PaletteAI
SECURE

# PaletteAI Secure

The mission-ready platform to securely design, deploy and manage compliant AI environments at scale.

## The situation

Enterprise infrastructure is undergoing its fastest transformation in decades.

AI has become the defining force reshaping infrastructure, software ecosystems, and applications — all at once.

As organizations rush to harness its potential, the stakes are even higher for government and highly regulated industries, where security, compliance, and data integrity are paramount. The rapid adoption of AI introduces new risks, from data exposure to model tampering, making trusted, standards-based protection like FIPS 140-3 encryption essential from the start.

To maintain competitive advantage, enterprises are racing to build AI-ready infrastructure, taking advantage of exponential advances in GPU performance and new technologies like DPUs, which have emerged as critical enablers of Zero-Trust computing, secure data, and workload isolation.

Riding this AI wave is easier said than done. ROI is hard to come by. Overprovisioning and underutilization mean scarce, valuable resources are sitting idle, resulting in millions in wasted enterprise spend. In regulated industries, unmanaged AI growth can introduce risks around operational security.

Friction between teams is also growing.

AI and ML teams of data scientists and developers push for innovation, speed, and access to the latest tools. The AI application ecosystem is already 2.5× larger than the cloud-native ecosystem and evolving rapidly.

At the same time, platform teams demand control, compliance, and cost efficiency, trying to bring order to chaos, but they struggle to manage the sprawl of disconnected environments and the rise of “shadow AI” which often operates outside approved governance frameworks.

What’s the answer?

Enterprises need a secure, unified platform that bridges these competing needs: a solution that provides freedom and flexibility without sacrificing governance, FIPS-140-3-grade security, or ROI.

Spectro Cloud

# The solution

With PaletteAI Secure, enterprises can build repeatable, compliant, and trusted AI workloads that accelerate innovation while maintaining operational discipline and meeting stringent security standards such as FIPS 140–3.

PaletteAI Secure gives platform teams and AI practitioners a shared environment to design, deploy, and manage AI workloads from the data center to the edge with speed, confidence, and verified protection.

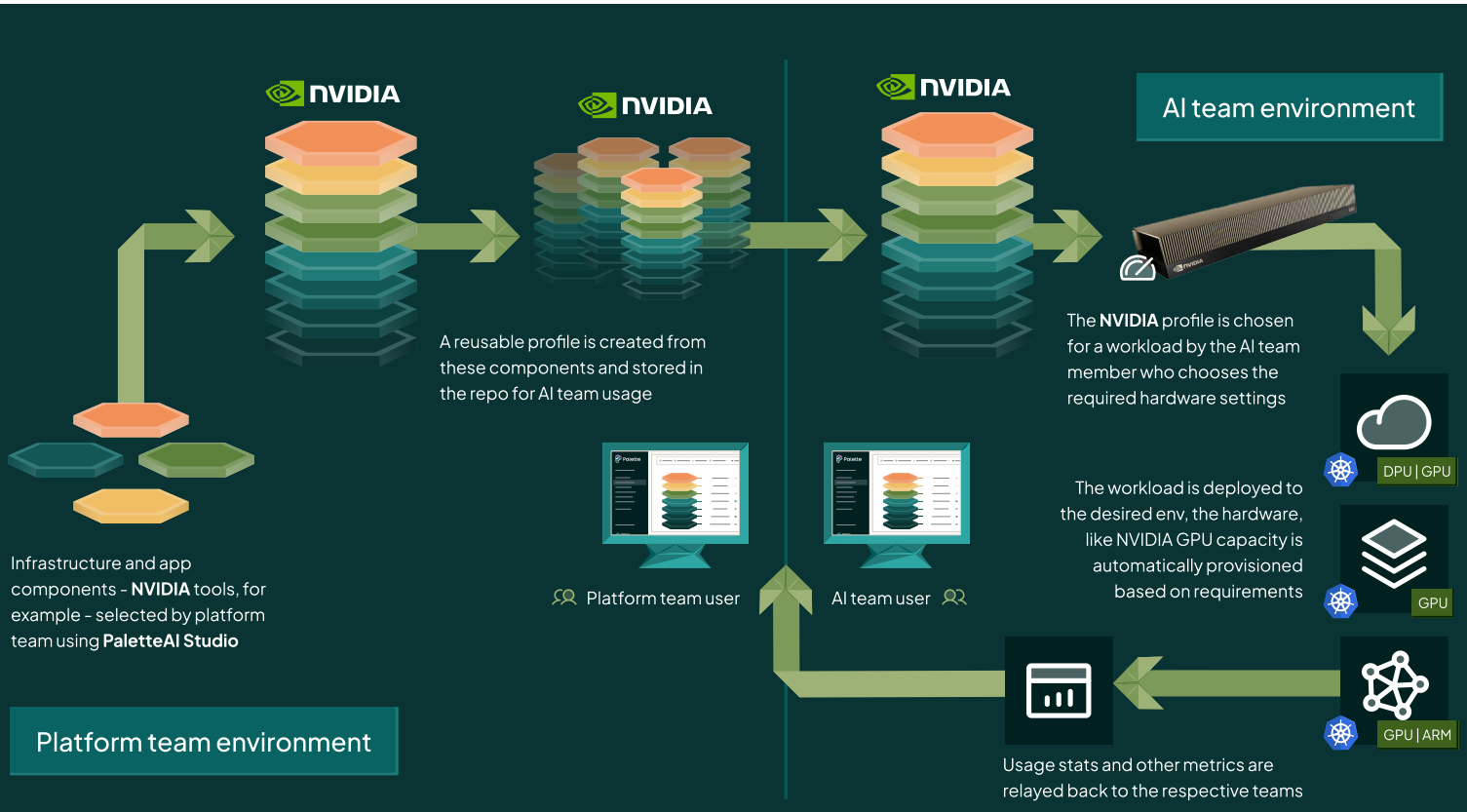
It includes distinct interfaces for platform teams and practitioners. Platform teams make available secure, compliant cluster templates in PaletteAI Secure for AI teams to use. These clusters are built on standardized reference designs from NVIDIA and include all the essential infrastructure layers: operating system, Kubernetes, networking, and storage, providing a consistent and reliable foundation for AI workloads.

Platform teams also curate workload profiles: preconfigured AI and ML applications enhanced with corporate IT guardrails and security policies validated for regulated environments. Practitioners can then easily customize and deploy these workloads on the available clusters, accelerating innovation while maintaining compliance, observability, and operational consistency.

PaletteAI Secure also supports the deployment of secure NVAIE-powered AI factories, enabling enterprises to bring NVIDIA's AI Factory vision to life at scale while adhering to strict data protection and zero-trust requirements.

With native integration across the NVIDIA AI Enterprise (NVAIE) suite, including NeMo, NIM, ClearML, and Run:AI, PaletteAI Secure simplifies the rollout and management of complete AI factory environments, unifying NVIDIA Blackwell GPUs and BlueField DPU automation with standardized, repeatable stacks across data centers, clouds, and the edge.

In short, platform teams can design guardrailed, FIPS-compliant templates and policies, while AI teams can deploy freely within approved and secure boundaries.



# How it works

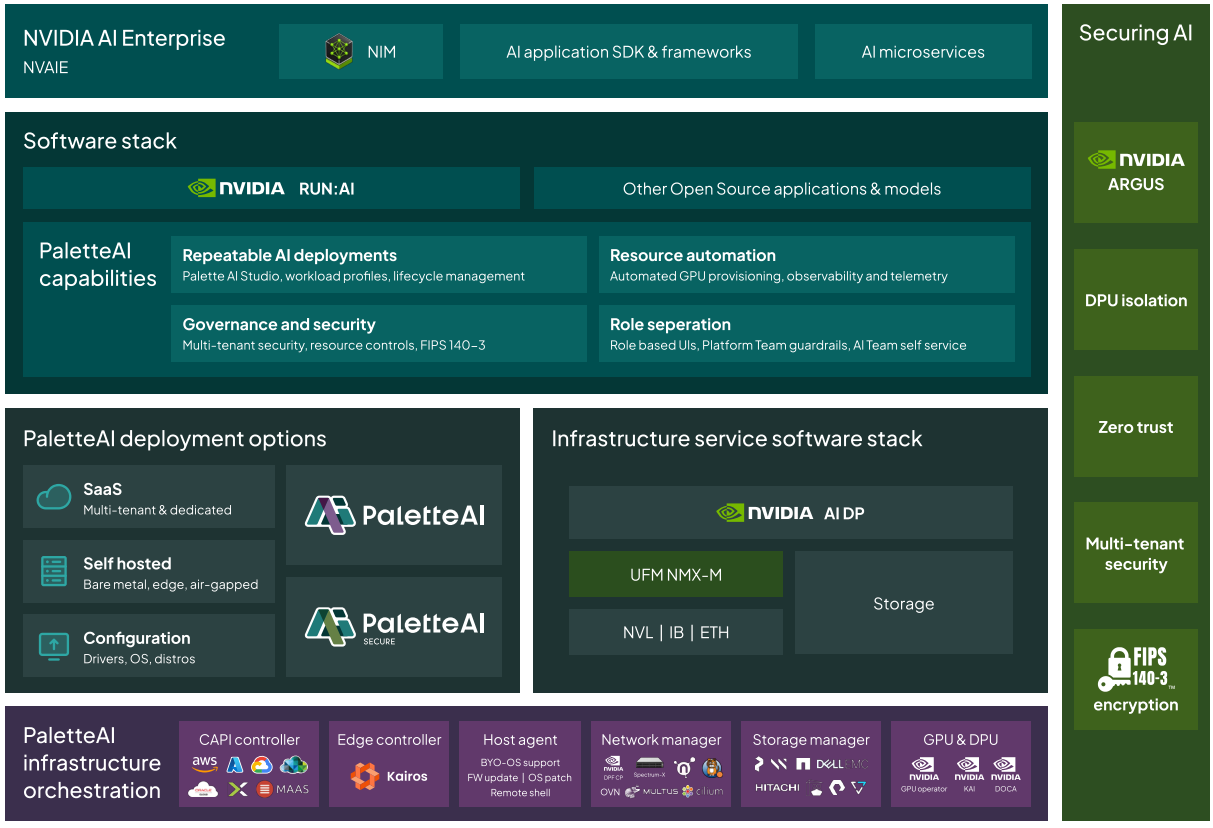
PaletteAI Secure brings together platform and practitioner workflows into a unified system for building, deploying, and managing secure and compliant AI environments.

Platform teams can define hardened workload templates that span the full stack, from FIPS 140-3–validated operating systems and Kubernetes distributions to secure storage and networking, combining these layers with trusted AI and ML tools to create ready-to-deploy workloads. Practitioners can then easily customize and launch these templates wherever they are needed, maintaining compliance and performance across environments.

PaletteAI Secure provides a complete operational model that connects design, governance, and execution, giving enterprises a clear path from AI concept to production in regulated and security-sensitive settings.

Its core capabilities create a seamless flow: platform teams design, AI teams deploy, PaletteAI Secure automates, and organizations scale with confidence and verified protection.

- **FIPS 140-3 compliance:** Every layer, from the operating system to networking and AI workloads, uses FIPS-validated encryption and adheres to strict security and auditing requirements essential for government and regulated industries.
- **Intelligent efficiency:** Cost and resource optimization are built in, with policy-based optimization that maximizes performance while maintaining compliance boundaries.
- **PaletteAI Studio:** A secure design environment that lets platform teams define and publish full AI and ML stacks with consistent pre-approved NVIDIA components such as NeMo, NIM, and DOCA.
- **Workload blueprints:** Template-driven deployments define the complete stack from hardened infrastructure to AI applications.
- **Role separation:** Platform teams set guardrails, security policies, and cost controls for AI teams to consume.
- **Lifecycle management:** Provisioning, scaling, monitoring, and updates are automated and policy-driven across environments.
- **Unified governance:** observability tools provide centralized visibility and compliance controls across SaaS, self-hosted, and air-gapped deployments, giving enterprises confidence in every operation.



# Why choose PaletteAI Secure?

When you choose Spectro Cloud and PaletteAI Secure, you're selecting a best-in-class solution that delivers both speed and control enabling innovation at scale with the security, compliance, and trust that regulated industries demand. We offer:

- **Accelerated ROI:** eliminating idle GPU spend, right-sizing infrastructure, and shortening pilot-to-production timelines.
- **Freedom of choice:** deploy across clouds, edge, and data center with hardened infrastructure offerings and no vendor lock-in.
- **Operational efficiency:** standardized, automated workflows and reusable blueprints reduce manual toil and human error.
- **Enterprise governance and trust:** built-in policy enforcement, auditability, and zero-trust DPU-backed security ensure consistent compliance and verified protection at scale.
- **NVIDIA-validated architecture:** PaletteAI Secure is built on NVIDIA AI Enterprise (NVAIE), supporting the latest Blackwell GPUs, Grace CPUs, BlueField DPUs, and Spectrum-X networking.
- **The fast path to NVIDIA's AI Factory:** supporting evolving AI frameworks such as NIM, NeMo, ClearML, and Run:AI.
- **Strong industry partnerships:** we work with the best — from NVIDIA to HPE, Supermicro, WWT, WEKA, and other leaders in the AI ecosystem.
- **World-class support:** we back every PaletteAI Secure customer with global 24×7 support across your entire software and infrastructure stack.

Trusted by customers who require the most rigorous security and compliance, Spectro Cloud solutions already power mission-critical AI environments across government, defense, and tactical deployments, as well as financial services, healthcare, energy, and oil and gas.

These organizations rely on our FIPS 140-3-compliant architecture, zero-trust access model, and policy-driven automation to meet stringent data protection and operational requirements without compromising agility.

## Start your journey with PaletteAI Secure

Visit **palette-ai.com** to learn more about PaletteAI Secure and arrange a live, hands-on demo tailored to your organization and use case.

Spectro Cloud