Redfish Release 2019.3 and Forum Update

DMTF Redfish Forum

October 2019

www.dmtf.org

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
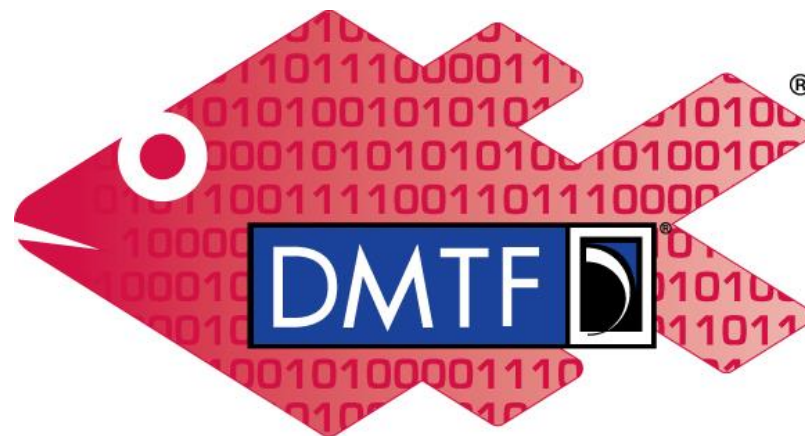
NEW: SNMP and SMTP support

- 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

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Redfish Forum Update
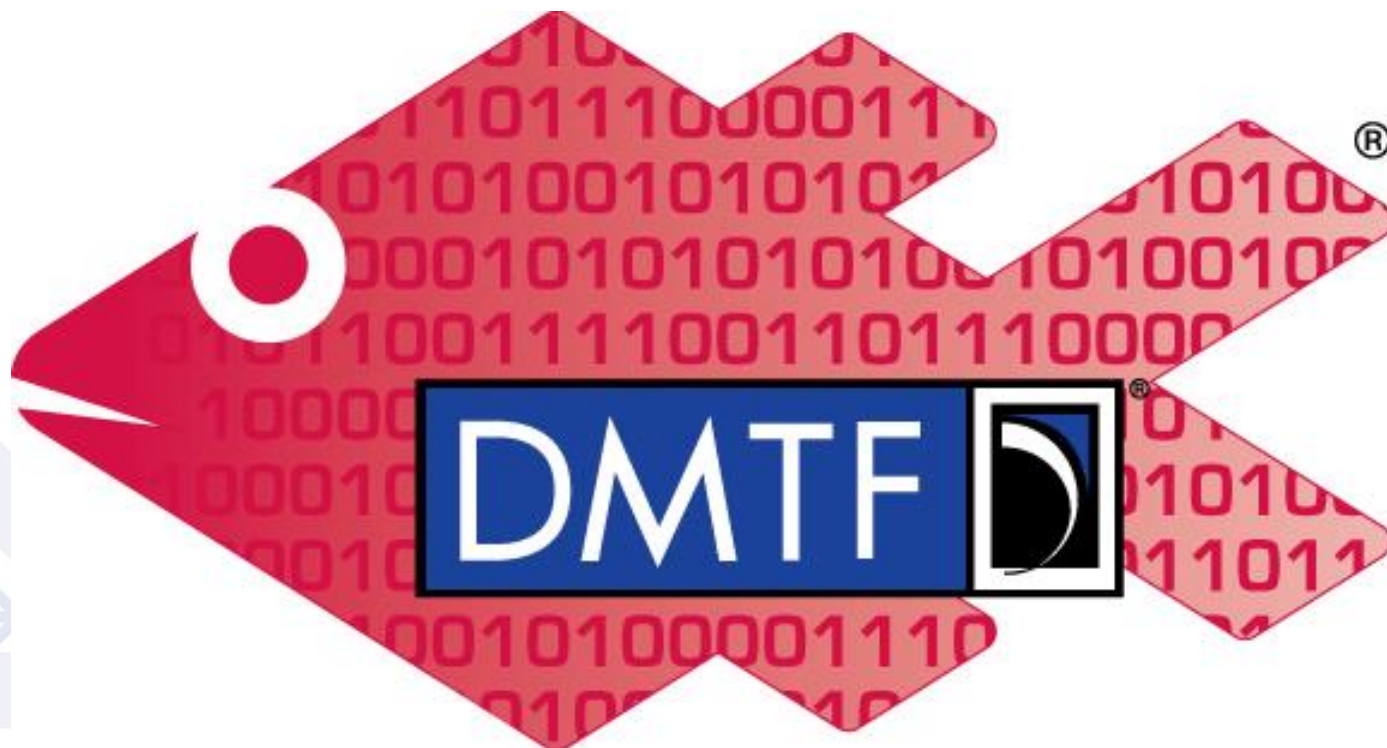
Ongoing discussions in the Redfish Forum

- 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