



Fact Sheet

New HP Helion Self-service HPC Solution Makes High-Performance Computing Easier to Access, Accelerates Innovation

Private cloud solution—based on HP Helion OpenStack—provides automation and agility via a self-service portal

Overview

The new HP Helion Self-Service HPC solution empowers organizations to rapidly deliver more competitive products and insights by making high-performance computing (HPC) resources more agile and easier to access via an HPC-optimized private cloud.

This new solution provides a self-service portal that makes using HPC resources as easy as using a familiar application—thereby making them accessible for more staff. The solution also makes HPC accessible and manageable for organizations by allowing them the choice to manage it themselves or have HP HPC experts implement and manage it for them through a pay-for-use model that lets them stay focused on delivering products and innovation.

The solution is unique in its ability to offer a customizable HPC portal experience for multiple groups while completely automating complex HPC services. Based on HP Helion OpenStack®, the solution provides a common open architecture across HPC private cloud and standard IT clouds with extensible hybrid support to other clouds for future on-demand capacity.

Ease of access and use helps harness the promise of HPC

To be able to compete and thrive, organizations must deliver innovative products to market faster and analyze growing amounts of data quicker and easier. HPC addresses these problems and provides solutions in a fraction of the time of conventional computing, but using the complex architectures can be a barrier to adoption and implementation. The HP Helion Self-Service solution makes it easy for new users to access HPC resources.

Familiar interface, rapid automation of complete HPC service

The integrated solution provides a self-service portal that makes accessing HPC resources and submitting jobs as easy as requesting consumer applications and using their regular application tool parameters. HP Helion Self-Service HPC automatically provisions complex HPC application environments and automates jobs with just a few clicks using either virtual or physical cloud resources. The self-service HPC portal can be

tailored for each group's application and data needs with out-of-the-box integration with popular ISV applications such as ANSYS applications.

Open, efficient management of complex HPC resources

The HP Helion Self-Service HPC solution provides integrated cluster, cloud and policy-based workload management to optimize utilization and prioritize HPC resources. It also offers an open, common architecture across HPC and standard IT private clouds with extensible hybrid support to public cloud with HP Helion OpenStack. The solution additionally provides simplified usage and application license management.

Secure, scalable performance for demanding HPC Workloads

Organizations can leverage the solution to meet the needs of demanding design, simulation and analysis workloads. The HP Helion Self-Service HPC solution ensures secure access to the HPC applications, resources and data with LDAP integration and role-based access controls. Application results are accelerated as the solution provides out-of-the-box integration with a customer's choice of leading cluster infrastructure optimized for HPC including the new HP Apollo systems, HP Cluster Platforms, co-processors and accelerators.

Making HPC easy to access and manage for organizations

Organizations can leverage HP HPC experts to implement and manage their HP Helion Self-Service HPC solution to reduce expertise barriers and enable a pay-for-use model to reduce capital expenses. Customers can also choose to manage and own the HPC solution resources to leverage existing expertise and investments.

Customer results

Customers like [CADFEM](#) are leveraging HP technology to provide self-service HPC solutions to their engineer customers. CADFEM is using HP technology to power their CADFEM Engineering Simulation Cloud that offers critical CAE applications and resources as rapid and secure HPC services that their engineer customers can easily access to accomplish their range of development tasks faster.

"The CADFEM Engineering Simulation Cloud provides a high-performance CAE environment for ANSYS Workbench, easily accessible from everywhere and complete up and running. It provides fast batch solving of very large models as well as interactive pre- and post-processing capabilities. A high degree of scalability, efficient 3D-visualisation and powerful data compression are an integral part of this tailored solution. The CAE environment is powered by the technologies of HP, Nice DCV, VCollab and of course ANSYS Inc., together with CADFEM's engineering support on top."

— Gerhard Zelder, manager, IT-Solutions, CADFEM

Pricing and availability

The HP Helion Self-Service offering is available in June 2014 with modular pricing that allows the solution to be tailored to each organization's needs based on both the range of capabilities as well as services required.

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