



Platform Management Components Intercommunications (PMCI) Working Group Charter

Dated 2019-09-25

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

Management Problem(s) and Environment

The need to monitor and control a system is not constrained to scenarios where an operating system (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 subsystem 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.

The Platform Management Components Intercommunications Working Group (PMCI WG) defines the standards to address “inside the box” communication and functional interfaces between the components of the platform management subsystem. The PMCI WG creates intraplatform manageability standards and technologies, which complement DMTF’s interplatform standards such as the [Redfish Standard](#) from the Redfish Forum, Common Information Model ([CIM](#)) profiles, as well as remote access protocols that are defined in the other DMTF groups.

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 Technical Committee.

The PMCI WG is chartered to provide specifications for:

- Protocols, Interfaces, and data models 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 interconnects.
- Interface bindings between low level medium physical interconnects and the protocols that provide intercommunication between management components.
- Security protocols, interfaces, and data model for intercommunication between management components including authentication, authorization, and encryption.
- Mappings between the low level data models and external data models, such as Redfish and CIM. 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.
- A standardized host interface between the host software (pre-boot, OS, etc.) and the platform management hardware.
- Develop tools for PMCI standards development and conformance:
 - Publish the source code for tools when appropriate
 - Develop tools to exercise management components that implement PMCI specifications
 - Provide scripts to simplify testing
 - Open source projects selected must be aligned with DMTF IP and indemnification policies

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

- Sub-ID numbers under the DMTF “DMT” PlugNPlay Vendor ID
- Peripheral Component Interconnect Express Vendor Defined Messages (PCIe VDM) definitions under the DMTF PCIe Vendor ID
- Specification of Interface Type/Protocol Type Values used in System Management BIOS (SMBIOS) Structure Type 42 (Management Controller Host Interface Structure)

- Specification and maintenance of the Management Controller Host Interface (MCHI) Description Table used by Advanced Configuration and Power Interface (ACPI)
- Specification of the usage of the Advanced Systems Format (ASF) bit in System Management Bus (SMBus) Unique Device Identifier (UDID)

Reliance/Coordination with Other DMTF Groups

The PMCI WG will work, as required, with the Redfish Forum and SMBIOS WG 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 and forums.

Links

- To join the PMCI Working Group, DMTF members see <http://members.dmtf.org/apps/org/workgroup/pmcil/>.
- To see public schedules and deliverables, see <https://www.dmtf.org/standards/pmcil>.
- To contact the chairs, DMTF members see pmci-chair@dmtf.org. All others can contact admin@dmtf.org.
- To join the DMTF, see <http://www.dmtf.org/join/>.