



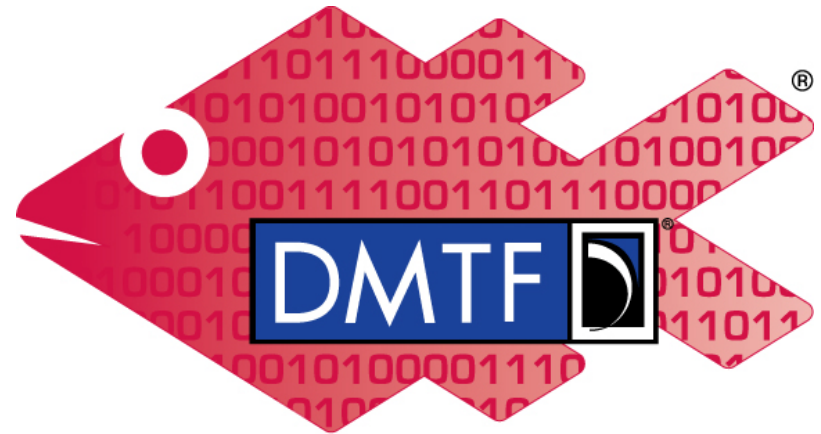
Redfish Release 2021.3

DMTF Redfish Forum
October 2021



Redfish Release 2021.3

- Redfish Specification v1.14.1
 - Errata release
 - Clarified the Link header clause and corrected payload annotation examples
- Redfish Schema Bundle 2021.3
 - DSP8010 contains all released Redfish schemas
- Redfish Message Registry Bundle 2021.3
 - DSP8011 contains all released Redfish registries
 - Base v1.12 adds *ActionParameterValueConflict*, *ResetRecommended*, and *PropertyNotUpdated*
 - ResourceEvent v1.1 adds *PowerState* change and resource-level *State* change messages
 - **NEW** License registry for license management messages
- **3 NEW Schemas, 20 updated schemas**
 - Addition of License, LicenseService, and SwitchMetrics schemas
 - Support for electrical bus products added to the PowerDistribution schema
 - Added properties to Outlet, Circuit, Chassis, and PowerSupply to show electrical connectivity between devices
 - Addition of UEFI-defined “CPER” and “CPERSection” types to DiagnosticDataType in LogEntry
 - See release notes in DSP8010 for errata details
- Download all published material at: <http://www.dmtf.org/standards/redfish>



Redfish



Schema Guide, Property Guide, and Schema Supplement

- Guide documents are updated for each schema (DSP8010) release
 - Description text for properties taken directly from schema files
 - DMTF documentation generator creates these guide documents
- Redfish Resource and Schema Guide (DSP2046)
 - Presents schema definition contents in a more human-readable format
 - Includes example payloads for each schema
- Redfish Property Guide (DSP2053)
 - 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
- Redfish Schema Supplement (DSP0268)
 - Presents normative (“LongDescription”) schema definition contents
 - Useful for Redfish Service developers to ensure conformance



NEW Support for Licenses and License Management

- **LicenseService**

- Licenses installed by POST operation to the **LicenseCollection**
- Also provides an *Install* action to pull a license from a remote location

- **License**

- A single license, as obtained by the user, or otherwise installed
- Supports Service-level, Device-centric or Capacity-limited license types
- *LicenseString* is a Base64-encoded string provided on POST
 - This format allows for support of either binary (file-based) or text-based licenses, and is not returned in payload
 - Instead, *EntitlementId* provides a user-facing, displayable representation
 - The full license may be downloaded (if supported) from *DownloadURI*
- *AuthorizedDevices[]*, *MaxAuthorizedDevices*, *RemainingDuration* and *RemainingUseCount* provide additional details for specific license types



NEW Electrical buses and electrical connectivity

- *EquipmentType* of “Bus” added to **PowerDistribution**
- Busbars / busways are modeled as **PowerDistribution** instances
 - Input Circuit instance allows for power monitoring if supported
 - Output “drops” can be modeled as **Circuit** or **Outlet** instances
 - Provides a consistent model to follow electrical connections
- Additional properties show electrical connections to/from devices
 - Allows links to Redfish resources, as well as simple text labels to document connections to un-managed devices
 - Connections from **Circuit / Outlet** to **Circuit / Chassis / PowerSupply**
 - *ElectricalSourceNames[]* – Text labels to document power source
 - *ElectricalSourceManagerURIs[]* – URI to web interface of power source
 - *PowerOutlets[]* – Link to **Outlet** resources providing power
 - *SourceCircuit[]* – Link to **Circuit** resources providing power
 - *DistributionCircuits[]* – Link to downstream **Circuit** in the distribution chain



Redfish Schema Minor Revisions (1 of 4)

- **AggregationSource v1.2.0**
 - Added *AggregationType*
 - Added *TrapCommunity* to *SNMP*
 - *HostName* is not required if *AggregationType* contains “NotificationsOnly”
- **Cable v1.1.0**
 - Added *UserLabel*
- **Certificate v1.5.0**
 - Added *SPDM* with *SlotId*
- **Chassis v1.18.0**
 - Added *ElectricalSourceManagerURIs* and *ElectricalSourceNames* properties
 - Added *PowerOutlets* to *Links*
- **Circuit v1.4.0**
 - Added *UserLabel*, *SourceCircuit*, *PowerOutlet*, *ElectricalSourceManagerURI*, *ElectricalSourceName*, *ElectricalConsumerNames*, and *DistributionCircuit* properties
 - Added *Bus* to *CircuitType*



Redfish Schema Minor Revisions (2 of 4)

- FabricAdapter v1.3.0
 - Added *PCleDevices* to *Links*
- Facility v1.3.0
 - Added *ElectricalBuses* to *Links*
- LogEntry v1.10.0
 - Added “CPER” and “CPERSection” to *DiagnosticDataType*
- MessageRegistry v1.5.0
 - Added *VersionAdded*, *Deprecated*, and *VersionDeprecated* properties
- Outlet v1.3.0
 - Added “BusConnection” to *OutletType*
 - Added *UserLabel* and *ElectricalConsumerNames* properties
 - Added *DistributionCircuits*, *Chassis*, and *PowerSupplies* to *Links*
- PCleDevice v1.8.0
 - Added common *PCleErrors* object for reference from other schemas



Redfish Schema Minor Revisions (3 of 4)

- **PCleSlots v1.5.0**
 - Added *Processors* to *Links* for each slot
- **PowerDistribution v1.3.0**
 - Added “Bus” to *PowerEquipmentType*
- **PowerDomain v1.2.0**
 - Added *ElectricalBuses* to *Links*
- **PowerEquipment v1.2.0**
 - Added *ElectricalBuses* property
- **PowerSupply v1.2.0**
 - Added *ElectricalSourceManagerURIs* and *ElectricalSourceNames* properties
 - Added *PowerOutlets* to *Links*
- **ProcessorMetrics v1.4.0**
 - Added *PCleErrors* property



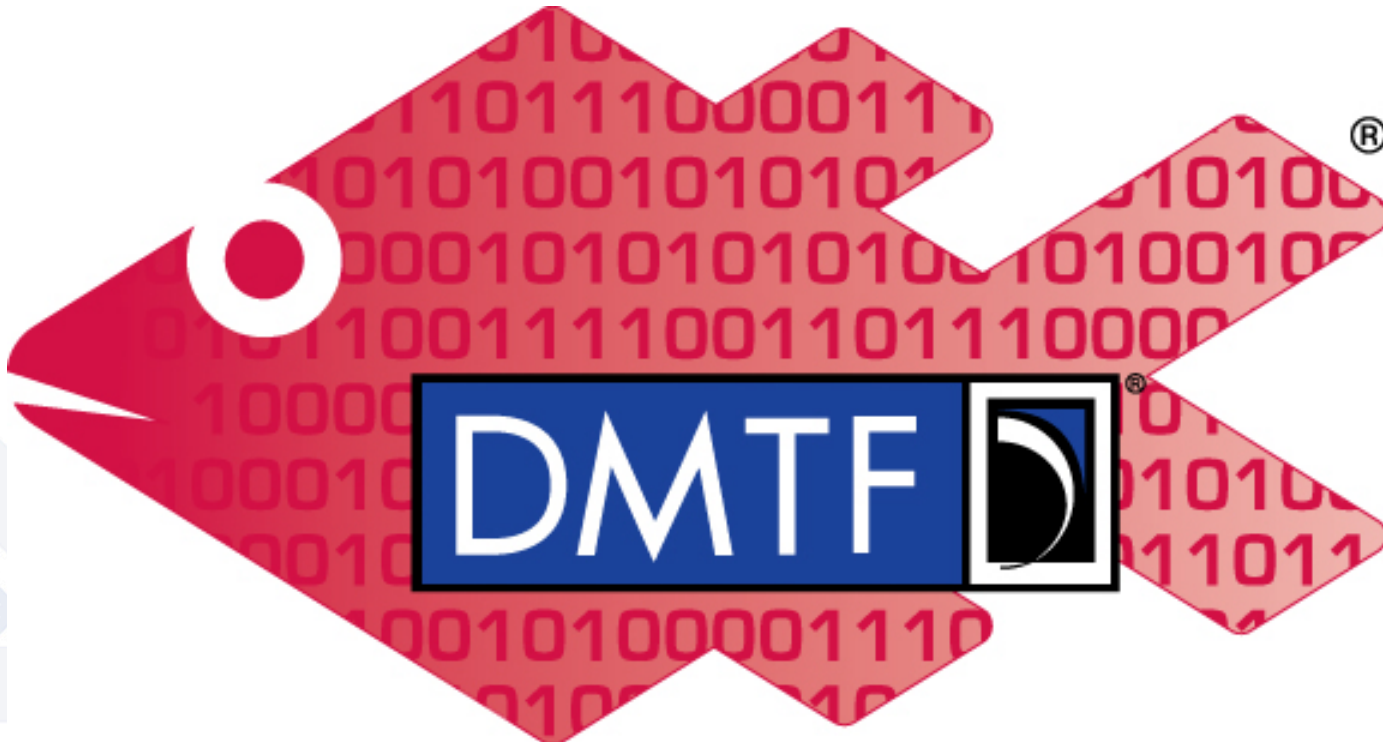
Redfish Schema Minor Revisions (4 of 4)

- **ServiceRoot v1.12.0**
 - Added *LicenseService* property
- **StorageController v1.4.0**
 - Added *AllocatedSubmissionQueues* and *AllocatedCompletionQueues* to *NVMeControllerPropertie*
- **Switch v1.7.0**
 - Added *Metrics* property



Errata Schema Revisions

- **ComputerSystem v1.x.x**
 - Clarified *BootOrder* might require configuration with *@Redfish.Settings*
- **EventDestination v1.x.x**
 - Clarified how to construct the value for *Destination* when the resource represents an SSE connection
- **ManagerAccount v1.x.x**
 - Clarified *AccountTypes* describes the services the account is allowed to access on the manager



Redfish