

John C. Lincoln

Operates With Cutting-Edge Computing: The ClearCube I/Port Solution



John C. Lincoln Hospital

OVERVIEW

► The Challenge

Dramatically reduce PC support costs and downtime; Meet HIPAA data security standards; Improve employee comfort and flexibility

► The Solution

Replace traditional PCs with ClearCube PC Blades and I/Ports and utilize the ClearCube Grid Center software to optimize system management; Implement a mobile cart solution to maximize flexibility while improving HIPAA security

► The Benefit

- 80% reduction in help desk calls and 80% faster “time to repair”
- Lower operating costs
- Stronger HIPAA security
- Improved work areas for medical staff

The John C. Lincoln (JCL) Health Network has served the Phoenix community since 1927, with a level of commitment that makes them the only Arizona hospital to have earned the McGaw Prize for Excellence. The JCL network includes two hospitals (Deer Valley and North Mountain) and 11 clinics with nearly 3,000 employees.

The Symptoms: Severe PC Management Headaches

Rob Israel, CIO of JCL, was frustrated with the limitations of traditional desktop PCs in the hospital environment. Traditional PCs required heavy IT support (help desk and repair), took up too much room in constrained work areas (e.g., nurse’s stations), posed a security risk because patient data was stored on the local drive, and were inflexible because they could not be easily moved or redeployed.

The Prescription: ClearCube PC Blades and I/Ports

JCL chose ClearCube to address their PC management and security challenges. ClearCube’s PC Blades deliver fully functional Intel®-based computing to the end user’s work area from a secure, centralized location. The traditional PC is removed from the work area and replaced with a small I/Port which is mounted behind the monitor. The I/Port enables users to connect to their PC Blades over a standard Ethernet network. A single I/Port can be assigned to a single PC Blade (dedicated mode) or up to four I/Ports can be simultaneously connected to a single PC Blade (shared mode).

The Result: Dramatic improvements in cost, security, availability and manageability

“I immediately saw an 80% reduction in calls to the help desk and an 80% reduction in the time to fix a problem”

--Rob Israel, CIO
John C. Lincoln

Add Users But Not PC Support Staff

JCL installed 180 PC Blades in the North Mountain facility which provided computing to over 700 end users in the two hospitals and regional clinics. The centralized PC Blades and the local I/Port set up enables centralized manageability so that the hospital system can grow without having to add PC support staff. For example, JCL recently expanded at Deer Valley (ER, ICU), but did not add PC support staff. There are plans to add 30 more beds, but additional users will be easily managed by the existing staff. Since the PC Blades can be dedicated or shared, IT has flexibility and lower acquisition costs.

Stronger HIPAA Security

JCL was very interested in meeting or exceeding security and privacy regulations of the federally mandated HIPAA guidelines. ClearCube enabled HIPAA compliance in two important ways. First, since the PC Blades (and disk drives) are housed in a secured data center, the risk of stolen hardware (and data) is virtually eliminated. Second, since IT can lock out an end user's ability to save data onto removable media (floppies, CDRW), the risk of patient data being downloaded is minimized.



Monitor mounted I/Ports

Better Manageability with ClearCube Grid Center

Using the ClearCube Grid Center software, JCL administrators optimize their hardware utilization by dynamically allocating I/Ports to a defined pool of PC Blades. Using a sophisticated algorithm, Grid Center tracks Blade loads and automatically initiates a connection to the most underutilized Blade when each user logs on. Power users can be assigned dedicated Blades if needed. So end users get the on-demand computing power they need, when they need it.

If the user has a hardware or software issue, the help desk administrator can use Grid Center to easily hot-swap the user to a spare PC Blade. The end user is up and running within 2 to 5 minutes. "With the traditional PC it would take us at least 2 to 4 hours to get the end user back up. Our medical staff is very happy with the results," said Mr. Israel.



Admissions, JCL Deer Valley Hospital

Secure Mobility and Improved Work Environment

For mobile computing in the hospital, ClearCube has partnered with Enovate IT to provide a mobile cart-based computing solution. Instead of using a laptop on the mobile cart, JCL now places an I/Port. Since I/Ports do not store data locally, they are more secure. They are also less likely to be stolen because they would be of no use without the PC Blade.

For fixed location computing (nurse's stations, ER, OR, labs), the I/Ports are noiseless and can be mounted behind a monitor or under a desk. Medical staff can now recover the counter and "knee" space that was lost to bulky PC towers and work without the annoying noise of PC fans. In difficult to service areas like ER/OR/infectious disease wards, IT no longer needs to disturb the area because they can manage PC Blades back in the data center.



Enovate mobile cart with I/Port mounted

The Prognosis: ClearCube

JCL's IT and medical staff have been pleased with security, operating cost and work space improvements since deploying ClearCube. "Both physicians and nurses appreciate the space saving solution along with the fact that no re-training was involved to use the system," said Mr. Israel.