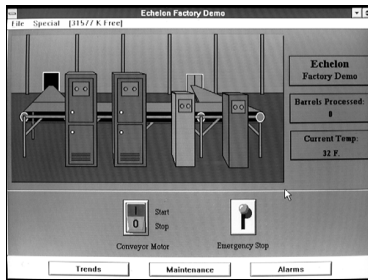


LONMANAGER DDE SERVER MODEL 33000



FEATURES

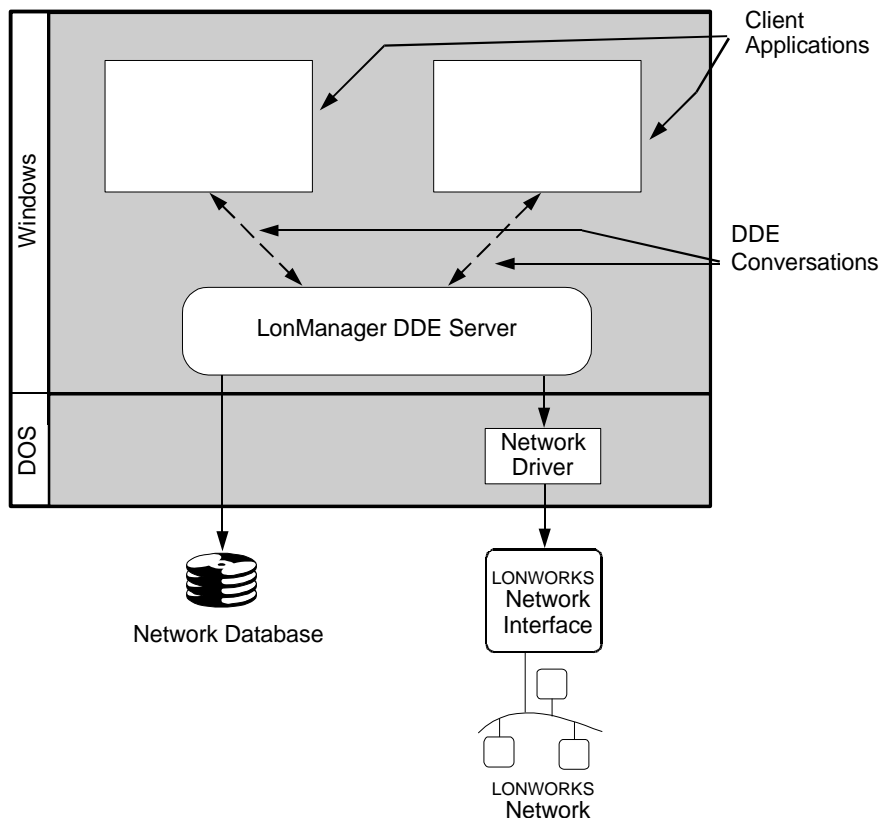
- Standard DDE support allows any DDE-compatible Microsoft Windows application (i.e. Microsoft Visual Basic) the ability to monitor and control LONWORKS control networks
- Fast DDE option for faster data throughput with Wonderware's InTouch operator-interface builder or Microsoft Excel
- Supports multiple DDE clients for simultaneous charting, logging, and operator displays
- Polled and event-driven updates for metered data transfer (polled), and faster notification and reduced network traffic (event-driven) on a point-by-point basis
- Data transferred in formatted strings
- Report-by-exception updates
- Uses any network database from any LonManager tool
- Compatibility with the LonManager API for Windows allows the LonManager DDE Server and the LonManager API for Windows applications to share the same network database
- Uses any standard LONWORKS network interface

DESCRIPTION

The LonManager[®] Dynamic Data Exchange (DDE) Server gives any DDE-compatible Microsoft Windows application the ability to monitor and control LONWORKS[®] control networks — *without* programming. DDE defines a standard way for Microsoft Windows applications to share information with one another. With the LonManager DDE Server, applications that "speak" DDE now have the ability to monitor and modify the value of any network variable in a LONWORKS network and to send and receive explicit messages.

The LonManager DDE Server is intended for developers and system integrators who are creating applications that monitor and control LONWORKS networks. These applications include:

- Operator interfaces for control systems.
- Man-machine interfaces for building management, process control, factory control, etc.
- Links to spreadsheets and databases for automatic billing and inventory control applications.



The LonManager DDE Server exchanges network variable and explicit message data between a LONWORKS network and Windows client applications. Using it, client applications can observe the values of network variables and explicit messages and can change the value of network variables or send explicit messages to effect the operation of the network.

The LonManager DDE Server uses the information contained in a network database to accomplish its tasks. This database is created by a network management tool, such as the LonManager LonMaker™ Installation Tool, during network installation.

USAGE

The LonManager DDE Server requires a 386 or better PC and Windows 3.1. The PC must have at least 4Mbytes of memory and 1Mbyte of disk space available for the DDE Server and its related files. Additional disk space is required for the network database.

A LONWORKS network interface and its associated network driver are required to communicate with the LONWORKS network. The network interface provides the physical connection between a LONWORKS network and the PC running the LonManager DDE Server. The LonManager DDE Server can be used with Echelon's PCNSS or PCNSI PC Interface Cards, PCLTA PC LonTalk Adapters, or SLTA Serial LonTalk Adapters. Any other network interface with a network driver conforming to the LonTalk network driver protocol for DOS can be used.

A network database is required to provide addressing and naming information to the LonManager DDE Server. The network database can be generated by any of the following tools:

- The LonManager LonMaker Installation Tool
- Any tool based on the LonManager API for DOS
- Any tool based on the LonManager API for Windows
- The LonManager NSS-10 Module (must be reconstructed)
- The LonBuilder Developer's Workbench (must be converted)
- The NodeBuilder Development Tool

The figure on the previous page shows two applications (clients) communicating via DDE with the LonManager DDE Server and the relationship between the clients, the DDE Server, the network database, the network interface, the network driver, and the LONWORKS network.

When a client sends out a request to begin a DDE conversation, all DDE servers running on the PC see the message. In order to direct the message to a particular server, the client addresses the message using a two-part hierarchy of *application* and *topic*. Once the DDE conversation is established, the client can read or write the value of *items* within the topic. To address a DDE message to the LonManager DDE Server, the client specifies `LMSRVR1` as the

application and NETVAR or MSGTAG as the topic. The item specifies the network variable or explicit message that the client wants to monitor or update. For example, for network variables the item format is node_name.variable_name. For example, the item door_lock.status is used to monitor or update the value of the network variable named status on the node named door_lock.

SPECIFICATIONS

Performance and Capacity

Maximum number of client applications	8
Maximum number of network interfaces	1
Maximum number of network databases	1
Maximum network size	unlimited
Maximum number of DDE links	unlimited
Typical bound network variable updates per second	
PCLTA	226
MIP P/50	200
SLTA/2	100
Typical polled network variable updates per second	
PCLTA	65
MIP P/50	54
SLTA/2	33

Data Formatting Options

Formatted data	Returns and accepts both Standard Network Variable Type (SNVT) data and non-SNVT data as formatted strings, integers, real numbers, or discrete values
Raw data	Returns and accepts data as tab-separated decimal byte values
DDE Compatibility	
DDE Services	Initiate, Terminate, Request, Advise, Poke, Fast DDE
DDE Links	Advise, request
LonTalk Options	
Messaging Services	Request/response, unacknowledged, repeated, acknowledged
Addressing Options	Domain-wide broadcast, subnet-wide broadcast, all nodes in a connection, node
Input Data Sources	Bound network variables, polled network variables, bound message tags
Output Data Destination	Network variable update, explicit message

DOCUMENTATION

The following documentation is included with the LonManager DDE Server. The documentation describes how to use the LonManager DDE Server to access and update network variables, as well as send and receive explicit messages on a LONWORKS network from a Windows application and provides examples of using the LonManager DDE Server with Excel and InTouch.

Document & Echelon Model Number

LonManager DDE Server User's Guide	078-0109-01B/39300
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ORDERING INFORMATION

Product & Echelon Model Number

LonManager DDE Server	33000
PCNSS PC Interface Card	34100
SLTA/2 Serial LonTalk Adapter	73000

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