Charter for OCP Hardware Management Project

The **Hardware Management Project** provides a common foundation from providing manageability for other Open Compute projects, thereby enabling interoperable manageability for Open Compute platforms.

This charter describes the scope of work and activities that the Hardware Management Project may perform.

In-Scope Activities

The activities of the Hardware Management Project will be in the following areas.

Manageability Interface & Capabilities
- Standard manageability interfaces, which include the following capabilities
  - Resource discovery
  - Configuration and update
  - Telemetry
  - Control
  - Asynchronous eventing and notification
  - Composition
- Baseline manageability capabilities across the following Open Compute projects:
  - Server
  - Storage
  - Networking
  - Telco
  - Data center facility
  - Rack and power
- Provide guidance and feedback to other Open Compute projects extending the baseline manageability capabilities
- Overseeing the OCP's repository for OCP Profiles

Baseboard Management Controller
- Baseboard management controller (BMC)
- Out-of-band manageability interface to the BMC
- In-band (system or host interface) manageability interface to the BMC

Rack Management Firmware
- A rack manager manages OCP platforms installed on one or more racks, and exposes that manageability to the rest of the datacenter
- The rack manager is the combination of open-source rack management firmware executing on a contributed rack management controller
- The rack management firmware will expose an interface which conforms to an OCP prescribed interface.
- The activities for this area are in the purview of the **Open RMC** subproject

Management Controller Module
- The management controller module separates the common platform management hardware and places them behind a connector.

- The module is specified by its connector pin-out
- The module may have one or more form-factors
- The activities for this area in the purview of the **Hardware Management Module** subproject

Hardware Fault Management
- Requirements for hardware fault management
- Standardizing system behavior under hardware failures
- Define key baseline requirements of managing HW errors to achieve target service level
- Provide reference and guidance on system hardware failure management
- The activities for this area are the purview of the **Hardware Fault Management** subproject

Subprojects

The **Hardware Management Project** support the forming of subprojects by the community to focus on specific goals, activities and deliverables. The subprojects may have their own meetings. The subprojects are described below.

The **Open RMC subproject's** goal is an opensource-based rack management firmware ecosystem. The subproject's activities include:
- Specifying the management capabilities of the rack management firmware as exposed by the northbound interface.
- Specifying the southbound interface requirements for the rack management firmware
- Designs for rack management controllers
- Overseeing the OCP's repository for Rack-Manager source

The **Hardware Management Module subproject's** goal is management control module products which are interoperable. The subproject's activities include:
- Specifying and updating the interface between the management control module and the underlying platform
- Design guides for platform designers wanting to use the module
- Designs for reference modules and carrier cards
- Overseeing the roadmap for development of modules

The **Hardware Fault Management subproject's** goal is to address the large-scale data center pain-points in managing hardware faults effectively. The subproject's activities include:
- Develop Hardware fault management requirements
- Standardizing system behavior under hardware failures
- Define key baseline requirements of managing HW errors to achieve target service level
- Provide reference and guidance on system hardware failure management

Out-of-Scope Activities

In general, all areas not specified as in-scope should be considered out-of-scope. Specifically, this includes
- Platform-specific manageability capabilities
- Software or application management