



GPU Workstation as a Service

# NVIDIA VIRTUAL GPU AND VMWARE HORIZON END USER COMPUTING PLATFORM

Across the enterprise, there's a growing need for graphics and compute acceleration with fast, secure access from anywhere, on any device. Engineers, designers, and architects are using powerful applications that rely on graphicsintensive datasets and need to be accessed by distributed teams from anywhere. At the same time, business users' requirements are rising. Flexible work as well as modern productivity and collaboration tools are demand a much higher level of graphics than before.

Desktop virtualization untethers users, enabling amazing mobility and productivity. Graphics Processing Units (GPUs) enhance the VDI experience by offloading tasks from the CPU to provide better performance and user experiences. Without a GPU, some accelerated graphics and compute workloads simply won't run in a virtualized environment or, at best, will run with a reduced feature set. GPUs also broaden the applicability of your VDI technology to support use cases that weren't previously viable, and enable a cost-effective, scalable infrastructure that lets you expand virtualization to more users. VMware partners with NVIDIA to deliver best-in-class user experiences on any device. VMware Horizon<sup>®</sup> and NVIDIA<sup>™</sup> virtual GPU solutions for end user computing together provide a full-spectrum approach to enhancing end user experience and Whether it's office productivity applications or professional visualization applications such as Autodesk Maya, IT is empowered to securely deliver feature-rich virtual Windows or Linux desktops and the apps employees need to remain productive, while improving the graphics performance every user expects.

## End User Computing Solutions For:



In collaboration with VMware

## **vm**ware<sup>®</sup>

## NVIDIA Virtual GPUs with VMware Horizon Solutions

## VMware Horizon with NVIDIA vGPU

NVIDIA and VMware deliver an entire end-to-end platform for accelerated end user computing. The NVIDIA Virtual GPU (vGPU) software creates virtual GPUs that enable every virtual machine (VM) to share a physical GPU installed on the server or allocate multiple GPUs to a single VM to power the most demanding workloads. Running on VMware vSphere, users can benefit from live migration, DRS placement, as well as GPU sharing. Because work that was typically done by the CPU is offloaded to the GPU, the user has a much better experience, and demanding engineering and creative applications can be supported in a virtualized and cloud environment.

## Work From Anywhere, Enabled

VMware Horizon, accelerated by NVIDIA vGPUs, securely delivers virtual apps and desktops, allowing users to seamlessly transition between the office and home.With NVIDIA vPC combined with VMware Horizon, remote workers benefit from animproved VDI experience with office applications, web browsers, high-definition video and the Windows operating system, all delivered securely from the data center. Using NVIDIA vWS and VMware Horizon, millions of creative and technical professionals can access the most demanding applications from whatever device they use, work from anywhere, and tackle larger datasets all while meeting the need for greater security.

## **NVIDIA + VMWARE END USER COMPUTING PLATFORM**



The NVIDIA virtual GPU solution is comprised of data center GPUs and software licensing components. Choose from three software editions: NVIDIA Virtual Applications (vApps) and Virtual PC (vPC) for standard office workers, and NVIDIA RTX Virtual Workstation (vWS) for professional graphics users. The NVIDIA RTX vWS includes a certified RTX driver to ensure that users get the same features expected of a physical workstation, including anti-aliasing, realistic models, enhanced application performance, and application certification.realistic models, enhanced application performance, and application certification.



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VMware and NVIDIA collaborate closely during product development to assure stability and reliability of the platform. As part of a joint Certification Program, NVIDIA virtual GPU solutions are thoroughly tested to ensure that customers get the performance they expect.

#### For more information, visit https://www.nvidia.com/en-us/data-center/virtual-gpu-technology or vmware.com/products/horizon

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## Key Benefits of the NVIDIA Virtual GPU and VMware Solution

#### **Immersive User Experience**

An accelerated virtual desktop experience optimized for modern productivity and collaboration tools with NVIDIA Virtual PC (vPC)

Most efficient, powerful, high-end virtual workstation performance with NVIDIA RTX Virtual Workstation (vWS)

Optimized App virtualization and delivery with NVIDIA Virtual Applications (vApps) and Horizon Apps

Better experience with NVIDIA virtual GPU products and VMware Blast Extreme

### Full Digital Transformation Capability

No barriers and the ability to broaden the applicability of your VDI technology to support more knowledge worker use cases with NVIDIA vPC and VMware Horizon

NVIDIA RTX vWS and VMware Horizon for support of accelerated graphics and compute (NVIDIA CUDA® and OpenCL) workflows to streamline design and computer-aided engineering simulation

## Greater Security For Mission-Critical Data

The ability to confidently enable global collaboration across your workforce knowing that large, mission critical datasets are securely centralized with RTX vWS, VMware Horizon, and VMware Intrinsic Solutions

## Single Platform, Lower Costs

VMware end-to-end platform and Horizon Cloud Control Plane for reduced OpEx and NVIDIA vGPU licenses tailored to the EUC requirements and budget

Integration of NVIDIA virtual GPU performance metrics in VMware vRealize Operations (vROps) to support both RTX vWS and vPC use cases

### Peace of Mind with ISV Certifications

A growing portfolio of certifications with the industry's leading 3D application ISVs with the vWS  $\,$ 

## **OEM Systems Partners**



Also available from Asus, Fujitsu, Hitachi, Huawei, Inspur, Nutanix, Sugon, Tyan, and Quanta. For a complete list of certified hardware, visit www.nvidia.com/buygrid.

