BT Exact

A Vertiv Case Study

About The Company

BT Exact is BT's research, technology and IT operations business. It specializes in telecommunications engineering, leading-edge network design, and IT system and application development. BT harnesses this knowledge to enable their clients in BT Group and beyond to stretch existing capabilities and open new business opportunities.

Background

BT's Cardiff-based data centre has the capability to house over 12,000 servers, currently around half of these are Unix-based and the remainder are Microsoft Windows servers. The servers are arranged in racks, each containing on average eight servers so they can be stored, managed and located easily. However, troubleshooting servers still proved to be time consuming. This resulted in downtime that had the potential to cause problems for customers managing critical e-business operations. Security in the data centre is naturally very tight. The servers' uptime and data integrity needs to be tightly safeguarded. Security measures for protecting these servers include state-of-the-art security checks such as biometrics. In addition to these physical security measures, all members of BT's Server Services team who maintain the servers in the data centres are security-cleared to government-level specifications.

> *"Avocent® technology, and the DSView™ software in particular, has significantly improved server support for us."*
>
> **– ADRIAN RAPPS, PLATFORM SUPPORT MANAGER, BT EXACT**

While providing stability to the business and helping to guarantee that service level agreements are honoured, these essential security measures present the Server Services team with some significant hurdles when it comes to their day-to-day work.

"Whenever a third-party such as a system or service engineer from a customer comes into one of the data centres, we perform an initial security test. However, it doesn't end there," said Adrian Rapps, platform support manager for BT Exact, Cardiff. *"Physical access to the data centre is very tightly controlled and any external party is escorted around the premises at all times."*

The Implementation Challenge

When it established the data centre, BT decided to implement an Avocent® keyboard, video and mouse (KVM) solution that would provide them with a more centralised way of controlling and monitoring all of the servers in the data centre. KVM technology allows BT to oversee the continuous operations of all of the servers in the data centre but also to immediately identify any servers that experience problems. If problems do occur then servers can be maintained from almost any remote location without the administrator ever needing to enter the data centre.

In the past a member of the Server Services team would have had to physically locate the server, gain access to the secure environment, then log onto the server to perform the maintenance. This was time-consuming and the downtime could be costly, depending on the severity of the problem.

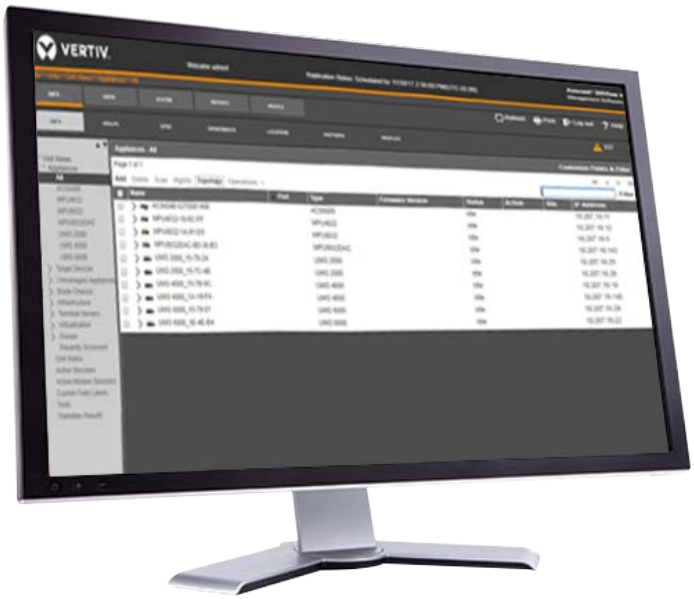
"We were aware of a number of solutions on the market but Avocent's KVM technology was the best digital solution available and it seemed the most appropriate for our needs, particularly in terms of flexibility and scalability, both of which are very important to us," said Rapps.

BT is currently using the Avocent® DSR2161 KVM over IP switching solution to control, monitor and provide support for over 400 servers at its Cardiff site. As well as enabling remote access over IP, the DSR2161 switch contains a local port, allowing the Server Services team to access servers at the rack, if necessary. BT is using the Avocent® DSView™ software interface, part of the DS management software suite, to administer the system. The DSView interface enables the Server Services team, to view activity on all servers connected to their KVM devices.

The implementation of Avocent technology means that BT now offers its customers individual access to their servers from a monitoring workstation in the Network Operations Centre (NOC), a secure room away from the data centre floor. User authentication rights, built into DSView software, provide an additional layer of security ensuring customers or their engineers can access only their servers.

The Server Services team is now free to concentrate on ensuring successful and continuous operations in the remainder of the data centre. At the same time, the new NOC gives customers additional confidence in the security measures that BT has in place.

"Avocent® technology, and the DSView software in particular, has significantly improved server support for us," added Rapps. *"The fact that we can leave a customer alone in a secure environment, safe in the knowledge that the only servers they can control are their own, has provided us with a genuine business benefit. The Server Service team can now focus more of their time on delivering higher levels of service to our customers, so everyone is happy."*



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