USER   USER   USER

NIC to let users access

Master Node/Login Node — Kubernetes Controller

Switch

Compute Node   Compute Node   Compute Node   Data Server   Data Server

To be installed:
MPI - Open MPI, MPICH
OS
SSH
Parallel shell: to run same command across multiple nodes, configuring similar nodes

Common /home for across nodes – same i/p and o/p files
NTP: Network time protocol, for time sync
Job schedulers/ resource manager: Open Lava/Slurm/Torque, etc.

Kubernetes can be used to manage HPC containers and all the required services.