



**FEATURES** 

## **Bright Cluster Manager**

Advanced Cluster Management Made Easy



# Manage Clusters for HPC, Big Data, Deep Learning, and More

Bright Cluster Manager lets you deploy complete clusters over bare metal and manage them effectively. It provides management for the entire cluster, including the hardware, operating system, and users. It even manages the Hadoop, HPC, Cassandra, Spark, and other big data software. With Bright Cluster Manager, you can quickly stand clusters up and keep them running reliably throughout their life cycle—all with the ease and elegance of a fully-featured, enterprise-grade cluster manager.

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Manage your entire cluster with Bright Cluster Manager

#### Deploys Easily

Installs everything you need, including your chosen distribution of Linux, workload manager, Hadoop, Spark, Cassandra, HPC and Deep Learning libraries, and more on Red Hat Enterprise Linux, CentOS, or Ubuntu.

#### Installs on Bare Metal

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

#### Provides Comprehensive Monitoring

Monitor, visualize, and analyze a comprehensive set of hardware, software, and job-based metrics, with ease.

#### Includes Two Powerful User Interfaces

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 the new web-based graphical user interface we call *Bright View*.

Integrated GPU and Hardware Accelerator Management Leverage powerful GPU and Hardware Accelerator management and monitoring capabilities to gain maximum control.

#### Optimizes Use of IT Resources

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

#### Containers

Plug and play integration with Docker, Kubernetes, Mesos, and Marathon allows containers to be scheduled and started in a Bright cluster.

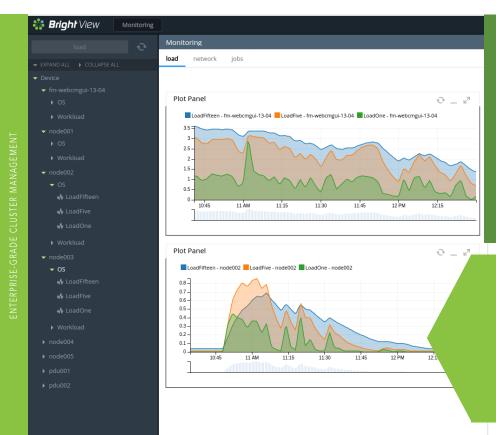
#### Includes Tools and Libraries

Comes with a complete set of tools and libraries for HPC and Deep Learning, plus Apache analytics applications so you will be ready to develop, debug, and deploy your code right away.



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#### **Proven Technology**

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 to help you implement your cluster management solution.

Bright View, our graphical user interface, makes monitoring and managing clusters easy.

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

### Quickly Deploy a Cluster for HPC, Big Data, or Deep Learning

When you need to get a cluster up and running, don't waste time cobbling together a solution from disparate open source tools. Bright software 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-premises or in the cloud, Bright is right for all of your clustered infrastructure projects.

### Dynamic Clusters

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 or Microsoft Azure automatically, and on demand. You can also set up your own Cluster on Demand for DevOps using Bright Cluster Manager with Bright OpenStack.

### 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.

### Clusters in the Public Cloud

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

Use Bright to move workload data to and from the cloud — Bright can take care of automatically moving the input and output job data into the cloud and back again. All your end users need to do is submit a job, specify which data to move, then sit back and leave the rest to Bright.

Make smart use of public cloud resources — Bright Cluster Manager can save you money by instantiating compute resources in AWS or Azure 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-premises workloads requires it.

Bright Computing

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