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Solution Brief

Transform Media Production with AI-Optimized Workflows

Dell and NVIDIA OVX offer a proven reference architecture that empowers next-gen media production with accelerated creative workflows, combining PowerEdge servers and PowerScale storage with high-performance Solidigm NVMe SSDs

Customer Spotlight:

ORBITAL STUDIOS

"Dell-NVIDIA OVX architecture gave us a plug-and-play powerhouse of a backbone for real-time production. Deployment was easy, integration with our existing pipeline was quick, and the performance gains were noticeable. With our near-zero latency environment running everything from complex scenes in Unreal Engine to 16K video playback, the reliability of our back-end systems is super important. The OVX system means our teams can iterate live, with speed and absolute confidence. It's no exaggeration to say it's transformed how we collaborate "from concept to on-set"- What used to take hours can now happen in real time."

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NVIDIA SOLIDIGM

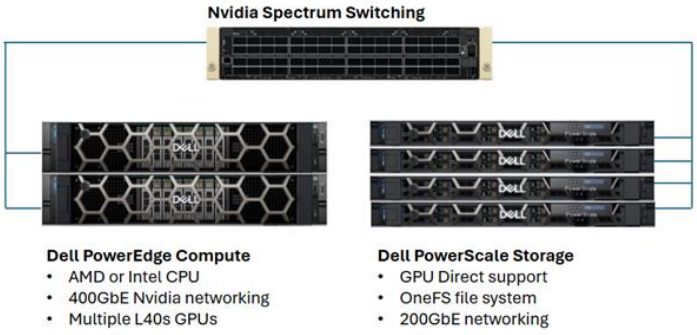
Media companies are turning to AI to revolutionize content creation—from generative video, NeRFs and real-time virtual production. Yet, scaling these innovations from individual use to team-wide adoption brings challenges in performance, collaboration, and infrastructure complexity.

Bringing the solution together:

The Dell + NVIDIA OVX platform delivers a validated reference architecture to power next-gen AI and creative media workflows. Combining Dell PowerEdge R760xa servers, NVIDIA L40 GPUs, and PowerScale storage, it tackles key challenges in scaling AI for content creation, virtual production, and real-time collaboration. Designed for flexibility, scalability, and seamless pipeline integration, OVX provides a future-ready foundation for high-performance, efficient media production.

Key capabilities include:

- Generative AI for 3D asset creation
- Real-time virtual production (ICVFX)
- High-resolution video processing
- Shared AI compute environments



High-Level Configuration:

Compute: Intel-powered Dell PowerEdge R760xa servers with support for multiple NVIDIA L40 GPUs, delivering high-throughput AI workloads.

Storage: Dell PowerScale F210/F710/F910 flash storage with Solidigm NVMe, providing scalable, reliable, high-speed shared access.

Expandability: Modular design allows scale-out of compute, storage, GPUs, and network connectivity, tailored to deployment needs (confirm per-server GPU count and networking standards).

Networking: NVIDIA Spectrum Switching ensures ultra-low latency and high throughput, enabling seamless communication and optimized performance across the infrastructure.

Compatibility: Seamlessly integrates with leading creative applications and AI tools for media workflows.

Dell PowerScale – scalable, flexible, and built for innovation.

Value Proposition

- Scalable AI Journey: From single-user setups to large-scale production teams, the OVX platform grows with your needs.
- Performance Validated: Real-world testing ensures readiness for high-throughput, latency-sensitive creative tasks.
- Simplified Infrastructure: Reduce the number of machines required on-set, streamline workflows, and enable faster scene updates.
- Collaboration Ready: Shared flash storage enables parallel processing and efficient team collaboration.
- Future-Proof: Supports the latest GPU architectures and higher VRAM capacities for evolving AI workloads.

Customer Outcomes

- ✓ Faster iteration and reduced rework in AI-driven content creation
- ✓ Confidence in deploying AI at scale with validated performance
- ✓ Cost savings through infrastructure consolidation
- ✓ Early access to insights and optimizations from Dell's testing

Beyond GenAI: A Platform for All Creative Workloads

While the OVX reference architecture excels in generative AI applications, its flexibility extends far beyond. The platform is equally well-suited for agentic AI workflows, where autonomous systems require real-time responsiveness and adaptive decision-making. It also supports real-time game engine pipelines, enabling seamless integration with tools like Unreal Engine for virtual production and immersive content creation. Additionally, traditional distributed rendering workloads benefit from the architecture's high-throughput compute and scalable storage, making it a versatile foundation for any media production environment—whether you're generating, simulating, or rendering.

About Solidigm

Solidigm, a pioneer in enterprise data storage, leverages decades of product leadership and technical innovation, collaborating with customers to transform their business and propel them into the data-centric future. Our legacy of industry leadership is helping enable AI and more with our robust end-to-end product portfolio for core data centers to the edge. Headquartered in Rancho Cordova, California, Solidigm operates globally as a standalone subsidiary of SK Hynix Inc.

Why Solidigm NVMe SSDs

AI and realtime workloads demand speed, scale, capacity and reliability. Dell PowerScale is powered by Solidigm NVMe, offering ultra-fast throughput, low latency, and industry-leading capacities up to 122TB, ideal for accelerating AI training, inference, and real-time analytics. Their power efficiency and consistent performance make them a smart foundation for scalable, AI-ready storage.

Solidigm launches world's highest capacity PCIe SSD

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