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
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.

- 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](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