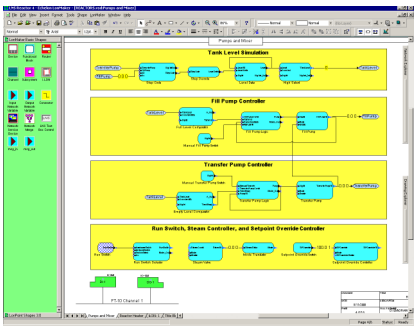
LonMaker™ Integration Tool / Release 3.1
Models 37000-31 and 37020-31



- Provides graphical design, commissioning, operation, and maintenance for LonWorks® networks
- Includes the LNS® Network Operating System and Microsoft Visio® 2002
- Supports remote access via LonWorks or IP networks
- Includes *i*.LON® support for easy integration with the Internet and other IP networks
- Recovers a design from existing networks
- Merges independent networks into a single network
- Includes operator interface components
- Simplifies installation with integrated support for LonMark® applications
- Includes the LonPoint® plug-in for fast and easy configuration of LonPoint devices
- Supports multiple users

Description

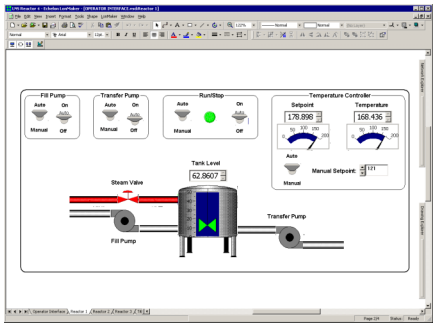
The LonMaker Integration Tool, Release 3.1 SR3A, is a software package for designing, installing, operating, and maintaining multi-vendor, open, interoperable LonWorks networks. Based on Echelon's LNS network operating system, the LonMaker tool combines a powerful client-server architecture with an easy-to-use Microsoft Visio user interface. The result is a tool that is sophisticated enough to design and commission a distributed control network, yet economical enough to be left behind as an operations and maintenance tool.

The LonMaker tool provides comprehensive support for LonMark devices, *i*.LON Internet Servers, and other LonWorks devices. The tool takes full advantage of LonMark features such as standard functional profiles, configuration properties, resource files, network variable aliases, dynamic network variables, and changeable types. LonMark functional profiles are exposed as graphical functional blocks within a LonMaker drawing, making it easy to visualize and document the logic of a control system.

Users are provided with a familiar, CAD-like environment for designing a control system. Visio's smart shape drawing feature provides an intuitive, simple means for creating devices. The LonMaker tool includes a number of smart shapes for LonWorks networks, and users can create new custom shapes. Custom shapes may be as simple as a single device, functional block, or connection, or as complex as a complete subsystem with nested subsystems and predefined devices, functional blocks, and connections between them. Using custom subsystem shapes, additional subsystems can be created by simply dragging a custom subsystem shape from a stencil to the drawing, a time-saving feature when designing complex systems.

Network installation time is minimized by the ability of the installer to commission multiple devices at the same time. Devices can be identified by service pin, bar code scanning, winking, manual entry, or automatic recovery. Network recovery allows easy migration of networks that were installed with other tools, or networks for which the database is no longer available. Network merge allows large systems to be initially installed as multiple independent systems, and then later merged into a single, integrated system.

Testing and device configuration is simplified by an integrated application for browsing network variables and configuration properties. A management window is provided to test, enable/disable, or override individual functional blocks within a device—or to test, wink, or set online and offline states for devices.



Using an integrated LNS Text Box, the LonMaker tool can be used to create simple operator interfaces for LonWorks networks. The LNS Text Box is an ActiveX control that can be added to any LonMaker drawing page. The LNS Text Box

can be linked to any network variable, configuration property, or LONMARK object override in the network, and used to monitor or set the selected point. Visio's built-in scripting language, VBA, can be used to link the LNS Text Box to third-party ActiveX controls such as National Instruments ComponentWorks™, providing the capability to create graphical operator interfaces within a LonMaker drawing. By using the LNS Text Box, the LonMaker tool can be used as a single-tool solution for many networks.

For more complex monitoring and control applications, the LonMaker tool is compatible with the LNS DDE Server which is used as an I/O driver for a variety of third-party operator-interface packages such as Wonderware's InTouch®, Intellution FIX®, USDATA FactoryLink®, and National Instruments' LabView® and BridgeView®. The LonMaker tool can be used to create network variables on the LonMaker PC and then to bind these network variables to a virtually unlimited number of network variables in the network.

The LonMaker tool can both import and export AutoCAD® files and generate as-built documentation. An integrated report generator and bill-of-materials generator can also be used to generate detailed reports of the network configuration.

The LonMaker Integration Tool is available in three editions—the Professional Edition, Standard Edition, and Trial Edition. The table below explains the differences between them.

The LonMaker Professional Edition is the premier integration tool for network integrators and the Standard Edition is an ideal leave-behind maintenance tool. The LonMaker Trial Edition provides all the features of the LonMaker Professional Edition, but is limited to six device demonstration networks, can only be installed on one computer, and quits functioning after 30 days. The Trial Edition provides an easy way to try the LonMaker tool before buying it. You can request a free trial CD from www.echelon.com/lonmaker.

LNS Network Operating System

The LonMaker tool includes an LNS 3 runtime and LNS 3 Server. LNS provides a standard platform for supporting interoperable applications on LONWORKS networks. LNS permits multiple applications and users to manage and interact simultaneously with a network. Multiple LonMaker users can access a shared LNS Server via the LONWORKS network, a local area network, or the Internet.

The LonMaker tool conforms to the LNS plug-in standard. This standard allows LONWORKS device manufacturers to provide customized applications for their products. These applications make it easy for system engineers and technicians to define, commission, maintain, and test the associated devices. A LonPoint plug-in is included so that the LonMaker tool can be used to easily configure LonPoint modules. A listing of additional LNS plug-ins is available at www.echelon.com/plugins.

Release 1, 2, and 3 Upgrades

Users of Release 1, 2, or 3 of the LonMaker Integration Tool can upgrade to Release 3.1 by purchasing the Model 37012-31 or 37032-31 LonMaker Upgrade.

LonMaker Integration Tool Editions

LonMaker Integration Tool	Microsoft Visio Edition	LonMaker Credits	Model Number
Professional Edition	2002 Professional (See note 1)	64	37000-31
Standard Edition	2002 Standard	5	37020-31
Trial Edition (30 days)	2002 Professional 30-Day Trial	0 (See note 2)	Request from www.echelon.com/lonmaker

NOTES:

1. Includes all the features in Visio 2002 Standard, plus enhanced support for engineering drawings; building, space, and floor plans; logical network diagrams, and other technical drawings.
2. LonMaker Trial networks are limited to six or fewer devices.

Specifications

Function	Description
PC requirements	Windows XP, Windows 2000, or Windows 98; Minimum hardware: Pentium 200; 128MB RAM; CD-ROM drive; Super VGA (800x600) or higher-resolution display with 256 colors; mouse or other Windows-compatible pointing device; 350MB available hard drive space; LNS or IP network interface required; Recommended configuration: Windows XP or 2000, Pentium III 500, 256MB RAM minimum, and 1024x768 256-color display minimum
Compatible LNS network interfaces and routers	*i*.LON 1000 Internet Server, *i*.LON 100 Internet Server, *i*.LON 10 Ethernet Adapter, PCLTA-20 PCI Card, PCLTA-10 ISA Card, PCC-10 PC Card, PCNSI ISA Card, and SLTA-10 Serial LonTalk Adapter
Network variables	4,096 maximum per host-based device; 62 maximum per Neuron® Chip- or Echelon Smart Transceiver-hosted device

The following maximum limits apply per network defined in the LonMaker tool:

Function	Description
Active LonMaker Tools	5 maximum
Application device types	32,385 maximum
Channels	1,000 maximum
Devices	32,385 maximum (2 addresses required per router and network service device)
Domains	1 maximum per network
Routers	1,000 maximum

Pricing for the LonMaker tool is based on usage. A low initial price provides you with a license to use the LonMaker tool on a single PC to design any number of networks and also includes a license for Visio 2002. When you start commissioning devices, the LonMaker tool requires a pre-paid fee per device called a LonMaker credit. The first 64 LonMaker credits are included for free with the LonMaker Professional Edition; the first five LonMaker credits are included for free with the LonMaker Standard edition. The LonMaker Trial Edition does not include LonMaker Credits, but can be used to create demo networks of up to six devices. Additional credits can be purchased by ordering Model 37100 LonMaker Credits.

Ordering Information

Product	Echelon Model/Part Number
LonMaker Integration Tool Professional Edition	37000-31
LonMaker Integration Tool Standard Edition	37020-31
LonMaker Integration Tool Trial Edition	850-0252-01 (Request from www.echelon.com/lonmaker)
LonMaker Credits (minimum order: 20 credits)	37100
LonMaker 3.1 Professional Edition Upgrade	37012-31
LonMaker 3.1 Standard Edition Upgrade	37032-31

Documentation

The following documentation is available for download from www.echelon.com.

Document	Echelon Part Number
LonMaker User's Guide	078-0168-02

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