Case Study Overview:
A global medical technology company needed a full software and hardware solution for medical device communication at hospitals. It chose the Lantronix ConsoleFlow device management software and SGX 5150 IoT Device Gateway. Lantronix’s products met the need for a flexible, secure and compliant solution and resolved complex challenges, including gaps in Wi-Fi coverage as well as outbound Internet connection limitations. By providing encrypted and reliable medical device communication, hospitals have the assurance that critical patient data is private and protected.

“Lantronix increases efficiency and reduces operational costs by delivering a complete hardware and cloud/on-premises centralized management solution for medical device connectivity.”

- Paul Pickle, president and CEO of Lantronix Inc.

Challenge: Securely Transmit Video and Data 24/7
Hospitals face several challenges in providing flexible, secure and robust connectivity for medical devices, potentially resulting in medical device information being improperly transmitted, stored or shared.

To improve patient care and transmission of critical device operational data, such as COVID-19 treatment, hospitals need a connectivity solution to overcome network infrastructure connection challenges and comply with network infrastructure security requirements.

Some of the connectivity challenges facing hospitals are:
- Unifying and connecting varying device and network infrastructure technologies and unique configuration requirements
- Overcoming Wi-Fi connectivity issues, such as coverage gaps
- Handling outbound Internet connection limitations
- Meeting security and governance requirements, which can be unique for each hospital
- Delivering cloud and on-premises device management solutions
- Providing secure remote device management capabilities to keep devices up to date and quickly address any issues that may arise with alerts and notifications

Product: ConsoleFlow
ConsoleFlow cloud and on-premises deployment options provide centralized device management for the SGX 5150 gateways, improving operational efficiency. ConsoleFlow’s features include:
- Zero-touch remote updates for firmware and configuration
- Remote provisioning for hundreds of gateways
- Custom dashboards to visualize and run analytics on network connectivity data

For more information, visit: https://www.lantronix.com/products/consoleflow/
Solution: Lantronix ConsoleFlow Software and SGX 5150 IoT Device Gateway

ConsoleFlow is Lantronix’s cloud and on-premises hosted management software platform. It delivers resilience and intelligence to the network infrastructure through aggregation, automation and APIs for IT and IoT assets. It gives authorized users one-click access to securely monitor devices. Its centralized IT asset directly makes instant search fast and easy for real-time network performance monitoring.

Lantronix SGX 5150 IoT Gateway provides the hardware needed to connect medical devices to hospital networks. Its multi-interface access provides the flexibility to connect multiple device types using the SGX gateway. It includes built-in device security features, including secure boot, secure firmware, data-at-rest protection and role-based access control.

Delivering highly resilient communications with the latest in secure Wi-Fi and Ethernet connectivity, Lantronix SGX 5150 gateway features include:

• Remote access to gateways for troubleshooting and remediation
• Automated remote firmware updates for critical security patches
• Status telemetry data for remote monitoring of events
• Device ID so that device is visible to authorized users

“Lantronix delivers a flexible, secure and resilient solution for medical device connectivity, improving efficiency and reducing operational costs.”
– Paul Pickle, president and CEO of Lantronix Inc.

Results: Flexible, Secure and Reliable Connectivity

Together, Lantronix ConsoleFlow and SGX 5150 networking and management solutions give hospitals a flexible, secure and reliable solution for medical device connectivity to help improve patient care and operational efficiency.

Benefits include:

• Meets hospitals’ needs for secure and reliable medical device communications
• Enables analysis of critical gateway connectivity telemetry data to gain insights into the device and network real-time operation
• Reduces operation costs by eliminating or reducing on-site visits at hospitals for deployments and real-time troubleshooting
• Increases operational efficiency with remote analysis, updates and troubleshooting
• Resolves connectivity issues, including gaps in Wi-Fi coverage and provides secure outbound Internet connectivity

Product: SGX 5150: IoT Device Gateway

The Lantronix SGX 5150 is a next-generation IoT device gateway that enables business-critical assets and data, such as medical devices, to be securely connected to the enterprise network.

Product Features

• Easy “out-of-the-box” configuration and connection to the enterprise network
• Unique Device ID feature that makes device visible to authorized users
• Linux SDK and Python runtime services, allowing quick development and deployment of custom apps
• Wi-Fi Alliance and USB Certification

For more information, visit: https://www.lantronix.com/products/sgx-5150/

About Lantronix

Lantronix, Inc. is a global provider of software as a service (SaaS), engineering services and hardware for Edge Computing, the Internet of Things (IoT) and Remote Environment Management (REM). Lantronix enables its customers to provide reliable and secure solutions while accelerating their time to market.