

NVIDIA FLEET COMMAND

Securely deploy and manage AI at the edge



Al at the edge delivers powerful, real-time insights to organizations looking to drive actionable results at lower costs. With lower latency than cloud platforms, it's quickly becoming the go-to Al infrastructure for cutting-edge organizations. But securely deploying, managing, and scaling Al across the edge is complex and challenging. NVIDIA Fleet Command[™] combines the security and real-time processing capabilities of edge computing with the remote management and ease of software as a service (SaaS).

Organizations are deploying edge AI to address the limitations of cloud-only platforms like latency and cost of scaling. However, edge computing presents its own set of challenges. For enterprises gathering insights from many separate locations, installing hardware, deploying software, and maintaining upgrades at each individual location is both time consuming and costly. Additionally, the skilled IT personnel needed to execute these tasks, along with providing on-call support, can be difficult to arrange for numerous remote or geographically dispersed locations.

NVIDIA Fleet Command is a cloud service that securely deploys, manages, and scales AI applications across distributed edge infrastructure. Purpose-built for AI, Fleet Command is a turnkey solution for AI lifecycle management. It removes the complexity of building and maintaining an edge software platform by offering streamlined deployments, over-the-air updates, and detailed monitoring capabilities. Layered security protocols protect intellectual property and application insights from cloud to edge. Constant monitoring for performance, irregularities, and security incidents shift the burden off organizations to build and operate these features.

Simplified Edge AI

Fleet Command is a cloud platform for orchestrating AI applications at the edge, offering a turnkey solution to streamline deployments with minimal infrastructure footprint. It removes the complexity of do-it-yourself building, operating, and maintaining an edge software platform, offering administrators an "IT free" tested and optimized solution that allows them move from software installation to edge deployment in just a few clicks. Powerful NVIDIA-Certified Systems[™] deployed at edge locations are capable of running any application—even the most compute-intensive ones—minimizing the infrastructure needed to successfully deploy and manage AI at the edge.



NVIDIA Fleet Command simplifies deployments and centralizes management of edge AI through a cloud service. After a system is installed at a physical location once, the end-to-end lifecycle can be managed by Fleet Command, making it easy to provision, update, and monitor AI at remote locations. From retailers building intelligent stores, to hospitals using AI to improve patient care, to manufacturers looking to optimize operations, Fleet Command makes managing AI at the edge easy.

Centralized, remote management of AI deployments enables over-the-air software updates, remote debugging, and system monitoring, as well as other features such as self-healing systems. These remote management features make maintenance and upkeep easier and AI more accessible and practical for locations that are difficult to access or far from headquarters—which delivers faster, more comprehensive insights that can drive real-time decisions.

Streamlined Deployment

Combining the ease of SaaS and the benefits of edge computing, Fleet Command saves organizations weeks of planning and manually implementing edge infrastructure by centralizing the orchestration of AI applications across devices at the edge. One-touch provisioning turns NVIDIA-Certified Systems into AI appliances and eliminates the need for skilled IT workers to travel to edge locations to install servers. A simplified interface allows administrators of any skill level to deploy and scale custom applications to any number of locations. And a repository of AI models and containers jumpstarts new deployments, generating valuable insights faster.

AI Lifecycle Management

Fleet Command simplifies AI lifecycle management with features designed specifically for ease of use. Administrators can update applications over the air, easily scale additional applications, and monitor AI health from system to applications. A resilient software platform reduces application downtime by automatically restarting applications and migrating workloads at the onset of problems. Detailed monitoring dashboards and extensive automated processes make managing edge AI easy.

Layered Security

From cloud to edge, Fleet Command offers leading security protocols to ensure application data is always protected. Applications in Fleet Command can be deployed from a secure private registry which isolates intellectual property to protect it from unauthorized users. Secure and measured boot certify against tampering, and encryption in transit and at rest safeguards valuable data. Fleet Command is a managed platform, providing constant monitoring for operational and security irregularities, shifting the burden off organizations to build and operate these features.

Power Change with Edge AI

NVIDIA Fleet Command makes it easy to manage, scale, and keep your entire AI deployment running smoothly. From dozens of edge devices to millions, IT admins can take secure, remote control of the fleet, simplifying deployment and powering resilient AI across a network in mere minutes.



