



Niagara 4 Features

- Centralized system management
- Quickly navigate to individual buildings using tags to diagnose problems
- Compare data between buildings
- Export system data to external databases
- Integrate BAS to other enterprise applications
- Integrate to other applications, such as work order management, analytics, etc.
- Single tool used to program JACE controllers and Supervisor
- Remotely back up JACE applications to Supervisor
- Batch provisioning of JACE firmware upgrades from Supervisor
- Robust built-in analytic capabilities supported by standard Niagara components and visualizations
- Compatibility with Niagara Analytics, adding data source, functional and mathematical programming blocks to enable sophisticated analytic algorithms
- Compatibility with Niagara Enterprise Security access control and security application. Allows integration of BAS and access control to save energy and optimize operations
- Eligible for accreditation under the Federal Risk Management Framework (RMF)
- FIPS 140-2 Level 1 conformance available

The Niagara 4 Supervisor allows multiple Niagara-based JACE® controllers, along with other IP-based controller and field devices, to be networked together. It serves real-time graphical information to standard web-browser clients and provides server-level functions. These functions include centralized data logging/trending, archiving to external databases, alarming, dashboarding, system navigation, master scheduling, database management and integration with other enterprise software applications through an XML interface (oBIX standard). Also, it provides a comprehensive graphical engineering toolset for application development.



SUPPORTED DRIVERS

Many open protocol IP drivers are included with Niagara 4. Others can be purchased separately à la carte.

COMPATITBILITY

In any given Niagara system, the Niagara Supervisor must be running the highest version of any Niagara instance in the architecture. When connecting to JACEs that are running older versions of Niagara, these compatibility guidelines apply:

- Niagara AX: Niagara 4 Supervisors can connect to JACEs running Niagara AX versions 3.6u4, 3.7u1, 3.8R and higher.
- R2: Niagara AX and Niagara 4 Supervisors can connect to JACEs running R2 through the oBIX XML interface only. oBIX is included in all NiagaraAX and Niagara 4 Supervisors as a means of integrating Niagara-based Release 2 (R2) JACEs. With Niagara Release 2.3.522 or higher, the oBIX driver can be added to expose all data points, schedules, trends and alarms to a Niagara AX or Niagara 4 system. This oBIX driver is both a client and a server.

PLATFORM REQUIREMENTS FOR NIAGARA 4.6

Niagara 4 Supervisors may run acceptably on lower-rated platforms, or may even require more powerful platforms, depending on the application, number of data points integrated, data poll rate, number of concurrent users, performance expectations, etc.

- Processor: Intel® Xeon® CPU E5-2640 x64 (or better), compatible with dual- and quad-core processors
- Operating System: Windows 7 Professional/Enterprise/Ultimate (32 and 64 bit), Windows 8.1 Professional/Enterprise/Ultimate (32 and 64 bit) Windows 10 (32 and 64 bit), Windows Server 2012 R2 (SP2) Standard/Enterprise, Windows Server 2016, Red Hat Enterprise Linux 7.4
- Memory: 6 GB minimum, 8 GB or more recommended for larger systems
- Hard Drive: 4 GB minimum, more recommended depending on archiving requirements
- 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)
- Connectivity: Full-time high-speed ISP connection recommended for remote site access (i.e., T1, ADSL, cable modem) and IPv6 compliant Platform requirements for older versions of Niagara Supervisors are included in the release notes for each particular version.

COMPATITBILITY

HTML5 and Java-enabled user interface (UI); JavaScript data interface library included (BajaScript)

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, MySQL or Oracle databases, and HTTP/HTML/XML, CSV or 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 email alarm acknowledging

Access to alarms, logs, graphics, schedules and configuration data with a standard web browser

Niagara follows industry best practices for cyber security, with support for features such as strong, hashed passwords, TLSv1.2 for secure communications and certificate management tools for authentication

HTML-based help system that includes comprehensive online system documentation

Supports multiple Niagara-based stations connected to a local Ethernet network or the internet

Provides online/offline use of the Niagara Framework® Workbench AX graphical configuration tool and a comprehensive Java Object Library

Optional direct Ethernet-based driver support for most Open IP field bus protocols (see supported drivers document)