

Platform Management Components Intercommunications Working Group

Dated 8/5/09

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

Management Problem(s) and Environment

The need to monitor and control a system is not constrained to scenarios where an OS is always available or functioning. A good example of this is the time in which a system is booting, before the OS has loaded, or when the OS is inoperable.

Also, system vendors are faced with the task of designing manageability hardware for servers, clients, and mobile systems, which do not share platform management sub-system designs and components.

Platform management interfaces need to operate in full power, low power, and varying speed environments. Specifications are needed for transport and management protocols that can be delivered over a variety of platform interconnect media to meet power-states and bandwidth needs of particular applications.

PMCI defines the standards to address “inside the box” communication and functional interfaces between the components of the platform management subsystem. The PMCI standards and technologies are complementary to DMTF Common Information Model (CIM) profiles and remote access protocols that are defined in the other DMTF sub-committees and work groups such as Desktop and Mobile Work Group (DMWG) and Server Management Work Group (SMWG).

Working Group Charter

The focus of PMCI WG is to enable intercommunications between different management components of a platform management subsystem in a standard manner across any implementation of a management component, independent of the operating system state and platform management subsystem implementation.

The PMCI WG reports to the Platform Management Subcommittee.

The PMCI WG is chartered to provide specifications for:

- Protocols and Interfaces for intercommunication between management components (e.g. management controllers, network controllers, processors, management devices, sensors, system firmware) to carry out management operations involving multiple types of traffic across platform inter-connects.
- Mappings between the low level data models and CIM based external data models. Management controller to secondary management controller interface – hardware bus, message protocol, and data models.
- Management controller interfaces to specific sensors – hardware signals/buses, and message protocol that the management controller uses to connect to standard sensors including power-on/off, reset, temperature, and voltage sensors.
- Common data model for use over internal messaging protocol
- An optional standardized interface between the local runtime software and the platform management hardware for use by local CIM providers

The PMCI WG is also chartered to coordinate and maintain the following:

- [Sub-ID numbers under the DMTF “DMT” PlugNPlay Vendor ID](#)

- PCIe VDM definitions under the DMTF PCIe Vendor ID
- Specification of Interface Type/Protocol Type Values used in SMBIOS Structure Type 42 (Management Controller Host Interface Structure)
- Specification and maintenance of the MCHI Description Table used by ACPI
- Specification of the usage of the ASF bit in SMBus UDID

Alliance Partnerships

- UEFI

Reliance/Coordination with other WG Models

The PMCI WG will work with the Platform Profiles WG, SMWG, and DMWG to ensure the internal interfaces and protocols defined by the PMCI WG enable and support the production of the external interfaces and protocols defined by these other working groups.

Prior Work

Prior work of the PMCI, ASF, and NC-SI sub-teams of the former Pre-OS WG including:

- DSP2015 Platform Management Component Intercommunications (PMCI) Architecture White Paper
- DSP2016 Management Component Transport Protocol (MCTP) Overview White Paper
- DSP0236 Management Component Transport Protocol (MCTP) Base Specification
- DSP0237 Management Component Transport Protocol (MCTP) SMBus/I2C Transport Binding Specification
- DSP0238 Management Component Transport Protocol (MCTP) PCIe VDM Transport Binding Specification
- DSP0239 Management Component Transport Protocol (MCTP) IDs and Codes
- DSP0222 Network Controller Sideband Interface (NC-SI) Specification
- DSP0136 Alert Standard Format Specification
- DSP0240 Platform Level Data Model (PLDM) Base Specification
- DSP0241 Platform Level Data Model (PLDM) over MCTP Binding Specification
- DSP0245 Platform Level Data Model (PLDM) IDs and Codes Specification
- DSP0246 Platform Level Data Model (PLDM) for SMBIOS Data Transfer Specification
- DSP0247 Platform Level Data Model (PLDM) for BIOS Control and Configuration Specification
- DSP0248 Platform Level Data Model (PLDM) for Platform Monitoring and Control Specification
- DSP0249 Platform Level Data Model (PLDM) States Sets Specification

Current Work – Overview, Deliverables and Timeline

- Take current specifications to DMTF Standard
 - Update white papers as appropriate
- DSP0844 – Platform Level Data Model (PLDM) CIM Mapping Specification

DSP0256 – MCTP Host Interface Specification

DSP0254 – MCTP KCS Transport Binding Specification

DSP0253 – MCTP Serial Transport Binding Specification

- Add additional specifications as needed, such as NC-SI over MCTP, PLDM for firmware update, PLDM for opaque management data, and PLDM FRU data transfer.

DMTF Contacts

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To join the DMTF and/or PMCI WG, see

<http://www.dmtf.org/join/> and

<http://www.dmtf.org/apps/org/workgroup/pmci/>