

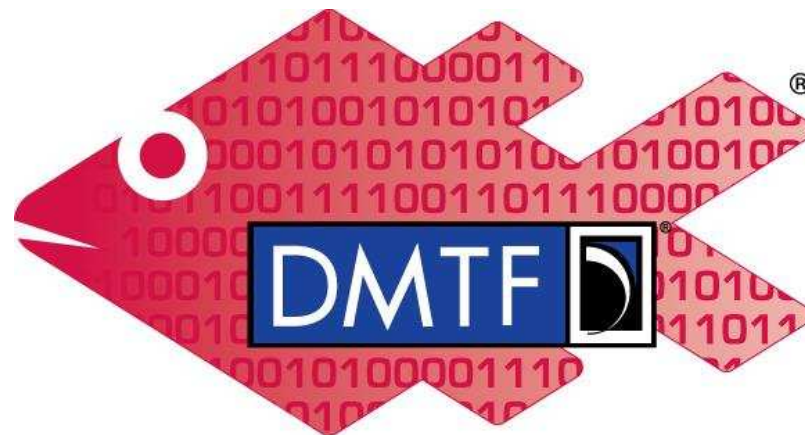


Redfish Release 2019.3 and Forum Update

DMTF Redfish Forum
October 2019

Redfish Release 2019.3

- Redfish Host Interface v1.2.0
 - Supports for multiple SMBIOS Type 42 structures to allow specification of multiple Protocol Records
- Redfish Schema Bundle 2019.3
 - Bundle contains all released Redfish schemas
- Redfish Message Registry Bundle 2019.3
 - Bundle contains all released Redfish message registries
 - Errata releases of *Base* and *Privilege* Registries
- 14 Updated Schemas (highlights)
 - Addition of support for configuring SNMP or SMTP-based services and event delivery
 - Added *GeneratorId* in LogEntry for mapping IPMI SEL events
 - Added *Reset* action for power supplies and processors
- Download all published material at: <http://www.dmtf.org/standards/redfish>



Redfish



NEW: SNMP and SMTP support

- Ability to configure SNMP and SMTP services via Redfish
 - These services / protocols are expected to remain in production for years
 - Customers desire ability to perform all configuration tasks using Redfish
- Support added in four schemas to provide this functionality
- *EventDestination*
 - Allow destinations to receive events via SNMP Trap / Inform or by email
- *EventService*
 - Properties to configure outbound SMTP messages from the Service
- *ManagerAccount*
 - Provide configuration and credentials for accessing SNMP services
- *ManagerNetworkProtocol*
 - Enable and configure support for SNMP v1, v2c, v3 services



Redfish Schema Minor Revisions (1 of 2)

- **ComputerSystem v1.9.0**
 - Added *HttpBootUri* property to *Boot*
- **Drive v1.8.0**
 - Added *StoragePools* property to *Links*
- **EventDestination v1.7.0**
 - Added properties to support SNMP and SMTP-based event delivery
- **EventService v1.5.0**
 - Added properties to support SMTP-based event delivery
- **LogEntry v1.5.0**
 - Added *GeneratorId* property
- **ManagerAccount v1.4.0**
 - Added properties to support access to SNMP services
- **ManagerNetworkProtocol v1.5.0**
 - Added properties to support configuration of SNMP services



Redfish Schema Minor Revisions (2 of 2)

- Power v1.6.0
 - Added *PowerSupplyReset* action
- Privilege
 - Added *NoAuth* privilege
- Processor v1.6.0
 - Added *Reset* action
- Protocol
 - Added *TCP*, *UDP*, and *TFTP* protocols
- Settings v1.3.0
 - Added *OnStartUpdateRequest* to the *OperationApplyTime* enumeration
- Storage v1.8.0
 - Added *FileSystems*, *StoragePools*, *StorageGroups*, *EndpointGroups* and *ConsistencyGroups* properties
- UpdateService v1.7.0
 - Added *StartUpdate* action



Errata Schema Revisions

- **LogEntry v1.x.x**
 - Modified description of *MessageId* to include the Event Type / Event Direction byte in the string for SEL type entries
- **Privileges**
 - Clarified the description for *ConfigureSelf* to show that it's also used for users to log out of their own sessions
- **Processor v1.x.x**
 - Removed "CPUID" term from the *IdentificationRegisters* description in order to not be tied to x86 processors
- **Resource v1.8.3**
 - Removed "Excerpt" annotations from common *Name* property
- **Sensor v1.0.3**
 - Corrected units for ApparentVA and ReactiveVAR. Fixed several "Excerpt" annotations.



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 Forum Update



Ongoing discussions in the Redfish Forum

- Developing models for Aggregation of services
 - For example: “Rack Manager” products
- Extending Message Registry coverage
 - Network devices, Jobs, Firmware update, etc.
- SecureBoot certificate and key management
- Host Serial Console discovery
 - Specify capabilities and interoperable means to locate functionality
 - Differentiate between “OS console” and “BMC command line interface”
 - Support multi-host Manager implementations



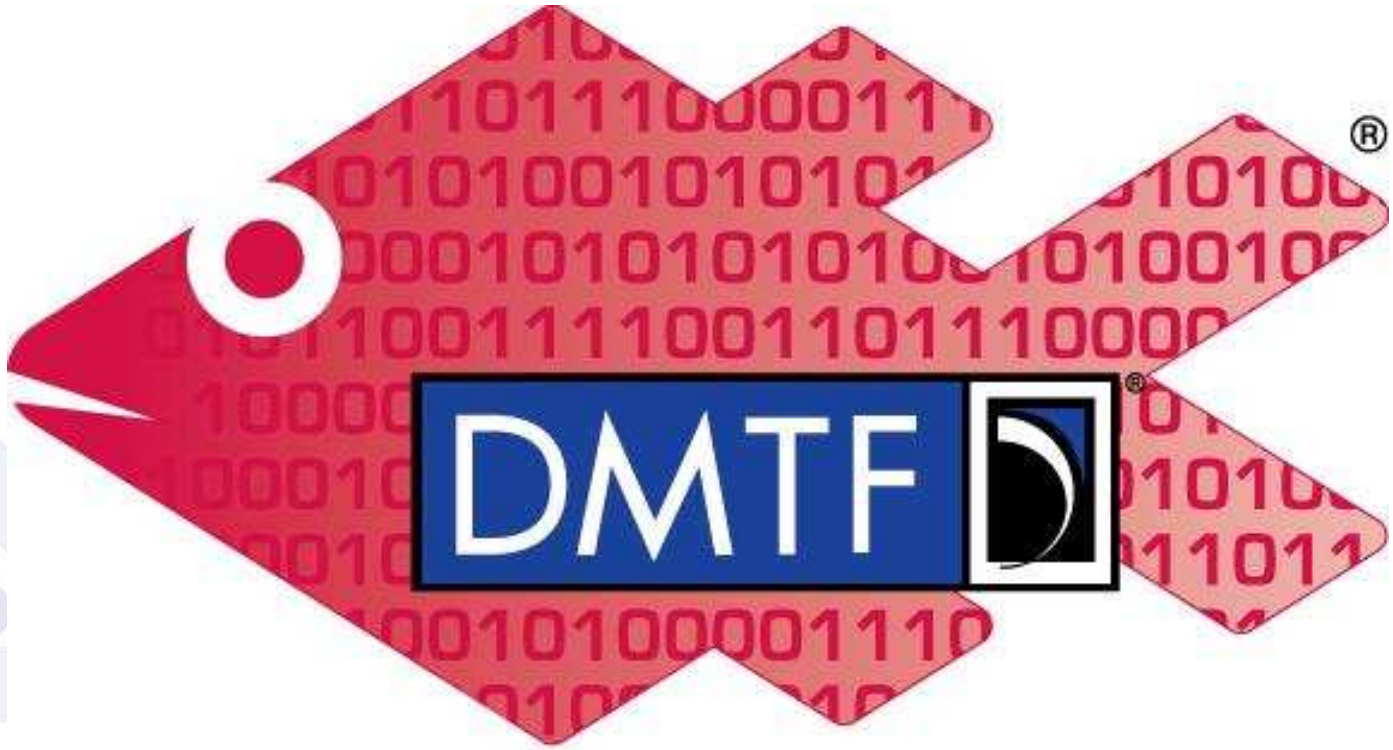
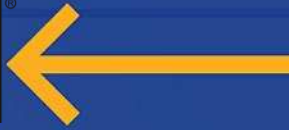
Active Redfish Forum Task Forces

- **Legacy Removal Task Force**
 - Creating Message Registries to enable migration from IPMI SEL usage
 - Working with OS vendors to understand data requirements
 - Seeking end user feedback on ongoing usage of legacy protocols
- **Host Interface Task Force**
 - Kernel / OS credential handshaking
 - Defining additional standard methods for authentication
- **Data Center Infrastructure (DCIM) Task Force**
 - Completing work on Power Distribution schemas
 - Covering Rack-level PDUs, Floor PDUs, Automatic Transfer Switches
 - Expect to leverage PDU schemas for defining UPS schemas
 - Working to align Alarm schema with ISA / ANSI 18.2 practices



Active Redfish Forum Task Forces, continued

- Tools Task Force
 - Weekly builds of popular validation and developer tools
 - **Redfish Tackle Box** – “Microtools” for common Redfish operations
 - Download at: <https://github.com/DMTF/Redfish-Tacklebox>
 - Firmware update, sensor, system inventory listings
 - Boot override, system power, and reset controls
 - Continued integration work with Ansible and OpenStack
 - Virtual media support, firmware update, RAID management
- Firmware Update Task Force
 - Creating message registry for reporting of firmware update process
- Fabrics Task Force
 - Enhancements to the data model to support Gen-Z fabric management



Redfish