

Dyfed-Powys Police

IBM-Racked ClearCube Blade Solution Improves System Reliability in New Command and Control Center



Unfortunately, cramped housing conditions and twenty-four hour operations soon began to have a negative impact on the computers. “Providing enough cooling for the computers was difficult since they were tucked away underneath the users’ desks,” says IT Services Manager Aled Williams. “The heat was a major contributor towards frequent PC failure. Then our IT staff would have to get underneath the desks to gain access to them, which was awkward and inconvenient.”

The Solution

Dyfed-Powys Police turned to IBM Global Services for a better computing solution. IBM was a one-stop shop for the force, providing a solution demonstration, site survey, and assistance with system design and build. After reviewing the force’s computing needs, IBM determined that ClearCube blades would be the best fit.

ClearCube removes the PC from the desk, condenses it into an Intel®-based blade form-factor, and rack-mounts it in a centralized location. The IBM-racked ClearCube blade solution was installed in a purpose-built room alongside the command and control center, taking the PCs out of the working environment and locating all cooling in one place.



Marc Jones, Sr. Technical Support Officer, with ClearCube blades in data center

OVERVIEW

► The Challenge

Minimize disruption of operations in a police command and control center by replacing box PCs with a more reliable, accessible and efficiently cooled computing system

► The Solution

Integrate a centralized, rack-mounted solution (using IBM racks and ClearCube blades) into an existing environment and provide end users with small connective user ports and dual monitors

► The Benefit

A remotely managed system that provides 99.9% availability, hardened data security and more desktop space

Dyfed-Powys Police serves the people who live in Carmarthenshire, Ceredigion, Pembrokeshire and Powys. The Dyfed-Powys Police geographical coverage area, which spans more than half the landmass of Wales, is the largest Constabulary area in England and Wales.

From one end of the force to the other, the area is over 160 miles – greater than the distance from London to Cardiff. The Authority is currently staffed by 1162 regular officers, 147 special constables and 534 civilian support staff.

The Challenge

In a single day, the Dyfed-Powys Police force will respond to over 1,000 emergency phone calls. To manage the high volume of incidents, the force recently constructed a new command and control center in Dyfed, Wales. Utilizing traditional box PCs, command and control operators would log each incoming call into the force’s handling system and record incident details.

Now all that remains at each user's work area are the peripherals (dual-monitor, keyboard, mouse) and two small access devices called ClearCube user ports. Dyfed-Powys Police opted to use cable-connected C/Port user ports for basic command and control operations and Ethernet-connected I/Port user ports for training and high-level operations.

"We considered thin clients, but we didn't think they would really meet our needs," says Williams. "After seeing the blades in action at IBM's Southbank demonstration suite in London, we knew they were what we wanted. Blades are more resilient and just a better solution overall."



Each set of peripherals connects back to its allocated blade through a small footprint ClearCube user port that is secured underneath the desk.

In addition to providing a solution that greatly improves IT manageability, IBM was also able to help integrate the new system into the force's existing deployment and systems management processes. "The fact

that we didn't have to replace the entire infrastructure was very attractive," says Williams.

The Benefit

By removing the bulky box PCs from the work area, the command and control center was able to reduce the size of its desks and introduce more operators. The work area is also noticeably cooler and quieter.

"PCs overheating may seem innocuous, but in mission-critical situations, anything that causes downtime is unacceptable," says Williams. "By putting the blades in a controlled environment like the data center, we can ensure they have proper cooling and don't overheat."

The solution's simplified management also contributes to continuous uptime. The ClearCube Management Suite (CMS), a powerful suite of asset management tools, enables the force's IT administrators to remotely manage users and blades. In the event of a failure, IT personnel can reallocate the user to a spare blade in three seconds without disrupting command and control operations.

The force's IT staff appreciates that they can execute repairs, software installations, BIOS upgrades and blade re-imaging without ever visiting the user's desk. Even if an administrator must physically touch every blade for memory upgrades or hard drive replacements, he or she can do so directly in the data center.

Centralizing the blades in a remote data center also hardens data and asset security. "We like the fact that we can lock the Blades away, and only support personnel has access to them," says Williams.

All data and applications are stored and processed directly on the blades, and the desktop user ports do not contain CD or disk drives. Users can only access mass storage devices with IT authorization, meaning they cannot download data onto removable media devices or upload software onto the blades.

"We used to have problems with users installing games onto their computers or putting in CDs. Now we can control what goes in or out of the system," says Williams.

The Dyfed-Powys Police force is pleased with its blade solution and is currently looking into further implementations. "We like to think we're cutting edge when it comes to technology," says Williams.

"IBM Global Services provided us with a ClearCube blade solution that has cured three ills for us: desktop PC failure, information security and environmental issues."

**— Aled Williams,
IT Services Manager
Dyfed-Powys Police**
