

High-Performance Computing at Scale— Powered by Padova and NVIDIA

Purpose-built systems designed to perform complex computational tasks at speed for CFD / AI applications

Why Padova and NVIDIA

Workloads are growing in complexity and urgency. From computational fluid dynamics (CFD) to large-scale modeling environments, federal teams need infrastructure they can rely on to process large data workloads with precision.

Padova and NVIDIA bring together two critical capabilities: proven system design and industry-leading GPU performance. Each solution is tailored to mission-specific requirements, enabling government programs to confidently deploy high-throughput computing platforms.

- **Tailored system architecture** – Padova engineers architect each deployment around mission-specific constraints, optimizing for power, size, cooling, and performance
- **Consistent performance under pressure** – NVIDIA GPUs provide low-latency interconnects and fast memory bandwidth for data-heavy operations
- **Operational trust and security** – Systems are built for secure, classified, and mission-critical deployments with U.S.-based engineering and vetted supply chains
- **Proven in the field** – These jointly engineered systems are already supporting high-impact programs across aerospace

This partnership is grounded in a shared commitment to performance, reliability, and mission success, making Padova + NVIDIA a strategic choice for modern computing.

A trusted approach to mission-critical infrastructure

Padova, an Elite NVIDIA Partner, builds customer-tailored GPU-powered systems to support high-performance computing (HPC) for national defense. As a trusted partner of prime contractors and federal systems integrators, Padova delivers turnkey Technology infrastructures optimized for simulation, modeling, and data-intensive workloads.

By integrating NVIDIA's industry-leading accelerators, Padova delivers cohesive, scalable systems that ensure speed, repeatability, and reliability—essential performance for federal programs operating under tight constraints and high expectations.

GPUs at scale for high performance computing

Workloads continue to evolve, becoming more data-intensive, time-sensitive, and reliant on computational precision. Federal system integrators and contractors need infrastructure they can trust to perform under pressure. The combined strengths of Padova and NVIDIA address these needs head-on, delivering high-performance systems designed specifically for modeling, simulation, and AI-enabling workloads.

Padova brings deep experience in building mission-critical technology infrastructure, combined with a longstanding commitment to performance and reliability. As an Elite NVIDIA Partner, Padova integrates NVIDIA's high-performing GPUs and low-latency interconnect technologies into every solution. This partnership ensures that each system is purpose-built to meet the speed, accuracy, and consistency required across the landscape.

The result? A dependable, scalable platform that enables next-generation compute environments. Whether deployed in secure or classified environments, Padova + NVIDIA systems are engineered to meet the operational standards of programs. This includes:

- Supporting real-time modeling
- Accelerating simulation cycles
- Delivering the compute power to process data-heavy tasks
- Enabling consistent performance in secure and classified environments
- Supporting parallel workloads to reduce time-to-completion for complex simulations

Built for Federal Systems Integrators

Padova has decades of experience working within the regulatory, logistical, and operational needs of procurement.

U.S.-based engineering and an integrated supply chain support secure acquisition workflows

Systems align with compliance frameworks and acquisition cycles common to federal programs

From design to delivery, Padova meets the unique constraints of mission environments

Systems are delivered as ready-to-deploy, mission-aligned infrastructure, helping developers move quickly from concept to execution with minimal friction.

Accelerate simulation and modeling workloads

Mission readiness depends on speed to insight. Padova + NVIDIA systems are purpose-built to meet the demand for high-fidelity simulations across air, land, sea, and space domains.

- Systems deliver faster results without compromising reliability
- Integrated GPU performance supports real-time processing, even in resource-constrained environments
- Workloads are processed consistently and accurately, so teams can focus on outcomes, not infrastructure

Whether you're prototyping next-generation systems or supporting ongoing operational programs, Padova's infrastructure equips you to execute with precision.

Mission-aligned infrastructure. Industry-proven performance.

Padova and NVIDIA combine deep technical expertise with a strong history of successful federal deployments. Together, we help teams scale compute capabilities, meet strict performance benchmarks, and stay mission-ready, today and tomorrow.

Let's build a technical infrastructure that's ready for what comes next.

Connect with our team: [padovatech.com/about/contact](https://www.padovatech.com/about/contact)



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