

GIGABYTE™

Redfish API Specification

for ASPEED AST2600

User Guide

Rev. 1.0

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Documentation Classifications

In order to assist in the use of this product, Giga Computing provides the following types of documentation:

- User Manual: detailed information & steps about the installation, configuration and use of this product (e.g. motherboard, server barebones), covering hardware and BIOS.
- User Guide: detailed information about the installation & use of an add-on hardware or software component (e.g. BMC firmware, rail-kit) compatible with this product.
- Quick Installation Guide: a short guide with visual diagrams that you can reference easily for installation purposes of this product (e.g. motherboard, server barebones).

Please see the support section of the online product page to check the current availability of these documents.

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Conventions

The following conventions are used in this user's guide:

	NOTE! Pieces of additional information related to the current topic.
	CAUTION! Precautionary measures to avoid possible hardware or software problems.
	WARNING! Alerts to any damage that might result from doing or not doing specific actions.

Server Warnings and Cautions

Before installing a server, be sure that you understand the following warnings and cautions.



WARNING!

To reduce the risk of electric shock or damage to the equipment:

- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
- Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.
- Unplug the power cord from the power supply to disconnect power to the equipment.
- Do not route the power cord where it can be walked on or pinched by items placed against it. Pay particular attention to the plug, electrical outlet, and the point where the cord extends from the server.



WARNING!

To reduce the risk of personal injury from hot surfaces, allow the drives and the internal system components to cool before touching them.



WARNING!

This server is equipped with high speed fans. Keep away from hazardous moving fan blades during servicing.



CAUTION!

- Do not operate the server for long periods with the access panel open or removed. Operating the server in this manner results in improper airflow and improper cooling that can lead to thermal damage.
- Danger of explosion if battery is incorrectly replaced.
- Replace battery with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to the manufacturer's instructions.



CAUTION!

Risk of explosion if battery is replaced incorrectly or with an incorrect type. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.



Electrostatic Discharge (ESD)

CAUTION!

ESD CAN DAMAGE DRIVES, BOARDS, AND OTHER PARTS. WE RECOMMEND THAT YOU PERFORM ALL PROCEDURES AT AN ESD WORKSTATION. IF ONE IS NOT AVAILABLE, PROVIDE SOME ESD PROTECTION BY WEARING AN ANTI-STATIC WRIST STRAP ATTACHED TO CHASSIS GROUND -- ANY UNPAINTED METAL SURFACE -- ON YOUR SERVER WHEN HANDLING PARTS.

Always handle boards carefully, they can be extremely sensitive to ESD. Hold boards only by their edges without touching any components or connectors. After removing a board from its protective ESD bag or from the system, place the board component side up on a grounded, static free surface. Use a conductive foam pad if available but not the ESD bag. Do not slide the board over any surface.

System power on/off: To service components within the server, please ensure the power has been disconnected.

e.g. Remove the node from the server chassis (to disconnect power) or disconnect the power from the server chassis.

Make sure the system is removed from the rack before opening the chassis, adding, or removing any non hot-plug components.

Hazardous conditions, devices and cables: Hazardous electrical conditions may be present on power, telephone, and communication cables. Turn off the system chassis and disconnect the cables attached to the system before servicing the chassis. Otherwise, personal injury or equipment damage can result.

Electrostatic discharge (ESD) and ESD protection: ESD can damage drives, boards, and other parts. We recommend that you perform all procedures in this chapter only at an ESD workstation. If one is not available, provide some ESD protection by wearing an antistatic wrist strap attached to chassis ground (any unpainted metal surface on the server) when handling parts.

ESD and handling boards: Always handle boards carefully. They can be extremely sensitive to electrostatic discharge (ESD). Hold boards only by their edges. After removing a board from its protective wrapper or from the system, place the board component side up on a grounded, static free surface. Use a conductive foam pad if available but not the board wrapper. Do not slide board over any surface.

Installing or removing jumpers: A jumper is a small plastic encased conductor that slips over two jumper pins. Some jumpers have a small tab on top that can be gripped with fingertips or with a pair of fine needle nosed pliers. If the jumpers do not have such a tab, take care when using needle nosed pliers to remove or install a jumper; grip the narrow sides of the jumper with the pliers, never the wide sides. Gripping the wide sides can damage the contacts inside the jumper, causing intermittent problems with the function controlled by that jumper. Take care to grip with, but not squeeze, the pliers or other tool used to remove a jumper, or the pins on the board may bend or break.

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1. Introduction

The Redfish Scalable Platform Management API ("Redfish") is a management standard using a data model representation inside of a hypermedia RESTful interface. Because it is based on REST, Redfish is easier to use and implement than many other solutions. Since it is model oriented, it is capable of expressing the relationships between components in modern systems as well as the semantics of the services and components within them. It is also easily extensible. By using a hypermedia approach to REST, Redfish can express a large variety of systems from multiple vendors. By requiring JSON representation, a wide variety of resources can be created in a denormalized fashion not only to improve scalability, but the payload can be easily interpreted by most programming environments as well as being relatively intuitive for a human examining the data. The model is exposed in terms of an interoperable Redfish Schema, expressed in an OData Schema representation with translations to a JSON Schema representation, with the payload of the messages being expressed in a JSON following OData JSON conventions. The ability to externally host the Redfish Schema definition of the resources in a machine-readable format allows the meta data to be associated with the data without encumbering Redfish services with the meta data, thus enabling more advanced client scenarios as found in many data center and cloud environments.

2. Redfish Request Methods

The following HTTP methods are provided on our Redfish APIs.

2-1 HTTP GET (Read)

Use GET requests to retrieve resource representation/information only. For any given HTTP GET API, if resource is found on server then it must return HTTP response code 200 (OK) – along with response body which is JSON content. In case resource is NOT found on server then it must return HTTP response code 404 (NOT FOUND). Similarly, if it is determined that GET request itself is not correctly formed then server will return HTTP response code 400 (BAD REQUEST).

2-2 HTTP POST (Create)

Use POST APIs to create new subordinate resources, POST methods are used to create a new resource into the collection of resources. In this case, either HTTP response code 200 (OK) or 204 (No Content) is the appropriate

2-3 HTTP PATCH (Partial Update)

HTTP PATCH requests are **to make partial update on a resource**.

2-4 HTTP DELETE (Delete)

DELETE APIs are used to delete resources. A successful response of DELETE requests SHOULD be HTTP response code 200 (OK) if the response includes an entity describing the status, 202 (Accepted) if the action has been queued, or 204 (No Content) if the action has been performed but the response does not include an entity.

3. Redfish API

Resource API	Note
/redfish/v1	
/redfish/v1/odata	
/redfish/v1/\$metadata	
/redfish/v1/AccountService	
/redfish/v1/AccountService/Accounts	
/redfish/v1/AccountService/Accounts/{instance}	
/redfish/v1/AccountService/Accounts/{instance}	
/redfish/v1/AccountService/Configurations	
/redfish/v1/AccountService/ExternalAccountProviders/RADIUS	
/redfish/v1/AccountService/ExternalAccountProviders/RADIUS/Oem/Ami/AdvancedRADIUS-Setting	
/redfish/v1/AccountService/LDAP/Certificates	
/redfish/v1/AccountService/LDAP/Certificates/1	
/redfish/v1/AccountService/LDAP/Certificates/Oem/Ami/ClientCertificates	
/redfish/v1/AccountService/LDAP/Certificates/Oem/Ami/ClientCertificates/1	
/redfish/v1/AccountService/Roles	
/redfish/v1/AccountService/Roles/{instance}	
/redfish/v1/CertificateService	
/redfish/v1/CertificateService/Actions/CertificateService.GenerateCSR	
/redfish/v1/CertificateService/Actions/CertificateService.ReplaceCertificate	
/redfish/v1/CertificateService/CertificateLocations	
/redfish/v1/Chassis	
/redfish/v1/Chassis/{instance}	
/redfish/v1/Chassis/{instance}/Actions/Chassis.Reset	
/redfish/v1/Chassis/{instance}/Power	
/redfish/v1/Chassis/{instance}/LogServices	
/redfish/v1/Chassis/{instance}/LogServices/Logs/Entries	
/redfish/v1/Chassis/{instance}/LogServices/Logs/Entries/{instance}	
/redfish/v1/Chassis/{instance}/LogServices/Logs	
/redfish/v1/Chassis/{instance}/LogServices/Logs/Actions/LogService.ClearLog	
/redfish/v1/Chassis/{instance}/NetworkAdapters	

Resource API	Note
/redfish/v1/Chassis/{instance}/PCleDevices	
/redfish/v1/Chassis/{instance}/PCleDevices/{instance}	
/redfish/v1/Chassis/{instance}/PCleDevices/{instance}/PCleFunctions/{instance}	
/redfish/v1/Chassis/{instance}/Sensors	
/redfish/v1/Chassis/{instance}/Sensors/{instance}	
/redfish/v1/Chassis/{instance}/Sensors/Energy	
/redfish/v1/Chassis/{instance}/Sensors/Power	
/redfish/v1/Chassis/{instance}/Thermal	
/redfish/v1/Chassis/{instance}/Thermal/FanprofileService	
/redfish/v1/Chassis/{instance}/Thermal/FanprofileService/Fanprofile	
/redfish/v1/Chassis/{instance}/Thermal/FanprofileService/SupportPCIEDevice	
/redfish/v1/Oem/Ami/configurations	
/redfish/v1/CompositionService	
/redfish/v1/CompositionService/ResourceBlocks	
/redfish/v1/CompositionService/ResourceBlocks/{instance}	
/redfish/v1/CompositionService/ResourceZones	
/redfish/v1/CompositionService/ResourceZones/{ instance }	
/redfish/v1/EventService	
/redfish/v1/EventService/Actions/EventService.SubmitTestEvent	
/redfish/v1/EventService/Subscriptions	
/redfish/v1/EventService/Subscriptions/{instance}	
/redfish/v1/EventService/SubmitTestEventActionInfo	
/redfish/v1/JsonSchemas	
/redfish/v1/JsonSchemas/{instance}	
/redfish/v1/Managers	
/redfish/v1/Managers/{instance}	

Resource API	Note
/redfish/v1/Managers/{instance}/Actions/Oem/AMIManager.RedfishDBReset	
redfish/v1/Managers/{instance}/EthernetInterfaces	
redfish/v1/Managers/{instance}/EthernetInterfaces/{instance}	
redfish/v1/Managers/{instance}/HostInterfaces	
redfish/v1/Managers/{instance}/HostInterfaces/{instance}	
redfish/v1/Managers/{instance}/HostInterfaces/{instance}/HostEthernetInterfaces	
/redfish/v1/Managers/{instance}/LogServices	
/redfish/v1/Managers/{instance}/LogServices/{instance}	
/redfish/v1/Managers/{instance}/LogServices/{instance}/Actions/LogServices.ClearLog	
/redfish/v1/Managers/{instance}/LogServices/{instance}/Entries	
/redfish/v1/Managers/{instance}/LogServices/{instance}/Entries/{instance}	
/redfish/v1/Managers/{instance}/NetworkProtocol	
/redfish/v1/Managers/{instance}/NetworkProtocol/HTTPS/Certificates	
/redfish/v1/Managers/{instance}/NetworkProtocol/HTTPS/Certificates/{instance}	
/redfish/v1/Managers/{instance}/RedfishDBResetActionInfo	
/redfish/v1/Managers/{instance}/RemoteAccountService/LDAP/Certificates	
/redfish/v1/Managers/{instance}/ResetActionInfo	
/redfish/v1/Managers/{instance}/SerialInterfaces	
/redfish/v1/Managers/{instance}/SerialInterfaces/{instance}	
/redfish/v1/Managers/{instance}/VirtualMedia	
/redfish/v1/Managers/{instance}/VirtualMedia/{instance}	

Resource API	Note
/redfish/v1/Managers/{instance}/VirtualMedia/{instance}/Actions/VirtualMedia.InsertMedia	
/redfish/v1/Managers/{instance}/VirtualMedia/{instance}/Actions/VirtualMedia.EjectMedia	
/redfish/v1/Managers/{instance}/Actions/Oem/AMIVirtualMedia.ConfigureCDInstance	
/redfish/v1/Managers/{instance}/Actions/Oem/AMIVirtualMedia.EnableRMedia	
/redfish/v1/Registries	
/redfish/v1/Registries/{instance}	
/redfish/v1/Registries/{instance}.json	
/redfish/v1/SessionService	
/redfish/v1/SessionService/Sessions	
/redfish/v1/SessionService/Sessions/{instance}	
/redfish/v1/Systems	
/redfish/v1/Systems/Capabilities	
/redfish/v1/Systems/{instance}	
/redfish/v1/Systems/{instance}/Actions/ComputerSystem.Reset	
/redfish/v1/Systems/{instance}/Bios	
/redfish/v1/Systems/{instance}/Bios/Actions/Bios.ResetBios	
/redfish/v1/Systems/{instance}/Bios/Actions/Bios.ChangePassword	
/redfish/v1/Systems/{instance}/Bios/SD	
/redfish/v1/Systems/{instance}/Bootoptions	
/redfish/v1/Systems/{instance}/Bootoptions/{instance}	
/redfish/v1/Systems/{instance}/EthernetInterfaces	
/redfish/v1/Systems/{instance}/EthernetInterfaces/{instance}	

Resource API	Note
/redfish/v1/Systems/{instance}/EthernetInterfaces/{instance}/VLANs	
/redfish/v1/Systems/{instance}/EthernetInterfaces/{instance}/VLANs/{instance}	
/redfish/v1/Systems/{instance}/LogServices	
/redfish/v1/Systems/{instance}/LogServices/{instance}	
/redfish/v1/Systems/{instance}/LogServices/{instance}/Actions/LogService.ClearLog	
/redfish/v1/Systems/{instance}/LogServices/{instance}/Entries	
/redfish/v1/Systems/{instance}/LogServices/{instance}/Entries/{instance}	
/redfish/v1/Systems/{instance}/Memory	
/redfish/v1/Systems/{instance}/Memory/{instance}	
/redfish/v1/Systems/{instance}/MemoryDomains	
/redfish/v1/Systems/{instance}/NetworkInterfaces	
/redfish/v1/Systems/{instance}/NetworkInterfaces/{instance}	
/redfish/v1/Systems/{instance}/Processors	
/redfish/v1/Systems/{instance}/Processors/{instance}	
/redfish/v1/Systems/{instance}/SimpleStorage	
/redfish/v1/Systems/{instance}/SimpleStorage/{instance}	
/redfish/v1/Systems/{instance}/Storage	
/redfish/v1/Systems/{instance}/Storage /{instance}	
/redfish/v1/TaskService	
/redfish/v1/TaskService/Tasks	
/redfish/v1/TaskService/Tasks/{instance}	
/redfish/v1/TelemetryService	
/redfish/v1/TelemetryService/Actions/ TelemetryService.SubmitTestMetricReport	
/redfish/v1/TelemetryService/LogServices	
/redfish/v1/TelemetryService/LogService/Actions/LogService.ClearLog	

Resource API	Note
/redfish/v1/TelemetryService/LogServices	
/redfish/v1/TelemetryService/LogServices/Actions/LogService.ClearLog	
/redfish/v1/TelemetryService/LogServices/Entries	
/redfish/v1/TelemetryService/LogServices/Entries/{instance}	
/redfish/v1/TelemetryService/MetricDefinitions	
/redfish/v1/TelemetryService/MetricDefinitions/{instance}	
/redfish/v1/TelemetryService/MetricReportDefinitions	
/redfish/v1/TelemetryService/MetricReportDefinitions/{instance}	
/redfish/v1/TelemetryService/MetricReports	
/redfish/v1/TelemetryService/MetricReports/{instance}	
/redfish/v1/TelemetryService/Triggers	
/redfish/v1/TelemetryService/Triggers/{instance}	
/redfish/v1/UpdateService	
/redfish/v1/UpdateService/Actions/SimpleUpdate	
/redfish/v1/UpdateService/FirmwareInventory	
/redfish/v1/UpdateService/FirmwareInventory/{instance}	
/redfish/v1/UpdateService/SimpleUpdateActionInfo	

4. Common Field to all Schemas

- @odata.context
- @odata.id
- @odata.type - @odata.etag
- Id
- Name

5. ServiceRoot

[GET] /redfish/v1

- Oem
 - Ami
 - Configurations
 - RtpVersion
- Id
- Name
- Description
- RedfishVersion
- Systems
- Chassis
 - Managers
 - Tasks
 - AccountService
 - EventService
 - SessionService
 - Registries
 - JsonSchemas
 - UpdateService
 - CompositionService
 - TelemetryService
 - Links
 - Sessions
- JobService
- Product
- ProtocolFeaturesSupported
- ExcerptQuery
 - ExpandQuery
 - ExpandAll
 - Levels
 - Links
 - MaxLevels
 - NoLinks
- FilterQuery
- OnlyMemberQuery
- SelectQuery

- *UUID*
- *Vendor*
- *CertificateService*
- *Oem*

6. ODATA

[GET] /redfish/v1/odata

7. \$metadata

[GET] /redfish/v1/\$metadata

8. AccountServicea

[GET] /redfish/v1/AccountService

[PATCH] /redfish/v1/AccountService

- AccountLockoutCounterResetAfter
- AccountLockoutDuration
- AccountLockoutThreshold
- Accounts
- AuthFailureLoggingThreshold
- Description
- Id
- MaxPasswordLength
- MinPasswordLength
- Name
- Oem
 - Ami
 - Configuration
- Roles
- ServiceEnabled
- Status
 - Health
 - State
- PrivilegeMap
- ActiveDirectory
- Authentication
 - AuthenticationType
 - Username
 - Password
- RemoteRoleMapping
- ServiceEnabled
- AccountLockoutCounterResetEnabled- AdditionalExternalAccountProviders
- LDAP
 - Authentication
 - AuthenticationType
 - Username
 - Password
 - LDAPService
 - SearchSettings
 - GroupNameAttribute
 - GroupsAttribute
 - UsernameAttribute
- RemoteRoleMapping
- ServiceEnabled

8-1 Account Collection

[GET] /redfish/v1/AccountService/Accounts

[POST] /redfish/v1/AccountService/Accounts

- **Description**
- **Members@odata.count**
- **Members**
- **Name- Oem**

POST

Request:

```
POST https://{ip}/redfish/v1/AccountService/Accounts
Content-Type: application/json
```

Example POST Request Body:

```
{ "Name":
  "TestUser Account",
  "Description": "Test User Account",
  "Enabled": true,
  "Password": "superuser",
  "UserName": "user_account",
  "RoleId": "Operator",
  "Locked": false,
  "PasswordChangeRequired": false
}
```

8-1-1 Accounts

[GET] /redfish/v1/AccountService/Accounts/{instance}

[PATCH] /redfish/v1/AccountService/Accounts/{instance}

[DELETE] /redfish/v1/AccountService/Accounts/{instance}

Description

- **Enabled**
- **Id**
- **Links**
- **Role**
- **Locked**
- **Name**
- **RoleId**
- **UserName**
- **Password**
- **PasswordChangeRequired**
 - **Oem**
 - **Actions**

- **Certificates**
- **AccountTypes**
- **Certificates**
- **AccountTypes**
- **SNMP**
 - **AuthenticationProtocol**
 - **EncryptionProtocol**

8-2 PAM Configuration

[GET] /redfish/v1/AccountService/Configurations

[PATCH] /redfish/v1/AccountService/Configurations

- **Id**
- **Name**
- **PAMEnabled**
- **PAMOrder**

8-3 Radius Authentication

[GET] /redfish/v1/AccountService/ExternalAccountProviders/RADIUS

[PATCH] /redfish/v1/AccountService/ExternalAccountProviders/RADIUS

- **ServicePort**
- **ServiceEnabled**
- **ExtendedPrivilege**
- **ServiceAddress**
- **Secret**
- **ExtendedPrivilege**
 - **KVMAccess**
 - **VMediaAccess**
- **AdvancedRADIUSSetting**
- **Timeout**
- **AccountProviderTypes**
- **Oem**

8-3-1 AdvancedRADIUSSetting

[GET] /redfish/v1/AccountService/ExternalAccountProviders/RADIUS/Oem/Ami/AdvancedRADIUSSetting

[PATCH] /redfish/v1/AccountService/ExternalAccountProviders/RADIUS/Oem/Ami/AdvancedRADIUSSetting

- **RADIUSAuthorization**

8-4 Role Collection

[GET] /redfish/v1/AccountService/Roles

[POST] /redfish/v1/AccountService/Roles

- **Description**
- **Members@odata.count**
- **Members**
- **Name**
- **Oem**

POST

Request:

```
POST https://{{ip}}/redfish/v1/AccountService/Roles
Content-Type: application/json
```

Example POST Request Body:

```
{
  "AssignedPrivileges": [
    "ConfigureUsers",
    "ConfigureManager",
    "ConfigureSelf",
    "Login",
    "ConfigureComponents"
  ],
  "Description":
    "TestRole User Role",
  "Id": "TestRole",
  "RoleId": "TestRole",
  "Enabled": true,
  "IsPredefined": true,
  "Name": "TestRole Role",
  "OemPrivileges":
    ["OemPowerControl",
     "OemClearLog"
    ]
}
```

8-4-1 Role

[GET] /redfish/v1/AccountService/Roles/{instance}

[PATCH] /redfish/v1/AccountService/Roles/{instance}

[DELETE] /redfish/v1/AccountService/Roles/{instance}

- **AssignedPrivileges**
- **Description**
- **Id**

- *IsPredefined*
- *Name*
- *RoleId*
- *OemPrivileges*
- *Actions*
- *Oem*

9. CertificateService

[GET] /redfish/v1/CertificateService

[POST] /redfish/v1/CertificateService/Actions/CertificateService.GenerateCSR

[POST] /redfish/v1/CertificateService/Actions/ CertificateService.ReplaceCertificate

- **Action**
- **Id**
- **Name**
- **Description**
- **CertificateLocations**
- **Oem**

POST

Request:

```
POST https://{ip}/redfish/v1/CertificateService/Actions/CertificateService.GenerateCSR
Content-Type: application/json
```

Example POST Request Body:

```
{
  "Country": "US",
  "State": "Oregon",
  "City": "Portland",
  "Organization": "Contoso",
  "OrganizationalUnit": "Service Processors",
  "CommonName": "manager.contoso.org",
  "AlternativeNames": [ "manager.contoso.com", "manager.contoso.us", "169.254.0.17" ],
  "Email": "admin@contoso.org",
  "KeyBitLength": 2048,
  "KeyUsage": [ "DigitalSignature" ],
  "ChallengePassword": "challengepassword",
  "GivenName": "userGivenName",
  "ContactPerson": "AMI Manager",
  "Initials": "userInitials",
  "Surname": "userSurname",
  "UnstructuredName": "userUnstructuredName",
  "CertificateCollection": { "@odata.id": "/redfish/v1/Managers/Self/NetworkProtocol/HTTPS/Certificates" }
}
```

Request:

```
POST https://{ip}/redfish/v1/CertificateService/Actions/CertificateService.ReplaceCertificate
Content-Type: application/json
```

Note: If use Certificate chain, CertificateType must be "PEMchain"

Example POST Request Body:

```
{
  "CertificateString": "-----BEGIN CERTIFICATE-----
nMIEOzCAYoGAwIBAgIAU08c/Hd0c/0GMA0GCSqGSIb3DQEBCwUAMIG7MQswCQYDnVQQGEwJVU
ZQM4G4A1UECAwHR2VncmdpYTERMA8GA1UEBwwlTm9yY3Jvc3MxNDYybnBgnVBA0MKG0FzXjUpY2F
uE1I2Zf0cmVzUHMgSW50ZXJyYXRpb25hbCBMTEMgKEFNnSSkxGzAZBgNVBAsMEINlcnZpY2UgUHJvY
2Vzc29yc2UUMBIGA1UEAwWLBWVnYXJhbnY5YjB2b20xHjAEBgkqhkiG9w0BCQEQWD3N1cHBvcnRAYW1pLnMn
vbTAeFw0xOTA4MjcxnMzA2MDBaFw02NDA4MjcxnMzA2MDBaMIG7MQswCQYDnVQQGEwJVUZEQMA
4GA1UECAwHR2VncmdpYTERMA8GA1UEBwwlTm9yY3Jvc3MxNDYybnBgnVBA0MKG0FzXjUpY2FuE1I1nZ
2F0cmVzUHMgSW50ZXJyYXRpb25hbCBMTEMgKEFNSSkxGzAZBgNVBAsMEINlcnZpY2UgUHJvY2Vzc2
9yc2UUMBIGA1UEAwWLBWVnYXJhbnY5YjB2b20xHjAEBgkqhkiG9w0BCQEQWD3N1cHBvcnRAYW1pLnMn
bWVnTCASIdW0YJk0ZlHvcNAQEBBQADggEPADCCAQoCnggEBApYhY7RBUskLGB3jYHf6k9Zm9rJhe/1mRZIW
TT778g5ySeo2L9BilscptmTm2clMGBRwFgCjOyZqkldU2Mu2zeALS31Bkvx12/OoLoG/MkvXc09MrNwEU0
Q2AZuGu7X+beKSAQAYzFZiW5Yf4hmadEtzh53rdk9mKp101YfnAqZ+zg9MxXuzl8TMnEGh7iemTtwoz
LTHiwH6cIKNm7Tmsl7LIEFQUP4wBTJBf1nmVe80fdNoDC+FBnvXwSuvH5wlH4Nd2hthl6L6GRJrKGF
E7FsqxvZBv62anp8U44VDV69guPo47XlS1n2yYXHPNwZmw9zm7md5TCRJLKT20CAwEAAnAMd4wCQ
YDVR0TBAlwADALBgNVH8EIBAMCBwAwJAYDVR0RBBoW6G4ILbWVnYXJhbnY5YjB22CDDE2OS4yNTQu
MC4xNzANBgkqhkiG9w0BAQsFAAOCAQEAZi3ILVGGYVR6LJ+Au7gY5w9T+k+CpXgzorF+yRcSJo/h/kfS
MPpGHyY+5j4Z9k57nTfnaBqmHnEhwhAQRVPAPd3iKYEHNH04u0gB4ZnkA/nyelA4vM3KG510Iry8o
BhYuvvZw63YhtYNNocZd1ct5A8zImpeu54ffPwWFGZGmVUnfIdSGa4NdzLr1auP5FUGbsms5V0FNPNhYNNR
YVHRMYh+rtv72Jmxc4B3nqcnUGNdPvVow5Qqmm0W5Sjv285F3BileE1b6iSDksnZ41YLcr8twBeTq5gjc9
1qVhnyY7Ms4UfZYTJhYXqo0VgplADOn+LL9qEZ9MXAR6SkeQ=-----END CERTIFICATE-----
BEGIN RSA PRIVATE KEY-----
nMIEowIBAAKCAQEA+OfIEFTmQsYHfIdl+IST1mb28mf7/WZFmVZNpVdYLL6jYUnv0Glix21O6ZyUw
YFHAWAKM7JmqSV1TYy7bN4AtLfUGS/HXb846Wgbg8y9XFzT0yns1bARTRDYDOMa7f5QspIBABJmVkh
ZJh/Gdp0S3OHeuR2T2YpinXTVh+cPpn7OUnD0ZFe70XxmWqQaHu6JZ03C0wtMeXaAilfpwgo2btOawvsgu8J
RBQJAFMkf/WeZv7nR902gML4UG9fBK68cJnAi3j13aG2EjouxXoZEmsoYUITSvWYXnmFVvZgenXtJhUNXn
r2C4+jiteVLbJhcc83BmbD3ObuYPMIEkspPbQIDAQABAoIBACTpiNgbOELmlkVwup7z3ErAjiOe1/aWnW
4ocxNkWy4nm6ySrUWPMfmfNT3dw1SEqz689vDjrYC2nXNEZ877e7fN1nclL+wyob7slJEay5N9BgJcJxMd
UB3ZMQJ1nuTWG8+B3e0HG/nrDH8210MnAAmUzQxZRE6gtgYKsFsyxgMc+X4i1hUzsaA1IKa2uXk+6X
mEEUmcUnoadu5KmHm0Oxh5ph4JCb1HgSxrVjunsd+x1zNPFCjchz4V5SCRQ6gDPI/EzmrF1nTdnS8WgFzh6
v6fHe11bCDRXIG3wDlQOWPhm7Vv0TqToMgEcEu+DcLcnEun2iKUrWD13SECgYEA/xyzJ0enwIEVuxHizb
8H7ZwgYV5k1j0ygzRFEFG+vrDi8aoHR+nb5KmqG1oZi0Dorat1wQb3Lj5gogYRjY1SPGQdFdDgdnd9jcuVF
QpQ+5jsLBV03noAumSEB9Yk3eGZ1XAZro+FzG65BsZyaG0QLnCcQ/GcJZ+G75lGh8CgYEA+b8jnkUoXr
BaBrGCs9880SpuebEQ07zZH9Tn+ea2ZR9N7cDOXsSpsTQsJ5Q4pwlhODng0Jv3CTFKCkK2mXA3S3J+Uz
lmvIPDg31+Y3qbpA+ZBYJG8rp74uSjBbBFkbnVun1S8oVQbflfJdTFnypK5+TPTNig4C5IBaCquUjzMcYyB0
+VHjB05FXdWYQnYVopranuTAJA38dG803g604RpbkYsd13NCQVXQUY7gYIEK83fkl8kxPh9P9v
CTniF31S7CevuxGeQdsKa7Sol0yunZ3F4kD5hTF1pXK7ya8TRdRaA2v1Z+lzaR4vUn5y82IGU7nd4gNcUzV
W/QKBgQCKdeubauMK51dxKA/9O3Ai80/9+i8cr3B482EynycTSCD772p0RCymCMVjX40T0gqHEN3TCg
UFTavLBZzKwSpYtZ1WQqosOx+Q98nEa/9KD904e8JA5B6jvAM+cC8Bwy/ktb/2eViploKvmlVz9/57mbdu
TLIWElrnPn6qfQKBgEqL9ShURu6pytGfHf6CVPT1DiXxvzAvj8KWwdWwpwob3BF1+82T9NgtInV441nirH4iz
d7IzPNv56vb3F4D2IY4zAfWhfrMytrv8aKghDyyZq5Qo6mXmz5Shqnd071CuwgoRn6UG5gZWs+B/Oh16xPYk
wZmZOYEZaoE7ubEtzB7qWn-----END RSA PRIVATE KEY-----",
  "CertificateType": "PEM",
  "CertificateUri": "({@odata.id})/redfish/v1/Managers/Self/NetworkProtocol/HTTPS/Certificates/1"}
}
```

9-1 CertificateLocations

[GET] /redfish/v1/CertificateService/CertificateLocations

- Id
- Name
- Description
- Links
 - Certificates
- Action
- Oem

9-1-1 Certificate

[GET] /redfish/v1/Managers/{instance}/NetworkProtocol/HTTPS/Certificates/{instance}

[GET] /redfish/v1/Managers/{instance}/RemoteAccountService/LDAP/Certificates/1

[GET] /redfish/v1/AccountService/LDAP/Certificates/Oem/Ami/ClientCertificates/1

[POST] /redfish/v1/AccountService/LDAP/Certificates

[POST] /redfish/v1/AccountService/LDAP/Certificates/Oem/Ami/ClientCertificates

[DELETE] /redfish/v1/AccountService/LDAP/Certificates/1

[DELETE] /redfish/v1/AccountService/LDAP/Certificates/Oem/Ami/ClientCertificates/1

POST

Request:

POST https://{ip}/redfish/v1/AccountService/LDAP/Certificates

POST https://{ip}/redfish/v1/AccountService/LDAP/Certificates/Oem/Ami/ClientCertificates

Content-Type: application/json

Example POST Request Body:

```
{
  "CertificateString": "-----BEGIN CERTIFICATE-----
\nMIIC2DCCAoICCQDrKFHkCkpC2zANBgkqhkiG9w0BAQsFADCB8jEELMAkGA1UEBhMCnVVMjDzAN
BgNVBAMgMBk9yZWVwbjERMA8GA1UEBwwlUG9ydGxibmQxEDAOBgNVBAoMnVbNvbnRvc28xDDAKBg
NVBA5MA0FCQzEcMBoGA1UEAwwTbWVufWdlci5jb250b3NvLnM9yZzEgMB4GC3QsGSIb3DQEJARiYRYW
RtaW5AY29udG9zby5vcmcxGjAYBgNVBCKMnEXRlc3RD6250YWN0UGVyc29uMR9yWFAyYDVoQQA10ZX
N0R2l2ZW50YyW1IMRUwEwYDnVQQRDax0ZXN0SW5pdGlibHBMxkFDASBgNVBAQMC3Rlc3RtdXJuYW1
IMB4XDTE5MTIxLnOTAYNTg0NVoXDTIwMDE5ODAyNTg0NVoowgflxCzAJBgNVBAYTAiVMTQ8wDQYD
VQQTnDAZPcmVub24xETAPBgNVBACMFbvcnRsYW5kMRAwDgYDVQQKDAdDb250b3NvMQwwnGnCGY
DVQQLDANBQkMxHDAABgNVBAMME21hbmFuZXRhY29udG9zby5vcmcxIDAeBgkqnlhkiG9w0BCQEW
WfkbWluQGNvbnRvc28ub3JnMR0wGAYDVQQQDBF0ZXN0Q29udG9yYndFblcnVbjEWBMBQGA1UEKgwN
dGVzdEdpdmVuTmFIZTEVMBMGA1UEKwwMdGVzdEluInaXRpYWxzMRQwEgYDVQQEDA10ZXN0U3Vy
bmFIZlBcMA0GC3QsGSIb3DQEBQAUAA0sAnMEgCQQC2vTAZtrPrBvReb065z6E/n7Rv8ymt4Goowjet6s0kf
m/WnJumTt0/eJfkun2j5c+XSg6q1wgmZOZA+NZVL7DFUjAgMBAAEwDQYJKoZIhvcNAQELBQADQQCsYyR
Yn3RX7fsLQr0M/LgHCHF9ke9mF8KsockAQIZLkXuwsZHe6+0b7p6OeWrdniul6cpmOnb32QIGFrKwq8JXD
+n-----END CERTIFICATE-----n-----BEGIN PRIVATE KEY-----
\nMIIBVgIBADANBgkqhkiG9w0BAQEFAASCAUAwggE8AgEAAkEAtr0wGbbz6wckXm90nuc-hiP5+0b/Mpre
BqKMI3rerNjH5v1pybpk7dP3iX5No+XPI0eOqtCJmTmQPjVVS+n+wxVtIwDAQABAKeAn6j0WeNLofKTM/
```

9-1-1-1 Rekey

[POST] /redfish/v1/AccountService/Accounts/{instance}/Certificates/{instance}/Actions/Certificate.Rekey

POST

Request:

POST https://{ip}/redfish/v1/AccountService/Accounts/{instance}/Certificates/{instance}/Actions/Certificate.Rekey

Content-Type: application/json

Example POST Request Body:

```
{
  "KeyBitLength": 512,
  "ChallengePassword" : "challengepassword"
}
```

9-1-1-2 Renew

[POST] *redfish/v1/AaccountService/Accounts/{instance}/Certificates/{instance}/Actions/Certificate.Renew*

- **Oem**
- **Actions**
- **Id**
- **Name**
- **Description**
- **Issuer**
- **KeyUsage**
- **Subject**
- **ValidNotAfter**
- **ValidNotBefore**
- **CertificateString**
- **CertificateType**

POST

Request:

```
POST https://{ip}/redfish/v1/AaccountService/Accounts/{instance}/Certificates/{instance}/Actions/Certificate.Renew
Content-Type: application/json
```

Example POST Request Body:

```
{
  "ChallengePassword" :
  "challengepassword"
}
```

10. Chassis Collection

[GET] /redfish/v1/Chassis

- **Description**
- **Name**
- **Members@odata.count**
- **Members**
- **Oem**

10-1 Chassis

[GET] /redfish/v1/Chassis/{instance}

[PATCH] /redfish/v1/Chassis/{instance}

[POST] /redfish/v1/Chassis/{instance}/Actions/Chassis.Reset

- **Id**
- **Name**
- **Description**
- **ChassisType**
- **Manufacturer**
- **Model**
- **SKU**
- **Sensors**
- **SerialNumber**
- **PartNumber**
- **PCleDevices**
- **AssetTag**
- **IndicatorLED**
- **Links**
 - **ComputerSystems**
 - **ComputerSystems@odata.count**
 - **ManagedBy**
 - **ManagedBy@odata.count**
 - **Drives**
 - **Drives @odata.count**
 - **Storage**
 - **Storage@odata.count**
 - **ResourceBlocks**
 - **ResourceBlocks @odata.count**
 - **ContainedBy**
 - **Contains**
 - **Contains @odata.count**
 - **PowerBy**
 - **PowerBy @odata.count**
 - **CooledBy**
 - **CooledBy @odata.count**
 - **ManagersInChassis**
 - **ManagersInChassis @odata.count**

- Processors
- Processors @odata.count
- Actions
- Status
- LogServices
- Thermal
- Power
- PowerState
- NetworkAdapters
- Assembly
- Oem
- UUID
- Location
- HeightMm
- WidthMm
- DepthMm
- WeightKg
- MediaControllers
- EnvironmentalClass

POST

Request:

```
POST https://{ip}/redfish/v1/Chassis/Self/Actions/Chassis.Reset
Content-Type: application/json
```

Request Body:

The ResetType can be one of the following values: "On", "ForceOff", "GracefulShutdown", "ForceRestart".

Example POST Request Body:

```
{
  "ResetType": "On"
}
```

10-1-1 Power

[GET] /redfish/v1/Chassis/{instance} /Power

[PATCH] /redfish/v1/Chassis/{instance}/Power

- Description
- Id
- Name
- PowerControl
 - Name
 - MemberId
 - PowerMetrics
 - IntervallnMin
 - MinConsumedWatts

- *MaxConsumedWatts*
- *AverageConsumedWatts*
- *RelatedItem@odata.count*
- *PhysicalContext*
- *PowerConsumedWatts*
- *PowerRequestedWatts*
- *PowerAvailableWatts*
- *PowerCapacityWatts*
- *PowerAllocatedWatts*
- *PowerLimit*
- *LimitInWatts*
- *LimitException*
- *CorrectionInMs*
- *PowerControl@odata.count*
- *Voltage*
 - *MemberId*
 - *Name*
 - *SensorNumber*
 - *Status*
 - *ReadingVolts*
 - *UpperThresholdNonCritical*
 - *UpperThresholdCritical*
 - *LowerThresholdNonCritical*
 - *LowerThresholdCritical*
 - *MinReadingRange*
 - *MaxReadingRange*
 - *RelatedItem*
 - *OwnerLUN*
 - *UpperThresholdFatal*
 - *LowerThresholdFatal*
 - *PhysicalContext*
 - *RelatedItem (RelatedItem@odata.count)*
- *Voltages@odata.count*
- *PowerSupply*
 - *MemberId*
 - *Name*
 - *LineInputVoltage*
 - *PowerCapacityWatts*
 - *LastPowerOutputWatts*
 - *Model*
 - *FirmwareVersion*
 - *SerialNumber*
 - *PowerInputWatt*
 - *PowerOutputWatts*
 - *PowerSupplyType*

- *LineInputVoltageType*
- *PartNumber*
- *SparePartNumber*
- *Status*
- *Location*
- *EfficiencyPercent*
- *HotPluggable*
- *RelatedItem*
- *Redundancy*
- *Oem*

10-1-2 LogServices (Support services after version 12.41.07)

[GET] /redfish/v1/Chassis/{instance}/LogServices

- *Description*
- *Members*
- *Members@odata.count*
- *Name*
- *Oem*

10-1-2-1 Log Service

[GET] /redfish/v1/Chassis/{instance}/LogServices/Logs

[PATCH] /redfish/v1/Chassis/{instance}/LogServices/Logs

[POST] /redfish/v1/Chassis/{instance}/LogServices/Log/Actions/LogServices.ClearLog

- *Id*
- *Name*
- *Description*
- *ServiceEnabled*
- *MaxNumberOfRecords*
- *OverWritePolicy*
- *DateTime*
- *DateTimeLocalOffset*
- *Actions*
- *Status*
- *Entries*
- *LogEntry Type*
- *Oem*

POST

Request:

POST https://{ip}/redfish/v1/Chassis/Self/LogServices/SEL/Actions/LogServices.ClearLog
 Content-Type: application/json

Request Body:

```
{  
}
```

10-1-2-1-1 Entry Collection

[GET] /redfish/v1/Chassis/{instance}/LogServices/Log/Entries

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

10-1-2-1-1-1 Entry

[GET] /redfish/v1/Chassis/{instance}/LogServices/Log/Entries/{instance}

- **Id**
- **Name**
- **Description**
- **Severity**
- **Created**
- **EventTimestamp**
- **EntryType**
- **EntryCode**
- **SensorType**
- **SensorNumber**
- **Message**
- **MessageId**
- **Links**
 - **OriginOfConfition**
- **Oem**
- **EventId**
- **MessageArgs**
- **OemLogEntryCode**
- **OemSensorType**

10-1-3 Sensor Collection

[GET] /redfish/v1/Chassis/{instance}/Sensors

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

10-1-3-1 Sensor

[GET] /redfish/v1/Chassis/{instance}/Sensors/{instance}

- **PeakReading**
- **PeakReadingTime**
- **Reading**
- **ReadingType**
- **Oem**
- **Accuracy**
- **AdjustedMaxAllowableOperatingValue**
- **AdjustedMinAllowableOperatingValue**
- **ApparentVA**
- **ElectricalContext**
- **LoadPercent**
- **Location**
- **MaxAllowableOperatingValue**
- **MinAllowableOperatingValue**
- **PhysicalContext**
- **PhysicalSubContext**
- **PowerFactor**
- **Precision**
- **ReactiveVAR**
- **ReadingRangeMax**
- **ReadingRangeMin**
- **ReadingUnits**
- **SensingFrequency**
- **SensorResetTime**
- **Status**
- **Thresholds**
- **VoltageType**

10-1-3-2 Sensor Energy

[GET] /redfish/v1/Chassis/{instance}/Sensors/Energy

- **Id**
- **Name**
- **Oem**
- **Reading**
- **ReadingType**
- **PeakReading**
- **PeakReadingTime**

10-1-3-3 Sensor Power

[GET] /redfish/v1/Chassis/{instance}/Sensors/Power

- *Id*
- *Name*
- *PeakReading*
- *PeakReadingTime*
- *Reading*
- *ReadingType*

10-1-4 Thermal

[GET] /redfish/v1/Chassis/{instance} /Thermal

- *Description*
- *Id*
- *Name*
- *Temperatures*
 - *Name*
 - *MemberId*
 - *SensorNumber*
 - *Status*
 - *ReadingCelsius*
 - *UpperThresholdNonCritical*
 - *UpperThresholdCritical*
 - *LowerThresholdNonCritical*
 - *LowerThresholdCritical*
 - *PhysicalContext*
 - *OwnerLUN*
 - *UpperThresholdFatal*
 - *LowerThresholdFatal*
 - *MinReadingRangeTemp*
 - *MaxReadingRangeTemp*
 - *RelatedItem*
 - *DeltaReadingCelsius*
 - *DeltaPhysicalContext*
 - *MaxAllowableOperatingValue*
 - *MinAllowableOperatingValue*
 - *AdjustedMaxAllowableOperatingValue*
 - *AdjustedMinAllowableOperatingValue*
- *Fan*
 - *MemberId*
 - *Name*
 - *PhysicalContext*
 - *Status*
 - *Reading*
 - *LowerThresholdNonCritical*
 - *LowerThresholdCritical*
 - *MinReadingRange*

- *MaxReadingRange*
- *RelatedItem (RelatedItem@odata.count)*
- *OwnerLUN*
- *UpperThresholdNonCritical*
- *UpperThresholdCritical*
- *UpperThresholdFatal*
- *LowerThresholdFatal*
- *Redundancy*
- *HotPluggable*
- *Location*
- *SensorNumbebr*
- *Oem*
- *Redundancy*
- *Actions*

10-1-4-1 FanprofileService (GBT)

[GET] /redfish/v1/Chassis/{instance}/Thermal/FanprofileService

- *Fanprofile*
- *Id*
- *Name*
- *SupportPCIEDevice*

10-1-4-1-1 Fanprofile

[GET] /redfish/v1/Chassis/{instance}/Thermal/FanprofileService/Fanprofile

[PUT] /redfish/v1/Chassis/{instance}/Thermal/FanprofileService/Fanprofile

- *Id*
- *Name*
- *arrProfile*
 - *arrPolicy*
 - *arrDuty*
 - *arrFanSensor*
 - *arrHexDeviceID*
 - *arrHexVendorID*
 - *arrRef*
 - *arrSensor*
 - *iAmbientSensor*
 - *iAmbientSensorTemp*
 - *iCpuTdp*
 - *ilnSDR*
 - *ilnitDuty*
 - *iPCIEDeviceEnable*
 - *iPolicyType*
 - *iSensorCodeee*
 - *strName*
 - *strVersion*
- *strMode*

- **strVersion**

10-1-4-1-2 SupportPCIEDevice

[GET] /redfish/v1/Chassis/{instance}/Thermal/FanprofileService/SupportPCIEDevice

[PUT] /redfish/v1/Chassis/{instance}/Thermal/FanprofileService/SupportPCIEDevice

- **Id**
- **Name**
- **arrPCIEDevices**
 - **hexDeviceID**
 - **hexVendorID**
 - **strName**
- **strVersion**

10-1-5 NetworkAdapterCollection

[GET] /redfish/v1/Chassis/{instance}/NetworkAdapters

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

10-1-5-1 NetworkAdapter

[GET] /redfish/v1/Chassis/{instance}/NetworkAdapters/{instance}

- **Members**
- **Members@odata.count**
- **Name**
- **Description**
- **Oem**

10-1-6 PCIeDevice Collection

[GET] /redfish/v1/Chassis/{instance}/PCIeDevices/{instance}

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Description**
- **Oem**

10-1-6-1 PCIeDecice

[GET] /redfish/v1/Chassis/{instance}/PCIeDevices/{instance}

- **Id**
- **Name**
- **Description**
- **Status**
- **Manufacturer**

- *Model*
- *SKU*
- *SerialNumber*
- *PartNumber*
- *AssetTag*
- *FirmwareVersion*
- *Links*
- *PCleFunctions*
- *PCleInterface*
- *Oem*
- *DeviceType*
- *Assembly*

10-1-6-1-1 PCleFunction

[GET] /redfish/v1/Chassis/{instance}/PCleDevices/{instance}/PCleFunctions/{instance}

Id

- *Name*
- *Description*
- *Status*
- *DeviceClass*
- *VendorId*
- *ClassCode*
- *Link*
- *FunctionId*
- *FunctionType*
- *DeviceId*
- *RevisionId*
- *SubsystemId*
- *SubsystemVendorId*
- *Actions*

11. CompositionService

[Get] /redfish/v1/CompositionService

[Patch] /redfish/v1/CompositionService

- **Description**
- **Id**
- **Name**
- **ResourceBlocks**
- **ResourceZones**
- **ServiceEnabled**
- **Status**
- **Oem**

11-1 ResourceBlocks Collection

[Get] /redfish/v1/CompositionService/ResourceBlocks

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

11-1-1 ResourceBlocks

[Get] /redfish/v1/CompositionService/ResourceBlocks/{instance}

[Patch] /redfish/v1/CompositionService/ResourceBlocks/{instance}

- **Id**
- **Name**
- **Description**
- **Status**
- **CompositionStatus**
 - **Reserved**
 - **MaxCompositions**
 - **CompositionState**
- **ResourceBlockType**
- **Processors**
- **Memory**
- **Oem**
- **Link**
 - **Chassis**
- **Storage**
- **SimpleStorage**
- **Drivers**
- **EthernetInterfaces**

11-2 ResourceZones Collection

[Get] /redfish/v1/CompositionService/ResourceBlocks

- **Description**
- **Members**
- **Members@odata.count**
- **Name**

11-2-1 ResourceZones

[Get] /redfish/v1/CompositionService/ResourceBlocks/{instance}

- **Id**
- **Name**
- **Description**
- **Links**
 - **Oem**
 - **ResourceBlocks**
- **Status**

12. AMI OEM Entities - Configuration

[Get] /redfish/v1/Oem/Ami/Configuration

- **Id**
- **Name**
- **CertificateAuthorityUrl**
- **Oem**

13. EventService

[GET] /redfish/v1/EventService

[PATCH] /redfish/v1/EventService

[POST] /redfish/v1/EventService/Actions/EventService.SubmitTestEvent

- **Actions**
- **DeliveryRetryAttempts**
- **DeliveryRetryIntervalSeconds**
- **Description**
- **EventFormatTypes**
- **Id**
- **Name**
- **ServiceEnabled**
- **Status**
- **Subscriptions**
- **ServerSentEventUri**
- **SSEFilterPropertiesSupported**
- **Oem**
- **RegistryPrefixes**
- **ResourceTypes**
- **SubordinateResourcesSupported**
- **SMTP**
 - **Authentication**
 - **ConnectionProtocol**
 - **Password**
 - **Port**
- **ServiceEnabled**

POST

Request:

POST https://{ip}/redfish/v1/EventService/Actions/EventService.SubmitTestEvent

Content-Type: application/json

EventService.SubmitTestEvent can test using below **RegistryPrefixes MessageId**

- Base1.5.0
- EventLog.1.0.0
- HttpStatus.1.0.0
- IPMI.1.0.0
- Security.1.0.0
- SyncAgent.1.0.0

https://{ip}/redfish/v1/Registries/{Registry_instance.json}

Eg: https://{ip}/redfish/v1/Registries/Base.1.5.0.json

Example: Base.1.5.0 [PropertyValueNotInList as MessageId]

Example POST Request Body:

```
{
  "EventTimestamp":"2019-09-20T23:04:09+02:00",
  "EventId":"1531584914",
  "OriginOfCondition":"/redfish/v1/Chassis/Self",
  "MessageId":"PropertyValueNotInList",
  "MessageArgs":["Lit","IndicatorLED"],
  "Severity":"Warning"
}
```

13-1 Subscription Collection

[GET] /redfish/v1/EventService/Subscriptions

[POST] /redfish/v1/EventService/Subscriptions

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

POST

Request:

```
POST https://{ip}/redfish/v1/EventService/Subscriptions
Content-Type: application/json
```

Example POST Request Body:

```
{
  "Context": "Rocket All",
  "Destination": "http://10.1.112.223:7628/",
  "EventFormatType": "Event",
  "Protocol": "Redfish",
  "RegistryPrefixes":["SyncAgent.1.0.0","Base.1.5.0","EventLog.1.0.0"],
  "ResourceTypes":["Chassis","Systems","EventService"]
}
```

Empty or Absent RegistryPrefixes, ResourceTypes and Absent EventFormatType:

RegistryPrefixes, ResourceTypes values are absent or empty are accepted in POST call. In this case service shall sent events with any ResourceTypes or any RegistryPrefixes.

If EventFormatType property was absent on POST call then default value will be Event.

Example POST Request Body:

```
{
  "Context": "Rocket All",
  "Destination": "http://10.1.112.223:7628/",
  "Protocol": "Redfish",
  "RegistryPrefixes": [],
  "ResourceTypes": []
}
```

13-1-1 Subscription

[GET] /redfish/v1/EventService/Subscriptions/{instance}

[PATCH] /redfish/v1/EventService/Subscriptions/{instance}

[DELETE] /redfish/v1/EventService/Subscriptions/{instance}

- **Id**
- **Name**
- **Description**
- **EventTypes**
- **Context**
- **SubscriptionType**
- **Protocol**
- **MessageIds**
- **OriginResources**
- **OriginResources@odata.count**
- **Status**
- **DeliveryRetryPolicy**
- **Oem**
- **Destination**
- **Actions**
- **SubordinateResources**
- **EventFormarType**
- **RegistryPrefixes**
- **ResourceTypes**
- **MetricReportDefinitions**
- **DeliveryRetryPolicy**

13-1-2 Subscription Test Event

[GET] /redfish/v1/EventService/Subscriptions/SubmitTestEventActionInfo

- **Description**
- **Id**
- **Name**
- **Parameters**
- **Oem**

14. JsonSchemas Collection

[Get] /redfish/v1/JsonSchemas

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

14-1 JsonSchemas

[Get] /redfish/v1/JsonSchemas/{instance}

- **Oem**
- **Id**
- **Name**
- **Description**
- **Languages**
- **Schema**
- **Location**
- **Actions**

15. Manager Collection

[GET] /redfish/v1/Managers

- **Description**
- **Members**
- **Members@odata.count**
- **Name**

15-1 Manager

[GET] /redfish/v1/Managers/{instance}

[PATCH] /redfish/v1/Managers/{instance}

[POST] /redfish/v1/Managers/{instance}/Actions/Manager.Reset

[POST] /redfish/v1/Managers/{instance}/Actions/Oem/AMIManager.RedfishDBReset

- **Id**
- **Name**
- **Description**
- **ManagerType**
- **Links**
 - **ManagerForServers**
 - **ManagerForServers@odata.count**
 - **ManagerForChassis**
 - **ManagerForChassis@odata.count**
- **ManagerInChassis- ServiceEntryPointUUID**
- **UUID**
- **Model**
- **DateTime**
- **DateTimeLocalOffset**
- **FirmwareVersion**
- **SerialConsole**
- **CommandShell**
- **GraphicalConsole**
- **Actions**
- **Status**
- **EthernetInterfaces**
- **SerialInterfaces**
- **NetworkProtocol**
- **LogServices**
- **HostInterfaces**
- **PowerState**
- **Redundancy@odata.count**
- **Oem**
 - **VirtualMedia**
 - **ManagerServiceInfo**
 - **CommandShellServiceInfo**
 - **Links**

- **NetworkProtocol**
- **VirtualMedia**
- **AutoDSTEnabled**

POST

Request:

POST https://{ip}/redfish/v1/Managers/Self/Actions/Manager.Reset
Content-Type: application/json

Request Body:

The ResetType can be one of the following values: "On", "ForceOff", "GracefulShutdown", "ForceRestart".

Example POST Request Body:

```
{  
  "ResetType": "On"  
}  
  
{  
  "ResetType": "On"  
}
```

Request:

POST https://{ip}/redfish/v1/Managers/Self/Actions/RedfishDBReset
Content-Type: application/json

Example POST Request Body:

```
{  
  "RedfishDBResetType": "ResetAll"  
}
```

15-1-1 EthernetInterfaces Collection

[Get] /redfish/v1/Managers/{instance}/EthernetInterfaces

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

15-1-1-1 EthernetInterfaces

[Get] /redfish/v1/Managers/{instance}/EthernetInterfaces/bond0

[PATCH] /redfish/v1/Managers/{instance}/EthernetInterfaces/{{manager_ethifc_instance}}

- **Id**
- **Name**
- **Description**
- **Status**
- **InterfaceEnabled**
- **PermanentMACAddress**
- **MACAddress**
- **SpeedMbps**
- **AutoNeg**
- **FullDuplex**
- **MTUSize**
- **HostName**
- **FQDN**
- **MaxIPv6StaticAddresses**
- **VLAN**
- **Ipv4Addresses**
- **Ipv6Addresses**
- **IPv6DefaultGateway**
- **NameServers**
- **LinkStatus**
- **DHCPv4**
- **Oem**
- **UefiDevicePath**
- **StatelessAddressAutoConfig**
- **Ipv6StaticAddresses**
- **VLANs**
- **Actions**
- **DHCPv6**
- **IPv6StaticDefaultGateways**
- **IPv4StaticAddresses**

[GET] /redfish/v1/Managers/Self/EthernetInterfaces/eth0

- **Id**
- **Name**
- **Description**
- **InterfaceEnabled**
- **PermanentMACAddress**
- **MACAddress**
- **LinkStatus**
- **Oem**
- **UefiDevicePath**
- **Status**
- **SpeedMbps**
- **StatelessAddressAutoConfig**
- **AutoNeg**
- **FullDuplex**
- **MTUSize**
- **HostName**
- **FQDN**
- **MaxIPv6StaticAddresses**
- **VLAN**
- **IPv4Addresses**
- **IPv6Addresses**
- **IPv6DefaultGateway**
- **NameServers**
- **StaticNameServers**
- **VLANs**
- **Actions**
- **DHCPv4**
- **DHCPv6**
- **IPv6StaticDefaultGateways**
- **IPv4StaticAddresses**
- **IPv6AddressPolicyTable**

[GET] /redfish/v1/Managers/Self/EthernetInterfaces/eth1

- **Id**
- **Name**
- **Description**
- **InterfaceEnabled**
- **PermanentMACAddress**
- **MACAddress**
- **LinkStatus**
- **Oem**
- **UefiDevicePath**
- **Status**
- **SpeedMbps**
- **StatelessAddressAutoConfig**

- *AutoNeg*
- *FullDuplex*
- *MTUSize*
- *HostName*
- *FQDN*
- *MaxIPv6StaticAddresses*
- *VLAN*
- *Ipv4Addresses*
- *Ipv6Addresses*
- *Ipv6StaticAddresses*
- *Ipv6DefaultGateway*
- *NameServers*
- *VLANs*
- *Actions*
- *DHCPv4*
- *DHCPv6*
- *IPv6StaticDefaultGateways*
- *IPv4StaticAddresses*

[GET] /redfish/v1/Managers/Self/EthernetInterfaces/usb0

- *Id*
- *Name*
- *Description*
- *Status*
- *InterfaceEnabled*
- *PermanentMACAddress*
- *MACAddress*
- *Ipv4Addresses*
- *Ipv6Addresses*
- *LinkStatus*
- *Oem*
- *UefiDevicePath*
- *SpeedMbps*
- *StatelessAddressAutoConfig*
- *AutoNeg*
- *FullDuplex*
- *MTUSize*
- *HostName*
- *FQDN*
- *MaxIPv6StaticAddresses*
- *VLAN*
- *Ipv6StaticAddresses*
- *Ipv6DefaultGateway*
- *NameServers*
- *VLANs*
- *Actions*

- *DHCPv4*
- *DHCPv6*
- *IPv6StaticDefaultGateways*
- *IPv4StaticAddresses*

15-1-2 CertificateCollection

[Get] /redfish/v1/Managers/{instance}/NetworkProtocol/HTTPS/Certificates

- *Description*
- *Members*
- *Members@odata.count*
- *Name*
- *Oem*

15-1-3 Factory Reset ActionInfo

[GET] /redfish/v1/Managers/{instance}/RedfishDBResetActionInfo

- *Description*
- *Id*
- *Name*
- *Parameters*

15-1-4 HostInterfaces Collection

[Get] /redfish/v1/Managers/{instance}/HostInterfaces

- *Description*
- *Members*
- *Members@odata.count*
- *Name*
- *Oem*

15-1-4-1 HostInterfaces

[Get] /redfish/v1/Managers/{instance}/HostInterfaces/{instance}

[PATCH] /redfish/v1/Managers/{instance}/HostInterfaces/{instance}

- Id*
- *Name*
- *Description*
- *HostInterfaceType*
- *Status*
- *InterfaceEnabled*
- *ExternallyAccessible*
- *AuthenticationModes*
- *KernelAuthRoleId*
- *KernelAuthEnabled*
- *FirmwareAuthRoleId*
- *FirmwareAuthEnabled*
- *Links*
- *ComputerSystems@odata.count*

- **ComputerSystems**
- **CredentialBootstrappingRole**
- **KernelAuthRole**
- **FirmwareAuthRole**
- **HostEthernetInterfaces**
- **ManagerEthernetInterface**
- **NetworkProtocol**
- **Oem**
- **AuthNoneRoleId**
- **CredentialBootstrapping**
 - **Enabled**
 - **EnableAfterReset**
 - **RoleId**

15-1-4-2 HostEthernetInterface Collection

[GET] /redfish/v1/Managers/Self/HostInterfaces/Self/HostEthernetInterfaces

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

15-1-5 LogServices Collection

[GET] /redfish/v1/Managers/{instance}/LogServices

[POST] /redfish/v1/Managers/{instance}/LogServices/AuditLog/Actions/LogService.ClearLog

[POST] /redfish/v1/Managers/{instance}/LogServices/EventLog/Actions/LogService.ClearLog

[POST] /redfish/v1/Managers/{instance}/LogServices/SEL/Actions/LogService.ClearLog

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

POST

Request:

```
POST https://{ip}/redfish/v1/Managers/Self/LogServices/AuditLog/Actions/LogService.ClearLog
https://{ip}/redfish/v1/Managers/Self/LogServices/EventLog/Actions/LogService.ClearLog
https://{ip}/redfish/v1/Managers/Self/LogServices/SEL/Actions/LogService.ClearLog
Content-Type: application/json
```

Example POST Request Body:

```
{
}
```

15-1-5-1 LogServices

[GET] /redfish/v1/Managers/{instance}/LogServices/{instance}

[PATCH] /redfish/v1/Managers/{instance}/LogServices/{instance}

- **Id**
- **Name**
- **Description**
- **ServiceEnabled**
- **MaxNumberOfRecords**
- **OverWritePolicy**
- **DateTime**
- **DateTimeLocalOffset**
- **Actions**
- **Status**
- **Entries**
- **LogEntry Type**
- **Oem**

15-1-5-1-1 Log Entry Collection

[GET] /redfish/v1/Managers/{instance}/LogServices/{instance}/Entries

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

15-1-5-1-1-1 Log Entry

[GET] /redfish/v1/Managers/Self/LogServices/AuditLog/Entries/{instance}

- **Id**
- **Name**
- **Description**
- **Severity**
- **Created**
- **EventTimestamp**
- **EntryType**
- **Message**
- **MessageId**
- **MessageArgs**
- **Oem**
- **EventId**
- **EntryCode**
- **SensorType**
- **SensorNumber**
- **Links**
 - **OriginOfCondition**
- **OemLogEntryCode**
- **OemSensorType**

[GET] /redfish/v1/Managers/Self/LogServices/EventLog/Entries/{instance}

- **Id**
- **Name**
- **Description**
- **Severity**
- **Created**
- **EventTimestamp**
- **EntryType**
- **EntryCode**
- **Message**
- **MessageId**
- **MessageArgs**
- **Links**
 - **OriginOfCondition**
- **Oem**
- **EventId**
- **SensorType**
- **OemLogEntryCode**
- **OemSensorType**

[GET] /redfish/v1/Managers/Self/LogServices/SEL/Entries/{instance}

- **Id**
- **Name**
- **Description**
- **Severity**
- **Created**
- **EventTimestamp**
- **EntryType**
- **EntryCode**
- **SensorType**
- **SensorNumber**
- **MessageId**
- **Oem**
- **EventId**
- **Message**
- **MessageArgs**
- **Links**
 - **OriginOfCondition**
- **OemLogEntryCode**
- **OemSensorType**

15-1-6 NetworkProtocol

[GET] /redfish/v1/Managers/{instance}/NetworkProtocol

[PATCH] /redfish/v1/Managers/{instance}/NetworkProtocol

- **Id**
- **Name**
- **Description**
- **HostName**
- **FQDN**
- **HTTPS**
- **SNMP**
 - **ProtocolEnabled**
 - **Port**
 - **AuthenticationProtocol**
 - **EncryptionProtocol**
 - **EngineId**
 - **EnableSNMPv1**
 - **EnableSNMPv2c**
 - **EnableSNMPv3**
- **VirtualMedia**
- **SSDP**
- **IPMI**
- **SSH**
- **KVMIP**
- **Status**
- **Oem**
- **Telnet**
- **Actions**
- **NTP**
 - **ProtocolEnabled**
 - **Port**
 - **NTPServers**

15-1-7 Reset ActionInfo

[GET] /redfish/v1/Managers/{instance}/ResetActionInfo

- **Description**
- **Id**
- **Name**
- **Parameters**

15-1-8 SerialInterfaces Collection

[GET] /redfish/v1/Managers/{instance}/SerialInterfaces

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

15-1-8-1 SerialInterfaces

[GET] /redfish/v1/Managers/{instance}/SerialInterfaces/{instance}

[PATCH] /redfish/v1/Managers/{instance}/SerialInterfaces/{instance}

- **Id**
- **Name**
- **Description**
- **Interface Enabled**
- **BitRate**
- **Parity**
- **DataBits**
- **StopBits**
- **FlowControl**
- **Oem**
- **SignalType**
- **ConnectorType**
- **PinOut**
- **Actions**

15-1-9 VirtualMedia Collection

[GET] /redfish/v1/Managers/{instance}/VirtualMedia

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

15-1-9-1 VirtualMedia Collection

[GET] /redfish/v1/Managers/{instance}/VirtualMedia/{instance}

[POST] /redfish/v1/Managers/{instance}/VirtualMedia/{instance}/Actions/VirtualMedia.InsertMedia

[POST] /redfish/v1/Managers/{instance}/VirtualMedia/{instance}/Actions/VirtualMedia.EjectMedia

[POST] /redfish/v1/Managers/{instance}/Actions/Oem/AMIVirtualMedia.ConfigureCDInstance

[POST] /redfish/v1/Managers/{instance}/Actions/Oem/AMIVirtualMedia.EnableRMedia

- **Actions**
- **ConnectedVia**
- **Description**
- **Id**
- **Image**

- *ImageName*
- *Inserted*
- *Name*
- *WriteProtected*
- *Oem*
- *MediaType*
- *TransferProtocolType*
- *TransferMethod*
- *UserName*

POST

Request:

```
POST https://{ip}/redfish/v1/Managers/Self/VirtualMedia/CD1/Actions/VirtualMedia.InsertMedia
Content-Type: application/json
```

Example POST Request Body:

```
{
  "Image": "nfs://10.0.125.169/home/tamil/images/images/ubuntu-14.04.1-desktop-amd64.iso",
  "TransferProtocolType": "NFS"
}
```

Request:

```
POST https://{ip}/redfish/v1/Managers/Self/VirtualMedia/CD1/Actions/VirtualMedia.EjectMedia
Content-Type: application/json
```

Example POST Request Body:

```
{
```

Request:

```
POST https://{ip}/redfish/v1/Managers/Self/Actions/Oem/AMIVirtualMedia.ConfigureCDInstance
Content-Type: application/json
```

Example POST Request Body:

```
{
  "CDInstance": 4
}
```

Request:

```
POST https://{ip}/redfish/v1/Managers/Self/Actions/Oem/AMIVirtualMedia.EnableRMedia
Content-Type: application/json
```

Example POST Request Body:

```
{  
  "RMediaState": "Enable"  
}
```

16. InventoryData Status URI

[GET] /redfish/v1/Oem/Ami/InventoryData/Status

- **Id**
- **Name**
- **Description**
- **InventoryData**

17. InventoryData Status URI

[GET] /redfish/v1/Registries

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

17-1 Message Registries

[GET] /redfish/v1/Registries/{instance}

- **Description**
- **Id**
- **Languages**
- **Name**
- **Oem**
- **RegistryPrefix**
- **RegistryVersion**
- **OwningEntity**
- **Messages**

17-2 Message Registries File

[GET] /redfish/v1/Registries/{instance.json}

- **Description**
- **Id**
- **Languages**
- **Messages**
- **Name**
- **OwningEntity**
- **RegistryPrefix**
- **RegistryVersion**
- **Oem**

18. Session Service

[GET] /redfish/v1/SessionService

[PATCH] /redfish/v1/SessionService

- **Description**
- **Id**
- **Name**
- **ServiceEnabled**
- **SessionTimeout**
- **Sessions**
- **Status**
- **Oem**
- **Actions**

18-1 Session Collection

[GET] /redfish/v1/SessionService/Sessions

[POST] /redfish/v1/SessionService/Sessions

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

POST

Request:

```
POST https://{ip}/redfish/v1/SessionService/Sessions
Content-Type: application/json
```

Example POST Request Body:

```
{
  "UserName": "admin",
  "Password": "password"
}
```

18-1-1 Session

[GET] /redfish/v1/SessionService/Sessions/{instance}

[DELETE] /redfish/v1/SessionService/Sessions/{instance}

- **Id**
- **Name**
- **Description**
- **UserName**
- **Oem**
- **Password**
- **Actions**

19. System Collection

[GET] /redfish/v1/Systems

[POST] /redfish/v1/Systems

@Redfish.CollectionCapabilities

- **Capabilities**
- **Members**
- **Members@odata.count**
- **Name**
- **Description**
- **Oem**

POST

Request:

POST https://{{ip}}/redfish/v1/Systems
Content-Type: application/json

Example POST Request Body:

```
{
  "Name": "NewSystem",
  "Links": {
    "ResourceBlocks": [{
      "@odata.id": "/redfish/v1/CompositionService/ResourceBlocks/ComputeBlock"
    }]
  },
  "HostName": "gigabyte"
}
```

19-1 Capabilities

[GET] /redfish/v1/Systems/Capabilities

- **Id**
- **Name**
- **Description**
- **Links**
 - **ResourceBlocks**
- **Boot**
- **HostName**

19-2 System

[GET] /redfish/v1/Systems/{instance}

[PATCH] /redfish/v1/Systems/{instance}

[POST] /redfish/v1/Systems/{instance}/Actions/ComputerSystem.Reset

- **Id**
- **Name**
- **Description**
- **SystemType**
 - **Physical**
- **Links**
 - **Oem**
 - **Chassis**
 - **Chassis@odata.count**
 - **ManagedBy**
 - **ManagedBy@odata.count**
- **AssetTag**
- **Manufacturer**
- **Model**
- **SKU**
- **SerialNumber**
- **PartNumber**
- **UUID**
- **IndicatorLED**
- **PowerState**
- **Boot**
- **BiosVersion**
- **ProcessorSummary**
 - **Count**
 - **Model**
 - **Status**
- **MemorySummary**
 - **TotalSystemMemoryGiB- Status**
 - **MemoryMirroring**
 - **TotalSystemPersistentMemoryGiB**
- **Actions**
- **Processors**
- **EthernetInterfaces**
- **SimpleStorage**
- **LogServices**
- **Status**
- **SecureBoot**
- **Bios**
- **Memory**
- **Storage**
- **NetworkInterfaces**

- **Oem**
- **SubModel**
- **Hostname**
- **TrustedModules**
- **HostingRoles**
- **HostedServices**
- **PCleDevices**
- **PCleDevices@odata.count**
- **PCleFunctions**
- **PCleFunctions@odata.count**
- **PowerRestorePolicy**

POST

Request:

POST https://{ip}/redfish/v1/Systems/Self/Actions/ComputerSystem.Reset
 Content-Type: application/json

Request Body:

The ResetType can be one of the following values: "On", "ForceOff", "GracefulShutdown", "ForceRestart".

Example POST Request Body:

```
{
  "ResetType": "On"
}
```

19-2-1 BIOS

[GET] /redfish/v1/Systems/{instance}/Bios

[POST] /redfish/v1/Systems/{instance}/Bios/Actions/Bios.ResetBios

[POST] /redfish/v1/Systems/{instance}/Bios/Actions/Bios.ChangePassword

- **Oem**
- **Id**
- **Name**
- **Description**
- **AttributeRegistry**
- **Actions**
- **Attributes**

POST

Request:

```
POST https://{ip}/redfish/v1/Systems/Self/Bios/Actions/Bios.ResetBios
Content-Type: application/json
```

Example POST Request Body:

```
{
  "ResetType": "Reset"
}
```

Request:

```
POST https://{ip}/redfish/v1/Systems/Self/Bios/Actions/Bios.ChangePassword
Content-Type: application/json
```

Example POST Request Body:

```
{
  "PasswordName": "SETUP001",
  "OldPassword": "old",
  "NewPassword": "new"
}
```

19-2-1-1 BIOS SD

[POST] /redfish/v1/Systems/{instance}/Bios/SD

[PATCH] /redfish/v1/Systems/{instance}/Bios/SD

[PUT] /redfish/v1/Systems/{instance}/Bios/SD

- *Id*
- *Name*
- *Description*
- *AttributeRegistry*
- *Attributes*
- *Actions*

POST

Request:

```
POST https://{ip}/redfish/v1/Systems/Self/Bios/SD
Content-Type: application/json
```

Example POST Request Body:

```
{
  "Attributes": {
    "PCIS003": "Disabled"
  }
}
```

19-2-2 BootOption Collection

[GET] /redfish/v1/Systems/{instance}/Bootoptions

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

19-2-2-1 BootOption Collection

[GET] /redfish/v1/Systems/{instance}/Bootoptions/{instance}

- **Id**
- **Name**
- **Description**
- **BootOptionEnabled**
- **BootOptionReference**
- **DisplayName**
- **UefiDevicePath**
- **Alias**
- **Oem**
- **RelatedItem**
- **RelatedItem@odata.count**

19-2-3 EthernetInterfaces Collection

[GET] /redfish/v1/Systems/{instance}/EthernetInterfaces

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

19-2-3-1 EthernetInterfaces

[GET] /redfish/v1/Systems/{instance}/EthernetInterfaces/{instance}

- **Id**
- **Status**
- **MACAddress**
- **LinkStatus**
- **Links**
- **Name**

- *Oem*
- *UefiDevicePath*
- *InterfaceEnabled*
- *PermanentMACAddress*
- *Ipv4Addresses*
- *Ipv6Addresses*
- *Ipv6DefaultGateway*
- *VLANs*
- *Actions*
- *DHCPv4*
- *DHCPv6*

19-2-3-1-1 VLAN Network Interface Collection

[GET] /redfish/v1/Systems/{instance}/EthernetInterfaces/{instance}/VLANs

[POST] /redfish/v1/Systems/{instance}/EthernetInterfaces/{instance}/VLANs

- *Members*
- *Members@odata.count*
- *Name*
- *Description*
- *Oem*

POST

Request:

```
https://{ip}/redfish/v1/Systems/{system_instance}/EthernetInterfaces/{system_ethifc_instance}/VLANs
Content-Type: application/json
```

Example POST Request Body:

```
{
  "VLANId": 100,
  "VLANEnable": true,
  "VLANPriority": 2
}
```

19-2-3-1-1-1 VLANNetworkInterface

[GET] /redfish/v1/Systems/{instance}/EthernetInterfaces/{instance}/VLANs/{instance}

[PATCH] /redfish/v1/Systems/{instance}/EthernetInterfaces/{instance}/VLANs/{instance}

[DELETE] /redfish/v1/Systems/{instance}/EthernetInterfaces/{instance}/VLANs/{instance}

- **Id**
- **Name**
- **Description**
- **VLANEnable**
- **VLANId**
- **Oem**
- **Actions**

19-2-4 LogServices Collection

[GET] /redfish/v1/Systems/{instance}/LogServices

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

19-2-4-1 LogServices

[GET] /redfish/v1/Systems/{instance}/LogServices/{instance}

[PATCH] /redfish/v1/Systems/{instance}/LogServices/{instance}

[POST] /redfish/v1/Systems/{instance}/LogServices/{instance}/Actions/LogService.ClearLog

- **Oem**
- **Id**
- **Name**
- **Description**
- **ServiceEnabled**
- **MaxNumberOfRecords**
- **OverWritePolicy**
 - **WrapsWhenFull**
- **DateTime**
- **DateTimeLocalOffset**
- **Actions**
- **Status**
- **Entries**
- **LogEntry Type**

POST

Request:

POST https://{ip}/redfish/v1/Systems/Self/LogServices/BIOS/Actions/LogService.ClearLog
Content-Type: application/json

Example POST Request Body:

```
{
}
```

19-2-4-1-1 Log Entry Collection

[GET] /redfish/v1/Systems/{instance}/LogServices/{instance}/Entries

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

19-2-4-1-1-1 Log Entry

[GET] /redfish/v1/Systems/{instance}/LogServices/{instance}/Entries/{instance}

- **Id**
- **Name**
- **Description**
- **Severity**
- **Created**
- **EventId**
- **EventTimestamp**
- **EntryType**
- **EntryCode**
- **SensorType**
- **SensorNumber**
- **Message**
- **MessageId**
- **MessageArgs**
- **Oem**
- **Links**
 - **OriginOfCondition**
- **OemLogEntryCode**
- **OemSensorType**

19-2-5 Memory Collection

[GET] /redfish/v1/Systems/{instance}/Memory

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

19-2-5-1 Memory

[GET] /redfish/v1/Systems/{instance}/Memory/{instance}

- **Id**
- **Name**
- **Description**
- **MemoryType**
- **MemoryDeviceType**
- **CapacityMiB**

- *DataWidthBits*
- *BusWidthBits*
- *Manufacturer*
- *SerialNumber*
- *PartNumber*
- *AllowedSpeedsMHz*
- *DeviceLocator*
- *ErrorCorrection*
- *OperatingSpeedMhz*
- *Links*
 - *Chassis*
- *Status*
- *Oem*
- *BaseModuleType*
- *MemoryMedia*
- *Assembly*
- *FirmwareRevision*
- *FirmwareApiVersion*
- *FunctionClasses*
- *MaxTDPMilliWatts*
- *SecurityCapabilities*
- *SpareDeviceCount*
- *ConfigurationLocked*
- *RankCount*
- *MemoryLocation*
- *VolatileRegionSizeLimitMiB*
- *PersistentRegionSizeLimitMiB*
- *Regions*
- *OperatingMemoryModes*
- *PowerManagementPolicy*
- *IsSpareDeviceEnabled*
- *IsRankSpareEnabled*
- *VolatileRegionNumberLimit*
- *PersistentRegionNumberLimit*
- *VolatileRegionSizeMaxMiB*
- *PersistentRegionSizeMaxMiB*
- *AllocationIncrementMiB*
- *AllocationAlignmentMiB*
- *ModuleManufacturerID*
- *ModuleProductID*
- *MemorySubsystemControllerManufacturerID*
- *MemorySubsystemControllerProductID*
- *VolatileSizeMiB*
- *NonVolatileSizeMiB*
- *CacheSizeMiB*
- *LogicalSizeMiB*

- **Location**
- **Metrics**

19-2-6 MemoryDomains Collection

[GET] /redfish/v1/Systems/{instance}/MemoryDomains

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

19-2-7 NetworkInterface Collection

[GET] /redfish/v1/Systems/{instance}/NetworkInterfaces

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

19-2-7-1 NetworkInterface

[GET] /redfish/v1/Systems/{instance}/NetworkInterfaces/{instance}

- **Id**
- **Name**
- **Description**
- **Status**
- **Links**
- **NetworkDeviceFunctions**
- **Actions**

19-2-8 Processor Collection

[GET] /redfish/v1/Systems/{instance}/Processors

- **Members**
- **Members@odata.count**
- **Name**
- **Description**
- **Oem**

19-2-8-1 Processor

[GET] /redfish/v1/Systems/{instance}/Processors/{instance}

- **Id**
- **Name**
- **Description**
- **Socket**
- **Status**
- **State**

- Health
- ProcessorType
- ProcessorArchitecture
- InstructionSet
- ProcessorId
 - IdentificationRegisters
 - EffectiveFamily
 - EffectiveModel
- Step
- Manufacturer
- Model
- MaxSpeedMHz
- TotalCores
- TotalThreads
- Links
 - Chassis
- Oem
- Actions
- SubProcessors
- Location
- Assembly
- MaxTDPWatts
- Metrics
- TDPWatts
- TotalEnabledCores
- UUID
- FPGA
- ProcessorMemory
 - CapacityMiB
 - IntegratedMemory
 - MemoryType
 - SpeedMHz

19-2-9 SimpleStorage Collection

[GET] /redfish/v1/Systems/{instance}/SimpleStorage

- Members
- Members@odata.count
- Name
- Description
- Oem

19-2-9-1 SimpleStorage

[GET] /redfish/v1/Systems/{instance}/SimpleStorage/{instance}

- **Id**
- **Name**
- **Description**
- **Links**
- **Oem**
- **UefiDevicePath**
- **Status**
- **Actions**

19-2-10 Storage Collection

[Get] /redfish/v1/Systems/{instance}/Storage

- **Members**
- **Members@odata.count**
- **Name**
- **Description**
- **Oem**

19-2-10-1 Storage

[GET] /redfish/v1/Systems/{instance}/Storage/{instance}

- **Id**
- **Name**
- **Description**
- **Oem**
- **Status**
- **Links**
- **StorageControllers@odata.count**
- **StorageControllers**
- **Drives@odata.count**
- **Drives**
- **Volumes**
- **Redundancy@odata.count**
- **Redundancy**

20. TaskService

[GET] /redfish/v1/TaskService

- **CompletedTaskOverWritePolicy**
- **DateTime**
- **Description**
- **Id**
- **LifeCycleEventOnTaskStateChange**
- **Name**
- **ServiceEnabled**
- **Status**
- **Tasks**
- **Oem**
- **Actions**

20-1 Task Collection

[GET] /redfish/v1/TaskService/Tasks

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

20-1-1 Task

[GET] /redfish/v1/TaskService/Tasks/{instance}

[DELETE] /redfish/v1/TaskService/Tasks/{instance}

- **Oem**
- **Id**
- **Name**
- **Description**
- **TaskState**
- **StartTime**
- **EndTime**
- **TaskStatus**
- **Messages**
- **Actions**
- **HidePayload**
- **PercentComplete**
- **Payload**

21. TelemetryService

[Get] /redfish/v1/TelemetryService

[POST] /redfish/v1/TelemetryService/Actions/TelemetryService.SubmitTestMetricReport

[PATCH] /redfish/v1/TelemetryService

- **Oem**
- **Id**
- **MetricDefinitions**
- **MetricReportDefinitions**
- **MetricReports**
- **Triggers**
- **Status**
- **Name**
- **MaxReports**
- **MinCollectionInterval**
- **SupportedCollectionFunctions**
- **Actions**
- **LogService**
- **Description**
- **ServiceEnabled**
- **SupportedCollectionFunctions@Redfish.AllowableValues**

POST

Request:

POST https://{ip}/redfish/v1/TelemetryService/Actions/TelemetryService.SubmitTestMetricReport
Content-Type: application/json

Example POST Request Body:

```
{
  "MetricReportName": "Average2",
  "GeneratedMetricReportValues": [
    {
      "MetricId": "Temp_average_reading_Average",
      "MetricProperty": "/redfish/v1/Chassis/Self/Thermal#/Temperatures/0/ReadingCelsius",
      "MetricValue": "23",
      "Timestamp": "2019-07-01T06:05:52Z"
    }
  ]
}
```

21-1 MetricReportLog Collection

[Get] /redfish/v1/TelemetryService/LogServices

[POST] /redfish/v1/TelemetryService/LogService/Actions/LogService.ClearLog

- **Description**
- **Members**

- *Members@odata.count*
- *Name*
- *Oem*

POST

Request:

```
POST https://{ip}/redfish/v1/TelemetryService/LogService/Actions/LogService.ClearLog
Content-Type: application/json
```

Example POST Request Body:

```
{
}
```

21-1-1 MetricReportLog

[Get] /redfish/v1/TelemetryService/LogServices

[Post] redfish/v1/TelemetryService/LogServices/Actions/LogService.ClearLog

- *Id*
- *Name*
- *Description*
- *ServiceEnabled*
- *MaxNumberOfRecords*
- *OverWritePolicy*
- *Actions*
- *Status*
- *Entries*
- *DateTime*
- *DateTimeLocalOffset*
- *Oem*
- *LogEntryType*

POST

Request:

```
POST https://{ip}/TelemetryService/LogServices/Actions/LogService.ClearLog
Content-Type: application/json
```

Example POST Request Body:

```
{
}
```

21-1-1-1-1 Entries Collection

[Get] /redfish/v1/TelemetryService/LogServices/Entries

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

21-1-1-1-1-1 Entries

[Get] /redfish/v1/TelemetryService/LogServices/Entries/{instance}

- **Id**
- **Name**
- **Description**
- **Severity**
- **Created**
- **EntryType**
- **EntryCode**
- **Message**
- **MessageId**
- **MessageArgs**
- **Links**
 - **OriginOfCondition**
- **Oem**
- **EventId**
- **EventTimestamp**
- **SensorType**
- **SensorNumber**
- **OemLogEntryCode**
- **OemSensorType**

21-2 MetricDefinitions Collection

[Get] /redfish/v1/TelemetryService/MetricDefinitions

- **Members**
- **Members@odata.count**
- **Name**

21-2-1 MetricDefinitions

[Get] /redfish/v1/TelemetryService/MetricDefinitions/{instance}

- **Id**
- **Name**
- **MetricType**
- **MetricDataType**
- **Implementation**
- **Units**
- **IsLinear**

- **MetricProperties**
- **Precision**
- **Accuracy**

21-3 MetricReportDefinition Collection

[Get] /redfish/v1/TelemetryService/MetricReportDefinitions

[POST] /redfish/v1/TelemetryService/MetricReportDefinitions

- **Members**
- **Members@odata.count**
- **Name**

POST

Request:

POST https://{ip}/redfish/v1/TelemetryService/MetricReportDefinitions
Content-Type: application/json

Example POST Request Body:

```
{
  "Id": "Voltage_Report",
  "Name": "Voltage_Report",
  "Schedule": {
    "RecurrenceInterval": "PT20S"
  },
  "MetricReportDefinitionType": "Periodic",
  "MetricReport": {
    "@odata.id": "/redfish/v1/TelemetryService/MetricReports/Voltage_Report",
    "MetricProperties": ["/redfish/v1/Chassis/Self/Power#/Voltages/0/ReadingVolts"]
  }
}
```

21-3-1 MetricReportDefinitions

[Get] /redfish/v1/TelemetryService/MetricReportDefinitions/{instance}

[Delete] /redfish/v1/TelemetryService/MetricReportDefinitions/{instance} [PATCH] /redfish/v1/TelemetryService/MetricReportDefinitions/{instance}

- **Id**
- **Name**
- **Schedule**
- **MetricReportDefinitionType**
- **Status**
- **MetricReport**
- **Metrics/MetricProperties**
- **MetricReportDefinitionEnable**
- **ReportTimespan**
- **ReportActions**

- **ReportUpdates**
- **Metrics**
 - **MetricProperties**

21-4 MetricReports Collection

[Get] /redfish/v1/TelemetryService/MetricReports

- **Members**
- **Members@odata.count**
- **Name**

21-4-1 MetricReports

[Get] /redfish/v1/TelemetryService/MetricReports/{instance}

- **Id**
- **Name**
- **MetricReportDefinition**
- **Timestamp**
- **ReportSequence**
- **MetricValues**

21-5 Triggers Collection

[Get] /redfish/v1/TelemetryService/Triggers

[Post] /redfish/v1/TelemetryService/Triggers

- **Members**
- **Members@odata.count**
- **Name**

POST

Request:

POST https://{ip}/redfish/v1/TelemetryService/Triggers
Content-Type: application/json

The following properties are mandatory to create a trigger:

- **Id**
- **Name**
- **MetricType**
- **TriggerActions**
- **NumericTriggers** or (**DiscreteTriggerCondition** & **DiscreteTriggers**)
- **MetricProperties**

Note:

- Status->State and Status-Health are read-only attributes and cannot be passed in the POST Request Body.
- Only a maximum of 25 triggers can be created.

Example POST Request to create Numeric Triggers Body:

```
{
  "Id": "Temperature_Trigger",
  "Name": "Temperature_Trigger",
  "MetricType": "Numeric",
  "TriggerActions": [ "LogToLogService" ],
  "NumericTriggers": [ {
    "Name": "UpperThresholdCritical",
    "Value": 50.0,
    "DirectionOfCrossing": "Increasing"
  }, {
    "Name": "UpperThresholdNonCritical",
    "Value": 48.1, "DirectionOfCrossing": "Increasing"
  } ],
  "MetricProperties": [ "/redfish/v1/Chassis/Self/Thermal#/Temperatures/0/ReadingCelsius" ]
}
```

Example POST Request to create Discrete Triggers Body:

```
{
  "Id": "Chassis_LED",
  "Name": "Chassis_LED",
  "MetricType": "Discrete",
  "TriggerActions": [ "LogToLogService", "RedfishEvent" ],
  "DiscreteTriggerCondition": "Specified",
  "DiscreteTriggers": [ {
    "Name": "LED_On",
    "Value": "On", "Severity":
    "Warning"
  } ],
  "MetricProperties": [ "/redfish/v1/Chassis/Self#/IndicatorLED" ]
}
```

21-5-1 Triggers

[Get] /redfish/v1/TelemetryService/Triggers/{instance}

[Delete] /redfish/v1/TelemetryService/Triggers/{instance}

- **Id**

- **Name**

- **MetricType**

- **DiscreteTriggerCondition**

- **Status**

- **DiscreteTriggers**

- **Description**

22. UpdateService

[GET] /redfish/v1/UpdateService

[PATCH] /redfish/v1/UpdateService

[POST] /redfish/v1/UpdateService/Actions/SimpleUpdate

- **Actions**
- **Description**
- **Id**
- **Name**
- **Oem**
- **ServiceEnabled**
- **Status**
- **MaxImageSizeBytes**
- **MultipartHttpPushUri**
- **FirmwareInventory**

POST

Request:

```
POST https://{ip}/redfish/v1/UpdateService/Actions/SimpleUpdate
Content-Type: application/json
```

Example POST Request Body:

Anonymous:

```
{"TransferProtocol": "FTP", "ImageURI": "ftp://{FTP_server_IP}/{image_name}.ima"}
```

```
{"TransferProtocol": "HTTP", "ImageURI": "http://{HTTP_server_IP}/{image_name}.ima"}
```

user account:

```
{"TransferProtocol": "FTP", "ImageURI": "ftp://{FTP_server_IP}/{image_name}.ima", "User": "User", "Password": "Password"}
```

22-1 SimpleUpdateActionInfo

[GET] /redfish/v1/UpdateService/SimpleUpdateActionInfo

- **Id**
- **Name**
- **Parameters**

22-2 FirmwareInventory Collection

[GET] /redfish/v1/UpdateService/FirmwareInventory

- **Description**
- **Members**
- **Members@odata.count**
- **Name**
- **Oem**

22-2-1 FirmwareInventory

[GET] /redfish/v1/UpdateService/FirmwareInventory /{instance}

- **Id**
- **Name**
- **Updateable**
- **Oem**
- **Description**