

Server, Desktop, Mobile Platforms Working Group (SDMPWG)

Dated 2011-04-25

The information provided below is subject to change and reflects the current knowledge of the Working Group.

1. Management Problem(s) and Environment

The pressure for IT to reduce the costs of maintaining enterprise computing infrastructure continues. Servers (including stand alone, rack mount, blades and partitionable machines), desktop platforms, mobile platforms, and bladed Platforms (herein referred to as “Targeted Platforms”) in the enterprise infrastructure drive significant IT cost. There is a desire to create common interfaces between management applications and the Targeted Platforms for in-band, out-of-band, in-service, and out-of-service usages (consistent with definitions in DSP2001). Targeted Platforms implementations have specific cost, resource, and power constraints, so careful consideration must be taken in selecting the right protocol(s) as appropriate for each Targeted Platform.

Managing heterogeneous Targeted Platforms (i.e. from multiple vendors), independent of machine state, operating system state, server system topology and access mechanisms, requires specifications that meet the following needs:

- Standard interfaces that provide a command line protocol-based management of various server system topologies, a Web services-based protocol for all Targeted Platforms, and lightweight protocols, including web-service based protocols, for out-of-band management.
- Common DMTF CIM Profiles (consistent with the DMTF Profile Users Guide DSP1001) covering various aspects of all managed physical system platforms and the capability to create/extend the CIM profiles for Targeted Platforms.

2. Working Group Charter

The SDMPWG is chartered to define a platform independent, interoperable, industry standard management solutions for server platforms, desktop platforms, mobile platforms, and bladed PCs (“Targeted Platforms”), to enable:

1. Basic alerts & events
2. Access to alert, event and other logs – characterize, define content, retrieve and write to logs
3. Remote system power control (on/off/reset) and monitoring
4. Select, control and transfer executable (boot) images
5. Boot process visibility & control and selection and transfer of boot properties and images
6. Platform asset inventory (hardware, firmware, etc.)
7. OS re-imaging and recovery assistance
8. Discovery of Targeted Platforms
9. Provisioning of Targeted Platforms
10. Enumeration of hardware and hardware related software
11. OS present/not present, architected transitions independent of OS
12. Power, cooling and system control, configuration and monitoring

13. Access to sensor data, including presence, temperature and other sensors.
14. Access to logs – characterize, define content, retrieve and write
15. View and set status indicators (LED, text LCD, alarms etc.)
16. Configuration of service processors and their components/services.
17. Media & KVM redirection
18. Correlation of multiple Management Access Points (MAP)
19. OS recovery assistance
20. Access to security information, such as accounts, groups and security modules
21. Network Interface monitoring and control including wired and wireless.
22. IO interconnect technologies such as PCI, SMBus, Bluetooth, USB and other interconnects.

By performing the following tasks:

- Define an architectural model for Targeted Platform management
- Leverage DMTF protocols and identify lightweight management stack(s) suitable for out-of-band management
- Define platform independent, interoperable, industry standard management data models, profiles and registries for the aspects of managing the physical aspects of system platforms that are within the scope of the management solutions described above.
- Define mechanisms for secure management
- Define mechanisms for scalable management
- Define mechanisms for scalable discovery & correlation

The SDMPWG will also own the following tasks related to its area of focus:

- Definition of the DMTF Management Initiative DASH
- Definition of the DMTF Management Initiative SMASH
- Work with the System Management Forum (SMF) to develop a compliance program for DASH & SMASH

Examples of physical system platforms include, but are not limited to:

- desktop platforms
- mobile platforms
- bladed PCs
- Servers spanning the spectrum of:
 - Stand alone, blades, racks and partitionable systems
 - Enterprise & Telco
 - Low cost to mission critical

In the course of authoring profiles, the WG will identify schema additions and modifications as necessary and work with the Schema Sub-Committee to incorporate these changes.

The focus of the WG is management of Targeted Platforms for in-band, out-of-band, in-service, and out-of-service (consistent with definitions in DSP2001) environments. This includes interactions with the operating system that are necessary to assist in hardware management. Direct management of a running operating system and its associated applications is out of scope.

The Server, Desktop, Mobile Platforms WG reports to the Platform Management Subcommittee.

Alliance Partnerships

- SNIA (Storage Networking Industry Alliance: Storage Management Initiative)

- TCG (Trusted Computing Group)
- TGG (The Green Grid)
- CompTIA (Computing Technology Industry Association)
- Consortium for Service Innovation
- SA Forum (Service Availability Forum)
- Blade Systems Alliance
- UEFI

3. Reliance/Coordination with other WG Models

The SDMPWG will work closely with all of the Working Groups and sub-committees under the TC.

4. Prior Work

- 2.
3. **DSP0217 SMASH Implementation Requirements**
4. **DSP0232 DASH Implementation Requirements**
5. **DSP0244 IPMI PET-to-CIM Message Registry Mapping Specification**
- 6.
7. **DSP0800 Base Server Profile SM CLP Command Mapping Specification**
8. **DSP0801 CLP Service Profile SM CLP Command Mapping Specification**
9. **DSP0802 SMASH Collections Profile SM CLP Command Mapping Specification**
10. **DSP0803 SM CLP Admin Domain Profile SM CLP Command Mapping Specification**
11. **DSP0804 Modular System Profile SM CLP Command Mapping Specification**
12. **DSP0805 Sensors Profile SM CLP Command Mapping Specification**
13. **DSP0806 Device Tray Profile SM CLP Command Mapping Specifications**
14. **DSP0807 Pass-Through Module Profile SM CLP Command Mapping Specification**
15. **DSP0808 CPU Profile SM CLP Command Mapping Specification**
16. **DSP0809 System Memory Profile SM CLP Command Mapping Specification**
17. **DSP0810 Record Log Profile SM CLP Command Mapping Specification**
18. **DSP0811 Simple Identity Management Profile SM CLP Command Mapping Specification**
19. **DSP0812 Physical Asset Profile SM CLP Command Mapping Specification**
20. **DSP0813 Boot Control Profile SM CLP Command Mapping Specification**
21. **DSP0814 Fan Profile SM CLP Command Mapping Specification**
22. **DSP0815 Ethernet Port Profile SM CLP Command Mapping Specification**
23. **DSP0816 Host LAN Network Port Profile SM CLP Command Mapping Specification**
24. **DSP0817 IP Interface Profile SM CLP Command Mapping Specification**
25. **DSP0818 DHCP Client Profile SM CLP Command Mapping Specification**
26. **DSP0819 DNS Client Profile SM CLP Command Mapping Specification**
27. **DSP0820 Telnet Service Profile SM CLP Command Mapping Specification**
28. **DSP0821 SSH Service Profile SM CLP Command Mapping Specification**
29. **DSP0822 Power Supply Profile SM CLP Command Mapping Specification**

- 30. DSP0823 Power State Management Profile SM CLP Command Mapping Specification
- 31. DSP0824 Chassis Manager Profile SM CLP Command Mapping Specification
- 32. DSP0825 Shared Device Management Profile SM CLP Mapping Specification
- 33. DSP0826 Software Inventory Profile SM CLP Command Mapping Specification
- 34. DSP0827 Software Update Profile SM CLP Command Mapping Specification
- 35. DSP0828 Text Console Redirection Profile SM CLP Command Mapping Specification
- 36. DSP0830 Role Based Authorization Profile SM CLP Command Mapping Specification
- 37. DSP0831 Platform Watchdog Profile SM CLP Command Mapping Specification
- 38. DSP0834 Computer System Profile SM CLP Command Mapping Specification
- 39. DSP0835 Indicator LED Profile SM CLP Command Mapping Specification
- 40. DSP0836 KVM Redirection Profile SM CLP Command Mapping Specification
- 41. DSP0842 OS Status Profile SM CLP Command Mapping Specification
- 42. DSP0843 Media Redirection Profile SM CLP Command Mapping Specification
- 43. DSP0845 Base Metrics Profile SM CLP Command Mapping Specification

- DSP1004 Base Server Profile
- DSP1005 CLP Service Profile
- DSP1006 SMASH Collections Profile
- DSP1007 SM CLP Admin Domain Profile
- DSP1008 Modular Systems Profile
- DSP1009 Sensors Profile
- DSP1010 Record Log Profile
- DSP1011 Physical Asset Profile
- DSP1012 Boot Control Profile
- DSP1013 Fan Profile
- DSP1014 Ethernet Port Profile
- DSP1015 Power Supply Profile
- DSP1016 Telnet Service Profile
- DSP1017 SSH Service Profile
- DSP1018 Service Processor Profile
- DSP1019 Device Tray Profile
- DSP1020 Pass-Through Module Profile
- DSP1021 Shared Device Management Profile
- DSP1022 CPU Profile
- DSP1023 Software Inventory Profile
- DSP1024 Text Console Redirection Profile
- DSP1025 Software Update Profile
- DSP1026 System Memory Profile
- DSP1027 Power State Management Profile
- DSP1028 Alarm Device Profile
- DSP1029 OS Status Profile
- DSP1030 Battery Profile
- DSP1035 Host LAN Network Port Profile
- DSP1036 IP Interface Profile
- DSP1037 DHCP Client Profile

DSP1038	DNS Client Profile
DSP1039	Role Based Authorization Profile
DSP1040	Platform Watchdog Profile
DSP1052	Computer System Profile
DSP1058	Base Desktop and Mobile Profile
DSP1061	BIOS Management Profile
DSP1070	Opaque Management Data Profile
DSP1074	Indicator LED Profile
DSP1075	PCI Device Profile
DSP1076	KVM Redirection Profile
DSP1077	USB Redirection Profile
DSP1085	Power-Utilization Management Profile
DSP1086	Media Redirection Profile
DSP1088	WiFi Port Profile
DSP1102	Launch In Context Profile

44. DSP2001 System Management Architecture for Server Hardware
Whitepaper

45. DSP2014 Systems Management Architecture for Mobile and Desktop
Hardware White Paper

46.

DSP8007 Platform Message Registry

DSP8021 BIOS Attribute Registry

DSP8030 DASH XML Schema

DSP8039 SMASH XML Schema

1. Current Work – Overview, Deliverables and Timeline

- Extend existing profiles with Indications support
- Deepen the functionality provided by existing profiles
- Add additional profiles and SM-CLP Mapping Specifications, as needed
- DSP0232 DASH Implementation Requirements
- DSP2014 Systems Management Architecture for Mobile and Desktop
Hardware White Paper
- DSP0217 SMASH Implementation Requirements
- DSP2001 SMASH White Paper
- Develop Machine Readable Profiles for WG-owned profiles, as needed

2. DMTF Contacts

Chair: sdmpwg-chair@dmtof.org

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47. To join the DMTF and/or the WG, see
<http://www.dmtf.org/join/> and
<http://www.dmtf.org/apps/org/workgroup/sdmpwg/>