



AX Supervisor

Overview

New levels of flexibility from the leading provider of open, Internet-enabled, automation infrastructure solutions

Tridium has developed a suite of Niagara-based products designed to integrate diverse smart devices into a unified, Internet-enabled, web-based system. These solutions integrate LonWorks™, BACnet™, oBIX, Internet and web services protocols in a software platform that can be used in embedded controllers or server applications. The products includes integrated network management tools to support the design, configuration, installation, and maintenance of interoperable networks.

The AX Supervisor® is a flexible network server used in applications where multiple Niagara^{AX}-based JACE controllers will be networked together (SoftJACE®, JACE-545®, JACE-403®, JACE-200®, JACE-600®, or JACE-XPR® series.). The AX Supervisor serves real time graphical information displays to standard web-browser clients and also provides server-level functions such as: centralized data logging, archiving, alarming, real time graphical displays, master scheduling, system-wide database management, and integration with enterprise software applications. In addition, the AX Supervisor provides a comprehensive, graphical engineering toolset for application development.

In addition to the standard AX Supervisor, a 64 bit version for PCs supporting the Windows 64 bit OS is now available for monitoring systems intended to monitor in excess of 150 and up to 500 JACEs. It supports the same feature set as the standard version.

With Niagara^{AX} release 3.4 or greater, Tridium offers a new platform for the AX Supervisor which runs on Redhat Linux. Niagara^{AX}-3.4 provides AX Supervisor software that is targeted for a specific Linux-based platform: an Intel-based PC platform running the operating system of Red Hat Enterprise Linux 5.

oBIX is now included with the AX Supervisor, the 64 bit version, and the Linux version, as a means of integrating Niagara-based Release 2 JACEs. With release 2.3.522 or greater, the oBIX driver can be added to expose all data points, schedules, trends and alarms to an AX system. This oBIX driver is both a client and a server.

Features

- Java-enabled user interface (UI) as well as a non-Java UI for browsers.
- Supports an unlimited number of users over the Internet / Intranet with a standard web browser, depending on the host PC resources.
- Optional enterprise-level data archival using SQL, Oracle or DB2 database, and HTTP/HTML/XML text formats.
- "Audit Trail" of database changes, database storage and backup, global time functions, calendar, central scheduling, control, and energy management routines.
- Sophisticated alarm processing and routing, including e-mail and paging.
- Provides access to alarms, logs, graphics, schedules, and configuration data with a standard web browser.
- Password protection and security using standard Java (on Windows platforms only) authentication and encryption techniques with optional security supported via an external LDAP connection.
- HTML-based help system that includes comprehensive on-line system documentation.
- Supports multiple JACE-200, JACE-403, JACE-545, JACE-600, or JACE-XPR stations connected to a local Ethernet network, or the Internet.
- Provides online/offline use of the Niagara Framework WorkPlace AX® graphical configuration tool and a comprehensive Java Object Library.
- Optional direct Ethernet based driver support for BACnet I/P, OPC (Client), Modbus TCP, and SNMP; additional point blocks for each driver may be purchased in blocks of 500 for each protocol. *Note: these are not supported on the 64 bit platform or on Linux at this time.*
- A "Small Building System" version is available for support of a system with up to three JACEs.
- Also available is a 64 bit Windows compliant version of the AX Supervisor for large systems monitoring in excess of 200 JACEs. All features of the standard AX Supervisor are included with this platform. Currently, the only driver, other than the built in driver for JACEs, available for the 64 bit version is BACnet.

Platform Requirements

Processor

- Intel Pentium® IV, 2 GHz or higher, Core 2 Duo also acceptable.

Operating System

- Microsoft Windows XP Professional, Windows 2003 or 2008 Server (if Microsoft IIS is disabled), Vista Ultimate, Mozilla Firefox™ or Internet Explorer™ 5.0 or later
- For the 64 bit AX Supervisor, the required OS is Windows XP Professional-64 bit.
- For the Linux version, the required version is Red Hat Enterprise Linux 5.

Memory

- 1 GB minimum, 2GB or more recommended for large systems , 8 GB or more recommended for the Windows 64 bit version.

Hard Drive

- 1 GB minimum, 5 GB for applications that need more archiving capacity

Display

- Video card and monitor capable of displaying 1024 x 768 pixel resolution or greater

Network Support

- Ethernet adapter (10/100 Mb with RJ-45 connector)

Modem

- 56 KB minimum, full time high speed ISP connection recommended for remote site access (i.e. T1, ADSL, cable modem)

Ordering Information

Model Number	Description
S-AX	Basic 32 bit AX Supervisor; all JACEs must have EC-SP for connectivity to the AX Supervisor for Windows XP Professional, Vista Pro, Windows Server 2003, or Windows Server 2008 ; includes one copy of Workbench
S-AX-SBS	Small Building System version of the AX Supervisor with a three JACE limit; all JACEs must have EC-SP for connectivity to the SBS AX Supervisor; includes one copy of Workbench
S-AX-SBS-EXUP	Upgrade from the S-AX-SBS to a full AX Supervisor
S-AX-64	AX Supervisor software for 64 bit Window's platforms; Includes Niagara Historical Database and Workplace AX. Includes OBIX client / server driver for connecting to Niagara based controllers only. Includes one copy of Workbench
S-AX-LNX	AX Supervisor software for Red Hat Enterprise Linux 5; Includes Niagara Historical Database and Workplace AX. Includes OBIX client / server driver for connecting to Niagara based controllers only. Includes one copy of Workbench

Optional Database Drivers for External Database applications (not available for SBS version of AX Supervisor)

S-DB-SQL	Microsoft SQL Database Driver
S-DB-DB2	IBM DB2 Database Driver
S-DB-ORCL	Oracle Database Driver
S-AX-SBS-EXUP	Upgrade from the S-AX-SBS to a full AX Supervisor
WP-AX	Additional copy of Workplace AX

Open System Drivers for AX Supervisor only (not for SBS, nor for 64 bit Windows and Linux version)

DR-S-BAC-AX	Adds BACnet IP Client driver support to AX Supervisor; includes 500 points
DR-S-BAC-500	Adds 500 BACnet IP points to AX Supervisor with above driver option
DR-S-MTCP-AX	Adds Modbus TCP driver support to AX Supervisor; includes 500 points
DR-S-MTCP-500	Adds 500 Modbus TCP points to AX Supervisor with above driver option
DR-S-SNMP-AX	Adds SNMP driver support to AX Supervisor; includes 500 points
DR-S-SNMP-500	Adds 500 SNMP points to AX Supervisor with above driver option
DR-S-OPC-AX	Adds OPC Client driver support to AX Supervisor; includes 500 points
DR-S-OPC-500	Adds 500 OPC points to AX Supervisor with above driver option
DR-S-OBIX-AX	oBIX client for non-Niagara point data. Includes 500 points
DR-S-OBIX-500	Adds 500 oBIX points to AX Supervisor

Architecture

