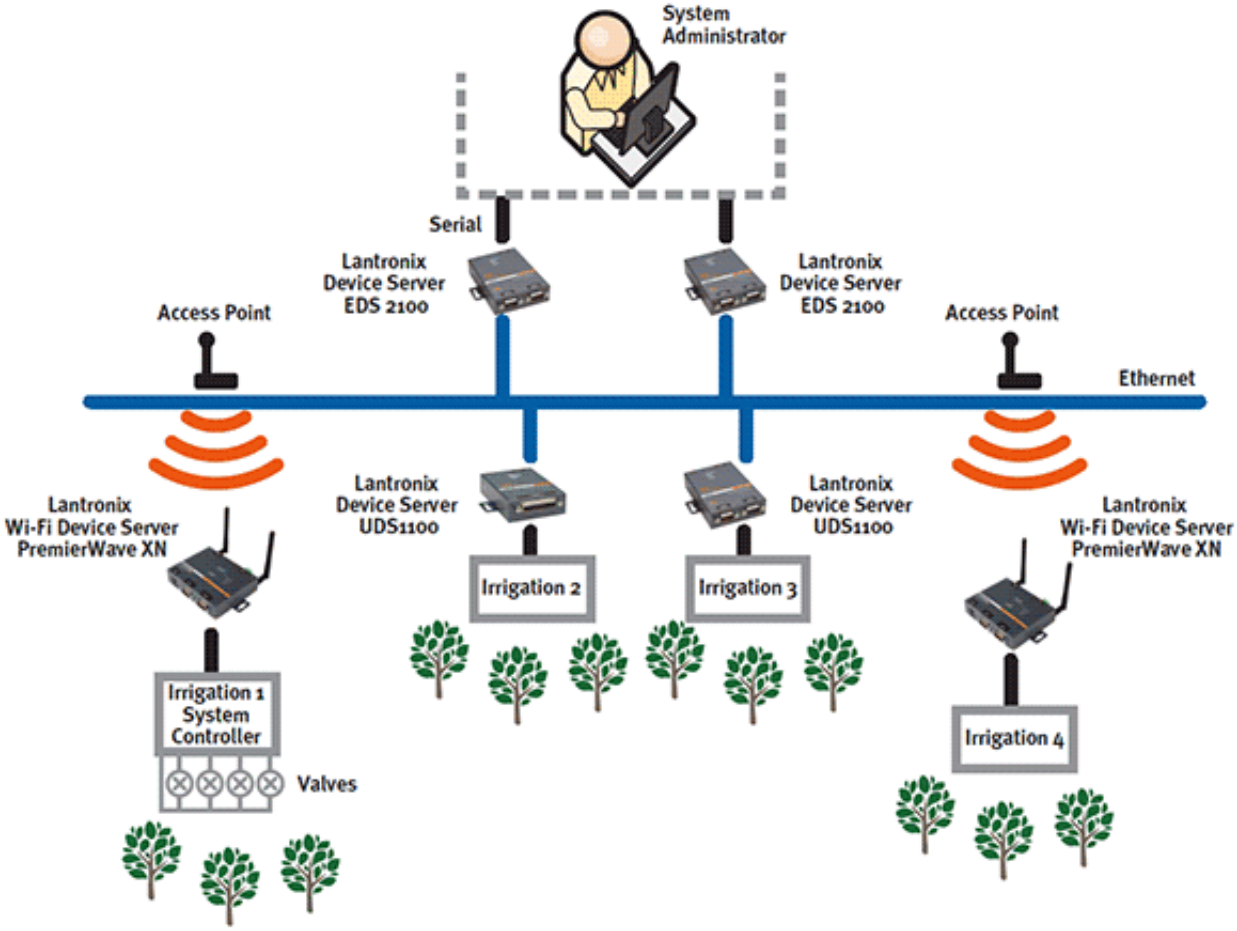
# Enabling Secure, Real-Time Management of Irrigation Resources

## A theme park, with thousands of acres of plants, grass, and other horticulture that needs specific watering on a very timely schedule.




## Enabling Secure, Real-Time Management of Irrigation Resources

***Challenge:***

The customer ? a Fortune 500 organization, who is in the business of theme parks, with thousands of acres of plants, grass, and other horticulture that needs specific watering on a very timely schedule. Irrigation controllers are scattered throughout

the property. Some can be reached by wire, and others cannot. The proprietary irrigation software resides on a single PC in the data center, but needs bi-directional access to each irrigation controller.

Historically, for connectivity, the application supports a ?modem? to dial the irrigation controller at the remote location. As phones have gone digital, and switchboards have moved on property, the POTS line is no longer available or expensive. Could Lantronix provide a more cost effective solution that was reliable and scalable?

***Key Requirements:***

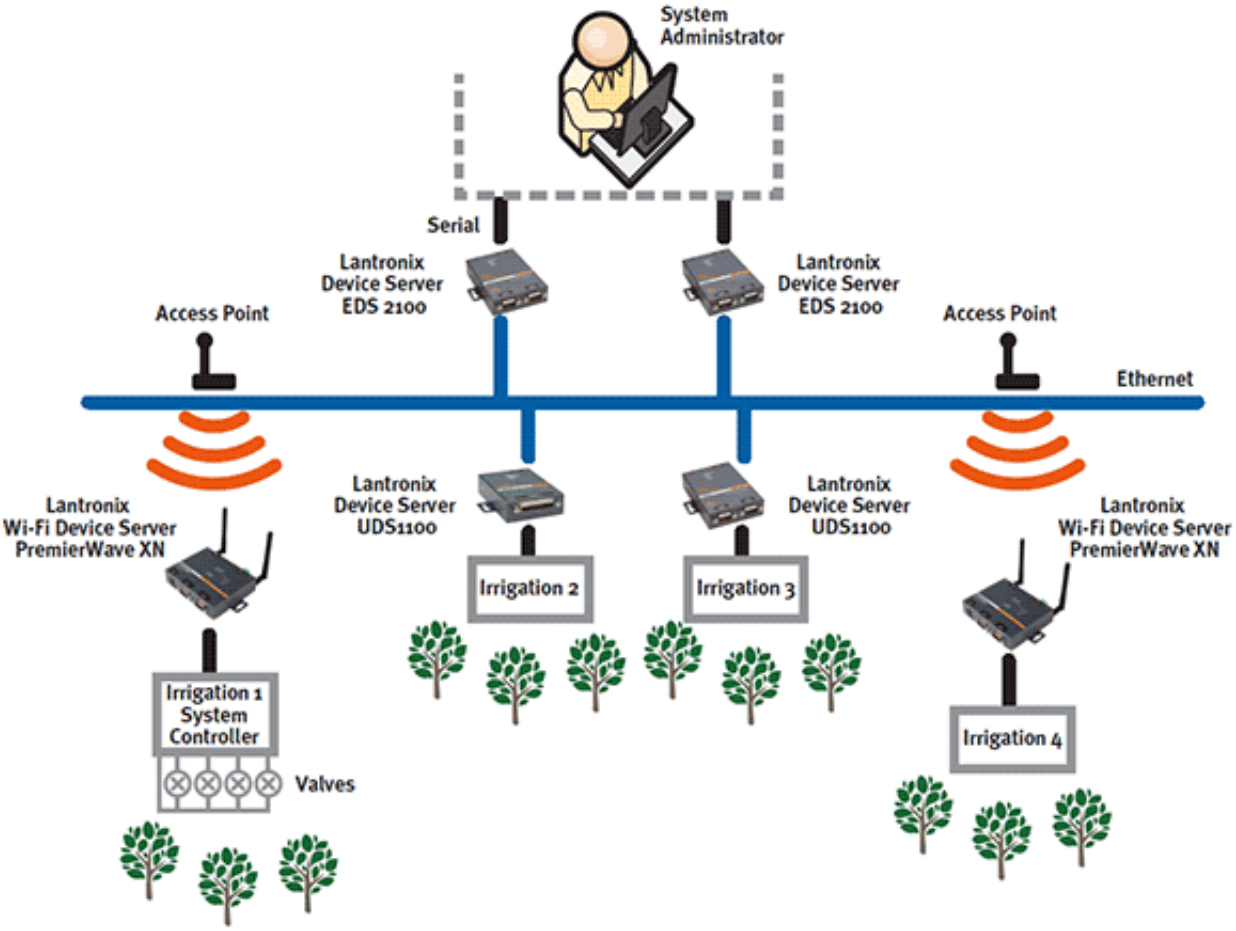
- Solution must be scalable ? capable of handling the existing multiple irrigation controller locations and able to accommodate rapid expansion of additional locations
- Ease-of-implementation was critical
- Ease-of-integration with each the office?s unique software
- Remote access, control and device management
- Highest levels of encryption and security to ensure data assets are protected over Wi-Fi® utilizing EAP-TLS enterprise level security

***The Solution:***

**Lantronix PremierWave XN ? Wireless Device Server**

The Lantronix PremierWave XN ? a solution for distributed control environments ? was an ideal solution for the customer, whose business model requires the need to manage hundreds of irrigation controllers with thousands of sprinklers. Without changes to the application software, and Lantronix modem emulation, the centralized PC can contact each controller (via Wi-Fi or Ethernet), access the appropriate weather conditions, build the watering program, and download it to the controller without making an on-site visit.

*PremierWave XN Application: Wireless Device Server*




***Results:***

- Rapid deployment ? the set-up and configuration of the PremierWave XN was done in a matter of minutes and the centralized solution was up and running within days
- Customer can remotely manage and control all irrigation controllers either over Ethernet or Wi-Fi
- The PremierWave XN solution overall resulted in reduced operating costs, improved horticulture watering program times and the ability to change the watering program ?on the fly? as the plantings change.

## About the Lantronix PremierWave XN

PremierWave XN is a multi-port application server that offers high performance Ethernet or Wireless connectivity for remote access and easy management of machines or equipment over the network and across the Internet.

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| ***PremierWave XN Key Benefits:***<br><br>• Increased wireless speed, improved reliability and extended transmission range with dualband (2.4/5 GHz) 802.11 a/b/g/n<br>• Lantronix SmartRoam? technology provides seamless mobile connectivity and improved reliability<br>• Enterprise-level security options including AES, SSL, SSH and EAP for data encryption and authentication<br>• Simple device set-up, configuration and monitoring with powerful, industry-standard management tools (Web, CLI, XML), Lantronix DeviceInstaller, QuickConnect, and WPS support | |  |