

**EVIDEN**

BullSequana EX & AI

# Redfish Documentation

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### **Hardware**

**November 2024**

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# Contents

<b>1 AccountService service</b>	<b>9</b>
1.1 Descriptions . . . . .	9
1.2 URIs . . . . .	9
1.3 Properties . . . . .	9
1.4 Property details . . . . .	12
<b>2 Bios service</b>	<b>13</b>
2.1 Descriptions . . . . .	13
2.2 URIs . . . . .	13
2.3 Properties . . . . .	13
2.4 Actions . . . . .	14
<b>3 Certificate service</b>	<b>15</b>
3.1 Descriptions . . . . .	15
3.2 URIs . . . . .	15
3.3 Properties . . . . .	15
<b>4 CertificateCollection service</b>	<b>17</b>
4.1 Descriptions . . . . .	17
4.2 URIs . . . . .	17
4.3 Properties . . . . .	17
<b>5 CertificateLocations service</b>	<b>18</b>
5.1 Descriptions . . . . .	18
5.2 URIs . . . . .	18
5.3 Properties . . . . .	18
<b>6 CertificateService service</b>	<b>19</b>
6.1 Descriptions . . . . .	19
6.2 URIs . . . . .	19
6.3 Properties . . . . .	19
6.4 Actions . . . . .	19
6.5 Property details . . . . .	20
<b>7 Chassis service</b>	<b>21</b>
7.1 Descriptions . . . . .	21
7.2 URIs . . . . .	21
7.3 Properties . . . . .	21
7.4 Actions . . . . .	23
7.5 Property details . . . . .	24
<b>8 ChassisCollection service</b>	<b>27</b>
8.1 Descriptions . . . . .	27
8.2 URIs . . . . .	27
8.3 Properties . . . . .	27
<b>9 ComputerSystem service</b>	<b>28</b>
9.1 Descriptions . . . . .	28
9.2 URIs . . . . .	28
9.3 Properties . . . . .	28
9.4 Actions . . . . .	32
9.5 Property details . . . . .	33

<b>10 ComputerSystemCollection service</b>	<b>37</b>
10.1 Descriptions . . . . .	37
10.2 URIs . . . . .	37
10.3 Properties . . . . .	37
<b>11 Drive service</b>	<b>38</b>
11.1 Descriptions . . . . .	38
11.2 URIs . . . . .	38
11.3 Properties . . . . .	38
11.4 Property details . . . . .	39
<b>12 EthernetInterface service</b>	<b>41</b>
12.1 Descriptions . . . . .	41
12.2 URIs . . . . .	41
12.3 Properties . . . . .	41
12.4 Property details . . . . .	43
<b>13 EthernetInterfaceCollection service</b>	<b>45</b>
13.1 Descriptions . . . . .	45
13.2 URIs . . . . .	45
13.3 Properties . . . . .	45
<b>14 EventDestinationCollection service</b>	<b>46</b>
14.1 Descriptions . . . . .	46
14.2 URIs . . . . .	46
14.3 Properties . . . . .	46
<b>15 EventService service</b>	<b>47</b>
15.1 Descriptions . . . . .	47
15.2 URIs . . . . .	47
15.3 Properties . . . . .	47
15.4 Actions . . . . .	48
15.5 Property details . . . . .	49
<b>16 JsonSchemaFile service</b>	<b>50</b>
16.1 Descriptions . . . . .	50
16.2 URIs . . . . .	50
16.3 Properties . . . . .	50
<b>17 JsonSchemaFileCollection service</b>	<b>51</b>
17.1 Descriptions . . . . .	51
17.2 URIs . . . . .	51
17.3 Properties . . . . .	51
<b>18 LogEntry service</b>	<b>52</b>
18.1 Descriptions . . . . .	52
18.2 URIs . . . . .	52
18.3 Properties . . . . .	52
18.4 Property details . . . . .	53
<b>19 LogEntry service</b>	<b>54</b>
19.1 Descriptions . . . . .	54
19.2 URIs . . . . .	54
19.3 Properties . . . . .	54
19.4 Property details . . . . .	54

<b>20 LogEntryCollection service</b>	<b>56</b>
20.1 Descriptions . . . . .	56
20.2 URIs . . . . .	56
20.3 Properties . . . . .	56
<b>21 LogService service</b>	<b>59</b>
21.1 Descriptions . . . . .	59
21.2 URIs . . . . .	59
21.3 Properties . . . . .	59
21.4 Actions . . . . .	59
21.5 Property details . . . . .	60
<b>22 LogService service</b>	<b>61</b>
22.1 Descriptions . . . . .	61
22.2 URIs . . . . .	61
22.3 Properties . . . . .	61
22.4 Actions . . . . .	61
22.5 Property details . . . . .	62
<b>23 LogServiceCollection service</b>	<b>63</b>
23.1 Descriptions . . . . .	63
23.2 URIs . . . . .	63
23.3 Properties . . . . .	63
<b>24 Manager service</b>	<b>64</b>
24.1 Descriptions . . . . .	64
24.2 URIs . . . . .	64
24.3 Properties . . . . .	64
24.4 Actions . . . . .	68
24.5 Property details . . . . .	68
<b>25 ManagerAccount service</b>	<b>71</b>
25.1 Descriptions . . . . .	71
25.2 URIs . . . . .	71
25.3 Properties . . . . .	71
25.4 Property details . . . . .	72
<b>26 ManagerAccountCollection service</b>	<b>73</b>
26.1 Descriptions . . . . .	73
26.2 URIs . . . . .	73
26.3 Properties . . . . .	73
<b>27 ManagerCollection service</b>	<b>74</b>
27.1 Descriptions . . . . .	74
27.2 URIs . . . . .	74
27.3 Properties . . . . .	74
<b>28 ManagerNetworkProtocol service</b>	<b>75</b>
28.1 Descriptions . . . . .	75
28.2 URIs . . . . .	75
28.3 Properties . . . . .	75
28.4 Property details . . . . .	76
<b>29 Memory service</b>	<b>78</b>
29.1 Descriptions . . . . .	78

29.2 URIs . . . . .	78
29.3 Properties . . . . .	78
29.4 Property details . . . . .	79
<b>30 MemoryCollection service</b>	<b>82</b>
30.1 Descriptions . . . . .	82
30.2 URIs . . . . .	82
30.3 Properties . . . . .	82
<b>31 MessageRegistryFile service</b>	<b>83</b>
31.1 Descriptions . . . . .	83
31.2 URIs . . . . .	83
31.3 Properties . . . . .	83
<b>32 MessageRegistryFileCollection service</b>	<b>84</b>
32.1 Descriptions . . . . .	84
32.2 URIs . . . . .	84
32.3 Properties . . . . .	84
<b>33 PCIeDevice service</b>	<b>85</b>
33.1 Descriptions . . . . .	85
33.2 URIs . . . . .	85
33.3 Properties . . . . .	85
33.4 Property details . . . . .	86
<b>34 PCIeDeviceCollection service</b>	<b>87</b>
34.1 Descriptions . . . . .	87
34.2 URIs . . . . .	87
34.3 Properties . . . . .	87
<b>35 PCIeFunctionCollection service</b>	<b>88</b>
35.1 Descriptions . . . . .	88
35.2 URIs . . . . .	88
35.3 Properties . . . . .	88
<b>36 Power service</b>	<b>89</b>
36.1 Descriptions . . . . .	89
36.2 URIs . . . . .	89
36.3 Properties . . . . .	89
36.4 Property details . . . . .	90
<b>37 Processor service</b>	<b>92</b>
37.1 Descriptions . . . . .	92
37.2 URIs . . . . .	92
37.3 Properties . . . . .	92
37.4 Property details . . . . .	94
<b>38 ProcessorCollection service</b>	<b>96</b>
38.1 Descriptions . . . . .	96
38.2 URIs . . . . .	96
38.3 Properties . . . . .	96
<b>39 Role service</b>	<b>97</b>
39.1 Descriptions . . . . .	97
39.2 URIs . . . . .	97

39.3 Properties . . . . .	97
39.4 Property details . . . . .	97
<b>40 RoleCollection service</b>	<b>99</b>
40.1 Descriptions . . . . .	99
40.2 URIs . . . . .	99
40.3 Properties . . . . .	99
<b>41 Sensor service</b>	<b>100</b>
41.1 Descriptions . . . . .	100
41.2 URIs . . . . .	100
41.3 Properties . . . . .	100
41.4 Property details . . . . .	101
<b>42 SensorCollection service</b>	<b>103</b>
42.1 Descriptions . . . . .	103
42.2 URIs . . . . .	103
42.3 Properties . . . . .	103
<b>43 ServiceRoot service</b>	<b>104</b>
43.1 Descriptions . . . . .	104
43.2 URIs . . . . .	104
43.3 Properties . . . . .	104
<b>44 Session service</b>	<b>107</b>
44.1 Descriptions . . . . .	107
44.2 URIs . . . . .	107
44.3 Properties . . . . .	107
<b>45 SessionCollection service</b>	<b>108</b>
45.1 Descriptions . . . . .	108
45.2 URIs . . . . .	108
45.3 Properties . . . . .	108
<b>46 SessionService service</b>	<b>109</b>
46.1 Descriptions . . . . .	109
46.2 URIs . . . . .	109
46.3 Properties . . . . .	109
<b>47 SoftwareInventory service</b>	<b>110</b>
47.1 Descriptions . . . . .	110
47.2 URIs . . . . .	110
47.3 Properties . . . . .	110
47.4 Property details . . . . .	111
<b>48 SoftwareInventoryCollection service</b>	<b>112</b>
48.1 Descriptions . . . . .	112
48.2 URIs . . . . .	112
48.3 Properties . . . . .	112
<b>49 Storage service</b>	<b>113</b>
49.1 Descriptions . . . . .	113
49.2 URIs . . . . .	113
49.3 Properties . . . . .	113
49.4 Property details . . . . .	114

<b>50 StorageCollection service</b>	<b>115</b>
50.1 Descriptions . . . . .	115
50.2 URIs . . . . .	115
50.3 Properties . . . . .	115
<b>51 Task service</b>	<b>116</b>
51.1 Descriptions . . . . .	116
51.2 URIs . . . . .	116
51.3 Properties . . . . .	116
51.4 Property details . . . . .	117
<b>52 TaskCollection service</b>	<b>118</b>
52.1 Descriptions . . . . .	118
52.2 URIs . . . . .	118
52.3 Properties . . . . .	118
<b>53 TaskService service</b>	<b>119</b>
53.1 Descriptions . . . . .	119
53.2 URIs . . . . .	119
53.3 Properties . . . . .	119
53.4 Property details . . . . .	120
<b>54 Thermal service</b>	<b>122</b>
54.1 Descriptions . . . . .	122
54.2 URIs . . . . .	122
54.3 Properties . . . . .	122
<b>55 UpdateService service</b>	<b>123</b>
55.1 Descriptions . . . . .	123
55.2 URIs . . . . .	123
55.3 Properties . . . . .	123
55.4 Actions . . . . .	124
55.5 Property details . . . . .	124
<b>56 VlanNetworkInterfaceCollection service</b>	<b>126</b>
56.1 Descriptions . . . . .	126
56.2 URIs . . . . .	126
56.3 Properties . . . . .	126
<b>57 VirtualMediaCollection service</b>	<b>127</b>
57.1 Descriptions . . . . .	127
57.2 URIs . . . . .	127
57.3 Properties . . . . .	127

# 1 AccountService service

## 1.1 Descriptions

This resource shall be used to represent a management account service for a Redfish implementation.

## 1.2 URIs

/redfish/v1/AccountService

## 1.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#AccountService.v1_5_0.AccountService"
AccountLockoutDuration	integer	read-write	The time in seconds an account is locked out. The value must be greater than or equal to the value of the AccountLockoutCounterResetAfter property. If set to 0, no lockout occurs.
AccountLockoutThreshold	integer	read-write	The number of failed login attempts allowed before a user account is locked for a specified duration. A value of 0 means it is never locked.
Accounts		read-only	A link to a collection of Manager Accounts.
{ @odata.id	string	read-only	The unique identifier for a resource.
}			
ActiveDirectory			The first ActiveDirectory external account provider this AccountService supports.
{ Authentication			This property contains the authentication information for the external account provider.
{			
AuthenticationType	null	read-write	This property contains the type of authentication used to connect to the external account provider.
Password	string	read-write	See "Property details" section for details This property is used with a PATCH or PUT to write the password for the account service. This property is null on a GET.
Username	string	read-write	This property contains the user name for the account service.
}			
LDAPService			This property contains additional mapping information needed to parse a generic LDAP service.
{			
SearchSettings			This property contains the settings needed to search an external LDAP service.
{			

continues on next page

Table 1 – continued from previous page

Property	Type	Attributes	Notes
BaseDistinguished-Names [ ]	array	read-write	The base distinguished names to use when searching the LDAP service.
GroupsAttribute	string	read-write	The attribute name that contains the Groups for a user on the user LDAP entry.
UsernameAttribute }	string	read-write	The attribute name that contains the Username on the user LDAP entry.
RemoteRoleMapping [ ]	array		This property contains a collection of the mapping rules to convert the external account providers account information to the local Redfish Role.
ServiceAddresses [ ]	array	read-write	This property contains the addresses of the user account providers this resource references. The format of this field depends on the Type.
ServiceEnabled }	boolean	read-write	This indicates whether this service is enabled.
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Account Service"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
LDAP { Authentication { AuthenticationType			The first LDAP external account provider this AccountService supports.
AuthenticationType	null	read-write	This property contains the authentication information for the external account provider.
Password	string	read-write	This property contains the type of authentication used to connect to the external account provider. See "Property details" section for details
Username }	string	read-write	This property is used with a PATCH or PUT to write the password for the account service. This property is null on a GET.
Certificates {		read-only	This property contains the user name for the account service.
@odata.id }	string	read-only	This is a reference to a collection of certificates used for the external account provider.
LDAPService { SearchSettings {			The unique identifier for a resource.
SearchSettings {			This property contains additional mapping information needed to parse a generic LDAP service.
			This property contains the settings needed to search an external LDAP service.

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Table 1 – continued from previous page

Property	Type	Attributes	Notes
BaseDistinguished-Names [ ]	array	read-write	The base distinguished names to use when searching the LDAP service.
GroupsAttribute	string	read-write	The attribute name that contains the Groups for a user on the user LDAP entry.
UsernameAttribute }	string	read-write	The attribute name that contains the Username on the user LDAP entry.
RemoteRoleMapping [ ]	array		This property contains a collection of the mapping rules to convert the external account providers account information to the local Redfish Role.
ServiceAddresses [ ]	array	read-write	This property contains the addresses of the user account providers this resource references. The format of this field depends on the Type.
ServiceEnabled }	boolean	read-write	This indicates whether this service is enabled.
MaxPasswordLength	integer	read-only	The maximum password length for this service.
MinPasswordLength	integer	read-only	The minimum password length for this service.
Name	string	read-only	The name of the resource or array member. Value: "Account Service"
Oem { OpenBMC { @odata.type			This is the manufacturer/provider specific extension moniker used to divide the Oem object into sections.  Value: "#OemAccountService.v1_0_0.AccountService"
AuthMethods { BasicAuth Cookie SessionToken TLS XToken } } }			
Roles { @odata.id		read-only	A link to a collection of Roles.
}	string	read-only	The unique identifier for a resource.

continues on next page

Table 1 – continued from previous page

Property	Type	Attributes	Notes
ServiceEnabled	boolean	read-write	Indicates whether this service is enabled. If set to false, the AccountService is disabled. This means no users can be created, deleted or modified. Any service attempting to access the AccountService resource (for example, the Session Service) will fail. New sessions cannot be started when the service is disabled. However, established sessions may still continue operating. This does not affect Basic AUTH connections.

## 1.4 Property details

### AuthenticationType

string	Description
KerberosKeytab	A kerberos keytab.
OEM	An OEM specific authentication mechanism.
Token	An opaque authentication token.
UsernameAndPassword	Username and password combination.

## 2 Bios service

### 2.1 Descriptions

This Resource shall represent BIOS attributes for a Redfish implementation.

### 2.2 URIs

```
/redfish/v1/Systems/system/Bios/Settings
/redfish/v1/Systems/system/Bios
```

### 2.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Bios.v1_1_0.Bios"
AttributeRegistry	string	read-only	The Resource ID of the Attribute Registry that has the system-specific information about a BIOS Resource.
Attributes			The list of BIOS attributes specific to the manufacturer or provider.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "Bios Settings"
@Redfish.Settings			
{			
@odata.type	string	read-only	The type of a resource. Value: "#Settings.v1_3_0.Settings"
SettingsObject			
{			
@odata.id	string	read-only	The unique identifier for a resource.
}			
}			
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "BIOS Configuration Service"
Links			The links to other Resources that are related to this Resource.
{			
ActiveSoftwareImage		read-write	The link to the SoftwareInventory that represents the active BIOS firmware image.
{			

continues on next page

Table 3 – continued from previous page

Property	Type	Attributes	Notes
@odata.id }			The SoftwareInventory schema contains an inventory of software components. This can include software components such as BIOS, BMC firmware, firmware for other devices, system drivers, or provider software.
SoftwareImages [	array	read-only	The images that are associated with this BIOS.
@odata.id ]			The SoftwareInventory schema contains an inventory of software components. This can include software components such as BIOS, BMC firmware, firmware for other devices, system drivers, or provider software.
SoftwareImages@odata.count }	integer	read-only	The number of items in a collection.

## 2.4 Actions

### ChangePassword

Description: This action shall change the selected BIOS password.

Action URI: /redfish/v1/Systems/system/Bios/Actions/Bios.ChangePassword

Action parameters:

This action takes no parameters.

### ResetBios

Description: This action shall reset the BIOS attributes to their default values. A system reset may be required to apply the default values. This action may impact other Resources.

Action URI: /redfish/v1/Systems/system/Bios/Actions/Bios.ResetBios

Action parameters:

This action takes no parameters.

## 3 Certificate service

### 3.1 Descriptions

This resource shall be used to represent a Certificate for a Redfish implementation.

### 3.2 URIs

/redfish/v1/Managers/bmc/NetworkProtocol/HTTPS/Certificates/1

### 3.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Certificate.v1_0_0.Certificate"
CertificateString	string	read-only	The string for the certificate.
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "HTTPS Certificate"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Issuer			The issuer of the certificate.
{			
City	string	read-only	The city or locality of the organization of the entity.
CommonName	string	read-only	The fully qualified domain name of the entity.
Country	string	read-only	The country of the organization of the entity.
Organization	string	read-only	The name of the organization of the entity.
OrganizationalUnit	string	read-only	The name of the unit or division of the organization of the entity.
}			
KeyUsage	array	read-only	The usage of the key contained in the certificate.
[			
]			See "Property details" section for details
Name	string	read-only	The name of the resource or array member. Value: "HTTPS Certificate"
Subject			The subject of the certificate.
{			
City	string	read-only	The city or locality of the organization of the entity.
CommonName	string	read-only	The fully qualified domain name of the entity.
Country	string	read-only	The country of the organization of the entity.
Organization	string	read-only	The name of the organization of the entity.

continues on next page

Table 4 – continued from previous page

Property	Type	Attributes	Notes
OrganizationalUnit }	string	read-only	The name of the unit or division of the organization of the entity.
ValidNotAfter	string	read-only	The date when the certificate is no longer valid.
ValidNotBefore	string	read-only	The date when the certificate becomes valid.

## 4 CertificateCollection service

### 4.1 Descriptions

This resource shall represent a resource collection of Certificate instances for a Redfish implementation.

### 4.2 URIs

/redfish/v1/AccountService/LDAP/Certificates  
/redfish/v1/Managers/bmc/NetworkProtocol/HTTPS/Certificates

### 4.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#CertificateCollection. CertificateCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "A Collection of LDAP certificate instances"
Members [ ]	array	read-only	The members of this collection.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "LDAP Certificates Collection"

## 5 CertificateLocations service

### 5.1 Descriptions

This resource shall be used to represent the Certificate Location Properties for a Redfish implementation.

### 5.2 URIs

/redfish/v1/CertificateService/CertificateLocations

### 5.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#CertificateLocations.v1_0_0.CertificateLocations"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Defines a resource that an administrator can use in order to locate all certificates installed on a given service"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Links			Contains references to other resources that are related to this resource.
{ Certificates	array	read-only	This property is an array of references to the certificates installed on this service.
[ @odata.id			The Certificate schema describes a certificate that proves the identify of a component, account, or service.
]			
Certificates@odata.count	integer	read-only	The number of items in a collection.
}			
Name	string	read-only	The name of the resource or array member. Value: "Certificate Locations"

## 6 CertificateService service

### 6.1 Descriptions

This resource shall be used to represent the Certificate Service Properties for a Redfish implementation.

### 6.2 URIs

/redfish/v1/CertificateService

### 6.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#CertificateService.v1_0_0.CertificateService"
CertificateLocations		read-only	Information regarding the location of certificates.
{ @odata.id }			The CertificateLocations schema describes a Resource that an administrator can use in order to locate all certificates installed on a given service.
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Actions available to manage certificates"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "Certificate Service"

### 6.4 Actions

#### GenerateCSR

Description: This action shall perform a certificate signing request. The response shall contain a signing request that is used to be signed by a certificate authority (CA). The service should retain the private key used for the generation of this request for when the certificate is installed. The private key should not be part of the response.

Action URI: /redfish/v1/CertificateService/Actions/CertificateService.GenerateCSR

Action parameters:

This action takes no parameters.

Response payload:

Property	Type	Attributes	Notes
CSRString	string	read-only	The string for the certificate signing request.
CertificateCollection		read-only	A link to the certificate collection where the certificate will be installed.

### ReplaceCertificate

Description: This action shall replace an existing certificate. The Location header in the response shall contain the URI of the new Certificate resource.

Action URI: /redfish/v1/CertificateService/Actions/CertificateService.ReplaceCertificate

Action parameters:

Parameter Name	Type	Notes
CertificateType	object	The format of the certificate.

## 6.5 Property details

### CertificateType

string	Description
PEM	A Privacy Enhanced Mail (PEM)-encoded single certificate.

## 7 Chassis service

### 7.1 Descriptions

This resource shall represent a chassis or other physical enclosure for a Redfish implementation.

### 7.2 URIs

/redfish/v1/Chassis/<str>

### 7.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Chassis.v1_14_0.Chassis"
Assembly		read-only	The link to the assembly associated with this chassis.
{ Model			The Assembly schema defines an assembly. Assembly information contains details about a device, such as part number, serial number, manufacturer, and production date. It also provides access to the original data for the assembly.
PartNumber			The Assembly schema defines an assembly. Assembly information contains details about a device, such as part number, serial number, manufacturer, and production date. It also provides access to the original data for the assembly.
Producer			The Assembly schema defines an assembly. Assembly information contains details about a device, such as part number, serial number, manufacturer, and production date. It also provides access to the original data for the assembly.
ProductionDate			The Assembly schema defines an assembly. Assembly information contains details about a device, such as part number, serial number, manufacturer, and production date. It also provides access to the original data for the assembly.
SerialNumber }			The Assembly schema defines an assembly. Assembly information contains details about a device, such as part number, serial number, manufacturer, and production date. It also provides access to the original data for the assembly.

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Table 11 – continued from previous page

Property	Type	Attributes	Notes
ChassisType		read-only	The type of physical form factor of the chassis. See “Property details” section for details
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Links			The links to other resources that are related to this resource.
{ ComputerSystems	array	read-only	An array of links to the computer systems that this chassis directly and wholly contains.
[ @odata.id ]			The ComputerSystem schema represents a computer or system instance and the software-visible resources, or items within the data plane, such as memory, CPU, and other devices that it can access. Details of those resources or subsystems are also linked through this resource.
ManagedBy	array	read-only	An array of links to the managers responsible for managing this chassis.
[ @odata.id ] }			In Redfish, a manager is a systems management entity that can implement or provide access to a Redfish service. Examples of managers are BMCs, enclosure managers, management controllers, and other subsystems that are assigned manageability functions. An implementation can have multiple managers, which might be directly accessible through a Redfish-defined interface.
Manufacturer	string	read-only	The manufacturer of this chassis.
Model	string	read-only	The model number of the chassis.
Name	string	read-only	The name of the resource or array member. Value: “OR1UGRB”
Oem			The OEM extension property.
{ Eviden_com			
{ BoardId			
RevId			
} }			
PCleDevices		read-only	The link to the collection of PCIe devices located in this chassis.
{ @odata.id	string	read-only	The unique identifier for a resource.
}			
PartNumber	string	read-only	The part number of the chassis.

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Table 11 – continued from previous page

Property	Type	Attributes	Notes
Power {		read-only	The link to the power properties, or power supplies, power policies, and sensors, for this chassis.
@odata.id }			The Power schema describes power metrics and represents the properties for power consumption and power limiting.
PowerState	null	read-only	The current power state of the chassis. See “Property details” section for details
Sensors {		read-only	The link to the collection of sensors located in the equipment and sub-components.
@odata.id }	string	read-only	The unique identifier for a resource.
SerialNumber	string	read-only	The serial number of the chassis.
Status {			The status and health of the resource and its subordinate or dependent resources.
Health	null	read-only	The health state of this resource in the absence of its dependent resources. See “Property details” section for details
HealthRollup	null	read-only	The overall health state from the view of this resource. See “Property details” section for details
State }	null	read-only	The known state of the resource, such as, enabled. See “Property details” section for details
Thermal {		read-only	The link to the thermal properties, such as fans, cooling, and sensors, for this chassis.
@odata.id }			The Thermal schema describes temperature monitoring and thermal management subsystems, such as cooling fans, for a computer system or similar devices contained within a chassis.

## 7.4 Actions

### Reset

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

Action URI: /redfish/v1/Chassis/OR1UGRB/Actions/Chassis.Reset

Action parameters:

This action takes no parameters.

## 7.5 Property details

### ChassisType

string	Description
Blade	An enclosed or semi-enclosed, typically vertically-oriented, system chassis that must be plugged into a multi-system chassis to function normally.
Card	A loose device or circuit board intended to be installed in a system or other enclosure.
Cartridge	A small self-contained system intended to be plugged into a multi-system chassis.
Component	A small chassis, card, or device that contains devices for a particular subsystem or function.
Drawer	An enclosed or semi-enclosed, typically horizontally-oriented, system chassis that can be slid into a multi-system chassis.
Enclosure	A generic term for a chassis that does not fit any other description.
Expansion	A chassis that expands the capabilities or capacity of another chassis.
IPBasedDrive	A chassis in a drive form factor with IP-based network connections.
Module	A small, typically removable, chassis or card that contains devices for a particular subsystem or function.
Other	A chassis that does not fit any of these definitions.
Pod	A collection of equipment racks in a large, likely transportable, container.
Rack	An equipment rack, typically a 19-inch wide freestanding unit.
RackGroup	A group of racks that form a single entity or share infrastructure.
RackMount	A single-system chassis designed specifically for mounting in an equipment rack.
Row	A collection of equipment racks.
Shelf	An enclosed or semi-enclosed, typically horizontally-oriented, system chassis that must be plugged into a multi-system chassis to function normally.
Sidecar	A chassis that mates mechanically with another chassis to expand its capabilities or capacity.
Sled	An enclosed or semi-enclosed, system chassis that must be plugged into a multi-system chassis to function normally similar to a blade type chassis.
StandAlone	A single, free-standing system, commonly called a tower or desktop chassis.
StorageEnclosure	A chassis that encloses storage.
Zone	A logical division or portion of a physical chassis that contains multiple devices or systems that cannot be physically separated.

## Health

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

## HealthRollup

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

## PowerState

string	Description
Off	The components within the chassis have no power, except some components might continue to have AUX power, such as the management controller.
On	The components within the chassis have power.
PoweringOff	A temporary state between on and off. The components within the chassis can take time to process the power off action.
PoweringOn	A temporary state between off and on. The components within the chassis can take time to process the power on action.

## State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.

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Table 16 – continued from previous page

string	Description
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 8 ChassisCollection service

### 8.1 Descriptions

This resource shall represent a resource collection of Chassis instances for a Redfish implementation.

### 8.2 URIs

/redfish/v1/Chassis

### 8.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#ChassisCollection.ChassisCollection"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The Chassis schema represents the physical components of a system. This resource represents the sheet-metal confined spaces and logical zones such as racks, enclosures, chassis and all other containers. Subsystems, such as sensors, that operate outside of a system's data plane are linked either directly or indirectly through this resource. A subsystem that operates outside of a system's data plane are not accessible to software that runs on the system. It also describes the location, such as a slot, socket, or bay, where a unit can be installed, by populating a resource instance with an absent state if a unit is not present.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Chassis Collection"

## 9 ComputerSystem service

### 9.1 Descriptions

This resource shall represent a computing system in the Redfish Specification.

### 9.2 URIs

/redfish/v1/Systems/system

### 9.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#ComputerSystem.v1_13_0.ComputerSystem"
AssetTag	string	read-write	The user-definable tag that can track this computer system for inventory or other client purposes.
Bios		read-only	The link to the BIOS settings associated with this system.
{ @odata.id }			The Bios schema contains properties related to the BIOS attribute registry. The attribute registry describes the system-specific BIOS attributes and actions for changing to BIOS settings. Changes to the BIOS typically require a system reset before they take effect. It is likely that a client finds the <i>@Redfish.Settings</i> term in this resource, and if it is found, the client makes requests to change BIOS settings by modifying the resource identified by the <i>@Redfish.Settings</i> term.
BiosVersion	string	read-only	The version of the system BIOS or primary system firmware.
Boot			The boot settings for this system.
{ AutomaticRetryAttempts	integer	read-write	The number of attempts the system will automatically retry booting.
AutomaticRetryConfig	null	read-write	The configuration of how the system retries booting automatically. See "Property details" section for details
AutomaticRetryConfig@Redfish.AllowableValues			
BootSourceOverrideEnabled	null	read-write	The state of the boot source override feature. See "Property details" section for details

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Table 18 – continued from previous page

Property	Type	Attributes	Notes
BootSourceOverride-Mode	null	read-write	The BIOS boot mode to use when the system boots from the BootSourceOverrideTarget boot source. See “Property details” section for details
BootSourceOverrideTarget	null	read-write	The current boot source to use at the next boot instead of the normal boot device, if BootSourceOverrideEnabled is <i>true</i> . See “Property details” section for details
BootSourceOverrideTarget@Redfish.AllowableValues			
Oem			
{			
Eviden_com			
{			
BootDeviceInstance			
}			
RemainingAutomaticRetryAttempts	integer	read-only	The number of remaining automatic retry boots.
}			
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: “Computer System”
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
IndicatorLED	null	read-write	The state of the indicator LED, which identifies the system. See “Property details” section for details
LastResetTime	string	read-only	The date and time when the system was last reset or rebooted.
Links			The links to other resources that are related to this resource.
{			
Chassis	array	read-only	An array of links to the chassis that contains this system.
[			
@odata.id			The Chassis schema represents the physical components of a system. This resource represents the sheet-metal confined spaces and logical zones such as racks, enclosures, chassis and all other containers. Subsystems, such as sensors, that operate outside of a system’s data plane are linked either directly or indirectly through this resource. A subsystem that operates outside of a system’s data plane are not accessible to software that runs on the system. It also describes the location, such as a slot, socket, or bay, where a unit can be installed, by populating a resource instance with an absent state if a unit is not present.
]			
}			

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Table 18 – continued from previous page

Property	Type	Attributes	Notes
ManagedBy [ @odata.id ]	array	read-only	An array of links to the managers responsible for this system.
			In Redfish, a manager is a systems management entity that can implement or provide access to a Redfish service. Examples of managers are BMCs, enclosure managers, management controllers, and other subsystems that are assigned manageability functions. An implementation can have multiple managers, which might be directly accessible through a Redfish-defined interface.
LocationIndicatorActive	boolean	read-write	An indicator allowing an operator to physically locate this resource.
LogServices { @odata.id }		read-only	The link to the collection of log services associated with this system.
	string	read-only	The unique identifier for a resource.
Manufacturer	string	read-only	The manufacturer or OEM of this system.
Memory { @odata.id }		read-only	The link to the collection of memory associated with this system.
	string	read-only	The unique identifier for a resource.
MemorySummary { Status { Health			The central memory of the system in general detail.
			The status and health of the resource and its subordinate or dependent resources.
	null	read-only	The health state of this resource in the absence of its dependent resources.
			See “Property details” section for details
			The overall health state from the view of this resource.
			See “Property details” section for details
			The known state of the resource, such as, enabled.
			See “Property details” section for details
			The total configured operating system-accessible memory (RAM), measured in GiB.
TotalSystemMemoryGiB }	number	read-only	
Model	string	read-only	The product name for this system, without the manufacturer name.
Name	string	read-only	The name of the resource or array member. Value: “system”
PCIeDevices [	array	read-only	The link to a collection of PCIe devices that this computer system uses.

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Table 18 – continued from previous page

Property	Type	Attributes	Notes
@odata.id ]			The PCIeDevice schema describes the properties of a PCIe device that is attached to a system. It also describes the location, such as a slot, socket, or bay, where a unit can be installed, by populating a resource instance with an absent state if a unit is not present.
PCIeDevices@odata.count	integer	read-only	The number of items in a collection.
PartNumber	string	read-only	The part number for this system.
PowerRestorePolicy		read-write	The desired power state of the system when power is restored after a power loss. See “Property details” section for details
PowerState	null	read-only	The current power state of the system. See “Property details” section for details
ProcessorSummary {			The central processors of the system in general detail.
Count	integer	read-only	The number of physical processors in the system.
Model	string	read-only	The processor model for the primary or majority of processors in this system.
Status {			The status and health of the resource and its subordinate or dependent resources.
Health	null	read-only	The health state of this resource in the absence of its dependent resources. See “Property details” section for details
HealthRollup	null	read-only	The overall health state from the view of this resource. See “Property details” section for details
State }	null	read-only	The known state of the resource, such as, enabled. See “Property details” section for details
Processors {		read-only	The link to the collection of processors associated with this system.
@odata.id }	string	read-only	The unique identifier for a resource.
SerialNumber	string	read-only	The serial number for this system.
Status {			The status and health of the resource and its subordinate or dependent resources.
Health	null	read-only	The health state of this resource in the absence of its dependent resources. See “Property details” section for details
HealthRollup	null	read-only	The overall health state from the view of this resource. See “Property details” section for details
State }	null	read-only	The known state of the resource, such as, enabled. See “Property details” section for details
Storage {		read-only	The link to the collection of storage devices associated with this system.

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Table 18 – continued from previous page

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
} SubModel	string	read-only	The sub-model for this system.
SystemType		read-only	The type of computer system that this resource represents. See “Property details” section for details

## 9.4 Actions

### Reset

Description: This action shall reset the system represented by the resource. For systems that implement ACPI Power Button functionality, the PushPowerButton value shall perform or emulate an ACPI Power Button Push. The ForceOff value shall remove power from the system or perform an ACPI Power Button Override, commonly known as a four-second hold of the Power Button. The ForceRestart value shall perform a ForceOff action, followed by an On action.

Action URI: /redfish/v1/Systems/system/Actions/ComputerSystem.Reset

Action parameters:

This action takes no parameters.

### Create

Description: This Action triggers the create identity method using a POST command.

Action URI: /redfish/v1/Systems/system/Actions/Oem/Identitycard.Create

Action parameters:

This action takes no parameters.

Response payload:

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: ""
Id	string		Task ID of Identity Card Create task
TaskState	string		Completion status of the task.
TaskStatus	string		State of the task.

## Download

Description: This Action downloads created IdentityCard file in json format using a GET command. The file contains data in json format. This action takes no parameter.

Action URI: /redfish/v1/Systems/system/Actions/Oem/Identitycard.Download

Action parameters:

This action takes no parameters.

## 9.5 Property details

### AutomaticRetryConfig

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

### BootSourceOverrideEnabled

string	Description
Continuous	The system boots to the target specified in the BootSourceOverride-Target property until this property is <i>Disabled</i> .
Disabled	The system boots normally.
Once	On its next boot cycle, the system boots one time to the boot source override target. Then, the BootSourceOverrideEnabled value is reset to <i>Disabled</i> .

### BootSourceOverrideMode

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

## BootSourceOverrideTarget

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

## Health

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

## HealthRollup

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

## IndicatorLED

string	Description
Blinking	The indicator LED is blinking.
Lit	The indicator LED is lit.
Off	The indicator LED is off.
Unknown	The state of the indicator LED cannot be determined.

## PowerRestorePolicy

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

## PowerState

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

## State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## SystemType

string	Description
Composed	A computer system constructed by binding resource blocks together.
OS	An operating system instance.
Physical	A computer system.
PhysicallyPartitioned	A hardware-based partition of a computer system.
Virtual	A virtual machine instance running on this system.
VirtuallyPartitioned	A virtual or software-based partition of a computer system.

## 10 ComputerSystemCollection service

### 10.1 Descriptions

This resource shall represent a resource collection of ComputerSystem instances for a Redfish implementation.

### 10.2 URIs

/redfish/v1/Systems

### 10.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#ComputerSystemCollection. ComputerSystemCollection"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The ComputerSystem schema represents a computer or system instance and the software-visible resources, or items within the data plane, such as memory, CPU, and other devices that it can access. Details of those resources or subsystems are also linked through this resource.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Computer System Collection"

## 11 Drive service

### 11.1 Descriptions

This Resource shall represent a drive or other physical storage medium for a Redfish implementation.

### 11.2 URIs

/redfish/v1/Systems/system/Storage/1/Drives/<str>

### 11.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Drive.v1_7_0.Drive"
Capacity			
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Links			The links to other Resources that are related to this Resource.
{ Chassis { @odata.id } }		read-only	The link to the chassis that contains this drive.  The Chassis schema represents the physical components of a system. This resource represents the sheet-metal confined spaces and logical zones such as racks, enclosures, chassis and all other containers. Subsystems, such as sensors, that operate outside of a system's data plane are linked either directly or indirectly through this resource. A subsystem that operates outside of a system's data plane are not accessible to software that runs on the system. It also describes the location, such as a slot, socket, or bay, where a unit can be installed, by populating a resource instance with an absent state if a unit is not present.
Manufacturer	string	read-only	The manufacturer of this drive.
Model	string	read-only	The model number for the drive.
Name	string	read-only	The name of the resource or array member. Value: "MRB_M2_DISK0"
PartNumber	string	read-only	The part number for this drive.
SerialNumber	string	read-only	The serial number for this drive.
Status			The status and health of the Resource and its subordinate or dependent Resources.
{			

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Table 32 – continued from previous page

Property	Type	Attributes	Notes
Health	null	read-only	The health state of this resource in the absence of its dependent resources. See “Property details” section for details
HealthRollup	null	read-only	The overall health state from the view of this resource. See “Property details” section for details
State }	null	read-only	The known state of the resource, such as, enabled. See “Property details” section for details
Type			

## 11.4 Property details

### Health

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

### HealthRollup

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

### State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.

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Table 35 – continued from previous page

string	Description
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 12 EthernetInterface service

### 12.1 Descriptions

This resource shall be used to represent NIC resources as part of the Redfish specification.

### 12.2 URIs

/redfish/v1/Managers/bmc/EthernetInterfaces/<str>

### 12.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#EthernetInterface.v1_4_1.EthernetInterface"
DHCPv4	null		DHCPv4 configuration for this interface.
{ DHCPEnabled	boolean	read-write	Determines whether DHCPv4 is enabled on this interface.
UseDNSServers	boolean	read-write	Determines whether to use DHCPv4-supplied DNS servers.
UseDomainName	boolean	read-write	Determines whether to use a DHCPv4-supplied domain name.
UseNTPServers }	boolean	read-write	Determines whether to use DHCPv4-supplied NTP servers.
DHCPv6	null		DHCPv6 configuration for this interface.
{ OperatingMode	null	read-write	Determines the DHCPv6 operating mode for this interface. See "Property details" section for details
UseDNSServers	boolean	read-write	When enabled, DNS server addresses supplied through DHCPv6 stateless mode will be used.
UseDomainName	boolean	read-write	When enabled, the domain name supplied through DHCPv6 stateless mode will be used.
UseNTPServers }	boolean	read-write	When enabled, NTP server addresses supplied through DHCPv6 stateless mode will be used.
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Management Network Interface"
FQDN	string	read-write	This is the complete, fully qualified domain name obtained by DNS for this interface.
HostName	string	read-write	The DNS Host Name, without any domain information.

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Table 36 – continued from previous page

Property	Type	Attributes	Notes
IPv4Addresses [ Address AddressOrigin Gateway SubnetMask ]	array		The IPv4 addresses currently assigned to this interface. This type describes an IPv4 address. This type describes an IPv4 address. This type describes an IPv4 address. This type describes an IPv4 address.
IPv4StaticAddresses [ ]	array		The IPv4 static addresses assigned to this interface.
IPv6AddressPolicyTable [ ]	array		An array representing the RFC 6724 Address Selection Policy Table.
IPv6Addresses [ Address AddressOrigin AddressState PrefixLength ]	array		Enumerates in an array all of the currently assigned IPv6 addresses on this interface. This type describes an IPv6 address. This type describes an IPv6 address. This type describes an IPv6 address. This type describes an IPv6 address.
IPv6DefaultGateway	string	read-only	This is the IPv6 default gateway address that is currently in use on this interface.
IPv6StaticAddresses [ ]	array		Represents in an array all of the IPv6 static addresses to be assigned on this interface.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
InterfaceEnabled	boolean	read-write	This indicates whether this interface is enabled.
LinkStatus	null	read-only	The link status of this interface (port). See “Property details” section for details
MACAddress	null	read-write	This is the currently configured MAC address of the (logical port) interface.
Name	string	read-only	The name of the resource or array member. Value: “Manager Ethernet Interface”
NameServers [ ]	array	read-only	This represents DNS name servers that are currently in use on this interface.
SpeedMbps	integer	read-write	This is the current speed in Mbps of this interface.
StaticNameServers [ ]	array	read-write	A statically defined set of DNS server IP addresses (both IPv4 and IPv6).
Status { Health			This property describes the status and health of the resource and its children. The health state of this resource in the absence of its dependent resources. See “Property details” section for details
	null	read-only	

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Table 36 – continued from previous page

Property	Type	Attributes	Notes
HealthRollup	null	read-only	The overall health state from the view of this resource. See “Property details” section for details
State }	null	read-only	The known state of the resource, such as, enabled. See “Property details” section for details
VLANs {		read-only	This is a reference to a collection of VLANs and is only used if the interface supports more than one VLANs.
@odata.id }	string	read-only	The unique identifier for a resource.

## 12.4 Property details

### Health

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

### HealthRollup

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

### LinkStatus

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

## OperatingMode

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

## State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 13 EthernetInterfaceCollection service

### 13.1 Descriptions

This resource shall represent a resource collection of EthernetInterface instances for a Redfish implementation.

### 13.2 URIs

/redfish/v1/Managers/bmc/EthernetInterfaces

### 13.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#EthernetInterfaceCollection. EthernetInterfaceCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Collection of EthernetInterfaces for this Manager"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The EthernetInterface schema represents a single, logical Ethernet interface or network interface controller (NIC).
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Ethernet Network Interface Collection"

## 14 EventDestinationCollection service

### 14.1 Descriptions

This Resource shall represent a Resource Collection of EventDestination instances for a Redfish implementation.

### 14.2 URIs

/redfish/v1/EventService/Subscriptions

### 14.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#EventDestinationCollection.EventDestinationCollection"
Members [ ]	array	read-only	The members of this collection.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Event Destination Collections"

## 15 EventService service

### 15.1 Descriptions

This Resource shall represent an Event Service for a Redfish implementation.

### 15.2 URIs

/redfish/v1/EventService

### 15.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#EventService.v1_5_0.EventService"
DeliveryRetryAttempts	integer	read-write	The number of times that the POST of an event is retried before the subscription terminates. This retry occurs at the service level, which means that the HTTP POST to the event destination fails with an HTTP 4XX or 5XX status code or an HTTP timeout occurs this many times before the event destination subscription terminates.
DeliveryRetryIntervalSeconds	integer	read-write	The interval, in seconds, between retry attempts for sending any event.
EventFormatTypes [ ]	array	read-only	The content types of the message that this service can send to the event destination. See "Property details" section for details
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "Event Service"
RegistryPrefixes [ ]	array	read-only	The list of the prefixes of the Message Registries that can be used for the RegistryPrefix property on a subscription. If this property is absent or contains an empty array, the service does not support RegistryPrefix-based subscriptions.
ResourceTypes [ ]	array	read-only	The list of @odata.type values, or Schema names, that can be specified in the ResourceTypes array in a subscription. If this property is absent or contains an empty array, the service does not support Resource type-based subscriptions.

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Table 44 – continued from previous page

Property	Type	Attributes	Notes
] SSEFilterPropertiesSupported			The set of properties that are supported in the \$filter query parameter for the ServerSentEventUri.
{ EventFormatType	boolean	read-only	An indication of whether the service supports the EventFormatType property in the \$filter query parameter.
MessageId	boolean	read-only	An indication of whether the service supports the MessageId property in the \$filter query parameter.
MetricReportDefinition	boolean	read-only	An indication of whether the service supports the MetricReportDefinition property in the \$filter query parameter.
OriginResource	boolean	read-only	An indication of whether the service supports the OriginResource property in the \$filter query parameter.
RegistryPrefix	boolean	read-only	An indication of whether the service supports the RegistryPrefix property in the \$filter query parameter.
ResourceType	boolean	read-only	An indication of whether the service supports the ResourceType property in the \$filter query parameter.
} ServiceEnabled	boolean	read-write	An indication of whether this service is enabled.
Status			The status and health of the Resource and its subordinate or dependent Resources.
{ State	null	read-only	The known state of the resource, such as, enabled.
} Subscriptions		read-only	The link to a collection of event destination Resources.
{ @odata.id	string	read-only	The unique identifier for a resource.
}			

## 15.4 Actions

### SubmitTestEvent

Description: This action shall add a test event to the Event Service with the event data specified in the action parameters. Then, this message should be sent to any appropriate event destinations.

Action URI: /redfish/v1/EventService/Actions/EventService.SubmitTestEvent

Action parameters:

This action takes no parameters.

## 15.5 Property details

### EventFormatTypes

string	Description
Event	The subscription destination receives an event payload.
MetricReport	The subscription destination receives a metric report.

### State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 16 JsonSchemaFile service

### 16.1 Descriptions

This resource shall be used to represent the Schema File locator resource for a Redfish implementation.

### 16.2 URIs

/redfish/v1/JsonSchemas/<str>

### 16.3 Properties

Property	Type	Attributes	Notes
@odata.context	string	read-only	The OData description of a payload.
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#JsonSchemaFile.v1_0_2.JsonSchemaFile"
Name	string		The name of the resource or array member. Value: "AccelerationFunction Schema File"
Schema	string	read-only	The @odata.type name this schema describes.
Description	string		The description of this resource. Used for commonality in the schema definitions. Value: "AccelerationFunction Schema File Location"
Id	string		The unique identifier for this resource within the collection of similar resources.
Languages [ ]	array	read-only	Language codes for the schemas available.
Languages@odata.count			
Location [ Language ]	array	read-only	Location information for this schema file. The language code for the file the schema is in.
PublicationUri	string	read-only	Link to publicly available (canonical) URI for schema.
Uri	string	read-only	Link to locally available URI for schema.
Location@odata.count			

## 17 JsonSchemaFileCollection service

### 17.1 Descriptions

This Resource shall represent a Resource Collection of JsonSchemaFile instances for a Redfish implementation.

### 17.2 URIs

/redfish/v1/JsonSchemas

### 17.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.context	string	read-only	The OData description of a payload.
@odata.type	string	read-only	The type of a resource. Value: "#JsonSchemaFileCollection.JsonSchemaFileCollection"
Name	string	read-only	The name of the resource or array member. Value: "JsonSchemaFile Collection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Collection of JsonSchemaFiles"
Members@odata.count	integer	read-only	The number of items in a collection.
Members	array	read-only	The members of this collection.
[ @odata.id ]			The JsonSchemaFile schema contains the properties that describe the locations, as URIs, of a Redfish Schema definition that a Redfish Service implements or references.

## 18 LogEntry service

### 18.1 Descriptions

This resource shall represent the log format for log services in a Redfish implementation.

### 18.2 URIs

```
/redfish/v1/Managers/bmc/LogServices/PostCodes/Entries  
/redfish/v1/Managers/bmc/LogServices/<str0>/Entries/<str1>  
/redfish/v1/Systems/system/LogServices/<str0>/Entries/<str1>
```

### 18.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#LogEntry.v1_4_0.LogEntry"
Created	string	read-only	The time the log entry was created.
EntryType		read-only	This is the type of log entry.
Id	string	read-only	See "Property details" section for details The unique identifier for this resource within the collection of similar resources.
Message	string	read-only	This property decodes from EntryType. If the EntryType is Event, then it is a message string. Otherwise, it is SEL or OEM specific. In most cases, this will be the actual Log Entry.
MessageArgs [ ] ]	array	read-only	The values of this property shall be any arguments for the message.
MessageId	string	read-only	This property decodes from EntryType. If the EntryType is Event, then it is a message id. If the EntryType is SEL, then it contains the Event Data. Otherwise, it is OEM specific. This value is only used for registries - for more information, see the specification.
Name	string	read-only	The name of the resource or array member. Value: "System Event Log Entry"
Severity	null	read-only	This is the severity of the log entry. See "Property details" section for details
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Collection of POST Code Log Entries"
Members			

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Table 49 – continued from previous page

Property	Type	Attributes	Notes
Members@odata.count OemRecordFormat	string	read-only	If the EntryType is Oem, this will contain more information about the record format from the Oem.

## 18.4 Property details

### EntryType

string	Description
Event	Contains a Redfish-defined message (event).
Oem	Contains an entry in an OEM-defined format.
SEL	Contains a legacy IPMI System Event Log (SEL) entry.

### Severity

string	Description
Critical	A critical condition requiring immediate attention.
OK	Informational or operating normally.
Warning	A condition requiring attention.

## 19 LogEntry service

### 19.1 Descriptions

This resource shall represent the log format for log services in a Redfish implementation.

### 19.2 URIs

/redfish/v1/Managers/bmc/LogServices/Dump/Entries/<str>

### 19.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#LogEntry.v1_7_0.LogEntry"
AdditionalDataSizeBytes	integer	read-only	The size of the additional data for the log entry.
AdditionalDataURI	string	read-only	The URI at which to access the additional data for the log entry, such as diagnostic data, image captures, or other files.
Created	string	read-only	The date and time when the log entry was created.
DiagnosticDataType	null	read-only	The type of diagnostic data. See "Property details" section for details
EntryType		read-only	The type of log entry. See "Property details" section for details
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "BMC Dump Entry"

### 19.4 Property details

#### DiagnosticDataType

string	Description
Manager	Manager diagnostic data.
OEM	OEM diagnostic data.
OS	Operating system (OS) diagnostic data.
PreOS	Pre-OS diagnostic data.

## EntryType

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

## 20 LogEntryCollection service

### 20.1 Descriptions

This resource shall represent a resource collection of LogEntry instances for a Redfish implementation.

### 20.2 URIs

/redfish/v1/Managers/bmc/LogServices/<str>/Entries  
/redfish/v1/Systems/system/LogServices/<str>/Entries

### 20.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#LogEntryCollection. LogEntryCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Collection of System Event Log Entries"
Members	array	read-only	The members of this collection.
[ @odata.id			The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType.
@odata.type			The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType. Value: "#LogEntry.v1_4_0.LogEntry"

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Table 55 – continued from previous page

Property	Type	Attributes	Notes
Created			The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType.
EntryType			The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType.
Id			The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType.
Message			The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType.
MessageArgs [			The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType.
] MessageId			The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType.

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Table 55 – continued from previous page

Property	Type	Attributes	Notes
Name			The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType. Value: "System Event Log Entry"
Severity ]			The LogEntry schema defines the record format for a log. It is designed for Redfish event logs, OEM-specific log formats, and the IPMI System Event Log (SEL). The EntryType field indicates the type of log and the resource includes several additional properties dependent on the EntryType.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "System Event Log Entries"
Members@odata.nextLink	string	read-only	The URI to the resource containing the next set of partial members.

## 21 LogService service

### 21.1 Descriptions

This resource shall be used to represent a log service for a Redfish implementation.

### 21.2 URIs

`/redfish/v1/Managers/bmc/LogServices/<str>`  
`/redfish/v1/Systems/system/LogServices/<str>`

### 21.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#LogService.v1_1_0.LogService"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "System Event Log Service"
Entries		read-only	References to the log entry collection.
{ @odata.id }	string	read-only	The unique identifier for a resource.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "Event Log Service"
OverWritePolicy		read-only	The overwrite policy for this service that takes place when the log is full. See "Property details" section for details
MaxNumberOfRecords	number	read-only	The maximum number of log entries this service can have.

### 21.4 Actions

#### ClearLog

Description: This action shall delete all entries found in the Entries collection for this Log Service.

Action URI: `/redfish/v1/Managers/bmc/LogServices/EventLog/Actions/LogService.ClearLog`

Action parameters:

This action takes no parameters.

## 21.5 Property details

### OverWritePolicy

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

## 22 LogService service

### 22.1 Descriptions

This Resource shall represent a Log Service for a Redfish implementation.

### 22.2 URIs

/redfish/v1/<str0>/<str1>/LogServices/Dump

### 22.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#LogService.v1_2_0.LogService"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "BMC Dump LogService"
Entries		read-only	The link to the log entry collection.
{ @odata.id }	string	read-only	The unique identifier for a resource.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "Dump LogService"
OverWritePolicy		read-only	The overwrite policy for this service that takes place when the log is full. See "Property details" section for details

### 22.4 Actions

#### ClearLog

Description: This action shall delete all entries found in the Entries collection for this Log Service.

Action URI: /redfish/v1/Managers/bmc/LogServices/Dump/Actions/LogService.ClearLog

Action parameters:

This action takes no parameters.

## CollectDiagnosticData

Description: This action shall collect the diagnostic data for the given type. The *Location* header in the response shall contain a URI to a resource of type LogEntry that contains the diagnostic data.

Action URI: /redfish/v1/Managers/bmc/LogServices/Dump/Actions/LogService.CollectDiagnosticData

Action parameters:

This action takes no parameters.

## 22.5 Property details

### OverWritePolicy

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

## 23 LogServiceCollection service

### 23.1 Descriptions

This Resource shall represent a Resource Collection of LogService instances for a Redfish implementation.

### 23.2 URIs

/redfish/v1/<str0>/<str1>/LogServices

### 23.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#LogServiceCollection. LogServiceCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Collection of LogServices for this Manager"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The LogService schema contains properties for monitoring and configuring a log service. When the Id property contains <i>DeviceLog</i> , the log contains device-resident log entries that follow the physical device when moved from system-to-system, and not a replication or subset of a system event log.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Open BMC Log Services Collection"

## 24 Manager service

### 24.1 Descriptions

This resource shall represent a management subsystem for a Redfish implementation.

### 24.2 URIs

/redfish/v1/Managers/bmc

### 24.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Manager.v1_9_0.Manager"
DateTime	string	read-write	The current date and time with UTC offset that the manager uses to set or read time.
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Baseboard Management Controller"
EthernetInterfaces		read-only	The link to a collection of NICs that this manager uses for network communication.
{ @odata.id	string	read-only	The unique identifier for a resource.
}			
FirmwareVersion	string	read-only	The firmware version of this manager.
GraphicalConsole			The information about the graphical console (KVM-IP) service of this manager.
{ ConnectTypesSupported	array	read-only	This property enumerates the graphical console connection types that the implementation allows.
[			
]			See "Property details" section for details
MaxConcurrentSessions	integer	read-only	The maximum number of service sessions, regardless of protocol, that this manager can support.
ServiceEnabled	boolean	read-write	An indication of whether the service is enabled for this manager.
}			
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
LastResetTime	string	read-only	The date and time when the manager was last reset or rebooted.
Links			The links to other resources that are related to this resource.
{ ActiveSoftwareImage		read-write	The link to the software inventory resource that represents the active firmware image for this manager.
{			

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Table 61 – continued from previous page

Property	Type	Attributes	Notes
@odata.id }			The SoftwareInventory schema contains an inventory of software components. This can include software components such as BIOS, BMC firmware, firmware for other devices, system drivers, or provider software.
ManagerForChassis [	array	read-only	An array of links to the chassis this manager controls.
@odata.id ]			The Chassis schema represents the physical components of a system. This resource represents the sheet-metal confined spaces and logical zones such as racks, enclosures, chassis and all other containers. Subsystems, such as sensors, that operate outside of a system's data plane are linked either directly or indirectly through this resource. A subsystem that operates outside of a system's data plane are not accessible to software that runs on the system. It also describes the location, such as a slot, socket, or bay, where a unit can be installed, by populating a resource instance with an absent state if a unit is not present.
ManagerForChassis@odata.count	integer	read-only	The number of items in a collection.
ManagerForServers [	array	read-only	An array of links to the systems that this manager controls.
@odata.id ]			The ComputerSystem schema represents a computer or system instance and the software-visible resources, or items within the data plane, such as memory, CPU, and other devices that it can access. Details of those resources or subsystems are also linked through this resource.
Manager-ForServers@odata.count	integer	read-only	The number of items in a collection.
ManagerInChassis {		read-only	The link to the chassis where this manager is located.

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Table 61 – continued from previous page

Property	Type	Attributes	Notes
@odata.id }			The Chassis schema represents the physical components of a system. This resource represents the sheet-metal confined spaces and logical zones such as racks, enclosures, chassis and all other containers. Subsystems, such as sensors, that operate outside of a system's data plane are linked either directly or indirectly through this resource. A subsystem that operates outside of a system's data plane are not accessible to software that runs on the system. It also describes the location, such as a slot, socket, or bay, where a unit can be installed, by populating a resource instance with an absent state if a unit is not present.
SoftwareImages [	array	read-only	The images that are associated with this manager.
@odata.id ]			The SoftwareInventory schema contains an inventory of software components. This can include software components such as BIOS, BMC firmware, firmware for other devices, system drivers, or provider software.
SoftwareIm- ages@odata.count }	integer	read-only	The number of items in a collection.
LogServices {		read-only	The link to a collection of logs that the manager uses.
@odata.id }	string	read-only	The unique identifier for a resource.
ManagerType		read-only	The type of manager that this resource represents. See "Property details" section for details
Model	string	read-only	The model information of this manager, as defined by the manufacturer.
Name	string	read-only	The name of the resource or array member. Value: "OpenBmc Manager"
NetworkProtocol {		read-only	The link to the network services and their settings that the manager controls.
@odata.id }			The network service settings for the manager.
Oem {			The OEM extension property.
@odata.id			
@odata.type			Value: "#OemManager.Oem"
Eviden_com {			
CurrentBoot			

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Table 61 – continued from previous page

Property	Type	Attributes	Notes
FrontPanelPowerButtonStatus			
KVMKeyboardLayout			
SecureKeyId			
SecurityState			
}			
OpenBmc			
{			
@odata.id			
@odata.type			Value: "#OemManager.OpenBmc"
Certificates			
{			
@odata.id			
}			
}			
PowerState	null	read-only	The current power state of the manager. See "Property details" section for details
SerialConsole			The serial console service that this manager provides.
{			
ConnectTypesSupported	array	read-only	This property enumerates the serial console connection types that the implementation allows.
[			
]			See "Property details" section for details
MaxConcurrentSessions	integer	read-only	The maximum number of service sessions, regardless of protocol, that this manager can support.
ServiceEnabled	boolean	read-write	An indication of whether the service is enabled for this manager.
}			
ServiceEntryPointUUID	null	read-only	The UUID of the Redfish service that is hosted by this manager.
Status			The status and health of the resource and its subordinate or dependent resources.
{			
Health	null	read-only	The health state of this resource in the absence of its dependent resources.
HealthRollup	null	read-only	The overall health state from the view of this resource.
State	null	read-only	The known state of the resource, such as, enabled.
}			See "Property details" section for details
UUID	null	read-only	The UUID for this manager.
VirtualMedia		read-only	The link to the Virtual Media services for this particular manager.
{			
@odata.id	string	read-only	The unique identifier for a resource.
}			

## 24.4 Actions

### Reset

Description: This action shall reset the manager.

Action URI: /redfish/v1/Managers/bmc/Actions/Manager.Reset

Action parameters:

This action takes no parameters.

### ResetToDefaults

Description: This action shall reset the manager settings. This action might impact other resources.

Action URI: /redfish/v1/Managers/bmc/Actions/Manager.ResetToDefaults

Action parameters:

Parameter Name	Type	Notes
ResetToDefaultsType	object	The type of reset to defaults.

## 24.5 Property details

### ConnectTypesSupported

string	Description
IPMI	The controller supports a serial console connection through the IPMI Serial Over LAN (SOL) protocol.
SSH	The controller supports a serial console connection through the SSH protocol.

### Health

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

## HealthRollup

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

## ManagerType

string	Description
AuxiliaryController	A controller that provides management functions for a particular sub-system or group of devices.
BMC	A controller that provides management functions for a single computer system.
EnclosureManager	A controller that provides management functions for a chassis or group of devices or systems.
ManagementController	A controller that primarily monitors or manages the operation of a device or system.
RackManager	A controller that provides management functions for a whole or part of a rack.
Service	A software-based service that provides management functions.

## PowerState

string	Description
Off	The resource is powered off. The components within the resource might continue to have AUX power.
On	The resource is powered on.
Paused	The resource is paused.
PoweringOff	A temporary state between on and off. The components within the resource can take time to process the power off action.
PoweringOn	A temporary state between off and on. The components within the resource can take time to process the power on action.

## ResetToDefaultsType

string	Description
ResetAll	Reset all settings to factory defaults.

## State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 25 ManagerAccount service

### 25.1 Descriptions

This Resource shall represent Resources that represent the user accounts for the manager.

### 25.2 URIs

/redfish/v1/AccountService/Accounts/admin

### 25.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#ManagerAccount.v1_4_0.ManagerAccount"
AccountTypes [ ]	array	read-write	The account types.
Description	string	read-only	See "Property details" section for details The description of this resource. Used for commonality in the schema definitions. Value: "User Account"
Enabled	boolean	read-write	An indication of whether an account is enabled. An administrator can disable it without deleting the user information. If <i>true</i> , the account is enabled and the user can log in. If <i>false</i> , the account is disabled and, in the future, the user cannot log in. This property overrides the Locked property.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Links { Role { @odata.id } }		read-only	The links to other Resources that are related to this Resource. The link to the Redfish Role that defines the privileges for this account. The Role schema contains a Redfish role to use in conjunction with a manager account.
Locked	boolean	read-write	An indication of whether the Account Service automatically locked the account because the lockout threshold was exceeded. To manually unlock the account before the lockout duration period, an administrator can change the property to <i>false</i> to clear the lockout condition.
Locked@Redfish.AllowableVa			

continues on next page

Table 70 – continued from previous page

Property	Type	Attributes	Notes
Name	string	read-only	The name of the resource or array member. Value: "User Account"
Password	string	read-write	The password. Use this property with a PATCH or PUT to write the password for the account. This property is <i>null</i> in responses.
PasswordChangeRequired	boolean	read-write	An indication of whether the service requires that the password for this account be changed before further access to the account is allowed.
RoleId	string	read-write	The Role for this account.
UserName	string	read-write	The user name for the account.

## 25.4 Property details

### AccountTypes

string	Description
Redfish	Allow access to the Redfish Service.

## 26 ManagerAccountCollection service

### 26.1 Descriptions

This resource shall represent a resource collection of ManagerAccount instances for a Redfish implementation.

### 26.2 URIs

/redfish/v1/AccountService/Accounts

### 26.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#ManagerAccountCollection. ManagerAccountCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "BMC User Accounts"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The ManagerAccount schema defines the user accounts that are owned by a manager. Changes to a manager account might affect the current Redfish service connection if this manager is responsible for the Redfish service.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Accounts Collection"

## 27 ManagerCollection service

### 27.1 Descriptions

This resource shall represent a resource collection of Manager instances for a Redfish implementation.

### 27.2 URIs

/redfish/v1/Managers

### 27.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#ManagerCollection.ManagerCollection"
Members	array	read-only	The members of this collection.
[ @odata.id ]			In Redfish, a manager is a systems management entity that can implement or provide access to a Redfish service. Examples of managers are BMCs, enclosure managers, management controllers, and other subsystems that are assigned manageability functions. An implementation can have multiple managers, which might be directly accessible through a Redfish-defined interface.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Manager Collection"

## 28 ManagerNetworkProtocol service

### 28.1 Descriptions

This Resource shall represent the network service settings for the manager.

### 28.2 URIs

/redfish/v1/Managers/bmc/NetworkProtocol

### 28.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#ManagerNetworkProtocol.v1_5_0.ManagerNetworkProtocol"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Manager Network Service"
FQDN	string	read-only	The fully qualified domain name for the manager obtained by DNS including the host name and top-level domain name.
HTTP			The settings for this manager's HTTP protocol support.
{ Port	integer	read-write	The protocol port.
ProtocolEnabled	boolean	read-write	An indication of whether the protocol is enabled.
}			
HTTPS			The settings for this manager's HTTPS protocol support.
{ Certificates		read-only	The link to a collection of certificates used for HTTPS by this manager.
{ @odata.id	string	read-only	The unique identifier for a resource.
}			
Port	integer	read-write	The protocol port.
ProtocolEnabled	boolean	read-write	An indication of whether the protocol is enabled.
}			
HostName	string	read-only	The DNS host name of this manager, without any domain information.
IPMI			The settings for this manager's IPMI-over-LAN protocol support.
{ Port	integer	read-write	The protocol port.
ProtocolEnabled	boolean	read-write	An indication of whether the protocol is enabled.
}			
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
NTP			The settings for this manager's NTP protocol support.
{			

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Table 74 – continued from previous page

Property	Type	Attributes	Notes
NTPServers [ ]	array	read-write	Indicates to which NTP servers this manager is subscribed.
ProtocolEnabled }	boolean	read-write	An indication of whether the protocol is enabled.
Name	string	read-only	The name of the resource or array member. Value: "Manager Network Protocol"
Oem {			The OEM extension property.
Eviden_com {			
@odata.type			Value: "#OemManager.Oem"
Rsyslog {			
IP			
Port			
}			
}			
SSH {			The settings for this manager's Secure Shell (SSH) protocol support.
Port	integer	read-write	The protocol port.
ProtocolEnabled }	boolean	read-write	An indication of whether the protocol is enabled.
Status {			The status and health of the Resource and its subordinate or dependent Resources.
Health	null	read-only	The health state of this resource in the absence of its dependent resources. See "Property details" section for details
HealthRollup	null	read-only	The overall health state from the view of this resource. See "Property details" section for details
State }	null	read-only	The known state of the resource, such as, enabled. See "Property details" section for details

## 28.4 Property details

### Health

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

## HealthRollup

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

## State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 29 Memory service

### 29.1 Descriptions

This resource shall be used to represent the Memory in a Redfish implementation.

### 29.2 URIs

/redfish/v1/Systems/system/Memory/<str>

### 29.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Memory.v1_7_0.Memory"
Action			
{			
Oem			This is the manufacturer/provider specific extension moniker used to divide the Oem object into sections.
{			
#Bul-			
IOEMDimm.Disable			
{			
target			
}			
}			
}			
AllowedSpeedsMHz	array	read-only	Speed bins supported by this Memory.
[			
]			
BaseModuleType	null	read-only	The base module type of Memory. See "Property details" section for details
BusWidthBits	integer	read-only	Bus Width in bits.
CapacityMiB	integer	read-only	Memory Capacity in mebibytes (MiB).
DataWidthBits	integer	read-only	Data Width in bits.
ErrorCorrection	null	read-only	Error correction scheme supported for this memory. See "Property details" section for details
FirmwareRevision	string	read-only	Revision of firmware on the Memory controller.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Manufacturer	string	read-only	The Memory manufacturer.
MemoryLocation			Memory connection information to sockets and memory controllers.
{			
Channel	integer	read-only	Channel number in which Memory is connected.

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Table 78 – continued from previous page

Property	Type	Attributes	Notes
MemoryController	integer	read-only	Memory controller number in which Memory is connected.
Slot	integer	read-only	Slot number in which Memory is connected.
Socket	integer	read-only	Socket number in which Memory is connected.
} MemoryType	null	read-only	The type of Memory. See “Property details” section for details
Name	string	read-only	The name of the resource or array member. Value: “CPU0_CHA0”
Oem {			This is the manufacturer/provider specific extension moniker used to divide the Oem object into sections.
Eviden_com {			
DIMMExclusionState			
ExclusionReason			
Manufacturing Date			
}			
} OperatingSpeedMhz	integer	read-only	Operating speed of Memory in MHz or MT/s as appropriate.
PartNumber	string	read-only	The product part number of this device.
RankCount	integer	read-only	Number of ranks available in the Memory.
SerialNumber	string	read-only	The product serial number of this device.
Status {			This property describes the status and health of the resource and its children.
Health	null	read-only	The health state of this resource in the absence of its dependent resources. See “Property details” section for details
HealthRollup	null	read-only	The overall health state from the view of this resource. See “Property details” section for details
State }	null	read-only	The known state of the resource, such as, enabled. See “Property details” section for details

## 29.4 Property details

### BaseModuleType

string	Description
Die	A die within a package.
LRDIMM	Load Reduced.
Mini_RDIMM	Mini_RDIMM.
Mini_UDIMM	Mini_UDIMM.

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Table 79 – continued from previous page

string	Description
RDIMM	Registered DIMM.
SO_DIMM	SO_DIMM.
SO_DIMM_16b	SO_DIMM_16b.
SO_DIMM_32b	SO_DIMM_32b.
SO_RDIMM_72b	SO_RDIMM_72b.
SO_UDIMM_72b	SO_UDIMM_72b.
UDIMM	UDIMM.

### ErrorCorrection

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

### Health

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

### HealthRollup

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

### MemoryType

string	Description
DRAM	The memory module is composed of volatile memory.
IntelOptane	The memory module is Intel Optane DC Persistent Memory and composed of a combination of non-volatile and volatile memory.
NVDIMM_F	The memory module is composed of non-volatile memory.
NVDIMM_N	The memory module is composed of volatile memory backed by non-volatile memory.

continues on next page

Table 83 – continued from previous page

string	Description
NVDIMM_P	The memory module is composed of a combination of non-volatile and volatile memory.

### State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 30 MemoryCollection service

### 30.1 Descriptions

This resource shall represent a resource collection of Memory instances for a Redfish implementation.

### 30.2 URIs

/redfish/v1/Systems/system/Memory

### 30.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#MemoryCollection.MemoryCollection"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The Memory schema represents a memory device, such as a DIMM, and its configuration. It also describes the location, such as a slot, socket, or bay, where a unit can be installed, by populating a resource instance with an absent state if a unit is not present.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Memory Module Collection"

## 31 MessageRegistryFile service

### 31.1 Descriptions

This resource shall be used to represent the Schema File locator resource for a Redfish implementation.

### 31.2 URIs

/redfish/v1/Registries/<str>

### 31.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#MessageRegistryFile.v1_1_0.MessageRegistryFile"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "DMTF Base Message Registry File Location"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Languages [ ]	array	read-only	Language codes for the schemas available.
Languages@odata.count			
Location [ Language ]	array		Location information for this schema file.
Language	string	read-only	The language code for the file the schema is in.
PublicationUri	string	read-only	Link to publicly available (canonical) URI for schema.
Uri	string	read-only	Link to locally available URI for schema.
Location@odata.count			
Name	string	read-only	The name of the resource or array member. Value: "Base Message Registry File"
Registry	string	read-only	The Registry Name, Major and Minor version used in MessageID construction.

## 32 MessageRegistryFileCollection service

### 32.1 Descriptions

This Resource shall represent a Resource Collection of MessageRegistryFile instances for a Redfish implementation.

### 32.2 URIs

/redfish/v1/Registries

### 32.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#MessageRegistryFileCollection. MessageRegistryFileCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Collection of MessageRegistryFiles"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The MessageRegistryFile schema describes the Message Registry file locator Resource.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "MessageRegistryFile Collection"

## 33 PCIeDevice service

### 33.1 Descriptions

This Resource contains a PCIeDevice that is attached to a system.

### 33.2 URIs

/redfish/v1/Systems/system/PCIeDevices/<str>

### 33.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#PCIeDevice.v1_4_0.PCIeDevice"
DeviceType		read-only	The device type for this PCIe device. See "Property details" section for details
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Manufacturer	string	read-only	The manufacturer of this PCIe device.
Name	string	read-only	The name of the resource or array member. Value: "PCIe Device"
Oem			The OEM extension property.
{			
Eviden_com			
{			
DeviceName			
Model			
PcieBusNumber			
PcieDeviceNumber			
PcieSegmentNumber			
PortNumber			
PortWidth			
SlotID			
Speed			
}			
}			
PCIeFunctions		read-only	The link to the collection of PCIe functions associated with this PCIe device.
{			
@odata.id	string	read-only	The unique identifier for a resource.
}			

## 33.4 Property details

### DeviceType

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

## 34 PCIeDeviceCollection service

### 34.1 Descriptions

This resource shall represent a resource collection of PCIeDevice instances for a Redfish implementation.

### 34.2 URIs

/redfish/v1/Systems/system/PCIeDevices

### 34.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#PCIeDeviceCollection. PCIeDeviceCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Collection of PCIe Devices"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The PCIeDevice schema describes the properties of a PCIe device that is attached to a system. It also describes the location, such as a slot, socket, or bay, where a unit can be installed, by populating a resource instance with an absent state if a unit is not present.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "PCIe Device Collection"

## 35 PCIeFunctionCollection service

### 35.1 Descriptions

This resource shall represent a resource collection of PCIeFunction instances for a Redfish implementation.

### 35.2 URIs

/redfish/v1/Systems/system/PCIeDevices/<str>/PCIeFunctions

### 35.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#PCIeFunctionCollection. PCIeFunctionCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Collection of PCIe Functions for PCIe Device GPU0"
Members [ ]	array	read-only	The members of this collection.
Name	string	read-only	The name of the resource or array member. Value: "PCIe Function Collection"
PCIeFunc- tions@odata.count			

## 36 Power service

### 36.1 Descriptions

This resource shall be used to represent a power metrics resource for a Redfish implementation.

### 36.2 URIs

/redfish/v1/Chassis/<str>/Power

### 36.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Power.v1_5_2.Power"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "Power"
PowerControl [ ]	array		This is the definition for power control function (power reading/limiting).
Redundancy [ ]	array		Redundancy information for the power subsystem of this system or device.
PowerSupplies [	array		Details of the power supplies associated with this system or device.
@odata.id	string	read-only	The unique identifier for a resource.
EfficiencyPercent	number	read-only	The measured efficiency of this Power Supply as a percentage.
Manufacturer	string	read-only	This is the manufacturer of this power supply.
MemberId	string	read-only	This is the identifier for the member within the collection.
Model	string	read-only	The model number for this Power Supply.
Name	string	read-only	The name of the Power Supply. Value: "PSU0"
PartNumber	string	read-only	The part number for this Power Supply.
PowerOutputWatts	number	read-only	The measured output power of this Power Supply.
SerialNumber	string	read-only	The serial number for this Power Supply.
Status {			This property describes the status and health of the resource and its children.
Health	null	read-only	The health state of this resource in the absence of its dependent resources. See "Property details" section for details

continues on next page

Table 92 – continued from previous page

Property	Type	Attributes	Notes
State }	null	read-only	The known state of the resource, such as, enabled.
]			See “Property details” section for details
Voltages [	array		This is the definition for voltage sensors.
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type			Value: “#Power.v1_0_0.Voltage”
LowerThresholdCritical	number	read-only	Below normal range but not yet fatal.
LowerThresholdNonCritical	number	read-only	Below normal range.
MaxReadingRange	number	read-only	Maximum value for this Voltage sensor.
MemberId	string	read-only	This is the identifier for the member within the collection.
MinReadingRange	number	read-only	Minimum value for this Voltage sensor.
Name	string	read-only	Voltage sensor name. Value: “P12V Volt”
ReadingVolts	number	read-only	The present reading of the voltage sensor.
Status {			This property describes the status and health of the resource and its children.
Health	null	read-only	The health state of this resource in the absence of its dependent resources. See “Property details” section for details
State }	null	read-only	The known state of the resource, such as, enabled. See “Property details” section for details
UpperThresholdCritical	number	read-only	Above normal range but not yet fatal.
UpperThresholdNonCritical	number	read-only	Above normal range.
]			

## 36.4 Property details

### Health

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

## State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 37 Processor service

### 37.1 Descriptions

This resource shall represent a single processor that a system contains. A processor includes both performance characteristics, clock speed, architecture, core count, and so on, and compatibility, such as the CPU ID instruction results.

### 37.2 URIs

/redfish/v1/Systems/system/Processors/CPU0

### 37.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Processor.v1_9_0.Processor"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
MaxSpeedMHz	integer	read-only	The maximum clock speed of the processor.
Name	string	read-only	The name of the resource or array member. Value: "Processor"
Oem			The OEM extension property.
{			
Eviden_com			
{			
Architecture			
CoreProcessorFamily			
CoreProcessorModel			
CoreProcessorStepping			
DTSMMaximum			
{			
Reading			
Reading Unit			
}			
HyperThreading			
LLCCacheSize			
{			
Reading			
Reading Unit			
}			
MLCCacheSize			
{			
Reading			
Reading Unit			
}			
}			

continues on next page

Table 95 – continued from previous page

Property	Type	Attributes	Notes
Manufacturer			
MaximumDDR1DPCSpeed			
{			
Reading			
Reading Unit			
}			
MaximumDDR2DPCSpeed			
{			
Reading			
Reading Unit			
}			
MaximumP0CoreFrequency			
{			
Reading			
Reading Unit			
}			
MaximumP1CoreFrequency			
{			
Reading			
Reading Unit			
}			
MaximumPCleTransferRate			
{			
Reading			
Reading Unit			
}			
Model			
NVMDIMMMaximumCapacity			
{			
Reading			
Reading Unit			
}			
NumberOfUPILinks			
PackageType			
PnLimit			
ProcessorFamilyNumber			
ProcessorSKUNumber			
QDFNumber			
Sample			
SerialNumber			
TCaseMaximum			
{			
Reading			

continues on next page

Table 95 – continued from previous page

Property	Type	Attributes	Notes
Reading Unit			
} ThermalDesignPower			
{ Reading			
Reading Unit			
}			
}			
ProcessorId			The identification information for this processor.
{ EffectiveFamily	string	read-only	The effective family for this processor.
}			
ProcessorType	null	read-only	The type of processor. See “Property details” section for details
Socket	string	read-only	The socket or location of the processor.
Status			The status and health of the resource and its subordinate or dependent resources.
{ Health	null	read-only	The health state of this resource in the absence of its dependent resources. See “Property details” section for details
HealthRollup	null	read-only	The overall health state from the view of this resource. See “Property details” section for details
State	null	read-only	The known state of the resource, such as, enabled. See “Property details” section for details
}			
TotalCores	integer	read-only	The total number of cores that this processor contains.
TotalThreads	integer	read-only	The total number of execution threads that this processor supports.

## 37.4 Property details

### Health

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

## HealthRollup

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

## ProcessorType

string	Description
Accelerator	An accelerator.
CPU	A CPU.
Core	A core in a processor.
DSP	A DSP.
FPGA	An FPGA.
GPU	A GPU.
OEM	An OEM-defined processing unit.
Thread	A thread in a processor.

## State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 38 ProcessorCollection service

### 38.1 Descriptions

This resource shall represent a resource collection of Processor instances for a Redfish implementation.

### 38.2 URIs

/redfish/v1/Systems/system/Processors

### 38.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#ProcessorCollection. ProcessorCollection"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The Processor schema describes the information about a single processor that a system contains. A processor includes both performance characteristics, clock speed, architecture, core count, and so on, and compatibility, such as the CPU ID instruction results. It also describes the location, such as a slot, socket, or bay, where a unit can be installed, by populating a resource instance with an absent state if a unit is not present.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Processor Collection"

## 39 Role service

### 39.1 Descriptions

This resource shall be used to represent resources that represent the user role for the user account.

### 39.2 URIs

/redfish/v1/AccountService/Roles/<str>

### 39.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Role.v1_2_2.Role"
AssignedPrivileges [ ]	array	read-write	The redfish privileges that this role includes. See "Property details" section for details
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Administrator User Role"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
IsPredefined	boolean	read-only	This property is used to indicate if the Role is one of the Redfish Predefined Roles vs a Custom role.
Name	string	read-only	The name of the resource or array member. Value: "User Role"
OemPrivileges [ ]	array	read-write	The OEM privileges that this role includes.
RoleId	string	read-only	This property contains the name of the Role.

### 39.4 Property details

#### AssignedPrivileges

string	Description
ConfigureComponents	Can configure components that this service manages.
ConfigureManager	Can configure managers.

continues on next page

Table 102 – continued from previous page

string	Description
ConfigureSelf	Can change the password for the current user account, log out of their own sessions, and perform operations on resources they created. Services will need to be aware of resource ownership to map this privilege to an operation from a particular user.
ConfigureUsers	Can configure users and their accounts.
Login	Can log in to the service and read resources.

## 40 RoleCollection service

### 40.1 Descriptions

This resource shall represent a resource collection of Role instances for a Redfish implementation.

### 40.2 URIs

/redfish/v1/AccountService/Roles

### 40.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#RoleCollection.RoleCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "BMC User Roles"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The Role schema contains a Redfish role to use in conjunction with a manager account.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Roles Collection"

## 41 Sensor service

### 41.1 Descriptions

This resource shall represent a sensor for a Redfish implementation.

### 41.2 URIs

/redfish/v1/Chassis/motherboard/Sensors/<str>

### 41.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Sensor.v1_4_0.Sensor"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "PSU0 lout"
Reading	number	read-only	The sensor value.
ReadingRangeMax	number	read-only	The maximum possible value for this sensor.
ReadingRangeMin	number	read-only	The minimum possible value for this sensor.
ReadingType	null	read-only	The type of sensor. See "Property details" section for details
ReadingUnits	string	read-only	The units of the reading and thresholds.
Status			The status and health of the resource and its subordinate or dependent resources.
{ Health	null	read-only	The health state of this resource in the absence of its dependent resources. See "Property details" section for details
State }	null	read-only	The known state of the resource, such as, enabled. See "Property details" section for details
Thresholds			The set of thresholds defined for this sensor.
{ LowerCaution			The value at which the reading is below normal range.
Reading }	number	read-write	The threshold value.
LowerCritical			The value at which the reading is below normal range but not yet fatal.
Reading }	number	read-write	The threshold value.

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Table 104 – continued from previous page

Property	Type	Attributes	Notes
UpperCaution {			The value at which the reading is above normal range.
Reading	number	read-write	The threshold value.
}			
UpperCritical {			The value at which the reading is above normal range but not yet fatal.
Reading	number	read-write	The threshold value.
}			
}			

## 41.4 Property details

### Health

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

### ReadingType

string	Description
AirFlow	Airflow.
Altitude	Altitude.
Barometric	Barometric pressure.
ChargeAh	Charge (Ah).
Current	Current.
EnergyJoules	Energy (Joules).
EnergyWh	Energy (Wh).
EnergykWh	Energy (kWh).
Frequency	Frequency.
Humidity	Relative Humidity.
LiquidFlow	Liquid flow.
LiquidLevel	Liquid level.
Percent	Percent.
Power	Power.
Pressure	Pressure.
Rotational	Rotational.
Temperature	Temperature.
Voltage	Voltage (AC or DC).

## State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 42 SensorCollection service

### 42.1 Descriptions

This resource shall represent a resource collection of Sensor instances for a Redfish implementation.

### 42.2 URIs

/redfish/v1/Chassis/<str>/Sensors

### 42.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#SensorCollection.SensorCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Collection of Sensors for this Chassis"
Members [ ]	array	read-only	The members of this collection.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Sensors"

## 43 ServiceRoot service

### 43.1 Descriptions

This object represents the root Redfish service. All values for resources described by this schema shall comply to the requirements as described in the Redfish specification.

### 43.2 URIs

/redfish/v1

### 43.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#ServiceRoot.v1_5_0.ServiceRoot"
AccountService		read-only	This is a link to the Account Service.
{ @odata.id }			The AccountService schema defines an account service. The properties are common to, and enable management of, all user accounts. The properties include the password requirements and control features, such as account lockout. Properties and actions in this service specify general behavior that should be followed for typical accounts, however implementations may override these behaviors for special accounts or situations to avoid denial of service or other deadlock situations.
CertificateService		read-only	This is a link to the CertificateService.
{ @odata.id }			The CertificateService schema describes a certificate service that represents the actions available to manage certificates and links to the certificates.
Chassis		read-only	This is a link to a collection of Chassis.
{ @odata.id }	string	read-only	The unique identifier for a resource.
EventService		read-only	This is a link to the EventService.
{			

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Table 109 – continued from previous page

Property	Type	Attributes	Notes
@odata.id }			The EventService schema contains properties for managing event subscriptions and generates the events sent to subscribers. The resource has links to the actual collection of subscriptions, which are called event destinations.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
JsonSchemas {		read-only	This is a link to a collection of Json-Schema files.
@odata.id }	string	read-only	The unique identifier for a resource.
Links {			Contains references to other resources that are related to this resource.
Sessions {		read-only	Link to a collection of Sessions.
@odata.id }	string	read-only	The unique identifier for a resource.
Managers {		read-only	This is a link to a collection of Managers.
@odata.id }	string	read-only	The unique identifier for a resource.
Name	string	read-only	The name of the resource or array member. Value: "Root Service"
Oem {			This is the manufacturer/provider specific extension moniker used to divide the Oem object into sections.
BoardId			
Manufacturer			
Model			
SerialNumber			
redfishOEMId			
RedfishVersion	string	read-only	The version of the Redfish service.
Registries {		read-only	This is a link to a collection of Registries.
@odata.id }	string	read-only	The unique identifier for a resource.
SessionService {		read-only	This is a link to the Sessions Service.
@odata.id }			The SessionService schema describes the session service and its properties, with links to the actual list of sessions.
Systems {		read-only	This is a link to a collection of Systems.
@odata.id }	string	read-only	The unique identifier for a resource.

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Table 109 – continued from previous page

Property	Type	Attributes	Notes
Tasks { @odata.id }		read-only	This is a link to the Task Service.
UUID	null	read-only	The TaskService schema describes a task service that enables management of long-duration operations, includes the properties for the task service itself, and has links to the resource collection of tasks.  Unique identifier for a service instance. When SSDP is used, this value should be an exact match of the UUID value returned in a 200OK from an SSDP M-SEARCH request during discovery.
UpdateService { @odata.id }		read-only	This is a link to the UpdateService.  The UpdateService schema describes the update service and the properties for the service itself with links to collections of firmware and software inventory. The update service also provides methods for updating software and firmware of the resources in a Redfish service.

## 44 Session service

### 44.1 Descriptions

This Resource shall represent a session for a Redfish implementation.

### 44.2 URIs

/redfish/v1/SessionService/Sessions/<str>

### 44.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Session.v1_3_0.Session"
ClientOriginIPAddress	string	read-only	The IP address of the client that created the session.
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Manager User Session"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "User Session"
Oem			The OEM extension property.
{ Eviden_com			
{ KVMKeyboardLayout			
} }			
UserName	string	read-only	The UserName for the account for this session.

## 45 SessionCollection service

### 45.1 Descriptions

This resource shall represent a resource collection of Session instances for a Redfish implementation.

### 45.2 URIs

/redfish/v1/SessionService/Sessions/

### 45.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#SessionCollection.SessionCollection"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Session Collection"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The Session resource describes a single connection (session) between a client and a Redfish service instance.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Session Collection"

## 46 SessionService service

### 46.1 Descriptions

This resource shall be used to represent the Session Service Properties for a Redfish implementation.

### 46.2 URIs

/redfish/v1/SessionService/

### 46.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#SessionService.v1_0_2.SessionService"
Description	string		The description of this resource. Used for commonality in the schema definitions. Value: "Session Service"
Id	string		The unique identifier for this resource within the collection of similar resources.
Name	string		The name of the resource or array member. Value: "Session Service"
ServiceEnabled	boolean		This indicates whether this service is enabled.
SessionTimeout	number	read-write	This is the number of seconds of inactivity that a session may have before the session service closes the session due to inactivity.
Sessions		read-only	Link to a collection of Sessions
{ @odata.id	string	read-only	The unique identifier for a resource.
}			

## 47 SoftwareInventory service

### 47.1 Descriptions

This resource shall be used to represent a single software component managed by this Redfish Service.

### 47.2 URIs

/redfish/v1/UpdateService/FirmwareInventory/<str>

### 47.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#SoftwareInventory.v1_1_0. SoftwareInventory"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Host image"
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Members@odata.count			
Name	string	read-only	The name of the resource or array member. Value: "Software Inventory"
RelatedItem	array	read-only	The ID(s) of the resources associated with this software inventory item.
[ @odata.id ]	string	read-only	The unique identifier for a resource.
Status			
{ Health	null	read-only	The health state of this resource in the absence of its dependent resources. See "Property details" section for details
HealthRollup State }			
Updateable	boolean	read-only	Indicates whether this software can be updated by the update service.
Version	string	read-only	A string representing the version of this software.

## 47.4 Property details

### Health

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

## 48 SoftwareInventoryCollection service

### 48.1 Descriptions

This Resource shall represent a Resource Collection of SoftwareInventory instances for a Redfish implementation.

### 48.2 URIs

/redfish/v1/UpdateService/FirmwareInventory

### 48.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#SoftwareInventoryCollection. SoftwareInventoryCollection"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The SoftwareInventory schema contains an inventory of software components. This can include software components such as BIOS, BMC firmware, firmware for other devices, system drivers, or provider software.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Software Inventory Collection"

## 49 Storage service

### 49.1 Descriptions

This Resource shall represent a storage subsystem in the Redfish Specification.

### 49.2 URIs

/redfish/v1/Systems/system/Storage/1

### 49.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Storage.v1_7_1.Storage"
Drives [ @odata.id ]	array	read-only	The set of drives attached to the storage controllers that this Resource represents. The Drive schema represents a single physical drive for a system, including links to associated volumes. It also describes the location, such as a slot, socket, or bay, where a unit can be installed, by populating a resource instance with an absent state if a unit is not present.
Drives@odata.count	integer	read-only	The number of items in a collection.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "Storage"
Status { Health	null	read-only	The status and health of the Resource and its subordinate or dependent Resources. The health state of this resource in the absence of its dependent resources. See "Property details" section for details
HealthRollup	null	read-only	The overall health state from the view of this resource. See "Property details" section for details
State }	null	read-only	The known state of the resource, such as, enabled. See "Property details" section for details

## 49.4 Property details

### Health

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

### HealthRollup

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

### State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.
Updating	The element is updating and might be unavailable or degraded.

## 50 StorageCollection service

### 50.1 Descriptions

This resource shall represent a resource collection of Storage instances for a Redfish implementation.

### 50.2 URIs

/redfish/v1/Systems/system/Storage

### 50.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#StorageCollection.StorageCollection"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The Storage schema defines a storage subsystem and its respective properties. A storage subsystem represents a set of physical or virtual storage controllers and the resources, such as volumes, that can be accessed from that subsystem.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Storage Collection"

## 51 Task service

### 51.1 Descriptions

This Resource contains a Task for a Redfish implementation.

### 51.2 URIs

/redfish/v1/TaskService/Tasks/0

### 51.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Task.v1_4_3.Task"
EndTime	string	read-only	The date and time when the task was completed. This property will only appear when the task is complete.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Messages	array		An array of messages associated with the task.
[ @odata.type			The message that the Redfish service returns. Value: "#Message.v1_0_0.Message"
Message			The message that the Redfish service returns.
MessageArgs			The message that the Redfish service returns.
[ ] MessageId			The message that the Redfish service returns.
Resolution			The message that the Redfish service returns.
Severity			The message that the Redfish service returns.
] Name	string	read-only	The name of the resource or array member. Value: "Task 0"
Payload			The HTTP and JSON payload details for this task, unless they are hidden from view by the service.
{ HttpHeaders	array	read-only	An array of HTTP headers that this task includes.
[ ] HttpOperation	string	read-only	The HTTP operation to perform to execute this task.

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Table 121 – continued from previous page

Property	Type	Attributes	Notes
JsonBody	string	read-only	The JSON payload to use in the execution of this task.
TargetUri	string	read-only	The URI of the target for this task.
StartTime	string	read-only	The date and time when the task was started.
TaskMonitor	string	read-only	The URI of the Task Monitor for this task.
TaskState		read-only	The state of the task. See “Property details” section for details
TaskStatus		read-only	The completion status of the task. See “Property details” section for details

## 51.4 Property details

### TaskState

string	Description
Cancelled	Task has been cancelled by an operator or internal process.
Cancelling	Task is in the process of being cancelled.
Completed	Task was completed.
Exception	Task has stopped due to an exception condition.
Interrupted	Task has been interrupted.
Killed	Task was terminated.
New	A new task.
Pending	Task is pending and has not started.
Running	Task is running normally.
Service	Task is running as a service.
Starting	Task is starting.
Stopping	Task is in the process of stopping.
Suspended	Task has been suspended.

### TaskStatus

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

## 52 TaskCollection service

### 52.1 Descriptions

This Resource shall represent a Resource Collection of Task instances for a Redfish implementation.

### 52.2 URIs

/redfish/v1/TaskService/Tasks

### 52.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#TaskCollection.TaskCollection"
Members	array	read-only	The members of this collection.
[ @odata.id ]			The Task schema contains information about a task that the Redfish task service schedules or executes. Tasks represent operations that take more time than a client typically wants to wait.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "Task Collection"

## 53 TaskService service

### 53.1 Descriptions

This Resource contains a Task Service for a Redfish implementation.

### 53.2 URIs

/redfish/v1/TaskService

### 53.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#TaskService.v1_1_4.TaskService"
CompletedTaskOver-WritePolicy		read-only	The overwrite policy for completed tasks. This property indicates whether the Task Service overwrites completed task information. See "Property details" section for details
DateTime	string	read-only	The current date and time, with UTC offset, setting that the Task Service uses.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
LifeCycleEventOnTaskStateChange	boolean	read-only	An indication of whether a task state change sends an event.
Name	string	read-only	The name of the resource or array member. Value: "Task Service"
ServiceEnabled	boolean	read-write	An indication of whether this service is enabled.
Status			The status and health of the Resource and its subordinate or dependent Resources.
{ Health	null	read-only	The health state of this resource in the absence of its dependent resources. See "Property details" section for details
HealthRollup	null	read-only	The overall health state from the view of this resource. See "Property details" section for details
State	null	read-only	The known state of the resource, such as, enabled. See "Property details" section for details
Tasks		read-only	The links to the Tasks collection.
{ @odata.id	string	read-only	The unique identifier for a resource.

## 53.4 Property details

### CompletedTaskOverWritePolicy

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

### Health

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

### HealthRollup

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

### State

string	Description
Absent	This function or device is not currently present or detected. This resource represents a capability or an available location where a device can be installed.
Deferring	The element does not process any commands but queues new requests.
Disabled	This function or resource is disabled.
Enabled	This function or resource is enabled.
InTest	This function or resource is undergoing testing, or is in the process of capturing information for debugging.
Qualified	The element quality is within the acceptable range of operation.
Quiesced	The element is enabled but only processes a restricted set of commands.
StandbyOffline	This function or resource is enabled but awaits an external action to activate it.
StandbySpare	This function or resource is part of a redundancy set and awaits a failover or other external action to activate it.
Starting	This function or resource is starting.
UnavailableOffline	This function or resource is present but cannot be used.

continues on next page

Table 129 – continued from previous page

string	Description
Updating	The element is updating and might be unavailable or degraded.

## 54 Thermal service

### 54.1 Descriptions

This resource shall be used to represent a thermal metrics resource for a Redfish implementation.

### 54.2 URIs

/redfish/v1/Chassis/<str>/Thermal

### 54.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#Thermal.v1_4_0.Thermal"
Fans [ ]	array	read-write	This is the definition for fans.
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "Thermal"
Redundancy [ ]	array		This structure is used to show redundancy for fans. The Component ids will reference the members of the redundancy groups.
Temperatures [ ]	array	read-write	This is the definition for temperature sensors.

## 55 UpdateService service

### 55.1 Descriptions

This resource shall be used to represent an Update Service for a Redfish implementation. It represents the properties that affect the service itself.

### 55.2 URIs

/redfish/v1/UpdateService

### 55.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#UpdateService.v1_4_0.UpdateService"
Description	string	read-only	The description of this resource. Used for commonality in the schema definitions. Value: "Service for Software Update"
FirmwareInventory	null	read-only	An inventory of firmware.
{ @odata.id }	string	read-only	The unique identifier for a resource.
HttpPushUri	string	read-only	The URI used to perform an HTTP or HTTPS push update to the Update Service.
HttpPushUriOptions			This property contains options for software update via HttpPushUri.
{ HttpPushUriApplyTime			This property contains settings for when firmware is to be applied when provided via HttpPushUri.
{ ApplyTime		read-write	This property indicates when the software update invoked via HttpPushUri should be applied.
} } }			See "Property details" section for details
Id	string	read-only	The unique identifier for this resource within the collection of similar resources.
Name	string	read-only	The name of the resource or array member. Value: "Update Service"
Oem			This is the manufacturer/provider specific extension moniker used to divide the Oem object into sections.
{ Eviden_com			
{ ForceUpgrade			

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Table 131 – continued from previous page

Property	Type	Attributes	Notes
ManualUpgrade } }			
ServiceEnabled	boolean	read-write	This indicates whether this service is enabled.

## 55.4 Actions

### SimpleUpdate

Description: This action shall perform an update of installed software component(s) as contained within a software image file located at a URI referenced by the ImageURI parameter.

Action URI: /redfish/v1/UpdateService/Actions/UpdateService.SimpleUpdate

Action parameters:

Parameter Name	Type	Notes
TransferProtocol	object	The network protocol used by the Update Service to retrieve the software image file located at the URI provided in ImageURI, if the URI does not contain a scheme.

### Activate

Description: This action activates the update when the ManualUpgrade property is set to true. it is reserved for Atos usage only: using this may provoke upgarde issues.

Action URI: /redfish/v1/UpdateService/Actions/Oem/UpdateService.Activate

Action parameters:

Parameter Name	Type	Notes
Name	string	Firmware encrypted name (as seen in firmwareInventory)

## 55.5 Property details

### ApplyTime

string	Description
AtMaintenanceWindowStart	Apply during a maintenance window as specified by an administrator.
Immediate	Apply immediately.

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Table 134 – continued from previous page

string	Description
InMaintenanceWindowOn-Reset	Apply after a reset but within maintenance window as specified by an administrator.
OnReset	Apply on a reset.

### TransferProtocol

string	Description
TFTP	Trivial File Transfer Protocol.

## 56 VlanNetworkInterfaceCollection service

### 56.1 Descriptions

This resource shall represent a resource collection of VlanNetworkInterface instances for a Redfish implementation.

### 56.2 URIs

/redfish/v1/Managers/bmc/EthernetInterfaces/<str>/VLANs

### 56.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#VlanNetworkInterfaceCollection.VlanNetworkInterfaceCollection"
Members [ ] ]	array	read-only	The members of this collection.
Members@odata.count	integer	read-only	The number of items in a collection.
Name	string	read-only	The name of the resource or array member. Value: "VLAN Network Interface Collection"

## 57 VirtualMediaCollection service

### 57.1 Descriptions

This Resource shall represent a Resource Collection of VirtualMedia instances for a Redfish implementation.

### 57.2 URIs

/redfish/v1/Managers/bmc/VirtualMedia

### 57.3 Properties

Property	Type	Attributes	Notes
@odata.id	string	read-only	The unique identifier for a resource.
@odata.type	string	read-only	The type of a resource. Value: "#VirtualMediaCollection.VirtualMediaCollection"
Name	string	read-only	The name of the resource or array member. Value: "Virtual Media Services"
error			
{			
@Message.ExtendedInfo			
code			
message			
}			

