

Redfish Release 2019.1

DMTF Redfish Forum May 2019



Redfish Release 2019.1

• Redfish Specification v1.7.0

- Significant clean-up of document for clarity
- Improved account password management
- Clarification of array property handling
- Redfish Schema Bundle 2019.1
 - Bundle contains all released Redfish schemas
- Redfish Host Interface v1.1.0
 - Numerous clarifications to SMBIOS table data
 - Added v2 of USB and PCIe device descriptors
- Redfish Message Registry Bundle 2019.1
 - Bundle contains all released Redfish message registries
- 19 Updated Schemas (highlights)
 - Certificate v1.1 Added *Renew* and *Rekey* Actions
 - ManagerAccount v1.3 Added PasswordChangeRequired
 - Event related schemas Completed transition to new Event Subscription methods
- Download all published material at: <u>http://www.dmtf.org/standards/redfish</u>



Redfish

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Redfish Specification v1.7.0

- Document renamed simply "Redfish Specification"
- **NEW**: Added Redfish Dictionary (RDE) file naming rules and repository
- **NEW**: Added Password Management clause to describe functional behavior when an account requires a password change
- NEW: Enhanced schema localization definitions and repository location
- Significant re-formatting and clean-up throughout document
 - Unless specifically mentioned, any change in normative language was unintentional and should be considered errata (please provide feedback)
- Protocol details now three separate clauses
 - General protocol description, Service requests, and Service responses
- Data model clause now separate from schema definition
- New clauses for each of the supported schema definition languages
 - OData CSDL, JSON schema and OpenAPI YAML

Redfish Specification v1.7.0, continued

• Normative clarifications (highlights)

- Handling of array properties and PATCH operations on arrays
- Clarified schema versioning methodology
- Added missing statements regarding SSE in Event mechanism clause
- Clarified that Event Subscriptions are persistent across service restarts
- Clarified Task operations involving @Redfish.OperationApplyTime and @Redfish.MaintenanceWindow annotations
- See change log in document for complete list of clarifications

Redfish Schema Minor Revisions (1 of 4)

- AccountService v1.5.0
 - Added AccountLockoutResetAfterEnabled property
 - Deprecated AccountProviderType property in LDAP and ActiveDirectory
- Certificate v1.1.0
 - Added Renew and Rekey actions
- ComputerSystem v1.7.0
 - Added Certificates link property to Boot
 - Added *Metrics* link property to *ProcessorSummary*
- Drive v1.6.0
 - Added PCIeFunctions to Links
- EthernetInterface v1.5.0
 - Added FallbackAddress property to DHCPv4

Redfish Schema Minor Revisions (2 of 4)

• Event Mechanism Updates

- Finished transition to v2018.3 event subscription methods (deprecating EventType throughout schema)
- Event v1.4.0
 - Added Other to the EventType enumeration (transition to new methods)
- EventDestination v1.5.0
 - Deprecated *EventTypes* property (no longer a required property)
- EventService v1.3.0
 - Deprecated EventType related properties throughout
 - Added EventGroupId parameter to SubmitTestEvent
- ManagerAccount v1.3.0
 - Added PasswordChangeRequired property

Redfish Schema Minor Revisions (3 of 4)

• MessageRegistry v1.3.0

- Added LongDescription, ArgDescriptions and ArgLongDescriptions properties
- MetricReportDefinition v1.2.0
 - Added MetricReportDefinitionEnabled, SuppressRepeatedMetricValue, and MetricReportHeartbeatInterval properties
 - Added Triggers to Links
- PCIeSlots v1.1.0
 - Added HotPluggable property
- PhysicalContext (unversioned)
 - Added PowerSubsystem and Rectifier PhysicalContext types.
- Processor v1.5.0
 - Added TotalEnabledCores property

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Redfish Schema Minor Revisions (4 of 4)

- Session v1.2.0
 - Added SessionType and OEMSessionType properties
- Storage v1.7.0
 - Added Ports, ControllerRates, and PCIeFunctions to StorageControllers
- Triggers v1.1.0
 - Added *EventTriggers* property
 - Added MetricReportDefinitions to Links
 - Added RedfishMetricReport to TriggerActionEnum
- UpdateService v1.5.0
 - Added MaxImageSizeBytes property
- Zone v1.3.0
 - Added ExternalAccessibility property

Errata Schema Revisions (1 of 2)

- Complete errata details shown in the Change Log within DSP8010
- All schemas
 - JSON schemas revised to use "uri-reference" instead of "uri" as the format for properties that represent URIs.
 - Corrected several properties that allowed for "null" that were not intended
 - Various typographical corrections and improvements to descriptions
- Event v1.x.x
 - Removed @odata.id and @odata.etag properties from JSON schemas
- EventDestination v1.x.x
 - Modified rules around usage of *HttpHeaders* in a GET response to allow for an empty array

Errata Schema Revisions (2 of 2)

• Resource v1.x.x

 Corrected regex pattern for properties inside of *Oem* to match requirements in the specification

• Sensor v1.0.1

 Corrected descriptions and units definition for Energy reading types of "kWh" and corrected UCUM unit definition to use "kW.h"

UpdateService v1.x.x

• Clarified *HttpPushUri* to indicate a recommendation of using HTTP status 411 when the request does not include the "Content-Length" header

Host Interface and Message Registry updates

- Redfish Host Interface v1.1.0 (DSP0270)
 - Added version 2 of the USB and PCI/PCI-e device descriptors
 - Superset of information provided in v1 of the descriptor
 - Adds MAC Address to descriptor
 - Added bus/device/function information for PCI devices
 - Clarified byte ordering in SMBIOS structures
 - Clarified formats of Host Name and UUID
 - Clarified data and reformatted tables in Device Descriptor Table clause
 - Added Descriptor Table examples

Redfish Message Registries v2019.1

- **DSP8011_2019.1.ZIP** contains all published message registries
- Added SubscriptionTerminated and PasswordChangeRequired messages to Base v1.5.0

Schema Guide and Property Guide

- Redfish Resource and Schema Guide (DSP2046) v2019.1
 - Presents schema definition contents in a more human-readable format
 - Description text taken directly from schema files
 - **NEW**: Release list maps each schema version to a DSP8010 release
 - Includes example payloads for each schema
 - Updated for each DSP8010 release
- NEW: Redfish Property Guide (DSP2053) v2019.1
 - Provides an alphabetical list of all properties defined in Redfish schema
 - Useful for schema writers to locate existing definitions or properties
 - Helps avoid re-defining property names already in use
 - Description text taken directly from schema files
 - Updated for each DSP8010 release





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