

## COURSE OVERVIEW

As the importance of Artificial Intelligence increases, the amount of infrastructure required to build, maintain, and serve these new AI models and tools continues to grow. Efficiently managing and monitoring this infrastructure to allow the important AI work to be done is critical.

NVIDIA Base Command Manager is a cluster management tool that effectively manages and monitors infrastructure and workload managers for AI and HPC clusters.

This course provides an overview of the Base Command Manager solution. For those that are going to be managing and working with HPC or AI clusters, this course will give you a head start on understanding a powerful tool for cluster and workload management.

## TRAINING DELIVERY METHOD

On-site training or Instructor-led remote training sessions via NVIDIA Academy Teams platform. Both methods include access to hands-on environment.

## TARGET AUDIENCE

This course is designed for systems administrators and engineers who wish to learn how to install, configure, manage, monitor a cluster using Base Command Manager.

## TRAINING DURATION

Remote: 3 sessions of 4 hours

## TRAINING OUTLINE

### Session 1: Base Command Manager Overview

- Base Command Manager Overview
  - Base Command Manager Architecture
  - Base Command Manager Components
  - Base Command Management Tools
- Managing Nodes and Software Images
  - Creating Node Categories and Nodes
  - Creating and Modifying Software Images
  - Updating and Synchronizing Nodes
- Base Command Manager Monitoring
  - Overview
  - Health Checks

- Job Metrics
- Device Metrics
- Base Command Manager User Management
  - Adding/Removing Users
  - Configuration

## **Session 2: Base Command Manager Workloads and Cloud Integrations**

- Base Command Manager Running Workloads
  - Slurm Management
  - Kubernetes Management
  - JupyterLab Management
- Base Command Manager Heterogeneous Infrastructure
  - Cluster on Demand
  - Cluster Extension
- Base Command Manager Auto-scaler
  - Overview
  - Configuration
- NVIDIA GPU Configuration
  - Multi-Instance GPU
  - GPU Metrics and Monitoring

## **Session 3: Hands-On Base Command Manager Installation**

- Base Command Manager Installation
- Bringing Up the Cluster
  - Licensing Cluster
  - Provisioning Nodes
- Kubernetes Installation
  - cm-kubernetes-setup
  - Installation Verification