DMTF

Scalable Platforms Management Forum Charter
Dated 2014-08-12

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, multi-vendor deployments lags in scalable computing. The IPMI/DCMI feature set is limited to lowest common denominator (e.g. Power On/Off/Reboot, temperature value, text console) where OEM extensions are not interoperable. SMASH is viewed by these customers as too complex, non-scalable 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 JSON oriented 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 & publish an open industry-standard spec & 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.
- HTTP/HTTPS RESTful interface
- Lightweight data model & schema based on JSON and/or OData.
- 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 cpu-memory topologies.
- Enable implementations on existing Baseboard Management Controller (BMC) designs
- Work with PMCI to develop any in-band 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) & 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^{tm}, Java^{tm} & PowerShell^{tm})
- 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

The Scalable Platforms Management Forum reports directly to the Technical Committee

Reliance/Coordination with Other DMTF Groups

PMCI Working Group for coordination for an internal facing interface and mapping to PMCI
SMBIOS Working Group to ensure data is represented in the interface for computer systems

Links

- To join the Scalable Platforms Management Forum, DMTF members see http://members.dmtf.org/apps/org/workgroup/spmf/.

- To see public schedules and deliverables, see <insert public page URL hyperlink>.

- 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/.