

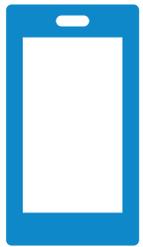


# Niagara 4.9

## Features Overview

# Niagara Framework: Always Evolving – 4.9

Niagara 4.9 brings exciting new features that continue to evolve Niagara's key tenets of visualization, rapid deployment, security, Edge, connectivity, certification and IT compliance.



## Visualization

Tag Based Graphics  
Video Framework &  
Driver Update



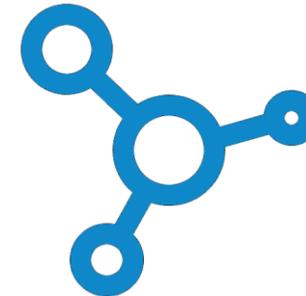
## Deployment

Edge Tools Updates  
ACE for  
Portable Niagara  
Edge 10 ACE Support for IO-R



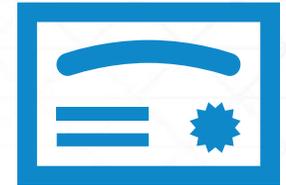
## Security

SAML Internal IdP  
Security History  
Critical Support/Enhancements



## Connectivity

MQTT Authentication  
JSON Toolkit



## Certification & Compliance

Expanded Support for  
Databases, OS, and browsers

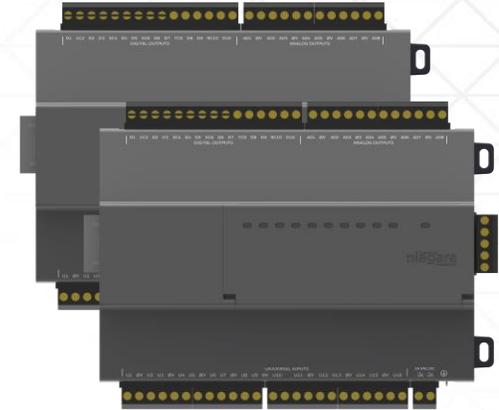
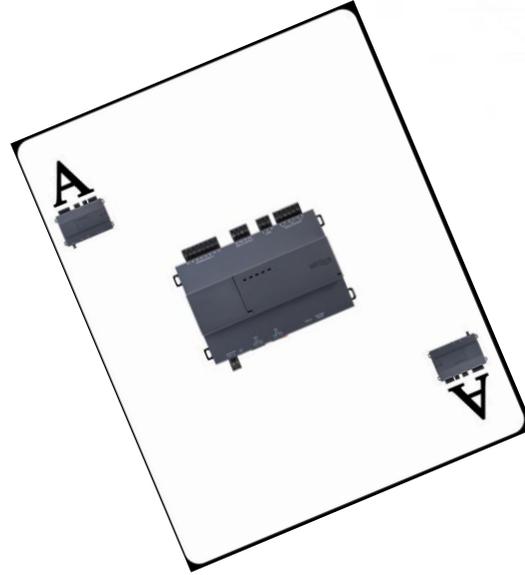
# Integration with Video Surveillance



- Maximize the safety and protection of building assets and occupants
  - Video Surveillance can now be seamlessly incorporated into your Building Management System (BMS) with html-5 presentation.
- Stream live or recorded video feeds
  - Browser or Mobile Device Ready
  - Control PTZ Cameras
  - Incorporate Video into system graphics
- Integrate Video with Niagara Alarm Console
  - Display Video Feeds for cameras associated with Niagara Alarms
  - Pop-up Video on alarm
  - Go to PTZ Preset on alarm
  - Detect Motion / Occupancy
- Supported Integrations
  - Milestone Xprotect Professional+ and Corporate
  - Axis Cameras (Live Viewing)



# Enabling Critical Control of Field Equipment



Updated to support 2 IO-R-34 modules and control of both onboard and remote IO with ACE, utilize Edge 10 in more projects and for more applications by enabling critical control of field equipment that require additional IO modules

# Supporting ACE on 3rd Party Hardware

*powered by*

**niagara**  
framework®

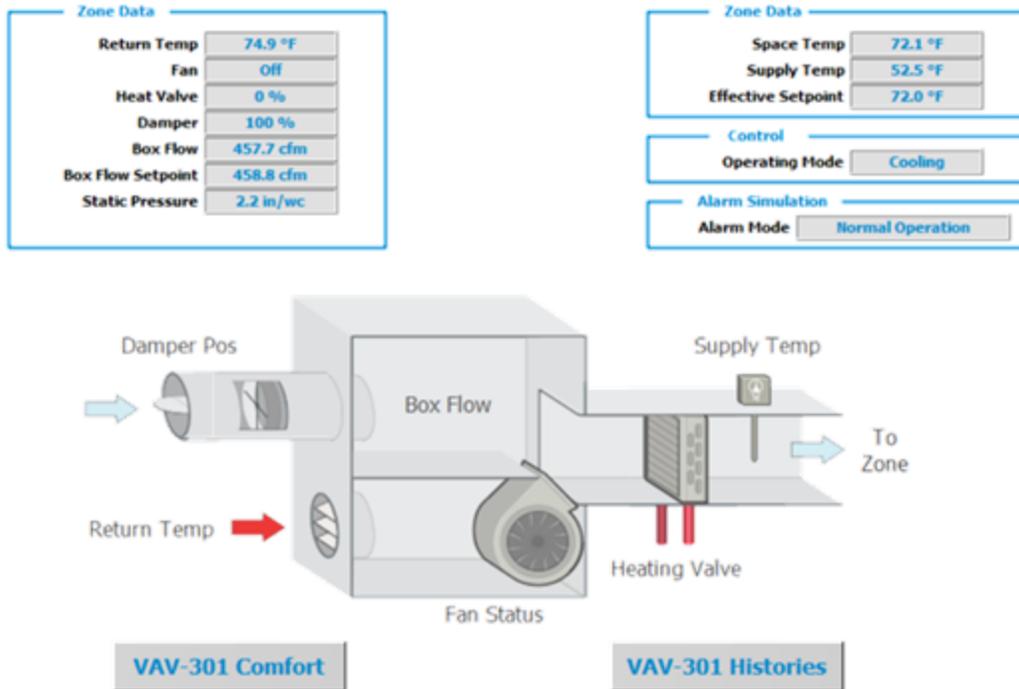
Originally released in 4.8 for Edge 10, 3rd party hardware vendors creating controllers powered by Niagara now have the option to include ACE on their platforms.

ACE offers deterministic time and fast startup to control times that enables critical control of field equipment and reduces downtime.

Look for announcements from your favorite Powered By Niagara controller as ACE is rolled out!

Early Access for Niagara Portability Customers

# Enhanced Graphics with Tag Based Visualization



- Time spent re-creating graphics for a common application is money wasted
  - Create local graphics based on tags once, and then reuse for any other Niagara instance that features tags
- Tags and metadata are the future of building management
  - Conform with the latest building design specifications by using a graphical user interface (GUI) based entirely on tags
- Want to see more information?
  - Check out the [Tridium Talk](#) and free [Tridium University](#) module.

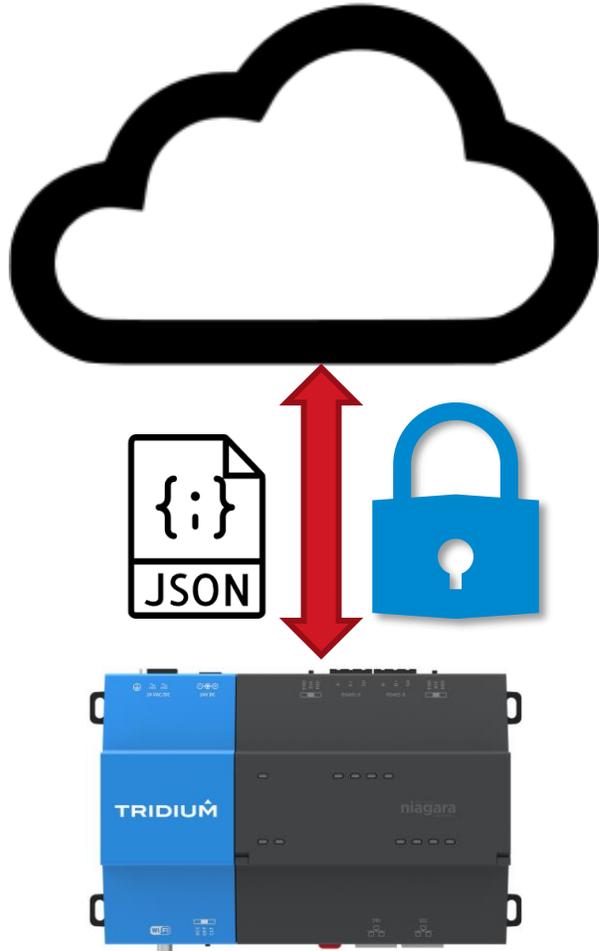
# Securely Navigate Niagara Stations with Single Sign On

Niagara 4.4 introduced Single Sign On (SSO) with **your** Identity Provider (IdP).  
Niagara 4.9 now features native IdP capability



- Reduce reliance on IT support infrastructure when accessing Niagara Stations via a browser
  - Users can now utilize Niagara as an IdP, instead of manually configuring and managing an external IdP
  - Improves the security posture of your stations by centralizing user credentials and management
- Improve user navigation and experience across Niagara infrastructure
  - SSO allows users to login into one station and access all other connected stations without having to re-authenticate

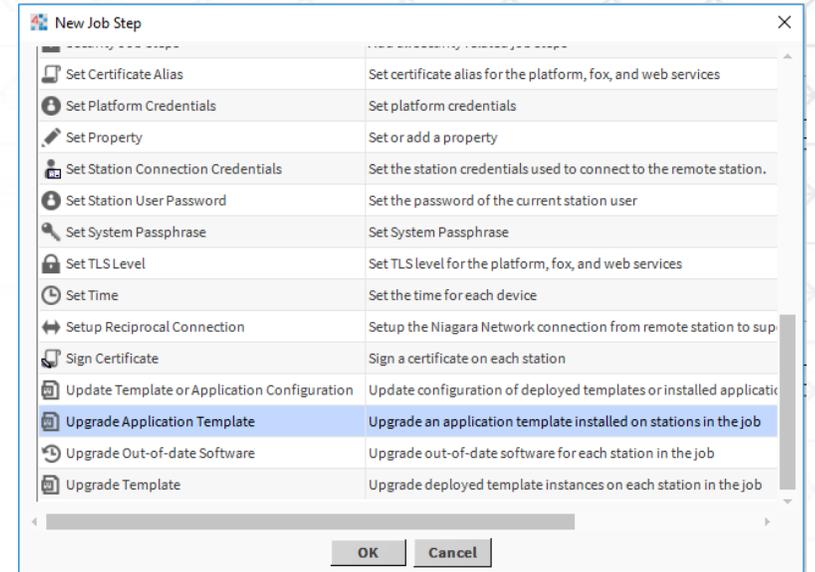
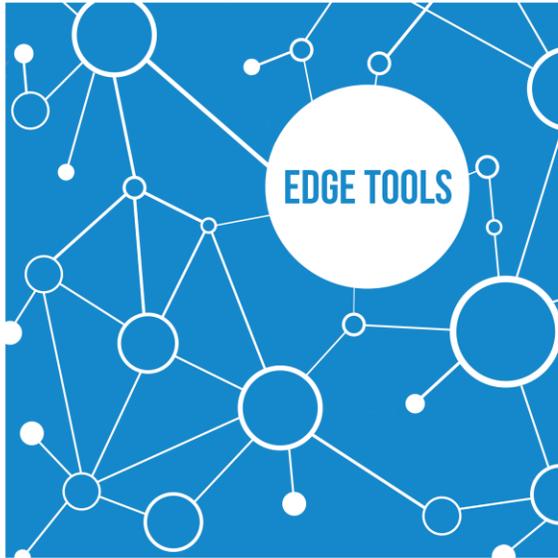
# Enabling Cloud Connectivity



Reduce the time and complexity of integrating Niagara with cloud solutions with updated connectivity options.

- Updates to Niagara MQTT driver to support AWS (Amazon Web Services) Authentication.
- New JSON Toolkit to construct bespoke messages into required formats for cloud communication.

# Facilitating Niagara at the Edge



Reduce time spent installing, commissioning, and configuring multiple Niagara devices with application templates and provisioning.

The latest updates to Edge Tools include the ability to upgrade installed application templates, flexibility in defining and configuring peer device and/or station proxies upon installation of an application template, and new provisioning steps.

# IT Operations Support



Facilitate compliance and enable modern services that need to communicate with the web by allowing secure connectivity behind corporate IT proxy servers. Niagara Proxy Service now supports HTTPS connections and digest authentication scheme!

# Understanding Access to Niagara

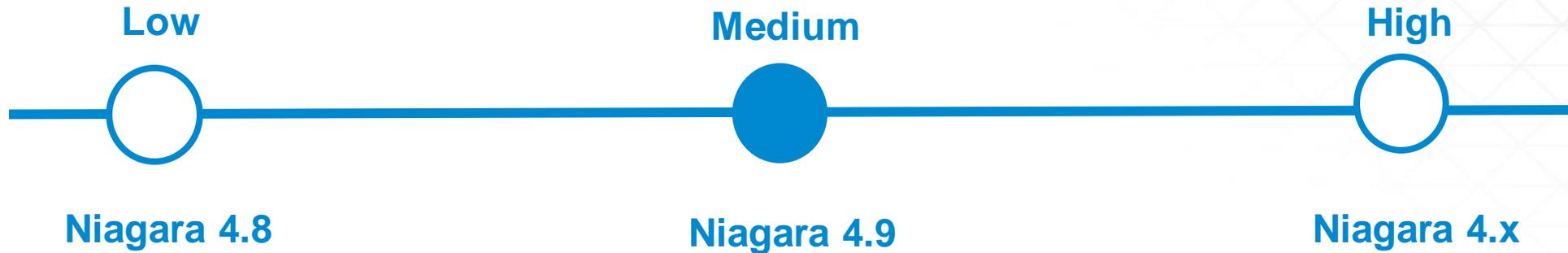


Understand who or what is logging into or changing security related settings on your Niagara instance with a dedicated **Security History Log**.

Coupled with the Niagara Security Dashboard (4.8), this is a powerful tool for administrators and security professionals to ensure that their Niagara system is appropriately configured and compliant with security standards.

# Securing Niagara - 3<sup>rd</sup> Party Module Signing

## Default Verification Mode by Version



Verification Mode	Description
Low	Modules that are unsigned, untrusted, or have expired certificates will cause warnings but still function. Error if signed module modified after it was signed. Can be increased to Medium or High.
Medium	All modules must be signed by valid, trusted certificate (may be self-signed). Can be decreased to Low or increased to High
High	All modules must be signed with CA Certificate. Can be decreased to Medium.

# Updated Infrastructure

## Supported OS/Browser/DB (Added noted in bold)

OS, Browser, DB	Version
Red Hat Enterprise Linux	<b>7.7, 8.1</b>
Windows Server	10 (64bit), 2016, <b>2019</b>
VMWare ESXi	<b>6.7</b>
Oracle Database	<b>19c, 18c ... 12.2/12.1</b>
MySQL Database	<b>8</b>
MS SQL Server Database	2016, <b>2017, 2019</b>
Browsers (Current Rev)	Chrome, FireFox, Microsoft Edge
Mobile Browsers	Safari (iOS 12, 13), Chrome (8, 9, 10)

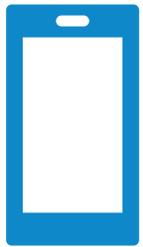
Keeping pace with advancing infrastructure to enable more efficient, long term support.

## Deprecated OS/Browser/DB Support

OS, Browser, DB	Version
Red Hat Enterprise Linux	7.5, 7.6
Windows Server	7 (32/64), 8.1, 2012
Oracle Database	11g
MySQL Database	5.7
MS Sql Server Database	2012
Browsers	Internet Explorer 11, Opera
Mobile Browsers	Safari (iOS 10, 11), Chrome (Android 6, 7)
Java Web Start	N/A

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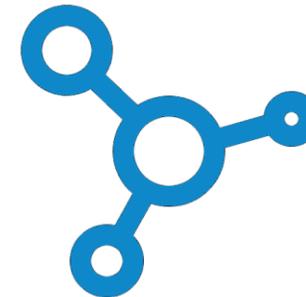
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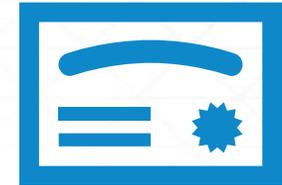
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