ECHELON

IzoT™ Network Services Server

Software Platform for IzoT Network Design, Installation, Monitoring, and Control Applications

Features

- Provides a software platform for Windows that can be used to develop or run Windows applications for designing, installing, monitoring, or controlling IzoT and LONWORKS® networks
- Compatible with all IzoT and LONWORKS media including IzoT/EN, IzoT/Wi-Fi, IzoT/FT, IzoT/RS-485, LONWORKS/FT, LONWORKS/PL, and LONWORKS/RS-485
- Provides an open platform supporting multiple simultaneous users commissioning, monitoring, and operating devices and running multiple applications from multiple vendors
- Supports a wide variety of applications including network management applications, operator interface applications, drivers, and network diagnostic tools
- Supports IzoT, OpenLNS, and LNS plug-ins
- Supported by hundreds of third-party applications
- Supports networks with up to 32,385 devices on up to 1000 channels, with each device supporting up to 4096 datapoints or network variables
- Supports multi-channel networks with multiple IzoT, LONWORKS, and IP-852 routers
- Free trial edition is available for download
- Trial edition may be freely redistributed with IzoT applications and plug-ins

Overview

Create or run applications to install, commission, monitor, and control a community of devices. The IzoT Network Services Server provides services for Windows applications to configure devices, connections, routers, and channels, as well as subsystems containing devices and routers.

Create IzoT or LONWORKS networks with up to 32,385 devices on up to 1000 channels. Each device in the network can have up to 4096 datapoints or network variables. Create peer-to-peer connections between devices or between groups of devices. Each network may contain tens of thousands of connections.

The server works with all IzoT and LONWORKS devices giving you a wide variety of options for the devices to be installed in your networks. There are never any per-device fees, credits, or royalties when using the IzoT Network Services Server.

The server maintains all device and network configuration information in a high-performance database. Networks can be designed off-line without access to the physical hardware so that networks can be designed prior to the availability of physical hardware. The database enables replacement of devices that fail, so that the configuration and connections of the failed device can be automatically copied to the replacement device. Upgrade services ensure that configuration and connections are maintained, even in cases where the replacement device has updated firmware with a modified network interface.

A database backup and restore mechanism is included so that the entire network database can be routinely backed-up, and then later be restored after a computer hardware failure. A hot-backup capability is included so that a system can continue to run while the

database is backed up. Networks can also be recovered from the physical devices in cases where the database and all backups are lost.

Network operation is supported with services to read and write datapoints, network variables, and configuration properties. Datapoint and network variable update notification events are provided so that applications can be notified when specified datapoints or network variables are updated. Datapoint, network variable, and configuration property values are automatically formatted based on resource file definitions, with application control of the formats used for each point.

Network maintenance is supported with services to test and control device state, and to override, enable, test, or disable individual blocks or functional blocks on a device. Maintenance services include services to download updated applications and Neuron firmware to Neuron hosted devices.

The server supports multiple users and applications, with each modifying, monitoring, or controlling devices in the same network at the same time. A single application can also be used with multiple networks simultaneously.

Compatible plug-in applications for configuring a wide variety of IzoT and LONWORKS devices are available from hundreds of device manufacturers, or you can use the server to create your own plug-ins. Commissioning tools such as IzoT CT integrates seamlessly with these plug-ins so users can automatically start the correct plug-in from their commissioning tool.

For very large networks where connectivity is not available between all devices during initial construction, applications can initially create independent networks. When connectivity is available between the networks, services are provided to automatically merge the independent networks into one large network.

Free Updates and Upgrades

One year of maintenance is included with every IzoT Network Services Server. During the first year all updates and upgrades to the server can be downloaded and install for free.

You can renew annual maintenance any time prior to the end of the first pre-paid maintenance period, and again prior to the end of each subsequent maintenance period. Annual maintenance cannot be renewed after expiration of the last pre-paid or paid maintenance period. Once renewed, all updates and upgrades can be downloaded and installed for an additional year.

Specifications

PC Requirements

Operating System

- Microsoft Windows 8 (64-bit and 32-bit), Windows 7 (64-bit and 32-bit), Windows Server 2012 (64-bit), Windows Server 2008 R2 (64-bit), Windows Server 2008 with SP2 (32-bit), or Windows XP with SP3 (32-bit)

Minimum Hardware

- Intel Pentium III 1.3 GHz processor or faster, and meeting the minimum Windows requirements for the selected version of Windows
- 2 GB RAM

IzoT and LonWorks Network Limits

Limits per Device

- 4096 datapoints or NVs per device

Limits per Network

- 20 active clients
- 32,385 devices (routers and network service devices count as two devices each)
- 32,385 application device types
- 1000 channels and 1000 routers
- 1 domain
- 12,288 bound selectors (selectors are automatically reused so the number of connections is not limited by this protocol limit)

Limits per IzoT Network Service Server

- 100 network databases can be open simultaneously in independent mode for monitoring and control
- 50 network databases can be open simultaneously for full IzoT network services including management, monitoring, and control
- 8000 datapoints can be active with intelligent point sharing if multiple applications are monitoring the same point; this limit does not apply to permanent monitor point monitoring
- 65,535 permanent monitor points; monitoring a local host network variable does not consume a persistent monitor point
- 8000 permanent monitor sets; each monitor set may be used by any application
- 32,768 address table entries
- 1024 alias table entries
- 250 simultaneous outgoing transactions (when using a Layer 2 or IP-852 interface)
- 250 simultaneous incoming transactions (when using a Layer 2 or IP-852 interface)

Ordering Information

- IzoT Network Services Server Standard Edition Activation Key
- IzoT Network Services Server Standard Edition One-Year Maintenance Key

Preliminary

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