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# **Usage Guide for GPU**

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## 1 Scope

This document contains baseline requirements for the OCP GPU Universal Baseboard Management API v1.0. The baseline Universal Base Board management tasks set as a common set of manageability from which OCP UBB platforms can extend for specific usages.

## 2 Requirements

As a Redfish-based interface, the required Redfish interface model elements are specified in a corresponding profile document. For the Baseline GPU Management API v1.0

The Redfish Interop Validator is an open-source conformance test that reads the profile, executes the tests against an implementation, and generates a test report in text or HTML forma

> python3 RedfishInteropValidator.py -u user -p password -r host:port profileName

The Redfish Interop Validator is located at https://github.com/DMTF/Redfish-Interop-Validator.

#### 3 Overview

#### 3.1 GPU Universal Base Board

- "OCP HGX" defines the hardware for a UBB for GPUs
- UBB can be described as tray which consists of base board and a set of OAM/high-speed with the necessary high-speed interconnect and other I/O devices
- As per OCP HGX, GPU UBBs contain an Accelerator Management Controller (AMC)
- · The UBB AMC is managed directly via Redfish interface to an enclosure management controller

alt text

#### 3.2 List of Resources included in the Profile

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#### 3.3 UBB Management Redfish Model

alt text

#### 3.4 GPU Profile Use Cases

- Requirements
  - Standardize (Required, Recommended and Optional) Redfish Resources and Properties
    - Provided by GPU platform vendors
    - Required by Hyperscalers
- Publish Standard OEM Features
  - Vendors to publish available OEM features
  - Hyperscalers to publish their required OEM features
- Validation
  - $\circ$   $\;$  Vendors can utilize the Redfish Interoperability Validator to provide compliance to the RIP
- Compliance
  - Hyperscalers can utilize the Redfish Interoperability Validator to test compliance against RIP

### 3.5 Validating conformance

The profile file can be read by the open-source conformance test, Redfish Interop Validator [3]. The validator will auto-generate tests, execute the tests against an implementation, and create a test report.

### **4 References**

- [1] "OCP UBB Baseline Management Profile v1.0.0" "OCP\_UBB\_BaselineManagement.v1.0.0.json"
- [2] "Redfish Specification" [\*https://www.dmtf.org/dsp/DSP0266\*](https://www.dmtf.org/dsp/DSP0266)
- [3] "Redfish Data Model Specification" [\*https://www.dmtf.org/dsp/DSP0268\*](https://www.dmtf.org/dsp/DSP0268)
- [4] "Redfish Interoperability Profiles Specification" [\*https://www.dmtf.org/dsp/DSP0270\*](https://www.dmtf.org/dsp/DSP0270)

### **5 Revision**

Revision	Date	Description
1.0.0	TBD	Initial release.