Redfish Resource and Schema Guide

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Contents

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 Scalable Platforms Management ("Redfish") protocol addresses these needs by providing a standard protocol based on out-of-band systems management.

With the above 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.

Historical Reference

This version of the Redfish Resource and Schema Guide was created to allow for historical comparison to previous releases of the Redfish Schema bundle (DSP8010). The latest version of this document, available from the Redfish Standards website, contains up-to-date schema contents, as well as common property definitions, example payloads, and additional material to explain the Redfish data model. This version of the document should only be used as a historical reference.

Where can I find more information?

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

- **Redfish Developer Hub:** http://redfish.dmtf.org Resources for developers building applications using Redfish. Contains an interactive schema explorer, hosted schema and other links.
- **Redfish User Forum:** http://www.redfishforum.com User forum monitored by DMTF Redfish personnel to answer questions about any Redfish-related topics:
- **DMTF Github Repositories:** http://www.github.com/DMTF Open source tools and libraries for working with the Redfish API.
- **Redfish Standards:** http://www.dmtf.org/standards/redfish Schemas, specs, mockups, white papers, FAQ, educational material and more.
- **DMTF Redfish Forum** (Working group that maintains the Redfish standard): http://www.dmtf.org/standards/spmf Companies involved, upcoming schedules and future work, charter, and information about joining.

Using this guide

Every Redfish API response consists of a JSON payload containing properties that are strictly defined by a schema for that resource. The schema defining a particular 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, version and description of the schema.
- A table defining each property with additional details for those properties when needed.
- A listing of the available Actions defined for the schema.

The property-level details include:

Column	Purpose
Property Name	The name of the JSON property as it will appear (case sensitive) in the JSON payload. For properties added to the schema after the initial release (v1.0.0), the version that the property was added will be shown in parenthesis. Properties that have been deprecated will also be indicated (along with the version where the deprecation occurred).
Type	The JSON data type(s) for the property. This can include boolean, number, string or object. String types that use defined enumerations will state "(enum)". Number types will state their units where used.
Attributes	Designates whether the property is read-only or read-write (if supported by the implementation), and whether a 'null' value may be returned by the Service if the value of the property is temporarily unavailable.
Description	The description of the property, as copied directly from the schema 'Description' definition.

Reference Guide

This guide was produced using the contents of the schema files from DMTF Redfish Schema bundle DSP8010 and merged with supplemental text using the DMTF's [Redfish Documentation Generator](#).

AccountService 1.0.2

Account Service contains properties common to all user accounts, such as password requirements, and control features such as account lockout. It also contains links to the collections of Manager Accounts and Roles.

AccountLockoutCounterResetAfter	number	read-write	The interval of time in seconds since the last failed login attempt at which point the lockout threshold counter for the account is reset to zero. Must be less than or equal to AccountLockoutDuration
AccountLockoutDuration	number	read-write (null)	The time in seconds an account is locked after the account lockout threshold is met. Must be >= AccountLockoutResetAfter. If set to 0, no lockout will occur.
AccountLockoutThreshold	number	read-write (null)	The number of failed login attempts before a user account is locked for a specified duration. (0=never locked)
Accounts {	object		Link to a 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.
AuthFailureLoggingThreshold	number	read-write	This is the number of authorization failures that need to occur before the failure attempt is logged to the manager log.
MaxPasswordLength	number	read-only	This is the maximum password length for this service.
MinPasswordLength	number	read-only	This is the minimum password length for this service.
Roles {	object		Link to a collection of 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)	This indicates whether this service is enabled.
Status { }	object		See the [Resource](#) schema for details on this property.

ActionInfo 1.0.0

ActionInfo describes the parameters and other information necessary to perform a Redfish Action to a particular Action target. As parameter support may differ between implementations and even among instances of a resource, this data can be used to ensure Action requests from applications contain supported parameters.

Parameters [{	array	read-only	The parameters associated with the specified Redfish Action
AllowableValues [ ]	array (string,	read-only	A list of values for this parameter supported by this Action target

	null)		
DataType	string (enum)	read-only (null)	The JSON property type used for this parameter See *DataType* in Property Details, below, for the possible values of this property.
Name	string	read-only	The name of the parameter for this Action.
ObjectDataType	string	read-only (null)	The OData Type of an object-based parameter
Required }]	boolean	read-only	Indicates whether the parameter is required to perform this Action.

Property Details

DataType:

The JSON property type used for this parameter

string	Description
Boolean	A boolean (true or false)
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

AttributeRegistry 1.0.0

An Attribute Registry is a set of key-value pairs which are specific to a particular implementation or product, such that creating standardized property names would be impractical. This schema describes the structure of a Registry, and also includes mechanisms for building user interfaces (menus) allowing consistent navigation of the contents.

Language	string	read-only required	This is the RFC 5646 compliant language code for the registry.
OwningEntity	string	read-only required	This is the organization or company that publishes this registry.
RegistryEntries {	object		List of all attributes and their metadata for this component.
Attributes [{	array	read-only	The array containing the attributes and their possible values.
AttributeName	string	read-only	The unique name of the attribute.
CurrentValue	string, boolean, number	read-only (null)	Placeholder of the current value of the attribute.
DefaultValue	string, boolean, number	read-only (null)	The default current value of the attribute.

DisplayName	string	read-only (null)	The user-readable display string of the attribute in the defined 'Language'.
DisplayOrder	number	read-only (null)	The numeric value describing the ascending order that the attribute is displayed relative to other attributes.
GrayOut	boolean	read-only (null)	The gray-out state of this attribute.
HelpText	string	read-only (null)	The help text for the attribute.
Hidden	boolean	read-only (null)	The hidden state of this attribute.
Immutable	boolean	read-only (null)	Defines whether this attribute is immutable or not.
IsSystemUniqueProperty	boolean	read-only (null)	Defines whether this attribute is unique for this system and should not be replicated.
LowerBound	number	read-only (null)	The lower limit of the value of an attribute of type 'Integer'.
MaxLength	number	read-only (null)	The maximum character length of the value of an attribute of type 'String'.
MenuPath	string	read-only (null)	A path that describes the menu hierarchy of this attribute.
MinLength	number	read-only (null)	The minimum character length of the value of an attribute of type 'String'.
ReadOnly	boolean	read-only (null)	The read-only state of this attribute.
ScalarIncrement	number	read-only (null)	The amount to increment or decrement the value of an attribute of type 'Integer' each time a user requests a value change.
Type	string (enum)	read-only	The type of the attribute. See *Type in Property Details, below, for the possible values of this property.*
UpperBound	number	read-only (null)	The upper limit of the value of an attribute of type 'Integer'.
Value [{	array	read-only	The array containing possible values for attributes of type 'Enumeration'.
ValueDisplayName	string	read-only (null)	A user-readable display string of the value of the attribute in the defined 'Language'.
ValueName }]	string	read-only (null)	The value name of the attribute.
ValueExpression	string	read-only (null)	A regular expression that is used to validate the value of the attribute. This is only applicable to attributes of type 'String' or 'Integer'.
WarningText	string	read-only (null)	The warning text for changing the attribute.
WriteOnly	boolean	read-only	Defines whether this attribute is write-only. Such attributes

}]		(null)	revert back to their initial value after settings are applied.
Dependencies [{	array	read-only	The array containing a list of dependencies of attributes on this component.
Dependency {	object		
MapFrom [{	array	read-only	Array of the map-from conditions for mapping dependency.
MapFromAttribute	string	read-only	The attribute that is used to evaluate this dependency expression.
MapFromCondition	string (enum)	read-only	The condition that is used to evaluate this dependency expression. *See MapFromCondition in Property Details, below, for the possible values of this property.*
MapFromProperty	string (enum)	read-only	The meta-data property of the attribute specified in MapFromAttribute that is used to evaluate this dependency expression. *See MapFromProperty in Property Details, below, for the possible values of this property.*
MapFromValue	string, boolean, number	read-only (null)	The value that the is used property specified in MapFromProperty that is used to evaluate this dependency expression.
MapTerms }]	string (enum)	read-only	The logical term used to combine two or more MapFrom conditions in this dependency expression. *See MapTerms in Property Details, below, for the possible values of this property.*
MapToAttribute	string	read-only	The Name of the attribute that is affected by this dependency expression.
MapToProperty	string (enum)	read-only	The meta-data property of the attribute specified in MapFromAttribute that is used to evaluate this dependency expression. *See MapToProperty in Property Details, below, for the possible values of this property.*
MapToValue }	string, boolean, number	read-only (null)	The value that MapToProperty is changed 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. *See Type in Property Details, below, for the possible values of this property.*
Menus [{	array	read-only	The array containing the attributes menus and their hierarchy.
DisplayName	string	read-only (null)	The user-readable display string of this menu in the defined 'Language'.
DisplayOrder	number	read-only (null)	The numeric value describing the ascending order in which this menu is displayed relative to other menus.
GrayOut	boolean	read-only (null)	The gray-out state of this menu. A grayed-only menu is not accessible in user interfaces.

MenuName	string	read-only	The unique name string of this menu.
MenuPath	string	read-only (null)	A path that describes this menu hierarchy relative to other menus.
ReadOnly }] }	boolean	read-only (null)	The read-only state of this menu.
RegistryVersion	string	read-only required	This is the attribute registry version which is used in the middle portion of a AttributeRegistry.
SupportedSystems [{	array	read-write	Array of systems supported by this attribute registry.
ProductName	string	read-only (null)	Firmware version.
SystemId }]	string	read-only (null)	The system ID of the system.

Property Details

MapFromCondition:

The condition that is used 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'.
NEQ	The logical operation for 'Not Equal'.

MapFromProperty:

The meta-data property of the attribute specified in MapFromAttribute that is used 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.

MapTerms:

The logical term used to combine two or more MapFrom conditions in this dependency expression.

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

MapToProperty:

The meta-data property of the attribute specified in MapFromAttribute that is used to evaluate 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.

Type:

The type of the dependency structure.

string	Description
Map	A simple mapping dependency. The attribute value or state is changed to the mapped value if the condition evaluates to true.

Bios 1.0.0

Bios contains properties surrounding a BIOS Attribute Registry (where the system-specific BIOS attributes are described) and the Actions needed to perform changes to BIOS settings, which typically require a system reset to apply.

Actions {	object		The available actions for this resource.
#Bios.ChangePassword { }	object		This action is used to change the BIOS passwords. *For more information, see the Action Details section below.*
#Bios.ResetBios { } }	object		This action is used to reset the BIOS attributes to default. *For more information, see the Action Details section below.*
AttributeRegistry	string	read-write (null)	The Resource ID of the Attribute Registry for the BIOS Attributes resource.
Attributes { }	object		This is the manufacturer/provider specific list of BIOS attributes.

Action Details

ChangePassword

This action is used to change the BIOS passwords.

(This action takes no parameters.)

ResetBios

This action is used to reset the BIOS attributes to default.

(This action takes no parameters.)

Chassis 1.3.0

A Chassis represents the physical components for any system. This resource represents the sheet-metal confined spaces and logical zones like racks, enclosures, chassis and all other containers. Subsystems (like sensors), which operate outside of a system's data plane (meaning the resources are not accessible to software running on the system) are linked either directly or indirectly through this resource.

Actions {	object		The available actions for this resource.
#Chassis.Reset { } }	object		This action is used to reset the chassis. This action resets the chassis, not Systems or other contained resources, although side effects may occur which affect those resources. *For more information, see the Action Details section below.*
AssetTag	string	read-write (null)	The user assigned asset tag for this chassis.
ChassisType	string (enum)	read-only required	This property indicates the type of physical form factor of this resource. *See ChassisType in Property Details, below, for the possible values of this property.*
IndicatorLED	string (enum)	read-write (null)	The state of the indicator LED, used to identify the chassis. *See IndicatorLED in Property Details, below, for the possible values of this property.*
Links {	object		Contains references to other resources that are related to this resource.

ComputerSystems [{	array	read-only	An array of references to the computer systems contained in this chassis. This will only reference ComputerSystems that are directly and wholly contained in this chassis.
@odata.id }]	string	read-only	Link to a ComputerSystem resource. See the Links section and the ComputerSystem schema for details.
ContainedBy {	object		A reference to the chassis that this chassis is contained by.
@odata.id }	string	read-only	Link to another Chassis resource.
Contains [{	array	read-only	An array of references to any other chassis that this chassis has in it.
@odata.id }]	string	read-only	Link to another Chassis resource.
CooledBy [{	array	read-only	An array of ID[s] of resources that cool this chassis. Normally the ID will be a chassis or a specific set of fans.
@odata.id }]	string	read-only	The unique identifier for a resource.
Drives *(v1.2+)* [{	array	read-only	An array of references to the disk 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.
ManagedBy [{	array	read-only	An array of references 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.
ManagersInChassis *(v1.2+)* [{	array	read-only	An array of references 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.
Oem { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
PoweredBy [{	array	read-only	An array of ID[s] of resources that power this chassis. Normally the ID will be a chassis or a specific set of powerSupplies
@odata.id }]	string	read-only	The unique identifier for a resource.
Storage *(v1.2+)* [{	array	read-only	An array of references 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.
Location *(v1.2+)* { }	object		See the v1_1_0.v1_1_0 schema for details on this property.
LogServices {	object		A reference 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)	This is the manufacturer of this chassis.
Model	string	read-only (null)	This is the model number for the chassis.
PartNumber	string	read-only (null)	The part number for this chassis.
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. *See IntrusionSensor in Property Details, below, for the possible values of this property.*
IntrusionSensorNumber	number	read-only (null)	A numerical identifier to represent the physical security sensor.
IntrusionSensorReArm }	string (enum)	read-only (null)	This indicates how the Normal state to be restored. *See IntrusionSensorReArm in Property Details, below, for the possible values of this property.*
Power {	object		A reference to the power properties (power supplies, power policies, 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 *(v1.1+)*	string (enum)	read-only (null)	This is the current power state of the chassis. *See PowerState in Property Details, below, for the possible values of this property.*
SerialNumber	string	read-only (null)	The serial number for this chassis.
SKU	string	read-only (null)	This is the SKU for this chassis.
Status { }	object		See the Resource schema for details on this property.
Thermal {	object		A reference to the thermal properties (fans, cooling, 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.

Action Details

Reset

This action is used to reset the chassis. This action resets the chassis, not Systems or other contained resources, although side effects may occur which affect those resources.

(This action takes no parameters.)

Property Details

ChassisType:

This property indicates the type of physical form factor of this resource.

string	Description
Blade	An enclosed or semi-enclosed, typically vertically-oriented, system chassis which 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 which contains devices for a particular subsystem or function
Drawer	An enclosed or semi-enclosed, typically horizontally-oriented, system chassis which may be slid into a multi-system chassis.
Enclosure	A generic term for a chassis that does not fit any other description
Expansion	A chassis which expands the capabilities or capacity of another chassis
IPBasedDrive (v1.3+)	A chassis in a drive form factor with IP-based network connections.
Module	A small, typically removable, chassis or card which 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
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 which 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 which 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
Zone	A logical division or portion of a physical chassis that contains multiple devices or systems that cannot be physically separated

IndicatorLED:

The state of the indicator LED, used to identify the chassis.

string	Description
Blinking	The Indicator LED is blinking.
Lit	The Indicator LED is lit.
Off	The Indicator LED is off.
Unknown	The state of the Indicator LED cannot be determined. Deprecated: Return null if state is unknown.

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 as being in an insecure state.
Normal	No abnormal physical security conditions are detected at this time.
TamperingDetected	Physical tampering of the monitored entity is detected.

IntrusionSensorReArm:

This indicates how the Normal state to be restored.

string	Description
Automatic	This sensor would be restored to the Normal state automatically as no abnormal physical security conditions are detected.
Manual	This sensor would be restored to the Normal state by a manual re-arm.

PowerState:

This is the current power state of the chassis.

string	Description
Off	The components within the chassis has no power, except some components may continue to have AUX power such as management controller.
On	The components within the chassis has power on.
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.

ComputerSystem 1.2.0

This schema defines a computer system and its respective properties. A computer system represents a machine (physical or virtual) and the local resources such as memory, cpu and other devices that can be accessed from that machine.

Actions {	object		The available actions for this resource.
#ComputerSystem.Reset { } }	object		This action is used to reset the system. *For more information, see the [Action Details](#) section below.*
AssetTag	string	read-write (null)	The user definable tag that can be used to track this computer system for inventory or other client purposes
Bios *(v1.1+)* {	object		A reference 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-write (null)	The version of the system BIOS or primary system firmware.

Boot {	object		Information about the boot settings for this system
BootSourceOverrideEnabled	string (enum)	read-write (null)	Describes the state of the Boot Source Override feature *See [BootSourceOverrideEnabled](#) in Property Details, below, for the possible values of this property.*
BootSourceOverrideMode *(v1.1+)*	string (enum)	read-write (null)	The BIOS Boot Mode (either Legacy or UEFI) to be used when BootSourceOverrideTarget boot source is booted from. *See [BootSourceOverrideMode](#) in Property Details, below, for the possible values of this property.*
BootSourceOverrideTarget	string (enum)	read-write (null)	The current boot source to be used at next boot instead of the normal boot device, if BootSourceOverrideEnabled is true. *See [BootSourceOverrideTarget](#) in Property Details, below, for the possible values of this property.*
UefiTargetBootSourceOverride }	string	read-write (null)	This property is the UEFI Device Path of the device to boot from when BootSourceOverrideSupported is UefiTarget.
EthernetInterfaces {	object		A reference 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.
HostedServices *(v1.2+)* {	object		The services that this computer system supports.
Oem { }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
StorageServices }		read-write	A reference to a collection of storage services supported by this computer system
HostingRoles *(v1.2+)* [ ]	array (string (enum))	read-write	The hosing roles that this computer system supports. The enumerations of HostingRoles specify different features that the hosting ComputerSystem supports. *See [HostingRoles](#) in Property Details, below, for the possible values of this property.*
HostName	string	read-write (null)	The DNS Host Name, without any domain information
IndicatorLED	string (enum)	read-write (null)	The state of the indicator LED, used to identify the system *See [IndicatorLED](#) in Property Details, below, for the possible values of this property.*
Links {	object		Contains references to other resources that are related to this resource.
Chassis [{	array	read-only	An array of references to the chassis in which this system is contained
@odata.id }]	string	read-only	Link to a Chassis resource. See the Links section and the [Chassis](#) schema for details.
CooledBy [{	array	read-only	An array of ID[s] of resources that cool this computer system. Normally the ID will be a chassis or a specific

			set of fans.
@odata.id }]	string	read-only	The unique identifier for a resource.
Endpoints *(v1.2+)* [{	array	read-only	An array of references 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.
ManagedBy [{	array	read-only	An array of references 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.
Oem { }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
PoweredBy [{	array	read-only	An array of ID[s] of resources that power this computer system. Normally the ID will be a chassis or a specific set of powerSupplies
@odata.id }] }	string	read-only	The unique identifier for a resource.
LogServices {	object		A reference 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		A reference 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 {	object	(null)	A reference 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		This object describes the central memory of the system in general detail.
MemoryMirroring *(v1.1+)*	string (enum)	read-only (null)	The ability and type of memory mirroring supported by this system. See *[MemoryMirroring](#) in Property Details, below, for the possible values of this property.*
Status { }	object		See the [Resource](#) schema for details on this property.
TotalSystemMemoryGiB }	number	read-only (null)	The total installed, operating system-accessible memory (RAM), measured in GiB.

Model	string	read-only (null)	The model number for this system
PartNumber	string	read-only (null)	The part number for this system
PCIeDevices *(v1.2+)* [{	array	read-only	A reference to a collection of PCIe Devices used by this computer system
@odata.id }]	string	read-only	Link to a PCIeDevice resource. See the Links section and the [PCIeDevice](#) schema for details.
PCIeFunctions *(v1.2+)* [{	array	read-only	A reference to a collection of PCIe Functions used by this computer system
@odata.id }]	string	read-only	Link to a PCIeFunction resource. See the Links section and the [PCIeFunction](#) schema for details.
PowerState	string (enum)	read-only (null)	This is the current power state of the system *See [PowerState](#) in Property Details, below, for the possible values of this property.*
Processors {	object		A reference 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		This object describes the central processors of the system in general detail.
Count	number	read-only (null)	The number of processors in the system.
Model	string	read-only (null)	The processor model for the primary or majority of processors in this system.
Status { } }	object		See the [Resource](#) schema for details on this property.
SecureBoot *(v1.1+)* {	object		A reference to the UEFI SecureBoot resource 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		A reference 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		See the [Resource](#) schema for details on this property.
Storage *(v1.1+)* {	object		A reference 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.
SystemType	string (enum)	read-only	The type of computer system represented by this resource. See *SystemType* in Property Details, below, for the possible values of this property.
TrustedModules *(v1.1+)* [{	array	read-write	This object describes the array of Trusted Modules in the system.
FirmwareVersion	string	read-only (null)	The firmware version of this Trusted Module
InterfaceType	string (enum)	read-only (null)	This property indicates the interface type of the Trusted Module. See *InterfaceType* in Property Details, below, for the possible values of this property.
Oem { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
Status { } }]	object		See the Resource schema for details on this property.
UUID	string	read-only (null)	The universal unique identifier (UUID) for this system

Action Details

Reset

This action is used to reset the system.

(This action takes no parameters.)

Property Details

BootSourceOverrideEnabled:

Describes the state of the Boot Source Override feature

string	Description
Continuous	The system will boot to the target specified in the BootSourceOverrideTarget until this property is set to Disabled.
Disabled	The system will boot normally.
Once	On its next boot cycle, the system will boot (one time) to the Boot Source Override Target. The value of BootSourceOverrideEnabled is then reset back to Disabled.

BootSourceOverrideMode:

The BIOS Boot Mode (either Legacy or UEFI) to be used when BootSourceOverrideTarget boot source is booted from.

string	Description
Legacy	The system will boot in non-UEFI boot mode to the Boot Source Override Target.
UEFI	The system will boot in UEFI boot mode to the Boot Source Override Target.

BootSourceOverrideTarget:

The current boot source to be used at 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/DVD disc
Diags	Boot 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 (e.g. iSCSI)
SDCard	Boot from an SD Card
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 USB device as specified by the system BIOS
Utilities	Boot the manufacturer's Utilities program(s)

HostingRoles:

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

string	Description
ApplicationServer	The system hosts functionality that supports general purpose applications.
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.

IndicatorLED:

The state of the indicator LED, used to identify the system

string	Description
Blinking	The Indicator LED is blinking.
Lit	The Indicator LED is lit.
Off	The Indicator LED is off.
Unknown	The state of the Indicator LED cannot be determined. Deprecated: Return null if state is unknown.

InterfaceType:

This property indicates 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

MemoryMirroring:

The ability and type of memory mirroring supported by this system.

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.

PowerState:

This is the current power state of the system

string	Description
Off	The system is powered off, although some components may 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.

SystemType:

The type of computer system represented by this resource.

string	Description
OS	An operating system instance
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

Drive 1.1.0

Drive contains properties describing a single physical disk drive for any system, along with links to associated Volumes.

Actions {	object		The available actions for this resource.

#Drive.SecureErase { } }	object		This action is used to securely erase the contents of the drive. *For more information, see the Action Details section below.*
AssetTag	string	read-write (null)	The user assigned asset tag for this drive.
BlockSizeBytes	number (bytes)	read-only (null)	The size of the smallest addressable unit (Block) of this drive in bytes
CapableSpeedGbs	number (Gbit/s)	read-only (null)	The speed which this drive can communicate to a storage controller in ideal conditions in Gigabits per second
CapacityBytes	number (bytes)	read-only (null)	The size in bytes of this Drive
EncryptionAbility	string (enum)	read-only (null)	The encryption abilities of this drive *See EncryptionAbility in Property Details, below, for the possible values of this property.*
EncryptionStatus	string (enum)	read-only (null)	The status of the encrytion of this drive *See EncryptionStatus in Property Details, below, for the possible values of this property.*
FailurePredicted	boolean	read-only (null)	Is this drive currently predicting a failure in the near future
HotspareType	string (enum)	read-only (null)	The type of hotspare this drive is currently serving as *See HotspareType in Property Details, below, for the possible values of this property.*
Identifiers [{ }]	array (object)		The Durable names for the drive See the v1_1_0.v1_1_0 schema for details on this property.
IndicatorLED	string (enum)	read-write (null)	The state of the indicator LED, used to identify the drive. *See IndicatorLED in Property Details, below, for the possible values of this property.*
Links {	object		Contains references to other resources that are related to this resource.
Endpoints *(v1.1+)* [{	array	read-only	An array of references 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.
Oem { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
Volumes [{	array	read-only	An array of references to the volumes contained in this drive. This will reference Volumes that are either wholly or only partly contained by this drive.
@odata.id }] }	string	read-only	Link to a Volume resource. See the Links section and the Volume schema for details.
Location [{ }]	array (object)		The Location of the drive See the v1_1_0.v1_1_0 schema for details on this property.
Manufacturer	string	read-only (null)	This is the manufacturer of this drive.
MediaType	string	read-only	The type of media contained in this drive

	(enum)	(null)	See *MediaType* in Property Details, below, for the possible values of this property.
Model	string	read-only (null)	This is the model number for the drive.
NegotiatedSpeedGbs	number (Gbit/s)	read-only (null)	The speed which this drive is currently communicating to the storage controller in Gigabits per second
Operations [{ }]	array (object)		The operations currently running on the Drive See the Volume.v1_0_0 schema for details on this property.
PartNumber	string	read-only (null)	The part number for this drive.
PredictedMediaLifeLeftPercent	number	read-only (null)	The percentage of reads and writes that are predicted to still be available for the media
Protocol	string (enum)	read-only (null)	The protocol this drive is using to communicate to the storage controller See *Protocol* in Property Details, below, for the possible values of this property.
Revision	string	read-only (null)	The revision of this Drive
RotationSpeedRPM	number (RPM)	read-only (null)	The rotation speed of this Drive in Revolutions per Minute (RPM)
SerialNumber	string	read-only (null)	The serial number for this drive.
SKU	string	read-only (null)	This is the SKU for this drive.
Status { }	object		See the Resource schema for details on this property.
StatusIndicator	string (enum)	read-write (null)	The state of the status indicator, used to communicate status information about this drive. See *StatusIndicator* in Property Details, below, for the possible values of this property.

Action Details

SecureErase

This action is used to securely erase the contents of the drive.

(This action takes no parameters.)

Property Details

EncryptionAbility:

The encryption abilities of this drive

string	Description
None	The drive is not capable of self encryption
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

EncryptionStatus:

The status of the encrytion 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 has the ability to unlock the drive automatically
Unecrypted	The drive is not currently encrypted. Deprecated: Use Unencrypted
Unencrypted (v1.1+)	The drive is not currently encrypted
Unlocked	The drive is currently encrypted but the data is accessible to the user unencrypted

HotspareType:

The type of hotspare this drive is currently serving as

string	Description
Chassis	The drive is currently serving as a hotspare for all other drives in the chassis
Dedicated	The drive is currently serving as a hotspare for a user defined set of drives
Global	The drive is currently serving as a hotspare for all other drives in the storage system
None	The drive is not currently a hotspare

IndicatorLED:

The state of the indicator LED, used to identify the drive.

string	Description
Blinking	The Indicator LED is blinking.
Lit	The Indicator LED is lit.
Off	The Indicator LED is off.

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

Protocol:

The protocol this drive is using to communicate to the storage controller

string	Description
AHCI	Advanced Host Controller Interface
FC	Fibre Channel

FCoE	Fibre Channel over Ethernet
FTP	File Transfer Protocol
HTTP	Hypertext Transport Protocol
HTTPS	Secure Hypertext Transport Protocol
iSCSI	Internet SCSI
NFSv3	Network File System version 3
NFSv4	Network File System version 4
NVMe	Non-Volatile Memory Express
NVMeOverFabrics	NVMe over Fabrics
PCIe	PCI Express (Vendor Proprietary)
SAS	Serial Attached SCSI
SATA	Serial AT Attachment
SFTP	Secure File Transfer Protocol
SMB	Server Message Block (aka CIFS Common Internet File System)
UHCI	Universal Host Controller Interface
USB	Universal Serial Bus

StatusIndicator:

The state of the status indicator, used to communicate status information about this drive.

string	Description
Fail	The drive has failed.
Hotspare	The drive is marked to be automatically rebuilt and used as a replacement for a failed drive.
InACriticalArray	The array that this drive is a part of is degraded.
InAFailedArray	The array that this drive is a part of is failed.
OK	The drive is OK.
PredictiveFailureAnalysis	The drive is still working but predicted to fail soon.
Rebuild	The drive is being rebuilt.

Endpoint 1.0.0

This is the schema definition for the Endpoint resource. It represents the properties of an entity that sends or receives protocol defined messages over a transport.

Actions { }	object		The Actions object contains the available custom actions on this resource.
ConnectedEntities [{	array	read-only	All the entities connected to this endpoint.

EntityLink { }	object	(null)	A link to the associated entity. See the [Resource](#) schema for details on this property.
EntityPciId {	object	(null)	The PCI ID of the connected entity.
DeviceId	string	read-write (null)	The Device ID of this PCIe function.
SubsystemId	string	read-write (null)	The Subsystem ID of this PCIe function.
SubsystemVendorId	string	read-write (null)	The Subsystem Vendor ID of this PCIe function.
VendorId }	string	read-write (null)	The Vendor ID of this PCIe function.
EntityRole	string (enum)	read-only (null)	The role of the connected entity. See [*EntityRole*](#) *in Property Details, below, for the possible values of this property.*
EntityType	string (enum)	read-only (null)	The type of the connected entity. See [*EntityType*](#) *in Property Details, below, for the possible values of this property.*
Identifiers [{ }]	array (object)	(null)	Identifiers for the remote entity. See the [v1_1_0.v1_1_0](#) schema for details on this property.
Oem { }	object	(null)	See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
PciClassCode	string	read-write (null)	The Class Code and Subclass code of this PCIe function.
PciFunctionNumber }]	number	read-only (null)	The PCI ID of the connected entity.
EndpointProtocol	string (enum)	read-only (null)	The protocol supported by this endpoint. See [*EndpointProtocol*](#) *in Property Details, below, for the possible values of this property.*
HostReservationMemoryBytes	number (bytes)	read-only (null)	The amount of memory in Bytes that the Host should allocate to connect to this endpoint.
Identifiers [{ }]	array (object)	(null)	Identifiers for this endpoint See the [v1_1_0.v1_1_0](#) schema for details on this property.
Links {	object		The links object contains the links to other resources that are related to this resource.
MutuallyExclusiveEndpoints [{	array	read-only	An array of references to the endpoints that may not be used in zones if this endpoint is used in a zone.
@odata.id }]	string	read-only	Link to another Endpoint resource.
Oem { }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
Ports [{	array	read-only	An array of references to the the physical ports associated with this endpoint.

@odata.id }] }	string	read-only	Link to a Port resource. See the Links section and the [Port](#) schema for details.
PciId {	object	(null)	The PCI ID of the endpoint.
DeviceId	string	read-write (null)	The Device ID of this PCIe function.
SubsystemId	string	read-write (null)	The Subsystem ID of this PCIe function.
SubsystemVendorId	string	read-write (null)	The Subsystem Vendor ID of this PCIe function.
VendorId }	string	read-write (null)	The Vendor ID of this PCIe function.
Redundancy [{ }]	array (object)		A reference to a set of Redundancy entities that provide redundant services for this resource. See the [Redundancy](#) object definition in the Common objects section. See the [Redundancy](#) schema for details on this property.
Status { }	object	(null)	See the [Resource](#) schema for details on this property.

Property Details

EndpointProtocol:

The protocol supported by this endpoint.

string	Description
AHCI	Advanced Host Controller Interface
FC	Fibre Channel
FCoE	Fibre Channel over Ethernet
FTP	File Transfer Protocol
HTTP	Hypertext Transport Protocol
HTTPS	Secure Hypertext Transport Protocol
iSCSI	Internet SCSI
NFSv3	Network File System version 3
NFSv4	Network File System version 4
NVMe	Non-Volatile Memory Express
NVMeOverFabrics	NVMe over Fabrics
PCIe	PCI Express (Vendor Proprietary)
SAS	Serial Attached SCSI
SATA	Serial AT Attachment
SFTP	Secure File Transfer Protocol
SMB	Server Message Block (aka CIFS Common Internet File System)

UHCI	Universal Host Controller Interface
USB	Universal Serial Bus

EntityRole:

The role of the connected entity.

string	Description
Both	The entity is acting as both an initiator and a target
Initiator	The entity is acting as an initiator
Target	The entity is acting as a target

EntityType:

The type of the connected entity.

string	Description
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.Drive entity
NetworkController	The entity is a network controller. The EntityLink property (if present) should be an EthernetInterface.EthernetInterface entity
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.ComputerSystem entity
StorageExpander	The entity is a storage expander. The EntityLink property (if present) should be a Chassis.Chassis entity
StorageInitiator	The entity is a storage initator. The EntityLink property (if present) should be a Storage.StorageController entity

EthernetInterface 1.1.0

This schema defines a simple ethernet NIC resource.

AutoNeg	boolean	read-write (null)	This indicates if the speed and duplex are automatically negotiated and configured on this interface.
FQDN	string	read-write (null)	This is the complete, fully qualified domain name obtained by DNS for this interface.
FullDuplex	boolean	read-write (null)	This indicates if the interface is in Full Duplex mode or not.
HostName	string	read-write (null)	The DNS Host Name, without any domain information
InterfaceEnabled	boolean	read-write (null)	This indicates whether this interface is enabled.
IPv4Addresses [{ }]	array		The IPv4 addresses assigned to this interface See the

	(object)		v1_0_0.v1_0_0 schema for details on this property.
IPv6Addresses [{ }]	array (object)		This array of objects enumerates all of the currently assigned IPv6 addresses on this interface. See the v1_0_0.v1_0_0 schema for details on this property.
IPv6AddressPolicyTable [{	array	read-write	An array representing the RFC 6724 Address Selection Policy Table.
Label	number	read-write (null)	The IPv6 Label (as defined in RFC 6724 section 2.1)
Precedence	number	read-write (null)	The IPv6 Precedence (as defined in RFC 6724 section 2.1
Prefix }]	string	read-write (null)	The IPv6 Address Prefix (as defined in RFC 6724 section 2.1)
IPv6DefaultGateway	string	read-only (null)	This is the IPv6 default gateway address that is currently in use on this interface.
IPv6StaticAddresses [{ }]	array (object)		This array of objects represents all of the IPv6 static addresses to be assigned on this interface. This object represents a single IPv6 static address to be assigned on a network interface. See the v1_0_0.v1_0_0 schema for details on this property.
Links *(v1.1+)* {	object		Contains references to other resources that are related to this resource.
Endpoints [{	array	read-only	An array of references 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.
Oem { } }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
LinkStatus *(v1.1+)*	string (enum)	read-only (null)	The link status of this interface (port) *See LinkStatus in Property Details, below, for the possible values of this property.*
MACAddress	string	read-write (null)	This is the currently configured MAC address of the (logical port) interface.
MaxIPv6StaticAddresses	number	read-only (null)	This indicates the maximum number of Static IPv6 addresses that can be configured on this interface.
MTUSize	number	read-write (null)	This is the currently configured Maximum Transmission Unit (MTU) in bytes on this interface.
NameServers [ ]	array (string)	read-only	This represents DNS name servers that are currently in use on this interface.
PermanentMACAddress	string	read-only (null)	This is the permanent MAC address assigned to this interface (port)
SpeedMbps	number (Mbit/s)	read-write (null)	This is the current speed in Mbps of this interface.
Status { }	object	(null)	See the Resource schema for details on this property.
UefiDevicePath	string	read-only (null)	The UEFI device path for this interface

VLAN { }	object	(null)	If this Network Interface supports more than one VLAN, this property will not be present and the client should look for VLANs collection in the link section of this resource. See the VLanNetworkInterface.v1_0_0 schema for details on this property.
VLANs {	object		This is a reference to a collection of VLANs and is only used if the interface supports more than one VLANs. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of VLanNetworkInterface. See the VLanNetworkInterface schema for details.

Property Details

LinkStatus:

The link status of this interface (port)

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

Event 1.1.1

The Event schema describes the JSON payload received by an Event Destination (which has subscribed to event notification) when events occurs. This resource contains data about event(s), including descriptions, severity and MessageId reference to a Message Registry that can be accessed for further information.

Context *(v1.1+)*	string	read-only	A context can be supplied at subscription time. This property is the context value supplied by the subscriber.
Events [{	array	read-write required	Each event in this array has a set of properties that describe the event. Since this is an array, more than one event can be sent simultaneously.
Context	string	read-only	A context can be supplied at subscription time. This property is the context value supplied by the subscriber.
EventId	string	read-only	This is a unique instance identifier of an event.
EventTimestamp	string	read-only	This is time the event occurred.
EventType	string (enum)	read-only	This indicates the type of event sent, according to the definitions in the EventService. See *EventType* in Property Details, below, for the possible values of this property.
MemberId	string	read-write	This is the identifier for the member within the collection.
Message	string	read-only	This is the human readable message, if provided.
MessageArgs [ ]	array (string)	read-only	This array of message arguments are substituted for the arguments in the message when looked up in the message registry.
MessageId	string	read-only	This is the key for this message which can be used to look up the message in a message registry.
Oem { }	object		See the OEM object definition in the Common properties section. See

			the Resource schema for details on this property.
OriginOfCondition {	object		This indicates the resource that originated the condition that caused the event to be generated.
@odata.id **}**	string	read-only	The unique identifier for a resource.
Severity **}]**	string	read-only	This is the severity of the event.

Property Details

EventType:

This indicates the type of event sent, according to the definitions in the EventService.

string	Description
Alert	A condition exists which requires attention
ResourceAdded	A resource has been added
ResourceRemoved	A resource has been removed
ResourceUpdated	The value of this resource has been updated
StatusChange	The status of this resource has changed

EventDestination 1.1.0

An Event Destination desribes the target of an event subscription, including the types of events subscribed and context to provide to the target in the Event payload.

Context	string	read-write required on create	A client-supplied string that is stored with the event destination subscription.
Destination	string	read-only required on create	The URI of the destination Event Service.
EventTypes [ ]	array (string (enum))	read-only	This property shall contain the types of events that shall be sent to the desination. See *EventTypes* in Property Details, below, for the possible values of this property.
HttpHeaders [{ }]	array	read-write	This is for setting HTTP headers, such as authorization information. This object will be null on a GET.
MessageIds *(v1.1+)* [ ]	array (string, null)	read-only	A list of MessageIds that the service will only send.
OriginResources *(v1.1+)* [{	array	read-only	A list of resources for which the service will only send related events.
@odata.id **}]**	string	read-only	The unique identifier for a resource.
Protocol	string (enum)	read-only required on create	The protocol type of the event connection. See *Protocol* in Property Details, below, for the possible values of this property.

Property Details

EventTypes:

This property shall contain the types of events that shall be sent to the desination.

string	Description
Alert	A condition exists which requires attention
ResourceAdded	A resource has been added
ResourceRemoved	A resource has been removed
ResourceUpdated	The value of this resource has been updated
StatusChange	The status of this resource has changed

Protocol:

The protocol type of the event connection.

string
Redfish

EventService 1.0.2

The Event Service resource contains properties for managing event subcriptions and generates the events sent to subscribers. The resource has links to the actual collection of subscriptions (called Event Destinations).

Actions {	object		The available actions for this resource.
#EventService.SubmitTestEvent { } }	object		This action is used to generate a test event. *For more information, see the Action Details section below.*
DeliveryRetryAttempts	number	read-only	This is the number of attempts an event posting is retried before the subscription is terminated.
DeliveryRetryIntervalSeconds	number	read-only	This represents the number of seconds between retry attempts for sending any given Event
EventTypesForSubscription [ ]	array (string (enum))	read-only	This is the types of Events that can be subscribed to. *See EventTypesForSubscription in Property Details, below, for the possible values of this property.*
ServiceEnabled	boolean	read-write (null)	This indicates whether this service is enabled.
Status { }	object		See the Resource schema for details on this property.
Subscriptions {	object		This is a reference to a collection of Event Destination resources. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of EventDestination. See the EventDestination schema for details.

Action Details

SubmitTestEvent

This action is used to generate a test event.

(This action takes no parameters.)

Property Details

EventTypesForSubscription:

This is the types of Events that can be subscribed to.

string	Description
Alert	A condition exists which requires attention
ResourceAdded	A resource has been added
ResourceRemoved	A resource has been removed
ResourceUpdated	The value of this resource has been updated
StatusChange	The status of this resource has changed

Fabric 1.0.0

Fabric contains properties describing a simple fabric consisting of one or more switches, zero or more endpoints, and zero or more zones.

Actions { }	object		The available actions for this resource.
Endpoints {	object		A collection of references to the endpoints contained in this fabric. 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-write (null)	The protocol being sent over this fabric. See FabricType in Property Details, below, for the possible values of this property.
Links {	object		Contains references to other resources that are related to this resource.
Oem { } }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
MaxZones	number	read-write (null)	The value of this property shall contain the maximum number of zones the switch can currently configure.
Status { }	object		See the Resource schema for details on this property.
Switches {	object		A collection of references to the switches contained in this fabric. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of Switch. See the Switch schema for details.
Zones {	object		A collection of references to the zones contained in this fabric. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of Zone. See the Zone schema for details.

Property Details

FabricType:

The protocol being sent over this fabric.

string	Description
AHCI	Advanced Host Controller Interface
FC	Fibre Channel
FCoE	Fibre Channel over Ethernet
FTP	File Transfer Protocol
HTTP	Hypertext Transport Protocol
HTTPS	Secure Hypertext Transport Protocol
iSCSI	Internet SCSI
NFSv3	Network File System version 3
NFSv4	Network File System version 4
NVMe	Non-Volatile Memory Express
NVMeOverFabrics	NVMe over Fabrics
PCIe	PCI Express (Vendor Proprietary)
SAS	Serial Attached SCSI
SATA	Serial AT Attachment
SFTP	Secure File Transfer Protocol
SMB	Server Message Block (aka CIFS Common Internet File System)
UHCI	Universal Host Controller Interface
USB	Universal Serial Bus

JsonSchemaFile 1.0.2

This is the schema definition for the Schema File locator resource.

Languages [ ]	array (string)	read-only required	Language codes for the schemas available.
Location [{	array	read-only required	Location information for this schema file.
ArchiveFile	string	read-only	If the schema is hosted on the service in an archive file, this is the name of the file within the archive.
ArchiveUri	string	read-only	If the schema is hosted on the service in an archive file, this is the link to the archive file.
Language	string	read-only	The language code for the file the schema is in.
PublicationUri	string	read-only	Link to publicly available (canonical) URI for schema.
Uri }]	string	read-only	Link to locally available URI for schema.

Schema	string	read-only required	The @odata.type name this schema describes.

LogEntry 1.1.0

This resource defines the record format for a log. It is designed to be used for SEL logs (from IPMI) as well as Event Logs and OEM-specific log formats. The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType.

Created	string	read-only	The time the log entry was created.
EntryCode	string (enum)	read-only (null)	If the EntryType is SEL, this will have the entry code for the log entry. See *EntryCode* in Property Details, below, for the possible values of this property.
EntryType	string (enum)	read-only required on create	his is the type of log entry. See *EntryType* in Property Details, below, for the possible values of this property.
EventId *(v1.1+)*	string	read-only	This is a unique instance identifier of an event.
EventTimestamp *(v1.1+)*	string	read-only	This is time the event occurred.
EventType *(v1.1+)*	string (enum)	read-only	This indicates the type of an event recorded in this log. See *EventType* in Property Details, below, for the possible values of this property.
Links {	object		Contains references to other resources that are related to this resource.
Oem { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
OriginOfCondition {	object		This is the URI of the resource that caused the log entry
@odata.id } }	string	read-only	The unique identifier for a resource.
Message	string	read-only (null)	This property decodes from EntryType: If it is Event then it is a message string. Otherwise, it is SEL or Oem specific. In most cases, this will be the actual Log Entry.
MessageArgs [ ]	array (string)	read-only	The values of this property shall be any arguments for the message.
MessageId	string	read-only	This property decodes from EntryType: If it is Event then it is a message id. Otherwise, it is SEL or Oem specific. This value is only used for registries - for more information, see the specification.
OemRecordFormat	string	read-only (null)	If the entry type is Oem, this will contain more information about the record format from the Oem.
SensorNumber	number	read-only (null)	This property decodes from EntryType: If it is SEL, it is the sensor number; if Event then the count of events. Otherwise, it is Oem specific.
SensorType	string	read-only (null)	If the EntryType is SEL, this will have the sensor type that the

	(enum)		log entry pertains to. See *SensorType* in Property Details, below, for the possible values of this property.
Severity	string (enum)	read-only (null)	This is the severity of the log entry. See *Severity* in Property Details, below, for the possible values of this property.

Property Details

EntryCode:

If the EntryType is SEL, this will have the entry code for the log entry.

string
Assert
D0 Power State
D1 Power State
D2 Power State
D3 Power State
Deassert
Device Disabled
Device Enabled
Device Inserted / Device Present
Device Removed / Device Absent
Fully Redundant
Informational
Install Error
Limit Exceeded
Limit Not Exceeded
Lower Critical - going high
Lower Critical - going low
Lower Non-critical - going high
Lower Non-critical - going low
Lower Non-recoverable - going high
Lower Non-recoverable - going low
Monitor
Non-redundant:Insufficient Resources
Non-redundant:Sufficient Resources from Insufficient Resources
Non-redundant:Sufficient Resources from Redundant

Performance Lags
Performance Met
Predictive Failure asserted
Predictive Failure deasserted
Redundancy Degraded
Redundancy Degraded from Fully Redundant
Redundancy Degraded from Non-redundant
Redundancy Lost
State Asserted
State Deasserted
Transition to Active
Transition to Busy
Transition to Critical from less severe
Transition to Critical from Non-recoverable
Transition to Degraded
Transition to Idle
Transition to In Test
Transition to Non-Critical from more severe
Transition to Non-Critical from OK
Transition to Non-recoverable
Transition to Non-recoverable from less severe
Transition to Off Duty
Transition to Off Line
Transition to OK
Transition to On Line
Transition to Power Off
Transition to Power Save
Transition to Running
Upper Critical - going high
Upper Critical - going low
Upper Non-critical - going high
Upper Non-critical - going low
Upper Non-recoverable - going high
Upper Non-recoverable - going low

EntryType:

his is the type of log entry.

string
Event
Oem
SEL

EventType:

This indicates the type of an event recorded in this log.

string	Description
Alert	A condition exists which requires attention
ResourceAdded	A resource has been added
ResourceRemoved	A resource has been removed
ResourceUpdated	The value of this resource has been updated
StatusChange	The status of this resource has changed

SensorType:

If the EntryType is SEL, this will have the sensor type that the log entry pertains to.

string
Add-in Card
BaseOSBoot/InstallationStatus
Battery
Boot Error
Button/Switch
Cable/Interconnect
Chassis
ChipSet
CoolingDevice
Critical Interrupt
Current
Drive Slot/Bay
Entity Presence
Event Logging Disabled
Fan
FRUState

LAN
Management Subsystem Health
Memory
Microcontroller/Coprocessor
Module/Board
Monitor ASIC/IC
OS Stop/Shutdown
Other FRU
Other Units-based Sensor
Physical Chassis Security
Platform Alert
Platform Security Violation Attempt
POST Memory Resize
Power Supply / Converter
PowerUnit
Processor
Session Audit
Slot/Connector
System ACPI PowerState
System Event
System Firmware Progress
SystemBoot/Restart
Temperature
Terminator
Version Change
Voltage
Watchdog

Severity:

This is the severity of the log entry.

string
Critical
OK
Warning

LogService 1.0.2

This resource represents the log service for the resource or service to which it is associated.

Actions {	object		The available actions for this resource.
#LogService.ClearLog { } }	object		*For more information, see the [Action Details](#) section below.*
DateTime	string	read-write (null)	The current DateTime (with offset) for the log service, used to set or read time.
DateTimeLocalOffset	string	read-write (null)	The time offset from UTC that the DateTime property is set to in format: +06:00 .
Entries {	object		References 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.
MaxNumberOfRecords	number	read-only	The maximum number of log entries this service can have.
OverWritePolicy	string (enum)	read-only	The overwrite policy for this service that takes place when the log is full. *See [OverWritePolicy](#) in Property Details, below, for the possible values of this property.*
ServiceEnabled	boolean	read-write (null)	This indicates whether this service is enabled.
Status { }	object	(null)	See the [Resource](#) schema for details on this property.

Action Details

ClearLog

(This action takes no parameters.)

Property Details

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 will be discarded
Unknown	The overwrite policy is not known or is undefined
WrapsWhenFull	When full, new entries to the Log will overwrite previous entries

Manager 1.2.0

This is the schema definition for a Manager. Examples of managers are BMCs, Enclosure Managers, Management Controllers and other subsystems assigned managability functions.

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 [Action Details](#) section below.*
#Manager.ModifyRedundancySet { }	object		The ModifyRedundancySet operation is used to add or remove members to a redundant group of manager. *For more information, see the [Action Details](#) section below.*
#Manager.Reset { } }	object		The reset action resets/reboots the manager. *For more information, see the [Action Details](#) section below.*
CommandShell {	object		Information about the Command Shell service provided by this manager.
ConnectTypesSupported [ ]	array (string (enum))	read-only	This object is used to enumerate the Command Shell connection types allowed by the implementation. *See [ConnectTypesSupported](#) in Property Details, below, for the possible values of this property.*
MaxConcurrentSessions	number	read-only	Indicates the maximum number of service sessions, regardless of protocol, this manager is able to support.
ServiceEnabled }	boolean	read-write	Indicates if the service is enabled for this manager.
DateTime	string	read-write (null)	The current DateTime (with offset) for the manager, used to set or read time.
DateTimeLocalOffset	string	read-write (null)	The time offset from UTC that the DateTime property is set to in format: +06:00 .
EthernetInterfaces {	object		This is a reference to a collection of NICs that this manager uses for network communication. It is here that clients will find NIC configuration options and settings. 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 value of this property shall contain the information about the Graphical Console (KVM-IP) service of this manager.
ConnectTypesSupported [ ]	array (string (enum))	read-only	This object is used to enumerate the Graphical Console connection types allowed by the implementation. *See [ConnectTypesSupported](#) in Property Details, below, for the possible values of this property.*
MaxConcurrentSessions	number	read-only	Indicates the maximum number of service sessions, regardless of protocol, this manager is able to support.
ServiceEnabled }	boolean	read-write	Indicates if the service is enabled for this manager.

Links {	object		Contains references to other resources that are related to this resource.
ManagerForChassis [{	array	read-only	This property is an array of references to the chassis that this manager has control over.
@odata.id }]	string	read-only	Link to a Chassis resource. See the Links section and the Chassis schema for details.
ManagerForServers [{	array	read-only	This property is an array of references to the systems that this manager has control over.
@odata.id }]	string	read-only	Link to a ComputerSystem resource. See the Links section and the ComputerSystem schema for details.
ManagerInChassis *(v1.1+)* {	object		This property is a reference to the chassis that this manager is located in. 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		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
LogServices {	object		This is a reference to a collection of Logs used by the manager. 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	This property represents the type of manager that this resource represents. *See ManagerType in Property Details, below, for the possible values of this property.*
Model	string	read-only (null)	The model information of this Manager as defined by the manufacturer
NetworkProtocol {	object		This is a reference to the network services and their settings that the manager controls. It is here that clients will find network configuration options as well as 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.
PowerState	string (enum)	read-only (null)	This is the current power state of the Manager. *See PowerState in Property Details, below, for the possible values of this property.*
Redundancy [{ }]	array (object)		A reference to a set of Redundancy entities that provide redundant services for this resource. See the Redundancy object definition in the Common objects section. See the Redundancy schema for details on this property.
SerialConsole {	object		Information about the Serial Console service provided by this manager.

ConnectTypesSupported [ ]	array (string (enum))	read-only	This object is used to enumerate the Serial Console connection types allowed by the implementation. *See ConnectTypesSupported in Property Details, below, for the possible values of this property.*
MaxConcurrentSessions	number	read-only	Indicates the maximum number of service sessions, regardless of protocol, this manager is able to support.
ServiceEnabled }	boolean	read-write	Indicates if the service is enabled for this manager.
SerialInterfaces {	object		This is a reference to a collection of serial interfaces that this manager uses for serial and console communication. It is here that clients will find serial configuration options and settings. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of SerialInterface. See the SerialInterface schema for details.
ServiceEntryPointUUID	string	read-only	The UUID of the Redfish Service provided by this manager
Status { }	object		See the Resource schema for details on this property.
UUID	string	read-only (null)	The Universal Unique Identifier (UUID) for this Manager
VirtualMedia {	object		This is a reference 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.

Action Details

ForceFailover

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

(This action takes no parameters.)

ModifyRedundancySet

The ModifyRedundancySet operation is used to add or remove members to a redundant group of manager.

(This action takes no parameters.)

Reset

The reset action resets/reboots the manager.

(This action takes no parameters.)

Property Details

ConnectTypesSupported:

This object is used to enumerate the Serial Console connection types allowed by the implementation.

string	Description
IPMI	The controller supports a Serial Console connection using the IPMI Serial-over-LAN (SOL) protocol
Oem	The controller supports a Serial Console connection using an OEM-specific protocol

SSH	The controller supports a Serial Console connection using the SSH protocol
Telnet	The controller supports a Serial Console connection using the Telnet protocol

ManagerType:

This property represents the type of manager that this resource represents.

string	Description
AuxiliaryController	A controller which provides management functions for a particular subsystem or group of devices
BMC	A controller which provides management functions for a single computer system
EnclosureManager	A controller which provides management functions for a chassis or group of devices or systems
ManagementController	A controller used primarily to monitor or manage the operation of a device or system
RackManager	A controller which provides management functions for a whole or part of a rack

PowerState:

This is 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.

ManagerAccount 1.0.2

The user accounts, owned by a Manager, are defined in this resource. Changes to a Manager Account may affect the current Redfish service connection if this manager is responsible for the Redfish service.

Enabled	boolean	read-write	This property is used by a User Administrator to disable an account w/o having to delete the user information. When set to true, the user can login. When set to false, the account is administratively disabled and the user cannot login.
Links {	object		Contains references to other resources that are related to this resource.
Oem { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
Role {	object		A reference to the Role object defining Privileges for this account-- returned when the resource is read. The ID of the role is the same as property RoleId. 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	This property indicates that the account has been auto-locked by the account service because the lockout threshold has been exceeded.

			When set to true, the account is locked. A user admin can write the property to false to manually unlock, or the account service will unlock it once the lockout duration period has passed.
Password	string	read-write required on create (null)	This property is used with a PATCH or PUT to write the password for the account. This property is null on a GET.
RoleId	string	read-write required on create	This property contains the Role for this account.
UserName	string	read-write required on create	This property contains the user name for the account.

ManagerNetworkProtocol 1.0.2

This resource is used to obtain or modify the network services managed by a given manager.

FQDN	string	read-only (null)	This is 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		Settings for this Manager's HTTP protocol support
Port	number	read-write (null)	Indicates the protocol port.
ProtocolEnabled }	boolean	read-write (null)	Indicates if the protocol is enabled or disabled
HTTPS {	object		Settings for this Manager's HTTPS protocol support
Port	number	read-write (null)	Indicates the protocol port.
ProtocolEnabled }	boolean	read-write (null)	Indicates if the protocol is enabled or disabled
IPMI {	object		Settings for this Manager's IPMI-over-LAN protocol support
Port	number	read-write (null)	Indicates the protocol port.
ProtocolEnabled }	boolean	read-write (null)	Indicates if the protocol is enabled or disabled
KVMIP {	object		Settings for this Manager's KVM-IP protocol support
Port	number	read-write (null)	Indicates the protocol port.
ProtocolEnabled }	boolean	read-write (null)	Indicates if the protocol is enabled or disabled
SNMP {	object		Settings for this Manager's SNMP support
Port	number	read-write (null)	Indicates the protocol port.

ProtocolEnabled }	boolean	read-write (null)	Indicates if the protocol is enabled or disabled
SSDP {	object		Settings for this Manager's SSDP support
NotifyIPv6Scope	string (enum)	read-write (null)	Indicates the scope for the IPv6 Notify messages for SSDP. See *NotifyIPv6Scope in Property Details, below, for the possible values of this property.*
NotifyMulticastIntervalSeconds	number	read-write (null)	Indicates how often the Multicast is done from this service for SSDP.
NotifyTTL	number	read-write (null)	Indicates the time to live hop count for SSDPs Notify messages.
Port	number	read-write (null)	Indicates the protocol port.
ProtocolEnabled }	boolean	read-write (null)	Indicates if the protocol is enabled or disabled
SSH {	object		Settings for this Manager's SSH (Secure Shell) protocol support
Port	number	read-write (null)	Indicates the protocol port.
ProtocolEnabled }	boolean	read-write (null)	Indicates if the protocol is enabled or disabled
Status { }	object		See the Resource schema for details on this property.
Telnet {	object		Settings for this Manager's Telnet protocol support
Port	number	read-write (null)	Indicates the protocol port.
ProtocolEnabled }	boolean	read-write (null)	Indicates if the protocol is enabled or disabled
VirtualMedia {	object		Settings for this Manager's Virtual Media support
Port	number	read-write (null)	Indicates the protocol port.
ProtocolEnabled }	boolean	read-write (null)	Indicates if the protocol is enabled or disabled

Property Details

NotifyIPv6Scope:

Indicates the scope for the IPv6 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

Memory 1.0.0

This is the schema definition for definition of a Memory and its configuration

Actions {	object		The available actions for this resource.
#Memory.DisablePassphrase { }	object		Disable passphrase for given regions *For more information, see the [Action Details](#) section below.*
#Memory.SecureEraseUnit { }	object		This defines the action for securely erasing given regions. *For more information, see the [Action Details](#) section below.*
#Memory.SetPassphrase { }	object		Set passphrase for the given regions *For more information, see the [Action Details](#) section below.*
#Memory.UnlockUnit { } }	object		This defines the action for unlocking given regions. *For more information, see the [Action Details](#) section below.*
AllowedSpeedsMHz [ ]	array (number)	read-only	Speed bins supported by this Memory
BaseModuleType	string (enum)	read-only (null)	The base module type of Memory *See [BaseModuleType](#) in Property Details, below, for the possible values of this property.*
BusWidthBits	number	read-only (null)	Bus Width in bits.
CapacityMiB	number	read-only (null)	Memory Capacity in MiB.
DataWidthBits	number	read-only (null)	Data Width in bits.
DeviceID	string	read-only (null)	Device ID
DeviceLocator	string	read-only (null)	Location of the Memory in the platform
ErrorCorrection	string (enum)	read-only (null)	Error correction scheme supported for this memory *See [ErrorCorrection](#) in Property Details, below, for the possible values of this property.*
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 [ ]	array (string)	read-only	Function Classes by the Memory
IsRankSpareEnabled	boolean	read-only (null)	Rank spare enabled status
IsSpareDeviceEnabled	boolean	read-only (null)	Spare device enabled status

Manufacturer	string	read-only (null)	The Memory manufacturer
MaxTDPMilliWatts [ ]	array (number)	read-only	Maximum TDPs in milli Watts
MemoryDeviceType	string (enum)	read-only (null)	Type details of the Memory See *MemoryDeviceType* in Property Details, below, for the possible values of this property.
MemoryLocation {	object		Memory connection information to sockets and memory controllers.
Channel	number	read-only (null)	Channel number in which Memory is connected
MemoryController	number	read-only (null)	Memory controller number in which Memory is connected
Slot	number	read-only (null)	Slot number in which Memory is connected
Socket }	number	read-only (null)	Socket number in which Memory is connected
MemoryMedia [ ]	array (string (enum))	read-only	Media of this Memory See *MemoryMedia* in Property Details, below, for the possible values of this property.
MemoryType	string (enum)	read-only (null)	The type of Memory See *MemoryType* in Property Details, below, for the possible values of this property.
Metrics {	object		A reference 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.
OperatingMemoryModes [ ]	array (string (enum))	read-only	Memory modes supported by the Memory See *OperatingMemoryModes* in Property Details, below, for the possible values of this property.
OperatingSpeedMhz	number	read-only (null)	Operating speed of Memory in MHz
PartNumber	string	read-only (null)	The product part number of this device
PersistentRegionSizeLimitMiB	number	read-only (null)	Total size of persistent regions in MiB
PowerManagementPolicy {	object		Power management policy information.
AveragePowerBudgetMilliWatts	number	read-only (null)	Average power budget in milli watts
MaxTDPMilliWatts	number	read-only (null)	Maximum TDP in milli watts
PeakPowerBudgetMilliWatts	number	read-only (null)	Peak power budget in milli watts

PolicyEnabled }	boolean	read-only (null)	Power management policy enabled status
RankCount	number	read-only (null)	Number of ranks available in the Memory
Regions [{	array	read-only	Memory regions information within the Memory
MemoryClassification	string (enum)	read-only (null)	Classification of memory occupied by the given memory region See *MemoryClassification* in Property Details, below, for the possible values of this property.
OffsetMiB	number	read-only (null)	Offset with in the Memory that corresponds to the starting of this memory region in MiB
PassphraseState	boolean	read-only (null)	State of the passphrase for this region
RegionId	string	read-only (null)	Unique region ID representing a specific region within the Memory
SizeMiB }]	number	read-only (null)	Size of this memory region in MiB
SecurityCapabilities {	object		This object contains security capabilities of the Memory.
MaxPassphraseCount	number	read-only (null)	Maximum number of passphrases supported for this Memory
PassphraseCapable	boolean	read-only (null)	Memory passphrase set capability
SecurityStates [ ] }	array (string (enum))	read-only	Security states supported by the Memory See *SecurityStates* in Property Details, below, for the possible values of this property.
SerialNumber	string	read-only (null)	The product serial number of this device
SpareDeviceCount	number	read-only (null)	Number of unused spare devices available in the Memory
SubsystemDeviceID	string	read-only (null)	Subsystem Device ID
SubsystemVendorID	string	read-only (null)	SubSystem Vendor ID
VendorID	string	read-only (null)	Vendor ID
VolatileRegionSizeLimitMiB	number	read-only (null)	Total size of volatile regions in MiB

Action Details

DisablePassphrase

Disable passphrase for given regions

(This action takes no parameters.)

SecureEraseUnit

This defines the action for securely erasing given regions.

(This action takes no parameters.)

SetPassphrase

Set passphrase for the given regions

(This action takes no parameters.)

UnlockUnit

This defines the action for unlocking given regions.

(This action takes no parameters.)

Property Details

BaseModuleType:

The base module type of Memory

string	Description
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

ErrorCorrection:

Error correction scheme supported for this memory

string	Description
AddressParity	Address Parity errors can be corrected
MultiBitECC	Multi-bit Data errors can be corrected by ECC
NoECC	No ECC available
SingleBitECC	Single bit Data error can be corrected by ECC

MemoryClassification:

Classification of memory occupied by the given memory region

string	Description
Block	Block accesible memory
ByteAccessiblePersistent	Byte accessible persistent memory
Volatile	Volatile memory

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
LPDDR3_SDRAM	LPDDR3 SDRAM
LPDDR4_SDRAM	LPDDR4 SDRAM
PipelinedNibble	Pipelined Nibble
ROM	ROM
SDRAM	SDRAM

MemoryMedia:

Media of this Memory

string	Description
DRAM	DRAM media
NAND	NAND media
Proprietary	Proprietary media

MemoryType:

The type of Memory

string	Description
DRAM	DRAM
NVDIMM_F	NVDIMM_F as defined by JEDEC.

NVDIMM_N	NVDIMM_N as defined by JEDEC.
NVDIMM_P	NVDIMM_P as defined by JEDEC.

OperatingMemoryModes:

Memory modes supported by the Memory

string	Description
Block	Block accessible system memory
PMEM	Persistent memory, byte accesible through system address space
Volatile	Volatile memory

SecurityStates:

Security states supported by the Memory

string	Description
Disabled	Secure mode is disabled
Enabled	Secure mode is enabled
Frozen	Secure state is frozen and can not 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

MemoryChunks 1.0.0

This is the schema definition of a Memory Chunk and its configuration.

AddressRangeType	string (enum)	read-only (null)	Memory type of this memory chunk See *AddressRangeType* in Property Details, below, for the possible values of this property.
InterleaveSets [{	array	read-only	This is 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	number	read-only (null)	Level of the interleave set for multi-level tiered memory.
OffsetMiB	number	read-only (null)	Offset within the DIMM that corresponds to the start of this memory region, with units in MiB
RegionId	string	read-only (null)	DIMM region identifier
SizeMiB }]	number	read-only (null)	Size of this memory region in MiB
IsMirrorEnabled	boolean	read-only	Mirror Enabled status

		(null)	
IsSpare	boolean	read-only (null)	Spare enabled status
MemoryChunkSizeMiB	number	read-only (null)	Size of the memory chunk in MiB

Property Details

AddressRangeType:

Memory type of this memory chunk

string	Description
Block	Block accesible memory
PMEM	Byte accessible persistent memory
Volatile	Volatile memory

MemoryDomain 1.0.0

This is the schema definition of a Memory Domain and its configuration. Memory Domains are used to indicate to the client which Memory (DIMMs) can be grouped together in Memory Chunks to form interleave sets or otherwise grouped together.

AllowsBlockProvisioning	boolean	read-only (null)	Indicates if this Memory Domain supports the provisioning of blocks of memory.
AllowsMemoryChunkCreation	boolean	read-only (null)	Indicates if this Memory Domain supports the creation of Memory Chunks.
InterleavableMemorySets [{	array	read-only	This is the interleave sets for the memory chunk.
MemorySet [{	array	read-only	This is the collection 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.
MemoryChunks {	object	(null)	A reference 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.

MemoryMetrics 1.0.0

MemoryMetrics contains usage and health statistics for a single Memory module or device instance.

Actions {	object		The available actions for this resource.
#MemoryMetrics.ClearCurrentPeriod { } }	object		This sets the CurrentPeriod object values to zero. *For more information, see the [Action Details](#) section below.*
BlockSizeBytes	number	read-only (null)	Block size in bytes

CurrentPeriod {	object		This object describes the central memory of the system in general detail.
BlocksRead	number	read-only (null)	Number of blocks read since reset
BlocksWritten }	string	read-only (null)	Number of blocks written since reset
HealthData {	object		This object describes the central memory of the system in general detail.
AlarmTrips {	object		Alarm trip information about the memory
AddressParityError	boolean	read-only (null)	Address parity error detected status
CorrectableECCError	boolean	read-only (null)	Correctable data error threshold crossing alarm trip detected status
SpareBlock	boolean	read-only (null)	Spare block capacity crossing alarm trip detected status
Temperature	boolean	read-only (null)	Temperature threshold crossing alarm trip detected status
UncorrectableECCError }	boolean	read-only (null)	Uncorrectable data error threshold crossing alarm trip detected status
DataLossDetected	boolean	read-only (null)	Data loss detection status
LastShutdownSuccess	boolean	read-only (null)	Status of last shutdown
PerformanceDegraded	boolean	read-only (null)	Performance degraded mode status
RemainingSpareBlockPercentage }	number	read-only (null)	Remaining spare blocks in percentage
LifeTime {	object		This object describes the central memory of the system in general detail.
BlocksRead	number	read-only (null)	Number of blocks read for the lifetime of the Memory
BlocksWritten }	string	read-only (null)	Number of blocks written for the lifetime of the Memory

Action Details

ClearCurrentPeriod

This sets the CurrentPeriod object values to zero.

(This action takes no parameters.)

MessageRegistry 1.0.2

This is the schema definition for all Message Registries. It represents the properties for the registries themselves. The MessageId is formed per the Redfish specification. It consists of the RegistryPrefix concatenated with the version concatenated with the unique identifier for the message registry entry.

Language	string	read-only required	This is the RFC 5646 compliant language code for the registry.
Messages { }	object	required	The pattern property indicates that a free-form string is the unique identifier for the message within the registry.
OwningEntity	string	read-only required	This is the organization or company that publishes this registry.
RegistryPrefix	string	read-only required	This is the single word prefix used to form a messageID structure.
RegistryVersion	string	read-only required	This is the message registry version which is used in the middle portion of a messageID.

MessageRegistryFile 1.0.2

This is the schema definition for the Schema File locator resource.

Languages [ ]	array (string)	read-only required	Language codes for the schemas available.
Location [{	array	read-only required	Location information for this schema file.
ArchiveFile	string	read-only	If the schema is hosted on the service in an archive file, this is the name of the file within the archive.
ArchiveUri	string	read-only	If the schema is hosted on the service in an archive file, this is the link to the archive file.
Language	string	read-only	The language code for the file the schema is in.
PublicationUri	string	read-only	Link to publicly available (canonical) URI for schema.
Uri }]	string	read-only	Link to locally available URI for schema.
Registry	string	read-only required	The Registry Name, Major and Minor version used in MessageID construction.

PCIeDevice 1.0.0

This is the schema definition for the PCIeDevice resource. It represents the properties of a PCIeDevice attached to a System.

AssetTag	string	read-write (null)	The user assigned asset tag for this PCIe device.
DeviceType	string (enum)	read-only	The device type for this PCIe device. See *DeviceType* in Property Details, below, for the possible values of this property.
FirmwareVersion	string	read-only (null)	The version of firmware for this PCIe device.
Links {	object		The links object contains the links to other resources that are related to this resource.

Chassis [{	array	read-only	An array of references 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.
Oem { }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
PCIeFunctions [{	array	read-only	An array of references to PCIeFunctions exposed by this device.
@odata.id }] }	string	read-only	Link to a PCIeFunction resource. See the Links section and the [PCIeFunction](#) schema for details.
Manufacturer	string	read-only (null)	This is the manufacturer of this PCIe device.
Model	string	read-only (null)	This is the model number for the PCIe device.
PartNumber	string	read-only (null)	The part number for this PCIe device.
SerialNumber	string	read-only (null)	The serial number for this PCIe device.
SKU	string	read-only (null)	This is the SKU for this PCIe device.
Status { }	object	(null)	See the [Resource](#) schema for details on this property.

Property Details

DeviceType:

The device type for this PCIe device.

string	Description
MultiFunction	A multi-function PCIe device
Simulated	A PCIe device which is not currently physically present, but is being simulated by the PCIe infrastructure
SingleFunction	A single-function PCIe device

PCIeFunction 1.0.0

This is the schema definition for the PCIeFunction resource. It represents the properties of a PCIeFunction attached to a System.

ClassCode	string	read-write (null)	The Class Code of this PCIe function.
DeviceClass	string (enum)	read-only	The class for this PCIe Function. See [DeviceClass](#) in Property Details, below, for the possible values of this property.
DeviceId	string	read-write (null)	The Device ID of this PCIe function.

FunctionId	number	read-only (null)	The the PCIe Function identifier.
FunctionType	string (enum)	read-only	The type of the PCIe Function. See _FunctionType_ in Property Details, below, for the possible values of this property.
Links {	object		The links object contains the links to other resources that are related to this resource.
Drives [{	array	read-only	An array of references to the drives which the PCIe device produces
@odata.id }]	string	read-only	Link to a Drive resource. See the Links section and the Drive schema for details.
EthernetInterfaces [{	array	read-only	An array of references to the ethernet interfaces which the PCIe device produces
@odata.id }]	string	read-only	Link to a EthernetInterface resource. See the Links section and the EthernetInterface schema for details.
Oem { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
PCIeDevice {	object	(null)	A reference to the PCIeDevice 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	read-only	An array of references to the storage controllers which the PCIe device produces
@odata.id }] }	string	read-only	The unique identifier for a resource.
RevisionId	string	read-write (null)	The Revision ID of this PCIe function.
Status { }	object	(null)	See the Resource schema for details on this property.
SubsystemId	string	read-write (null)	The Subsystem ID of this PCIe function.
SubsystemVendorId	string	read-write (null)	The Subsystem Vendor ID of this PCIe function.
VendorId	string	read-write (null)	The Vendor ID of this PCIe function.

Property Details

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
UnassignedClass	An unassigned class
UnclassifiedDevice	An unclassified device
WirelessController	A wireless controller

FunctionType:

The type of the PCIe Function.

string	Description
Physical	A physical PCIe function
Virtual	A virtual PCIe function

Port 1.0.0

Port contains properties describing a port of a switch.

Actions {	object		The available actions for this resource.
#Port.Reset { } }	object		This action is used to reset this switch. *For more information, see the Action Details section below.*
CurrentSpeedGbps	number (Gbit/s)	read-only (null)	The current speed of this port.
Links {	object		Contains references to other resources that are related to this

			resource.
AssociatedEndpoints [{	array	read-only	An array of references to the endpoints that connect to the switch through this port.
@odata.id }]	string	read-only	Link to a Endpoint resource. See the Links section and the [Endpoint](#) schema for details.
ConnectedSwitches [{	array	read-only	An array of references to the switches that connect to the switch through this port.
@odata.id }]	string	read-only	Link to a Switch resource. See the Links section and the [Switch](#) schema for details.
ConnectedSwitchPorts [{	array	read-only	An array of references to the ports that connect to the switch through this port.
@odata.id }]	string	read-only	Link to another Port resource.
Oem { } }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
MaxSpeedGbps	number (Gbit/s)	read-only (null)	The maximum speed of this port as currently configured.
PortId	string	read-only (null)	This is the label of this port on the physical switch package.
PortProtocol	string (enum)	read-write (null)	The protocol being sent over this port. *See [PortProtocol](#) in Property Details, below, for the possible values of this property.*
PortType	string (enum)	read-only (null)	This is the type of this port. *See [PortType](#) in Property Details, below, for the possible values of this property.*
Status { }	object		See the [Resource](#) schema for details on this property.
Width	number	read-only (null)	The number of lanes, phys, or other physical transport links that this port contains.

Action Details

Reset

This action is used to reset this switch.

(This action takes no parameters.)

Property Details

PortProtocol:

The protocol being sent over this port.

string	Description
AHCI	Advanced Host Controller Interface
FC	Fibre Channel
FCoE	Fibre Channel over Ethernet
FTP	File Transfer Protocol

HTTP	Hypertext Transport Protocol
HTTPS	Secure Hypertext Transport Protocol
iSCSI	Internet SCSI
NFSv3	Network File System version 3
NFSv4	Network File System version 4
NVMe	Non-Volatile Memory Express
NVMeOverFabrics	NVMe over Fabrics
PCIe	PCI Express (Vendor Proprietary)
SAS	Serial Attached SCSI
SATA	Serial AT Attachment
SFTP	Secure File Transfer Protocol
SMB	Server Message Block (aka CIFS Common Internet File System)
UHCI	Universal Host Controller Interface
USB	Universal Serial Bus

PortType:

This is 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

Power 1.2.0

This is the schema definition for the Power Metrics. It represents the properties for Power Consumption and Power Limiting.

PowerControl [{	array	read-write	This is the definition for power control function (power reading/limiting).
MemberId	string	read-write	This is the identifier for the member within the collection.
Name	string	read-only (null)	Power Control Function name.
Oem { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.

PowerAllocatedWatts	number (Watts)	read-only (null)	The total amount of power that has been allocated (or budegeted)to chassis resources.
PowerAvailableWatts	number (Watts)	read-only (null)	The amount of power not already budgeted and therefore available for additional allocation. (powerCapacity - powerAllocated). This indicates how much reserve power capacity is left.
PowerCapacityWatts	number (Watts)	read-only (null)	The total amount of power available to the chassis for allocation. This may the power supply capacity, or power budget assigned to the chassis from an up-stream chassis.
PowerConsumedWatts	number (Watts)	read-only (null)	The actual power being consumed by the chassis.
PowerLimit {	object		Power limit status and configuration information for this chassis
CorrectionInMs	number (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. *See LimitException in Property Details, below, for the possible values of this property.*
LimitInWatts }	number (Watts)	read-write (null)	The Power limit in watts. Set to null to disable power capping.
PowerMetrics {	object		Power readings for this chassis.
AverageConsumedWatts	number (Watts)	read-only (null)	The average power level over the measurement window (the last IntervalInMin minutes).
IntervalInMin	number (min)	read-only (null)	The time interval (or window) in which the PowerMetrics are measured over.
MaxConsumedWatts	number (Watts)	read-only (null)	The highest power consumption level that has occured over the measurement window (the last IntervalInMin minutes).
MinConsumedWatts }	number (Watts)	read-only (null)	The lowest power consumption level over the measurement window (the last IntervalInMin minutes).
PowerRequestedWatts	number (Watts)	read-only (null)	The potential power that the chassis resources are requesting which may be higher than the current level being consumed since requested power includes budget that the chassis resource wants for future use.
RelatedItem [{	array	read-write	The ID(s) of the resources associated with this Power Limit
@odata.id }]	string	read-only	The unique identifier for a resource.
Status { } }]	object		See the Resource schema for details on this property.
PowerSupplies [{	array	read-write	Details of the power supplies associated with this system or device
FirmwareVersion	string	read-only (null)	The firmware version for this Power Supply
IndicatorLED *(v1.2+)*	string (enum)	read-write (null)	The state of the indicator LED, used to identify the power supply

			See *IndicatorLED* in Property Details, below, for the possible values of this property.
InputRanges *(v1.1+)* [{	array	read-only	This is the input ranges that the power supply can use.
InputType	string (enum)	read-only (null)	The Input type (AC or DC) See *InputType* in Property Details, below, for the possible values of this property.
MaximumFrequencyHz	number (Hz)	read-only (null)	The maximum line input frequency at which this power supply input range is effective
MaximumVoltage	number (Volts)	read-only (null)	The maximum line input voltage at which this power supply input range is effective
MinimumFrequencyHz	number (Hz)	read-only (null)	The minimum line input frequency at which this power supply input range is effective
MinimumVoltage	number (Volts)	read-only (null)	The minimum line input voltage at which this power supply input range is effective
Oem { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
OutputWattage }]	number (Watts)	read-only (null)	The maximum capacity of this Power Supply when operating in this input range
LastPowerOutputWatts	number (Watts)	read-only (null)	The average power output of this Power Supply
LineInputVoltage	number (Volts)	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 See *LineInputVoltageType* in Property Details, below, for the possible values of this property.
Manufacturer *(v1.1+)*	string	read-only (null)	This is the manufacturer of this power supply.
MemberId	string	read-write	This is the identifier for the member within the collection.
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		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
PartNumber	string	read-only (null)	The part number for this Power Supply
PowerCapacityWatts	number (Watts)	read-only (null)	The maximum capacity of this Power Supply
PowerSupplyType	string (enum)	read-only (null)	The Power Supply type (AC or DC) See *PowerSupplyType* in Property Details, below, for the possible values of this property.
InputRanges [{			

Redundancy [{ }]	array (object)		A reference to a set of Redundancy entities that provide redundant services for this resource. See the [Redundancy](#) object definition in the Common objects section. See the [Redundancy](#) schema for details on this property.
RelatedItem [{	array	read-write	The ID(s) of the resources associated with this Power Limit
@odata.id }]	string	read-only	The unique identifier for a resource.
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		See the [Resource](#) schema for details on this property.
Redundancy [{ }]	array (object)		A reference to a set of Redundancy entities that provide redundant services for this resource. See the [Redundancy](#) object definition in the Common objects section. See the [Redundancy](#) schema for details on this property.
Voltages [{	array	read-write	This is the definition for voltage sensors.
LowerThresholdCritical	number (Volts)	read-only (null)	Below normal range but not yet fatal.
LowerThresholdFatal	number (Volts)	read-only (null)	Below normal range and is fatal
LowerThresholdNonCritical	number (Volts)	read-only (null)	Below normal range
MaxReadingRange	number (Volts)	read-only (null)	Maximum value for CurrentReading
MemberId	string	read-write	This is the identifier for the member within the collection.
MinReadingRange	number (Volts)	read-only (null)	Minimum value for CurrentReading
Name	string	read-only (null)	Voltage sensor name.
Oem { }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
PhysicalContext	string (enum)	read-only	Describes the area or device to which this voltage measurement applies. See *[PhysicalContext](#) in Property Details, below, for the possible values of this property.*
ReadingVolts	number (Volts)	read-only (null)	The current value of the voltage sensor.
RelatedItem [{	array	read-only	Describes the areas or devices to which this voltage measurement applies.
@odata.id }]	string	read-only	The unique identifier for a resource.

SensorNumber	number	read-only (null)	A numerical identifier to represent the voltage sensor
Status { }	object		See the [Resource](#) schema for details on this property.
UpperThresholdCritical	number (Volts)	read-only (null)	Above normal range but not yet fatal.
UpperThresholdFatal	number (Volts)	read-only (null)	Above normal range and is fatal
UpperThresholdNonCritical }]	number (Volts)	read-only (null)	Above normal range

Property Details

IndicatorLED:

The state of the indicator LED, used to identify the power supply

string	Description
Blinking	The Indicator LED is blinking.
Lit	The Indicator LED is lit.
Off	The Indicator LED is off.

InputType:

The Input type (AC or DC)

string	Description
AC	Alternating Current (AC) input range
DC	Direct Current (DC) input range

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.

LineInputVoltageType:

The line voltage type supported as an input to this Power Supply

string	Description
AC120V	AC 120V nominal input
AC240V	AC 240V nominal input
AC277V	AC 277V nominal input
ACandDCWideRange	Wide range AC or DC input

ACHighLine	277V AC input. Deprecated: Use AC277V
ACLowLine	100-127V AC input. Deprecated: Use AC120V
ACMidLine	200-240V AC input. Deprecated: Use AC240V
ACWideRange	Wide range AC input
DC240V	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

PhysicalContext:

Describes the area or device to which this voltage measurement applies.

string	Description
Back	The back of the chassis
Backplane	A backplane within the chassis
ComputeBay	Within a compute bay
CPU	A Processor (CPU)
Exhaust	The exhaust point of the chassis
ExpansionBay	Within an expansion bay
Front	The front of the chassis
GPU	A Graphics Processor (GPU)
Intake	The intake point of the chassis
Lower	The lower portion of the chassis
NetworkBay	Within a networking bay
NetworkingDevice	A networking device
PowerSupply	A power supply
PowerSupplyBay	Within a power supply bay
Room	The room
StorageBay	Within a storage bay
StorageDevice	A storage device
SystemBoard	The system board (PCB)
Upper	The upper portion of the chassis
VoltageRegulator	A voltage regulator device

PowerSupplyType:

The Power Supply type (AC or DC)

string	Description
AC	Alternating Current (AC) power supply
ACorDC	Power Supply supports both DC or AC
DC	Direct Current (DC) power supply
Unknown	The power supply type cannot be determined

Processor 1.0.2

This is the schema definition for the Processor resource. It represents the properties of a processor attached to a System.

InstructionSet	string (enum)	read-only (null)	The instruction set of the processor See *InstructionSet* in Property Details, below, for the possible values of this property.
Manufacturer	string	read-only (null)	The processor manufacturer
MaxSpeedMHz	number	read-only (null)	The maximum clock speed of the processor
Model	string	read-only (null)	The product model number of this device
ProcessorArchitecture	string (enum)	read-only (null)	The architecture of the processor See *ProcessorArchitecture* in Property Details, below, for the possible values of this property.
ProcessorId {	object		Identification information for this processor.
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 contents of the Identification Registers (CPUID) 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
ProcessorType	string (enum)	read-only (null)	The type of processor See *ProcessorType* in Property Details, below, for the possible values of this property.
Socket	string	read-only (null)	The socket or location of the processor
Status { }	object		See the Resource schema for details on this property.
TotalCores	number	read-only (null)	The total number of cores contained in this processor

TotalThreads	number	read-only (null)	The total number of execution threads supported by this processor

Property Details

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
x86	x86 32-bit
x86-64	x86 64-bit

ProcessorArchitecture:

The architecture of the processor

string	Description
ARM	ARM
IA-64	Intel Itanium
MIPS	MIPS
OEM	OEM-defined
x86	x86 or x86-64

ProcessorType:

The type of processor

string	Description
Accelerator	An Accelerator
CPU	A Central Processing Unit
DSP	A Digital Signal Processor
FPGA	A Field Programmable Gate Array
GPU	A Graphics Processing Unit
OEM	An OEM-defined Processing Unit

Role 1.0.2

This resource defines a user role to be used in conjunction with a Manager Account.

AssignedPrivileges [ ]	array (string (enum))	read-write	The redfish privileges that this role includes. *See AssignedPrivileges in Property Details, below, for the possible values of this property.*
IsPredefined	boolean	read-only	This property is used to indicate if the Role is one of the Redfish Predefined Roles vs a Custom role.
OemPrivileges [ ]	array (string)	read-write	The OEM privileges that this role includes.

Property Details

AssignedPrivileges:

The redfish privileges that this role includes.

string	Description
ConfigureComponents	Able to configure components managed by this service.
ConfigureManager	Able to configure Manager resources.
ConfigureSelf	Able to change the password for the current user Account.
ConfigureUsers	Able to configure Users and their Accounts.
Login	Able to log into the service and read resources.

SecureBoot 1.0.0

This resource contains UEFI Secure Boot information. It represents properties for managing the UEFI Secure Boot functionality of a system.

Actions {	object		The available actions for this resource.
#SecureBoot.ResetKeys { } }	object		This action is used to reset the Secure Boot keys. *For more information, see the Action Details section below.*
SecureBootCurrentBoot	string (enum)	read-only (null)	Secure Boot state during the current boot cycle. *See SecureBootCurrentBoot in Property Details, below, for the possible values of this property.*
SecureBootEnable	boolean	read-write (null)	Enable or disable UEFI Secure Boot (takes effect on next boot).
SecureBootMode	string (enum)	read-only (null)	Current Secure Boot Mode. *See SecureBootMode in Property Details, below, for the possible values of this property.*

Action Details

ResetKeys

This action is used to reset the Secure Boot keys.

(This action takes no parameters.)

Property Details

SecureBootCurrentBoot:

Secure Boot state during the current boot cycle.

string	Description
Disabled	Secure Boot is currently disabled.
Enabled	Secure Boot is currently enabled.

SecureBootMode:

Current Secure Boot Mode.

string	Description
AuditMode	Secure Boot is currently in Audit Mode.
DeployedMode	Secure Boot is currently in Deployed Mode.
SetupMode	Secure Boot is currently in Setup Mode.
UserMode	Secure Boot is currently in User Mode.

SerialInterface 1.0.2

This schema defines an asynchronous serial interface resource.

BitRate	string (enum)	read-write	The receive and transmit rate of data flow, typically in bits-per-second (bps), over the serial connection. See *BitRate* in Property Details, below, for the possible values of this property.
ConnectorType	string (enum)	read-only	The type of connector used for this interface. See *ConnectorType* in Property Details, below, for the possible values of this property.
DataBits	string (enum)	read-write	The number of data bits that will follow the start bit over the serial connection. See *DataBits* in Property Details, below, for the possible values of this property.
FlowControl	string (enum)	read-write	The type of flow control, if any, that will be imposed on the serial connection. See *FlowControl* in Property Details, below, for the possible values of this property.
InterfaceEnabled	boolean	read-write (null)	This indicates whether this interface is enabled.
Parity	string (enum)	read-write	The type of parity used by the sender and receiver in order to detect errors over the serial connection. See *Parity* in Property Details, below, for the possible values of this property.
PinOut	string (enum)	read-only (null)	The physical pin configuration needed for a serial connector. See *PinOut* in Property Details, below, for the possible values of this property.
SignalType	string (enum)	read-only	The type of signal used for the communication connection - RS232 or RS485. See *SignalType* in Property Details, below, for the possible values of this property.
StopBits	string (enum)	read-write	The period of time before the next start bit is transmitted. See *StopBits* in Property Details, below, for the possible values of this

				property.

Property Details

BitRate:

The receive and transmit rate of data flow, typically in bits-per-second (bps), over the serial connection.

string
115200
1200
19200
230400
2400
38400
4800
57600
9600

ConnectorType:

The type of connector used for this interface.

string
DB25 Female
DB25 Male
DB9 Female
DB9 Male
mUSB
RJ11
RJ45
USB
uUSB

DataBits:

The number of data bits that will follow the start bit over the serial connection.

string
5
6
7
8

FlowControl:

The type of flow control, if any, that will be 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

Parity:

The type of parity used by the sender and receiver in order to detect errors over the serial connection.

string
Even
Mark
None
Odd
Space

PinOut:

The physical pin configuration needed for a serial connector.

string
Cisco
Cyclades
Digi

SignalType:

The type of signal used for the communication connection - RS232 or RS485.

string
Rs232
Rs485

StopBits:

The period of time before the next start bit is transmitted.

string
1
2

ServiceRoot 1.1.0

This object represents the root Redfish service.

AccountService {	object		This is a 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.
Chassis {	object		This is a 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.
EventService {	object		This is a link to the EventService. 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		A 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.
JsonSchemas {	object		This is a 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	Contains references to other resources that are related to this resource.
Oem { }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
Sessions {	object		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		This is a 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.
RedfishVersion	string	read-only	The version of the Redfish service
Registries {	object		This is a 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.
SessionService {	object		This is a 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+)*		read-only	A link to a collection of all storage service entities.
StorageSystems *(v1.1+)*		read-only	This is a link to a collection of storage systems.
Systems {	object		This is a 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		This is a 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.
UpdateService *(v1.1+)* {	object		This is a link to the UpdateService. 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 200OK from an SSDP M-SEARCH request during discovery.

Session 1.0.2

The Session resource describes a single connection (session) between a client and a Redfish service instance.

Password	string	read-write required on create (null)	This property is used in a POST to specify a password when creating a new session. This property is null on a GET.
UserName	string	read-only required on create (null)	The UserName for the account for this session.

SessionService 1.1.0

This is the schema definition for the Session Service. It represents the properties for the service itself and has links to the actual list of sessions.

Actions *(v1.1+)* { }	object		The Actions object contains the available custom actions on this resource.
ServiceEnabled	boolean	read-write (null)	This indicates whether this service is enabled.
Sessions {	object		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	number (seconds)	read-write	This is the number of seconds of inactivity that a session may have before the session service closes the session due to inactivity.
Status { }	object		See the [Resource](#) schema for details on this property.

SimpleStorage 1.1.0

This is the schema definition for the Simple Storage resource. It represents the properties of a storage controller and its directly-attached devices.

Devices [{	array	read-only	The storage devices associated with this resource
CapacityBytes *(v1.1+)*	number	read-only	The size of the storage device.

			(null)	
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		The name of the resource or array element.
Oem { }	object			See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
Status { } }]	object			See the Resource schema for details on this property.
Status { }	object			See the Resource schema for details on this property.
UefiDevicePath	string	read-only (null)		The UEFI device path used to access this storage controller.

SoftwareInventory 1.0.0

This schema defines an inventory of software components.

Actions { }	object		The Actions object contains the available custom actions on this resource.
Status { }	object	(null)	See the Resource schema for details on this property.
Updateable	boolean	read-only (null)	Indicates whether this firmware can be updated by the update service.
Version	string	read-only (null)	A string representing the version of this firmware.

Storage 1.0.1

This schema defines a storage subsystem and its respective properties. A storage subsystem represents a set of storage controllers (physical or virtual) and the resources such as volumes that can be accessed from that subsystem.

Actions {	object		The available actions for this resource.
#Storage.SetEncryptionKey { } }	object		This action is used to set the encryption key for the storage subsystem. *For more information, see the Action Details section below.*
Drives [{	array	read-only	The set of drives attached to the storage controllers represented by this resource.
@odata.id }]	string	read-only	Link to a Drive resource. See the Links section and the Drive schema for details.
Links {	object		Contains references to other resources that are related to this resource.
Enclosures [{	array	read-only	An array of references 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.

Oem { } }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
Redundancy [{ }]	array (object)		A reference to a set of Redundancy entities that provide redundant services for this resource. See the [Redundancy](#) object definition in the Common objects section. See the [Redundancy](#) schema for details on this property.
Status { }	object		See the [Resource](#) schema for details on this property.
StorageControllers [{	array	read-only	The set of storage controllers represented by this resource.
AssetTag	string	read-write (null)	The user assigned asset tag for this storage controller.
FirmwareVersion	string	read-only (null)	The firmware version of this storage Controller
Identifiers [{ }]	array (object)		The Durable names for the storage controller See the [v1_1_0.v1_1_0](#) schema for details on this property.
Manufacturer	string	read-only (null)	This is the manufacturer of this storage controller.
MemberId	string	read-write	This is the identifier for the member within the collection.
Model	string	read-only (null)	This is the model number for the storage controller.
Oem { }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
PartNumber	string	read-only (null)	The part number for this storage controller.
SerialNumber	string	read-only (null)	The serial number for this storage controller.
SKU	string	read-only (null)	This is the SKU for this storage controller.
SpeedGbps	number (Gbit/s)	read-only (null)	The speed of the storage controller interface.
Status { }	object		See the [Resource](#) schema for details on this property.
SupportedControllerProtocols [ ]	array (string (enum))	read-only	This represents the protocols by which this storage controller can be communicated to. See *[SupportedControllerProtocols](#) in Property Details, below, for the possible values of this property.*
SupportedDeviceProtocols [ ] }]	array (string (enum))	read-only	This represents the protocols which the storage controller can use to communicate with attached devices. See *[SupportedDeviceProtocols](#) in Property Details, below, for the possible values of this property.*
Volumes {	object		The set of volumes produced by the storage controllers represented by this resource. Contains a link to a resource.

@odata.id }	string	read-only	Link to Collection of [Volume](#). See the Volume schema for details.

Action Details

SetEncryptionKey

This action is used to set the encryption key for the storage subsystem.

(This action takes no parameters.)

Property Details

SupportedControllerProtocols:

This represents the protocols by which this storage controller can be communicated to.

string	Description
AHCI	Advanced Host Controller Interface
FC	Fibre Channel
FCoE	Fibre Channel over Ethernet
FTP	File Transfer Protocol
HTTP	Hypertext Transport Protocol
HTTPS	Secure Hypertext Transport Protocol
iSCSI	Internet SCSI
NFSv3	Network File System version 3
NFSv4	Network File System version 4
NVMe	Non-Volatile Memory Express
NVMeOverFabrics	NVMe over Fabrics
PCIe	PCI Express (Vendor Proprietary)
SAS	Serial Attached SCSI
SATA	Serial AT Attachment
SFTP	Secure File Transfer Protocol
SMB	Server Message Block (aka CIFS Common Internet File System)
UHCI	Universal Host Controller Interface
USB	Universal Serial Bus

SupportedDeviceProtocols:

This represents the protocols which the storage controller can use to communicate with attached devices.

string	Description
AHCI	Advanced Host Controller Interface
FC	Fibre Channel
FCoE	Fibre Channel over Ethernet

FTP	File Transfer Protocol
HTTP	Hypertext Transport Protocol
HTTPS	Secure Hypertext Transport Protocol
iSCSI	Internet SCSI
NFSv3	Network File System version 3
NFSv4	Network File System version 4
NVMe	Non-Volatile Memory Express
NVMeOverFabrics	NVMe over Fabrics
PCIe	PCI Express (Vendor Proprietary)
SAS	Serial Attached SCSI
SATA	Serial AT Attachment
SFTP	Secure File Transfer Protocol
SMB	Server Message Block (aka CIFS Common Internet File System)
UHCI	Universal Host Controller Interface
USB	Universal Serial Bus

Switch 1.0.0

Switch contains properties describing a simple fabric switch.

Actions {	object		The available actions for this resource.
#Switch.Reset { } }	object		This action is used to reset this switch. *For more information, see the* Action Details *section below.*
AssetTag	string	read-write (null)	The user assigned asset tag for this switch.
DomainID	number	read-only (null)	The Domain ID for this switch.
IndicatorLED	string (enum)	read-write (null)	The state of the indicator LED, used to identify the switch. *See* IndicatorLED *in Property Details, below, for the possible values of this property.*
IsManaged	boolean	read-write (null)	This indicates whether the switch is in a managed or unmanaged state.
Links {	object		Contains references to other resources that are related to this resource.
Chassis {	object		A reference to the chassis which contains this switch. 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.
ManagedBy [{	array	read-only	An array of references 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.
Oem { } **}**	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
LogServices {	object	(null)	A reference 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)	This is the manufacturer of this switch.
Model	string	read-only (null)	The product model number of this switch.
PartNumber	string	read-only (null)	The part number for this switch.
Ports {	object		A collection of references to the 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)	This is the current power state of the switch. *See PowerState in Property Details, below, for the possible values of this property.*
Redundancy [{ }]	array (object)		A reference to a set of Redundancy entities that provide redundant services for this resource. See the Redundancy object definition in the Common objects section. See the Redundancy schema for details on this property.
SerialNumber	string	read-only (null)	The serial number for this switch.
SKU	string	read-only (null)	This is the SKU for this switch.
Status { }	object		See the Resource schema for details on this property.
SwitchType	string (enum)	read-write (null)	The protocol being sent over this switch. *See SwitchType in Property Details, below, for the possible values of this property.*
TotalSwitchWidth	number	read-only (null)	The total number of lanes, phys, or other physical transport links that this switch contains.

Action Details

Reset

This action is used to reset this switch.

(This action takes no parameters.)

Property Details

IndicatorLED:

The state of the indicator LED, used to identify the switch.

string	Description
Blinking	The Indicator LED is blinking.
Lit	The Indicator LED is lit.
Off	The Indicator LED is off.

PowerState:

This is 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.

SwitchType:

The protocol being sent over this switch.

string	Description
AHCI	Advanced Host Controller Interface
FC	Fibre Channel
FCoE	Fibre Channel over Ethernet
FTP	File Transfer Protocol
HTTP	Hypertext Transport Protocol
HTTPS	Secure Hypertext Transport Protocol
iSCSI	Internet SCSI
NFSv3	Network File System version 3
NFSv4	Network File System version 4
NVMe	Non-Volatile Memory Express
NVMeOverFabrics	NVMe over Fabrics
PCIe	PCI Express (Vendor Proprietary)
SAS	Serial Attached SCSI
SATA	Serial AT Attachment
SFTP	Secure File Transfer Protocol
SMB	Server Message Block (aka CIFS Common Internet File System)
UHCI	Universal Host Controller Interface
USB	Universal Serial Bus

Task 1.0.2

This resource contains information about a specific Task scheduled by or being executed by a Redfish service's Task Service.

EndTime	string	read-only	The date-time stamp that the task was last completed.
Messages [{ }]	array (object)		This is an array of messages associated with the task. See the [Message](#) schema for details on this property.
StartTime	string	read-only	The date-time stamp that the task was last started.
TaskState	string (enum)	read-only	The state of the task. *See [TaskState](#) in Property Details, below, for the possible values of this property.*
TaskStatus	string (enum)	read-only	This is the completion status of the task. *See [TaskStatus](#) in Property Details, below, for the possible values of this property.*

Property Details

TaskState:

The state of the task.

string	Description
Completed	Task has completed
Exception	Task has stopped due to an exception condition
Interrupted	Task has been interrupted
Killed	Task was terminated
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

TaskStatus:

This is the completion status of the task.

string	Description
Critical	A critical condition exists that requires immediate attention
OK	Normal
Warning	A condition exists that requires attention

TaskService 1.0.2

This is the schema definition for the Task Service. It represents the properties for the service itself and has links to the actual list of tasks.

CompletedTaskOverWritePolicy	string (enum)	read-only	Overwrite policy of completed tasks *See CompletedTaskOverWritePolicy in Property Details, below, for the possible values of this property.*
DateTime	string	read-only (null)	The current DateTime (with offset) setting that the task service is using.
LifeCycleEventOnTaskStateChange	boolean	read-only	Send an Event upon Task State Change.
ServiceEnabled	boolean	read-write (null)	This indicates whether this service is enabled.
Status { }	object		See the Resource schema for details on this property.
Tasks {	object		References to the Tasks collection. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of Task. See the Task schema for details.

Property Details

CompletedTaskOverWritePolicy:

Overwrite policy of completed tasks

string	Description
Manual	Completed tasks are not automatically overwritten
Oldest	Oldest completed tasks are overwritten

Thermal 1.1.0

This is the schema definition for the Thermal properties. It represents the properties for Temperature and Cooling.

Fans [{	array	read-write	This is the definition for fans.
FanName	string	read-only (null)	Name of the fan
LowerThresholdCritical	number	read-only (null)	Below normal range but not yet fatal
LowerThresholdFatal	number	read-only (null)	Below normal range and is fatal
LowerThresholdNonCritical	number	read-only (null)	Below normal range
MaxReadingRange	number	read-only (null)	Maximum value for Reading
MemberId	string	read-write	This is the identifier for the member within the collection.
MinReadingRange	number	read-only (null)	Minimum value for Reading

Name *(v1.1+)*	string	read-only (null)	Name of the fan
Oem { }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
PhysicalContext	string (enum)	read-only	Describes the area or device associated with this fan. *See [PhysicalContext](#) in Property Details, below, for the possible values of this property.*
Reading	number	read-only (null)	Current fan speed
ReadingUnits *(v1.1+)*	string (enum)	read-only (null)	Units in which the reading and thresholds are measured. *See [ReadingUnits](#) in Property Details, below, for the possible values of this property.*
Redundancy [{ }]	array (object)		A reference to a set of Redundancy entities that provide redundant services for this resource. See the [Redundancy](#) object definition in the Common objects section. See the [Redundancy](#) schema for details on this property.
RelatedItem [{	array	read-write	The ID(s) of the resources serviced with this fan
@odata.id }]	string	read-only	The unique identifier for a resource.
Status { }	object		See the [Resource](#) schema for details on this property.
UpperThresholdCritical	number	read-only (null)	Above normal range but not yet fatal
UpperThresholdFatal	number	read-only (null)	Above normal range and is fatal
UpperThresholdNonCritical }]	number	read-only (null)	Above normal range
Redundancy [{ }]	array (object)		A reference to a set of Redundancy entities that provide redundant services for this resource. See the [Redundancy](#) object definition in the Common objects section. See the [Redundancy](#) schema for details on this property.
Status { }	object		See the [Resource](#) schema for details on this property.
Temperatures [{	array	read-write	This is the definition for temperature sensors.
LowerThresholdCritical	number	read-only (null)	Below normal range but not yet fatal.
LowerThresholdFatal	number	read-only (null)	Below normal range and is fatal
LowerThresholdNonCritical	number	read-only (null)	Below normal range
MaxReadingRangeTemp	number	read-only (null)	Maximum value for ReadingCelsius
MemberId	string	read-write	This is the identifier for the member within the collection.
MinReadingRangeTemp	number	read-only (null)	Minimum value for ReadingCelsius

Name	string	read-only (null)	Temperature sensor name.
Oem { }	object		See the OEM object definition in the [Common properties](#) section. See the [Resource](#) schema for details on this property.
PhysicalContext	string (enum)	read-only	Describes the area or device to which this temperature measurement applies. *See [PhysicalContext](#) in Property Details, below, for the possible values of this property.*
ReadingCelsius	number	read-only (null)	Temperature
RelatedItem [{	array	read-only	Describes the areas or devices to which this temperature measurement applies.
@odata.id }]	string	read-only	The unique identifier for a resource.
SensorNumber	number	read-only (null)	A numerical identifier to represent the temperature sensor
Status { }	object		See the [Resource](#) schema for details on this property.
UpperThresholdCritical	number	read-only (null)	Above normal range but not yet fatal.
UpperThresholdFatal	number	read-only (null)	Above normal range and is fatal
UpperThresholdNonCritical }]	number	read-only (null)	Above normal range

Property Details

PhysicalContext:

Describes the area or device to which this temperature measurement applies.

string	Description
Back	The back of the chassis
Backplane	A backplane within the chassis
ComputeBay	Within a compute bay
CPU	A Processor (CPU)
Exhaust	The exhaust point of the chassis
ExpansionBay	Within an expansion bay
Front	The front of the chassis
GPU	A Graphics Processor (GPU)
Intake	The intake point of the chassis
Lower	The lower portion of the chassis
NetworkBay	Within a networking bay
NetworkingDevice	A networking device

PowerSupply	A power supply
PowerSupplyBay	Within a power supply bay
Room	The room
StorageBay	Within a storage bay
StorageDevice	A storage device
SystemBoard	The system board (PCB)
Upper	The upper portion of the chassis
VoltageRegulator	A voltage regulator device

ReadingUnits:

Units in which the reading and thresholds are measured.

string	Description
Percent	Indicates that the fan reading and thresholds are measured in percentage.
RPM	Indicates that the fan reading and thresholds are measured in rotations per minute.

UpdateService 1.0.0

This is the schema definition for the Update Service. It represents the properties for the service itself and has links to collections of firmware and software inventory.

Actions {	object		The Actions object contains the available custom actions on this resource.
#UpdateService.SimpleUpdate { } }	object		This action is used to update software components. *For more information, see the Action Details section below.*
FirmwareInventory {	object	(null)	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.
ServiceEnabled	boolean	read-write (null)	This indicates whether this service is enabled.
SoftwareInventory {	object	(null)	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	(null)	See the Resource schema for details on this property.

Action Details

SimpleUpdate

This action is used to update software components.

(This action takes no parameters.)

VirtualMedia 1.0.2

This resource allows monitoring and control of an instance of virtual media (e.g. a remote CD, DVD, or USB device) functionality provided by a Manager for a system or device.

ConnectedVia	string (enum)	read-only (null)	Current virtual media connection methods See *ConnectedVia* in Property Details, below, for the possible values of this property.
Image	string	read-only (null)	A URI providing the location of the selected image
ImageName	string	read-only (null)	The current image name
Inserted	boolean	read-only (null)	Indicates if virtual media is inserted in the virtual device.
MediaTypes [ ]	array (string (enum))	read-only	This is the media types supported as virtual media. See *MediaTypes* in Property Details, below, for the possible values of this property.
WriteProtected	boolean	read-only (null)	Indicates the media is write protected.

Property Details

ConnectedVia:

Current virtual media connection methods

string	Description
Applet	Connected to a client application
NotConnected	No current connection
Oem	Connected via an OEM-defined method
URI	Connected to a URI location

MediaTypes:

This is 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

VLanNetworkInterface 1.0.2

This resource contains information for a Virtual LAN (VLAN) network instance available on a manager, system or other device.

VLANEnable	boolean	read-write required on create (null)	This indicates if this VLAN is enabled.

VLANId	number	read-write required on create (null)	This indicates the VLAN identifier for this VLAN.

Volume 1.0.1

Volume contains properties used to describe a volume, virtual disk, LUN, or other logical storage entity for any system.

Actions {	object		The available actions for this resource.
#Volume.Initialize { } }	object		This action is used to prepare the contents of the volume for use by the system. *For more information, see the Action Details section below.*
BlockSizeBytes	number (bytes)	read-only (null)	The size of the smallest addressable unit (Block) of this volume in bytes
CapacityBytes	number (bytes)	read-only (null)	The size in bytes of this Volume
Encrypted	boolean	read-write (null)	Is this Volume encrypted
EncryptionTypes [ ]	array (string (enum))	read-write	The types of encryption used by this Volume *See EncryptionTypes in Property Details, below, for the possible values of this property.*
Identifiers [{ }]	array (object)		The Durable names for the volume See the v1_1_0.v1_1_0 schema for details on this property.
Links {	object		Contains references to other resources that are related to this resource.
Drives [{	array	read-only	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.
Oem { } }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
Operations [{	array	read-only	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 }]	number	read-only (null)	The percentage of the operation that has been completed.
OptimumIOSizeBytes	number (bytes)	read-only (null)	The size in bytes of this Volume's optimum IO size.
Status { }	object		See the Resource schema for details on this property.
VolumeType	string (enum)	read-only (null)	The type of this volume *See VolumeType in Property Details, below, for the possible values*

			of this property.

Action Details

Initialize

This action is used to prepare the contents of the volume for use by the system.

(This action takes no parameters.)

Property Details

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
SoftwareAssisted	The volume is being encrypted by software running on the system or the operating system

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

Zone 1.0.0

Switch contains properties describing a simple fabric zone.

Links {	object		Contains references to other resources that are related to this resource.
Endpoints [{	array	read-only	An array of references to the endpoints that are contained in this zone.
@odata.id }]	string	read-only	Link to a Endpoint resource. See the Links section and the Endpoint schema for details.
InvolvedSwitches [{	array	read-only	An array of references to the switchs that are utilized in this zone.
@odata.id }]	string	read-only	Link to a Switch resource. See the Links section and the Switch schema for details.
Oem { } }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.

Status { }	object	See the [Resource](#) schema for details on this property.

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 http://www.github.com/DMTF/Redfish-Tools.

ANNEX A

Change log

Version	Date	Description
2018.2	2018-08-10	Release built from Redfish schemas released in DSP8010 version 2018.2
		Expanded introduction section with additional information.
		Expanded Common Objects section to include previously excluded objects.
		Added URI listings for all resources for use with Redfish Specification v1.6.0
		Added Resource Collection table showing schema names and URIs.
		Restructured common objects section utilizing new Documentation Generator functions.
2018.1	2018-05-01	Initial release. Built from Redfish schemas released in DSP8010 version 2018.1
2017.3	2018-10-30	Historical version build from DSP8010 v2017.3 for use in comparisons with later releases.
2017.2	2018-10-30	Historical version build from DSP8010 v2017.2 for use in comparisons with later releases.
2017.1	2018-10-30	Historical version build from DSP8010 v2017.1 for use in comparisons with later releases.
2016.3	2018-10-30	Historical version build from DSP8010 v2016.3 for use in comparisons with later releases.
2016.2	2018-10-30	Historical version build from DSP8010 v2016.2 for use in comparisons with later releases.
2016.1	2018-10-30	Historical version build from DSP8010 v2016.1 for use in comparisons with later releases.
2017.0a	2017-05-19	Work in progress release to gather feedback on content and format.