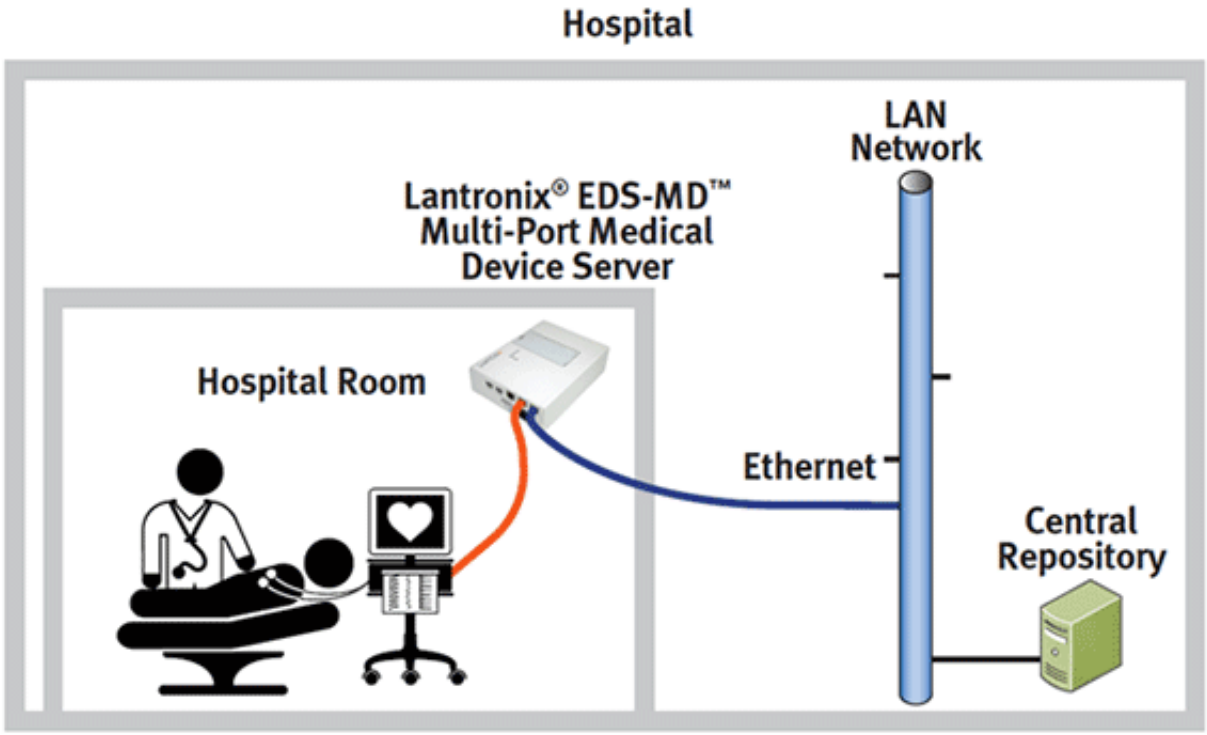
The Digital Hospital Room

The customer is an innovator in the area of increasing hospital efficiency.



The Digital Hospital Room

Challenge:

The customer ? a designer and manufacturer of products and solutions that improve patient care and lower healthcare operating costs, is an innovator in the area of increasing hospital efficiency. The customer saw an opportunity to develop a central repository of patient information by connecting patient monitoring devices (blood pressure, temperature, heart rate, respiration and other vital signs) to a hospital?s Local Area Network (LAN).

To enable its clients to concentrate on their core competencies ? healing patients ? the customer was challenged to create a solution that provided secure networking capabilities without the need for networking-proficient, technically savvy end users. Could Lantronix provide a networking solution for hospital devices that was cost-effective, reliable, and secure?

Key Requirements:

- Provide the ability to store medical device data to a central patient repository via a local network
- Highest levels of encryption and security to ensure data assets are protected over the network
- Ease of implementation was critical
- Enable a secure, two-way communication between bedside patient monitors and the hospital?s LAN

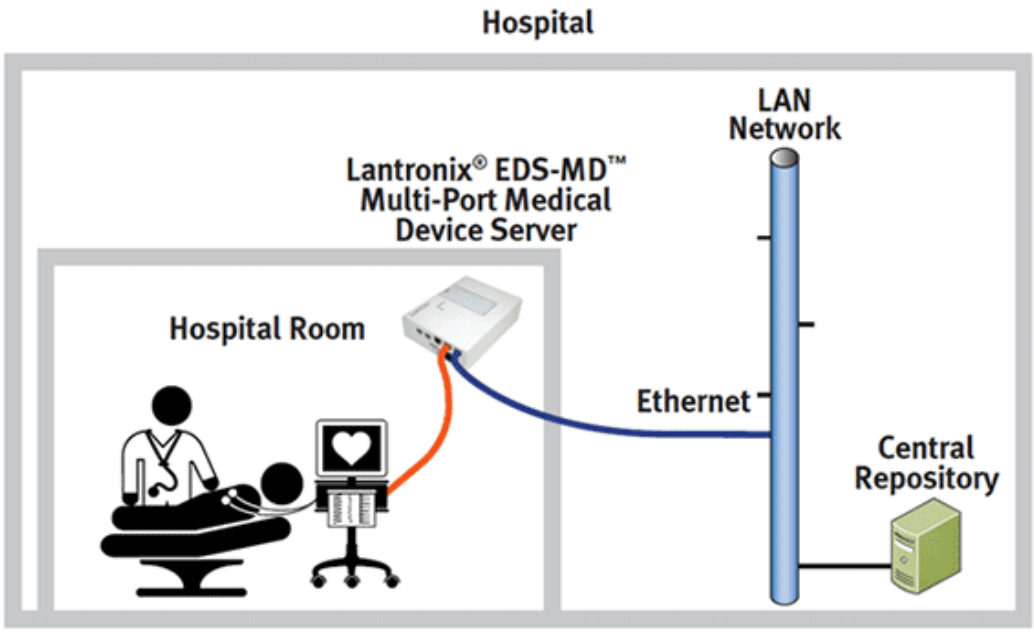
The Solution:

Lantronix EDS-MD Multi-Port Medical Device Server

To provide the secure transfer of data needed to conform with patient privacy rights, the customer turned to the networking expertise of Lantronix. The Lantronix EDS-MD multi-port medical device server developed specifically for the medical industry provided the needed connectivity. The advanced networking technology establishes a secure, two-way communication between a bedside patient monitor and the hospital?s LAN. The EDS-MD enables the bedside monitor to transmit data over a shared network or the Internet and permits clinicians to make programming changes based on the data gathered from connected medical devices.

The Lantronix EDS-MD solution enables and supports several key features of the customer?s system, while being scalable, cost-effective and reliable. The EDS-MD connects multiple bedside monitors with a single network connection, expanding to monitor multiple patients simultaneously while minimizing installation costs. Meanwhile, hospital staff is free to concentrate on the business of healing patients.

Lantronix EDS-MD Application: Securely Connect Medical Monitoring Devices



Results:

- Highest security ? including SSL and SSH encryption providing a reliable networking solution for medical devices allowing secure, two-way communication that conformed with patient privacy rights
- Cost effective ? easily integrated with minimal effort from hospital staff
- Scalable ? connect multiple bedside monitors with a single network connection, expanding to monitor multiple patients simultaneously
- Maximized hospital efficiency for improved patient care

About the Lantronix EDS-MD ? Multi-Port Medical Device Server

Specifically designed for the medical industry ? the UL and IEC-60601 compliant EDS-MD? provides mission-critical device connectivity, allowing remote access and management of virtually any electronic or medical device.

EDS-MD boasts 4, 8 or 16 individually isolated RS-232 serial ports with a Gigabit (10/100/1000Mpbs) network interface. Going above and beyond the IEC-60601 requirement, EDS-MD provides galvanic isolation on all ports to ensure the highest levels of safety. If a grounding problem occurs, the operation of EDS-MD or other connected devices will not be affected.