

Compute

HPC Cluster

High Performance IaaS-based HPC Cluster Environment

HPC Cluster auto-configures and provides HPC (High-performance computing) cluster environment that is needed to execute highly complex computations such as CAE (Computer-aided engineering) application. Configuring a high-performance computing environment is easier with the help of Bare Metal Server and File Storage (BM) of Samsung Cloud Platform and computing resources are utilized efficiently using Job Scheduler.

Auto-configure HPC Cluster Environment

Using the Samsung Cloud Platform console, users can install Bare Metal Server, Networking, File Storage resources as well as compiler, MPI library, and job scheduler with ease. GCC, open MPI, and slurm are provided for open-source middleware and more solutions will be made available in the future.

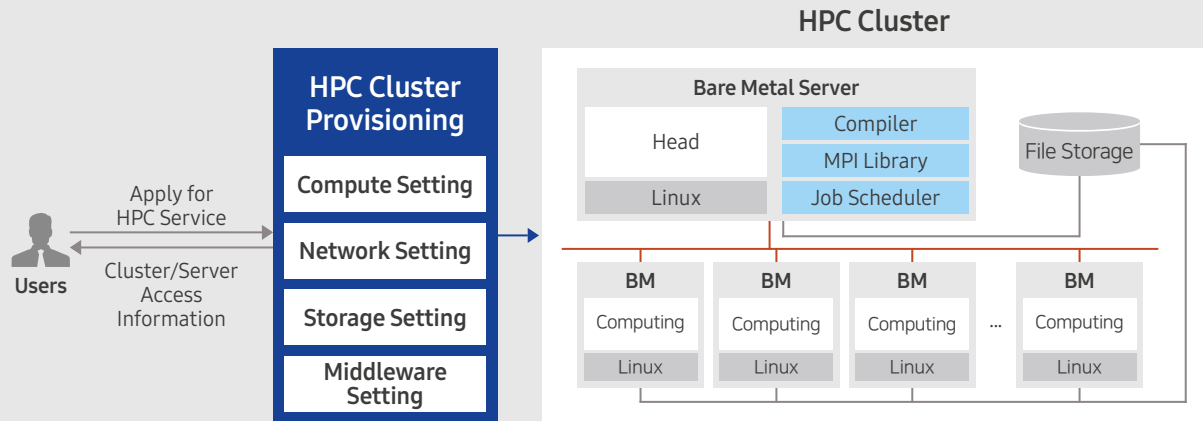
High Performance IaaS-based Service

Using up to 20 high-performance Bare Metal Servers, users can configure compute nodes. Storage and sharing of computing results in a Bare Metal Server dedicated File Storage make fast handling of complex computation possible.

Utilization of CAE Application

The HPC environment of Samsung Cloud Platform allows for easy installation of the application for CAE in the client library, thereby assuring continuity of business. Using putty, a program used to connect to a remote server, users can cost-effectively configure an HPC environment.

서비스 구성도



Key Features

- **HPC cluster creation**
 - Provide up to 20 Bare Metal Servers for computational nodes
(When using twenty 48 core, 960 core can be used)
 - Enable hyper-threading control on Bare Metal Server
 - File Storage(BM) integration setting
 - Auto install middleware (job scheduler, compiler, MPI library)
 - **HPC cluster management**
 - Settings change/stop/start for HPC cluster in operation
 - No charges made when a HPC cluster stops, data stored on connected File Storage will remain unchanged
 - Send notifications when a HPC cluster is created or scaled out
 - **Utilization of job scheduler**
 - Request specific resource features such as computational node, CPU core per node, memory, etc.
 - Resources will be allocated soon after in case of insufficient available resource
 - Check work status and store usage history
- ※ HPC job log management, web-based work environment and VM-based Auto-Scaling to be provided in the future




Pricing

- **Billing**
 - For middleware SW, open source is offered free of charge
 - IaaS fees are charged separately depending on usage

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FOR MORE INFORMATION

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