

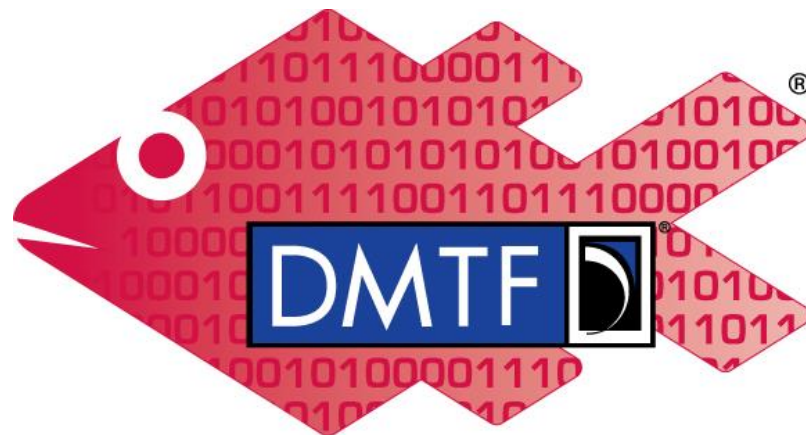


# Redfish 2019 Release 1

DMTF Redfish Forum  
April 2019

# Redfish 2019 Release 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: <http://www.dmtf.org/standards/redfish>



## Redfish

## 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 *PCleFunctions* 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*
- **PCleSlots v1.1.0**
  - Added *HotPluggable* property
- **PhysicalContext (unversioned)**
  - Added *PowerSubsystem* and *Rectifier PhysicalContext* types.
- **Processor v1.5.0**
  - Added *TotalEnabledCores* property



## Redfish Schema Minor Revisions (4 of 4)

- Session v1.2.0
  - Added *SessionType* and *OEMSessionType* properties
- Storage v1.7.0
  - Added *Ports*, *ControllerRates*, and *PCleFunctions* 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)

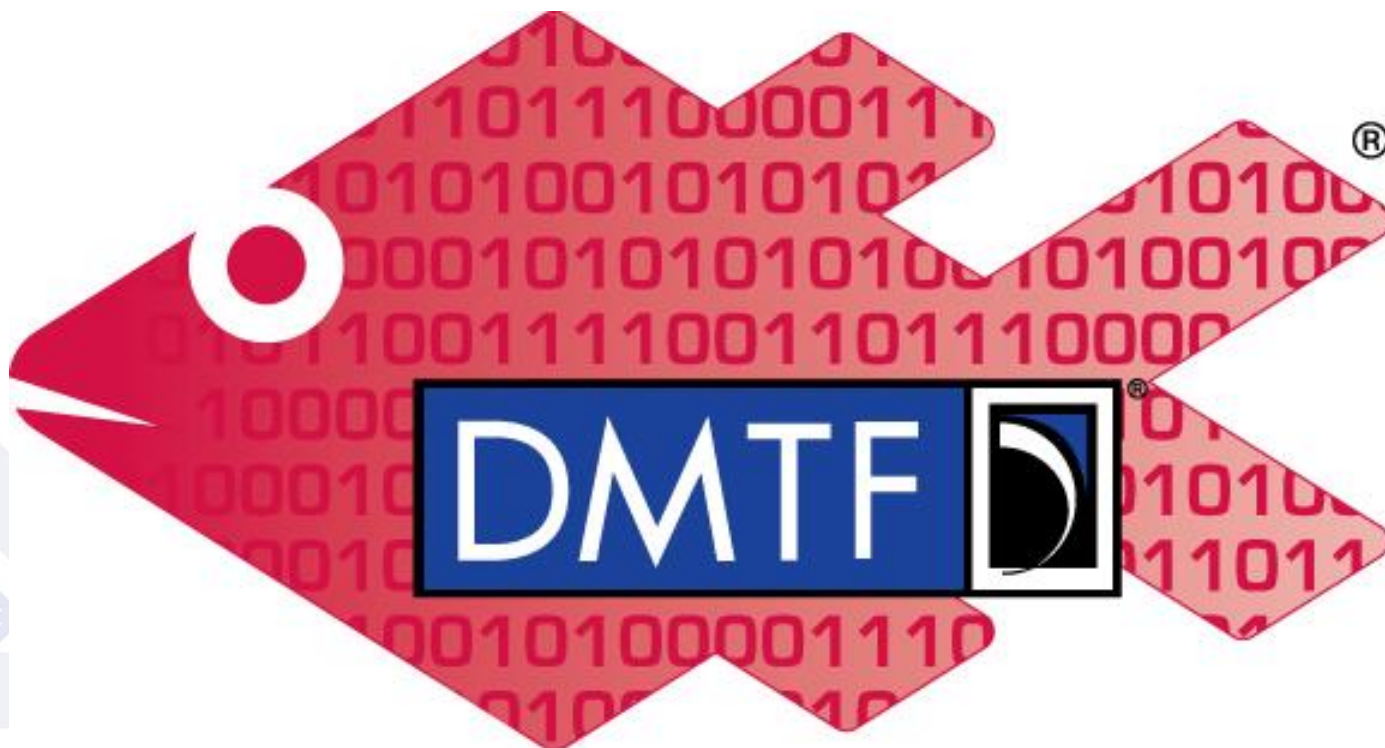
- Resource v1.x.x
  - Corrected regex pattern for properties inside of *Oem* to match requirements in the specification
- Sensor v1.0.1
  - Corrected descriptions and units definition for Energy reading types of "kWh" and corrected UCUM unit definition to use "kW.h"
- UpdateService v1.x.x
  - Clarified *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



# Redfish