

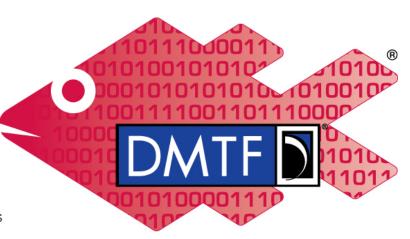
Redfish Release 2020.2

DMTF Redfish Forum
June 2020



Redfish Release 2020.2

- Redfish Specification v1.11.0
 - Adds clauses for aggregators
 - Contains informative text describing aggregators
 - Specifies requirements of aggregators (unifying southbound services, assembling resource collections, sanitizing URIs)
- Redfish Schema Bundle 2020.2
 - Bundle (DSP8010) contains all released Redfish schemas
- Redfish Message Registry Bundle 2020.2
 - Bundle (DSP8011) contains all released Redfish message registries
 - NEW StorageDevice registry to provide storage-specific events or status changes
- 5 NEW Schemas, 10 updated schemas
 - Addition of Aggregate, AggregationService, AggregationSource, ConnectionMethod, and OperatingConfig
- Download all published material at: http://www.dmtf.org/standards/redfish







NEW AggregationService

- New service exposed via service root
- Provides client interface for managing aggregation of southbound services
- Provides links to AggregationSource, ConnectionMethod, and Aggregate resources



NEW AggregationSource and ConnectionMethod

- AggregationSource
 - Represents a southbound service being aggregated
 - Clients can create new instances and specify the location of the southbound service, credentials to access the service, and the type of connection (ConnectionMethod) used with the service
- ConnectionMethod
 - Represents a type of connection/protocol the service supports for aggregation
 - Connection types can be Redfish, IPMI, SNMP, NETCONF, or OEM
 - Connection types further qualified using ConnectionMethodVariant
 - Example: For IPMI, a variant could be "Contoso IPMI Flavor"



NEW Aggregate

- A client-defined grouping of resources
 - The *Elements* array contains the set of the resources to aggregate
 - Clients use the *AddElements* and *RemoveElements* actions to modify the array after the resource is created
- Used to perform large-scale operations on multiple, similar resources
 - For example, resetting 10000 systems at the same time
 - Aggregate allows single action to occur on a set of resources
- Defines two actions that can be performed on the aggregate
 - Reset
 - SetDefaultBootOrder
- When invoked, the action is carried out on all members of the aggregate (if the member supports the action)



NEW Operating Config

- Added to Processor to express pre-defined operating modes supported by the processor
 - Core count configuration
 - Speed configuration
 - Turbo mode profiles
- Properties added to Processor to allow a client to specify which OperatingConfig to apply to the Processor



NEW StorageDevice Message Registry

- Registry provides messages specific to storage devices
 - Follows "topic-based" message pattern from NetworkDevice registry
 - Explicit messages defined for device and controller state changes
 - Registry to expand as more standardized messages are defined
- Topics covered in StorageDevice message registry v1.0.0
 - Storage Controller status changes
 - Drive (Storage device) status changes
 - Predictive Failure status changes
 - Write Cache status changes
 - Drive Inserted or Removed
 - Volume status changes



Redfish Schema Minor Revisions (1 of 2)

- ComputerSystem v1.12.0
 - Added LastResetTime property
- Drive v1.10.0
 - Added ReadyToRemove property
- Event v1.5.0
 - Added MessageSeverity property and deprecated Severity property
 - Severity was not tied to the enumeration values of State, which caused interoperability issues
- EventService v1.7.0
 - Deprecated Login enumeration in SMTPAuthenticationMethods in favor of Plain
- Manager v1.9.0
 - Added LastResetTime property
 - Added ManagedBy and ManagerForManagers properties to Links



Redfish Schema Minor Revisions (2 of 2)

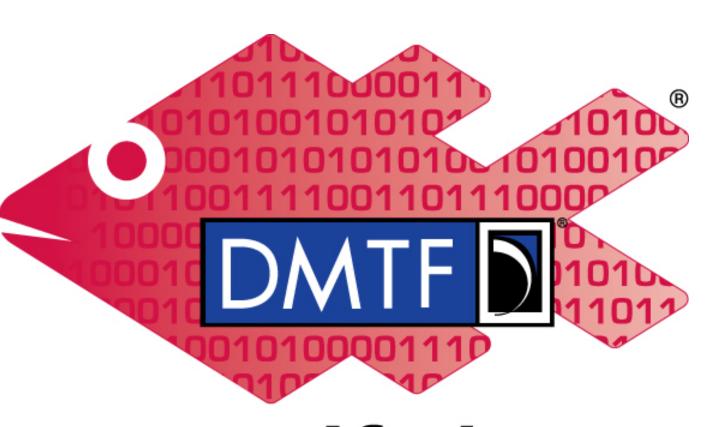
- MediaController v1.1.0
 - Added *UUID* property
- MetricReport v1.4.0
 - Added Context property
- NetworkAdapter v1.4.0
 - Added *Identifiers* and *Location* properties
- Processor v1.9.0
 - Deprecated Firmware Version in FPGA in favor of Firmware Version at the root of the resource
 - Added TurboState, BaseSpeedPriorityState, HighSpeedCoreIDs, OperatingConfigs, and AppliedOperatingConfig properties
- ServiceRoot v1.8.0
 - Added AggregationService property



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





Redfish