

# Compute Cluster Bring Up Workshop

## OUTLINE

### TRAINING OVERVIEW

This workshop dives in the process of bringing up an AI Factory. This includes installing Base Command Manager to manage the cluster.

The learners will be introduced to the installation methods for Base Command Manager. They will then use wizards built into Base Command Manager to install a workload manager, a Kubernetes cluster, and NVIDIA Mission Control related tools. The learners will become familiar with navigating Base Command Manager for deploying and managing an AI Factory.

### TRAINING DELIVERY METHOD

Instructor-led remote training sessions via NVIDIA Academy Teams platform.

Hands-on lab exercises focused on the deployment of AI Factory Components.

### TARGET AUDIENCE

This course is aimed at teams that will deploy the software stack for management and observability of an AI Factory.

### TRAINING DURATION

Remote: 3 sessions of 4 hours

### SESSION 1

#### *AI Factory & Mission Control Review*

- What is an AI Factory
- What is NVIDIA Mission Control
- What is Base Command Manager

#### *Base Command Manager Installation & Licensing*

- Graphical Installation of BCM
- Installing Cluster License
- Configuring and provisioning nodes

#### *BCM Directory Services Integration*

- LDAP Configuration
- User Import
- Permissions Configuration

### SESSION 2

#### *Slurm & Kubernetes Overview*

- InfiniBand Overview and Key Features
- InfiniBand Fabric Components

#### *Slurm Installation*

- Cluster configuration
- Slurm installation wizard
- Reprovision nodes
- Run Slurm test job

#### *Kubernetes Installation*

- Cluster configuration
- Kubernetes installation wizard (including Run:ai install)
- Reprovision nodes
- Run Kubernetes test job

### SESSION 3

#### *Bulk inventory import and Base View usage*

- Import GB200 racks into Base Command Manager
- View and verify in Base View

#### *Autonomous Hardware Recovery Review and Install*

- Overview of AHR
- Install AHR
- Use AHR to test cluster components