#### Datasheet



# NVIDIA Base Command Platform

Enterprise-class platform for AI training.

Many businesses find themselves sinking in AI model debt with data science innovation languishing in prototypes and rarely realized in production. Typical challenges that constrain time-to-insights include data scientist productivity, workflow bottlenecks, inefficient access to resources and infrastructure, and lack of IT/DevOps integration processes. Businesses need a solution that accelerates their AI initiatives with simplified experimentation and workflows, and streamlined management of users, jobs, and data sets that's effortlessly supported by IT teams.

NVIDIA Base Command<sup>™</sup> Platform is an enterprise-class AI training software as a service (SaaS) that enables businesses and their data scientists to accelerate AI development. It provides centralized control of the AI training process from end-toend, including resource sharing, job scheduling, and data set management, using an intuitive graphical user interface (UI), a command line interface, and integrated monitoring and reporting dashboards. Part of the NVIDIA DGX platform, the Base Command Platform software service provides a single-pane-of-glass view into AI training projects across your DGX infrastructure, both in the cloud and on premises.

## **Accelerated ROI for AI Initiatives**

For enterprises to succeed in AI, there needs to be simple and flexible ways for data scientists to define, configure, and execute their workloads, collect and inspect results, and iterate to further innovate. At the same time, management demands comprehensive reporting on AI infrastructure utilization to set priorities and plan for the future. NVIDIA Base Command Platform provides a cloud-hosted control plane designed for AI development with hybrid infrastructure so you can avoid the overhead and pitfalls of deploying and running a do-it-yourself platform.

## **Comprehensive AI Workflow Management**

Deep learning and data science practitioners need ready-to-run, optimized Al software, and want end-to-end Al experimentation and workflow management, enabling them to take data science development from concept to production scale.

NVIDIA Base Command Platform efficiently configures and manages AI workloads, delivers integrated data set management, and executes them on right-sized resources, ranging from a single GPU to large-scale, multi-node clusters. Its cloudhosted management features provide common control and user experience for NVIDIA DGX Cloud and NVIDIA DGX SuperPOD<sup>™</sup>. Base Command Platform accommodates diverse approaches by providing consistent capabilities across its



#### **Key Features**

- Single-GPU, multi-GPU, and multi-node AI training
- > Designed for cloud, onpremises, or hybrid NVIDIA DGX<sup>™</sup> infrastructure
- Custom scheduler with quota controls
- Built-in data set management and data governance
- Role-Based Access Control (RBAC), Single Sign-On (SSO), team collaboration, and sharing
- Comprehensive job telemetry, including Tensor Core utilization and GPU affinity
- > Detailed showback reporting
- GPU-optimized software from the NVIDIA NGC catalog
- > APIs for MLOps integration
- Support for interactive jobs to access
- Jupyter Notebooks and TensorBoard
- Fastest path to building the most complex AI applications with integrated tools, including
- NeMo Megatron for developing large-scale natural language processing (NLP)

web UI, command line, and API. A large library of pre-built containers, with optimized deep learning and data science frameworks and pre-trained models, is instantly available via NVIDIA NGC<sup>™</sup>. This enables your data scientists to deliver production-ready models and applications faster.

## Simplified Collaboration for Data Science Teams

While enterprises are beginning to infuse AI into their businesses and investing in powerful infrastructure, oftentimes their IT organizations struggle to provide simple yet powerful tools that allow their researchers and scientists to share it efficiently. NVIDIA Base Command Platform provides the easiest way for your researchers and scientists to share data, models, results, and AI compute power across the organization.

## Integrated Monitoring and Reporting Dashboards

Al projects are multi-faceted, very iterative in nature, and require constant fine-tuning. With NVIDIA Base Command Platform, your IT staff and Al practitioners can analyze and optimize Al resources with features like built-in telemetry, and your business leaders can access reporting and showback capabilities, so you can get the most from your Al infrastructure, set project priorities, and plan for future success by correctly forecasting compute capacity needs.

## The AI Training Platform NVIDIA Uses

Base Command Platform delivers continuous innovations. Because NVIDIA's own engineers and researchers rely on it every day, NVIDIA provides ongoing enhancements, enabling your AI practitioners to experience the same efficiency and reliability as our own.

## Choose The Compute Environment That's Right for You

The full power of NVIDIA Base Command Platform is realized by executing AI training workloads on the best-of-breed, NVIDIA DGX infrastructure. Choose what best fits your IT environment, from hosted services to on-premises deployments. Try Base Command Platform with DGX Cloud, or with your own DGX SuperPOD deployed in your data center or colocation facility.

#### **Get Base Command Platform**

#### **DGX Infrastructure:**

- > NVIDIA DGX Cloud
- > NVIDIA DGX SuperPOD

## Ready to Get Started?

To learn more about NVIDIA Base Command Platform, visit: nvidia.com/base-command-platform

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