

Niagara Security



Overview

Niagara Security by Tridium, is an open, web-based security management solution that allows you to manage and monitor your facility anytime, anywhere. Built on Tridium's Niagara^{AX} Framework, Niagara Security integrates with any building automation system, enabling you to control lighting, HVAC equipment, and other building systems in response to access events and alarm conditions.

The heart of Niagara Security is the advanced IP-based controller that eliminates the need for on-site PCs or thick client software.

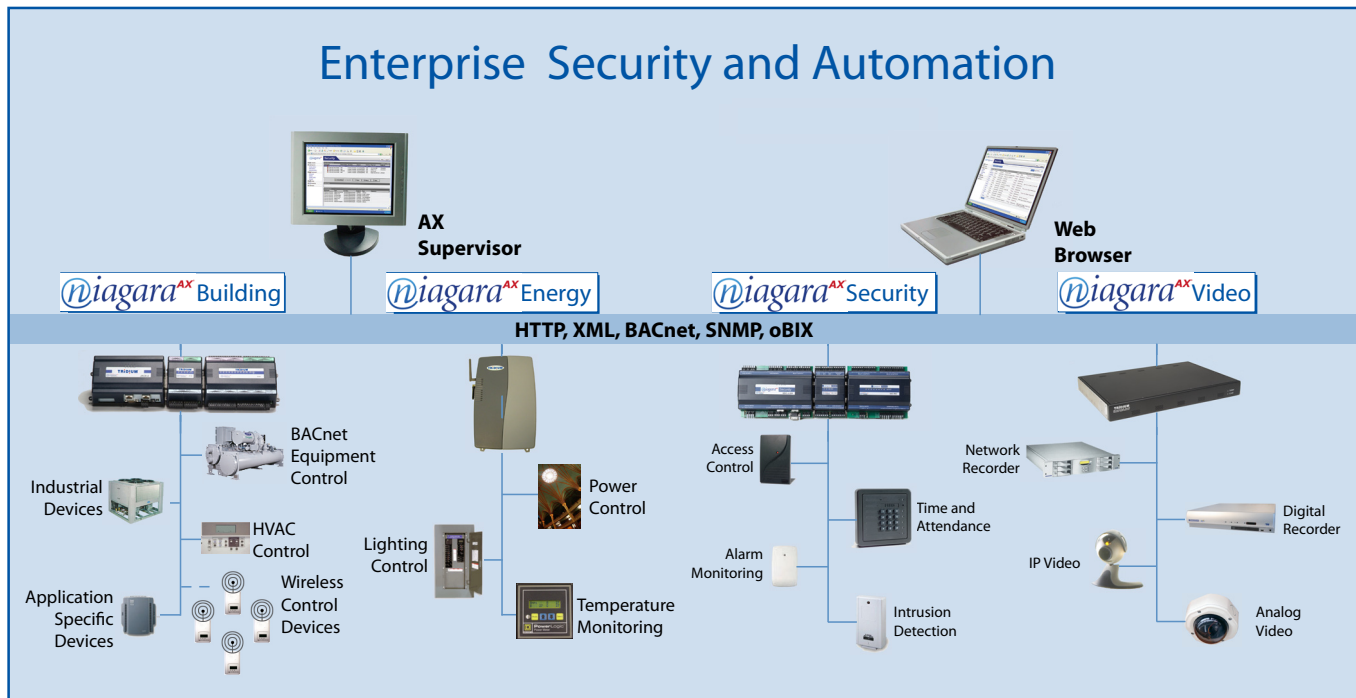
Niagara Security enables authorized security administrators to manage credentials, access rights, access control, intrusion detection and alarm monitoring via a web browser interface from anywhere.

Niagara Security is built on the Niagara^{AX} Framework, the industry's leading automation infrastructure platform. This allows integration with your building control system via BACnet, Lonworks, and Modbus as well as supports enterprise connectivity through XML, SNMP, oBIX and HTTP.

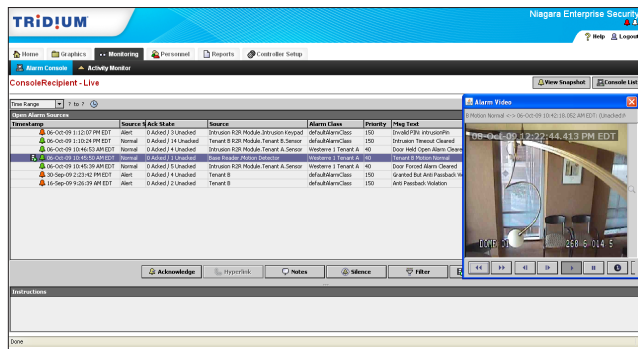
Features

- Web-based security controller – easily managed via a web browser anytime, anywhere
- Connectivity to any facility system via BACnet®, LonWorks®, Modbus®, and oBIX
- Seamlessly integrates to HVAC, Lighting, and Energy Management Applications
- IT connectivity via oBIX, SNMP and HTTP
- No thick client software required
- Built on Tridium's highly successful Niagara^{AX} Framework, the industry's leading facility management software platform
- Open architecture, flexible platform solution
- Web User Interface serves rich presentations and live data to a browser
- Integrated management of access control, alarm monitoring, intrusion detection and credential database
- Pre-defined custom reports on screen or exported
- Custom graphic floor plans and equipment displays
- User-definable Wiegand card formats
- Elevator control
- Intrusion detection
- Access zone (advanced occupancy restrictions)

Architecture Solutions



Security Appliance



Real Time Monitoring

Access real time alarm and activity monitoring from an intuitive console and quickly view facility graphical layouts to locate points of entry, exit and alarms. Facilitate operator response to system events with unique alarm point instructions and process events with pertinent notes to create a written record of events.

The screenshot shows the Niagara Enterprise Security console's **Access History** view. The table lists access events with columns for **Timestamp**, **Reader**, **Reader ID**, **Reader Name**, **Activity**, and **Remarks**.

Timestamp	Reader	Reader ID	Reader Name	Activity	Remarks
11-Oct-09 9:11:18 PM EDT	Parking Gate	00564 [0]	Wicks, Dan	Granted	
06-Oct-09 11:32:36 PM EDT	Tenant A	03412 [0]	Boyle, Scott	Granted	
06-Oct-09 11:40:43 PM EDT	Front Door	03412 [0]	Boyle, Scott	Granted	
06-Oct-09 11:03:29 PM EDT	Club	03412 [0]	Boyle, Scott	Granted	
06-Oct-09 11:07:07 PM EDT	Club	03412 [0]	Boyle, Scott	Granted	
06-Oct-09 10:40:35 AM EDT	Parking Gate	00231 [0]	Isidore, Anthony	Granted	
06-Oct-09 10:40:10 AM EDT	Parking Gate	00230 [0]	Hemery, Ed	Granted	
06-Oct-09 10:40:22 AM EDT	Tenant A	00564 [0]	Scott, Steve	Granted	
06-Oct-09 10:37:54 AM EDT	Parking Gate	00230 [0]	Hemery, Ed	Granted	
30-Sep-09 3:12:03 PM EDT	Parking Gate	12340 [0]	Wicks, Dan	Granted	
30-Sep-09 2:18:18 PM EDT	Tenant A	03412 [0]	Boyle, Scott	Granted	
30-Sep-09 2:18:09 PM EDT	Tenant A	03412 [0]	Boyle, Scott	Granted	
30-Sep-09 2:18:57 PM EDT	Club - Back Reader - Front Door	03412 [0]	User - dms	Manual Override	
30-Sep-09 2:18:42 PM EDT	Club	03412 [0]	Boyle, Scott	Granted But Anti Feedback Violation	Person Entering to Not Inside
30-Sep-09 2:18:28 PM EDT	Club	03412 [0]	Boyle, Scott	Granted But Anti Feedback Violation	Person Entering to Not Inside
30-Sep-09 2:18:19 PM EDT	Club	03412 [0]	Boyle, Scott	Granted But Anti Feedback Violation	Person Entering to Not Inside
30-Sep-09 2:18:03 PM EDT	Club	03412 [0]	Boyle, Scott	Granted But Anti Feedback Violation	Person Entering to Not Inside
30-Sep-09 2:17:37 PM EDT	Front Door	03412 [0]	Boyle, Scott	Granted	

Comprehensive Reporting

Historical data is easily searchable through a list of pre-defined reports and comprehensive ad-hoc reporting capabilities. Export results to comma separated value (CSV) format or standard PDF format utilizing flexible report styles to customize report layouts.

Security Family of Products



The Niagara Security product family consists of a Security JACE, reader modules, and I/O modules available in 3 different sized enclosures. The hardware modules support Wiegand style readers, supervised inputs, Form C relay-controlled outputs, and digital inputs. Enclosures are equipped with key lock, tamper switch, and in the medium/large enclosures, a power supply covered by a protective metal shield. Knockouts are provided on top, bottom and sides for external connections. The enclosure interior has generous space for cable management.



Security JACE (T-SEC-J-201 or T-SEC-J-601)

Web based, access control network controller that contains a web-server, embedded database, and Niagara Security application software. The controller includes capacity for 2 card readers and additional I/O for general purpose usage.



I/O Module (T-SEC-RIO)

Contains capacity for 8 supervised inputs and 8 relay outputs. The I/O Module can be utilized for monitoring intrusion sensors, elevator controls, or controlling doors which do not require a card reader.



Reader Module (T-SEC-R2R)

Supports 2 Wiegand style card readers and required I/O to support 2 doors. The I/O supports a door sensor, request-to-exit device, and strike for each door.



Intrusion Arming Keypad (T-SEC-INT-KP)

LCD display and keypad for arming and disarming Intrusion Zones. Display also provides feedback to the user regarding arming status and status of individual intrusion points.

Specifications

Part Number	Card Readers	Supervised Inputs	Relay Outputs	Digital Inputs
T-SEC-J-201	2	6	4	3
T-SEC-J-601	2	6	4	3
T-SEC-R2R	2	4	2	2
T-SEC-RIO	—	8	8	2

JACE-201 Platform

- PowerPC 405EP 250 MHz processor
- 128 MB SDRAM & 64 MB Serial Flash
- Battery backup
- Real-time clock

JACE-601 Platform

- PowerPC 440 524 MHz processor
- 256 MB DDR RAM & 128 MB Serial Flash
- Battery backup
- Real-time clock

Power Supply

- NPB-PWR-UN: 100-240 VAC, 50/60 Hz, 15VDC power supply module, 30 Watt

Communications

- 2 Ethernet Ports – 10/100 Mbps
- 1 RS 232 Port (9 pin D-shell connector)
- 1 RS 485 (6 pin screw terminal)

Operating System

- QNX RTOS
- IBM J9 JVM (Java Virtual Machine)
- Niagara^{AX}

Environment

- Operating temperature range: 0° to 50°C (32°F to 122°F)
- Storage temperature range: 0° to 60°C (32°F to 140°F)
- Relative humidity range: 5% to 95%, non-condensing

Agency Listings

- FCC part 15 Class A
- UL 294
- CE
- Canadian UL

Resource Capacities

	Security JACE-201	Security JACE-601
Reader Modules	up to 7	up to 15 ¹
I/O Modules	up to 8	up to 15 ¹
Total Readers	16	32 ²
Intrusion Arming Keypad	up to 2	up to 6
Total I/O	64/64	120 ² /120 ²
Personnel Records	5,000	20,000
History Records	10,000	50,000

¹ Max of 15 modules (combined reader and I/O) per JACE-601;

² Up to 32 readers or 120 I/O points, depending on module combination

General Note: For systems requiring multiple controllers or greater than 32 readers, use enterprise security software platform.

Ordering Information

Part Number	Description
T-SEC-J-201	<p>Security JACE-201. Includes connections for 2 Card Readers, 6 Supervised Inputs, 4 Form C Relay Outputs, and 3 Digital Inputs. Includes 128 MB RAM/64 MB Flash, 2 10/100 Mb Ethernet ports, (1) RS-485 serial port, (1) RS-232 serial port, and 2 communication card option slots. Contains removable screw terminal connectors, and status indication LEDs. The Security JACE is designed for DIN rail mounting.</p> <p>Supports up to 16 card readers, 5,000 personnel records and 10,000 transactional history records. Includes Niagara Security application, Web UI and the following standard drivers: oBIX Client / Server, Niagara Network (Fox) Client/Server and BACnet IP Server.</p>
T-SEC-J-601	<p>Security JACE-601. Includes connections for 2 Card Readers, 6 Supervised Inputs, 4 Form C Relay Outputs, and 3 Digital Inputs. Includes 256 MB RAM/128 MB Flash, 2 10/100 Mb Ethernet ports, (1) RS-485 serial port, (1) RS-232 serial port, and 2 communication card option slots. Contains removable screw terminal connectors, and status indication LEDs. The Security JACE is designed for DIN rail mounting.</p> <p>Supports up to 32 card readers, 20,000 personnel records, and 50,000 transactional history records. Includes Niagara Security application, Web UI and the following standard drivers: oBIX Client / Server, Niagara Network (Fox) Client / Server and BACnet IP Server.</p>
T-SEC-R2R	Reader Module. Includes connections for 2 Card Readers, 4 Supervised Inputs, 2 Form C Relay Outputs, and 2 Digital Inputs.
T-SEC-RIO	Remote I/O. Includes connections for 8 Supervised Inputs, 8 Form C Relay Outputs, and 2 Digital Inputs.
NPB-PWR-UN	Universal Power Supply. Universal 100-240 VAC IN, 15 VDC OUT 30 watt power supply.
T-SEC-ENC-SML	Small sized Security Enclosure. Enclosure with DIN rail, tamper switch and key lock. Single 2 reader module only option available for this enclosure.
T-SEC-ENC-MED	Medium sized Security Enclosure. Enclosure with DIN rail, tamper switch, key lock, universal power supply, and capacity for user provided SLA batteries. Configurable options include 1 Security JACE, 2 reader modules or 1 I/O module.
T-SEC-ENC-LRG	Large sized Security Enclosure. Enclosure with DIN rail, tamper switch, key lock, universal power supply, and capacity for user provided SLA batteries. Enclosure includes 2 DIN rails for additional module expansion. Configurable options include 1 Security JACE, 4 reader modules or 2 I/O modules.
T-SEC-INT-KP	Intrusion Alarming Keypad. LCD display and keypad for arming and disarming Intrusion Zones.