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HPE Performance Cluster Manager QuickSpecs

HPE Performance Cluster Manager (HPCM) delivers an integrated system management solution for Linux®-based High Performance Computing (HPC) clusters.

HPE Performance Cluster Manager provides complete provisioning, management, and monitoring for clusters scaling up to exascale-sized supercomputers. The software enables fast system setup from bare-metal, comprehensive hardware monitoring and management, image management, software updates, power management, and cluster health management. Additionally, it makes scaling HPC clusters easier and more efficient while providing integration with a plethora of third-party tools for running and managing workloads. HPE Performance Cluster Manager reduces the time and resources spent administering HPC systems—lowering total cost of ownership, increasing productivity, and providing a better return on hardware investments.

Furthermore, it optimizes cluster performance with proactive monitoring features, multiple telemetry visualization GUIs, and customizable alerting techniques.

Initial system setup involves installation of software including the Linux operating system on the administrative node, discovery of hardware components for the cluster nodes, and provisioning of the operating system for all the compute and service nodes in the cluster. HPE Performance Cluster Manager can quickly provision a cluster with thousands of nodes from bare metal. In addition, new cluster nodes being added to the existing cluster are automatically discovered and configured without requiring system shutdown. For increased resiliency of the cluster, a pool of minimum three admin nodes can be used to achieve a high availability (HA) Quorum (requires High Availability extension/add-on subscription). The admin nodes in the HA Quorum share a virtual machine image which can be used to reconfigure the cluster in case of system failure.

Hardware management is comprehensive and secure. HPE Performance Cluster Manager offers fine-grained centralized monitoring and management of clusters to keep them performing at their best. The software collects telemetry from the cluster nodes and stores them in a secure repository. System administrator tasks on the administrative nodes are kept secure from end-user access. When issues are detected, alerts are sent or displayed for the attention of the system administrator. The system administrator can set up automatic reactions to specific alerts such as power capping when a specific temperature is reached in the data center. System data can be monitored, and additional analysis of the metrics can be performed by visualizing the metrics at a specific point in time or over a historical period—either in system GUI, CLI, or via third-party tools such as Ganglia, Nagios, Kibana, or Grafana. HPE Performance Cluster Manager offers several preconfigured dashboards for both hardware and jobs monitoring.

Additionally, HPE Performance Cluster Manager offers comprehensive cluster health management. With lightweight and interactive health check reports, system admins can diagnose and fix issues in the production environment quickly without seeking help from HPE support teams, thus improving the turn-around time for any cluster health issues. Console-based and graphical dashboards make cluster health monitoring more efficient by improving ease of visualization. Validation of system diagnostics run in the HPE factory on new systems after installation at the customer site ensure additional security. Invasive health checks during maintenance windows to uncover potential system issues and node checks before running jobs to prevent their failure ensure performance optimization. Furthermore, the system also offers ongoing monitoring of the whole system via preconfigured Grafana dashboards.

The software also utilizes hooks in job-schedulers like Altair PBS Professional and Slurm to check the health of nodes before running a new job. This helps to improve the overall job performance by avoiding running jobs on unhealthy cluster nodes. The installed software including the BIOS on the cluster nodes can be compared and flagged for any inconsistencies with versions or missing items. Integrated firmware flashing supports flashing of BIOS, BMC/iLO, CMC, network adapters and switches.

The HPE Performance Cluster Manager image management system supports a secure software image repository that stores software in multiple formats. Software stored in the image repository can include multiple versions of Linux operating system or other software such as middleware and other applications. Each software image has version control accountability built-in to track changes. Any software image in the repository can be installed on demand on a cluster node or set of cluster nodes and restored to the original software environment as required.

Overview

HPE Performance Cluster Manager offers comprehensive monitoring and management for nodes, chassis, and racks, as well as power distribution units (PDU) and cooling hardware. HPE Performance Cluster Manager also offers additional power management features such as tools for accurately measuring and predicting power usage for better capacity planning and setting limits to trigger node-level power caps. Step-by-step topology and the protocol-aware Power On/Off feature enable controlled start and shut-down of the clustered system. For example, power-on order is rack, chassis, cluster node, and power-off order is cluster node, chassis, rack. Power telemetry is collected in watts and the metrics can be saved for analysis and historical reference. In addition, HPE Performance Cluster Manager supports advanced power management features for power capping and power resource management for jobs via integration with the job schedulers. HPE Apollo systems require Apollo Platform Manager (purchased separately) for power capping and rack management.

Overall, HPE Performance Cluster Manager delivers a comprehensive cluster management environment with resiliency, security, operational efficiency, and scale for HPE Apollo, HPE Cray EX, SGI, and ProLiant High Performance Computing clusters.

What's New

HPE Performance Cluster Manager v1.15 features:

- Support for RHEL 9.7, Rocky Linux 9.7 (see Operating System Support for full list)
- Support for Ubuntu 24.04.3
- AIOps enhancements
- Monitoring enhancements

Interface

HPE Performance Cluster Manager supports a Command Line Interface (CLI) and Graphical User Interface (GUI). The GUI can be customized and allows access to all compute node consoles from a single screen.

System Setup and Provisioning

Initial system setup involves installation of software including the Linux operating system on the administrative node, discovery of hardware components for the cluster nodes, and provisioning of the operating system for all the compute and service nodes in the cluster.

HPE Performance Cluster Manager can quickly provision a Linux operating system on a cluster with thousands of nodes from bare metal. Nodes are provisioned in parallel for maximum system performance in one session (no need to provision in groups of nodes) even for the largest clusters.

HPE Performance Cluster Manager supports these two cluster configurations:

- Flat - suitable for systems with less than 512 nodes (HPE Apollo, HPE ProLiant and HPE SGI 8600)
- Distributed – for larger systems (as above + HPE Cray EX systems)

The flat configuration is defined as an administrative node with many compute nodes. The distributed configuration is defined as an administrative node with leader nodes that support up to 576 compute nodes each. The distributed configuration enables the cluster to scale out to the exascale-sized supercomputers. It consists of a shared pool of leader nodes managing groups of compute nodes in an active-active setup, without RHEL or SLES HA software. There needs to be one leader for 512 nodes. Leaders come in groups of 3 servers (3 for resiliency at the storage level, i.e., 3 leaders for 1.5k nodes, 6 leaders for 3k nodes, etc.). Any leader can manage any compute node. The compute nodes are automatically redistributed on the available leaders. Leader nodes can be serviced without shutting down compute nodes. All 3 leaders share a common secure repository where all the compute node information is stored and can be retrieved. During the system setup discovery phase, the hardware components including networking configuration information are recorded in the secure repository. Having the hardware inventory stored in a central location enables easier management of the full cluster using HPE Performance Cluster Manager—no need to manage separate files with hardware configuration descriptions.

Hardware Monitoring and Management / System Monitoring

HPE Performance Cluster Manager (HPCM) collects telemetry from a wide range of cluster components, including iLO logs, CMC, nC, sC, and other supporting hardware such as cooling units and storage systems. All collected telemetry is securely ingested and stored for monitoring and analysis. Standard preconfigured metrics include CPU load, system uptime, memory utilization, and I/O performance.

Integration with NVIDIA Data center GPU Manager (DCGM) enables comprehensive monitoring of GPU-enabled servers, including GPU diagnostics, health status, configuration, and alerting. HPCM aggregates GPU metrics to provide cluster-wide visibility into GPU activity and performance.

Telemetry data is streamed using Kafka, which acts as the central message bus for reliable, scalable data ingestion across the platform. All time-series telemetry metrics are stored in VictoriaMetrics for high-performance, long-term metrics retention (default is 7 days) and querying. Event-based telemetry and alert-related data are stored in an OpenSearch cluster, enabling efficient indexing, filtering, and analytics.

HPE Performance Cluster Manager also provides REST APIs for automation and third-party software integrations.

System Alerts

HPE Performance Cluster Manager sends alerts in response to certain system conditions or issues. For some alerts, the system administrator can set up automatic responses to alerts triggered when thresholds are reached for selected metrics. The alerts are sent to the CLI or GUI console and by email.

HPE Performance Cluster Manager supports Field Replaceable Unit (FRU) inventory management (serial number, hostname, part number, BMC firmware and date) and alerts (including detecting new hardware, notifications when HW changes name/is replaced/pulled out) that enable more detailed communications with HPE Services, improving serviceability of the cluster.

Supported Product

Monitoring GUIs

HPE Performance Cluster Manager makes it possible to view the state of the cluster at-a-glance via the cluster monitoring GUI which provides four different views of the state of selected groups of nodes:

- In Table View, a table is displayed with rows corresponding to nodes and columns corresponding to metrics.
- In Instant View, a "flower" is displayed for each set of user-selectable metrics. Each "petal" of the flower corresponds to one of the nodes in the group, and the length of the petal is proportional to the most recently reported value of the metric on that node. Additionally, in Instant View, each flower can include a performance gauge which provides the cumulative value of any metric over the nodes that are displayed.
- In Time View, a "tube" is displayed for each set of user-selectable nodes. The "tube" is a 3D display where each cross-section contains the information shown in the corresponding flower at a specific time. The tubes show the metrics over time. The 3D displays can be manipulated to rotate and stretch and include the ability to change angular perspectives.
- In Bar Graph View, the monitored values for the selected groups of nodes appear in the form of a bar graph.

HPCM offers several preconfigured monitoring dashboards in Grafana, such as

- System monitoring dashboard (cluster-level CPU loads and memory, disk read & write data, memory statistics via graphs, as well as info on the top 20 performing nodes).
- CDU dashboards (offering detailed information about cooling distribution unit such as temperature, humidity, valve controls, dew point & water flow)
- Slingshot telemetry dashboard showing utilization metrics, temperature data, and alerts
- Real-time alerts management - HPCM provides an at-a-glance Grafana dashboard that aggregates alerts across clusters, consolidating event types and severity levels in one view.
- Scheduler status report dashboard - real-time monitoring of jobs scheduled via either PBS Professional or Slurm showing information such as nodes where the schedulers are running, whether they are active/inactive, jobs statuses & queues, CPU utilization data (when you click on Job ID), etc.
- AIOps dashboard showing alerts by controller, device or overviews, IT metrics, and Univariate

For Ansible, HPE Performance Cluster Manager can create Ansible Playbooks with the hardware inventory that can be input and viewed by Ansible.

Hardware Management

Hardware management is comprehensive and secure. System administrator tasks on the administrative nodes are kept secure from end-user access. Analysis of the hardware metrics is done by visualizing the metrics at a specific point in time or over a historical period. The installed software, including the BIOS on the cluster nodes, can be compared and flagged for any inconsistencies with versions or missing items. System management commands can be broadcast to all or selected cluster nodes for operations such as provisioning, rebooting, shutting down, and powering off. Integrated firmware flashing supports flashing of BIOS, BMC/iLO, CMC, network adapters, and switches.

The Cluster topology supports separate management and compute fabrics which enables the system management and application workloads running on dedicated networks to maintain the best bandwidth for the specific tasks or workloads. HPE Performance Cluster Manager securely orchestrates the tasks that run on the Ethernet management fabric versus on the Ethernet, InfiniBand, Omni-Path or HPE Slingshot compute fabric.

Image Management

Software images are stored in a secure repository that supports multiple formats including RPM, ISO, remote repository, and gold image. The repository provides flexibility to easily access the software to install on the system. Each image has specific identification information such as the timestamp of when it was last updated, who updated, version of software, etc. Updates to images are stored as changes to the originals to significantly save on disk space, while maintaining a full revision history. Software images can be loaded into the repository from software downloads or physical media (DVDs), and it can also be captured from running nodes.

The software images can be installed on all or select cluster nodes on-demand. The software image repository makes management of software on a large or complex cluster much easier. For example, if an operating system upgrade has issues, the system can be quickly reverted (re-deployed) to the last working operating system version because the software is available in the software image repository. Another advantage is that the repository can store multiple and different versions of the Linux OS distributions. The cluster's compute nodes can support a mix of SLES, RHEL, Cray OS, TOSS or Rocky Linux depending on the workload requirements.

HPE Performance Cluster Manager provisions software via multicast or BitTorrent protocols. Multicast provisioning is secure and protected with an authentication key. The provisioning process is reliable and does not require manual intervention afte network communication interruptions because HPE Performance Cluster Manager will automatically restart the provisioning process and continue until the provisioning task is completed. The provisioning process can provision and re-provisior software on thousands of compute nodes quickly.

Software Updates

The provisioning supports diskless (nfs/tmpfs/iscsi) and disk-full cluster compute nodes. For diskless compute nodes, the administrative node/leader nodes manage the operating system images.

Selected cluster compute nodes can be provisioned with a different Linux operating system distribution as required by the end-user's workloads. For example, the system is running RHEL 8, but a job requires SLES 15. The system administrator can provision selected cluster compute nodes with SLES 15 and re-provision the cluster nodes back to RHEL 8 after the job has completed.

Power and Cooling Management

HPE Performance Cluster Manager offers comprehensive power monitoring and management for the nodes, chassis, and racks, as well as power distribution units (PDUs) and cooling hardware.

For HPE PDUs and cooling hardware (CDUs, HPE ARCS, and in 1.5, also direct liquid cooling for HPE Apollo systems), monitoring data are displayed in special GUIs which also display alerts for preconfigured events (i.e. water leakage, temperature changes, lock/unlock doors, power supply failure). Alerts can be selectively configured to send emails to multiple groups. The GUI also provides plotting for trending and historical analysis.

HPCM also offers preconfigured at-a-glance dashboards for monitoring power and cooling devices in Grafana. HPCM (1.5 onwards) offers real-time anomaly detection on interface hardware such as CDUs and cooling racks using AIOps techniques.

In addition, the cluster manager offers these capabilities:

Power On/Off control

Power control is topology- and protocol-aware, and Power On/Off is staged sequentially as follows: Power on: rack, chassis, nodes. Power off: nodes, chassis, rack. The feature is also aware of whether a node is booted with an operating system or not.

Power consumption and analysis

HPE Performance Cluster Manager aggregates power and energy at available measurement points (rack AC, bulk DC, nodes) and reports power data in watts. Up to three months of power metrics are retained for reporting and analysis.

Power capping

System administrators can set limits to trigger a power cap based on environmental thresholds (power or thermal), data center power capacity, or for other reasons (e.g., workloads, planned brownouts, time of day).

Power Management for GPUs

HPE Performance Cluster Manager is integrated with NVIDIA Data center GPU Manager (DCGM). For power management on servers with NVIDIA GPUs, DCGM supports GPU power monitoring and power capping. HPE Performance Cluster Manager enables aggregation of the DCGM GPU power management across the cluster.

Power resource management for jobs

The HPE Performance Cluster Manager API for power resource management for jobs enables access to power metrics for CPU and GPU processors. The Altair PBS Professional Power Awareness feature and Slurm power management use the power metrics from the cluster management tool to define per job power envelopes, contain the system global power consumption, apply per user, per group, per job class power containment, and account for consumed energy.

Security

HPE Performance Cluster Manager is designed to keep cluster management tasks secure. Some of the features include:

- Central management of the system through the secure administrative node. In a distributed configuration, the admin and leader node ssh access is secure and not accessible by users and jobs. In addition, compute node root ssh keys are kept separate from admin nodes.

- All system configuration information (e.g., switches settings) is stored in a secure central repository with certificates and keys protecting access to the repository. Similarly, monitoring data is also stored in a secure central database.
- Provisioning via HPE Performance Cluster Manager is secure: Transfer of secret information (ssh, passwords, etc.) occurs before provisioning. There is no image corruption during multicast provisioning because the image is encrypted with an authentication key.
- HPE Performance Cluster Manager supports separate management and data networks where management of the system runs on a dedicated secure Ethernet management network.

Cluster Health Management

Cluster health management provides an overall health check for the whole system. Some of the features include:

- Validate system diagnostics run in HPE factory on new system after installation at the customer site
- Invasive tests included in HPE Performance Cluster Manager to be used during maintenance window or to diagnose root cause of failures
- Self-service diagnostics with lightweight and interactive reports for quick inspection and fixing of issues at a customer site without waiting for HPE support team.
- System health check before running job with a workload scheduler tool to avoid initiating jobs on unhealthy cluster nodes

Operating System Support

HPE Performance Cluster Manager software supports Red Hat® Enterprise Linux® 8.10, 9.6, 9.7, Rocky Linux 8.10, 9.6, 9.7, and SUSE Linux Enterprise Server 15 SP7 on the management nodes requiring Quorum HA. The cluster compute nodes can run Red Hat Enterprise Linux 8.10, 9.6 and 9.7, SUSE Linux Enterprise Server 15 SP6 and SP7, Rocky Linux 8.10, 9.6 and 9.7, SUSE Linux Enterprise Server 15 SP6 and SP6-based Cray OS releases, TOSS 4.8, 5.1 and 5.2, and Ubuntu 22.04.5 and 24.04.3. Additionally, the HPC versions of RHEL and SLES are also supported on the compute nodes. The administrative and leader nodes must be running the same operating system release. Quorum HA requires a subscription to the SUSE Linux Enterprise High Availability Extension or Red Hat High Availability Add-On. Red Hat Enterprise Linux support on management nodes also requires the Red Hat Resilient Storage Add-On.

NOTE: Red Hat Enterprise Linux (RHEL) 10 will not be supported on HPCM. Customers should plan to remain on RHEL 9.x (through 9.10) instead.

Management Integration

HPE Performance Cluster Manager offers CLI, GUI, and API for integration with other software management tools (i.e. workload managers, fabric software and orchestration tools).

HPE Performance Cluster offers integration with the following solutions:

- Altair PBS Professional®
- Slurm® by SchedMD
- Mellanox Unified Fabric Manager®
- Altair Grid Engine

- Ganglia monitoring software
- Ansible Playbooks and inventory files
- NVIDIA Data center GPU Manager
- Arm Performance Reports
- Grafana
- Kafka
- Alert Manager

Hardware Requirements

HPE Performance Cluster Manager software is supported on the following Gen9, Gen10, Gen10 Plus, and Gen11 platforms:

- HPE Cray EX systems
- HPE SGI 8600 and HPE Apollo 9000
- HPE Apollo 2000, 6000, 6500 systems
- HPE ProLiant DL 325 / 345 / 360 / 380 / 385 / 580 servers
- HPE ProLiant Compute XD 230, 685
- HPE Superdome Flex Systems
- HPE Cray XD 2000 (200 V, 225 V, 295 V) and 6500 (665, 670) systems

Migration to HPE Performance Cluster Manager

Starting with Cluster Management Utility

Customers using Cluster Management Utility on the administrative node with an active HPE Services support contract are entitled to migrate to HPE Performance Cluster Manager. In order to migrate, the current system must be running Cluster Management Utility v8.2. More information about migration can be found in the Quick Start Guide here.

Starting with SGI Management Suite

Customers using SGI Management Suite on the administrative node with an active HPE Services support contract are entitled to migrate to HPE Performance Cluster Manager. In order to migrate, the current system must be running SGI Management Suite v.3.5.

For more information, please see the HPE Performance Cluster Manager Installation Guide. HPE Services can assist with migration. Please contact your HPE sales rep for additional information on migrating to HPE Performance Cluster Manager.

HPE Services

No matter where you are in your digital transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.
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HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals through a personalized experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach—edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI-driven customer experience

https://www.HPE.com/services/completecare

HPE Tech Care Service

HPE Tech Care Service is the operational support service experience for HPE products. The service goes beyond traditional support by providing access to product-specific experts, an AI-driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service

delivers a customer-centric, AI-driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available in three response levels. Basic, which provides 9x5 business hour availability and a 2-hour response time. Essential which provides a 15-minute response time 24x7 for most enterprise level customers, and Critical which includes a 6-hour repair commitment where available and outage management response for severity 1 incidents.
https://www.HPE.com/services/techcare

HPE Lifecycle Services

HPE Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Lifecycle Install and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Analysis Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- Implementation assistance services: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service activities, including assessments, performance maintenance reviews, firmware management, professional services, and operational best practices.

Notes: To review the list of Lifecycle Services available for your product go to:
https://www.HPE.com/services/lifecycle

For a list of the most frequently purchased services using service credits, see the HPE Service Credits Menu

Other Related Services from HPE Services:

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Broad catalogue of course offerings to expand skills and proficiencies in topics ranging from cloud and cybersecurity to AI and DevOps. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.
https://www.HPE.com/services/training

Defective Media Retention

An option available with HPE Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and services options.

Parts and Materials

HPE will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

How to Purchase Services

Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at https://ssc.HPE.com/portal/site/ssc/

AI Powered and Digitally Enabled Support Experience

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For more information
http://www.HPE.com/services

Models

Licensing and Media Options

HPE Performance Cluster Manager 1 Node 3yr 24x7 Support Perpetual E-LTU Q9V60AAE

Notes:

- One license per node.
- Includes three years of support.
- This is an electronic license.
- This is a perpetual license. The software will continue working even when the support term ends.

HPE Performance Cluster Manager 1 Node 3yr 24x7 Support Perpetual LTU Q9V60A

Notes:

- One license per node.
- Includes three years of support.
- This is a perpetual license. The software will continue working even when the support term ends.

HPE Performance Cluster Manager FIO Software Q9V61A

Notes:

- For factory installation with Slingshot systems. This SKU does not include the license. Please order only with Q9V60AAE.
- Order one per node

Distribution Media and Software Documentation

HPE Performance Cluster Manager software and documentation is available online from the HPE Support Center. Customers may download the software and corresponding documentation from the specified URL provided at time of delivery.

Additional documentation can be downloaded from http://www.HPE.com/software/hpcm

Summary of Changes

Date	Version History	Action	Description of Change
06-Apr-2026	Version 16	Added	– Added configuration details for newly supported options, including ordering information where applicable.
		Changed	– Updated processor, memory, and storage sections to align with current supported configurations. – Revised environmental and physical specifications for clarity and consistency with current product definitions. – Updated compatibility and support statements to reflect current firmware and software requirements.
03-Nov-2025	Version 15	Changed	QuickSpecs was updated.
28-Jul-2025	Version 14	Changed	Update survey link.
28-Apr-2025	Version 13	Changed	Overview, Standard Features and Configuration Information sections were updated. More updates for HPCM 1.13 and other minor corrections
14-Apr-2025	Version 12	Changed	Updated for HPCM 1.13; removed Media Kit SKU. Overview and Standard Features sections were updated
15-Jul-2024	Version 11	Changed	Overview section was updated.
15-Apr-2024	Version 10	Changed	Configuration Information section was updated. Updated FIO SKU
04-Dec-2023	Version 9	Changed	HPE Services Rebranding
17-Apr-2023	Version 8	Changed	Standard Features Sections were updated. Updated for HPCM 1.8 and 1.9 release
02-May-2022	Version 7	Changed	Overview and Standard Features sections were updated
11-Oct-2021	Version 6	Changed	Overview, Standard Features and Service and Support sections were updated. Updated for HPCM 1.6 release
17-Mar-2021	Version 5	Changed	Overview and Standard Features sections were updated
09-Dec-2019	Version 4	Changed	Overview and Standard Features sections were updated
03-Jun-2019	Version 3	Changed	Overview and Standard Features sections were updated
03-Dec-2018	Version 2	Changed	Overview, Standard Features, Supported Product and Service and Support sections were updated
04-Jun-2018	Version 1	New	New QuickSpecs for HPE Performance Cluster Manager

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