Redfish Forum Charter
Dated 2025-07-15

The information provided below is subject to change and reflects the current state of the Forum charter within the DMTF.

Management Problem(s) and Environment

The platform market is quickly shifting to scale-out solutions. These platforms take several forms. Among these are massive quantities of simple servers where reliability is achieved through software as well as some traditional enterprise components and hyperscale computing.

The usage model of scale-out solutions is drastically different than the traditional enterprise platforms and the desired interfaces directly asked for by customers do not currently exist. Customer demand for standards-based, multivendor deployments lags in scalable computing. The Intelligent Platform Management Interface/Data Center Manageability Interface (IPMI/DCMI) feature set is limited to the lowest common denominator (e.g., Power On/Off/Reboot, temperature value, text console) where Original Equipment Manufacturer (OEM) extensions are not interoperable. Systems Management Architecture for Server Hardware (SMASH) is viewed by these customers as too complex, nonscalable, and requiring too rich of an infrastructure to match the resources they have available for management.

Customers are increasingly developing their own tools for tight integration and are asking for JavaScript Object Notation (JSON) oriented Representational State Transfer-style (RESTful) interfaces. Thus, a standard needs to be developed that will meet those customer expectations for simple, modern, secure interfaces that integrate with their chosen tool chain.

Forum Charter

Create and publish an open industry-standard specification and schema that meets the expectations of Cloud and Web-based IT professionals for scalable platform hardware management utilizing existing tool chains as well as being usable by personnel with minimal experience.

- Hypertext Transfer Protocol/Hypertext Transfer Protocol Secure (HTTP/HTTPS) RESTful interface.
- Lightweight data model and schema based on JSON and/or Open Data protocol (OData) with additional schema mappings as needed.
- Extensible interface with sufficient compatibility rules.
- Ability to deliver value-add, vendor-specific data alongside standardized items.
- Focus first on needs of scalable platform customers, Open Compute Project requirements, OpenStack and ensure feature equivalency with IPMI. Add requirements over time as needed by the industry such as those around fabric and forthcoming central processing unit−memory topologies.
- Enable implementations on existing Baseboard Management Controller (BMC) designs.
- Work with PMCI to develop any access methodology that matches the new paradigm over time.
- Discovery, Security and other requirements that meet the new paradigm.

Develop and publish sample implementation(s) and demonstration software:

- Browser/Plug-in accessible
- Static web page capable of demonstrating functionality
- Simple emulator capable of demonstrating restful protocol
- Intended as an educational/demonstration tool
- Not a reference implementation

Develop test tools and publish the source code for those tools:

- Libraries of functionality to make complex tasks simple (for example: Python™, Java™ & PowerShell™)
- Command line utility to exercise the library(s)
- Test scripts that utilize the command line utility to simplify testing
- Goal is for end-users to be able to run the certification suite

Develop a conformance program for Redfish:

- Tests that assess conformance of a Redfish service implementation to published standards
- Tests that assess conformance of a Redfish service implementation to one or more requirements profiles
- Document the results of executing the conformance tests

- Create a registry where documented conformance test results may be shared publicly

Develop Redfish integration source code for open source projects

- Plug-ins and integration modules that enable an open source project to utilize a conformant Redfish service implementation
- Utilize integration experience to further refine Redfish specs and schemas
- Open source projects selected must be aligned with DMTF IP and Indemnification policies
- Open source projects that are selected and prioritized by the SPMF are:
    - OpenStack
    - Ansible
    - Puppet

The Redfish Forum reports directly to the Technical Committee.

Reliance/Coordination with Other DMTF Groups

- Platform Management Components Intercommunication (PMCI) Working Group for coordination for an internal facing interface and mapping to PMCI
- System Management BIOS (SMBIOS) Working Group to ensure data is represented in the interface for computer systems

Links

- To join the Redfish Forum, DMTF members see http://members.dmtf.org/apps/org/workgroup/spmf/.
- To see public schedules and deliverables, see http://dmtf.org/about/working-groups.
- To contact the chairs, DMTF members see spmf-chair@dmtf.org.
  All others can contact admin@dmtf.org.
- To join the DMTF, see http://www.dmtf.org/join/.