

ABB CYLON® TECHNICAL BULLETIN NO. 501 Issue Date: 10 October 2022

Niagara 4.12

Products Affected: INTEGRA Range of products

NIAGARA 4.12 IS AVAILABLE

This update to our software is designed to promote customer success in smart building and IoT deployments. From the largest enterprise customers to small single-site building owners, Niagara 4 is designed to enable end-users to directly access, analyze and act on a wide range of operational data in an easy, customized and secure way.

Niagara 4.12 brings exciting new features that continue to evolve Niagara's key tenets of visualization, rapid deployment, security, Edge, connectivity, certification and IT compliance.

NIAGARA 4.12 FEATURES

- WebWiresheet 2.0: WebWiresheet is an HTML5 browser-based configuration tool which extends the existing Wiresheet application in Workbench. The 4.12 implementation represents the final iteration of WebWiresheet and includes the following new functionality:
 - Link/relate by dragging on/from Wiresheet:
 - 4.12 enhancement Linking functionality at bottom bar in component glyphs
 - Link/relate by dragging from Nav Tree and Search Service to Wiresheet
 - 4.12 enhancement With the NAV tree sidebar or search sidebar and Wiresheet opened, you can now drag a component from the NAV tree (or search side bar) onto a separate component in the Wiresheet. A dialogue will then appear, providing the ability to either link mark or relation mark. The dialogue will remember the last setting selected, such that the same function will be presented anytime the same action is performed. If multiple components are selected on the Wiresheet, then anytime the user drags a component from the NAV tree, the user will be able to either link mark or relation mark to those selected components. When dragging onto the Wiresheet Grid, the same rules which apply to the traditional Workbench Wiresheet will apply for the WebWiresheet 2.0. Different visual indications are provided on the Wiresheet when components are dragged or linked from the component space
 - o Multi-selection mode
 - 4.12 enhancement A multi-selection mode has been added to provide the user with the ability to
 easily select multiple items without needing to hold the control key. This is especially useful when
 designing a UI for a touch device.
 - Delete Link/Relation Enhancements
 - 4.12 enhancement Right click menu is now special for stubs as well as when you have multiple stubs. The Delete Command has been turned into a command group, and you can pick individual stubs to follow (or delete)
 - Go-To-Link
 - 4.12 enhancement Right click menu is now special for stubs as well as when you have multiple stubs. The Go-To-Link Command has been turned into a command group, and you can pick individual stubs to follow
 - o Go-To Linked Component
 - 4.12 enhancement Right click menu is now special for stubs as well as when you have multiple stubs. The Go-To-Linked-Component Command has been turned into a command group, and you can pick individual stubs to follow

- HTML5 Niagara Network Point Manager: HTML5 Implementation of the Point Manager View in Workbench has enhanced functionality:
 - Point Database Pane
 - Niagara Network Point Discovery Pane
 - Trace Descendants, Edit, Match and New Commands
 - Multi-selection mode
- **HTML5 BQL Builder:** HTML5 Implementation of the BQL Builder in Workbench includes the following new functionality:
 - o Configure and create BQL queries across your Niagara Stations
 - o BQL Query Pop-up
 - Configure BQL reports with the Report Service
- Transform Pane: TransformPane has been added to PX for Bajaui/bajaux and HX
 - Provides the ability for BPictures to rotate, flip and mirror. This will reduce the amount of time required to create custom graphics
 - This PX pane supports multiple transform modes and may have a Label, Picture, Button, or another TransformPane embedded in the content.
 - Exporting to PDF will not apply any transform and will print out a warning if there is a transform pane that has a transformation setting of 'none.'
 - Picture does not update as expected without refresh in the PX editor when changing its properties and the surrounding widgets layout.
- New HTML5 Color Editor for WebChart: Check out the new color editor in WebChart!
 - \circ ~ Includes an intuitive Color Picker for quickly selecting colors
- Expanded History Character Limitation: The character limit on history names has been increased from 44 to 200
- Internationalization Support: New Release artifact provides a list of any lexicons which have been added, edited or removed in the release in a user-friendly format
- Edge Tool Updates: Reduces the time needed to install, commission, and configure multiple Niagara devices with application templates and provisioning. The latest updates to Edge Tools include:
 - Enhanced Layout
 - The division between steps related to laying out the network and laying out devices has been removed. All job steps are displayed in the same pane in both the job stage builder and the job step chooser
 - New Provisioning Job Steps
 - Remove Platform User
 - Remove Property command can be used to remove a property value in a remote station
 - Set Platform User Password Job Step allows users to change the password for a remote device
 - Enhanced Job Steps

0

- Provisioning update license job step provides a configuration option for restarting/rebooting immediately or deferring for later
- Certain Provisioning job steps can now be edited prior to running a job
 - Set Certificate Alias
 - Set System Passphrase
 - Update Template or Application Template Configuration
- MQTT Azure Authenticator: New connectivity options reduce the time and complexity of integrating Niagara with cloud solutions
 - Updates to Niagara MQTT driver to support Azure Authentication
- HTTP Client Driver: The HTTP Client module provides tools and a driver, which interact with HTTP services, such as web services and RESTful API endpoints
 - This transport permits data exchange both in and out of a station
 - HTTP Clients provide the functionality to execute a GET, POST or PUT command between Niagara and compatible web services and APIs
 - Available as a software option and requires an active SMA upon GA release
- **MSTP Engine Optimization:** MSTP processing has been re-engineered to utilize the on-board co-processor to ensure efficient communication
- **BACnet Enhancements:** Enhancements to support compatibility with Protocol Revision 15

- HTML5 MaxPro Video Streaming: The MaxPro video driver has been updated to eliminate Java dependencies in the browser
 - View video streams associated with alarms directly from the Niagara alarm console and add video links to your system graphics to enhance building intelligence. With HTML5 streaming, mobile devices can also access these video streams, enabling remote users to quickly assess situations in their facility and react accordingly.
- General Security Enhancements:
 - User Prototypes & Authentication Scheme
 - The SAML Authentication Scheme can now be configured to optionally merge user prototypes that match a user's prototype attributes, instead of just picking a single prototype.
 - LDAP and Kerberos authentication schemes can now be configured to optionally merge user prototypes that match a user's prototype attributes, instead of just picking a single prototype.
 - Platform User Access
 - Niagara Daemon user logins and login failures are now captured in the local station's "Security Audit Log"
 - Security Dashboard Enhancements
 - Hidden Users are now displayed on the User Service Card

BE READY TO OFFER NIAGARA 4.12 BEFORE THE RELEASE IS ANNOUNCED TO THE GLOBAL NIAGARA COMMUNITY:

- 1. Learn more about Niagara 4.12 by downloading the features overview and release notes*.
- 2. Get familiar with the breaking changes* with this release BacnetPropertyList and BacnetDescriptorUtil made final, Promise handling for bajaUx Command invocation, Java-JSON library upgrade, Constructing paths to subdirectories of Niagara Home, and jettyWrapper jar relocated
- 3. Read more about Niagara 4.9+ and IT Network Scanners.
- 4. Review the upgrade considerations* prior to upgrading to Niagara 4.11+.
- 5. Download the Niagara Supervisor Data Sheet and associated source files here.
- 6. Visit the events page to find 4.12-related TridiumTalks on demand.
- 7. Review the Niagara Framework Software Maintenance Policy for prospective support end dates.

ANNOUNCING NIAGARA ENTERPRISE SECURITY 4.12

Niagara Enterprise Security 4.12 brings updated cyber security and visualization enhancements included in the Niagara 4.12 framework release to customers of Niagara Enterprise Security. All Niagara Enterprise Security customers with an active software maintenance agreement can download the version upgrade. To purchase a Niagara Enterprise Security software maintenance agreement, contact your ABB representative or ABB support.