

Simplifying GenAl development

Dell Pro Max and NVIDIA AI Workbench

Get Started



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GenAI development challenges

From setting up GPUs and Jupyter notebooks to moving workloads to managing workflows, the everyday challenges of GenAI development can have a negative impact on project progress. The required time and technical expertise can seem daunting for data scientists, engineers, and developers. Fortunately, the right technology partners and tools can help address obstacles and accelerate development.

Common GenAl obstacles

Complex GPU setup

Limited workload portability

Time-consuming workflow management

The solution: NVIDIA AI Workbench on Dell Pro Max PCs

With NVIDIA AI Workbench on Dell Pro Max high-performance PCs, expert and novice developers can quickly and easily create, test, and customize GenAI projects locally, then scale them up or down to any platform.* Do it all on workstations with the high performance required to process large data sets and complex neural networks.

NVIDIA AI Workbench



Streamline setup

Start coding and customizing models faster with automated GPU system setup/configuration

Run projects anywhere

Develop locally and move workloads easily to run on the best platform for cost, speed, and scale

Accelerate AI workflows

Improve productivity with automation for container and version management

Dell Pro Max PCs



Local GenAl development

Customize and develop GenAI models locally on GPU-accelerated workstations

Scalable

Scale up from one to four NVIDIA RTX™ GPUs

Al-ready

Designed and configured to meet your Al workload needs

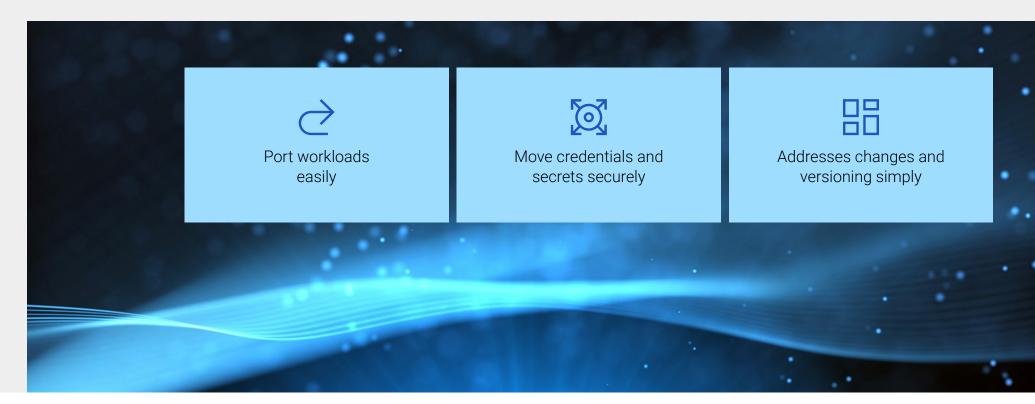
Streamline hardware setup

Productivity suffers when developers have to deal with the complex process of setting up a GPU machine for deep learning and GenAI work. NVIDIA AI Workbench eliminates common setup issues such as OS/driver mismatches and CUDA driver and firmware incompatibilities. Developers can start coding quickly with automated software and driver installation and configuration. NVIDIA AI Workbench also helps ensure containers are configured for optimal GPU efficiency based on your workload.

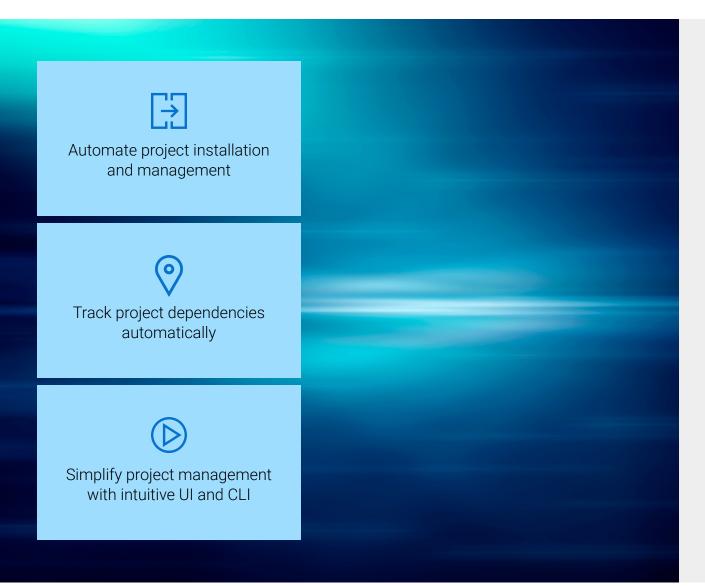


Run projects anywhere

NVIDIA AI Workbench gives developers the freedom to create, customize, and collaborate easily with seamless workload portability. Move NVIDIA AI Workbench projects to the best GPU-enabled system for cost, speed, and scale securely. Do it all without the time and technical skill typically required. Environment, data, model, and location changes and versioning can be addressed with ease while NVIDIA AI Workbench securely handles the authentication and secrets needed for users to access different resources.



Accelerate AI workflows



With NVIDIA AI Workbench, novice and expert developers can quickly identify, install, and manage elements of AI and deep-learning projects. Give productivity a boost with the automated installation of multiple project resources. Easily track project dependencies for a given model and GPU so developers can focus on execution. NVIDIA AI Workbench simplifies workflow management with an intuitive user interface and powerful command-line interface.

See workflow examples on GitHub:

- → <u>Hybrid RAG Project</u>
- → <u>NIM Anywhere Project</u>
- → <u>Stable Diffusion Project</u>
- ⇒ Fine-Tuning Project

Success story: Invoke Enterprise

Invoke used an NVIDIA AI Workbench project to enable companies to train AI image models securely and collaboratively. Invoke deployed both Invoke Enterprise and NVIDIA AI Workbench on-premises, running AI compute locally on <u>Dell Precision 7780 mobile workstations</u> powered by NVIDIA RTX[™] 5000 Ada Generation GPUs.

"Deploying generative AI models on Dell Precision AI-ready workstations, particularly the Precision 7780, has set a new standard for performance. Older hardware can struggle with the demands of AI compute, but running Invoke on the 7780 is seamless, powerful, and supports all of our most advanced AI workflows."

– Kent Keirsey, Founder and CEO, Invoke







NVIDIA AI Workbench and NVIDIA AI Enterprise

Combine NVIDIA AI Workbench with NVIDIA AI Enterprise to access an end-to-end, cloud-native software platform that accelerates data science pipelines and streamlines development and deployment of production-grade AI applications. NVIDIA AI Workbench is free and comes with enterprise support for NVIDIA AI Enterprise license holders, including security features, NIM, and production branches.



Next steps and resources



Learn more

- Ownload AI Workbench for free
- O Discover the Dell Pro Max portfolio
- ⊖ Contact us to purchase NVIDIA AI Enterprise through Dell
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- Learn more about Dell Al Factory with NVIDIA
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- → Decoding How NVIDIA AI Workbench Powers App Development blog
- Optimize AI Model Performance and Maintain Data Privacy with Hybrid RAG blog
- Develop and Deploy Scalable Generative AI Models Seamlessly with NVIDIA AI Workbench blog

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*Previously referred to as Dell Precision workstations

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