



## NVIDIA BASE COMMAND

The Operating System of the Accelerated Data Center

Providing a robust AI infrastructure for a large enterprise is about much more than hardware. To reach maximum performance and usability takes purposeful design and orchestration of the entire data center. This requires not only choosing best-of-breed technology such as NVIDIA DGX™ systems, NVIDIA networking, optimized storage, and more, but also advanced infrastructure software to ensure everything is managed optimally and utilization is maximized to provide AI development capabilities across the entire organization.

NVIDIA Base Command™ is the operating system of the accelerated AI data center, helping organizations speed the ROI of AI. Base Command powers every NVIDIA DGX system, enabling organizations to leverage the best of NVIDIA software innovation. Enterprises can tap into the full potential of their DGX investment with a proven platform that includes enterprise-grade orchestration and cluster management, libraries that accelerate compute, storage and network infrastructure, and system software optimized for running AI workloads.

### The Best of NVIDIA Software

The same software that supports NVIDIA's thousands of in-house developers, researchers, and AI practitioners is now available with every NVIDIA DGX system. Best-of-breed developer software, infrastructure management, and accelerated infrastructure libraries have been incorporated into a single powerful software stack to power DGX infrastructure, with ongoing enhancements and innovations. As organizations evolve their infrastructure from simple single-node environments to clusters to infrastructure at NVIDIA DGX SuperPOD™ scale, Base Command supports their needs.

### Enterprise-Grade AI Job Scheduling and Workload Orchestration

Base Command provides Kubernetes, Slurm, and Jupyter Notebook environments for DGX systems, delivering an easy-to-use, enterprise-proven scheduling and orchestration solution based on well-established enterprise standards. With Base Command, you can leverage the tools you already know with unified management and the backing of world-class NVIDIA support to meet enterprise service-level agreements (SLAs).

### Comprehensive Cluster Management

Automate the end-to-end management of DGX systems, from a single node to thousands, with full-featured cluster management in Base Command. Whether it's initial provisioning, operating system and firmware updates, on-demand system reconfiguration, or health checks and real-time monitoring, Base Command provides

#### KEY CHALLENGES

- > ROI on AI investment can be slow to realize.
- > It can be challenging to manage and scale AI infrastructure.
- > Available hardware is often both oversubscribed and underutilized.
- > There's a lack of enterprise-grade support.

#### BENEFITS

- > Speed up ROI with a full gamut of hardened software for accelerated data centers.
- > Manage clusters of any size, spanning DGX systems, other GPU, CPU, and cloud nodes.
- > Maximize utilization with enterprise-grade job scheduling and workload orchestration with integrated monitoring.
- > Base Command is backed by world-class NVIDIA Enterprise Support.

a single pane-of-glass view that gives you complete control of heterogeneous clusters of any size, including DGX, other GPU, CPU, and cloud nodes.

## **Fully Optimized, Hardened, and Supported for Enterprise Requirements**

The complete Base Command software stack is optimized for DGX environments that scale from a single node to large-scale clusters, ensuring maximum performance and productivity. And NVIDIA AI Enterprise, included with every DGX system, enables organizations to harness the power of AI with a fully supported suite of software optimized to streamline AI development and deployment.

## **Enabling Your Journey to an AI Center of Excellence**

DGX systems have always offered the highest performance and scalability, giving every enterprise a platform that supports their business objectives. DGX is architected to remove limitations and achieve aspirations, taking organizations where no other system can. With Base Command, DGX hardware is paired with the software that enables those aspirations, delivering capabilities that are ready when customers need them, helping them achieve the art of the possible. Base Command supports an organization's AI journey, from their first system all the way to a TOP500-class DGX SuperPOD.

## **Realize Faster ROI on AI Infrastructure**

NVIDIA Base Command delivers the best of NVIDIA software innovation, making it faster, easier, and more cost-effective to realize the ROI on AI infrastructure.

## **Ordering Information**

NVIDIA Base Command is available exclusively for customers of NVIDIA DGX systems. Contact your NVIDIA sales representative to learn more.

## **Learn More**

To learn more about NVIDIA Base Command visit:

[nvidia.com/base-command](https://www.nvidia.com/base-command)