

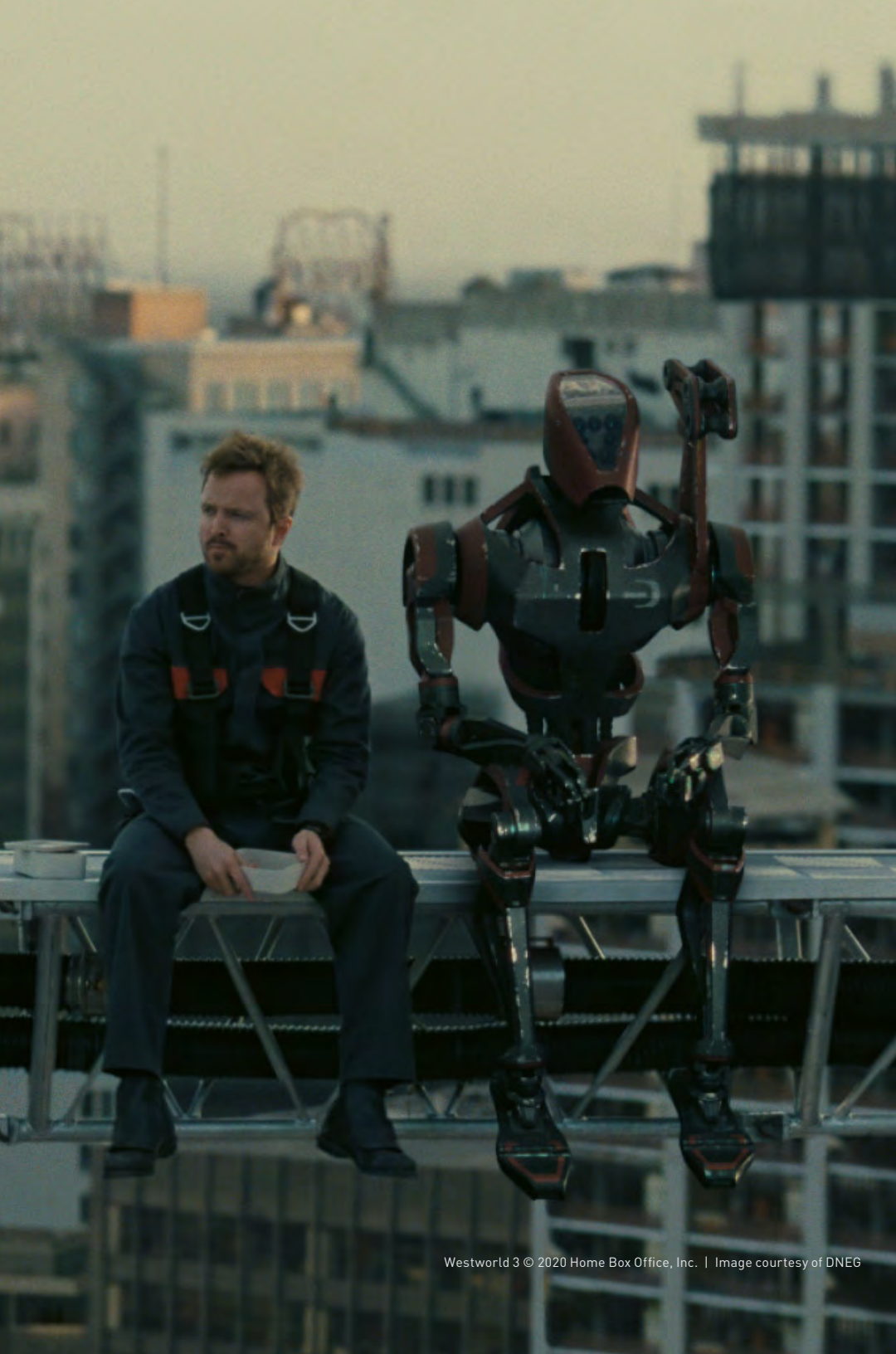
PNY



HYBRID WORK SOLUTIONS

For Media and Entertainment





HYBRID WORK CHALLENGES IN M&E

The demands of the media and entertainment industry are constantly evolving. Artists are challenged to maximize creative iterations in shorter time frames, and studios are hiring globally to get the best talent and keep projects moving forward.

Audiences are expecting high-quality visual effects and animation, and studios are striving to meet tight production deadlines to meet revenue goals. Real-time technologies are opening up new production pipelines for virtual production and virtual art departments.

For mergers, acquisitions, new startups, and remote workforces, companies have to scale their compute resources and quickly set up users to maintain productivity while keeping intellectual property and assets secure.

NVIDIA SOLUTIONS: PERFORMANCE FROM ANYWHERE

NVIDIA technology is used by the world's leading film and television studios to power the most advanced, visually rich feature films and TV shows ever created. Now, studios are tapping into that same power from anywhere. In a globally-distributed workforce, artists are now taking on creative challenges and meeting tight production deadlines while working from home. NVIDIA virtual GPU (vGPU) technology enables increased productivity and a satisfying user experience with superior graphics performance on virtual workstations. Studios can easily onboard new employees in minutes versus days, while securing media assets in the data center or cloud. Artists and designers can speed up the creative process by accessing fully 3D-capable virtual workstations on any device. Studios can also run multiple workloads from a single

infrastructure, spinning up virtual workstations, render nodes, and scaling resources as needed. Professionals can centralize projects in the data center or cloud for greater control, and flexibility with multi-user collaboration using the NVIDIA Omniverse™ platform. Studios who still need access to physical NVIDIA RTX™ and NVIDIA® Quadro RTX™ desktop workstations for specific hardware configurations or data requirements, NVIDIA's hardware and software partners offer a variety of solutions for secure, remote access. Studios that are looking for more flexibility with mobile computing, NVIDIA RTX and Quadro RTX mobile workstations are now capable of desktop-class performance to help artists to stay productive anywhere.



Men In Black © 2019 CTMG. All Rights Reserved. | Image courtesy of DNEG



Altered Carbon 2 © 2020 Netflix | Image courtesy of DNEG

HYBRID WORK WITH NVIDIA: SOLUTIONS OVERVIEW

NVIDIA hybrid work solutions are optimized for designers and artists. From laptops and desktops to workstations, servers, and the cloud, NVIDIA GPUs provide users with enhanced mobility, flexibility, and performance for graphics and visualizations, along with improved security and IT management capabilities.

> NVIDIA RTX Studio Laptops

NVIDIA RTX™ Studio laptops give creators the ability to transform their homes into the studio of their dreams. With support for premiere creative applications and next-generation AI and ray-tracing technology, these laptops deliver next level power and performance in thin, light designs for effortless content creation—whenever and wherever.

> NVIDIA RTX™ Virtual Workstation (vWS)

NVIDIA RTX™ vWS provides artists with GPU-accelerated virtual desktops and applications to enable remote access to 3D modeling, animation, visual effects, and creative finishing software such as Autodesk Maya, 3ds Max, and Flame, Foundry Nuke, Blackmagic Design DaVinci Resolve, Adobe Creative Cloud and NVIDIA Omniverse.

> NVIDIA Virtual PC (vPC) and Virtual Apps (vApps)

Employees can leverage NVIDIA vPC and vApps for general-purpose virtual desktop infrastructure (VDI) running Windows 10 and modern productivity applications. Creators can also stream video and multimedia using interactive training platforms and teleconferencing.



Dark Crystal © 2019 Netflix | Image courtesy of DNEG



Togo © 2019 Disney Enterprises, Inc. All Rights Reserved. | Image courtesy of DNEG



> NVIDIA RTX™ Virtual Workstation (vWS) in the Cloud

With instances of NVIDIA RTX™ Virtual Workstation (vWS) available in the public cloud, artists can leverage the simplicity and flexibility of AWS (Amazon Web Services), Google Cloud, Azure Cloud, and many other cloud providers. Desktop-as-a-service (DaaS) solutions like Windows Virtual Desktop and Horizon Cloud ease manageability.

This helps new users get support quickly in instances to be deprovisioned just as quickly, so companies only need to pay for what they use. With support for NVIDIA GPUs by global cloud service providers, users can run graphics-intensive applications such as modeling, visual effects, and rendering in the cloud.

> NVIDIA EGX Platform

Modern production pipelines involve multiple artist disciplines that require different GPU configurations depending on the task at hand—and studios are often faced with the choice to overprovision some artists or limit others. From rendering and virtualization to content collaboration with NVIDIA Omniverse, accelerate multiple workloads on any device with the NVIDIA® EGX™ Platform.

A highly flexible reference design that combines high-end NVIDIA GPUs with NVIDIA virtual GPU (vGPU) software and high-performance networking, these systems deliver exceptional graphics and compute power, enabling artists to take advantage of high-performance GPUs to increase interactivity and visual quality, while centralizing GPU resources. NVIDIA RTX-accelerated virtual desktops cater to production-specific requirements, leveraging vWS software to make it easy to reallocate GPUs to different artists, whether they're creating content virtually or rendering massive datasets.

HYBRID WORK SUCCESS WITH NVIDIA TECHNOLOGY



Animal Logic

Animal Logic Studios creates visual effects and animations for feature films. Their second studio needed a cost-effective and flexible way to provide users with secondary desktops for Windows applications. The IT team deployed VMs powered by NVIDIA RTX™ Virtual Workstation (vWS) instead of purchasing new \$10,000 workstations. The NVIDIA vGPU-enabled VMs ensure that Animal Logic's artists can access both Linux- and Windows-based applications from a single machine. Flexible training environments can also be set up and broken down in a matter of minutes.



DNEG

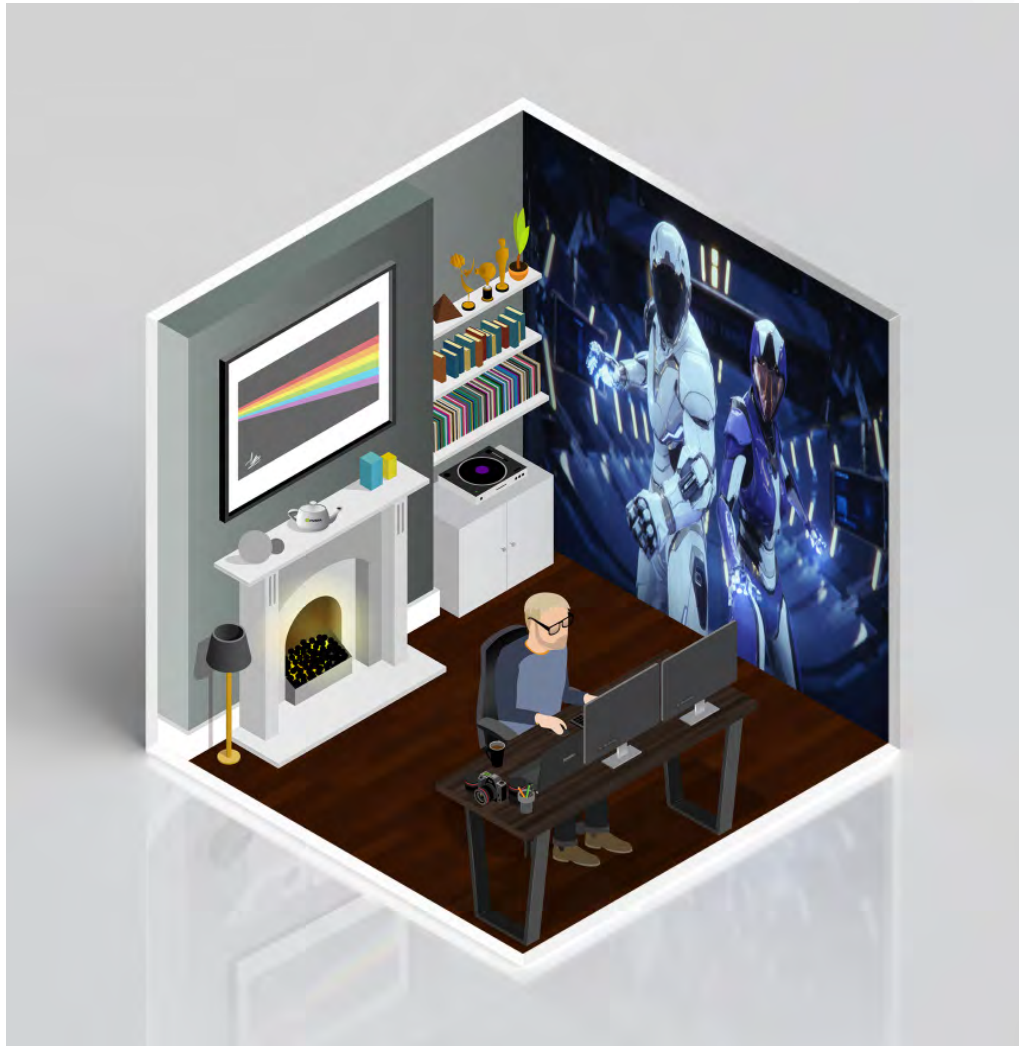
DNEG is behind some of the most advanced and visually rich films and TV programs ever created. They wanted to deploy virtual machines for visual effects artists working at a new Montréal studio. The virtual workstations needed to deliver a great user experience for graphics-intensive 3D applications. DNEG's IT team deployed infrastructure installed with NVIDIA RTX GPUs and powered by NVIDIA RTX™ Virtual Workstation (vWS) software. This enabled artists to access VMs from anywhere and enjoy performance on the same level as physical workstations. DNEG's IT compute resources can easily be scaled according to the needs of artists and projects.



Untold Studios

Untold Studios is an independent creative studio composed of seasoned artists and producers. Their projects range from commercials to the latest season of Netflix's *The Crown*. Being cloud-based has given Untold Studios the ability to move around and work from anywhere. With the AWS G4 instances powered by NVIDIA T4 Tensor Core GPUs, the artists at Untold Studios get all the creative power they need to work remotely with NVIDIA RTX Virtual Workstations.





DO YOUR LIFE'S WORK FROM ANYWHERE WITH NVIDIA

The global shift to remote work has created a lasting impact on the Media & Entertainment industry. Now, hybrid work environments are rising rapidly, and studios are adapting very quickly to gain new operational efficiencies and creative capabilities for their distributed workforce. Studios are further enabling richer remote review and approval sessions with clients, while providing artists with the flexibility to work from anywhere.

In this new normal, where everything is different, NVIDIA technologies help studios make anything possible.

Learn more about NVIDIA's hybrid work solutions at:
www.pny.com/professional/learn-more/gpu-virtualization