

niagara⁴ supervisor

PRODUCT DEFINITION

The Niagara Supervisor is part of the portfolio of Java-based controller/server products, software applications and tools powered by the Niagara Framework®. It provides server-level functions for a network of JACE, Niagara Edge and other field device clients. The Niagara Supervisor serves real-time graphical information to standard web-browser clients and performs other functions like 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.

The Niagara Supervisor allows the networking of multiple Niagara-based JACE® and Niagara Edge™ controllers, along with other IP-based controllers and field devices. It enables the design, configuration and maintenance of a unified, real-time controls network.

key 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 and Edge controllers and Supervisor
- Remotely back up JACE and Edge applications to Supervisor
- Batch provisioning of JACE and Edge firmware upgrades, security credentials, applications and commissioning options 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

powered by

niagara
framework®

SPECIFICATIONS

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)

SOFTWARE & DRIVERS

Every JACE comes with a Niagara 4 software license
and many open-protocol IP drivers that cover standard
control situations. Other drivers can be purchased
separately à la carte. For an up-to-date list of supported
drivers, visit the resource library on tridium.com.

SOFTWARE MAINTENANCE

Purchase of a software maintenance agreement (SMA)
is required with initial Niagara Supervisor licensing. The
initial SMA is for 18 months, with extended agreements of
3 years and 5 years available for discounted rates.

If a Software Maintenance Agreement is not in effect
for any period, the price of maintenance for the next
period for which it is purchased will be priced at a cost
equal to the maintenance fee for the period(s) for which
maintenance was not purchased, up to a maximum of 5
years, plus the maintenance fee for the next year.

For an up-to-date list of
supported drivers, visit the
resource library on tridium.com.

ORDERING INFORMATION

| Part number | Description |
|---------------------------|---|
| SUP-0 | No Niagara network - Devices only. 18mo SMA required |
| SUP-0-SMA-INIT | 18mo initial SMA required (3YR or 5YR can be substituted) |
| SUP-1 | 1 Niagara network connection (18mo SMA req) |
| SUP-1-SMA-INIT | 18mo initial SMA required (3YR or 5YR can be substituted) |
| SUP-2 | 2 Niagara network connections (18mo SMA req) |
| SUP-2-SMA-INIT | 18mo initial SMA required (3YR or 5YR can be substituted) |
| SUP-3 | 3 Niagara network connections (18mo SMA req) |
| SUP-3-SMA-INIT | 18mo initial SMA required (3YR or 5YR can be substituted) |
| SUP-10 | 10 Niagara network connections (18mo SMA req) |
| SUP-10-SMA-INIT | 18mo initial SMA required (3YR or 5YR can be substituted) |
| SUP-100 | 100 Niagara network connections (18mo SMA req) |
| SUP-100-SMA-INIT | 18mo initial SMA required (3YR or 5YR can be substituted) |
| SUP-UNL | Unlimited Niagara network connections (18mo SMA req) |
| SUP-UNL-SMA-INIT | 18mo initial SMA required (3YR or 5YR can be substituted) |
| SUP-DEMO | Niagara 4 Supervisor demo |
| SUP-UP-1 | Adds one additional Niagara connection to Supervisor |
| SUP-UP-100 | Upgrades small Supervisor to 100 Niagara connections |
| SUP-UP-UNL | Upgrades Supervisor 100 to unlimited Niagara connections |
| SUP-DEVICE-10 | 10 device upgrade (standard drivers included) |
| SUP-DEVICE-25 | 25 device upgrade (standard drivers included) |
| SUP-DEVICE-50 | 50 device upgrade (standard drivers included) |
| SUP-DEVICE-100 | 100 device upgrade (standard drivers included) |
| SUP-DEVICE-200 | 200 device upgrade (standard drivers included) |
| SUP-DEVICE-500 | 500 device upgrade (standard drivers included) |
| SUP-DEVICE-1000 | 1000 device upgrade (standard drivers included) |
| SP-S-FIPS | Provides FIPS 140-2 Level 1 conformance for 4.6 and later |
| SUP-AX | Enables Supervisor to run Niagara AX (v3.8) |
| SUP-[0-UNL]-SMA-[1,3,5]YR | Supervisor [0-UNL] Maintenance - [1,3,5] YR extensions |

COMPATIBILITY

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 Niagara AX 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 SUPERVISOR

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.



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Locations and customer support, worldwide

| Headquarters | Support | | |
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| North America | North America & Latin America | Europe, Middle East & Africa | Asia Pacific |
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