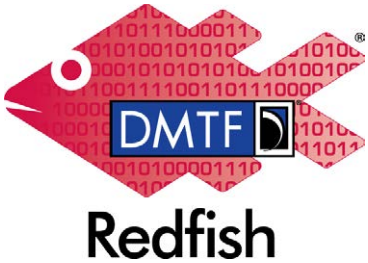

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Redfish Resource and Schema Guide

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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Historical Reference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 This version of the document should only be used as a historical reference.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 1.1.0

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 (seconds)	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 (seconds)	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.
PrivilegeMap *(v1.1+)* {	object		A reference to the Privilege mapping defining the privileges needed to perform a requested operation on a URI associated with this service. See the PrivilegeRegistry schema for details on this property.
@odata.id }	string	read-only	Link to a PrivilegeRegistry resource. See the Links section and the PrivilegeRegistry schema for details.
Roles {	object		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 1.0.1

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-write	The parameters associated with the specified Redfish Action.
AllowableValues [ ]	array (string, null)	read-only	A list of values for this parameter supported by this Action target.
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 1.0.1

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-write	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-write	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 (null)	Defines whether this attribute is write-only. Such attributes revert back to their initial value after settings are applied.
Dependencies [{	array	read-write	The array containing a list of dependencies of attributes on this component.
Dependency {	object		The dependency expression for one or more Attributes in this Attribute Registry.
MapFrom [{	array	read-write	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-write	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 1.0.1

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-only (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 1.4.0

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.
DepthMm *(v1.4+)*	number (mm)	read-only (null)	The depth of the chassis.
HeightMm *(v1.4+)*	number (mm)	read-only (null)	The height of the chassis.
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.
PCIeDevices *(v1.4+)* [{	array	read-only	An array of references to the PCIe Devices located in this Chassis.

@odata.id }]	string	read-only	Link to a PCIeDevice resource. See the Links section and the PCIeDevice schema for details.
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 Power Supplies.
@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.
NetworkAdapters *(v1.4+)* {	object		A reference to the collection of Network Adapters associated with this chassis. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of NetworkAdapter. See the NetworkAdapter schema for details.
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.
WeightKg *(v1.4+)*	number (kg)	read-only (null)	The weight of the chassis.
WidthMm *(v1.4+)*	number (mm)	read-only (null)	The width of the chassis.

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.
RackGroup *(v1.4+)*	A group of racks which form a single entity or share infrastructure.
RackMount	A single system chassis designed specifically for mounting in an equipment rack.
Row	A collection of equipment racks.
Shelf	An enclosed or semi-enclosed, typically horizontally-oriented, system chassis 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 1.3.0

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-only (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-only	A reference to a collection of storage services supported by this computer system.
HostingRoles *(v1.2+)* [ ]	array (string (enum))	read-only	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 Power Supplies.
@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.
NetworkInterfaces *(v1.3+)* {	object		A reference to the collection of Network Interfaces associated with this system. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of NetworkInterface. See the NetworkInterface schema for details.
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.
FirmwareVersion2 *(v1.3+)*	string	read-only (null)	The 2nd firmware version of this Trusted Module, if applicable.
InterfaceType	string	read-only	This property indicates the interface type of the Trusted

	(enum)	(null)	Module. *See InterfaceType in Property Details, below, for the possible values of this property.*
InterfaceTypeSelection *(v1.3+)*	string (enum)	read-only (null)	The Interface Type selection supported by this Trusted Module. *See InterfaceTypeSelection 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.

InterfaceTypeSelection:

The Interface Type selection supported by this Trusted Module.

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

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 1.1.1

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 addressible 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 (enum)	read-only (null)	The type of media contained in this drive. *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. This is typically the firmware/hardware version of the 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 1.0.1

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-write	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-only (null)	The Device ID of this PCIe function.
SubsystemId	string	read-only (null)	The Subsystem ID of this PCIe function.
SubsystemVendorId	string	read-only (null)	The Subsystem Vendor ID of this PCIe function.
VendorId }	string	read-only (null)	The Vendor ID of this PCIe function.
EntityRole	string (enum)	read-only (null)	The role of the connected entity. *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-only (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-only (null)	The Device ID of this PCIe function.
SubsystemId	string	read-only (null)	The Subsystem ID of this PCIe function.
SubsystemVendorId	string	read-only (null)	The Subsystem Vendor ID of this PCIe function.
VendorId }	string	read-only (null)	The Vendor ID of this PCIe function.
Redundancy [{	array	read-write	Redundancy information for the lower level endpoints supporting this endpoint.
@odata.id }]	string	read-only	The unique identifier for a resource.
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 1.2.0

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 (object)		The IPv4 addresses assigned to this interface. See the 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.
HostInterface *(v1.2+)* {	object		This is a reference to a Host Interface that is associated with this Ethernet Interface. See the HostInterface schema for details on this property.
@odata.id }	string	read-only	Link to a HostInterface resource. See the Links section and the HostInterface schema for details.
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 1.1.2

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-only	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 1.1.1

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 1.0.3

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 (seconds)	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 1.0.1

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-only (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-only (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

HostInterface 1.0.0

This schema defines a Host Interface resource.

AuthenticationModes [ ]	array (string (enum))	read-write	This indicates the authentication modes available on this interface. *See AuthenticationModes in Property Details, below, for the possible values of this property.*
ExternallyAccessible	boolean	read-only (null)	This indicates whether this interface is accessible by external entities.

FirmwareAuthEnabled	boolean	read-write (null)	This indicates whether this firmware authentication is enabled for this interface.
FirmwareAuthRoleId	string	read-write	This property contains the Role for firmware authentication on this interface.
HostEthernetInterfaces {	object		This is a reference to a collection of NICs that Computer Systems use for network communication with this Host Interface. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of EthernetInterface. See the EthernetInterface schema for details.
HostInterfaceType	string (enum)	read-only (null)	This indicates the Host Interface type for this interface. *See HostInterfaceType in Property Details, below, for the possible values of this property.*
InterfaceEnabled	boolean	read-write (null)	This indicates whether this interface is enabled.
KernelAuthEnabled	boolean	read-write (null)	This indicates whether this kernel authentication is enabled for this interface.
KernelAuthRoleId	string	read-write	This property contains the Role for kernel authentication on this interface.
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 connected to this Host Interface.
@odata.id }]	string	read-only	Link to a ComputerSystem resource. See the Links section and the ComputerSystem schema for details.
FirmwareAuthRole {	object		A reference to the Role object defining Privileges for this Host Interface when using firmware authentication. See the Role schema for details on this property.
@odata.id }	string	read-only	Link to a Role resource. See the Links section and the Role schema for details.
KernelAuthRole {	object		A reference to the Role object defining Privileges for this Host Interface when using kernel authentication. See the Role schema for details on this property.
@odata.id }	string	read-only	Link to a Role resource. See the Links section and the Role schema for details.
Oem { } }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
ManagerEthernetInterface {	object		This is a reference to a single NIC that this Manager uses for network communication with this Host Interface. See the EthernetInterface schema for details on this property.
@odata.id }	string	read-only	Link to a EthernetInterface resource. See the Links section and the EthernetInterface schema for details.
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.
Status { }	object	(null)	See the Resource schema for details on this property.

Property Details

AuthenticationModes:

This indicates the authentication modes available on this interface.

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

HostInterfaceType:

This indicates the Host Interface type for this interface.

string	Description
NetworkHostInterface	This interface is a Network Host Interface.

JsonSchemaFile 1.0.3

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-write 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 1.1.1

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 (enum)	read-only (null)	If the EntryType is SEL, this will have the sensor type that the 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 1.0.3

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 1.3.0

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.
HostInterfaces *(v1.3+)* {	object		This is a reference to a collection of Host Interfaces that this manager uses for local host communication. It is here that clients will find Host Interface configuration options and settings. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of HostInterface. See the HostInterface schema for details.
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	read-write	Redundancy information for the managers of this system.
@odata.id }]	string	read-only	The unique identifier for a resource.
SerialConsole {	object		Information about the Serial Console service provided by this manager.
ConnectTypesSupported [ ]	array	read-only	This object is used to enumerate the Serial Console

	(string (enum))		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 1.0.3

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 delet 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 1.1.0

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

DHCP {	object		Settings for this Manager's DHCP protocol support.
Port	number	read-write (null)	Indicates the protocol port.
ProtocolEnabled }	boolean	read-write (null)	Indicates if the protocol is enabled or disabled.
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	Indicates the protocol port.

		(null)	
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 (seconds)	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 1.1.0

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 (mebibytes)	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 (milliWatts)	read-only (null)	Average power budget in milli watts.
MaxTDPMilliWatts	number (milliWatts)	read-only (null)	Maximum TDP in milli watts.
PeakPowerBudgetMilliWatts	number (milliWatts)	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-write	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 (mebibytes)	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 (mebibytes)	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.
Status *(v1.1+)* { }	object		See the Resource schema for details on this property.
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 1.0.1

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-write	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 (null)	Mirror Enabled status.
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 1.1.0

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.
AllowsMirroring *(v1.1+)*	boolean	read-only (null)	Indicates if this Memory Domain supports the creation of Memory Chunks with mirroring enabled.
AllowsSparing *(v1.1+)*	boolean	read-only (null)	Indicates if this Memory Domain supports the creation of Memory Chunks with sparing enabled.
InterleavableMemorySets [{	array	read-write	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 1.1.1

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 (bytes)	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.
PredictedMediaLifeLeftPercent *(v1.1+)*	number	read-only (null)	The percentage of reads and writes that are predicted to still be available for the media.
RemainingSpareBlockPercentage }	number	read-only (null)	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 1.0.3

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 1.0.3

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-write 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	The Registry Name, Major and Minor version used in MessageID

		required	construction.

NetworkAdapter 1.0.0

A NetworkAdapter represents the physical network adapter capable of connecting to a computer network. Examples include but are not limited to Ethernet, Fibre Channel, and converged network adapters.

Actions {	object		The available actions for this resource.
#NetworkAdapter.ResetSettingsToDefault { } }	object		This action is to clear the settings back to factory defaults. *For more information, see the Action Details section below.*
Controllers [{	array	read-write	The set of network controllers ASICs that make up this NetworkAdapter.
ControllerCapabilities {	object	(null)	The capabilities of this controller.
DataCenterBridging {	object	(null)	Data Center Bridging (DCB) for this controller.
Capable }	boolean	read-only (null)	Whether this controller is capable of Data Center Bridging (DCB).
NetworkDeviceFunctionCount	number	read-only (null)	The maximum number of physical functions available on this controller.
NetworkPortCount	number	read-only (null)	The number of physical ports on this controller.
NPIV {	object	(null)	N_Port ID Virtualization (NPIV) capabilties for this controller.
MaxDeviceLogins	number	read-only (null)	The maximum number of N_Port ID Virtualization (NPIV) logins allowed simultaneously from all ports on this controller.
MaxPortLogins }	number	read-only (null)	The maximum number of N_Port ID Virtualization (NPIV) logins allowed per physical port on this controller.
VirtualizationOffload {	object	(null)	Virtualization offload for this controller.
SRIOV {	object	(null)	Single-Root Input/Output Virtualization (SR-IOV) capabilities.
SRIOVVEPACapable }	boolean	read-only (null)	Whether this controller supports Single Root Input/Output Virtualization (SR-IOV) in Virtual Ethernet Port Aggregator (VEPA) mode.
VirtualFunction {	object	(null)	
DeviceMaxCount	number	read-only (null)	The maximum number of Virtual Functions (VFs) supported by this controller.
MinAssignmentGroupSize	number	read-only (null)	The minimum number of Virtual Functions (VFs) that can be allocated or moved between physical functions for this controller.

NetworkPortMaxCount } } }	number	read-only (null)	The maximum number of Virtual Functions (VFs) supported per network port for this controller.
FirmwarePackageVersion	string	read-only (null)	The version of the user-facing firmware package.
Links {	object		Links.
NetworkDeviceFunctions [{	array	read-only	Contains the members of this collection.
@odata.id }]	string	read-only	Link to a NetworkDeviceFunction resource. See the Links section and the NetworkDeviceFunction schema for details.
NetworkPorts [{	array	read-only	Contains the members of this collection.
@odata.id }]	string	read-only	Link to a NetworkPort resource. See the Links section and the NetworkPort schema for details.
Oem { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
PCIeDevices [{	array	read-only	Contains the members of this collection.
@odata.id }] } }]	string	read-only	Link to a PCIeDevice resource. See the Links section and the PCIeDevice schema for details.
Manufacturer	string	read-only (null)	The manufacturer or OEM of this network adapter.
Model	string	read-only (null)	The model string for this network adapter.
NetworkDeviceFunctions {	object		Contains the members of this collection. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of NetworkDeviceFunction. See the NetworkDeviceFunction schema for details.
NetworkPorts {	object		Contains the members of this collection. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of NetworkPort. See the NetworkPort schema for details.
PartNumber	string	read-only (null)	Part number for this network adapter.
SerialNumber	string	read-only (null)	The serial number for this network adapter.
SKU	string	read-only (null)	The manufacturer SKU for this network adapter.
Status { }	object	(null)	See the Resource schema for details on this

			property.

Action Details

ResetSettingsToDefault

This action is to clear the settings back to factory defaults.

(This action takes no parameters.)

NetworkDeviceFunction 1.0.0

A Network Device Function represents a logical interface exposed by the network adapter.

AssignablePhysicalPorts [{	array	read-only	Contains the members of this collection.
@odata.id }]	string	read-only	Link to a NetworkPort resource. See the Links section and the NetworkPort schema for details.
BootMode	string (enum)	read-write (null)	The boot mode configured for this network device function. *See BootMode in Property Details, below, for the possible values of this property.*
DeviceEnabled	boolean	read-write (null)	Whether the network device function is enabled.
Ethernet {	object	(null)	Ethernet.
MACAddress	string	read-write (null)	This is the currently configured MAC address of the (logical port) network device function.
MTUSize	number	read-write (null)	The Maximum Transmission Unit (MTU) configured for this network device function.
PermanentMACAddress }	string	read-only (null)	This is the permanent MAC address assigned to this network device function (physical function).
FibreChannel {	object	(null)	Fibre Channel.
AllowFIPVLANDiscovery	boolean	read-write (null)	Whether the FCoE Initialization Protocol (FIP) is used for populating the FCoE VLAN Id.
BootTargets [{	array	read-write	An array of Fibre Channel boot targets configured for this network device function.
BootPriority	number	read-write (null)	The relative priority for this entry in the boot targets array.
LUNID	string	read-write (null)	The Logical Unit Number (LUN) ID to boot from on the device referred to by the corresponding WWPN.
WWPN }]	string	read-write (null)	The World-Wide Port Name to boot from.
FCoEActiveVLANId	number	read-only (null)	The active FCoE VLAN ID.
FCoELocalVLANId	number	read-write (null)	The locally configured FCoE VLAN ID.
PermanentWWNN	string	read-only (null)	This is the permanent WWNN address assigned to this network device function (physical function).

PermanentWWPN	string	read-only (null)	This is the permanent WWPN address assigned to this network device function (physical function).
WWNN	string	read-write (null)	This is the currently configured WWNN address of the network device function (physical function).
WWNSource	string (enum)	read-write (null)	The configuration source of the WWNs for this connection (WWPN and WWNN). *See WWNSource in Property Details, below, for the possible values of this property.*
WWPN }	string	read-write (null)	This is the currently configured WWPN address of the network device function (physical function).
iSCSIBoot {	object	(null)	iSCSI Boot.
AuthenticationMethod	string (enum)	read-write (null)	The iSCSI boot authentication method for this network device function. *See AuthenticationMethod in Property Details, below, for the possible values of this property.*
CHAPSecret	string	read-write (null)	The shared secret for CHAP authentication.
CHAPUsername	string	read-write (null)	The username for CHAP authentication.
InitiatorDefaultGateway	string	read-write (null)	The IPv6 or IPv4 iSCSI boot default gateway.
InitiatorIPAddress	string	read-write (null)	The IPv6 or IPv4 address of the iSCSI initiator.
InitiatorName	string	read-write (null)	The iSCSI initiator name.
InitiatorNetmask	string	read-write (null)	The IPv6 or IPv4 netmask of the iSCSI boot initiator.
IPAddressType	string (enum)	read-write (null)	The type of IP address (IPv6 or IPv4) being populated in the iSCSIBoot IP address fields. *See IPAddressType in Property Details, below, for the possible values of this property.*
IPMaskDNSViaDHCP	boolean	read-write (null)	Whether the iSCSI boot initiator uses DHCP to obtain the iniator name, IP address, and netmask.
MutualCHAPSecret	string	read-write (null)	The CHAP Secret for 2-way CHAP authentication.
MutualCHAPUsername	string	read-write (null)	The CHAP Username for 2-way CHAP authentication.
PrimaryDNS	string	read-write (null)	The IPv6 or IPv4 address of the primary DNS server for the iSCSI boot initiator.
PrimaryLUN	number	read-write (null)	The logical unit number (LUN) for the primary iSCSI boot target.
PrimaryTargetIPAddress	string	read-write (null)	The IP address (IPv6 or IPv4) for the primary iSCSI boot target.
PrimaryTargetName	string	read-write (null)	The name of the iSCSI primary boot target.

PrimaryTargetTCPPort	number	read-write (null)	The TCP port for the primary iSCSI boot target.
PrimaryVLANEnable	boolean	read-write (null)	This indicates if the primary VLAN is enabled.
PrimaryVLANId	number	read-write (null)	The 802.1q VLAN ID to use for iSCSI boot from the primary target.
RouterAdvertisementEnabled	boolean	read-write (null)	Whether IPv6 router advertisement is enabled for the iSCSI boot target.
SecondaryDNS	string	read-write (null)	The IPv6 or IPv4 address of the secondary DNS server for the iSCSI boot initiator.
SecondaryLUN	number	read-write (null)	The logical unit number (LUN) for the secondary iSCSI boot target.
SecondaryTargetIPAddress	string	read-write (null)	The IP address (IPv6 or IPv4) for the secondary iSCSI boot target.
SecondaryTargetName	string	read-write (null)	The name of the iSCSI secondary boot target.
SecondaryTargetTCPPort	number	read-write (null)	The TCP port for the secondary iSCSI boot target.
SecondaryVLANEnable	boolean	read-write (null)	This indicates if the secondary VLAN is enabled.
SecondaryVLANId	number	read-write (null)	The 802.1q VLAN ID to use for iSCSI boot from the secondary target.
TargetInfoViaDHCP }	boolean	read-write (null)	Whether the iSCSI boot target name, LUN, IP address, and netmask should be obtained from DHCP.
Links {	object		Links.
PCIeFunction {	object		Contains the members of this collection. See the PCIeFunction schema for details on this property.
@odata.id } }	string	read-only	Link to a PCIeFunction resource. See the Links section and the PCIeFunction schema for details.
MaxVirtualFunctions	number	read-only (null)	The number of virtual functions (VFs) that are available for this Network Device Function.
NetDevFuncCapabilities [ ]	array (string (enum))	read-only (null)	Capabilities of this network device function. *See NetDevFuncCapabilities in Property Details, below, for the possible values of this property.*
NetDevFuncType	string (enum)	read-write (null)	The configured capability of this network device function. *See NetDevFuncType in Property Details, below, for the possible values of this property.*
PhysicalPortAssignment {	object		Contains the members of this collection. See the NetworkPort schema for details on this property.
@odata.id }	string	read-only	Link to a NetworkPort resource. See the Links section and the NetworkPort schema for details.
Status { }	object	(null)	See the Resource schema for details on this property.

VirtualFunctionsEnabled	boolean	read-only (null)	Whether Single Root I/O Virtualization (SR-IOV) Virual Functions (VFs) are enabled for this Network Device Function.

Property Details

AuthenticationMethod:

The iSCSI boot authentication method for this network device function.

string	Description
CHAP	iSCSI Challenge Handshake Authentication Protocol (CHAP) authentication is used.
MutualCHAP	iSCSI Mutual Challenge Handshake Authentication Protocol (CHAP) authentication is used.
None	No iSCSI authentication is used.

BootMode:

The boot mode configured for this network device function.

string	Description
Disabled	Do not indicate to UEFI/BIOS that this device is bootable.
FibreChannel	Boot this device using the embedded Fibre Channel support and configuration. Only applicable if the NetworkDeviceFunctionType is set to FibreChannel.
FibreChannelOverEthernet	Boot this device using the embedded Fibre Channel over Ethernet (FCoE) boot support and configuration. Only applicable if the NetworkDeviceFunctionType is set to FibreChannelOverEthernet.
iSCSI	Boot this device using the embedded iSCSI boot support and configuration. Only applicable if the NetworkDeviceFunctionType is set to iSCSI.
PXE	Boot this device using the embedded PXE support. Only applicable if the NetworkDeviceFunctionType is set to Ethernet.

IPAddressType:

The type of IP address (IPv6 or IPv4) being populated in the iSCSIBoot IP address fields.

string	Description
IPv4	IPv4 addressing is used for all IP-fields in this object.
IPv6	IPv6 addressing is used for all IP-fields in this object.

NetDevFuncCapabilities:

Capabilities of this network device function.

string	Description
Disabled	Neither enumerated nor visible to the operating system.
Ethernet	Appears to the operating system as an Ethernet device.
FibreChannel	Appears to the operating system as a Fibre Channel device.
FibreChannelOverEthernet	Appears to the operating system as an FCoE device.
iSCSI	Appears to the operating system as an iSCSI device.

NetDevFuncType:

The configured capability of this network device function.

string	Description
Disabled	Neither enumerated nor visible to the operating system.
Ethernet	Appears to the operating system as an Ethernet device.
FibreChannel	Appears to the operating system as a Fibre Channel device.
FibreChannelOverEthernet	Appears to the operating system as an FCoE device.
iSCSI	Appears to the operating system as an iSCSI device.

WWNSource:

The configuration source of the WWNs for this connection (WWPN and WWNN).

string	Description
ConfiguredLocally	The set of FC/FCoE boot targets was applied locally through API or UI.
ProvidedByFabric	The set of FC/FCoE boot targets was applied by the Fibre Channel fabric.

NetworkInterface 1.0.0

A NetworkInterface contains references linking NetworkAdapter, NetworkPort, and NetworkDeviceFunction resources and represents the functionality available to the containing system.

Links {	object		Links.
NetworkAdapter {	object		Contains the members of this collection. See the NetworkAdapter schema for details on this property.
@odata.id }	string	read-only	Link to a NetworkAdapter resource. See the Links section and the NetworkAdapter schema for details.
Oem { } }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
NetworkDeviceFunctions {	object		Contains the members of this collection. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of NetworkDeviceFunction. See the NetworkDeviceFunction schema for details.
NetworkPorts {	object		Contains the members of this collection. Contains a link to a resource.
@odata.id }	string	read-only	Link to Collection of NetworkPort. See the NetworkPort schema for details.
Status { }	object	(null)	See the Resource schema for details on this property.

NetworkPort 1.0.0

A Network Port represents a discrete physical port capable of connecting to a network.

ActiveLinkTechnology	string (enum)	read-write (null)	Network Port Active Link Technology. *See ActiveLinkTechnology in Property Details, below, for*

			the possible values of this property.
AssociatedNetworkAddresses [ ]	array (string, null)	read-only	The array of configured network addresses (MAC or WWN) that are associated with this Network Port, including the programmed address of the lowest numbered Network Device Function, the configured but not active address if applicable, the address for hardware port teaming, or other network addresses.
EEEEnabled	boolean	read-write (null)	Whether IEEE 802.3az Energy Efficient Ethernet (EEE) is enabled for this network port.
FlowControlConfiguration	string (enum)	read-write (null)	The locally configured 802.3x flow control setting for this network port. *See FlowControlConfiguration in Property Details, below, for the possible values of this property.*
FlowControlStatus	string (enum)	read-only (null)	The 802.3x flow control behavior negotiated with the link partner for this network port (Ethernet-only). *See FlowControlStatus in Property Details, below, for the possible values of this property.*
LinkStatus	string (enum)	read-only (null)	The status of the link between this port and its link partner. *See LinkStatus in Property Details, below, for the possible values of this property.*
NetDevFuncMaxBWAlloc [{	array	read-write	The array of maximum bandwidth allocation percentages for the Network Device Functions associated with this port.
MaxBWAllocPercent	number	read-write (null)	The maximum bandwidth allocation percentage allocated to the corresponding network device function instance.
NetworkDeviceFunction {	object		Contains the members of this collection. See the NetworkDeviceFunction schema for details on this property.
@odata.id } }]	string	read-only	Link to a NetworkDeviceFunction resource. See the Links section and the NetworkDeviceFunction schema for details.
NetDevFuncMinBWAlloc [{	array	read-write	The array of minimum bandwidth allocation percentages for the Network Device Functions associated with this port.
MinBWAllocPercent	number	read-write (null)	The minimum bandwidth allocation percentage allocated to the corresponding network device function instance.
NetworkDeviceFunction {	object		Contains the members of this collection. See the NetworkDeviceFunction schema for details on this property.
@odata.id } }]	string	read-only	Link to a NetworkDeviceFunction resource. See the Links section and the NetworkDeviceFunction schema for details.
PhysicalPortNumber	string	read-only (null)	The physical port number label for this port.
PortMaximumMTU	number	read-only (null)	The largest maximum transmission unit (MTU) that can be configured for this network port.
SignalDetected	boolean	read-only (null)	Whether or not the port has detected enough signal on enough lanes to establish link.
Status { }	object	(null)	See the Resource schema for details on this property.
SupportedEthernetCapabilities [ ]	array	read-only	The set of Ethernet capabilities that this port supports.

	(string (enum))	(null)	*See SupportedEthernetCapabilities in Property Details, below, for the possible values of this property.*
SupportedLinkCapabilities [{	array	read-write	The self-described link capabilities of this port.
LinkNetworkTechnology	string (enum)	read-only (null)	The self-described link network technology capabilities of this port. *See LinkNetworkTechnology in Property Details, below, for the possible values of this property.*
LinkSpeedMbps }]	number	read-only (null)	The speed of the link in Mbps when this link network technology is active.
WakeOnLANEnabled	boolean	read-write (null)	Whether Wake on LAN (WoL) is enabled for this network port.

Property Details

ActiveLinkTechnology:

Network Port Active Link Technology.

string	Description
Ethernet	The port is capable of connecting to an Ethernet network.
FibreChannel	The port is capable of connecting to a Fibre Channel network.
InfiniBand	The port is capable of connecting to an InfiniBand network.

FlowControlConfiguration:

The locally configured 802.3x flow control setting for this network port.

string	Description
None	No IEEE 802.3x flow control is enabled on this port.
RX	IEEE 802.3x flow control may be initiated by the link partner.
TX	IEEE 802.3x flow control may be initiated by this station.
TX_RX	IEEE 802.3x flow control may be initiated by this station or the link partner.

FlowControlStatus:

The 802.3x flow control behavior negotiated with the link partner for this network port (Ethernet-only).

string	Description
None	No IEEE 802.3x flow control is enabled on this port.
RX	IEEE 802.3x flow control may be initiated by the link partner.
TX	IEEE 802.3x flow control may be initiated by this station.
TX_RX	IEEE 802.3x flow control may be initiated by this station or the link partner.

LinkNetworkTechnology:

The self-described link network technology capabilities of this port.

string	Description
Ethernet	The port is capable of connecting to an Ethernet network.

FibreChannel	The port is capable of connecting to a Fibre Channel network.
InfiniBand	The port is capable of connecting to an InfiniBand network.

LinkStatus:

The status of the link between this port and its link partner.

string	Description
Down	The port is enabled but link is down.
Up	The port is enabled and link is good (up).

SupportedEthernetCapabilities:

The set of Ethernet capabilities that this port supports.

string	Description
EEE	IEEE 802.3az Energy Efficient Ethernet (EEE) is supported on this port.
WakeOnLAN	Wake on LAN (WoL) is supported on this port.

PCIeDevice 1.0.1

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 1.0.1

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

ClassCode	string	read-only (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-only (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-only (null)	The Revision ID of this PCIe function.
Status { }	object	(null)	See the Resource schema for details on this property.
SubsystemId	string	read-only (null)	The Subsystem ID of this PCIe function.
SubsystemVendorId	string	read-only (null)	The Subsystem Vendor ID of this PCIe function.
VendorId	string	read-only (null)	The Vendor ID of this PCIe function.

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 1.0.1

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-only (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 1.2.1

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-only	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-only	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-write	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-only	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.*
Redundancy [{	array	read-write	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.
@odata.id }]	string	read-only	The unique identifier for a resource.
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	read-write	Redundancy information for the power subsystem of this system or device.
@odata.id }]	string	read-only	The unique identifier for a resource.
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 this Voltage sensor.
MemberId	string	read-only	This is the identifier for the member within the collection.
MinReadingRange	number (Volts)	read-only (null)	Minimum value for this Voltage sensor.
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 present reading 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.

PrivilegeRegistry 1.0.0

This is the schema definition for Operation to Privilege mapping.

Mappings [{	array	read-write	

Entity	string	read-only	Indicates entity name. e.g., Manager.
OperationMap {	object		List mapping between HTTP method and privilege required for entity.
DELETE [{	array	read-write	Indicates privilege required for HTTP DELETE operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
GET [{	array	read-write	Indicates privilege required for HTTP GET operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
HEAD [{	array	read-write	Indicates privilege required for HTTP HEAD operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
PATCH [{	array	read-write	Indicates privilege required for HTTP PATCH operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
POST [{	array	read-write	Indicates privilege required for HTTP POST operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
PUT [{	array	read-write	Indicates privilege required for HTTP PUT operation.
Privilege [ ] }] }	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
PropertyOverrides [{	array	read-write	Indicates privilege overrides of property or element within a entity.
OperationMap {	object	(null)	List mapping between HTTP operation and privilege needed to perform operation.
DELETE [{	array	read-write	Indicates privilege required for HTTP DELETE operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
GET [{	array	read-write	Indicates privilege required for HTTP GET operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
HEAD [{	array	read-write	Indicates privilege required for HTTP HEAD operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
PATCH [{	array	read-write	Indicates privilege required for HTTP PATCH operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
POST [{	array	read-write	Indicates privilege required for HTTP POST operation.
Privilege [ ]	array	read-only	Lists the privileges that are allowed to perform the given type of

}]	(string)		HTTP operation on the entity type.
PUT [{	array	read-write	Indicates privilege required for HTTP PUT operation.
Privilege [ ] }] }	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
Targets [ ] }]	array (string, null)	read-only	Indicates the URI or Entity.
ResourceURIOverrides [{	array	read-write	Indicates privilege overrides of Resource URI.
OperationMap {	object	(null)	List mapping between HTTP operation and privilege needed to perform operation.
DELETE [{	array	read-write	Indicates privilege required for HTTP DELETE operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
GET [{	array	read-write	Indicates privilege required for HTTP GET operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
HEAD [{	array	read-write	Indicates privilege required for HTTP HEAD operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
PATCH [{	array	read-write	Indicates privilege required for HTTP PATCH operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
POST [{	array	read-write	Indicates privilege required for HTTP POST operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
PUT [{	array	read-write	Indicates privilege required for HTTP PUT operation.
Privilege [ ] }] }	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
Targets [ ] }]	array (string, null)	read-only	Indicates the URI or Entity.
SubordinateOverrides [{	array	read-write	Indicates privilege overrides of subordinate resource.
OperationMap {	object	(null)	List mapping between HTTP operation and privilege needed to perform operation.
DELETE [{	array	read-write	Indicates privilege required for HTTP DELETE operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
GET [{	array	read-write	Indicates privilege required for HTTP GET operation.
Privilege [ ]	array	read-only	Lists the privileges that are allowed to perform the given type of

}]	(string)		HTTP operation on the entity type.
HEAD [{	array	read-write	Indicates privilege required for HTTP HEAD operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
PATCH [{	array	read-write	Indicates privilege required for HTTP PATCH operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
POST [{	array	read-write	Indicates privilege required for HTTP POST operation.
Privilege [ ] }]	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
PUT [{	array	read-write	Indicates privilege required for HTTP PUT operation.
Privilege [ ] }] }	array (string)	read-only	Lists the privileges that are allowed to perform the given type of HTTP operation on the entity type.
Targets [ ] }] }]	array (string, null)	read-only	Indicates the URI or Entity.
OEMPrivilegesUsed [ ]	array (string)	read-only	Lists the set of OEM Priviliges used in building this mapping.
PrivilegesUsed [ ]	array (string (enum))	read-only	Lists the set of Redfish standard priviliges used in building this mapping. *See PrivilegesUsed in Property Details, below, for the possible values of this property.*

Property Details

PrivilegesUsed:

Lists the set of Redfish standard priviliges used in building this mapping.

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.

Processor 1.0.3

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	The processor manufacturer.

		(null)	
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 1.0.1

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 1.0.3

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 1.1.1

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 1.0.3

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

Password	string	read-only 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 1.1.1

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 1.1.1

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-write	The storage devices associated with this resource.
CapacityBytes *(v1.1+)*	number (bytes)	read-only (null)	The size of the storage device.
Manufacturer	string	read-only (null)	The name of the manufacturer of this device.
Model	string	read-only (null)	The product model number of this device.
Name	string	read-only	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 1.1.0

This schema defines an inventory of software components.

Actions { }	object		The Actions object contains the available custom actions on this resource.
LowestSupportedVersion *(v1.1+)*	string	read-only (null)	A string representing the lowest supported version of this software.
RelatedItem *(v1.1+)* [{	array	read-only	The ID(s) of the resources associated with this software inventory item.
@odata.id }]	string	read-only	The unique identifier for a resource.
SoftwareId *(v1.1+)*	string	read-only	A string representing the implementation-specific ID for identifying this software.
Status { }	object	(null)	See the Resource schema for details on this property.
UefiDevicePaths *(v1.1+)* [ ]	array (string, null)	read-only	A list of strings representing the UEFI Device Path(s) of the component(s) associated with this software inventory item.
Updateable	boolean	read-only (null)	Indicates whether this software can be updated by the update service.
Version	string	read-only (null)	A string representing the version of this software.

Storage 1.1.1

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	read-write	Redundancy information for the storage subsystem.
@odata.id }]	string	read-only	The unique identifier for a resource.
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 *(v1.1+)*	string	read-write (null)	The user assigned asset tag for this storage controller.
FirmwareVersion *(v1.1+)*	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.
Links *(v1.1+)* {	object		Contains references to other resources that are related to this resource.
Endpoints [{	array	read-write	An array of references to the endpoints that connect to this controller.
@odata.id }]	string	read-only	Link to a Endpoint resource. See the Links section and the Endpoint schema for details.
Oem { } }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
Manufacturer *(v1.1+)*	string	read-only (null)	This is the manufacturer of this storage controller.
MemberId *(v1.1+)*	string	read-only	This is the identifier for the member within the collection.
Model *(v1.1+)*	string	read-only (null)	This is the model number for the storage controller.
Oem *(v1.1+)* { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
PartNumber *(v1.1+)*	string	read-only (null)	The part number for this storage controller.
SerialNumber *(v1.1+)*	string	read-only (null)	The serial number for this storage controller.
SKU *(v1.1+)*	string	read-only (null)	This is the SKU for this storage controller.
SpeedGbps *(v1.1+)*	number (Gbit/s)	read-only (null)	The speed of the storage controller interface.
Status *(v1.1+)* { }	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	read-only	This represents the protocols which the storage

}]	(string (enum))		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 1.0.1

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	read-write	Redundancy information for the switches.
@odata.id }]	string	read-only	The unique identifier for a resource.
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-only (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 1.0.3

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 1.0.3

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 1.2.0

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 *(deprecated v1.2)*	string	read-only (null)	Name of the fan. *Deprecated v1.2+. This property has been Deprecated in favor of Thermal.v1_1_0.Thermal.Fan.Name*
IndicatorLED *(v1.2+)*	string (enum)	read-write (null)	The state of the indicator LED, used to identify this Fan. *See IndicatorLED in Property Details, below, for the possible values of this property.*
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.
Manufacturer *(v1.2+)*	string	read-only (null)	This is the manufacturer of this Fan.
MaxReadingRange	number	read-only (null)	Maximum value for Reading.
MemberId	string	read-only	This is the identifier for the member within the collection.
MinReadingRange	number	read-only (null)	Minimum value for Reading.
Model *(v1.2+)*	string	read-only (null)	The model number for this Fan.
Name *(v1.1+)*	string	read-only (null)	Name of the fan.
Oem { }	object		See the OEM object definition in the Common properties section. See the Resource schema for details on this property.
PartNumber *(v1.2+)*	string	read-only (null)	The part number for this Fan.
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	read-write	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.
@odata.id }]	string	read-only	The unique identifier for a resource.
RelatedItem [{	array	read-only	The ID(s) of the resources serviced with this fan.
@odata.id }]	string	read-only	The unique identifier for a resource.
SerialNumber *(v1.2+)*	string	read-only (null)	The serial number for this Fan.
SparePartNumber *(v1.2+)*	string	read-only (null)	The spare part number for this Fan.
Status { }	object		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	read-write	This structure is used to show redundancy for fans. The Component ids will reference the members of the redundancy groups.
@odata.id }]	string	read-only	The unique identifier for a resource.
Status { }	object		See the Resource schema for details on this property.
Temperatures [{	array	read-write	This is the definition for temperature sensors.
LowerThresholdCritical	number (Celsius)	read-only (null)	Below normal range but not yet fatal.
LowerThresholdFatal	number (Celsius)	read-only (null)	Below normal range and is fatal.
LowerThresholdNonCritical	number (Celsius)	read-only (null)	Below normal range.
MaxReadingRangeTemp	number (Celsius)	read-only (null)	Maximum value for ReadingCelsius.
MemberId	string	read-only	This is the identifier for the member within the collection.
MinReadingRangeTemp	number (Celsius)	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 (Celsius)	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 (Celsius)	read-only (null)	Above normal range but not yet fatal.
UpperThresholdFatal	number (Celsius)	read-only (null)	Above normal range and is fatal.
UpperThresholdNonCritical	number	read-only	Above normal range.

}]	(Celsius)	(null)	

Property Details

IndicatorLED:

The state of the indicator LED, used to identify this Fan.

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

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 1.1.0

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.
HttpPushUri *(v1.1+)*	string	read-only	The URI used to perform an HTTP or HTTPS push update to the Update Service.
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 1.0.3

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	Indicates if virtual media is inserted in the virtual device.

		(null)	
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 1.0.3

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 1.0.2

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 addressible 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-write	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 1.0.1

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.