Redfish Schema Supplement

CONTENTS

1 Overview

The Redfish standard comprises a set of specifications maintained by the Redfish Forum, a working group within the DMTF. The standard defines a protocol that uses RESTful interfaces to provide access to data and operations associated with the management of systems and networks. One of the strengths of the Redfish protocol is that it works with a wide range of servers: from stand-alone servers to rack-mount and bladed environments to large-scale data centers and cloud environments.

The Redfish standard addresses several key issues for infrastructures that require scalability. Large infrastructures often consist of many simple servers of different makes and types. This hyper-scale usage model requires a new approach to systems management. The Redfish protocol addresses these needs by providing a standard protocol based on out-of-band systems management.

With the previous goals in mind, the Redfish protocol was designed as an open-industry standard to meet scalability requirements in multi-vendor deployments. It easily integrates with commonly used tools, using RESTful interfaces to perform operations and using JSON and OData formats for data payloads.

1.1 Who should read this document?

This document is for Redfish Service developers or application software developers. This document includes the normative language copied from the `LongDescription` text in the Redfish Schema (DSP8010) bundle, and adds supplemental normative text to further explain the usage of particular properties or resources.

This document differs from the *Redfish Resource and Schema Guide* (DSP2046) by incorporating the normative description text rather than the end user-focused, informative (non-normative) `Description` text from the schema.

1.2 Where can I find more information?

The following web sites provide more information about the Redfish standard:

- **Redfish Developer Hub**

  Resources for developers who use Redfish to build applications. Contains an interactive schema explorer, hosted schema, and other links.

- **Redfish Specification Forum**

  DMTF Redfish-monitored user forum. Answers questions about Redfish-related topics.

- **DMTF GitHub repositories**

  Open source tools and libraries for working with Redfish.

- **Redfish standards**

    Schemas, specifications, mockups, white papers, FAQ, educational material, and more.

- **DMTF Redfish Forum**

    Working group that maintains the Redfish standard. Site lists member companies, future work and schedules, charter, and information about joining.

2 Using this guide

Every Redfish response consists of a JSON payload containing properties that are strictly defined by a schema for that resource. The schema that defines a resource can be determined from the value of the `@odata.type` property returned in every Redfish response. This guide details the definitions for every Redfish standard schema.

Each schema section contains:

- The name, current version, and description of the schema.
- The release history of the schema. Lists each minor schema version and the DSP8010 release bundle that included it.
- List of the possible URIs where schema-defined resources can appear in a Redfish Service v1.6 or later. See URI listings.
- Table that defines each property. Shows additional details for those properties when needed.
- List of available Actions defined for the schema.
- Example JSON payload for a resource using the schema.

The property-level details include:

Table 2. Property-level details

Column	Purpose
Property name	The case-sensitive name of the JSON property as it appears in the JSON payload. Lists the schema version in parentheses when properties were added to or deprecated in the schema after the initial v1.0.0 release.
Type	The JSON data types for the property, which can include boolean, number, string, or object. The `string (enum)` tag identifies enumerated strings. Number types that use units specify the units.
Attributes	Designates whether the property is read-only or read-write, if supported by the implementation, and whether the service might return a `null` value if the property value is temporarily unavailable.
Description	The normative description of the property, as copied directly from the schema `LongDescription` definition.

2.1 URI listings

The *Redfish Specification v1.6.0* added mandatory support for the *OpenAPI Specification v3.0*. As part of this support, the URIs for every Redfish Resource are defined to appear at known, fixed locations. Resource Collections also appear at fixed locations, with the members of each collection appearing at URIs constructed by using a fixed path structure, with appropriate path segments equal to the value of `Id` properties of members along the path.

Support for v1.6.0 and OpenAPI can be determined by comparing the value of the `RedfishVersion` property in the

Service Root (`\redfish\v1\`). Services that report a `1.6.0` or higher value, such as `1.6.1` or `1.7.0` , adhere to the URI definitions.

The URI listings do not apply to Redfish Services that support specification versions earlier than v1.6.0. For those Services, clients must use the hypermedia features of the API to discover links from the Service Root to each resource. While Services typically match the URIs listed in this document for many of their resources, this match is not guaranteed and results in errors.

3 Common properties

3.1 Properties that all Redfish Schemas define

The following properties are defined for inclusion in every Redfish Schema, and therefore may be encountered in any response payload. Their documentation here prevents repetition in the *Reference Guide* property tables.

> **Note:** Several of these properties are payload annotations but appear here because they are required for all Redfish resources.

Table 3. Common properties

@odata.context	string *read-only*	The URL to a metadata document with a fragment that describes the data, which is typically rooted at the top-level singleton or collection. Technically, the metadata document has to only define, or reference, any of the types that it directly uses, and different payloads could reference different metadata documents. However, because this property provides a root URL for resolving a relative reference, such as `@odata.id`, the API returns the canonical metadata document.
@odata.etag	string *read-only*	The current ETag for the Resource.
@odata.id	string *read-only* *required*	The unique ID for the Resource.
@odata.type	string *read-only* *required*	The type of a resource.
Description	string *read-only*	The human-readable description for the Resource.
Id	string *read-only*	The ID that uniquely identifies the Resource within the collection that contains it. This value is unique within a collection.

Name	string *read-only* *required*	The human-readable moniker for a Resource. The type is string. The value is NOT necessarily unique across Resource instances within a collection.
Oem {}	object	The manufacturer- or provider-specific extension moniker that divides the `Oem` object into sections.

3.2 Frequently used properties

In addition, Redfish Schemas frequently define the following properties. Their definition and usage is the same throughout the Redfish data model.

Table 4. Frequently used properties

Actions {}	object	The Redfish actions available for this Resource.
Links {}	object	The links associated with the Resource, as defined by that Resource's schema definition. All associated reference properties defined for a Resource are nested under the Links property. Find all directly referenced, or subordinate, Resource properties from the root of the Resource.
RelatedItem [{	array	An array of links. Each link points to a Resource or part of a Resource as defined by that Resource's schema. This representation is not intended to be a strong linking methodology like other references. Instead, it shows a relationship between elements or subelements in disparate parts of the service. For example, fans may be in one area of the system and processors in another. The relationship between the two might not be obvious. This property can show that one is related to the other. In this example, it might indicate that a specific fan cools a specific processor.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		

3.3 Payload annotations

Payload annotations are a mechanism in which a service provides additional information about a given property or object. Redfish limits usage of these annotations to OData core terms, Redfish Extensions or Redfish Messages.

3.3.1 Property-level annotations

A payload annotation for a single property takes the form of an additional property named `Property@Schema.Term`, where `Property` is the JSON property being annotated, `Schema` is the schema file where the definition for the annotation is found, and `Term` is the name of the Annotation.

Table 5. Property-level annotations

@Message.ExtendedInfo {}	object	The additional information for a set of message structures for a property. These messages can be useful when a property is `null` due to an error condition and the service wants to convey why the property is `null`.
@odata.count	integer *read-only*	The number of items in a collection.
@Redfish.AllowableValues []	array (string) *read-only*	The string values that a service accepts for a property or action parameter.

In the following example, the property `ResetType` is being annotated with the `AllowableValues` term, which is defined in the `Redfish` schema (an alias for RedfishExtensions). This is used to indicate to the client that the service supports the values `On` and `ForceOff` for `ResetType`.

```
{
  "ResetType@Redfish.AllowableValues": [
    "On",
    "ForceOff"
  ]
}
```

3.3.2 Resource- or object-level annotations

A payload annotation for an entire resource or a JSON object takes the form of `@Schema.Term`, where `Namespace` is the schema file where the definition is found and `Term` is the name of the Annotation. These payload annotations are used to provide further information about the object itself.

Table 6. Resource- or object-level annotations

@Redfish.ActionInfo	string *read-only*	The URI to an ActionInfo Resource, which describes the parameters that this Action instance supports.
@Redfish.CollectionCapabilities {}	object	The reference to the Resource that represents the POST capabilities of a collection. For property details, see CollectionCapabilities.
@Redfish.MaintenanceWindow {}	object	The maintenance window configuration that defines when to apply settings or operations to a Resource. For property details, see MaintenanceWindow.

@Redfish.OperationApplyTime	string (enum) *read-write*	The client's requested apply time to complete a create, delete, or action operation. *For the possible property values, see @Redfish.OperationApplyTime in Property details.*
@Redfish.OperationApplyTimeSupport {}	object	An indication of whether a client can request a specific apply time for a create, delete, or action operation for a Resource through the OperationApplyTime term. For property details, see OperationApplyTimeSupport.
@Redfish.Settings {}	object	The reference to the Resource that represents the settings to apply to this object. For property details, see Settings.
@Redfish.SettingsApplyTime {}	object	The configuration settings that define when to apply the settings to a Resource. For property details, see PreferredApplyTime.

3.4 Property details

3.4.1 @Redfish.OperationApplyTime

The client's requested apply time to complete a create, delete, or action operation.

String	Description
AtMaintenanceWindowStart	The requested operation is applied within the administrator-specified maintenance window.
Immediate	The requested operation is applied immediately.
InMaintenanceWindowOnReset	The requested operation is applied after a reset but within the administrator-specified maintenance window.
OnReset	The requested operation is applied on a reset.
OnStartUpdateRequest	The requested operation is applied when the StartUpdate action of the update service is invoked.

In the following example, the object is being annotated with the `ActionInfo` term, which is defined in the `Redfish` schema (an alias for RedfishExtensions). This is used to indicate to the client that it can find more information about the given action, in this case `#ComputerSystem.Reset`, at the URI `/redfish/v1/Systems/1/ResetActionInfo`.

```
{
  "#ComputerSystem.Reset": {
    "target": "/redfish/v1/Systems/1/Actions/ComputerSystem.Reset",
    "@Redfish.ActionInfo": "/redfish/v1/Systems/1/ResetActionInfo"
  }
}
```

4 Common objects

The following JSON objects are frequently defined in Redfish Schemas. Like the individual common properties listed above, these objects share a common definition which is shown here to avoid repetition in the Reference Guide property tables.

4.1 Actions

The Actions object contains descriptions of the actions defined and available for this resource.

Table 7. Actions

#{action name} {	object	A single Redfish action.
@Redfish.ActionInfo	string *read-only*	The URI for an ActionInfo Resource that describes this action.
target	string *read-only*	The target URI for the POST operation to invoke the action.
}		

4.2 Capacity

This is the schema definition for the Capacity of a device. It represents the properties for capacity for any data store.

Data {	object	The capacity information relating to the user data.
AllocatedBytes	integer (By) *read-write* *(null)*	The number of bytes currently allocated by the storage system in this data store for this data type.
ConsumedBytes	integer (By) *read-only* *(null)*	The number of bytes consumed in this data store for this data type.

GuaranteedBytes	integer (By) *read-write (null)*	The number of bytes the storage system guarantees can be allocated in this data store for this data type.
ProvisionedBytes	integer (By) *read-write (null)*	The maximum number of bytes that can be allocated in this data store for this data type.
}		
IsThinProvisioned	boolean *read-only (null)*	Marks that the capacity is not necessarily fully allocated.
Metadata {	object	The capacity information relating to metadata.
AllocatedBytes	integer (By) *read-write (null)*	The number of bytes currently allocated by the storage system in this data store for this data type.
ConsumedBytes	integer (By) *read-only (null)*	The number of bytes consumed in this data store for this data type.
GuaranteedBytes	integer (By) *read-write (null)*	The number of bytes the storage system guarantees can be allocated in this data store for this data type.
ProvisionedBytes	integer (By) *read-write (null)*	The maximum number of bytes that can be allocated in this data store for this data type.
}		
Snapshot {	object	The capacity information relating to snapshot or backup data.

	integer (By)	
AllocatedBytes	*read-write (null)*	The number of bytes currently allocated by the storage system in this data store for this data type.
ConsumedBytes	integer (By) *read-only (null)*	The number of bytes consumed in this data store for this data type.
GuaranteedBytes	integer (By) *read-write (null)*	The number of bytes the storage system guarantees can be allocated in this data store for this data type.
ProvisionedBytes	integer (By) *read-write (null)*	The maximum number of bytes that can be allocated in this data store for this data type.
}		

4.3 Identifier

Any additional identifiers for a resource.

	string	
DurableName *(v1.1+)*	*read-only (null)*	The world-wide, persistent name of the resource.
DurableNameFormat *(v1.1+)*	string (enum) *read-only (null)*	The format of the durable name property. *For the possible property values, see DurableNameFormat in Property details.*

4.3.1 Property details

4.3.1.1 DurableNameFormat

The format of the durable name property.

String	Description
EUI	The IEEE-defined 64-bit Extended Unique Identifier (EUI).
FC_WWN	The Fibre Channel (FC) World Wide Name (WWN).
iQN	The iSCSI Qualified Name (iQN).
NAA	The Name Address Authority (NAA) format.
NQN *(v1.6+)*	The NVMe Qualified Name (NQN).
NSID *(v1.6+)*	The NVM Namespace Identifier (NSID).
UUID	The Universally Unique Identifier (UUID).

4.4 IOStatistics

The properties of this type represent IO statistics.

@odata.id	string *read-only*	Link to another IOStatistics resource.

4.5 IPv4Address

This type describes an IPv4 address.

Address	string *read-write (null)*	The IPv4 address.
AddressOrigin	string (enum) *read-only (null)*	This indicates how the address was determined. *For the possible property values, see AddressOrigin in Property details.*
Gateway	string *read-write (null)*	The IPv4 gateway for this address.
Oem {}	object	The OEM extension property. For property details, see Oem.

	string	
SubnetMask	*read-write (null)*	The IPv4 subnet mask.

4.5.1 Property details

4.5.1.1 AddressOrigin

This indicates how the address was determined.

String	Description
BOOTP	A BOOTP service-provided address.
DHCP	A DHCPv4 service-provided address.
IPv4LinkLocal	The address is valid for only this network segment, or link.
Static	A user-configured static address.

4.6 IPv6Address

This type describes an IPv6 address.

	string	
Address	*read-write (null)*	The IPv6 address.
AddressOrigin	string (enum) *read-only (null)*	This indicates how the address was determined. *For the possible property values, see AddressOrigin in Property details.*
AddressState	string (enum) *read-only (null)*	The current RFC4862-defined state of this address. *For the possible property values, see AddressState in Property details.*
Oem {}	object	The OEM extension property. For property details, see Oem.

	integer	
PrefixLength	*read-only* *(null)*	The IPv6 address prefix Length.

4.6.1 Property details

4.6.1.1 AddressOrigin

This indicates how the address was determined.

String	Description
DHCPv6	A DHCPv6 service-provided address.
LinkLocal	The address is valid for only this network segment, or link.
SLAAC	A stateless autoconfiguration (SLAAC) service-provided address.
Static	A static user-configured address.

4.6.1.2 AddressState

The current RFC4862-defined state of this address.

String	Description
Deprecated	This address is currently within its valid lifetime but is now outside its RFC4862-defined preferred lifetime.
Failed	This address has failed Duplicate Address Detection (DAD) testing, as defined in RFC4862, section 5.4, and is not currently in use.
Preferred	This address is currently within both its RFC4862-defined valid and preferred lifetimes.
Tentative	This address is currently undergoing Duplicate Address Detection (DAD) testing, as defined in RFC4862, section 5.4.

4.7 IPv6GatewayStaticAddress

This type represents a single IPv6 static address to be assigned on a network interface.

	string	
Address *(v1.1+)*	*read-write required* *(null)*	A valid IPv6 address.
Oem *(v1.1+)* {}	object	The OEM extension property. For property details, see Oem.

PrefixLength *(v1.1+)*	integer *read-write* *(null)*	The IPv6 network prefix length, in bits, for this address.

4.8 IPv6StaticAddress

This type represents a single IPv6 static address to be assigned on a network interface.

Address	string *read-write required* *(null)*	A valid IPv6 address.
Oem {}	object	The OEM extension property. For property details, see Oem.
PrefixLength	integer *read-write required* *(null)*	The prefix length, in bits, of this IPv6 address.

4.9 Location

The location of a resource.

AltitudeMeters *(v1.6+)*	number (m) *read-write* *(null)*	The altitude of the resource in meters.
Contacts *(v1.7+)* [{	array	An array of contact information.
ContactName	string *read-write* *(null)*	Name of this contact.
EmailAddress	string *read-write* *(null)*	Email address for this contact.
PhoneNumber	string *read-write* *(null)*	Phone number for this contact.

}]		
Info *(v1.1+, deprecated v1.5)*	string *read-only* *(null)*	The location of the resource. *Deprecated in v1.5 and later. This property has been deprecated in favor of the PostalAddress, Placement, and PartLocation properties.*
InfoFormat *(v1.1+, deprecated v1.5)*	string *read-only* *(null)*	The format of the Info property. *Deprecated in v1.5 and later. This property has been deprecated in favor of the PostalAddress, Placement, and PartLocation properties.*
Latitude *(v1.6+)*	number (deg) *read-write* *(null)*	The latitude of the resource.
Longitude *(v1.6+)*	number (deg) *read-write* *(null)*	The longitude of the resource in degrees.
Oem *(v1.1+)* {	object	The OEM extension property.
(pattern) {} [ ]	array, boolean, integer, number, object, string *(null)*	Property names follow regular expression pattern "^([a-zA-Z_][a-zA-Z0-9_]*)?@(odata|Redfish|Message)\.[a-zA-Z_][a-zA-Z0-9_]*$"
(pattern) {	object	Property names follow regular expression pattern "^[A-Za-z0-9_]+$"
(pattern) {} [ ]	array, boolean, integer, number, object, string *(null)*	Property names follow regular expression pattern "^([a-zA-Z_][a-zA-Z0-9_]*)?@(odata|Redfish|Message)\.[a-zA-Z_][a-zA-Z0-9_]*$"
}		
}		
PartLocation *(v1.5+)* {	object	The part location within the placement.
LocationOrdinalValue	integer *read-only* *(null)*	The number that represents the location of the part. If LocationType is `slot` and this unit is in slot 2, the LocationOrdinalValue is 2.

	string (enum) *read-only* *(null)*	
LocationType	string (enum) *read-only* *(null)*	The type of location of the part, such as slot, bay, socket and slot. *For the possible property values, see LocationType in Property details.*
Orientation	string (enum) *read-only* *(null)*	The orientation for the ordering of the slot enumeration used by the LocationOrdinalValue property. *For the possible property values, see Orientation in Property details.*
Reference	string (enum) *read-only* *(null)*	The reference point for the part location. Provides guidance about the general location of the part. *For the possible property values, see Reference in Property details.*
ServiceLabel	string *read-only* *(null)*	The label of the part location, such as a silk-screened name or a printed label.
}		
Placement *(v1.3+)* {	object	A place within the addressed location.
AdditionalInfo *(v1.7+)*	string *read-write* *(null)*	Area designation or other additional info.
Rack	string *read-write* *(null)*	The name of a rack location within a row.
RackOffset	integer *read-write* *(null)*	The vertical location of the item, in terms of RackOffsetUnits.
RackOffsetUnits	string (enum) *read-write* *(null)*	The type of rack units in use. *For the possible property values, see RackOffsetUnits in Property details.*
Row	string *read-write* *(null)*	The name of the row.

}		
PostalAddress *(v1.3+)* {	object	The postal address of the addressed resource.
AdditionalCode	string *read-write* *(null)*	The additional code.
AdditionalInfo *(v1.7+)*	string *read-write* *(null)*	The room designation or other additional information.
Building	string *read-write* *(null)*	The name of the building.
City	string *read-write* *(null)*	City, township, or shi (JP).
Community	string *read-write* *(null)*	The postal community name.
Country	string *read-write* *(null)*	The country.
District	string *read-write* *(null)*	A county, parish, gun (JP), or district (IN).
Division	string *read-write* *(null)*	City division, borough, city district, ward, or chou (JP).
Floor	string *read-write* *(null)*	The floor.
GPSCoords *(deprecated v1.6)*	string *read-write* *(null)*	The GPS coordinates of the part. *Deprecated in v1.6 and later. This property has been deprecated in favor of the Longitude and Latitude properties.*

HouseNumber	integer *read-write* *(null)*	The numeric portion of house number.
HouseNumberSuffix	string *read-write* *(null)*	The house number suffix.
Landmark	string *read-write* *(null)*	The landmark.
LeadingStreetDirection	string *read-write* *(null)*	A leading street direction.
Location *(deprecated v1.7)*	string *read-write* *(null)*	The room designation or other additional information. *Deprecated in v1.7 and later. This property has been deprecated in favor of the AdditionalInfo property.*
Name	string *read-write* *(null)*	The name.
Neighborhood	string *read-write* *(null)*	Neighborhood or block.
PlaceType	string *read-write* *(null)*	The description of the type of place that is addressed.
POBox	string *read-write* *(null)*	The post office box (PO box).
PostalCode	string *read-write* *(null)*	The postal code or zip code.

Road	string *read-write* *(null)*	The primary road or street.
RoadBranch	string *read-write* *(null)*	The road branch.
RoadPostModifier	string *read-write* *(null)*	The road post-modifier.
RoadPreModifier	string *read-write* *(null)*	The road pre-modifier.
RoadSection	string *read-write* *(null)*	The road section.
RoadSubBranch	string *read-write* *(null)*	The road sub branch.
Room	string *read-write* *(null)*	The name or number of the room.
Seat	string *read-write* *(null)*	The seat, such as the desk, cubicle, or workstation.
Street	string *read-write* *(null)*	Street name.
StreetSuffix	string *read-write* *(null)*	Avenue, Platz, Street, Circle.

	string *read-write* *(null)*	
Territory		A top-level subdivision within a country.
TrailingStreetSuffix	string *read-write* *(null)*	A trailing street suffix.
Unit	string *read-write* *(null)*	The name or number of the apartment unit or suite.
}		

4.9.1 Property details

4.9.1.1 LocationType

The type of location of the part, such as slot, bay, socket and slot.

String	Description
Bay	The bay as the type of location.
Connector	The connector as the type of location.
Slot	The slot as the type of location.
Socket	The socket as the type of location.

4.9.1.2 Orientation

The orientation for the ordering of the slot enumeration used by the LocationOrdinalValue property.

String	Description
BackToFront	The ordering for the LocationOrdinalValue is back to front.
BottomToTop	The ordering for LocationOrdinalValue is bottom to top.
FrontToBack	The ordering for LocationOrdinalValue is front to back.
LeftToRight	The ordering for the LocationOrdinalValue is left to right.
RightToLeft	The ordering for the LocationOrdinalValue is right to left.

String	Description
TopToBottom	The ordering for the LocationOrdinalValue is top to bottom.

4.9.1.3 RackOffsetUnits

The type of rack units in use.

String	Description
EIA_310	A rack unit that is equal to 1.75 in (44.45 mm).
OpenU	A rack unit that is equal to 48 mm (1.89 in).

4.9.1.4 Reference

The reference point for the part location. Provides guidance about the general location of the part.

String	Description
Bottom	The part is in the bottom of the unit.
Front	The part is in the front of the unit.
Left	The part is on the left side of of the unit.
Middle	The part is in the middle of the unit.
Rear	The part is in the rear of the unit.
Right	The part is on the right side of the unit.
Top	The part is in the top of the unit.

4.10 Message

The message that the Redfish Service returns.

Message	string *read-only (null)*	The human-readable message, if provided.

	array (string) read-only	This array of message arguments are substituted for the arguments in the message when looked up in the Message Registry.
MessageArgs [ ]		
MessageId	string read-only required	The key for this message used to find the message in a Message Registry.
MessageSeverity *(v1.1+)*	string (enum) read-only (null)	The severity of the message. *For the possible property values, see MessageSeverity in Property details.*
Oem {}	object	The OEM extension property. For property details, see Oem.
RelatedProperties [ ]	array (string) read-only	A set of properties described by the message.
Resolution	string read-only (null)	Used to provide suggestions on how to resolve the situation that caused the error.
Severity *(deprecated v1.1)*	string read-only (null)	The severity of the errors. *Deprecated in v1.1 and later. This property has been deprecated in favor of MessageSeverity, which ties the values to the enumerations defined for the Health property within Status.*

4.10.1 Property details

4.10.1.1 MessageSeverity

The severity of the message.

String	Description
Critical	A critical condition requires immediate attention.
OK	Normal.

String	Description
Warning	A condition requires attention.

4.11 Oem

The OEM extension.

(pattern) {} [ ]	array, boolean, integer, number, object, string *(null)*	Property names follow regular expression pattern "^([a-zA-Z_][a-zA-Z0-9_]*)?@(odata|Redfish|Message)\.[a-zA-Z_][a-zA-Z0-9_]*$"
(pattern) {	object	Property names follow regular expression pattern "^[A-Za-z0-9_]+$"
(pattern) {} [ ]	array, boolean, integer, number, object, string *(null)*	Property names follow regular expression pattern "^([a-zA-Z_][a-zA-Z0-9_]*)?@(odata|Redfish|Message)\.[a-zA-Z_][a-zA-Z0-9_]*$"
}		

4.12 ReplicaInfo

Defines the characteristics of a replica of a source.

ConsistencyEnabled	boolean *read-only* *(null)*	True if consistency is enabled.
ConsistencyState	string (enum) *read-only* *(null)*	The current state of consistency. *For the possible property values, see ConsistencyState in Property details.*
ConsistencyStatus	string (enum) *read-only* *(null)*	The current status of consistency. *For the possible property values, see ConsistencyStatus in Property details.*

ConsistencyType	string (enum) *read-only* *(null)*	Indicates the consistency type used by the source and its associated target group. *For the possible property values, see ConsistencyType in Property details.*
DataProtectionLineOfService *(v1.1+)* {	object	A pointer to the DataProtection line of service element that describes this replica.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
FailedCopyStopsHostIO	boolean *read-only* *(null)*	If true, the storage array tells host to stop sending data to source element if copying to a remote element fails.
PercentSynced	integer (%) *read-only* *(null)*	Specifies the percent of the work completed to reach synchronization.
Replica {	object	Deprecated - Use Source Replica. The resource that is the source of this replica.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
ReplicaFaultDomain *(v1.3+)*	string (enum) *read-only* *(null)*	ReplicaFaultDomain describes the fault domain (local or remote) of the replica relationship. *For the possible property values, see ReplicaFaultDomain in Property details.*
ReplicaPriority	string (enum) *read-only* *(null)*	The priority of background copy engine I/O to be managed relative to host I/O operations during a sequential background copy operation. *For the possible property values, see ReplicaPriority in Property details.*

ReplicaProgressStatus	string (enum) *read-only (null)*	The status of the session with respect to Replication activity. *For the possible property values, see ReplicaProgressStatus in Property details.*
ReplicaReadOnlyAccess	string (enum) *read-only (null)*	This property specifies whether the source, the target, or both elements are read only to the host. *For the possible property values, see ReplicaReadOnlyAccess in Property details.*
ReplicaRecoveryMode	string (enum) *read-only (null)*	Describes whether the copy operation continues after a broken link is restored. *For the possible property values, see ReplicaRecoveryMode in Property details.*
ReplicaRole	string (enum) *read-only (null)*	The source or target role of this replica. *For the possible property values, see ReplicaRole in Property details.*
ReplicaSkewBytes	integer (By) *read-only (null)*	Applies to Adaptive mode and it describes maximum number of bytes the SyncedElement (target) can be out of sync.
ReplicaState	string (enum) *read-only (null)*	ReplicaState describes the state of the relationship with respect to Replication activity. *For the possible property values, see ReplicaState in Property details.*
ReplicaType	string (enum) *read-only (null)*	ReplicaType describes the intended outcome of the replication. *For the possible property values, see ReplicaType in Property details.*

	string (enum)	
ReplicaUpdateMode	*read-only (null)*	Describes whether the target elements will be updated synchronously or asynchronously. *For the possible property values, see ReplicaUpdateMode in Property details.*
RequestedReplicaState	string (enum) *read-only (null)*	The last requested or desired state for the relationship. *For the possible property values, see RequestedReplicaState in Property details.*
SourceReplica *(v1.2+)* {	object	The resource that is the source of this replica.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
SyncMaintained	boolean *read-only (null)*	Synchronization is maintained.
UndiscoveredElement	string (enum) *read-only (null)*	This property specifies whether the source, the target, or both elements involved in a copy operation are undiscovered. *For the possible property values, see UndiscoveredElement in Property details.*
WhenActivated	string (%) *read-only (null)*	Specifies when point-in-time copy was taken or when the replication relationship is activated, reactivated, resumed or re-established.
WhenDeactivated	string (%) *read-only (null)*	Specifies when the replication relationship is deactivated.

	string (%)	
WhenEstablished	*read-only (null)*	Specifies when the replication relationship is established.
WhenSuspended	string (%) *read-only (null)*	Specifies when the replication relationship is suspended.
WhenSynced	string *read-only (null)*	The point in time that the Elements were synchronized.
WhenSynchronized	string (%) *read-only (null)*	Specifies when the replication relationship is synchronized.

4.12.1 Property details

4.12.1.1 ConsistencyState

The current state of consistency.

String	Description
Consistent	Consistent.
Inconsistent	Not consistent.

4.12.1.2 ConsistencyStatus

The current status of consistency.

String	Description
Consistent	Consistent.
Disabled	Consistency disabled.

String	Description
InError	Consistency error.
InProgress	Becoming consistent.

4.12.1.3 ConsistencyType

Indicates the consistency type used by the source and its associated target group.

String	Description
SequentiallyConsistent	Sequentially consistent.

4.12.1.4 ReplicaFaultDomain

ReplicaFaultDomain describes the fault domain (local or remote) of the replica relationship.

String	Description
Local	Local indicates that the source and target replicas are contained within a single fault domain.
Remote	Remote indicates that the source and target replicas are in separate fault domains.

4.12.1.5 ReplicaPriority

The priority of background copy engine I/O to be managed relative to host I/O operations during a sequential background copy operation.

String	Description
High	Copy engine I/O has higher priority than host I/O.
Low	Copy engine I/O lower priority than host I/O.
Same	Copy engine I/O has the same priority as host I/O.
Urgent	Copy operation to be performed as soon as possible, regardless of the host I/O requests.

4.12.1.6 ReplicaProgressStatus

The status of the session with respect to Replication activity.

String	Description
Aborting	Abort in progress.
Completed	The request is completed. Data flow is idle.
Detaching	Detach in progress.
Dormant	Indicates that the data flow is inactive, suspended or quiesced.
FailingBack	Undoing the result of failover.
FailingOver	In the process of switching source and target.
Fracturing	Fracture in progress.
Initializing	In the process of establishing source/replica relationship and the data flow has not started.
Mixed	Applies to groups with element pairs with different statuses. Generally, the individual statuses need to be examined.
Pending	The flow of data has stopped momentarily due to limited bandwidth or a busy system.
Preparing	Preparation in progress.
RequiresActivate	The requested operation has completed, however, the synchronization relationship needs to be activated before further copy operations can be issued.
RequiresDetach	The requested operation has completed, however, the synchronization relationship needs to be detached before further copy operations can be issued.
RequiresFracture	The requested operation has completed, however, the synchronization relationship needs to be fractured before further copy operations can be issued.
RequiresResume	The requested operation has completed, however, the synchronization relationship needs to be resumed before further copy operations can be issued.
RequiresResync	The requested operation has completed, however, the synchronization relationship must be resynchronized before further copy operations can be issued.
RequiresSplit	The requested operation has completed, however, the synchronization relationship needs to be split before further copy operations can be issued.
Restoring	Restore in progress.
Resyncing	Resync in progress.
Splitting	Split in progress.
Suspending	The copy operation is in the process of being suspended.
Synchronizing	Sync in progress.
Terminating	The relationship is in the process of terminating.

4.12.1.7 ReplicaReadOnlyAccess

This property specifies whether the source, the target, or both elements are read only to the host.

String	Description
Both	Both the source and the target elements are read only to the host.
ReplicaElement	The replica element.
SourceElement	The source element.

4.12.1.8 ReplicaRecoveryMode

Describes whether the copy operation continues after a broken link is restored.

String	Description
Automatic	Copy operation resumes automatically.
Manual	ReplicaState is set to Suspended after the link is restored. It is required to issue the Resume operation to continue.

4.12.1.9 ReplicaRole

The source or target role of this replica.

String	Description
Source	The source element.
Target	The target element.

4.12.1.10 ReplicaState

ReplicaState describes the state of the relationship with respect to Replication activity.

String	Description
Aborted	The copy operation is aborted with the Abort operation. Use the Resync Replica operation to restart the copy operation.
Broken	The relationship is non-functional due to errors in the source, the target, the path between the two or space constraints.
Failedover	Reads and writes are sent to the target element. Source element is not reachable.
Fractured	Target is split from the source.

String	Description
Inactive	Data flow has stopped, writes to source element will not be sent to target element.
Initialized	The link to enable replication is established and source/replica elements are associated, but the data flow has not started.
Invalid	The array is unable to determine the state of the replication relationship, for example, after the connection is restored; however, either source or target elements have an unknown status.
Mixed	Applies to the ReplicaState of GroupSynchronized. It indicates the StorageSynchronized relationships of the elements in the groups have different ReplicaState values.
Partitioned	State of replication relationship can not be determined, for example, due to a connection problem.
Prepared	Initialization is completed, however, the data flow has not started.
Restored	It indicates the source element was restored from the target element.
Skewed	The target has been modified and is no longer synchronized with the source element or the point-in-time view.
Split	The target element was gracefully (or systematically) split from its source element -- consistency is guaranteed.
Suspended	Data flow between the source and target elements has stopped. Writes to source element are held until the relationship is Resumed.
Synchronized	For the Mirror, Snapshot, or Clone replication, the target represents a copy of the source.
Unsynchronized	Not all the source element data has been copied to the target element.

4.12.1.11 ReplicaType

ReplicaType describes the intended outcome of the replication.

String	Description
Clone	Create a point in time, full copy the source.
Mirror	Create and maintain a copy of the source.
Snapshot	Create a point in time, virtual copy of the source.
TokenizedClone	Create a token based clone.

4.12.1.12 ReplicaUpdateMode

Describes whether the target elements will be updated synchronously or asynchronously.

String	Description
Active	Active-Active (i.e. bidirectional) synchronous updates.

String	Description
Adaptive	Allows implementation to switch between synchronous and asynchronous modes.
Asynchronous	Asynchronous updates.
Synchronous	Synchronous updates.

4.12.1.13 RequestedReplicaState

The last requested or desired state for the relationship.

String	Description
Aborted	The copy operation is aborted with the Abort operation. Use the Resync Replica operation to restart the copy operation.
Broken	The relationship is non-functional due to errors in the source, the target, the path between the two or space constraints.
Failedover	Reads and writes are sent to the target element. Source element is not reachable.
Fractured	Target is split from the source.
Inactive	Data flow has stopped, writes to source element will not be sent to target element.
Initialized	The link to enable replication is established and source/replica elements are associated, but the data flow has not started.
Invalid	The array is unable to determine the state of the replication relationship, for example, after the connection is restored; however, either source or target elements have an unknown status.
Mixed	Applies to the ReplicaState of GroupSynchronized. It indicates the StorageSynchronized relationships of the elements in the groups have different ReplicaState values.
Partitioned	State of replication relationship can not be determined, for example, due to a connection problem.
Prepared	Initialization is completed, however, the data flow has not started.
Restored	It indicates the source element was restored from the target element.
Skewed	The target has been modified and is no longer synchronized with the source element or the point-in-time view.
Split	The target element was gracefully (or systematically) split from its source element -- consistency is guaranteed.
Suspended	Data flow between the source and target elements has stopped. Writes to source element are held until the relationship is Resumed.
Synchronized	For the Mirror, Snapshot, or Clone replication, the target represents a copy of the source.
Unsynchronized	Not all the source element data has been copied to the target element.

4.12.1.14 UndiscoveredElement

This property specifies whether the source, the target, or both elements involved in a copy operation are undiscovered.

String	Description
ReplicaElement	The replica element is undiscovered.
SourceElement	The source element is undiscovered.

4.13 Schedule

Schedule a series of occurrences.

EnabledDaysOfMonth [ ]	array (integer, null) *read-write*	Days of the month when scheduled occurrences are enabled. `0` indicates that every day of the month is enabled.
EnabledDaysOfWeek [ ]	array (string (enum)) *read-write (null)*	Days of the week when scheduled occurrences are enabled, for enabled days of the month and months of the year. If not present, all days of the week are enabled. Days of the week. *For the possible property values, see EnabledDaysOfWeek in Property details.*
EnabledIntervals *(v1.1+)* [ ]	array (string, null) *read-write*	Intervals when scheduled occurrences are enabled.
EnabledMonthsOfYear [ ]	array (string (enum)) *read-write (null)*	The months of the year when scheduled occurrences are enabled. If not present, all months of the year are enabled. Months of the year. *For the possible property values, see EnabledMonthsOfYear in Property details.*

InitialStartTime	string *read-write (null)*	The date and time when the initial occurrence is scheduled to occur.
Lifetime	string *read-write (null)*	The time after provisioning when the schedule as a whole expires.
MaxOccurrences	integer *read-write (null)*	The maximum number of scheduled occurrences.
Name	string *read-write (null)*	The schedule name.
RecurrenceInterval	string *read-write (null)*	The amount of time until the next occurrence occurs.

4.13.1 Property details

4.13.1.1 EnabledDaysOfWeek

Days of the week when scheduled occurrences are enabled, for enabled days of the month and months of the year. If not present, all days of the week are enabled. Days of the week.

String	Description
Every	Every day of the week.
Friday	Friday.
Monday	Monday.
Saturday	Saturday.
Sunday	Sunday.
Thursday	Thursday.

String	Description
Tuesday	Tuesday.
Wednesday	Wednesday.

4.13.1.2 EnabledMonthsOfYear

The months of the year when scheduled occurrences are enabled. If not present, all months of the year are enabled. Months of the year.

String	Description
April	April.
August	August.
December	December.
Every	Every month of the year.
February	February.
January	January.
July	July.
June	June.
March	March.
May	May.
November	November.
October	October.
September	September.

4.14 Status

The status and health of a resource and its children.

Health	string (enum) read-only (null)	The health state of this resource in the absence of its dependent resources. *For the possible property values, see Health in Property details.*

HealthRollup	string (enum) *read-only* *(null)*	The overall health state from the view of this resource. *For the possible property values, see HealthRollup in Property details.*
Oem {	object	The OEM extension property.
(pattern) {} [ ]	array, boolean, integer, number, object, string *(null)*	Property names follow regular expression pattern "^([a-zA-Z_][a-zA-Z0-9_]*)?@(odata|Redfish|Message)\.[a-zA-Z_][a-zA-Z0-9_]*$"
(pattern) {	object	Property names follow regular expression pattern "^[A-Za-z0-9_]+$"
(pattern) {} [ ]	array, boolean, integer, number, object, string *(null)*	Property names follow regular expression pattern "^([a-zA-Z_][a-zA-Z0-9_]*)?@(odata|Redfish|Message)\.[a-zA-Z_][a-zA-Z0-9_]*$"
}		
}		
State	string (enum) *read-only* *(null)*	The known state of the resource, such as, enabled. *For the possible property values, see State in Property details.*

4.14.1 Property details

4.14.1.1 Health

The health state of this resource in the absence of its dependent resources.

String	Description
Critical	A critical condition requires immediate attention.
OK	Normal.
Warning	A condition requires attention.

4.14.1.2 HealthRollup

The overall health state from the view of this resource.

String	Description
Critical	A critical condition requires immediate attention.
OK	Normal.
Warning	A condition requires attention.

4.14.1.3 State

The known state of the resource, such as, enabled.

String	Description
Absent	This function or resource is either not present or detected.
Deferring *(v1.2+)*	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified *(v1.9+)*	The element quality is within the acceptable range of operation.
Quiesced *(v1.2+)*	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline *(v1.1+)*	This function or resource is present but cannot be used.
Updating *(v1.2+)*	The element is updating and might be unavailable or degraded.

4.14.2 Redundancy

Other resource schemas use this redundancy definition.

Table 8. Redundancy

@odata.id	string *read-only* *required*	The unique identifier for a resource.
Actions {}	object	The available actions for this resource.

	integer	
MaxNumSupported	*read-only* *required* *(null)*	This is the maximum number of members allowable for this particular redundancy group.
MemberId	string *read-only* *required*	This is the identifier for the member within the collection.
MinNumNeeded	integer *read-only* *required* *(null)*	This is the minimum number of members needed for this group to be redundant.
Mode	string (enum) *read-write* *required* *(null)*	This is the redundancy mode of the group. *For the possible property values, see Mode in Property details.*
Name	string *read-only* *required*	The name of the resource or array element.
Oem {}	object	This is the manufacturer/provider specific extension moniker used to divide the Oem object into sections. For property details, see Oem.
RedundancyEnabled	boolean *read-write* *(null)*	This indicates whether redundancy is enabled.
RedundancySet [{	array * required*	Contains any ids that represent components of this redundancy set.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
RedundancySet@odata.count	integer *read-only*	The number of items in a collection.

	object	This property describes the status and health of the resource and its children. For property details, see Status.
Status {}	* required*	

4.14.3 Property details

4.14.3.1 Mode

This is the redundancy mode of the group.

String	Description
Failover	Failure of one unit will automatically cause its functions to be taken over by a standby or offline unit in the redundancy set.
N+m	Multiple units are available and active such that normal operation will continue if one or more units fail.
NotRedundant	The subsystem is not configured in a redundancy mode, either due to configuration or the functionality has been disabled by the user.
Sharing	Multiple units contribute or share such that operation will continue, but at a reduced capacity, if one or more units fail.
Sparing	One or more spare units are available to take over the function of a failed unit, but takeover is not automatic.

5 Resource collections

A resource collection is a core concept in Redfish. A collection is a group of like resources where the number of instances in the group can shrink or grow depending on the scope of the Redfish Service or the configuration of the devices being managed. Every Resource Collection resource has the same set of supported properties, and all contain "Collection" in the name of their schema. Every resource linked in the "Members" array within a Resource Collection will have the same resource type (same schema with the same major version, but can vary in minor or errata schema versions, which are all compatible).

The properties of a Resource Collection are:

Table 9. Resource Collection properties

@odata.context	string *read-only*	The OData description of a payload.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array * required*	The members of this collection.
@odata.id	string *read-only*	The link to a Resource instance, which is a member of this collection.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.

Members@odata.navigationLink	string *read-write*	
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The manufacturer- or provider-specific extension moniker that divides the `Oem` object into sections.

As the following example shows, a Redfish Service may provide management functionality for several Computer Systems, and therefore a ComputerSystemCollection resource is provided. This example shows a Service with four ComputerSystem instances ("Members").

```
{
    "@odata.type": "#ComputerSystemCollection.ComputerSystemCollection",
    "Name": "Computer System Collection",
    "Members@odata.count": 4,
    "Members": [
        {
            "@odata.id": "/redfish/v1/Systems/529QB9450R6"
        },
        {
            "@odata.id": "/redfish/v1/Systems/529QB9451R6"
        },
        {
            "@odata.id": "/redfish/v1/Systems/529QB9452R6"
        },
        {
            "@odata.id": "/redfish/v1/Systems/529QB9453R6"
        }
    ],
    "@odata.context": "/redfish/v1/$metadata#ComputerSystemCollection.ComputerSystemCollection",
    "@odata.id": "/redfish/v1/Systems"
}
```

5.1 Resource collection URIs in Redfish v1.6 and later

The following table lists all Redfish-defined Resource Collections and the URIs where they can appear.

> **Note:** The URIs listed are valid for Redfish Services that conform to the *Redfish Specification v1.6.0* or higher. Services built on earlier specification versions might use different URIs, which must be discovered by following the links from the Service Root (`/redfish/v1/`).

Collection type	URIs
AccelerationFunctionCollection	/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/AccelerationFunctions /redfish/v1/CompositionService/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/AccelerationFunctions /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/AccelerationFunctions /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/AccelerationFunctions /redfish/v1/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/AccelerationFunctions
AddressPoolCollection	/redfish/v1/Fabrics/*{FabricId}*/AddressPools
AggregateCollection	/redfish/v1/AggregationService/Aggregates
AggregationSourceCollection	/redfish/v1/AggregationService/AggregationSources
BootOptionCollection	/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/BootOptions /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/BootOptions /redfish/v1/Systems/*{ComputerSystemId}*/BootOptions
CertificateCollection	/redfish/v1/AccountService/Accounts/*{ManagerAccountId}*/Certificates /redfish/v1/AccountService/ActiveDirectory/Certificates /redfish/v1/AccountService/ExternalAccountProviders/*{ExternalAccountProviderId}*/Certificates /redfish/v1/AccountService/LDAP/Certificates /redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Boot/Certificates /redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/ SecureBootDatabases/*{DatabaseId}*/Certificates /redfish/v1/Managers/*{ManagerId}*/NetworkProtocol/HTTPS/Certificates /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/Accounts/*{ManagerAccountId}*/Certificates /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/ActiveDirectory/Certificates /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/ExternalAccountProviders/*{ExternalAccountProviderId}*/Certificates /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/LDAP/Certificates /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Boot/Certificates /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/SecureBootDatabases/*{DatabaseId}*/Certificates /redfish/v1/Systems/*{ComputerSystemId}*/Boot/Certificates /redfish/v1/Systems/*{ComputerSystemId}*/SecureBoot/SecureBootDatabases/*{DatabaseId}*/Certificates
ChassisCollection	/redfish/v1/Chassis

Collection type	URIs
CircuitCollection	/redfish/v1/PowerEquipment/FloorPDUs/{*PowerDistributionId*}/Branches /redfish/v1/PowerEquipment/FloorPDUs/{*PowerDistributionId*}/Mains /redfish/v1/PowerEquipment/FloorPDUs/{*PowerDistributionId*}/Subfeeds /redfish/v1/PowerEquipment/RackPDUs/{*PowerDistributionId*}/Branches /redfish/v1/PowerEquipment/RackPDUs/{*PowerDistributionId*}/Mains /redfish/v1/PowerEquipment/TransferSwitches/{*PowerDistributionId*}/Branches /redfish/v1/PowerEquipment/TransferSwitches/{*PowerDistributionId*}/Feeders /redfish/v1/PowerEquipment/TransferSwitches/{*PowerDistributionId*}/Mains
ComputerSystemCollection	/redfish/v1/Systems
ConnectionMethodCollection	/redfish/v1/AggregationService/ConnectionMethods
EndpointCollection	/redfish/v1/Fabrics/{*FabricId*}/Endpoints
EthernetInterfaceCollection	/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/EthernetInterfaces /redfish/v1/Managers/{*ManagerId*}/EthernetInterfaces /redfish/v1/Managers/{*ManagerId*}/HostInterfaces/{*HostInterfaceId*}/HostEthernetInterfaces /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/EthernetInterfaces /redfish/v1/Systems/{*ComputerSystemId*}/EthernetInterfaces
EventDestinationCollection	/redfish/v1/EventService/Subscriptions
ExternalAccountProviderCollection	/redfish/v1/AccountService/ExternalAccountProviders /redfish/v1/Managers/{*ManagerId*}/RemoteAccountService/ExternalAccountProviders
FabricAdapterCollection	/redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters
FabricCollection	/redfish/v1/Fabrics
FacilityCollection	/redfish/v1/Facilities
HostInterfaceCollection	/redfish/v1/Managers/{*ManagerId*}/HostInterfaces
JobCollection	/redfish/v1/JobService/Jobs /redfish/v1/JobService/Jobs/{*JobId*}/Steps
JsonSchemaFileCollection	/redfish/v1/JsonSchemas

Collection type	URIs
LogEntryCollection	/redfish/v1/Chassis/{*ChassisId*}/LogServices/{*LogServiceId*}/Entries /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/LogServices/{*LogServiceId*}/Entries /redfish/v1/JobService/Log/Entries /redfish/v1/Managers/{*ManagerId*}/LogServices/{*LogServiceId*}/Entries /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/LogServices/{*LogServiceId*}/Entries /redfish/v1/Systems/{*ComputerSystemId*}/LogServices/{*LogServiceId*}/Entries /redfish/v1/TelemetryService/LogService/Entries
LogServiceCollection	/redfish/v1/Chassis/{*ChassisId*}/LogServices /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/LogServices /redfish/v1/Managers/{*ManagerId*}/LogServices /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/LogServices /redfish/v1/Systems/{*ComputerSystemId*}/LogServices
ManagerAccountCollection	/redfish/v1/AccountService/Accounts /redfish/v1/Managers/{*ManagerId*}/RemoteAccountService/Accounts
ManagerCollection	/redfish/v1/Managers
MediaControllerCollection	/redfish/v1/Chassis/{*ChassisId*}/MediaControllers
MemoryChunksCollection	/redfish/v1/Chassis/{*ChassisId*}/MemoryDomains/{*MemoryDomainId*}/MemoryChunks /redfish/v1/CompositionService/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/MemoryDomains/{*MemoryDomainId*}/MemoryChunks /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/MemoryDomains/{*MemoryDomainId*}/MemoryChunks /redfish/v1/Systems/{*ComputerSystemId*}/MemoryDomains/{*MemoryDomainId*}/MemoryChunks
MemoryCollection	/redfish/v1/Chassis/{*ChassisId*}/Memory /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory /redfish/v1/Systems/{*ComputerSystemId*}/Memory
MemoryDomainCollection	/redfish/v1/Chassis/{*ChassisId*}/MemoryDomains /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/MemoryDomains /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/MemoryDomains /redfish/v1/Systems/{*ComputerSystemId*}/MemoryDomains
MessageRegistryCollection	
MessageRegistryFileCollection	/redfish/v1/Registries

Collection type	URIs
MetricDefinitionCollection	/redfish/v1/TelemetryService/MetricDefinitions
MetricReportCollection	/redfish/v1/TelemetryService/MetricReports
MetricReportDefinitionCollection	/redfish/v1/TelemetryService/MetricReportDefinitions
NetworkAdapterCollection	/redfish/v1/Chassis/{*ChassisId*}/NetworkAdapters
NetworkDeviceFunctionCollection	/redfish/v1/Chassis/{*ChassisId*}/NetworkAdapters/{*NetworkAdapterId*}/NetworkDeviceFunctions /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/NetworkInterfaces/{*NetworkInterfaceId*}/NetworkDeviceFunctions /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/NetworkInterfaces/{*NetworkInterfaceId*}/NetworkDeviceFunctions /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/NetworkInterfaces/{*NetworkInterfaceId*}/NetworkDeviceFunctions /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/NetworkInterfaces/{*NetworkInterfaceId*}/NetworkDeviceFunctions /redfish/v1/Systems/{*ComputerSystemId*}/NetworkInterfaces/{*NetworkInterfaceId*}/NetworkDeviceFunctions
NetworkInterfaceCollection	/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/NetworkInterfaces /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/NetworkInterfaces /redfish/v1/Systems/{*ComputerSystemId*}/NetworkInterfaces
NetworkPortCollection	/redfish/v1/Chassis/{*ChassisId*}/NetworkAdapters/{*NetworkAdapterId*}/NetworkPorts /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/NetworkInterfaces/{*NetworkInterfaceId*}/NetworkPorts /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/NetworkInterfaces/{*NetworkInterfaceId*}/NetworkPorts /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/NetworkInterfaces/{*NetworkInterfaceId*}/NetworkPorts /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/NetworkInterfaces/{*NetworkInterfaceId*}/NetworkPorts /redfish/v1/Systems/{*ComputerSystemId*}/NetworkInterfaces/{*NetworkInterfaceId*}/NetworkPorts
OperatingConfigCollection	/redfish/v1/Systems/{*ComputerSystemId*}/OperatingConfigs /redfish/v1/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/OperatingConfigs
OutletCollection	/redfish/v1/PowerEquipment/RackPDUs/{*PowerDistributionId*}/Outlets /redfish/v1/PowerEquipment/TransferSwitches/{*PowerDistributionId*}/Outlets
OutletGroupCollection	/redfish/v1/PowerEquipment/RackPDUs/{*PowerDistributionId*}/OutletGroups /redfish/v1/PowerEquipment/TransferSwitches/{*PowerDistributionId*}/OutletGroups

Collection type	URIs
PCIeDeviceCollection	/redfish/v1/Chassis/{*ChassisId*}/PCIeDevices /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/PCIeDevices /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/PCIeDevices /redfish/v1/Systems/{*ComputerSystemId*}/PCIeDevices
PCIeFunctionCollection	/redfish/v1/Chassis/{*ChassisId*}/PCIeDevices/{*PCIeDeviceId*}/PCIeFunctions /redfish/v1/CompositionService/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/PCIeDevices/{*PCIeDeviceId*}/PCIeFunctions /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/PCIeDevices/{*PCIeDeviceId*}/PCIeFunctions /redfish/v1/Systems/{*ComputerSystemId*}/PCIeDevices/{*PCIeDeviceId*}/PCIeFunctions
PortCollection	/redfish/v1/Chassis/{*ChassisId*}/MediaControllers/{*MediaControllerId*}/Ports /redfish/v1/CompositionService/ ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/StorageControllers/{*StorageControllerMemberId*}/Ports /redfish/v1/CompositionService/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StorageControllers/{*StorageControllerMemberId*}/Ports /redfish/v1/Fabrics/{*FabricId*}/Switches/{*SwitchId*}/Ports /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/StorageControllers/{*StorageControllerMemberId*}/Ports /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StorageControllers/{*StorageControllerMemberId*}/Ports /redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters/{*FabricAdapterId*}/Ports /redfish/v1/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StorageControllers/{*StorageControllerMemberId*}/Ports
PowerDistributionCollection	/redfish/v1/PowerEquipment/FloorPDUs /redfish/v1/PowerEquipment/RackPDUs /redfish/v1/PowerEquipment/Switchgear /redfish/v1/PowerEquipment/TransferSwitches
PowerDomainCollection	/redfish/v1/Facilities/{*FacilityId*}/PowerDomains
ProcessorCollection	/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Processors/{*ProcessorId*}/SubProcessors /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/SubProcessors /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Processors/{*ProcessorId*}/SubProcessors /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/SubProcessors /redfish/v1/Systems/{*ComputerSystemId*}/Processors /redfish/v1/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/SubProcessors
ResourceBlockCollection	/redfish/v1/CompositionService/ResourceBlocks /redfish/v1/ResourceBlocks

Collection type	URIs
RoleCollection	/redfish/v1/AccountService/Roles /redfish/v1/Managers/{*ManagerId*}/RemoteAccountService/Roles
RouteEntryCollection	/redfish/v1/Fabrics/{*FrabricId*}/Switches/{*SwitchId*}/Ports/{*PortId*}/LPRT /redfish/v1/Fabrics/{*FrabricId*}/Switches/{*SwitchId*}/Ports/{*PortId*}/MPRT /redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters/{*FabricAdapterId*}/MSDT /redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters/{*FabricAdapterId*}/Ports/{*PortId*}/LPRT /redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters/{*FabricAdapterId*}/Ports/{*PortId*}/MPRT /redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters/{*FabricAdapterId*}/SSDT
RouteSetEntryCollection	/redfish/v1/Fabrics/{*FrabricId*}/Switches/{*SwitchId*}/Ports/{*PortId*}/LPRT/{*LPRTId*}/RouteSet /redfish/v1/Fabrics/{*FrabricId*}/Switches/{*SwitchId*}/Ports/{*PortId*}/MPRT/{*MPRTId*}/RouteSet /redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters/{*FabricAdapterId*}/MSDT/{*MSDTId*}/RouteSet /redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters/{*FabricAdapterId*}/Ports/{*PortId*}/LPRT/{*LPRTId*}/RouteSet /redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters/{*FabricAdapterId*}/Ports/{*PortId*}/MPRT/{*MPRTId*}/RouteSet /redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters/{*FabricAdapterId*}/SSDT/{*SSDTId*}/RouteSet
SecureBootDatabaseCollection	/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SecureBoot/SecureBootDatabases /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SecureBoot/SecureBootDatabases /redfish/v1/Systems/{*ComputerSystemId*}/SecureBoot/SecureBootDatabases
SensorCollection	/redfish/v1/Chassis/{*ChassisId*}/Sensors /redfish/v1/Facilities/{*FacilityId*}/Sensors /redfish/v1/PowerEquipment/FloorPDUs/{*PowerDistributionId*}/Sensors /redfish/v1/PowerEquipment/RackPDUs/{*PowerDistributionId*}/Sensors /redfish/v1/PowerEquipment/Switchgear/{*PowerDistributionId*}/Sensors /redfish/v1/PowerEquipment/TransferSwitches/{*PowerDistributionId*}/Sensors
SerialInterfaceCollection	/redfish/v1/Managers/{*ManagerId*}/SerialInterfaces
SessionCollection	/redfish/v1/SessionService/Sessions
SignatureCollection	/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SecureBoot/SecureBootDatabases/{*DatabaseId*}/Signatures /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SecureBoot/SecureBootDatabases/{*DatabaseId*}/Signatures /redfish/v1/Systems/{*ComputerSystemId*}/SecureBoot/SecureBootDatabases/{*DatabaseId*}/Signatures
SimpleStorageCollection	/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SimpleStorage /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SimpleStorage /redfish/v1/Systems/{*ComputerSystemId*}/SimpleStorage

Collection type	URIs
SoftwareInventoryCollection	/redfish/v1/UpdateService/FirmwareInventory /redfish/v1/UpdateService/SoftwareInventory
StorageCollection	/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Storage /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Storage /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage /redfish/v1/Systems/{*ComputerSystemId*}/Storage
SwitchCollection	/redfish/v1/Fabrics/{*FabricId*}/Switches
TaskCollection	/redfish/v1/TaskService/Tasks
TriggersCollection	/redfish/v1/TelemetryService/Triggers
VCATEntryCollection	/redfish/v1/Fabrics/{*FabricId*}/Switches/{*SwitchId*}/Ports/{*PortId*}/VCAT /redfish/v1/Systems/{*SystemId*}/FabricAdapters/{*FabricAdapterId*}/Ports/{*PortId*}/VCAT /redfish/v1/Systems/{*SystemId*}/FabricAdapters/{*FabricAdapterId*}/REQ-VCAT /redfish/v1/Systems/{*SystemId*}/FabricAdapters/{*FabricAdapterId*}/RSP-VCAT
VirtualMediaCollection	/redfish/v1/Managers/{*ManagerId*}/VirtualMedia
VLanNetworkInterfaceCollection	/redfish/v1/Chassis/{*ChassisId*}/NetworkAdapters/{*NetworkAdapterId*}/NetworkDeviceFunctions/{*NetworkDeviceFunctionId*}/Ethernet/VLANs /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/EthernetInterfaces/{*EthernetInterfaceId*}/VLANs /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/EthernetInterfaces/{*EthernetInterfaceId*}/VLANs /redfish/v1/Managers/{*ManagerId*}/EthernetInterfaces/{*EthernetInterfaceId*}/VLANs /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/EthernetInterfaces/{*EthernetInterfaceId*}/VLANs /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/EthernetInterfaces/{*EthernetInterfaceId*}/VLANs /redfish/v1/Systems/{*ComputerSystemId*}/EthernetInterfaces/{*EthernetInterfaceId*}/VLANs

Collection type	URIs
VolumeCollection	/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes /redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes /redfish/v1/StorageServices/*{StorageServiceId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes /redfish/v1/StorageServices/*{StorageServiceId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes /redfish/v1/StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes /redfish/v1/StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes /redfish/v1/StorageServices/*{StorageServiceId}*/Volumes /redfish/v1/StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes /redfish/v1/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes /redfish/v1/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes /redfish/v1/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes /redfish/v1/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes /redfish/v1/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes
ZoneCollection	/redfish/v1/CompositionService/ResourceZones /redfish/v1/Fabrics/*{FabricId}*/Zones

6 Schema Reference Guide

The DMTF's Redfish Documentation Generator merges the Redfish Schema file text with supplemental text to build this guide.

6.1 AccelerationFunction 1.0.2

v1.0
2018.3

The AccelerationFunction schema describes an acceleration function that a processor implements. This can include functions such as audio processing, compression, encryption, packet inspection, packet switching, scheduling, or video processing.

URIs:

/redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Processors/{*ProcessorId*}/AccelerationFunctions/{*AccelerationFunctionId*} /redfish/
v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/AccelerationFunctions/{*AccelerationFunctionId*} /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Processors/{*ProcessorId*}/AccelerationFunctions/{*AccelerationFunctionId*} /redfish/
v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/AccelerationFunctions/{*AccelerationFunctionId*} /redfish/v1/
Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/AccelerationFunctions/{*AccelerationFunctionId*}

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.

@odata.type	string *read-only* *required*	The type of a resource.
AccelerationFunctionType	string (enum) *read-only* *(null)*	The acceleration function type. *For the possible property values, see AccelerationFunctionType in Property details.*
Actions {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
FpgaReconfigurationSlots [ ]	array (string) *read-only*	An array of the reconfiguration slot identifiers of the FPGA that this acceleration function occupies.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other Resources that are related to this Resource.
Endpoints [{	array	An array of links to the endpoints that connect to this acceleration function.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Endpoints@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeFunctions [{	array	An array of links to the PCIeFunctions associated with this acceleration function.
@odata.id	string *read-only*	Link to a PCIeFunction resource. See the Links section and the *PCIeFunction* schema for details.
}]		
PCIeFunctions@odata.count	integer *read-only*	The number of items in a collection.

	string *read-only*	
}		
Manufacturer	string *read-only*	The acceleration function code manufacturer.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PowerWatts	integer (W) *read-only*	The acceleration function power consumption, in watts.
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.
UUID	string *read-only* *(null)*	The UUID for this acceleration function.
Version	string *read-only*	The acceleration function version.

6.1.1 Property details

6.1.1.1 AccelerationFunctionType

The acceleration function type.

String	Description
AudioProcessing	An audio processing function.
Compression	A compression function.
Encryption	An encryption function.
OEM	An OEM-defined acceleration function.
PacketInspection	A packet inspection function.
PacketSwitch	A packet switch function.
Scheduler	A scheduler function.

String	Description
VideoProcessing	A video processing function.

6.2 AccelerationFunctionCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/AccelerationFunctions
/redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/AccelerationFunctions
/redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/AccelerationFunctions /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/AccelerationFunctions
/redfish/v1/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/AccelerationFunctions

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a AccelerationFunction resource. See the Links section and the *AccelerationFunction* schema for details.
}]		

Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.3 AccountService 1.7.1

v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2019.4	2019.2	2019.1	2018.3	2018.1	2017.1	2016.3	1.0

The AccountService schema defines an account service. The properties are common to, and enable management of, all user accounts. The properties include the password requirements and control features, such as account lockout. The schema also contains links to the manager accounts and roles.

URIs:

/redfish/v1/AccountService /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.

@odata.type	string *read-only* *required*	The type of a resource.
AccountLockoutCounterResetAfter	integer (s) *read-write*	The period of time, in seconds, between the last failed login attempt and the reset of the lockout threshold counter. This value must be less than or equal to the AccountLockoutDuration value. A reset sets the counter to `0` .
AccountLockoutCounterResetEnabled *(v1.5+)*	boolean *read-write*	An indication of whether the threshold counter is reset after AccountLockoutCounterResetAfter expires. If `true` , it is reset. If `false` , only a successful login resets the threshold counter and if the user reaches the AccountLockoutThreshold limit, the account will be locked out indefinitely and only an administrator-issued reset clears the threshold counter. If this property is absent, the default is `true` .
AccountLockoutDuration	integer (s) *read-write* *(null)*	The period of time, in seconds, that an account is locked after the number of failed login attempts reaches the account lockout threshold, within the period between the last failed login attempt and the reset of the lockout threshold counter. If this value is `0` , no lockout will occur. If the AccountLockoutCounterResetEnabled value is `false` , this property is ignored.
AccountLockoutThreshold	integer *read-write* *(null)*	The number of allowed failed login attempts before a user account is locked for a specified duration. If `0` , the account is never locked.
Accounts {	object	The collection of manager accounts. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *ManagerAccount*. See the ManagerAccount schema for details.
}		
Actions *(v1.2+)* {}	object	The available actions for this resource.
ActiveDirectory *(v1.3+)* {	object	The first Active Directory external account provider that this account service supports.
AccountProviderType *(deprecated v1.5)*	string (enum) *read-only* *(null)*	The type of external account provider to which this service connects. *For the possible property values, see AccountProviderType in Property details. Deprecated in v1.5 and later. This property is deprecated because the account provider type is known when used in the LDAP and ActiveDirectory objects.*
Authentication {	object	The authentication information for the external account provider.

AuthenticationType	string (enum) *read-write (null)*	The type of authentication used to connect to the external account provider. *For the possible property values, see AuthenticationType in Property details.*
KerberosKeytab	string *read-write (null)*	The Base64-encoded version of the Kerberos keytab for this service. A PATCH or PUT operation writes the keytab. This property is `null` in responses.
Oem {}	object	The OEM extension property. For property details, see Oem.
Password	string *read-write (null)*	The password for this service. A PATCH or PUT request writes the password. This property is `null` in responses.
Token	string *read-write (null)*	The token for this service. A PATCH or PUT operation writes the token. This property is `null` in responses.
Username	string *read-write*	The user name for the service.
}		
Certificates *(v1.4+)* {	object	The link to a collection of certificates that the external account provider uses. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Certificate*. See the Certificate schema for details.
}		
LDAPService {	object	The additional mapping information needed to parse a generic LDAP service.
Oem {}	object	The OEM extension property. For property details, see Oem.
SearchSettings {	object	The required settings to search an external LDAP service.

BaseDistinguishedNames [ ]	array (string, null) *read-write*	The base distinguished names to use to search an external LDAP service.
GroupNameAttribute	string *read-write (null)*	The attribute name that contains the LDAP group name entry.
GroupsAttribute	string *read-write (null)*	The attribute name that contains the groups for a user on the LDAP user entry.
UsernameAttribute	string *read-write (null)*	The attribute name that contains the LDAP user name entry.
}		
}		
PasswordSet *(v1.7+)*	boolean *read-only*	Indicates if the Password property is set.
RemoteRoleMapping [{	array	The mapping rules to convert the external account providers account information to the local Redfish role.
LocalRole	string *read-write (null)*	The name of the local Redfish role to which to map the remote user or group.
Oem {}	object	The OEM extension property. For property details, see Oem.
RemoteGroup	string *read-write (null)*	The name of the remote group, or the remote role in the case of a Redfish service, that maps to the local Redfish role to which this entity links.

RemoteUser	string *read-write (null)*	The name of the remote user that maps to the local Redfish role to which this entity links.
}]		
ServiceAddresses [ ]	array (string, null) *read-write*	The addresses of the user account providers to which this external account provider links. The format of this field depends on the type of external account provider.
ServiceEnabled	boolean *read-write (null)*	An indication of whether this service is enabled.
}		
AdditionalExternalAccountProviders *(v1.3+)* {	object	The additional external account providers that this account service uses. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *ExternalAccountProvider*. See the ExternalAccountProvider schema for details.
}		
AuthFailureLoggingThreshold	integer *read-write*	The number of authorization failures that are allowed before the failed attempt is logged to the manager log.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
LDAP *(v1.3+)* {	object	The first LDAP external account provider that this account service supports.

AccountProviderType *(deprecated v1.5)*	string (enum) *read-only (null)*	The type of external account provider to which this service connects. *For the possible property values, see AccountProviderType in Property details. Deprecated in v1.5 and later. This property is deprecated because the account provider type is known when used in the LDAP and ActiveDirectory objects.*
Authentication {	object	The authentication information for the external account provider.
AuthenticationType	string (enum) *read-write (null)*	The type of authentication used to connect to the external account provider. *For the possible property values, see AuthenticationType in Property details.*
KerberosKeytab	string *read-write (null)*	The Base64-encoded version of the Kerberos keytab for this service. A PATCH or PUT operation writes the keytab. This property is `null` in responses.
Oem {}	object	The OEM extension property. For property details, see Oem.
Password	string *read-write (null)*	The password for this service. A PATCH or PUT request writes the password. This property is `null` in responses.
Token	string *read-write (null)*	The token for this service. A PATCH or PUT operation writes the token. This property is `null` in responses.
Username	string *read-write*	The user name for the service.
}		
Certificates *(v1.4+)* {	object	The link to a collection of certificates that the external account provider uses. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Certificate*. See the Certificate schema for details.
}		

LDAPService {	object	The additional mapping information needed to parse a generic LDAP service.
Oem {}	object	The OEM extension property. For property details, see Oem.
SearchSettings {	object	The required settings to search an external LDAP service.
BaseDistinguishedNames [ ]	array (string, null) read-write	The base distinguished names to use to search an external LDAP service.
GroupNameAttribute	string read-write (null)	The attribute name that contains the LDAP group name entry.
GroupsAttribute	string read-write (null)	The attribute name that contains the groups for a user on the LDAP user entry.
UsernameAttribute	string read-write (null)	The attribute name that contains the LDAP user name entry.
}		
}		
PasswordSet (v1.7+)	boolean read-only	Indicates if the Password property is set.
RemoteRoleMapping [{	array	The mapping rules to convert the external account providers account information to the local Redfish role.
LocalRole	string read-write (null)	The name of the local Redfish role to which to map the remote user or group.
Oem {}	object	The OEM extension property. For property details, see Oem.

RemoteGroup	string *read-write (null)*	The name of the remote group, or the remote role in the case of a Redfish service, that maps to the local Redfish role to which this entity links.
RemoteUser	string *read-write (null)*	The name of the remote user that maps to the local Redfish role to which this entity links.
}]		
ServiceAddresses [ ]	array (string, null) *read-write*	The addresses of the user account providers to which this external account provider links. The format of this field depends on the type of external account provider.
ServiceEnabled	boolean *read-write (null)*	An indication of whether this service is enabled.
}		
LocalAccountAuth *(v1.3+)*	string (enum) *read-write*	An indication of how the service uses the accounts collection within this account service as part of authentication. The enumerated values describe the details for each mode. *For the possible property values, see LocalAccountAuth in Property details.*
MaxPasswordLength	integer *read-only*	The maximum password length for this account service.
MinPasswordLength	integer *read-only*	The minimum password length for this account service.
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

PrivilegeMap *(v1.1+)* {	object	The link to the mapping of the privileges required to complete a requested operation on a URI associated with this service. See the *PrivilegeRegistry* schema for details on this property.
@odata.id	string *read-only*	Link to a PrivilegeRegistry resource. See the Links section and the *PrivilegeRegistry* schema for details.
}		
Roles {	object	The collection of Redfish roles. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Role*. See the Role schema for details.
}		
ServiceEnabled	boolean *read-write* *(null)*	An indication of whether the account service is enabled. If `true`, it is enabled. If `false`, it is disabled and users cannot be created, deleted, or modified, and new sessions cannot be started. However, established sessions might still continue to run. Any service, such as the session service, that attempts to access the disabled account service fails. However, this does not affect HTTP Basic Authentication connections.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.3.1 Property details

6.3.1.1 AccountProviderType

The type of external account provider to which this service connects.

String	Description
ActiveDirectoryService	An external Active Directory service.
LDAPService	A generic external LDAP service.
OEM	An OEM-specific external authentication or directory service.
RedfishService	An external Redfish service.

6.3.1.2 AuthenticationType

The type of authentication used to connect to the external account provider.

String	Description
KerberosKeytab	A Kerberos keytab.
OEM	An OEM-specific authentication mechanism.
Token	An opaque authentication token.
UsernameAndPassword	A user name and password combination.

6.3.1.3 LocalAccountAuth

An indication of how the service uses the accounts collection within this account service as part of authentication. The enumerated values describe the details for each mode.

String	Description
Disabled	The service never authenticates users based on the account service-defined accounts collection.
Enabled	The service authenticates users based on the account service-defined accounts collection.
Fallback	The service authenticates users based on the account service-defined accounts collection only if any external account providers are currently unreachable.
LocalFirst (v1.6+)	The service first authenticates users based on the account service-defined accounts collection. If authentication fails, the service authenticates by using external account providers.

6.4 ActionInfo 1.1.2

v1.1	v1.0
2018.2	2016.2

The ActionInfo schema defines the supported parameters and other information for a Redfish action. Supported parameters can differ among vendors and even among Resource instances. This data can ensure that action requests from applications contain supported parameters.

@odata.context	string read-only	The OData description of a payload.
@odata.etag	string read-only	The current ETag of the resource.

@odata.id	string read-only required	The unique identifier for a resource.
@odata.type	string read-only required	The type of a resource.
Description	string read-only (null)	The description of this resource. Used for commonality in the schema definitions.
Id	string read-only required	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string read-only required	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Parameters [{	array	The list of parameters included in the specified Redfish action.
AllowableValues [ ]	array (string, null) read-only	The allowable values for this parameter as applied to this action target.
DataType	string (enum) read-only (null)	The JSON property type for this parameter. *For the possible property values, see DataType in Property details.*
MaximumValue (v1.1+)	number read-only (null)	The maximum supported value for this parameter.
MinimumValue (v1.1+)	number read-only (null)	The minimum supported value for this parameter.

Name	string *read-only* *required*	The name of the parameter for this action.
ObjectDataType	string *read-only* *(null)*	The data type of an object-based parameter.
Required	boolean *read-only*	An indication of whether the parameter is required to complete this action.
}]		

6.4.1 Property details

6.4.1.1 DataType

The JSON property type for this parameter.

String	Description
Boolean	A boolean.
Number	A number.
NumberArray	An array of numbers.
Object	An embedded JSON object.
ObjectArray	An array of JSON objects.
String	A string.
StringArray	An array of strings.

6.5 AddressPool 1.0.0

v1.0
2019.4

The schema definition of an address pool and its configuration.

URIs:

/redfish/v1/Fabrics/*{FabricId}*/AddressPools/*{AddressPoolId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
GenZ {	object	The Gen-Z related properties for this address pool.
AccessKey	string *read-write* *(null)*	The Access Key required for this address pool.
MaxCID	integer *read-write* *(null)*	The maximum value for the Component Identifier (CID).
MaxSID	integer *read-write* *(null)*	The maximum value for the Subnet Identifier (SID).
MinCID	integer *read-write* *(null)*	The minimum value for the Component Identifier (CID).
MinSID	integer *read-write* *(null)*	The minimum value for the Subnet Identifier (SID).

}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other Resources that are related to this Resource.
Endpoints [{	array	An array of links to the endpoints that this address pool contains.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Endpoints@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
Zones [{	array	An array of links to the zones that this address pool contains.
@odata.id	string *read-only*	Link to a Zone resource. See the Links section and the *Zone* schema for details.
}]		
Zones@odata.count	integer *read-only*	The number of items in a collection.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.

6.6 AddressPoolCollection

URIs:

/redfish/v1/Fabrics/*{FabricId}*/AddressPools

@odata.context *read-only*	string	The OData description of a payload.
@odata.etag *read-only*	string	The current ETag of the resource.
@odata.id *read-only*	string	The unique identifier for a resource.
@odata.type *read-only*	string	The type of a resource.
Description *read-only (null)*	string	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id *read-only*	string	Link to a AddressPool resource. See the Links section and the *AddressPool* schema for details.
}]		
Members@odata.count *read-only*	integer	The number of items in a collection.
Members@odata.nextLink *read-only*	string	The URI to the resource containing the next set of partial members.
Name *read-only*	string	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.7 Aggregate 1.0.0

v1.0
2020.2

The Aggregate schema describes a grouping method for an aggregation service. Aggregates are formal groups of resources that are more persistent than ad hoc groupings.

URIs:

/redfish/v1/AggregationService/Aggregates/*{AggregateId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#Aggregate.AddElements {}	object	This action is used to add one or more resources to the aggregate. *For more information, see the Actions section below.*
#Aggregate.RemoveElements {}	object	This action is used to remove one or more resources from the aggregate. *For more information, see the Actions section below.*
#Aggregate.Reset {}	object	This action is used to reset a collection of resources. For example, this could be an aggregate or a list of computer systems. *For more information, see the Actions section below.*
#Aggregate.SetDefaultBootOrder {}	object	This action is used to restore the boot order to the default state for the computer systems that are members of this aggregate. *For more information, see the Actions section below.*
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

Elements [{	array * required*	The elements of this aggregate.
Resource	read-write	
}]		
Elements@odata.count	integer read-only	The number of items in a collection.
ElementsCount	integer read-only (null)	The number of entries in the Elements array.
Id	string read-only required	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string read-only required	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.7.1 Actions

6.7.1.1 AddElements

This action is used to add one or more resources to the aggregate.

URIs:

/redfish/v1/AggregationService/Aggregates/*{AggregateId}*/Actions/Aggregate.AddElements

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
Elements [{	array *required*	An array of resource links to add to the Elements array.
Resource	*read-write*	
}]		
}		

6.7.1.2 RemoveElements

This action is used to remove one or more resources from the aggregate.

URIs:

/redfish/v1/AggregationService/Aggregates/*{AggregateId}*/Actions/Aggregate.RemoveElements

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
Elements [{	array *required*	An array of resource links to remove from the Elements array.
Resource	*read-write*	
}]		
}		

6.7.1.3 Reset

This action is used to reset a collection of resources. For example, this could be an aggregate or a list of computer systems.

URIs:

/redfish/v1/AggregationService/Aggregates/*{AggregateId}*/Actions/Aggregate.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
BatchSize	integer *optional*	The number of elements in each batch being reset.
DelayBetweenBatchesInSeconds	integer (s) *optional*	The delay of the batches of elements being reset in seconds.
ResetType	string (enum) *optional*	The type of reset. *For the possible property values, see ResetType in Property details.*
}		

6.7.1.4 SetDefaultBootOrder

This action is used to restore the boot order to the default state for the computer systems that are members of this aggregate.

URIs:

/redfish/v1/AggregationService/Aggregates/*{AggregateId}*/Actions/Aggregate.SetDefaultBootOrder

(This action takes no parameters.)

6.7.2 Property details

6.7.2.1 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.

String	Description
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.
On	Turn on the unit.
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.8 AggregateCollection

URIs:

/redfish/v1/AggregationService/Aggregates

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Aggregate resource. See the Links section and the *Aggregate* schema for details.
}]		

Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.9 AggregationService 1.0.0

v1.0
2020.2

The AggregationService schema contains properties for managing aggregation operations, either on ad hoc combinations of resources or on defined sets of resources called aggregates. Access points define the properties needed to access the entity being aggregated and connection methods describe the protocol or other semantics of the connection.

URIs:

/redfish/v1/AggregationService

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.

@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#AggregationService.Reset {}	object	This action is used to reset a set of resources. For example this could be a list of computer systems. *For more information, see the Actions section below.*
#AggregationService.SetDefaultBootOrder {}	object	This action is used to restore the boot order to the default state for the specified computer systems. *For more information, see the Actions section below.*
}		
Aggregates {	object	The link to the collection of aggregates associated with this service. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Aggregate*. See the Aggregate schema for details.
}		
AggregationSources {	object	The link to the collection of aggregation sources associated with this service. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *AggregationSource*. See the AggregationSource schema for details.
}		
ConnectionMethods {	object	The link to the collection of connection methods associated with this service. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *ConnectionMethod*. See the ConnectionMethod schema for details.
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

Id	string read-only required	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string read-only required	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
ServiceEnabled	boolean read-write (null)	An indication of whether the aggregation service is enabled.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.9.1 Actions

6.9.1.1 Reset

This action is used to reset a set of resources. For example this could be a list of computer systems.

URIs:

/redfish/v1/AggregationService/Actions/AggregationService.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
BatchSize	integer optional	The number of elements in each batch being reset.
DelayBetweenBatchesInSeconds	integer (s) optional	The delay of the batches of elements being reset in seconds.

ResetType	string (enum) optional	The type of reset. *For the possible property values, see ResetType in Property details.*
TargetURIs [{	array required	An array of links to the resources being reset.
Resource	read-write	
}]		
}		

6.9.1.2 SetDefaultBootOrder

This action is used to restore the boot order to the default state for the specified computer systems.

URIs:

/redfish/v1/AggregationService/Actions/AggregationService.SetDefaultBootOrder

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
Systems [{	array required	The computer systems to restore.
@odata.id	string read-only	Link to a ComputerSystem resource. See the Links section and the *ComputerSystem* schema for details.
}]		
}		

6.9.2 Property details

6.9.2.1 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.
On	Turn on the unit.
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.10 AggregationSource 1.0.0

v1.0
2020.2

The AggregationSource schema is used to represent the source of information for a subset of the resources provided by a Redfish service. It can be thought of as a provider of information. As such, most such interfaces have requirements to support the gathering of information like address and account used to access the information.

URIs:

/redfish/v1/AggregationService/AggregationSources/*{AggregationSourceId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
HostName	string *read-write* *required* *(null)*	The URI of the system to be accessed.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
ConnectionMethod {	object *(null)*	An array of links to the connection methods used to contact this aggregation source. See the *ConnectionMethod* schema for details on this property.
@odata.id	string *read-only*	Link to a ConnectionMethod resource. See the Links section and the *ConnectionMethod* schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
ResourcesAccessed [{	array	An array links to the resources added to the service through this aggregation source. It is recommended that this be the minimal number of properties needed to find the resources that would be lost when the aggregation source is deleted.

Resource	*read-write*	
}]		
ResourcesAccessed@odata.count	integer *read-only*	The number of items in a collection.
}		
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Password	string *read-write (null)*	The password for accessing the aggregation source. The value is `null` in responses.
UserName	string *read-write (null)*	The user name for accessing the aggregation source.

6.11 AggregationSourceCollection

URIs:

/redfish/v1/AggregationService/AggregationSources

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

	string *read-only*	The unique identifier for a resource.
@odata.id		
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a AggregationSource resource. See the Links section and the *AggregationSource* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.12 Assembly 1.2.3

v1.2	*v1.1*	*v1.0*
2018.2	2018.1	2017.3

The Assembly schema defines an assembly. Assembly information contains details about a device, such as part

number, serial number, manufacturer, and production date. It also provides access to the original data for the assembly.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Assembly /redfish/v1/Chassis/*{ChassisId}*/Drives/*{DriveId}*/Assembly /redfish/v1/
Chassis/*{ChassisId}*/NetworkAdapters/*{NetworkAdapterId}*/Assembly /redfish/v1/
Chassis/*{ChassisId}*/PCIeDevices/*{PCIeDeviceId}*/Assembly /redfish/v1/Chassis/*{ChassisId}*/Power/
PowerSupplies/*{PowerSupplyId}*/Assembly /redfish/v1/Chassis/*{ChassisId}*/Thermal/Fans/*{FanId}*/Assembly /redfish/v1/
CompositionService/ResourceBlocks/*{ResourceBlockId}*/Drives/*{DriveId}*/Assembly /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}*/Assembly /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/Assembly /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/Assembly /redfish/v1/
CompositionService/ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Assembly /redfish/v1/
CompositionService/ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Assembly /redfish/v1/
CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Assembly
/redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/Assembly /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/Assembly /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Assembly /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Assembly
/redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Drives/*{DriveId}*/Assembly /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}*/Assembly /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/Assembly /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/Assembly /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Assembly /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Assembly /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Assembly /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/Assembly /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/Assembly /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Assembly
/redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Assembly
/redfish/v1/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Assembly /redfish/v1/
Systems/*{ComputerSystemId}*/PCIeDevices/*{PCIeDeviceId}*/Assembly /redfish/v1/
Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/Assembly /redfish/v1/
Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/Assembly /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Assembly /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Assembly

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
Assemblies [{	array	The assembly records.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
Actions {}	object	The available actions for this Resource.
BinaryDataURI	string *read-only* *(null)*	The URI at which to access an image of the assembly information.
Description	string *read-only* *(null)*	The description of the assembly.
EngineeringChangeLevel	string *read-only* *(null)*	The engineering change level of the assembly.
MemberId	string *read-only* *required*	The identifier for the member within the collection.
Model	string *read-only* *(null)*	The model number of the assembly.

Name	string *read-only* *(null)*	The name of the assembly.
Oem {}	object	The OEM extension property. For property details, see Oem.
PartNumber	string *read-only* *(null)*	The part number of the assembly.
PhysicalContext *(v1.2+)*	string (enum) *read-only*	The area or device to which the assembly data applies. *For the possible property values, see PhysicalContext in Property details.*
Producer	string *read-only* *(null)*	The producer or manufacturer of the assembly.
ProductionDate	string *read-only* *(null)*	The production date of the assembly.
SerialNumber *(v1.2+)*	string *read-only* *(null)*	The serial number of the assembly.
SKU	string *read-only* *(null)*	The SKU of the assembly.
SparePartNumber	string *read-only* *(null)*	The spare part number of the assembly.
Status *(v1.1+)* {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.
Vendor	string *read-only* *(null)*	The vendor of the assembly.

	string *read-only* *(null)*	
Version		The hardware version of the assembly.
}]		
Assemblies@odata.count	integer *read-only*	The number of items in a collection.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.12.1 Property details

6.12.1.1 PhysicalContext

The area or device to which the assembly data applies.

String	Description
Accelerator	An accelerator.
ACInput	An AC input.
ACMaintenanceBypassInput	An AC maintenance bypass input.
ACOutput	An AC output.
ACStaticBypassInput	An AC static bypass input.
ACUtilityInput	An AC utility input.
ASIC	An ASIC device, such as a networking chip or chipset component.
Back	The back of the chassis.

String	Description
Backplane	A backplane within the chassis.
Chassis	The entire chassis.
ComputeBay	Within a compute bay.
CoolingSubsystem	The entire cooling, or air and liquid, subsystem.
CPU	A processor (CPU).
CPUSubsystem	The entire processor (CPU) subsystem.
DCBus	A DC bus.
Exhaust	The air exhaust point or points or region of the chassis.
ExpansionBay	Within an expansion bay.
Fan	A fan.
FPGA	An FPGA.
Front	The front of the chassis.
GPU	A graphics processor (GPU).
GPUSubsystem	The entire graphics processor (GPU) subsystem.
Intake	The air intake point or points or region of the chassis.
LiquidInlet	The liquid inlet point of the chassis.
LiquidOutlet	The liquid outlet point of the chassis.
Lower	The lower portion of the chassis.
Memory	A memory device.
MemorySubsystem	The entire memory subsystem.
Motor	A motor.
NetworkBay	Within a networking bay.
NetworkingDevice	A networking device.
PowerSubsystem	The entire power subsystem.
PowerSupply	A power supply.
PowerSupplyBay	Within a power supply bay.
Rectifier	A rectifier device.

String	Description
Room	The room.
StorageBay	Within a storage bay.
StorageDevice	A storage device.
SystemBoard	The system board (PCB).
Transformer	A transformer.
Upper	The upper portion of the chassis.
VoltageRegulator	A voltage regulator device.

6.13 AttributeRegistry 1.3.3

v1.3	v1.2	v1.1	v1.0
2018.3	2018.1	2017.1	2016.1

The AttributeRegistry schema contains a set of key-value pairs that represent the structure of an attribute registry. It includes mechanisms for building user interfaces, or menus, allowing consistent navigation of the contents. The attribute registry is specific to an implementation or product. The attributes and property names are not standardized.

@odata.type	string read-only required	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this resource.
Description	string read-only (null)	The description of this resource. Used for commonality in the schema definitions.
Id	string read-only required	The identifier that uniquely identifies the resource within the collection of similar resources.
Language	string read-only required	The RFC5646-conformant language code for the attribute registry.

Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OwningEntity	string *read-only* *required*	The organization or company that publishes this attribute registry.
RegistryEntries {	object	The list of all attributes and their metadata for this component.
Attributes [{	array	An array of attributes and their possible values in the attribute registry.
AttributeName	string *read-only* *required*	The unique name for the attribute.
CurrentValue	string, boolean, number *read-only* *(null)*	The placeholder of the current value for the attribute.
DefaultValue	string, boolean, number *read-only* *(null)*	The default value for the attribute.
DisplayName	string *read-only* *(null)*	The user-readable display string for the attribute in the defined language.
DisplayOrder	integer *read-only* *(null)*	The ascending order, as a number, in which this attribute appears relative to other attributes.
GrayOut	boolean *read-only* *(null)*	An indication of whether this attribute is grayed out. A grayed-out attribute is not active and is grayed out in user interfaces but the attribute value can be modified.

HelpText	string *read-only* *(null)*	The help text for the attribute.
Hidden	boolean *read-only* *(null)*	An indication of whether this attribute is hidden in user interfaces.
Immutable	boolean *read-only* *(null)*	An indication of whether this attribute is immutable. Immutable attributes shall not be modified and typically reflect a hardware state.
IsSystemUniqueProperty	boolean *read-only* *(null)*	An indication of whether this attribute is unique for this system and should not be replicated.
LowerBound	integer *read-only* *(null)*	The lower limit for an integer attribute.
MaxLength	integer *read-only* *(null)*	The maximum character length of a string attribute.
MenuPath	string *read-only* *(null)*	The path that describes the menu hierarchy of this attribute.
MinLength	integer *read-only* *(null)*	The minimum character length of the string attribute.
Oem *(v1.3+)* {}	object	The OEM extension property. For property details, see Oem.
ReadOnly	boolean *read-only* *(null)*	An indication of whether this attribute is read-only. A read-only attribute cannot be modified, and should be grayed out in user interfaces.
ResetRequired *(v1.2+)*	boolean *read-only* *(null)*	An indication of whether a system or device reset is required for this attribute value change to take effect.

ScalarIncrement	integer *read-only* *(null)*	The amount to increment or decrement an integer attribute each time a user requests a value change. The `0` value indicates a free-form numeric user-input attribute.
Type	string (enum) *read-only*	The attribute type. *For the possible property values, see Type in Property details.*
UefiDevicePath *(v1.2+)*	string *read-only* *(null)*	The UEFI device path that qualifies this attribute.
UefiKeywordName *(v1.2+)*	string *read-only*	The UEFI keyword string for this attribute.
UefiNamespaceId *(v1.2+)*	string *read-only*	The UEFI namespace ID for the attribute.
UpperBound	integer *read-only* *(null)*	The upper limit for an integer attribute.
Value [{	array	An array of the possible values for enumerated attribute values.
ValueDisplayName	string *read-only* *(null)*	A user-readable display string of the value for the attribute in the defined language.
ValueName	string *read-only* *required*	The unique value name for the attribute.
}]		
ValueExpression	string *read-only* *(null)*	A valid regular expression, according to the Perl regular expression dialect, that validates the attribute value. Applies to only string and integer attributes.
WarningText	string *read-only* *(null)*	The warning text for the attribute.

WriteOnly	boolean *read-only* *(null)*	An indication of whether this attribute is write-only. A write-only attribute reverts to its initial value after settings are applied.
}]		
Dependencies [{	array	An array of dependencies of attributes on this component.
Dependency {	object	The dependency expression for one or more attributes in this attribute registry.
MapFrom [{	array	An array of the map-from conditions for a mapping dependency.
MapFromAttribute	string *read-only*	The attribute to use to evaluate this dependency expression.
MapFromCondition	string (enum) *read-only*	The condition to use to evaluate this dependency expression. *For the possible property values, see MapFromCondition in Property details.*
MapFromProperty	string (enum) *read-only*	The metadata property for the attribute that the MapFromAttribute property specifies to use to evaluate this dependency expression. *For the possible property values, see MapFromProperty in Property details.*
MapFromValue	string, boolean, number *read-only* *(null)*	The value to use to evaluate this dependency expression.
MapTerms	string (enum) *read-only*	The logical term that combines two or more map-from conditions in this dependency expression. For example, `AND` for logical AND, or `OR` for logical OR. *For the possible property values, see MapTerms in Property details.*
}]		
MapToAttribute	string *read-only*	The AttributeName of the attribute that is affected by this dependency expression.
MapToProperty	string (enum) *read-only*	The metadata property for the attribute that contains the map-from condition that evaluates this dependency expression. *For the possible property values, see MapToProperty in Property details.*

MapToValue	string, boolean, number *read-only* *(null)*	The value that the map-to property changes to if the dependency expression evaluates to `true`.
}		
DependencyFor	string *read-only*	The AttributeName of the attribute whose change triggers the evaluation of this dependency expression.
Type	string (enum) *read-only*	The type of the dependency structure. *For the possible property values, see Type in Property details.*
}]		
Menus [{	array	An array for the attributes menus and their hierarchy in the attribute registry.
DisplayName	string *read-only* *(null)*	The user-readable display string of this menu in the defined language.
DisplayOrder	integer *read-only* *(null)*	The ascending order, as a number, in which this menu appears relative to other menus.
GrayOut	boolean *read-only* *(null)*	An indication of whether this menu is grayed out. A grayed-only menu is not accessible in user interfaces.
Hidden *(v1.3+)*	boolean *read-only* *(null)*	An indication of whether this menu is hidden in user interfaces.
MenuName	string *read-only*	The unique name string of this menu.
MenuPath	string *read-only* *(null)*	The path to the menu names that describes this menu hierarchy relative to other menus.
Oem *(v1.3+)* {}	object	The OEM extension property. For property details, see Oem.

ReadOnly	boolean *read-only* *(null)*	An indication of whether this menu is read-only. A read-only menu, its properties, and sub-menus are not accessible in user interfaces.
`} ]`		
`}`		
RegistryVersion	string *read-only* *required*	The attribute registry version.
SupportedSystems [{	array	An array of systems that this attribute registry supports.
FirmwareVersion *(v1.1+)*	string *read-only* *(null)*	Firmware version.
ProductName	string *read-only* *(null)*	The product name of the computer system to which this attribute registry applies.
SystemId	string *read-only* *(null)*	The ID of the systems to which this attribute registry applies.
`} ]`		

6.13.1 Property details

6.13.1.1 MapFromCondition

The condition to use to evaluate this dependency expression.

String	Description
EQU	The logical operation for 'Equal'.
GEQ	The logical operation for 'Greater than or Equal'.
GTR	The logical operation for 'Greater than'.
LEQ	The logical operation for 'Less than or Equal'.
LSS	The logical operation for 'Less than'.

String	Description
NEQ	The logical operation for 'Not Equal'.

6.13.1.2 MapFromProperty

The metadata property for the attribute that the MapFromAttribute property specifies to use to evaluate this dependency expression.

String	Description
CurrentValue	The dependency on an attribute's CurrentValue.
DefaultValue	The dependency on an attribute's DefaultValue.
GrayOut	The dependency on an attribute's GrayOut state.
Hidden	The dependency on an attribute's Hidden state.
LowerBound	The dependency on an attribute's LowerBound.
MaxLength	The dependency on an attribute's MaxLength.
MinLength	The dependency on an attribute's MinLength.
ReadOnly	The dependency on an attribute's ReadOnly state.
ScalarIncrement	The dependency on an attribute's ScalarIncrement.
UpperBound	The dependency on an attribute's UpperBound.
WriteOnly	The dependency on an attribute's WriteOnly state.

6.13.1.3 MapTerms

The logical term that combines two or more map-from conditions in this dependency expression. For example, `AND` for logical AND, or `OR` for logical OR.

String	Description
AND	The operation used for logical 'AND' of dependency terms.
OR	The operation used for logical 'OR' of dependency terms.

6.13.1.4 MapToProperty

The metadata property for the attribute that contains the map-from condition that evaluates this dependency expression.

String	Description
CurrentValue	The dependency that affects an attribute's CurrentValue.
DefaultValue	The dependency that affects an attribute's DefaultValue.
DisplayName	The dependency that affects an attribute's DisplayName.
DisplayOrder	The dependency that affects an attribute's DisplayName.
GrayOut	The dependency that affects an attribute's GrayOut state.
HelpText	The dependency that affects an attribute's HelpText.
Hidden	The dependency that affects an attribute's Hidden state.
Immutable	The dependency that affects an attribute's Immutable state.
LowerBound	The dependency that affects an attribute's LowerBound.
MaxLength	The dependency that affects an attribute's MaxLength.
MinLength	The dependency that affects an attribute's MinLength.
ReadOnly	The dependency that affects an attribute's ReadOnly state.
ScalarIncrement	The dependency that affects an attribute's ScalarIncrement.
UpperBound	The dependency that affects an attribute's UpperBound.
ValueExpression	The dependency that affects an attribute's ValueExpression.
WarningText	The dependency that affects an attribute's WarningText.
WriteOnly	The dependency that affects an attribute's WriteOnly state.

6.13.1.5 Type

The type of the dependency structure.

String	Description
Map	A simple mapping dependency. If the condition evaluates to `true`, the attribute or state changes to the mapped value.

6.14 Bios 1.1.1

v1.1	v1.0
2019.2	2016.1

The Bios schema contains properties related to the BIOS attribute registry. The attribute registry describes the system-specific BIOS attributes and actions for changing to BIOS settings. Changes to the BIOS typically require a system reset before they take effect. It is likely that a client finds the `@Redfish.Settings` term in this resource, and if it is found, the client makes requests to change BIOS settings by modifying the resource identified by the `@Redfish.Settings` term.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Bios /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Bios /redfish/v1/Systems/{*ComputerSystemId*}/Bios

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only required*	The unique identifier for a resource.
@odata.type	string *read-only required*	The type of a resource.
Actions {	object	The available actions for this resource.
#Bios.ChangePassword {}	object	This action changes a BIOS password. *For more information, see the Actions section below.*
#Bios.ResetBios {}	object	This action resets the BIOS attributes to default. *For more information, see the Actions section below.*
}		
AttributeRegistry	string *read-only* *(null)*	The resource ID of the attribute registry that has the system-specific information about a BIOS resource.
Attributes {	object	The list of BIOS attributes specific to the manufacturer or provider.
(pattern) {} [ ]	array, boolean, integer, number, object, string *(null)*	Property names follow regular expression pattern "^([a-zA-Z_][a-zA-Z0-9_]*)?@(odata|Redfish|Message)\.[a-zA-Z_][a-zA-Z0-9_]*$"

	string, boolean, number	
(pattern)	*read-write* (null)	Property names follow regular expression pattern "^[A-Za-z][A-Za-z0-9_]+$"
}		
Description	string *read-only* (null)	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links *(v1.1+)* {	object	The links to other resources that are related to this resource.
ActiveSoftwareImage {	object	The link to the software inventory that represents the active BIOS firmware image. See the *SoftwareInventory* schema for details on this property.
@odata.id	string *read-only*	Link to a SoftwareInventory resource. See the Links section and the *SoftwareInventory* schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
SoftwareImages [{	array	The images that are associated with this BIOS.
@odata.id	string *read-only*	Link to a SoftwareInventory resource. See the Links section and the *SoftwareInventory* schema for details.
}]		
SoftwareImages@odata.count	integer *read-only*	The number of items in a collection.
}		
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.14.1 Actions

6.14.1.1 ChangePassword

This action changes a BIOS password.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Bios/Actions/
Bios.ChangePassword /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Bios/Actions/
Bios.ChangePassword /redfish/v1/Systems/*{ComputerSystemId}*/Bios/Actions/Bios.ChangePassword

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
NewPassword	string *required*	The new BIOS password.
OldPassword	string *required*	The existing BIOS password.
PasswordName	string *required*	The name of the BIOS password to change.
}		

6.14.1.2 ResetBios

This action resets the BIOS attributes to default.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Bios/Actions/
Bios.ResetBios /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Bios/Actions/
Bios.ResetBios /redfish/v1/Systems/*{ComputerSystemId}*/Bios/Actions/Bios.ResetBios

(This action takes no parameters.)

6.15 BootOption 1.0.4

v1.0
2017.3

The BootOption schema reports information about a single boot option in a system. It represents the properties of a bootable device available in the system.

URIs:

/redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/BootOptions/{*BootOptionId*} /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/BootOptions/{*BootOptionId*} /redfish/v1/
Systems/{*ComputerSystemId*}/BootOptions/{*BootOptionId*}

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
Alias	string (enum) *read-only* (null)	The alias of this boot source. *For the possible property values, see Alias in Property details.*

BootOptionEnabled	boolean *read-write* *(null)*	An indication of whether the boot option is enabled. If `true`, it is enabled. If `false`, the boot option that the boot order array on the computer system contains is skipped. In the UEFI context, this property shall influence the load option active flag for the boot option.
BootOptionReference	string *read-only* *required* *(null)*	The unique boot option.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
DisplayName	string *read-only* *(null)*	The user-readable display name of the boot option that appears in the boot order list in the user interface.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
RelatedItem [{	array	An array of links to resources or objects associated with this boot option.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
RelatedItem@odata.count	integer *read-only*	The number of items in a collection.

UefiDevicePath	string *read-only (null)*	The UEFI device path to access this UEFI boot option.

6.15.1 Property details

6.15.1.1 Alias

The alias of this boot source.

String	Description
BiosSetup	Boot to the BIOS setup utility.
Cd	Boot from the CD or DVD.
Diags	Boot to the manufacturer's diagnostics program.
Floppy	Boot from the floppy disk drive.
Hdd	Boot from a hard drive.
None	Boot from the normal boot device.
Pxe	Boot from the Pre-Boot EXecution (PXE) environment.
RemoteDrive	Boot from a remote drive, such as an iSCSI target.
SDCard	Boot from an SD card.
UefiBootNext	Boot to the UEFI device that the BootNext property specifies.
UefiHttp	Boot from a UEFI HTTP network location.
UefiShell	Boot to the UEFI Shell.
UefiTarget	Boot to the UEFI device specified in the UefiTargetBootSourceOverride property.
Usb	Boot from a system BIOS-specified USB device.
Utilities	Boot to the manufacturer's utilities program or programs.

6.16 BootOptionCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/BootOptions

/redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/BootOptions /redfish/v1/
Systems/*{ComputerSystemId}*/BootOptions

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a BootOption resource. See the Links section and the *BootOption* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.17 Certificate 1.2.1

v1.2	*v1.1*	*v1.0*

2020.1	2019.1	2018.3

The Certificate schema describes a certificate that proves the identify of a component, account, or service.

URIs:

/redfish/v1/AccountService/Accounts/{*ManagerAccountId*}/Certificates/{*CertificateId*} /redfish/v1/AccountService/ ActiveDirectory/Certificates/{*CertificateId*} /redfish/v1/AccountService/ ExternalAccountProviders/{*ExternalAccountProviderId*}/Certificates/{*CertificateId*} /redfish/v1/AccountService/LDAP/ Certificates/{*CertificateId*} /redfish/v1/CompositionService/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Boot/Certificates/{*CertificateId*} /redfish/v1/ CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SecureBoot/ SecureBootDatabases/{*DatabaseId*}/Certificates/{*CertificateId*} /redfish/v1/Managers/{*ManagerId*}/NetworkProtocol/ HTTPS/Certificates/{*CertificateId*} /redfish/v1/Managers/{*ManagerId*}/RemoteAccountService/ Accounts/{*ManagerAccountId*}/Certificates/{*CertificateId*} /redfish/v1/Managers/{*ManagerId*}/RemoteAccountService/ ActiveDirectory/Certificates/{*CertificateId*} /redfish/v1/Managers/{*ManagerId*}/RemoteAccountService/ ExternalAccountProviders/{*ExternalAccountProviderId*}/Certificates/{*CertificateId*} /redfish/v1/ Managers/{*ManagerId*}/RemoteAccountService/LDAP/Certificates/{*CertificateId*} /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Boot/Certificates/{*CertificateId*} /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SecureBoot/ SecureBootDatabases/{*DatabaseId*}/Certificates/{*CertificateId*} /redfish/v1/Systems/{*ComputerSystemId*}/Boot/ Certificates/{*CertificateId*} /redfish/v1/Systems/{*ComputerSystemId*}/SecureBoot/ SecureBootDatabases/{*DatabaseId*}/Certificates/{*CertificateId*}

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#Certificate.Rekey *(v1.1+)* {}	object	This action generates a new key-pair for a certificate and produces a certificate signing request. *For more information, see the Actions section below.*

#Certificate.Renew (v1.1+) {}	object	This action generates a certificate signing request by using the existing information and key-pair of the certificate. *For more information, see the Actions section below.*
}		
CertificateString	string *read-only required on create* (null)	The string for the certificate.
CertificateType	string (enum) *read-only required on create* (null)	The format of the certificate. *For the possible property values, see CertificateType in Property details.*
Description	string *read-only* (null)	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Issuer {	object	The issuer of the certificate.
City	string *read-only*	The city or locality of the organization of the entity.
CommonName	string *read-only*	The fully qualified domain name of the entity.
Country	string *read-only*	The country of the organization of the entity.
Email	string *read-only* (null)	The email address of the contact within the organization of the entity.
Organization	string *read-only*	The name of the organization of the entity.

OrganizationalUnit	string *read-only*	The name of the unit or division of the organization of the entity.
State	string *read-only*	The state, province, or region of the organization of the entity.
}		
KeyUsage [ ]	array (string (enum)) *read-only (null)*	The key usage extension, which defines the purpose of the public keys in this certificate. The usages of a key contained within a certificate. *For the possible property values, see KeyUsage in Property details.*
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Subject {	object	The subject of the certificate.
City	string *read-only*	The city or locality of the organization of the entity.
CommonName	string *read-only*	The fully qualified domain name of the entity.
Country	string *read-only*	The country of the organization of the entity.
Email	string *read-only (null)*	The email address of the contact within the organization of the entity.
Organization	string *read-only*	The name of the organization of the entity.
OrganizationalUnit	string *read-only*	The name of the unit or division of the organization of the entity.
State	string *read-only*	The state, province, or region of the organization of the entity.

}		
UefiSignatureOwner *(v1.2+)*	string *read-only* *(null)*	The UEFI signature owner for this certificate.
ValidNotAfter	string *read-only*	The date when the certificate is no longer valid.
ValidNotBefore	string *read-only*	The date when the certificate becomes valid.

6.17.1 Actions

6.17.1.1 Rekey

This action generates a new key-pair for a certificate and produces a certificate signing request.

URIs:

/redfish/v1/AccountService/Accounts/*{ManagerAccountId}*/Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/AccountService/ActiveDirectory/Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/ AccountService/ExternalAccountProviders/*{ExternalAccountProviderId}*/Certificates/*{CertificateId}*/Actions/ Certificate.Rekey /redfish/v1/AccountService/LDAP/Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/ CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Boot/ Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/CompositionService/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/ SecureBootDatabases/*{DatabaseId}*/Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/ Managers/*{ManagerId}*/NetworkProtocol/HTTPS/Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/ Managers/*{ManagerId}*/RemoteAccountService/Accounts/*{ManagerAccountId}*/Certificates/*{CertificateId}*/Actions/ Certificate.Rekey /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/ActiveDirectory/ Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/ ExternalAccountProviders/*{ExternalAccountProviderId}*/Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/ Managers/*{ManagerId}*/RemoteAccountService/LDAP/Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Boot/Certificates/*{CertificateId}*/Actions/ Certificate.Rekey /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/ SecureBootDatabases/*{DatabaseId}*/Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/ Systems/*{ComputerSystemId}*/Boot/Certificates/*{CertificateId}*/Actions/Certificate.Rekey /redfish/v1/ Systems/*{ComputerSystemId}*/SecureBoot/SecureBootDatabases/*{DatabaseId}*/Certificates/*{CertificateId}*/Actions/ Certificate.Rekey

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ChallengePassword	string *optional*	The challenge password to apply to the certificate for revocation requests.
KeyBitLength	integer *optional*	The length of the key, in bits, if needed based on the KeyPairAlgorithm parameter value.
KeyCurveId	string *optional*	The curve ID to use with the key, if needed based on the KeyPairAlgorithm parameter value.
KeyPairAlgorithm	string *optional*	The type of key-pair for use with signing algorithms.
}		

6.17.1.2 Renew

This action generates a certificate signing request by using the existing information and key-pair of the certificate.

URIs:

/redfish/v1/AccountService/Accounts/*{ManagerAccountId}*/Certificates/*{CertificateId}*/Actions/Certificate.Renew
/redfish/v1/AccountService/ActiveDirectory/Certificates/*{CertificateId}*/Actions/Certificate.Renew /redfish/v1/
AccountService/ExternalAccountProviders/*{ExternalAccountProviderId}*/Certificates/*{CertificateId}*/Actions/
Certificate.Renew /redfish/v1/AccountService/LDAP/Certificates/*{CertificateId}*/Actions/Certificate.Renew /redfish/v1/
CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Boot/
Certificates/*{CertificateId}*/Actions/Certificate.Renew /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Certificates/*{CertificateId}*/Actions/Certificate.Renew /redfish/v1/
Managers/*{ManagerId}*/NetworkProtocol/HTTPS/Certificates/*{CertificateId}*/Actions/Certificate.Renew /redfish/v1/
Managers/*{ManagerId}*/RemoteAccountService/Accounts/*{ManagerAccountId}*/Certificates/*{CertificateId}*/Actions/
Certificate.Renew /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/ActiveDirectory/
Certificates/*{CertificateId}*/Actions/Certificate.Renew /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/
ExternalAccountProviders/*{ExternalAccountProviderId}*/Certificates/*{CertificateId}*/Actions/Certificate.Renew /redfish/
v1/Managers/*{ManagerId}*/RemoteAccountService/LDAP/Certificates/*{CertificateId}*/Actions/Certificate.Renew
/redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Boot/Certificates/*{CertificateId}*/Actions/
Certificate.Renew /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Certificates/*{CertificateId}*/Actions/Certificate.Renew /redfish/v1/
Systems/*{ComputerSystemId}*/Boot/Certificates/*{CertificateId}*/Actions/Certificate.Renew /redfish/v1/
Systems/*{ComputerSystemId}*/SecureBoot/SecureBootDatabases/*{DatabaseId}*/Certificates/*{CertificateId}*/Actions/
Certificate.Renew

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ChallengePassword	string *optional*	The challenge password to apply to the certificate for revocation requests.
}		

6.17.2 Property details

6.17.2.1 CertificateType

The format of the certificate.

String	Description
PEM	A Privacy Enhanced Mail (PEM)-encoded certificate.
PKCS7	A Privacy Enhanced Mail (PEM)-encoded PKCS7 certificate.

6.17.2.2 KeyUsage

The key usage extension, which defines the purpose of the public keys in this certificate. The usages of a key contained within a certificate.

String	Description
ClientAuthentication	TLS WWW client authentication.
CodeSigning	Signs downloadable executable code.
CRLSigning	Verifies signatures on certificate revocation lists (CRLs).
DataEncipherment	Directly enciphers raw user data without an intermediate symmetric cipher.
DecipherOnly	Deciphers data while performing a key agreement.
DigitalSignature	Verifies digital signatures, other than signatures on certificates and CRLs.
EmailProtection	Email protection.
EncipherOnly	Enciphers data while performing a key agreement.
KeyAgreement	Key agreement.

String	Description
KeyCertSign	Verifies signatures on public key certificates.
KeyEncipherment	Enciphers private or secret keys.
NonRepudiation	Verifies digital signatures, other than signatures on certificates and CRLs, and provides a non-repudiation service that protects against the signing entity falsely denying some action.
OCSPSigning	Signs OCSP responses.
ServerAuthentication	TLS WWW server authentication.
Timestamping	Binds the hash of an object to a time.

6.18 CertificateCollection

URIs:

/redfish/v1/AccountService/Accounts/*{ManagerAccountId}*/Certificates /redfish/v1/AccountService/ActiveDirectory/
Certificates /redfish/v1/AccountService/ExternalAccountProviders/*{ExternalAccountProviderId}*/Certificates /redfish/v1/
AccountService/LDAP/Certificates /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Boot/Certificates /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Certificates /redfish/v1/Managers/*{ManagerId}*/NetworkProtocol/HTTPS/
Certificates /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/Accounts/*{ManagerAccountId}*/Certificates
/redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/ActiveDirectory/Certificates /redfish/v1/
Managers/*{ManagerId}*/RemoteAccountService/ExternalAccountProviders/*{ExternalAccountProviderId}*/Certificates
/redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/LDAP/Certificates /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Boot/Certificates /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Certificates /redfish/v1/Systems/*{ComputerSystemId}*/Boot/Certificates /redfish/
v1/Systems/*{ComputerSystemId}*/SecureBoot/SecureBootDatabases/*{DatabaseId}*/Certificates

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.

@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Certificate resource. See the Links section and the *Certificate* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.19 CertificateLocations 1.0.2

v1.0
2018.3

The CertificateLocations schema describes a Resource that an administrator can use in order to locate all certificates installed on a given service.

URIs:

/redfish/v1/CertificateService/CertificateLocations

@odata.context	string *read-only*	The OData description of a payload.

@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other Resources that are related to this Resource.
Certificates [{	array	An array of links to the certificates installed on this service.
@odata.id	string *read-only*	Link to a Certificate resource. See the Links section and the *Certificate* schema for details.
}]		
Certificates@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.20 CertificateService 1.0.3

v1.0
2018.3

The CertificateService schema describes a certificate service that represents the actions available to manage certificates and links to the certificates.

URIs:

/redfish/v1/CertificateService

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#CertificateService.GenerateCSR {}	object	This action makes a certificate signing request. *For more information, see the Actions section below.*
#CertificateService.ReplaceCertificate {}	object	This action replaces a certificate. *For more information, see the Actions section below.*
}		
CertificateLocations {	object	The information about the location of certificates. See the *CertificateLocations* schema for details on this property.
@odata.id	string *read-only*	Link to a CertificateLocations resource. See the Links section and the *CertificateLocations* schema for details.
}		

Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.20.1 Actions

6.20.1.1 GenerateCSR

This action makes a certificate signing request.

URIs:

/redfish/v1/CertificateService/Actions/CertificateService.GenerateCSR

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
AlternativeNames [ ]	array (string) *optional*	The additional host names of the component to secure.
CertificateCollection {	object *required*	The link to the certificate collection where the certificate is installed after the certificate authority (CA) signs the certificate. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Certificate*. See the Certificate schema for details.
}		

ChallengePassword 	string *optional*	The challenge password to apply to the certificate for revocation requests.
City	string *required*	The city or locality of the organization making the request.
CommonName	string *required*	The fully qualified domain name of the component to secure.
ContactPerson	string *optional*	The name of the user making the request.
Country	string *required*	The two-letter country code of the organization making the request.
Email	string *optional*	The email address of the contact within the organization making the request.
GivenName	string *optional*	The given name of the user making the request.
Initials	string *optional*	The initials of the user making the request.
KeyBitLength	integer *optional*	The length of the key, in bits, if needed based on the KeyPairAlgorithm parameter value.
KeyCurveId	string *optional*	The curve ID to use with the key, if needed based on the KeyPairAlgorithm parameter value.
KeyPairAlgorithm	string *optional*	The type of key-pair for use with signing algorithms.
KeyUsage [ ]	array (string (enum)) *read-write*	The usage of the key contained in the certificate. The usages of a key contained within a certificate. *For the possible property values, see KeyUsage in Property details.*

Organization	string *required*	The name of the organization making the request.
OrganizationalUnit	string *required*	The name of the unit or division of the organization making the request.
State	string *required*	The state, province, or region of the organization making the request.
Surname	string *optional*	The surname of the user making the request.
UnstructuredName	string *optional*	The unstructured name of the subject.
}		

6.20.1.2 ReplaceCertificate

This action replaces a certificate.

URIs:

/redfish/v1/CertificateService/Actions/CertificateService.ReplaceCertificate

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
CertificateString	string *required*	The string for the certificate.
CertificateType	string (enum) *required*	The format of the certificate. *For the possible property values, see CertificateType in Property details.*
CertificateUri {	object *required*	The link to the certificate that is being replaced. See the *Certificate* schema for details on this property.

	string	Link to a Certificate resource. See the Links section and the *Certificate* schema for details.
@odata.id		
	read-only	
}		
}		

6.20.2 Property details

6.20.2.1 CertificateType

The format of the certificate.

String	Description
PEM	A Privacy Enhanced Mail (PEM)-encoded certificate.
PKCS7	A Privacy Enhanced Mail (PEM)-encoded PKCS7 certificate.

6.20.2.2 KeyUsage

The usage of the key contained in the certificate. The usages of a key contained within a certificate.

String	Description
ClientAuthentication	TLS WWW client authentication.
CodeSigning	Signs downloadable executable code.
CRLSigning	Verifies signatures on certificate revocation lists (CRLs).
DataEncipherment	Directly enciphers raw user data without an intermediate symmetric cipher.
DecipherOnly	Deciphers data while performing a key agreement.
DigitalSignature	Verifies digital signatures, other than signatures on certificates and CRLs.
EmailProtection	Email protection.
EncipherOnly	Enciphers data while performing a key agreement.
KeyAgreement	Key agreement.
KeyCertSign	Verifies signatures on public key certificates.
KeyEncipherment	Enciphers private or secret keys.

String	Description
NonRepudiation	Verifies digital signatures, other than signatures on certificates and CRLs, and provides a non-repudiation service that protects against the signing entity falsely denying some action.
OCSPSigning	Signs OCSP responses.
ServerAuthentication	TLS WWW server authentication.
Timestamping	Binds the hash of an object to a time.

6.21 Chassis 1.13.0

v1.13	v1.12	v1.11	v1.10	v1.9	v1.8	v1.7	v1.6	v1.5	v1.4	v1.3	...
2020.2	2020.1	2019.4	2019.2	2018.3	2018.2	2018.1	2017.3	2017.1	2016.3	2016.2	...

The Chassis schema represents the physical components of a system. This resource represents the sheet-metal confined spaces and logical zones such as racks, enclosures, chassis and all other containers. Subsystems, such as sensors, that operate outside of a system's data plane are linked either directly or indirectly through this resource. A subsystem that operates outside of a system's data plane are not accessible to software that runs on the system.

URIs:

/redfish/v1/Chassis/*{ChassisId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.

Actions {	object	The available actions for this resource.
#Chassis.Reset {}	object	This action resets the chassis but does not reset systems or other contained resources, although side effects might occur that affect those resources. *For more information, see the Actions section below.*
}		
Assembly *(v1.6+)* {	object	The link to the assembly associated with this chassis. See the *Assembly* schema for details on this property.
@odata.id	string *read-only*	Link to a Assembly resource. See the Links section and the *Assembly* schema for details.
}		
AssetTag	string *read-write* *(null)*	The user-assigned asset tag of this chassis.
ChassisType	string (enum) *read-only* *required*	The type of physical form factor of the chassis. *For the possible property values, see ChassisType in Property details.*
DepthMm *(v1.4+)*	number (mm) *read-only* *(null)*	The depth of the chassis.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
EnvironmentalClass *(v1.9+)*	string (enum) *read-only* *(null)*	The ASHRAE Environmental Class for this chassis. *For the possible property values, see EnvironmentalClass in Property details.*

HeightMm *(v1.4+)*	number (mm) *read-only* *(null)*	The height of the chassis.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
IndicatorLED	string (enum) *read-write* *(null)*	The state of the indicator LED, which identifies the chassis. *For the possible property values, see IndicatorLED in Property details.*
Links {	object	The links to other resources that are related to this resource.
ComputerSystems [{	array	An array of links to the computer systems that this chassis directly and wholly contains.
@odata.id	string *read-only*	Link to a ComputerSystem resource. See the Links section and the *ComputerSystem* schema for details.
}]		
ComputerSystems@odata.count	integer *read-only*	The number of items in a collection.
ContainedBy {	object	The link to the chassis that contains this chassis.
@odata.id	string *read-only*	Link to another Chassis resource.
}		
Contains [{	array	An array of links to any other chassis that this chassis has in it.
@odata.id	string *read-only*	Link to another Chassis resource.
}]		

Contains@odata.count	integer *read-only*	The number of items in a collection.
CooledBy [{	array	An array of links to resources or objects that cool this chassis. Normally, the link is for either a chassis or a specific set of fans.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
CooledBy@odata.count	integer *read-only*	The number of items in a collection.
Drives *(v1.2+)* [{	array	An array of links to the drives located in this chassis.
@odata.id	string *read-only*	Link to a Drive resource. See the Links section and the *Drive* schema for details.
}]		
Drives@odata.count	integer *read-only*	The number of items in a collection.
Facility *(v1.11+)* {	object	The link to the facility that contains this chassis. See the *Facility* schema for details on this property.
@odata.id	string *read-only*	Link to a Facility resource. See the Links section and the *Facility* schema for details.
}		
ManagedBy [{	array	An array of links to the managers responsible for managing this chassis.
@odata.id	string *read-only*	Link to a Manager resource. See the Links section and the *Manager* schema for details.
}]		

ManagedBy@odata.count	integer *read-only*		The number of items in a collection.
ManagersInChassis *(v1.2+)* [{	array		An array of links to the managers located in this chassis.
@odata.id	string *read-only*		Link to a Manager resource. See the Links section and the *Manager* schema for details.
}]			
ManagersInChassis@odata.count	integer *read-only*		The number of items in a collection.
Oem {}	object		The OEM extension property. For property details, see Oem.
PCIeDevices *(v1.4+, deprecated v1.10)* [{	array		An array of links to the PCIe devices located in this chassis. *Deprecated in v1.10 and later. This property has been deprecated in favor of the PCIeDevices resource collection in the root of this resource.*
@odata.id	string *read-only*		Link to a PCIeDevice resource. See the Links section and the *PCIeDevice* schema for details.
}]			
PCIeDevices@odata.count	integer *read-only*		The number of items in a collection.
PoweredBy [{	array		An array of links to resources or objects that power this chassis. Normally, the link is for either a chassis or a specific set of power supplies.
@odata.id	string *read-only*		The unique identifier for a resource.
}]			
PoweredBy@odata.count	integer *read-only*		The number of items in a collection.
Processors *(v1.9+)* [{	array		An array of links to the processors located in this chassis.

@odata.id	string *read-only*	Link to a Processor resource. See the Links section and the *Processor* schema for details.
}]		
Processors@odata.count	integer *read-only*	The number of items in a collection.
ResourceBlocks *(v1.5+)* [{	array	An array of links to the resource blocks located in this chassis.
@odata.id	string *read-only*	Link to a ResourceBlock resource. See the Links section and the *ResourceBlock* schema for details.
}]		
ResourceBlocks@odata.count	integer *read-only*	The number of items in a collection.
Storage *(v1.2+)* [{	array	An array of links to the storage subsystems connected to or inside this chassis.
@odata.id	string *read-only*	Link to a Storage resource. See the Links section and the *Storage* schema for details.
}]		
Storage@odata.count	integer *read-only*	The number of items in a collection.
Switches *(v1.7+)* [{	array	An array of links to the switches located in this chassis.
@odata.id	string *read-only*	Link to a Switch resource. See the Links section and the *Switch* schema for details.
}]		
Switches@odata.count	integer *read-only*	The number of items in a collection.

}		
Location *(v1.2+)* {}	object	The location of the chassis. For property details, see Location.
LogServices {	object	The link to the logs for this chassis. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *LogService*. See the LogService schema for details.
}		
Manufacturer	string *read-only* *(null)*	The manufacturer of this chassis.
MaxPowerWatts *(v1.12+)*	number (W) *read-only* *(null)*	The upper bound of the total power consumed by the chassis.
MediaControllers *(v1.11+)* {	object	The link to the collection of media controllers located in this chassis. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *MediaController*. See the MediaController schema for details.
}		
Memory *(v1.11+)* {	object	The link to the collection of memory located in this chassis. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Memory*. See the Memory schema for details.
}		
MemoryDomains *(v1.11+)* {	object	The link to the collection of memory domains located in this chassis. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *MemoryDomain*. See the MemoryDomain schema for details.
}		

MinPowerWatts *(v1.12+)*	number (W) *read-only (null)*	The lower bound of the total power consumed by the chassis.
Model	string *read-only (null)*	The model number of the chassis.
Name	string *read-only required*	The name of the resource or array member.
NetworkAdapters *(v1.4+)* {	object	The link to the collection of network adapters associated with this chassis. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *NetworkAdapter*. See the NetworkAdapter schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
PartNumber	string *read-only (null)*	The part number of the chassis.
PCIeDevices *(v1.10+)* {	object	The link to the collection of PCIe devices located in this chassis. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *PCIeDevice*. See the PCIeDevice schema for details.
}		
PCIeSlots *(v1.8+)* {	object	The link to the PCIe slot properties for this chassis. See the *PCIeSlots* schema for details on this property.

	string	
@odata.id	*read-only*	Link to a PCIeSlots resource. See the Links section and the *PCIeSlots* schema for details.
}		
PhysicalSecurity *(v1.1+)* {	object	The state of the physical security sensor.
IntrusionSensor	string (enum) *read-write (null)*	This indicates the known state of the physical security sensor, such as if it is hardware intrusion detected. *For the possible property values, see IntrusionSensor in Property details.*
IntrusionSensorNumber	integer *read-only (null)*	A numerical identifier to represent the physical security sensor.
IntrusionSensorReArm	string (enum) *read-only (null)*	The method that restores this physical security sensor to the normal state. *For the possible property values, see IntrusionSensorReArm in Property details.*
}		
Power {	object	The link to the power properties, or power supplies, power policies, and sensors, for this chassis. See the *Power* schema for details on this property.
@odata.id	string *read-only*	Link to a Power resource. See the Links section and the *Power* schema for details.
}		
PowerState *(v1.0.1+)*	string (enum) *read-only (null)*	The current power state of the chassis. *For the possible property values, see PowerState in Property details.*
Sensors *(v1.9+)* {	object	The link to the collection of sensors located in the equipment and sub-components. Contains a link to a resource.

@odata.id	string *read-only*	Link to Collection of *Sensor*. See the Sensor schema for details.
}		
SerialNumber	string *read-only* *(null)*	The serial number of the chassis.
SKU	string *read-only* *(null)*	The SKU of the chassis.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
Thermal {	object	The link to the thermal properties, such as fans, cooling, and sensors, for this chassis. See the *Thermal* schema for details on this property.
@odata.id	string *read-only*	Link to a Thermal resource. See the Links section and the *Thermal* schema for details.
}		
UUID *(v1.7+)*	string *read-only* *(null)*	The UUID for this chassis.
WeightKg *(v1.4+)*	number (kg) *read-only* *(null)*	The weight of the chassis.
WidthMm *(v1.4+)*	number (mm) *read-only* *(null)*	The width of the chassis.

6.21.1 Actions

6.21.1.1 Reset

This action resets the chassis but does not reset systems or other contained resources, although side effects might occur that affect those resources.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Actions/Chassis.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ResetType	string (enum) *optional*	The type of reset. *For the possible property values, see ResetType in Property details.*
}		

6.21.2 Property details

6.21.2.1 ChassisType

The type of physical form factor of the chassis.

String	Description
Blade	An enclosed or semi-enclosed, typically vertically-oriented, system chassis that must be plugged into a multi-system chassis to function normally.
Card	A loose device or circuit board intended to be installed in a system or other enclosure.
Cartridge	A small self-contained system intended to be plugged into a multi-system chassis.
Component	A small chassis, card, or device that contains devices for a particular subsystem or function.
Drawer	An enclosed or semi-enclosed, typically horizontally-oriented, system chassis that can be slid into a multi-system chassis.
Enclosure	A generic term for a chassis that does not fit any other description.
Expansion	A chassis that expands the capabilities or capacity of another chassis.

String	Description
IPBasedDrive *(v1.3+)*	A chassis in a drive form factor with IP-based network connections.
Module	A small, typically removable, chassis or card that contains devices for a particular subsystem or function.
Other	A chassis that does not fit any of these definitions.
Pod	A collection of equipment racks in a large, likely transportable, container.
Rack	An equipment rack, typically a 19-inch wide freestanding unit.
RackGroup *(v1.4+)*	A group of racks that form a single entity or share infrastructure.
RackMount	A single-system chassis designed specifically for mounting in an equipment rack.
Row	A collection of equipment racks.
Shelf	An enclosed or semi-enclosed, typically horizontally-oriented, system chassis that must be plugged into a multi-system chassis to function normally.
Sidecar	A chassis that mates mechanically with another chassis to expand its capabilities or capacity.
Sled	An enclosed or semi-enclosed, system chassis that must be plugged into a multi-system chassis to function normally similar to a blade type chassis.
StandAlone	A single, free-standing system, commonly called a tower or desktop chassis.
StorageEnclosure *(v1.6+)*	A chassis that encloses storage.
Zone	A logical division or portion of a physical chassis that contains multiple devices or systems that cannot be physically separated.

6.21.2.2 EnvironmentalClass

The ASHRAE Environmental Class for this chassis.

String	Description
A1	ASHRAE Environmental Class 'A1'.
A2	ASHRAE Environmental Class 'A2'.
A3	ASHRAE Environmental Class 'A3'.
A4	ASHRAE Environmental Class 'A4'.

6.21.2.3 IndicatorLED

The state of the indicator LED, which identifies the chassis.

String	Description
Blinking	The indicator LED is blinking.
Lit	The indicator LED is lit.
Off	The indicator LED is off.
Unknown (deprecated v1.2)	The state of the indicator LED cannot be determined. *Deprecated in v1.2 and later. This value has been deprecated in favor of returning null if the state is unknown.*

6.21.2.4 IntrusionSensor

This indicates the known state of the physical security sensor, such as if it is hardware intrusion detected.

String	Description
HardwareIntrusion	A door, lock, or other mechanism protecting the internal system hardware from being accessed is detected to be in an insecure state.
Normal	No abnormal physical security condition is detected at this time.
TamperingDetected	Physical tampering of the monitored entity is detected.

6.21.2.5 IntrusionSensorReArm

The method that restores this physical security sensor to the normal state.

String	Description
Automatic	Because no abnormal physical security condition is detected, this sensor is automatically restored to the normal state.
Manual	A manual re-arm of this sensor restores it to the normal state.

6.21.2.6 PowerState

The current power state of the chassis.

String	Description
Off	The components within the chassis have no power, except some components might continue to have AUX power, such as the management controller.

String	Description
On	The components within the chassis have power.
PoweringOff	A temporary state between on and off. The components within the chassis can take time to process the power off action.
PoweringOn	A temporary state between off and on. The components within the chassis can take time to process the power on action.

6.21.2.7 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.
On	Turn on the unit.
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.22 ChassisCollection

URIs:

/redfish/v1/Chassis

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.23 Circuit 1.0.1

v1.0
2019.4

This is the schema definition for an electrical circuit.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Branches/*{CircuitId}* /redfish/v1/PowerEquipment/
FloorPDUs/*{PowerDistributionId}*/Mains/*{CircuitId}* /redfish/v1/PowerEquipment/
FloorPDUs/*{PowerDistributionId}*/Subfeeds/*{CircuitId}* /redfish/v1/PowerEquipment/
RackPDUs/*{PowerDistributionId}*/Branches/*{CircuitId}* /redfish/v1/PowerEquipment/

RackPDUs/*{PowerDistributionId}*/Mains/*{CircuitId}* /redfish/v1/PowerEquipment/
TransferSwitches/*{PowerDistributionId}*/Branches/*{CircuitId}* /redfish/v1/PowerEquipment/
TransferSwitches/*{PowerDistributionId}*/Feeders/*{CircuitId}* /redfish/v1/PowerEquipment/
TransferSwitches/*{PowerDistributionId}*/Mains/*{CircuitId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#Circuit.BreakerControl {}	object	This action attempts to reset the circuit breaker. *For more information, see the Actions section below.*
#Circuit.PowerControl {}	object	This action turns the circuit on or off. *For more information, see the Actions section below.*
#Circuit.ResetMetrics {}	object	This action resets metrics related to this circuit. *For more information, see the Actions section below.*
}		
BreakerState	string (enum) *read-only* *(null)*	The state of the over current protection device. *For the possible property values, see BreakerState in Property details.*
CircuitType	string (enum) *read-only* *(null)*	The type of circuit. *For the possible property values, see CircuitType in Property details.*

CriticalCircuit	boolean *read-write* *(null)*	Designates if this is a critical circuit.
CurrentAmps {	object (excerpt)	The current reading for this single phase circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
ElectricalContext	string (enum) *read-only* *(null)*	The combination of current-carrying conductors. *For the possible property values, see ElectricalContext in Property details.*
EnergykWh {	object (excerpt)	The energy reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.

DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
LifetimeReading *(v1.1+)*	number *read-only* *(null)*	The total accumulation value for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.
}		
FrequencyHz {	object (excerpt)	The frequency reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.

IndicatorLED	string (enum) read-write (null)	The state of the indicator LED, which identifies the circuit. *For the possible property values, see IndicatorLED in Property details.*
Links {	object	The links to other resources that are related to this resource.
BranchCircuit {	object (null)	A reference to the branch circuit related to this circuit.
@odata.id	string read-only	Link to another Circuit resource.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
Outlets [{	array	An array of references to the outlets contained by this circuit.
@odata.id	string read-only	Link to a Outlet resource. See the Links section and the *Outlet* schema for details.
}]		
Outlets@odata.count	integer read-only	The number of items in a collection.
}		
Name	string read-only required	The name of the resource or array member.
NominalVoltage	string (enum) read-only (null)	The nominal voltage for this circuit. *For the possible property values, see NominalVoltage in Property details.*
Oem {}	object	The OEM extension property. For property details, see Oem.

PhaseWiringType	string (enum) *read-only* *(null)*	The number of ungrounded current-carrying conductors (phases) and the total number of conductors (wires). *For the possible property values, see PhaseWiringType in Property details.*
PlugType	string (enum) *read-only* *(null)*	The type of plug according to NEMA, IEC, or regional standards. *For the possible property values, see PlugType in Property details.*
PolyPhaseCurrentAmps {	object *(null)*	The current readings for this circuit.
Line1 {	object (excerpt)	Line 1 current sensor. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
Line2 {	object (excerpt)	Line 2 current sensor. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.

CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
Line3 {	object (excerpt)	Line 3 current sensor. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).

}		
Neutral {	object (excerpt)	Neutral line current sensor. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only (null)*	The crest factor for this sensor.
DataSourceUri	string *read-only (null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only (null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only (null)*	The total harmonic distortion (THD).
}		
}		
PolyPhaseEnergykWh {	object *(null)*	The energy readings for this circuit.
Line1ToLine2 {	object (excerpt)	The Line 1 to Line 2 energy reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
DataSourceUri	string *read-only (null)*	The link to the resource that provides the data for this sensor.
LifetimeReading *(v1.1+)*	number *read-only (null)*	The total accumulation value for this sensor.

Reading	number *read-only* *(null)*	The sensor value.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.
}		
Line1ToNeutral {	object (excerpt)	The Line 1 to Neutral energy reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
LifetimeReading *(v1.1+)*	number *read-only* *(null)*	The total accumulation value for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.
}		
Line2ToLine3 {	object (excerpt)	The Line 2 to Line 3 energy reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.

LifetimeReading *(v1.1+)*	number *read-only* *(null)*	The total accumulation value for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.
}		
Line2ToNeutral {	object (excerpt)	The Line 2 to Neutral energy reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
LifetimeReading *(v1.1+)*	number *read-only* *(null)*	The total accumulation value for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.
}		
Line3ToLine1 {	object (excerpt)	The Line 3 to Line 1 energy reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.

DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
LifetimeReading *(v1.1+)*	number *read-only* *(null)*	The total accumulation value for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.
}		
Line3ToNeutral {	object (excerpt)	The Line 3 to Neutral energy reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
LifetimeReading *(v1.1+)*	number *read-only* *(null)*	The total accumulation value for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.

}		
}		
PolyPhasePowerWatts {	object *(null)*	The power readings for this circuit.
Line1ToLine2 {	object (excerpt)	The Line 1 to Line 2 power reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
ApparentVA	number (V.A) *read-only* *(null)*	The product of voltage and current for an AC circuit, in Volt-Ampere units.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
PowerFactor	number *read-only* *(null)*	The power factor for this sensor.
ReactiveVAR	number (V.A) *read-only* *(null)*	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.
Reading	number *read-only* *(null)*	The sensor value.
}		
Line1ToNeutral {	object (excerpt)	The Line 1 to Neutral power reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.

ApparentVA	number (V.A) *read-only (null)*	The product of voltage and current for an AC circuit, in Volt-Ampere units.
DataSourceUri	string *read-only (null)*	The link to the resource that provides the data for this sensor.
PowerFactor	number *read-only (null)*	The power factor for this sensor.
ReactiveVAR	number (V.A) *read-only (null)*	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.
Reading	number *read-only (null)*	The sensor value.
}		
Line2ToLine3 {	object (excerpt)	The Line 2 to Line 3 power reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
ApparentVA	number (V.A) *read-only (null)*	The product of voltage and current for an AC circuit, in Volt-Ampere units.
DataSourceUri	string *read-only (null)*	The link to the resource that provides the data for this sensor.

PowerFactor	number *read-only* *(null)*	The power factor for this sensor.
ReactiveVAR	number (V.A) *read-only* *(null)*	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.
Reading	number *read-only* *(null)*	The sensor value.
}		
Line2ToNeutral {	object (excerpt)	The Line 2 to Neutral power reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
ApparentVA	number (V.A) *read-only* *(null)*	The product of voltage and current for an AC circuit, in Volt-Ampere units.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
PowerFactor	number *read-only* *(null)*	The power factor for this sensor.
ReactiveVAR	number (V.A) *read-only* *(null)*	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.

	number	
Reading	*read-only* *(null)*	The sensor value.
}		
Line3ToLine1 {	object (excerpt)	The Line 3 to Line 1 power reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
ApparentVA	number (V.A) *read-only* *(null)*	The product of voltage and current for an AC circuit, in Volt-Ampere units.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
PowerFactor	number *read-only* *(null)*	The power factor for this sensor.
ReactiveVAR	number (V.A) *read-only* *(null)*	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.
Reading	number *read-only* *(null)*	The sensor value.
}		
Line3ToNeutral {	object (excerpt)	The Line 3 to Neutral power reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.

ApparentVA	number (V.A) *read-only* *(null)*	The product of voltage and current for an AC circuit, in Volt-Ampere units.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
PowerFactor	number *read-only* *(null)*	The power factor for this sensor.
ReactiveVAR	number (V.A) *read-only* *(null)*	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.
Reading	number *read-only* *(null)*	The sensor value.
}		
}		
PolyPhaseVoltage {	object *(null)*	The voltage readings for this circuit.
Line1ToLine2 {	object (excerpt)	The Line 1 to Line 2 voltage reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.

DataSourceUri	string *read-only* (null)	The link to the resource that provides the data for this sensor.
Reading	number *read-only* (null)	The sensor value.
THDPercent *(v1.1+)*	number *read-only* (null)	The total harmonic distortion (THD).
}		
Line1ToNeutral {	object (excerpt)	The Line 1 to Neutral voltage reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* (null)	The crest factor for this sensor.
DataSourceUri	string *read-only* (null)	The link to the resource that provides the data for this sensor.
Reading	number *read-only* (null)	The sensor value.
THDPercent *(v1.1+)*	number *read-only* (null)	The total harmonic distortion (THD).
}		
Line2ToLine3 {	object (excerpt)	The Line 2 to Line 3 voltage reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.

CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
Line2ToNeutral {	object (excerpt)	The Line 2 to Neutral voltage reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).

}		
Line3ToLine1 {	object (excerpt)	The Line 3 to Line 1 voltage reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
Line3ToNeutral {	object (excerpt)	The Line 3 to Neutral voltage reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.

	number	
THDPercent *(v1.1+)*	*read-only* *(null)*	The total harmonic distortion (THD).
}		
}		
PowerCycleDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power on after a PowerControl action to cycle power. Zero seconds indicates no delay.
PowerEnabled	boolean *read-only* *(null)*	Indicates if the circuit can be powered.
PowerOffDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power off after a PowerControl action. Zero seconds indicates no delay to power off.
PowerOnDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power up after a power cycle or a PowerControl action. Zero seconds indicates no delay to power up.
PowerRestoreDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power on after power has been restored. Zero seconds indicates no delay.
PowerRestorePolicy	string (enum) *read-write*	The desired power state of the circuit when power is restored after a power loss. *For the possible property values, see PowerRestorePolicy in Property details.*
PowerState	string (enum) *read-only* *(null)*	The power state of the circuit. *For the possible property values, see PowerState in Property details.*

PowerWatts {	object (excerpt)	The power reading for this circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
ApparentVA	number (V.A) *read-only* *(null)*	The product of voltage and current for an AC circuit, in Volt-Ampere units.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
PowerFactor	number *read-only* *(null)*	The power factor for this sensor.
ReactiveVAR	number (V.A) *read-only* *(null)*	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.
Reading	number *read-only* *(null)*	The sensor value.
}		
RatedCurrentAmps	number (A) *read-only* *(null)*	The rated maximum current allowed for this circuit.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
Voltage {	object (excerpt)	The voltage reading for this single phase circuit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.

CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
VoltageType	string (enum) *read-only* *(null)*	The type of voltage applied to the circuit. *For the possible property values, see VoltageType in Property details.*

6.23.1 Actions

6.23.1.1 BreakerControl

This action attempts to reset the circuit breaker.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Branches/*{CircuitId}*/Actions/Circuit.BreakerControl
/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Mains/*{CircuitId}*/Actions/Circuit.BreakerControl
/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Subfeeds/*{CircuitId}*/Actions/Circuit.BreakerControl
/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Branches/*{CircuitId}*/Actions/Circuit.BreakerControl
/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Mains/*{CircuitId}*/Actions/Circuit.BreakerControl
/redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Branches/*{CircuitId}*/Actions/
Circuit.BreakerControl /redfish/v1/PowerEquipment/

TransferSwitches/*{PowerDistributionId}*/Feeders/*{CircuitId}*/Actions/Circuit.BreakerControl /redfish/v1/
PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Mains/*{CircuitId}*/Actions/Circuit.BreakerControl

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
PowerState	string (enum) *optional*	The desired power state of the circuit if the breaker is reset successfully. *For the possible property values, see PowerState in Property details.*
}		

6.23.1.2 PowerControl

This action turns the circuit on or off.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Branches/*{CircuitId}*/Actions/Circuit.PowerControl
/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Mains/*{CircuitId}*/Actions/Circuit.PowerControl
/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Subfeeds/*{CircuitId}*/Actions/Circuit.PowerControl
/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Branches/*{CircuitId}*/Actions/Circuit.PowerControl
/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Mains/*{CircuitId}*/Actions/Circuit.PowerControl
/redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Branches/*{CircuitId}*/Actions/
Circuit.PowerControl /redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Feeders/*{CircuitId}*/Actions/
Circuit.PowerControl /redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Mains/*{CircuitId}*/Actions/
Circuit.PowerControl

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
PowerState	string (enum) *optional*	The desired power state of the circuit. *For the possible property values, see PowerState in Property details.*
}		

6.23.1.3 ResetMetrics

This action resets metrics related to this circuit.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Branches/*{CircuitId}*/Actions/Circuit.ResetMetrics /redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Mains/*{CircuitId}*/Actions/Circuit.ResetMetrics /redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Subfeeds/*{CircuitId}*/Actions/Circuit.ResetMetrics /redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Branches/*{CircuitId}*/Actions/Circuit.ResetMetrics /redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Mains/*{CircuitId}*/Actions/Circuit.ResetMetrics /redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Branches/*{CircuitId}*/Actions/Circuit.ResetMetrics /redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Feeders/*{CircuitId}*/Actions/Circuit.ResetMetrics /redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Mains/*{CircuitId}*/Actions/Circuit.ResetMetrics

(This action takes no parameters.)

6.23.2 Property details

6.23.2.1 BreakerState

The state of the over current protection device.

String	Description
Normal	The breaker is powered on.
Off	The breaker is off.
Tripped	The breaker has been tripped.

6.23.2.2 CircuitType

The type of circuit.

String	Description
Branch	A branch (output) circuit.
Feeder	A feeder (output) circuit.
Mains	A mains input or utility circuit.
Subfeed	A subfeed (output) circuit.

6.23.2.3 ElectricalContext

The combination of current-carrying conductors.

String	Description
Line1	The circuits that share the L1 current-carrying conductor.
Line1ToLine2	The circuit formed by L1 and L2 current-carrying conductors.
Line1ToNeutral	The circuit formed by L1 and neutral current-carrying conductors.
Line1ToNeutralAndL1L2	The circuit formed by L1, L2, and neutral current-carrying conductors.
Line2	The circuits that share the L2 current-carrying conductor.
Line2ToLine3	The circuit formed by L2 and L3 current-carrying conductors.
Line2ToNeutral	The circuit formed by L2 and neutral current-carrying conductors.
Line2ToNeutralAndL1L2	The circuit formed by L1, L2, and Neutral current-carrying conductors.
Line2ToNeutralAndL2L3	The circuits formed by L2, L3, and neutral current-carrying conductors.
Line3	The circuits that share the L3 current-carrying conductor.
Line3ToLine1	The circuit formed by L3 and L1 current-carrying conductors.
Line3ToNeutral	The circuit formed by L3 and neutral current-carrying conductors.
Line3ToNeutralAndL3L1	The circuit formed by L3, L1, and neutral current-carrying conductors.
LineToLine	The circuit formed by two current-carrying conductors.
LineToNeutral	The circuit formed by a line and neutral current-carrying conductor.
Neutral	The grounded current-carrying return circuit of current-carrying conductors.
Total	The circuit formed by all current-carrying conductors.

6.23.2.4 IndicatorLED

The state of the indicator LED, which identifies the circuit.

String	Description
Blinking	The indicator LED is blinking.
Lit	The indicator LED is lit.
Off	The indicator LED is off.

6.23.2.5 NominalVoltage

The nominal voltage for this circuit.

String	Description
AC100To240V	AC 100-240V nominal.
AC100To277V	AC 100-277V nominal.
AC120V	AC 120V nominal.
AC200To240V	AC 200-240V nominal.
AC200To277V	AC 200-277V nominal.
AC208V	AC 208V nominal.
AC230V	AC 230V nominal.
AC240AndDC380V	AC 200-240V and DC 380V.
AC240V	AC 240V nominal.
AC277AndDC380V	AC 200-277V and DC 380V.
AC277V	AC 277V nominal.
AC400V	AC 400V or 415V nominal.
AC480V	AC 480V nominal.
DC240V	DC 240V nominal.
DC380V	High Voltage DC (380V).
DCNeg48V	-48V DC.

6.23.2.6 PhaseWiringType

The number of ungrounded current-carrying conductors (phases) and the total number of conductors (wires).

String	Description
OneOrTwoPhase3Wire	Single or Two-Phase / 3-Wire (Line1, Line2 or Neutral, Protective Earth).
OnePhase3Wire	Single-phase / 3-Wire (Line1, Neutral, Protective Earth).
ThreePhase4Wire	Three-phase / 4-Wire (Line1, Line2, Line3, Protective Earth).
ThreePhase5Wire	Three-phase / 5-Wire (Line1, Line2, Line3, Neutral, Protective Earth).
TwoPhase3Wire	Two-phase / 3-Wire (Line1, Line2, Protective Earth).
TwoPhase4Wire	Two-phase / 4-Wire (Line1, Line2, Neutral, Protective Earth).

6.23.2.7 PlugType

The type of plug according to NEMA, IEC, or regional standards.

String	Description
California_CS8265	California Standard CS8265 (Single-phase 250V; 50A; 2P3W).
California_CS8365	California Standard CS8365 (Three-phase 250V; 50A; 3P4W).
Field_208V_3P4W_60A	Field-wired; Three-phase 200-250V; 60A; 3P4W.
Field_400V_3P5W_32A	Field-wired; Three-phase 200-240/346-415V; 32A; 3P5W.
IEC_60309_316P6	IEC 60309 316P6 (Single-phase 200-250V; 16A; 1P3W; Blue, 6-hour).
IEC_60309_332P6	IEC 60309 332P6 (Single-phase 200-250V; 32A; 1P3W; Blue, 6-hour).
IEC_60309_363P6	IEC 60309 363P6 (Single-phase 200-250V; 63A; 1P3W; Blue, 6-hour).
IEC_60309_460P9	IEC 60309 460P9 (Three-phase 200-250V; 60A; 3P4W; Blue; 9-hour).
IEC_60309_516P6	IEC 60309 516P6 (Three-phase 200-240/346-415V; 16A; 3P5W; Red; 6-hour).
IEC_60309_532P6	IEC 60309 532P6 (Three-phase 200-240/346-415V; 32A; 3P5W; Red; 6-hour).
IEC_60309_560P9	IEC 60309 560P9 (Three-phase 120-144/208-250V; 60A; 3P5W; Blue; 9-hour).
IEC_60309_563P6	IEC 60309 563P6 (Three-phase 200-240/346-415V; 63A; 3P5W; Red; 6-hour).
IEC_60320_C14	IEC C14 (Single-phase 250V; 10A; 1P3W).
IEC_60320_C20	IEC C20 (Single-phase 250V; 16A; 1P3W).
NEMA_5_15P	NEMA 5-15P (Single-phase 125V; 15A; 1P3W).
NEMA_5_20P	NEMA 5-20P (Single-phase 125V; 20A; 1P3W).
NEMA_6_15P	NEMA 6-15P (Single-phase 250V; 15A; 2P3W).
NEMA_6_20P	NEMA 6-20P (Single-phase 250V; 20A; 2P3W).
NEMA_L14_20P	NEMA L14-20P (Split-phase 125/250V; 20A; 2P4W).
NEMA_L14_30P	NEMA L14-30P (Split-phase 125/250V; 30A; 2P4W).
NEMA_L15_20P	NEMA L15-20P (Three-phase 250V; 20A; 3P4W).
NEMA_L15_30P	NEMA L15-30P (Three-phase 250V; 30A; 3P4W).
NEMA_L21_20P	NEMA L21-20P (Three-phase 120/208V; 20A; 3P5W).
NEMA_L21_30P	NEMA L21-30P (Three-phase 120/208V; 30A; 3P5W).

String	Description
NEMA_L22_20P	NEMA L22-20P (Three-phase 277/480V; 20A; 3P5W).
NEMA_L22_30P	NEMA L22-30P (Three-phase 277/480V; 30A; 3P5W).
NEMA_L5_15P	NEMA L5-15P (Single-phase 125V; 15A; 1P3W).
NEMA_L5_20P	NEMA L5-20P (Single-phase 125V; 20A; 1P3W).
NEMA_L5_30P	NEMA L5-30P (Single-phase 125V; 30A; 1P3W).
NEMA_L6_15P	NEMA L6-15P (Single-phase 250V; 15A; 2P3W).
NEMA_L6_20P	NEMA L6-20P (Single-phase 250V; 20A; 2P3W).
NEMA_L6_30P	NEMA L6-30P (Single-phase 250V; 30A; 2P3W).

6.23.2.8 PowerRestorePolicy

The desired power state of the circuit when power is restored after a power loss.

String	Description
AlwaysOff	Always remain powered off when external power is applied.
AlwaysOn	Always power on when external power is applied.
LastState	Return to the last power state (on or off) when external power is applied.

6.23.2.9 PowerState

The power state of the circuit.

String	Description
Off	The state is powered off.
On	The state is powered on.
PoweringOff	A temporary state between on and off.
PoweringOn	A temporary state between off and on.

6.23.2.10 VoltageType

The type of voltage applied to the circuit.

String	Description
AC	Alternating Current (AC) circuit.
DC	Direct Current (DC) circuit.

6.24 CircuitCollection

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/{*PowerDistributionId*}/Branches /redfish/v1/PowerEquipment/
FloorPDUs/{*PowerDistributionId*}/Mains /redfish/v1/PowerEquipment/FloorPDUs/{*PowerDistributionId*}/Subfeeds
/redfish/v1/PowerEquipment/RackPDUs/{*PowerDistributionId*}/Branches /redfish/v1/PowerEquipment/
RackPDUs/{*PowerDistributionId*}/Mains /redfish/v1/PowerEquipment/TransferSwitches/{*PowerDistributionId*}/Branches
/redfish/v1/PowerEquipment/TransferSwitches/{*PowerDistributionId*}/Feeders /redfish/v1/PowerEquipment/
TransferSwitches/{*PowerDistributionId*}/Mains

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Circuit resource. See the Links section and the *Circuit* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.

Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.25 CompositionService 1.1.2

v1.1	*v1.0*
2018.2	2017.1

The CompositionService schema describes a Composition Service and its properties and links to the Resources available for composition.

URIs:

/redfish/v1/CompositionService

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
AllowOverprovisioning (v1.1+)	boolean *read-write* *(null)*	An indication of whether this service is allowed to overprovision a composition relative to the composition request.

	boolean	
AllowZoneAffinity *(v1.1+)*	*read-only* *(null)*	An indication of whether a client can request that a specific Resource Zone fulfill a composition request.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
ResourceBlocks {	object	The Resource Blocks available on the service. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *ResourceBlock*. See the ResourceBlock schema for details.
}		
ResourceZones {	object	The Resource Zones available on the service. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Zone*. See the Zone schema for details.
}		
ServiceEnabled	boolean *read-write* *(null)*	An indication of whether this service is enabled.
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.

6.26 ComputerSystem 1.12.0

v1.12	v1.11	v1.10	v1.9	v1.8	v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	...
2020.2	2020.1	2019.4	2019.3	2019.2	2019.1	2018.3	2017.3	2017.1	2016.3	2016.2	...

The ComputerSystem schema represents a computer or system instance and the software-visible resources, or items within the data plane, such as memory, CPU, and other devices that it can access. Details of those resources or subsystems are also linked through this resource.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}* /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}* /redfish/v1/Systems/*{ComputerSystemId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#ComputerSystem.AddResourceBlock *(v1.6+)* {}	object	This action adds a resource block to a system. *For more information, see the Actions section below.*
#ComputerSystem.RemoveResourceBlock *(v1.6+)* {}	object	This action removes a resource block from a system. *For more information, see the Actions section below.*
#ComputerSystem.Reset {}	object	This action resets the system. *For more information, see the Actions section below.*
#ComputerSystem.SetDefaultBootOrder *(v1.5+)* {}	object	This action sets the BootOrder to the default settings. *For more information, see the Actions section below.*
}		
AssetTag	string *read-write* *(null)*	The user-definable tag that can track this computer system for inventory or other client purposes.

Bios *(v1.1+)* {	object	The link to the BIOS settings associated with this system. See the *Bios* schema for details on this property.
@odata.id	string *read-only*	Link to a Bios resource. See the Links section and the *Bios* schema for details.
}		
BiosVersion	string *read-only* *(null)*	The version of the system BIOS or primary system firmware.
Boot {	object	The boot settings for this system.
AliasBootOrder *(v1.6+)* [ ]	array (string (enum)) *read-write* *(null)*	Ordered array of boot source aliases representing the persistent boot order associated with this computer system. *For the possible property values, see AliasBootOrder in Property details.*
AutomaticRetryAttempts *(v1.11+)*	integer *read-write* *(null)*	The number of attempts the system will automatically retry booting.
AutomaticRetryConfig *(v1.11+)*	string (enum) *read-write* *(null)*	The configuration of how the system retries booting automatically. *For the possible property values, see AutomaticRetryConfig in Property details.*
BootNext *(v1.5+)*	string *read-write* *(null)*	The BootOptionReference of the Boot Option to perform a one-time boot from when BootSourceOverrideTarget is `UefiBootNext` .
BootOptions *(v1.5+)* {	object	The link to the collection of the UEFI boot options associated with this computer system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *BootOption*. See the BootOption schema for details.

}		
BootOrder *(v1.5+)* [ ]	array (string, null) *read-write*	An array of BootOptionReference strings that represent the persistent boot order for with this computer system.
BootOrderPropertySelection *(v1.6+)*	string (enum) *read-write (null)*	The name of the boot order property that the system uses for the persistent boot order. *For the possible property values, see BootOrderPropertySelection in Property details.*
BootSourceOverrideEnabled	string (enum) *read-write (null)*	The state of the boot source override feature. *For the possible property values, see BootSourceOverrideEnabled in Property details.*
BootSourceOverrideMode *(v1.1+)*	string (enum) *read-write (null)*	The BIOS boot mode to use when the system boots from the BootSourceOverrideTarget boot source. *For the possible property values, see BootSourceOverrideMode in Property details.*
BootSourceOverrideTarget	string (enum) *read-write (null)*	The current boot source to use at the next boot instead of the normal boot device, if BootSourceOverrideEnabled is `true` . *For the possible property values, see BootSourceOverrideTarget in Property details.*
Certificates *(v1.7+)* {	object	The link to a collection of certificates used for booting through HTTPS by this computer system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Certificate*. See the Certificate schema for details.
}		
HttpBootUri *(v1.9+)*	string *read-write (null)*	The URI to boot from when BootSourceOverrideTarget is set to `UefiHttp` .

RemainingAutomaticRetryAttempts *(v1.11+)*	integer *read-only* *(null)*	The number of remaining automatic retry boots.
UefiTargetBootSourceOverride	string *read-write* *(null)*	The UEFI device path of the device from which to boot when BootSourceOverrideTarget is `UefiTarget` .
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
EthernetInterfaces {	object	The link to the collection of Ethernet interfaces associated with this system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *EthernetInterface*. See the EthernetInterface schema for details.
}		
FabricAdapters *(v1.10+)* {	object	The link to the collection of fabric adapters associated with this system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *FabricAdapter*. See the FabricAdapter schema for details.
}		
HostedServices *(v1.2+)* {	object	The services that this computer system supports.
Oem {}	object	The OEM extension property. For property details, see Oem.
StorageServices {	object	The link to a collection of storage services that this computer system supports.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
}		

HostingRoles *(v1.2+)* [ ]	array (string (enum)) *read-only*	The hosting roles that this computer system supports. The enumerations of HostingRoles specify different features that the hosting ComputerSystem supports. *For the possible property values, see HostingRoles in Property details.*
HostName	string *read-write (null)*	The DNS host name, without any domain information.
HostWatchdogTimer *(v1.5+)* {	object	The host watchdog timer functionality for this system.
FunctionEnabled	boolean *read-write required (null)*	An indication of whether a user has enabled the host watchdog timer functionality. This property indicates only that a user has enabled the timer. To activate the timer, installation of additional host-based software is necessary; an update to this property does not initiate the timer.
Oem {}	object	The OEM extension property. For property details, see Oem.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
TimeoutAction	string (enum) *read-write required (null)*	The action to perform when the watchdog timer reaches its timeout value. *For the possible property values, see TimeoutAction in Property details.*
WarningAction	string (enum) *read-write (null)*	The action to perform when the watchdog timer is close to reaching its timeout value. This action typically occurs from three to ten seconds before to the timeout value, but the exact timing is dependent on the implementation. *For the possible property values, see WarningAction in Property details.*
}		
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.

IndicatorLED	string (enum) read-write (null)	The state of the indicator LED, which identifies the system. *For the possible property values, see IndicatorLED in Property details.*
LastResetTime *(v1.12+)*	string read-only	The date and time when the system was last reset or rebooted.
Links {	object	The links to other resources that are related to this resource.
Chassis [{	array	An array of links to the chassis that contains this system.
@odata.id	string read-only	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}]		
Chassis@odata.count	integer read-only	The number of items in a collection.
ConsumingComputerSystems *(v1.5+)* [{	array	An array of links to ComputerSystems that are realized, in whole or in part, from this ComputerSystem.
@odata.id	string read-only	Link to another ComputerSystem resource.
}]		
ConsumingComputerSystems@odata.count	integer read-only	The number of items in a collection.
CooledBy [{	array	An array of links to resources or objects that that cool this computer system. Normally, the link is for either a chassis or a specific set of fans.
@odata.id	string read-only	The unique identifier for a resource.
}]		

CooledBy@odata.count	integer *read-only*	The number of items in a collection.
Endpoints *(v1.2+)* [{	array	An array of links to the endpoints that connect to this system.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Endpoints@odata.count	integer *read-only*	The number of items in a collection.
ManagedBy [{	array	An array of links to the managers responsible for this system.
@odata.id	string *read-only*	Link to a Manager resource. See the Links section and the *Manager* schema for details.
}]		
ManagedBy@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
PoweredBy [{	array	An array of links to resources or objects that power this computer system. Normally, the link is for either a chassis or a specific set of power supplies.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
PoweredBy@odata.count	integer *read-only*	The number of items in a collection.
ResourceBlocks *(v1.4+)* [{	array	An array of links to the resource blocks that are used in this computer system.

	string *read-only*	Link to a ResourceBlock resource. See the Links section and the *ResourceBlock* schema for details.
@odata.id		
}]		
ResourceBlocks@odata.count	integer *read-only*	The number of items in a collection.
SupplyingComputerSystems *(v1.5+)* [{	array	An array of links to ComputerSystems that contribute, in whole or in part, to the implementation of this ComputerSystem.
@odata.id	string *read-only*	Link to another ComputerSystem resource.
}]		
SupplyingComputerSystems@odata.count	integer *read-only*	The number of items in a collection.
}		
LogServices {	object	The link to the collection of log services associated with this system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *LogService*. See the LogService schema for details.
}		
Manufacturer	string *read-only* *(null)*	The manufacturer or OEM of this system.
Memory *(v1.1+)* {	object	The link to the collection of memory associated with this system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Memory*. See the Memory schema for details.
}		

MemoryDomains (v1.2+) {	object	The link to the collection of memory domains associated with this system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *MemoryDomain*. See the MemoryDomain schema for details.
}		
MemorySummary {	object	The central memory of the system in general detail.
MemoryMirroring (v1.1+)	string (enum) *read-only* *(null)*	The ability and type of memory mirroring that this computer system supports. *For the possible property values, see MemoryMirroring in Property details.*
Metrics (v1.8+) {	object	The link to the metrics associated with all memory in this system. See the *MemoryMetrics* schema for details on this property.
@odata.id	string *read-only*	Link to a MemoryMetrics resource. See the Links section and the *MemoryMetrics* schema for details.
}		
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
TotalSystemMemoryGiB	number (GiBy) *read-only* *(null)*	The total configured operating system-accessible memory (RAM), measured in GiB.
TotalSystemPersistentMemoryGiB (v1.4+)	number (GiBy) *read-only* *(null)*	The total configured, system-accessible persistent memory, measured in GiB.
}		
Model	string *read-only* *(null)*	The product name for this system, without the manufacturer name.

Name	string *read-only* *required*	The name of the resource or array member.
NetworkInterfaces *(v1.3+)* {	object	The link to the collection of Network Interfaces associated with this system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *NetworkInterface*. See the NetworkInterface schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
PartNumber	string *read-only* *(null)*	The part number for this system.
PCIeDevices *(v1.2+)* [{	array	The link to a collection of PCIe devices that this computer system uses.
@odata.id	string *read-only*	Link to a PCIeDevice resource. See the Links section and the *PCIeDevice* schema for details.
}]		
PCIeDevices@odata.count	integer *read-only*	The number of items in a collection.
PCIeFunctions *(v1.2+)* [{	array	The link to a collection of PCIe functions that this computer system uses.
@odata.id	string *read-only*	Link to a PCIeFunction resource. See the Links section and the *PCIeFunction* schema for details.
}]		
PCIeFunctions@odata.count	integer *read-only*	The number of items in a collection.

PowerRestorePolicy *(v1.6+)*	string (enum) *read-write*	The desired power state of the system when power is restored after a power loss. *For the possible property values, see PowerRestorePolicy in Property details.*
PowerState	string (enum) *read-only (null)*	The current power state of the system. *For the possible property values, see PowerState in Property details.*
Processors {	object	The link to the collection of processors associated with this system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Processor*. See the Processor schema for details.
}		
ProcessorSummary {	object	The central processors of the system in general detail.
Count	integer *read-only (null)*	The number of physical processors in the system.
LogicalProcessorCount *(v1.5+)*	integer *read-only (null)*	The number of logical processors in the system.
Metrics *(v1.7+)* {	object	The link to the metrics associated with all processors in this system. See the *ProcessorMetrics* schema for details on this property.
@odata.id	string *read-only*	Link to a ProcessorMetrics resource. See the Links section and the *ProcessorMetrics* schema for details.
}		
Model	string *read-only (null)*	The processor model for the primary or majority of processors in this system.

Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
}		
Redundancy *(v1.5+)* [{	array	The link to a collection of redundancy entities. Each entity specifies a kind and level of redundancy and a collection, or redundancy set, of other computer systems that provide the specified redundancy to this computer system.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Redundancy@odata.count	integer *read-only*	The number of items in a collection.
SecureBoot *(v1.1+)* {	object	The link to the UEFI Secure Boot associated with this system. See the *SecureBoot* schema for details on this property.
@odata.id	string *read-only*	Link to a SecureBoot resource. See the Links section and the *SecureBoot* schema for details.
}		
SerialNumber	string *read-only (null)*	The serial number for this system.
SimpleStorage {	object	The link to the collection of storage devices associated with this system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *SimpleStorage*. See the SimpleStorage schema for details.
}		
SKU	string *read-only (null)*	The manufacturer SKU for this system.

Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
Storage *(v1.1+)* {	object	The link to the collection of storage devices associated with this system. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Storage*. See the Storage schema for details.
}		
SubModel *(v1.5+)*	string *read-only* *(null)*	The sub-model for this system.
SystemType	string (enum) *read-only*	The type of computer system that this resource represents. *For the possible property values, see SystemType in Property details.*
TrustedModules *(v1.1+)* [{	array	An array of trusted modules in the system.
FirmwareVersion	string *read-only* *(null)*	The firmware version of this Trusted Module.
FirmwareVersion2 *(v1.3+)*	string *read-only* *(null)*	The second firmware version of this Trusted Module, if applicable.
InterfaceType	string (enum) *read-only* *(null)*	The interface type of the Trusted Module. *For the possible property values, see InterfaceType in Property details.*
InterfaceTypeSelection *(v1.3+)*	string (enum) *read-only* *(null)*	The interface type selection supported by this Trusted Module. *For the possible property values, see InterfaceTypeSelection in Property details.*

Oem {}	object	The OEM extension property. For property details, see Oem.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
}]		
UUID	string read-only (null)	The UUID for this system. *For more information about this property, see Property details.*

6.26.1 Actions

6.26.1.1 AddResourceBlock

This action adds a resource block to a system.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Actions/
ComputerSystem.AddResourceBlock /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Actions/ComputerSystem.AddResourceBlock
/redfish/v1/Systems/*{ComputerSystemId}*/Actions/ComputerSystem.AddResourceBlock

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
ComputerSystemETag	string *optional*	The current ETag of the system.
ResourceBlock {	object *required*	The resource block to add to the system. See the *ResourceBlock* schema for details on this property.
@odata.id	string *read-only*	Link to a ResourceBlock resource. See the Links section and the *ResourceBlock* schema for details.
}		
ResourceBlockETag	string *optional*	The current ETag of the resource block to add to the system.

}		

6.26.1.2 RemoveResourceBlock

This action removes a resource block from a system.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Actions/
ComputerSystem.RemoveResourceBlock /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Actions/ComputerSystem.RemoveResourceBlock
/redfish/v1/Systems/*{ComputerSystemId}*/Actions/ComputerSystem.RemoveResourceBlock

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
ComputerSystemETag	string *optional*	The current ETag of the system.
ResourceBlock {	object *required*	The resource block to remove from the system. See the *ResourceBlock* schema for details on this property.
@odata.id	string *read-only*	Link to a ResourceBlock resource. See the Links section and the *ResourceBlock* schema for details.
}		
ResourceBlockETag	string *optional*	The current ETag of the resource block to remove from the system.
}		

6.26.1.3 Reset

This action resets the system.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Actions/

ComputerSystem.Reset /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Actions/
ComputerSystem.Reset /redfish/v1/Systems/*{ComputerSystemId}*/Actions/ComputerSystem.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
ResetType	string (enum) *optional*	The type of reset. *For the possible property values, see ResetType in Property details.*
}		

6.26.1.4 SetDefaultBootOrder

This action sets the BootOrder to the default settings.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Actions/
ComputerSystem.SetDefaultBootOrder /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Actions/ComputerSystem.SetDefaultBootOrder
/redfish/v1/Systems/*{ComputerSystemId}*/Actions/ComputerSystem.SetDefaultBootOrder

(This action takes no parameters.)

6.26.2 Property details

6.26.2.1 AliasBootOrder

Ordered array of boot source aliases representing the persistent boot order associated with this computer system.

String	Description
BiosSetup	Boot to the BIOS setup utility.
Cd	Boot from the CD or DVD.
Diags	Boot to the manufacturer's diagnostics program.
Floppy	Boot from the floppy disk drive.
Hdd	Boot from a hard drive.
None	Boot from the normal boot device.

String	Description
Pxe	Boot from the Pre-Boot EXecution (PXE) environment.
RemoteDrive	Boot from a remote drive, such as an iSCSI target.
SDCard	Boot from an SD card.
UefiBootNext	Boot to the UEFI device that the BootNext property specifies.
UefiHttp	Boot from a UEFI HTTP network location.
UefiShell	Boot to the UEFI Shell.
UefiTarget	Boot to the UEFI device specified in the UefiTargetBootSourceOverride property.
Usb	Boot from a system BIOS-specified USB device.
Utilities	Boot to the manufacturer's utilities program or programs.

6.26.2.2 AutomaticRetryConfig

The configuration of how the system retries booting automatically.

String	Description
Disabled	Disable automatic retrying of booting.
RetryAlways	Always automatically retry booting.
RetryAttempts	Automatic retrying of booting is based on a specified retry count.

6.26.2.3 BootOrderPropertySelection

The name of the boot order property that the system uses for the persistent boot order.

String	Description
AliasBootOrder	The system uses the AliasBootOrder property to specify the persistent boot order.
BootOrder	The system uses the BootOrder property to specify the persistent boot order.

6.26.2.4 BootSourceOverrideEnabled

The state of the boot source override feature.

String	Description
Continuous	The system boots to the target specified in the BootSourceOverrideTarget property until this property is `Disabled`.
Disabled	The system boots normally.
Once	On its next boot cycle, the system boots one time to the boot source override target. Then, the BootSourceOverrideEnabled value is reset to `Disabled`.

6.26.2.5 BootSourceOverrideMode

The BIOS boot mode to use when the system boots from the BootSourceOverrideTarget boot source.

String	Description
Legacy	The system boots in non-UEFI boot mode to the boot source override target.
UEFI	The system boots in UEFI boot mode to the boot source override target.

6.26.2.6 BootSourceOverrideTarget

The current boot source to use at the next boot instead of the normal boot device, if BootSourceOverrideEnabled is `true`.

String	Description
BiosSetup	Boot to the BIOS setup utility.
Cd	Boot from the CD or DVD.
Diags	Boot to the manufacturer's diagnostics program.
Floppy	Boot from the floppy disk drive.
Hdd	Boot from a hard drive.
None	Boot from the normal boot device.
Pxe	Boot from the Pre-Boot EXecution (PXE) environment.
RemoteDrive *(v1.2+)*	Boot from a remote drive, such as an iSCSI target.
SDCard *(v1.1+)*	Boot from an SD card.
UefiBootNext *(v1.5+)*	Boot to the UEFI device that the BootNext property specifies.
UefiHttp *(v1.1+)*	Boot from a UEFI HTTP network location.
UefiShell	Boot to the UEFI Shell.

String	Description
UefiTarget	Boot to the UEFI device specified in the UefiTargetBootSourceOverride property.
Usb	Boot from a system BIOS-specified USB device.
Utilities	Boot to the manufacturer's utilities program or programs.

6.26.2.7 HostingRoles

The hosting roles that this computer system supports. The enumerations of HostingRoles specify different features that the hosting ComputerSystem supports.

String	Description
Appliance	The system hosts functionality that supports the system acting as an appliance.
ApplicationServer	The system hosts functionality that supports general purpose applications.
BareMetalServer	The system hosts functionality that supports the system acting as a bare metal server.
ContainerServer	The system hosts functionality that supports the system acting as a container server.
StorageServer	The system hosts functionality that supports the system acting as a storage server.
Switch	The system hosts functionality that supports the system acting as a switch.
VirtualMachineServer	The system hosts functionality that supports the system acting as a virtual machine server.

6.26.2.8 IndicatorLED

The state of the indicator LED, which identifies the system.

String	Description
Blinking	The indicator LED is blinking.
Lit	The indicator LED is lit.
Off	The indicator LED is off.
Unknown (deprecated v1.1)	The state of the indicator LED cannot be determined. *Deprecated in v1.1 and later. This value has been deprecated in favor of returning null if the state is unknown.*

6.26.2.9 InterfaceType

The interface type of the Trusted Module.

String	Description
TCM1_0	Trusted Cryptography Module (TCM) 1.0.
TPM1_2	Trusted Platform Module (TPM) 1.2.
TPM2_0	Trusted Platform Module (TPM) 2.0.

6.26.2.10 InterfaceTypeSelection

The interface type selection supported by this Trusted Module.

String	Description
BiosSetting	The TrustedModule supports switching InterfaceType through platform software, such as a BIOS configuration attribute.
FirmwareUpdate	The TrustedModule supports switching InterfaceType through a firmware update.
None	The TrustedModule does not support switching the InterfaceType.
OemMethod	The TrustedModule supports switching InterfaceType through an OEM proprietary mechanism.

6.26.2.11 MemoryMirroring

The ability and type of memory mirroring that this computer system supports.

String	Description
DIMM	The system supports DIMM mirroring at the DIMM level. Individual DIMMs can be mirrored.
Hybrid	The system supports a hybrid mirroring at the system and DIMM levels. Individual DIMMs can be mirrored.
None	The system does not support DIMM mirroring.
System	The system supports DIMM mirroring at the system level. Individual DIMMs are not paired for mirroring in this mode.

6.26.2.12 PowerRestorePolicy

The desired power state of the system when power is restored after a power loss.

String	Description
AlwaysOff	The system always remains powered off when power is applied.
AlwaysOn	The system always powers on when power is applied.
LastState	The system returns to its last on or off power state when power is applied.

6.26.2.13 PowerState

The current power state of the system.

String	Description
Off	The system is powered off, although some components might continue to have AUX power such as management controller.
On	The system is powered on.
PoweringOff	A temporary state between on and off. The power off action can take time while the OS is in the shutdown process.
PoweringOn	A temporary state between off and on. This temporary state can be very short.

6.26.2.14 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.
On	Turn on the unit.
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.26.2.15 SystemType

The type of computer system that this resource represents.

String	Description
Composed (v1.4+)	A computer system constructed by binding resource blocks together.
OS	An operating system instance.

String	Description
Physical	A computer system.
PhysicallyPartitioned	A hardware-based partition of a computer system.
Virtual	A virtual machine instance running on this system.
VirtuallyPartitioned	A virtual or software-based partition of a computer system.

6.26.2.16 TimeoutAction

The action to perform when the watchdog timer reaches its timeout value.

String	Description
None	No action taken.
OEM	Perform an OEM-defined action.
PowerCycle	Power cycle the system.
PowerDown	Power down the system.
ResetSystem	Reset the system.

6.26.2.17 UUID

The UUID for this system.

The UUID property contains the value of the Universally Unique IDentifier (UUID) of a system, also known in some systems as GUIDs (Globally Unique IDentifier). A UUID is 128 bits long (16 bytes).

Redfish clients should consider the value of the property to be opaque and should not interpret any sub-fields within the UUID.

The UUID property is a string data type. The RFC4122-specified 35-character string format is `xxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx`, where each `x` represents a hexadecimal value from `0` to `f`.

If the computer system supports SMBIOS, the UUID string should be formed from the raw binary 16-byte SMBIOS UUID structure. This allows out-of-band clients to correlate the UUID that in-band agents are reading from SMBIOS. The UUID is represented out-of-band through the Redfish API.

6.26.2.18 Case sensitivity

Regarding the case of the hex values, RFC4122 specifies that the hex values should be lowercase characters. Most

modern scripting languages typically also represent hex values in lowercase characters following the RFC. However, dmidecode, WMI and some Redfish implementations currently use uppercase characters for UUID on output.

Comparisons between UUID values should always be case-insensitive.

For new Redfish implementations, the recommendation is to follow RFC4122 guidelines: output using lower-case hex values when converting from the SMBIOS raw binary data.

Redfish implementations and operating system APIs are permitted to output in uppercase. For that reason, Redfish clients MUST compare UUIDs using a case-insensitive comparison (as recommended by RFC4122).

6.26.2.19 Conversion of UUID format

The SMBIOS 2.6 and later specification specifies the proper algorithm for converting the raw binary SMBIOS 16-byte structure into the canonical string format of `xxxxxx-xxxx-xxxx-xxxx-xxxxxx`). Redfish services should follow the SMBIOS 2.6 and later specification for implementing this conversion.

WMI and Linux dmidecode also follow the SMBIOS guidelines.

Specifically, RFC4122 defines that the canonical string value should follow network byte ordering. The SMBIOS represents the UUID as these fields:

```
{
  DWORD    time_low,
  WORD     time_mid,
  WORD     time_hi_and_version,
  BYTE     clock_seq_hi_and_reserved,
  BYTE     clock_seq_low,
  BYTE[6]  node
}
```

Little-endian systems (including x86 systems) require a little-endian to network-byte-order conversion for the first three fields in order to convert the SMBIOS binary UUID to network byte order.

As specified in the SMBIOS 2.6 and later specifications, if the canonical UUID string is:

```
00112233-4455-6677-8899-aabbccddeeff
```

The corresponding raw representation in the SMBIOS UUID structure is:

```
raw_smbios_uuid = {
  0x33,
```

```
    0x22,
    0x11,
    0x00,
    0x55,
    0x44,
    0x77,
    0x66,
    0x88,
    0x99,
    0xAA,
    0xBB,
    0xCC,
    0xDD,
    0xEE,
    0xFF
}
```

Notice in the above SMBIOS representation that each of the first three words boundaries are in little-endian order. For example, the hex digits "00112233" are represented by the first raw SMBIOS 4-byte DWORD "0x33, 0x22, 0x11, 0x00".

The following sample code (written in C) could be used to convert the raw SMBIOS UUID struct in a little-endian system to the 35-character canonical string:

```
/* routine to convert raw little-endian smbios structure to canonical string */
sprintf(
  redfishUUID,
  "%02x%02x%02x%02x-%02x%02x-%02x%02x-%02x%02x-%02x%02x%02x%02x%02x%02x")
raw_smbios_uuid[3], raw_smbios_uuid[2],
  raw_smbios_uuid[1], raw_smbios_uuid[0],
  raw_smbios_uuid[5], raw_smbios_uuid[4],
  raw_smbios_uuid[7], raw_smbios_uuid[6],
  raw_smbios_uuid[8], raw_smbios_uuid[9],
  raw_smbios_uuid[10], raw_smbios_uuid[11],
  raw_smbios_uuid[12], raw_smbios_uuid[13],
  raw_smbios_uuid[14], raw_smbios_uuid[15]
);
```

The previous sample code creates the same canonical-formated string as WMI and dmidecode for little-endian X86 systems.

If the computer architecture is not little-endian, then the conversion and canonical representation should be the same as the operating system's APIs, such as WMI and dmidecode.

> **Note:** As specified in RFC4122, the fields in the string should be zero-filled hexadecimal values, as shown in the previous conversion code, so that the overall string length and format is `xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx` .

6.26.2.20 WarningAction

The action to perform when the watchdog timer is close to reaching its timeout value. This action typically occurs from three to ten seconds before to the timeout value, but the exact timing is dependent on the implementation.

String	Description
DiagnosticInterrupt	Raise a (typically non-maskable) Diagnostic Interrupt.
MessagingInterrupt	Raise a legacy IPMI messaging interrupt.
None	No action taken.
OEM	Perform an OEM-defined action.
SCI	Raise an interrupt using the ACPI System Control Interrupt (SCI).
SMI	Raise a Systems Management Interrupt (SMI).

6.27 ComputerSystemCollection

URIs:

/redfish/v1/Systems

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.

Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a ComputerSystem resource. See the Links section and the *ComputerSystem* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.28 ConnectionMethod 1.0.0

v1.0
2020.2

The ConnectionMethod schema describes the protocol, provider, or other method used to communicate to a given access point for a Redfish aggregation service.

URIs:

/redfish/v1/AggregationService/ConnectionMethods/*{ConnectionMethodId}*

@odata.context	string *read-only*	The OData description of a payload.

	string *read-only*	The current ETag of the resource.
@odata.etag		
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
ConnectionMethodType	string (enum) *read-only* *(null)*	The type of connection method. *For the possible property values, see ConnectionMethodType in Property details.*
ConnectionMethodVariant	string *read-only* *(null)*	The variant of connection method.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
AggregationSources [{	array	An array of links to the access points using this connection method.
@odata.id	string *read-only*	Link to a AggregationSource resource. See the Links section and the *AggregationSource* schema for details.
}]		
AggregationSources@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		

Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.28.1 Property details

6.28.1.1 ConnectionMethodType

The type of connection method.

String	Description
IPMI15	IPMI 1.5 connection method.
IPMI20	IPMI 2.0 connection method.
NETCONF	NETCONF connection method.
OEM	OEM connection method.
Redfish	Redfish connection method.
SNMP	SNMP connection method.

6.29 ConnectionMethodCollection

URIs:

/redfish/v1/AggregationService/ConnectionMethods

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.

	string	
@odata.type	*read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a ConnectionMethod resource. See the Links section and the *ConnectionMethod* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.30 Drive 1.10.0

v1.10	v1.9	v1.8	v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2020.2	2019.4	2019.3	2019.2	2019.1	2018.2	2018.1	2017.3	2017.1	2016.2	2016.1

The Drive schema represents a single physical drive for a system, including links to associated volumes.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Drives/*{DriveId}* /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Drives/*{DriveId}* /redfish/v1/CompositionService/

ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Drives/*{DriveId}* /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Drives/*{DriveId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Drives/*{DriveId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}* /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#Drive.Reset *(v1.7+)* {}	object	This action resets this drive. *For more information, see the Actions section below.*
#Drive.SecureErase {}	object	This action securely erases the contents of the drive. *For more information, see the Actions section below.*
}		
Assembly *(v1.3+)* {	object	The link to the assembly associated with this drive. See the *Assembly* schema for details on this property.
@odata.id	string *read-only*	Link to a Assembly resource. See the Links section and the *Assembly* schema for details.
}		

AssetTag	string *read-write* *(null)*	The user-assigned asset tag for this drive.
BlockSizeBytes	integer (By) *read-only* *(null)*	The size, in bytes, of the smallest addressable unit, or block.
CapableSpeedGbs	number (Gbit/s) *read-only* *(null)*	The speed, in gigabit per second (Gbit/s), at which this drive can communicate to a storage controller in ideal conditions.
CapacityBytes	integer (By) *read-only* *(null)*	The size, in bytes, of this drive.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
EncryptionAbility	string (enum) *read-only* *(null)*	The encryption ability of this drive. *For the possible property values, see EncryptionAbility in Property details.*
EncryptionStatus	string (enum) *read-only* *(null)*	The status of the encryption of this drive. *For the possible property values, see EncryptionStatus in Property details.*
FailurePredicted	boolean *read-only* *(null)*	An indication of whether this drive currently predicts a failure in the near future.

HotspareReplacementMode *(v1.5+)*	string (enum) *read-write (null)*	The replacement mode for the hot spare drive. *For the possible property values, see HotspareReplacementMode in Property details.*
HotspareType	string (enum) *read-only (null)*	The type of hot spare that this drive currently serves as. *For the possible property values, see HotspareType in Property details.*
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Identifiers [{ }]	array (object)	The durable names for the drive. Any additional identifiers for a resource. For property details, see Identifier.
IndicatorLED	string (enum) *read-write (null)*	The state of the indicator LED, that identifies the drive. *For the possible property values, see IndicatorLED in Property details.*
Links {	object	The links to other resources that are related to this resource.
Chassis *(v1.2+)* {	object	The link to the chassis that contains this drive. See the *Chassis* schema for details on this property.
@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}		
Endpoints *(v1.1+)* [{	array	An array of links to the endpoints that connect to this drive.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		

Endpoints@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeFunctions *(v1.6+)* [{	array	An array of links to the PCIe functions that the drive produces.
@odata.id	string *read-only*	Link to a PCIeFunction resource. See the Links section and the *PCIeFunction* schema for details.
}]		
PCIeFunctions@odata.count	integer *read-only*	The number of items in a collection.
StoragePools *(v1.8+)* [{	array	An array of links to the storage pools to which this drive belongs.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
StoragePools@odata.count	integer *read-only*	The number of items in a collection.
Volumes [{	array	An array of links to the volumes that this drive either wholly or only partially contains.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Volumes@odata.count	integer *read-only*	The number of items in a collection.
}		
Location *(deprecated v1.4)* [{ }]	array (object)	The location of the drive. The location of a resource. For property details, see Location. *Deprecated in v1.4 and later. This property has been deprecated in favor of the singular property PhysicalLocation found in Drive.v1_4_0.*

Manufacturer	string read-only (null)	The manufacturer of this drive.
MediaType	string (enum) read-only (null)	The type of media contained in this drive. *For the possible property values, see MediaType in Property details.*
Model	string read-only (null)	The model number for the drive.
Multipath *(v1.9+)*	boolean read-only (null)	An indication of whether the drive is accessible from multiple paths.
Name	string read-only required	The name of the resource or array member.
NegotiatedSpeedGbs	number (Gbit/s) read-only (null)	The speed, in gigabit per second (Gbit/s), at which this drive currently communicates to the storage controller.
Oem {}	object	The OEM extension property. For property details, see Oem.
Operations *(v1.1+)* [{	array	The operations currently running on the Drive.
AssociatedTask {	object	The link to the task associated with the operation, if any. See the *Task* schema for details on this property.
@odata.id	string read-only	Link to a Task resource. See the Links section and the *Task* schema for details.
}		

OperationName	string *read-only* *(null)*	The name of the operation.
PercentageComplete	integer (%) *read-only* *(null)*	The percentage of the operation that has been completed.
}]		
PartNumber	string *read-only* *(null)*	The part number for this drive.
PhysicalLocation *(v1.4+)* {}	object	The location of the drive. For property details, see Location.
PredictedMediaLifeLeftPercent	number (%) *read-only* *(null)*	The percentage of reads and writes that are predicted to be available for the media.
Protocol	string (enum) *read-only* *(null)*	The protocol that this drive currently uses to communicate to the storage controller. *For the possible property values, see Protocol in Property details.*
ReadyToRemove *(v1.10+)*	boolean *read-write* *(null)*	An indication of whether the drive is prepared by the system for removal.
Revision	string *read-only* *(null)*	The revision of this drive. This is typically the firmware or hardware version of the drive.

	number (RPM) *read-only (null)*	The rotation speed of this drive, in revolutions per minute (RPM).
RotationSpeedRPM		
SerialNumber	string *read-only (null)*	The serial number for this drive.
SKU	string *read-only (null)*	The SKU for this drive.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
StatusIndicator	string (enum) *read-write (null)*	The state of the status indicator, which communicates status information about this drive. *For the possible property values, see StatusIndicator in Property details.*
WriteCacheEnabled *(v1.7+)*	boolean *read-write (null)*	An indication of whether the drive write cache is enabled.

6.30.1 Actions

6.30.1.1 Reset

This action resets this drive.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Drives/*{DriveId}*/Actions/Drive.Reset /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Drives/*{DriveId}*/Actions/Drive.Reset /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Actions/Drive.Reset /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Actions/
Drive.Reset /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Drives/*{DriveId}*/Actions/Drive.Reset /redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Actions/Drive.Reset /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Actions/
Drive.Reset /redfish/v1/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Actions/Drive.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
ResetType	string (enum) *optional*	The type of reset. *For the possible property values, see ResetType in Property details.*
}		

6.30.1.2 SecureErase

This action securely erases the contents of the drive.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Drives/*{DriveId}*/Actions/Drive.SecureErase /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Drives/*{DriveId}*/Actions/Drive.SecureErase /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Actions/Drive.SecureErase /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Actions/
Drive.SecureErase /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Drives/*{DriveId}*/Actions/Drive.SecureErase /redfish/
v1/ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Actions/Drive.SecureErase /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Actions/
Drive.SecureErase /redfish/v1/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Drives/*{DriveId}*/Actions/
Drive.SecureErase

(This action takes no parameters.)

6.30.2 Property details

6.30.2.1 EncryptionAbility

The encryption ability of this drive.

String	Description
None	The drive is not capable of self-encryption.

String	Description
Other	The drive is capable of self-encryption through some other means.
SelfEncryptingDrive	The drive is capable of self-encryption per the Trusted Computing Group's Self Encrypting Drive Standard.

6.30.2.2 EncryptionStatus

The status of the encryption of this drive.

String	Description
Foreign	The drive is currently encrypted, the data is not accessible to the user, and the system requires user intervention to expose the data.
Locked	The drive is currently encrypted and the data is not accessible to the user. However, the system can unlock the drive automatically.
Unecrypted (deprecated v1.1)	The drive is not currently encrypted. *Deprecated in v1.1 and later. This value has been deprecated in favor of Unencrypted.*
Unencrypted (v1.1+)	The drive is not currently encrypted.
Unlocked	The drive is currently encrypted but the data is accessible to the user in unencrypted form.

6.30.2.3 HotspareReplacementMode

The replacement mode for the hot spare drive.

String	Description
NonRevertible	The hot spare drive that is commissioned due to a drive failure remains as a data drive and does not revert to a hot spare if the failed drive is replaced.
Revertible	The hot spare drive that is commissioned due to a drive failure reverts to a hot spare after the failed drive is replaced and rebuilt.

6.30.2.4 HotspareType

The type of hot spare that this drive currently serves as.

String	Description
Chassis	The drive is currently serving as a hot spare for all other drives in the chassis.
Dedicated	The drive is currently serving as a hot spare for a user-defined set of drives.
Global	The drive is currently serving as a hot spare for all other drives in the storage system.

String	Description
None	The drive is not currently a hot spare.

6.30.2.5 IndicatorLED

The state of the indicator LED, that identifies the drive.

String	Description
Blinking	The indicator LED is blinking.
Lit	The indicator LED is lit.
Off	The indicator LED is off.

6.30.2.6 MediaType

The type of media contained in this drive.

String	Description
HDD	The drive media type is traditional magnetic platters.
SMR	The drive media type is shingled magnetic recording.
SSD	The drive media type is solid state or flash memory.

6.30.2.7 Protocol

The protocol that this drive currently uses to communicate to the storage controller.

String	Description
AHCI	Advanced Host Controller Interface (AHCI).
FC	Fibre Channel.
FCoE	Fibre Channel over Ethernet (FCoE).
FCP	Fibre Channel Protocol for SCSI.
FICON	FIbre CONnection (FICON).
FTP	File Transfer Protocol (FTP).
GenZ	GenZ.

String	Description
HTTP	Hypertext Transport Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).
I2C	Inter-Integrated Circuit Bus.
iSCSI	Internet SCSI.
iWARP	Internet Wide Area RDMA Protocol (iWARP).
MultiProtocol	Multiple Protocols.
NFSv3	Network File System (NFS) version 3.
NFSv4	Network File System (NFS) version 4.
NVMe	Non-Volatile Memory Express (NVMe).
NVMeOverFabrics	NVMe over Fabrics.
OEM	OEM-specific.
PCIe	PCI Express.
RoCE	RDMA over Converged Ethernet Protocol.
RoCEv2	RDMA over Converged Ethernet Protocol Version 2.
SAS	Serial Attached SCSI.
SATA	Serial AT Attachment.
SFTP	SSH File Transfer Protocol (SFTP).
SMB	Server Message Block (SMB). Also known as the Common Internet File System (CIFS).
TCP	Transmission Control Protocol (TCP).
TFTP	Trivial File Transfer Protocol (TFTP).
UDP	User Datagram Protocol (UDP).
UHCI	Universal Host Controller Interface (UHCI).
USB	Universal Serial Bus (USB).

6.30.2.8 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.
On	Turn on the unit.
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.30.2.9 StatusIndicator

The state of the status indicator, which communicates status information about this drive.

String	Description
Fail	The drive has failed.
Hotspare	The drive has been marked to automatically rebuild and replace a failed drive.
InACriticalArray	The array to which this drive belongs has been degraded.
InAFailedArray	The array to which this drive belongs has failed.
OK	The drive is OK.
PredictiveFailureAnalysis	The drive still works but is predicted to fail soon.
Rebuild	The drive is being rebuilt.

6.31 Endpoint 1.4.2

v1.4	v1.3	v1.2	v1.1	v1.0
2019.4	2018.3	2018.2	2017.3	2016.2

The Endpoint schema contains the properties of an endpoint resource that represents the properties of an entity that sends or receives protocol-defined messages over a transport.

URIs:

/redfish/v1/Fabrics/*{FabricId}*/Endpoints/*{EndpointId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
ConnectedEntities [{	array	All the entities connected to this endpoint.
EntityLink	*read-only*	The link to the associated entity.
EntityPciId {	object	The PCI ID of the connected entity.
ClassCode *(v1.2+)*	string *read-only* *(null)*	The Class Code, Subclass, and Programming Interface code of this PCIe function.
DeviceId	string *read-only* *(null)*	The Device ID of this PCIe function.

FunctionNumber *(v1.2+)*	integer *read-only* *(null)*	The PCI ID of the connected entity.
SubsystemId	string *read-only* *(null)*	The Subsystem ID of this PCIe function.
SubsystemVendorId	string *read-only* *(null)*	The Subsystem Vendor ID of this PCIe function.
VendorId	string *read-only* *(null)*	The Vendor ID of this PCIe function.
}		
EntityRole	string (enum) *read-only* *(null)*	The role of the connected entity. *For the possible property values, see EntityRole in Property details.*
EntityType	string (enum) *read-only* *(null)*	The type of the connected entity. *For the possible property values, see EntityType in Property details.*
GenZ *(v1.4+)* {	object *(null)*	The Gen-Z related properties for the entity.
AccessKey	string *read-write* *(null)*	The Access Key for the entity.

GCID {	object *(null)*	The Global Component ID (GCID) for the entity.
CID	string *read-write* *(null)*	The component identifier portion of the GCID for the entity.
SID	string *read-write* *(null)*	The subnet identifier portion of the GCID for the entity.
}		
RegionKey	string *read-write* *(null)*	The Region Key for the entity.
}		
Identifiers [{ }]	array (object)	Identifiers for the remote entity. Any additional identifiers for a resource. For property details, see Identifier.
Oem {}	object	The OEM extension property. For property details, see Oem.
PciClassCode *(deprecated v1.2)*	string *read-only* *(null)*	The Class Code, Subclass, and Programming Interface code of this PCIe function. *Deprecated in v1.2 and later. This property has been deprecated in favor of the ClassCode property inside the EntityPciId object.*
PciFunctionNumber *(deprecated v1.2)*	integer *read-only* *(null)*	The PCI ID of the connected entity. *Deprecated in v1.2 and later. This property has been deprecated in favor of the FunctionNumber property inside the EntityPciId object.*
}]		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

EndpointProtocol	string (enum) *read-only* (null)	The protocol supported by this endpoint. *For the possible property values, see EndpointProtocol in Property details.*
HostReservationMemoryBytes	integer (By) *read-only* (null)	The amount of memory in bytes that the host should allocate to connect to this endpoint.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Identifiers [{ }]	array (object)	Identifiers for this endpoint. Any additional identifiers for a resource. For property details, see Identifier.
IPTransportDetails *(v1.1+)* [{	array	An array of details for each IP transport supported by this endpoint. The array structure can model multiple IP addresses for this endpoint.
IPv4Address {}	object	The IPv4 addresses assigned to the endpoint. For property details, see IPv4Address.
IPv6Address {}	object	The IPv6 addresses assigned to the endpoint. For property details, see IPv6Address.
Port	number *read-only*	The UDP or TCP port number used by the endpoint.
TransportProtocol	string (enum) *read-only*	The protocol used by the connection entity. *For the possible property values, see TransportProtocol in Property details.*
}]		
Links {	object	The links to other resources that are related to this resource.
AddressPools *(v1.4+)* [{	array	An array of links to the address pools associated with this endpoint.
@odata.id	string *read-only*	Link to a AddressPool resource. See the Links section and the *AddressPool* schema for details.

}]		
AddressPools@odata.count	integer *read-only*	The number of items in a collection.
ConnectedPorts *(v1.4+)* [{	array	An array of links to the ports that connect to this endpoint.
@odata.id	string *read-only*	Link to a Port resource. See the Links section and the *Port* schema for details.
}]		
ConnectedPorts@odata.count	integer *read-only*	The number of items in a collection.
MutuallyExclusiveEndpoints [{	array	An array of links to the endpoints that cannot be used in zones if this endpoint is in a zone.
@odata.id	string *read-only*	Link to another Endpoint resource.
}]		
MutuallyExclusiveEndpoints@odata.count	integer *read-only*	The number of items in a collection.
NetworkDeviceFunction *(v1.1+)* [{	array	When NetworkDeviceFunction resources are present, this array contains links to the network device functions that connect to this endpoint.
@odata.id	string *read-only*	Link to a NetworkDeviceFunction resource. See the Links section and the *NetworkDeviceFunction* schema for details.
}]		
NetworkDeviceFunction@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
Ports [{	array	An array of links to the physical ports associated with this endpoint.

	string	
@odata.id	*read-only*	Link to a Port resource. See the Links section and the *Port* schema for details.
}]		
Ports@odata.count	integer *read-only*	The number of items in a collection.
}		
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PciId {	object	The PCI ID of the endpoint.
ClassCode *(v1.2+)*	string *read-only (null)*	The Class Code, Subclass, and Programming Interface code of this PCIe function.
DeviceId	string *read-only (null)*	The Device ID of this PCIe function.
FunctionNumber *(v1.2+)*	integer *read-only (null)*	The PCI ID of the connected entity.
SubsystemId	string *read-only (null)*	The Subsystem ID of this PCIe function.
SubsystemVendorId	string *read-only (null)*	The Subsystem Vendor ID of this PCIe function.

VendorId	string *read-only* *(null)*	The Vendor ID of this PCIe function.
}		
Redundancy [{	array	Redundancy information for the lower-level endpoints supporting this endpoint.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Redundancy@odata.count	integer *read-only*	The number of items in a collection.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.31.1 Property details

6.31.1.1 EndpointProtocol

The protocol supported by this endpoint.

String	Description
AHCI	Advanced Host Controller Interface (AHCI).
FC	Fibre Channel.
FCoE	Fibre Channel over Ethernet (FCoE).
FCP	Fibre Channel Protocol for SCSI.
FICON	FIbre CONnection (FICON).
FTP	File Transfer Protocol (FTP).
GenZ	GenZ.
HTTP	Hypertext Transport Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).

String	Description
I2C	Inter-Integrated Circuit Bus.
iSCSI	Internet SCSI.
iWARP	Internet Wide Area RDMA Protocol (iWARP).
MultiProtocol	Multiple Protocols.
NFSv3	Network File System (NFS) version 3.
NFSv4	Network File System (NFS) version 4.
NVMe	Non-Volatile Memory Express (NVMe).
NVMeOverFabrics	NVMe over Fabrics.
OEM	OEM-specific.
PCIe	PCI Express.
RoCE	RDMA over Converged Ethernet Protocol.
RoCEv2	RDMA over Converged Ethernet Protocol Version 2.
SAS	Serial Attached SCSI.
SATA	Serial AT Attachment.
SFTP	SSH File Transfer Protocol (SFTP).
SMB	Server Message Block (SMB). Also known as the Common Internet File System (CIFS).
TCP	Transmission Control Protocol (TCP).
TFTP	Trivial File Transfer Protocol (TFTP).
UDP	User Datagram Protocol (UDP).
UHCI	Universal Host Controller Interface (UHCI).
USB	Universal Serial Bus (USB).

6.31.1.2 EntityRole

The role of the connected entity.

String	Description
Both	The entity can both send and receive commands, messages, and other requests to or from other entities on the fabric.

String	Description
Initiator	The entity sends commands, messages, or other types of requests to other entities on the fabric, but cannot receive commands from other entities.
Target	The entity receives commands, messages, or other types of requests from other entities on the fabric, but cannot send commands to other entities.

6.31.1.3 EntityType

The type of the connected entity.

String	Description
AccelerationFunction *(v1.3+)*	The entity is an acceleration function realized through a device, such as an FPGA. The EntityLink property, if present, should be an AccelerationFunction type.
Bridge	The entity is a PCI(e) bridge.
DisplayController	The entity is a display controller.
Drive	The entity is a disk drive. The EntityLink property, if present, should be a Drive type.
FabricBridge *(v1.4+)*	The entity is a fabric bridge. The EntityLink property, if present, should be a FabricAdapter type.
MediaController *(v1.4+)*	The entity is a media controller. The EntityLink property, if present, should be a MediaController type.
MemoryChunk *(v1.4+)*	The entity is a memory chunk. The EntityLink property, if present, should be a MemoryChunk type.
NetworkController	The entity is a network controller. The EntityLink property, if present, should contain an EthernetInterface type.
Processor	The entity is a processor device.
RootComplex	The entity is a PCI(e) root complex. The EntityLink property, if present, should be a ComputerSystem type.
StorageExpander	The entity is a storage expander. The EntityLink property, if present, should be a Chassis type.
StorageInitiator	The entity is a storage initiator. The EntityLink property, if present, should be a StorageController type.
Switch *(v1.4+)*	The entity is a switch, not an expander. Use `Expander` for expanders. The EntityLink property, if present, should be a Switch type.
Volume *(v1.1+)*	The entity is a volume. The EntityLink property, if present, should be a Volume type.

6.31.1.4 TransportProtocol

The protocol used by the connection entity.

String	Description
AHCI	Advanced Host Controller Interface (AHCI).
FC	Fibre Channel.
FCoE	Fibre Channel over Ethernet (FCoE).
FCP	Fibre Channel Protocol for SCSI.
FICON	FIbre CONnection (FICON).
FTP	File Transfer Protocol (FTP).
GenZ	GenZ.
HTTP	Hypertext Transport Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).
I2C	Inter-Integrated Circuit Bus.
iSCSI	Internet SCSI.
iWARP	Internet Wide Area RDMA Protocol (iWARP).
MultiProtocol	Multiple Protocols.
NFSv3	Network File System (NFS) version 3.
NFSv4	Network File System (NFS) version 4.
NVMe	Non-Volatile Memory Express (NVMe).
NVMeOverFabrics	NVMe over Fabrics.
OEM	OEM-specific.
PCIe	PCI Express.
RoCE	RDMA over Converged Ethernet Protocol.
RoCEv2	RDMA over Converged Ethernet Protocol Version 2.
SAS	Serial Attached SCSI.
SATA	Serial AT Attachment.
SFTP	SSH File Transfer Protocol (SFTP).
SMB	Server Message Block (SMB). Also known as the Common Internet File System (CIFS).
TCP	Transmission Control Protocol (TCP).
TFTP	Trivial File Transfer Protocol (TFTP).

String	Description
UDP	User Datagram Protocol (UDP).
UHCI	Universal Host Controller Interface (UHCI).
USB	Universal Serial Bus (USB).

6.32 EndpointCollection

URIs:

/redfish/v1/Fabrics/*{FabricId}*/Endpoints

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.

Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.33 EthernetInterface 1.6.1

v1.6	*v1.5*	*v1.4*	*v1.3*	*v1.2*	*v1.1*	*v1.0*
2020.1	2019.1	2017.3	2017.1	2016.3	2016.2	1.0

The EthernetInterface schema represents a single, logical Ethernet interface or network interface controller (NIC).

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/EthernetInterfaces/*{EthernetInterfaceId}* /redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/EthernetInterfaces/*{EthernetInterfaceId}* /redfish/v1/Managers/*{ManagerId}*/EthernetInterfaces/*{EthernetInterfaceId}* /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/EthernetInterfaces/*{EthernetInterfaceId}* /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/EthernetInterfaces/*{EthernetInterfaceId}* /redfish/v1/Systems/*{ComputerSystemId}*/EthernetInterfaces/*{EthernetInterfaceId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.3+)* {}	object	The available actions for this resource.

AutoNeg	boolean *read-write* *(null)*	An indication of whether the speed and duplex are automatically negotiated and configured on this interface.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
DHCPv4 *(v1.4+)* {	object	DHCPv4 configuration for this interface.
DHCPEnabled	boolean *read-write* *(null)*	An indication of whether DHCP v4 is enabled on this Ethernet interface.
FallbackAddress *(v1.5+)*	string (enum) *read-write* *(null)*	DHCPv4 fallback address method for this interface. *For the possible property values, see FallbackAddress in Property details.*
UseDNSServers	boolean *read-write* *(null)*	An indication of whether this interface uses DHCP v4-supplied DNS servers.
UseDomainName	boolean *read-write* *(null)*	An indication of whether this interface uses a DHCP v4-supplied domain name.
UseGateway	boolean *read-write* *(null)*	An indication of whether this interface uses a DHCP v4-supplied gateway.
UseNTPServers	boolean *read-write* *(null)*	An indication of whether the interface uses DHCP v4-supplied NTP servers.

UseStaticRoutes	boolean *read-write* *(null)*	An indication of whether the interface uses DHCP v4-supplied static routes.
}		
DHCPv6 *(v1.4+)* {	object	DHCPv6 configuration for this interface.
OperatingMode	string (enum) *read-write* *(null)*	Determines the DHCPv6 operating mode for this interface. *For the possible property values, see OperatingMode in Property details.*
UseDNSServers	boolean *read-write* *(null)*	An indication of whether the interface uses DHCP v6-supplied DNS servers.
UseDomainName	boolean *read-write* *(null)*	An indication of whether the interface uses a domain name supplied through DHCP v6 stateless mode.
UseNTPServers	boolean *read-write* *(null)*	An indication of whether the interface uses DHCP v6-supplied NTP servers.
UseRapidCommit	boolean *read-write* *(null)*	An indication of whether the interface uses DHCP v6 rapid commit mode for stateful mode address assignments. Do not enable this option in networks where more than one DHCP v6 server is configured to provide address assignments.
}		
EthernetInterfaceType *(v1.6+)*	string (enum) *read-only* *(null)*	The type of interface. *For the possible property values, see EthernetInterfaceType in Property details.*

	string	
FQDN	*read-write (null)*	The complete, fully qualified domain name that DNS obtains for this interface.
FullDuplex	boolean *read-write (null)*	An indication of whether full-duplex mode is enabled on the Ethernet connection for this interface.
HostName	string *read-write (null)*	The DNS host name, without any domain information.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
InterfaceEnabled	boolean *read-write (null)*	An indication of whether this interface is enabled.
IPv4Addresses [{ }]	array (object)	The IPv4 addresses currently assigned to this interface. This type describes an IPv4 address. For property details, see IPv4Address.
IPv4StaticAddresses *(v1.4+)* [{ }]	array (object) *(null)*	The IPv4 static addresses assigned to this interface. This type describes an IPv4 address. For property details, see IPv4Address.
IPv6Addresses [{ }]	array (object)	An array of the currently assigned IPv6 addresses on this interface. This type describes an IPv6 address. For property details, see IPv6Address.
IPv6AddressPolicyTable [{	array	An array that represents the RFC6724-defined address selection policy table.
Label	integer *read-write (null)*	The IPv6 label, as defined in RFC6724, section 2.1.

	integer	
Precedence	*read-write* *(null)*	The IPv6 precedence, as defined in RFC6724, section 2.1.
Prefix	string *read-write* *(null)*	The IPv6 address prefix, as defined in RFC6724, section 2.1.
}]		
IPv6DefaultGateway	string *read-only* *(null)*	The IPv6 default gateway address in use on this interface.
IPv6StaticAddresses [{ }]	array (object) *(null)*	An array of the IPv6 static addresses to assign on this interface. This type represents a single IPv6 static address to be assigned on a network interface. For property details, see IPv6StaticAddress.
IPv6StaticDefaultGateways *(v1.4+)* [{ }]	array (object) *(null)*	The IPv6 static default gateways for this interface. This type represents a single IPv6 static address to be assigned on a network interface. For property details, see IPv6GatewayStaticAddress (v1.1.2).
Links *(v1.1+)* {	object	The links to other resources that are related to this resource.
Chassis *(v1.3+)* {	object	The link to the chassis that contains this Ethernet interface. See the *Chassis* schema for details on this property.
@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}		
Endpoints [{	array	An array of links to the endpoints that connect to this Ethernet interface.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		

Endpoints@odata.count	integer *read-only*	The number of items in a collection.
HostInterface *(v1.2+)* {	object	The link to a Host Interface that is associated with this Ethernet interface. See the *HostInterface* schema for details on this property.
@odata.id	string *read-only*	Link to a HostInterface resource. See the Links section and the *HostInterface* schema for details.
}		
NetworkDeviceFunction *(v1.6+)* {	object *(null)*	The link to the parent network device function and is only used when representing one of the VLANs on that network device function, such as is done in Unix. See the *NetworkDeviceFunction* schema for details on this property.
@odata.id	string *read-only*	Link to a NetworkDeviceFunction resource. See the Links section and the *NetworkDeviceFunction* schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
LinkStatus *(v1.1+)*	string (enum) *read-only* *(null)*	The link status of this interface, or port. *For the possible property values, see LinkStatus in Property details.*
MACAddress	string *read-write* *(null)*	The currently configured MAC address of the interface, or logical port.
MaxIPv6StaticAddresses	integer *read-only* *(null)*	The maximum number of static IPv6 addresses that can be configured on this interface.

MTUSize	integer *read-write* *(null)*	The currently configured maximum transmission unit (MTU), in bytes, on this interface.
Name	string *read-only* *required*	The name of the resource or array member.
NameServers [ ]	array (string) *read-only*	The DNS servers in use on this interface.
Oem {}	object	The OEM extension property. For property details, see Oem.
PermanentMACAddress	string *read-only* *(null)*	The permanent MAC address assigned to this interface, or port.
SpeedMbps	integer (Mbit/s) *read-write* *(null)*	The current speed, in Mbit/s, of this interface.
StatelessAddressAutoConfig *(v1.4+)* {	object	Stateless address autoconfiguration (SLAAC) parameters for this interface.
IPv4AutoConfigEnabled	boolean *read-write* *(null)*	An indication of whether IPv4 stateless address autoconfiguration (SLAAC) is enabled for this interface.
IPv6AutoConfigEnabled	boolean *read-write* *(null)*	An indication of whether IPv6 stateless address autoconfiguration (SLAAC) is enabled for this interface.
}		

	array (string, null)	
StaticNameServers *(v1.4+)* [ ]	*read-write*	The statically-defined set of DNS server IPv4 and IPv6 addresses.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
UefiDevicePath	string *read-only (null)*	The UEFI device path for this interface.
VLAN {	object	If this network interface supports more than one VLAN, this property is absent. VLAN collections appear in the Links property of this resource. See the *VLanNetworkInterface* schema for details on this property.
@odata.id	string *read-only*	Link to a VLAN resource. See the Links section and the *VLanNetworkInterface* schema for details.
}		
VLANs {	object	The link to a collection of VLANs, which applies only if the interface supports more than one VLAN. If this property applies, the VLANEnabled and VLANId properties do not apply. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *VLanNetworkInterface*. See the VLanNetworkInterface schema for details.
}		

6.33.1 Property details

6.33.1.1 EthernetInterfaceType

The type of interface.

String	Description
Physical	A physical Ethernet interface.
Virtual	A virtual Ethernet interface.

6.33.1.2 FallbackAddress

DHCPv4 fallback address method for this interface.

String	Description
AutoConfig	Fall back to an autoconfigured address.
None	Continue attempting DHCP without a fallback address.
Static	Fall back to a static address specified by IPv4StaticAddresses.

6.33.1.3 LinkStatus

The link status of this interface, or port.

String	Description
LinkDown	No link is detected on this interface, but the interface is connected.
LinkUp	The link is available for communication on this interface.
NoLink	No link or connection is detected on this interface.

6.33.1.4 OperatingMode

Determines the DHCPv6 operating mode for this interface.

String	Description
Disabled	DHCPv6 is disabled.
Stateful	DHCPv6 stateful mode.
Stateless	DHCPv6 stateless mode.

6.34 EthernetInterfaceCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/EthernetInterfaces
/redfish/v1/Managers/*{ManagerId}*/EthernetInterfaces /redfish/v1/
Managers/*{ManagerId}*/HostInterfaces/*{HostInterfaceId}*/HostEthernetInterfaces /redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/EthernetInterfaces /redfish/v1/
Systems/*{ComputerSystemId}*/EthernetInterfaces

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a EthernetInterface resource. See the Links section and the *EthernetInterface* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.

Oem {}	object	The OEM extension property. For property details, see Oem.

6.35 Event 1.5.0

v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2020.2	2019.1	2018.2	2017.1	2016.1	1.0

The Event schema describes the JSON payload received by an event destination, which has subscribed to event notification, when events occur. This resource contains data about events, including descriptions, severity, and a message identifier to a message registry that can be accessed for further information.

@odata.context	string *read-only*	The OData description of a payload.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.2+)* {}	object	The available actions for this resource.
Context *(v1.1+)*	string *read-only*	A context can be supplied at subscription time. This property is the context value supplied by the subscriber.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Events [{	array * required*	Each event in this array has a set of properties that describe the event. Because this is an array, more than one event can be sent simultaneously.
Actions *(v1.2+)* {}	object	The available actions for this resource.
Context *(deprecated v1.1)*	string *read-only*	A context can be supplied at subscription time. This property is the context value supplied by the subscriber. *Deprecated in v1.1 and later. Events are triggered independently from subscriptions to those events. This property has been deprecated in favor of the Context property found at the root level of the object.*

EventGroupId (v1.3+)	integer read-only	The identifier that correlates events with the same root cause. If `0`, no other event is related to this event.
EventId	string read-only	The unique instance identifier of an event.
EventTimestamp	string read-only	The time the event occurred.
EventType (deprecated v1.3)	string (enum) read-only required	The type of event. *For the possible property values, see EventType in Property details. Deprecated in v1.3 and later. This property has been deprecated. Starting with Redfish Specification v1.6 (Event v1.3), subscriptions are based on the RegistryPrefix and ResourceType properties and not on the EventType property.*
MemberId	string read-only required	The identifier for the member within the collection.
Message	string read-only	The human-readable event message.
MessageArgs [ ]	array (string) read-only	An array of message arguments that are substituted for the arguments in the message when looked up in the message registry.
MessageId	string read-only required	The key used to find the message in a message registry.
MessageSeverity (v1.5+)	string (enum) read-only (null)	The severity of the message in this event. *For the possible property values, see MessageSeverity in Property details.*
Oem {}	object	The OEM extension property. For property details, see Oem.

OriginOfCondition {	object	A link to the resource or object that originated the condition that caused the event to be generated.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
Severity (deprecated v1.5)	string *read-only*	The severity of the event. *Deprecated in v1.5 and later. This property has been deprecated in favor of MessageSeverity, which ties the values to the enumerations defined for the Health property within Status.*
}]		
Events@odata.count	integer *read-only*	The number of items in a collection.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.35.1 Property details

6.35.1.1 EventType

The type of event.

String	Description
Alert	A condition requires attention.
MetricReport *(v1.3+)*	The telemetry service is sending a metric report.

String	Description
Other *(v1.4+)*	Because EventType is deprecated as of Redfish Specification v1.6, the event is based on a registry or resource but not an EventType.
ResourceAdded	A resource has been added.
ResourceRemoved	A resource has been removed.
ResourceUpdated	A resource has been updated.
StatusChange	The status of a resource has changed.

6.35.1.2 MessageSeverity

The severity of the message in this event.

String	Description
Critical	A critical condition requires immediate attention.
OK	Normal.
Warning	A condition requires attention.

6.36 EventDestination 1.8.1

v1.8	v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2020.1	2019.3	2019.2	2019.1	2018.2	2018.1	2017.1	2016.2	1.0

The EventDestination schema defines the target of an event subscription, including the event types and context to provide to the target in the Event payload.

URIs:

/redfish/v1/EventService/Subscriptions/*{EventDestinationId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.2+)* {	object	The available actions for this Resource.
#EventDestination.ResumeSubscription {}	object	This action resumes a suspended event subscription. *For more information, see the Actions section below.*
}		
Context	string *read-write* *required* *(null)*	A client-supplied string that is stored with the event destination subscription.
DeliveryRetryPolicy *(v1.6+)*	string (enum) *read-write* *(null)*	This property shall contain the subscription delivery retry policy for events, where the subscription type is RedfishEvent. *For the possible property values, see DeliveryRetryPolicy in Property details.*
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Destination	string *read-only* *required on create*	The URI of the destination event receiver.
EventFormatType *(v1.4+)*	string (enum) *read-only* *(null)*	The content types of the message that are sent to the EventDestination. *For the possible property values, see EventFormatType in Property details.*

EventTypes *(deprecated v1.5)* [ ]	array (string (enum)) *read-only*	The types of events that are sent to the destination. *For the possible property values, see EventTypes in Property details. Deprecated in v1.5 and later. This property has been deprecated. Starting with Redfish Specification v1.6 (Event v1.3), subscriptions are based on the RegistryPrefix and ResourceType properties and not on the EventType property. Use EventFormatType to create subscriptions for Metric Reports. If the subscription does not include this property, the service shall use a single element with a default of* `Other` .
HttpHeaders [{	array	An array of settings for HTTP headers, such as authorization information. This array is null or an empty array in responses. An empty array is the preferred return value on read operations.
(pattern) {} [ ]	array, boolean, integer, number, object, string *(null)*	Property names follow regular expression pattern "^([a-zA-Z_][a-zA-Z0-9_]*)?@(odata|Redfish|Message)\.[a-zA-Z_][a-zA-Z0-9_]*$"
(pattern)	string *read-write*	Property names follow regular expression pattern "^[^:\\\\s]+$"
}]		
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
IncludeOriginOfCondition *(v1.8+)*	boolean *read-only (null)*	An indication of whether the events subscribed to will also include the entire resource or object referenced the OriginOfCondition property in the event payload.
MessageIds *(v1.1+)* [ ]	array (string, null) *read-only*	The list of MessageIds that the service sends. If this property is absent or the array is empty, events with any MessageId are sent to the subscriber.
MetricReportDefinitions *(v1.6+)* [{	array	A list of metric report definitions for which the service only sends related metric reports. If this property is absent or the array is empty, metric reports that originate from any metric report definition are sent to the subscriber.

@odata.id	string *read-only*	Link to a MetricReportDefinition resource. See the Links section and the *MetricReportDefinition* schema for details.
}]		
MetricReportDefinitions@odata.count	integer *read-only*	The number of items in a collection.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OriginResources *(v1.1+)* [{	array	The array of Resources for which the service sends only related events. If this property is absent or the array is empty, the service sends the events that originate from any Resource to the subscriber.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
OriginResources@odata.count	integer *read-only*	The number of items in a collection.
Protocol	string (enum) *read-only* *required* *on* *create*	The protocol type of the event connection. *For the possible property values, see Protocol in Property details.*
RegistryPrefixes *(v1.4+)* [ ]	array (string, null) *read-only*	The list of the prefixes for the Message Registries that contain the MessageIds that are sent to this event destination.

ResourceTypes *(v1.4+)* [ ]	array (string, null) *read-only*	The list of Resource Type values (Schema names) that correspond to the OriginOfCondition. The version and full namespace should not be specified.
SNMP *(v1.7+)* {	object	Settings for an SNMP event destination.
AuthenticationKey	string *read-write (null)*	The secret authentication key for SNMPv3.
AuthenticationProtocol	string (enum) *read-write (null)*	The authentication protocol for SNMPv3. *For the possible property values, see AuthenticationProtocol in Property details.*
EncryptionKey	string *read-write (null)*	The secret authentication key for SNMPv3.
EncryptionProtocol	string (enum) *read-write (null)*	The encryption protocol for SNMPv3. *For the possible property values, see EncryptionProtocol in Property details.*
TrapCommunity	string *read-write (null)*	The SNMP trap community string.
}		
Status *(v1.6+)* {}	object	This property shall contain the status of the subscription. For property details, see Status.
SubordinateResources *(v1.4+)*	boolean *read-only (null)*	An indication of whether the subscription is for events in the OriginResources array and its subordinate Resources. If `true` and the OriginResources array is specified, the subscription is for events in the OriginResources array and its subordinate Resources. Note that Resources associated through the Links section are not considered subordinate. If `false` and the OriginResources array is specified, the subscription shall be for events in the OriginResources array only. If the OriginResources array is not present, this property shall have no relevance.

SubscriptionType *(v1.3+)*	string (enum) read-only required *(null)*	The subscription type for events. *For the possible property values, see SubscriptionType in Property details.*

6.36.1 Actions

6.36.1.1 ResumeSubscription

This action resumes a suspended event subscription.

URIs:

/redfish/v1/EventService/Subscriptions/*{EventDestinationId}*/Actions/EventDestination.ResumeSubscription

(This action takes no parameters.)

6.36.2 Property details

6.36.2.1 AuthenticationProtocol

The authentication protocol for SNMPv3.

String	Description
CommunityString	Trap community string authentication.
HMAC_MD5	HMAC-MD5-96 authentication.
HMAC_SHA96	HMAC-SHA-96 authentication.
None	No authentication.

6.36.2.2 DeliveryRetryPolicy

This property shall contain the subscription delivery retry policy for events, where the subscription type is RedfishEvent.

String	Description
RetryForever	The subscription is not suspended or terminated, and attempts at delivery of future events shall continue even after the maximum number of retries is reached.

String	Description
SuspendRetries	The subscription is suspended after the maximum number of retries is reached.
TerminateAfterRetries	The subscription is terminated after the maximum number of retries is reached.

6.36.2.3 EncryptionProtocol

The encryption protocol for SNMPv3.

String	Description
CBC_DES	CBC-DES encryption.
CFB128_AES128	CFB128-AES-128 encryption.
None	No encryption.

6.36.2.4 EventFormatType

The content types of the message that are sent to the EventDestination.

String	Description
Event	The subscription destination receives JSON bodies of the Resource of type Event.
MetricReport	The subscription destination receives JSON bodies of the Resource of type MetricReport.

6.36.2.5 EventTypes

The types of events that are sent to the destination.

String	Description
Alert	A condition requires attention.
MetricReport	The telemetry service is sending a metric report.
Other	Because EventType is deprecated as of Redfish Specification v1.6, the event is based on a registry or resource but not an EventType.
ResourceAdded	A resource has been added.
ResourceRemoved	A resource has been removed.
ResourceUpdated	A resource has been updated.
StatusChange	The status of a resource has changed.

6.36.2.6 Protocol

The protocol type of the event connection.

String	Description
Redfish	The destination follows the Redfish Specification for event notifications.
SMTP *(v1.7+)*	The destination follows the SMTP specification for event notifications.
SNMPv1 *(v1.7+)*	The destination follows the SNMPv1 protocol for event notifications.
SNMPv2c *(v1.7+)*	The destination follows the SNMPv2c protocol for event notifications.
SNMPv3 *(v1.7+)*	The destination follows the SNMPv3 protocol for event notifications.

6.36.2.7 SubscriptionType

The subscription type for events.

String	Description
RedfishEvent	The subscription follows the Redfish Specification for event notifications. To send an event notification, a service sends an HTTP POST to the subscriber's destination URI.
SNMPInform *(v1.7+)*	The subscription follows versions 2 and 3 of SNMP Inform for event notifications.
SNMPTrap *(v1.7+)*	The subscription follows the various versions of SNMP Traps for event notifications.
SSE	The subscription follows the HTML5 Server-Sent Event definition for event notifications.

6.37 EventDestinationCollection

URIs:

/redfish/v1/EventService/Subscriptions

	string *read-only*	The OData description of a payload.
@odata.context		

@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a EventDestination resource. See the Links section and the *EventDestination* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.38 EventService 1.7.0

v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0

2020.2	2020.1	2019.3	2019.2	2019.1	2018.2	2018.1	1.0

The EventService schema contains properties for managing event subscriptions and generates the events sent to subscribers. The resource has links to the actual collection of subscriptions, which are called event destinations.

URIs:

/redfish/v1/EventService

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#EventService.SubmitTestEvent {}	object	This action generates a test event. *For more information, see the Actions section below.*
}		
DeliveryRetryAttempts	integer *read-write*	The number of times that the POST of an event is retried before the subscription terminates. This retry occurs at the service level, which means that the HTTP POST to the event destination fails with an HTTP `4XX` or `5XX` status code or an HTTP timeout occurs this many times before the event destination subscription terminates.
DeliveryRetryIntervalSeconds	integer (s) *read-write*	The interval, in seconds, between retry attempts for sending any event.

Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
EventFormatTypes *(v1.2+)* [ ]	array (string (enum)) *read-only* *(null)*	The content types of the message that this service can send to the event destination. *For the possible property values, see EventFormatTypes in Property details.*
EventTypesForSubscription *(deprecated v1.3)* [ ]	array (string (enum)) *read-only*	The types of events to which a client can subscribe. *For the possible property values, see EventTypesForSubscription in Property details. Deprecated in v1.3 and later. This property has been deprecated. Starting with Redfish Specification v1.6 (Event v1.3), subscriptions are based on the RegistryPrefix and ResourceType properties and not on the EventType property.*
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
IncludeOriginOfConditionSupported *(v1.6+)*	boolean *read-only* *(null)*	An indication of whether the service supports including the resource payload of the origin of condition in the event payload.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
RegistryPrefixes *(v1.2+)* [ ]	array (string, null) *read-only*	The list of the prefixes of the message registries that can be used for the RegistryPrefix property on a subscription. If this property is absent or contains an empty array, the service does not support RegistryPrefix-based subscriptions.

ResourceTypes *(v1.2+)* [ ]	array (string, null) *read-only*	The list of @odata.type values, or schema names, that can be specified in the ResourceTypes array in a subscription. If this property is absent or contains an empty array, the service does not support resource type-based subscriptions.
ServerSentEventUri *(v1.1+)*	string *read-only*	The link to a URI for receiving Server-Sent Event representations for the events that this service generates.
ServiceEnabled	boolean *read-write (null)*	An indication of whether this service is enabled.
SMTP *(v1.5+)* {	object	Settings for SMTP event delivery.
Authentication	string (enum) *read-write (null)*	The authentication method for the SMTP server. *For the possible property values, see Authentication in Property details.*
ConnectionProtocol	string (enum) *read-write (null)*	The connection type to the outgoing SMTP server. *For the possible property values, see ConnectionProtocol in Property details.*
FromAddress	string *read-write (null)*	The 'from' email address of the outgoing email.
Password	string *read-write (null)*	The password for authentication with the SMTP server. The value is `null` in responses.
Port	integer *read-write (null)*	The destination SMTP port.

ServerAddress	string *read-write* *(null)*	The address of the SMTP server.	
ServiceEnabled	boolean *read-write* *(null)*	An indication if SMTP for event delivery is enabled.	
Username	string *read-write* *(null)*	The username for authentication with the SMTP server.	
}			
SSEFilterPropertiesSupported *(v1.2+)* {	object	The set of properties that are supported in the `$filter` query parameter for the ServerSentEventUri.	
EventFormatType	boolean *read-only*	An indication of whether the service supports filtering by the EventFormatType property.	
EventType *(deprecated v1.3)*	boolean *read-only*	An indication of whether the service supports filtering by the EventType property. *Deprecated in v1.3 and later. This property has been deprecated. Starting with Redfish Specification v1.6 (Event v1.3), subscriptions are based on the RegistryPrefix and ResourceType properties and not on the EventType property.*	
MessageId	boolean *read-only*	An indication of whether the service supports filtering by the MessageId property.	
MetricReportDefinition	boolean *read-only*	An indication of whether the service supports filtering by the MetricReportDefinition property.	
OriginResource	boolean *read-only*	An indication of whether the service supports filtering by the OriginResource property.	
RegistryPrefix	boolean *read-only*	An indication of whether the service supports filtering by the RegistryPrefix property.	

ResourceType	boolean *read-only*	An indication of whether the service supports filtering by the ResourceType property.
SubordinateResources *(v1.4+)*	boolean *read-only*	An indication of whether the service supports filtering by the SubordinateResources property.
}		
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
SubordinateResourcesSupported *(v1.2+)*	boolean *read-only* *(null)*	An indication of whether the service supports the SubordinateResource property on both event subscriptions and generated events.
Subscriptions {	object	The link to a collection of event destinations. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *EventDestination*. See the EventDestination schema for details.
}		

6.38.1 Actions

6.38.1.1 SubmitTestEvent

This action generates a test event.

URIs:

/redfish/v1/EventService/Actions/EventService.SubmitTestEvent

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
EventGroupId *(v1.3+)*	integer *optional*	The group identifier for the event.

	string optional	The ID for the event to add.
EventId		
EventTimestamp	string optional	The date and time for the event to add.
EventType (deprecated v1.3)	string (enum) optional	The type for the event to add. *For the possible property values, see EventType in Property details. Deprecated in v1.3 and later. This parameter has been deprecated. Starting with Redfish Specification v1.6 (Event v1.3), subscriptions are based on the RegistryPrefix and ResourceType properties and not on the EventType property.*
Message	string optional	The human-readable message for the event to add.
MessageArgs [ ]	array (string) optional	An array of message arguments for the event to add.
MessageId	string required	The MessageId for the event to add.
OriginOfCondition	string optional	The URL in the OriginOfCondition property of the event to add. It is not a reference object.
Severity	string optional	The severity for the event to add.
}		

6.38.2 Property details

6.38.2.1 Authentication

The authentication method for the SMTP server.

String	Description
AutoDetect	Auto-detect.
CRAM_MD5	CRAM-MD5 authentication.
Login (deprecated v1.7)	LOGIN authentication. *Deprecated in v1.7 and later. This value has been deprecated in favor of* `Plain` *, which supersedes the LOGIN authentication method for SASL.*

String	Description
None	No authentication.
Plain	PLAIN authentication.

6.38.2.2 ConnectionProtocol

The connection type to the outgoing SMTP server.

String	Description
AutoDetect	Auto-detect.
None	Clear text.
StartTLS	StartTLS.
TLS_SSL	TLS/SSL.

6.38.2.3 EventFormatTypes

The content types of the message that this service can send to the event destination.

String	Description
Event	The subscription destination receives JSON bodies of the Resource of type Event.
MetricReport	The subscription destination receives JSON bodies of the Resource of type MetricReport.

6.38.2.4 EventType

The type for the event to add.

String	Description
Alert	A condition requires attention.
MetricReport	The telemetry service is sending a metric report.
Other	Because EventType is deprecated as of Redfish Specification v1.6, the event is based on a registry or resource but not an EventType.
ResourceAdded	A resource has been added.
ResourceRemoved	A resource has been removed.
ResourceUpdated	A resource has been updated.

String	Description
StatusChange	The status of a resource has changed.

6.38.2.5 EventTypesForSubscription

The types of events to which a client can subscribe.

String	Description
Alert	A condition requires attention.
MetricReport	The telemetry service is sending a metric report.
Other	Because EventType is deprecated as of Redfish Specification v1.6, the event is based on a registry or resource but not an EventType.
ResourceAdded	A resource has been added.
ResourceRemoved	A resource has been removed.
ResourceUpdated	A resource has been updated.
StatusChange	The status of a resource has changed.

6.39 ExternalAccountProvider 1.1.3

v1.1	v1.0
2018.3	2018.1

The ExternalAccountProvider schema represents a remote service that provides accounts for this manager to use for authentication.

URIs:

/redfish/v1/AccountService/ExternalAccountProviders/*{ExternalAccountProviderId}* /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/ExternalAccountProviders/*{ExternalAccountProviderId}*

@odata.context	string read-only	The OData description of a payload.
@odata.etag	string read-only	The current ETag of the resource.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
AccountProviderType	string (enum) *read-only* *required on* *create* *(null)*	The type of external account provider to which this service connects. *For the possible property values, see AccountProviderType in Property details.*
Actions {}	object	The available actions for this resource.
Authentication {	object	The authentication information for the external account provider.
AuthenticationType	string (enum) *read-write* *(null)*	The type of authentication used to connect to the external account provider. *For the possible property values, see AuthenticationType in Property details.*
KerberosKeytab	string *read-write* *(null)*	The Base64-encoded version of the Kerberos keytab for this service. A PATCH or PUT operation writes the keytab. This property is `null` in responses.
Oem {}	object	The OEM extension property. For property details, see Oem.
Password	string *read-write* *(null)*	The password for this service. A PATCH or PUT request writes the password. This property is `null` in responses.
Token	string *read-write* *(null)*	The token for this service. A PATCH or PUT operation writes the token. This property is `null` in responses.
Username	string *read-write*	The user name for the service.
}		
Certificates *(v1.1+)* {	object	The link to a collection of certificates that the external account provider uses. Contains a link to a resource.

	string	Link to Collection of *Certificate*. See the Certificate schema for details.
@odata.id	*read-only*	
}		
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
LDAPService {	object	The additional mapping information needed to parse a generic LDAP service.
Oem {}	object	The OEM extension property. For property details, see Oem.
SearchSettings {	object	The required settings to search an external LDAP service.
BaseDistinguishedNames [ ]	array (string, null) *read-write*	The base distinguished names to use to search an external LDAP service.
GroupNameAttribute	string *read-write (null)*	The attribute name that contains the LDAP group name entry.
GroupsAttribute	string *read-write (null)*	The attribute name that contains the groups for a user on the LDAP user entry.
UsernameAttribute	string *read-write (null)*	The attribute name that contains the LDAP user name entry.
}		
}		
Links {	object	The links to other resources that are related to this resource.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		

Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
RemoteRoleMapping [{	array	The mapping rules to convert the external account providers account information to the local Redfish role.
LocalRole	string *read-write* *(null)*	The name of the local Redfish role to which to map the remote user or group.
Oem {}	object	The OEM extension property. For property details, see Oem.
RemoteGroup	string *read-write* *(null)*	The name of the remote group, or the remote role in the case of a Redfish service, that maps to the local Redfish role to which this entity links.
RemoteUser	string *read-write* *(null)*	The name of the remote user that maps to the local Redfish role to which this entity links.
}]		
ServiceAddresses [ ]	array (string, null) *read-write*	The addresses of the user account providers to which this external account provider links. The format of this field depends on the type of external account provider.
ServiceEnabled	boolean *read-write* *(null)*	An indication of whether this service is enabled.

6.39.1 Property details

6.39.1.1 AccountProviderType

The type of external account provider to which this service connects.

String	Description
ActiveDirectoryService	An external Active Directory service.
LDAPService	A generic external LDAP service.

String	Description
OEM	An OEM-specific external authentication or directory service.
RedfishService	An external Redfish service.

6.39.1.2 AuthenticationType

The type of authentication used to connect to the external account provider.

String	Description
KerberosKeytab	A Kerberos keytab.
OEM	An OEM-specific authentication mechanism.
Token	An opaque authentication token.
UsernameAndPassword	A user name and password combination.

6.40 ExternalAccountProviderCollection

URIs:

/redfish/v1/AccountService/ExternalAccountProviders /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/
ExternalAccountProviders

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.

Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a ExternalAccountProvider resource. See the Links section and the *ExternalAccountProvider* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.41 Fabric 1.1.1

v1.1	*v1.0*
2019.4	2016.2

The Fabric schema represents a simple fabric consisting of one or more switches, zero or more endpoints, and zero or more zones.

URIs:

/redfish/v1/Fabrics/*{FabricId}*

@odata.context	string *read-only*	The OData description of a payload.

@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
AddressPools *(v1.1+)* {	object	The collection of links to the address pools that this fabric contains. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *AddressPool*. See the AddressPool schema for details.
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Endpoints {	object	The collection of links to the endpoints that this fabric contains. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Endpoint*. See the Endpoint schema for details.
}		
FabricType	string (enum) *read-only* *(null)*	The protocol being sent over this fabric. *For the possible property values, see FabricType in Property details.*
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		

MaxZones	integer read-only (null)	The maximum number of zones the switch can currently configure.
Name	string read-only required	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
Switches {	object	The collection of links to the switches that this fabric contains. Contains a link to a resource.
@odata.id	string read-only	Link to Collection of *Switch*. See the Switch schema for details.
}		
Zones {	object	The collection of links to the zones that this fabric contains. Contains a link to a resource.
@odata.id	string read-only	Link to Collection of *Zone*. See the Zone schema for details.
}		

6.41.1 Property details

6.41.1.1 FabricType

The protocol being sent over this fabric.

String	Description
AHCI	Advanced Host Controller Interface (AHCI).
FC	Fibre Channel.
FCoE	Fibre Channel over Ethernet (FCoE).
FCP	Fibre Channel Protocol for SCSI.
FICON	FIbre CONnection (FICON).
FTP	File Transfer Protocol (FTP).

String	Description
GenZ	GenZ.
HTTP	Hypertext Transport Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).
I2C	Inter-Integrated Circuit Bus.
iSCSI	Internet SCSI.
iWARP	Internet Wide Area RDMA Protocol (iWARP).
MultiProtocol	Multiple Protocols.
NFSv3	Network File System (NFS) version 3.
NFSv4	Network File System (NFS) version 4.
NVMe	Non-Volatile Memory Express (NVMe).
NVMeOverFabrics	NVMe over Fabrics.
OEM	OEM-specific.
PCIe	PCI Express.
RoCE	RDMA over Converged Ethernet Protocol.
RoCEv2	RDMA over Converged Ethernet Protocol Version 2.
SAS	Serial Attached SCSI.
SATA	Serial AT Attachment.
SFTP	SSH File Transfer Protocol (SFTP).
SMB	Server Message Block (SMB). Also known as the Common Internet File System (CIFS).
TCP	Transmission Control Protocol (TCP).
TFTP	Trivial File Transfer Protocol (TFTP).
UDP	User Datagram Protocol (UDP).
UHCI	Universal Host Controller Interface (UHCI).
USB	Universal Serial Bus (USB).

6.42 FabricAdapter 1.0.0

v1.0
2019.4
A FabricAdapter represents the physical fabric adapter capable of connecting to an interconnect fabric. Examples include but are not limited to Ethernet, NVMe over Fabrics, Gen-Z, and SAS fabric adapters.

URIs:

/redfish/v1/Systems/*{SystemId}*/FabricAdapters/*{FabricAdapterId}*

	string	
@odata.context	*read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
ASICManufacturer	string *read-only* *(null)*	The manufacturer name for the ASIC of this fabric adapter.
ASICPartNumber	string *read-only* *(null)*	The part number for the ASIC on this fabric adapter.
ASICRevisionIdentifier	string *read-only* *(null)*	The revision identifier for the ASIC on this fabric adapter.

Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
FirmwareVersion	string *read-only* *(null)*	The firmware version of this fabric adapter.
GenZ {	object	The Gen-Z specific properties for this fabric adapter.
MSDT {	object	The Multi Subnet Destination Table for the component. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *RouteEntry*. See the RouteEntry schema for details.
}		
PIDT [ ]	array (string, null) *read-write*	An array of table entry values for the Packet Injection Delay Table.
RequestorVCAT {	object	The Requestor Virtual Channel Action Table for the component. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *VCATEntry*. See the VCATEntry schema for details.
}		
ResponderVCAT {	object	The Responder Virtual Channel Action Table for the component. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *VCATEntry*. See the VCATEntry schema for details.
}		
RITable [ ]	array (string, null) *read-write*	An array of table entry values for the Responder Interface Table.
SSDT {	object	The Single Subnet Destination Table for the component. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *RouteEntry*. See the RouteEntry schema for details.
}		

}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other Resources that are related to this Resource.
Endpoints [{	array	An array of links to the endpoints that represent the logical fabric connection to this fabric adapter.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Endpoints@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Manufacturer	string *read-only* *(null)*	The manufacturer or OEM of this fabric adapter.
Model	string *read-only* *(null)*	The model string for this fabric adapter.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PartNumber	string *read-only* *(null)*	The part number for this fabric adapter.
PCIeInterface {	object	The PCIe interface details for this fabric adapter. See the *PCIeDevice* schema for details on this property.
@odata.id	string *read-only*	Link to a PCIeInterface resource. See the Links section and the *PCIeDevice* schema for details.

}		
Ports {	object	The link to the collection of ports that exist on the fabric adapter. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Port*. See the Port schema for details.
}		
SerialNumber	string *read-only* *(null)*	The serial number for this fabric adapter.
SKU	string *read-only* *(null)*	The manufacturer SKU for this fabric adapter.
SparePartNumber	string *read-only* *(null)*	The spare part number for this fabric adapter.
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.
UUID	string *read-only* *(null)*	The UUID for this fabric adapter.

6.43 FabricAdapterCollection

URIs:

/redfish/v1/Systems/*{ComputerSystemId}*/FabricAdapters

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string	The unique identifier for a resource.
	read-only	
@odata.type	string	The type of a resource.
	read-only	
Description	string	The description of this resource. Used for commonality in the schema definitions.
	read-only (null)	
Members [{	array	The members of this collection.
@odata.id	string	Link to a FabricAdapter resource. See the Links section and the *FabricAdapter* schema for details.
	read-only	
}]		
Members@odata.count	integer	The number of items in a collection.
	read-only	
Members@odata.nextLink	string	The URI to the resource containing the next set of partial members.
	read-only	
Name	string	The name of the resource or array member.
	read-only	
Oem {}	object	The OEM extension property. For property details, see Oem.

6.44 FabricCollection

URIs:

/redfish/v1/Fabrics

@odata.context	string	The OData description of a payload.
	read-only	
@odata.etag	string	The current ETag of the resource.
	read-only	

@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Fabric resource. See the Links section and the *Fabric* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.45 Facility 1.0.1

v1.0
2019.4

The Facility schema represents the physical location containing equipment, such as a room, building, or campus.

URIs:

/redfish/v1/Facilities/*{FacilityId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
FacilityType	string (enum) *read-only* *required*	The type of location this resource represents. *For the possible property values, see FacilityType in Property details.*
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
ContainedByFacility {	object	The link to the facility that contains this facility.
@odata.id	string *read-only*	Link to another Facility resource.
}		
ContainsChassis [{	array	An array of links to outermost chassis contained within this facility.
@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}]		

ContainsChassis@odata.count	integer *read-only*	The number of items in a collection.
ContainsFacilities [{	array	An array of links to other facilities contained within this facility.
@odata.id	string *read-only*	Link to another Facility resource.
}]		
ContainsFacilities@odata.count	integer *read-only*	The number of items in a collection.
FloorPDUs [{	array	An array of links to the floor power distribution units in this facility.
@odata.id	string *read-only*	Link to a PowerDistribution resource. See the Links section and the *PowerDistribution* schema for details.
}]		
FloorPDUs@odata.count	integer *read-only*	The number of items in a collection.
ManagedBy [{	array	An array of links to the managers responsible for managing this facility.
@odata.id	string *read-only*	Link to a Manager resource. See the Links section and the *Manager* schema for details.
}]		
ManagedBy@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
RackPDUs [{	array	An array of links to the rack-level power distribution units in this facility.
@odata.id	string *read-only*	Link to a PowerDistribution resource. See the Links section and the *PowerDistribution* schema for details.
}]		
RackPDUs@odata.count	integer *read-only*	The number of items in a collection.

Switchgear [{	array	An array of links to the switchgear in this facility.
@odata.id	string *read-only*	Link to a PowerDistribution resource. See the Links section and the *PowerDistribution* schema for details.
}]		
Switchgear@odata.count	integer *read-only*	The number of items in a collection.
TransferSwitches [{	array	An array of links to the transfer switches in this facility.
@odata.id	string *read-only*	Link to a PowerDistribution resource. See the Links section and the *PowerDistribution* schema for details.
}]		
TransferSwitches@odata.count	integer *read-only*	The number of items in a collection.
}		
Location {}	object	The location of the facility. For property details, see Location.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PowerDomains {	object	Link to the power domains in this facility. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *PowerDomain*. See the PowerDomain schema for details.
}		
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.45.1 Property details

6.45.1.1 FacilityType

The type of location this resource represents.

String	Description
Building	A structure with a roof and walls.
Floor	A floor inside of a building.
Room	A room inside of a building or floor.
Site	A small area consisting of several buildings.

6.46 FacilityCollection

URIs:

/redfish/v1/Facilities

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Facility resource. See the Links section and the *Facility* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.

	string	
Members@odata.nextLink	*read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.47 HostInterface 1.2.2

v1.2	*v1.1*	*v1.0*
2018.2	2017.1	2016.3

The properties associated with a Host Interface. A Host Interface is a connection between host software and a Redfish Service.

URIs:

/redfish/v1/Managers/*{ManagerId}*/HostInterfaces/*{HostInterfaceId}*

	string	
@odata.context	*read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this Resource.

AuthenticationModes [ ]	array (string (enum)) *read-write*	The authentication modes available on this interface. *For the possible property values, see AuthenticationModes in Property details.*
AuthNoneRoleId *(v1.2+)*	string *read-write*	The role when no authentication on this interface is used.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
ExternallyAccessible	boolean *read-only (null)*	An indication of whether external entities can access this interface. External entities are non-host entities. For example, if the host and manager are connected through a switch and the switch also exposes an external port on the system, external clients can also use the interface, and this property value is `true`.
FirmwareAuthEnabled	boolean *read-write (null)*	An indication of whether this firmware authentication is enabled for this interface.
FirmwareAuthRoleId	string *read-write*	The Role used for firmware authentication on this interface.
HostEthernetInterfaces {	object	A link to the collection of network interface controllers or cards (NICs) that a computer system uses to communicate with this Host Interface. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *EthernetInterface*. See the EthernetInterface schema for details.
}		
HostInterfaceType	string (enum) *read-only (null)*	The Host Interface type for this interface. *For the possible property values, see HostInterfaceType in Property details.*

Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
InterfaceEnabled	boolean *read-write* *(null)*	An indication of whether this interface is enabled.
KernelAuthEnabled	boolean *read-write* *(null)*	An indication of whether this kernel authentication is enabled for this interface.
KernelAuthRoleId	string *read-write*	The Role used for kernel authentication on this interface.
Links {	object	The links to other Resources that are related to this Resource.
AuthNoneRole *(v1.2+)* {	object	The link to the Redfish Role that contains the privileges on this Host Interface when no authentication is performed. See the *Role* schema for details on this property.
@odata.id	string *read-only*	Link to a Role resource. See the Links section and the *Role* schema for details.
}		
ComputerSystems [{	array	An array of links to the computer systems connected to this Host Interface.
@odata.id	string *read-only*	Link to a ComputerSystem resource. See the Links section and the *ComputerSystem* schema for details.
}]		
ComputerSystems@odata.count	integer *read-only*	The number of items in a collection.
FirmwareAuthRole {	object	The link to the Redfish Role that has firmware authentication privileges on this Host Interface. See the *Role* schema for details on this property.

@odata.id	string *read-only*	Link to a Role resource. See the Links section and the *Role* schema for details.
}		
KernelAuthRole {	object	The link to the Redfish Role defining privileges for this Host Interface when using kernel authentication. See the *Role* schema for details on this property.
@odata.id	string *read-only*	Link to a Role resource. See the Links section and the *Role* schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
ManagerEthernetInterface {	object	A link to a single network interface controllers or cards (NIC) that this manager uses for network communication with this Host Interface. See the *EthernetInterface* schema for details on this property.
@odata.id	string *read-only*	Link to a EthernetInterface resource. See the Links section and the *EthernetInterface* schema for details.
}		
Name	string *read-only* *required*	The name of the resource or array member.
NetworkProtocol {	object	A link to the network services and their settings that the manager controls. In this property, clients find configuration options for the network and network services. See the *ManagerNetworkProtocol* schema for details on this property.
@odata.id	string *read-only*	Link to a ManagerNetworkProtocol resource. See the Links section and the *ManagerNetworkProtocol* schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.

6.47.1 Property details

6.47.1.1 AuthenticationModes

The authentication modes available on this interface.

String	Description
AuthNone	Requests without any sort of authentication are allowed.
BasicAuth	Requests using HTTP Basic Authentication are allowed.
OemAuth	Requests using OEM authentication mechanisms are allowed.
RedfishSessionAuth	Requests using Redfish Session Authentication are allowed.

6.47.1.2 HostInterfaceType

The Host Interface type for this interface.

String	Description
NetworkHostInterface	This interface is a Network Host Interface.

6.48 HostInterfaceCollection

URIs:

/redfish/v1/Managers/{*ManagerId*}/HostInterfaces

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.

Description	string read-only (null)	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string read-only	Link to a HostInterface resource. See the Links section and the *HostInterface* schema for details.
}]		
Members@odata.count	integer read-only	The number of items in a collection.
Members@odata.nextLink	string read-only	The URI to the resource containing the next set of partial members.
Name	string read-only	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.49 Job 1.0.4

| v1.0 |
| 2018.2 |

The Job schema contains information about a job that a Redfish job service schedules or executes. Clients create jobs to describe a series of operations that occur at periodic intervals.

URIs:

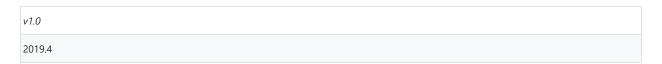/redfish/v1/JobService/Jobs/*{JobId}* /redfish/v1/JobService/Jobs/*{JobId}*/Steps/*{JobId2}*

| @odata.context | string read-only | The OData description of a payload. |

@odata.etag	string read-only	The current ETag of the resource.
@odata.id	string read-only required	The unique identifier for a resource.
@odata.type	string read-only required	The type of a resource.
Actions {}	object	The available actions for this resource.
CreatedBy	string read-only	The person or program that created this job entry.
Description	string read-only (null)	The description of this resource. Used for commonality in the schema definitions.
EndTime	string read-only	The date and time when the job was completed.
HidePayload	boolean read-only	An indication of whether the contents of the payload should be hidden from view after the job has been created. If `true`, responses do not return the payload. If `false`, responses return the payload. If this property is not present when the job is created, the default is `false`.
Id	string read-only required	The identifier that uniquely identifies the resource within the collection of similar resources.
JobState	string (enum) read-write	The state of the job. *For the possible property values, see JobState in Property details.*

JobStatus	string (enum) *read-only*	The status of the job. *For the possible property values, see JobStatus in Property details.*
MaxExecutionTime	string *read-write (null)*	The maximum amount of time the job is allowed to execute.
Messages [{ }]	array (object)	An array of messages associated with the job. The message that the Redfish Service returns. For property details, see Message.
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Payload {	object	The HTTP and JSON payload details for this job.
HttpHeaders [ ]	array (string) *read-only*	An array of HTTP headers in this job.
HttpOperation	string *read-only*	The HTTP operation that executes this job.
JsonBody	string *read-only*	The JSON payload to use in the execution of this job.
TargetUri	string *read-only*	The link to the target for this job.
}		

	integer (%) *read-only (null)*	The completion percentage of this job.
PercentComplete		
Schedule {}	object	The schedule settings for this job. For property details, see Schedule.
StartTime	string *read-only*	The date and time when the job was started or is scheduled to start.
StepOrder [ ]	array (string) *read-only*	The serialized execution order of the job steps.
Steps {	object	The link to a collection of steps for this job. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Job*. See the Job schema for details.
}		

6.49.1 Property details

6.49.1.1 JobState

The state of the job.

String	Description
Cancelled	Job was cancelled.
Completed	Job was completed.
Continue	Job is to resume operation.
Exception	Job has stopped due to an exception condition.
Interrupted	Job has been interrupted.
New	A new job.
Pending	Job is pending and has not started.

String	Description
Running	Job is running normally.
Service	Job is running as a service.
Starting	Job is starting.
Stopping	Job is in the process of stopping.
Suspended	Job has been suspended.
UserIntervention	Job is waiting for user intervention.

6.49.1.2 JobStatus

The status of the job.

String	Description
Critical	A critical condition requires immediate attention.
OK	Normal.
Warning	A condition requires attention.

6.50 JobCollection

URIs:

/redfish/v1/JobService/Jobs /redfish/v1/JobService/Jobs/{*JobId*}/Steps

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.

Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Job resource. See the Links section and the *Job* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.51 JobService 1.0.3

v1.0
2018.2

The JobService schema contains properties for scheduling and execution of operations, represents the properties for the job service itself, and has links to jobs managed by the job service.

URIs:

/redfish/v1/JobService

@odata.context	string *read-only*	The OData description of a payload.

@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
DateTime	string *read-only* *(null)*	The current date and time setting for the job service.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Jobs {	object	The links to the jobs collection. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Job*. See the Job schema for details.
}		
Log {	object	The link to a log service that the job service uses. This service can be a dedicated log service or a pointer a log service under another resource, such as a manager. See the *LogService* schema for details on this property.

	string read-only	Link to a LogService resource. See the Links section and the *LogService* schema for details.
@odata.id		
}		
Name	string read-only required	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
ServiceCapabilities {	object	The supported capabilities of this job service implementation.
MaxJobs	integer read-only (null)	The maximum number of jobs supported.
MaxSteps	integer read-only (null)	The maximum number of job steps supported.
Scheduling	boolean read-only (null)	An indication of whether scheduling of jobs is supported.
}		
ServiceEnabled	boolean read-write (null)	An indication of whether this service is enabled.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.52 JsonSchemaFile 1.1.4

v1.1	v1.0

| 2017.1 | 1.0 |

The JsonSchemaFile schema contains the properties that describe the locations, as URIs, of a Redfish Schema definition that a Redfish Service implements or references.

URIs:

/redfish/v1/JsonSchemas/*{JsonSchemaFileId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only required*	The unique identifier for a resource.
@odata.type	string *read-only required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Languages [ ]	array (string) *read-only required*	The RFC5646-conformant language codes for the available schemas.
Location [{	array * required*	Location information for this schema file.
ArchiveFile	string *read-only*	The name of the file in the archive, if the schema is hosted on the service in an archive file.
ArchiveUri	string *read-only*	The link to an archive file, if the schema is hosted on the service in an archive file.

Language	string *read-only*	The language code for the schema file.
PublicationUri	string *read-only*	The link to publicly available (canonical) URI for schema.
Uri	string *read-only*	The link to locally available URI for schema.
}]		
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Schema	string *read-only required*	The @odata.type name this schema describes.

6.53 JsonSchemaFileCollection

URIs:

/redfish/v1/JsonSchemas

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.

Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a JsonSchemaFile resource. See the Links section and the *JsonSchemaFile* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.54 LogEntry 1.6.1

v1.6	*v1.5*	*v1.4*	*v1.3*	*v1.2*	*v1.1*	*v1.0*
2020.1	2019.3	2018.2	2017.3	2017.1	2016.2	1.0

The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/LogServices/*{LogServiceId}*/Entries/*{LogEntryId}* /redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/LogServices/*{LogServiceId}*/Entries/*{LogEntryId}* /redfish/v1/JobService/Log/Entries/*{LogEntryId}* /redfish/v1/ Managers/*{ManagerId}*/LogServices/*{LogServiceId}*/Entries/*{LogEntryId}* /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/LogServices/*{LogServiceId}*/Entries/*{LogEntryId}* /redfish/v1/Systems/*{ComputerSystemId}*/LogServices/*{LogServiceId}*/Entries/*{LogEntryId}* /redfish/v1/ TelemetryService/LogService/Entries/*{LogEntryId}*

@odata.context	string *read-only*	The OData description of a payload.

@odata.etag	string read-only	The current ETag of the resource.
@odata.id	string read-only required	The unique identifier for a resource.
@odata.type	string read-only required	The type of a resource.
Actions *(v1.2+)* {}	object	The available actions for this resource.
Created	string read-only	The date and time when the log entry was created.
Description	string read-only (null)	The description of this resource. Used for commonality in the schema definitions.
EntryCode	string (enum) read-only (null)	The entry code for the log entry if the entry type is `SEL`. *For the possible property values, see EntryCode in Property details.*
EntryType	string (enum) read-only required	The type of log entry. *For the possible property values, see EntryType in Property details.*
EventGroupId *(v1.4+)*	integer read-only (null)	An identifier that correlates events with the same cause.

	string	The unique instance identifier for an event.
EventId *(v1.1+)*	*read-only*	

	string	The date and time when the event occurred.
EventTimestamp *(v1.1+)*	*read-only*	

	string (enum)	The type of event recorded in this log. *For the possible property values, see EventType in Property details. Deprecated in v1.4 and later. This property has been deprecated. Starting with Redfish Specification v1.6 (Event v1.3), subscriptions are based on the RegistryPrefix and ResourceType properties and not on the EventType property.*
EventType *(v1.1+, deprecated v1.4)*	*read-only*	

	string	An identifier of the device that has generated the IPMI SEL Event Record.
GeneratorId *(v1.5+)*	*read-only (null)*	

	string	The identifier that uniquely identifies the resource within the collection of similar resources.
Id	*read-only required*	

Links {	object	The links to other resources that are related to this resource.
Oem {}	object	The OEM extension property. For property details, see Oem.
OriginOfCondition {	object	The link to the resource that caused the log entry.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
}		

	string	The message of the log entry. This property decodes from the entry type. If the entry type is `Event`, this property contains a message. If the entry type is `SEL`, this property contains an SEL-specific message. Otherwise, this property contains an OEM-specific log entry. In most cases, this property contains the actual log entry.
Message	*read-only (null)*	

MessageArgs [ ]	array (string) *read-only*	The arguments for the message.
MessageId	string *read-only*	The MessageId, event data, or OEM-specific information. This property decodes from the entry type. If the entry type is `Event` , this property contains a Redfish Specification-defined MessageId. If the entry type is `SEL` , this property contains the Event Data. Otherwise, this property contains OEM-specific information.
Modified *(v1.6+)*	string *read-only*	The date and time when the log entry was last modified.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OemLogEntryCode *(v1.3+)*	string *read-only* *(null)*	The OEM-specific entry code, if the LogEntryCode type is `OEM` .
OemRecordFormat	string *read-only* *(null)*	The OEM-specific format of the entry. If the entry type is `Oem` , this property contains more information about the record format from the OEM.
OemSensorType *(v1.3+)*	string *read-only* *(null)*	The OEM-specific sensor type if the sensor type is `OEM` .
SensorNumber	integer *read-only* *(null)*	The sensor number, the count of events, or OEM-specific information. This property value is decoded from the entry type. If the entry type is `SEL` , this property contains the sensor number. If the entry type is `Event` , this property contains the count of events. Otherwise, this property contains OEM-specific information.

SensorType	string (enum) *read-only* *(null)*	The sensor type to which the log entry pertains if the entry type is `SEL`. *For the possible property values, see SensorType in Property details.*
Severity	string (enum) *read-only* *(null)*	The severity of the log entry. *For the possible property values, see Severity in Property details.*

6.54.1 Property details

6.54.1.1 EntryCode

The entry code for the log entry if the entry type is `SEL`.

String	Description
Assert	The condition has been asserted.
D0 Power State	The ACPI-defined D0 power state.
D1 Power State	The ACPI-defined D1 power state.
D2 Power State	The ACPI-defined D2 power state.
D3 Power State	The ACPI-defined D3 power state.
Deassert	The condition has been deasserted.
Device Disabled	A device has been disabled.
Device Enabled	A device has been enabled.
Device Inserted / Device Present	A device has been inserted or is present.
Device Removed / Device Absent	A device has been removed or is absent.
Fully Redundant	Indicates that full redundancy has been regained.
Informational	An informational event.
Install Error	An install error has been detected.
Limit Exceeded	A limit has been exceeded.
Limit Not Exceeded	A limit has not been exceeded.

String	Description
Lower Critical - going high	The reading crossed the Lower Critical threshold while going high.
Lower Critical - going low	The reading crossed the Lower Critical threshold while going low.
Lower Non-critical - going high	The reading crossed the Lower Non-critical threshold while going high.
Lower Non-critical - going low	The reading crossed the Lower Non-critical threshold while going low.
Lower Non-recoverable - going high	The reading crossed the Lower Non-recoverable threshold while going high.
Lower Non-recoverable - going low	The reading crossed the Lower Non-recoverable threshold while going low.
Monitor	A monitor event.
Non-redundant:Insufficient Resources	Unit is non-redundant and has insufficient resources to maintain normal operation.
Non-redundant:Sufficient Resources from Insufficient Resources	Unit has regained minimum resources needed for normal operation.
Non-redundant:Sufficient Resources from Redundant	Redundancy has been lost but unit is functioning with minimum resources needed for normal operation.
OEM *(v1.3+)*	An OEM-defined event.
Performance Lags	Performance does not meet expectations.
Performance Met	Performance meets expectations.
Predictive Failure asserted	A Predictive Failure has been detected.
Predictive Failure deasserted	A Predictive Failure is no longer present.
Redundancy Degraded	Redundancy still exists, but at less than full level.
Redundancy Degraded from Fully Redundant	Unit has lost some redundant resource(s) but is still in a redundant state.
Redundancy Degraded from Non-redundant	Unit has regained some resource(s) and is redundant but not fully redundant.
Redundancy Lost	Entered any non-redundant state, including Non-redundant: Insufficient Resources.
State Asserted	The state has been asserted.
State Deasserted	The state has been deasserted.
Transition to Active	The state transitioned to active.
Transition to Busy	The state transitioned to busy.
Transition to Critical from less severe	A state has changed to Critical from less severe.
Transition to Critical from Non-recoverable	A state has changed to Critical from Non-recoverable.
Transition to Degraded	A state has transitioned to Degraded.

String	Description
Transition to Idle	The state transitioned to idle.
Transition to In Test	A state has transitioned to In Test.
Transition to Non-Critical from more severe	A state has changed to Non-Critical from more severe.
Transition to Non-Critical from OK	A state has changed to Non-Critical from OK.
Transition to Non-recoverable	A state has changed to Non-recoverable.
Transition to Non-recoverable from less severe	A state has changed to Non-recoverable from less severe.
Transition to Off Duty	A state has transitioned to Off Duty.
Transition to Off Line	A state has transitioned to Off Line.
Transition to OK	A state has changed to OK.
Transition to On Line	A state has transitioned to On Line.
Transition to Power Off	A state has transitioned to Power Off.
Transition to Power Save	A state has transitioned to Power Save.
Transition to Running	A state has transitioned to Running.
Upper Critical - going high	The reading crossed the Upper Critical threshold while going high.
Upper Critical - going low	The reading crossed the Upper Critical threshold while going low.
Upper Non-critical - going high	The reading crossed the Upper Non-critical threshold while going high.
Upper Non-critical - going low	The reading crossed the Upper Non-critical threshold while going low.
Upper Non-recoverable - going high	The reading crossed the Upper Non-recoverable threshold while going high.
Upper Non-recoverable - going low	The reading crossed the Upper Non-recoverable threshold while going low.

6.54.1.2 EntryType

The type of log entry.

String	Description
Event	A Redfish-defined message.
Oem	An entry in an OEM-defined format.
SEL	A legacy IPMI System Event Log (SEL) entry.

6.54.1.3 EventType

The type of event recorded in this log.

String	Description
Alert	A condition requires attention.
MetricReport	The telemetry service is sending a metric report.
Other	Because EventType is deprecated as of Redfish Specification v1.6, the event is based on a registry or resource but not an EventType.
ResourceAdded	A resource has been added.
ResourceRemoved	A resource has been removed.
ResourceUpdated	A resource has been updated.
StatusChange	The status of a resource has changed.

6.54.1.4 SensorType

The sensor type to which the log entry pertains if the entry type is `SEL` .

String	Description
Add-in Card	A sensor for an add-in card.
BaseOSBoot/InstallationStatus	A sensor for a base OS boot or installation status event.
Battery	A sensor for a battery.
Boot Error	A sensor for a boot error event.
Button/Switch	A sensor for a button or switch.
Cable/Interconnect	A sensor for a cable or interconnect device type.
Chassis	A sensor for a chassis.
ChipSet	A sensor for a chipset.
CoolingDevice	A sensor for a cooling device.
Critical Interrupt	A sensor for a critical interrupt event.
Current	A current sensor.
Drive Slot/Bay	A sensor for a drive slot or bay.

String	Description
Entity Presence	A sensor for an entity presence event.
Event Logging Disabled	A sensor for the event log.
Fan	A fan sensor.
FRUState	A sensor for a FRU state event.
LAN	A sensor for a LAN device.
Management Subsystem Health	A sensor for a management subsystem health event.
Memory	A sensor for a memory device.
Microcontroller/Coprocessor	A sensor for a microcontroller or coprocessor.
Module/Board	A sensor for a module or board.
Monitor ASIC/IC	A sensor for a monitor ASIC or IC.
OEM *(v1.3+)*	An OEM-defined sensor.
OS Stop/Shutdown	A sensor for an OS stop or shutdown event
Other FRU	A sensor for another type of FRU.
Other Units-based Sensor	A sensor for a miscellaneous analog sensor.
Physical Chassis Security	A physical security sensor.
Platform Alert	A sensor for a platform alert event.
Platform Security Violation Attempt	A platform security sensor.
POST Memory Resize	A sensor for a POST memory resize event.
Power Supply / Converter	A sensor for a power supply or DC-to-DC converter.
PowerUnit	A sensor for a power unit.
Processor	A sensor for a processor.
Session Audit	A sensor for a session audit event.
Slot/Connector	A sensor for a slot or connector.
System ACPI PowerState	A sensor for an ACPI power state event.
System Event	A sensor for a system event.
System Firmware Progress	A sensor for a system firmware progress event.
SystemBoot/Restart	A sensor for a system boot or restart event.

String	Description
Temperature	A temperature sensor.
Terminator	A sensor for a terminator.
Version Change	A sensor for a version change event.
Voltage	A voltage sensor.
Watchdog	A sensor for a watchdog event.

6.54.1.5 Severity

The severity of the log entry.

String	Description
Critical	A critical condition that requires immediate attention.
OK	Informational or operating normally.
Warning	A condition that requires attention.

6.55 LogEntryCollection

URIs:

/redfish/v1/Chassis/*{ChassisId}*/LogServices/*{LogServiceId}*/Entries /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/LogServices/*{LogServiceId}*/Entries /redfish/v1/
JobService/Log/Entries /redfish/v1/Managers/*{ManagerId}*/LogServices/*{LogServiceId}*/Entries /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/LogServices/*{LogServiceId}*/Entries /redfish/v1/
Systems/*{ComputerSystemId}*/LogServices/*{LogServiceId}*/Entries /redfish/v1/TelemetryService/LogService/Entries

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.

	string	The type of a resource.
@odata.type	*read-only*	
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a LogEntry resource. See the Links section and the *LogEntry* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.56 LogService 1.1.3

v1.1	*v1.0*
2017.3	1.0

The LogService schema contains properties for monitoring and configuring a Log Service.

URIs:

/redfish/v1/Chassis/{*ChassisId*}/LogServices/{*LogServiceId*} /redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/LogServices/{*LogServiceId*} /redfish/v1/JobService/
Log /redfish/v1/Managers/{*ManagerId*}/LogServices/{*LogServiceId*} /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/LogServices/{*LogServiceId*} /redfish/v1/
Systems/{*ComputerSystemId*}/LogServices/{*LogServiceId*} /redfish/v1/TelemetryService/LogService

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this Resource.
#LogService.ClearLog {}	object	The action to clear the log for this Log Service. *For more information, see the Actions section below.*
}		
DateTime	string *read-write* *(null)*	The current date and time, with UTC offset, that the Log Service uses to set or read time.
DateTimeLocalOffset	string *read-write* *(null)*	The UTC offset that the current DateTime property value contains in the `+HH:MM` format.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Entries {	object	The link to the log entry collection. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *LogEntry*. See the LogEntry schema for details.
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.

	string (enum)	
LogEntryType *(v1.1+)*	read-only (null)	The format of the log entries. *For the possible property values, see LogEntryType in Property details.*
MaxNumberOfRecords	integer read-only	The maximum number of log entries that this service can have.
Name	string read-only required	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OverWritePolicy	string (enum) read-only	The overwrite policy for this service that takes place when the log is full. *For the possible property values, see OverWritePolicy in Property details.*
ServiceEnabled	boolean read-write (null)	An indication of whether this service is enabled.
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.

6.56.1 Actions

6.56.1.1 ClearLog

The action to clear the log for this Log Service.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/LogServices/*{LogServiceId}*/Actions/LogService.ClearLog /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/LogServices/*{LogServiceId}*/Actions/
LogService.ClearLog /redfish/v1/JobService/Log/Actions/LogService.ClearLog /redfish/v1/
Managers/*{ManagerId}*/LogServices/*{LogServiceId}*/Actions/LogService.ClearLog /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/LogServices/*{LogServiceId}*/Actions/
LogService.ClearLog /redfish/v1/Systems/*{ComputerSystemId}*/LogServices/*{LogServiceId}*/Actions/
LogService.ClearLog /redfish/v1/TelemetryService/LogService/Actions/LogService.ClearLog

(This action takes no parameters.)

6.56.2 Property details

6.56.2.1 LogEntryType

The format of the log entries.

String	Description
Event	The log contains Redfish-defined messages.
Multiple	The log contains multiple log entry types and, therefore, the Log Service cannot guarantee a single entry type.
OEM	The log contains entries in an OEM-defined format.
SEL	The log contains legacy IPMI System Event Log (SEL) entries.

6.56.2.2 OverWritePolicy

The overwrite policy for this service that takes place when the log is full.

String	Description
NeverOverWrites	When full, new entries to the log are discarded.
Unknown	The overwrite policy is not known or is undefined.
WrapsWhenFull	When full, new entries to the log overwrite earlier entries.

6.57 LogServiceCollection

URIs:

/redfish/v1/Chassis/{*ChassisId*}/LogServices /redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/LogServices /redfish/v1/
Managers/{*ManagerId*}/LogServices /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/LogServices /redfish/v1/
Systems/{*ComputerSystemId*}/LogServices

	string	The OData description of a payload.
@odata.context	*read-only*	

@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a LogService resource. See the Links section and the *LogService* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.58 Manager 1.9.0

v1.9	v1.8	v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2020.2	2020.1	2019.4	2019.2	2018.2	2018.1	2016.3	2016.2	2016.1	1.0

In Redfish, a manager is a systems management entity that can implement or provide access to a Redfish service. Examples of managers are BMCs, enclosure managers, management controllers, and other subsystems that are assigned manageability functions. An implementation can have multiple managers, which might be directly accessible through a Redfish-defined interface.

URIs:

/redfish/v1/Managers/*{ManagerId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#Manager.ForceFailover {}	object	The ForceFailover action forces a failover of this manager to the manager used in the parameter. *For more information, see the Actions section below.*
#Manager.ModifyRedundancySet {}	object	The ModifyRedundancySet operation adds members to or removes members from a redundant group of managers. *For more information, see the Actions section below.*
#Manager.Reset {}	object	The reset action resets/reboots the manager. *For more information, see the Actions section below.*
#Manager.ResetToDefaults *(v1.8+)* {}	object	The reset action resets the manager settings to factory defaults. This might cause the manager to reset. *For more information, see the Actions section below.*
}		
AutoDSTEnabled *(v1.4+)*	boolean *read-write*	An indication of whether the manager is configured for automatic Daylight Saving Time (DST) adjustment.
CommandShell {	object	The command shell service that this manager provides.

ConnectTypesSupported [ ]	array (string (enum)) *read-only*	This property enumerates the command shell connection types that the implementation allows. *For the possible property values, see ConnectTypesSupported in Property details.*
MaxConcurrentSessions	integer *read-only*	The maximum number of service sessions, regardless of protocol, that this manager can support.
ServiceEnabled	boolean *read-write*	An indication of whether the service is enabled for this manager.
}		
DateTime	string *read-write (null)*	The current date and time with UTC offset that the manager uses to set or read time.
DateTimeLocalOffset	string *read-write (null)*	The time offset from UTC that the DateTime property is in `+HH:MM` format.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
EthernetInterfaces {	object	The link to a collection of NICs that this manager uses for network communication. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *EthernetInterface*. See the EthernetInterface schema for details.
}		
FirmwareVersion	string *read-only (null)*	The firmware version of this manager.

GraphicalConsole {	object	The information about the graphical console (KVM-IP) service of this manager.
ConnectTypesSupported [ ]	array (string (enum)) *read-only*	This property enumerates the graphical console connection types that the implementation allows. *For the possible property values, see ConnectTypesSupported in Property details.*
MaxConcurrentSessions	integer *read-only*	The maximum number of service sessions, regardless of protocol, that this manager can support.
ServiceEnabled	boolean *read-write*	An indication of whether the service is enabled for this manager.
}		
HostInterfaces *(v1.3+)* {	object	The link to a collection of host interfaces that this manager uses for local host communication. Clients can find host interface configuration options and settings in this navigation property. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *HostInterface*. See the HostInterface schema for details.
}		
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
LastResetTime *(v1.9+)*	string *read-only*	The date and time when the manager was last reset or rebooted.
Links {	object	The links to other resources that are related to this resource.
ActiveSoftwareImage *(v1.6+)* {	object	The link to the software inventory resource that represents the active firmware image for this manager. See the *SoftwareInventory* schema for details on this property.
@odata.id	string *read-only*	Link to a SoftwareInventory resource. See the Links section and the *SoftwareInventory* schema for details.

}		
ManagedBy *(v1.9+)* [{	array	The array of links to the managers responsible for managing this manager.
@odata.id	string *read-only*	Link to another Manager resource.
}]		
ManagedBy@odata.count	integer *read-only*	The number of items in a collection.
ManagerForChassis [{	array	An array of links to the chassis this manager controls.
@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}]		
ManagerForChassis@odata.count	integer *read-only*	The number of items in a collection.
ManagerForManagers *(v1.9+)* [{	array	An array of links to the managers that are managed by this manager.
@odata.id	string *read-only*	Link to another Manager resource.
}]		
ManagerForManagers@odata.count	integer *read-only*	The number of items in a collection.
ManagerForServers [{	array	An array of links to the systems that this manager controls.
@odata.id	string *read-only*	Link to a ComputerSystem resource. See the Links section and the *ComputerSystem* schema for details.
}]		

ManagerForServers@odata.count	integer *read-only*	The number of items in a collection.
ManagerForSwitches *(v1.4+)* [{	array	An array of links to the switches that this manager controls.
@odata.id	string *read-only*	Link to a Switch resource. See the Links section and the *Switch* schema for details.
}]		
ManagerForSwitches@odata.count	integer *read-only*	The number of items in a collection.
ManagerInChassis *(v1.1+)* {	object	The link to the chassis where this manager is located. See the *Chassis* schema for details on this property.
@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
SoftwareImages *(v1.6+)* [{	array	The images that are associated with this manager.
@odata.id	string *read-only*	Link to a SoftwareInventory resource. See the Links section and the *SoftwareInventory* schema for details.
}]		
SoftwareImages@odata.count	integer *read-only*	The number of items in a collection.
}		
LogServices {	object	The link to a collection of logs that the manager uses. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *LogService*. See the LogService schema for details.

}		
ManagerType	string (enum) *read-only*	The type of manager that this resource represents. *For the possible property values, see ManagerType in Property details.*
Manufacturer *(v1.7+)*	string *read-only (null)*	The manufacturer of this manager.
Model	string *read-only (null)*	The model information of this manager, as defined by the manufacturer.
Name	string *read-only required*	The name of the resource or array member.
NetworkProtocol {	object	The link to the network services and their settings that the manager controls. See the *ManagerNetworkProtocol* schema for details on this property.
@odata.id	string *read-only*	Link to a ManagerNetworkProtocol resource. See the Links section and the *ManagerNetworkProtocol* schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
PartNumber *(v1.7+)*	string *read-only (null)*	The part number of the manager.
PowerState *(v1.2+)*	string (enum) *read-only (null)*	The current power state of the manager. *For the possible property values, see PowerState in Property details.*
Redundancy [{	array	The redundancy information for the managers of this system.

@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Redundancy@odata.count	integer *read-only*	The number of items in a collection.
RemoteAccountService *(v1.5+)* {	object	The link to the account service resource for the remote manager that this resource represents. See the *AccountService* schema for details on this property.
@odata.id	string *read-only*	Link to a AccountService resource. See the Links section and the *AccountService* schema for details.
}		
RemoteRedfishServiceUri *(v1.5+)*	string *read-only* *(null)*	The URI of the Redfish service root for the remote manager that this resource represents.
SerialConsole {	object	The serial console service that this manager provides.
ConnectTypesSupported [ ]	array (string (enum)) *read-only*	This property enumerates the serial console connection types that the implementation allows. *For the possible property values, see ConnectTypesSupported in Property details.*
MaxConcurrentSessions	integer *read-only*	The maximum number of service sessions, regardless of protocol, that this manager can support.
ServiceEnabled	boolean *read-write*	An indication of whether the service is enabled for this manager.
}		
SerialInterfaces {	object	The link to a collection of serial interfaces that this manager uses for serial and console communication. Contains a link to a resource.

@odata.id	string *read-only*	Link to Collection of *SerialInterface*. See the SerialInterface schema for details.
}		
SerialNumber *(v1.7+)*	string *read-only* *(null)*	The serial number of the manager.
ServiceEntryPointUUID	string *read-only* *(null)*	The UUID of the Redfish service that is hosted by this manager.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
UUID	string *read-only* *(null)*	The UUID for this manager.
VirtualMedia {	object	The link to the Virtual Media services for this particular manager. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *VirtualMedia*. See the VirtualMedia schema for details.
}		

6.58.1 Actions

6.58.1.1 ForceFailover

The ForceFailover action forces a failover of this manager to the manager used in the parameter.

URIs:

/redfish/v1/Managers/*{ManagerId}*/Actions/Manager.ForceFailover

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
NewManager {	object *required*	The manager to which to fail over.
@odata.id	string *read-only*	Link to another Manager resource.
}		
}		

6.58.1.2 ModifyRedundancySet

The ModifyRedundancySet operation adds members to or removes members from a redundant group of managers.

URIs:

/redfish/v1/Managers/*{ManagerId}*/Actions/Manager.ModifyRedundancySet

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
Add [{	array *optional*	An array of managers to add to the redundancy set.
@odata.id	string *read-only*	Link to another Manager resource.
}]		
Remove [{	array *optional*	An array of managers to remove from the redundancy set.
@odata.id	string *read-only*	Link to another Manager resource.
}]		
}		

6.58.1.3 Reset

The reset action resets/reboots the manager.

URIs:

/redfish/v1/Managers/*{ManagerId}*/Actions/Manager.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ResetType	string (enum) *optional*	The type of reset. *For the possible property values, see ResetType in Property details.*
}		

6.58.1.4 ResetToDefaults

The reset action resets the manager settings to factory defaults. This might cause the manager to reset.

URIs:

/redfish/v1/Managers/*{ManagerId}*/Actions/Manager.ResetToDefaults

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ResetType	string (enum) *required*	The type of reset to defaults. *For the possible property values, see ResetType in Property details.*
}		

6.58.2 Property details

6.58.2.1 ConnectTypesSupported

This property enumerates the serial console connection types that the implementation allows.

String	Description
IPMI	The controller supports a serial console connection through the IPMI Serial Over LAN (SOL) protocol.
Oem	The controller supports a serial console connection through an OEM-specific protocol.
SSH	The controller supports a serial console connection through the SSH protocol.
Telnet	The controller supports a serial console connection through the Telnet protocol.

6.58.2.2 ManagerType

The type of manager that this resource represents.

String	Description
AuxiliaryController	A controller that provides management functions for a particular subsystem or group of devices.
BMC	A controller that provides management functions for a single computer system.
EnclosureManager	A controller that provides management functions for a chassis or group of devices or systems.
ManagementController	A controller that primarily monitors or manages the operation of a device or system.
RackManager	A controller that provides management functions for a whole or part of a rack.
Service *(v1.4+)*	A software-based service that provides management functions.

6.58.2.3 PowerState

The current power state of the manager.

String	Description
Off	The state is powered off.
On	The state is powered on.
PoweringOff	A temporary state between on and off.
PoweringOn	A temporary state between off and on.

6.58.2.4 ResetType

The type of reset to defaults.

String	Description
PreserveNetwork	Reset all settings except network settings to factory defaults.
PreserveNetworkAndUsers	Reset all settings except network and local user names/passwords to factory defaults.
ResetAll	Reset all settings to factory defaults.

6.59 ManagerAccount 1.6.1

v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2020.1	2019.4	2019.3	2019.1	2018.3	2017.1	1.0

The ManagerAccount schema defines the user accounts that are owned by a manager. Changes to a manager account might affect the current Redfish service connection if this manager is responsible for the Redfish service.

URIs:

/redfish/v1/AccountService/Accounts/*{ManagerAccountId}* /redfish/v1/
Managers/*{ManagerId}*/RemoteAccountService/Accounts/*{ManagerAccountId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
AccountTypes *(v1.4+)* [ ]	array (string (enum)) *read-write* *(null)*	The account types. *For the possible property values, see AccountTypes in Property details.*

Actions *(v1.1+)* {}	object	The available actions for this resource.
Certificates *(v1.2+)* {	object	The link to a collection of certificates used for this account. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Certificate*. See the Certificate schema for details.
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Enabled	boolean *read-write*	An indication of whether an account is enabled. An administrator can disable it without deleting the user information. If `true`, the account is enabled and the user can log in. If `false`, the account is disabled and, in the future, the user cannot log in.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
Oem {}	object	The OEM extension property. For property details, see Oem.
Role {	object	The link to the Redfish role that defines the privileges for this account. See the *Role* schema for details on this property.
@odata.id	string *read-only*	Link to a Role resource. See the Links section and the *Role* schema for details.
}		
}		
Locked	boolean *read-write*	An indication of whether the account service automatically locked the account because the lockout threshold was exceeded. To manually unlock the account before the lockout duration period, an administrator can change the property to `false` to clear the lockout condition.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

OEMAccountTypes *(v1.4+)* [ ]	array (string, null) *read-write*	The OEM account types.
Password	string *read-write required on create (null)*	The password. Use this property with a PATCH or PUT to write the password for the account. This property is `null` in responses.
PasswordChangeRequired *(v1.3+)*	boolean *read-write (null)*	An indication of whether the service requires that the password for this account be changed before further access to the account is allowed.
PasswordExpiration *(v1.6+)*	string *read-write (null)*	Indicates the date and time when this account password expires. If `null`, the account password never expires.
RoleId	string *read-write required on create*	The role for this account.
SNMP *(v1.4+)* {	object *(null)*	The SNMP settings for this account.
AuthenticationKey	string *read-write (null)*	The secret authentication key for SNMPv3.
AuthenticationKeySet *(v1.5+)*	boolean *read-only*	Indicates if the AuthenticationKey property is set.

AuthenticationProtocol	string (enum) *read-write* *(null)*	The authentication protocol for SNMPv3. *For the possible property values, see AuthenticationProtocol in Property details.*
EncryptionKey	string *read-write* *(null)*	The secret authentication key used in SNMPv3.
EncryptionKeySet *(v1.5+)*	boolean *read-only*	Indicates if the EncryptionKey property is set.
EncryptionProtocol	string (enum) *read-write* *(null)*	The encryption protocol for SNMPv3. *For the possible property values, see EncryptionProtocol in Property details.*
}		
UserName	string *read-write* *required* *on create*	The user name for the account.

6.59.1 Property details

6.59.1.1 AccountTypes

The account types.

String	Description
OEM	OEM account type.
Redfish	Allow access to the Redfish service.
SNMP	Allow access to SNMP services.

6.59.1.2 AuthenticationProtocol

The authentication protocol for SNMPv3.

String	Description
HMAC_MD5	HMAC-MD5-96 authentication.
HMAC_SHA96	HMAC-SHA-96 authentication.
None	No authentication.

6.59.1.3 EncryptionProtocol

The encryption protocol for SNMPv3.

String	Description
CBC_DES	CBC-DES encryption.
CFB128_AES128	CFB128-AES-128 encryption.
None	No encryption.

6.60 ManagerAccountCollection

URIs:

/redfish/v1/AccountService/Accounts /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/Accounts

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.

@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a ManagerAccount resource. See the Links section and the *ManagerAccount* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.61 ManagerCollection

URIs:

/redfish/v1/Managers

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Manager resource. See the Links section and the *Manager* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.62 ManagerNetworkProtocol 1.6.0

v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2020.1	2019.3	2018.3	2018.2	2017.1	2016.3	1.0

The network service settings for the manager.

URIs:

/redfish/v1/Managers/*{ManagerId}*/NetworkProtocol

	string	
@odata.context	*read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.2+)* {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
DHCP *(v1.1+)* {	object	The settings for this manager's DHCPv4 protocol support.
Port	integer *read-write* *(null)*	The protocol port.
ProtocolEnabled	boolean *read-write* *(null)*	An indication of whether the protocol is enabled.
}		
DHCPv6 *(v1.3+)* {	object	The settings for this manager's DHCPv6 protocol support.
Port	integer *read-write* *(null)*	The protocol port.
ProtocolEnabled	boolean *read-write* *(null)*	An indication of whether the protocol is enabled.
}		

FQDN	string *read-only* *(null)*	The fully qualified domain name for the manager obtained by DNS including the host name and top-level domain name.
HostName	string *read-only* *(null)*	The DNS host name of this manager, without any domain information.
HTTP {	object	The settings for this manager's HTTP protocol support.
Port	integer *read-write* *(null)*	The protocol port.
ProtocolEnabled	boolean *read-write* *(null)*	An indication of whether the protocol is enabled.
}		
HTTPS {	object	The settings for this manager's HTTPS protocol support.
Certificates *(v1.4+)* {	object	The link to a collection of certificates used for HTTPS by this manager. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Certificate*. See the Certificate schema for details.
}		
Port	integer *read-write* *(null)*	The protocol port.
ProtocolEnabled	boolean *read-write* *(null)*	An indication of whether the protocol is enabled.
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
IPMI {	object	The settings for this manager's IPMI-over-LAN protocol support.

Port	integer *read-write* *(null)*	The protocol port.
ProtocolEnabled	boolean *read-write* *(null)*	An indication of whether the protocol is enabled.
}		
KVMIP {	object	The settings for this manager's KVM-IP protocol support.
Port	integer *read-write* *(null)*	The protocol port.
ProtocolEnabled	boolean *read-write* *(null)*	An indication of whether the protocol is enabled.
}		
Name	string *read-only* *required*	The name of the resource or array member.
NTP *(v1.2+)* {	object	The settings for this manager's NTP protocol support.
NTPServers [ ]	array (string, null) *read-write*	Indicates to which NTP servers this manager is subscribed.
Port	integer *read-write* *(null)*	The protocol port.
ProtocolEnabled	boolean *read-write* *(null)*	An indication of whether the protocol is enabled.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
RDP *(v1.3+)* {	object	The settings for this manager's Remote Desktop Protocol support.

Port	integer *read-write (null)*	The protocol port.
ProtocolEnabled	boolean *read-write (null)*	An indication of whether the protocol is enabled.
}		
RFB *(v1.3+)* {	object	The settings for this manager's Remote Frame Buffer protocol support, which can support VNC.
Port	integer *read-write (null)*	The protocol port.
ProtocolEnabled	boolean *read-write (null)*	An indication of whether the protocol is enabled.
}		
SNMP {	object	The settings for this manager's SNMP support.
AuthenticationProtocol *(v1.5+)*	string (enum) *read-write (null)*	The authentication protocol for SNMP. *For the possible property values, see AuthenticationProtocol in Property details.*
CommunityAccessMode *(v1.5+)*	string (enum) *read-write (null)*	The access level of the SNMP community. *For the possible property values, see CommunityAccessMode in Property details.*
CommunityStrings *(v1.5+)* [{	array	The SNMP community strings.
AccessMode	string (enum) *read-write (null)*	The access level of the SNMP community. *For the possible property values, see AccessMode in Property details.*
CommunityString	string *read-write (null)*	The SNMP community string.

	string *read-write* *(null)*	
Name	string *read-write* *(null)*	The name of the SNMP community.
}]		
EnableSNMPv1 *(v1.5+)*	boolean *read-write* *(null)*	Indicates if access via SNMPv1 is enabled.
EnableSNMPv2c *(v1.5+)*	boolean *read-write* *(null)*	Indicates if access via SNMPv2c is enabled.
EnableSNMPv3 *(v1.5+)*	boolean *read-write* *(null)*	Indicates if access via SNMPv3 is enabled.
EncryptionProtocol *(v1.5+)*	string (enum) *read-write* *(null)*	The encryption protocol for SNMPv3. *For the possible property values, see EncryptionProtocol in Property details.*
EngineId *(v1.5+)* {	object *(null)*	The engine ID.
ArchitectureId *(v1.6+)*	string *read-only* *(null)*	The architecture identifier.
EnterpriseSpecificMethod	string *read-only* *(null)*	The enterprise specific method.
PrivateEnterpriseId	string *read-only* *(null)*	The private enterprise ID.
}		

HideCommunityStrings *(v1.5+)*	boolean *read-write (null)*	Indicates if the community strings should be hidden.
Port	integer *read-write (null)*	The protocol port.
ProtocolEnabled	boolean *read-write (null)*	An indication of whether the protocol is enabled.
}		
SSDP {	object	The settings for this manager's SSDP support.
NotifyIPv6Scope	string (enum) *read-write (null)*	The IPv6 scope for multicast NOTIFY messages for SSDP. *For the possible property values, see NotifyIPv6Scope in Property details.*
NotifyMulticastIntervalSeconds	integer (s) *read-write (null)*	The time interval, in seconds, between transmissions of the multicast NOTIFY ALIVE message from this service for SSDP.
NotifyTTL	integer *read-write (null)*	The time-to-live hop count for SSDP multicast NOTIFY messages.
Port	integer *read-write (null)*	The protocol port.
ProtocolEnabled	boolean *read-write (null)*	An indication of whether the protocol is enabled.
}		
SSH {	object	The settings for this manager's Secure Shell (SSH) protocol support.

	integer	The protocol port.
Port	*read-write (null)*	
ProtocolEnabled	boolean *read-write (null)*	An indication of whether the protocol is enabled.
}		
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.
Telnet {	object	The settings for this manager's Telnet protocol support.
Port	integer *read-write (null)*	The protocol port.
ProtocolEnabled	boolean *read-write (null)*	An indication of whether the protocol is enabled.
}		
VirtualMedia {	object	The settings for this manager's virtual media support.
Port	integer *read-write (null)*	The protocol port.
ProtocolEnabled	boolean *read-write (null)*	An indication of whether the protocol is enabled.
}		

6.62.1 Property details

6.62.1.1 AccessMode

The access level of the SNMP community.

String	Description
Full	READ-WRITE access mode.
Limited	READ-ONLY access mode.

6.62.1.2 AuthenticationProtocol

The authentication protocol for SNMP.

String	Description
Account	Authentication is determined by account settings.
CommunityString	SNMP community string authentication.
HMAC_MD5	HMAC-MD5-96 authentication.
HMAC_SHA96	HMAC-SHA-96 authentication.

6.62.1.3 CommunityAccessMode

The access level of the SNMP community.

String	Description
Full	READ-WRITE access mode.
Limited	READ-ONLY access mode.

6.62.1.4 EncryptionProtocol

The encryption protocol for SNMPv3.

String	Description
Account	Encryption is determined by account settings.
CBC_DES	CBC-DES encryption.
CFB128_AES128	CFB128-AES-128 encryption.
None	No encryption.

6.62.1.5 NotifyIPv6Scope

The IPv6 scope for multicast NOTIFY messages for SSDP.

String	Description
Link	SSDP NOTIFY messages are sent to addresses in the IPv6 local link scope.
Organization	SSDP NOTIFY messages are sent to addresses in the IPv6 local organization scope.
Site	SSDP NOTIFY messages are sent to addresses in the IPv6 local site scope.

6.63 MediaController 1.1.0

v1.1	v1.0
2020.2	2019.4

The MediaController schema contains the definition of the media controller and its configuration.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/MediaControllers/*{MediaControllerId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#MediaController.Reset {}	object	This action resets this media controller. *For more information, see the Actions section below.*
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

Id	string read-only required	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
Endpoints [{	array	An array of links to the endpoints that connect to this media controller.
@odata.id	string read-only	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Endpoints@odata.count	integer read-only	The number of items in a collection.
MemoryDomains [{	array	An array of links to the memory domains associated with this media controller.
@odata.id	string read-only	Link to a MemoryDomain resource. See the Links section and the *MemoryDomain* schema for details.
}]		
MemoryDomains@odata.count	integer read-only	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Manufacturer	string read-only (null)	The manufacturer of this media controller.
MediaControllerType	string (enum) read-only (null)	The type of media controller. *For the possible property values, see MediaControllerType in Property details.*
Model	string read-only (null)	The model of this media controller.

Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PartNumber	string *read-only* *(null)*	The part number of this media controller.
Ports {	object	The link to the collection of ports associated with this media controller. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Port*. See the Port schema for details.
}		
SerialNumber	string *read-only* *(null)*	The serial number of this media controller.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
UUID *(v1.1+)*	string *read-only* *(null)*	The UUID for this media controller.

6.63.1 Actions

6.63.1.1 Reset

This action resets this media controller.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/MediaControllers/*{MediaControllerId}*/Actions/MediaController.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		

	string (enum) optional	The type of reset. *For the possible property values, see ResetType in Property details.*
ResetType		
}		

6.63.2 Property details

6.63.2.1 MediaControllerType

The type of media controller.

String	Description
Memory	The media controller is for memory.

6.63.2.2 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.
On	Turn on the unit.
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.64 MediaControllerCollection

URIs:

/redfish/v1/Chassis/*{ChassisId}*/MediaControllers

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a MediaController resource. See the Links section and the *MediaController* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.65 Memory 1.9.2

v1.9	v1.8	v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2019.4	2019.2	2018.3	2018.2	2018.1	2017.3	2017.2	2017.1	2016.3	2016.1

The schema for definition of a memory and its configuration.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Memory/*{MemoryId}* /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}* /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}* /redfish/v1/
Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#Memory.DisablePassphrase {}	object	Disable passphrase for given regions. *For more information, see the Actions section below.*
#Memory.OverwriteUnit *(v1.6+)* {}	object	This contains the action for securely erasing given regions using the NIST SP800-88 Purge: Overwrite. *For more information, see the Actions section below.*

#Memory.Reset *(v1.8+)* {}	object	This action resets this memory. *For more information, see the Actions section below.*
#Memory.SecureEraseUnit {}	object	This contains the action for securely erasing given regions using the NIST SP800-88 Purge: Cryptographic Erase. *For more information, see the Actions section below.*
#Memory.SetPassphrase {}	object	Set passphrase for the given regions. *For more information, see the Actions section below.*
#Memory.UnlockUnit {}	object	This contains the action for unlocking given regions. *For more information, see the Actions section below.*
}		
AllocationAlignmentMiB *(v1.2+)*	integer (MiBy) *read-only (null)*	The boundary that memory regions are allocated on, measured in mebibytes (MiB).
AllocationIncrementMiB *(v1.2+)*	integer (MiBy) *read-only (null)*	The size of the smallest unit of allocation for a memory region in mebibytes (MiB).
AllowedSpeedsMHz [ ]	array (MHz) (integer) *read-only*	Speeds supported by this memory.
Assembly *(v1.4+)* {	object	The link to the assembly resource associated with this memory. See the *Assembly* schema for details on this property.
@odata.id	string *read-only*	Link to a Assembly resource. See the Links section and the *Assembly* schema for details.
}		
BaseModuleType	string (enum) *read-only (null)*	The base module type of the memory. *For the possible property values, see BaseModuleType in Property details.*

BusWidthBits	integer *read-only* *(null)*	The bus width, in bits.
CacheSizeMiB *(v1.4+)*	integer (MiBy) *read-only* *(null)*	Total size of the cache portion memory in MiB.
CapacityMiB	integer (MiBy) *read-only* *(null)*	Memory capacity in mebibytes (MiB).
ConfigurationLocked *(v1.7+)*	boolean *read-only* *(null)*	An indication of whether the configuration of this memory is locked and cannot be altered.
DataWidthBits	integer *read-only* *(null)*	Data width in bits.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
DeviceID *(deprecated v1.3)*	string *read-only* *(null)*	Device ID. *Deprecated in v1.3 and later. This property has been deprecated in favor of ModuleProductID.*
DeviceLocator *(deprecated v1.9)*	string *read-only* *(null)*	Location of the memory in the platform. *Deprecated in v1.9 and later. This property has been deprecated in favor of the ServiceLabel property within Location.*

ErrorCorrection	string (enum) *read-only* *(null)*	Error correction scheme supported for this memory. *For the possible property values, see ErrorCorrection in Property details.*
FirmwareApiVersion	string *read-only* *(null)*	Version of API supported by the firmware.
FirmwareRevision	string *read-only* *(null)*	Revision of firmware on the memory controller.
FunctionClasses *(deprecated v1.3)* [ ]	array (string) *read-only*	Function classes by the memory. *Deprecated in v1.3 and later. This property has been deprecated in favor of OperatingMemoryModes at the root of the resource, or MemoryClassification found within RegionSet.*
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
IsRankSpareEnabled	boolean *read-only* *(null)*	An indication of whether rank spare is enabled for this memory.
IsSpareDeviceEnabled	boolean *read-only* *(null)*	An indication of whether a spare device is enabled for this memory.
Links *(v1.2+)* {	object	The links to other resources that are related to this resource.
Chassis {	object	The link to the chassis that contains this memory. See the *Chassis* schema for details on this property.
@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.

}		
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Location *(v1.4+)* {}	object	The location of the memory. For property details, see Location.
LogicalSizeMiB *(v1.4+)*	integer (MiBy) *read-only* *(null)*	Total size of the logical memory in MiB.
Manufacturer	string *read-only* *(null)*	The memory manufacturer.
MaxTDPMilliWatts [ ]	array (mW) (integer) *read-only*	Set of maximum power budgets supported by the memory in milliwatts.
MemoryDeviceType	string (enum) *read-only* *(null)*	Type details of the memory. *For the possible property values, see MemoryDeviceType in Property details.*
MemoryLocation {	object	Memory connection information to sockets and memory controllers.
Channel	integer *read-only* *(null)*	The channel number to which the memory is connected.
MemoryController	integer *read-only* *(null)*	The memory controller number to which the memory is connected.

Slot	integer *read-only* *(null)*	The slot number to which the memory is connected.
Socket	integer *read-only* *(null)*	The socket number to which the memory is connected.
}		
MemoryMedia [ ]	array (string (enum)) *read-only*	Media of this memory. *For the possible property values, see MemoryMedia in Property details.*
MemorySubsystemControllerManufacturerID *(v1.3+)*	string *read-only* *(null)*	The manufacturer ID of the memory subsystem controller of this memory module.
MemorySubsystemControllerProductID *(v1.3+)*	string *read-only* *(null)*	The product ID of the memory subsystem controller of this memory module.
MemoryType	string (enum) *read-only* *(null)*	The type of memory. *For the possible property values, see MemoryType in Property details.*
Metrics {	object	The link to the Metrics associated with this memory. See the *MemoryMetrics* schema for details on this property.
@odata.id	string *read-only*	Link to a MemoryMetrics resource. See the Links section and the *MemoryMetrics* schema for details.
}		

ModuleManufacturerID *(v1.3+)*	string *read- only (null)*	The manufacturer ID of this memory module.
ModuleProductID *(v1.3+)*	string *read- only (null)*	The product ID of this memory module.
Name	string *read- only required*	The name of the resource or array member.
NonVolatileSizeMiB *(v1.4+)*	integer (MiBy) *read- only (null)*	Total size of the non-volatile portion memory in MiB.
Oem {}	object	The OEM extension property. For property details, see Oem.
OperatingMemoryModes [ ]	array (string (enum)) *read- only*	Memory modes supported by the memory. *For the possible property values, see OperatingMemoryModes in Property details.*
OperatingSpeedMhz	integer (MHz) *read- only (null)*	Operating speed of memory in MHz or MT/s as appropriate.
PartNumber	string *read- only (null)*	The product part number of this device.
PersistentRegionNumberLimit *(v1.2+)*	integer *read- only (null)*	Total number of persistent regions this memory can support.

PersistentRegionSizeLimitMiB	integer (MiBy) *read-only (null)*	Total size of persistent regions in mebibytes (MiB).
PersistentRegionSizeMaxMiB *(v1.2+)*	integer (MiBy) *read-only (null)*	Maximum size of a single persistent region in mebibytes (MiB).
PowerManagementPolicy {	object	Power management policy information.
AveragePowerBudgetMilliWatts	integer (mW) *read-only (null)*	Average power budget, in milliwatts.
MaxTDPMilliWatts	integer (mW) *read-only (null)*	Maximum TDP in milliwatts.
PeakPowerBudgetMilliWatts	integer (mW) *read-only (null)*	Peak power budget, in milliwatts.
PolicyEnabled	boolean *read-only (null)*	An indication of whether the power management policy is enabled.
}		
RankCount	integer *read-only (null)*	Number of ranks available in the memory.
Regions [{	array	Memory regions information within the memory.

	string (enum) read-only (null)	The classification of memory that the memory region occupies. *For the possible property values, see MemoryClassification in Property details.*
MemoryClassification		
OffsetMiB	integer (MiBy) read-only (null)	Offset within the memory that corresponds to the start of this memory region in mebibytes (MiB).
PassphraseEnabled *(v1.5+)*	boolean read-only (null)	An indication of whether the passphrase is enabled for this region.
PassphraseState *(deprecated v1.5)*	boolean read-only (null)	An indication of whether the state of the passphrase for this region is enabled. *Deprecated in v1.5 and later. This property has been deprecated in favor of PassphraseEnabled found within RegionSet.*
RegionId	string read-only (null)	Unique region ID representing a specific region within the memory.
SizeMiB	integer (MiBy) read-only (null)	Size of this memory region in mebibytes (MiB).
}]		
SecurityCapabilities {	object	Security capabilities of the memory.
ConfigurationLockCapable *(v1.7+)*	boolean read-only (null)	An indication of whether this memory supports the locking, or freezing, of the configuration.

DataLockCapable *(v1.7+)*	boolean *read-only* *(null)*	An indication of whether this memory supports data locking.
MaxPassphraseCount	integer *read-only* *(null)*	Maximum number of passphrases supported for this memory.
PassphraseCapable	boolean *read-only* *(null)*	An indication of whether the memory is passphrase capable.
PassphraseLockLimit *(v1.7+)*	integer *read-only* *(null)*	The maximum number of incorrect passphrase attempts allowed before memory is locked.
SecurityStates *(deprecated v1.7)* [ ]	array (string (enum)) *read-only*	Security states supported by the memory. *For the possible property values, see SecurityStates in Property details. Deprecated in v1.7 and later. This property has been deprecated in favor of using the individual PassphraseCapable, DataLockCapable and ConfigurationLockCapable properties.*
}		
SecurityState *(v1.7+)*	string (enum) *read-write* *(null)*	The current security state of this memory. *For the possible property values, see SecurityState in Property details.*
SerialNumber	string *read-only* *(null)*	The product serial number of this device.
SpareDeviceCount	integer *read-only* *(null)*	Number of unused spare devices available in the memory.

Status *(v1.1+)* {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
SubsystemDeviceID *(deprecated v1.3)*	string *read-only* *(null)*	Subsystem device ID. *Deprecated in v1.3 and later. This property has been deprecated in favor of MemorySubsystemControllerProductID.*
SubsystemVendorID *(deprecated v1.3)*	string *read-only* *(null)*	SubSystem vendor ID. *Deprecated in v1.3 and later. This property has been deprecated in favor of MemorySubsystemControllerManufacturerID.*
VendorID *(deprecated v1.3)*	string *read-only* *(null)*	Vendor ID. *Deprecated in v1.3 and later. This property has been deprecated in favor of ModuleManufacturerID.*
VolatileRegionNumberLimit *(v1.2+)*	integer *read-only* *(null)*	Total number of volatile regions this memory can support.
VolatileRegionSizeLimitMiB	integer (MiBy) *read-only* *(null)*	Total size of volatile regions in mebibytes (MiB).
VolatileRegionSizeMaxMiB *(v1.2+)*	integer (MiBy) *read-only* *(null)*	Maximum size of a single volatile region in mebibytes (MiB).
VolatileSizeMiB *(v1.4+)*	integer (MiBy) *read-only* *(null)*	Total size of the volatile portion memory in MiB.

6.65.1 Actions

6.65.1.1 DisablePassphrase

Disable passphrase for given regions.

URIs:

/redfish/v1/Chassis/{*ChassisId*}/Memory/{*MemoryId*}/Actions/Memory.DisablePassphrase /redfish/v1/
CompositionService/ResourceBlocks/{*ResourceBlockId*}/Memory/{*MemoryId*}/Actions/Memory.DisablePassphrase
/redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory/{*MemoryId*}/Actions/
Memory.DisablePassphrase /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Memory/{*MemoryId*}/Actions/
Memory.DisablePassphrase /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory/{*MemoryId*}/Actions/
Memory.DisablePassphrase /redfish/v1/Systems/{*ComputerSystemId*}/Memory/{*MemoryId*}/Actions/
Memory.DisablePassphrase

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
Passphrase	string *required*	Passphrase for doing the operation.
RegionId	string *required*	The memory region ID to which to apply this action.
}		

6.65.1.2 OverwriteUnit

This contains the action for securely erasing given regions using the NIST SP800-88 Purge: Overwrite.

URIs:

/redfish/v1/Chassis/{*ChassisId*}/Memory/{*MemoryId*}/Actions/Memory.OverwriteUnit /redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Memory/{*MemoryId*}/Actions/Memory.OverwriteUnit /redfish/v1/
CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory/{*MemoryId*}/Actions/
Memory.OverwriteUnit /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Memory/{*MemoryId*}/Actions/
Memory.OverwriteUnit /redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Actions/Memory.OverwriteUnit
/redfish/v1/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Actions/Memory.OverwriteUnit

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
Passphrase	string *required*	Passphrase for doing the operation.
RegionId	string *required*	The memory region ID to which to apply this action.
}		

6.65.1.3 Reset

This action resets this memory.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Memory/*{MemoryId}*/Actions/Memory.Reset /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}*/Actions/Memory.Reset /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Actions/Memory.Reset /redfish/
v1/ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}*/Actions/Memory.Reset /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Actions/Memory.Reset /redfish/
v1/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Actions/Memory.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ResetType	string (enum) *optional*	The type of reset. *For the possible property values, see ResetType in Property details.*
}		

6.65.1.4 SecureEraseUnit

This contains the action for securely erasing given regions using the NIST SP800-88 Purge: Cryptographic Erase.

URIs:

/redfish/v1/Chassis/{*ChassisId*}/Memory/{*MemoryId*}/Actions/Memory.SecureEraseUnit /redfish/v1/
CompositionService/ResourceBlocks/{*ResourceBlockId*}/Memory/{*MemoryId*}/Actions/Memory.SecureEraseUnit
/redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory/{*MemoryId*}/Actions/
Memory.SecureEraseUnit /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Memory/{*MemoryId*}/Actions/
Memory.SecureEraseUnit /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory/{*MemoryId*}/Actions/
Memory.SecureEraseUnit /redfish/v1/Systems/{*ComputerSystemId*}/Memory/{*MemoryId*}/Actions/
Memory.SecureEraseUnit

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
Passphrase	string *required*	Passphrase for doing the operation.
RegionId	string *required*	The memory region ID to which to apply this action.
}		

6.65.1.5 SetPassphrase

Set passphrase for the given regions.

URIs:

/redfish/v1/Chassis/{*ChassisId*}/Memory/{*MemoryId*}/Actions/Memory.SetPassphrase /redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Memory/{*MemoryId*}/Actions/Memory.SetPassphrase /redfish/v1/
CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory/{*MemoryId*}/Actions/
Memory.SetPassphrase /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Memory/{*MemoryId*}/Actions/
Memory.SetPassphrase /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory/{*MemoryId*}/Actions/Memory.SetPassphrase
/redfish/v1/Systems/{*ComputerSystemId*}/Memory/{*MemoryId*}/Actions/Memory.SetPassphrase

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		

	string *required*	Passphrase for doing the operation.
Passphrase		
RegionId	string *required*	The memory region ID to which to apply this action.
}		

6.65.1.6 UnlockUnit

This contains the action for unlocking given regions.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Memory/*{MemoryId}*/Actions/Memory.UnlockUnit /redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}*/Actions/Memory.UnlockUnit /redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Actions/Memory.UnlockUnit /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}*/Actions/Memory.UnlockUnit /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Actions/Memory.UnlockUnit /redfish/v1/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/Actions/Memory.UnlockUnit

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
Passphrase	string *required*	The passphrase required to complete the operation.
RegionId	string *required*	The memory region ID to which to apply this action.
}		

6.65.2 Property details

6.65.2.1 BaseModuleType

The base module type of the memory.

String	Description
Die *(v1.7+)*	A die within a package.
LRDIMM	Load Reduced.
Mini_RDIMM	Mini_RDIMM.
Mini_UDIMM	Mini_UDIMM.
RDIMM	Registered DIMM.
SO_DIMM	SO_DIMM.
SO_DIMM_16b	SO_DIMM_16b.
SO_DIMM_32b	SO_DIMM_32b.
SO_RDIMM_72b	SO_RDIMM_72b.
SO_UDIMM_72b	SO_UDIMM_72b.
UDIMM	UDIMM.

6.65.2.2 ErrorCorrection

Error correction scheme supported for this memory.

String	Description
AddressParity	Address parity errors can be corrected.
MultiBitECC	Multibit data errors can be corrected by ECC.
NoECC	No ECC available.
SingleBitECC	Single bit data errors can be corrected by ECC.

6.65.2.3 MemoryClassification

The classification of memory that the memory region occupies.

String	Description
Block	Block-accessible memory.
ByteAccessiblePersistent	Byte-accessible persistent memory.
Volatile	Volatile memory.

6.65.2.4 MemoryDeviceType

Type details of the memory.

String	Description
DDR	DDR.
DDR2	DDR2.
DDR2_SDRAM	DDR2 SDRAM.
DDR2_SDRAM_FB_DIMM	DDR2 SDRAM FB_DIMM.
DDR2_SDRAM_FB_DIMM_PROBE	DDR2 SDRAM FB_DIMM PROBE.
DDR3	DDR3.
DDR3_SDRAM	DDR3 SDRAM.
DDR4	DDR4.
DDR4_SDRAM	DDR4 SDRAM.
DDR4E_SDRAM	DDR4E SDRAM.
DDR_SDRAM	DDR SDRAM.
DDR_SGRAM	DDR SGRAM.
EDO	EDO.
FastPageMode	Fast Page Mode.
HBM *(v1.7+)*	High Bandwidth Memory.
HBM2 *(v1.7+)*	High Bandwidth Memory 2.
Logical *(v1.4+)*	Logical Non-volatile device.
LPDDR3_SDRAM	LPDDR3 SDRAM.
LPDDR4_SDRAM	LPDDR4 SDRAM.
PipelinedNibble	Pipelined Nibble.
ROM	ROM.
SDRAM	SDRAM.

6.65.2.5 MemoryMedia

Media of this memory.

String	Description
DRAM	DRAM media.
Intel3DXPoint	Intel 3D XPoint media.
NAND	NAND media.
Proprietary	Proprietary media.

6.65.2.6 MemoryType

The type of memory.

String	Description
DRAM	The memory module is comprised of volatile memory.
IntelOptane *(v1.6+)*	The memory module is an Intel Optane DC Persistent Memory Module.
NVDIMM_F	The memory module is comprised of non-volatile memory.
NVDIMM_N	The memory module is comprised of volatile memory backed by non-volatile memory.
NVDIMM_P	The memory module is comprised of a combination of non-volatile and volatile memory.

6.65.2.7 OperatingMemoryModes

Memory modes supported by the memory.

String	Description
Block	Block-accessible system memory.
PMEM	Persistent memory, byte-accessible through system address space.
Volatile	Volatile memory.

6.65.2.8 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.
On	Turn on the unit.
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.65.2.9 SecurityState

The current security state of this memory.

String	Description
Disabled	Secure mode is disabled.
Enabled	Secure mode is enabled and access to the data is allowed.
Frozen (deprecated v1.7)	Secure state is frozen and cannot be modified until reset. *Deprecated in v1.7 and later. This value has been deprecated in favor of using the ConfigurationLocked to indicate that the configuration has been frozen.*
Locked	Secure mode is enabled and access to the data is locked.
Passphraselimit	Number of attempts to unlock the memory exceeded limit.
Unlocked (deprecated v1.7)	Secure mode is enabled and access to the data is unlocked. *Deprecated in v1.7 and later. This value has been deprecated in favor of 'Enabled' to indicate normal security operation.*

6.65.2.10 SecurityStates

Security states supported by the memory.

String	Description
Disabled	Secure mode is disabled.

String	Description
Enabled	Secure mode is enabled and access to the data is allowed.
Frozen	Secure state is frozen and cannot be modified until reset.
Locked	Secure mode is enabled and access to the data is locked.
Passphraselimit	Number of attempts to unlock the memory exceeded limit.
Unlocked	Secure mode is enabled and access to the data is unlocked.

6.66 MemoryChunks 1.3.1

v1.3	v1.2	v1.1	v1.0
2019.4	2017.3	2017.1	2016.2

The schema definition of a memory chunk and its configuration.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/MemoryDomains/*{MemoryDomainId}*/MemoryChunks/*{MemoryChunksId}* /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemoryDomains/*{MemoryDomainId}*/MemoryChunk
s/*{MemoryChunksId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemoryDomains/*{MemoryDomainId}*/MemoryChunk
s/*{MemoryChunksId}* /redfish/v1/
Systems/*{ComputerSystemId}*/MemoryDomains/*{MemoryDomainId}*/MemoryChunks/*{MemoryChunksId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.

Actions *(v1.1+)* {}	object	The available actions for this resource.
AddressRangeOffsetMiB *(v1.3+)*	integer (MiBy) *read-only* *(null)*	Offset of the memory chunk in the address range in MiB.
AddressRangeType	string (enum) *read-only* *(null)*	Memory type of this memory chunk. *For the possible property values, see AddressRangeType in Property details.*
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
InterleaveSets [{	array	The interleave sets for the memory chunk.
Memory {	object	Describes a memory device of the interleave set.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
MemoryLevel	integer *read-only* *(null)*	Level of the interleave set for multi-level tiered memory.
OffsetMiB	integer (MiBy) *read-only* *(null)*	Offset within the DIMM that corresponds to the start of this memory region, measured in mebibytes (MiB).
RegionId	string *read-only* *(null)*	DIMM region identifier.

	integer (MiBy)		
SizeMiB	*read-only* *(null)*	Size of this memory region measured in mebibytes (MiB).	
}]			
IsMirrorEnabled	boolean *read-only* *(null)*	An indication of whether memory mirroring is enabled for this memory chunk.	
IsSpare	boolean *read-only* *(null)*	An indication of whether sparing is enabled for this memory chunk.	
Links *(v1.3+)* {	object	The links to other resources that are related to this resource.	
Endpoints [{	array	An array of links to the endpoints that connect to this memory chunk.	
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.	
}]			
Endpoints@odata.count	integer *read-only*	The number of items in a collection.	
Oem {}	object	The OEM extension property. For property details, see Oem.	
}			
MemoryChunkSizeMiB	integer (MiBy) *read-only* *(null)*	Size of the memory chunk measured in mebibytes (MiB).	
Name	string *read-only* *required*	The name of the resource or array member.	
Oem {}	object	The OEM extension property. For property details, see Oem.	
Status *(v1.2+)* {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.	

6.66.1 Property details

6.66.1.1 AddressRangeType

Memory type of this memory chunk.

String	Description
Block	Block accessible memory.
PMEM	Byte accessible persistent memory.
Volatile	Volatile memory.

6.67 MemoryChunksCollection

URIs:

/redfish/v1/Chassis/*{ChassisId}*/MemoryDomains/*{MemoryDomainId}*/MemoryChunks /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemoryDomains/*{MemoryDomainId}*/MemoryChunk
s /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemoryDomains/*{MemoryDomainId}*/MemoryChunk
s /redfish/v1/Systems/*{ComputerSystemId}*/MemoryDomains/*{MemoryDomainId}*/MemoryChunks

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

Members [{		array	The members of this collection.
@odata.id	string *read-only*		Link to a MemoryChunks resource. See the Links section and the *MemoryChunks* schema for details.
}]			
Members@odata.count	integer *read-only*		The number of items in a collection.
Members@odata.nextLink	string *read-only*		The URI to the resource containing the next set of partial members.
Name	string *read-only*		The name of the resource or array member.
Oem {}		object	The OEM extension property. For property details, see Oem.

6.68 MemoryCollection

URIs:

/redfish/v1/Chassis/{*ChassisId*}/Memory /redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Memory /redfish/v1/
Systems/{*ComputerSystemId*}/Memory

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.

Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Memory resource. See the Links section and the *Memory* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.69 MemoryDomain 1.3.0

v1.3	*v1.2*	*v1.1*	*v1.0*
2019.4	2017.1	2016.3	2016.2

The MemoryDomain schema describes a memory domain and its configuration. Memory domains indicate to the client which memory, or DIMMs, can be grouped together in memory chunks to represent addressable memory.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/MemoryDomains/*{MemoryDomainId}* /redfish/v1/CompositionService/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemoryDomains/*{MemoryDomainId}* /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemoryDomains/*{MemoryDomainId}* /redfish/v1/ Systems/*{ComputerSystemId}*/MemoryDomains/*{MemoryDomainId}*

@odata.context	string *read-only*	The OData description of a payload.

@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.2+)* {}	object	The available actions for this Resource.
AllowsBlockProvisioning	boolean *read-only* *(null)*	An indication of whether this memory domain supports the provisioning of blocks of memory.
AllowsMemoryChunkCreation	boolean *read-only* *(null)*	An indication of whether this memory domain supports the creation of memory chunks.
AllowsMirroring *(v1.1+)*	boolean *read-only* *(null)*	An indication of whether this memory domain supports the creation of memory chunks with mirroring enabled.
AllowsSparing *(v1.1+)*	boolean *read-only* *(null)*	An indication of whether this memory domain supports the creation of memory chunks with sparing enabled.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
InterleavableMemorySets [{	array	The interleave sets for the memory chunk.
MemorySet [{	array	The set of memory for a particular interleave set.
@odata.id	string *read-only*	Link to a Memory resource. See the Links section and the *Memory* schema for details.

	}]		
MemorySet@odata.count	integer *read-only*	The number of items in a collection.
}]		
Links *(v1.3+)* {	object	The links to other Resources that are related to this Resource.
MediaControllers [{	array	An array of links to the media controllers for this memory domain.
@odata.id	string *read-only*	Link to a MediaController resource. See the Links section and the *MediaController* schema for details.
}]		
MediaControllers@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
MemoryChunks {	object	The link to the collection of memory chunks associated with this memory domain. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *MemoryChunks*. See the MemoryChunks schema for details.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.70 MemoryDomainCollection

URIs:

/redfish/v1/Chassis/*{ChassisId}*/MemoryDomains /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemoryDomains /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemoryDomains /redfish/v1/
Systems/*{ComputerSystemId}*/MemoryDomains

@odata.context	string read-only	The OData description of a payload.
@odata.etag	string read-only	The current ETag of the resource.
@odata.id	string read-only	The unique identifier for a resource.
@odata.type	string read-only	The type of a resource.
Description	string read-only (null)	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string read-only	Link to a MemoryDomain resource. See the Links section and the *MemoryDomain* schema for details.
}]		
Members@odata.count	integer read-only	The number of items in a collection.
Members@odata.nextLink	string read-only	The URI to the resource containing the next set of partial members.
Name	string read-only	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.71 MemoryMetrics 1.3.0

v1.3	v1.2	v1.1	v1.0
2020.1	2019.2	2016.2	2016.1

The usage and health statistics for a memory device or system memory summary.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}*/MemoryMetrics /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/MemoryMetrics /redfish/v1/
CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemorySummary/
MemoryMetrics /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}*/MemoryMetrics /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/MemoryMetrics /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemorySummary/MemoryMetrics /redfish/v1/
Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/MemoryMetrics /redfish/v1/
Systems/*{ComputerSystemId}*/MemorySummary/MemoryMetrics

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#MemoryMetrics.ClearCurrentPeriod {}	object	This action sets the CurrentPeriod property's values to 0. *For more information, see the Actions section below.*
}		

BandwidthPercent *(v1.2+)*	number (%) *read-only (null)*	The memory bandwidth utilization as a percentage.
BlockSizeBytes	integer (By) *read-only (null)*	The block size, in bytes.
CurrentPeriod {	object	The memory metrics since the last reset or ClearCurrentPeriod action.
BlocksRead	integer *read-only (null)*	The number of blocks read since reset.
BlocksWritten	integer *read-only (null)*	The number of blocks written since reset.
}		
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
HealthData {	object	The health information of the memory.
AlarmTrips {	object	Alarm trip information about the memory.
AddressParityError	boolean *read-only (null)*	An indication of whether an address parity error was detected that a retry could not correct.
CorrectableECCError	boolean *read-only (null)*	An indication of whether the correctable error threshold crossing alarm trip was detected.
SpareBlock	boolean *read-only (null)*	An indication of whether the spare block capacity crossing alarm trip was detected.

Temperature	boolean *read-only* *(null)*	An indication of whether a temperature threshold alarm trip was detected.
UncorrectableECCError	boolean *read-only* *(null)*	An indication of whether the uncorrectable error threshold alarm trip was detected.
}		
DataLossDetected	boolean *read-only* *(null)*	An indication of whether data loss was detected.
LastShutdownSuccess	boolean *read-only* *(null)*	An indication of whether the last shutdown succeeded.
PerformanceDegraded	boolean *read-only* *(null)*	An indication of whether performance has degraded.
PredictedMediaLifeLeftPercent *(v1.1+)*	number (%) *read-only* *(null)*	The percentage of reads and writes that are predicted to still be available for the media.
RemainingSpareBlockPercentage	number (%) *read-only* *(null)*	The remaining spare blocks, as a percentage.
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
LifeTime {	object	The memory metrics for the lifetime of the memory.
BlocksRead	integer *read-only* *(null)*	The number of blocks read for the lifetime of the memory.

BlocksWritten	integer *read-only* *(null)*	The number of blocks written for the lifetime of the memory.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OperatingSpeedMHz *(v1.3+)*	integer (MHz) *read-only* *(null)*	Operating speed of memory in MHz or MT/s as appropriate.

6.71.1 Actions

6.71.1.1 ClearCurrentPeriod

This action sets the CurrentPeriod property's values to 0.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}*/MemoryMetrics/Actions/
MemoryMetrics.ClearCurrentPeriod /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/MemoryMetrics/Actions/
MemoryMetrics.ClearCurrentPeriod /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemorySummary/MemoryMetrics/Actions/
MemoryMetrics.ClearCurrentPeriod /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Memory/*{MemoryId}*/MemoryMetrics/Actions/MemoryMetrics.ClearCurrentPeriod
/redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/MemoryMetrics/
Actions/MemoryMetrics.ClearCurrentPeriod /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/MemorySummary/MemoryMetrics/Actions/
MemoryMetrics.ClearCurrentPeriod /redfish/v1/Systems/*{ComputerSystemId}*/Memory/*{MemoryId}*/MemoryMetrics/
Actions/MemoryMetrics.ClearCurrentPeriod /redfish/v1/Systems/*{ComputerSystemId}*/MemorySummary/
MemoryMetrics/Actions/MemoryMetrics.ClearCurrentPeriod

(This action takes no parameters.)

6.72 MessageRegistry 1.4.0

v1.4	v1.3	v1.2	v1.1	v1.0
2020.1	2019.1	2018.2	2017.1	1.0

The MessageRegistry schema describes all Message Registries. It represents the properties for the Message Registries themselves.

@odata.type	string *read-only required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Language	string *read-only required*	The RFC5646-conformant language code for the Message Registry.
Messages {	object * required*	The message keys contained in the Message Registry.
(pattern) {	object	Property names follow regular expression pattern "[A-Za-z0-9]+"
ArgDescriptions *(v1.3+)* [ ]	array (string, null) *read-only*	The MessageArg descriptions, in order, used for this message.
ArgLongDescriptions *(v1.3+)* [ ]	array (string, null) *read-only*	The MessageArg normative descriptions, in order, used for this message.
ClearingLogic *(v1.2+)* {	object	The clearing logic associated with this message. The properties within indicate that what messages are cleared by this message as well as under what conditions.
ClearsAll	boolean *read-only* *(null)*	An indication of whether all prior conditions and messages are cleared, provided the ClearsIf condition is met.

ClearsIf	string (enum) *read-only* *(null)*	The condition when the event is cleared. *For the possible property values, see ClearsIf in Property details.*
ClearsMessage [ ]	array (string, null) *read-only*	The array of MessageIds that this message clears when the other conditions are met.
}		
Description	string *read-only required*	A short description of how and when to use this message.
LongDescription *(v1.3+)*	string *read-only* *(null)*	The normative language that describes this message's usage.
Message	string *read-only required*	The actual message.
MessageSeverity *(v1.4+)*	string (enum) *read-only required* *(null)*	The severity of the message. *For the possible property values, see MessageSeverity in Property details.*
NumberOfArgs	integer *read-only required*	The number of arguments in the message.
Oem {}	object	The OEM extension property. For property details, see Oem.
ParamTypes [ ]	array (string (enum)) *read-only*	The MessageArg types, in order, for the message. *For the possible property values, see ParamTypes in Property details.*
Resolution	string *read-only required*	Used to provide suggestions on how to resolve the situation that caused the error.
Severity *(deprecated v1.4)*	string *read-only required*	The severity of the message. *Deprecated in v1.4 and later. This property has been deprecated in favor of MessageSeverity, which ties the values to the enumerations defined for the Health property within Status.*
}		

	array, boolean, integer, number, object, string (null)	Property names follow regular expression pattern "^([a-zA-Z_][a-zA-Z0-9_]*)?@(odata|Redfish|Message)\.[a-zA-Z_][a-zA-Z0-9_]*$"
(pattern) {} [ ]		
}		
Name	string read-only required	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OwningEntity	string read-only required	The organization or company that publishes this Message Registry.
RegistryPrefix	string read-only required	The single-word prefix that is used in forming and decoding MessageIds.
RegistryVersion	string read-only required	The Message Registry version in the middle portion of a MessageId.

6.72.1 Property details

6.72.1.1 ClearsIf

The condition when the event is cleared.

String	Description
SameOriginOfCondition	This enumeration shall describe when the message for an event is cleared by the other messages in the ClearingLogic property, provided the OriginOfCondition for both events are the same.

6.72.1.2 MessageSeverity

The severity of the message.

String	Description
Critical	A critical condition requires immediate attention.
OK	Normal.

String	Description
Warning	A condition requires attention.

6.72.1.3 ParamTypes

The MessageArg types, in order, for the message.

String	Description
number	The argument is a number.
string	The argument is a string.

6.73 MessageRegistryCollection

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a MessageRegistry resource. See the Links section and the *MessageRegistry* schema for details.

}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.74 MessageRegistryFile 1.1.3

v1.1	*v1.0*
2017.1	2016.1

The MessageRegistryFile schema describes the Message Registry file locator Resource.

URIs:

/redfish/v1/Registries/*{MessageRegistryFileId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.

Actions *(v1.1+)* {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Languages [ ]	array (string) *read-only* *required*	The RFC5646-conformant language codes for the available Message Registries.
Location [{	array * required*	The location information for this Message Registry file.
ArchiveFile	string *read-only*	If the service hosts the Message Registry in an archive file, the name of the file within the archive.
ArchiveUri	string *read-only*	If the Message Registry is hosted on the service in an archive file, the link to the archive file.
Language	string *read-only*	The language code for the Message Registry file.
PublicationUri	string *read-only*	The link to publicly available (canonical) URI for the Message Registry.
Uri	string *read-only*	The link to locally available URI for the Message Registry.
}]		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

	string *read-only* *required*	The registry name and its major and minor versions. This registry can be any type of registry, such as a Message Registry, Privilege Registry, or Attribute Registry.
Registry		

6.75 MessageRegistryFileCollection

URIs:

/redfish/v1/Registries

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a MessageRegistryFile resource. See the Links section and the *MessageRegistryFile* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.

	string *read-only*	The URI to the resource containing the next set of partial members.
Members@odata.nextLink		
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.76 MetricDefinition 1.0.4

v1.0
2018.2

The MetricDefinition schema describes the metadata information for a metric.

URIs:

/redfish/v1/TelemetryService/MetricDefinitions/*{MetricDefinitionId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Accuracy	number *read-only* *(null)*	The estimated percent error of measured versus actual values.
Actions {}	object	The available actions for this resource.

Calculable	string (enum) *read-write* *(null)*	An indication of whether the metric can be used in a calculation. *For the possible property values, see Calculable in Property details.*
CalculationAlgorithm	string (enum) *read-only* *(null)*	The calculation that is performed on a source metric to obtain the metric being defined. *For the possible property values, see CalculationAlgorithm in Property details.*
CalculationParameters [{	array	The metric properties that are part of the synthesis calculation. This property is present when the MetricType property is `Synthesized` .
ResultMetric	string *read-only* *(null)*	The link to a metric property that stores the result of the calculation.
SourceMetric	string *read-only* *(null)*	The metric property used as the input into the calculation.
}]		
CalculationTimeInterval	string *read-write* *(null)*	The time interval over which the metric calculation is performed.
Calibration	number *read-only* *(null)*	The calibration offset added to the metric reading.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
DiscreteValues [ ]	array (string, null) *read-write*	This array property specifies possible values of a discrete metric.

Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Implementation	string (enum) *read-only* *(null)*	The implementation of the metric. *For the possible property values, see Implementation in Property details.*
IsLinear	boolean *read-write* *(null)*	An indication of whether the metric values are linear versus non-linear.
MaxReadingRange	number *read-only* *(null)*	Maximum value for metric reading.
MetricDataType	string (enum) *read-write* *(null)*	The data type of the metric. *For the possible property values, see MetricDataType in Property details.*
MetricProperties [ ]	array (string, null) *read-write*	The list of URIs with wildcards and property identifiers that this metric definition defines. If a URI has wildcards, the wildcards are substituted as specified in the Wildcards array property.
MetricType	string (enum) *read-write* *(null)*	The type of metric. *For the possible property values, see MetricType in Property details.*
MinReadingRange	number *read-only* *(null)*	Minimum value for metric reading.
Name	string *read-only* *required*	The name of the resource or array member.

Oem {}	object	The OEM extension property. For property details, see Oem.
PhysicalContext	string (enum) *read-only (null)*	The physical context of the metric. *For the possible property values, see PhysicalContext in Property details.*
Precision	integer *read-only (null)*	Number of significant digits in the metric reading.
SensingInterval	string *read-write (null)*	The time interval between when a metric is updated.
TimestampAccuracy	string *read-only (null)*	The accuracy of the timestamp.
Units	string *read-write (null)*	The units of measure for this metric.
Wildcards [{	array	The wildcards and their substitution values for the entries in the MetricProperties array property.
Name	string *read-only (null)*	The string used as a wildcard.
Values [ ]	array (string, null) *read-only*	An array of values to substitute for the wildcard.
}]		

6.76.1 Property details

6.76.1.1 Calculable

An indication of whether the metric can be used in a calculation.

String	Description
NonCalculatable	No calculations should be performed on the metric reading.
NonSummable	The sum of the metric reading across multiple instances is not meaningful.
Summable	The sum of the metric reading across multiple instances is meaningful.

6.76.1.2 CalculationAlgorithm

The calculation that is performed on a source metric to obtain the metric being defined.

String	Description
Average	The metric is calculated as the average metric reading over a sliding time interval.
Maximum	The metric is calculated as the maximum metric reading over during a time interval.
Minimum	The metric is calculated as the minimum metric reading over a sliding time interval.

6.76.1.3 Implementation

The implementation of the metric.

String	Description
Calculated	The metric is implemented by applying a calculation on another metric property. The calculation is specified in the CalculationAlgorithm property.
DigitalMeter	The metric is implemented as digital meter.
PhysicalSensor	The metric is implemented as a physical sensor.
Synthesized	The metric is implemented by applying a calculation on one or more metric properties. The calculation is not provided.

6.76.1.4 MetricDataType

The data type of the metric.

String	Description
Boolean	The JSON boolean definition.
DateTime	The JSON string definition with the date-time format.
Decimal	The JSON decimal definition.
Enumeration	The JSON string definition with a set of defined enumerations.

String	Description
Integer	The JSON integer definition.
String	The JSON string definition.

6.76.1.5 MetricType

The type of metric.

String	Description
Countdown	The metric is a countdown metric. The metric reading is a non-negative integer that decreases monotonically. When a counter reaches its minimum, the value resets to preset value and resumes counting down.
Counter	The metric is a counter metric. The metric reading is a non-negative integer that increases monotonically. When a counter reaches its maximum, the value resets to 0 and resumes counting.
Discrete	The metric is a discrete metric. The metric value is discrete. The possible values are listed in the DiscreteValues property.
Gauge	The metric is a gauge metric. The metric value is a real number. When the metric value reaches the gauges extrema, it stays at that value, until the reading falls within the extrema.
Numeric	The metric is a numeric metric. The metric value is any real number.

6.76.1.6 PhysicalContext

The physical context of the metric.

String	Description
Accelerator	An accelerator.
ACInput	An AC input.
ACMaintenanceBypassInput	An AC maintenance bypass input.
ACOutput	An AC output.
ACStaticBypassInput	An AC static bypass input.
ACUtilityInput	An AC utility input.
ASIC	An ASIC device, such as a networking chip or chipset component.
Back	The back of the chassis.
Backplane	A backplane within the chassis.
Chassis	The entire chassis.

String	Description
ComputeBay	Within a compute bay.
CoolingSubsystem	The entire cooling, or air and liquid, subsystem.
CPU	A processor (CPU).
CPUSubsystem	The entire processor (CPU) subsystem.
DCBus	A DC bus.
Exhaust	The air exhaust point or points or region of the chassis.
ExpansionBay	Within an expansion bay.
Fan	A fan.
FPGA	An FPGA.
Front	The front of the chassis.
GPU	A graphics processor (GPU).
GPUSubsystem	The entire graphics processor (GPU) subsystem.
Intake	The air intake point or points or region of the chassis.
LiquidInlet	The liquid inlet point of the chassis.
LiquidOutlet	The liquid outlet point of the chassis.
Lower	The lower portion of the chassis.
Memory	A memory device.
MemorySubsystem	The entire memory subsystem.
Motor	A motor.
NetworkBay	Within a networking bay.
NetworkingDevice	A networking device.
PowerSubsystem	The entire power subsystem.
PowerSupply	A power supply.
PowerSupplyBay	Within a power supply bay.
Rectifier	A rectifier device.
Room	The room.
StorageBay	Within a storage bay.

String	Description
StorageDevice	A storage device.
SystemBoard	The system board (PCB).
Transformer	A transformer.
Upper	The upper portion of the chassis.
VoltageRegulator	A voltage regulator device.

6.77 MetricDefinitionCollection

URIs:

/redfish/v1/TelemetryService/MetricDefinitions

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a MetricDefinition resource. See the Links section and the *MetricDefinition* schema for details.

}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.78 MetricReport 1.4.0

v1.4	v1.3	v1.2	v1.1	v1.0
2020.2	2019.4	2019.2	2018.3	2018.2

The metric definitions that create a metric report.

URIs:

/redfish/v1/TelemetryService/MetricReports/*{MetricReportId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.

	string *read-only required*	The type of a resource.
@odata.type		
Actions {}	object	The available actions for this resource.
Context *(v1.4+)*	string *read-only*	A context can be supplied at subscription time. This property is the context value supplied by the subscriber.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
MetricReportDefinition {	object	The link to the definition of this metric report. See the *MetricReportDefinition* schema for details on this property.
@odata.id	string *read-only*	Link to a MetricReportDefinition resource. See the Links section and the *MetricReportDefinition* schema for details.
}		
MetricValues [{	array	An array of metric values for the metered items of this metric report.
MetricDefinition {	object	The link to the metric definition for this metric. See the *MetricDefinition* schema for details on this property.
@odata.id	string *read-only*	Link to a MetricDefinition resource. See the Links section and the *MetricDefinition* schema for details.
}		
MetricId	string *read-only (null)*	The metric definitions identifier for this metric.

	string	
MetricProperty	*read-only* *(null)*	The URI for the property from which this metric is derived.
MetricValue	string *read-only* *(null)*	The metric value, as a string.
Oem *(v1.2+)* {}	object	The OEM extension property. For property details, see Oem.
Timestamp	string *read-only* *(null)*	The date and time when the metric is obtained. A management application can establish a time series of metric data by retrieving the instances of metric value and sorting them according to their timestamp.
}]		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
ReportSequence *(deprecated v1.3)*	string *read-only*	The current sequence identifier for this metric report. *Deprecated in v1.3 and later. This property has been deprecated due to specification changes with regards to Server-Sent Events.*
Timestamp *(v1.1+)*	string *read-only* *(null)*	The time associated with the metric report in its entirety. The time of the metric report can be relevant when the time of individual metrics are minimally different.

6.79 MetricReportCollection

URIs:

/redfish/v1/TelemetryService/MetricReports

	string	
@odata.context	*read-only*	The OData description of a payload.

@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a MetricReport resource. See the Links section and the *MetricReport* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.80 MetricReportDefinition 1.3.2

v1.3	*v1.2*	*v1.1*	*v1.0*
2019.2	2019.1	2018.3	2018.2

The MetricReportDefinition schema describes set of metrics that are collected into a metric report.

URIs:

/redfish/v1/TelemetryService/MetricReportDefinitions/*{MetricReportDefinitionId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
AppendLimit	integer *read-only*	The maximum number of entries that can be appended to a metric report. When the metric report reaches its limit, its behavior is dictated by the ReportUpdates property.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links *(v1.2+)* {	object	The links to other resources that are related to this resource.
Oem {}	object	The OEM extension property. For property details, see Oem.
Triggers [{	array	The triggers that cause this metric report definition to generate a new metric report upon a trigger occurrence when the TriggerActions property contains `RedfishMetricReport` .
@odata.id	string *read-only*	Link to a Triggers resource. See the Links section and the *Triggers* schema for details.

}]		
Triggers@odata.count	integer *read-only*	The number of items in a collection.
}		
MetricProperties [ ]	array (string, null) *read-write*	The list of URIs with wildcards and property identifiers to include in the metric report. If a URI has wildcards, the wildcards are substituted as specified in the Wildcards property.
MetricReport {	object	The location where the resultant metric report is placed. See the *MetricReport* schema for details on this property.
@odata.id	string *read-only*	Link to a MetricReport resource. See the Links section and the *MetricReport* schema for details.
}		
MetricReportDefinitionEnabled *(v1.2+)*	boolean *read-write* *(null)*	An indication of whether the generation of new metric reports is enabled.
MetricReportDefinitionType	string (enum) *read-write* *(null)*	Specifies when the metric report is generated. *For the possible property values, see MetricReportDefinitionType in Property details.*
MetricReportHeartbeatInterval *(v1.2+)*	string *read-write* *(null)*	The interval at which to send the complete metric report because the Redfish client wants refreshed metric data even when the data has not changed. This property value is always greater than the recurrence interval of a metric report, and it only applies when the SuppressRepeatedMetricValue property is `true` .
Metrics [{	array	The list of metrics to include in the metric report. The metrics might include metric properties or calculations applied to a metric property.
CollectionDuration	string *read-write* *(null)*	The duration over which the function is computed.

CollectionFunction	string (enum) *read-write (null)*	Specifies the function to perform on each of the metric properties listed in the MetricProperties property. *For the possible property values, see CollectionFunction in Property details.*
CollectionTimeScope	string (enum) *read-write (null)*	The scope of time over which the function is applied. *For the possible property values, see CollectionTimeScope in Property details.*
MetricId	string *read-only (null)*	The label for the metric definition that is derived by applying the collectionFunction to the metric property. It matches the Id property of the corresponding metric definition.
MetricProperties [ ]	array (string, null) *read-write*	The set of URIs for the properties on which this metric is collected.
}]		
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
ReportActions [ ]	array (string (enum)) *read-only*	The set of actions to perform when a metric report is generated. Actions to perform when a metric report is generated. *For the possible property values, see ReportActions in Property details.*
ReportTimespan *(v1.3+)*	string *read-write (null)*	The maximum timespan that a metric report can cover.

ReportUpdates	string (enum) *read-only*	The behavior for how subsequent metric reports are handled in relationship to an existing metric report created from the metric report definition. Namely, whether to overwrite, append, or create a report resource. *For the possible property values, see ReportUpdates in Property details.*
Schedule {}	object	The schedule for generating the metric report. For property details, see Schedule.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
SuppressRepeatedMetricValue *(v1.2+)*	boolean *read-write (null)*	An indication of whether any metrics are suppressed from the generated metric report. If `true`, any metric that equals the same value in the previously generated metric report is suppressed from the current report. Also, duplicate metrics are suppressed. If `false`, no metrics are suppressed from the current report. The current report might contain no metrics if all metrics equal the values in the previously generated metric report.
Wildcards [{	array	The set of wildcards and their substitution values for the entries in the MetricProperties property.
Keys *(deprecated v1.1)* [ ]	array (string, null) *read-only*	An array of values to substitute for the wildcard. *Deprecated in v1.1 and later. This property has been deprecated in favor of using the property Values.*
Name	string *read-only (null)*	The string used as a wildcard.
Values *(v1.1+)* [ ]	array (string, null) *read-only*	An array of values to substitute for the wildcard.
}]		

6.80.1 Property details

6.80.1.1 CollectionFunction

Specifies the function to perform on each of the metric properties listed in the MetricProperties property.

String	Description
Average	The metric is calculated as the average metric reading over a duration.
Maximum	The metric is calculated as the maximum metric reading over a duration.
Minimum	The metric is calculated as the minimum metric reading over a duration.
Summation	The metric is calculated as the sum of the values over a duration.

6.80.1.2 CollectionTimeScope

The scope of time over which the function is applied.

String	Description
Interval	The corresponding metric values apply to a time interval. On the corresponding metric value instances, the Timestamp property value in the metric report specifies the end of the time interval and the CollectionDuration property specifies its duration.
Point	The corresponding metric values apply to a point in time. On the corresponding metric value instances, the Timestamp property value in the metric report specifies the point in time.
StartupInterval	The corresponding metric values apply to a time interval that began at the startup of the measured resource. On the corresponding metric value instances, the Timestamp property value in the metric report shall specifies the end of the time interval. The CollectionDuration property value specifies the duration between the startup of resource and timestamp.

6.80.1.3 MetricReportDefinitionType

Specifies when the metric report is generated.

String	Description
OnChange	The metric report is generated when any of the metric values change.
OnRequest	The metric report is generated when a HTTP GET is performed on the specified metric report.
Periodic	The metric report is generated at a periodic time interval, specified in the Schedule property.

6.80.1.4 ReportActions

The set of actions to perform when a metric report is generated. Actions to perform when a metric report is generated.

String	Description
LogToMetricReportsCollection	Record the occurrence to the metric report collection.

String	Description
RedfishEvent	Send a Redfish event message containing the metric report.

6.80.1.5 ReportUpdates

The behavior for how subsequent metric reports are handled in relationship to an existing metric report created from the metric report definition. Namely, whether to overwrite, append, or create a report resource.

String	Description
AppendStopsWhenFull	New information is appended to the metric report. The service stops adding entries when the metric report has reached its maximum capacity.
AppendWrapsWhenFull	New information is appended to the metric report. The metric report entries are overwritten with new entries when the metric report has reached its maximum capacity.
NewReport	A new metric report is created, whose resource name is the metric report resource name concatenated with the timestamp.
Overwrite	Overwrite the metric report.

6.81 MetricReportDefinitionCollection

URIs:

/redfish/v1/TelemetryService/MetricReportDefinitions

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.

	string	
Description	*read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a MetricReportDefinition resource. See the Links section and the *MetricReportDefinition* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.82 NetworkAdapter 1.4.0

v1.4	v1.3	v1.2	v1.1	v1.0
2020.2	2019.2	2018.2	2017.3	2016.3

The NetworkAdapter schema represents a physical network adapter capable of connecting to a computer network. Examples include but are not limited to Ethernet, Fibre Channel, and converged network adapters.

URIs:

/redfish/v1/Chassis/{*ChassisId*}/NetworkAdapters/{*NetworkAdapterId*}

@odata.context	string read-only	The OData description of a payload.
@odata.etag	string read-only	The current ETag of the resource.
@odata.id	string read-only required	The unique identifier for a resource.
@odata.type	string read-only required	The type of a resource.
Actions {	object	The available actions for this resource.
#NetworkAdapter.ResetSettingsToDefault {}	object	This action is to clear the settings back to factory defaults. *For more information, see the Actions section below.*
}		
Assembly *(v1.1+)* {	object	The link to the assembly resource associated with this adapter. See the *Assembly* schema for details on this property.
@odata.id	string read-only	Link to a Assembly resource. See the Links section and the *Assembly* schema for details.
}		
Controllers [{	array	The set of network controllers ASICs that make up this NetworkAdapter.
ControllerCapabilities {	object	The capabilities of this controller.
DataCenterBridging {	object	Data center bridging (DCB) for this controller.
Capable	boolean read-only (null)	An indication of whether this controller is capable of data center bridging (DCB).
}		

NetworkDeviceFunctionCount	integer read-only (null)	The maximum number of physical functions available on this controller.
NetworkPortCount	integer read-only (null)	The number of physical ports on this controller.
NPAR *(v1.2+)* {	object	NIC Partitioning (NPAR) capabilities for this controller.
NparCapable	boolean read-only (null)	An indication of whether the controller supports NIC function partitioning.
NparEnabled	boolean read-write (null)	An indication of whether NIC function partitioning is active on this controller.
}		
NPIV {	object	N_Port ID Virtualization (NPIV) capabilities for this controller.
MaxDeviceLogins	integer read-only (null)	The maximum number of N_Port ID Virtualization (NPIV) logins allowed simultaneously from all ports on this controller.
MaxPortLogins	integer read-only (null)	The maximum number of N_Port ID Virtualization (NPIV) logins allowed per physical port on this controller.
}		
VirtualizationOffload {	object	Virtualization offload for this controller.
SRIOV {	object	Single-root input/output virtualization (SR-IOV) capabilities.
SRIOVVEPACapable	boolean read-only (null)	An indication of whether this controller supports single root input/output virtualization (SR-IOV) in Virtual Ethernet Port Aggregator (VEPA) mode.

}		
VirtualFunction {	object	The virtual function of the controller.
DeviceMaxCount	integer *read-only* *(null)*	The maximum number of virtual functions supported by this controller.
MinAssignmentGroupSize	integer *read-only* *(null)*	The minimum number of virtual functions that can be allocated or moved between physical functions for this controller.
NetworkPortMaxCount	integer *read-only* *(null)*	The maximum number of virtual functions supported per network port for this controller.
}		
}		
}		
FirmwarePackageVersion	string *read-only* *(null)*	The version of the user-facing firmware package.
Identifiers *(v1.3+)* [{ }]	array (object)	The durable names for the network adapter controller. Any additional identifiers for a resource. For property details, see Identifier.
Links {	object	The links to other resources that are related to this resource.
NetworkDeviceFunctions [{	array	An array of links to the network device functions associated with this network controller.
@odata.id	string *read-only*	Link to a NetworkDeviceFunction resource. See the Links section and the *NetworkDeviceFunction* schema for details.
}]		
NetworkDeviceFunctions@odata.count	integer *read-only*	The number of items in a collection.

NetworkPorts [{	array	An array of links to the network ports associated with this network controller.
@odata.id	string *read-only*	Link to a NetworkPort resource. See the Links section and the *NetworkPort* schema for details.
}]		
NetworkPorts@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeDevices [{	array	An array of links to the PCIe devices associated with this network controller.
@odata.id	string *read-only*	Link to a PCIeDevice resource. See the Links section and the *PCIeDevice* schema for details.
}]		
PCIeDevices@odata.count	integer *read-only*	The number of items in a collection.
}		
Location *(v1.1+)* {}	object	The location of the network adapter controller. For property details, see Location.
PCIeInterface *(v1.2+)* {	object	The PCIe interface details for this controller. See the *PCIeDevice* schema for details on this property.
@odata.id	string *read-only*	Link to a PCIeInterface resource. See the Links section and the *PCIeDevice* schema for details.
}		
}]		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

Id	string read-only required	The identifier that uniquely identifies the resource within the collection of similar resources.
Identifiers *(v1.4+)* [{ }]	array (object)	The durable names for the network adapter. Any additional identifiers for a resource. For property details, see Identifier.
Location *(v1.4+)* {}	object	The location of the network adapter. For property details, see Location.
Manufacturer	string read-only (null)	The manufacturer or OEM of this network adapter.
Model	string read-only (null)	The model string for this network adapter.
Name	string read-only required	The name of the resource or array member.
NetworkDeviceFunctions {	object	The link to the collection of network device functions associated with this network adapter. Contains a link to a resource.
@odata.id	string read-only	Link to Collection of *NetworkDeviceFunction*. See the NetworkDeviceFunction schema for details.
}		
NetworkPorts {	object	The link to the collection of network ports associated with this network adapter. Contains a link to a resource.
@odata.id	string read-only	Link to Collection of *NetworkPort*. See the NetworkPort schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.

PartNumber	string *read-only* *(null)*	Part number for this network adapter.
SerialNumber	string *read-only* *(null)*	The serial number for this network adapter.
SKU	string *read-only* *(null)*	The manufacturer SKU for this network adapter.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.82.1 Actions

6.82.1.1 ResetSettingsToDefault

This action is to clear the settings back to factory defaults.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/NetworkAdapters/*{NetworkAdapterId}*/Actions/
NetworkAdapter.ResetSettingsToDefault

(This action takes no parameters.)

6.83 NetworkAdapterCollection

URIs:

/redfish/v1/Chassis/*{ChassisId}*/NetworkAdapters

@odata.context	string *read-only*	The OData description of a payload.

	string *read-only*	The current ETag of the resource.
@odata.etag		
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a NetworkAdapter resource. See the Links section and the *NetworkAdapter* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.84 NetworkDeviceFunction 1.4.1

v1.4	*v1.3*	*v1.2*	*v1.1*	*v1.0*

| 2020.1 | 2018.2 | 2017.3 | 2017.1 | 2016.3 |

The NetworkDeviceFunction schema represents a logical interface that a network adapter exposes.

URIs:

/redfish/v1/
Chassis/*{ChassisId}*/NetworkAdapters/*{NetworkAdapterId}*/NetworkDeviceFunctions/*{NetworkDeviceFunctionId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this resource.
AssignablePhysicalPorts [{	array	An array of physical ports to which this network device function can be assigned.
@odata.id	string *read-only*	Link to a NetworkPort resource. See the Links section and the *NetworkPort* schema for details.
}]		
AssignablePhysicalPorts@odata.count	integer *read-only*	The number of items in a collection.

BootMode	string (enum) *read-write (null)*	The boot mode configured for this network device function. *For the possible property values, see BootMode in Property details.*
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
DeviceEnabled	boolean *read-write (null)*	An indication of whether the network device function is enabled.
Ethernet {	object	The Ethernet capabilities, status, and configuration values for this network device function.
MACAddress	string *read-write (null)*	The currently configured MAC address.
MTUSize	integer *read-write (null)*	The maximum transmission unit (MTU) configured for this network device function.
PermanentMACAddress	string *read-only (null)*	The permanent MAC address assigned to this function.
VLAN *(v1.3+)* {	object	The VLAN information for this interface. If this network interface supports more than one VLAN, this property is not present. See the *VLanNetworkInterface* schema for details on this property.
@odata.id	string *read-only*	Link to a VLAN resource. See the Links section and the *VLanNetworkInterface* schema for details.
}		
VLANs *(v1.3+)* {	object	The link to a collection of VLANs. This property is used only if the interface supports more than one VLAN. Contains a link to a resource.

@odata.id	string	Link to Collection of *VLanNetworkInterface*. See the VLanNetworkInterface schema for details.
	read-only	
}		
}		
FibreChannel {	object	The Fibre Channel capabilities, status, and configuration values for this network device function.
AllowFIPVLANDiscovery	boolean	An indication of whether the FCoE Initialization Protocol (FIP) populates the FCoE VLAN ID.
	read-write (null)	
BootTargets [{	array	An array of Fibre Channel boot targets configured for this network device function.
BootPriority	integer	The relative priority for this entry in the boot targets array.
	read-write (null)	
LUNID	string	The logical unit number (LUN) ID from which to boot on the device to which the corresponding WWPN refers.
	read-write (null)	
WWPN	string	The World Wide Port Name (WWPN) from which to boot.
	read-write (null)	
}]		
FCoEActiveVLANId	integer	The active FCoE VLAN ID.
	read-only (null)	
FCoELocalVLANId	integer	The locally configured FCoE VLAN ID.
	read-write (null)	

FibreChannelId *(v1.3+)*	string *read-only* *(null)*	The Fibre Channel ID that the switch assigns for this interface.
PermanentWWNN	string *read-only* *(null)*	The permanent World Wide Node Name (WWNN) address assigned to this function.
PermanentWWPN	string *read-only* *(null)*	The permanent World Wide Port Name (WWPN) address assigned to this function.
WWNN	string *read-write* *(null)*	The currently configured World Wide Node Name (WWNN) address of this function.
WWNSource	string (enum) *read-write* *(null)*	The configuration source of the World Wide Names (WWN) for this World Wide Node Name (WWNN) and World Wide Port Name (WWPN) connection. *For the possible property values, see WWNSource in Property details.*
WWPN	string *read-write* *(null)*	The currently configured World Wide Port Name (WWPN) address of this function.
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
iSCSIBoot {	object	The iSCSI boot capabilities, status, and configuration values for this network device function.

AuthenticationMethod	string (enum) *read-write* *(null)*	The iSCSI boot authentication method for this network device function. *For the possible property values, see AuthenticationMethod in Property details.*
CHAPSecret	string *read-write* *(null)*	The shared secret for CHAP authentication.
CHAPUsername	string *read-write* *(null)*	The user name for CHAP authentication.
InitiatorDefaultGateway	string *read-write* *(null)*	The IPv6 or IPv4 iSCSI boot default gateway.
InitiatorIPAddress	string *read-write* *(null)*	The IPv6 or IPv4 address of the iSCSI initiator.
InitiatorName	string *read-write* *(null)*	The iSCSI initiator name.
InitiatorNetmask	string *read-write* *(null)*	The IPv6 or IPv4 netmask of the iSCSI boot initiator.
IPAddressType	string (enum) *read-write* *(null)*	The type of IP address being populated in the iSCSIBoot IP address fields. *For the possible property values, see IPAddressType in Property details.*

	boolean	
IPMaskDNSViaDHCP	*read-write (null)*	An indication of whether the iSCSI boot initiator uses DHCP to obtain the initiator name, IP address, and netmask.
MutualCHAPSecret	string *read-write (null)*	The CHAP secret for two-way CHAP authentication.
MutualCHAPUsername	string *read-write (null)*	The CHAP user name for two-way CHAP authentication.
PrimaryDNS	string *read-write (null)*	The IPv6 or IPv4 address of the primary DNS server for the iSCSI boot initiator.
PrimaryLUN	integer *read-write (null)*	The logical unit number (LUN) for the primary iSCSI boot target.
PrimaryTargetIPAddress	string *read-write (null)*	The IPv4 or IPv6 address for the primary iSCSI boot target.
PrimaryTargetName	string *read-write (null)*	The name of the iSCSI primary boot target.
PrimaryTargetTCPPort	integer *read-write (null)*	The TCP port for the primary iSCSI boot target.
PrimaryVLANEnable	boolean *read-write (null)*	An indication of whether the primary VLAN is enabled.

PrimaryVLANId	integer *read-write* *(null)*	The 802.1q VLAN ID to use for iSCSI boot from the primary target.
RouterAdvertisementEnabled	boolean *read-write* *(null)*	An indication of whether IPv6 router advertisement is enabled for the iSCSI boot target.
SecondaryDNS	string *read-write* *(null)*	The IPv6 or IPv4 address of the secondary DNS server for the iSCSI boot initiator.
SecondaryLUN	integer *read-write* *(null)*	The logical unit number (LUN) for the secondary iSCSI boot target.
SecondaryTargetIPAddress	string *read-write* *(null)*	The IPv4 or IPv6 address for the secondary iSCSI boot target.
SecondaryTargetName	string *read-write* *(null)*	The name of the iSCSI secondary boot target.
SecondaryTargetTCPPort	integer *read-write* *(null)*	The TCP port for the secondary iSCSI boot target.
SecondaryVLANEnable	boolean *read-write* *(null)*	An indication of whether the secondary VLAN is enabled.
SecondaryVLANId	integer *read-write* *(null)*	The 802.1q VLAN ID to use for iSCSI boot from the secondary target.

TargetInfoViaDHCP	boolean *read-write (null)*	An indication of whether the iSCSI boot target name, LUN, IP address, and netmask should be obtained from DHCP.
}		
Links {	object	The links to other resources that are related to this resource.
Endpoints *(v1.2+)* [{	array	An array of links to endpoints associated with this network device function.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Endpoints@odata.count	integer *read-only*	The number of items in a collection.
EthernetInterface *(v1.4+)* {	object	The link to a virtual Ethernet interface that was created when one of the network device function VLANs is represented as a virtual NIC for the purpose of showing the IP address associated with that VLAN. See the *EthernetInterface* schema for details on this property.
@odata.id	string *read-only*	Link to a EthernetInterface resource. See the Links section and the *EthernetInterface* schema for details.
}		
PCIeFunction {	object	The link to the PCIe function associated with this network device function. See the *PCIeFunction* schema for details on this property.
@odata.id	string *read-only*	Link to a PCIeFunction resource. See the Links section and the *PCIeFunction* schema for details.
}		
PhysicalPortAssignment *(v1.3+)* {	object	The physical port to which this network device function is currently assigned. See the *NetworkPort* schema for details on this property.
@odata.id	string *read-only*	Link to a NetworkPort resource. See the Links section and the *NetworkPort* schema for details.
}		

}		
MaxVirtualFunctions	integer *read-only (null)*	The number of virtual functions that are available for this network device function.
Name	string *read-only required*	The name of the resource or array member.
NetDevFuncCapabilities [ ]	array (string (enum)) *read-only (null)*	An array of capabilities for this network device function. *For the possible property values, see NetDevFuncCapabilities in Property details.*
NetDevFuncType	string (enum) *read-write (null)*	The configured capability of this network device function. *For the possible property values, see NetDevFuncType in Property details.*
Oem {}	object	The OEM extension property. For property details, see Oem.
PhysicalPortAssignment *(deprecated v1.3)* {	object	The physical port to which this network device function is currently assigned. See the *NetworkPort* schema for details on this property. *Deprecated in v1.3 and later. This property has been deprecated and moved to the Links property to avoid loops on expand.*
@odata.id	string *read-only*	Link to a NetworkPort resource. See the Links section and the *NetworkPort* schema for details.
}		
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
VirtualFunctionsEnabled	boolean *read-only (null)*	An indication of whether single root input/output virtualization (SR-IOV) virtual functions are enabled for this network device function.

6.84.1 Property details

6.84.1.1 AuthenticationMethod

The iSCSI boot authentication method for this network device function.

String	Description
CHAP	iSCSI Challenge Handshake Authentication Protocol (CHAP) authentication is used.
MutualCHAP	iSCSI Mutual Challenge Handshake Authentication Protocol (CHAP) authentication is used.
None	No iSCSI authentication is used.

6.84.1.2 BootMode

The boot mode configured for this network device function.

String	Description
Disabled	Do not indicate to UEFI/BIOS that this device is bootable.
FibreChannel	Boot this device by using the embedded Fibre Channel support and configuration. Only applicable if the NetworkDeviceFunctionType is `FibreChannel` .
FibreChannelOverEthernet	Boot this device by using the embedded Fibre Channel over Ethernet (FCoE) boot support and configuration. Only applicable if the NetworkDeviceFunctionType is `FibreChannelOverEthernet` .
iSCSI	Boot this device by using the embedded iSCSI boot support and configuration. Only applicable if the NetworkDeviceFunctionType is `iSCSI` .
PXE	Boot this device by using the embedded PXE support. Only applicable if the NetworkDeviceFunctionType is `Ethernet` .

6.84.1.3 IPAddressType

The type of IP address being populated in the iSCSIBoot IP address fields.

String	Description
IPv4	IPv4 addressing is used for all IP-fields in this object.
IPv6	IPv6 addressing is used for all IP-fields in this object.

6.84.1.4 NetDevFuncCapabilities

An array of capabilities for this network device function.

String	Description
Disabled	Neither enumerated nor visible to the operating system.
Ethernet	Appears to the operating system as an Ethernet device.
FibreChannel	Appears to the operating system as a Fibre Channel device.
FibreChannelOverEthernet	Appears to the operating system as an FCoE device.
iSCSI	Appears to the operating system as an iSCSI device.

6.84.1.5 NetDevFuncType

The configured capability of this network device function.

String	Description
Disabled	Neither enumerated nor visible to the operating system.
Ethernet	Appears to the operating system as an Ethernet device.
FibreChannel	Appears to the operating system as a Fibre Channel device.
FibreChannelOverEthernet	Appears to the operating system as an FCoE device.
iSCSI	Appears to the operating system as an iSCSI device.

6.84.1.6 WWNSource

The configuration source of the World Wide Names (WWN) for this World Wide Node Name (WWNN) and World Wide Port Name (WWPN) connection.

String	Description
ConfiguredLocally	The set of FC/FCoE boot targets was applied locally through API or UI.
ProvidedByFabric	The set of FC/FCoE boot targets was applied by the Fibre Channel fabric.

6.85 NetworkDeviceFunctionCollection

URIs:

/redfish/v1/Chassis/*{ChassisId}*/NetworkAdapters/*{NetworkAdapterId}*/NetworkDeviceFunctions /redfish/v1/
CompositionService/

ResourceBlocks/*{ResourceBlockId}*/NetworkInterfaces/*{NetworkInterfaceId}*/NetworkDeviceFunctions /redfish/v1/
CompositionService/

ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/NetworkInterfaces/*{NetworkInterfaceId}*/NetworkDevi
ceFunctions /redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/NetworkInterfaces/*{NetworkInterfaceId}*/NetworkDeviceFunctions /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/NetworkInterfaces/*{NetworkInterfaceId}*/NetworkDevi
ceFunctions /redfish/v1/

Systems/*{ComputerSystemId}*/NetworkInterfaces/*{NetworkInterfaceId}*/NetworkDeviceFunctions

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a NetworkDeviceFunction resource. See the Links section and the *NetworkDeviceFunction* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.

	string *read-only*	The URI to the resource containing the next set of partial members.
Members@odata.nextLink		
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.86 NetworkInterface 1.1.4

v1.1	*v1.0*
2017.1	2016.3

The NetworkInterface schema describes links to the network adapters, network ports, and network device functions, and represents the functionality available to the containing system.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/NetworkInterfaces/*{NetworkInterfaceId}* /redfish/ v1/CompositionService/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/NetworkInterfaces/*{NetworkInterfaceId}* /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/NetworkInterfaces/*{NetworkInterfaceId}* /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/NetworkInterfaces/*{NetworkInterfaceId}* /redfish/v1/ Systems/*{ComputerSystemId}*/NetworkInterfaces/*{NetworkInterfaceId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.

Actions *(v1.1+)* {}	object	The available actions for this resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
NetworkAdapter {	object	The link to the network adapter that contains this network interface. See the *NetworkAdapter* schema for details on this property.
@odata.id	string *read-only*	Link to a NetworkAdapter resource. See the Links section and the *NetworkAdapter* schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Name	string *read-only* *required*	The name of the resource or array member.
NetworkDeviceFunctions {	object	The link to the network device functions associated with this network interface. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *NetworkDeviceFunction*. See the NetworkDeviceFunction schema for details.
}		
NetworkPorts {	object	The link to the network ports associated with this network interface. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *NetworkPort*. See the NetworkPort schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.87 NetworkInterfaceCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/NetworkInterfaces
/redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/NetworkInterfaces /redfish/v1/
Systems/*{ComputerSystemId}*/NetworkInterfaces

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a NetworkInterface resource. See the Links section and the *NetworkInterface* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.

	string	
Members@odata.nextLink	read-only	The URI to the resource containing the next set of partial members.
Name	string read-only	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.88 NetworkPort 1.2.5

v1.2	v1.1	v1.0
2018.2	2017.1	2016.3

The NetworkPort schema describes a network port, which is a discrete physical port that can connect to a network.

URIs:

/redfish/v1/Chassis/{*ChassisId*}/NetworkAdapters/{*NetworkAdapterId*}/NetworkPorts/{*NetworkPortId*}

	string	
@odata.context	read-only	The OData description of a payload.
@odata.etag	string read-only	The current ETag of the resource.
@odata.id	string read-only required	The unique identifier for a resource.
@odata.type	string read-only required	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this resource.

ActiveLinkTechnology	string (enum) *read-write* *(null)*	Network port active link technology. *For the possible property values, see ActiveLinkTechnology in Property details.*
AssociatedNetworkAddresses [ ]	array (string, null) *read-only*	An array of configured MAC or WWN network addresses that are associated with this network port, including the programmed address of the lowest numbered network device function, the configured but not active address, if applicable, the address for hardware port teaming, or other network addresses.
CurrentLinkSpeedMbps *(v1.2+)*	integer (Mbit/s) *read-write* *(null)*	Network port current link speed.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
EEEEnabled	boolean *read-write* *(null)*	An indication of whether IEEE 802.3az Energy-Efficient Ethernet (EEE) is enabled for this network port.
FCFabricName *(v1.2+)*	string *read-only* *(null)*	The FC Fabric Name provided by the switch.
FCPortConnectionType *(v1.2+)*	string (enum) *read-only* *(null)*	The connection type of this port. *For the possible property values, see FCPortConnectionType in Property details.*
FlowControlConfiguration	string (enum) *read-write* *(null)*	The locally configured 802.3x flow control setting for this network port. *For the possible property values, see FlowControlConfiguration in Property details.*

	string (enum) read-only (null)	The 802.3x flow control behavior negotiated with the link partner for this network port (Ethernet-only). *For the possible property values, see FlowControlStatus in Property details.*
FlowControlStatus		
Id	string read-only required	The identifier that uniquely identifies the resource within the collection of similar resources.
LinkStatus	string (enum) read-only (null)	The status of the link between this port and its link partner. *For the possible property values, see LinkStatus in Property details.*
MaxFrameSize *(v1.2+)*	integer (By) read-only (null)	The maximum frame size supported by the port.
Name	string read-only required	The name of the resource or array member.
NetDevFuncMaxBWAlloc [{	array	An array of maximum bandwidth allocation percentages for the network device functions associated with this port.
MaxBWAllocPercent	integer (%) read-write (null)	The maximum bandwidth allocation percentage allocated to the corresponding network device function instance.
NetworkDeviceFunction {	object	The link to the network device function associated with this bandwidth setting of this network port. See the *NetworkDeviceFunction* schema for details on this property.
@odata.id	string read-only	Link to a NetworkDeviceFunction resource. See the Links section and the *NetworkDeviceFunction* schema for details.
}		

}]		
NetDevFuncMinBWAlloc [{	array	An array of minimum bandwidth allocation percentages for the network device functions associated with this port.
MinBWAllocPercent	integer (%) *read-write* (null)	The minimum bandwidth allocation percentage allocated to the corresponding network device function instance.
NetworkDeviceFunction {	object	The link to the network device function associated with this bandwidth setting of this network port. See the *NetworkDeviceFunction* schema for details on this property.
@odata.id	string *read-only*	Link to a NetworkDeviceFunction resource. See the Links section and the *NetworkDeviceFunction* schema for details.
}		
}]		
NumberDiscoveredRemotePorts *(v1.2+)*	integer *read-only* (null)	The number of ports not on this adapter that this port has discovered.
Oem {}	object	The OEM extension property. For property details, see Oem.
PhysicalPortNumber	string *read-only* (null)	The physical port number label for this port.
PortMaximumMTU	integer *read-only* (null)	The largest maximum transmission unit (MTU) that can be configured for this network port.
SignalDetected	boolean *read-only* (null)	An indication of whether the port has detected enough signal on enough lanes to establish a link.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

SupportedEthernetCapabilities [ ]	array (string (enum)) *read-only* *(null)*	The set of Ethernet capabilities that this port supports. *For the possible property values, see SupportedEthernetCapabilities in Property details.*
SupportedLinkCapabilities [{	array	The link capabilities of this port.
AutoSpeedNegotiation *(v1.2+)*	boolean *read-only* *(null)*	An indication of whether the port is capable of auto-negotiating speed.
CapableLinkSpeedMbps *(v1.2+)* [ ]	array (integer, null) *read-only*	The set of link speed capabilities of this port.
LinkNetworkTechnology	string (enum) *read-only* *(null)*	The link network technology capabilities of this port. *For the possible property values, see LinkNetworkTechnology in Property details.*
LinkSpeedMbps *(deprecated v1.2)*	integer (Mbit/s) *read-only* *(null)*	The speed of the link in Mbit/s when this link network technology is active. *Deprecated in v1.2 and later. This property has been deprecated in favor of the CapableLinkSpeedMbps.*
}]		
VendorId *(v1.2+)*	string *read-only* *(null)*	The vendor Identification for this port.
WakeOnLANEnabled	boolean *read-write* *(null)*	An indication of whether Wake on LAN (WoL) is enabled for this network port.

6.88.1 Property details

6.88.1.1 ActiveLinkTechnology

Network port active link technology.

String	Description
Ethernet	The port is capable of connecting to an Ethernet network.
FibreChannel	The port is capable of connecting to a Fibre Channel network.
InfiniBand	The port is capable of connecting to an InfiniBand network.

6.88.1.2 FCPortConnectionType

The connection type of this port.

String	Description
ExtenderFabric	This port connection type is an extender fabric port.
Generic	This port connection type is a generic fabric port.
NotConnected	This port is not connected.
NPort	This port connects through an N-port to a switch.
PointToPoint	This port connects in a point-to-point configuration.
PrivateLoop	This port connects in a private loop configuration.
PublicLoop	This port connects in a public configuration.

6.88.1.3 FlowControlConfiguration

The locally configured 802.3x flow control setting for this network port.

String	Description
None	No IEEE 802.3x flow control is enabled on this port.
RX	The link partner can initiate IEEE 802.3x flow control.
TX	This station can initiate IEEE 802.3x flow control.
TX_RX	This station or the link partner can initiate IEEE 802.3x flow control.

6.88.1.4 FlowControlStatus

The 802.3x flow control behavior negotiated with the link partner for this network port (Ethernet-only).

String	Description
None	No IEEE 802.3x flow control is enabled on this port.
RX	The link partner can initiate IEEE 802.3x flow control.
TX	This station can initiate IEEE 802.3x flow control.
TX_RX	This station or the link partner can initiate IEEE 802.3x flow control.

6.88.1.5 LinkNetworkTechnology

The link network technology capabilities of this port.

String	Description
Ethernet	The port is capable of connecting to an Ethernet network.
FibreChannel	The port is capable of connecting to a Fibre Channel network.
InfiniBand	The port is capable of connecting to an InfiniBand network.

6.88.1.6 LinkStatus

The status of the link between this port and its link partner.

String	Description
Down	The port is enabled but link is down.
Up	The port is enabled and link is good (up).

6.88.1.7 SupportedEthernetCapabilities

The set of Ethernet capabilities that this port supports.

String	Description
EEE	IEEE 802.3az Energy-Efficient Ethernet (EEE) is supported on this port.
WakeOnLAN	Wake on LAN (WoL) is supported on this port.

6.89 NetworkPortCollection

URIs:

/redfish/v1/Chassis/*{ChassisId}*/NetworkAdapters/*{NetworkAdapterId}*/NetworkPorts /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/NetworkInterfaces/*{NetworkInterfaceId}*/NetworkPorts /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/NetworkInterfaces/*{NetworkInterfaceId}*/NetworkPorts
/redfish/v1/ResourceBlocks/*{ResourceBlockId}*/NetworkInterfaces/*{NetworkInterfaceId}*/NetworkPorts /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/NetworkInterfaces/*{NetworkInterfaceId}*/NetworkPorts
/redfish/v1/Systems/*{ComputerSystemId}*/NetworkInterfaces/*{NetworkInterfaceId}*/NetworkPorts

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a NetworkPort resource. See the Links section and the *NetworkPort* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.

Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.90 OperatingConfig 1.0.0

v1.0
2020.2

The OperatingConfig schema specifies a configuration that can be used when the processor is operational.

URIs:

/redfish/v1/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/OperatingConfigs/*{OperatingConfigId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
BaseSpeedMHz	integer (MHz) *read-only* *(null)*	The base ?? clock speed of the processor in MHz.
BaseSpeedPrioritySettings [{	array	The clock speed for sets of cores when the configuration is operational.

BaseSpeedMHz	integer (MHz) *read-only* *(null)*	The clock speed to configure the set of cores in MHz.
CoreCount	integer *read-only* *(null)*	The number of cores to configure with a specified speed.
CoreIDs [ ]	array (integer, null) *read-only*	The identifier of the cores to configure with the specified speed.
}]		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
MaxJunctionTemperatureCelsius	integer (Cel) *read-only* *(null)*	The maximum temperature of the junction in degrees Celsius.
MaxSpeedMHz	integer (MHz) *read-only* *(null)*	The maximum clock speed to which the processor can be configured in MHz.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
TDPWatts	integer (W) *read-only* *(null)*	The thermal design point of the processor in watts.

	integer read-only (null)	The number of cores in the processor that can be configured.
TotalAvailableCoreCount		
TurboProfile [{	array	The turbo profiles for the processor. A turbo profile is the maximum turbo clock speed as a function of the number of active cores.
ActiveCoreCount	integer read-only (null)	The number of active cores to be configured with the specified maximum clock speed.
MaxSpeedMHz	integer (MHz) read-only (null)	The maximum turbo clock speed that correspond to the number of active cores in MHz.
}]		

6.91 OperatingConfigCollection

URIs:

/redfish/v1/Systems/*{ComputerSystemId}*/OperatingConfigs /redfish/v1/
Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/OperatingConfigs

	string read- only	The OData description of a payload.
@odata.context		
@odata.etag	string read- only	The current ETag of the resource.
@odata.id	string read- only	The unique identifier for a resource.
@odata.type	string read- only	The type of a resource.

	string	
Description	*read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a OperatingConfig resource. See the Links section and the *OperatingConfig* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.92 Outlet 1.0.1

v1.0
2019.4

The Outlet schema contains definition for an electrical outlet.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Outlets/*{OutletId}* /redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Outlets/*{OutletId}* /redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Outlets/*{OutletId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#Outlet.PowerControl {}	object	This action turns the outlet on or off. *For more information, see the Actions section below.*
#Outlet.ResetMetrics {}	object	This action resets metrics related to this outlet. *For more information, see the Actions section below.*
}		
CurrentAmps {	object (excerpt)	The current reading for this single phase outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.

	number	
THDPercent *(v1.1+)*	*read-only* *(null)*	The total harmonic distortion (THD).
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
ElectricalContext	string (enum) *read-only* *(null)*	The combination of current-carrying conductors. *For the possible property values, see ElectricalContext in Property details.*
EnergykWh {	object (excerpt)	The energy reading for this outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
LifetimeReading *(v1.1+)*	number *read-only* *(null)*	The total accumulation value for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.
}		
FrequencyHz {	object (excerpt)	The frequency reading for this outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.

	string	
DataSourceUri	*read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
IndicatorLED	string (enum) *read-write* *(null)*	The state of the indicator LED, which identifies the outlet. *For the possible property values, see IndicatorLED in Property details.*
Links {	object	The links to other resources that are related to this resource.
BranchCircuit {	object *(null)*	A reference to the branch circuit related to this outlet. See the *Circuit* schema for details on this property.
@odata.id	string *read-only*	Link to a Circuit resource. See the Links section and the *Circuit* schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Name	string *read-only* *required*	The name of the resource or array member.

NominalVoltage	string (enum) *read-only (null)*	The nominal voltage for this outlet. *For the possible property values, see NominalVoltage in Property details.*
Oem {}	object	The OEM extension property. For property details, see Oem.
OutletType	string (enum) *read-only (null)*	The type of receptacle according to NEMA, IEC, or regional standards. *For the possible property values, see OutletType in Property details.*
PhaseWiringType	string (enum) *read-only (null)*	The number of ungrounded current-carrying conductors (phases) and the total number of conductors (wires). *For the possible property values, see PhaseWiringType in Property details.*
PolyPhaseCurrentAmps {	object *(null)*	The current readings for this outlet.
Line1 {	object (excerpt)	Line 1 current sensor. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only (null)*	The crest factor for this sensor.
DataSourceUri	string *read-only (null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only (null)*	The sensor value.

	number	
THDPercent *(v1.1+)*	*read-only* *(null)*	The total harmonic distortion (THD).
}		
Line2 {	object (excerpt)	Line 2 current sensor. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
Line3 {	object (excerpt)	Line 3 current sensor. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.

Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
Neutral {	object (excerpt)	Neutral line current sensor. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
}		
PolyPhaseVoltage {	object *(null)*	The voltage readings for this outlet.
Line1ToLine2 {	object (excerpt)	The Line 1 to Line 2 voltage reading for this outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.

	number	
CrestFactor *(v1.1+)*	*read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
Line1ToNeutral {	object (excerpt)	The Line 1 to Neutral voltage reading for this outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).

}		
Line2ToLine3 {	object (excerpt)	The Line 2 to Line 3 voltage reading for this outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number read-only (null)	The crest factor for this sensor.
DataSourceUri	string read-only (null)	The link to the resource that provides the data for this sensor.
Reading	number read-only (null)	The sensor value.
THDPercent *(v1.1+)*	number read-only (null)	The total harmonic distortion (THD).
}		
Line2ToNeutral {	object (excerpt)	The Line 2 to Neutral voltage reading for this outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number read-only (null)	The crest factor for this sensor.
DataSourceUri	string read-only (null)	The link to the resource that provides the data for this sensor.
Reading	number read-only (null)	The sensor value.

THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
Line3ToLine1 {	object (excerpt)	The Line 3 to Line 1 voltage reading for this outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
Line3ToNeutral {	object (excerpt)	The Line 3 to Neutral voltage reading for this outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.

	number	
Reading	*read-only* *(null)*	The sensor value.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
}		
}		
PowerCycleDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power on after a PowerControl action to cycle power. Zero seconds indicates no delay.
PowerEnabled	boolean *read-only* *(null)*	Indicates if the outlet can be powered.
PowerOffDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power off after a PowerControl action. Zero seconds indicates no delay to power off.
PowerOnDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power up after a power cycle or a PowerControl action. Zero seconds indicates no delay to power up.
PowerRestoreDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power on after power has been restored. Zero seconds indicates no delay.
PowerRestorePolicy	string (enum) *read-write*	The desired power state of the outlet when power is restored after a power loss. *For the possible property values, see PowerRestorePolicy in Property details.*

PowerState	string (enum) read-only (null)	The power state of the outlet. *For the possible property values, see PowerState in Property details.*
PowerWatts {	object (excerpt)	The power reading for this outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
ApparentVA	number (V.A) read-only (null)	The product of voltage and current for an AC circuit, in Volt-Ampere units.
DataSourceUri	string read-only (null)	The link to the resource that provides the data for this sensor.
PowerFactor	number read-only (null)	The power factor for this sensor.
ReactiveVAR	number (V.A) read-only (null)	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.
Reading	number read-only (null)	The sensor value.
}		
RatedCurrentAmps	number (A) read-only (null)	The rated maximum current allowed for this outlet.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

Voltage {	object (excerpt)	The voltage reading for this single phase outlet. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
CrestFactor *(v1.1+)*	number read-only (null)	The crest factor for this sensor.
DataSourceUri	string read-only (null)	The link to the resource that provides the data for this sensor.
Reading	number read-only (null)	The sensor value.
THDPercent *(v1.1+)*	number read-only (null)	The total harmonic distortion (THD).
}		
VoltageType	string (enum) read-only (null)	The type of voltage applied to the outlet. *For the possible property values, see VoltageType in Property details.*

6.92.1 Actions

6.92.1.1 PowerControl

This action turns the outlet on or off.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Outlets/*{OutletId}*/Actions/Outlet.PowerControl
/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Outlets/*{OutletId}*/Actions/Outlet.PowerControl
/redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Outlets/*{OutletId}*/Actions/Outlet.PowerControl

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
PowerState	string (enum) *optional*	The desired power state of the outlet. *For the possible property values, see PowerState in Property details.*
}		

6.92.1.2 ResetMetrics

This action resets metrics related to this outlet.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Outlets/*{OutletId}*/Actions/Outlet.ResetMetrics
/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Outlets/*{OutletId}*/Actions/Outlet.ResetMetrics
/redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Outlets/*{OutletId}*/Actions/Outlet.ResetMetrics

(This action takes no parameters.)

6.92.2 Property details

6.92.2.1 ElectricalContext

The combination of current-carrying conductors.

String	Description
Line1	The circuits that share the L1 current-carrying conductor.
Line1ToLine2	The circuit formed by L1 and L2 current-carrying conductors.
Line1ToNeutral	The circuit formed by L1 and neutral current-carrying conductors.
Line1ToNeutralAndL1L2	The circuit formed by L1, L2, and neutral current-carrying conductors.
Line2	The circuits that share the L2 current-carrying conductor.
Line2ToLine3	The circuit formed by L2 and L3 current-carrying conductors.
Line2ToNeutral	The circuit formed by L2 and neutral current-carrying conductors.
Line2ToNeutralAndL1L2	The circuit formed by L1, L2, and Neutral current-carrying conductors.

String	Description
Line2ToNeutralAndL2L3	The circuits formed by L2, L3, and neutral current-carrying conductors.
Line3	The circuits that share the L3 current-carrying conductor.
Line3ToLine1	The circuit formed by L3 and L1 current-carrying conductors.
Line3ToNeutral	The circuit formed by L3 and neutral current-carrying conductors.
Line3ToNeutralAndL3L1	The circuit formed by L3, L1, and neutral current-carrying conductors.
LineToLine	The circuit formed by two current-carrying conductors.
LineToNeutral	The circuit formed by a line and neutral current-carrying conductor.
Neutral	The grounded current-carrying return circuit of current-carrying conductors.
Total	The circuit formed by all current-carrying conductors.

6.92.2.2 IndicatorLED

The state of the indicator LED, which identifies the outlet.

String	Description
Blinking	The indicator LED is blinking.
Lit	The indicator LED is lit.
Off	The indicator LED is off.

6.92.2.3 NominalVoltage

The nominal voltage for this outlet.

String	Description
AC100To240V	AC 100-240V nominal.
AC100To277V	AC 100-277V nominal.
AC120V	AC 120V nominal.
AC200To240V	AC 200-240V nominal.
AC200To277V	AC 200-277V nominal.
AC208V	AC 208V nominal.
AC230V	AC 230V nominal.

String	Description
AC240AndDC380V	AC 200-240V and DC 380V.
AC240V	AC 240V nominal.
AC277AndDC380V	AC 200-277V and DC 380V.
AC277V	AC 277V nominal.
AC400V	AC 400V or 415V nominal.
AC480V	AC 480V nominal.
DC240V	DC 240V nominal.
DC380V	High Voltage DC (380V).
DCNeg48V	-48V DC.

6.92.2.4 OutletType

The type of receptacle according to NEMA, IEC, or regional standards.

String	Description
BS_1363_Type_G	BS 1363 Type G (250V; 13A).
CEE_7_Type_E	CEE 7/7 Type E (250V; 16A).
CEE_7_Type_F	CEE 7/7 Type F (250V; 16A).
IEC_60320_C13	IEC C13 (250V; 10A or 15A).
IEC_60320_C19	IEC C19 (250V; 16A or 20A).
NEMA_5_15R	NEMA 5-15R (120V; 15A).
NEMA_5_20R	NEMA 5-20R (120V; 20A).
NEMA_L5_20R	NEMA L5-20R (120V; 20A).
NEMA_L5_30R	NEMA L5-30R (120V; 30A).
NEMA_L6_20R	NEMA L6-20R (250V; 20A).
NEMA_L6_30R	NEMA L6-30R (250V; 30A).
SEV_1011_TYPE_12	SEV 1011 Type 12 (250V; 10A).
SEV_1011_TYPE_23	SEV 1011 Type 23 (250V; 16A).

6.92.2.5 PhaseWiringType

The number of ungrounded current-carrying conductors (phases) and the total number of conductors (wires).

String	Description
OneOrTwoPhase3Wire	Single or Two-Phase / 3-Wire (Line1, Line2 or Neutral, Protective Earth).
OnePhase3Wire	Single-phase / 3-Wire (Line1, Neutral, Protective Earth).
ThreePhase4Wire	Three-phase / 4-Wire (Line1, Line2, Line3, Protective Earth).
ThreePhase5Wire	Three-phase / 5-Wire (Line1, Line2, Line3, Neutral, Protective Earth).
TwoPhase3Wire	Two-phase / 3-Wire (Line1, Line2, Protective Earth).
TwoPhase4Wire	Two-phase / 4-Wire (Line1, Line2, Neutral, Protective Earth).

6.92.2.6 PowerRestorePolicy

The desired power state of the outlet when power is restored after a power loss.

String	Description
AlwaysOff	Always remain powered off when external power is applied.
AlwaysOn	Always power on when external power is applied.
LastState	Return to the last power state (on or off) when external power is applied.

6.92.2.7 PowerState

The power state of the outlet.

String	Description
Off	The state is powered off.
On	The state is powered on.
PoweringOff	A temporary state between on and off.
PoweringOn	A temporary state between off and on.

6.92.2.8 VoltageType

The type of voltage applied to the outlet.

String	Description
AC	Alternating Current (AC) outlet.
DC	Direct Current (DC) outlet.

6.93 OutletCollection

URIs:

/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Outlets /redfish/v1/PowerEquipment/
TransferSwitches/*{PowerDistributionId}*/Outlets

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Outlet resource. See the Links section and the *Outlet* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.

Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.94 OutletGroup 1.0.1

v1.0
2019.4

The OutletGroup schema contains definitions for an electrical outlet group.

URIs:

/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/OutletGroups/*{OutletGroupId}* /redfish/v1/
PowerEquipment/TransferSwitches/*{PowerDistributionId}*/OutletGroups/*{OutletGroupId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#OutletGroup.PowerControl {}	object	This action turns the outlet group on or off. *For more information, see the Actions section below.*
#OutletGroup.ResetMetrics {}	object	This action resets metrics related to this outlet group. *For more information, see the Actions section below.*
}		

CreatedBy	string *read-write* *(null)*	The creator of this outlet group.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
EnergykWh {	object (excerpt)	The energy reading for this outlet group. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
LifetimeReading *(v1.1+)*	number *read-only* *(null)*	The total accumulation value for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
Oem {}	object	The OEM extension property. For property details, see Oem.
Outlets [{	array	The set of outlets in this outlet group.
@odata.id	string *read-only*	Link to a Outlet resource. See the Links section and the *Outlet* schema for details.
}]		

Outlets@odata.count	integer *read-only*	The number of items in a collection.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PowerCycleDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power on after a PowerControl action to cycle power. Zero seconds indicates no delay.
PowerEnabled	boolean *read-only* *(null)*	Indicates if the outlet group can be powered.
PowerOffDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power off after a PowerControl action. Zero seconds indicates no delay to power off.
PowerOnDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power up after a power cycle or a PowerControl action. Zero seconds indicates no delay to power up.
PowerRestoreDelaySeconds	number *read-write* *(null)*	The number of seconds to delay power on after power has been restored. Zero seconds indicates no delay.
PowerRestorePolicy	string (enum) *read-write*	The desired power state of the outlet group when power is restored after a power loss. *For the possible property values, see PowerRestorePolicy in Property details.*
PowerState	string (enum) *read-only* *(null)*	The power state of the outlet group. *For the possible property values, see PowerState in Property details.*
PowerWatts {	object (excerpt)	The power reading for this outlet group. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.

ApparentVA	number (V.A) *read-only (null)*	The product of voltage and current for an AC circuit, in Volt-Ampere units.
DataSourceUri	string *read-only (null)*	The link to the resource that provides the data for this sensor.
PowerFactor	number *read-only (null)*	The power factor for this sensor.
ReactiveVAR	number (V.A) *read-only (null)*	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.
Reading	number *read-only (null)*	The sensor value.
}		
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.94.1 Actions

6.94.1.1 PowerControl

This action turns the outlet group on or off.

URIs:

/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/OutletGroups/*{OutletGroupId}*/Actions/ OutletGroup.PowerControl /redfish/v1/PowerEquipment/ TransferSwitches/*{PowerDistributionId}*/OutletGroups/*{OutletGroupId}*/Actions/OutletGroup.PowerControl

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		

PowerState	string (enum) optional	The desired power state of the outlet group. *For the possible property values, see PowerState in Property details.*
}		

6.94.1.2 ResetMetrics

This action resets metrics related to this outlet group.

URIs:

/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/OutletGroups/*{OutletGroupId}*/Actions/
OutletGroup.ResetMetrics /redfish/v1/PowerEquipment/
TransferSwitches/*{PowerDistributionId}*/OutletGroups/*{OutletGroupId}*/Actions/OutletGroup.ResetMetrics

(This action takes no parameters.)

6.94.2 Property details

6.94.2.1 PowerRestorePolicy

The desired power state of the outlet group when power is restored after a power loss.

String	Description
AlwaysOff	Always remain powered off when external power is applied.
AlwaysOn	Always power on when external power is applied.
LastState	Return to the last power state (on or off) when external power is applied.

6.94.2.2 PowerState

The power state of the outlet group.

String	Description
Off	The state is powered off.
On	The state is powered on.
PoweringOff	A temporary state between on and off.
PoweringOn	A temporary state between off and on.

6.95 OutletGroupCollection

URIs:

/redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/OutletGroups /redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*/OutletGroups

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a OutletGroup resource. See the Links section and the *OutletGroup* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.96 PCIeDevice 1.4.0

v1.4	v1.3	v1.2	v1.1	v1.0
2019.2	2018.2	2017.3	2017.1	2016.2

The PCIeDevice schema describes the properties of a PCIe device that is attached to a system.

URIs:

/redfish/v1/Chassis/{*ChassisId*}/PCIeDevices/{*PCIeDeviceId*} /redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/PCIeDevices/{*PCIeDeviceId*} /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/PCIeDevices/{*PCIeDeviceId*} /redfish/v1/
Systems/{*ComputerSystemId*}/PCIeDevices/{*PCIeDeviceId*}

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this Resource.
Assembly *(v1.2+)* {	object	The link to the assembly Resource associated with this PCIe device. See the *Assembly* schema for details on this property.
@odata.id	string *read-only*	Link to a Assembly resource. See the Links section and the *Assembly* schema for details.
}		

AssetTag	string *read-write (null)*	The user-assigned asset tag for this PCIe device.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
DeviceType	string (enum) *read-only*	The device type for this PCIe device. *For the possible property values, see DeviceType in Property details.*
FirmwareVersion	string *read-only (null)*	The version of firmware for this PCIe device.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other Resources that are related to this Resource.
Chassis [{	array	An array of links to the chassis in which the PCIe device is contained.
@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}]		
Chassis@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeFunctions *(deprecated v1.4)* [{	array	An array of links to PCIeFunctions exposed by this device. *Deprecated in v1.4 and later. This property has been deprecated in favor of the PCIeFunctions property in the root that provides a link to a Resource Collection.*

@odata.id	string *read-only*	Link to a PCIeFunction resource. See the Links section and the *PCIeFunction* schema for details.
}]		
PCIeFunctions@odata.count	integer *read-only*	The number of items in a collection.
}		
Manufacturer	string *read-only* *(null)*	The manufacturer of this PCIe device.
Model	string *read-only* *(null)*	The model number for the PCIe device.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PartNumber	string *read-only* *(null)*	The part number for this PCIe device.
PCIeFunctions *(v1.4+)* {	object	The link to the collection of PCIe functions associated with this PCIe device. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *PCIeFunction*. See the PCIeFunction schema for details.
}		
PCIeInterface *(v1.3+)* {	object	The PCIe interface details for this PCIe device.

LanesInUse	integer *read-only* *(null)*	The number of PCIe lanes in use by this device.
MaxLanes	integer *read-only* *(null)*	The number of PCIe lanes supported by this device.
MaxPCIeType	string (enum) *read-only* *(null)*	The highest version of the PCIe specification supported by this device. *For the possible property values, see MaxPCIeType in Property details.*
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeType	string (enum) *read-only* *(null)*	The version of the PCIe specification in use by this device. *For the possible property values, see PCIeType in Property details.*
}		
SerialNumber	string *read-only* *(null)*	The serial number for this PCIe device.
SKU	string *read-only* *(null)*	The SKU for this PCIe device.
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.

6.96.1 Property details

6.96.1.1 DeviceType

The device type for this PCIe device.

String	Description
MultiFunction	A multi-function PCIe device.
Simulated	A PCIe device that is not currently physically present, but is being simulated by the PCIe infrastructure.
SingleFunction	A single-function PCIe device.

6.96.1.2 MaxPCIeType

The highest version of the PCIe specification supported by this device.

String	Description
Gen1	A PCIe v1.0 slot.
Gen2	A PCIe v2.0 slot.
Gen3	A PCIe v3.0 slot.
Gen4	A PCIe v4.0 slot.
Gen5	A PCIe v5.0 slot.

6.96.1.3 PCIeType

The version of the PCIe specification in use by this device.

String	Description
Gen1	A PCIe v1.0 slot.
Gen2	A PCIe v2.0 slot.
Gen3	A PCIe v3.0 slot.
Gen4	A PCIe v4.0 slot.
Gen5	A PCIe v5.0 slot.

6.97 PCIeDeviceCollection

URIs:

/redfish/v1/Chassis/{*ChassisId*}/PCIeDevices /redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/PCIeDevices /redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/PCIeDevices /redfish/v1/
Systems/*{ComputerSystemId}*/PCIeDevices

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a PCIeDevice resource. See the Links section and the *PCIeDevice* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.98 PCIeFunction 1.2.3

v1.2	*v1.1*	*v1.0*

| 2018.1 | 2017.1 | 2016.2 |

The schema definition for the PCIeFunction Resource. It represents the properties of a PCIeFunction attached to a System.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/PCIeDevices/*{PCIeDeviceId}*/PCIeFunctions/*{PCIeFunctionId}* /redfish/v1/ CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/PCIeDevices/*{PCIeDeviceId}*/PCIeFunctions/*{PCIeFunctionId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/PCIeDevices/*{PCIeDeviceId}*/PCIeFunctions/*{PCIeFunctionId}* /redfish/v1/Systems/*{ComputerSystemId}*/PCIeDevices/*{PCIeDeviceId}*/PCIeFunctions/*{PCIeFunctionId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this Resource.
ClassCode	string *read-only* *(null)*	The Class Code of this PCIe function.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
DeviceClass	string (enum) *read-only*	The class for this PCIe function. *For the possible property values, see DeviceClass in Property details.*

DeviceId	string *read-only* *(null)*	The Device ID of this PCIe function.	
FunctionId	integer *read-only* *(null)*	The PCIe Function Number.	
FunctionType	string (enum) *read-only*	The type of the PCIe function. *For the possible property values, see FunctionType in Property details.*	
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.	
Links {	object	The links to other Resources that are related to this Resource.	
Drives [{	array	An array of links to the drives that the PCIe device produces.	
@odata.id	string *read-only*	Link to a Drive resource. See the Links section and the *Drive* schema for details.	
}]			
Drives@odata.count	integer *read-only*	The number of items in a collection.	
EthernetInterfaces [{	array	An array of links to the Ethernet interfaces that the PCIe device produces.	
@odata.id	string *read-only*	Link to a EthernetInterface resource. See the Links section and the *EthernetInterface* schema for details.	
}]			
EthernetInterfaces@odata.count	integer *read-only*	The number of items in a collection.	
NetworkDeviceFunctions *(v1.2+)* [{	array	An array of links to the network device functions that the PCIe device produces.	
@odata.id	string *read-only*	Link to a NetworkDeviceFunction resource. See the Links section and the *NetworkDeviceFunction* schema for details.	
}]			

NetworkDeviceFunctions@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeDevice {	object	The link to the PCIe device on which this function resides. See the *PCIeDevice* schema for details on this property.
@odata.id	string *read-only*	Link to a PCIeDevice resource. See the Links section and the *PCIeDevice* schema for details.
}		
StorageControllers [{	array	An array of links to the storage controllers that the PCIe device produces.
@odata.id	string *read-only*	Link to a StorageController resource. See the Links section and the *Storage* schema for details.
}]		
StorageControllers@odata.count	integer *read-only*	The number of items in a collection.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
RevisionId	string *read-only* *(null)*	The Revision ID of this PCIe function.
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.
SubsystemId	string *read-only* *(null)*	The Subsystem ID of this PCIe function.
SubsystemVendorId	string *read-only* *(null)*	The Subsystem Vendor ID of this PCIe function.

	string	
VendorId	*read-only (null)*	The Vendor ID of this PCIe function.

6.98.1 Property details

6.98.1.1 DeviceClass

The class for this PCIe function.

String	Description
Bridge	A bridge.
CommunicationController	A communication controller.
Coprocessor	A coprocessor.
DisplayController	A display controller.
DockingStation	A docking station.
EncryptionController	An encryption controller.
GenericSystemPeripheral	A generic system peripheral.
InputDeviceController	An input device controller.
IntelligentController	An intelligent controller.
MassStorageController	A mass storage controller.
MemoryController	A memory controller.
MultimediaController	A multimedia controller.
NetworkController	A network controller.
NonEssentialInstrumentation	A non-essential instrumentation.
Other	A other class. The function Device Class Id needs to be verified.
ProcessingAccelerators	A processing accelerators.
Processor	A processor.
SatelliteCommunicationsController	A satellite communications controller.
SerialBusController	A serial bus controller.
SignalProcessingController	A signal processing controller.

String	Description
UnassignedClass	An unassigned class.
UnclassifiedDevice	An unclassified device.
WirelessController	A wireless controller.

6.98.1.2 FunctionType

The type of the PCIe function.

String	Description
Physical	A physical PCIe function.
Virtual	A virtual PCIe function.

6.99 PCIeFunctionCollection

URIs:

/redfish/v1/Chassis/*{ChassisId}*/PCIeDevices/*{PCIeDeviceId}*/PCIeFunctions /redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/PCIeDevices/*{PCIeDeviceId}*/PCIeFunctions /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/PCIeDevices/*{PCIeDeviceId}*/PCIeFunctions /redfish/v1/Systems/*{ComputerSystemId}*/PCIeDevices/*{PCIeDeviceId}*/PCIeFunctions

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a PCIeFunction resource. See the Links section and the *PCIeFunction* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.100 PCIeSlots 1.3.0

v1.3	v1.2	v1.1	v1.0
2020.1	2019.4	2019.1	2018.2

The PCIeSlots schema describes PCIe slot properties.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/PCIeSlots

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.

@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Slots [{	array	An array of PCI Slot information.
HotPluggable *(v1.1+)*	boolean *read-only* *(null)*	An indication of whether this PCIe slot supports hotplug.
Lanes	integer *read-only* *(null)*	The number of PCIe lanes supported by this slot.
Links {	object	The links to other Resources that are related to this Resource.
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeDevice [{	array	An array of links to the PCIe devices contained in this slot.
@odata.id	string *read-only*	Link to a PCIeDevice resource. See the Links section and the *PCIeDevice* schema for details.
}]		
PCIeDevice@odata.count	integer *read-only*	The number of items in a collection.
}		

Location {}	object	The location of the PCIe slot. For property details, see Location.
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeType	string (enum) *read-only (null)*	The PCIe specification supported by this slot. *For the possible property values, see PCIeType in Property details.*
SlotType	string (enum) *read-only (null)*	The PCIe slot type for this slot. *For the possible property values, see SlotType in Property details.*
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.
}]		

6.100.1 Property details

6.100.1.1 PCIeType

The PCIe specification supported by this slot.

String	Description
Gen1	A PCIe v1.0 slot.
Gen2	A PCIe v2.0 slot.
Gen3	A PCIe v3.0 slot.
Gen4	A PCIe v4.0 slot.
Gen5	A PCIe v5.0 slot.

6.100.1.2 SlotType

The PCIe slot type for this slot.

String	Description
FullLength	Full-Length PCIe slot.
HalfLength	Half-Length PCIe slot.

String	Description
LowProfile	Low-Profile or Slim PCIe slot.
M2	PCIe M.2 slot.
Mini	Mini PCIe slot.
OCP3Large *(v1.2+)*	Open Compute Project 3.0 large form factor slot.
OCP3Small *(v1.2+)*	Open Compute Project 3.0 small form factor slot.
OEM	An OEM-specific slot.
U2 *(v1.3+)*	U.2 / SFF-8639 slot or bay.

6.101 Port 1.2.1

v1.2	*v1.1*	*v1.0*
2019.4	2017.3	2016.2

The Port schema contains properties that describe a port of a switch, controller, chassis, or any other device that could be connected to another entity.

URIs:

/redfish/v1/Chassis/{*ChassisId*}/MediaControllers/{*MediaControllerId*}/Ports/{*PortId*} /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/StorageControllers/{*StorageControllerId*}/Ports/{*PortId*} /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StorageControllers/{*StorageControllerId*}/Ports/{*PortId*} /redfish/v1/Fabrics/{*FabricId*}/Switches/{*SwitchId*}/Ports/{*PortId*} /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/StorageControllers/{*StorageControllerId*}/Ports/{*PortId*} /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StorageControllers/{*StorageControllerId*}/Ports/{*PortId*} /redfish/v1/Systems/{*ComputerSystemId*}/FabricAdapters/{*FabricAdapterId*}/Ports/{*PortId*} /redfish/v1/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StorageControllers/{*StorageControllerId*}/Ports/{*PortId*}

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#Port.Reset {}	object	This action resets this port. *For more information, see the Actions section below.*
}		
ActiveWidth *(v1.2+)*	integer *read-only*	The number of active lanes for this interface.
CurrentSpeedGbps	number (Gbit/s) *read-only* *(null)*	The current speed of this port.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
GenZ *(v1.2+)* {	object	Gen-Z specific properties.
LPRT {	object	The Linear Packet Relay Table for the port. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *RouteEntry*. See the RouteEntry schema for details.
}		
MPRT {	object	the Multi-subnet Packet Relay Table for the port. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *RouteEntry*. See the RouteEntry schema for details.
}		
VCAT {	object	the Virtual Channel Action Table for the port. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *VCATEntry*. See the VCATEntry schema for details.

}		
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
InterfaceEnabled *(v1.2+)*	boolean *read-write* *(null)*	An indication of whether the interface is enabled.
LinkNetworkTechnology *(v1.2+)*	string (enum) *read-only* *(null)*	The link network technology capabilities of this port. *For the possible property values, see LinkNetworkTechnology in Property details.*
Links {	object	The links to other resources that are related to this resource.
AssociatedEndpoints [{	array	An array of links to the endpoints that connect through this port.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
AssociatedEndpoints@odata.count	integer *read-only*	The number of items in a collection.
ConnectedPorts *(v1.2+)* [{	array	An array of links to the remote ports connected to this port.
@odata.id	string *read-only*	Link to another Port resource.
}]		
ConnectedPorts@odata.count	integer *read-only*	The number of items in a collection.
ConnectedSwitches [{	array	An array of links to the switches that connect to the device through this port.
@odata.id	string *read-only*	Link to a Switch resource. See the Links section and the *Switch* schema for details.
}]		

ConnectedSwitches@odata.count	integer *read-only*	The number of items in a collection.	
ConnectedSwitchPorts [{	array	An array of links to the ports that connect to the switch through this port.	
@odata.id	string *read-only*	Link to another Port resource.	
}]			
ConnectedSwitchPorts@odata.count	integer *read-only*	The number of items in a collection.	
Oem {}	object	The OEM extension property. For property details, see Oem.	
}			
LinkState *(v1.2+)*	string (enum) *read-write*	The desired link state for this interface. *For the possible property values, see LinkState in Property details.*	
LinkStatus *(v1.2+)*	string (enum) *read-write*	The desired link status for this interface. *For the possible property values, see LinkStatus in Property details.*	
LinkTransitionIndicator *(v1.2+)*	integer *read-write*	The number of link state transitions for this interface.	
Location *(v1.1+)* {}	object	The location of the port. For property details, see Location.	
MaxSpeedGbps	number (Gbit/s) *read-only* *(null)*	The maximum speed of this port as currently configured.	
Metrics *(v1.2+)* {	object *(null)*	The link to the metrics associated with this port. See the *PortMetrics* schema for details on this property.	
@odata.id	string *read-only*	Link to a PortMetrics resource. See the Links section and the *PortMetrics* schema for details.	
}			

	string *read-only* *required*	
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PortId	string *read-only* *(null)*	The label of this port on the physical package for this port.
PortMedium *(v1.2+)*	string (enum) *read-only* *(null)*	The physical connection medium for this port. *For the possible property values, see PortMedium in Property details.*
PortProtocol	string (enum) *read-only* *(null)*	The protocol being sent over this port. *For the possible property values, see PortProtocol in Property details.*
PortType	string (enum) *read-only* *(null)*	The type of this port. *For the possible property values, see PortType in Property details.*
SignalDetected *(v1.2+)*	boolean *read-only* *(null)*	An indication of whether a signal is detected on this interface.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
Width	integer *read-only* *(null)*	The number of lanes, phys, or other physical transport links that this port contains.

6.101.1 Actions

6.101.1.1 Reset

This action resets this port.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/MediaControllers/*{MediaControllerId}*/Ports/*{PortId}*/Actions/Port.Reset /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/StorageControllers/*{StorageControllerId}*/Ports/*{PortId}*/Actions
/Port.Reset /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StorageControllers/*{StorageContr
ollerId}*/Ports/*{PortId}*/Actions/Port.Reset /redfish/v1/Fabrics/*{FabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/Actions/
Port.Reset /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/StorageControllers/*{StorageControllerId}*/Ports/*{PortId}*/Actions
/Port.Reset /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StorageControllers/*{StorageContr
ollerId}*/Ports/*{PortId}*/Actions/Port.Reset /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/Actions/Port.Reset /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StorageControllers/*{StorageControllerId}*/Ports/*{PortId}*/Actions/
Port.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
ResetType	string (enum) *optional*	The type of reset. *For the possible property values, see ResetType in Property details.*
}		

6.101.2 Property details

6.101.2.1 LinkNetworkTechnology

The link network technology capabilities of this port.

String	Description
Ethernet	The port is capable of connecting to an Ethernet network.
FibreChannel	The port is capable of connecting to a Fibre Channel network.
GenZ	The port is capable of connecting to a Gen-Z fabric.
InfiniBand	The port is capable of connecting to an InfiniBand network.

6.101.2.2 LinkState

The desired link state for this interface.

String	Description
Disabled	This link is disabled.
Enabled	This link is enabled.

6.101.2.3 LinkStatus

The desired link status for this interface.

String	Description
LinkDown	The link on this interface is down.
LinkUp	This link on this interface is up.
NoLink	No physical link detected on this interface.
Starting	This link on this interface is starting.
Training	This link on this interface is training.

6.101.2.4 PortMedium

The physical connection medium for this port.

String	Description
Electrical	This port has an electrical cable connection.
Optical	This port has an optical cable connection.

6.101.2.5 PortProtocol

The protocol being sent over this port.

String	Description
AHCI	Advanced Host Controller Interface (AHCI).
FC	Fibre Channel.
FCoE	Fibre Channel over Ethernet (FCoE).
FCP	Fibre Channel Protocol for SCSI.
FICON	FIbre CONnection (FICON).

String	Description
FTP	File Transfer Protocol (FTP).
GenZ	GenZ.
HTTP	Hypertext Transport Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).
I2C	Inter-Integrated Circuit Bus.
iSCSI	Internet SCSI.
iWARP	Internet Wide Area RDMA Protocol (iWARP).
MultiProtocol	Multiple Protocols.
NFSv3	Network File System (NFS) version 3.
NFSv4	Network File System (NFS) version 4.
NVMe	Non-Volatile Memory Express (NVMe).
NVMeOverFabrics	NVMe over Fabrics.
OEM	OEM-specific.
PCIe	PCI Express.
RoCE	RDMA over Converged Ethernet Protocol.
RoCEv2	RDMA over Converged Ethernet Protocol Version 2.
SAS	Serial Attached SCSI.
SATA	Serial AT Attachment.
SFTP	SSH File Transfer Protocol (SFTP).
SMB	Server Message Block (SMB). Also known as the Common Internet File System (CIFS).
TCP	Transmission Control Protocol (TCP).
TFTP	Trivial File Transfer Protocol (TFTP).
UDP	User Datagram Protocol (UDP).
UHCI	Universal Host Controller Interface (UHCI).
USB	Universal Serial Bus (USB).

6.101.2.6 PortType

The type of this port.

String	Description
BidirectionalPort	This port connects to any type of device.
DownstreamPort	This port connects to a target device.
InterswitchPort	This port connects to another switch.
ManagementPort	This port connects to a switch manager.
UnconfiguredPort	This port has not yet been configured.
UpstreamPort	This port connects to a host device.

6.101.2.7 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.
On	Turn on the unit.
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.102 PortCollection

URIs:

/redfish/v1/Chassis/*{ChassisId}*/MediaControllers/*{MediaControllerId}*/Ports /redfish/v1/CompositionService/

ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/StorageControllers/*{StorageControllerMemberId}*/Ports /redfish/ v1/CompositionService/

ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StorageControllers/*{StorageContr ollerMemberId}*/Ports /redfish/v1/Fabrics/*{FabricId}*/Switches/*{SwitchId}*/Ports /redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/StorageControllers/*{StorageControllerMemberId}*/Ports /redfish/ v1/

ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StorageControllers/*{StorageContr ollerMemberId}*/Ports /redfish/v1/Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports /redfish/v1/ Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StorageControllers/*{StorageControllerMemberId}*/Ports

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Port resource. See the Links section and the *Port* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.

Oem {}	object	The OEM extension property. For property details, see Oem.

6.103 PortMetrics 1.0.0

v1.0
2019.4

The usage and health statistics for a switch device or component port summary.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/MediaControllers/*{MediaControllerId}*/Ports/*{PortId}*/Metrics /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/StorageControllers/*{StorageControllerId}*/Ports/*{PortId}*/Metrics
/redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StorageControllers/*{StorageContr
ollerId}*/Ports/*{PortId}*/Metrics /redfish/v1/Fabrics/*{FabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/Metrics /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/StorageControllers/*{StorageControllerId}*/Ports/*{PortId}*/Metrics
/redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StorageControllers/*{StorageContr
ollerId}*/Ports/*{PortId}*/Metrics /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/Metrics /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StorageControllers/*{StorageControllerId}*/Ports/*{PortId}*/Metrics

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this Resource.

Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
GenZ {	object	The port metrics specific to Gen-Z ports.
AccessKeyViolations	integer *read-only* *(null)*	The total number of Access Key Violations detected.
EndToEndCRCErrors	integer *read-only* *(null)*	The total number of ECRC transient errors detected.
LinkNTE	integer *read-only* *(null)*	The total number of link-local non-transient errors detected.
LLRRecovery	integer *read-only* *(null)*	The total number of times Link-Level Reliability (LLR) recovery has been initiated.
MarkedECN	integer *read-only* *(null)*	The number of packets with the Congestion ECN bit set.
NonCRCTransientErrors	integer *read-only* *(null)*	The total number transient errors detected that are unrelated to CRC validation.
PacketCRCErrors	integer *read-only* *(null)*	The total number of PCRC transient errors detected.
PacketDeadlineDiscards	integer *read-only* *(null)*	The number of packets discarded due to the Congestion Deadline sub-field reaching zero.
ReceivedECN	integer *read-only* *(null)*	The number of packets received on this interface with the Congestion ECN bit set.

RXStompedECRC	integer *read-only* *(null)*	The total number of packets received with a stomped ECRC field.
TXStompedECRC	integer *read-only* *(null)*	The total number of packets that this interface stomped the ECRC field.
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.104 Power 1.6.1

v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2019.3	2017.3	2017.2	2017.1	2016.2	2016.1	1.0

The Power schema describes power metrics and represents the properties for power consumption and power limiting.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Power

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.3+)* {	object	The available actions for this resource.
#Power.PowerSupplyReset *(v1.6+)* {}	object	This action resets the targeted power supply. *For more information, see the Actions section below.*
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PowerControl [{	array	The set of power control functions, including power reading and limiting.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
Actions *(v1.3+)* {}	object	The available actions for this resource.

MemberId	string *read-only* *required*	The identifier for the member within the collection.
Name	string *read-only* *(null)*	The power control function name.
Oem {}	object	The OEM extension property. For property details, see Oem.
PhysicalContext *(v1.4+)*	string (enum) *read-only*	The area, device, or set of devices to which this power control applies. *For the possible property values, see PhysicalContext in Property details.*
PowerAllocatedWatts	number (W) *read-only* *(null)*	The total amount of power that has been allocated or budgeted to chassis.
PowerAvailableWatts	number (W) *read-only* *(null)*	The amount of reserve power capacity, in watts, that remains. This value is the PowerCapacity value minus the PowerAllocated value.
PowerCapacityWatts	number (W) *read-only* *(null)*	The total amount of power that can be allocated to the chassis. This value can be either the power supply capacity or the power budget that an upstream chassis assigns to this chassis.
PowerConsumedWatts	number (W) *read-only* *(null)*	The actual power that the chassis consumes, in watts.
PowerLimit {	object	The power limit status and configuration information for this chassis.

CorrectionInMs	integer (ms) *read-write* *(null)*	The time required for the limiting process to reduce power consumption to below the limit.
LimitException	string (enum) *read-write* *(null)*	The action that is taken if the power cannot be maintained below the LimitInWatts. *For the possible property values, see LimitException in Property details.*
LimitInWatts	number (W) *read-write* *(null)*	The power limit, in watts. If `null`, power capping is disabled.
}		
PowerMetrics {	object	The power readings for this chassis.
AverageConsumedWatts	number (W) *read-only* *(null)*	The average power level over the measurement window over the last IntervalInMin minutes.
IntervalInMin	integer (min) *read-only* *(null)*	The time interval, or window, over which the power metrics are measured.
MaxConsumedWatts	number (W) *read-only* *(null)*	The highest power consumption level, in watts, that has occurred over the measurement window within the last IntervalInMin minutes.
MinConsumedWatts	number (W) *read-only* *(null)*	The lowest power consumption level, in watts, over the measurement window that occurred within the last IntervalInMin minutes.

}		
PowerRequestedWatts	number (W) *read-only (null)*	The potential power, in watts, that the chassis requests, which might be higher than the current level being consumed because the requested power includes a budget that the chassis wants for future use.
RelatedItem [{	array	An array of links to resources or objects associated with this power limit.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
RelatedItem@odata.count	integer *read-only*	The number of items in a collection.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
}]		
PowerControl@odata.count	integer *read-only*	The number of items in a collection.
PowerSupplies [{	array	The set of power supplies associated with this system or device.
@odata.id	string *read-only required*	The unique identifier for a resource.
Actions *(v1.3+)* {}	object	The available actions for this resource.
Assembly *(v1.5+)* {	object	The link to the assembly resource associated with this power supply. See the *Assembly* schema for details on this property.
@odata.id	string *read-only*	Link to a Assembly resource. See the Links section and the *Assembly* schema for details.
}		

	number (%) read-only (null)	The measured efficiency of this power supply as a percentage.
EfficiencyPercent *(v1.5+)*		
FirmwareVersion	string read-only (null)	The firmware version for this power supply.
HotPluggable *(v1.5+)*	boolean read-only (null)	An indication of whether this device can be inserted or removed while the equipment is in operation.
IndicatorLED *(v1.2+)*	string (enum) read-write (null)	The state of The indicator LED, which identifies the power supply. *For the possible property values, see IndicatorLED in Property details.*
InputRanges *(v1.1+)* [{	array	The input ranges that the power supply can use.
InputType	string (enum) read-only (null)	The Input type (AC or DC). *For the possible property values, see InputType in Property details.*
MaximumFrequencyHz	number (Hz) read-only (null)	The maximum line input frequency at which this power supply input range is effective.
MaximumVoltage	number (V) read-only (null)	The maximum line input voltage at which this power supply input range is effective.

	number (Hz) read-only (null)	
MinimumFrequencyHz	number (Hz) read-only (null)	The minimum line input frequency at which this power supply input range is effective.
MinimumVoltage	number (V) read-only (null)	The minimum line input voltage at which this power supply input range is effective.
Oem {}	object	The OEM extension property. For property details, see Oem.
OutputWattage	number (W) read-only (null)	The maximum capacity of this power supply when operating in this input range.
}]		
LastPowerOutputWatts	number (W) read-only (null)	The average power output of this power supply.
LineInputVoltage	number (V) read-only (null)	The line input voltage at which the power supply is operating.
LineInputVoltageType	string (enum) read-only (null)	The line voltage type supported as an input to this power supply. *For the possible property values, see LineInputVoltageType in Property details.*
Location *(v1.5+)* {}	object	The location of the power supply. For property details, see Location.
Manufacturer *(v1.1+)*	string read-only (null)	The manufacturer of this power supply.

	string *read-only* *required*	The identifier for the member within the collection.
MemberId		
Model	string *read-only* *(null)*	The model number for this power supply.
Name	string *read-only* *(null)*	The name of the power supply.
Oem {}	object	The OEM extension property. For property details, see Oem.
PartNumber	string *read-only* *(null)*	The part number for this power supply.
PowerCapacityWatts	number (W) *read-only* *(null)*	The maximum capacity of this power supply.
PowerInputWatts *(v1.5+)*	number (W) *read-only* *(null)*	The measured input power of this power supply.
PowerOutputWatts *(v1.5+)*	number (W) *read-only* *(null)*	The measured output power of this power supply.
PowerSupplyType	string (enum) *read-only* *(null)*	The power supply type (AC or DC). *For the possible property values, see PowerSupplyType in Property details.*

Redundancy [{	array	The set of redundancy groups for this power supply.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Redundancy@odata.count	integer *read-only*	The number of items in a collection.
RelatedItem [{	array	An array of links to resources or objects associated with this power supply.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
RelatedItem@odata.count	integer *read-only*	The number of items in a collection.
SerialNumber	string *read-only (null)*	The serial number for this power supply.
SparePartNumber	string *read-only (null)*	The spare part number for this power supply.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
}]		
PowerSupplies@odata.count	integer *read-only*	The number of items in a collection.
Redundancy [{	array	The redundancy information for the set of power supplies in this chassis.

@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Redundancy@odata.count	integer *read-only*	The number of items in a collection.
Voltages [{	array	The set of voltage sensors for this chassis.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
Actions *(v1.3+)* {}	object	The available actions for this resource.
LowerThresholdCritical	number (V) *read-only* *(null)*	The value at which the reading is below normal range but not yet fatal.
LowerThresholdFatal	number (V) *read-only* *(null)*	The value at which the reading is below normal range and fatal.
LowerThresholdNonCritical	number (V) *read-only* *(null)*	The value at which the reading is below normal range.
MaxReadingRange	number (V) *read-only* *(null)*	Maximum value for this sensor.

MemberId	string *read-only* *required*	The identifier for the member within the collection.
MinReadingRange	number (V) *read-only* *(null)*	Minimum value for this sensor.
Name	string *read-only* *(null)*	Voltage sensor name.
Oem {}	object	The OEM extension property. For property details, see Oem.
PhysicalContext	string (enum) *read-only*	The area or device to which this voltage measurement applies. *For the possible property values, see PhysicalContext in Property details.*
ReadingVolts	number (V) *read-only* *(null)*	The reading of the voltage sensor.
RelatedItem [{	array	An array of links to resources or objects to which this voltage measurement applies.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
RelatedItem@odata.count	integer *read-only*	The number of items in a collection.
SensorNumber	integer *read-only* *(null)*	A numerical identifier to represent the voltage sensor.

Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
UpperThresholdCritical	number (V) *read-only (null)*	The value at which the reading is above normal range but not yet fatal.
UpperThresholdFatal	number (V) *read-only (null)*	The value at which the reading is above normal range and fatal.
UpperThresholdNonCritical	number (V) *read-only (null)*	The value at which the reading is above normal range.
}]		
Voltages@odata.count	integer *read-only*	The number of items in a collection.

6.104.1 Actions

6.104.1.1 PowerSupplyReset

This action resets the targeted power supply.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Power/Actions/Power.PowerSupplyReset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
MemberId	string *required*	The MemberId of the power supply within the PowerSupplies array on which to perform the reset.

ResetType	string (enum) *optional*	The type of reset. *For the possible property values, see ResetType in Property details.*
}		

6.104.2 Property details

6.104.2.1 IndicatorLED

The state of The indicator LED, which identifies the power supply.

String	Description
Blinking	The indicator LED is blinking.
Lit	The indicator LED is lit.
Off	The indicator LED is off.

6.104.2.2 InputType

The Input type (AC or DC).

String	Description
AC	Alternating Current (AC) input range.
DC	Direct Current (DC) input range.

6.104.2.3 LimitException

The action that is taken if the power cannot be maintained below the LimitInWatts.

String	Description
HardPowerOff	Turn the power off immediately when the limit is exceeded.
LogEventOnly	Log an event when the limit is exceeded, but take no further action.
NoAction	Take no action when the limit is exceeded.
Oem	Take an OEM-defined action.

6.104.2.4 LineInputVoltageType

The line voltage type supported as an input to this power supply.

String	Description
AC120V *(v1.1+)*	AC 120V nominal input.
AC240V *(v1.1+)*	AC 240V nominal input.
AC277V *(v1.1+)*	AC 277V nominal input.
ACandDCWideRange *(v1.1+)*	Wide range AC or DC input.
ACHighLine *(deprecated v1.1)*	277V AC input. *Deprecated in v1.1 and later. This value has been deprecated in favor of AC277V.*
ACLowLine *(deprecated v1.1)*	100-127V AC input. *Deprecated in v1.1 and later. This value has been deprecated in favor of AC120V.*
ACMidLine *(deprecated v1.1)*	200-240V AC input. *Deprecated in v1.1 and later. This value has been deprecated in favor of AC240V.*
ACWideRange *(v1.1+)*	Wide range AC input.
DC240V *(v1.1+)*	DC 240V nominal input.
DC380V	High Voltage DC input (380V).
DCNeg48V	-48V DC input.
Unknown	The power supply line input voltage type cannot be determined.

6.104.2.5 PhysicalContext

The area or device to which this voltage measurement applies.

String	Description
Accelerator	An accelerator.
ACInput	An AC input.
ACMaintenanceBypassInput	An AC maintenance bypass input.
ACOutput	An AC output.
ACStaticBypassInput	An AC static bypass input.
ACUtilityInput	An AC utility input.
ASIC	An ASIC device, such as a networking chip or chipset component.
Back	The back of the chassis.

String	Description
Backplane	A backplane within the chassis.
Chassis	The entire chassis.
ComputeBay	Within a compute bay.
CoolingSubsystem	The entire cooling, or air and liquid, subsystem.
CPU	A processor (CPU).
CPUSubsystem	The entire processor (CPU) subsystem.
DCBus	A DC bus.
Exhaust	The air exhaust point or points or region of the chassis.
ExpansionBay	Within an expansion bay.
Fan	A fan.
FPGA	An FPGA.
Front	The front of the chassis.
GPU	A graphics processor (GPU).
GPUSubsystem	The entire graphics processor (GPU) subsystem.
Intake	The air intake point or points or region of the chassis.
LiquidInlet	The liquid inlet point of the chassis.
LiquidOutlet	The liquid outlet point of the chassis.
Lower	The lower portion of the chassis.
Memory	A memory device.
MemorySubsystem	The entire memory subsystem.
Motor	A motor.
NetworkBay	Within a networking bay.
NetworkingDevice	A networking device.
PowerSubsystem	The entire power subsystem.
PowerSupply	A power supply.
PowerSupplyBay	Within a power supply bay.
Rectifier	A rectifier device.

String	Description
Room	The room.
StorageBay	Within a storage bay.
StorageDevice	A storage device.
SystemBoard	The system board (PCB).
Transformer	A transformer.
Upper	The upper portion of the chassis.
VoltageRegulator	A voltage regulator device.

6.104.2.6 PowerSupplyType

The power supply type (AC or DC).

String	Description
AC	Alternating Current (AC) power supply.
ACorDC	The power supply supports both DC or AC.
DC	Direct Current (DC) power supply.
Unknown	The power supply type cannot be determined.

6.104.2.7 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.
On	Turn on the unit.

String	Description
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.105 PowerDistribution 1.0.1

v1.0
2019.4

This is the schema definition for a power distribution component or unit, such as a floor power distribution unit (PDU) or switchgear.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}* /redfish/v1/PowerEquipment/ RackPDUs/*{PowerDistributionId}* /redfish/v1/PowerEquipment/TransferSwitches/*{PowerDistributionId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#PowerDistribution.TransferControl {}	object	This action transfers control to the alternative input circuit. *For more information, see the Actions section below.*
}		

AssetTag	string *read-write (null)*	The user-assigned asset tag for this equipment.
Branches {	object	A link to the branch circuits for this equipment. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Circuit*. See the Circuit schema for details.
}		
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
EquipmentType	string (enum) *read-only required*	The type of equipment this resource represents. *For the possible property values, see EquipmentType in Property details.*
Feeders {	object	A link to the feeder circuits for this equipment. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Circuit*. See the Circuit schema for details.
}		
FirmwareVersion	string *read-only*	The firmware version of this equipment.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
Chassis [{	array	An array of links to the chassis that contain this equipment.

@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}]		
Chassis@odata.count	integer *read-only*	The number of items in a collection.
Facility {	object	A link to the facility that contains this equipment. See the *Facility* schema for details on this property.
@odata.id	string *read-only*	Link to a Facility resource. See the Links section and the *Facility* schema for details.
}		
ManagedBy [{	array	An array of links to the managers responsible for managing this equipment.
@odata.id	string *read-only*	Link to a Manager resource. See the Links section and the *Manager* schema for details.
}]		
ManagedBy@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Location {}	object	The location of the equipment. For property details, see Location.
Mains {	object	A link to the power input circuits for this equipment. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Circuit*. See the Circuit schema for details.
}		

Manufacturer	string *read-only* *(null)*	The manufacturer of this equipment.
Metrics {	object	A link to the summary metrics for this equipment. See the *PowerDistributionMetrics* schema for details on this property.
@odata.id	string *read-only*	Link to a PowerDistributionMetrics resource. See the Links section and the *PowerDistributionMetrics* schema for details.
}		
Model	string *read-only* *(null)*	The product model number of this equipment.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OutletGroups {	object	A link to the outlet groups for this equipment. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *OutletGroup*. See the OutletGroup schema for details.
}		
Outlets {	object	A link to the outlets for this equipment. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Outlet*. See the Outlet schema for details.
}		
PartNumber	string *read-only* *(null)*	The part number for this equipment.

ProductionDate	string *read-only* *(null)*	The production or manufacturing date of this equipment.
Sensors {	object	A link to the collection of sensors located in the equipment and sub-components. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Sensor*. See the Sensor schema for details.
}		
SerialNumber	string *read-only* *(null)*	The serial number for this equipment.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
Subfeeds {	object	A link to the subfeed circuits for this equipment. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Circuit*. See the Circuit schema for details.
}		
TransferConfiguration {	object *(null)*	The configuration settings for an automatic transfer switch.
ActiveMainsId	string *read-write* *(null)*	The mains circuit that is switched on and qualified to supply power to the output circuit.
AutoTransferEnabled	boolean *read-write* *(null)*	Indicates if the qualified alternate mains circuit is automatically switched on when the preferred mains circuit becomes unqualified and is automatically switched off.

ClosedTransitionAllowed	boolean *read-write* *(null)*	Indicates if a make-before-break switching sequence of the mains circuits is permitted when they are both qualified and in synchronization.
ClosedTransitionTimeoutSeconds	integer *read-write* *(null)*	The time in seconds to wait for a closed transition to occur.
PreferredMainsId	string *read-write* *(null)*	The preferred source for the mains circuit to this equipment.
RetransferDelaySeconds	integer *read-write* *(null)*	The time in seconds to delay the automatic transfer from the alternate mains circuit back to the preferred mains circuit.
RetransferEnabled	boolean *read-write* *(null)*	Indicates if the automatic transfer is permitted from the alternate mains circuit back to the preferred mains circuit after the preferred mains circuit is qualified again and the Retransfer Delay time has expired.
TransferDelaySeconds	integer *read-write* *(null)*	The time in seconds to delay the automatic transfer from the preferred mains circuit to the alternate mains circuit when the preferred mains circuit is disqualified.
TransferInhibit	boolean *read-write* *(null)*	Indicates if any transfer is inhibited.
}		
TransferCriteria {	object *(null)*	The criteria used to initiate a transfer for an automatic transfer switch.

OverNominalFrequencyHz	number (Hz) *read-write (null)*	The frequency in Hertz over the nominal value that satisfies a criterion for transfer.
OverVoltageRMSPercentage	number (%) *read-write (null)*	The positive percentage of voltage RMS over the nominal value that satisfies a criterion for transfer.
TransferSensitivity	string (enum) *read-write (null)*	The sensitivity to voltage waveform quality to satisfy the criterion for initiating a transfer. *For the possible property values, see TransferSensitivity in Property details.*
UnderNominalFrequencyHz	number (Hz) *read-write (null)*	The frequency in Hertz under the nominal value that satisfies a criterion for transfer.
UnderVoltageRMSPercentage	number (%) *read-write (null)*	The negative percentage of voltage RMS under the nominal value that satisfies a criterion for transfer.
}		
UUID	string *read-only (null)*	The UUID for this equipment.
Version	string *read-only (null)*	The hardware version of this equipment.

6.105.1 Actions

6.105.1.1 TransferControl

This action transfers control to the alternative input circuit.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Actions/PowerDistribution.TransferControl /redfish/v1/
PowerEquipment/RackPDUs/*{PowerDistributionId}*/Actions/PowerDistribution.TransferControl /redfish/v1/
PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Actions/PowerDistribution.TransferControl

(This action takes no parameters.)

6.105.2 Property details

6.105.2.1 EquipmentType

The type of equipment this resource represents.

String	Description
AutomaticTransferSwitch	An automatic power transfer switch.
FloorPDU	A power distribution unit providing feeder circuits for further power distribution.
ManualTransferSwitch	A manual power transfer switch.
RackPDU	A power distribution unit providing outlets for a rack or similar quantity of devices.
Switchgear	Electrical switchgear.

6.105.2.2 TransferSensitivity

The sensitivity to voltage waveform quality to satisfy the criterion for initiating a transfer.

String	Description
High	High sensitivity for initiating a transfer.
Low	Low sensitivity for initiating a transfer.
Medium	Medium sensitivity for initiating a transfer.

6.106 PowerDistributionCollection

URIs:

/redfish/v1/PowerEquipment/FloorPDUs /redfish/v1/PowerEquipment/RackPDUs /redfish/v1/PowerEquipment/
Switchgear /redfish/v1/PowerEquipment/TransferSwitches

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a PowerDistribution resource. See the Links section and the *PowerDistribution* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.

	string	
Members@odata.nextLink	*read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.107 PowerDistributionMetrics 1.0.0

v1.0
2019.4

This is the schema definition for the metrics of a power distribution component or unit, such as a floor power distribution unit (PDU) or switchgear.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/{*PowerDistributionId*}/Metrics /redfish/v1/PowerEquipment/RackPDUs/{*PowerDistributionId*}/Metrics /redfish/v1/PowerEquipment/TransferSwitches/{*PowerDistributionId*}/Metrics

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#PowerDistributionMetrics.ResetMetrics {}	object	This action resets the summary metrics related to this equipment. *For more information, see the Actions section below.*

}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
EnergykWh {	object (excerpt)	The energy consumption of this unit. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
DataSourceUri	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
LifetimeReading *(v1.1+)*	number *read-only* *(null)*	The total accumulation value for this sensor.
Reading	number *read-only* *(null)*	The sensor value.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PowerWatts {	object (excerpt)	The total power reading for this equipment. This object is an excerpt of the *Sensor* resource located at the URI shown in DataSourceUri.
ApparentVA	number (V.A) *read-only* *(null)*	The product of voltage and current for an AC circuit, in Volt-Ampere units.

	string *read-only* *(null)*	The link to the resource that provides the data for this sensor.
DataSourceUri		
PowerFactor	number *read-only* *(null)*	The power factor for this sensor.
ReactiveVAR	number (V.A) *read-only* *(null)*	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.
Reading	number *read-only* *(null)*	The sensor value.
}		

6.107.1 Actions

6.107.1.1 ResetMetrics

This action resets the summary metrics related to this equipment.

URIs:

/redfish/v1/PowerEquipment/FloorPDUs/*{PowerDistributionId}*/Metrics/Actions/
PowerDistributionMetrics.ResetMetrics /redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Metrics/
Actions/PowerDistributionMetrics.ResetMetrics /redfish/v1/PowerEquipment/
TransferSwitches/*{PowerDistributionId}*/Metrics/Actions/PowerDistributionMetrics.ResetMetrics

(This action takes no parameters.)

6.108 PowerDomain 1.0.1

v1.0
2019.4

The PowerDomain schema contains definition for the DCIM power domain.

URIs:

/redfish/v1/Facilities/*{FacilityId}*/PowerDomains/*{PowerDomainId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
FloorPDUs [{	array	An array of links to the floor power distribution units in this power domain.
@odata.id	string *read-only*	Link to a PowerDistribution resource. See the Links section and the *PowerDistribution* schema for details.
}]		
FloorPDUs@odata.count	integer *read-only*	The number of items in a collection.
ManagedBy [{	array	An array of links to the managers responsible for managing this power domain.
@odata.id	string *read-only*	Link to a Manager resource. See the Links section and the *Manager* schema for details.

	}]		
ManagedBy@odata.count	integer _read-only_	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
RackPDUs [{	array	An array of links to the rack-level power distribution units in this power domain.
@odata.id	string _read-only_	Link to a PowerDistribution resource. See the Links section and the _PowerDistribution_ schema for details.
}]		
RackPDUs@odata.count	integer _read-only_	The number of items in a collection.
Switchgear [{	array	An array of links to the switchgear in this power domain.
@odata.id	string _read-only_	Link to a PowerDistribution resource. See the Links section and the _PowerDistribution_ schema for details.
}]		
Switchgear@odata.count	integer _read-only_	The number of items in a collection.
TransferSwitches [{	array	An array of links to the transfer switches in this power domain.
@odata.id	string _read-only_	Link to a PowerDistribution resource. See the Links section and the _PowerDistribution_ schema for details.
}]		
TransferSwitches@odata.count	integer _read-only_	The number of items in a collection.
}		
Name	string _read-only_ _required_	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.109 PowerDomainCollection

URIs:

/redfish/v1/Facilities/*{FacilityId}*/PowerDomains

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a PowerDomain resource. See the Links section and the *PowerDomain* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.

Oem {}	object	The OEM extension property. For property details, see Oem.

6.110 PowerEquipment 1.0.0

v1.0
2019.4

This is the schema definition for the set of power equipment.

URIs:

/redfish/v1/PowerEquipment

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
FloorPDUs {	object	A link to a collection of floor power distribution units. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *PowerDistribution*. See the PowerDistribution schema for details.
}		

Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
ManagedBy [{	array	An array of links to the managers responsible for managing this power equipment.
@odata.id	string *read-only*	Link to a Manager resource. See the Links section and the *Manager* schema for details.
}]		
ManagedBy@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
RackPDUs {	object	A link to a collection of rack-level power distribution units. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *PowerDistribution*. See the PowerDistribution schema for details.
}		
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
Switchgear {	object	A link to a collection of switchgear. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *PowerDistribution*. See the PowerDistribution schema for details.
}		
TransferSwitches {	object	A link to a collection of transfer switches. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *PowerDistribution*. See the PowerDistribution schema for details.

}		

6.111 PrivilegeRegistry 1.1.4

v1.1	v1.0
2017.1	2016.3

The PrivilegeRegistry schema describes the operation-to-privilege mappings.

@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Mappings [{	array	The mappings between entities and the relevant privileges that access those entities.
Entity	string *read-only*	The Resource name, such as `Manager` .
OperationMap {	object	List mapping between HTTP methods and privilege required for the Resource.
DELETE [{	array	The privilege required to complete an HTTP DELETE operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
GET [{	array	The privilege required to complete an HTTP GET operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		

HEAD [{	array	The privilege required to complete an HTTP HEAD operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
PATCH [{	array	The privilege required to complete an HTTP PATCH operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
POST [{	array	The privilege required to complete an HTTP POST operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
PUT [{	array	The privilege required to complete an HTTP PUT operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
}		
PropertyOverrides [{	array	The privilege overrides of properties within a Resource.
OperationMap {	object	The mapping between the HTTP operation and the privilege required to complete the operation.
DELETE [{	array	The privilege required to complete an HTTP DELETE operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
GET [{	array	The privilege required to complete an HTTP GET operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
HEAD [{	array	The privilege required to complete an HTTP HEAD operation.

Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]			
PATCH [{	array	The privilege required to complete an HTTP PATCH operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]			
POST [{	array	The privilege required to complete an HTTP POST operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]			
PUT [{	array	The privilege required to complete an HTTP PUT operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]			
}			
Targets [ ]	array (string, null) *read-only*	The set of URIs, Resource types, or properties.
}]			
ResourceURIOverrides [{	array	The privilege overrides of Resource URIs.
OperationMap {	object	The mapping between the HTTP operation and the privilege required to complete the operation.
DELETE [{	array	The privilege required to complete an HTTP DELETE operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]			
GET [{	array	The privilege required to complete an HTTP GET operation.

Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
HEAD [{	array	The privilege required to complete an HTTP HEAD operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
PATCH [{	array	The privilege required to complete an HTTP PATCH operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
POST [{	array	The privilege required to complete an HTTP POST operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
PUT [{	array	The privilege required to complete an HTTP PUT operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
}		
Targets [ ]	array (string, null) *read-only*	The set of URIs, Resource types, or properties.
}]		
SubordinateOverrides [{	array	The privilege overrides of the subordinate Resource.
OperationMap {	object	The mapping between the HTTP operation and the privilege required to complete the operation.
DELETE [{	array	The privilege required to complete an HTTP DELETE operation.

Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
GET [{	array	The privilege required to complete an HTTP GET operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
HEAD [{	array	The privilege required to complete an HTTP HEAD operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
PATCH [{	array	The privilege required to complete an HTTP PATCH operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
POST [{	array	The privilege required to complete an HTTP POST operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
PUT [{	array	The privilege required to complete an HTTP PUT operation.
Privilege [ ]	array (string) *read-only*	An array of privileges that are required to complete a specific HTTP operation on a Resource.
}]		
}		
Targets [ ]	array (string, null) *read-only*	The set of URIs, Resource types, or properties.
}]		

}]		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OEMPrivilegesUsed [ ]	array (string) *read-only*	The set of OEM privileges used in this mapping.
PrivilegesUsed [ ]	array (string (enum)) *read-only*	The set of Redfish standard privileges used in this mapping. *For the possible property values, see PrivilegesUsed in Property details.*

6.111.1 Property details

6.111.1.1 PrivilegesUsed

The set of Redfish standard privileges used in this mapping.

String	Description
ConfigureComponents	Can configure components that this service manages.
ConfigureManager	Can configure managers.
ConfigureSelf	Can change the password for the current user account and log out of their own sessions.
ConfigureUsers	Can configure users and their accounts.
Login	Can log in to the service and read Resources.
NoAuth	Authentication is not required.

6.112 Processor 1.9.0

v1.9	v1.8	v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2020.2	2020.1	2019.4	2019.3	2019.1	2018.3	2018.1	2017.3	2017.1	1.0

The Processor schema describes the information about a single processor that a system contains. A processor includes both performance characteristics, clock speed, architecture, core count, and so on, and compatibility, such as the CPU ID instruction results.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}* /redfish/v1/
CompositionService/ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*
/redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}* /redfish/v1/
CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*
} /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*
} /redfish/v1/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}* /redfish/v1/
Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
AccelerationFunctions *(v1.4+)* {	object	The link to the collection of acceleration functions associated with this processor. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *AccelerationFunction*. See the AccelerationFunction schema for details.
}		
Actions *(v1.1+)* {	object	The available actions for this resource.
#Processor.Reset *(v1.6+)* {}	object	This action resets the processor. *For more information, see the Actions section below.*

}		
AppliedOperatingConfig *(v1.9+)* {	object	The link to the operating configuration that is applied to this processor. See the *OperatingConfig* schema for details on this property.
@odata.id	string *read-only*	Link to a OperatingConfig resource. See the Links section and the *OperatingConfig* schema for details.
}		
Assembly *(v1.2+)* {	object	The link to an assembly associated with this processor. See the *Assembly* schema for details on this property.
@odata.id	string *read-only*	Link to a Assembly resource. See the Links section and the *Assembly* schema for details.
}		
BaseSpeedPriorityState *(v1.9+)*	string (enum) *read-only* *(null)*	The state of the base frequency settings of the operation configuration applied to this processor. *For the possible property values, see BaseSpeedPriorityState in Property details.*
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
FirmwareVersion *(v1.7+)*	string *read-only*	The firmware version of the processor.
FPGA *(v1.4+)* {	object	The properties for processors of the FPGA type.
ExternalInterfaces [{	array	An array of the FPGA external interfaces.
Ethernet {	object	The Ethernet-related information for this interface.
MaxLanes	integer *read-only* *(null)*	The number of lanes supported by this interface.

MaxSpeedMbps	integer (Mbit/s) *read-only* *(null)*	The maximum speed supported by this interface.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
InterfaceType	string (enum) *read-only* *(null)*	The interface type. *For the possible property values, see InterfaceType in Property details.*
PCIe {	object	The PCIe-related information for this interface. See the *PCIeDevice* schema for details on this property.
@odata.id	string *read-only*	Link to a PCIeInterface resource. See the Links section and the *PCIeDevice* schema for details.
}		
}]		
FirmwareId	string *read-only*	The FPGA firmware identifier.
FirmwareManufacturer	string *read-only*	The FPGA firmware manufacturer.
FirmwareVersion *(deprecated v1.9)*	string *read-only*	The FPGA firmware version. *Deprecated in v1.9 and later. This property has been deprecated in favor of the FirmwareVersion property in the root of this resource.*
FpgaType	string (enum) *read-only*	The FPGA type. *For the possible property values, see FpgaType in Property details.*
HostInterface *(deprecated v1.8)* {	object	The FPGA interface to the host. *Deprecated in v1.8 and later. This property has been deprecated in favor of the SystemInterface property in the root of this resource.*

Ethernet {	object	The Ethernet-related information for this interface.
MaxLanes	integer *read-only* *(null)*	The number of lanes supported by this interface.
MaxSpeedMbps	integer (Mbit/s) *read-only* *(null)*	The maximum speed supported by this interface.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
InterfaceType	string (enum) *read-only* *(null)*	The interface type. *For the possible property values, see InterfaceType in Property details.*
PCIe {	object	The PCIe-related information for this interface. See the *PCIeDevice* schema for details on this property.
@odata.id	string *read-only*	Link to a PCIeInterface resource. See the Links section and the *PCIeDevice* schema for details.
}		
}		
Model	string *read-only*	The FPGA model.
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeVirtualFunctions	integer *read-write*	The number of the PCIe Virtual Functions.

ProgrammableFromHost	boolean *read-write* *(null)*	An indication of whether the FPGA firmware can be reprogrammed from the host by using system software.
ReconfigurationSlots [{	array	An array of the FPGA reconfiguration slots. An FPGA uses a reconfiguration slot to contain an acceleration function that can change as the FPGA is provisioned.
AccelerationFunction {	object	The link to the acceleration function that the code programmed into a reconfiguration slot provides. See the *AccelerationFunction* schema for details on this property.
@odata.id	string *read-only*	Link to a AccelerationFunction resource. See the Links section and the *AccelerationFunction* schema for details.
}		
ProgrammableFromHost	boolean *read-write* *(null)*	An indication of whether the reconfiguration slot can be reprogrammed from the host by using system software.
SlotId	string *read-only* *(null)*	The FPGA reconfiguration slot identifier.
UUID	string *read-only* *(null)*	The UUID for this reconfiguration slot. *For more information about this property, see Property details.*
}]		
}		
HighSpeedCoreIDs *(v1.9+)* [ ]	array (integer, null) *read-only*	The list of core identifiers corresponding to the cores that have been configured with the higher clock speed from the operating configuration applied to this processor.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.

InstructionSet	string (enum) read-only (null)	The instruction set of the processor. *For the possible property values, see InstructionSet in Property details.*
Links *(v1.1+)* {	object	The links to other resources that are related to this resource.
Chassis {	object	The link to the chassis that contains this processor. See the *Chassis* schema for details on this property.
@odata.id	string read-only	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}		
ConnectedProcessors *(v1.4+)* [{	array	An array of links to the processors directly connected to this processor.
@odata.id	string read-only	Link to another Processor resource.
}]		
ConnectedProcessors@odata.count	integer read-only	The number of items in a collection.
Endpoints *(v1.4+)* [{	array	An array of links to the endpoints that connect to this processor.
@odata.id	string read-only	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Endpoints@odata.count	integer read-only	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeDevice *(v1.4+)* {	object	The link to the PCIe device associated with this processor. See the *PCIeDevice* schema for details on this property.

@odata.id	string *read-only*	Link to a PCIeDevice resource. See the Links section and the *PCIeDevice* schema for details.
}		
PCIeFunctions *(v1.4+)* [{	array	An array of links to the PCIeFunctions associated with this processor.
@odata.id	string *read-only*	Link to a PCIeFunction resource. See the Links section and the *PCIeFunction* schema for details.
}]		
PCIeFunctions@odata.count	integer *read-only*	The number of items in a collection.
}		
Location *(v1.2+)* {}	object	The location of the processor. For property details, see Location.
Manufacturer	string *read-only* *(null)*	The processor manufacturer.
MaxSpeedMHz	integer (MHz) *read-only* *(null)*	The maximum clock speed of the processor.
MaxTDPWatts *(v1.4+)*	integer (W) *read-only* *(null)*	The maximum Thermal Design Power (TDP) in watts.
Metrics *(v1.4+)* {	object	The link to the metrics associated with this processor. See the *ProcessorMetrics* schema for details on this property.
@odata.id	string *read-only*	Link to a ProcessorMetrics resource. See the Links section and the *ProcessorMetrics* schema for details.

}		
MinSpeedMHz *(v1.8+)*	integer (MHz) *read-only* *(null)*	The minimum clock speed of the processor in MHz.
Model	string *read-only* *(null)*	The product model number of this device.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OperatingConfigs *(v1.9+)* {	object	The link to the collection operating configurations that can be applied to this processor. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *OperatingConfig*. See the OperatingConfig schema for details.
}		
OperatingSpeedMHz *(v1.8+)*	integer (MHz) *read-only* *(null)*	Operating speed of the processor in MHz.
PartNumber *(v1.7+)*	string *read-only* *(null)*	The part number of the processor.
ProcessorArchitecture	string (enum) *read-only* *(null)*	The architecture of the processor. *For the possible property values, see ProcessorArchitecture in Property details.*

ProcessorId {	object	The identification information for this processor. *For more information about this property, see Property details.*
EffectiveFamily	string *read-only* *(null)*	The effective family for this processor.
EffectiveModel	string *read-only* *(null)*	The effective model for this processor.
IdentificationRegisters	string *read-only* *(null)*	The raw manufacturer-provided processor identification registers for this processor.
MicrocodeInfo	string *read-only* *(null)*	The microcode information for this processor.
Step	string *read-only* *(null)*	The step value for this processor.
VendorId	string *read-only* *(null)*	The vendor identification for this processor.
}		
ProcessorMemory *(v1.4+)* [{	array	The memory directly attached or integrated within this processor.
CapacityMiB	integer (MiBy) *read-only* *(null)*	The memory capacity in MiB.

IntegratedMemory	boolean *read-only* *(null)*	An indication of whether this memory is integrated within the processor.
MemoryType	string (enum) *read-only* *(null)*	The type of memory used by this processor. *For the possible property values, see MemoryType in Property details.*
SpeedMHz	integer *read-only* *(null)*	The operating speed of the memory in MHz.
}]		
ProcessorType	string (enum) *read-only* *(null)*	The type of processor. *For the possible property values, see ProcessorType in Property details.*
SerialNumber *(v1.7+)*	string *read-only* *(null)*	The serial number of the processor.
Socket	string *read-only* *(null)*	The socket or location of the processor.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
SubProcessors *(v1.3+)* {	object	The link to the collection of sub-processors associated with this system, such as cores or threads, that are part of a processor. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Processor*. See the Processor schema for details.
}		

SystemInterface *(v1.8+)* {	object	The interface between the system and the processor.
Ethernet {	object	The Ethernet-related information for this interface.
MaxLanes	integer *read-only* *(null)*	The number of lanes supported by this interface.
MaxSpeedMbps	integer (Mbit/s) *read-only* *(null)*	The maximum speed supported by this interface.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
InterfaceType	string (enum) *read-only* *(null)*	The interface type. *For the possible property values, see InterfaceType in Property details.*
PCIe {	object	The PCIe-related information for this interface. See the *PCIeDevice* schema for details on this property.
@odata.id	string *read-only*	Link to a PCIeInterface resource. See the Links section and the *PCIeDevice* schema for details.
}		
}		
TDPWatts *(v1.4+)*	integer (W) *read-only* *(null)*	The nominal Thermal Design Power (TDP) in watts.
TotalCores	integer *read-only* *(null)*	The total number of cores that this processor contains.

TotalEnabledCores *(v1.5+)*	integer *read-only* *(null)*	The total number of enabled cores that this processor contains.
TotalThreads	integer *read-only* *(null)*	The total number of execution threads that this processor supports.
TurboState *(v1.9+)*	string (enum) *read-only* *(null)*	The state of the turbo for this processor. *For the possible property values, see TurboState in Property details.*
UUID *(v1.4+)*	string *read-only* *(null)*	The UUID for this processor. *For more information about this property, see Property details.*
Version *(v1.7+)*	string *read-only* *(null)*	The hardware version of the processor.

6.112.1 Actions

6.112.1.1 Reset

This action resets the processor.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Processors/{*ProcessorId*}/Actions/Processor.Reset
/redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Processors/{*ProcessorId*}/SubProcessors/{*ProcessorId2*}/Actions/Processor.Reset
/redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/Actions/Processor.Reset
/redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/SubProcessors/{*ProcessorId2*}/Actions/Processor.Reset /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Processors/{*ProcessorId*}/Actions/
Processor.Reset /redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/Actions/Processor.Reset
/redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/Actions/
Processor.Reset /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/Actions/Processor.Reset /redfish/v1/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/Actions/Processor.Reset
/redfish/v1/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/Actions/
Processor.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ResetType	string (enum) *optional*	The type of reset. *For the possible property values, see ResetType in Property details.*
}		

6.112.2 Property details

6.112.2.1 BaseSpeedPriorityState

The state of the base frequency settings of the operation configuration applied to this processor.

String	Description
Disabled	Base speed priority is disabled.
Enabled	Base speed priority is enabled.

6.112.2.2 FpgaType

The FPGA type.

String	Description
Discrete	The discrete FPGA device.
Integrated	The FPGA device integrated with other processor in the single chip.

6.112.2.3 InstructionSet

The instruction set of the processor.

String	Description
ARM-A32	ARM 32-bit.
ARM-A64	ARM 64-bit.
IA-64	Intel IA-64.
MIPS32	MIPS 32-bit.
MIPS64	MIPS 64-bit.
OEM	OEM-defined.
PowerISA *(v1.4+)*	PowerISA-64 or PowerISA-32.
x86	x86 32-bit.
x86-64	x86 64-bit.

6.112.2.4 InterfaceType

The interface type.

String	Description
AMBA *(v1.8+)*	The Arm Advanced Microcontroller Bus Architecture interface.
CCIX *(v1.8+)*	The Cache Coherent Interconnect for Accelerators interface.
CXL *(v1.8+)*	The Compute Express Link interface.
Ethernet	An Ethernet interface.
OEM	An OEM-defined interface.
PCIe	A PCI Express interface.
QPI	The Intel QuickPath Interconnect.
UPI	The Intel UltraPath Interconnect.

6.112.2.5 MemoryType

The type of memory used by this processor.

String	Description
DDR	Double data rate synchronous dynamic random-access memory.
DDR2	Double data rate type two synchronous dynamic random-access memory.

String	Description
DDR3	Double data rate type three synchronous dynamic random-access memory.
DDR4	Double data rate type four synchronous dynamic random-access memory.
DDR5	Double data rate type five synchronous dynamic random-access memory.
Flash	Flash memory.
GDDR	Synchronous graphics random-access memory.
GDDR2	Double data rate type two synchronous graphics random-access memory.
GDDR3	Double data rate type three synchronous graphics random-access memory.
GDDR4	Double data rate type four synchronous graphics random-access memory.
GDDR5	Double data rate type five synchronous graphics random-access memory.
GDDR5X	Double data rate type five synchronous graphics random-access memory.
GDDR6	Double data rate type five synchronous graphics random-access memory.
HBM1	High Bandwidth Memory.
HBM2	The second generation of High Bandwidth Memory.
HBM3	The third generation of High Bandwidth Memory.
L1Cache	L1 cache.
L2Cache	L2 cache.
L3Cache	L3 cache.
L4Cache	L4 cache.
L5Cache	L5 cache.
L6Cache	L6 cache.
L7Cache	L7 cache.
OEM	OEM-defined.
SDRAM	Synchronous dynamic random-access memory.
SGRAM	Synchronous graphics RAM.
SRAM	Static random-access memory.

6.112.2.6 ProcessorArchitecture

The architecture of the processor.

String	Description
ARM	ARM.
IA-64	Intel Itanium.
MIPS	MIPS.
OEM	OEM-defined.
Power *(v1.4+)*	Power.
x86	x86 or x86-64.

6.112.2.7 ProcessorId

The identification information for this processor.

This object's properties shall contain values that depend on the `ProcessorArchitecture` property value, as the following sections list.

6.112.2.8 ProcessorArchitecture: x86

When the `ProcessorArchitecture` property value is `x86`, some properties are defined by using the following pseudo-code functions:

- `cpuid`. The x86 CPUID instruction uses the `eax` register value and, optionally, the `ecx` register value, executes the instruction, and returns values in the `eax`, `ebx`, `ecx`, and `edx` registers. For example:

    ```
    (eax, ebx, ecx, edx) = cpuid(eax=M [,ecx=N]);
    ```

- `rdmsr`. The x86 RDMSR instruction takes an input argument in the `ecx` register, executes the instruction, and returns values in the `eax` and `edx` registers. For example:

    ```
    (eax, edx) = rdmsr(ecx=M);
    ```

6.112.2.8.1 VendorId

This property shall contain the 12-byte, little-endian, ASCII string that results from the execution of the processor's CPUID instruction. This string is derived by using this algorithm:

6.112.2.9 ProcessorType

The type of processor.

String	Description
Accelerator	An accelerator.
Core *(v1.3+)*	A core in a processor.
CPU	A CPU.
DSP	A DSP.
FPGA	An FPGA.
GPU	A GPU.
OEM	An OEM-defined processing unit.
Thread *(v1.3+)*	A thread in a processor.

6.112.2.10 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.
On	Turn on the unit.
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.112.2.11 TurboState

The state of the turbo for this processor.

String	Description
Disabled	Turbo is disabled.
Enabled	Turbo is enabled.

6.112.2.12 UUID

The UUID for this processor.

The UUID property contains the value of the Universally Unique IDentifier (UUID) of a system, also known in some systems as GUIDs (Globally Unique IDentifier). A UUID is 128 bits long (16 bytes).

Redfish clients should consider the value of the property to be opaque and should not interpret any sub-fields within the UUID.

The UUID property is a string data type. The RFC4122-specified 35-character string format is `xxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx` , where each `x` represents a hexadecimal value from `0` to `f` .

If the computer system supports SMBIOS, the UUID string should be formed from the raw binary 16-byte SMBIOS UUID structure. This allows out-of-band clients to correlate the UUID that in-band agents are reading from SMBIOS. The UUID is represented out-of-band through the Redfish API.

6.112.2.13 Case sensitivity

Regarding the case of the hex values, RFC4122 specifies that the hex values should be lowercase characters. Most modern scripting languages typically also represent hex values in lowercase characters following the RFC. However, dmidecode, WMI and some Redfish implementations currently use uppercase characters for UUID on output.

Comparisons between UUID values should always be case-insensitive.

For new Redfish implementations, the recommendation is to follow RFC4122 guidelines: output using lower-case hex values when converting from the SMBIOS raw binary data.

Redfish implementations and operating system APIs are permitted to output in uppercase. For that reason, Redfish clients MUST compare UUIDs using a case-insensitive comparison (as recommended by RFC4122).

6.112.2.14 Conversion of UUID format

The SMBIOS 2.6 and later specification specifies the proper algorithm for converting the raw binary SMBIOS 16-byte

structure into the canonical string format of `xxxxxx-xxxx-xxxx-xxxx-xxxxxx`). Redfish services should follow the SMBIOS 2.6 and later specification for implementing this conversion.

WMI and Linux dmidecode also follow the SMBIOS guidelines.

Specifically, RFC4122 defines that the canonical string value should follow network byte ordering. The SMBIOS represents the UUID as these fields:

```
{
 DWORD    time_low,
 WORD     time_mid,
 WORD     time_hi_and_version,
 BYTE     clock_seq_hi_and_reserved,
 BYTE     clock_seq_low,
 BYTE[6]  node
}
```

Little-endian systems (including x86 systems) require a little-endian to network-byte-order conversion for the first three fields in order to convert the SMBIOS binary UUID to network byte order.

As specified in the SMBIOS 2.6 and later specifications, if the canonical UUID string is:

```
00112233-4455-6677-8899-aabbccddeeff
```

The corresponding raw representation in the SMBIOS UUID structure is:

```
raw_smbios_uuid = {
  0x33,
  0x22,
  0x11,
  0x00,
  0x55,
  0x44,
  0x77,
  0x66,
  0x88,
  0x99,
  0xAA,
  0xBB,
  0xCC,
  0xDD,
  0xEE,
  0xFF
}
```

Notice in the above SMBIOS representation that each of the first three words boundaries are in little-endian order. For example, the hex digits "00112233" are represented by the first raw SMBIOS 4-byte DWORD "0x33, 0x22, 0x11, 0x00".

The following sample code (written in C) could be used to convert the raw SMBIOS UUID struct in a little-endian system to the 35-character canonical string:

```
sprintf(
  redfishUUID,
  "%02x%02x%02x%02x-%02x%02x-%02x%02x-%02x%02x-%02x%02x%02x%02x%02x%02x")
raw_smbios_uuid[3], raw_smbios_uuid[2],
  raw_smbios_uuid[1], raw_smbios_uuid[0],
  raw_smbios_uuid[5], raw_smbios_uuid[4],
  raw_smbios_uuid[7], raw_smbios_uuid[6],
  raw_smbios_uuid[8], raw_smbios_uuid[9],
  raw_smbios_uuid[10], raw_smbios_uuid[11],
  raw_smbios_uuid[12], raw_smbios_uuid[13],
  raw_smbios_uuid[14], raw_smbios_uuid[15]
);
```

The previous sample code creates the same canonical-formated string as WMI and dmidecode for little-endian X86 systems.

If the computer architecture is not little-endian, then the conversion and canonical representation should be the same as the operating system's APIs, such as WMI and dmidecode.

> **Note:** As specified in RFC4122, the fields in the string should be zero-filled hexadecimal values, as shown in the previous conversion code, so that the overall string length and format is `xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx`.

6.113 ProcessorCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Processors/{*ProcessorId*}/SubProcessors /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors /redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/SubProcessors /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Processors/{*ProcessorId*}/SubProcessors /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/SubProcessors /redfish/v1/Systems/{*ComputerSystemId*}/Processors /redfish/v1/Systems/{*ComputerSystemId*}/Processors/{*ProcessorId*}/SubProcessors

	string	The OData description of a payload.
@odata.context	*read-only*	
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Processor resource. See the Links section and the *Processor* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.114 ProcessorMetrics 1.1.1

v1.1	*v1.0*
2020.1	2018.3

The ProcessorMetrics schema contains usage and health statistics for a processor.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/ProcessorMetrics /redfish/v1/CompositionService/ ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/ProcessorMetrics /redfish/ v1/CompositionService/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/ProcessorMetrics /redfish/ v1/CompositionService/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/ProcessorMetrics /redfish/v1/CompositionService/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/ProcessorSummary/ProcessorMetrics /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/ProcessorMetrics /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/ProcessorMetrics /redfish/ v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/ProcessorMetrics /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/ProcessorMetrics /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/ProcessorSummary/ ProcessorMetrics /redfish/v1/Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/ProcessorMetrics /redfish/v1/ Systems/*{ComputerSystemId}*/Processors/*{ProcessorId}*/SubProcessors/*{ProcessorId2}*/ProcessorMetrics /redfish/v1/ Systems/*{ComputerSystemId}*/ProcessorSummary/ProcessorMetrics

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
AverageFrequencyMHz *(deprecated v1.1)*	number (MHz) *read-only* *(null)*	The average frequency of the processor. *Deprecated in v1.1 and later. This property has been deprecated in favor of OperatingSpeedMHz property.*

BandwidthPercent	number (%) *read-only (null)*	The CPU bandwidth as a percentage.
Cache [{	array	The processor cache metrics.
CacheMiss	number *read-only (null)*	The number of cache line misses in millions.
CacheMissesPerInstruction	number *read-only (null)*	The number of cache misses per instruction.
HitRatio	number *read-only (null)*	The cache line hit ratio.
Level	string *read-only (null)*	The cache level.
OccupancyBytes	integer (By) *read-only (null)*	The total cache level occupancy in bytes.
OccupancyPercent	number (%) *read-only (null)*	The total cache occupancy percentage.
}]		
ConsumedPowerWatt	number (W) *read-only (null)*	The power, in watts, that the processor has consumed.
CoreMetrics [{	array	The processor core metrics.
CoreCache [{	array	The cache metrics of this core in the processor.

CacheMiss	number *read-only (null)*	The number of cache line misses in millions.
CacheMissesPerInstruction	number *read-only (null)*	The number of cache misses per instruction.
HitRatio	number *read-only (null)*	The cache line hit ratio.
Level	string *read-only (null)*	The cache level.
OccupancyBytes	integer (By) *read-only (null)*	The total cache level occupancy in bytes.
OccupancyPercent	number (%) *read-only (null)*	The total cache occupancy percentage.
}]		
CoreId	string *read-only (null)*	The processor core identifier.
CStateResidency [{	array	The C-state residency of this core in the processor.
Level	string *read-only (null)*	The C-state level, such as C0, C1, or C2.
ResidencyPercent	number (%) *read-only (null)*	The percentage of time that the processor or core has spent in this particular level of C-state.
}]		

InstructionsPerCycle	number *read-only* *(null)*	The number of instructions per clock cycle of this core.
IOStallCount	number *read-only* *(null)*	The number of stalled cycles due to I/O operations.
MemoryStallCount	number *read-only* *(null)*	The number of stalled cycles due to memory operations.
UnhaltedCycles	number *read-only* *(null)*	The unhalted cycles count of this core.
}]		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
FrequencyRatio	number *read-only* *(null)*	The frequency relative to the nominal processor frequency ratio.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
KernelPercent	number (%) *read-only* *(null)*	The percentage of time spent in kernel mode.
LocalMemoryBandwidthBytes	integer (By) *read-only* *(null)*	The local memory bandwidth usage in bytes.
Name	string *read-only* *required*	The name of the resource or array member.

Oem {}	object	The OEM extension property. For property details, see Oem.
OperatingSpeedMHz *(v1.1+)*	integer (MHz) *read-only (null)*	Operating speed of the processor in MHz.
RemoteMemoryBandwidthBytes	integer (By) *read-only (null)*	The remote memory bandwidth usage in bytes.
TemperatureCelsius	number (Cel) *read-only (null)*	The temperature of the processor.
ThrottlingCelsius	number (Cel) *read-only (null)*	The CPU margin to throttle (temperature offset in degree Celsius).
UserPercent	number (%) *read-only (null)*	The percentage of time spent in user mode.

6.115 ResourceBlock 1.3.3

v1.3	*v1.2*	*v1.1*	*v1.0*
2018.3	2018.2	2018.1	2017.1

The ResourceBlock schema contains definitions resource blocks, its components, and affinity to composed devices.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}* /redfish/v1/ResourceBlocks/*{ResourceBlockId}*

@odata.context	string *read-only*	The OData description of a payload.

@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
CompositionStatus {	object * required*	The composition status details for this resource block.
CompositionState	string (enum) *read-only* *required* (null)*	The current state of the resource block from a composition perspective. *For the possible property values, see CompositionState in Property details.*
MaxCompositions *(v1.1+)*	integer *read-only* (null)*	The maximum number of compositions in which this resource block can participate simultaneously.
NumberOfCompositions *(v1.1+)*	integer *read-only* (null)*	The number of compositions in which this resource block is currently participating.
Reserved	boolean *read-write* (null)*	An indication of whether any client has reserved the resource block.
SharingCapable *(v1.1+)*	boolean *read-only* (null)*	An indication of whether this resource block can participate in multiple compositions simultaneously.
SharingEnabled *(v1.1+)*	boolean *read-write* (null)*	An indication of whether this resource block is allowed to participate in multiple compositions simultaneously.

}		
ComputerSystems [{	array	An array of links to the computer systems available in this resource block.
@odata.id	string *read-only*	Link to a ComputerSystem resource. See the Links section and the *ComputerSystem* schema for details.
}]		
ComputerSystems@odata.count	integer *read-only*	The number of items in a collection.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Drives *(v1.3+)* [{	array	An array of links to the drives available in this resource block.
@odata.id	string *read-only*	Link to a Drive resource. See the Links section and the *Drive* schema for details.
}]		
Drives@odata.count	integer *read-only*	The number of items in a collection.
EthernetInterfaces [{	array	An array of links to the Ethernet interfaces available in this resource block.
@odata.id	string *read-only*	Link to a EthernetInterface resource. See the Links section and the *EthernetInterface* schema for details.
}]		
EthernetInterfaces@odata.count	integer *read-only*	The number of items in a collection.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
Chassis [{	array	An array of links to the chassis in which this resource block is contained.

@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.	
}]			
Chassis@odata.count	integer *read-only*	The number of items in a collection.	
ComputerSystems [{	array	An array of links to the computer systems that are composed from this resource block.	
@odata.id	string *read-only*	Link to a ComputerSystem resource. See the Links section and the *ComputerSystem* schema for details.	
}]			
ComputerSystems@odata.count	integer *read-only*	The number of items in a collection.	
Oem {}	object	The OEM extension property. For property details, see Oem.	
Zones [{	array	An array of links to the zones in which this resource block is bound.	
@odata.id	string *read-only*	Link to a Zone resource. See the Links section and the *Zone* schema for details.	
}]			
Zones@odata.count	integer *read-only*	The number of items in a collection.	
}			
Memory [{	array	An array of links to the memory available in this resource block.	
@odata.id	string *read-only*	Link to a Memory resource. See the Links section and the *Memory* schema for details.	
}]			
Memory@odata.count	integer *read-only*	The number of items in a collection.	
Name	string *read-only* *required*	The name of the resource or array member.	

NetworkInterfaces [{	array	An array of links to the Network Interfaces available in this resource block.
@odata.id	string *read-only*	Link to a NetworkInterface resource. See the Links section and the *NetworkInterface* schema for details.
}]		
NetworkInterfaces@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
Processors [{	array	An array of links to the processors available in this resource block.
@odata.id	string *read-only*	Link to a Processor resource. See the Links section and the *Processor* schema for details.
}]		
Processors@odata.count	integer *read-only*	The number of items in a collection.
ResourceBlockType [ ]	array (string (enum)) *read-only*	The types of resources available on this resource block. *For the possible property values, see ResourceBlockType in Property details.*
SimpleStorage [{	array	An array of links to the simple storage available in this resource block.
@odata.id	string *read-only*	Link to a SimpleStorage resource. See the Links section and the *SimpleStorage* schema for details.
}]		
SimpleStorage@odata.count	integer *read-only*	The number of items in a collection.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
Storage [{	array	An array of links to the storage available in this resource block.
@odata.id	string *read-only*	Link to a Storage resource. See the Links section and the *Storage* schema for details.
}]		

	integer	The number of items in a collection.
Storage@odata.count	*read-only*	

6.115.1 Property details

6.115.1.1 CompositionState

The current state of the resource block from a composition perspective.

String	Description
Composed	Final successful state of a resource block that has participated in composition.
ComposedAndAvailable *(v1.1+)*	The resource block is currently participating in one or more compositions, and is available to use in more compositions.
Composing	Intermediate state indicating composition is in progress.
Failed	The final composition resulted in failure and manual intervention might be required to fix it.
Unavailable *(v1.2+)*	The resource block has been made unavailable by the service, such as due to maintenance being performed on the resource block.
Unused	The resource block is free and can participate in composition.

6.115.1.2 ResourceBlockType

The types of resources available on this resource block.

String	Description
Compute	This resource block contains resources of type `Processor` and `Memory` in a manner that creates a compute complex.
ComputerSystem	This resource block contains resources of type `ComputerSystem` .
Expansion	This resource block is capable of changing over time based on its configuration. Different types of devices within this resource block can be added and removed over time.
Memory	This resource block contains resources of type `Memory` .
Network	This resource block contains network resources, such as resource of type `EthernetInterface` and `NetworkInterface` .
Processor	This resource block contains resources of type `Processor` .
Storage	This resource block contains storage resources, such as resources of type `Storage` and `SimpleStorage` .

6.116 ResourceBlockCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks /redfish/v1/ResourceBlocks

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a ResourceBlock resource. See the Links section and the *ResourceBlock* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.117 Role 1.2.5

v1.2	v1.1	v1.0
2017.2	2017.1	1.0

The Role schema contains a Redfish role to use in conjunction with a manager account.

URIs:

/redfish/v1/AccountService/Roles/*{RoleId}* /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/Roles/*{RoleId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only required*	The unique identifier for a resource.
@odata.type	string *read-only required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this resource.
AssignedPrivileges [ ]	array (string (enum)) *read-write*	The Redfish privileges for this role. *For the possible property values, see AssignedPrivileges in Property details.*
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
IsPredefined	boolean *read-only*	An indication of whether the role is a Redfish-predefined role rather than a custom Redfish role.

Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OemPrivileges [ ]	array (string) *read-write*	The OEM privileges for this role.
RoleId *(v1.2+)*	string *read-only required on create*	The name of the role.

6.117.1 Property details

6.117.1.1 AssignedPrivileges

The Redfish privileges for this role.

String	Description
ConfigureComponents	Can configure components that this service manages.
ConfigureManager	Can configure managers.
ConfigureSelf	Can change the password for the current user account and log out of their own sessions.
ConfigureUsers	Can configure users and their accounts.
Login	Can log in to the service and read Resources.
NoAuth	Authentication is not required.

6.118 RoleCollection

URIs:

/redfish/v1/AccountService/Roles /redfish/v1/Managers/*{ManagerId}*/RemoteAccountService/Roles

@odata.context	string *read-only*	The OData description of a payload.

	string	
@odata.etag	*read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Role resource. See the Links section and the *Role* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.119 RouteEntry 1.0.0

v1.0
2019.4

The RouteEntry schema describes the content of route entry rows. Each route entry contains route sets that list the possible routes for the route entry.

URIs:

/redfish/v1/Fabrics/*{FabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/LPRT/*{LPRTId}* /redfish/v1/
Fabrics/*{FabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/MPRT/*{MPRTId}* /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/MSDT/*{MSDTId}* /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/LPRT/*{LPRTId}* /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/MPRT/*{MPRTId}* /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/SSDT/*{SSDTId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
MinimumHopCount	integer *read-write*	The minimum number of hops.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
RawEntryHex	string *read-write*	The raw data of route entry rows.

RouteSet {	object	The link to the collection of route set entries associated with this route. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *RouteSetEntry*. See the RouteSetEntry schema for details.
}		

6.120 RouteEntryCollection

URIs:

/redfish/v1/Fabrics/*{FrabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/LPRT /redfish/v1/
Fabrics/*{FrabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/MPRT /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/MSDT /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/LPRT /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/MPRT /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/SSDT

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a RouteEntry resource. See the Links section and the *RouteEntry* schema for details.
}]		

	integer	
Members@odata.count	read-only	The number of items in a collection.
Members@odata.nextLink	string read-only	The URI to the resource containing the next set of partial members.
Name	string read-only	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.121 RouteSetEntry 1.0.0

v1.0
2019.4

The RouteSetEntry schema contains the information about a route. It is part of a larger set that contains possible routes for a particular route entry.

URIs:

/redfish/v1/Fabrics/*{FabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/LPRT/*{LPRTId}*/RouteSet/*{RouteId}* /redfish/v1/ Fabrics/*{FabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/MPRT/*{MPRTId}*/RouteSet/*{RouteId}* /redfish/v1/ Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/MSDT/*{MSDTId}*/RouteSet/*{RouteId}* /redfish/v1/ Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/LPRT/*{LPRTId}*/RouteSet/*{RouteId}* /redfish/v1/ Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/MPRT/*{MPRTId}*/RouteSet/*{RouteId}* /redfish/v1/Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/SSDT/*{SSDTId}*/RouteSet/*{RouteId}*

	string	
@odata.context	read-only	The OData description of a payload.
@odata.etag	string read-only	The current ETag of the resource.
@odata.id	string read-only required	The unique identifier for a resource.

@odata.type	string *read-only required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
EgressIdentifier	integer *read-write*	The egress interface identifier.
HopCount	integer *read-write*	The number of hops.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Valid	boolean *read-write*	An indication of whether the entry is valid.
VCAction	integer *read-write*	The Virtual Channel Action index.

6.122 RouteSetEntryCollection

URIs:

/redfish/v1/Fabrics/*{FrabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/LPRT/*{LPRTId}*/RouteSet /redfish/v1/
Fabrics/*{FrabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/MPRT/*{MPRTId}*/RouteSet /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/MSDT/*{MSDTId}*/RouteSet /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/LPRT/*{LPRTId}*/RouteSet /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/MPRT/*{MPRTId}*/RouteSet /redfish/v1/
Systems/*{ComputerSystemId}*/FabricAdapters/*{FabricAdapterId}*/SSDT/*{SSDTId}*/RouteSet

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a RouteSetEntry resource. See the Links section and the *RouteSetEntry* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.123 SecureBoot 1.1.0

v1.1	*v1.0*
2020.1	2016.1

The SecureBoot schema contains UEFI Secure Boot information and represents properties for managing the UEFI Secure Boot functionality of a system.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SecureBoot /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SecureBoot /redfish/v1/Systems/{*ComputerSystemId*}/SecureBoot

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#SecureBoot.ResetKeys {}	object	This action resets the UEFI Secure Boot keys. *For more information, see the Actions section below.*
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

	string (enum) read-only (null)	The UEFI Secure Boot state during the current boot cycle. *For the possible property values, see SecureBootCurrentBoot in Property details.*
SecureBootCurrentBoot		
SecureBootDatabases *(v1.1+)* {	object	A link to the collection of UEFI Secure Boot databases. Contains a link to a resource.
@odata.id	string read-only	Link to Collection of *SecureBootDatabase*. See the SecureBootDatabase schema for details.
}		
SecureBootEnable	boolean read-write (null)	An indication of whether UEFI Secure Boot is enabled.
SecureBootMode	string (enum) read-only (null)	The current UEFI Secure Boot Mode. *For the possible property values, see SecureBootMode in Property details.*

6.123.1 Actions

6.123.1.1 ResetKeys

This action resets the UEFI Secure Boot keys.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SecureBoot/Actions/ SecureBoot.ResetKeys /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/SecureBoot/ Actions/SecureBoot.ResetKeys /redfish/v1/Systems/{*ComputerSystemId*}/SecureBoot/Actions/SecureBoot.ResetKeys

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ResetKeysType	string (enum) required	The type of reset or delete to perform on the UEFI Secure Boot databases. *For the possible property values, see ResetKeysType in Property details.*
}		

6.123.2 Property details

6.123.2.1 ResetKeysType

The type of reset or delete to perform on the UEFI Secure Boot databases.

String	Description
DeleteAllKeys	Delete the contents of all UEFI Secure Boot key databases, including the PK key database. This puts the system in Setup Mode.
DeletePK	Delete the contents of the PK UEFI Secure Boot database. This puts the system in Setup Mode.
ResetAllKeysToDefault	Reset the contents of all UEFI Secure Boot key databases, including the PK key database, to the default values.

6.123.2.2 SecureBootCurrentBoot

The UEFI Secure Boot state during the current boot cycle.

String	Description
Disabled	UEFI Secure Boot is currently disabled.
Enabled	UEFI Secure Boot is currently enabled.

6.123.2.3 SecureBootMode

The current UEFI Secure Boot Mode.

String	Description
AuditMode	UEFI Secure Boot is currently in Audit Mode.
DeployedMode	UEFI Secure Boot is currently in Deployed Mode.
SetupMode	UEFI Secure Boot is currently in Setup Mode.
UserMode	UEFI Secure Boot is currently in User Mode.

6.124 SecureBootDatabase 1.0.0

v1.0
2020.1

The SecureBootDatabase schema describes a UEFI Secure Boot database used to store certificates or hashes.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/SecureBootDatabases/*{DatabaseId}*
/redfish/v1/Systems/*{ComputerSystemId}*/SecureBoot/SecureBootDatabases/*{DatabaseId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#SecureBootDatabase.ResetKeys **{}**	object	This action is used to reset the UEFI Secure Boot keys of this database. *For more information, see the Actions section below.*
}		
Certificates {	object	A link to the collection of certificates contained in this UEFI Secure Boot database. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Certificate*. See the Certificate schema for details.
}		
DatabaseId	string *read-only*	This property contains the name of the UEFI Secure Boot database.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

	string *read-only* *required*	
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Signatures {	object	A link to the collection of signatures contained in this UEFI Secure Boot database. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Signature*. See the Signature schema for details.
}		

6.124.1 Actions

6.124.1.1 ResetKeys

This action is used to reset the UEFI Secure Boot keys of this database.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Actions/SecureBootDatabase.ResetKeys /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Actions/SecureBootDatabase.ResetKeys /redfish/v1/
Systems/*{ComputerSystemId}*/SecureBoot/SecureBootDatabases/*{DatabaseId}*/Actions/SecureBootDatabase.ResetKeys

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ResetKeysType	string (enum) *required*	The type of reset or delete to perform on this UEFI Secure Boot database. *For the possible property values, see ResetKeysType in Property details.*
}		

6.124.2 Property details

6.124.2.1 ResetKeysType

The type of reset or delete to perform on this UEFI Secure Boot database.

String	Description
DeleteAllKeys	Delete the content of this UEFI Secure Boot key database.
ResetAllKeysToDefault	Reset the content of this UEFI Secure Boot key database to the default values.

6.125 SecureBootDatabaseCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases /redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases /redfish/v1/Systems/*{ComputerSystemId}*/SecureBoot/SecureBootDatabases

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.

Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a SecureBootDatabase resource. See the Links section and the *SecureBootDatabase* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.126 Sensor 1.1.1

v1.1	*v1.0*
2019.4	2018.3

The Sensor schema describes a sensor and its properties.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Sensors/*{SensorId}* /redfish/v1/PowerEquipment/
FloorPDUs/*{PowerDistributionId}*/Sensors/*{SensorId}* /redfish/v1/PowerEquipment/
RackPDUs/*{PowerDistributionId}*/Sensors/*{SensorId}* /redfish/v1/PowerEquipment/Sensors/*{SensorId}* /redfish/v1/
PowerEquipment/TransferSwitches/*{PowerDistributionId}*/Sensors/*{SensorId}*

@odata.context	string *read-only*	The OData description of a payload.

@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Accuracy	number (%) *read-only* *(null)*	The estimated percent error of measured versus actual values.
Actions {	object	The available actions for this resource.
#Sensor.ResetMetrics {}	object	Resets metrics related to this sensor. *For more information, see the Actions section below.*
}		
AdjustedMaxAllowableOperatingValue	number *read-only* *(null)*	The adjusted maximum allowable operating value for this equipment based on the environmental conditions.
AdjustedMinAllowableOperatingValue	number *read-only* *(null)*	The adjusted minimum allowable operating value for this equipment based on the environmental conditions.
ApparentVA	number (V.A) *read-only* *(null)*	The product of voltage and current for an AC circuit, in Volt-Ampere units.

CrestFactor *(v1.1+)*	number *read-only* *(null)*	The crest factor for this sensor.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
ElectricalContext	string (enum) *read-only* *(null)*	The combination of current-carrying conductors. *For the possible property values, see ElectricalContext in Property details.*
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Implementation *(v1.1+)*	string (enum) *read-only* *(null)*	The implementation of the sensor. *For the possible property values, see Implementation in Property details.*
LifetimeReading *(v1.1+)*	number *read-only* *(null)*	The total accumulation value for this sensor.
LoadPercent *(deprecated v1.1)*	number (%) *read-only* *(null)*	The power load utilization for this sensor. *Deprecated in v1.1 and later. This property has been deprecated in favor of using a sensor instance with a ReadingType of* `Percent` *to show utilization values when needed.*
Location {}	object	The location information for this sensor. For property details, see Location.
MaxAllowableOperatingValue	number *read-only* *(null)*	The maximum allowable operating value for this equipment.

MinAllowableOperatingValue	number *read-only* *(null)*	The minimum allowable operating value for this equipment.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PeakReading	number *read-only* *(null)*	The peak sensor value.
PeakReadingTime	string *read-only* *(null)*	The time when the peak sensor value occurred.
PhysicalContext	string (enum) *read-only* *(null)*	The area or device to which this sensor measurement applies. *For the possible property values, see PhysicalContext in Property details.*
PhysicalSubContext	string (enum) *read-only* *(null)*	The usage or location within a device to which this sensor measurement applies. *For the possible property values, see PhysicalSubContext in Property details.*
PowerFactor	number *read-only* *(null)*	The power factor for this sensor.
Precision	number *read-only* *(null)*	The number of significant digits in the reading.

ReactiveVAR	number (V.A) read-only (null)	The square root of the difference term of squared ApparentVA and squared Power (Reading) for a circuit, in var units.
Reading	number read-only (null)	The sensor value.
ReadingRangeMax	number read-only (null)	The maximum possible value for this sensor.
ReadingRangeMin	number read-only (null)	The minimum possible value for this sensor.
ReadingTime *(v1.1+)*	string read-only (null)	The date and time that the reading was acquired from the sensor.
ReadingType	string (enum) read-only (null)	The type of sensor. *For the possible property values, see ReadingType in Property details.*
ReadingUnits	string read-only (null)	The units of the reading and thresholds.
SensingFrequency *(deprecated v1.1)*	number read-only (null)	The time interval between readings of the physical sensor. *Deprecated in v1.1 and later. This property has been deprecated in favor of the SensingInterval property, which uses the duration time format for interoperability.*

SensingInterval *(v1.1+)*	string *read-only* *(null)*	The time interval between readings of the sensor.
SensorResetTime	string *read-only* *(null)*	The date and time when the time-based properties were last reset.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
THDPercent *(v1.1+)*	number *read-only* *(null)*	The total harmonic distortion (THD).
Thresholds {	object	The set of thresholds defined for this sensor.
LowerCaution {	object	The value at which the reading is below normal range.
Activation	string (enum) *read-write* *(null)*	The direction of crossing that activates this threshold. *For the possible property values, see Activation in Property details.*
DwellTime	string *read-write* *(null)*	The duration the sensor value must violate the threshold before the threshold is activated.
Reading	number *read-write* *(null)*	The threshold value.
}		
LowerCritical {	object	The value at which the reading is below normal range but not yet fatal.

	string (enum)	
Activation		The direction of crossing that activates this threshold. *For the possible property values, see Activation in Property details.*
	read-write (null)	
DwellTime	string	The duration the sensor value must violate the threshold before the threshold is activated.
	read-write (null)	
Reading	number	The threshold value.
	read-write (null)	
}		
LowerFatal {	object	The value at which the reading is below normal range and fatal.
Activation	string (enum)	The direction of crossing that activates this threshold. *For the possible property values, see Activation in Property details.*
	read-write (null)	
DwellTime	string	The duration the sensor value must violate the threshold before the threshold is activated.
	read-write (null)	
Reading	number	The threshold value.
	read-write (null)	
}		
UpperCaution {	object	The value at which the reading is above normal range.
Activation	string (enum)	The direction of crossing that activates this threshold. *For the possible property values, see Activation in Property details.*
	read-write (null)	

DwellTime	string *read-write* *(null)*	The duration the sensor value must violate the threshold before the threshold is activated.
Reading	number *read-write* *(null)*	The threshold value.
}		
UpperCritical {	object	The value at which the reading is above normal range but not yet fatal.
Activation	string (enum) *read-write* *(null)*	The direction of crossing that activates this threshold. *For the possible property values, see Activation in Property details.*
DwellTime	string *read-write* *(null)*	The duration the sensor value must violate the threshold before the threshold is activated.
Reading	number *read-write* *(null)*	The threshold value.
}		
UpperFatal {	object	The value at which the reading is above normal range and fatal.
Activation	string (enum) *read-write* *(null)*	The direction of crossing that activates this threshold. *For the possible property values, see Activation in Property details.*
DwellTime	string *read-write* *(null)*	The duration the sensor value must violate the threshold before the threshold is activated.

	number *read-write* *(null)*	
Reading		The threshold value.
}		
}		
VoltageType	string (enum) *read-only* *(null)*	The voltage type for this sensor. *For the possible property values, see VoltageType in Property details.*

6.126.1 Actions

6.126.1.1 ResetMetrics

Resets metrics related to this sensor.

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Sensors/*{SensorId}*/Actions/Sensor.ResetMetrics /redfish/v1/PowerEquipment/
FloorPDUs/*{PowerDistributionId}*/Sensors/*{SensorId}*/Actions/Sensor.ResetMetrics /redfish/v1/PowerEquipment/
RackPDUs/*{PowerDistributionId}*/Sensors/*{SensorId}*/Actions/Sensor.ResetMetrics /redfish/v1/PowerEquipment/
Sensors/*{SensorId}*/Actions/Sensor.ResetMetrics /redfish/v1/PowerEquipment/
TransferSwitches/*{PowerDistributionId}*/Sensors/*{SensorId}*/Actions/Sensor.ResetMetrics

(This action takes no parameters.)

6.126.2 Property details

6.126.2.1 Activation

The direction of crossing that activates this threshold.

String	Description
Decreasing	Value decreases below the threshold.
Either	Value crosses the threshold in either direction.
Increasing	Value increases above the threshold.

6.126.2.2 ElectricalContext

The combination of current-carrying conductors.

String	Description
Line1	The circuits that share the L1 current-carrying conductor.
Line1ToLine2	The circuit formed by L1 and L2 current-carrying conductors.
Line1ToNeutral	The circuit formed by L1 and neutral current-carrying conductors.
Line1ToNeutralAndL1L2	The circuit formed by L1, L2, and neutral current-carrying conductors.
Line2	The circuits that share the L2 current-carrying conductor.
Line2ToLine3	The circuit formed by L2 and L3 current-carrying conductors.
Line2ToNeutral	The circuit formed by L2 and neutral current-carrying conductors.
Line2ToNeutralAndL1L2	The circuit formed by L1, L2, and Neutral current-carrying conductors.
Line2ToNeutralAndL2L3	The circuits formed by L2, L3, and neutral current-carrying conductors.
Line3	The circuits that share the L3 current-carrying conductor.
Line3ToLine1	The circuit formed by L3 and L1 current-carrying conductors.
Line3ToNeutral	The circuit formed by L3 and neutral current-carrying conductors.
Line3ToNeutralAndL3L1	The circuit formed by L3, L1, and neutral current-carrying conductors.
LineToLine	The circuit formed by two current-carrying conductors.
LineToNeutral	The circuit formed by a line and neutral current-carrying conductor.
Neutral	The grounded current-carrying return circuit of current-carrying conductors.
Total	The circuit formed by all current-carrying conductors.

6.126.2.3 Implementation

The implementation of the sensor.

String	Description
PhysicalSensor	The reading is acquired from a physical sensor.
Reported	The reading is obtained from software or a device.
Synthesized	The reading is obtained by applying a calculation on one or more properties. The calculation is not provided.

6.126.2.4 PhysicalContext

The area or device to which this sensor measurement applies.

String	Description
Accelerator	An accelerator.
ACInput	An AC input.
ACMaintenanceBypassInput	An AC maintenance bypass input.
ACOutput	An AC output.
ACStaticBypassInput	An AC static bypass input.
ACUtilityInput	An AC utility input.
ASIC	An ASIC device, such as a networking chip or chipset component.
Back	The back of the chassis.
Backplane	A backplane within the chassis.
Chassis	The entire chassis.
ComputeBay	Within a compute bay.
CoolingSubsystem	The entire cooling, or air and liquid, subsystem.
CPU	A processor (CPU).
CPUSubsystem	The entire processor (CPU) subsystem.
DCBus	A DC bus.
Exhaust	The air exhaust point or points or region of the chassis.
ExpansionBay	Within an expansion bay.
Fan	A fan.
FPGA	An FPGA.
Front	The front of the chassis.
GPU	A graphics processor (GPU).
GPUSubsystem	The entire graphics processor (GPU) subsystem.
Intake	The air intake point or points or region of the chassis.
LiquidInlet	The liquid inlet point of the chassis.

String	Description
LiquidOutlet	The liquid outlet point of the chassis.
Lower	The lower portion of the chassis.
Memory	A memory device.
MemorySubsystem	The entire memory subsystem.
Motor	A motor.
NetworkBay	Within a networking bay.
NetworkingDevice	A networking device.
PowerSubsystem	The entire power subsystem.
PowerSupply	A power supply.
PowerSupplyBay	Within a power supply bay.
Rectifier	A rectifier device.
Room	The room.
StorageBay	Within a storage bay.
StorageDevice	A storage device.
SystemBoard	The system board (PCB).
Transformer	A transformer.
Upper	The upper portion of the chassis.
VoltageRegulator	A voltage regulator device.

6.126.2.5 PhysicalSubContext

The usage or location within a device to which this sensor measurement applies.

String	Description
Input	The input.
Output	The output.

6.126.2.6 ReadingType

The type of sensor.

String	Description
AirFlow	Airflow.
Altitude	Altitude.
Barometric	Barometric pressure.
Current	Current.
EnergyJoules	Energy (Joules).
EnergykWh	Energy (kWh).
Frequency	Frequency.
Humidity	Relative Humidity.
LiquidFlow	Liquid flow.
LiquidLevel	Liquid level.
Percent *(v1.1+)*	Percent.
Power	Power.
Pressure	Pressure.
Rotational	Rotational.
Temperature	Temperature.
Voltage	Voltage (AC or DC).

6.126.2.7 VoltageType

The voltage type for this sensor.

String	Description
AC	Alternating current.
DC	Direct current.

6.127 SensorCollection

URIs:

/redfish/v1/Chassis/*{ChassisId}*/Sensors /redfish/v1/Facilities/*{FacilityId}*/Sensors /redfish/v1/PowerEquipment/
FloorPDUs/*{PowerDistributionId}*/Sensors /redfish/v1/PowerEquipment/RackPDUs/*{PowerDistributionId}*/Sensors

/redfish/v1/PowerEquipment/Switchgear/*{PowerDistributionId}*/Sensors /redfish/v1/PowerEquipment/
TransferSwitches/*{PowerDistributionId}*/Sensors

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Sensor resource. See the Links section and the *Sensor* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.128 SerialInterface 1.1.7

v1.1	*v1.0*

2017.1	1.0

The SerialInterface schema describes an asynchronous serial interface, such as an RS-232 interface, available to a system or device.

URIs:

/redfish/v1/Managers/*{ManagerId}*/SerialInterfaces/*{SerialInterfaceId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this resource.
BitRate	string (enum) *read-write*	The receive and transmit rate of data flow, typically in bits per second (bit/s), over the serial connection. *For the possible property values, see BitRate in Property details.*
ConnectorType	string (enum) *read-only*	The type of connector used for this interface. *For the possible property values, see ConnectorType in Property details.*
DataBits	string (enum) *read-write*	The number of data bits that follow the start bit over the serial connection. *For the possible property values, see DataBits in Property details.*
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

	string (enum) read-write	The type of flow control, if any, that is imposed on the serial connection. *For the possible property values, see FlowControl in Property details.*
FlowControl		
Id	string read-only required	The identifier that uniquely identifies the resource within the collection of similar resources.
InterfaceEnabled	boolean read-write (null)	An indication of whether this interface is enabled.
Name	string read-only required	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Parity	string (enum) read-write	The type of parity used by the sender and receiver to detect errors over the serial connection. *For the possible property values, see Parity in Property details.*
PinOut	string (enum) read-only (null)	The physical pinout configuration for a serial connector. *For the possible property values, see PinOut in Property details.*
SignalType	string (enum) read-only	The type of signal used for the communication connection. *For the possible property values, see SignalType in Property details.*
StopBits	string (enum) read-write	The period of time before the next start bit is transmitted. *For the possible property values, see StopBits in Property details.*

6.128.1 Property details

6.128.1.1 BitRate

The receive and transmit rate of data flow, typically in bits per second (bit/s), over the serial connection.

String	Description
115200	A bit rate of 115200 bit/s.
1200	A bit rate of 1200 bit/s.
19200	A bit rate of 19200 bit/s.
230400	A bit rate of 230400 bit/s.
2400	A bit rate of 2400 bit/s.
38400	A bit rate of 38400 bit/s.
4800	A bit rate of 4800 bit/s.
57600	A bit rate of 57600 bit/s.
9600	A bit rate of 9600 bit/s.

6.128.1.2 ConnectorType

The type of connector used for this interface.

String	Description
DB25 Female	A DB25 Female connector.
DB25 Male	A DB25 Male connector.
DB9 Female	A DB9 Female connector.
DB9 Male	A DB9 Male connector.
mUSB	A mUSB connector.
RJ11	An RJ11 connector.
RJ45	An RJ45 connector.
USB	A USB connector.
uUSB	A uUSB connector.

6.128.1.3 DataBits

The number of data bits that follow the start bit over the serial connection.

String	Description
5	Five bits of data following the start bit.

String	Description
6	Six bits of data following the start bit.
7	Seven bits of data following the start bit.
8	Eight bits of data following the start bit.

6.128.1.4 FlowControl

The type of flow control, if any, that is imposed on the serial connection.

String	Description
Hardware	Out-of-band flow control imposed.
None	No flow control imposed.
Software	XON/XOFF in-band flow control imposed.

6.128.1.5 Parity

The type of parity used by the sender and receiver to detect errors over the serial connection.

String	Description
Even	An even parity bit.
Mark	A mark parity bit.
None	No parity bit.
Odd	An odd parity bit.
Space	A space parity bit.

6.128.1.6 PinOut

The physical pinout configuration for a serial connector.

String	Description
Cisco	The Cisco pinout configuration.
Cyclades	The Cyclades pinout configuration.
Digi	The Digi pinout configuration.

6.128.1.7 SignalType

The type of signal used for the communication connection.

String	Description
Rs232	The serial interface follows RS232.
Rs485	The serial interface follows RS485.

6.128.1.8 StopBits

The period of time before the next start bit is transmitted.

String	Description
1	One stop bit following the data bits.
2	Two stop bits following the data bits.

6.129 SerialInterfaceCollection

URIs:

/redfish/v1/Managers/*{ManagerId}*/SerialInterfaces

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a SerialInterface resource. See the Links section and the *SerialInterface* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.130 ServiceRoot 1.8.0

v1.8	v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2020.2	2020.1	2019.4	2018.3	2018.2	2017.3	2017.1	2016.2	1.0

The ServiceRoot schema describes the root of the Redfish Service, located at the '/redfish/v1' URI. All other Resources accessible through the Redfish interface on this device are linked directly or indirectly from the Service Root.

URIs:

/redfish/v1 /redfish/v1/

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
AccountService {	object	The link to the Account Service. See the *AccountService* schema for details on this property.
@odata.id	string *read-only*	Link to a AccountService resource. See the Links section and the *AccountService* schema for details.
}		
AggregationService *(v1.8+)* {	object	The link to the aggregation service. See the *AggregationService* schema for details on this property.
@odata.id	string *read-only*	Link to a AggregationService resource. See the Links section and the *AggregationService* schema for details.
}		
CertificateService *(v1.5+)* {	object	The link to the Certificate Service. See the *CertificateService* schema for details on this property.
@odata.id	string *read-only*	Link to a CertificateService resource. See the Links section and the *CertificateService* schema for details.
}		
Chassis {	object	The link to a collection of chassis. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Chassis*. See the Chassis schema for details.
}		
CompositionService *(v1.2+)* {	object	The link to the Composition Service. See the *CompositionService* schema for details on this property.

	string *read-only*	Link to a CompositionService resource. See the Links section and the *CompositionService* schema for details.
@odata.id		
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
EventService {	object	The link to the Event Service. See the *EventService* schema for details on this property.
@odata.id	string *read-only*	Link to a EventService resource. See the Links section and the *EventService* schema for details.
}		
Fabrics *(v1.1+)* {	object	The link to a collection of all fabric entities. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Fabric*. See the Fabric schema for details.
}		
Facilities *(v1.6+)* {	object	The link to a collection of facilities. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Facility*. See the Facility schema for details.
}		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
JobService *(v1.4+)* {	object	The link to the JobService. See the *JobService* schema for details on this property.
@odata.id	string *read-only*	Link to a JobService resource. See the Links section and the *JobService* schema for details.
}		

JsonSchemas {	object	The link to a collection of JSON Schema files. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *JsonSchemaFile*. See the JsonSchemaFile schema for details.
}		
Links {	object * required*	The links to other Resources that are related to this Resource.
Oem {}	object	The OEM extension property. For property details, see Oem.
Sessions {	object * required*	The link to a collection of Sessions. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Session*. See the Session schema for details.
}		
}		
Managers {	object	The link to a collection of managers. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Manager*. See the Manager schema for details.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PowerEquipment *(v1.6+)* {	object	The link to a set of power equipment. See the *PowerEquipment* schema for details on this property.
@odata.id	string *read-only*	Link to a PowerEquipment resource. See the Links section and the *PowerEquipment* schema for details.

}		
Product *(v1.3+)*	string *read-only* *(null)*	The product associated with this Redfish Service.
ProtocolFeaturesSupported *(v1.3+)* {	object	The information about protocol features that the service supports.
DeepOperations *(v1.7+)* {	object	The information about deep operations that the service supports.
DeepPATCH	boolean *read-only*	An indication of whether the service supports the deep PATCH operation.
DeepPOST	boolean *read-only*	An indication of whether the service supports the deep POST operation.
MaxLevels	integer *read-only*	The maximum levels of resources allowed in deep operations.
}		
ExcerptQuery *(v1.4+)*	boolean *read-only*	An indication of whether the service supports the excerpt query parameter.
ExpandQuery {	object	The information about the use of $expand in the service.
ExpandAll	boolean *read-only*	An indication of whether the service supports the asterisk (*) option of the $expand query parameter.
Levels	boolean *read-only*	An indication of whether the service supports the $levels option of the $expand query parameter.
Links	boolean *read-only*	An indication of whether this service supports the tilde (~) option of the $expand query parameter.

MaxLevels	integer *read-only*	The maximum $levels option value in the $expand query parameter.
NoLinks	boolean *read-only*	An indication of whether the service supports the period (`.`) option of the $expand query parameter.
}		
FilterQuery	boolean *read-only*	An indication of whether the service supports the $filter query parameter.
OnlyMemberQuery *(v1.4+)*	boolean *read-only*	An indication of whether the service supports the only query parameter.
SelectQuery	boolean *read-only*	An indication of whether the service supports the $select query parameter.
}		
RedfishVersion	string *read-only*	The version of the Redfish Service.
Registries {	object	The link to a collection of Registries. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *MessageRegistryFile*. See the MessageRegistryFile schema for details.
}		
ResourceBlocks *(v1.5+)* {	object	The link to a collection of all Resource Block Resources. This collection is intended for implementations that do not contain a Composition Service but that expose Resources to an orchestrator that implements a Composition Service. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *ResourceBlock*. See the ResourceBlock schema for details.
}		

SessionService {	object	The link to the Sessions Service. See the *SessionService* schema for details on this property.
@odata.id	string *read-only*	Link to a SessionService resource. See the Links section and the *SessionService* schema for details.
}		
StorageServices *(v1.1+)* {	object	The link to a collection of all storage service entities.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
StorageSystems *(v1.1+)* {	object	The link to a collection of storage systems.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
Systems {	object	The link to a collection of systems. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *ComputerSystem*. See the ComputerSystem schema for details.
}		
Tasks {	object	The link to the Task Service. See the *TaskService* schema for details on this property.
@odata.id	string *read-only*	Link to a TaskService resource. See the Links section and the *TaskService* schema for details.
}		
TelemetryService *(v1.4+)* {	object	The link to the Telemetry Service. See the *TelemetryService* schema for details on this property.
@odata.id	string *read-only*	Link to a TelemetryService resource. See the Links section and the *TelemetryService* schema for details.
}		

UpdateService *(v1.1+)* {	object	The link to the Update Service. See the *UpdateService* schema for details on this property.
@odata.id	string *read-only*	Link to a UpdateService resource. See the Links section and the *UpdateService* schema for details.
}		
UUID	string *read-only* *(null)*	Unique identifier for a service instance. When SSDP is used, this value should be an exact match of the UUID value returned in a 200 OK from an SSDP M-SEARCH request during discovery.
Vendor *(v1.5+)*	string *read-only* *(null)*	The vendor or manufacturer associated with this Redfish Service.

6.131 Session 1.2.1

v1.2	v1.1	v1.0
2019.1	2017.1	1.0

The Session Resource describes a single connection (session) between a client and a Redfish Service instance.

URIs:

/redfish/v1/SessionService/Sessions/*{SessionId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only required*	The unique identifier for a resource.
@odata.type	string *read-only required*	The type of a resource.

Actions *(v1.1+)* {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
OemSessionType *(v1.2+)*	string *read-only* *(null)*	The active OEM-defined session type.
Password	string *read-only required on create* *(null)*	The password for this session. The value is `null` in responses.
SessionType *(v1.2+)*	string (enum) *read-only* *(null)*	The active session type. *For the possible property values, see SessionType in Property details.*
UserName	string *read-only required on create* *(null)*	The UserName for the account for this session.

6.131.1 Property details

6.131.1.1 SessionType

The active session type.

String	Description
HostConsole	The host's console, which could be connected through Telnet, SSH, or other protocol.

String	Description
IPMI	Intelligent Platform Management Interface.
KVMIP	Keyboard-Video-Mouse over IP Session.
ManagerConsole	The manager's console, which could be connected through Telnet, SSH, SM CLP, or other protocol.
OEM	OEM Type. For OEM session types, see the OemSessionType property.
Redfish	A Redfish session.
VirtualMedia	Virtual media.
WebUI	A non-Redfish web user interface session, such as a graphical interface or another web-based protocol.

6.132 SessionCollection

URIs:

/redfish/v1/SessionService/Sessions

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Session resource. See the Links section and the *Session* schema for details.
}]		

	integer *read-only*	The number of items in a collection.
Members@odata.count		
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.133 SessionService 1.1.7

v1.1	*v1.0*
2016.2	1.0

The SessionService schema describes the session service and its properties, with links to the actual list of sessions.

URIs:

/redfish/v1/SessionService

	string *read-only*	The OData description of a payload.
@odata.context		
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.

Actions *(v1.1+)* {}	object	The available actions for this resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
ServiceEnabled	boolean *read-write* *(null)*	An indication of whether this service is enabled. If `true` , this service is enabled. If `false` , it is disabled, and new sessions cannot be created, old sessions cannot be deleted, and established sessions can continue operating.
Sessions {	object	The link to a collection of sessions. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Session*. See the Session schema for details.
}		
SessionTimeout	integer (s) *read-write*	The number of seconds of inactivity that a session can have before the session service closes the session due to inactivity.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.134 Signature 1.0.0

v1.0

2020.1

The Signature schema describes a signature or a hash.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Signatures/*{SignatureId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Signatures/*{SignatureId}* /redfish/v1/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Signatures/*{SignatureId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only required*	The unique identifier for a resource.
@odata.type	string *read-only required*	The type of a resource.
Actions {}	object	The available actions for this resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
SignatureString	string *read-only required on create* *(null)*	The string for the signature.

SignatureType	string *read-only required on create* *(null)*	The format of the signature.
SignatureTypeRegistry	string (enum) *read-only required on create* *(null)*	The type of the signature. *For the possible property values, see SignatureTypeRegistry in Property details.*
UefiSignatureOwner	string *read-only* *(null)*	The UEFI signature owner for this signature.

6.134.1 Property details

6.134.1.1 SignatureTypeRegistry

The type of the signature.

String	Description
UEFI	A signature defined in the UEFI Specification.

6.135 SignatureCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Signatures /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Signatures /redfish/v1/Systems/*{ComputerSystemId}*/SecureBoot/
SecureBootDatabases/*{DatabaseId}*/Signatures

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Signature resource. See the Links section and the *Signature* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.136 SimpleStorage 1.2.3

v1.2	*v1.1*	*v1.0*
2017.1	2016.1	1.0

The SimpleStorage schema represents the properties of a storage controller and its directly-attached devices.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/SimpleStorage/*{SimpleStorageId}* /redfish/v1/
CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SimpleStorage/*{SimpleStorageId}*
/redfish/v1/ResourceBlocks/*{ResourceBlockId}*/SimpleStorage/*{SimpleStorageId}* /redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SimpleStorage/*{SimpleStorageId}* /redfish/v1/
Systems/*{ComputerSystemId}*/SimpleStorage/*{SimpleStorageId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.2+)* {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Devices [{	array	The storage devices.
CapacityBytes *(v1.1+)*	integer (By) *read-only* *(null)*	The size, in bytes, of the storage device.
Manufacturer	string *read-only* *(null)*	The name of the manufacturer of this device.
Model	string *read-only* *(null)*	The product model number of this device.
Name	string *read-only* *required*	The name of the Resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.
}]		
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links *(v1.2+)* {	object	The links to other Resources that are related to this Resource.
Chassis {	object	The link to the chassis that contains this simple storage. See the *Chassis* schema for details on this property.
@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.
UefiDevicePath	string *read-only* *(null)*	The UEFI device path to access this storage controller.

6.137 SimpleStorageCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SimpleStorage
/redfish/v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/SimpleStorage /redfish/v1/
Systems/*{ComputerSystemId}*/SimpleStorage

@odata.context string *read-only*		The OData description of a payload.
@odata.etag string *read-only*		The current ETag of the resource.
@odata.id string *read-only*		The unique identifier for a resource.
@odata.type string *read-only*		The type of a resource.
Description string *read-only* *(null)*		The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a SimpleStorage resource. See the Links section and the *SimpleStorage* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.138 SoftwareInventory 1.3.0

v1.3	*v1.2*	*v1.1*	*v1.0*
2020.1	2018.1	2016.3	2016.2

The SoftwareInventory schema contains an inventory of software components. This can include software components such as BIOS, BMC firmware, firmware for other devices, system drivers, or provider software.

URIs:

/redfish/v1/UpdateService/FirmwareInventory/*{SoftwareInventoryId}* /redfish/v1/UpdateService/SoftwareInventory/*{SoftwareInventoryId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
LowestSupportedVersion *(v1.1+)*	string *read-only* *(null)*	The lowest supported version of this software.
Manufacturer *(v1.2+)*	string *read-only* *(null)*	The manufacturer or producer of this software.
Name	string *read-only* *required*	The name of the resource or array member.

Oem {}	object	The OEM extension property. For property details, see Oem.
RelatedItem *(v1.1+)* [{	array	The IDs of the Resources associated with this software inventory item.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
RelatedItem@odata.count	integer *read-only*	The number of items in a collection.
ReleaseDate *(v1.2+)*	string *read-only* *(null)*	The release date of this software.
SoftwareId *(v1.1+)*	string *read-only*	The implementation-specific label that identifies this software.
Status {}	object	The status and health of the Resource and its subordinate or dependent Resources. For property details, see Status.
UefiDevicePaths *(v1.1+)* [ ]	array (string, null) *read-only*	The list of UEFI device paths of the components associated with this software inventory item.
Updateable	boolean *read-only* *(null)*	An indication of whether the Update Service can update this software.
Version	string *read-only* *(null)*	The version of this software.
WriteProtected *(v1.3+)*	boolean *read-write* *(null)*	Indicates if the software is write-protected.

6.139 SoftwareInventoryCollection

URIs:

/redfish/v1/UpdateService/FirmwareInventory /redfish/v1/UpdateService/SoftwareInventory

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a SoftwareInventory resource. See the Links section and the *SoftwareInventory* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.140 Storage 1.8.1

v1.8	v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2019.3	2019.1	2018.3	2018.2	2017.3	2017.2	2017.1	2016.2	2016.1

The Storage schema defines a storage subsystem and its respective properties. A storage subsystem represents a set of physical or virtual storage controllers and the resources, such as volumes, that can be accessed from that subsystem.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*} /redfish/v1/ CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*} /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*} /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*} /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#Storage.SetEncryptionKey {}	object	This action sets the encryption key for the storage subsystem. *For more information, see the Actions section below.*
}		

ConsistencyGroups *(v1.8+)* {	object	The consistency groups, each of which contains a set of volumes that are treated by an application or set of applications as a single resource, that are managed by this storage subsystem.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Drives [{	array	The set of drives attached to the storage controllers that this resource represents.
@odata.id	string *read-only*	Link to a Drive resource. See the Links section and the *Drive* schema for details.
}]		
Drives@odata.count	integer *read-only*	The number of items in a collection.
EndpointGroups *(v1.8+)* {	object	All of the endpoint groups, each of which contains a set of endpoints that are used for a common purpose such as an ACL or logical identification, that belong to this storage subsystem.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
FileSystems *(v1.8+)* {	object	All file systems that are allocated by this storage subsystem.
@odata.id	string *read-only*	The unique identifier for a resource.
}		

	string *read-only* *required*	
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links {	object	The links to other resources that are related to this resource.
Enclosures [{	array	An array of links to the chassis to which this storage subsystem is attached.
@odata.id	string *read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}]		
Enclosures@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Redundancy [{	array	Redundancy information for the storage subsystem.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Redundancy@odata.count	integer *read-only*	The number of items in a collection.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
StorageControllers [{	array	The set of storage controllers that this resource represents.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
Actions *(v1.2+)* {}	object	The available actions for this resource.
Assembly *(v1.4+)* {	object	The link to the assembly associated with this storage controller. See the *Assembly* schema for details on this property.
@odata.id	string *read-only*	Link to a Assembly resource. See the Links section and the *Assembly* schema for details.
}		
AssetTag	string *read-write* *(null)*	The user-assigned asset tag for this storage controller.
CacheSummary *(v1.5+)* {	object	The cache memory of the storage controller in general detail.
PersistentCacheSizeMiB	integer (MiBy) *read-only* *(null)*	The portion of the cache memory that is persistent, measured in MiB.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
TotalCacheSizeMiB	integer (MiBy) *read-only* *required* *(null)*	The total configured cache memory, measured in MiB.
}		
ControllerRates *(v1.7+)* {	object	This property describes the various controller rates used for processes such as volume rebuild or consistency checks.

	integer	
ConsistencyCheckRatePercent	*read-write (null)*	The percentage of controller resources used for performing a data consistency check on volumes.
RebuildRatePercent	integer *read-write (null)*	The percentage of controller resources used for rebuilding/repairing volumes.
TransformationRatePercent	integer *read-write (null)*	The percentage of controller resources used for transforming volumes from one configuration to another.
}		
FirmwareVersion	string *read-only (null)*	The firmware version of this storage controller.
Identifiers [{ }]	array (object)	The durable names for the storage controller. Any additional identifiers for a resource. For property details, see Identifier.
Links *(v1.1+)* {	object	The links to other resources that are related to this resource.
Endpoints [{	array	An array of links to the endpoints that connect to this controller.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Endpoints@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
PCIeFunctions *(v1.7+)* [{	array	An array of links to the PCIe functions that the storage controller produces.
@odata.id	string *read-only*	Link to a PCIeFunction resource. See the Links section and the *PCIeFunction* schema for details.

}]		
PCIeFunctions@odata.count	integer *read-only*	The number of items in a collection.
StorageServices *(v1.4+)* [{	array	An array of links to the storage services that connect to this controller.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
StorageServices@odata.count	integer *read-only*	The number of items in a collection.
}		
Location *(v1.4+)* {}	object	The location of the storage controller. For property details, see Location.
Manufacturer	string *read-only* *(null)*	The manufacturer of this storage controller.
MemberId	string *read-only* *required*	The identifier for the member within the collection.
Model	string *read-only* *(null)*	The model number for the storage controller.
Name *(v1.3+)*	string *read-only* *(null)*	The name of the storage controller.
Oem {}	object	The OEM extension property. For property details, see Oem.

PartNumber	string *read-only* *(null)*	The part number for this storage controller.
PCIeInterface *(v1.5+)* {	object	The PCIe interface details for this controller. See the *PCIeDevice* schema for details on this property.
@odata.id	string *read-only*	Link to a PCIeInterface resource. See the Links section and the *PCIeDevice* schema for details.
}		
Ports *(v1.7+)* {	object	The link to the collection of ports that exist on the storage controller. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Port*. See the Port schema for details.
}		
SerialNumber	string *read-only* *(null)*	The serial number for this storage controller.
SKU	string *read-only* *(null)*	The SKU for this storage controller.
SpeedGbps	number (Gbit/s) *read-only* *(null)*	The maximum speed of the storage controller's device interface.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

	array (string (enum)) read-only	The supported set of protocols for communicating to this storage controller. *For the possible property values, see SupportedControllerProtocols in Property details.*
SupportedControllerProtocols [ ]		
SupportedDeviceProtocols [ ]	array (string (enum)) read-only	The protocols that the storage controller can use to communicate with attached devices. *For the possible property values, see SupportedDeviceProtocols in Property details.*
SupportedRAIDTypes *(v1.6+)* [ ]	array (string (enum)) read-only (null)	The set of RAID types supported by the storage controller. *For the possible property values, see SupportedRAIDTypes in Property details.*
}]		
StorageControllers@odata.count	integer read-only	The number of items in a collection.
StorageGroups *(v1.8+)* {	object	All of the storage groups, each of which contains a set of volumes and endpoints that are managed as a group for mapping and masking, that belong to this storage subsystem.
@odata.id	string read-only	The unique identifier for a resource.
}		
StoragePools *(v1.8+)* {	object	The set of all storage pools that are allocated by this storage subsystem. A storage pool is the set of storage capacity that can be used to produce volumes or other storage pools.
@odata.id	string read-only	The unique identifier for a resource.
}		
Volumes {	object	The set of volumes that the storage controllers produce.

@odata.id	string *read-only*	The unique identifier for a resource.
}		

6.140.1 Actions

6.140.1.1 SetEncryptionKey

This action sets the encryption key for the storage subsystem.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Actions/
Storage.SetEncryptionKey /redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Actions/
Storage.SetEncryptionKey /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Actions/
Storage.SetEncryptionKey /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Actions/
Storage.SetEncryptionKey /redfish/v1/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Actions/
Storage.SetEncryptionKey

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
EncryptionKey	string *required*	The encryption key to set on the storage subsystem.
}		

6.140.2 Property details

6.140.2.1 SupportedControllerProtocols

The supported set of protocols for communicating to this storage controller.

String	Description
AHCI	Advanced Host Controller Interface (AHCI).

String	Description
FC	Fibre Channel.
FCoE	Fibre Channel over Ethernet (FCoE).
FCP	Fibre Channel Protocol for SCSI.
FICON	FIbre CONnection (FICON).
FTP	File Transfer Protocol (FTP).
GenZ	GenZ.
HTTP	Hypertext Transport Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).
I2C	Inter-Integrated Circuit Bus.
iSCSI	Internet SCSI.
iWARP	Internet Wide Area RDMA Protocol (iWARP).
MultiProtocol	Multiple Protocols.
NFSv3	Network File System (NFS) version 3.
NFSv4	Network File System (NFS) version 4.
NVMe	Non-Volatile Memory Express (NVMe).
NVMeOverFabrics	NVMe over Fabrics.
OEM	OEM-specific.
PCIe	PCI Express.
RoCE	RDMA over Converged Ethernet Protocol.
RoCEv2	RDMA over Converged Ethernet Protocol Version 2.
SAS	Serial Attached SCSI.
SATA	Serial AT Attachment.
SFTP	SSH File Transfer Protocol (SFTP).
SMB	Server Message Block (SMB). Also known as the Common Internet File System (CIFS).
TCP	Transmission Control Protocol (TCP).
TFTP	Trivial File Transfer Protocol (TFTP).
UDP	User Datagram Protocol (UDP).

String	Description
UHCI	Universal Host Controller Interface (UHCI).
USB	Universal Serial Bus (USB).

6.140.2.2 SupportedDeviceProtocols

The protocols that the storage controller can use to communicate with attached devices.

String	Description
AHCI	Advanced Host Controller Interface (AHCI).
FC	Fibre Channel.
FCoE	Fibre Channel over Ethernet (FCoE).
FCP	Fibre Channel Protocol for SCSI.
FICON	FIbre CONnection (FICON).
FTP	File Transfer Protocol (FTP).
GenZ	GenZ.
HTTP	Hypertext Transport Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).
I2C	Inter-Integrated Circuit Bus.
iSCSI	Internet SCSI.
iWARP	Internet Wide Area RDMA Protocol (iWARP).
MultiProtocol	Multiple Protocols.
NFSv3	Network File System (NFS) version 3.
NFSv4	Network File System (NFS) version 4.
NVMe	Non-Volatile Memory Express (NVMe).
NVMeOverFabrics	NVMe over Fabrics.
OEM	OEM-specific.
PCIe	PCI Express.
RoCE	RDMA over Converged Ethernet Protocol.
RoCEv2	RDMA over Converged Ethernet Protocol Version 2.

String	Description
SAS	Serial Attached SCSI.
SATA	Serial AT Attachment.
SFTP	SSH File Transfer Protocol (SFTP).
SMB	Server Message Block (SMB). Also known as the Common Internet File System (CIFS).
TCP	Transmission Control Protocol (TCP).
TFTP	Trivial File Transfer Protocol (TFTP).
UDP	User Datagram Protocol (UDP).
UHCI	Universal Host Controller Interface (UHCI).
USB	Universal Serial Bus (USB).

6.140.2.3 SupportedRAIDTypes

The set of RAID types supported by the storage controller.

String	Description
RAID0	A placement policy where consecutive logical blocks of data are uniformly distributed across a set of independent storage devices without offering any form of redundancy.
RAID00	A placement policy that creates a RAID 0 stripe set over two or more RAID 0 sets.
RAID01	A data placement policy that creates a mirrored device (RAID 1) over a set of striped devices (RAID 0).
RAID1	A placement policy where each logical block of data is stored on more than one independent storage device.
RAID10	A placement policy that creates a striped device (RAID 0) over a set of mirrored devices (RAID 1).
RAID10E	A placement policy that uses a RAID 0 stripe set over two or more RAID 10 sets.
RAID10Triple	A placement policy that uses a striped device (RAID 0) over a set of triple mirrored devices (RAID 1Triple).
RAID1E	A placement policy that uses a form of mirroring implemented over a set of independent storage devices where logical blocks are duplicated on a pair of independent storage devices so that data is uniformly distributed across the storage devices.
RAID1Triple	A placement policy where each logical block of data is mirrored three times across a set of three independent storage devices.
RAID3	A placement policy using parity-based protection where logical bytes of data are uniformly distributed across a set of independent storage devices and where the parity is stored on a dedicated independent storage device.
RAID4	A placement policy using parity-based protection where logical blocks of data are uniformly distributed across a set of independent storage devices and where the parity is stored on a dedicated independent storage device.

String	Description
RAID5	A placement policy using parity-based protection for storing stripes of 'n' logical blocks of data and one logical block of parity across a set of 'n+1' independent storage devices where the parity and data blocks are interleaved across the storage devices.
RAID50	A placement policy that uses a RAID 0 stripe set over two or more RAID 5 sets of independent storage devices.
RAID6	A placement policy using parity-based protection for storing stripes of 'n' logical blocks of data and two logical blocks of independent parity across a set of 'n+2' independent storage devices where the parity and data blocks are interleaved across the storage devices.
RAID60	A placement policy that uses a RAID 0 stripe set over two or more RAID 6 sets of independent storage devices.
RAID6TP	A placement policy that uses parity-based protection for storing stripes of 'n' logical blocks of data and three logical blocks of independent parity across a set of 'n+3' independent storage devices where the parity and data blocks are interleaved across the storage devices.

6.141 StorageCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Storage /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Storage /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage /redfish/v1/
Systems/*{ComputerSystemId}*/Storage

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Storage resource. See the Links section and the *Storage* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.142 Switch 1.3.1

v1.3	v1.2	v1.1	v1.0
2019.4	2019.2	2017.3	2016.2

The Switch schema contains properties that describe a fabric switch.

URIs:

/redfish/v1/Fabrics/*{FabricId}*/Switches/*{SwitchId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.

	string *read-only* *required*	
@odata.type		The type of a resource.
Actions {	object	The available actions for this resource.
#Switch.Reset {}	object	This action resets this switch. *For more information, see the Actions section below.*
}		
AssetTag	string *read-write* *(null)*	The user-assigned asset tag for this switch.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
DomainID	integer *read-only* *(null)*	The domain ID for this switch.
FirmwareVersion *(v1.2+)*	string *read-only* *(null)*	The firmware version of this switch.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
IndicatorLED	string (enum) *read-write* *(null)*	The state of the indicator LED, which identifies the switch. *For the possible property values, see IndicatorLED in Property details.*
IsManaged	boolean *read-write* *(null)*	An indication of whether the switch is in a managed or unmanaged state.
Links {	object	The links to other resources that are related to this resource.
Chassis {	object	The link to the chassis that contains this switch. See the *Chassis* schema for details on this property.

	string	
@odata.id	*read-only*	Link to a Chassis resource. See the Links section and the *Chassis* schema for details.
}		
Endpoints *(v1.3+)* [{	array	An array of links to the endpoints that connect to this switch.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Endpoints@odata.count	integer *read-only*	The number of items in a collection.
ManagedBy [{	array	An array of links to the managers that manage this switch.
@odata.id	string *read-only*	Link to a Manager resource. See the Links section and the *Manager* schema for details.
}]		
ManagedBy@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		
Location *(v1.1+)* {}	object	The location of the switch. For property details, see Location.
LogServices {	object	The link to the collection of log services associated with this switch. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *LogService*. See the LogService schema for details.
}		
Manufacturer	string *read-only* *(null)*	The manufacturer of this switch.
Model	string *read-only* *(null)*	The product model number of this switch.

Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
PartNumber	string *read-only* *(null)*	The part number for this switch.
Ports {	object	The link to the collection ports for this switch. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Port*. See the Port schema for details.
}		
PowerState	string (enum) *read-only* *(null)*	The current power state of the switch. *For the possible property values, see PowerState in Property details.*
Redundancy [{	array	Redundancy information for the switches.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Redundancy@odata.count	integer *read-only*	The number of items in a collection.
SerialNumber	string *read-only* *(null)*	The serial number for this switch.
SKU	string *read-only* *(null)*	The SKU for this switch.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

	array (string (enum)) read-only	The protocols this switch supports. *For the possible property values, see SupportedProtocols in Property details.*
SupportedProtocols *(v1.3+)* [ ]		
SwitchType	string (enum) read-only (null)	The protocol being sent over this switch. *For the possible property values, see SwitchType in Property details.*
TotalSwitchWidth	integer read-only (null)	The total number of lanes, phys, or other physical transport links that this switch contains.
UUID *(v1.3+)*	string read-only (null)	The UUID for this switch.

6.142.1 Actions

6.142.1.1 Reset

This action resets this switch.

URIs:

/redfish/v1/Fabrics/*{FabricId}*/Switches/*{SwitchId}*/Actions/Switch.Reset

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ResetType	string (enum) optional	The type of reset. *For the possible property values, see ResetType in Property details.*
}		

6.142.2 Property details

6.142.2.1 IndicatorLED

The state of the indicator LED, which identifies the switch.

String	Description
Blinking	The indicator LED is blinking.
Lit	The indicator LED is lit.
Off	The indicator LED is off.

6.142.2.2 PowerState

The current power state of the switch.

String	Description
Off	The state is powered off.
On	The state is powered on.
PoweringOff	A temporary state between on and off.
PoweringOn	A temporary state between off and on.

6.142.2.3 ResetType

The type of reset.

String	Description
ForceOff	Turn off the unit immediately (non-graceful shutdown).
ForceOn	Turn on the unit immediately.
ForceRestart	Shut down immediately and non-gracefully and restart the system.
GracefulRestart	Shut down gracefully and restart the system.
GracefulShutdown	Shut down gracefully and power off.
Nmi	Generate a diagnostic interrupt, which is usually an NMI on x86 systems, to stop normal operations, complete diagnostic actions, and, typically, halt the system.

String	Description
On	Turn on the unit.
PowerCycle	Power cycle the unit.
PushPowerButton	Simulate the pressing of the physical power button on this unit.

6.142.2.4 SupportedProtocols

The protocols this switch supports.

String	Description
AHCI	Advanced Host Controller Interface (AHCI).
FC	Fibre Channel.
FCoE	Fibre Channel over Ethernet (FCoE).
FCP	Fibre Channel Protocol for SCSI.
FICON	FIbre CONnection (FICON).
FTP	File Transfer Protocol (FTP).
GenZ	GenZ.
HTTP	Hypertext Transport Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).
I2C	Inter-Integrated Circuit Bus.
iSCSI	Internet SCSI.
iWARP	Internet Wide Area RDMA Protocol (iWARP).
MultiProtocol	Multiple Protocols.
NFSv3	Network File System (NFS) version 3.
NFSv4	Network File System (NFS) version 4.
NVMe	Non-Volatile Memory Express (NVMe).
NVMeOverFabrics	NVMe over Fabrics.
OEM	OEM-specific.
PCIe	PCI Express.
RoCE	RDMA over Converged Ethernet Protocol.

String	Description
RoCEv2	RDMA over Converged Ethernet Protocol Version 2.
SAS	Serial Attached SCSI.
SATA	Serial AT Attachment.
SFTP	SSH File Transfer Protocol (SFTP).
SMB	Server Message Block (SMB). Also known as the Common Internet File System (CIFS).
TCP	Transmission Control Protocol (TCP).
TFTP	Trivial File Transfer Protocol (TFTP).
UDP	User Datagram Protocol (UDP).
UHCI	Universal Host Controller Interface (UHCI).
USB	Universal Serial Bus (USB).

6.142.2.5 SwitchType

The protocol being sent over this switch.

String	Description
AHCI	Advanced Host Controller Interface (AHCI).
FC	Fibre Channel.
FCoE	Fibre Channel over Ethernet (FCoE).
FCP	Fibre Channel Protocol for SCSI.
FICON	FIbre CONnection (FICON).
FTP	File Transfer Protocol (FTP).
GenZ	GenZ.
HTTP	Hypertext Transport Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).
I2C	Inter-Integrated Circuit Bus.
iSCSI	Internet SCSI.
iWARP	Internet Wide Area RDMA Protocol (iWARP).
MultiProtocol	Multiple Protocols.

String	Description
NFSv3	Network File System (NFS) version 3.
NFSv4	Network File System (NFS) version 4.
NVMe	Non-Volatile Memory Express (NVMe).
NVMeOverFabrics	NVMe over Fabrics.
OEM	OEM-specific.
PCIe	PCI Express.
RoCE	RDMA over Converged Ethernet Protocol.
RoCEv2	RDMA over Converged Ethernet Protocol Version 2.
SAS	Serial Attached SCSI.
SATA	Serial AT Attachment.
SFTP	SSH File Transfer Protocol (SFTP).
SMB	Server Message Block (SMB). Also known as the Common Internet File System (CIFS).
TCP	Transmission Control Protocol (TCP).
TFTP	Trivial File Transfer Protocol (TFTP).
UDP	User Datagram Protocol (UDP).
UHCI	Universal Host Controller Interface (UHCI).
USB	Universal Serial Bus (USB).

6.143 SwitchCollection

URIs:

/redfish/v1/Fabrics/*{FabricId}*/Switches

	string read-only	The OData description of a payload.
@odata.context		
@odata.etag	string read-only	The current ETag of the resource.

@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Switch resource. See the Links section and the *Switch* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.144 Task 1.4.3

v1.4	v1.3	v1.2	v1.1	v1.0
2018.3	2018.2	2018.1	2017.1	1.0

The Task schema contains information about a task that the Redfish Task Service schedules or executes. Tasks represent operations that take more time than a client typically wants to wait.

URIs:

/redfish/v1/TaskService/Tasks/*{TaskId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this Resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
EndTime	string *read-only*	The date and time when the task was completed. This property will only appear when the task is complete.
HidePayload *(v1.3+)*	boolean *read-only*	An indication of whether the contents of the payload are hidden from view after the task has been created. If `true`, responses do not return the payload. If `false`, responses return the payload. If this property is not present when the task is created, the default is `false`.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Messages [{ }]	array (object)	An array of messages associated with the task. The message that the Redfish Service returns. For property details, see Message.

Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Payload *(v1.3+)* {	object	The HTTP and JSON payload details for this task, unless they are hidden from view by the service.
HttpHeaders [ ]	array (string) *read-only*	An array of HTTP headers that this task includes.
HttpOperation	string *read-only*	The HTTP operation to perform to execute this task.
JsonBody	string *read-only*	The JSON payload to use in the execution of this task.
TargetUri	string *read-only*	The URI of the target for this task.
}		
PercentComplete *(v1.4+)*	integer (%) *read-only* *(null)*	The completion percentage of this task.
StartTime	string *read-only*	The date and time when the task was started.
TaskMonitor *(v1.2+)*	string *read-only*	The URI of the Task Monitor for this task.

TaskState	string (enum) read-only	The state of the task. *For the possible property values, see TaskState in Property details.*
TaskStatus	string (enum) read-only	The completion status of the task. *For the possible property values, see TaskStatus in Property details.*

6.144.1 Property details

6.144.1.1 TaskState

The state of the task.

String	Description
Cancelled *(v1.2+)*	Task has been cancelled by an operator or internal process.
Cancelling *(v1.2+)*	Task is in the process of being cancelled.
Completed	Task was completed.
Exception	Task has stopped due to an exception condition.
Interrupted	Task has been interrupted.
Killed *(deprecated v1.2)*	Task was terminated. *Deprecated in v1.2 and later. This value has been deprecated and is being replaced by the Cancelled value, which has more determinate semantics.*
New	A new task.
Pending	Task is pending and has not started.
Running	Task is running normally.
Service	Task is running as a service.
Starting	Task is starting.
Stopping	Task is in the process of stopping.
Suspended	Task has been suspended.

6.144.1.2 TaskStatus

The completion status of the task.

String	Description
Critical	A critical condition requires immediate attention.
OK	Normal.
Warning	A condition requires attention.

6.145 TaskCollection

URIs:

/redfish/v1/TaskService/Tasks

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Task resource. See the Links section and the *Task* schema for details.
}]		

Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.146 TaskService 1.1.5

v1.1	v1.0
2017.1	1.0

The TaskService schema describes a task service that enables management of long-duration operations, includes the properties for the task service itself, and has links to the resource collection of tasks.

URIs:

/redfish/v1/TaskService

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.

Actions *(v1.1+)* {}	object	The available actions for this resource.
CompletedTaskOverWritePolicy	string (enum) *read-only*	The overwrite policy for completed tasks. This property indicates whether the task service overwrites completed task information. *For the possible property values, see CompletedTaskOverWritePolicy in Property details.*
DateTime	string *read-only (null)*	The current date and time, with UTC offset, setting that the task service uses.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
LifeCycleEventOnTaskStateChange	boolean *read-only*	An indication of whether a task state change sends an event.
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
ServiceEnabled	boolean *read-write (null)*	An indication of whether this service is enabled.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
Tasks {	object	The links to the collection of tasks. Contains a link to a resource.

	string read- only	Link to Collection of *Task*. See the Task schema for details.
@odata.id		
}		

6.146.1 Property details

6.146.1.1 CompletedTaskOverWritePolicy

The overwrite policy for completed tasks. This property indicates whether the task service overwrites completed task information.

String	Description
Manual	Completed tasks are not automatically overwritten.
Oldest	Oldest completed tasks are overwritten.

6.147 TelemetryService 1.2.1

v1.2	v1.1	v1.0
2019.4	2018.3	2018.2

The TelemetryService schema describes a telemetry service. The telemetry service is used to for collecting and reporting metric data within the Redfish Service.

URIs:

/redfish/v1/TelemetryService

	string read- only	The OData description of a payload.
@odata.context		
@odata.etag	string read- only	The current ETag of the resource.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#TelemetryService.SubmitTestMetricReport {}	object	This action generates a metric report. *For more information, see the Actions section below.*
}		
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
LogService {	object	The link to a log service that the telemetry service uses. This service can be a dedicated log service or a pointer a log service under another resource, such as a manager. See the *LogService* schema for details on this property.
@odata.id	string *read-only*	Link to a LogService resource. See the Links section and the *LogService* schema for details.
}		
MaxReports	integer *read-only* *(null)*	The maximum number of metric reports that this service supports.
MetricDefinitions {	object	The link to the collection of metric definitions. Contains a link to a resource.

@odata.id	string *read-only*	Link to Collection of *MetricDefinition*. See the MetricDefinition schema for details.
}		
MetricReportDefinitions {	object	The link to the collection of metric report definitions. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *MetricReportDefinition*. See the MetricReportDefinition schema for details.
}		
MetricReports {	object	The link to the collection of metric reports. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *MetricReport*. See the MetricReport schema for details.
}		
MinCollectionInterval	string *read-only* *(null)*	The minimum time interval between gathering metric data that this service allows.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
ServiceEnabled *(v1.2+)*	boolean *read-write* *(null)*	An indication of whether this service is enabled.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

SupportedCollectionFunctions [ ]	array (string (enum)) *read-write (null)*	The functions that can be performed over each metric. An operation to perform over the sample. *For the possible property values, see SupportedCollectionFunctions in Property details.*
Triggers {	object	The link to the collection of triggers that apply to metrics. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *Triggers*. See the Triggers schema for details.
}		

6.147.1 Actions

6.147.1.1 SubmitTestMetricReport

This action generates a metric report.

URIs:

/redfish/v1/TelemetryService/Actions/TelemetryService.SubmitTestMetricReport

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
GeneratedMetricReportValues *(v1.1+)* [{	array *required*	The content of the MetricReportValues in the generated metric report.
MetricDefinition {	object	The link to the metric definition for this metric. See the *MetricDefinition* schema for details on this property.
@odata.id	string *read-only*	Link to a MetricDefinition resource. See the Links section and the *MetricDefinition* schema for details.
}		

	string	
MetricId	*read-only* *(null)*	The metric definitions identifier for this metric.
MetricProperty	string *read-only* *(null)*	The URI for the property from which this metric is derived.
MetricValue	string *read-only* *(null)*	The metric value, as a string.
Timestamp	string *read-only* *(null)*	The date and time when the metric is obtained. A management application can establish a time series of metric data by retrieving the instances of metric value and sorting them according to their timestamp.
}]		
MetricReportName	string *required*	The name of the metric report in generated metric report.
MetricReportValues *(deprecated v1.1)*	string *optional*	The contents of MetricReportValues array in the generated metric report. *Deprecated in v1.1 and later. This property has been deprecated in favor of using the property 'GeneratedMetricReportValues'.*
}		

6.147.2 Property details

6.147.2.1 SupportedCollectionFunctions

The functions that can be performed over each metric. An operation to perform over the sample.

String	Description
Average	An averaging function.
Maximum	A maximum function.
Minimum	A minimum function.

String	Description
Summation	A summation function.

6.148 Thermal 1.6.2

v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2019.4	2018.2	2017.3	2017.1	2016.3	2016.1	1.0

The Thermal schema describes temperature monitoring and thermal management subsystems, such as cooling fans, for a computer system or similar devices contained within a chassis.

URIs:

/redfish/v1/Chassis/{*ChassisId*}/Thermal

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.3+)* {}	object	The available actions for this resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Fans [{	array	The set of fans for this chassis.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
Actions *(v1.3+)* {}	object	The available actions for this resource.
Assembly *(v1.4+)* {	object	The link to the assembly associated with this fan. See the *Assembly* schema for details on this property.
@odata.id	string *read-only*	Link to a Assembly resource. See the Links section and the *Assembly* schema for details.
}		
FanName *(deprecated v1.1)*	string *read-only* *(null)*	The name of the fan. *Deprecated in v1.1 and later. This property has been deprecated in favor of the Name property.*
HotPluggable *(v1.4+)*	boolean *read-only* *(null)*	An indication of whether this device can be inserted or removed while the equipment is in operation.
IndicatorLED *(v1.2+)*	string (enum) *read-write* *(null)*	The state of the indicator LED, which identifies this fan. *For the possible property values, see IndicatorLED in Property details.*
Location *(v1.4+)* {}	object	The location of the fan. For property details, see Location.
LowerThresholdCritical	integer *read-only* *(null)*	The value at which the reading is below normal range but not yet fatal.
LowerThresholdFatal	integer *read-only* *(null)*	The value at which the reading is below normal range and fatal.

LowerThresholdNonCritical	integer *read-only* *(null)*	The value at which the reading is below normal range.
Manufacturer *(v1.2+)*	string *read-only* *(null)*	The manufacturer of this fan.
MaxReadingRange	integer *read-only* *(null)*	Maximum value for this sensor.
MemberId	string *read-only* *required*	The identifier for the member within the collection.
MinReadingRange	integer *read-only* *(null)*	Minimum value for this sensor.
Model *(v1.2+)*	string *read-only* *(null)*	The model number for this fan.
Name *(v1.1+)*	string *read-only* *(null)*	Name of the fan.
Oem {}	object	The OEM extension property. For property details, see Oem.
PartNumber *(v1.2+)*	string *read-only* *(null)*	The part number for this fan.

PhysicalContext	string (enum) *read-only*	The area or device associated with this fan. *For the possible property values, see PhysicalContext in Property details.*
Reading	integer *read-only (null)*	The fan speed.
ReadingUnits *(v1.0.1+)*	string (enum) *read-only (null)*	The units in which the fan reading and thresholds are measured. *For the possible property values, see ReadingUnits in Property details.*
Redundancy [{	array	The set of redundancy groups for this fan.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Redundancy@odata.count	integer *read-only*	The number of items in a collection.
RelatedItem [{	array	An array of links to resources or objects that this fan services.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
RelatedItem@odata.count	integer *read-only*	The number of items in a collection.
SensorNumber *(v1.5+)*	integer *read-only (null)*	The numerical identifier for this fan speed sensor.

SerialNumber *(v1.2+)*	string *read-only* *(null)*	The serial number for this fan.
SparePartNumber *(v1.2+)*	string *read-only* *(null)*	The spare part number for this fan.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
UpperThresholdCritical	integer *read-only* *(null)*	The value at which the reading is above normal range but not yet fatal.
UpperThresholdFatal	integer *read-only* *(null)*	The value at which the reading is above normal range and fatal.
UpperThresholdNonCritical	integer *read-only* *(null)*	The value at which the reading is above normal range.
}]		
Fans@odata.count	integer *read-only*	The number of items in a collection.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

Redundancy [{	array	The redundancy information for the set of fans in this chassis.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Redundancy@odata.count	integer *read-only*	The number of items in a collection.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
Temperatures [{	array	The set of temperature sensors for this chassis.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
Actions *(v1.3+)* {}	object	The available actions for this resource.
AdjustedMaxAllowableOperatingValue *(v1.4+)*	integer (Cel) *read-only* *(null)*	Adjusted maximum allowable operating temperature for this equipment based on the current environmental conditions present.
AdjustedMinAllowableOperatingValue *(v1.4+)*	integer (Cel) *read-only* *(null)*	Adjusted minimum allowable operating temperature for this equipment based on the current environmental conditions present.
DeltaPhysicalContext *(v1.4+)*	string (enum) *read-only*	The area or device to which the DeltaReadingCelsius temperature measurement applies, relative to PhysicalContext. *For the possible property values, see DeltaPhysicalContext in Property details.*
DeltaReadingCelsius *(v1.4+)*	number (Cel) *read-only* *(null)*	The delta temperature reading.

LowerThresholdCritical	number (Cel) *read-only (null)*	The value at which the reading is below normal range but not yet fatal.
LowerThresholdFatal	number (Cel) *read-only (null)*	The value at which the reading is below normal range and fatal.
LowerThresholdNonCritical	number (Cel) *read-only (null)*	The value at which the reading is below normal range.
LowerThresholdUser *(v1.6+)*	integer (Cel) *read-write (null)*	The value at which the reading is below the user-defined range.
MaxAllowableOperatingValue *(v1.4+)*	integer (Cel) *read-only (null)*	Maximum allowable operating temperature for this equipment.
MaxReadingRangeTemp	number (Cel) *read-only (null)*	Maximum value for this sensor.
MemberId	string *read-only required*	The identifier for the member within the collection.

MinAllowableOperatingValue *(v1.4+)*	integer (Cel) *read-only* *(null)*	Minimum allowable operating temperature for this equipment.
MinReadingRangeTemp	number (Cel) *read-only* *(null)*	Minimum value for this sensor.
Name	string *read-only* *(null)*	The temperature sensor name.
Oem {}	object	The OEM extension property. For property details, see Oem.
PhysicalContext	string (enum) *read-only*	The area or device to which this temperature measurement applies. *For the possible property values, see PhysicalContext in Property details.*
ReadingCelsius	number (Cel) *read-only* *(null)*	The temperature in degrees Celsius.
RelatedItem [{	array	An array of links to resources or objects that represent areas or devices to which this temperature applies.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
RelatedItem@odata.count	integer *read-only*	The number of items in a collection.

	integer *read-only* *(null)*	
SensorNumber		The numerical identifier of the temperature sensor.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
UpperThresholdCritical	number (Cel) *read-only* *(null)*	The value at which the reading is above normal range but not yet fatal.
UpperThresholdFatal	number (Cel) *read-only* *(null)*	The value at which the reading is above normal range and fatal.
UpperThresholdNonCritical	number (Cel) *read-only* *(null)*	The value at which the reading is above normal range.
UpperThresholdUser *(v1.6+)*	integer (Cel) *read-write* *(null)*	The value at which the reading is above the user-defined range.
}]		
Temperatures@odata.count	integer *read-only*	The number of items in a collection.

6.148.1 Property details

6.148.1.1 DeltaPhysicalContext

The area or device to which the DeltaReadingCelsius temperature measurement applies, relative to PhysicalContext.

String	Description
Accelerator	An accelerator.
ACInput	An AC input.
ACMaintenanceBypassInput	An AC maintenance bypass input.
ACOutput	An AC output.
ACStaticBypassInput	An AC static bypass input.
ACUtilityInput	An AC utility input.
ASIC	An ASIC device, such as a networking chip or chipset component.
Back	The back of the chassis.
Backplane	A backplane within the chassis.
Chassis	The entire chassis.
ComputeBay	Within a compute bay.
CoolingSubsystem	The entire cooling, or air and liquid, subsystem.
CPU	A processor (CPU).
CPUSubsystem	The entire processor (CPU) subsystem.
DCBus	A DC bus.
Exhaust	The air exhaust point or points or region of the chassis.
ExpansionBay	Within an expansion bay.
Fan	A fan.
FPGA	An FPGA.
Front	The front of the chassis.
GPU	A graphics processor (GPU).
GPUSubsystem	The entire graphics processor (GPU) subsystem.
Intake	The air intake point or points or region of the chassis.
LiquidInlet	The liquid inlet point of the chassis.
LiquidOutlet	The liquid outlet point of the chassis.
Lower	The lower portion of the chassis.
Memory	A memory device.

String	Description
MemorySubsystem	The entire memory subsystem.
Motor	A motor.
NetworkBay	Within a networking bay.
NetworkingDevice	A networking device.
PowerSubsystem	The entire power subsystem.
PowerSupply	A power supply.
PowerSupplyBay	Within a power supply bay.
Rectifier	A rectifier device.
Room	The room.
StorageBay	Within a storage bay.
StorageDevice	A storage device.
SystemBoard	The system board (PCB).
Transformer	A transformer.
Upper	The upper portion of the chassis.
VoltageRegulator	A voltage regulator device.

6.148.1.2 IndicatorLED

The state of the indicator LED, which identifies this fan.

String	Description
Blinking	The indicator LED is blinking.
Lit	The indicator LED is lit.
Off	The indicator LED is off.

6.148.1.3 PhysicalContext

The area or device to which this temperature measurement applies.

String	Description
Accelerator	An accelerator.

String	Description
ACInput	An AC input.
ACMaintenanceBypassInput	An AC maintenance bypass input.
ACOutput	An AC output.
ACStaticBypassInput	An AC static bypass input.
ACUtilityInput	An AC utility input.
ASIC	An ASIC device, such as a networking chip or chipset component.
Back	The back of the chassis.
Backplane	A backplane within the chassis.
Chassis	The entire chassis.
ComputeBay	Within a compute bay.
CoolingSubsystem	The entire cooling, or air and liquid, subsystem.
CPU	A processor (CPU).
CPUSubsystem	The entire processor (CPU) subsystem.
DCBus	A DC bus.
Exhaust	The air exhaust point or points or region of the chassis.
ExpansionBay	Within an expansion bay.
Fan	A fan.
FPGA	An FPGA.
Front	The front of the chassis.
GPU	A graphics processor (GPU).
GPUSubsystem	The entire graphics processor (GPU) subsystem.
Intake	The air intake point or points or region of the chassis.
LiquidInlet	The liquid inlet point of the chassis.
LiquidOutlet	The liquid outlet point of the chassis.
Lower	The lower portion of the chassis.
Memory	A memory device.
MemorySubsystem	The entire memory subsystem.

String	Description
Motor	A motor.
NetworkBay	Within a networking bay.
NetworkingDevice	A networking device.
PowerSubsystem	The entire power subsystem.
PowerSupply	A power supply.
PowerSupplyBay	Within a power supply bay.
Rectifier	A rectifier device.
Room	The room.
StorageBay	Within a storage bay.
StorageDevice	A storage device.
SystemBoard	The system board (PCB).
Transformer	A transformer.
Upper	The upper portion of the chassis.
VoltageRegulator	A voltage regulator device.

6.148.1.4 ReadingUnits

The units in which the fan reading and thresholds are measured.

String	Description
Percent	The fan reading and thresholds are measured as a percentage.
RPM	The fan reading and thresholds are measured in rotations per minute.

6.149 Triggers 1.1.2

v1.1	v1.0
2019.1	2018.2

The Triggers schema describes a trigger that applies to metrics.

URIs:

/redfish/v1/TelemetryService/Triggers/*{TriggersId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {}	object	The available actions for this resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
DiscreteTriggerCondition	string (enum) *read-only* *(null)*	The conditions when a discrete metric triggers. *For the possible property values, see DiscreteTriggerCondition in Property details.*
DiscreteTriggers [{	array	The list of discrete triggers.
DwellTime	string *read-write* *(null)*	The amount of time that a trigger event persists before the metric action is performed.
Name	string *read-only* *(null)*	The name of trigger.

Severity	string (enum) *read-write (null)*	The severity of the event message. *For the possible property values, see Severity in Property details.*
Value	string *read-write (null)*	The discrete metric value that constitutes a trigger event.
}]		
EventTriggers *(v1.1+)* [ ]	array (string, null) *read-write*	The array of MessageIds that specify when a trigger condition is met based on an event.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Links *(v1.1+)* {	object	The links to other resources that are related to this resource.
MetricReportDefinitions [{	array	The metric report definitions that generate new metric reports when a trigger condition is met and when the TriggerActions property contains `RedfishMetricReport` .
@odata.id	string *read-only*	Link to a MetricReportDefinition resource. See the Links section and the *MetricReportDefinition* schema for details.
}]		
MetricReportDefinitions@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
}		

MetricProperties [ ]	array (string, null) *read-write*	An array of URIs with wildcards and property identifiers for this trigger. Each wildcard shall be replaced with its corresponding entry in the Wildcard array property.
MetricType	string (enum) *read-only (null)*	The metric type of the trigger. *For the possible property values, see MetricType in Property details.*
Name	string *read-only required*	The name of the resource or array member.
NumericThresholds {	object	The thresholds when a numeric metric triggers.
LowerCritical {	object	The value at which the reading is below normal range and requires attention.
Activation	string (enum) *read-write (null)*	The direction of crossing that activates this threshold. *For the possible property values, see Activation in Property details.*
DwellTime	string *read-write (null)*	The duration the sensor value must violate the threshold before the threshold is activated.
Reading	number *read-write (null)*	The threshold value.
}		
LowerWarning {	object	The value at which the reading is below normal range.
Activation	string (enum) *read-write (null)*	The direction of crossing that activates this threshold. *For the possible property values, see Activation in Property details.*

	string *read-write* *(null)*	
DwellTime	string *read-write* *(null)*	The duration the sensor value must violate the threshold before the threshold is activated.
Reading	number *read-write* *(null)*	The threshold value.
}		
UpperCritical {	object	The value at which the reading is above normal range and requires attention.
Activation	string (enum) *read-write* *(null)*	The direction of crossing that activates this threshold. *For the possible property values, see Activation in Property details.*
DwellTime	string *read-write* *(null)*	The duration the sensor value must violate the threshold before the threshold is activated.
Reading	number *read-write* *(null)*	The threshold value.
}		
UpperWarning {	object	The value at which the reading is above normal range.
Activation	string (enum) *read-write* *(null)*	The direction of crossing that activates this threshold. *For the possible property values, see Activation in Property details.*
DwellTime	string *read-write* *(null)*	The duration the sensor value must violate the threshold before the threshold is activated.

	number	
Reading	*read-write* *(null)*	The threshold value.
}		
}		
Oem {}	object	The OEM extension property. For property details, see Oem.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
TriggerActions [ ]	array (string (enum)) *read-only*	The actions that the trigger initiates. The actions to perform when a trigger condition is met. *For the possible property values, see TriggerActions in Property details.*
Wildcards [{	array	The wildcards and their substitution values for the entries in the MetricProperties array property.
Name	string *read-only* *(null)*	The wildcard.
Values [ ]	array (string, null) *read-only*	An array of values to substitute for the wildcard.
}]		

6.149.1 Property details

6.149.1.1 Activation

The direction of crossing that activates this threshold.

String	Description
Decreasing	Value decreases below the threshold.

String	Description
Either	Value crosses the threshold in either direction.
Increasing	Value increases above the threshold.

6.149.1.2 DiscreteTriggerCondition

The conditions when a discrete metric triggers.

String	Description
Changed	A discrete trigger condition is met whenever the metric value changes.
Specified	A discrete trigger condition is met when the metric value becomes one of the values that the DiscreteTriggers property lists.

6.149.1.3 MetricType

The metric type of the trigger.

String	Description
Discrete	The trigger is for a discrete sensor.
Numeric	The trigger is for numeric sensor.

6.149.1.4 Severity

The severity of the event message.

String	Description
Critical	A critical condition requires immediate attention.
OK	Normal.
Warning	A condition requires attention.

6.149.1.5 TriggerActions

The actions that the trigger initiates. The actions to perform when a trigger condition is met.

String	Description
LogToLogService	When a trigger condition is met, record in a log.

String	Description
RedfishEvent	When a trigger condition is met, the service sends an event to subscribers.
RedfishMetricReport	When a trigger condition is met, force an update of the specified metric reports.

6.150 TriggersCollection

URIs:

/redfish/v1/TelemetryService/Triggers

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Triggers resource. See the Links section and the *Triggers* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.

Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.151 UpdateService 1.8.1

v1.8	v1.7	v1.6	v1.5	v1.4	v1.3	v1.2	v1.1	v1.0
2019.4	2019.3	2019.2	2019.1	2018.3	2018.2	2017.1	2016.3	2016.2

The UpdateService schema describes the update service and the properties for the service itself with links to collections of firmware and software inventory. The update service also provides methods for updating software and firmware of the resources in a Redfish service.

URIs:

/redfish/v1/UpdateService

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions {	object	The available actions for this resource.
#UpdateService.SimpleUpdate {}	object	This action updates software components. *For more information, see the Actions section below.*
#UpdateService.StartUpdate *(v1.7+)* {}	object	This action starts an update of software components. *For more information, see the Actions section below.*
}		

Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
FirmwareInventory {	object	An inventory of firmware. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *SoftwareInventory*. See the SoftwareInventory schema for details.
}		
HttpPushUri *(v1.1+)*	string *read-only*	The URI used to perform an HTTP or HTTPS push update to the update service. The format of the message is vendor-specific.
HttpPushUriOptions *(v1.4+)* {	object	The options for HttpPushUri-provided software updates.
HttpPushUriApplyTime {	object	The settings for when to apply HttpPushUri-provided firmware.
ApplyTime	string (enum) *read-write*	The time when to apply the HttpPushUri-provided software update. *For the possible property values, see ApplyTime in Property details.*
MaintenanceWindowDurationInSeconds	integer (s) *read-write*	The expiry time, in seconds, of the maintenance window.
MaintenanceWindowStartTime	string *read-write*	The start time of a maintenance window.
}		
}		
HttpPushUriOptionsBusy *(v1.4+)*	boolean *read-write* *(null)*	An indication of whether a client has reserved the HttpPushUriOptions properties for software updates.

HttpPushUriTargets *(v1.2+)* [ ]	array (string, null) *read-write*	An array of URIs that indicate where to apply the update image.
HttpPushUriTargetsBusy *(v1.2+)*	boolean *read-write (null)*	An indication of whether any client has reserved the HttpPushUriTargets property.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
MaxImageSizeBytes *(v1.5+)*	integer (By) *read-only (null)*	The maximum size in bytes of the software update image that this service supports.
MultipartHttpPushUri *(v1.6+)*	string *read-only*	The URI used to perform a Redfish Specification-defined Multipart HTTP or HTTPS push update to the update service.
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
ServiceEnabled	boolean *read-write (null)*	An indication of whether this service is enabled.
SoftwareInventory {	object	An inventory of software. Contains a link to a resource.
@odata.id	string *read-only*	Link to Collection of *SoftwareInventory*. See the SoftwareInventory schema for details.
}		
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.

6.151.1 Actions

6.151.1.1 SimpleUpdate

This action updates software components.

URIs:

/redfish/v1/UpdateService/Actions/UpdateService.SimpleUpdate

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
ImageURI	string *required*	The URI of the software image to install.
Password *(v1.4+)*	string *optional*	The password to access the URI specified by the ImageURI parameter.
Targets *(v1.2+)* [ ]	array (string) *optional*	An array of URIs that indicate where to apply the update image.
TransferProtocol	string (enum) *optional*	The network protocol that the update service uses to retrieve the software image file located at the URI provided in ImageURI, if the URI does not contain a scheme. *For the possible property values, see TransferProtocol in Property details.*
Username *(v1.4+)*	string *optional*	The user name to access the URI specified by the ImageURI parameter.
}		

6.151.1.2 StartUpdate

This action starts an update of software components.

URIs:

/redfish/v1/UpdateService/Actions/UpdateService.StartUpdate

(This action takes no parameters.)

6.151.2 Property details

6.151.2.1 ApplyTime

The time when to apply the HttpPushUri-provided software update.

String	Description
AtMaintenanceWindowStart	Apply during an administrator-specified maintenance window.
Immediate	Apply immediately.
InMaintenanceWindowOnReset	Apply after a reset but within an administrator-specified maintenance window.
OnReset	Apply on a reset.

6.151.2.2 TransferProtocol

The network protocol that the update service uses to retrieve the software image file located at the URI provided in ImageURI, if the URI does not contain a scheme.

String	Description
CIFS	Common Internet File System (CIFS).
FTP	File Transfer Protocol (FTP).
HTTP	Hypertext Transfer Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).
NFS *(v1.3+)*	Network File System (NFS).
NSF *(deprecated v1.3)*	Network File System (NFS). *Deprecated in v1.3 and later. This value has been deprecated in favor of NFS.*
OEM	A manufacturer-defined protocol.
SCP	Secure Copy Protocol (SCP).
SFTP *(v1.1+)*	Secure File Transfer Protocol (SFTP).
TFTP	Trivial File Transfer Protocol (TFTP).

6.152 VCATEntry 1.0.0

v1.0
2019.4

The Schema definition of the Virtual Channel Action Table entries. A Virtual Channel is a mechanism used to create multiple, logical communication streams across a physical link.

URIs:

/redfish/v1/Fabrics/*{FabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/VCAT/*{VCATEntryId}* /redfish/v1/
Systems/*{SystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/VCAT/*{VCATEntryId}* /redfish/v1/
Systems/*{SystemId}*/FabricAdapters/*{FabricAdapterId}*/REQ-VCAT/*{VCATEntryId}* /redfish/v1/
Systems/*{SystemId}*/FabricAdapters/*{FabricAdapterId}*/RSP-VCAT/*{VCATEntryId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only required*	The unique identifier for a resource.
@odata.type	string *read-only required*	The type of a resource.
Actions {}	object	The available actions for this Resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

	string	
RawEntryHex	*read-only* *(null)*	The hexadecimal value of the Virtual Channel Action Table entries.
VCEntries [{	array	An array of entries of the Virtual Channel Action Table.
Threshold	string *read-only* *(null)*	The configured threshold.
VCMask	string *read-only* *(null)*	The bits corresponding to the supported Virtual Channel.
}]		

6.153 VCATEntryCollection

URIs:

/redfish/v1/Fabrics/*{FabricId}*/Switches/*{SwitchId}*/Ports/*{PortId}*/VCAT /redfish/v1/
Systems/*{SystemId}*/FabricAdapters/*{FabricAdapterId}*/Ports/*{PortId}*/VCAT /redfish/v1/
Systems/*{SystemId}*/FabricAdapters/*{FabricAdapterId}*/REQ-VCAT /redfish/v1/
Systems/*{SystemId}*/FabricAdapters/*{FabricAdapterId}*/RSP-VCAT

	string	
@odata.context	*read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.

Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a VCATEntry resource. See the Links section and the *VCATEntry* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.154 VirtualMedia 1.3.2

v1.3	*v1.2*	*v1.1*	*v1.0*
2018.3	2017.3	2017.1	1.0

The VirtualMedia schema contains properties related to the monitor and control of an instance of virtual media, such as a remote CD, DVD, or USB device. A manager for a system or device provides virtual media functionality.

URIs:

/redfish/v1/Managers/*{ManagerId}*/VirtualMedia/*{VirtualMediaId}*

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only* *required*	The unique identifier for a resource.

@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.1+)* {	object	The available actions for this Resource.
#VirtualMedia.EjectMedia *(v1.2+)* {}	object	This action detaches remote media from virtual media. *For more information, see the Actions section below.*
#VirtualMedia.InsertMedia *(v1.2+)* {}	object	This action attaches remote media to virtual media. *For more information, see the Actions section below.*
}		
ConnectedVia	string (enum) *read-only* *(null)*	The current virtual media connection method. *For the possible property values, see ConnectedVia in Property details.*
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Image	string *read-write* *(null)*	The URI of the location of the selected image.
ImageName	string *read-only* *(null)*	The current image name.
Inserted	boolean *read-write* *(null)*	An indication of whether virtual media is inserted into the virtual device.
MediaTypes [ ]	array (string (enum)) *read-only*	The media types supported as virtual media. *For the possible property values, see MediaTypes in Property details.*

Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Password *(v1.3+)*	string *read-write* *(null)*	The password to access the Image parameter-specified URI. This property is null in responses.
TransferMethod *(v1.3+)*	string (enum) *read-write* *(null)*	The transfer method to use with the Image. *For the possible property values, see TransferMethod in Property details.*
TransferProtocolType *(v1.3+)*	string (enum) *read-write* *(null)*	The network protocol to use with the image. *For the possible property values, see TransferProtocolType in Property details.*
UserName *(v1.3+)*	string *read-write* *(null)*	The user name to access the Image parameter-specified URI.
WriteProtected	boolean *read-write* *(null)*	An indication of whether the media is write-protected.

6.154.1 Actions

6.154.1.1 EjectMedia

This action detaches remote media from virtual media.

URIs:

/redfish/v1/Managers/*{ManagerId}*/VirtualMedia/*{VirtualMediaId}*/Actions/VirtualMedia.EjectMedia

(This action takes no parameters.)

6.154.1.2 InsertMedia

This action attaches remote media to virtual media.

URIs:

/redfish/v1/Managers/*{ManagerId}*/VirtualMedia/*{VirtualMediaId}*/Actions/VirtualMedia.InsertMedia

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
Image *required*	string	The URI of the remote media to attach to the virtual media.
Inserted *optional*	boolean	An indication of whether the image is treated as inserted upon completion of the action. The default is `true` .
Password *(v1.3+)* *optional*	string	The password to access the Image parameter-specified URI.
TransferMethod *(v1.3+)* *optional*	string (enum)	The transfer method to use with the Image. *For the possible property values, see TransferMethod in Property details.*
TransferProtocolType *(v1.3+)* *optional*	string (enum)	The network protocol to use with the image. *For the possible property values, see TransferProtocolType in Property details.*
UserName *(v1.3+)* *optional*	string	The user name to access the Image parameter-specified URI.
WriteProtected *optional*	boolean	An indication of whether the remote media is treated as write-protected. The default is `true` .
}		

6.154.2 Property details

6.154.2.1 ConnectedVia

The current virtual media connection method.

String	Description
Applet	Connected to a client application.
NotConnected	No current connection.
Oem	Connected through an OEM-defined method.
URI	Connected to a URI location.

6.154.2.2 MediaTypes

The media types supported as virtual media.

String	Description
CD	A CD-ROM format (ISO) image.
DVD	A DVD-ROM format image.
Floppy	A floppy disk image.
USBStick	An emulation of a USB storage device.

6.154.2.3 TransferMethod

The transfer method to use with the Image.

String	Description
Stream	Stream image file data from the source URI.
Upload	Upload the entire image file from the source URI to the service.

6.154.2.4 TransferProtocolType

The network protocol to use with the image.

String	Description
CIFS	Common Internet File System (CIFS).
FTP	File Transfer Protocol (FTP).
HTTP	Hypertext Transfer Protocol (HTTP).
HTTPS	Hypertext Transfer Protocol Secure (HTTPS).

String	Description
NFS	Network File System (NFS).
OEM	A manufacturer-defined protocol.
SCP	Secure Copy Protocol (SCP).
SFTP	Secure File Transfer Protocol (SFTP).
TFTP	Trivial File Transfer Protocol (TFTP).

6.155 VirtualMediaCollection

URIs:

/redfish/v1/Managers/*{ManagerId}*/VirtualMedia

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a VirtualMedia resource. See the Links section and the *VirtualMedia* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.

	string	
Members@odata.nextLink	*read-only*	The URI to the resource containing the next set of partial members.
Name	string _read-only_	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.156 VLanNetworkInterface 1.1.5

v1.1	v1.0
2017.1	1.0

The VLanNetworkInterface schema describes a VLAN network instance that is available on a manager, system, or other device.

URIs:

/redfish/v1/
Chassis/*{ChassisId}*/NetworkAdapters/*{NetworkAdapterId}*/NetworkDeviceFunctions/*{NetworkDeviceFunctionId}*/Ethernet/VLANs/*{VLanNetworkInterfaceId}* /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs/*{VLanNetworkInterfaceId}* /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs/*{VLanNetworkInterfaceId}* /redfish/v1/
Managers/*{ManagerId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs/*{VLanNetworkInterfaceId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs/*{VLanNetworkInterfaceId}* /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs/*{VLanNetworkInterfaceId}* /redfish/v1/
Systems/*{ComputerSystemId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs/*{VLanNetworkInterfaceId}*

	string	
@odata.context	_read-only_	The OData description of a payload.
@odata.etag	string _read-only_	The current ETag of the resource.

@odata.id	string *read-only required*	The unique identifier for a resource.
@odata.type	string *read-only required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
VLANEnable	boolean *read-write required on create* *(null)*	An indication of whether this VLAN is enabled for this interface.
VLANId	integer *read-write required on create* *(null)*	The ID for this VLAN.

6.157 VLanNetworkInterfaceCollection

URIs:

/redfish/v1/
Chassis/*{ChassisId}*/NetworkAdapters/*{NetworkAdapterId}*/NetworkDeviceFunctions/*{NetworkDeviceFunctionId}*/Ethern
et/VLANs /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs
/redfish/v1/Managers/*{ManagerId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs
/redfish/v1/Systems/*{ComputerSystemId}*/EthernetInterfaces/*{EthernetInterfaceId}*/VLANs

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a VLanNetworkInterface resource. See the Links section and the *VLanNetworkInterface* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.158 Volume 1.4.1

v1.4	v1.3	v1.2
WIP v1.1.0	TP v1.0.6a	WIP v1.0.5
Volume contains properties used to describe a volume, virtual disk, LUN, or other logical storage entity for any system.		

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*} /redfish/ v1/CompositionService/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*} /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*} /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*} /redfish/v1/ StorageServices/{*StorageServiceId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes/{*VolumeId*} /redfish/v1/ StorageServices/{*StorageServiceId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes/ {*VolumeId*} /redfish/v1/StorageServices/{*StorageServiceId*}/StoragePools/{*StoragePoolId*}/AllocatedVolumes/{*VolumeId*} /redfish/v1/ StorageServices/{*StorageServiceId*}/StoragePools/{*StoragePoolId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolum es/{*VolumeId*} /redfish/v1/StorageServices/{*StorageServiceId*}/Volumes/{*VolumeId*} /redfish/v1/ StorageServices/{*StorageServiceId*}/Volumes/{*VolumeId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes/{*Provi dingVolumeId*} /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes/{*VolumeId*} /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/Prov idingVolumes/{*VolumeId*} /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StoragePools/{*StoragePoolId*}/AllocatedVolumes/{*VolumeId*} /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StoragePools/{*StoragePoolId*}/CapacitySources/{*CapacitySourceId*}/P rovidingVolumes/{*VolumeId*} /redfish/v1/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}

	string *read-only*	The OData description of a payload.
@odata.context		
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
AccessCapabilities *(v1.1+)* [ ]	array (string (enum)) *read-write* *(null)*	Supported IO access capabilities. Values of StorageAccessCapability describe abilities to read or write storage. *For the possible property values, see AccessCapabilities in Property details.*
Actions {	object	The available actions for this resource.
#Volume.AssignReplicaTarget *(v1.4+)* {}	object	This action is used to establish a replication relationship by assigning an existing volume to serve as a target replica for an existing source volume. *For more information, see the Actions section below.*
#Volume.CheckConsistency {}	object	This action is used to force a check of the Volume's parity or redundant data to ensure it matches calculated values. *For more information, see the Actions section below.*
#Volume.CreateReplicaTarget *(v1.4+)* {}	object	This action is used to create a new volume resource to provide expanded data protection through a replica relationship with the specified source volume. *For more information, see the Actions section below.*
#Volume.Initialize {}	object	This action is used to prepare the contents of the volume for use by the system. If InitializeType is not specified in the request body, the InitializeType should be Fast. *For more information, see the Actions section below.*
#Volume.RemoveReplicaRelationship *(v1.4+)* {}	object	This action is used to disable data synchronization between a source and target volume, remove the replication relationship, and optionally delete the target volume. *For more information, see the Actions section below.*
#Volume.ResumeReplication *(v1.4+)* {}	object	This action is used to resume the active data synchronization between a source and target volume, without otherwise altering the replication relationship. *For more information, see the Actions section below.*
#Volume.ReverseReplicationRelationship *(v1.4+)* {}	object	This action is used to reverse the replication relationship between a source and target volume. *For more information, see the Actions section below.*
#Volume.SplitReplication *(v1.4+)* {}	object	This action is used to split the replication relationship and suspend data synchronization between a source and target volume. *For more information, see the Actions section below.*

#Volume.SuspendReplication *(v1.4+)* {}	object	This action is used to suspend active data synchronization between a source and target volume, without otherwise altering the replication relationship. *For more information, see the Actions section below.*
}		
AllocatedPools *(v1.1+)* {	object	An array of references to StoragePools allocated from this Volume.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
BlockSizeBytes	integer (By) *read-only (null)*	The size of the smallest addressable unit (Block) of this volume in bytes.
Capacity *(v1.1+)* {}	object	Capacity utilization. For property details, see Capacity (v1.0.0).
CapacityBytes	integer (By) *read-write (null)*	The size in bytes of this Volume.
CapacitySources *(v1.1+)* [{	array	An array of space allocations to this volume.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
CapacitySources@odata.count	integer *read-only*	The number of items in a collection.
Compressed *(v1.4+)*	boolean *read-write (null)*	Indicator of whether or not the Volume has compression enabled.

Deduplicated *(v1.4+)*	boolean *read-write (null)*	Indicator of whether or not the Volume has deduplication enabled.
Description	string *read-only (null)*	The description of this resource. Used for commonality in the schema definitions.
DisplayName *(v1.4+)*	string *read-write (null)*	A user-configurable string to name the volume.
Encrypted	boolean *read-write (null)*	Is this Volume encrypted.
EncryptionTypes [ ]	array (string (enum)) *read-write*	The types of encryption used by this Volume. *For the possible property values, see EncryptionTypes in Property details.*
Id	string *read-only required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Identifiers [{ }]	array (object)	The Durable names for the volume. Any additional identifiers for a resource. For property details, see Identifier.
IOStatistics *(v1.2+)* {}	object	Statistics for this volume. For property details, see IOStatistics (v1.0.3).
Links {	object	Contains references to other resources that are related to this resource.
ClassOfService *(v1.1+)* {	object	The ClassOfService that this storage volume conforms to.
@odata.id	string *read-only*	The unique identifier for a resource.
}		

ClientEndpoints *(v1.4+)* [{	array	An array of references to the client Endpoints associated with this volume.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
ClientEndpoints@odata.count	integer *read-only*	The number of items in a collection.
ConsistencyGroups *(v1.4+)* [{	array	An array of references to the ConsistencyGroups associated with this volume.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
ConsistencyGroups@odata.count	integer *read-only*	The number of items in a collection.
DedicatedSpareDrives *(v1.2+)* [{	array	An array of references to the drives which are dedicated spares for this volume.
@odata.id	string *read-only*	Link to a Drive resource. See the Links section and the *Drive* schema for details.
}]		
DedicatedSpareDrives@odata.count	integer *read-only*	The number of items in a collection.
Drives [{	array	An array of references to the drives which contain this volume. This will reference Drives that either wholly or only partly contain this volume.
@odata.id	string *read-only*	Link to a Drive resource. See the Links section and the *Drive* schema for details.
}]		

Drives@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
OwningStorageService *(v1.4+)* {	object	A pointer to the StorageService that owns or contains this volume.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
ServerEndpoints *(v1.4+)* [{	array	An array of references to the server Endpoints associated with this volume.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
ServerEndpoints@odata.count	integer *read-only*	The number of items in a collection.
SpareResourceSets *(v1.3+)* [{	array	An array of references to SpareResourceSets.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
SpareResourceSets@odata.count	integer *read-only*	The number of items in a collection.
StorageGroups *(v1.4+)* [{	array	An array of references to the StorageGroups associated with this volume.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		

StorageGroups@odata.count	integer *read-only*	The number of items in a collection.
}		
LogicalUnitNumber *(v1.4+)*	integer *read-only (null)*	Indicates the host-visible LogicalUnitNumber assigned to this Volume.
LowSpaceWarningThresholdPercents *(v1.1+)* [ ]	array (%) (integer, null) *read-write*	Low space warning.
Manufacturer *(v1.1+)*	string *read-only (null)*	The manufacturer or OEM of this storage volume.
MaxBlockSizeBytes *(v1.1+)*	integer (By) *read-only (null)*	Max Block size in bytes.
MediaSpanCount *(v1.4+)*	integer *read-only (null)*	Indicates the number of media elements used per span in the secondary RAID for a hierarchical RAID type.
Model *(v1.1+)*	string *read-only (null)*	The model number for this storage volume.
Name	string *read-only required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

Operations [{	array	The operations currently running on the Volume.
AssociatedTask {	object	A reference to the task associated with the operation if any. See the *Task* schema for details on this property.
@odata.id	string *read-only*	Link to a Task resource. See the Links section and the *Task* schema for details.
}		
OperationName	string *read-only* *(null)*	The name of the operation.
PercentageComplete	integer *read-only* *(null)*	The percentage of the operation that has been completed.
}]		
OptimumIOSizeBytes	integer (By) *read-only* *(null)*	The size in bytes of this Volume's optimum IO size.
ProvisioningPolicy *(v1.4+)*	string (enum) *read-write* *(null)*	This property specifies the volume's storage allocation, or provisioning policy. *For the possible property values, see ProvisioningPolicy in Property details.*
RAIDType *(v1.3.1+)*	string (enum) *read-only* *(null)*	The RAID type of this volume. *For the possible property values, see RAIDType in Property details.*
ReadCachePolicy *(v1.4+)*	string (enum) *read-write* *(null)*	Indicates the read cache policy setting for the Volume. *For the possible property values, see ReadCachePolicy in Property details.*

RecoverableCapacitySourceCount *(v1.3+)*	integer *read-write (null)*	Current number of capacity source resources that are available as replacements.
RemainingCapacityPercent *(v1.2+)*	integer *read-only (null)*	The percentage of the capacity remaining in the Volume.
ReplicaInfo *(v1.1+)* {}	object	Describes this storage volume in its role as a target replica. For property details, see ReplicaInfo (v1.3.0).
ReplicaTargets *(v1.3+)* [{	array	The resources that are target replicas of this source.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
ReplicaTargets@odata.count	integer *read-only*	The number of items in a collection.
Status {}	object	The property contains the status of the Volume. For property details, see Status.
StorageGroups *(v1.1+)* {	object	An array of references to Storage Groups that includes this volume.
@odata.id	string *read-only*	The unique identifier for a resource.
}		
StripSizeBytes *(v1.4+)*	integer (By) *read-write (null)*	The number of blocks (bytes) in a strip in a disk array that uses striped data mapping.
VolumeType	string (enum) *read-only (null)*	The type of this volume. *For the possible property values, see VolumeType in Property details.*

VolumeUsage *(v1.4+)*	string (enum) *read-only (null)*	Indicates the Volume usage type setting for the Volume. *For the possible property values, see VolumeUsage in Property details.*
WriteCachePolicy *(v1.4+)*	string (enum) *read-write (null)*	Indicates the write cache policy setting for the Volume. *For the possible property values, see WriteCachePolicy in Property details.*
WriteCacheState *(v1.4+)*	string (enum) *read-only (null)*	Indicates the WriteCacheState policy setting for the Volume. *For the possible property values, see WriteCacheState in Property details.*
WriteHoleProtectionPolicy *(v1.4+)*	string (enum) *read-write*	The policy that the RAID volume is using to address the write hole issue. *For the possible property values, see WriteHoleProtectionPolicy in Property details.*

6.158.1 Actions

6.158.1.1 AssignReplicaTarget

This action is used to establish a replication relationship by assigning an existing volume to serve as a target replica for an existing source volume.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/
Volume.AssignReplicaTarget /redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/
Volume.AssignReplicaTarget /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/Volume.AssignReplicaTarget
/redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/
Volume.AssignReplicaTarget /redfish/v1/
StorageServices/{*StorageServiceId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes/{*VolumeId*}/Actions/
Volume.AssignReplicaTarget /redfish/v1/
StorageServices/{*StorageServiceId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes/

{VolumeId}/Actions/Volume.AssignReplicaTarget /redfish/v1/
StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions/
Volume.AssignReplicaTarget /redfish/v1/
StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolum
es/*{VolumeId}*/Actions/Volume.AssignReplicaTarget /redfish/v1/
StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/Actions/Volume.AssignReplicaTarget /redfish/v1/
StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/*{Provi
dingVolumeId}*/Actions/Volume.AssignReplicaTarget /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Acti
ons/Volume.AssignReplicaTarget /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/Prov
idingVolumes/*{VolumeId}*/Actions/Volume.AssignReplicaTarget /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions
/Volume.AssignReplicaTarget /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/P
rovidingVolumes/*{VolumeId}*/Actions/Volume.AssignReplicaTarget /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/Volume.AssignReplicaTarget

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
ReplicaType	string (enum) required	The type of replica relationship to be created. *For the possible property values, see ReplicaType in Property details.*
ReplicaUpdateMode	string (enum) required	The replica update mode (synchronous vs asynchronous). *For the possible property values, see ReplicaUpdateMode in Property details.*
TargetVolume	string required	The Uri to the existing target volume.
}		

6.158.1.2 CheckConsistency

This action is used to force a check of the Volume's parity or redundant data to ensure it matches calculated values.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.CheckConsistency /redfish/v1/CompositionService/

ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.CheckConsistency /redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/Volume.CheckConsistency
/redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.CheckConsistency /redfish/v1/

StorageServices/*{StorageServiceId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Actions/
Volume.CheckConsistency /redfish/v1/

StorageServices/*{StorageServiceId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/
{VolumeId}/Actions/Volume.CheckConsistency /redfish/v1/

StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions/
Volume.CheckConsistency /redfish/v1/

StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolum
es/*{VolumeId}*/Actions/Volume.CheckConsistency /redfish/v1/

StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/Actions/Volume.CheckConsistency /redfish/v1/

StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/*{Provi
dingVolumeId}*/Actions/Volume.CheckConsistency /redfish/v1/

Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Acti
ons/Volume.CheckConsistency /redfish/v1/

Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/Prov
idingVolumes/*{VolumeId}*/Actions/Volume.CheckConsistency /redfish/v1/

Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions
/Volume.CheckConsistency /redfish/v1/

Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/P
rovidingVolumes/*{VolumeId}*/Actions/Volume.CheckConsistency /redfish/v1/

Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/Volume.CheckConsistency

(This action takes no parameters.)

6.158.1.3 CreateReplicaTarget

This action is used to create a new volume resource to provide expanded data protection through a replica
relationship with the specified source volume.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.CreateReplicaTarget /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.CreateReplicaTarget /redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/Volume.CreateReplicaTarget
/redfish/v1/

ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.CreateReplicaTarget /redfish/v1/

StorageServices/*{StorageServiceId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Actions/
Volume.CreateReplicaTarget /redfish/v1/
StorageServices/*{StorageServiceId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/
{VolumeId}/Actions/Volume.CreateReplicaTarget /redfish/v1/
StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions/
Volume.CreateReplicaTarget /redfish/v1/
StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolum
es/*{VolumeId}*/Actions/Volume.CreateReplicaTarget /redfish/v1/
StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/Actions/Volume.CreateReplicaTarget /redfish/v1/
StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/*{Provi
dingVolumeId}*/Actions/Volume.CreateReplicaTarget /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Acti
ons/Volume.CreateReplicaTarget /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/Prov
idingVolumes/*{VolumeId}*/Actions/Volume.CreateReplicaTarget /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions
/Volume.CreateReplicaTarget /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/P
rovidingVolumes/*{VolumeId}*/Actions/Volume.CreateReplicaTarget /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/Volume.CreateReplicaTarget

The following table shows the parameters for the action which are included in the POST body to the URI shown in the
"target" property of the Action.

{		
ReplicaType	string (enum) *required*	The type of replica relationship to be created. *For the possible property values, see ReplicaType in Property details.*
ReplicaUpdateMode	string (enum) *required*	The replica update mode (synchronous vs asynchronous). *For the possible property values, see ReplicaUpdateMode in Property details.*
TargetStoragePool	string *required*	The Uri to the existing target Storage Pool.
VolumeName	string *optional*	The Name for the new target volume.
}		

6.158.1.4 Initialize

This action is used to prepare the contents of the volume for use by the system. If InitializeType is not specified in the request body, the InitializeType should be Fast.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/ Volume.Initialize /redfish/v1/CompositionService/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/ Volume.Initialize /redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/ Volume.Initialize /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/ Volume.Initialize /redfish/v1/ StorageServices/{*StorageServiceId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes/{*VolumeId*}/Actions/ Volume.Initialize /redfish/v1/ StorageServices/{*StorageServiceId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes/ {*VolumeId*}/Actions/Volume.Initialize /redfish/v1/ StorageServices/{*StorageServiceId*}/StoragePools/{*StoragePoolId*}/AllocatedVolumes/{*VolumeId*}/Actions/ Volume.Initialize /redfish/v1/ StorageServices/{*StorageServiceId*}/StoragePools/{*StoragePoolId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolum es/{*VolumeId*}/Actions/Volume.Initialize /redfish/v1/StorageServices/{*StorageServiceId*}/Volumes/{*VolumeId*}/Actions/ Volume.Initialize /redfish/v1/ StorageServices/{*StorageServiceId*}/Volumes/{*VolumeId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes/{*Provi dingVolumeId*}/Actions/Volume.Initialize /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes/{*VolumeId*}/Acti ons/Volume.Initialize /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/Prov idingVolumes/{*VolumeId*}/Actions/Volume.Initialize /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StoragePools/{*StoragePoolId*}/AllocatedVolumes/{*VolumeId*}/Actions /Volume.Initialize /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StoragePools/{*StoragePoolId*}/CapacitySources/{*CapacitySourceId*}/P rovidingVolumes/{*VolumeId*}/Actions/Volume.Initialize /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/Volume.Initialize

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
InitializeType	string (enum) optional	The type of initialization to be performed. *For the possible property values, see InitializeType in Property details.*

}		

6.158.1.5 RemoveReplicaRelationship

This action is used to disable data synchronization between a source and target volume, remove the replication relationship, and optionally delete the target volume.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/ Volume.RemoveReplicaRelationship /redfish/v1/CompositionService/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/ Volume.RemoveReplicaRelationship /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/ Volume.RemoveReplicaRelationship /redfish/v1/ ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/ Volume.RemoveReplicaRelationship /redfish/v1/ StorageServices/{*StorageServiceId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes/{*VolumeId*}/Actions/ Volume.RemoveReplicaRelationship /redfish/v1/ StorageServices/{*StorageServiceId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes/ {*VolumeId*}/Actions/Volume.RemoveReplicaRelationship /redfish/v1/ StorageServices/{*StorageServiceId*}/StoragePools/{*StoragePoolId*}/AllocatedVolumes/{*VolumeId*}/Actions/ Volume.RemoveReplicaRelationship /redfish/v1/ StorageServices/{*StorageServiceId*}/StoragePools/{*StoragePoolId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolum es/{*VolumeId*}/Actions/Volume.RemoveReplicaRelationship /redfish/v1/ StorageServices/{*StorageServiceId*}/Volumes/{*VolumeId*}/Actions/Volume.RemoveReplicaRelationship /redfish/v1/ StorageServices/{*StorageServiceId*}/Volumes/{*VolumeId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes/{*Provi dingVolumeId*}/Actions/Volume.RemoveReplicaRelationship /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes/{*VolumeId*}/Acti ons/Volume.RemoveReplicaRelationship /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/Prov idingVolumes/{*VolumeId*}/Actions/Volume.RemoveReplicaRelationship /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StoragePools/{*StoragePoolId*}/AllocatedVolumes/{*VolumeId*}/Actions /Volume.RemoveReplicaRelationship /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StoragePools/{*StoragePoolId*}/CapacitySources/{*CapacitySourceId*}/P rovidingVolumes/{*VolumeId*}/Actions/Volume.RemoveReplicaRelationship /redfish/v1/ Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/Volume.RemoveReplicaRelationship

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		

	boolean	
DeleteTargetVolume	*optional*	Indicate whether or not to delete the target volume as part of the operation.
TargetVolume	string	The Uri to the existing target volume.
	required	
}		

6.158.1.6 ResumeReplication

This action is used to resume the active data synchronization between a source and target volume, without otherwise altering the replication relationship.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/
Volume.ResumeReplication /redfish/v1/CompositionService/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/
Volume.ResumeReplication /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/Volume.ResumeReplication
/redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/
Volume.ResumeReplication /redfish/v1/
StorageServices/{*StorageServiceId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes/{*VolumeId*}/Actions/
Volume.ResumeReplication /redfish/v1/
StorageServices/{*StorageServiceId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes/
{*VolumeId*}/Actions/Volume.ResumeReplication /redfish/v1/
StorageServices/{*StorageServiceId*}/StoragePools/{*StoragePoolId*}/AllocatedVolumes/{*VolumeId*}/Actions/
Volume.ResumeReplication /redfish/v1/
StorageServices/{*StorageServiceId*}/StoragePools/{*StoragePoolId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolum
es/{*VolumeId*}/Actions/Volume.ResumeReplication /redfish/v1/
StorageServices/{*StorageServiceId*}/Volumes/{*VolumeId*}/Actions/Volume.ResumeReplication /redfish/v1/
StorageServices/{*StorageServiceId*}/Volumes/{*VolumeId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes/{*Provi
dingVolumeId*}/Actions/Volume.ResumeReplication /redfish/v1/
Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes/{*VolumeId*}/Acti
ons/Volume.ResumeReplication /redfish/v1/
Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/Prov
idingVolumes/{*VolumeId*}/Actions/Volume.ResumeReplication /redfish/v1/
Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StoragePools/{*StoragePoolId*}/AllocatedVolumes/{*VolumeId*}/Actions
/Volume.ResumeReplication /redfish/v1/
Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StoragePools/{*StoragePoolId*}/CapacitySources/{*CapacitySourceId*}/P
rovidingVolumes/{*VolumeId*}/Actions/Volume.ResumeReplication /redfish/v1/
Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes/{*VolumeId*}/Actions/Volume.ResumeReplication

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
TargetVolume	string *required*	The Uri to the existing target volume.
}		

6.158.1.7 ReverseReplicationRelationship

This action is used to reverse the replication relationship between a source and target volume.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/ Volume.ReverseReplicationRelationship /redfish/v1/CompositionService/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/ Volume.ReverseReplicationRelationship /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/ Volume.ReverseReplicationRelationship /redfish/v1/ ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/ Volume.ReverseReplicationRelationship /redfish/v1/ StorageServices/*{StorageServiceId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Actions/ Volume.ReverseReplicationRelationship /redfish/v1/ StorageServices/*{StorageServiceId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/ *{VolumeId}*/Actions/Volume.ReverseReplicationRelationship /redfish/v1/ StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions/ Volume.ReverseReplicationRelationship /redfish/v1/ StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolum es/*{VolumeId}*/Actions/Volume.ReverseReplicationRelationship /redfish/v1/ StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/Actions/Volume.ReverseReplicationRelationship /redfish/v1/ StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/*{Provi dingVolumeId}*/Actions/Volume.ReverseReplicationRelationship /redfish/v1/ Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Acti ons/Volume.ReverseReplicationRelationship /redfish/v1/ Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/Prov idingVolumes/*{VolumeId}*/Actions/Volume.ReverseReplicationRelationship /redfish/v1/ Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions /Volume.ReverseReplicationRelationship /redfish/v1/ Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/P rovidingVolumes/*{VolumeId}*/Actions/Volume.ReverseReplicationRelationship /redfish/v1/

Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.ReverseReplicationRelationship

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
TargetVolume	string *required*	The Uri to the existing target volume.
}		

6.158.1.8 SplitReplication

This action is used to split the replication relationship and suspend data synchronization between a source and target volume.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.SplitReplication /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.SplitReplication /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/Volume.SplitReplication /redfish/
v1/ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.SplitReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Actions/
Volume.SplitReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/
{VolumeId}/Actions/Volume.SplitReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions/
Volume.SplitReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolum
es/*{VolumeId}*/Actions/Volume.SplitReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/Actions/Volume.SplitReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/*{Provi
dingVolumeId}*/Actions/Volume.SplitReplication /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Acti
ons/Volume.SplitReplication /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/Prov
idingVolumes/*{VolumeId}*/Actions/Volume.SplitReplication /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions
/Volume.SplitReplication /redfish/v1/

Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/*{VolumeId}*/Actions/Volume.SplitReplication /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/Volume.SplitReplication

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
TargetVolume	string *required*	The Uri to the existing target volume.
}		

6.158.1.9 SuspendReplication

This action is used to suspend active data synchronization between a source and target volume, without otherwise altering the replication relationship.

URIs:

/redfish/v1/CompositionService/ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.SuspendReplication /redfish/v1/CompositionService/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.SuspendReplication /redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/Volume.SuspendReplication
/redfish/v1/
ResourceBlocks/*{ResourceBlockId}*/Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/
Volume.SuspendReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Actions/
Volume.SuspendReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/
{VolumeId}/Actions/Volume.SuspendReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions/
Volume.SuspendReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/*{VolumeId}*/Actions/Volume.SuspendReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/Actions/Volume.SuspendReplication /redfish/v1/
StorageServices/*{StorageServiceId}*/Volumes/*{VolumeId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/*{ProvidingVolumeId}*/Actions/Volume.SuspendReplication /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/ConsistencyGroups/*{ConsistencyGroupId}*/Volumes/*{VolumeId}*/Actions/Volume.SuspendReplication /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/FileSystems/*{FileSystemId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/*{VolumeId}*/Actions/Volume.SuspendReplication /redfish/v1/

Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/AllocatedVolumes/*{VolumeId}*/Actions/Volume.SuspendReplication /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/StoragePools/*{StoragePoolId}*/CapacitySources/*{CapacitySourceId}*/ProvidingVolumes/*{VolumeId}*/Actions/Volume.SuspendReplication /redfish/v1/
Systems/*{ComputerSystemId}*/Storage/*{StorageId}*/Volumes/*{VolumeId}*/Actions/Volume.SuspendReplication

The following table shows the parameters for the action which are included in the POST body to the URI shown in the "target" property of the Action.

{		
TargetVolume	string *required*	The Uri to the existing target volume.
}		

6.158.2 Property details

6.158.2.1 AccessCapabilities

Supported IO access capabilities. Values of StorageAccessCapability describe abilities to read or write storage.

String	Description
Append	AppendOnly.
Execute	Execute access is allowed by the file share.
Read	Read.
Streaming	Streaming.
Write	Write Many.
WriteOnce	WriteOnce.

6.158.2.2 EncryptionTypes

The types of encryption used by this Volume.

String	Description
ControllerAssisted	The volume is being encrypted by the storage controller entity.
NativeDriveEncryption	The volume is utilizing the native drive encryption capabilities of the drive hardware.

String	Description
SoftwareAssisted	The volume is being encrypted by software running on the system or the operating system.

6.158.2.3 InitializeType

The type of initialization to be performed.

String	Description
Fast	The volume is prepared for use quickly, typically by erasing just the beginning and end of the space so that partitioning can be performed.
Slow	The volume is prepared for use slowly, typically by completely erasing the volume.

6.158.2.4 ProvisioningPolicy

This property specifies the volume's storage allocation, or provisioning policy.

String	Description
Fixed	Storage is fully allocated.
Thin	Storage may be over allocated.

6.158.2.5 RAIDType

The RAID type of this volume.

String	Description
RAID0	A placement policy where consecutive logical blocks of data are uniformly distributed across a set of independent storage devices without offering any form of redundancy.
RAID00	A placement policy that creates a RAID 0 stripe set over two or more RAID 0 sets.
RAID01	A data placement policy that creates a mirrored device (RAID 1) over a set of striped devices (RAID 0).
RAID1	A placement policy where each logical block of data is stored on more than one independent storage device.
RAID10	A placement policy that creates a striped device (RAID 0) over a set of mirrored devices (RAID 1).
RAID10E	A placement policy that uses a RAID 0 stripe set over two or more RAID 10 sets.
RAID10Triple	A placement policy that uses a striped device (RAID 0) over a set of triple mirrored devices (RAID 1Triple).
RAID1E	A placement policy that uses a form of mirroring implemented over a set of independent storage devices where logical blocks are duplicated on a pair of independent storage devices so that data is uniformly distributed across the storage devices.

String	Description
RAID1Triple	A placement policy where each logical block of data is mirrored three times across a set of three independent storage devices.
RAID3	A placement policy using parity-based protection where logical bytes of data are uniformly distributed across a set of independent storage devices and where the parity is stored on a dedicated independent storage device.
RAID4	A placement policy using parity-based protection where logical blocks of data are uniformly distributed across a set of independent storage devices and where the parity is stored on a dedicated independent storage device.
RAID5	A placement policy using parity-based protection for storing stripes of 'n' logical blocks of data and one logical block of parity across a set of 'n+1' independent storage devices where the parity and data blocks are interleaved across the storage devices.
RAID50	A placement policy that uses a RAID 0 stripe set over two or more RAID 5 sets of independent storage devices.
RAID6	A placement policy using parity-based protection for storing stripes of 'n' logical blocks of data and two logical blocks of independent parity across a set of 'n+2' independent storage devices where the parity and data blocks are interleaved across the storage devices.
RAID60	A placement policy that uses a RAID 0 stripe set over two or more RAID 6 sets of independent storage devices.
RAID6TP	A placement policy that uses parity-based protection for storing stripes of 'n' logical blocks of data and three logical blocks of independent parity across a set of 'n+3' independent storage devices where the parity and data blocks are interleaved across the storage devices.

6.158.2.6 ReadCachePolicy

Indicates the read cache policy setting for the Volume.

String	Description
AdaptiveReadAhead	A caching technique in which the controller dynamically determines whether to pre-fetch data anticipating future read requests, based on previous cache hit ratio.
Off	The read cache is disabled.
ReadAhead	A caching technique in which the controller pre-fetches data anticipating future read requests.

6.158.2.7 ReplicaType

The type of replica relationship to be created.

String	Description
Clone	Create a point in time, full copy the source.
Mirror	Create and maintain a copy of the source.

String	Description
Snapshot	Create a point in time, virtual copy of the source.
TokenizedClone	Create a token based clone.

6.158.2.8 ReplicaUpdateMode

The replica update mode (synchronous vs asynchronous).

String	Description
Active	Active-Active (i.e. bidirectional) synchronous updates.
Adaptive	Allows implementation to switch between synchronous and asynchronous modes.
Asynchronous	Asynchronous updates.
Synchronous	Synchronous updates.

6.158.2.9 VolumeType

The type of this volume.

String	Description
Mirrored	The volume is a mirrored device.
NonRedundant	The volume is a non-redundant storage device.
RawDevice	The volume is a raw physical device without any RAID or other virtualization applied.
SpannedMirrors	The volume is a spanned set of mirrored devices.
SpannedStripesWithParity	The volume is a spanned set of devices which uses parity to retain redundant information.
StripedWithParity	The volume is a device which uses parity to retain redundant information.

6.158.2.10 VolumeUsage

Indicates the Volume usage type setting for the Volume.

String	Description
CacheOnly	The volume is allocated for use as a non-consumable cache only volume.
Data	The volume is allocated for use as a consumable data volume.

String	Description
ReplicationReserve	The volume is allocated for use as a non-consumable reserved volume for replication use.
SystemData	The volume is allocated for use as a consumable data volume reserved for system use.
SystemReserve	The volume is allocated for use as a non-consumable system reserved volume.

6.158.2.11 WriteCachePolicy

Indicates the write cache policy setting for the Volume.

String	Description
Off *(v1.4.1+)*	The write cache is disabled.
ProtectedWriteBack	A caching technique in which the completion of a write request is signaled as soon as the data is in cache, and actual writing to non-volatile media is guaranteed to occur at a later time.
UnprotectedWriteBack	A caching technique in which the completion of a write request is signaled as soon as the data is in cache; actual writing to non-volatile media is not guaranteed to occur at a later time.
WriteThrough	A caching technique in which the completion of a write request is not signaled until data is safely stored on non-volatile media.

6.158.2.12 WriteCacheState

Indicates the WriteCacheState policy setting for the Volume.

String	Description
Degraded	Indicates an issue with the cache state in which the cache space is diminished or disabled due to a failure or an outside influence such as a discharged battery.
Protected	Indicates that the cache state type in use generally protects write requests on non-volatile media.
Unprotected	Indicates that the cache state type in use generally does not protect write requests on non-volatile media.

6.158.2.13 WriteHoleProtectionPolicy

The policy that the RAID volume is using to address the write hole issue.

String	Description
DistributedLog	The policy that distributes additional log among the volume's capacity sources to address write hole issue.
Journaling	The policy that uses separate block device for write-ahead logging to address write hole issue.

String	Description
Oem	The policy that is Oem specific.
Off	The volume is not using any policy to address the write hole issue.

6.159 VolumeCollection

URIs:

/redfish/v1/CompositionService/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes /redfish/v1/
CompositionService/ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes
/redfish/v1/ResourceBlocks/{*ResourceBlockId*}/Storage/{*StorageId*}/Volumes /redfish/v1/
ResourceBlocks/{*ResourceBlockId*}/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes /redfish/v1/
StorageServices/{*StorageServiceId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes /redfish/v1/
StorageServices/{*StorageServiceId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes
/redfish/v1/StorageServices/{*StorageServiceId*}/StoragePools/{*StoragePoolId*}/AllocatedVolumes /redfish/v1/
StorageServices/{*StorageServiceId*}/StoragePools/{*StoragePoolId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolum
es /redfish/v1/StorageServices/{*StorageServiceId*}/Volumes /redfish/v1/
StorageServices/{*StorageServiceId*}/Volumes/{*VolumeId*}/CapacitySources/{*CapacitySourceId*}/ProvidingVolumes
/redfish/v1/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/ConsistencyGroups/{*ConsistencyGroupId*}/Volumes
/redfish/v1/
Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/FileSystems/{*FileSystemId*}/CapacitySources/{*CapacitySourceId*}/Prov
idingVolumes /redfish/v1/
Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StoragePools/{*StoragePoolId*}/AllocatedVolumes /redfish/v1/
Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/StoragePools/{*StoragePoolId*}/CapacitySources/{*CapacitySourceId*}/P
rovidingVolumes /redfish/v1/Systems/{*ComputerSystemId*}/Storage/{*StorageId*}/Volumes

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.

Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The value of each member references a Volume resource.
@odata.id	string *read-only*	The unique identifier for a resource.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.

6.160 Zone 1.4.2

v1.4	v1.3	v1.2	v1.1	v1.0
2019.4	2019.1	2017.3	2017.1	2016.2

The Zone schema describes a simple fabric zone for a Redfish implementation.

URIs:

/redfish/v1/CompositionService/ResourceZones/{*ZoneId*} /redfish/v1/Fabrics/{*FabricId*}/Zones/{*ZoneId*}

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.

@odata.id	string *read-only* *required*	The unique identifier for a resource.
@odata.type	string *read-only* *required*	The type of a resource.
Actions *(v1.1+)* {}	object	The available actions for this resource.
DefaultRoutingEnabled *(v1.4+)*	boolean *read-write* *(null)*	This property indicates whether routing within this zone is enabled.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
ExternalAccessibility *(v1.3+)*	string (enum) *read-write* *(null)*	Indicates accessibility of endpoints in this zone to endpoints outside of this zone. *For the possible property values, see ExternalAccessibility in Property details.*
Id	string *read-only* *required*	The identifier that uniquely identifies the resource within the collection of similar resources.
Identifiers *(v1.2+)* [{ }]	array (object)	The durable names for the zone. Any additional identifiers for a resource. For property details, see Identifier.
Links {	object	The links to other resources that are related to this resource.
AddressPools *(v1.4+)* [{	array	An array of links to the address pools associated with this zone.
@odata.id	string *read-only*	Link to a AddressPool resource. See the Links section and the *AddressPool* schema for details.
}]		
AddressPools@odata.count	integer *read-only*	The number of items in a collection.
ContainedByZones *(v1.4+)* [{	array	An array of links to the zone that contain this zone.

@odata.id	string *read-only*	Link to another Zone resource.
}]		
ContainedByZones@odata.count	integer *read-only*	The number of items in a collection.
ContainsZones *(v1.4+)* [{	array	An array of links to the zones that are contained by this zone.
@odata.id	string *read-only*	Link to another Zone resource.
}]		
ContainsZones@odata.count	integer *read-only*	The number of items in a collection.
Endpoints [{	array	The links to the endpoints that this zone contains.
@odata.id	string *read-only*	Link to a Endpoint resource. See the Links section and the *Endpoint* schema for details.
}]		
Endpoints@odata.count	integer *read-only*	The number of items in a collection.
InvolvedSwitches [{	array	The links to the collection of switches in this zone.
@odata.id	string *read-only*	Link to a Switch resource. See the Links section and the *Switch* schema for details.
}]		
InvolvedSwitches@odata.count	integer *read-only*	The number of items in a collection.
Oem {}	object	The OEM extension property. For property details, see Oem.
ResourceBlocks *(v1.1+)* [{	array	The links to the resource blocks with which this zone is associated.
@odata.id	string *read-only*	Link to a ResourceBlock resource. See the Links section and the *ResourceBlock* schema for details.

}]		
ResourceBlocks@odata.count	integer *read-only*	The number of items in a collection.
}		
Name	string *read-only* *required*	The name of the resource or array member.
Oem {}	object	The OEM extension property. For property details, see Oem.
Status {}	object	The status and health of the resource and its subordinate or dependent resources. For property details, see Status.
ZoneType *(v1.4+)*	string (enum) *read-write* *(null)*	The type of zone. *For the possible property values, see ZoneType in Property details.*

6.160.1 Property details

6.160.1.1 ExternalAccessibility

Indicates accessibility of endpoints in this zone to endpoints outside of this zone.

String	Description
GloballyAccessible	Any external entity with the correct access details, which might include authorization information, can access the endpoints that this zone lists.
NonZonedAccessible	Any external entity that another zone does not explicitly list can access the endpoints that this zone lists.
ZoneOnly	Only accessible by endpoints that this zone explicitly lists.

6.160.1.2 ZoneType

The type of zone.

String	Description
Default	The zone in which all endpoints are added by default when instantiated.
ZoneOfEndpoints	A zone that contains endpoints.

String	Description
ZoneOfZones	A zone that contains zones.

6.161 ZoneCollection

URIs:

/redfish/v1/CompositionService/ResourceZones /redfish/v1/Fabrics/*{FabricId}*/Zones

@odata.context	string *read-only*	The OData description of a payload.
@odata.etag	string *read-only*	The current ETag of the resource.
@odata.id	string *read-only*	The unique identifier for a resource.
@odata.type	string *read-only*	The type of a resource.
Description	string *read-only* *(null)*	The description of this resource. Used for commonality in the schema definitions.
Members [{	array	The members of this collection.
@odata.id	string *read-only*	Link to a Zone resource. See the Links section and the *Zone* schema for details.
}]		
Members@odata.count	integer *read-only*	The number of items in a collection.
Members@odata.nextLink	string *read-only*	The URI to the resource containing the next set of partial members.
Name	string *read-only*	The name of the resource or array member.

| Oem {} | object | The OEM extension property. For property details, see Oem. |

6.162 Redfish documentation generator

This document was created using the Redfish Documentation Generator utility, which uses the contents of the Redfish Schema files (in JSON schema format) to automatically generate the bulk of the text. The source code for the utility is available for download at the DMTF's GitHub repository located at https://www.github.com/DMTF/Redfish-Tools.

6.163 ANNEX A

Table 3. Change log

Version	Date	Built from Redfish Schema bundle
2020.1	2020-03-27	DSP8010 version 2020.1
2019.4	2019-12-06	DSP8010 version 2019.4
2019.3	2019-10-11	DSP8010 version 2019.3
2019.2	2019-09-13	DSP8010 version 2019.2
2019.1a	2019-05-03	DSP8010 version 2019.1 Work-in-progress release