RTX Brochure

Leading-Edge Solutions for Professional Workflows

New technologies improve productivity and accelerate AI, graphics, rendering, and compute workloads.

Überreicht durch:
systemworkx
IT-Lösungen & 3D Produktivität erleben
www.systemworkx.de | info@systemworkx.de | Fon: 089 898 678 0 oder 0821 998 648 1

Reinventing Professional Workflows With Advanced Technology

We're experiencing a new era of work for professionals driven by the rapid advancement and integration of artificial intelligence (AI). Visual computing and AI workflows are growing in complexity, working with large datasets and higher-fidelity and higher-resolution images and models. Photorealistic rendering is required to evaluate concepts and designs, create realistic prototypes for study and refinement, or gain a greater understanding of data by seeing it as it appears in the real world. Multi-application workflows are common, with users moving data between applications to complete their work. Generative AI use cases have rapidly expanded, and AI has been infused into many popular applications. The need for efficient, effective remote collaboration has never been greater, driving the requirement for employees to leverage AI tools to do any work from anywhere.

These changes are extremely beneficial to enterprises around the globe, driving unprecedented levels of productivity while reducing time to market and time to decision. Implementing these new work paradigms doesn't come without challenges. Complex software workflows, often involving multiple algorithms, can be difficult to manage and require more powerful computing hardware to drive the increased computing loads. Advanced technologies such as ray tracing, AI, data analytics, simulation, and extended reality continue to be adopted at an incredible pace, challenging existing IT infrastructure and hardware.

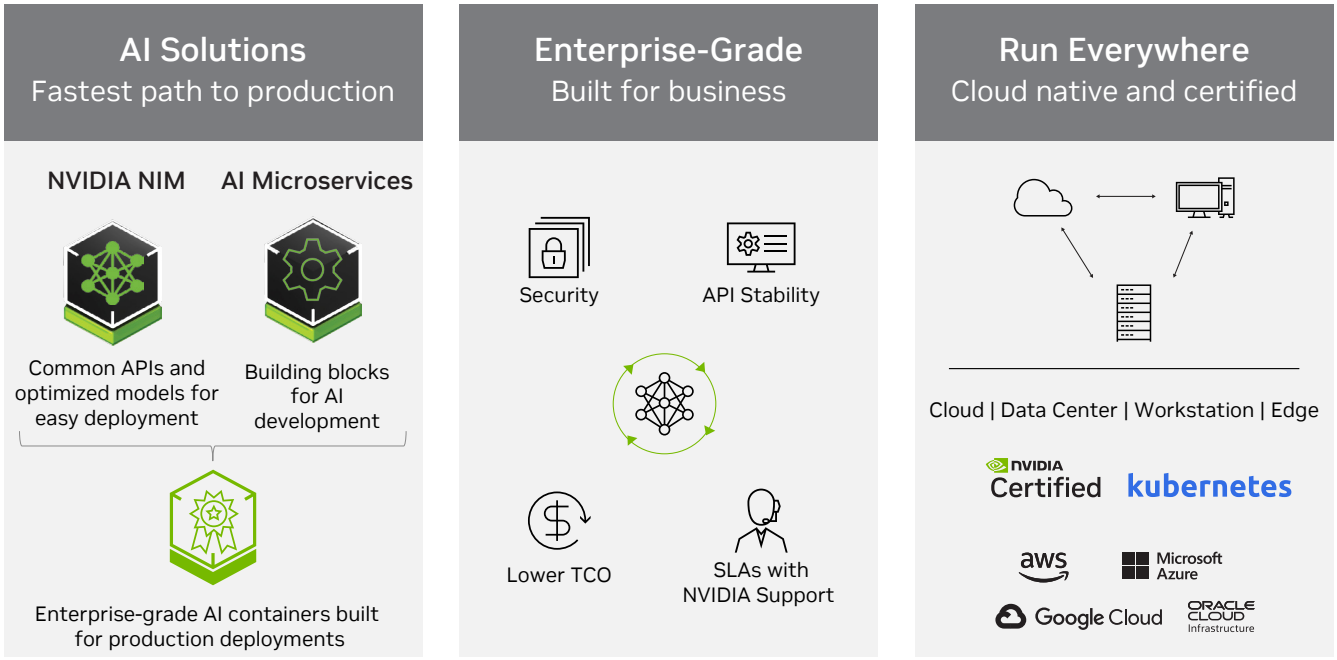
An enterprise-level AI-ready computing platform is key to meeting the needs of today's business environment. Workers must be equipped with AI tools and capabilities to do any work anywhere, taking advantage of the latest technologies that provide the competitive edge demanded in today's complex and rapidly changing world.

NVIDIA RTX: The World's Preeminent Accelerated Computing Platform

NVIDIA solutions have been the leading enterprise visual computing choice for over twenty years. Millions of professionals choose NVIDIA to power their AI and visualization workloads every day.

NVIDIA continues to be a driving force across industries with the NVIDIA RTX™ platform, a full-stack accelerated computing platform purpose-built for generative AI and visualization workloads. The latest generation of NVIDIA RTX GPUs and NVIDIA software technologies combine to deliver real-time ray tracing, AI, compute, simulation, and advanced graphics. Enterprises across the globe rely on the RTX platform to solve today's biggest challenges; create the next cutting-edge products; design smart, efficient, and sustainable buildings; develop new life-saving medical procedures; and help us better understand the world and the universe around us.

Working with leading hardware, software, and OEM system partners, NVIDIA continues to extend the reach of the RTX platform to tackle the most demanding AI and visual computing workflows in the form factors users need. The NVIDIA RTX platform is also available from the data center and cloud service providers. NVIDIA-Certified Systems™ and NVIDIA RTX Virtual Workstation Software (vWS) enables professionals to access the power of the NVIDIA RTX platform from everywhere.



With NVIDIA AI Enterprise—an end-to-end, cloud-native software platform—enterprises can accelerate data science pipelines and streamline development and deployment of production-grade copilots and other generative AI applications. Easy-to-use microservices provide optimized model performance with enterprise-grade security, support, and stability to ensure a smooth transition from prototype to production.

Professional Laptops

Cloud

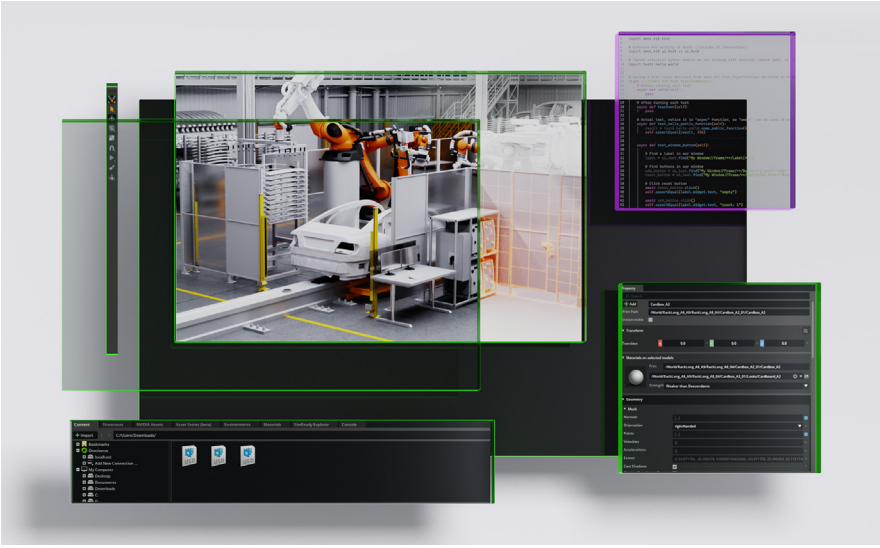
Virtual Workspaces

Desktop Workstations

Embedded Solutions

NVIDIA Certified Solutions

With NVIDIA Omniverse™ Enterprise—a platform of APIs, services, and software development kits (SDKs)—enterprises can take advantage of the RTX and OpenUSD to connect their 3D pipelines and develop advanced, generative AI-enabled 3D tools and applications for industrial digitalization. This allows them to speed up product development, deliver more immersive customer experiences, and unlock breakthrough operational efficiencies.



With the NVIDIA RTX platform, users can choose from a vast array of GPU-accelerated applications provided by a global ecosystem of NVIDIA software partners. These professional applications take advantage of NVIDIA AI, ray tracing, compute, and graphics technologies to provide the performance and capabilities required for demanding professional workflows across industries. This close partnership between NVIDIA and our hardware and software partners extends beyond technology integration to include testing, support, and certification.[1]

Built for Professionals

The NVIDIA RTX platform is built for professionals, providing the features, performance, stability, and reliability required for these demanding workflows. The RTX platform provides exclusive technologies and tools designed specifically for enterprise deployments. These include:

Artificial Intelligence

AI demands unprecedented computational power and specialized hardware, often leading to bottlenecks in the development, training, and deployment of AI applications. NVIDIA RTX is revolutionizing AI workflows with its cutting-edge GPU architecture, specialized AI accelerators, and optimized software libraries. Along with NVIDIA AI Enterprise, enterprises can tackle complex machine learning tasks with ease. This enables enterprises to significantly reduce latency and enhance overall system throughput for AI model development and deployment at scale.

1. Certain ISVs conduct formal certifications for professional application software. Please consult with your software vendor for specifics on software and hardware certification.

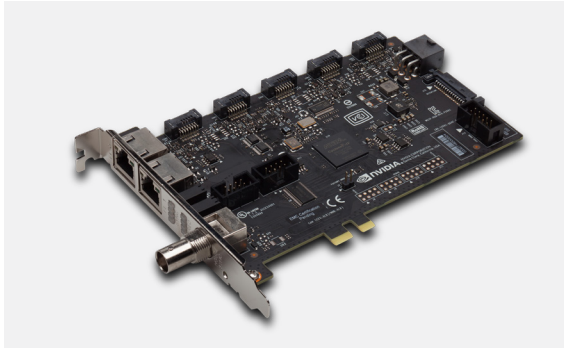
Multi-Display Technology

Professional displays have moved beyond a single desktop monitor. Multiple 4K and even 8K displays are becoming common. Video walls, CAVE environments, and LED volumes for virtual production are being deployed by businesses around the globe. The NVIDIA RTX platform provides NVIDIA Mosaic for massive multi-display deployments with NVIDIA Warp and Blend software tools for projection and curved displays.

Courtesy of ARRI

Video Synchronization

Advanced enterprise visualization solutions—such as flight or vehicle simulation or live video broadcast deployments—require precise video timing across multiple GPUs or systems. The NVIDIA RTX platform with NVIDIA® Quadro® Sync hardware enables multiple GPUs within a single workstation, server, or multiple network-connected workstations and servers, to synchronize GPU display output to each other or external timing signals for artifact-free displays.

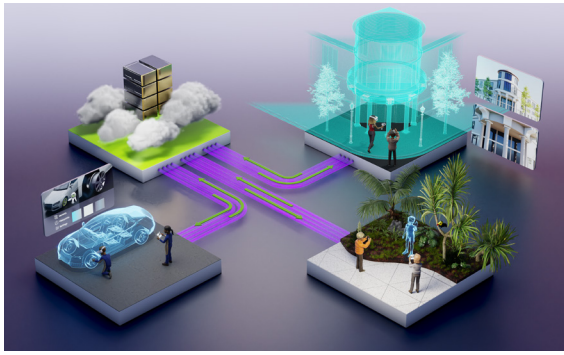


Video Processing

Enterprise workflows, such as video editing, video content distribution, or video analysis, put extreme demands on computing resources. NVIDIA RTX solutions provide workflow-specific capabilities, such as hardware encode and decode engines, which can process multiple simultaneous video streams, and NVIDIA GPUDirect® technology that enables data transfer directly to and from RTX GPUs, reducing latency.

Extended Reality (XR)

As enterprise use cases for virtual reality (VR) and augmented reality (AR) continue to grow, the NVIDIA RTX platform continues to drive these immersive workflows. With NVIDIA CloudXR™, enterprises can stream their VR and AR content across 5G and Wi-Fi networks with NVIDIA RTX.

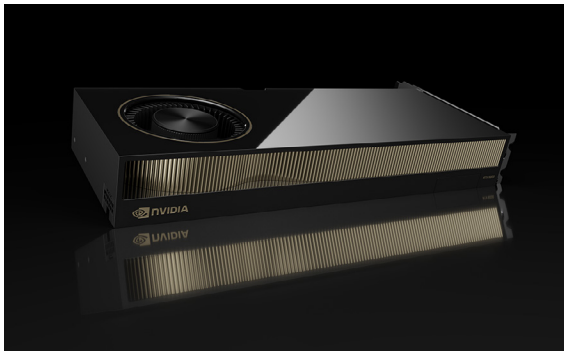


Enhanced Productivity

The need to maximize productivity has never been greater. The NVIDIA RTX platform provides tools to help workers boost their output. NVIDIA RTX Experience™ is a full suite of productivity tools, including up to 8k desktop recording capabilities,, automatic alerts for driver updates, and gaming features. NVIDIA RTX Desktop Manager software provides a full suite of display management tools, including flexible window snapping, user profiles, window management, and hotkey support.

Enterprise Deployment

Managing large-scale computing hardware deployments can be a challenge. The NVIDIA RTX platform provides a comprehensive set of enterprise management tools and enterprise-level drivers. NVIDIA RTX Enterprise Drivers are tuned, tested, and certified for 100+ professional applications.



Überreicht durch:

systemworkx
IT-Lösungen & 3D Produktivität erleben

www.systemworkx.de | info@systemworkx.de | Fon: 089 898 678 0 oder 0821 998 648 1

Ready to Get Started?

To learn more about NVIDIA RTX solutions, visit: nvidia.com/en-us/design-visualization/rtx/

Contact sales at: nvidia.com/en-us/contact/sales/

© 2024 NVIDIA Corporation and affiliates. All rights reserved. NVIDIA, the NVIDIA logo, NVIDIA-Certified Systems, NVIDIA RTX, RTX Virtual Workstation, NVIDIA AI Enterprise, NVIDIA Omniverse Enterprise, and NVIDIA CloudXR are trademarks and/or registered trademarks of NVIDIA Corporation and affiliates in the U.S. and other countries. Other company and product names may be trademarks of the respective owners with which they are associated. 3354735. SEP24

NVIDIA