>|< VOHKUS ®

A VOHKUS DATA CENTRE SOLUTION

PIONEERING VENTURES
IN MOBILE ENGINEERING

NVIDIA.

VDI in a CAD environment for construction engineering consultancy

Vohkus services:
Network service workshop, due diligence, installation

Technologies used:
Data centre: Software (virtualisation)

Industry:
Property and construction

Business drivers:
Quality of service

support@vohkus.com

VOHKUS.COM
UK: **0345 647 3000**
INTL: **+44 (0)1489 556102**

When this engineering consultancy business wanted to deploy centralised graphics processing to 200+ CAD power users, it turned to Vohkus for a solution that would support VDI.

CHALLENGES

▶ Existing workstation infrastructure vulnerable to individual failure.
▶ Staff could only work at fixed desks, affecting productivity.
▶ Need to improve resilience and security.

SOLUTIONS

▶ Design and proof-of-concept.
▶ Installation and deployment.
▶ Graphics processing managed at server level.

OUTCOMES

▶ Designers and consultants now mobile and able to connect from any device.
▶ Lower cost than maintaining individual highly-spec'd workstations.
▶ Data stays within the data centre.

TECHNOLOGY *EDGE* >|< BUSINESS *EDGE* ®

DATA CENTRE SOLUTIONS FROM VOHKUS

Vohkus combines extensive experience of architecting data centre solutions with in-depth technical knowledge of all relevant server, storage and networking components. We work with the world's leading vendors of server, storage, networking and related technologies.

We work with traditional, hybrid and cloud platforms, providing a common approach to project governance, and a thorough commercial and technical validation of each solution.

Our converged infrastructure and network solutions combine simplicity, security, governance and control with agility, performance and cost advantages.
We can even take on management of the entire infrastructure for you.

Situation

The client's engineering consultancy services cover the entire life cycle of any building project. Its multi-disciplinary services include building services engineering, civil engineering, structural engineering and sustainable design.
The company employs a team of 200+ highly-experienced design engineers, and any unscheduled downtime not only affects productivity but can also prove very expensive.

Each engineer was using an individual workstation with an extremely high specification to allow computer-aided design (CAD) software to run efficiently. Because active design data was stored locally, any failure would cause immediate disruption to projects. The engineers were largely tied to the same desks, and there was no provision for remote or mobile working which would have enabled productivity increases.

The client had an ongoing relationship with Vohkus, and asked it for assistance in deploying a new VDI-based model that would centralise data and reduce the dependence and vulnerabilities associated with the existing workstation model.

Solution

Because of the graphics processing power needed to support the client's software, a traditional VDI infrastructure would not be able to cope, even with an extremely high level of RAM. Coincidentally, the client's request for proposal was released to Vohkus while it was running a marketing programme around NVIDIA GRID. This was the only product on the market capable of meeting the client's requirements. NVIDIA GRID enables virtualisation to be deployed to those users who need it to be their most productive. Essentially a server-based graphics card, the technology ensures complete compatibility, meaning

any application that can run in a physical desktop can run in a virtual desktop. It ensures resources are consumed according to the needs of each individual user; in the client's case it runs alongside a VMWare implementation whereby users are allocated concurrently to GRID so that GRID can manage resource. Vohkus provided a technical design authority and server specialist to deploy new Dell servers in the client's data centre. Specialists in virtualisation from Vohkus' software division specified the configuration and requirements needed to ensure GRID would provide the performance the client needed. Vohkus managed all engineering and support.

Proof-of-concept was successfully completed, at which point NVIDIA announced new upgrades to its range of GRID cards. The newly-spec'd technology was rolled out in stages; initially 54 users were migrated to the new system, and after a bedding-in period the rest were scheduled in for migration.

Conclusion

The new infrastructure is achieving its aim of avoiding business interruption and downtime. Not only does the client have the performance it needs, but the whole solution is much easier to manage and support. The project has also improved security as critical data is all maintained in the data centre rather than individual workstations.

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VOHKUS LIMITED REGISTERED IN ENGLAND & WALES NO. 4142508. REGISTERED OFFICE - CENTURION HOUSE, BARNES WALLIS ROAD, SEGENSWORTH, PO15 5TT   **VOHKUS.COM**