

CUSTOMER SUCCESS STORY | GOULD EVANS

# DESIGNING BETTER SPACES THROUGH PERFORMANCE AND PRODUCTIVITY



Image courtesy of Gould Evans



# GOULD EVANS IMPROVES PERFORMANCE AND ENABLES FLEXIBILITY FOR HUNDREDS OF ARCHITECTURAL DESIGNERS WITH NVIDIA-POWERED DELL EMC VDI SOLUTION



Image courtesy of Gould Evans

## SUMMARY

- > Gould Evans leverages GPU-accelerated VDI to enable more than 100 designers across the U.S. to collaborate.
- > The increased application performance of the VDI environment significantly boosted productivity for designers.
- > GPU-accelerated VDI enables flexibility for Gould Evans designers in multiple locations to work on projects.
- > Gould Evans deployed Dell PowerEdge R740 servers with NVIDIA® Quadro® Virtual Data Center Workstation (Quadro vDWS) and NVIDIA GPUs.
- > The virtual workstation environment is easier to manage than physical workstations and additional GPU and memory resources can be provisioned in just minutes when needed.

## IMPROVING COLLABORATION FOR ON-SITE AND REMOTE DESIGNERS

Every day, more than 100 designers at the architecture and design firm Gould Evans use their computers to create detailed renderings of new residential towers, educational facilities, and other buildings. The designers rely on compute- and graphics-intensive design applications, such as Autodesk Revit and Trimble SketchUp, to build detailed models for clients.

As the organization's business grew, it became increasingly difficult for designers at the firm's offices across the U.S. to collaborate effectively on projects.

"It was very challenging working from five different locations," says Matt Wilson, the organization's IT manager. "We often had to ship computers from office to office to support specific projects, and we were constantly trying to track down which computers were used where." Shipping costs were also adding up. "It could be up to \$100 to ship something, and that was happening weekly," Wilson says.

To solve the problem, Gould Evans wanted to implement a VDI solution. "I saw the benefits of VDI in other industries, but I was concerned about it working for architecture because of our extreme graphics requirements," says Wilson. "We honestly didn't think we could find a powerful enough solution to run our applications."

## CUSTOMER PROFILE

**gouldevans**

**Organization**  
Gould Evans

**Industry**  
Architecture &  
Design

**Location**  
Headquartered  
in Kansas City,  
Missouri

**Employees**  
151

**Website**  
[www.gouldevans.com](http://www.gouldevans.com)



Image courtesy of Gould Evans

## SOFTWARE

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**Hypervisor:** VMware virtualization software

**Graphics Acceleration:** NVIDIA Quadro Virtual Data Center Workstation (Quadro vDWS) software

## HARDWARE

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**Server:** Dell EMC PowerEdge rack

**GPU:** NVIDIA T4, P4, and M60 GPUs

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**“Our designers get high-end workflows for architectural renderings at the same level of performance they were used to on physical desktop computers by using a Dell EMC VDI solution powered by NVIDIA Quadro vDWS.”**

Matt Wilson, IT Manager,  
Gould Evans

## IMPLEMENTING A DELL EMC AND NVIDIA VDI SOLUTION IN FIVE LOCATIONS

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Gould Evans found what it was looking for with a Dell EMC VDI solution based on VMware virtualization software and Dell EMC PowerEdge rack servers equipped with NVIDIA® Quadro® Virtual Data Center Workstation (Quadro vDWS) software and NVIDIA GPUs.

“We had some previous experience with Dell EMC storage and VMware, and we knew we would be getting strong performance and excellent support,” Wilson says. “Dell EMC is leaps and bounds above the competition, and we have a great relationship with them.”

The firm uses VMware virtualization software and Dell EMC PowerEdge rack servers that included NVIDIA P4, T4, and M60 GPUs, with NVIDIA Quadro vDWS software to divide the GPU resources so that they can be shared across multiple virtual workstations. Designers in all five Gould Evans locations use the VDI solution to run Revit, SketchUp, Enscape, and other 3D design applications from their virtual workstations.



Image courtesy of Gould Evans

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**“We work on large models for rendering, often up to 1 gigabyte each, and the Dell EMC and NVIDIA VDI solution easily supports that size—even if 20 people are working on the same file.”**

Matt Wilson, IT Manager,  
Gould Evans

### **VISUALIZING ARCHITECTURAL SPACES WITH POWERFUL PERFORMANCE**

Using VDI, enabled by the PowerEdge servers with NVIDIA virtual GPU technology, Gould Evans designers have powerful graphics-accelerated desktops that perform just like a physical workstation.

With the new solution, designers across studios can clearly visualize what an architectural space will look like. “We no longer have latency issues when people are at different sites, which previously caused corrupted files and locked design elements, so this makes collaboration much better,” said Wilson.

### **MAKING DESIGNERS MORE PRODUCTIVE AND BOOSTING FLEXIBILITY**

With increased application performance, Gould Evans designers are more productive, inside and outside the office. “We have solved most of our remote performance problems with the Dell EMC and NVIDIA VDI solution,” says Wilson. “This kind of performance gain is already giving a significant boost to our overall productivity.”

Gould Evans now has the flexibility to work on client projects using teams working in studios across the U.S. “Designers across studios, which vary through complimentary expertise, can collaborate to solve problems,” says Wilson.

The organization recently completed a design for a 35-story building in San Francisco using 17 designers—working from multiple locations. “The client wanted to know what technology we used on the back end, and we explained how we use VDI to collaborate from five offices,” Wilson says. “He was highly impressed with how the Dell EMC solution enabled us to do all this.”

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“Right after we deployed the solution, we asked a designer to do a rendering, and she was shocked at how fast she was able to complete it because of the Dell EMC PowerEdge R740 servers with NVIDIA Quadro vDWS software and NVIDIA T4 cards.”

Matt Wilson, IT Manager,  
Gould Evans

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“Everything is so much easier to manage with the NVIDIA virtual GPU technology.”

Matt Wilson  
IT Manager  
Gould Evans

#### **DOUBLING MEMORY CAPACITY AND GRAPHICS PROCESSING IN MINUTES**

Taking advantage of the flexibility of NVIDIA virtual GPU technology and using GPU live migration for continuous uptime and simple maintenance, the Gould Evans IT team can more easily provision resources when designers need additional capacity for graphics-heavy projects.

“If a designer needs more graphics or memory resources for a project, we can make some quick changes and double the memory or graphics processing power in a few minutes,” says Wilson. “In our previous traditional desktop environment, we couldn’t do that. We would have to order new graphics cards and wait at least several days for them to arrive. Now, we can do it immediately and ensure we hit all our project deadlines.”

To learn more about NVIDIA virtual GPU solutions, visit: [www.nvidia.com/virtualgpu](http://www.nvidia.com/virtualgpu)  
[www.nvidia.com](http://www.nvidia.com)



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