

CASE STUDY | ROBIN PARTINGTON & PARTNERS

# BUILDING ON COLLABORATION AND FLEXIBILITY

Architectural practice Robin Partington & Partners uses NVIDIA GRID™ technology to realize the power of remote working and boost productivity.



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# VDI with NVIDIA GRID fosters collaboration, flexibility, and innovation by delivering remote access to high-end CAD and BIM applications with full workstation performance.

## AT A GLANCE

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### CUSTOMER PROFILE

**Company:** Robin Partington & Partners

**Industry:** Architecture

**Location:** Greater London area, United Kingdom

**Size:** 60 employees

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### SUMMARY

- > Independent architectural practice whose workflows emphasize collaboration and flexibility
  - > Previous workstations were nearing end of life, opening an opportunity to explore VDI
  - > Adopted NVIDIA GRID K2 with vGPU support
  - > Significant performance gain when working locally or remotely while also streamlining IT operations
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### SOFTWARE

**Hypervisor:** VMware vSphere

**Desktop and Application Remoting:** VMware Horizon View

**Key applications:** Bentley AECOsim and MicroStation, Autodesk AutoCAD and Revit, NewForma Project Center and Adobe Creative Suite CC2014: Photoshop, InDesign, Illustrator, Acrobat

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### HARDWARE

**GRID boards:** K2

**Servers:** Dell PowerEdge R720

**Clients:** Various desktop, laptop, and mobile devices

Robin Partington & Partners (RPP) is an architecture practice headquartered in London UK that prides itself on being built around people. Their emphasis on creating an environment where employee creativity and communication is paramount earned them recognition as one of the *Sunday Times*' 100 Best Companies to Work For 2015 as well as winning the *Architects' Journal* Best Place to Work in London/South East for the past two years. Like all modern architectural practices, the studio's extensive use of 2D and 3D computer aided design (CAD), building information management (BIM), and information modeling software tools requires significant graphics processing capabilities.

## CHALLENGE

The company's client-centric design approach often requires architects to work remotely and collaborate on complex projects, making the flexibility and mobility offered by virtualization extremely appealing. With the lifecycle of their current workstations coming to an end, RPP saw an opportunity to invest in a virtual desktop infrastructure (VDI) platform that would not only meet its performance needs but actively support the company's commitment to collaboration, flexibility, and innovation. However, the viability of adopting this technology hinged on proving that VDI could deliver a solution that was both cost effective and acceptable to employees.

Performance of key software packages, including Bentley AECOsim, MicroStation, Autodesk AutoCAD and Revit, NewForma Project Center and Adobe® Creative Suite® CC2014 (Photoshop®, InDesign®, Illustrator®, and Acrobat®) needed to meet or exceed that offered by their current individual workstations. RPP employees require widely varying levels of graphics performance: support staff run basic productivity and administration software, while the architects work with graphically intensive CAD and BIM packages. The selected VDI solution would therefore need to meet performance needs across the entire user spectrum while simultaneously delivering the collaborative, flexibility and mobility benefits that RPP was seeking to achieve.



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### REASONS FOR GRID

- 1 Consistent, high quality user experience in key BIM and CAD software packages.
- 2 Facilitates flexible working practices.
- 3 Enhanced collaboration.
- 4 Reduced IT support costs.
- 5 Attractive total cost of ownership.

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### REASONS FOR VMWARE

VMware vSphere is the market leader in the virtualization space due to the reliability, performance, and maturity of the product. RPP first deployed vSphere as a reliable server virtualization platform, making it a perfect fit for the virtual desktop environment. Deploying a technology other than vSphere would have dramatically increased the TCO for RPP.

## SOLUTION

RPP turned to its IT consultancy partner Waterstons to discuss possible solutions in June of 2014. Waterstons had already helped RPP take its first steps towards virtualization by deploying a VMware vSphere cluster, making the VMware Horizon View VDI platform a natural fit. Waterstons developed a proof of concept for RPP based on a Dell PowerEdge R720 2U rack server equipped with two NVIDIA GRID K2 boards and running VMware Horizon View. A wide range of users, from senior architects to architectural assistants and support staff, then tested this proof of concept solution.

Testing was also performed across a range of graphics settings. Virtual dedicated graphics acceleration (vDGA), also known as pass-through, offered a high level of performance for power users; however, the 1:1 model that allocates one virtual graphics processing unit (GPU) to each user did not yield enough density to make the solution cost effective.

The search for a viable alternative led to RPP being accepted into a program that allowed early access to NVIDIA GRID™ vGPU™ with VMware Horizon and vSphere. The VDI platform was reconfigured to provide vGPU-accelerated virtual desktops and testing continued to compare VDI performance against individual workstations. Initial tests proved that VDI compared favorably when performing standard activities, such as opening files, changing views and rendering scenes.

The VDI platform was then deployed more widely to the architectural team working on RPP's Harbour Yard project in Chelsea, London. This allowed the team to assess virtual desktops under real production conditions and run their full spectrum of software packages, from basic productivity applications to complex design packages. The feedback was overwhelmingly positive.

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**NVIDIA GRID vGPU technology within VMware Horizon on vSphere is a real game changer for us. It offers the flexibility and productivity we need for our workforce. And it enables our designers to work on projects and collaborate with remote teams from any location. The new flexibility offered by vGPU is a huge gain. Without it, VDI would not have been an option for our company.**

Shaula Zanchi  
Operations Partner  
Robin Partington & Partners

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**NVIDIA GRID vGPU gives me remote access to all my live files and makes collaboration easier because I don't have to worry about synchronizing versions or clashing with other users over access. It means that I can keep my finger on the pulse even when I'm away from the studio.**

Robin Partington  
Managing Partner  
Robin Partington & Partners

To learn more about NVIDIA GRID visit  
[www.nvidia.com/vdi](http://www.nvidia.com/vdi)

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## RESULTS

The quick load times and smooth performance in key software provided by the NVIDIA GRID-enabled VDI deployment with vGPU support is delighting RPP employees. The studio's IT department is also seeing benefits. Deploying VDI has made it easier to deploy software updates, set up remote access, diagnose issues and reduce IT support tickets. The VDI platform also allows RPP to support BYOD, which was previously too costly and complex for the company to consider.

"NVIDIA GRID vGPU technology within VMware Horizon on vSphere is a real game changer for us," said Shaula Zanchi, Operations Partner at RPP. "It offers the flexibility and productivity we need for our workforce. And it enables our designers to work on projects and collaborate with remote teams from any location. The new flexibility offered by vGPU is a huge gain. Without it, VDI would not have been an option for our company."

"Performance when running 'heavy' programs like AECOSim and Adobe Creative Suite is improved," added Mark Williams-Jones, Architect at RPP. "I really like the ability to access my software packages and files from wherever I am. It helps me make the best use of my time."

"This technology gives me the performance I need, but also peace of mind knowing I can access my desktop virtually anywhere and come back to my work exactly where I left it," agreed Leo Cripps, Graphic Designer at RPP. "That reliability and reassurance are the biggest benefits to me."

Remote working, previously impossible for CAD users, has increased, positively impacting productivity and reducing IT support costs. The ability to work and collaborate regardless of where a project or client may be is also supporting RPP in delivering outstanding client service. This capability, made possible by NVIDIA GRID technology, is transforming how RPP does business.

"NVIDIA GRID vGPU gives me remote access to all my live files and makes collaboration easier because I don't have to worry about synchronizing versions or clashing with other users over access," concluded Robin Partington, Managing Partner at RPP. "It means that I can keep my finger on the pulse even when I'm away from the studio."