# Redfish Release 2020.1

DMTF Redfish Forum

April 2020

Redfish Release 2020.1

- ## Redfish Specification v1.10.0
  - "Deep" operation support for creating or updating multiple resources with a single operation
  - Restructured Security details clause for readability
  - Require support of TLS v1.2 or later
  - Deprecated use of TLS v1.1

- ## Redfish Specification v1.9.1
  - Numerous clarifications regarding query parameters and Actions
  - Clarified naming guidelines, especially concerning acronyms
  - Deprecated use of full ISO8601 "Duration" format to allow for a simplified version that omits years/months/weeks

- ## Redfish Schema Bundle 2020.1
  - Bundle (DSP8010) contains all released Redfish schemas

- ## Redfish Message Registry Bundle 2020.1
  - Bundle (DSP8011) contains all released Redfish message registries
  - NEW NetworkDevice registry to provide NIC / networking adapter-specific events or status changes
  - Minor release of *Base* Registry adding *MaximumErrorsExceeded, PreconditionFailed, PreconditionRequired, OperationFailed* and *OperationTimeout* messages

- ## 2 NEW Schemas, 19 updated schemas
  - Addition of SecureBootDatabase and Signature

- ## Download all published material at: http://www.dmtf.org/standards/redfish

www.dmtf.org
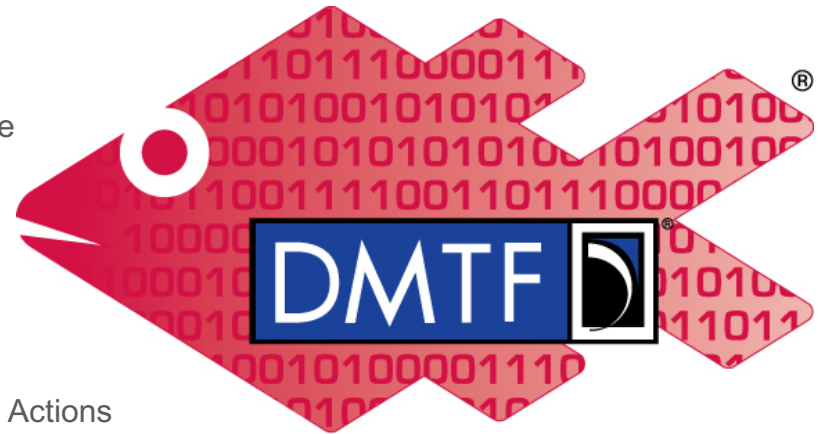
NEW SecureBoot Database

- SecureBootDatabase contains UEFI SecureBoot certificates or hashes
- *DatabaseId* – Database name from the UEFI specification
  - e.g. PK, KEK, db, dbx, dbc, dbt, Pkdefault, KEKDefault, dbDefault, dbxDefault, dbrDefault, dbtDefault
- Link to *SignatureCollection* for this database
  - Contains the hashes and encrypted hashes that are stored in this database
- Link to *CertificateCollection* for this database
  - Contains the Certificates that are stored in this database
- Action to ResetKeys
  - Allows resetting individual databases to their default (*ResetAllKeysToDefault*), or deleting all keys in this database (*DeleteAllKeys*)

NEW Signatures

- Each SecureBootDatabase contains a *SignatureCollection*

- *Signature* contains the following:
  - *SignatureTypeRegistry* to look up the definitions
    - Values of: UEFI, TCG, IANA, DMTF
  - *SignatureType* - Definition from referenced specification
  - *SignatureString* - Encodes the signature bytes in hexadecimal format
  - *UefiSignatureOwner* – Similar to the property in Certificate

Redfish Schema Minor Revisions (1 of 3)

- Certificate v1.2.0
  - Added *UefiSignatureOwner* property
- Chassis v1.12.0
  - Added *MaxPowerWatts* and *MinPowerWatts* properties
- ComputerSystem v1.11.0
  - Added *AutomaticRetryConfig, AutomaticRetryAttempts,* and *RemainingAutomaticRetryAttempts* properties to *Boot*
- EthernetInterface v1.6.0
  - Added *EthernetInterfaceType* property
  - Added *NetworkDeviceFunction* to *Links*
- EventDestination v1.8.0
  - Added *IncludeOriginOfCondition* property – this allows an event subscriber to request the entire resource be included in the event payload
- EventService v1.5.0
  - Added *IncludeOriginOfConditionSupported* property

www.dmtf.org

Redfish Schema Minor Revisions (2 of 3)

- LogEntry v1.6.0
  - Added *Modified* property
- Manager v1.8.0
  - Added *ResetToDefaults* action
- ManagerAccount v1.6.0
  - Added *PasswordExpiration* property
- ManagerNetworkProtocol v1.6.0
  - Added *ArchitectureId* to *EngineId* in *SNMP*
- MemoryMetrics v1.3.0
  - Added *OperatingSpeedMHz* property
- MessageRegistry v1.4.0
  - Added *MessageSeverity* property and deprecated *Severity* property
  - *Severity* was not tied to the enumeration values of *State*, which caused interoperability issues

Redfish Schema Minor Revisions (3 of 3)

- NetworkDeviceFunction v1.4.0
  - Added *EthernetInterface* to *Links*
- PCIeSlots v1.3.0
  - Added *U2* to *PCIeSlotType*
- Processor v1.8.0
  - Added *SystemInterface*, *OperatingSpeedMHz,* and *MinSpeedMHz* properties
  - Added *AMBA*, *CCIX*, and *CXL* values to the interface type enumeration
- ProcessorMetrics v1.1.0
  - Added *OperatingSpeedMHz* property and deprecated *AverageFrequencyMHz*
- SecureBoot v1.1.0
  - Added *SecureBootDatabases* property
- SoftwareInventory v1.3.0
  - Added *WriteProtected* property

Errata Schema Revisions (1 of 2)

- Event v1.x.x
  - Updated description for *OriginOfCondition* to show that a subscriber can request the full resource for the origin of the event to be included in the event itself

- ManagerAccount v1.x.x
  - Corrected formats for *AuthenticationKey* and *EncryptionKey* within *SNMP* to support patterns defined in RFC3414

- ManagerNetworkProtocol v1.x.x
  - Clarified *EnterpriseSpecificMethod* is tied to the "type 2 format" of the RFC3411-defined snmpEngineID
  - Made *PrivateEnterpriseId* and *EnterpriseSpecificMethod* read-only

- MemoryMetrics v1.x.x
  - Corrected description of *HealthData* to allow its usage with regards to being metrics for a memory summary

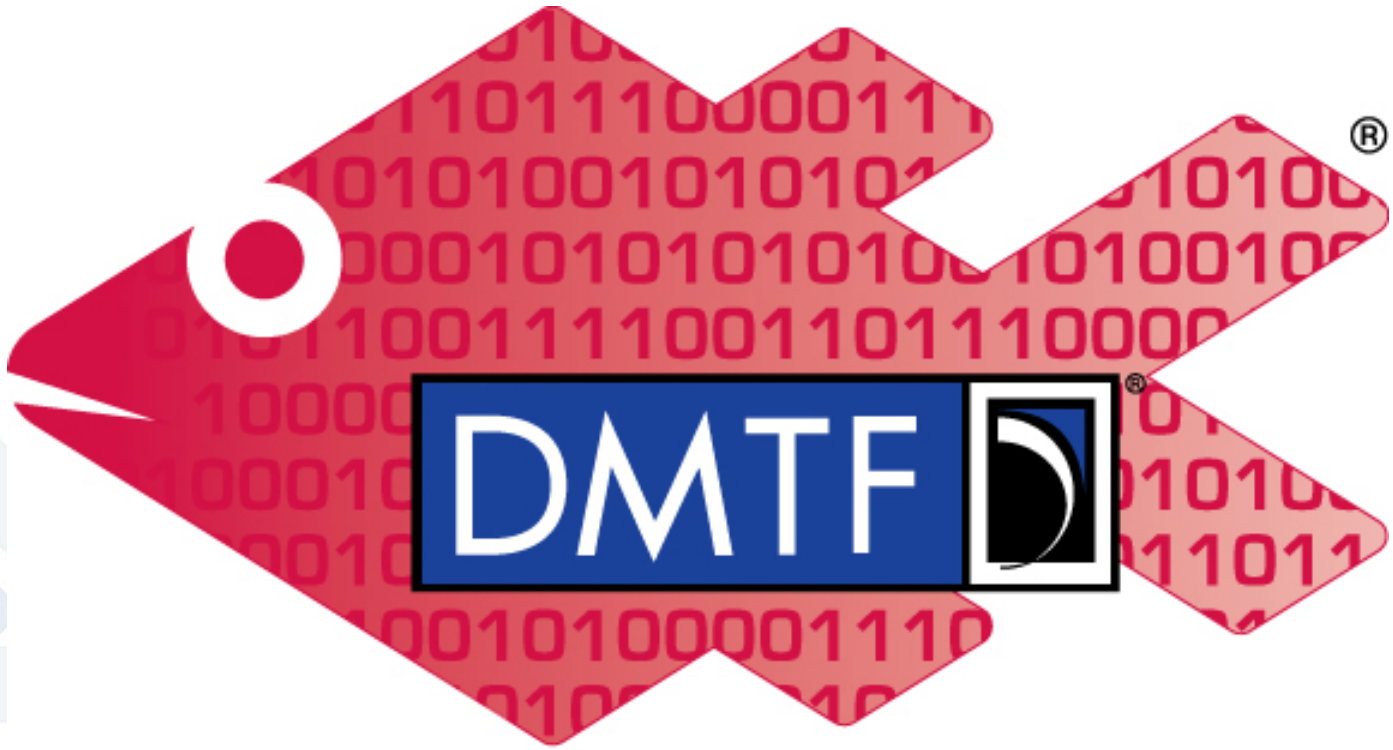# Errata Schema Revisions (2 of 2)

- MetricReportDefinition v1.x.x
  - Clarified that *ReportUpdates* and *ReportActions* should be ignored when *MetricReportDefinitionType* is *OnRequest*
  - Clarified behavior of some properties when a metric report stops.
  - Clarified *ReportTimespan* is the maximum timespan the report can cover
- SecureBoot v1.x.x
  - Updated descriptions as needed to reference UEFI Secure Boot databases
- TaskService v1.x.x
  - Clarified *LifeCycleEventOnTaskStateChange* to reference the Task Event Message Registry for task events

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