

Wyse Thin Clients Provide Secure Information Access at University of Colorado Hospital

Proximity Badge Reader and Single Sign-on Boost Productivity for Doctors and Nurses

Healthcare is undergoing a rapid transformation as it moves towards a paperless future. Since 2006, University of Colorado Hospital, a leader in using technology to improve patient outcomes while reducing the costs of healthcare, has been rolling out Wyse Thin Clients running the Windows XP Embedded operating system. Hospital workers use more than 500 of these advanced devices to access Health IT data quickly and securely with a familiar and easy-to-use interface. The thin clients save money by reducing energy consumption and system failures.

Situation

As the Rocky Mountain region's academic medical center, University of Colorado Hospital is always among the first – and sometimes the first – in the nation to bring advanced medicine to the bedside. It is long-recognized as one of America's best hospitals by others ranging from U.S. News & World Report to the American Nurse Credentialing Center.

The hospital's IT staff recently addressed a major technology problem: how to bring computers to the bedside so that healthcare providers can easily access critical information like patient charts, lab results, and instructions for dispensing medications.

"Our hospital had a fleet of Computers on Wheels, (COWS) that were essentially battery-powered desktop computers mounted to mobile carts," recalls Eric Harris, Desktop Systems Architect, University of Colorado Hospital. "But the large size of the PCs and the short battery life severely limited their usefulness. We considered wall

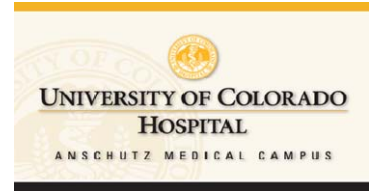
mounted PCs in each room, but finding available electrical outlets or even appropriate space were major roadblocks."

The hospital needed a hardware solution that would require less power, lasting a full 12-hour shift. It also wanted a software operating system that would exactly duplicate the PC experience for users, as well as support a wide range of application software and peripherals devices, such as badge and barcode readers.

Solution

Harris and his team began evaluating thin clients from several leading global manufacturers, but ultimately selected Wyse V90L and V90LE Thin Clients running the Windows XP Embedded operating system. Windows XP Embedded provides the power of Windows, with flexible component selection and the ability to run thousands of existing Windows applications and drivers.

"We started with a test pilot of two dozen thin clients, and then rapidly rolled out



Company: University of Colorado Hospital

Web Site: www.uch.edu

Country or Region: United States

Industry: Healthcare

Partner: Wyse

Partner Web Site: www.wyse.com

Company Profile

University of Colorado Hospital is internationally respected for its exceptional teams of medical specialists, remarkable medical outcomes, and overall clinical excellence.

Software and Services

- Windows XP Embedded

Hardware

- Wyse V90L Thin Client with Via C7 Eden 800MHz Embedded Processor
- Wyse V90LE Thin Client with Via C7 Eden 1.2GHz Embedded Processor
- Wyse S10 Thin Client with AMD Geode GX 366MHz Embedded Processor

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"Windows XP Embedded and Wyse thin clients support our mission to deliver world-class healthcare using advanced technology."

**Eric Harris, Desktop Systems Architect,
 University of Colorado Hospital**

more than five hundred more units over the next two years," says Harris. "Initially, we just used the thin clients on the mobile carts, but now we install them in common areas such as nurse's stations, exam rooms, and anywhere else workers need access to information."

The Windows XP Embedded operating system simplified the task of implementing the thin clients into the hospital's computing infrastructure, which includes Citrix XenApp application virtualization and several key pieces of Win32 software.

Benefits

The Wyse V90L and V90LE Thin Clients running Windows XP Embedded give University of Colorado Hospital a technologically advanced, eco-friendly, user-friendly solution for anywhere, anytime information access.

"Because Windows XP Embedded is componentized, we can use thin clients with embedded processors, which means less power usage," notes Harris. "We calculate a yearly energy savings of about \$25,000, but just as importantly, the mobile thin clients can run for a full 12-hour shift on a single battery charge, which really boosts productivity."

The thin clients are highly cost-effective because they have no moving parts and are less prone to failure. "Our computers run 24/7, so many of the older mobile units tended to overheat," recalls Harris. "Some ten-cent capacitor would fail and we'd need to replace an entire system board, costing us thousands of dollars and hundreds of man-hours on service calls. The new thin clients are far more reliable, and we've had almost no system failures."

Another important benefit of using Windows XP Embedded is the ability of the hospital IT staff to lock down the thin clients, so users cannot access local resources or make changes to the systems after deployment. Even more importantly, Windows XP Embedded presents users with the same familiar OS and applications on the thin client that they had on the PCs.

"The last thing we want to do is confuse our users," Harris explains. "With Windows

technology, we can be sure that users will have the exact same experience, whether they are on a thin client with an embedded OS or a full PC with a desktop client OS."

Compatibility with third-party peripheral devices that require a Windows device driver and service to run locally is yet another benefit of Windows XP Embedded. Every thin client is equipped with HID proximity badge readers that allow users to simply tap their badge, type a password, and be logged in for an entire 12-hour shift.

"University of Colorado Hospital is a leader in Health IT, in part because we are a teaching hospital, but also because management is always looking towards the future," Harris concludes. "Windows XP Embedded and Wyse thin clients support our mission to deliver world-class healthcare using advanced technology."

Keyword: Thin Client Devices, Thin Clients



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