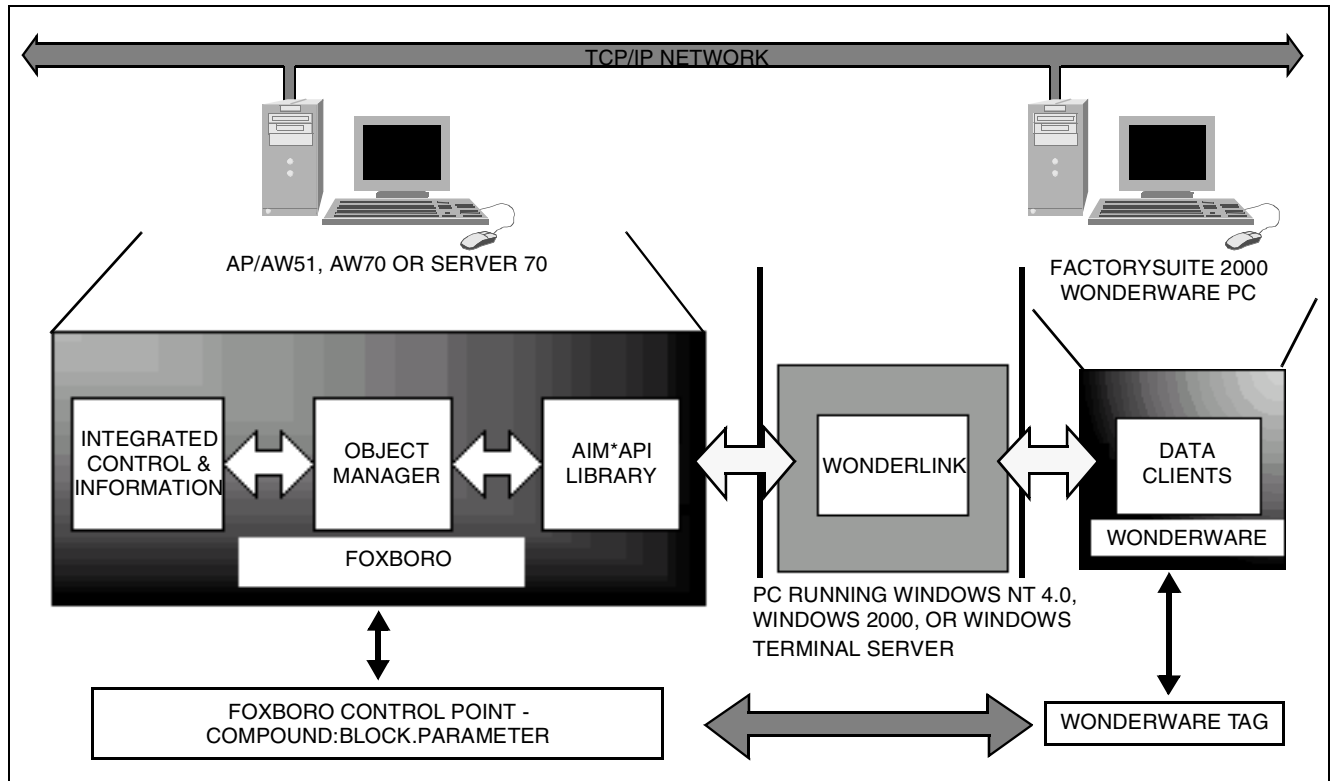# FOXBORO®

I/A Series® Information Suite
WonderLink™

WonderLink is a Microsoft® Windows® based application that provides a real-time read/write data interface between Foxboro integrated control information and Wonderware FactorySuite™ 2000 client applications, such as Wonderware's InTouch™, InBatch™, and SuiteVoyager™.

WonderLink software can be used with both standard off-the-shelf Foxboro and Wonderware software and systems.

WonderLink software has all of the functionality of a Wonderware I/O Server and provides the following features to its FactorySuite 2000 data clients:

- Access to I/A Series controls, information objects and status values via either Solaris™ or Windows NT stations.

- Access to AIM*Historian running on the corporate network.

- One-to-one association between Wonderware tags and Foxboro control and information objects.

- Automatic connection to the I/A Series network on startup for Wonderware data clients via standard TCP/IP protocol over a corporate or control network.

- Direct import of I/A Series system objects into the InTouch Tagname Dictionary for configuration of the objects as local tags (see Import Tag Browser).

- Import of I/A Series Historian and AIM*Historian points.

- Optional configuration of I/A Series points as remote tags using the Wonderware Tag Browser.

- Ability to acknowledge I/A Series and Wonderware alarms either together or separately.

PLATFORMS

WonderLink operates on the following platforms:

- I/A Series AW70 or Server 70

- Wonderware Factory 2000 host

- PC running Windows NT 4.0 (with Service Pack 5 or later), Windows 2000 or Windows Terminal Server.

The software is installed from the AIM*AT CD-ROM, which includes the appropriate version of AIM*API server software.

As shown in Figure 1, WonderLink software, the data clients, and the I/A Series control and information objects can exist in the same workstation, or in remote workstations connected using TCP/IP communication. The AIM*API server can be installed on any Solaris or Windows NT workstation including an AP/AW51 or an AW70. A given WonderLink application instance can communicate with multiple local and remote AIM*API servers. InTouch can communicate simultaneously with multiple WonderLink application instances.
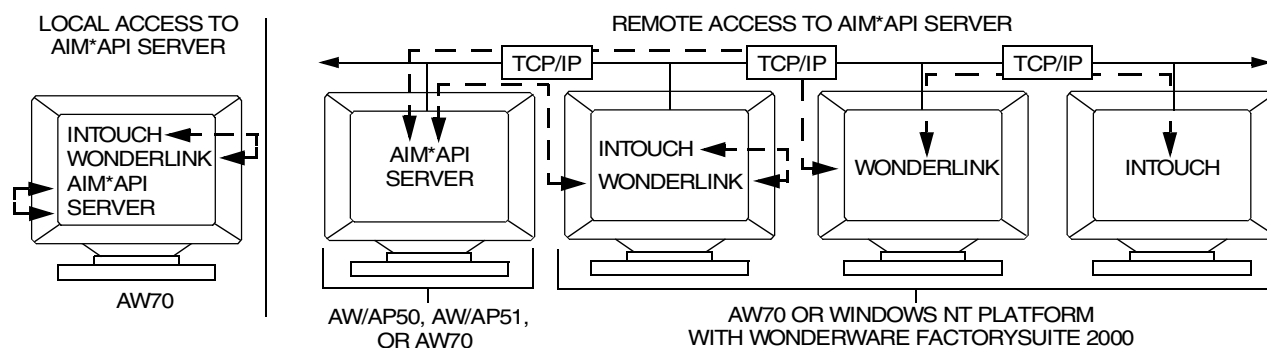

Figure 1. Example WonderLink Configuration with InTouch Data Client and I/A Series Control Locations

FEATURES

Configuration Tools

Two tag configuration tools are provided in Wonderware FactorySuite 2000 for rapid and convenient development of WonderLink applications.

Import Tag Browser

The Import Tag Browser is an add-in to WindowMaker that selects objects in an I/A Series control database and imports them into the FactorySuite Tagname Dictionary. The wizard includes an ActiveX control that enables you to set up multiple database filters to view data objects by specific server, by compound and block, or by parameter type. The wizard also provides for selection of tags from I/A Series Historian and AIM*Historian instances. The results of the search are displayed in a dialog box for selection as tags for the Wonderware application (Figure 2).
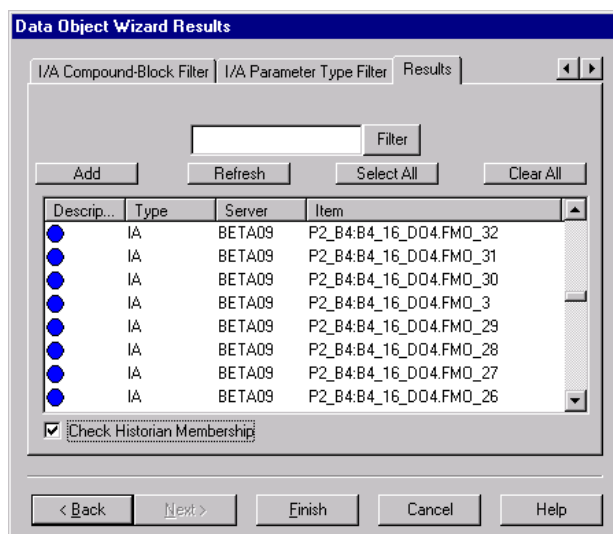

Figure 2. Results Page with Selected Objects from the I/A Series Control Database

Once selected, the I/A Series objects are displayed in a tree view in the Import Tag Browser dialog box (Figure 3).
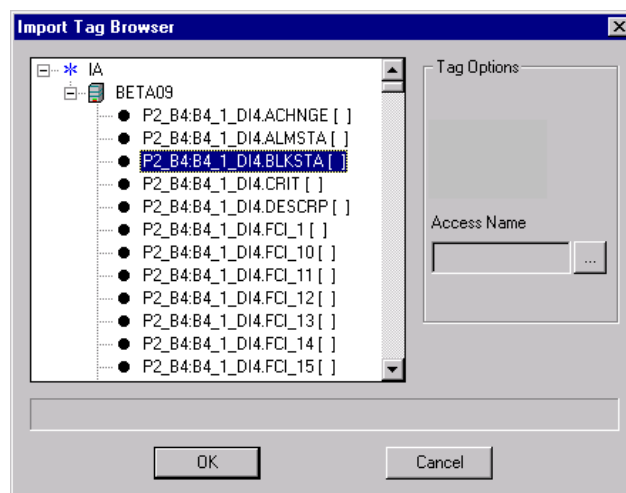

Figure 3. Import Tag Browser Dialog Box

In this dialog box, you must assign an Access Name to the tags to identify the Application Name, Topic Name, and protocol. After these selections, the wizard converts the I/A Series object names to conform to the Tag Dictionary requirements, and enters the Tags into the dictionary.

InTouch Tag Browser

For applications where you do not want to configure the I/A Series system object as remote tags, you can use the WindowMaker InTouch Tag Browser. This browser provides filtered access to the objects and a variety of Tag definition tools.

Interfacing Historians

WonderLink includes a Dynamic Link Library (DLL) that enables import of values from various AIM*Historian instances into InTouch Historical Charts. The DLL is enabled from WindowMaker.

WonderLink Server Window

Although WonderLink typically operates in the background, the application includes a user interface for managing server operation. The WonderLink Server window provides desktop access to configuration of three aspects of server operation:

• Topic Definition
• Operation as a Windows NT Service
• Reflective Writes.

The window is also used to monitor connection to both local and remote I/A Series and AIM*AT servers.

Topics

WonderLink operates as a Wonderware I/O Server and supports use of Wonderware Topics. The Topics enable high-speed reads and writes in a single execution thread between the control system and the Wonderware clients. The Topic Definition dialog box (Figure 4) identifies the I/A Series server, sets the update interval, and determines access to the data points as either read-only (unsecured writes) or read/write (secured writes).

Figure 4. Topic Definition Dialog Box

Operation as a Service or Application

WonderLink can be configured to run as an application or as a Windows NT Service, starting automatically on startup of the host computer. The Service is configured using the WonderLink Server window and a standard Windows NT applet.

Reflective Writes

Using the WonderLink Server window, you can enable or disable Reflective Writes for all SuiteLink™ Topics on the server. When disabled, SuiteLink does not read the write values back to the Wonderware client until they are actually written to the I/A Series control database.

SYSTEMS REQUIREMENTS

Platform

PC running Windows NT 4.0 with Service Pack 5 or later, Windows 2000, or Windows Terminal Server. AW70 or Server 70 running I/A Series software Version 6.1 or later.
Wonderware FactorySuite 2000 Version 7.1 or later.

Communication

TCP/IP Connections to the I/A Series Control System and to the Wonderware FactorySuite 2000 clients.