


Dell EMC SmartFabric Storage Software

RESTful API Guide

Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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About this document

This document contains information about the resource models for Dell EMC SmartFabric Storage Software (SFSS).

Table 1. Supported REST API version


Product	REST API version
SmartFabric Storage Software	1.0

Term replacements

Dell EMC has changed this term in the documentation.

Table 2. Term replacement

Old term	New term
Master node	Primary node

 **NOTE:** This API guide may contain language in the output examples that is not consistent with current guidelines. Dell plans to update this API guide over subsequent future releases to revise the language accordingly.

Overview


Dell EMC SmartFabric Storage Software (SFSS) supports RESTful APIs. Support for APIs enhances system management capabilities. The RESTful interface is provided over HTTPS in JSON based on ODATA usable by clients, scripts, and browser-based GUIs. The APIs allow you to build console management tools that are based on common programming and scripting languages such as Python, Java, C, etc.

Storage Fabric Services

The Dell EMC PowerSwitch OS10 software allows you to access the SFSS user interface (GUI). After you have logged into OS10, you can connect to SFSS where you can enable or disable SFSS and access the many SFSS features. For specific switches, you access the SFSS GUI through OS10 using the latest version of many common browsers, such as:

- Microsoft Edge
- Mozilla Firefox
- Google Chrome

The SFSS GUI connects in HTTPS mode using the OS10 system IP address.

 **NOTE:** For more information about Storage Fabric Services, including a list of supported switches, see the *Storage Fabric Services* section of the *Dell EMC SmartFabric OS10 User Guide*.

RESTful application programming interface

Representational State Transfer or REST is a software architectural style that is used within the World Wide Web (WWW). REST architectures are used for IT solutions, including the definition of web-based APIs. Systems that adhere to REST practices are known as RESTful interfaces. RESTful interfaces use the HTTP methods—GET, POST, DELETE, and so on—that web browsers use to access web pages.

OData

OData is an open protocol standard for the definition and exchange of information using RESTful APIs. When implementing a common interface across multiple vendors, it is best to standardize the data formats. Standardizing the data formats ensure that the data structures remain interchangeable between different manufacturers.

JSON data

Console API represents data using JSON. JSON is a lightweight data-interchange format that is readable and parsed by machines. JSON is based on a subset of the JavaScript Programming Language. JSON uses a text format that is language independent but uses conventions familiar to programmers of the C-family of languages such as C, C++, C#, Java, JavaScript, PERL, and Python. These properties make JSON an ideal data-interchange language.

HTTPS communication

The Hypertext Transfer Protocol (HTTP) is an application protocol for distributed, collaborative, hypermedia information systems. HTTP forms the foundation of data communication for the World Wide Web. Secure HTTP (HTTPS) is a secure version of HTTP where it operates within a network connection encrypted by TLS or SSL. With HTTPS, the security of console management is enhanced.

Topics:

- [REST API tree structure](#)
- [Security and authentication](#)
- [Resource information](#)
- [Data information](#)
- [Request headers](#)
- [Response codes and headers](#)

REST API tree structure

REST API tree structure

Resource model

`https://[IP or DNS name]/api/$metadata`

Redfish scheme

`HTTPS://[IP or DNS name]/redfish/v1`

Security and authentication

Security

For security, only HTTPS is supported. You can also update the SSL self-signed certificate with a custom certificate. For example, you can upload a PKCS-12 certificate or sign an application-generated Certificate Signing Request (CSR).

Authentication

Several common schemes are available for enabling authentication of REST requests. Basic Authentication and X-Auth-Token Authentication are some of the common schemes.

Basic authentication

The authorization header in the request has the base-64 encoding of the credentials—username and password. If you do not provide the credentials, a 401—Authorization Failure error is returned. Basic Authentication is supported only when SSL/TLS is used for the transport.

Authorization

Table 3. Authentication and authorization requirements

Actions	Authentication required	Authorization required
Read operation on any instrumentation data	Y	Y
Modify instrumentation data	Y	Y
Invoke actions	Y	Y
View service root	N	N
View metadata document	N	N

Table 3. Authentication and authorization requirements (continued)

Actions	Authentication required	Authorization required
View OData service document	N	N
View message registry	Y	N
View Redfish version URI	N	N
View JSONSchemaFile resource URI	N/A	N/A
View JSON schemas URI	N/A	N/A

Resource information

Each managed resource must be uniquely addressable using a distinct URI. The URI syntax must be intuitive and indicate the relationships with a parent resource.

Resource addressing

There are several ways to address specific resources either as instances of specific resource classes or within an associated parent context. Following is the format of a resource URI:

```
https://<IP address>/redfish/v1/sfss/<Instance #>/<API>
```

Where:

- <IP address> is the location of the API; for example, 10.10.10.10.
- <API> is the name of the API; for example, IpAclRules.

Following is an example of a resource URI, where 1234 is the unique identifier for the API:

```
https://<IP address>/redfish/v1/sfss/<Instance #>/<API(1234)>
```

Resource operations

Use standard HTTP methods to create, retrieve, update, and delete resources. The mapping of the HTTP methods to operational semantics is described in the following table:

Table 4. HTTPS methods

HTTPS method	Description	Example
GET	This method is used for retrieving the resource representation. This method does not modify the resource across repeated invocations. The query parameters are appended to the URI to appropriately filter the resource instances.	Only the eq operation is supported.
POST	This method is used for creating resources or performing actions.	Create a user session. Payload is not displayed. For example: POST <IP address>/redfish/v1/sfss/<Instance #>/<API>
PUT	This method is used for updating a specific instance or create a specific resource instance with a specific identifier.	Update the user account details. Payload is not displayed. For example: PUT <IP address>/redfish/v1/sfss/<Instance #>/<API>

Table 4. HTTPS methods (continued)

HTTPS method	Description	Example
DELETE	This method is used for removing a specific resource. If the resource does not exist, a Success response is returned.	Delete a specific user account. For example:DELETE <IP address>/redfish/v1/sfss/ <Instance #>/</API>

When you perform tasks using these methods, they return an HTTP response code.

To perform update and delete operations, you must be authorized to perform the operations on the resource. If you do not have the required permission, an Unauthorized error is returned.

Data information

Data filtering

The console software provides filtering options on certain URIs that return a collection of entities. Using this feature, the clients can extract a selected set of records using comparison operators on attributes of the model entity behind the collection. The relevant URI sections contain the information about the attributes and the operators that support filtering.

```
https://<IP address>/redfish/v1/sfss/<Instance #>/<API>
```

Where:

- <IP address> is the location of the API; for example, 10.10.10.10 or xx.xx.xx.xx.
- <API> is the name of the API; for example, DNS.

Data pagination

The console software provides pagination options on certain URIs that return a collection of entities. The pagination options enable the clients to get paginated results. If a URI supports pagination, the relevant URI sections indicate it.

Request headers

The request header represents headers in the client HTTPS request that communicate client-preferences to the service end point. The service provides the supported preference in the response header.

Table 5. Examples of request headers

Request header	Description	Example
Accept-Language	Choice of language that the client can request—Optional.	Accept-Language: en

Response codes and headers

For synchronous operations, the server returns HTTP response codes 200 or 204. For operations that take a long time, the server returns a status code of 202 along with an HTTP response header (Location). This response corresponds to the URI of the temporary resource that can be used to monitor the operation.

Table 6. HTTPS response codes

Request	Response code
Success codes	

Table 6. HTTPS response codes (continued)

Request	Response code
GET	<ul style="list-style-type: none"> • 200—OK with message body • 204—OK with no message body • 206—OK with partial message body
POST	<ul style="list-style-type: none"> • 201—Resource created; operation complete • 202—Resource accepted; operation pending
PUT	<ul style="list-style-type: none"> • 202—Accepted; operation pending • 204—Success; operation complete
DELETE	<ul style="list-style-type: none"> • 202—Accepted; operation pending • 204—Success; operation complete
Failure codes	
Invalid parameter	400—Invalid parameter
Authorization	401—Authorization failure
Permission denied	403—Permission denied
Not found	404—Resource not found
Invalid request method	405—Invalid request method
Internal server error	500—Internal server error
Service unavailable	503—Service unavailable

Response headers

The following table lists a few examples of response headers:

Table 7. Examples of response headers

Response headers	Description	Example
Connection	Control options for the current connection and list of hop-by-hop request fields.	Connection: Keep-Alive
Content-Type	Specifies the format of the content that the server returns. If there are multiple formats that can be accepted in the client request (using the Accept header), the server chooses the appropriate supported format.	Content-Type: application/json; odata.metadata=minimal
Keep-alive	<ul style="list-style-type: none"> • <i>Timeout</i> header parameter indicates the time that a connection is allowed to remain idle before it is closed. • <i>Max</i> header parameter indicates the maximum number of requests that are permitted before the connection is closed. 	Timeout=5; max=150
Content-length	The length of the request body in 8-bit bytes or octets.	Content-Length: 348
Date	The date and time that the message originated, in HTTP-date format as defined by RFC 7231 Date/Time Formats.	date: Thu, 02 Apr 2009 11:11:28 GMT
Odata-version	The version of Odata that is used.	Odata: 4.0

Table 7. Examples of response headers (continued)

Response headers	Description	Example
Location	Used in redirection or when a new resource is created.	Location: <BASE_URI>/SessionService/Sessions('3204bb9d-409d-4bd9-8a5f-d44005c81a2c')
Server	A name for the server.	Server: Apache
x-frame-options	Clickjacking protection: <ul style="list-style-type: none">• deny—no rendering within a frame• sameorigin—no rendering if origin mismatch• allow-from—allow from specified location• allowall—non-standard, allow from any location	DENY

APP REST APIs

APP REST APIs

The following are APP REST APIs.

Topics:

- [APP for Alerts](#)
- [APP for Backups](#)
- [APP for CDCHealthStatus](#)
- [APP for CDCInstanceManagers](#)
- [APP for Events](#)
- [APP for FabricManagerInfo](#)
- [APP for FoundationalConfigs](#)
- [APP for GlobalSettings](#)
- [APP for IPAddressManagement](#)
- [APP for License](#)
- [APP for Partner License](#)
- [APP for Restores](#)
- [APP for Security](#)
- [APP for SFSS APP](#)
- [APP for SFSSHealthStatus](#)
- [APP for SFSSImages](#)
- [APP for SFSS Interface List](#)
- [APP for SOS Reports](#)
- [APP for UserActivityAudit](#)

APP for Alerts

APP for Alerts

POST APP for Alerts

Description	Creates or updates APP Alerts.
Privilege	SysAdmin
Method	POST method for SFSS APP Alerts.
URL	<code>https://<IP address>/redfish/v1/SFSSApp/Alerts</code>
Example	

```
{
  "Protocol": "redfish",
  "Context": "SomeSubscription",
  "EventTypes": [
    "Alert"
  ],
  "CdcInstances": [
    "APP"
  ],
  "HttpHeaders": [
    "Authorization: Basic ZG52dXNlcjpwAITHwSU1vSQ=="
  ]
}
```

```

        "ExternalServerRequiredHeader: ItsValue"
    ],
    "Destination": "https://[ipv4/ipv6]/external/Server/eventHandler"
}

```

HTTP response

```

{"Identifier":"uuid1"}

HttpStatusCode: 201

```

PUT APP for Alerts

Description Changes the alerts APP.

Privilege SysAdmin

Method PUT method for alerts. The ('uuid1') in the URL and example is the alert identifier.

URL https://<IP address>/redfish/v1/SFSSApp/Alerts('identifier')

Example

```

{
  "Protocol": "redfish",
  "Identifier": "uuid",
  "Context": "NewSubscription",
  "EventTypes": [
    "Alert"
  ],
  "CdcInstances": [
    "APP"
  ],
  "HttpHeaders": [
    "Authorization: Basic ZG52dXNlcjpaIThwsU1vSQ==",
    "ExternalServerRequiredHeader: ItsValue"
  ],
  "Destination": "https://[ipv4/ipv6]/external/Server/NeweventHandler"
}

```

HTTP response

```

{"Identifier":"uuid1"}

HttpStatusCode: 201

```

DELETE APP for Alerts

Description Deletes Alerts.

Privilege SysAdmin

Method DELETE method for APP SFSS alerts. The ('uuid1') in the URL and example is the alert identifier.

URL

- https://<IP address>/redfish/v1/SFSSApp/Alerts(uuid1)

HTTP response

```

{"Identifier":"uuid1"}

HttpStatusCode: 201

```

GET APP for Alerts

Description	Retrieves Alerts APP information.
Privilege	SysAdmin
Method	GET method for the SFSS APP Alerts. The ('uuid') in the URL and example is the alert identifier.
URLs	<ul style="list-style-type: none">https://<IP address>/redfish/v1/SFSSApp/Alertshttps://<IP address>/redfish/v1/SFSSApp/Alerts('uuid')
Examples	


```
{
  "Alerts": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/Alerts('uuid')"
    }
  ],
  "Alerts@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/Alerts",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Alertss",
  "@odata.type": "#AlertsCollection.AlertsCollection"
}
```

Example including the identifier.

```
{
  "Identifier": "uuid",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Alerts/Alerts/$entity",
  "@odata.id": "/redfish/v1/SFSSApp/Alerts('uuid')",
  "Protocol": "redfish",
  "Context": "SomeSubscription",
  "EventTypes": [
    "Alert"
  ],
  "@odata.type": "#Alerts.Alerts",
  "HttpHeaders": [
    "Authorization: Basic ZG52dXNlcjpwAITHwSU1vSQ==",
    "ExternalServerRequiredHeader: ItsValue"
  ],
  "Destination": "https://[ipv4/ipv6]/external/Server/eventHandler"
}
```

APP for Backups

APP for Backups

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

POST APP for Backup

Description	Creates or updates the Backup APP.
Privilege	SysAdmin
Method	POST method for Backup.
URL	https://<IP address>/redfish/v1/SFSSApp/Backups

Example

```
{
    "ImageServerLocation": "xxx.xx.xx.xxx:/home/dell/
temp_images/",
    "ImageServerPassword": "force10",
    "TransportType": "SCP",
    "ImageServerUserName": "dell"
}
```

HTTP response

```
HTTP Response Code 201

{
  "ID": "d25d9f7e-8ae0-490a-94fe-071e8asdef"
}
```

GET APP for Backups

Description

Retrieves backup APP information.

Privilege

SysAdmin

Method

GET method for backup information.

URLs

- <https://<IP address>/redfish/v1/SFSSApp/Backups>
- [https://<IP address>/redfish/v1/SFSSApp/Backups?\\$expand=Backups](https://<IP address>/redfish/v1/SFSSApp/Backups?$expand=Backups)
- [https://<IP address>/redfish/v1/SFSSApp/Backups\('d25d9f7e-8ae0-490a-94fe-071e8asdef'\)](https://<IP address>/redfish/v1/SFSSApp/Backups('d25d9f7e-8ae0-490a-94fe-071e8asdef'))

Examples

```
{
  "Backups": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/
Backups('d25d9f7e-8ae0-490a-94fe-071e8asdef') "
    }
  ],
  "Backups@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/Backups",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Backups",
  "@odata.type": "#BackupsCollection.BackupsCollection"
}
```

Expand example

```
{
  "Backups": [
    {
      "ID": "d25d9f7e-8ae0-490a-94fe-071e8asdef",
      "ImageServerLocation": "xxx.xx.xx.xxx:/home/dell/
temp_images/",
      "StatusMessage": "Successfully backed up",
      "ImageServerPassword": "force10",
      "Status": "Success",
      "TimeStamp": "1626734910.8032453",
      "TransportType": "SCP",
      "ImageServerUserName": "dell",
      "@odata.id": "/redfish/v1/SFSSApp/
Backups('d25d9f7e-8ae0-490a-94fe-071e8asdef')",
      "@odata.type": "#Backups.Backups",
      "@odata.context": "/redfish/v1/SFSSApp/$metadata#Backups/
Backups/$entity"
    }
  ],
  "Backups@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/Backups?$expand=Backups",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Backups",
}
```

```

    "@odata.type": "#BackupsCollection.BackupsCollection"
  }

```

ID example


```

{
  "ID": "d25d9f7e-8ae0-490a-94fe-071e8asdef",
  "ImageServerLocation": "xxx.xx.xx.xxx:/home/dell/
temp_images/",
  "StatusMessage": "Successfully backed up",
  "ImageServerPassword": "force10",
  "Status": "Success",
  "TimeStamp": "1626734910.8032453",
  "TransportType": "SCP",
  "ImageServerUserName": "dell",
  "@odata.id": "/redfish/v1/SFSSApp/
Backups('d25d9f7e-8ae0-490a-94fe-071e8asdef')",
  "@odata.type": "#Backups.Backups",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Backups/
Backups/$entity"
}

```

APP for CDCHealthStatus

APP for CDCHealthStatus

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

GET APP for CDCHealthStatus

Description	Retrieves CDC health status APP information.
Privilege	SysAdmin
Method	GET method for CDC health status information.
URLs	<ul style="list-style-type: none"> https://<IP address>/redfish/v1/SFSSApp/CDCHealthStatus https://<IP address>/redfish/v1/SFSSApp/CDCHealthStatus('InstanceIdentifier')
Examples	<pre> { "CDCHealthStatus": [{ "@odata.id": "/redfish/v1/SFSSApp/CDCHealthStatus('global')" }, { "@odata.id": "/redfish/v1/SFSSApp/CDCHealthStatus('1')" }], "CDCHealthStatus@odata.count": 2, "@odata.id": "/redfish/v1/SFSSApp/CDCHealthStatus", "@odata.context": "/redfish/v1/SFSSApp/\$metadata#CDCHealthStatus", "@odata.type": "#CDCHealthStatusCollection.CDCHealthStatusCollection" } </pre>

InstanceIdentifier example

```

{
  "Health": "Yellow",
  "ReasonCode": [
    "offline"
  ],
  "InstanceIdentifier": "1",
  "@odata.id": "/redfish/v1/SFSSApp/CDCHealthStatus('1')",
  "@odata.type": "#CDCHealthStatus.CDCHealthStatus",
}

```

```
"@odata.context": "/redfish/v1/SFSSApp/$metadata#CDCHealthStatus/
CDCHealthStatus/$entity"
}
```

APP for CDCInstanceManagers

APP for CDCInstanceManagers

POST APP for CDCInstanceManagers

Description	Creates or updates APP CDC Instance managers.
Privilege	SysAdmin
Method	POST method for SFSS APP CDC Instance managers.
URL	<a href="https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers">https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers <a href="https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers">https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers (for embedded)

Example

```
{
  "InstanceIdentifier": "1",
  "Interfaces": ["ens192"],
  "CDCAdminState": "Enable",
  "DiscoverySvcAdminState": "Enable"
}
```

Example (for embedded)

```
{
  "InstanceIdentifier": "1",
  "ServiceNetworks": ["vn704", "vn804"],
  "CDCAdminState": "Enable",
  "DiscoverySvcAdminState": "Enable"
}
```

HTTP response

```
{
  "InstanceIdentifier": "1"
}

HttpStatusCode: 201
```

Example (for embedded)

```
{
  "InstanceIdentifier": "1"
}

HttpStatusCode: 201
```

PUT APP for CDCInstanceManagers

Description	Changes the APP CDC Instance managers.
Privilege	SysAdmin
Method	PUT method for SFSS APP CDC Instance managers. The ("1") in the URL and example is the CDC Instance identifier.
URL	<a 1")"="" href="https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers(">https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers("1")

Example

```
{
  "InstanceIdentifier": "1",
  "Interfaces": ["ens192"],
  "CDCAdminState": "Enable",
  "DiscoverySvcAdminState": "Disable"
}
```

HTTP response

```
{
  "InstanceIdentifier": "1"
}

HttpStatusCode: 201
```

DELETE APP for CDCInstanceManagers

Description

Deletes CDC Instance managers.

Privilege

SysAdmin

Method

DELETE method for APP SFSS CDC instance managers. The ('1') in the URL and example is the alert identifier.

URL

- [https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers\('1'\)](https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers('1'))

HTTP response

```
{
  "InstanceIdentifier": "1"
}

HttpStatusCode: 201
```

GET APP for CDCInstanceManagers

Description

Retrieves CDC Instance managers APP information.

Privilege

SysAdmin

Method

GET method for the SFSS APP CDC Instance managers. The ("1") in the URL and example is the CDC Instance identifier.

URLs

- <https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers>
- [https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers\('1'\)](https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers('1'))
- [https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers\('1'\) \(for embedded\)](https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers('1') (for embedded))
- <https://<IP address>/redfish/v1/SFSSApp/CDCInstanceManagers/Enums>

Examples

```
{
  "CDCInstanceManagers": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/CDCInstanceManagers('1')"
    }
  ],
  "CDCInstanceManagers@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/CDCInstanceManagers",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#CDCInstanceManagers",
  "@odata.type": "#CDCInstanceManagersCollection.CDCInstanceManagersCollection"
}
```

Example including the identifier ('1').

```
{
  "CDCAdminState": "Enable",
```

```

    "DiscoverySvcAdminState": "Enable",
    "InstanceIdentifier": "1",
    "Interfaces": [
        "ens161"
    ],
    "IpAddresses": [
        "100.94.72.181"
    ],
    "@odata.id": "/redfish/v1/SFSSApp/CDCInstanceManagers(\"1\")",
    "@odata.type": "#CDCInstanceManagers.CDCInstanceManagers",
    "@odata.context": "/redfish/v1/SFSSApp/$metadata#CDCInstanceManagers/
CDCInstanceManagers/$entity"
}

```

Example including the identifier ('1') for embedded

```

{
    "CDCAdminState": "Enable",
    "DiscoverySvcAdminState": "Enable",
    "InstanceIdentifier": "1",
    "ServiceNetworks": [
        "vn704",
        "vn804"
    ],
    "@odata.id": "/redfish/v1/SFSSApp/CDCInstanceManagers('1')",
    "@odata.type": "#CDCInstanceManagers.CDCInstanceManagers",
    "@odata.context": "/redfish/v1/SFSSApp/$metadata#CDCInstanceManagers/
CDCInstanceManagers/$entity"
}

```

Example including Enums.

```

{
    "CDCAdminState": [
        "Enable",
        "Disable"
    ],
    "DiscoverySvcAdminState": [
        "Enable",
        "Disable"
    ],
    "Status": [
        "INIT",
        "INPROGRESS",
        "SUCCESS",
        "FAIL",
        "ABORT"
    ]
}

```

APP for Events

APP for Events

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

GET APP for Events

Description	Retrieves event APP information.
Privilege	SysAdmin
Method	GET method for SFSS APP events. <ul style="list-style-type: none"> Use <code>\$skip</code> to get to the next record.

- Use CDCInstance as the filter logic.
- Use \$filter with pagination.

URLs

- https://<IP address>/redfish/v1/SFSSApp/Events
- https://<IP address>/redfish/v1/SFSSApp/Events?\$top=2
- https://<IP address>/redfish/v1/SFSSApp/Events?\$filter=CDCInstance eq '1'
- https://<IP address>/redfish/v1/SFSSApp/Events('16')

Examples

All events records.

```
{
  "Events": [
    {
      "Args": [
        "1",
        "NQN1"
      ],
      "CDCInstance": "1",
      "EEMI": "SVEP0004",
      "HostName": "J104XC3",
      "Message": "CDC Instance 1: Subsystem NQN1 is added.",
      "OriginOfCondition": [
        "ZoneMember"
      ],
      "Severity": "Informational",
      "Source": "NZ-CENTRAL",
      "SourceSubType": "Zone",
      "timestamp": "2021-05-18 16:36:25.353495",
      "@odata.id": "/redfish/v1/SFSSApp/Events('17')",
      "@odata.type": "#Events.Events",
      "@odata.context": "/redfish/v1/SFSSApp/$metadata#Events/Events/$entity"
    },
    {
      "Args": [
        "1",
        "NQN1"
      ],
      "CDCInstance": "1",
      "EEMI": "SVEP0004",
      "HostName": "J104XC3",
      "Message": "CDC Instance 1: Subsystem NQN1 is added.",
      "OriginOfCondition": [
        "ZoneMember"
      ],
      "Severity": "Informational",
      "Source": "NZ-CENTRAL",
      "SourceSubType": "Zone",
      "timestamp": "2021-05-14 15:08:07.864327",
      "@odata.id": "/redfish/v1/SFSSApp/Events('16')",
      "@odata.type": "#Events.Events",
      "@odata.context": "/redfish/v1/SFSSApp/$metadata#Events/Events/$entity"
    }
  ],
  "Events@odata.count": 17,
  "@odata.id": "/redfish/v1/SFSSApp/Events",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Events",
  "@odata.type": "#EventsCollection.EventsCollection"
}
```

Events skip. Use \$skip to get to the next record.

```
{
  "Events": [
    {
      "Args": [
        "1",
        "NQN1"
      ],
```

```

        "CDCInstance": "1",
        "EEMI": "SVEP0004",
        "HostName": "J104XC3",
        "Message": "CDC Instance 1: Subsystem NQN1 is added.",
        "OriginOfCondition": [
            "ZoneMember"
        ],
        "Severity": "Informational",
        "Source": "NZ-CENTRAL",
        "SourceSubType": "Zone",
        "timestamp": "2021-05-18 16:36:25.353495",
        "@odata.id": "/redfish/v1/SFSSApp/Events('17')",
        "@odata.type": "#Events.Events",
        "@odata.context": "/redfish/v1/SFSSApp/$metadata#Events/
Events/$entity"
    },
    {
        "Args": [
            "1",
            "NQN1"
        ],
        "CDCInstance": "1",
        "EEMI": "SVEP0004",
        "HostName": "J104XC3",
        "Message": "CDC Instance 1: Subsystem NQN1 is added.",
        "OriginOfCondition": [
            "ZoneMember"
        ],
        "Severity": "Informational",
        "Source": "NZ-CENTRAL",
        "SourceSubType": "Zone",
        "timestamp": "2021-05-14 15:08:07.864327",
        "@odata.id": "/redfish/v1/SFSSApp/Events('16')",
        "@odata.type": "#Events.Events",
        "@odata.context": "/redfish/v1/SFSSApp/$metadata#Events/
Events/$entity"
    }
],
    "Events@odata.count": 2,
    "@odata.id": "/redfish/v1/SFSSApp/Events?$top=2",
    "@odata.context": "/redfish/v1/SFSSApp/$metadata#Events",
    "@odata.type": "#EventsCollection.EventsCollection",
    "@odata.nextLink": "/redfish/v1/SFSSApp/Events?$top=2&$skip=2"
}

```

Events filter. You can only use CDCInstance as a filter logic. You can use \$filter with pagination.

```

{
    "Events": [
        {
            "Args": [
                "1",
                "NQN1"
            ],
            "CDCInstance": "1",
            "EEMI": "SVEP0004",
            "HostName": "J104XC3",
            "Message": "CDC Instance 1: Subsystem NQN1 is added.",
            "OriginOfCondition": [
                "ZoneMember"
            ],
            "Severity": "Informational",
            "Source": "NZ-CENTRAL",
            "SourceSubType": "Zone",
            "timestamp": "2021-05-18 16:36:25.353495",
            "@odata.id": "/redfish/v1/SFSSApp/Events('17')",
            "@odata.type": "#Events.Events",
            "@odata.context": "/redfish/v1/SFSSApp/$metadata#Events/
Events/$entity"
        },
        {
            "Args": [

```

```

        "1",
        "NQN1"
    ],
    "CDCInstance": "1",
    "EEMI": "SVEP0004",
    "HostName": "J104XC3",
    "Message": "CDC Instance 1: Subsystem NQN1 is added.",
    "OriginOfCondition": [
        "ZoneMember"
    ],
    "Severity": "Informational",
    "Source": "NZ-CENTRAL",
    "SourceSubType": "Zone",
    "timeStamp": "2021-05-14 15:08:07.864327",
    "@odata.id": "/redfish/v1/SFSSApp/Events('16')",
    "@odata.type": "#Events.Events",
    "@odata.context": "/redfish/v1/SFSSApp/$metadata#Events/Events/$entity"
  }
],
  "Events@odata.count": 17,
  "@odata.id": "/redfish/v1/SFSSApp/Events?$filter=CDCInstance%20eq%20%271%27",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Events",
  "@odata.type": "#EventsCollection.EventsCollection"
}

```

Events filter by ID. In this example, the filter ID is 16.

```

{
  "Args": [
    "1",
    "NQN1"
  ],
  "CDCInstance": "1",
  "EEMI": "SVEP0004",
  "HostName": "J104XC3",
  "Message": "CDC Instance 1: Subsystem NQN1 is added.",
  "OriginOfCondition": [
    "ZoneMember"
  ],
  "Severity": "Informational",
  "Source": "NZ-CENTRAL",
  "SourceSubType": "Zone",
  "timeStamp": "2021-05-14 15:08:07.864327",
  "@odata.id": "/redfish/v1/SFSSApp/Events('16')",
  "@odata.type": "#Events.Events",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Events/Events/$entity"
}

```

APP for FabricManagerInfo

APP for FabricManagerInfo

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

POST APP for FabricManagerInfo

Description	Creates or updates the fabric manager information.
Privilege	SysAdmin
Method	POST method for the fabric manager information. This API is for embedded.
URL	<code>https://<IP address>/redfish/v1/SFSSApp/FabricManagerInfo</code>

Example

```
{
  "IPAddress": "fde2:53ba:e9a0:cccc:0:5eff:fe00:1100",
  "AddrType": "INETV6",
  "UserName": "admin",
  "FabricType": "SFS"
}
```

HTTP response

```
{
  "IPAddress": "fde2:53ba:e9a0:cccc:0:5eff:fe00:1100"
}
```

GET API for FabricManagerInfo

Description

Retrieves fabric manager information and functionality.

Privilege

SysAdmin

Method

GET method for fabric manager functionality. This API is for embedded.

URLs


- <https://<ip-address>/redfish/v1/SFSSApp/FabricManagerInfo>

Examples

```
{
  "FabricManagerInfo": [
    {
      "AddrType": "INETV6",
      "FabricType": "SFS",
      "IPAddress": "fde2:53ba:e9a0:cccc:0:5eff:fe00:1100",
      "Password": "ctx+qquLnCK4Ban2RmtRj/d+nLAYfxP/
il0M+wNnMx9k8iWTIQU00RCW33G7gAs/",
      "UserName": "+NZ8FiNqmqSyexXUyquKf8k/
LixkBOq0H+XgABD7Vu+jGIXYoNiWNfCgTCoxDeAA",
      "@odata.id": "/redfish/v1/SFSSApp/FabricManagerInfo",
      "@odata.type": "#FabricManagerInfo.FabricManagerInfo",
      "@odata.context": "/redfish/v1/SFSSApp/
$metadata#FabricManagerInfo/FabricManagerInfo/$entity"
    }
  ],
  "FabricManagerInfo@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/FabricManagerInfo",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#FabricManagerInfo",
  "@odata.type":
  "#FabricManagerInfoCollection.FabricManagerInfoCollection"
}
```

APP for FoundationalConfigs

APP for FoundationalConfigs

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

GET API for FoundationalConfigs

Description

Retrieves foundational configuration information and functionality.

Privilege

SysAdmin

Method

GET method for foundational configuration functionality.

URLs

- <https://<ip-address>/redfish/v1/SFSSApp/FoundationalConfigs>
- [https://<ip-address>/redfish/v1/SFSSApp/FoundationalConfigs?\\$expand=FoundationalConfigs](https://<ip-address>/redfish/v1/SFSSApp/FoundationalConfigs?$expand=FoundationalConfigs)
- [https://<ip-address>/redfish/v1/SFSSApp/FoundationalConfigs\('1'\)](https://<ip-address>/redfish/v1/SFSSApp/FoundationalConfigs('1'))

Examples

```
{
  "FoundationalConfigs": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/FoundationalConfigs('2')"
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/FoundationalConfigs('1')"
    }
  ],
  "FoundationalConfigs@odata.count": 2,
  "@odata.id": "/redfish/v1/SFSSApp/FoundationalConfigs",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#FoundationalConfigs",
  "@odata.type":
    "#FoundationalConfigsCollection.FoundationalConfigsCollection"
}
```

Expand example

```
{
  "FoundationalConfigs": [
    {
      "DiscoveryControllerPort": "8009",
      "InstanceIdentifier": "2",
      "NQN": "nqn.1988-11.com.dell:SFSS:2:20210707135328e8",
      "@odata.id": "/redfish/v1/SFSSApp/FoundationalConfigs('2')",
      "@odata.type": "#FoundationalConfigs.FoundationalConfigs",
      "@odata.context": "/redfish/v1/SFSSApp/$metadata#FoundationalConfigs/FoundationalConfigs/$entity"
    },
    {
      "DiscoveryControllerPort": "8009",
      "InstanceIdentifier": "1",
      "NQN": "nqn.1988-11.com.dell:SFSS:1:20210707023327e8",
      "@odata.id": "/redfish/v1/SFSSApp/FoundationalConfigs('1')",
      "@odata.type": "#FoundationalConfigs.FoundationalConfigs",
      "@odata.context": "/redfish/v1/SFSSApp/$metadata#FoundationalConfigs/FoundationalConfigs/$entity"
    }
  ],
  "FoundationalConfigs@odata.count": 2,
  "@odata.id": "/redfish/v1/SFSSApp/FoundationalConfigs?
  $expand=FoundationalConfigs",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#FoundationalConfigs",
  "@odata.type":
    "#FoundationalConfigsCollection.FoundationalConfigsCollection"
}
```

('1') example

```
{
  "DiscoveryControllerPort": "8009",
  "InstanceIdentifier": "1",
  "NQN": "nqn.1988-11.com.dell:SFSS:1:20210707023327e8",
  "@odata.id": "/redfish/v1/SFSSApp/FoundationalConfigs('1')",
  "@odata.type": "#FoundationalConfigs.FoundationalConfigs",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#FoundationalConfigs/FoundationalConfigs/$entity"
}
```

APP for GlobalSettings

APP for GlobalSettings

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

PUT APP for GlobalSettings

Description	Changes the global settings.
Privilege	SysAdmin
Method	PUT method for gloabl settings. This API is available only in the VM.
URL	https://<IP address>/redfish/v1/SFSSApp/GlobalSettings

Example

```
{
  "HostName": "dell EMC-networkappliance",
  "ReservedIPv4SubnetPrefix": "172.20",
  "ReservedIPv6SubnetPrefix": "fd02"
}
```

HTTP response

```
HTTP Response Code 201

No response object
```

GET APP for Global Settings

Description	Retrieves global setting APP information.
Privilege	SysAdmin
Method	GET method for SFSS APP global settings. This API is only available in the VM.
URLs	<ul style="list-style-type: none">https://<IP address>/redfish/v1/SFSSApp/GlobalSettings

Examples

```
{
  "HostName": "dell EMC-networkappliance",
  "ReservedIPv4SubnetPrefix": "172.20.x.x",
  "ReservedIPv6SubnetPrefix": "fd02::x",
  "@odata.id": "/redfish/v1/SFSSApp/GlobalSettings",
  "@odata.type": "#GlobalSettings.GlobalSettings",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#GlobalSettings/GlobalSettings/$entity"
}
```

APP for IPAddressManagement

APP for IPAddressManagement

POST APP for IP Address Management

Description	Creates or updates the IP address management APP.
Privilege	SysAdmin
Method	POST method for the IP address management APP. You can only create a VLAN interface.
URL	https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements

Example

```
{
  "IPv4Address": [
    "xx.x.x.x"
  ],
  "IPv6Address": [
    "xx:xx:xx:xx:xx:xx"
  ]
}
```

* Eventhough the IP address is a list only one address can provided

```

    "IPV4Config": "MANUAL",                * If CONFTYPE is AUTOMATIC no
    need to provide IPV4 Address Fields
    "IPV4Gateway": "xx.x.x.xxx",
    "IPV4PrefixLength": 16,
    "IPV6Config": "MANUAL",                * If CONFTYPE is AUTOMATIC no
    need to provide IPV4 Address Fields

    "IPV6Address": [
        "fe80::1699:6f09:43dd:56c1"        * Eventhough the IP
    address is a list only one address can provided
    ],

    "IPV6Gateway": "fe80::1699:6f09:43dd:ffff",
    "IPV6PrefixLength": 64,
    "ParentInterface": "ens160",
    "VlanId": 60,
    "MTU": 9000 ## If this field is not present, the MTU is chosen as
    auto
}

```

PUT APP for IpAddressManagement

Description	Changes the IP address management.
Privilege	SysAdmin
Method	PUT method for the IP address management. You can only update the IP address. Both VLAN and Ethernet interfaces can be updated.
URL	<a href="https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements('ens160.60')">https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements('ens160.60')
Example	

```

{
    "IPV4Address": [
        "xx.x.x.x"
    ],
    "IPV4Config": "MANUAL",
    "IPV4Gateway": "xx.x.x.x",
    "IPV4PrefixLength": 16,
    "IPV6Config": "MANUAL",

    "IPV6Address": [
        "fe80::1699:6fff:43dd:56c1"
    ],

    "IPV6Gateway": "fe80::1699:6f09:43dd:ffff",
    "IPV6PrefixLength": 64,
    "MTU": 7000 ## If this field is not present, the MTU is chosen as
    auto
}

```

DELETE APP for IpAddressManagement

Description	Deletes IP address management information.
Privilege	SysAdmin
Method	DELETE method for IP address management information.
URL	<ul style="list-style-type: none"> <a href="https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements('ens192.100')">https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements('ens192.100')
HTTP response	

```

HttpStatusCode: 200

```

GET APP for IpAddressManagement

Description	Retrieves IP address management APP information.
Privilege	SysAdmin
Method	GET method for the IP address management APP. This API is available only in the StandAlone deployment.
URLs	<ul style="list-style-type: none">• <a href="https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements">https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements• <a href="https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements?\$expand=IpAddressManagements">https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements?\$expand=IpAddressManagements• <a href="https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements/Enums">https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements/Enums• <a href="https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements(ens160)">https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements(ens160)• <a href="https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements(ens160.60)">https://<IP address>/redfish/v1/SFSSApp/IpAddressManagements(ens160.60)

Examples

```
{
  "IpAddressManagements": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens160') "
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192') "
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens160.60') "
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.24') "
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.50') "
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.51') "
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.20') "
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.21') "
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.22') "
    }
  ],
  "IpAddressMgmts@odata.count": 9,
  "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements",
  "@odata.type": "#IpAddressMgmtsCollection.IpAddressMgmtsCollection"
}
```

Expanded example

```
{
  "IpAddressManagements": [
    {
      "Interface": "ens160",
      "Type": "ETHERNET",
      "IPv4Address": [
```

```

        "xxx.xx.xx.xxx"
    ],
    "IPV4Config": "MANUAL",
    "IPV4Gateway": "xxx.xx.xx.xxx",
    "IPV4PrefixLength": 16,
    "IPV6Address": [
        "fe80::1699:6f09:43dd:56c1"
    ],
    "IPV6Config": "AUTOMATIC",
    "IPV6PrefixLength": 32,

    "MTU": 9000,
    "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens160')",
    "@odata.type": "#IpAddressManagements.IpAddressManagements",
    "@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements/
IpAddressManagements/$entity"
    },
    {
        "Interface": "ens192",
        "Type": "ETHERNET",
        "IPV4Address": [
            "xxx.xx.xx.xxx"
        ],
        "IPV4Config": "MANUAL",
        "IPV4Gateway": "xxx.xx.xx.xxx4",
        "IPV4PrefixLength": 24,
        "IPV6Config": "AUTOMATIC",

        "MTU": 9000,
        "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192')",
        "@odata.type": "#IpAddressManagements.IpAddressManagements",
        "@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements/
IpAddressManagements/$entity"
    },
    {
        "Interface": "ens160.60",
        "Type": "VLAN",
        "IPV4Address": [
            "xx.x.x.x"
        ],
        "IPV4Config": "MANUAL",
        "IPV4Gateway": "xx.x.x.xxx",
        "IPV4PrefixLength": 16,
        "IPV6Config": "AUTOMATIC",
        "ParentInterface": "ens160",
        "VlanId": 60,
        "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens160.60')",
        "@odata.type": "#IpAddressManagements.IpAddressManagements",
        "@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements/
IpAddressManagements/$entity"
    },
    {
        "Interface": "ens192.24",
        "Type": "VLAN",
        "IPV4Address": [
            "xxx.xxx.xxx.xxx"
        ],
        "IPV4Config": "MANUAL",
        "IPV4Gateway": "xxx.xxx.xxx.x",
        "IPV4PrefixLength": 24,
        "IPV6Address": [
            "ab13::cafe"
        ],
        "IPV6Config": "MANUAL",
        "IPV6PrefixLength": 128,
        "ParentInterface": "ens192",
        "VlanId": 24,
        "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.24')",
        "@odata.type": "#IpAddressManagements.IpAddressManagements",
        "@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements/
IpAddressManagements/$entity"
    },
    {
        "Interface": "ens192.50",
        "Type": "VLAN",
        "IPV4Address": [
            "xxx.xxx.xx.xx"
        ],
        "IPV4Config": "AUTOMATIC",
        "IPV4PrefixLength": 24,
        "IPV6Config": "AUTOMATIC",
        "ParentInterface": "ens192",
        "VlanId": 50,
        "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.50')",
        "@odata.type": "#IpAddressManagements.IpAddressManagements",
        "@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements/
IpAddressManagements/$entity"
    },
    {
        "Interface": "ens192.51",

```

```

        "Type": "VLAN",
        "IPv4Config": "AUTOMATIC",
        "IPv6Config": "AUTOMATIC",
        "ParentInterface": "ens192",
        "VlanId": 51,
        "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.51')",
        "@odata.type": "#IpAddressManagements.IpAddressManagements",
        "@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements/
IpAddressManagements/$entity"
    },
    {
        "Interface": "ens192.20",
        "Type": "VLAN",
        "IPv4Address": [
            "xxx.xxx.xxx.xxx"
        ],
        "IPv4Config": "MANUAL",
        "IPv4Gateway": "xxx.xxx.xxx.x",
        "IPv4PrefixLength": 24,
        "IPv6Config": "AUTOMATIC",
        "ParentInterface": "ens192",
        "VlanId": 20,
        "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.20')",
        "@odata.type": "#IpAddressManagements.IpAddressManagements",
        "@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements/
IpAddressManagements/$entity"
    },
    {
        "Interface": "ens192.21",
        "Type": "VLAN",
        "IPv4Address": [
            "xxx.xxx.xxx.xxx"
        ],
        "IPv4Config": "MANUAL",
        "IPv4Gateway": "xxx.xxx.xxx.x",
        "IPv4PrefixLength": 24,
        "IPv6Config": "AUTOMATIC",
        "ParentInterface": "ens192",
        "VlanId": 21,
        "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.21')",
        "@odata.type": "#IpAddressManagements.IpAddressManagements",
        "@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements/
IpAddressManagements/$entity"
    },
    {
        "Interface": "ens192.22",
        "Type": "VLAN",
        "IPv4Address": [
            "xxx.xxx.xxx.xxx"
        ],
        "IPv4Config": "MANUAL",
        "IPv4Gateway": "xxx.xxx.xxx.x",
        "IPv4PrefixLength": 24,
        "IPv6Config": "AUTOMATIC",
        "ParentInterface": "ens192",
        "VlanId": 22,
        "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens192.22')",
        "@odata.type": "#IpAddressManagements.IpAddressManagements",
        "@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements/
IpAddressManagements/$entity"
    }
],
"IpAddressMgmts@odata.count": 9,
"@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements?$expand=IpAddressManagements",
"@odata.context": "/redfish/v1/SFSSApp/$metadata#IpAddressManagements",
"@odata.type": "#IpAddressMgmtsCollection.IpAddressMgmtsCollection"
}

```

Enums example

```

{
    "Type": [
        "ETHERNET",
        "VLAN"
    ],
    "IPv4Config": [
        "AUTOMATIC",
        "MANUAL"
    ],
    "IPv6Config": [
        "AUTOMATIC",
        "MANUAL"
    ]
}

```

Ethernet type of interface example ("ens160")

```
{
  "Interface": "ens160",
  "IPV4Address": [
    "xxx.x.xx.xxx"
  ],
  "Type": "ETHERNET",
  "IPV4Config": "MANUAL",
  "IPV4Gateway": "xxx.xx.xx.xxx",
  "IPV4PrefixLength": 16,
  "IPV6Address": [
    "fe80::1699:6f09:43dd:56c1"
  ],
  "IPV6Config": "MANUAL",
  "IPV6PrefixLength": 32,

  "MTU": 9000,
  "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens160')",
  "@odata.type": "#IpAddressManagements.IpAddressManagements",
  "@odata.context": "/redfish/v1/SFSSApp/
$metadata#IpAddressManagements/IpAddressManagements/$entity"
}
```

VLAN type of interface example ("ens160.60")

```
{
  "Interface": "ens160.60",
  "Type": "VLAN",
  "IPV4Address": [
    "xx.x.x.x"
  ],
  "IPV4Config": "MANUAL",
  "IPV4Gateway": "xx.x.x.xxx",
  "IPV4PrefixLength": 16,
  "IPV6Config": "AUTOMATIC",
  "ParentInterface": "ens160",
  "VlanId": 60,

  "MTU": 9000,
  "@odata.id": "/redfish/v1/SFSSApp/IpAddressManagements('ens160.60')",
  "@odata.type": "#IpAddressManagements.IpAddressManagements",
  "@odata.context": "/redfish/v1/SFSSApp/
$metadata#IpAddressManagements/IpAddressManagements/$entity"
}
```

APP for License

APP for License

POST APP for License

Description	Creates or updates APP Licenses.
Privilege	SysAdmin
Method	POST method for SFSS APP licenses.
URL	<a href="https://<IP address>/redfish/v1/SFSSApp/Licenses">https://<IP address>/redfish/v1/SFSSApp/Licenses
Example	

```
{
  "LicenseContent" : "XML-LicenseContent",
```



```
    "LicenseFileName": "BaseLicense.lic"
  }
```

HTTP response

```
{
  "Identifier" : "1"
}
```

GET APP for License

Description	Retrieves License APP information.
Privilege	SysAdmin
Method	GET method for the SFSS APP Licenses. The ('licenseId') in the URL and example is the license identifier.
URLs	<ul style="list-style-type: none">https://<IP address>/redfish/v1/SFSSApp/Devicehttps://<IP address>/redfish/v1/SFSSApp/Licenseshttps://<IP address>/redfish/v1/SFSSApp/Licenses('licenseId')
Examples	Device

```
{
  "DeviceId": "20210521211812c9",
  "TotalNumOfEndPoints": 0,
  "@odata.id": "/redfish/v1/SFSSApp/Device",
  "@odata.type": "#Device.Device",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Device/Device/
$entity",
  "NumOfEndPointInUse": 0
}
```

Licenses

```
{
  "Licenses": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/Licenses('1')"
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/Licenses('2')"
    }
  ],
  "Licenses@odata.count": 2,
  "@odata.id": "/redfish/v1/SFSSApp/Licenses",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Licenses",
  "@odata.type": "#LicensesCollection.LicensesCollection"
}
```

Example including the identifier.

```
{
  "ServiceTag": "1234567",
  "TotalNumOfEndPoints": 48,
  "Identifier": "1",
  "LicenseType": "Perpetual",
  "LicenseExpiry": "0",
  "@odata.id": "/redfish/v1/SFSSApp/Licenses('1')",
  "@odata.type": "#Licenses.Licenses",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Licenses/Licenses/
$entity",
  "DeviceId": "20210413120527b6"
}
```

APP for Partner License

APP for Partner License

POST APP for Partner License

Description	Creates or updates APP partner licenses.
Privilege	SysAdmin
Method	POST method for APP partner licenses.
URL	https://<IP address>/redfish/v1/SFSSApp/Partner Licenses
Example	

```
{
  "LicenseContent" : "XML-LicenseContent",
  "LicenseFileName": "BaseLicense.lic"
}
```

HTTP response

```
{
  "Identifier": "2",
  "EULA": "This End User License Agreement (\"EULA\") is between the individual consumer or business entity that will use the Software (\"You\") and the applicable entity identified in the \"Licensor Table\" located at www.dell.com/swlicensortable (\"Licensor\").\n\nThis EULA governs Your use of: (a) the object code version of Dell branded software that is preinstalled on Dell hardware or otherwise provided to You pursuant to a purchase contract, quote, order form, invoice or online procurement process (each, an \"Order\"); (b) associated software license keys, if any (\"License Keys\");\n(c) updates to such software (\"Updates\"); (d) the documentation for such software; and (e) all copies of the foregoing (collectively, \"Software\"). If You accept this EULA, or if You install or use the Software, then You agree to this EULA unless You already have a signed agreement with Dell Marketing L.P. or one of its affiliates (\"Dell\") that includes licensing terms that govern Your use of the Software (\"Pre-Existing Agreement\"). If You accept this EULA or install or use the Software on behalf of a business entity, then You represent that You have authority to take those actions, and this EULA will be binding on that business entity unless the entity already has a Pre-Existing Agreement. If You do not agree to this EULA, do not install or use the Software.\n\nIf You are a business entity and You purchase Software from a third party (\"Reseller\") who sublicenses the Software to You under the terms of an agreement between You and such Reseller (a \"Sublicense Agreement\"), then the terms of Your Sublicense Agreement with the Reseller shall govern Your use of the Software and not this EULA. Resellers may only grant rights, and must pass through conditions, consistent with this EULA. Thus, even though Your Sublicense Agreement is between you and the Reseller, by installing or using the Software, You acknowledge and agree that: (a) any license rights in the Sublicense Agreement that are greater than the license rights in this EULA shall not apply; (b) any license conditions in this EULA that are not contained in the Sublicense Agreement apply to You; (c) the limitations of liability set forth in this EULA will apply in favor of Licensor, its affiliates and suppliers despite the existence of a Sublicense Agreement; and (d) Licensor is a third-party beneficiary of the Sublicense Agreement and is entitled to exercise and enforce all of the Reseller's rights and benefits under that Sublicense Agreement.\n\nIf You purchase Software as an individual consumer, nothing in this EULA affects your statutory rights if the laws of your state or country do not permit it to do so.\n\n1. License Grant.\n1.1. Right to Use. Subject to and in consideration of your full compliance with the terms and conditions of this EULA, Licensor grants to You a personal, non-exclusive license to use the Software during the period stated in the
```

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2. License Conditions.

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- B. Use License Keys (if applicable) only from Licensor or an authorized Dell License Key provider;
- C. Treat the Software as Dell confidential information;
- D. Use the Software only on as many computers or devices that You purchased, in such configurations permitted by Dell or Licensor, and/or in accordance with the applicable unit of measure, each as may be specified on Your Order. For Software licensed via a unit of measure, the terms and descriptions of each unit of measure are located at www.dell.com/UOM_terms ("UOM Terms");
- E. Abide by the export control and economic sanctions laws of the United States, the European Union and other applicable jurisdictions. Under these laws, the Software must not be used, sold, leased, exported, imported, re-exported or transferred except in compliance with such laws, including, without limitation, export licensing requirements, end user, end-use and end-destination restrictions, prohibitions on dealings with sanctioned individuals and entities, including but not limited to persons on the Office of Foreign Assets Control's Specially Designated Nationals and Blocked Persons List, or the U.S. Department of Commerce Denied Persons List. You represent and warrant that You are not the subject or target of, and that You are not located in a country or territory (including without limitation, North Korea, Cuba, Iran, Syria, and Crimea) that is the subject or target of economic sanctions of the United States, European Union or other applicable jurisdictions; and
- F. Comply with all Third Party Terms (as defined in Section 5 below).

2.2. Except as otherwise permitted by this EULA or by mandatory law (meaning a law that the parties cannot change by contract), You must not, and must not allow Your Permitted Third Parties, to do the following:

- A. Modify or remove any proprietary notices or markings on or in the Software;
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- C. Download Updates from Licensor or an authorized provider unless You have a valid support agreement;
- D. Install Updates on Enterprise Products (e.g., server, networking, storage, integrated solutions, and data protection appliances) that have gone end of service life unless Licensor otherwise agrees in writing;
- E. Install and operate counterfeit versions of Software (i.e. software provided by anyone other than Dell or an authorized representative of Dell) on Dell hardware;
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- G. Sell, loan, rent, lease, sublicense, distribute or encumber (e.g., by lien, security interest, etc.) the Software;
- H. Use any trademarks or service marks of Licensor, its affiliates or suppliers;
- I. Provide access to the Software or allow use by any third party, other than Permitted Third Parties, without Licensor's prior written consent;
- J. Copy, republish, upload, post or transmit the Software in any way;
- K.

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Use the Software for high risk activities, including without limitation online control systems, or use in hazardous environments requiring fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation or communications systems, air traffic control, life support, weapons systems or in any other device or system in which function or malfunction of the Software could result in death, personal injury or physical or environmental damage;\nS. Use the Software for activities related to weapons of mass destruction, including but not limited to, activities related to the design, development, production or use of nuclear materials, nuclear facilities, nuclear weapons, missiles or support of missile projects, or chemical or biological weapons; and\nT. Assign this EULA, or any right or obligation under this EULA, or delegate any performance, without Dell's prior written consent, unless You are transferring the Software in accordance with the Transferability Section 3 below. Even if Dell consents to an assignment, You remain responsible for all obligations under this EULA that You incurred prior to the effective date of the assignment.\n\n3. Transferability. If You are an individual consumer, You may transfer the Software on a permanent basis as part of the sale or transfer of the hardware system on which the Software is loaded, provided that You retain no copies of any version of the Software. If You are a business entity, You may not transfer the Software to another person or entity without the express written permission of Dell, unless allowed by applicable law stating that transfer may not be restricted (note that a transfer fee may be charged by Dell).\n\n4. Compliance Verification. If You are a business entity, You must: (a) maintain and use systems and procedures that allow You to accurately track Your use of the Software; (b) certify to Dell in writing, at Dell's request, that Your use of Software fully complies with this EULA, indicating the number of Software licenses deployed at that time; and (c) cooperate fully and timely with Dell and its auditors if Dell notifies You that it will conduct an audit to confirm Your compliance with this EULA. Any such audit will be conducted during normal business hours. If Dell determines that You have over-deployed Software, You agree to immediately purchase licenses at the then-current list price to bring Your use into compliance. If You over-deployed Software by 5% or more, then You agree to pay the total cost of the audit, in addition to any other liabilities You may have.\n\n5. 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\n\n12. Limitation of Liability.\n\n12.1. Limitations on Damages. The limitations, exclusions and disclaimers set forth in a Pre-Existing Agreement or Dell Terms of Sale that applies your Order (in each case, the "Order Terms") shall apply to all disputes, claims or controversies (whether in contract, tort or otherwise) between You and Licensor or Dell related to or arising out of: (a) this EULA; (b) the breach, termination or validity of this EULA; or (c) any Orders (each, a "Dispute"). In the absence of applicable Order Terms, the terms set forth in this Section shall apply to all Disputes.\n\nThe terms of this Section are agreed allocations of risk constituting part of the consideration for Licensor's licensing of Software to You and will apply even if there is a failure of the essential purpose of any limited remedy, and regardless of whether a party has been advised of the possibility of the liabilities. If applicable law prohibits any portion of the limits on liability stated below, the parties agree that such limitation will be automatically modified, but only to the extent required to make the limitation compliant with applicable law.\n\nA. Limitation on Direct Damages. Except for Your obligation to pay for the Software, or for Your violation of the License Grant and License Conditions set forth herein or of Licensor's or Dell's intellectual property rights, the total liability of You and Licensor (including Licensor's affiliates and suppliers) arising out of any Dispute is limited to the amount You paid for the Software that is the subject of the Dispute, but excluding amounts received as reimbursement of expenses or payment of taxes. Notwithstanding anything otherwise set forth above, Licensor and its affiliates have no liability for any direct damages resulting from Your use or attempted use of Third Party Software, Free Software or Development Tools.\n\nB. Disclaimer of Certain Other Damages. Except for Your obligation to pay for the Software, or for Your violation of the License Grant and License Conditions set forth herein

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12.2. Regular Backups. You are solely responsible for Your data. You must back up Your data before Licensor or a third party performs any remedial, upgrade or other work on Your production systems. You acknowledge that it is a best practice to have more than one back up copy of Your data. If applicable law prohibits exclusion of liability for lost data, then Licensor will only be liable for the cost of the typical effort to recover the lost data from Your last available back up.

12.3. Limitation Period. Except as stated in this Section, all claims must be made within the period specified by applicable law. If the law allows the parties to specify a shorter period for bringing claims, or the law does not provide a time at all, then claims must be made within 18 months after the cause of action accrues.

13. Additional Terms.

13.1. Notices. The parties will provide all notices under this EULA in writing. Unless provided otherwise in an Order, You must provide notices to the local Dell entity in Your Order, or, if Your Order is not with a Dell entity, by e-mail to Dell_Legal_Notices@dell.com.

13.2. Waiver and Severability. Failure to enforce a provision of this EULA will not constitute a waiver of that or any other provision of this EULA. If a court of competent jurisdiction determines that any part of this EULA or document that incorporates this EULA by reference is unenforceable, that ruling will not affect the validity of all remaining parts.

13.3. Modifications. This EULA may only be modified in writing signed by both parties; provided, however, that Licensor may, in its sole discretion, update the Licensor Table, the OST Table, the UOM Terms and the Subscription Terms at any time. Any changes that Licensor makes to the Licensor Table, the OST Table, the UOM Terms or the Subscription Terms will only apply to Orders that occur after Licensor posts those changes online.

13.4. Governing Law and Jurisdiction. If You obtained the Software directly from Dell, then the governing law and jurisdiction provisions set forth in Your Order Terms shall apply to this EULA. Otherwise the following shall apply:

A. Subject to Section 13.4 D and 13.5, if You are domiciled in the United States or Canada: (1) this EULA and any Dispute is governed by the laws of the State of Texas (excluding the conflicts of law rules) and the federal laws of the United States; and (2) to the extent permitted by law, the state and federal courts located in Texas will have exclusive jurisdiction for any Dispute. Both parties agree to submit to the personal jurisdiction of the state and federal courts located within Travis or Williamson County, Texas, and agree to waive any and all objections to the exercise of jurisdiction over the parties by those courts and to venue in those courts.

B. Subject to Section 13.4 D, if You are domiciled outside of the United States or Canada: (1) this EULA and any Dispute is governed by the substantive laws in force in the country in which the Licensor is located (as indicated in the Licensor Table located at www.dell.com/swlicensortable), without regard to its conflict of law rules; and (2) the exclusive place of jurisdiction for any Dispute shall be in such country.

C. In any event, neither the U.N. Convention on Contracts for the International Sale of Goods, nor the Uniform Computer Information Transaction Act shall apply to this EULA or any Dispute.

D. If You are an individual consumer, this Section 13.4 does not deprive You of the protection afforded to You by the provisions of mandatory consumer protections laws that are applicable to You, nor does it prevent you from seeking remedies or enforcing your rights as a consumer under such laws.

13.5. Dispute Resolution and Binding Individual (non-class) Arbitration. This Section only applies if You are an individual consumer that resides in (or obtained the Software in) the United States or Canada. All Disputes shall be resolved exclusively and finally by binding individual arbitration. This means You and Licensor waive any right to litigate disputes in a court or before a jury and neither You nor Licensor shall be entitled to join, consolidate, or include any claims belonging to or alleged or arising from, by or on behalf of any third party to an arbitration brought hereunder, or to arbitrate any claim as a class action, class representative, class member, or in a private attorney general capacity. If You reside in (or obtained the Software in) the United States, the arbitration will be administered by the American Arbitration Association (AAA), or JAMS.

If You reside in (or obtained the Software in) Canada, arbitration will be at ADR Chambers pursuant to the general ADR Chambers Rules for Arbitration located at www.adrchambers.com. The arbitration shall be conducted in the English language. The arbitration panel shall have exclusive authority to resolve any arbitrability issues including any dispute over this EULA or this arbitration provision's scope, application, meaning and enforceability. The arbitration panel shall be empowered to grant whatever relief would be available in court, including without limitation preliminary relief, injunctive relief and specific performance. Any award of the arbitration panel shall be final and binding immediately when rendered, and judgment on the award may be entered in any court of competent jurisdiction. If any portion of this arbitration agreement is found unenforceable, the unenforceable portion shall be severed and the remaining arbitration terms shall be enforced (but in no event will there be a class arbitration). Consumer claimants (individuals whose transaction is intended for personal, family or household use) may elect to pursue their claims in small-claims court rather than arbitration. Licensor will be responsible for paying any individual consumer's arbitration/arbitrator fees. Notwithstanding the foregoing, Licensor may apply to any relevant government agency or any court of competent jurisdiction to preserve its rights under this EULA and to obtain any injunctive or preliminary relief, or any award of specific performance, to which it may be entitled, either against You or against a non-party; provided, however, that no such administrative or judicial authority shall have the right or power to render a judgment or award (or to enjoin the rendering of an arbitral award) for damages that may be due to or from either party under this EULA, which right and power shall be reserved exclusively to an arbitration panel proceeding in accordance herewith.

13.6. Third Party Rights. Other than as expressly set out in this EULA, this EULA does not create any rights for any person who is not a party to it, and no person who is not a party to this EULA may enforce any of its terms or rely on any exclusion or limitation contained in it.

13.7 Entire Agreement. You acknowledge that You have read this EULA, that You understand it, that You agree to be bound by its terms, and that this EULA, along with the Order Terms into which this EULA may be incorporated (as applicable), is the complete and exclusive statement of the agreement between You and Licensor regarding Your use of the Software. All content referenced in this EULA by hyperlink is incorporated into this EULA in its entirety and is available to You in hardcopy form upon Your request. The pre-printed terms of Your purchase order or any other document that is not issued or signed by Licensor or Dell do not apply to Software. You represent that You did not rely on any representations or statements that do not appear in this EULA when accepting this EULA.

(Dell EULA rev 24FEB2020)"

}

GET APP for Partner License before acceptance from user

Description	Retrieves partner license information before acceptance from the user.
Privilege	SysAdmin
Method	GET method for the partner license before acceptance from the user.
URLs	<ul style="list-style-type: none"> <a href="https://<IP address>/redfish/v1/SFSSApp/Licenses?\$expand=Licenses">https://<IP address>/redfish/v1/SFSSApp/Licenses?\$expand=Licenses
Examples	

```
{
  "Licenses": [
    {
      "Identifier": "2",
      "LicenseType": "Perpetual",
      "TotalNumOfEndPoints": 10,
      "EULA": "This End User License Agreement (\"EULA\")
is between the individual consumer or business entity that will use
the Software (\"You\") and the applicable entity identified in the
\"Licensor Table\" located at www.dell.com/swlicensortable (\"Licensor\").
\n\nThis EULA governs Your use of: (a) the object code version of Dell
```

branded software that is preinstalled on Dell hardware or otherwise provided to You pursuant to a purchase contract, quote, order form, invoice or online procurement process (each, an "Order"); (b) associated software license keys, if any ("License Keys"); (c) updates to such software ("Updates"); (d) the documentation for such software; and (e) all copies of the foregoing (collectively, "Software"). If You accept this EULA, or if You install or use the Software, then You agree to this EULA unless You already have a signed agreement with Dell Marketing L.P. or one of its affiliates ("Dell") that includes licensing terms that govern Your use of the Software ("Pre-Existing Agreement"). If You accept this EULA or install or use the Software on behalf of a business entity, then You represent that You have authority to take those actions, and this EULA will be binding on that business entity unless the entity already has a Pre-Existing Agreement. If You do not agree to this EULA, do not install or use the Software.

If You are a business entity and You purchase Software from a third party ("Reseller") who sublicenses the Software to You under the terms of an agreement between You and such Reseller (a "Sublicense Agreement"), then the terms of Your Sublicense Agreement with the Reseller shall govern Your use of the Software and not this EULA. Resellers may only grant rights, and must pass through conditions, consistent with this EULA. Thus, even though Your Sublicense Agreement is between you and the Reseller, by installing or using the Software, You acknowledge and agree that: (a) any license rights in the Sublicense Agreement that are greater than the license rights in this EULA shall not apply; (b) any license conditions in this EULA that are not contained in the Sublicense Agreement apply to You; (c) the limitations of liability set forth in this EULA will apply in favor of Licensor, its affiliates and suppliers despite the existence of a Sublicense Agreement; and (d) Licensor is a third-party beneficiary of the Sublicense Agreement and is entitled to exercise and enforce all of the Reseller's rights and benefits under that Sublicense Agreement.

If You purchase Software as an individual consumer, nothing in this EULA affects your statutory rights if the laws of your state or country do not permit it to do so.

1. License Grant.

1.1. Right to Use. Subject to and in consideration of your full compliance with the terms and conditions of this EULA, Licensor grants to You a personal, non-exclusive license to use the Software during the period stated in the applicable Order (if no period is specified, You may use the Software perpetually). If You are an individual consumer, this license grant allows You to use the Software in connection with Your own personal use. If You are a business entity, this license grant allows You to use the Software in connection with the internal business operations of Your entity. In addition, You may make a reasonable number of copies of the Software solely as needed for backup or archival purposes. Additional license terms for certain Software may be included in the Offering Specific Terms Table located at www.dell.com/offeringsspecificterms ("OST Table"), and additional terms for Software that is licensed to You for a limited time ("Subscription Software") are located at www.dell.com/subscription_terms ("Subscription Terms").

1.2. Third Party Use. If You are a business entity, You may allow Your contractors (each, a "Permitted Third Party") to use the Software solely for the purpose of providing services to You, provided that such use is in compliance with this EULA. You are liable for any breach of this EULA by any Permitted Third Party.

1.3. Rights Reserved. The Software is licensed and not sold. Except for the license expressly granted in this EULA, Licensor, on behalf of itself and its affiliates and suppliers, retains all rights in and to the Software and in all related materials ("Works"). The rights in these Works are valid and protected in all forms, media and technologies existing now or hereafter developed. Any use of Works other than as expressly set forth herein is strictly prohibited.

1.4. Ownership. Licensor, on behalf of itself and its affiliates, retains ownership of the Works and all related intellectual property rights. If Software is provided to You on removable media (e.g., CD, DVD or USB drive), You may own the media on which the Software is recorded.

2. License Conditions.

2.1. You and Your Permitted Third Parties must do the following:

- A. Run the Software only on the hardware for which it was intended to operate, when applicable;
- B. Use License Keys (if applicable) only from Licensor or an authorized Dell License Key provider;
- C. Treat the Software as Dell confidential information;
- D. Use the Software only on as many computers or devices that You purchased, in such configurations permitted by Dell or Licensor, and/or in accordance with the applicable unit of measure,

each as may be specified on Your Order. For Software licensed via a unit of measure, the terms and descriptions of each unit of measure are located at www.dellemc.com/UOM_terms ("UOM Terms");\nE. Abide by the export control and economic sanctions laws of the United States, the European Union and other applicable jurisdictions. Under these laws, the Software must not be used, sold, leased, exported, imported, re-exported or transferred except in compliance with such laws, including, without limitation, export licensing requirements, end user, end-use and end-destination restrictions, prohibitions on dealings with sanctioned individuals and entities, including but not limited to persons on the Office of Foreign Assets Control's Specially Designated Nationals and Blocked Persons List, or the U.S. Department of Commerce Denied Persons List. You represent and warrant that You are not the subject or target of, and that You are not located in a country or territory (including without limitation, North Korea, Cuba, Iran, Syria, and Crimea) that is the subject or target of economic sanctions of the United States, European Union or other applicable jurisdictions; and\nF. Comply with all Third Party Terms (as defined in Section 5 below).\n\n2.2. Except as otherwise permitted by this EULA or by mandatory law (meaning a law that the parties cannot change by contract), You must not, and must not allow Your Permitted Third Parties, to do the following:\n\nA. Modify or remove any proprietary notices or markings on or in the Software;\nB. Transfer License Keys to any other person or entity;\nC. Download Updates from Licensor or an authorized provider unless You have a valid support agreement;\nD. Install Updates on Enterprise Products (e.g., server, networking, storage, integrated solutions, and data protection appliances) that have gone end of service life unless Licensor otherwise agrees in writing;\nE. Install and operate counterfeit versions of Software (i.e. software provided by anyone other than Dell or an authorized representative of Dell) on Dell hardware;\nF. Violate or circumvent any technological use restrictions in the Software;\nG. Sell, loan, rent, lease, sublicense, distribute or encumber (e.g., by lien, security interest, etc.) the Software;\nH. Use any trademarks or service marks of Licensor, its affiliates or suppliers;\nI. Provide access to the Software or allow use by any third party, other than Permitted Third Parties, without Licensor's prior written consent;\nJ. Copy, republish, upload, post or transmit the Software in any way;\nK. Modify or create derivative works based upon the Software, or decompile, disassemble, reverse engineer, or otherwise attempt to derive source code from the Software, in whole or in part;\nL. Attack or attempt to undermine the security, integrity, authentication or intended operation of the Software;\nM. Use the Software on a service bureau, rental or managed services basis;\nN. Create or permit others to create Internet \"links\" to the Software or \"frame\" or \"mirror\" the Software on any other server, wireless or Internet-based device;\nO. Use the Software to create a competitive offering;\nP. Use the Software to create other software, products or technologies unless the Software contains Development Tools as described in Section 7;\nQ. Share or publish the results of any benchmarking of the Software without Dell's prior written consent;\nR. Use the Software for high risk activities, including without limitation online control systems, or use in hazardous environments requiring fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation or communications systems, air traffic control, life support, weapons systems or in any other device or system in which function or malfunction of the Software could result in death, personal injury or physical or environmental damage;\nS. Use the Software for activities related to weapons of mass destruction, including but not limited to, activities related to the design, development, production or use of nuclear materials, nuclear facilities, nuclear weapons, missiles or support of missile projects, or chemical or biological weapons; and\nT. Assign this EULA, or any right or obligation under this EULA, or delegate any performance, without Dell's prior written consent, unless You are transferring the Software in accordance with the Transferability Section 3 below. Even if Dell consents to an assignment, You remain responsible for all obligations under this EULA that You incurred prior to the effective date of the assignment.\n\n3. Transferability. If You are an individual consumer, You may transfer the Software on a permanent basis as part of the sale or transfer of the hardware system on which the Software is loaded, provided that You retain no copies of any version of the Software. If You are a business entity, You may not transfer the Software to another person or entity without the express written permission of

Dell, unless allowed by applicable law stating that transfer may not be restricted (note that a transfer fee may be charged by Dell).\n\n4. Compliance Verification. If You are a business entity, You must: (a) maintain and use systems and procedures that allow You to accurately track Your use of the Software; (b) certify to Dell in writing, at Dell's request, that Your use of Software fully complies with this EULA, indicating the number of Software licenses deployed at that time; and (c) cooperate fully and timely with Dell and its auditors if Dell notifies You that it will conduct an audit to confirm Your compliance with this EULA. Any such audit will be conducted during normal business hours. If Dell determines that You have over-deployed Software, You agree to immediately purchase licenses at the then-current list price to bring Your use into compliance. If You over-deployed Software by 5% or more, then You agree to pay the total cost of the audit, in addition to any other liabilities You may have.\n\n5. Third Party Software. "Third Party Software" is software, including open source software, that is contained in or provided with the Software and is licensed by a third party under its own terms of use ("Third Party Terms"). Third Party Software is governed solely by the applicable Third Party Terms and not by this EULA. Third Party Terms may be provided with the Third Party Software or may be included in the OST Table. For certain open source software, the applicable Third Party Terms may entitle You to obtain the corresponding source files. You may find corresponding source files for such open source software at //opensource.dell.com/ or in the "About" or "Read Me" file of Software, or other locations that Licensor may specify.\n\n6. Free Software. "Free Software" means Software that is provided to You without additional charge (e.g., scripts that enable customer installation; code that enables You to monitor Your use of Dell products; etc.). You may only use Free Software on or with equipment or in the operating environments for which Dell has designed that Free Software to operate. Licensor may terminate any license to Free Software at any time in its sole discretion. You may not transfer Free Software to anyone else.\n\n7. Development Tools. If the Software includes development tools, such as scripting tools, APIs or sample scripts (collectively "Development Tools"), and unless there is a separate agreement between You and Dell or Licensor for the Development Tools, You may use such Development Tools to create new scripts and code for the purpose of customizing Your use of the Software (within the parameters set forth in this EULA and in the Development Tools themselves) and for no other purpose.\n\n8. Evaluation Software. This EULA does not license use of Software for evaluation purposes ("Evaluation Software") except to the extent these terms may be invoked by the separate license terms and conditions accompanying that Evaluation Software.\n\n9. Support Services Not Included. If You purchase maintenance and support for Software, such services are identified in Your Order and will be provided under a separate services agreement.\n\n10. Termination. For Subscription Software, this EULA automatically terminates at the end of Your subscription period unless You renew Your rights. Licensor may terminate this EULA if You or a Permitted Third Party commits a material breach of this EULA and fails to cure such breach within thirty (30) days following Your receipt of notice of the breach from Dell. This right to terminate applies accordingly if Dell or the Reseller from whom You made Your purchase does not receive timely payment for the licenses to the Software or for the hardware on which the Software is loaded, if any. When this EULA terminates, all licenses granted automatically terminate and You must immediately cease use of the Software and return or destroy all copies of the Software. Except as otherwise agreed by Dell, You will not get a refund from Dell if this EULA is terminated. Rights and obligations under Sections of this EULA that, by their nature should survive, will survive termination, as well as obligations for payment.\n\n11. Warranty Disclaimer. Under this EULA, Licensor provides neither any warranties for the Software nor does it provide support for the Software. Your rights under any warranties and any support entitlements for Software acquired for a fee are solely between You and the Reseller or Dell entity from whom You procured the Software and related support, and are defined under the commercial terms agreed between You and such selling entity. Accordingly, except as otherwise offered by Dell, the Software is provided by Licensor under this EULA "As Is" without any warranties or conditions. To the maximum extent permitted by applicable law, Licensor, on behalf of itself and its affiliates and suppliers: (a) makes no express warranties or conditions related to the Software;

(b) disclaims all implied warranties and conditions related to the Software, including merchantability, fitness for a particular purpose, title, and non-infringement; and (c) disclaims any warranty or condition arising by statute, operation of law, course of dealing or performance, or usage of trade. Licensor does not warrant uninterrupted or error-free operation of the Software. This Section does not affect or modify any of the statutory warranty rights that are available to consumers.

12. Limitation of Liability.

12.1. Limitations on Damages. The limitations, exclusions and disclaimers set forth in a Pre-Existing Agreement or Dell Terms of Sale that applies your Order (in each case, the "Order Terms") shall apply to all disputes, claims or controversies (whether in contract, tort or otherwise) between You and Licensor or Dell related to or arising out of: (a) this EULA; (b) the breach, termination or validity of this EULA; or (c) any Orders (each, a "Dispute"). In the absence of applicable Order Terms, the terms set forth in this Section shall apply to all Disputes.

The terms of this Section are agreed allocations of risk constituting part of the consideration for Licensor's licensing of Software to You and will apply even if there is a failure of the essential purpose of any limited remedy, and regardless of whether a party has been advised of the possibility of the liabilities. If applicable law prohibits any portion of the limits on liability stated below, the parties agree that such limitation will be automatically modified, but only to the extent required to make the limitation compliant with applicable law.

A. Limitation on Direct Damages. Except for Your obligation to pay for the Software, or for Your violation of the License Grant and License Conditions set forth herein or of Licensor's or Dell's intellectual property rights, the total liability of You and Licensor (including Licensor's affiliates and suppliers) arising out of any Dispute is limited to the amount You paid for the Software that is the subject of the Dispute, but excluding amounts received as reimbursement of expenses or payment of taxes. Notwithstanding anything otherwise set forth above, Licensor and its affiliates have no liability for any direct damages resulting from Your use or attempted use of Third Party Software, Free Software or Development Tools.

B. Disclaimer of Certain Other Damages. Except for Your obligation to pay for the Software, or for Your violation of the License Grant and License Conditions set forth herein or of Licensor's or Dell's intellectual property rights, neither You nor Licensor (including Licensor's affiliates and suppliers) shall have any liability under this EULA for special, consequential, exemplary, punitive, incidental or indirect damages, or for lost profits, loss of revenue, loss or corruption of data, loss of use or procurement of substitute products or services.

12.2. Regular Backups. You are solely responsible for Your data. You must back up Your data before Licensor or a third party performs any remedial, upgrade or other work on Your production systems. You acknowledge that it is a best practice to have more than one back up copy of Your data. If applicable law prohibits exclusion of liability for lost data, then Licensor will only be liable for the cost of the typical effort to recover the lost data from Your last available back up.

12.3. Limitation Period. Except as stated in this Section, all claims must be made within the period specified by applicable law. If the law allows the parties to specify a shorter period for bringing claims, or the law does not provide a time at all, then claims must be made within 18 months after the cause of action accrues.

13. Additional Terms.

13.1. Notices. The parties will provide all notices under this EULA in writing. Unless provided otherwise in an Order, You must provide notices to the local Dell entity in Your Order, or, if Your Order is not with a Dell entity, by e-mail to Dell_Legal_Notices@dell.com.

13.2. Waiver and Severability. Failure to enforce a provision of this EULA will not constitute a waiver of that or any other provision of this EULA. If a court of competent jurisdiction determines that any part of this EULA or document that incorporates this EULA by reference is unenforceable, that ruling will not affect the validity of all remaining parts.

13.3. Modifications. This EULA may only be modified in writing signed by both parties; provided, however, that Licensor may, in its sole discretion, update the Licensor Table, the OST Table, the UOM Terms and the Subscription Terms at any time. Any changes that Licensor makes to the Licensor Table, the OST Table, the UOM Terms or the Subscription Terms will only apply to Orders that occur after Licensor posts those changes online.

13.4. Governing Law and Jurisdiction. If You obtained the Software directly from Dell, then the governing law and jurisdiction

provisions set forth in Your Order Terms shall apply to this EULA. Otherwise the following shall apply:\n\nA. Subject to Section 13.4 D and 13.5, if You are domiciled in the United States or Canada: (1) this EULA and any Dispute is governed by the laws of the State of Texas (excluding the conflicts of law rules) and the federal laws of the United States; and (2) to the extent permitted by law, the state and federal courts located in Texas will have exclusive jurisdiction for any Dispute. Both parties agree to submit to the personal jurisdiction of the state and federal courts located within Travis or Williamson County, Texas, and agree to waive any and all objections to the exercise of jurisdiction over the parties by those courts and to venue in those courts.\n\nB. Subject to Section 13.4 D, if You are domiciled outside of the United States or Canada: (1) this EULA and any Dispute is governed by the substantive laws in force in the country in which the Licensor is located (as indicated in the Licensor Table located at www.dell.com/swlicensortable), without regard to its conflict of law rules; and (2) the exclusive place of jurisdiction for any Dispute shall be in such country.\n\nC. In any event, neither the U.N. Convention on Contracts for the International Sale of Goods, nor the Uniform Computer Information Transaction Act shall apply to this EULA or any Dispute.\n\nD. If You are an individual consumer, this Section 13.4 does not deprive You of the protection afforded to You by the provisions of mandatory consumer protections laws that are applicable to You, nor does it prevent you from seeking remedies or enforcing your rights as a consumer under such laws.\n\n13.5. Dispute Resolution and Binding Individual (non-class) Arbitration. This Section only applies if You are an individual consumer that resides in (or obtained the Software in) the United States or Canada. All Disputes shall be resolved exclusively and finally by binding individual arbitration. This means You and Licensor waive any right to litigate disputes in a court or before a jury and neither You nor Licensor shall be entitled to join, consolidate, or include any claims belonging to or alleged or arising from, by or on behalf of any third party to an arbitration brought hereunder, or to arbitrate any claim as a class action, class representative, class member, or in a private attorney general capacity. If You reside in (or obtained the Software in) the United States, the arbitration will be administered by the American Arbitration Association (AAA), or JAMS. If You reside in (or obtained the Software in) Canada, arbitration will be at ADR Chambers pursuant to the general ADR Chambers Rules for Arbitration located at www.adrchambers.com. The arbitration shall be conducted in the English language. The arbitration panel shall have exclusive authority to resolve any arbitrability issues including any dispute over this EULA or this arbitration provision's scope, application, meaning and enforceability. The arbitration panel shall be empowered to grant whatever relief would be available in court, including without limitation preliminary relief, injunctive relief and specific performance. Any award of the arbitration panel shall be final and binding immediately when rendered, and judgment on the award may be entered in any court of competent jurisdiction. If any portion of this arbitration agreement is found unenforceable, the unenforceable portion shall be severed and the remaining arbitration terms shall be enforced (but in no event will there be a class arbitration). Consumer claimants (individuals whose transaction is intended for personal, family or household use) may elect to pursue their claims in small-claims court rather than arbitration. Licensor will be responsible for paying any individual consumer's arbitration/arbitrator fees. Notwithstanding the foregoing, Licensor may apply to any relevant government agency or any court of competent jurisdiction to preserve its rights under this EULA and to obtain any injunctive or preliminary relief, or any award of specific performance, to which it may be entitled, either against You or against a non-party; provided, however, that no such administrative or judicial authority shall have the right or power to render a judgment or award (or to enjoin the rendering of an arbitral award) for damages that may be due to or from either party under this EULA, which right and power shall be reserved exclusively to an arbitration panel proceeding in accordance herewith.\n\n13.6. Third Party Rights. Other than as expressly set out in this EULA, this EULA does not create any rights for any person who is not a party to it, and no person who is not a party to this EULA may enforce any of its terms or rely on any exclusion or limitation contained in it.\n\n13.7 Entire Agreement. You acknowledge that You have read this EULA, that You understand it, that You agree to be bound by its terms, and that this EULA, along with the

```

Order Terms into which this EULA may be incorporated (as applicable),
is the complete and exclusive statement of the agreement between You and
Licensor regarding Your use of the Software. All content referenced in
this EULA by hyperlink is incorporated into this EULA in its entirety
and is available to You in hardcopy form upon Your request. The pre-
printed terms of Your purchase order or any other document that is not
issued or signed by Licensor or Dell do not apply to Software. You
represent that You did not rely on any representations or statements
that do not appear in this EULA when accepting this EULA.\n\n\n\n(Dell
EULA rev 24FEB2020)",
    "ServiceTag": "ABCDEFGF",
    "DeviceId": "20210624140433e8"
  },
  "Licenses@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/Licenses?$expand=Licenses",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Licenses",
  "@odata.type": "#LicensesCollection.LicensesCollection"
}

```

GET APP for Partner License after acceptance from user

Description	Retrieves partner license information after acceptance from the user.
Privilege	SysAdmin
Method	GET method for the partner license after acceptance from the user.
URLs	<ul style="list-style-type: none"> https://<IP address>/redfish/v1/SFSSApp/Licenses('2')
Examples	

```

{
  "Identifier": "2",
  "LicenseType": "Perpetual",
  "TotalNumOfEndPoints": 10,
  "EULA": "Accepted",
  "ServiceTag": "ABCDEFGF",
  "@odata.id": "/redfish/v1/SFSSApp/Licenses('2')",
  "@odata.type": "#Licenses.Licenses",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Licenses/Licenses/
$entity",
  "DeviceId": "20210624140433e8"
}

```

APP for Restores

APP for Restores

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

POST APP for Restore

Description	Creates or updates the restore APP.
Privilege	SysAdmin
Method	POST method for Restore.
URL	https://<IP address>/redfish/v1/SFSSApp/Restores
Example	

```

{
  "ImageServerLocation": "xxx.xx.xx.xxx:/home/dell/temp_images/
backup_file.tar.gz",

```

```

        "ImageServerPassword": "force10",
        "TransportType": "SCP",
        "ImageServerUserName": "dell"
    }

```

HTTP response

```

HTTP Response Code 201

{
  "ID": "d25d9f7e-8ae0-490a-94fe-071e8b2fdf60"
}

```

GET APP for Restores

Description Retrieves restore APP information.

Privilege SysAdmin

Method GET method for restore information.

URLs

- <https://<IP address>/redfish/v1/SFSSApp/Restores>
- [https://<IP address>/redfish/v1/SFSSApp/Restores?\\$expand=Restores](https://<IP address>/redfish/v1/SFSSApp/Restores?$expand=Restores)
- [https://<IP address>/redfish/v1/SFSSApp/Restores\('d25d9f7e-8ae0-490a-94fe-071e8b2fdf60'\)](https://<IP address>/redfish/v1/SFSSApp/Restores('d25d9f7e-8ae0-490a-94fe-071e8b2fdf60'))

Examples

```

{
  "Restores": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/Restores('d25d9f7e-8ae0-490a-94fe-071e8b2fdf60')"
    }
  ],
  "Restores@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/Restores",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Restores",
  "@odata.type": "#RestoresCollection.RestoresCollection"
}

```

Expand example

```

{
  "Restores": [
    {
      "ID": "d25d9f7e-8ae0-490a-94fe-071e8b2fdf60",
      "ImageServerLocation": "xxx.xx.xx.xxx:/home/dell/temp_images/backup_file.tar.gz",
      "StatusMessage": "Successfully restored",
      "ImageServerPassword": "force10",
      "Status": "Success",
      "TimeStamp": "1626334910.8032453",
      "TransportType": "SCP",
      "ImageServerUserName": "dell",
      "@odata.id": "/redfish/v1/SFSSApp/Restores('d25d9f7e-8ae0-490a-94fe-071e8b2fdf60')",
      "@odata.type": "#Restores.Restores",
      "@odata.context": "/redfish/v1/SFSSApp/$metadata#Restores/Restores/$entity"
    }
  ],
  "Restores@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/Restores?$expand=Restores",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Restores",
  "@odata.type": "#RestoresCollection.RestoresCollection"
}

```

ID example

```
{
  "ID": "d25d9f7e-8ae0-490a-94fe-071e8b2fdf60",
  "ImageServerLocation": "xxx.xx.xx:/home/dell/temp_images/
some_uuid.tar.gz",
  "StatusMessage": "Successfully restored",
  "ImageServerPassword": "force10",
  "Status": "Success",
  "TimeStamp": "1626334910.8032453",
  "TransportType": "SCP",
  "ImageServerUserName": "dell",
  "@odata.id": "/redfish/v1/SFSSApp/
Restores('d25d9f7e-8ae0-490a-94fe-071e8b2fdf60')",
  "@odata.type": "#Restores.Restores",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#Restores/Restores/
$entity"
}
```

APP for Security

APP for Security

POST APP for Security

Description	Creates or updates APP security.
Privilege	SysAdmin
Method	POST method for SFSS APP security. To reset security, use the POST or PUT APP method. For "AuthenticationSequence," the values are local, radius, and tacacs+.
URL	<ul style="list-style-type: none">https://<IP address>/redfish/v1/SFSSApp/AuthenticationSequencehttps://<IP address>/redfish/v1/SFSSApp/TacacsServerhttps://<IP address>/redfish/v1/SFSSApp/RadiusServer
Example	Authentication sequence

```
{
  "AuthenticationSequence": [
    "tacacs+",
    "local"
  ],
}
```

Tacacs server

```
{
  "ServerIp": "xxx.x.x.x",
  "ServerPass": "xxxxxxx"
}
```

Radius server

```
{
  "ServerIp": "xxx.x.x.x",
  "ServerPass": "xxxxxxx"
}
```

HTTP response

```
{
  "AuthenticationSequence": "tacacs+,local"
}
```

DELETE APP for Security

Description	Deletes security information.
Privilege	SysAdmin
Method	DELETE method for APP SFSS security. There is no delete APP for Authentication Sequence. To reset, use the POST or PUT method with input as local.
URL	<ul style="list-style-type: none">• <code>https://<IP address>/redfish/v1/SFSSApp/Tacacsservers("serverip":"xxx.xx.x.x")</code>• <code>https://<IP address>/redfish/v1/SFSSApp/Radiusservers("serverip":"xxx.xx.x.x")</code>
HTTP response	Tacacs server

```
HttpStatusCode: 201
```

Radius server

```
HttpStatusCode: 201
```

GET APP for Security

Description	Retrieves security APP information.
Privilege	SysAdmin
Method	GET method for the SFSS APP security. The "TacacsServers/Sequence" and "RadiusServers/Sequence" APPs return the server IP addresses in the same order of your configuration.
URLs	<ul style="list-style-type: none">• <code>https://<IP address>/redfish/v1/SFSSApp/AuthenticationSequence</code>• <code>https://<IP address>/redfish/v1/SFSSApp/AuthenticationSequence/Enums</code>• <code>https://<IP address>/redfish/v1/SFSSApp/TacacsServers</code>• <code>https://<IP address>/redfish/v1/SFSSApp/TacacsServers('ip')</code>• <code>https://<IP address>/redfish/v1/SFSSApp/TacacsServers/Sequence</code>• <code>https://<IP address>/redfish/v1/SFSSApp/RadiusServers</code>• <code>https://<IP address>/redfish/v1/SFSSApp/RadiusServers('200.1.1.1')</code>• <code>https://<IP address>/redfish/v1/SFSSApp/RadiusServers/Sequence</code>
Examples	Authentication sequence

```
{
  "AuthenticationSequence": [
    "tacacs+",
    "local"
  ],
  "@odata.id": "/redfish/v1/SFSSApp/AuthenticationSequence",
  "@odata.type": "#AuthenticationSequence.AuthenticationSequence",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#AuthenticationSequence/AuthenticationSequence/$entity"
}
```

Enums

```
{
  "AuthenticationSequence": [
    "radius",
    "local",
    "tacacs+"
  ]
}
```


Tacacs servers

```
{
  "TacacsServers": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/TacacsServers('xxx.x.x.x') "
    }
  ],
  "TacacsServers@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/TacacsServers",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#TacacsServers",
  "@odata.type": "#TacacsServersCollection.TacacsServersCollection"
}
```

TacacsServers('ip')

```
{
  "ServerIp": "xxx.x.x.x",
  "ServerPass": "xxxxxxx",
  "@odata.id": "/redfish/v1/SFSSApp/TacacsServers('xxx.x.x.x')",
  "@odata.type": "#TacacsServers.TacacsServers",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#TacacsServers/
TacacsServers/$entity"
}
```

Radius servers

```
{
  "RadiusServers": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/RadiusServers('xxx.x.x.x') "
    }
  ],
  "RadiusServers@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/RadiusServers",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#RadiusServers",
  "@odata.type": "#RadiusServersCollection.RadiusServersCollection"
}
```

RadiusServers('200.1.1.1')

```
{
  "ServerIp": "xx.x.x.x",
  "ServerPass": "xxxxxxx",
  "@odata.id": "/redfish/v1/SFSSApp/RadiusServers(\"xxx.x.x.x\")",
  "@odata.type": "#RadiusServers.RadiusServers",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#RadiusServers/
RadiusServers/$entity"
}
```

APP for SFSS APP

APP for SFSS APP

PUT APP for SFSSApp (Upgrade)

Description	Changes the SFSSApp (Upgrade) feature.
Privilege	SysAdmin

Method PUT method for the SFSSApp (Upgrade) feature.

URL https://<IP address>/redfish/v1/SFSSApp

Example

```
{
  "Version": "1.2.0"
}
```

GET APP for SFSSApp

Description Retrieves SFSS APP information.

Privilege SysAdmin

Method GET method for the SFSS APP.

URLs

- https://<IP address>/redfish/v1/SFSSApp

Example

```
{
  "DeploymentModel": "StandAlone",
  "Version": "1.0.0",
  "@odata.id": "/redfish/v1/SFSSApp",
  "@odata.type": "#SFSSApp.SFSSApp",
  "@odata.context": "/redfish/v1/$metadata#SFSSApp/SFSSApp/$entity"
}
```

APP for SFSSHealthStatus

APP for SFSSHealthStatus

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

GET APP for SFSSHealthStatus

Description Retrieves SFSS health status APP information.

Privilege SysAdmin

Method GET method for SFSS health status information.

URLs

- https://<IP address>/redfish/v1/SFSSApp/SFSSHealthStatus

Examples

```
{
  "Health": "Yellow",
  "ReasonCode": [
    "Instance: instance1 module-testing reported:eemi-2"
  ],
  "@odata.id": "/redfish/v1/SFSSApp/SFSSHealthStatus",
  "@odata.type": "#SFSSHealthStatus.SFSSHealthStatus",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#SFSSHealthStatus/SFSSHealthStatus/$entity"
}
```

APP for SFSSImages

APP for SFSSImages

POST APP for SFSSImages

Description	Creates or updates APP SFSS images.
Privilege	SysAdmin
Method	POST method for the SFSS image APP.
URL	<ul style="list-style-type: none">https://<IP address>/redfish/v1/SFSSApp/SFSSImages
Example	Authentication sequence

```
{
  "Version": "1.2.0",
  "ImageServerUserName" : "dell",
  "ImageServerPassword" : "force10",
  "ImageServerLocation" : "xxx.xx.xx.xxx:/home/dell/temp_images/
SFSS-1.2.0.deb",
  "TransportType" : "SCP"
}
```

HTTP response

```
{
  "Version": "1.2.0"
}
```

PUT APP for SFSSImages

Description	Creates or updates APP SFSS images.
Privilege	SysAdmin
Method	PUT method for SFSS images APP.
URL	<ul style="list-style-type: none">https://<IP address>/redfish/v1/SFSSApp/SFSSImages("1.2.0")
Example	

```
{
  "Version": "1.2.0",
  "ImageServerUserName" : "dell",
  "ImageServerPassword" : "New_Password",
  "ImageServerLocation" : "xxx.xx.xx.xxx:/home/dell/new_location/
SFSS-1.2.0.deb",
  "TransportType" : "SCP"
}
```

HTTP response

```
{
  "Version": "1.2.0"
}
```

DELETE APP for SFSSImages

Description	Deletes SFSS image information.
Privilege	SysAdmin
Method	DELETE method for APP SFSS images.
URL	<ul style="list-style-type: none">https://<IP address>/redfish/v1/SFSSApp/SFSSImages("1.2.0")
HTTP response	

```
{
  "Version": "1.2.0"
}
```

GET APP for SFSSImages

Description	Retrieves SFSSImage APP information.
Privilege	SysAdmin
Method	GET method for the SFSS APP SFSSImages. The ('latest') in the URL and example is the CDC image identifier.
URLs	<ul style="list-style-type: none">• <a href="https://<IP address>/redfish/v1/SFSSApp/SFSSImages">https://<IP address>/redfish/v1/SFSSApp/SFSSImages• <a href="https://<IP address>/redfish/v1/SFSSApp/SFSSImages('1.0.0')">https://<IP address>/redfish/v1/SFSSApp/SFSSImages('1.0.0')• <a href="https://<IP address>/redfish/v1/SFSSApp/SFSSImages/Enums">https://<IP address>/redfish/v1/SFSSApp/SFSSImages/Enums

Examples

```
{
  "SFSSImages": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/SFSSImages('1.0.0')"
    },
    {
      "@odata.id": "/redfish/v1/SFSSApp/SFSSImages('1.0.1')"
    }
  ],
  "SFSSImages@odata.count": 2,
  "@odata.id": "/redfish/v1/SFSSApp/SFSSImages",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#SFSSImages",
  "@odata.type": "#SFSSImagesCollection.SFSSImagesCollection"
}
```

Example including the identifier.

```
{
  "ImageServerLocation": "somelocation",
  "ImageServerPassword": "*****",
  "TransportType": "SCP",
  "ImageServerUserName": "",
  "Version": "1.0.0",
  "@odata.id": "/redfish/v1/SFSSApp/SFSSImages('1.0.0')",
  "@odata.type": "#SFSSImages.SFSSImages",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#SFSSImages/SFSSImages/$entity"
}
```

Example including Enums.

```
{
  "Status": [
    "Failure",
    "InProgress",
    "Success",
    "NotStarted"
  ],
  "TransportType": [
    "SFTP",
    "HTTPS",
    "SCP",
    "HTTP"
  ]
}
```

APP for SFSS Interface List

APP for SFSS Interface List

GET APP for SFSS Interface List

Description	Retrieves SFSS interface list information.
Privilege	SysAdmin
Method	GET method for SFSS interface list information. This API does not support expand or fetching using keys; for example, using a specific interface as a key. This API retrieves the list of interfaces available in a StandAlone deployment only.
URLs	<ul style="list-style-type: none">https://<IP address>/redfish/v1/SFSSApp/SFSSInterfaceList
Examples	

```
{
  "List of Interfaces": ['ens160', 'ens192', 'ens192.15', 'ens192.20']
}
```

APP for SOS Reports

APP for SOS Reports

GET APP for SOS Reports

Description	Retrieves SFSS interface SOS report information.
Privilege	SysAdmin
Method	GET method for SFSS interface SOS report information.
URLs	<ul style="list-style-type: none">https://<IP address>/redfish/v1/SFSSApp/SosReportshttps://<IP address>/redfish/v1/SFSSApp/SosReports?\$expand=SosReportshttps://<IP address>/redfish/v1/SFSSApp/SosReports('d25d9f7e-8ae0-490a-94fe-071e8asdef')

Examples

```
{
  "SosReports": [
    {
      "@odata.id": "/redfish/v1/SFSSApp/
      SosReports('d25d9f7e-8ae0-490a-94fe-071e8asdef') "
    }
  ],
  "SosReports@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/SosReports",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#SosReports",
  "@odata.type": "#SosReportsCollection.SosReportsCollection"
}
```

Expand example

```
{
  "SosReports": [
    {
      "ID": "d25d9f7e-8ae0-490a-94fe-071e8asdef",
      "FileLocation": "xxx.xx.xx.xxx:/home/dell/temp_images/",
      "StatusMessage": "Successfully backed up",
      "ServerPassword": "forcel0",
      "Status": "Success",
      "TimeStamp": "1626734910.8032453",
      "TransportType": "SCP",
      "ServerUserName": "dell",
      "@odata.id": "/redfish/v1/SFSSApp/
      SosReports('d25d9f7e-8ae0-490a-94fe-071e8asdef') ",
      "@odata.type": "#SosReports.SosReports",
      "@odata.context": "/redfish/v1/SFSSApp/$metadata#SosReports/SosReports/
      $entity"
    }
  ]
}
```

```

    }
  ],
  "SosReports@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSSApp/SosReports?$expand=SosReports",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#SosReports",
  "@odata.type": "#SosReportsCollection.SosReportsCollection"
}

```

ID example

```

{
  "ID": "d25d9f7e-8ae0-490a-94fe-071e8asdef",
  "FileLocation": "xxx.xx.xx.xxx:/home/dell/temp_images/",
  "StatusMessage": "Successfully backed up",
  "ServerPassword": "forcel0",
  "Status": "Success",
  "TimeStamp": "1626734910.8032453",
  "TransportType": "SCP",
  "ServerUserName": "dell",
  "@odata.id": "/redfish/v1/SFSSApp/SosReports('d25d9f7e-8ae0-490a-94fe-071e8asdef')",
  "@odata.type": "#SosReports.SosReports",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#SosReports/SosReports/Entity"
}

```

POST APP for SOS Reports

Description	Creates or updates APP SFSS interface SOS reports.
Privilege	SysAdmin
Method	POST method for the APP SFSS interface SOS report.
URL	<ul style="list-style-type: none"> https://<IP address>/redfish/v1/SFSSApp/SosReports
Example	Authentication sequence

```

{
  "FileLocation": "xxx.xx.xx.xxx:/home/dell/temp_images/",
  "ServerPassword": "forcel0",
  "TransportType": "SCP",
  "ServerUserName": "dell"
}

```

HTTP response

```

HTTP Response Code 201
{
  "ID": "d25d9f7e-8ae0-490a-94fe-071e8asdef"
}

```

APP for UserActivityAudit

APP for Alerts

GET APP for UserActivityAudit

Description	Retrieves user activity audit APP information.
Privilege	SysAdmin
Method	GET method for the user activity audit information.

NOTE: You can only use the CDCInstance as a filter logic. You can include `$filter` along with the pagination.

URLs

- https://<IP address>/redfish/v1/SFSSApp/UserActivityAudit
- https://<IP address>/redfish/v1/SFSSApp/UserActivityAudit('1')

Examples

```
{
  "UserActivityAudits": [
    {
      "CDCInstance": "APP",
      "HTTPCode": "200 OK",
      "Operation": "GET",
      "Payload": "",
      "SourceIP": "xx.xxx.x.x",
      "TimeStamp": "2021-06-28 08:33:21.686088",
      "URL": "http://SFSS-infra/redfish/v1/SFSSApp/
UserActivityAudit",
      "UserAgent": "PostmanRuntime/7.28.0",
      "UserName": "admin",
      "UserRole":
"cdrom;floppy;sudo;audio;dip;video;plugdev;crontab;netdev;docker;admin",
      "@odata.id": "/redfish/v1/SFSSApp/UserActivityAudit('2')",
      "@odata.type": "#UserActivityAudit.UserActivityAudit",
      "@odata.context": "/redfish/v1/SFSSApp/
$metadata#UserActivityAudit/UserActivityAudit/$entity"
    },
    {
      "CDCInstance": "APP",
      "HTTPCode": "201 Created",
      "Operation": "PATCH",
      "Payload": "{\"InstanceIdentifier\":\"1\",\"Interfaces\":
[\"ens192\"]}",
      "SourceIP": "127.0.0.1",
      "TimeStamp": "2021-06-28 08:32:59.186355",
      "URL": "http://SFSS-infra/redfish/v1/SFSSApp/
CDCInstanceManagers('1')",
      "UserAgent": "curl/7.64.0",
      "UserName": "MENU_USER",
      "UserRole": "admin",
      "@odata.id": "/redfish/v1/SFSSApp/UserActivityAudit('1')",
      "@odata.type": "#UserActivityAudit.UserActivityAudit",
      "@odata.context": "/redfish/v1/SFSSApp/
$metadata#UserActivityAudit/UserActivityAudit/$entity"
    }
  ],
  "UserActivityAudits@odata.count": 2,
  "@odata.id": "/redfish/v1/SFSSApp/UserActivityAudit",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#UserActivityAudit",
  "@odata.type":
"#UserActivityAuditsCollection.UserActivityAuditsCollection"
}
```

Example with ID "1"

```
{
  "CDCInstance": "APP",
  "HTTPCode": "201 Created",
  "Operation": "PATCH",
  "Payload": "{\"InstanceIdentifier\":\"1\",\"Interfaces\":
[\"ens192\"]}",
  "SourceIP": "xxx.x.x.x",
  "TimeStamp": "2021-06-28 08:32:59.186355",
  "URL": "http://SFSS-infra/redfish/v1/SFSSApp/
CDCInstanceManagers('1')",
  "UserAgent": "curl/7.64.0",
  "UserName": "MENU_USER",
  "UserRole": "admin",
  "@odata.id": "/redfish/v1/SFSSApp/UserActivityAudit('1')",
  "@odata.type": "#UserActivityAudit.UserActivityAudit",
  "@odata.context": "/redfish/v1/SFSSApp/$metadata#UserActivityAudit/"
}
```

```
UserActivityAudit/$entity"  
}
```


CDCInstances

SFSS APIs for CDCInstances

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [GET API for CDCInstance](#)

GET API for CDCInstance

Description	Retrieves CDC instance information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for CDC instance functionality.
URLs	<ul style="list-style-type: none">• <a href="http://<ip-address>/redfish/v1/SFSS/<Instance#>/CDCInstance?\$source=config">http://<ip-address>/redfish/v1/SFSS/<Instance#>/CDCInstance?\$source=config
Examples	

```
{
  "DiscoveryControllerPort": 8009,
  "InstanceId": "1",
  "UpTime": "2021-06-24 14:05:06.590947",
  "Version": "1.0.0",
  "@odata.id": "/redfish/v1/SFSS/1/CDCInstance",
  "@odata.type": "#CDCInstance.CDCInstance",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#CDCInstance/
CDCInstance/$entity"
}
```

SFSS APIs for DDC

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [POST API for DDC](#)
- [PUT API for DDC](#)
- [DELETE API for DDC](#)
- [GET API for DDC](#)

POST API for DDC

Description	Creates or updates DDC functionality.
Privilege	SysAdmin
Method	POST method for DDC.
URLs	<ul style="list-style-type: none"> • <a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/DDCs">https://<ip-address>/redfish/v1/SFSS/<Instance #>/DDCs
Examples	Payload

```
{
  "TransportAddress": "111.111.111.115",
  "TransportAddressFamily": "IPv4",
  "PortId": 5450,
  "TransportType": "TCP",
  "Activate": true
}
```

Output

```
{
  "Id": "@111.111.111.115:V4::0:5450:TCP"
}
```

PUT API for DDC

Description	Changes the DDC.
Privilege	SysAdmin
Method	PUT method for DDC.
URL	<a href="https://<IP address>/redfish/v1/SFSS/<Instance#>/DDCs('Id')">https://<IP address>/redfish/v1/SFSS/<Instance#>/DDCs('Id')
Examples	Payload

```
{
  "Activate": false
}
```

Output

```
{
  "Id": "@111.111.111.115:V4::0:5450:TCP"
}
```

DELETE API for DDC

Description	Deletes the DDC.
Privilege	SysAdmin
Method	DELETE method DDCs.
URL	https://<ip-address>/redfish/v1/SFSS/<Instance #>/DDCs('Id')
Example	

```
{
  "Id": "@111.111.111.115:V4::0:5450:TCP"
}
```

GET API for DDC

Description	Retrieves DDC information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for DDC functionality.
URLs	<ul style="list-style-type: none">https://<ip-address>/redfish/v1/SFSS/<Instance #>/DDCshttps://<ip-address>/redfish/v1/SFSS/<Instance #>/ DDCs('Id')https://<ip-address>/redfish/v1/SFSS/<Instance #>/DDCs/Enums
Examples	DDCs

```
{
  "DDCs": [
    {
      "@odata.id": "/redfish/v1/SFSS/1/
DDCs ('@xxx.xxx.xxx:V4::0:5450:TCP') "
    }
  ],
  "DDCs@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSS/1/DDCs",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#DDCs",
  "@odata.type": "#DDCsCollection.DDCsCollection"
}
```

DDCs('Id') example

```
{
  "Id": "@xxx.xxx.xxx:V4::0:5450:TCP",
  "TransportAddress": "111.111.111.115",
  "TransportAddressFamily": "IPv4",
  "PortId": 5450,
  "TransportType": "TCP",
  "Activate": false,
  "ConfigType": "Manual",
  "ConnectionStatus": "Offline",
  "FailureReason": "0",
  "@odata.id": "/redfish/v1/SFSS/1/
DDCs ('@xxx.xxx.xxx:V4::0:5450:TCP') ",
  "@odata.type": "#DDCs.DDCs",
}
```

```
    "@odata.context": "/redfish/v1/SFSS/1/$metadata#DDCs/DDCs/$entity"  
  }
```

Enums example

```
{  
  "TransportAddressFamily": [  
    "IPv4",  
    "IPv6"  
  ],  
  "ConfigType": [  
    "KDCC",  
    "Manual",  
    "Push",  
    "Pull",  
    "Implicit"  
  ],  
  "ConnectionStatus": [  
    "Offline",  
    "Online"  
  ],  
  "TransportType": [  
    "TCP"  
  ]  
}
```

Global Policies

SFSS APIs for Global Policies

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [POST API for Global Policies](#)
- [GET API for Global Policies](#)

POST API for Global Policies

Description	Creates or updates global policies.
Privilege	SysAdmin
Method	POST method for global policies.
URL	<ul style="list-style-type: none"> • <a href="https://<IP address>/redfish/v1/SFSS/<Instance #>/GlobalPolicies">https://<IP address>/redfish/v1/SFSS/<Instance #>/GlobalPolicies
Example	

```
{
  "ZoningPolicy": "Disable"
  "NameServerEntityPurgeTOV" : "4Hr"
}
```

HTTP response	HttpStatusCode: 201
----------------------	---------------------

GET API for Global Policies

Description	Retrieves global policy information.
Privilege	SysAdmin
Method	GET method for global policies.
URL	<ul style="list-style-type: none"> • <a href="https://<IP address>/redfish/v1/SFSS/<Instance #>/GlobalPolicies">https://<IP address>/redfish/v1/SFSS/<Instance #>/GlobalPolicies • <a href="https://<IP address>/redfish/v1/SFSS/<Instance #>/GlobalPolicies/Enums">https://<IP address>/redfish/v1/SFSS/<Instance #>/GlobalPolicies/Enums
Example	

```
{
  "ZoningPolicy": "Enable",
  "NameServerEntityPurgeTOV": "4Hr",
  "@odata.id": "/redfish/v1/SFSS/1/GlobalPolicies",
  "@odata.type": "#GlobalPolicies.GlobalPolicies",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#GlobalPolicies/GlobalPolicies/$entity"
}
```

Enums

```
{
  "ZoningPolicy": [
    "Enable",
    "Disable"
  ],
}
```

```
    "NameServerEntityPurgeTOV": [  
        "NoTimeout",  
        "4Hr",  
        "24Hr",  
        "8Hr",  
        "48Hr",  
        "5Sec"  
    ]  
}
```

Host

SFSS APIs for Host

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [POST API for Host](#)
- [DELETE API for Host](#)
- [GET API for Host](#)

POST API for Host

Description	Creates or updates host functionality.
Privilege	SysAdmin
Method	POST method for hosts.
URLs	<ul style="list-style-type: none"> • <a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/Hosts">https://<ip-address>/redfish/v1/SFSS/<Instance #>/Hosts
Examples	Payload

```
{
  "NQN": "nqn.2014-08.org.nvmexpress:uuid:host",
  "TransportAddress": "xx.xx.xx.xx",
  "TransportAddressFamily": "IPv4",
  "TransportType": "TCP"
}
```

Output

```
{
  "Id": "nqn.2014-08.org.nvmexpress:uuid:host@xx.xx.xx.xx:V4::0:0:TCP"
}
```

DELETE API for Host

Description	Deletes the Host.
Privilege	SysAdmin
Method	DELETE method Hosts.
URL	<a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/Hosts('Id')">https://<ip-address>/redfish/v1/SFSS/<Instance #>/Hosts('Id')
Example	

```
{
  "Id": "nqn.2014-08.org.nvmexpress:uuid:host@xx.xx.xx.xx:V4::0:0:TCP"
}
```

GET API for Host

Description

Retrieves host information and functionality. The response goes to a JSON file.

Privilege

SysAdmin

Method

GET method for host functionality.

URLs

- `https://<ip-address>/redfish/v1/SFSS/<Instance#>/Hosts`
- `https://<ip-address>/redfish/v1/SFSS/<Instance#>/Hosts?$expand=Hosts`
- `https://<ip-address>/redfish/v1/SFSS/<Instance#>/Hosts('Id')`
- `https://<ip-address>/redfish/v1/SFSS/<Instance#>/Hosts?$source=config`
- `https://<ip-address>/redfish/v1/SFSS/<Instance #>/Hosts?$expand=Hosts&$skip=1`
- `https://<ip-address>/redfish/v1/SFSS/1/Hosts?$expand=Hosts&$filter=TransportAddress eq xx.xx.xx.xx or TransportAddress eq xx.xx.xx.xx`
 - This URL filters the query for specific records with TransportAddress.
- `https://<ip-address>/redfish/v1/SFSS/<Instance#>/Hosts/Enums`

Examples

```
{
  "Hosts": [
    {
      "@odata.id": "/redfish/v1/SFSS/1/Hosts('nqn.2014-08.org.nvmexpress:uuid:host@xx.xx.xx.xx:V4::0:0:TCP') "
    },
    {
      "@odata.id": "/redfish/v1/SFSS/1/Hosts('nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP') "
    },
    {
      "@odata.id": "/redfish/v1/SFSS/1/Hosts('nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP') "
    }
  ],
  "Hosts@odata.count": 3,
  "@odata.id": "/redfish/v1/SFSS/1/Hosts",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts",
  "@odata.type": "#HostsCollection.HostsCollection"
}
```

Expand example

```
{
  "Hosts": [
    {
      "Id":
      "nqn.2014-08.org.nvmexpress:uuid:host@xx.xx.xx.xx:V4::0:0:TCP",
      "NQN": "nqn.2014-08.org.nvmexpress:uuid:host",
      "TransportAddress": "xx.xx.xx.xx",
      "TransportAddressFamily": "IPV4",
      "PortId": 0,
      "TransportType": "TCP",
      "TREQ": "Secure channel Not specified",
      "TSAS": "No Security",
      "RegistrationType": "Manual",
      "ConnectionStatus": "Offline",
      "FailureReason": "NONE",
      "@odata.id": "/redfish/v1/SFSS/1/Hosts('nqn.2014-08.org.nvmexpress:uuid:host@xx.xx.xx.xx:V4::0:0:TCP') ",
      "@odata.type": "#Hosts.Hosts",
      "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts/Hosts/$entity"
    },
    {
      "Id":
      "nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP",
      "NQN": "nqn.2014-08.org.nvmexpress:uuid:host",
      "TransportAddress": "x.x.x.x",
      "TransportAddressFamily": "IPV4",
```



```

        "PortId": 0,
        "TransportType": "TCP",
        "TREQ": "Secure channel Not specified",
        "TSAS": "No Security",
        "RegistrationType": "Manual",
        "ConnectionStatus": "Offline",
        "FailureReason": "NONE",
        "@odata.id": "/redfish/v1/SFSS/1/
Hosts('nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP')",
        "@odata.type": "#Hosts.Hosts",
        "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts/Hosts/
$entity"
    },
    {
        "Id":
        "nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP",
        "NQN": "nqn.2014-08.org.nvmexpress:uuid:host",
        "TransportAddress": "x.x.x.x",
        "TransportAddressFamily": "IPV4",
        "PortId": 0,
        "TransportType": "TCP",
        "TREQ": "Secure channel Not specified",
        "TSAS": "No Security",
        "RegistrationType": "Manual",
        "ConnectionStatus": "Offline",
        "FailureReason": "NONE",
        "@odata.id": "/redfish/v1/SFSS/1/
Hosts('nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP')",
        "@odata.type": "#Hosts.Hosts",
        "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts/Hosts/
$entity"
    }
],
"Hosts@odata.count": 3,
"@odata.id": "/redfish/v1/SFSS/1/Hosts?$expand=Hosts",
"@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts",
"@odata.type": "#HostsCollection.HostsCollection"
}

```

Hosts('Id') example

```

{
  "Id": "nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP",
  "NQN": "nqn.2014-08.org.nvmexpress:uuid:host",
  "TransportAddress": "x.x.x.x",
  "TransportAddressFamily": "IPV4",
  "PortId": 0,
  "TransportType": "TCP",
  "TREQ": "Secure channel Not specified",
  "TSAS": "No Security",
  "RegistrationType": "Manual",
  "ConnectionStatus": "Offline",
  "FailureReason": "NONE",
  "@odata.id": "/redfish/v1/SFSS/1/
Hosts('nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP')",
  "@odata.type": "#Hosts.Hosts",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts/Hosts/$entity"
}

```

Config example

```

{
  "Hosts": [
    {
      "@odata.id": "/redfish/v1/SFSS/1/
Hosts('nqn.2014-08.org.nvmexpress:uuid:host@xx.xx.xx.xx:V4::0:0:TCP') "
    },
    {
      "@odata.id": "/redfish/v1/SFSS/1/
Hosts('nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP') "
    },
  ],
}

```

```

    {
      "@odata.id": "/redfish/v1/SFSS/1/
Hosts('nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP') "
    }
  ],
  "Hosts@odata.count": 3,
  "@odata.id": "/redfish/v1/SFSS/1/Hosts?$source=config",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts",
  "@odata.type": "#HostsCollection.HostsCollection"
}

```

Skip one record example

```

{
  "Hosts": [
    {
      "Id":
      "nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP",
      "NQN": "nqn.2014-08.org.nvmexpress:uuid:host",
      "TransportAddress": "x.x.x.x",
      "TransportAddressFamily": "IPV4",
      "PortId": 0,
      "TransportType": "TCP",
      "TREQ": "Secure channel Not specified",
      "TSAS": "No Security",
      "RegistrationType": "Manual",
      "ConnectionStatus": "Offline",
      "FailureReason": "NONE",
      "@odata.id": "/redfish/v1/SFSS/1/
Hosts('nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP')",
      "@odata.type": "#Hosts.Hosts",
      "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts/Hosts/
$entity"
    },
    {
      "Id":
      "nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP",
      "NQN": "nqn.2014-08.org.nvmexpress:uuid:host",
      "TransportAddress": "x.x.x.x",
      "TransportAddressFamily": "IPV4",
      "PortId": 0,
      "TransportType": "TCP",
      "TREQ": "Secure channel Not specified",
      "TSAS": "No Security",
      "RegistrationType": "Manual",
      "ConnectionStatus": "Offline",
      "FailureReason": "NONE",
      "@odata.id": "/redfish/v1/SFSS/1/
Hosts('nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP')",
      "@odata.type": "#Hosts.Hosts",
      "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts/Hosts/
$entity"
    }
  ],
  "Hosts@odata.count": 2,
  "@odata.id": "/redfish/v1/SFSS/1/Hosts?$expand=Hosts&$skip=1",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts",
  "@odata.type": "#HostsCollection.HostsCollection"
}

```

Transport Address example

```

{
  "Hosts": [
    {
      "Id":
      "nqn.2014-08.org.nvmexpress:uuid:host@xx.xx.xx.xx:V4::0:0:TCP",
      "NQN": "nqn.2014-08.org.nvmexpress:uuid:host",
      "TransportAddress": "xx.xx.xx.xx",
      "TransportAddressFamily": "IPV4",
      "PortId": 0,

```

```

        "TransportType": "TCP",
        "TREQ": "Secure channel Not specified",
        "TSAS": "No Security",
        "RegistrationType": "Manual",
        "ConnectionStatus": "Offline",
        "FailureReason": "NONE",
        "@odata.id": "/redfish/v1/SFSS/1/
Hosts('nqn.2014-08.org.nvmexpress:uuid:host@xx.xx.xx.xx:V4::0:0:TCP')",
        "@odata.type": "#Hosts.Hosts",
        "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts/Hosts/
$entity"
    },
    {
        "Id":
        "nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP",
        "NQN": "nqn.2014-08.org.nvmexpress:uuid:host",
        "TransportAddress": "x.x.x.x",
        "TransportAddressFamily": "IPv4",
        "PortId": 0,
        "TransportType": "TCP",
        "TREQ": "Secure channel Not specified",
        "TSAS": "No Security",
        "RegistrationType": "Manual",
        "ConnectionStatus": "Offline",
        "FailureReason": "NONE",
        "@odata.id": "/redfish/v1/SFSS/1/
Hosts('nqn.2014-08.org.nvmexpress:uuid:host@x.x.x.x:V4::0:0:TCP')",
        "@odata.type": "#Hosts.Hosts",
        "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts/Hosts/
$entity"
    }
},
    "Hosts@odata.count": 2,
    "@odata.id": "/redfish/v1/SFSS/1/Hosts?",
    $expand=Hosts&$filter=TransportAddress%20eq%2011.22.33.44%20or%20Transpor
tAddress%20eq%201.2.3.4",
    "@odata.context": "/redfish/v1/SFSS/1/$metadata#Hosts",
    "@odata.type": "#HostsCollection.HostsCollection"
}

```

Enums example

```

{
    "TransportAddressFamily": [
        "IPv4",
        "IPv6"
    ],
    "RegistrationType": [
        "Manual",
        "Explicit",
        "Implicit",
        "Pull"
    ],
    "ConnectionStatus": [
        "Offline",
        "Online"
    ],
    "TransportType": [
        "TCP"
    ]
}

```

Subsystem

SFSS APIs for Subsystem

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [POST API for Subsystem](#)
- [DELETE API for Subsystem](#)
- [GET API for Subsystem](#)

POST API for Subsystem

Description	Creates or updates subsystem functionality.
Privilege	SysAdmin
Method	POST method for subsystems.
URLs	<ul style="list-style-type: none"> • <a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/Subsystems">https://<ip-address>/redfish/v1/SFSS/<Instance #>/Subsystems
Examples	Payload

```
{
  "NQN": "nqn.2014-08.org.nvmexpress:uuid:subsystem",
  "TransportAddress": "x.x.x.x",
  "TransportAddressFamily": "IPv4",
  "PortId": xxxx,
  "TransportType": "TCP",
  "TransportServiceId": "900"
}
```

Output

```
{
  "Id":
  "nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:900:0:0:TCP"
}
```

DELETE API for Subsystem

Description	Deletes the subsystem.
Privilege	SysAdmin
Method	DELETE method Subsystems.
URL	<a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/Subsystems('Id')">https://<ip-address>/redfish/v1/SFSS/<Instance #>/Subsystems('Id')
Example	

```
{
  "Id":
  "nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:400:0:0:TCP"
}
```

GET API for Subsystem

Description	Retrieves subsystem information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for subsystem functionality.
URLs	<ul style="list-style-type: none">https://<ip-address>/redfish/v1/SFSS/<Instance#>/Subsystemshttps://<ip-address>/redfish/v1/SFSS/<Instance#>/Subsystems?\$expand=Subsystemshttps://<ip-address>/redfish/v1/SFSS/<Instance#>/Subsystems('Id')https://<ip-address>/redfish/v1/SFSS/<Instance#>/Subsystems?\$source=confighttps://<ip-address>/redfish/v1/SFSS/<Instance#>/Subsystems?\$expand=Subsystems&\$filter=TransportAddress eq 'xx.xx.xx.xx' or TransportAddress eq 'x.x.x.x'<ul style="list-style-type: none">This URL filters the query for transport IP address combinations.https://<ip-address>/redfish/v1/SFSS/<Instance#>/Subsystems/Enums
Examples	Subsystems

```
{
  "Subsystems": [
    {
      "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:600:0:0:TCP') "
    },
    {
      "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:400:0:0:TCP') "
    },
    {
      "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:900:0:0:TCP') "
    }
  ],
  "Subsystems@odata.count": 3,
  "@odata.id": "/redfish/v1/SFSS/1/Subsystems",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#Subsystems",
  "@odata.type": "#SubsystemsCollection.SubsystemsCollection"
}
```

Subsystems expanded example

```
{
  "Subsystems": [
    {
      "Id":
      "nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:600:0:0:TCP",
      "NQN": "nqn.2014-08.org.nvmexpress:uuid:subsystem",
      "TransportAddress": "x.x.x.x",
      "TransportAddressFamily": "IPV4",
      "PortId": 5450,
      "ControllerId": 65535,
      "TransportType": "TCP",
      "SubType": "NVM Subsystem",
      "TREQ": "Secure channel Not specified",
      "ASQZ": 32,
      "TransportServiceId": "600",
      "TSAS": "No Security",
      "RcvdGenCounter": 0,
      "RegistrationType": "Manual",
      "ConnectionStatus": "Offline",
      "FailureReason": "NONE",
      "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:600:0:0:TCP') ",
      "@odata.type": "#Subsystems.Subsystems",
      "@odata.context": "/redfish/v1/SFSS/1/$metadata#Subsystems/
Subsystems/$entity"
    },
    {
      "Id":
      "nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:400:0:0:TCP",
      "NQN": "nqn.2014-08.org.nvmexpress:uuid:subsystem",
      "TransportAddress": "x.x.x.x",

```

```

        "TransportAddressFamily": "IPv4",
        "PortId": 5450,
        "ControllerId": 65535,
        "TransportType": "TCP",
        "SubType": "NVM Subsystem",
        "TREQ": "Secure channel Not specified",
        "ASQZ": 32,
        "TransportServiceId": "400",
        "TSAS": "No Security",
        "RcvdGenCounter": 0,
        "RegistrationType": "Manual",
        "ConnectionStatus": "Offline",
        "FailureReason": "NONE",
        "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:400:0:0:TCP')",
        "@odata.type": "#Subsystems.Subsystems",
        "@odata.context": "/redfish/v1/SFSS/1/$metadata#Subsystems/
Subsystems/$entity"
    },
    {
        "Id":
        "nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:900:0:0:TCP",
        "NQN": "nqn.2014-08.org.nvmexpress:uuid:subsystem",
        "TransportAddress": "x.x.x.x",
        "TransportAddressFamily": "IPv4",
        "PortId": 5450,
        "ControllerId": 65535,
        "TransportType": "TCP",
        "SubType": "NVM Subsystem",
        "TREQ": "Secure channel Not specified",
        "ASQZ": 32,
        "TransportServiceId": "900",
        "TSAS": "No Security",
        "RcvdGenCounter": 0,
        "RegistrationType": "Manual",
        "ConnectionStatus": "Offline",
        "FailureReason": "NONE",
        "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:900:0:0:TCP')",
        "@odata.type": "#Subsystems.Subsystems",
        "@odata.context": "/redfish/v1/SFSS/1/$metadata#Subsystems/
Subsystems/$entity"
    }
],
"Subsystems@odata.count": 3,
"@odata.id": "/redfish/v1/SFSS/1/Subsystems?$expand=Subsystems",
"@odata.context": "/redfish/v1/SFSS/1/$metadata#Subsystems",
"@odata.type": "#SubsystemsCollection.SubsystemsCollection"
}

```

ID example

```

{
    "Id": "nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:400:0:0:TCP",
    "NQN": "nqn.2014-08.org.nvmexpress:uuid:subsystem",
    "TransportAddress": "x.x.x.x",
    "TransportAddressFamily": "IPv4",
    "PortId": 5450,
    "ControllerId": 65535,
    "TransportType": "TCP",
    "SubType": "NVM Subsystem",
    "TREQ": "Secure channel Not specified",
    "ASQZ": 32,
    "TransportServiceId": "400",
    "TSAS": "No Security",
    "RcvdGenCounter": 0,
    "RegistrationType": "Manual",
    "ConnectionStatus": "Offline",
    "FailureReason": "NONE",
    "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:400:0:0:TCP')",
    "@odata.type": "#Subsystems.Subsystems",
    "@odata.context": "/redfish/v1/SFSS/1/$metadata#Subsystems/Subsystems/$entity"
}

```

Configuration example

```
{
  "Subsystems": [
    {
      "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:600:0:0:TCP') "
    },
    {
      "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:400:0:0:TCP') "
    },
    {
      "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:900:0:0:TCP') "
    }
  ],
  "Subsystems@odata.count": 3,
  "@odata.id": "/redfish/v1/SFSS/1/Subsystems?$source=config",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#Subsystems",
  "@odata.type": "#SubsystemsCollection.SubsystemsCollection"
}
```

Filter with transport address combinations example

```
{
  "Subsystems": [
    {
      "Id":
      "nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:400:0:0:TCP",
      "NQN": "nqn.2014-08.org.nvmexpress:uuid:subsystem",
      "TransportAddress": "x.x.x.x",
      "TransportAddressFamily": "IPV4",
      "PortId": 5450,
      "ControllerId": 65535,
      "TransportType": "TCP",
      "SubType": "NVM Subsystem",
      "TREQ": "Secure channel Not specified",
      "ASQZ": 32,
      "TransportServiceId": "400",
      "TSAS": "No Security",
      "RcvdGenCounter": 0,
      "RegistrationType": "Manual",
      "ConnectionStatus": "Offline",
      "FailureReason": "NONE",
      "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:400:0:0:TCP') ",
      "@odata.type": "#Subsystems.Subsystems",
      "@odata.context": "/redfish/v1/SFSS/1/$metadata#Subsystems/
Subsystems/$entity"
    },
    {
      "Id":
      "nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:900:0:0:TCP",
      "NQN": "nqn.2014-08.org.nvmexpress:uuid:subsystem",
      "TransportAddress": "x.x.x.x",
      "TransportAddressFamily": "IPV4",
      "PortId": 5450,
      "ControllerId": 65535,
      "TransportType": "TCP",
      "SubType": "NVM Subsystem",
      "TREQ": "Secure channel Not specified",
      "ASQZ": 32,
      "TransportServiceId": "900",
      "TSAS": "No Security",
      "RcvdGenCounter": 0,
      "RegistrationType": "Manual",
      "ConnectionStatus": "Offline",
      "FailureReason": "NONE",
      "@odata.id": "/redfish/v1/SFSS/1/
Subsystems('nqn.2014-08.org.nvmexpress:uuid:subsystem@x.x.x.x:V4:900:0:0:TCP') ",
      "@odata.type": "#Subsystems.Subsystems",
      "@odata.context": "/redfish/v1/SFSS/1/$metadata#Subsystems/
Subsystems/$entity"
    }
  ]
}
```

```

    ],
    "Subsystems@odata.count": 2,
    "@odata.id": "/redfish/v1/SFSS/1/Subsystems?
$expand=Subsystems&$filter=TransportAddress%20eq%201.1.1.1%20or%20TransportAddre
ss%20eq%203.3.3.3",
    "@odata.context": "/redfish/v1/SFSS/1/$metadata#Subsystems",
    "@odata.type": "#SubsystemsCollection.SubsystemsCollection"
}

```

Enums example

```

{
  "TransportAddressFamily": [
    "IPv4",
    "IPv6"
  ],
  "RegistrationType": [
    "Manual",
    "Explicit",
    "Implicit",
    "Pull"
  ],
  "ConnectionStatus": [
    "Offline",
    "Online"
  ],
  "TransportType": [
    "TCP"
  ]
}

```


ZoneAlias

SFSS APIs for ZoneAlias

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [POST API for ZoneAlias](#)
- [DELETE API for ZoneAlias](#)
- [GET API for ZoneAlias](#)
- [GET API for ZoneAlias Using Key](#)

POST API for ZoneAlias

Description	Creates or updates zone alias functionality.
Privilege	SysAdmin
Method	POST method for the zone alias.
URLs	<ul style="list-style-type: none"> • <a href="https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias">https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias
Examples	Payload

```
{
  "ZoneDBType": "config",
  "ZoneAliasName": "DhanaSampleAlias123"
}
```

Output

```
{
  "EId": "config:DhanaSampleAlias123"
}
```

DELETE API for ZoneAlias

Description	Deletes the zone alias.
Privilege	SysAdmin
Method	DELETE method for zone alias.
URL	<a href="https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAliasTest')">https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAliasTest')

Example

```
{
  "EId": "config:DhanaSampleAliasTest"
}
```

GET API for ZoneAlias

Description	Retrieves zone alias information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone alias functionality.
URLs	<ul style="list-style-type: none">https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias?\$source=config&\$expand=ZoneAlias

Example

```
{
  "ZoneAlias": [
    {
      "ZoneAliasId": "config:DhanaSampleAlias",
      "ZoneAliasName": "DhanaSampleAlias",
      "NumberZoneMembers": "1",
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')",
      "@odata.type": "#ZoneAlias.ZoneAlias",
      "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/$metadata#ZoneAlias/ZoneAlias/$entity"
    },
    {
      "ZoneAliasId": "config:DhanaSampleAliasTest",
      "ZoneAliasName": "DhanaSampleAliasTest",
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAliasTest')",
      "@odata.type": "#ZoneAlias.ZoneAlias",
      "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/$metadata#ZoneAlias/ZoneAlias/$entity"
    }
  ],
  "ZoneAlias@odata.count": 2,
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias?$source=config&$expand=ZoneAlias",
  "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/$metadata#ZoneAlias",
  "@odata.type": "#ZoneAliasCollection.ZoneAliasCollection"
}
```

GET API for ZoneAlias Using Key

Description	Retrieves zone alias information and functionality using a key. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone alias functionality using a key.
URLs	<ul style="list-style-type: none">https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAliasTest')?\$source=config

Example

```
{
  "ZoneAliasId": "config:DhanaSampleAliasTest",
  "ZoneAliasName": "DhanaSampleAliasTest",
  "NumberZoneMembers": "1",
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAliasTest')",
  "@odata.type": "#ZoneAlias.ZoneAlias",
  "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/$metadata#ZoneAlias/ZoneAlias/$entity"
}
```

ZoneAliasMember

SFSS APIs for ZoneAliasMember

NOTE: APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [POST API for ZoneAliasMember Using NQN](#)
- [PUT API for ZoneAliasMember Using NQN](#)
- [POST API for ZoneAliasMember Using FullQualifiedName](#)
- [PUT API for ZoneAliasMember Using FullQualifiedName](#)
- [DELETE API for ZoneAliasMember](#)
- [GET API for ZoneAliasMember](#)
- [GET API for ZoneAliasMember Using Key](#)
- [GET API for ZoneAliasMember with Expand](#)
- [GET API for ZoneAliasMember Enums](#)

POST API for ZoneAliasMember Using NQN

Description	Creates or updates zone alias member using NQN functionality.
Privilege	SysAdmin
Method	POST method for the zone alias members using NQN.
URLs	<ul style="list-style-type: none"> • <a href="https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:SampleZoneAlias')/ZoneAliasMembers">https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:SampleZoneAlias')/ZoneAliasMembers
Examples	Payload

```
{
  "ZoneAliasMemberId": "nqn.2014-08.org.nvmexpress:uuid:host",
  "ZoneAliasMemberType": "NQN",
  "Role" : "Host"
}
```

Output

```
{
  "EId": "config:SampleZoneAlias:nqn.2014-08.org.nvmexpress:uuid:host"
}
```

PUT API for ZoneAliasMember Using NQN

Description	Changes the zone alias members using the NQN functionality.
Privilege	SysAdmin
Method	PUT method to change zone alias members using NQN.
URL	<a href="https://<IP-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:SampleZoneAlias')/ZoneAliasMembers('config:SampleZoneAlias:nqn.2014-08.org.nvmexpress:uuid:host')">https://<IP-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:SampleZoneAlias')/ZoneAliasMembers('config:SampleZoneAlias:nqn.2014-08.org.nvmexpress:uuid:host')

Examples

Payload

```
{
  "Role": "Subsystem"
}
```

Output

```
{
  "EId": "config:SampleZoneAlias:nqn.2014-08.org.nvmexpress:uuid:host"
}
```

POST API for ZoneAliasMember Using FullQualifiedName

Description

Creates or updates zone alias member using full qualified name functionality.

Privilege

SysAdmin

Method

POST method for the zone alias members using a full qualified name.

URLs

- [https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs\('config'\)/ZoneAlias\('config:DhanaSampleAlias'\)/ZoneAliasMembers](https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers)

Examples

Payload

```
{
  "ZoneAliasMemberId":
  "nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3002",
  "ZoneAliasMemberType": "FullQualifiedName",
  "Role" : "Subsystem"
}
```

Output

```
{
  "EId": "config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:
host:TCP:Ipv4:1.1.1.1:3002"
}
```

PUT API for ZoneAliasMember Using FullQualifiedName

Description

Changes the zone alias members using the full qualified name functionality.

Privilege

SysAdmin

Method

PUT method to change zone alias members using a full qualified name.

URL

[https://<IP-address>/redfish/v1/SFSS/<instance#>/ZoneDBs\('config'\)/ZoneAlias\('config:DhanaSampleAlias'\)/ZoneAliasMembers\('config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3002'\)](https://<IP-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers('config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3002'))

Examples

Payload

```
{
  "Role": "Host"
}
```

Output

```
{
  "EId": "config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:
host:TCP:Ipv4:1.1.1.1:3002"
}
```

DELETE API for ZoneAliasMember

Description	Deletes the zone alias member.
Privilege	SysAdmin
Method	DELETE method for zone alias members.
URL	<code>https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers('config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3002')</code>
Example	

```
{
  "EId": "config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:
host:TCP:Ipv4:x.x.x.x:3002"
}
```

GET API for ZoneAliasMember

Description	Retrieves zone alias member information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone alias member functionality.
URLs	<code>https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers?\$source=config</code>
Example	

```
{
  "ZoneAliasMembers": [
    {
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers('config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3002')",
    },
    {
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers('config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host')",
    }
  ],
  "ZoneAliasMembers@odata.count": 2,
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers?$source=config",
  "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/$metadata#ZoneAliasMembers",
  "@odata.type": "#ZoneMembersCollection.ZoneMembersCollection"
}
```

GET API for ZoneAliasMember Using Key

Description	Retrieves zone alias member information and functionality using a key. The response goes to a JSON file.
Privilege	SysAdmin

Method	GET method for zone alias member functionality using a key.
URLs	<ul style="list-style-type: none"> https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers('config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host')?\$source=config

Example

```
{
  "ZoneAliasMemberId": "config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host",
  "ZoneAliasMemberType": "NQN",
  "Role": "Host",
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers('config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host')",
  "@odata.type": "#ZoneAliasMembers.ZoneAliasMembers",
  "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/$metadata#ZoneAliasMembers/ZoneAliasMembers/$entity"
}
```

GET API for ZoneAliasMember with Expand

Description	Retrieves expanded zone alias member information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone alias member functionality.
URLs	https://<ip-address>/redfish/v1/SFSS/<instance#>/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers?\$source=config&\$expand=ZoneAliasMembers

Example

```
{
  "ZoneAliasMembers": [
    {
      "ZoneAliasMemberType": "FullQualifiedName",
      "ZoneAliasMemberId": "config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3002",
      "Role": "Host",
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers('config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3002')",
      "@odata.type": "#ZoneAliasMembers.ZoneAliasMembers",
      "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/$metadata#ZoneAliasMembers/ZoneAliasMembers/$entity"
    },
    {
      "ZoneAliasMemberId": "config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host",
      "ZoneAliasMemberType": "NQN",
      "Role": "Host",
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers('config:DhanaSampleAlias:nqn.2014-08.org.nvmexpress:uuid:host')",
      "@odata.type": "#ZoneAliasMembers.ZoneAliasMembers",
      "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/$metadata#ZoneAliasMembers/ZoneAliasMembers/$entity"
    }
  ],
  "ZoneAliasMembers@odata.count": 2,
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/ZoneAliasMembers?$source=config&$expand=ZoneAliasMembers",
  "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneAlias('config:DhanaSampleAlias')/$metadata#ZoneAliasMembers",
  "@odata.type": "#ZoneMembersCollection.ZoneMembersCollection"
}
```

GET API for ZoneAliasMember Enums

Description	Retrieves zone alias member Enums information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone alias member Enums functionality.
URLs	<ul style="list-style-type: none"> https://<ip-address>/redfish/v1/SFSS/<Instance#>/ZoneDBs/ZoneAlias/ZoneAliasMembers/Enums

Example

```
{
  "Role": [
    "Subsystem",
    "Host"
  ],
  "ZoneMemberType": [
    "NQN",
    "FullQualifiedName"
  ]
}
```

ZoneDB

SFSS APIs for ZoneDB

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [GET API for ZoneDB](#)

GET API for ZoneDB

Description	Retrieves zone database information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone database functionality.
URLs	<ul style="list-style-type: none"> • <a href="https://<ip-address>/redfish/v1/SFSS/<Instance#>/ZoneDBs">https://<ip-address>/redfish/v1/SFSS/<Instance#>/ZoneDBs • <a href="https://<ip-address>/redfish/v1/SFSS/<Instance#>/ZoneDBs?\$source=config">https://<ip-address>/redfish/v1/SFSS/<Instance#>/ZoneDBs?\$source=config
Example	

```
{
  "ZoneDBs": [
    {
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('pending')"
    },
    {
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('active')"
    }
  ],
  "ZoneDBs@odata.count": 2,
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#ZoneDBs",
  "@odata.type": "#ZoneDBsCollection.ZoneDBsCollection"
}
```

Config example

```
{
  "ZoneDBs": [
    {
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')"
    }
  ],
  "ZoneDBs@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs?$source=config",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#ZoneDBs",
  "@odata.type": "#ZoneDBsCollection.ZoneDBsCollection"
}
```


ZoneDB - ActiveDB

SFSS APIs for ZoneDB - ActiveDB

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [GET API for ZoneDB - ActiveDB](#)


GET API for ZoneDB - ActiveDB

Description	Retrieves zone database - Active database information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone database - Active database functionality.
URLs	<ul style="list-style-type: none"> • <a href="https://<ip-address>/redfish/v1/SFSS/<Instance#>/ZoneDBs('active')">https://<ip-address>/redfish/v1/SFSS/<Instance#>/ZoneDBs('active')
Example	

```
{
  "NumberZoneGroups": 1,
  "ZoneGroups": [
    "active:ZoneGrpDhana1111:"
  ],
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('active')",
  "@odata.type": "#ZoneDBs.ZoneDBs",
  "@odata.context": "/redfish/v1/SFSS/1/$metadata#ZoneDBs/ZoneDBs/$entity"
}
```

ZoneDB - ConfigDB

SFSS APIs for ZoneDB - ConfigDB

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [DELETE API for ZoneDB - ConfigDB Flush](#)
- [GET API for ZoneDB - ConfigDB](#)

DELETE API for ZoneDB - ConfigDB Flush

Description	Deletes the zone database - configuration database.
Privilege	SysAdmin
Method	DELETE method for zone databases - configuration databases.
URL	<code>https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')</code>
Example	<pre>{ "EId": "config" }</pre>

GET API for ZoneDB - ConfigDB

Description	Retrieves zone database - Config database information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone database - Config database functionality.
URLs	<ul style="list-style-type: none"> • <code>https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')?\$source=config</code>
Example	<pre>{ "NumberZoneGroups": 1, "ZoneGroups": ["config:ZoneGrpDhana1111:"], "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')", "@odata.type": "#ZoneDBs.ZoneDBs", "@odata.context": "/redfish/v1/SFSS/1/\$metadata#ZoneDBs/ZoneDBs/" }</pre>

ZoneGroup

SFSS APIs for ZoneGroup

NOTE: APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [POST API for ZoneGroup](#)
- [PUT API for ZoneGroup \(Activate\)](#)
- [PUT API for ZoneGroup \(Deactivate\)](#)
- [DELETE API for ZoneGroup](#)
- [GET API for ZoneGroup](#)
- [GET API for ZoneGroups](#)

POST API for ZoneGroup

Description	Creates or updates ZoneGroup functionality.
Privilege	SysAdmin
Method	POST method for ZoneGroups.
URLs	<ul style="list-style-type: none"> • <a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups">https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups
Examples	Payload

```
{
  "ZoneDBType": "config",
  "ZoneGroupName": "ZoneGrpDhana1111"
}
```

Output

```
{
  "EId":
    "config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8"
}
```

PUT API for ZoneGroup (Activate)

Description	Activates the zone group.
Privilege	SysAdmin
Method	PUT method to activate the zone groups.
URL	<a href="https://<IP-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')">https://<IP-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')
Examples	Payload

```
{
  "ActivateStatus": "Activate"
}
```

Output

```
{
  "EId":
    "active:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8"
}
```

PUT API for ZoneGroup (Deactivate)

Description	Deactivates the zone group.
Privilege	SysAdmin
Method	PUT method to deactivate the zone groups.
URL	<a href="https://<IP-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('active')/ZoneGroups('active:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')">https://<IP-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('active')/ZoneGroups('active:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')
Examples	Payload

```
{
  "ActivateStatus": "DeActivate"
}
```

Output

```
{
  "EId": "active:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8"
}
```

DELETE API for ZoneGroup

Description	Deletes the zone group.
Privilege	SysAdmin
Method	DELETE method for zone groups.
URL	<a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')">https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')
Example	

```
{
  "EId":
    "config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8"
}
```

GET API for ZoneGroup

Description	Retrieves zone group information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone group functionality.
URLs	<ul style="list-style-type: none"><a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGroup1:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')?\$source=config">https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGroup1:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')?\$source=config<a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs/ZoneGroups/Enums">https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs/ZoneGroups/Enums

Example

```
{
  "ZoneDBType": "config",
  "ZoneGroupId":
    "config:ZoneGroup1:nqn.1988-11.com.dell:SFSS:1:20210706164404e8",
  "zoneGroupName": "ZoneGroup1",
  "OriginatorNQN": "nqn.1988-11.com.dell:SFSS:1:20210706164404e8",
  "Type": "Manual",
  "ActivateStatus": "DeActivate",
  "ActivationState": "NotActive",
  "NumberZones": 0,
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs(config)/
ZoneGroups(config:ZoneGroup1:nqn.1988-11.com.dell:SFSS:1:20210706164404e8)",
  "@odata.type": "#ZoneGroups.ZoneGroups",
  "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs(config)/$metadata#ZoneGroups/
ZoneGroups/$entity"
}
```

Enums

```
{
  "ActivateStatus": [
    "Activate",
    "DeActivate"
  ],
  "ActivationState": [
    "Active",
    "ReActivationNeeded",
    "NotActive"
  ],
  "Type": [
    "Manual",
    "PULLANER",
    "ANER"
  ]
}
```

GET API for ZoneGroups

Description

Retrieves zone groups information and functionality.

Privilege

SysAdmin

Method

GET method for zone groups functionality.

URLs

- [https://<ip-address>/redfish/v1/SFSS/<Instance#>/ZoneDBs\('config'\)/ZoneGroups?\\$source=config](https://<ip-address>/redfish/v1/SFSS/<Instance#>/ZoneDBs('config')/ZoneGroups?$source=config)

Examples

```
{
  "ZoneGroups": [
    {
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/
ZoneGroups('config:ZoneGrpDhanal111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')",
      "@odata.type": "#ZoneGroupsCollection.ZoneGroupsCollection"
    }
  ],
  "ZoneGroups@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups?$source=config",
  "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/$metadata#ZoneGroups",
  "@odata.type": "#ZoneGroupsCollection.ZoneGroupsCollection"
}
```

Zone

SFSS APIs for Zone

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [POST API for Zone](#)
- [DELETE API for Zone](#)
- [GET API for Zone](#)

POST API for Zone

Description	Creates or updates zone functionality.
Privilege	SysAdmin
Method	POST method for zones.
URLs	<ul style="list-style-type: none"> • <a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')/Zones">https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')/Zones
Examples	Payload

```
{
  "ZoneName": "DhanaZone"
}
```

Output

```
{
  "EId":
  "config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8:DhanaZone"
}
```

DELETE API for Zone

Description	Deletes the zone.
Privilege	SysAdmin
Method	DELETE method for zones.
URL	<a href="https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')/Zones('config:ZoneGrpDhana:nqn.1988-11.com.dell:SFSS:1:20210706164404e8:DhanaZone')">https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')/Zones('config:ZoneGrpDhana:nqn.1988-11.com.dell:SFSS:1:20210706164404e8:DhanaZone')

Example

```
{
  "EId":
  "config:ZoneGrpDhana:nqn.1988-11.com.dell:SFSS:1:20210706164404e8:DhanaZone"
}
```

GET API for Zone

Description

Retrieves Zone information and functionality. The response goes to a JSON file.

Privilege

SysAdmin

Method

GET method for Zone functionality.

URLs


- [https://<ip-address>/redfish/v1/SFSS/<Instance#>/redfish/v1/SFSS/1/ZoneDBs\('config'\)/ZoneGroups\('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8'\)/Zones?\\$source=config](https://<ip-address>/redfish/v1/SFSS/<Instance#>/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')/Zones?$source=config)

Example

```
{
  "Zones": [
    {
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8')/Zones('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8:Dhana2)",
      "@odata.type": "#ZonesCollection.ZonesCollection"
    }
  ],
  "Zones@odata.count": 1,
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana1111:')/Zones?$source=config",
  "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana1111:')/$metadata#Zones",
  "@odata.type": "#ZonesCollection.ZonesCollection"
}
```

ZoneMember

SFSS APIs for ZoneMember

 **NOTE:** APIs are accepted only on the Primary node. The IP address that you use must be a Primary node IP address.

Topics:

- [POST API for ZoneMember Using NQN](#)
- [PUT API for ZoneMember using NQN](#)
- [POST API for ZoneMember Using FullQualifiedName](#)
- [PUT API for ZoneMember using FullQualifiedName](#)
- [POST API for ZoneMember Using ZoneAlias](#)
- [DELETE API for ZoneMember](#)
- [GET API for ZoneMember](#)
- [GET API for ZoneMember Using Key](#)
- [GET API for ZoneMember with Expand](#)
- [GET API for ZoneMember Enums](#)

POST API for ZoneMember Using NQN

Description	Creates or updates zone member using NQN functionality.
Privilege	SysAdmin
Method	POST method for zone members using NQN.
URLs	<ul style="list-style-type: none"> • <code>https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/ZoneMembers</code>
Examples	Payload

```
{
  "ZoneMemberId": "nqn.2014-08.org.nvmexpress:uuid:host",
  "ZoneMemberType": "NQN",
  "Role": "Host"
}
```

Output

```
{
  "EId": "config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1:nqn.2014-08.org.nvmexpress:uuid:host"
}
```

PUT API for ZoneMember using NQN

Description	Changes the zone member using NQN.
Privilege	SysAdmin
Method	PUT method to change zone members using NQN.
URL	<code>https://<IP-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/</code>


```
ZoneGroups('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/  
Zones('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/  
ZoneMembers('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:  
SampleZone1:nqn.2014-08.org.nvmexpress:uuid:host')
```

Examples

Payload

```
{  
  "Role": "Subsystem"  
}
```

Output

```
{  
  "EId": "config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:  
1:20210527171628c9:SampleZone1:nqn.2014-08.org.nvmexpress:uuid:host"  
}
```

POST API for ZoneMember Using FullQualifiedName

Description

Creates or updates zone member using the full qualified name functionality.

Privilege

SysAdmin

Method

POST method for zone members using a full qualified name.

URLs

```
https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/  
ZoneGroups('config:SampleZoneGroup: nqn.1988-11.com .dell:SFSS:1:20210527171628c9')/  
Zones('config:SampleZoneGroup: nqn.1988-11.com .dell:SFSS:1:20210527171628c9:SampleZone1')/  
ZoneMembers
```

Examples

Payload

```
{  
  "ZoneMemberId": "nqn.2014-08.org.nvmexpress:uuid:  
host:TCP:Ipv4:1.1.1.1:3000",  
  "ZoneMemberType": "FullQualifiedName",  
  "Role": "Host"  
}
```

Output

```
{  
  "EId": "config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:  
1:20210527171628c9:SampleZone1:nqn.2014-08.org.nvmexpress:uuid:  
host:TCP:Ipv4:1.1.1.1:3000"  
}
```

PUT API for ZoneMember using FullQualifiedName

Description

Changes the zone member using the full qualified name functionality.

Privilege

SysAdmin

Method

PUT method to change zone members using a full qualified name.

URL

```
https://<IP-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/  
ZoneGroups('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/  
Zones('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/  
ZoneMembers('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:  
SampleZone1:nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3000')
```

Examples

Payload

```
{
  "Role": "Subsystem"
}
```

Output

```
{
  "EId": "config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1:nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3000"
}
```

POST API for ZoneMember Using ZoneAlias

Description

Creates or updates zone member using zone alias functionality.

Privilege

SysAdmin

Method

POST method for zone members using a zone alias.

URLs

- https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:SampleZoneGroup: nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/ZoneMembers

Examples

Payload

```
{
  "ZoneMemberId": "AliasMemberIdDhana",
  "ZoneMemberType": "ZoneAlias"
}
```

Output

```
{
  "EId": "config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1:AliasMemberIdDhana"
}
```

DELETE API for ZoneMember

Description

Deletes the zone member.

Privilege

SysAdmin

Method

DELETE method for zone members.

URL

https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:ZoneGrpDhana:')/Zones('config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8:DhanaZone:nqn.2014-08.org.nvmexpress:uuid:host')/ZoneMembers('config:ZoneGrpDhana1111::DhanaZone:nqn.2014-08.org.nvmexpress:uuid:host')

Example

```
{
  "EId": "config:ZoneGrpDhana1111:nqn.1988-11.com.dell:SFSS:1:20210706164404e8:DhanaZone:nqn.2014-08.org.nvmexpress:uuid:host"
}
```

GET API for ZoneMember

Description	Retrieves zone member information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone member functionality.
URLs	<ul style="list-style-type: none">https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/ZoneMembers?\$source=config
Example	<pre>{ "ZoneMembers": [{ "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/ ZoneMembers ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1: nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3000') " }, { "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/ ZoneMembers ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1: AliasMemberIdDhana') " }, { "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/ ZoneMembers ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1: nqn.2014-08.org.nvmexpress:uuid:host') " }], "ZoneMembers@odata.count": 3, "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/ ZoneMembers?\$source=config", "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones ('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/ \$metadata#ZoneMembers", "@odata.type": "#ZoneMembersCollection.ZoneMembersCollection" }</pre>

GET API for ZoneMember Using Key

Description	Retrieves zone alias member information and functionality using a key. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone member functionality using a key.
URLs	https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/ZoneMembers('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1:nqn.2014-08.org.nvmexpress:uuid:host')?\$source=config
Example	<pre>{ "Role": "Subsystem", "ZoneMemberId": "config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:</pre>

```
1:20210527171628c9:SampleZone1:nqn.2014-08.org.nvmexpress:uuid:host",
  "ZoneMemberType": "NQN",
  "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:
SampleZone1')/ZoneMembers
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1:
nqn.2014-08.org.nvmexpress:uuid:host')",
  "@odata.type": "#ZoneMembers.ZoneMembers",
  "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:
SampleZone1')/$metadata#ZoneMembers/ZoneMembers/$entity"
}
```

GET API for ZoneMember with Expand

Description Retrieves expanded zone member information and functionality. The response goes to a JSON file.

Privilege SysAdmin

Method GET method for zone member functionality.

URLs [https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs\('config'\)/ZoneGroups\('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9'\)/Zones\('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1'\)/ZoneMembers?\\$source=config&\\$expand=ZoneMembers](https://<ip-address>/redfish/v1/SFSS/<Instance #>/ZoneDBs('config')/ZoneGroups('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/ZoneMembers?$source=config&$expand=ZoneMembers)

Example

```
{
  "ZoneMembers": [
    {
      "Role": "Subsystem",
      "ZoneMemberId": "config:SampleZoneGroup:nqn.1988-11.com.dell:
SFSS:1:20210527171628c9:SampleZone1:nqn.2014-08.org.nvmexpress:uuid:host:
TCP:Ipv4:1.1.1.1:3000",
      "ZoneMemberType": "FullQualifiedName",
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:
SampleZone1')/ZoneMembers('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:
1:20210527171628c9:SampleZone1:nqn.2014-08.org.nvmexpress:uuid:host:TCP:Ipv4:1.1.1.1:3000')",
      "@odata.type": "#ZoneMembers.ZoneMembers",
      "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')
/$metadata#ZoneMembers/ZoneMembers/$entity"
    },
    {
      "Role": "Subsystem",
      "ZoneMemberId": "config:SampleZoneGroup:nqn.1988-11.com.dell:
SFSS:1:20210527171628c9:SampleZone1:AliasMemberIdDhana",
      "ZoneMemberType": "ZoneAlias",
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')/
ZoneMembers('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:
20210527171628c9:SampleZone1:AliasMemberIdDhana')",
      "@odata.type": "#ZoneMembers.ZoneMembers",
      "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')
/$metadata#ZoneMembers/ZoneMembers/$entity"
    },
    {
      "Role": "Subsystem",
      "ZoneMemberId": "config:SampleZoneGroup:nqn.1988-11.com.dell:
SFSS:1:20210527171628c9:SampleZone1:nqn.2014-08.org.nvmexpress:uuid:host",
      "ZoneMemberType": "NQN",
      "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')
/$metadata#ZoneMembers/ZoneMembers/$entity"
    }
  ]
}
```

```

    },
    "ZoneMembers@odata.count": 3,
    "@odata.id": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')
/ZoneMembers?$source=config&$expand=ZoneMembers",
    "@odata.context": "/redfish/v1/SFSS/1/ZoneDBs('config')/ZoneGroups
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9')/Zones
('config:SampleZoneGroup:nqn.1988-11.com.dell:SFSS:1:20210527171628c9:SampleZone1')
/$metadata#ZoneMembers",
    "@odata.type": "#ZoneMembersCollection.ZoneMembersCollection"
}

```

GET API for ZoneMember Enums

Description	Retrieves expanded zone member information and functionality. The response goes to a JSON file.
Privilege	SysAdmin
Method	GET method for zone member functionality.
URLs	<ul style="list-style-type: none"> https://<ip-address>/redfish/v1/SFSS/<Instance#>/ZoneDBs/ZoneGroups/Zones/ZoneMembers/Enums

Example

```

{
  "Role": [
    "Subsystem",
    "Host"
  ],
  "ZoneMemberType": [
    "ZoneAlias",
    "NQN",
    "FullQualifiedName"
  ]
}

```

Dell EMC support

The Dell EMC support site provides documents and tools to help you effectively use Dell EMC equipment and mitigate network outages. Through the support site you can obtain technical information, access software upgrades and patches, download available management software, and manage your open cases. The Dell EMC support site provides integrated, secure access to these services.

To access the Dell EMC support site, go to www.dell.com/support/. To display information in your language, scroll down to the bottom of the web page and select your country from the drop-down menu.

- To obtain product-specific information, enter the 7-character Service Tag or 11-digit express service code of your switch, which is found on the pull-out tag, also known as a luggage tag, and click **Submit**.
- To receive more technical support, click **Contact Us**. On the Contact Information web page, click **Technical Support**.

To access product documentation and resources that might be helpful to install, configure, and troubleshoot the specific Dell EMC Networking switch, see the [Dell EMC Networking OS10 Info Hub](#).

To search for drivers and downloads, go to www.dell.com/drivers/.

To participate in Dell EMC community blogs and forums, go to www.dell.com/community.

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