# Niagara 4.4 Features overview (including Niagara Analytics update)





# **Release summary**

#### Niagara 4 version 4.4 offers many exciting Niagara Framework<sup>®</sup> updates

- <u>Single-Sign On (SSO) Capability</u>: For Niagara installations with multiple Niagara connections, you can now easily navigate between all of your Niagara devices using a SAML 2.0 authentication scheme over HTTP/HTTPS without needing to log in multiple times. Secure system navigation becomes easier.
- <u>HTML5 Views</u>: **Scheduler** and **Alarm** console views have been updated using HTML5, completing the last User views on the Java Applet needing to be updated. While using these views in the latest browsers (without need for special plug-ins or Java updates), the user will notice improvements. These updates will allow for more customization and flexibility when managing your building.
- <u>Performance Improvements</u>: The Niagara Community has spoken, and we have focused on improving the speed of Niagara's UI. Users will notice much faster web performance, as Niagara 4.4 now has server side caching, optimized HTML5 HX profile and an updated internal workbench web browser.
- <u>Haystack Dictionary</u>: We've updated the embedded dictionary to 3.0.2 so users can reference the latest in this tagging standard. (Niagara will still recognize deprecated tags.) Tridium also is working with the Haystack community to update the nHaystack community module to make data from Niagara stations with Haystack tags more accessible.
- <u>Legacy Support</u>: While this will be the last minor build to support the legacy JACE 3E, 6, 6E and 7 platforms, we have added enhancements to improve stability.
- **Niagara Analytics 2.0** is compatible with Niagara 4.2 and higher versions and is included in the Niagara 4.4 image. With this version, Niagara Analytics makes Refresh Cache workflow easier and provides performance improvements for initial chart load. It also enables Niagara developers to create custom analytic functional blocks for standardized use within their channel.



## Notable features of Niagara 4.4

Feature	Benefit	Notes
Single Sign On w/Existing SAML Scheme Provider	<ul> <li>Single Sign On (SSO) support is now available. In the first iteration of this functionality, users can leverage their existing SAML Identity Provider (IDP) to integrate with SSO servers to allow users to log into one station in their enterprise and have access to other stations without having to reauthenticate.</li> <li>Stations can be configured to use SAML SSO Authentication Scheme over HTTP/HTTPS</li> <li>Session timeout is incorporated and timeframe is configurable.</li> </ul>	See docStationSecurity.pdf for more details
Performance Improvements	<ul> <li>Faster performance through:</li> <li>Speedier UI</li> <li>Added server side caching technology to help deliver browser content faster</li> <li>Optimized HTML5 HX Profile for quicker loading times</li> <li>Updated internal Workbench Web Browser. This includes improvements in speed as well as enhanced stability and security.</li> </ul>	<ul> <li>Added a workbench loading splash screen</li> </ul>



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Feature	Benefit	Notes
HTML5 Scheduler	<ul> <li>The Niagara 4.4 release delivers an HTML5 version of our Scheduler.</li> <li>Features of the scheduler include but are not limited to:</li> <li>Weekly, Calendar and Trigger Scheduler</li> <li>Schedule Coloring</li> <li>Associated Field Editors</li> <li>Ability to embed into a PX view</li> <li>Touch Friendly</li> </ul>	
HTML 5 Alarm Console	<ul> <li>The Niagara 4.4 release delivers an HTML5 version of our Alarm Console.</li> <li>This HTML5 version debuts our newest feature, live alarm updates. Other features of the console include:</li> <li>Display of custom alarm data</li> <li>Selection of alarms by time range</li> <li>Paginated main table view and single source table view</li> <li>Hyperlinking</li> <li>Filter Alarms via the Filter Command</li> </ul>	<ul> <li>To prevent alarm console auto logoff, configure the user to not auto-logoff</li> </ul>

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Haystack Dictionary Update	<ul> <li>We've updated the Haystack Dictionary to version 3.0.2</li> <li>Added support to recognize deprecated tags so that existing stations using older versions of dictionary will still be operable</li> </ul>	<ul> <li>In concert with updating dictionary, Tridium is assisting with updating community nHaystack module for Niagara 4-tagged stations. Target availability Q1 2018. See GitHub for latest updates.</li> </ul>



# Notable analytics features with Niagara 4.4

Feature	Benefit	Notes
Performance Improvements	Analytics is tuned to utilize Niagara 4.4 hierarchy cache (vs. custom cache), which enables faster loading times of analytic charts, analytic bindings and analytic webcharts	Improved performance more significant on the Supervisor
Public APIs	Enables Niagara developers to create custom analytic function blocks. OEM partner can now create library of key algorithm rules that can be IP protected and promote use of common set of rules across SIs for consistency. This enables OEM partner to troubleshoot any algorithm issues more easily, as they can be confident that the rules were applied as developed by them.	<ul> <li>Ease of rules deployment by channel</li> <li>Troubleshooting for OEM technical support becomes much easier, as they have more control over what was implemented</li> </ul>

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# Notable analytics features with Niagara 4.4

Feature	Benefit	Notes	×
<ul><li>Feature Enhancements</li><li>Analytic charts</li></ul>	Helps improve data visualization experience with browser-friendly charts, configurable properties to change color and font size, BFormat support for series names		
<ul> <li>Better algorithm debugging logs</li> </ul>			
Refresh cache			

