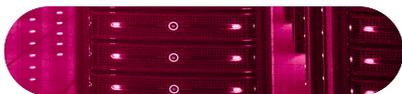Plan

Fulfill

EOL

Deploy

Optimize

Support

HPC Clusters Health Check

Optimize your high-performance computing (HPC) cluster for peak performance

Maintaining data center performance and efficiency is essential for smooth business operations. But it takes precious time and resources to tune your high-performance computing (HPC) cluster. Many IT organizations must concentrate on value-added initiatives that advance strategic business priorities, and lack the bandwidth to optimize infrastructure performance at the same time.

When Lenovo's expert consultants assess your HPC cluster, your organization gets a boost from our depth of experience in maximizing system performance, efficiency, and uptime.

During an HPC Clusters Health Check, the Lenovo Services team follows best practices and established methodologies to conduct a comprehensive evaluation of your HPC configuration. Skilled technicians check firmware levels, device drivers, cluster management software, OS patch levels, and software updates for components such as Open Fabrics Enterprise Distribution (OFED), General Parallel File System (GPFS™), compilers, and resource managers/schedulers. The technicians advise of necessary updates and investigate and address any error logs and alerts. Along the way, they'll also answer related concerns or questions you may raise.
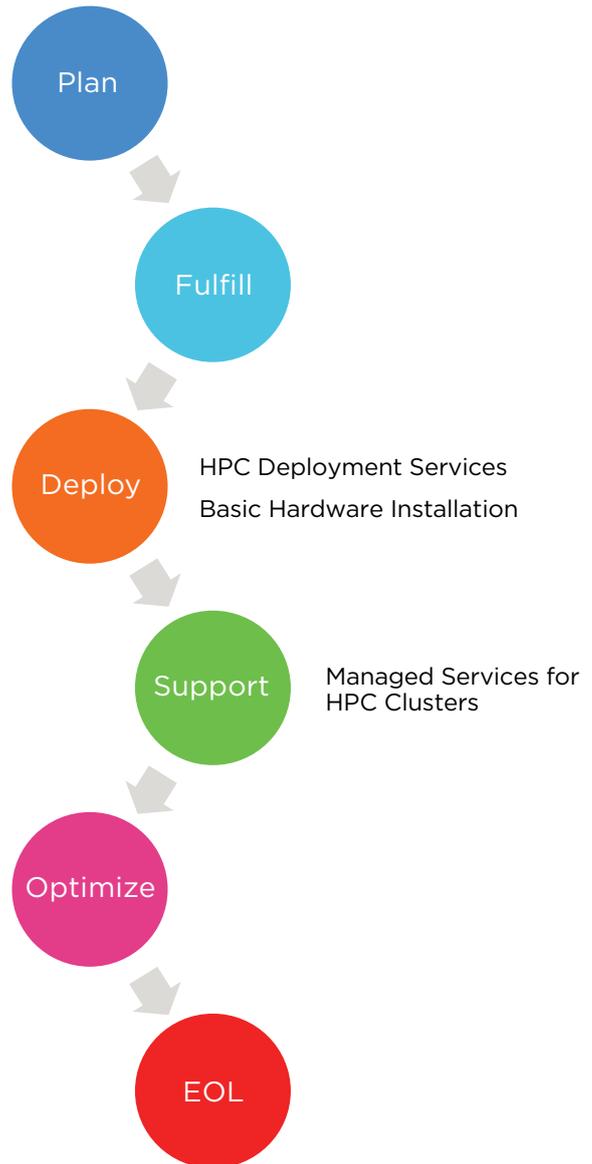
The Lenovo HPC Clusters Health Check also includes a detailed post-installation report. It is suitable for ongoing management and infrastructure support of covered hardware: Lenovo-branded server, storage, and networking devices as well as select Lenovo-supported products from other vendors that are sold by Lenovo or a Lenovo-authorized reseller. By maintaining a healthy HPC cluster, you make the most of your IT investment and manage enterprise resources to the best overall advantage.

HPC Clusters Health Check Process

During the Lenovo HPC Clusters Health Check, Lenovo consultants assess your data center environment and HPC cluster, report findings, and propose required updates. They will:

- Explain the HPC Clusters Health Check process
- Gather information about your existing environment through project preparation, planning, and pre-work sessions
- Identify requirements and establish end goals relevant to your business
- Perform a thorough system assessment of your HPC cluster
- Review and validate hardware configuration, prerequisites, and dependencies
- Verify interoperability of firmware levels and device drivers
- Check error logs and operating status of covered hardware and software components
- Investigate and address any HPC cluster alerts or concerns
- Provide health check report containing observations, recommendations, critical actions, and summary
- *Optional:* Update supported hardware to the latest level of firmware, device drivers, OS, and HPC cluster–specific software as needed, based on a mutually agreed schedule and maintenance window
- *Optional:* Run standard benchmarks for memory, CPU, interconnect, and storage
- Ensure network connectivity and infrastructure health

Customers Who Obtained These Services Also Procured…

Plan

Fulfill

Deploy — HPC Deployment Services
Basic Hardware Installation

Support — Managed Services for HPC Clusters

Optimize

EOL

Lenovo™ offers a comprehensive portfolio of services that supports the full lifecycle of your Lenovo IT assets. At every stage—plan, fulfill, deploy, support, optimize, and end of life (EOL)—we offer the expertise and services you need to more accurately budget for IT expenses, deliver better service-level agreements, and generate greater end-user satisfaction. Let Lenovo Services' unique offerings and expertise help you get the most out of your technology investment.

Lenovo's HPC Clusters Health Check service is part of a comprehensive portfolio of Lenovo Services that supports the entire suite of enterprise products.

Contact your Lenovo representative or Business Partner to learn more about Lenovo's HPC Clusters Health Check service. Or visit **www.lenovo.com/DataCenterServices**

Lenovo Services