

# Bright Cluster Manager Version 7.1 for HPC

Advanced Cluster Management Made Easy

## FEATURES

### Deploys Easily

Just answer a few questions about your cluster and Bright Cluster Manager takes care of installing the software you need to get you up and running.

### Installs on Bare Metal

With Bright there is nothing to pre-install so you can start building your cluster from bare metal servers.

### Provides Comprehensive Metrics

Bright Cluster Manager lets you monitor resources and services across the entire cluster in real time.

### Includes Powerful User Interface

Bright Cluster Manager provides two user interfaces so you can choose to provision, monitor, and manage your clusters with a traditional command line interface or an intuitive graphical user interface.

### Optimizes Use of IT Resources

Bright ensures HPC applications are allocated resources according to the policies of your organization. Your cluster will prioritize workloads according to your business priorities.

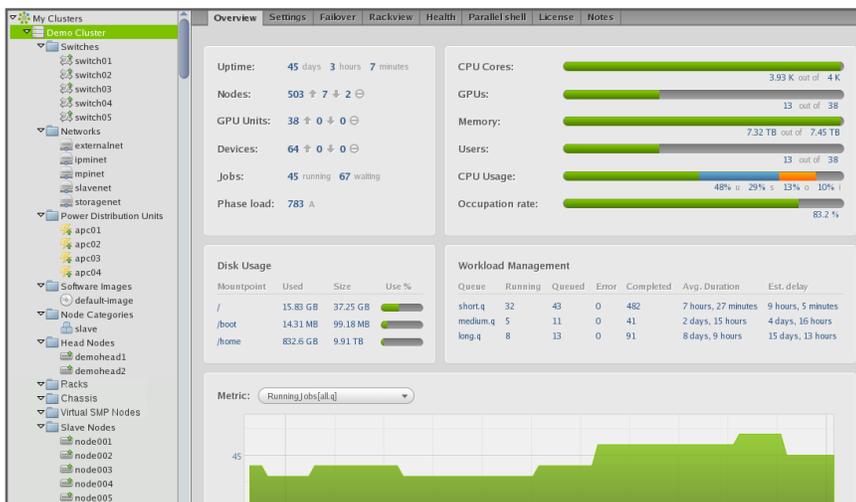
### Includes HPC Tools and Libraries

Every copy of Bright Cluster Manager comes with a complete set of HPC tools and libraries so you will be ready to develop, debug, and deploy your HPC code right away.



## For organizations that need to easily deploy and manage HPC clusters

Bright Cluster Manager for HPC lets customers deploy complete clusters over bare metal and manage them effectively. It provides single-pane-of-glass management for the hardware, the operating system, the HPC software, and users. With Bright Cluster Manager for HPC, system administrators can quickly get clusters up and running and keep them running reliably throughout their life cycle – all with the ease and elegance of a fully featured, enterprise-grade cluster manager.



Monitor your entire cluster at a glance with Bright Cluster Manager

EASY  
TO  
PROVISION  
OPERATE  
MONITOR  
MANAGE  
SCALE



You decide which metrics to monitor. Just drag a component into the display area, and Bright Cluster Manager instantly creates a graph of the data you need.

## Quickly build and deploy an HPC cluster

When you need to get an HPC cluster up and running, don't waste time cobbling together a solution from various open source tools. Bright's solution comes with everything you need to set up a complete cluster from bare metal and manage it with a powerful user interface. Whether your cluster is on-premise or in the cloud, Bright is a virtual one-stop-shop for your HPC project.

## Build a cluster in the cloud

Bright's dynamic cloud provisioning capability lets you build an entire cluster in the cloud or expand your physical cluster into the cloud for extra capacity. Bright allocates the compute resources in Amazon Web Services automatically, and on demand.

## Build a hybrid HPC/Big Data cluster

Does your organization need HPC clusters for technical computing and Hadoop or Spark clusters for big data? Bright offers add-on capabilities that enable you to easily build and manage both types of clusters from a single pane of glass. Your system administrators can monitor all cluster operations, manage users, and repurpose servers with ease.

## New Features in Version 7.1

- Provides enhanced integration with Slurm, Sun GridEngine, and Univa GridEngine
- Integrates fully with Intel Enterprise Edition Lustre®
- Supports BIOS -level settings for Dell R730, FC630, FC430, FC830, and M830 servers
- Integrates fully with Puppet® for advanced configuration
- Offers fine-grained kernel settings

Bright's state-of-the-art user interface makes monitoring and managing your HPC clusters easy.

## Proven. Hardened. Stable.

Bright has been building enterprise-grade cluster management software for more than a decade, and our solutions are deployed in thousands of locations around the globe. Rely on the experience we build into our software solutions to help you implement your cluster management solution.

## Clusters in the cloud

Bright Cluster Manager can provision and manage clusters that are running on virtual servers inside the AWS cloud as if they were local machines. Use this feature to build an entire cluster in AWS from scratch or extend a physical cluster into the cloud when you need extra capacity.

**Use native services for storage in AWS** – Bright Cluster Manager lets you take advantage of inexpensive, secure, durable, flexible and simple storage services for data use, archiving, and backup in the AWS cloud.

**Make smart use of AWS for HPC** – Bright Cluster Manager can save you money by instantiating compute resources in AWS only when they are needed. It uses built-in intelligence to create instances only after the data is ready for processing and the backlog in on-site workloads requires it.