Issue key	Release Notes	Summary
NCCB-49663	Large applications with multiple readers, persons, badges and zones may experience memory issues that cause remote station crashes. Nre configuration are made from the Beta Release build Enterprise Security 4.10.0.46 to accommodate the same.	J8000 Station failing due to memory issue on launch web session for EntSec application
NCCB-44684	Cache will only be triggered upon the analytic service is enabled.	Analytics Service builds cache on start when disabled
NCCB-49523	User will be able to see the table and perform sort action on it.	Analytic reports not rendering Table data
NCCB-49164	SurveillanceViewer fits in tight places to the minimum resolution that workbench supports.	SurvellianceViewer does not layout correctly in tight spaces in HxPx/UxMedia
NCCB-48990	Invalid property is corrected to a Java String type.	BAnalyticConfigValue contains illegal BStruct slot
NCCB-48410	The connection pool auto hike is stopped by re-using an open connection to the database. Connection will be auto closed when the analytic service is stopped.	Examine Why Connection Pool Increments when Analytics are Enabled and Doesn't Go Back Down

Issue key	Release Notes	Summary
NCCB-48894	If the Station is inside a folder or a subfolder in the Niagara Network, then while opening an alarm, it locates the station and the camera and displays the alarm video to the user.	handle alternate niagara network names and station in folder/subfolder
NCCB-21256	Support for PrivateKeyInfo formatted private keys is now supported. In addition, starting with 4.10u1, certificate chains that are out of order, will be sorted during import.	Unsupported private key format
NCCB-48819	In previous versions of Niagara, the jetty webserver in the Niagara Station may have previously printed an IllegalStateException stack trace with the message "Sesssion X already in cache" under heavy load conditions and fail to create a session for the request. This behavior has now been corrected.	Niagara Session infrastructure may clear Request _session value when session still valid
NCCB-51069	In previous versions of Niagara, there are times when device manager views to fail to display when a module file cannot be read. This behavior has been corrected.	Device manager views fail with 4.9 template patches or 4.9U1

Issue key	Release Notes	Summary
NCCB-10076	In previous versions of Niagara, duplicate text lines may have appeared in the Application Director when a Niagara Station was renamed. This behavior has been corrected.Â	Station output echoes each step output
NCCB-14531	In previous versions of Niagara, file transfers would say "Transferring Files..." as a message even when deleting files. This behavior has been corrected to say "Deleting Files...".	Delete license windows shows "Transferring license" window title.
NCCB-47767	In Niagara 4.9, software may have failed to uninstall properly on a Windows host if the Niagara Service was running when the uninstaller was started. To workaround, please stop the Niagara Service via 'plat uninstalldaemon' and restart the host prior to uninstalling Niagara.	Windows Event Viewer pins common.dll in memory after daemon uninstallation, prevents Add/Remove program uninstall
NCCB-46083	In previous versions Niagara, systems may have reported inaccurate free space for the various filesystems in the Platform Administration View. This has been corrected.	Native Platform Provider reports free disk space inaccurately

Issue key	Release Notes	Summary
NCCB-41368	In previous versions of Niagara, the Application Director view was enabling some fields for edit prior to the completion of the loading process, most often when loading the Application Director output. The view has now been updated to only enable the fields for edit after the loading process completes. The previous behavior allowed changes to be made to the Auto Start editors but not saved. This behavior has now been corrected.	Changes made to "Auto-Start" and "Restart on Failure" before output is loaded are not persisted
NCCB-41498	In previous versions of Niagara, the Software Details View showed the field "Processed for JACE" that was not meaningful for Niagara 4 based modules. This field is now hidden unless view Niagara AX software.	"Processed for Jace" is not a relevant status for Niagara 4 modules
NCCB-41918	In previous versions of Niagara, the Provisioning Network Extension would regularly print the following message to the INFO filter: [provisioningNiagara] Connecting to new daemon session [IP_ADDRESS:PORT]. This message has been moved to the FINE logs to prevent console overrun.	ProvisioningNiagara module station output can show high volume of "Connecting" messages

Issue key	Release Notes	Summary
NCCB-45467	In previous versions of Niagara, some context menu items for components in the navigation tree of the component tab of the template editor could be incorrectly disabled when editing a template file. This behavior has been corrected.	Application Template component tab menu differs between a saved template & one being created

Issue key	Release Notes	Summary
NCCB-37275	In both 4.9 and 4.10 versions of Niagara, Obix connections to a Niagara Obix server would result in a new session being created for each request, resulting in excessive authentication audit events. In 4.9, the option to allow Obix clients to re-use sessions has been added with the Allow Session Reuse property on the Obix Server, and is disabled by default. Enabling this property allows third party Obix clients that include the session cookie on subsequent requests to reuse their session, reducing the number of authentication audit events. In 4.10, the Allow Session Reuse property has been enabled by default, and the internal Niagara Obix client has been updated to include the session cookie on subsequent requests. The 4.10 changes introduce a breaking change to the public HttpConnection API. See "Breaking Change: HttpConnection getResponseHeaderFields method removed" for more information. This behavior has been addressed in both 4.9 and 4.10 versions.	Obix client authentication floods audit history

Issue key	Release Notes	Summary
NCCB-43494	In previous versions of Niagara, it was reported that the AirNow API had changed and that the Ozone values were no longer being reported. The values extracted for the air quality information in the weather service were updated to match the modified API. This behavior has been corrected.	AirNow API changes break ozone integration
NCCB-48395	In previous versions of Niagara, module signature verification could fail for modules signed using jarsigner due to certificates being embedded in the incorrect order. The module verification process has been updated to be tolerant of incorrectly ordered certificate chains.	Module verification fails if certificates are not in order
NCCB-47713	In previous versions of Niagara, Haystack tag group relations applied to a component inside a template were potentially removed when the template is saved. This has been corrected.	mock service does not process tag group relations from haystack tag dictionary when creating tempaltes

Issue key	Release Notes	Summary
HAREMB-1426	Previous versions of Niagara may not have properly identified that the "release" or "generated" dates in a Niagara license take effect at the start of the described day, rather than the end of the day. This may have prevented certain features enabled by that license from becoming effective until the next day listed. "Expiration" dates will continue to take effect at the end of the day.	License generated date is improperly used to bootstrap JACE RTC when negative TimeZone offset assigned
NCCB-46638	In previous versions of Niagara, there are specific conditions where a template installation initiated from the Template Sidebar "drag-and-drop" is not completed successfully if the template is open in the Template Editor. This situation will now result in an error dialog indicating that the Template Editor must be closed before installing the template.	Cannot deploy template if it is open

Issue key	Release Notes	Summary
NCCB-41984	In previous versions of Niagara, the system could fail to properly use a server certificate for Web / Fox / Niagara Daemon connections if that certificate's alias was specified with upper case letters. The Niagara Certificate tools will now require that the alias is converted to lowercase to avoid problems in the future. Do not use upper case letters in certificate aliases to avoid problems in previous versions. This issue has been corrected.	Case sensitivity in WebService.setHttpsCert results in loss of web connectivity
NCCB-46583	In previous versions of Niagara, connecting to the Niagara Daemon using an IPv6 address would result in empty application director output. This has been corrected.	Application Director output, Niagara Daemon output, not available for IPv6 based TLS connections
NCCB-34387	In previous versions of Niagara, device template processing during device discovery for nDriver-based drivers was slowing down the process. The processing has now been optimized to improve device discovery performance.	TemplateManager.getTemplatesForType unzips every module leading to long delays to calling methods

Issue key	Release Notes	Summary
NCCB-49241	In previous versions of Niagara, ACE application writable point values that are driven by a proxy point in Niagara would retain their driven value after the proxy point was deleted. This behavior has been corrected. Driven points will now reset to a null-status to relinquish the value with the proxy is deleted.	Deleting an AceEdgeNetwork proxy point does not remove its write value from the corresponding ACE component
NCCB-50209	In previous versions of the Niagara, the BACnet Driver may have thrown the exception "IllegalParentException" when attempting to add a BACnet Object to a subfolder of the Bacnet Config Manager under a device. This has been corrected.	Config node folder throws error when we try to add BACnet objects into it.

Issue key	Release Notes	Summary
NCCB-47640	In previous versions of Niagara, when a connected network cable was disconnected, instead to resetting the IP Adapter, the Driver would not poll for the network connection on a regular basis and disable the port. This behavior has now been fixed, as upon reconnecting the cable, the Adapter will be able to find an IP Address and then the driver will enable the port.	BACnet IP Port loses configuration on Station save, if cable disconnected on Station start
NCCB-49783	This fix is for BACnet objects that need to generate alarms when Out of Service is true. To generate the alarms, the Alarm Extension need to act on the Out Of Service values, and thus the Out Of Service needs to be on top of the Alarm Extension. If we want to do it for each point manually, click on the point and switch to "Reorder", and reordered the extensions. Now in this fix, we can manage for large points, switch to the Export Table and unhide the hidden slot "{{ReorderOutOfServiceExt}}" and trigger the action. This would reorder the Out of Service extension to top of all the dynamic properties.	An Out-Of-Service Analog Input should send Alarms went updated with WriteProperty.

Issue key	Release Notes	Summary
NCCB-48009	In Niagara 4.9, queued ndriver transactions could be incorrectly failed during particular circumstances. This behavior has now been corrected.	NCommTimer fails all queued outstanding requests as soon as a transaction becomes free
NCCB-48801	In Niagara 4.8 and 4.9, attempting to start Workbench or Station on a supervisor set to the Turkish locale would fail. This has been corrected.Â	N4.8 & N4.9 Workbench will not start if PC locale set to Turkish but will then work if niagara.moduleVerificationMode=low
NCCB-48998	In Niagara 4.9, customers using workbench to either reset a user's password due to password expiration or force a reset from affected versions to pre-4.9 stations, would fail. This behavior has now been corrected.	4.9 Workbench cannot change user password during login to 4.8 or older station
NCCB-47584	In Niagara 4.9, users were not prompted to reset their password when the corresponding password expiration setting was within the configured warning interval. This behavior has now been corrected.	Password expiration dialog not displayed in browser

Issue key	Release Notes	Summary
NCCB-45318	In previous versions of Niagara and under particular circumstances, changes made to slots that are mapped to template configuration would revert to a prior value when the station is restarted. Changes made, instead, through the template configuration would not revert. This behavior has now been corrected.	Slots that are assigned to template configuration do not always retain changed values
NCCB-47124	In Niagara 4.9, running the Set Station User Password provisioning step from a supervisor to pre-4.9 stations would fail. This behavior has now been corrected.	4.9 Set Station User Password provisioning step throws encoding exception against 4.4-4.8 stations.
NCCB-46706	A change in Jetty cookie handling now requires any client implementing HTTP scram authentication to a Niagara station to add handling for multiple Set-Cookie headers to retrieve the session ID cookie. See [https://www.niagara-community.com/s/article/Breaking-change-HTTP-scram] for more details.	AuthClientExample n4 client_type does not work in 4.9
NCCB-48724	In Niagara 4.9, the 64-bit LON driver for Windows platforms only allowed a single adapter. This issue has now been fixed and the 64-bit LON driver supports multiple adaptors.	N4.9 Supervisor can not have 2 Lon Networks with different valid lon ports at the same time

Issue key	Release Notes	Summary
NCCB-40651	In previous versions of Niagara, links from a component in the Ndio Network to a component outside the Ndio Network would be removed after running the Ndio to Nrio Conversion Tool. This behavior has now been corrected.	NDIO to NRIO conversion tool removes links outside of the NDIO network
NCCB-21207	In previous versions of Niagara, Templates did not support output linking to components other than Control Points. This behavior has now been corrected, as Templates support input resolution using the sourceSlotHint if it is defined. The definition of the sourceSlotHint can be a single slot name or a comma-separated list of slot names.	Templates don't support linking out to anything but a Control Point
NCCB-50087	In previous versions of the Niagara, the Daemon on Linux platforms may have sporadically exited on long running platforms during platform user authentication. This issue has now been corrected.	Linux Niagara Daemon 'niagaradctl' crashing

Issue key	Release Notes	Summary
NCCB-47795	Previous versions of Niagara may have thrown a SecurityException when restoring the deletion of alarm and history records after power loss when used in tandem with the Data Recovery Service. This has been corrected.	History record restore needs privileged block to delete / create alarm and history records
NCCB-48011	Previous versions of Niagara on Amazon Linux based platform failed to include the service script preamble that included copyright and author information. This has been corrected and failure to include this information should not have resulted in functional failure.	Linux installation script fails to add service preamble on Amazon Linux
NCCB-46513	Previous versions of the Niagara Daemon could have failed to load the PKI certificate alias properly if it contained uppercase characters. This has been corrected.	Improve Niagara Daemon failure mode when the TLS certificate specified is only different by case

Issue key	Release Notes	Summary
NCCB-44342	Previous versions of Niagara Workbench could fail to start when a directory under the / file path existed with invalid slot path characters. Workbench will now start with an error message indicating the directory; however, Workbench will be unable to use the directory in question for BFileSystem operations.	Niagara cannot boot on Linux (and possibly other *NIX) if root folder contains a subfolder with illegal characters
NCCB-50013	Starting in Niagara 4.9, the content of ModbusAsync packets was incorrectly generated when encoded as ASCII. This has been corrected in the 4.9U1 and later versions.	ModbusAysnc ASCII send empty packets
NCCB-48654	In previous versions of Niagara, a DashboardPane's dashboard id between the same PxView could be different when viewing in workbench and the browser. In the browser, this included viewing a PxView on a Component without a ViewQuery or viewing a PxFile directly. This has been corrected so in Niagara 4.10, uxMedia, HxPx, and Workbench should all be using the same dashboard ids for similar ords for the same Dashboard Pane.	DashboardPane IDs are sometimes inconsistent between workbench, HxPx,and UxMedia

Issue key	Release Notes	Summary
NCCB-38098	In prior versions of Niagara, the Bajaux Alarm Console would not display alarm records if a previous alarm for that the same source belonged to an alarm console not linked to the alarm console (even if the newer alarms had classes that belonged to this Alarm Console). This has now been corrected.	Ux Alarm Console may not display alarms from sources whose Alarm Class has changed
NCCB-50777	When upgrading from Niagara 4.8 to 4.9 or higher, svg files stored in modules would not stretch properly in HxPx when used with a BPicture with a scaleMode setup like "fit". This has been corrected. As a workaround, moving the svg to the station file system should transform it properly.	HxPx: SVG does not stretch when viewed in the the browser if image is referenced from a module ord

Issue key	Release Notes	Summary
NCCB-50909	When calling {{getDisplay}} on a {{baja.Complex}}, if the slot had changed value while the page was running, the resulting string would not respect slot facets. One example of this wasÂ {{kitControl:CurrentTime}}. It defaults the {{showSeconds}} facet to true. But once the page was up and running and the {{out}} value was changing, {{currentTime.getDisplay('out')}} would start to ignore the facet and omit the seconds. The default behavior of {{baja.Complex#getDisplay}} is unchanged, but you can now pass a context object as the second parameter - similar to how you might call {{simple.toString(cx)}}. When you pass this second parameter, {{getDisplay}} will now return a Promise that incorporates the context when formatting the string. Please note that only slots of type {{Simple}}, with valid Type Extensions registered, will perform string formatting. This includes all built-in BajaScript Simple types, such as {{baja.Boolean}} and {{baja.AbsTime}} - they will all successfully respect the string formatting context. {{baja.Format}} will also respect the formatting context,	baja.Complex.getDisplay Uses Incorrect Encoding from Station

Issue key	Release Notes	Summary
	whether it is passed as a {{cx}} parameter to {{baja.Format#format}}, or whether it comes from slot facets when formatting values from a {{Complex}}.	

Issue key	Release Notes	Summary
NCCB-40809	In prior versions of Niagara, the following methods were not supported in the corresponding ux version(s): * baja.Format: decodeFromString * baja.Format: substring * baja.Format: escape * baja.Format: unescape * typeDisplayName of Object * toDateString / toTimeString of AbsTime These methods have now been added in Niagara 4.10. Additionally, in prior versions of Niagara, AbsTime values would display using the UTC offset instead of timezone when working with baja.Format. This issue has also been fixed, as AbsTime values now display with the timezone.	Add support for additional calls in baja.Format

Issue key	Release Notes	Summary
NCCB-50748	Niagara 4.10 Html5HxProfile now includes a Media Command on PxPages for helping to switch between HxPx and UxMedia. users who already have "enable view selection = No" will not get the new command. If you want to disable this command for all users, you can use the system property "niagara.profile.hideMediaCommand=true".	Html5HxProfile 'Media Command' should be hidden when Profile View Selection is disabled or system property set

Issue key	Release Notes	Summary
NCCB-48664	In prior Niagara versions, if a wiresheet consisted of components configured to display multiple level of composites, it took a significant amount of time to load the wiresheet. This has been fixed now with some optimizations that greatly reduces the load time. As a part of this optimization, the ability to show the outgoing knob colors is now turned off by default. Users can turn this feature back on by setting this system property "niagara.wiresheet.leaseForOutgoingStubColors" to true. Since, turning this property on involves expense leasing, exercise caution.	Wiresheet loads slow and locks up Wb in high network latency scenario

Issue key	Release Notes	Summary
NCCB-50503	When using an HTML5 profile to edit number values in the locales {{bg}}, {{es}}, {{et}}, {{lv}}, or {{pl}}*, a comma used as a decimal point would not be parsed as such. Entering {{0,55}} would be interpreted as "fifty-five" instead of "zero point five five". This has been corrected. * This list of locales may not be exhaustive. Any locale that does not apply group separators to numbers less than ten thousand - i.e., one that would print "9999" instead of "9,999" - was affected.	Comma separator for decimals not recognized in browser for certain locales

Issue key	Release Notes	Summary
NCCB-43511	The {{ux-fullscreen}} class is now implemented using flexbox rather than absolute positioning. This allows {{ux-fullscreen}} widgets like Property Sheet to be placed on a page using static/default positioning. Widgets that require a minimum height to be usable, like Schedule or Web Chart, will still need a minimum height set when statically positioned, same as before. Note that if you were using the {{ux-fullscreen}} class on a sub-element within your widget to cause it to take up the entire contents of your widget, {{ux-fullscreen-support}} should be added on the immediate parent of the {{ux-fullscreen}} element.	ux-fullscreen widgets should be able to statically position as child widgets

Issue key	Release Notes	Summary
NCCB-50226	In previous versions of Niagara, image dimensions that were computed on a JACE were not properly cached to reuse this information. This has been corrected and HxPx pages with a heavy amount of images may see a performance increase of up to 3% faster load times.	MicroImageCache does not cache dimensions

Issue key	Release Notes	Summary
NCCB-49512	When a Niagara 4.8 station's WebService->WebStartConfig properties were updated from default, and was run against Niagara 4.9 or higher versions, it was causing a station start failure. Also, when using a newer workbench to connect to a 4.8 station, the BWebSevice was infrequently inaccessible due to this problem. This behavior has now been corrected, and as a workaround to both problems, switching your BFormat properties back to their default values may correct this: WebStartConfig.appTitle = "%station% - %server%" WebStartConfig.shortcutFolderName= "%app%"	4.8 Station cannot upgrade to 4.9 when WebStartConfig BFormat properties are non-default values

Issue key	Release Notes	Summary
NCCB-47764	In prior versions of Niagara, following the migration of an AX station to N4, the alignment of labels on a Px Graphic would appear as incorrect. This issue has been fixed, as in HxPx, Labels and its subclasses like Button and BoundLabel, now use the HTML and css Structure written for UxMedia in 4.10. This does a better job at aligning the text and the icon for the Labels. To compare or to revert to the the older 4.9 behavior either a system property can be used "hx.label.legacy=true" or a View Parameter can be provided to the HxPxView in the browser "|view?legacyLabel=true".	hxpx font alignment problems

Issue key	Release Notes	Summary
NCCB-14126	In prior versions of Niagara, BajaScript was not capable of resolving a {{slot:}} ORD against a base component in some circumstances. Direct ORD resolutions would fail, but another common problem was that relative hyperlinks in the form of a {{slot:}} ORD would fail on an HxPx page viewed within a hierarchy. This has now been resolved.	BajaScript cannot resolve slot: ORDs against a base
NCCB-49954	In Niagara 4.10 EA, there was a problem with the WebBrowser Widget rendering too small when they were placed on Responsive Pane within UxMedia, this has been corrected.	UxMedia: WebBrowser does not scale to ResponsivePane
NCCB-44624	In previous versions of Niagara, when using a BooleanConst or other Const Class from kitPx, it would fail to render when the PxPage was using a SetPointEditor and was also Virtualized with Virtual On Demand PxViews. This issue has now been corrected.	kitPX SetPointField editor not displaying correctly on Virtual PX page

Issue key	Release Notes	Summary
NCCB-37486	In prior versions of Niagara, the titles of PopUp binding pop-ups did not work in Hx and were not be localizable. This issue has now been fixed, as Hx now supports showing the Title field for popups when the browser's cross-origin rules support it. A blank title in Hxpx will usually allow for the original Page title to show up. Additionally, Hx, Ux, and Wb all now support a localizable title (examples provided in). The default is still set to English "Pop up", but "%lexicon(kitPx:popupBinding.title)% should also work for this effort.	Titles of PopUp Binding pop-ups do not work in Hx and should be localizable
NCCB-46253	In prior versions of Niagara, Histories were not available to choose via the OrdChooser in the HTML5 views. This is fixed now and Niagara History Ords can be chosen via the OrdChooser dialog.	Cannot select a history with baja:Ord into html5 view
NCCB-46027	In previous versions of Niagara, CSV exports with a semicolon delimiter did not work. This behavior has now been fixed.	Report service fails with semicolon delimiter

Issue key	Release Notes	Summary
NCCB-46127	In prior versions of Niagara, if you called an action that takes an argument in HxPx it popped up a dialog, then the first time you called the action, the value would be correct, but its possible that the second time you called the same action and if you didn't modify the arguments, then the previous dialog's action argument would be improperly used. This behavior has now been corrected and as a workaround, just refresh the page between calling the same action twice.	Multiple calls to HxPx Actions can fire second action with wrong action argument
NCCB-47613	In Niagara 4.9, non-super users could not expand or view Services from an HxProfile. This behavior has now been corrected.	non-superuser cannot expand or view services in station via browser

Issue key	Release Notes	Summary
NCCB-46554	In prior versions of Niagara, PopUpBindings with modal set to true allowed the parent window to position itself in front of the popup. This behavior has now been fixed, as kitPx:Popups in HxPx Media will now attempt to focus an existing popup if you open that modal=true popup while remaining on the same browser tab. Chrome 81 is currently capable of providing this functionality, but browsers like Firefox may only focus on an existing Popup if it links to the same host as the current station, as this functionality is limited by the browser's rules on interacting with "cross-origin objects".	Modal PopupBinding should focus on previous popup windows on second click

Issue key	Release Notes	Summary
NCCB-46629	In prior versions of Niagara, when a DynamicEnum had a range where a tag could be an integer different from its ordinal, such as on BacnetMultistate, the HTML5 DynamicEnum editor would have the wrong value preselected in the dropdown. This behavior has now been corrected and will work as expected.	BajaUx Enum override dialog doesn't work well if any options are numbers
NCCB-12587	In prior versions of Niagara, WebChart did not display the timezone associated with the history being viewed. This issue has now been fixed, as WebChart now displays the TimeZone associated with the primary History being viewed. If the browser is in a different timezone than the history, it will no longer be used, as series that are not associated with a history will use the station's timezone to display.	Missing TimeZone name in Webchart of the graph

Issue key	Release Notes	Summary
NCCB-46736	In prior versions of Niagara, the HTML5 ComponentGrid displayed empty cell data when the grid was added to a Px and the Px was accessed via the NiagaraNetwork of a Supervisor. This issue has been fixed now and HTML5 ComponentGrids should display correctly when access virtually.	Cannot load HTML5 Grid Table via NiagaraNetwork virtuals
NCCB-48229	In prior versions of Niagara, when choosing an Image from an Image Chooser, you were originally only able to select "png, jpg, gif and svg files", but Niagara supports more image files than what is shown therein, so you would have to manually change your filter to "any file" to select a "jfif" file. This issue has now been fixed, as the Image Chooser will allow you to select any image file supported by Niagara. This includes the following extensions by default: "png,apng,bmp,dib,gif,ico,jfi,jfif,jif,jpe,jpeg,jpg,svg,webp"	jfif and other supported images types cannot be easily picked in the Image Dialog

Issue key	Release Notes	Summary
NCCB-48663	In prior versions of Niagara, History ORDs would not normalize correctly in BajaScript. This issue has now been corrected, as queries prior to the first history query are removed, and adjacent history queries will merge together accordingly, which also matches Java behavior.	Bajascript HistoryScheme does not normalize
NCCB-48670	In prior versions of Niagara, the first palette opened would remain at the top of the Workbench dropdown forever, or until all palettes were closed and re-opened accordingly. This issue has now been fixed, as all opened palettes are correctly alphabetized.	First opened palette remains at the top of the list forever
NCCB-46472	In prior versions of Niagara, a BRelTime value on a Px page sometimes cutoff the hours or days' part when viewed in the browser. This has now been fixed, as all day and time parts of a BRelTime will display correctly in the browser.	HTML5 RelTimeEditor cannot show more than 99 hours

Issue key	Release Notes	Summary
NCCB-48937	In prior versions of Niagara, any custom BIMobileWebProfile could fail to load if it did not subclass from BMobileWebProfile or a BHxProfile. This has been corrected. The DefaultMobileWebProfile views are now specific to that profile and a support profile called DefaultMobileHandheldHxProfile will be used to show HxPx within the DefaultMobileWebProfile profile. This new profile is not intended to be selected by a user, but if it does, it should be a similar experience to the HandheldHxProfile.	Some Custom BIWebMobileProfiles no longer work as Mobile Web Profile
NCCB-48866	In prior versions of Niagara, special characters would not work in web hyperlinks like %, <, and >. These have all been corrected so now these hyperlinks should perform similarly, or as they did in AX.	Tag-based ORD Fails to Hyperlink when Nested in a HxHyperlinkLabel
NCCB-7311	In prior versions of Niagara, when using the "Go To Link" command on a Wiresheet, there was a problem that occurred when hyperlinking to, or from, a link on the Lon or Ace Wiresheet which prohibited its access. This issue has now been corrected.	Goto link to target component fails under LonNetwork or LonDevice containers

Issue key	Release Notes	Summary
NCCB-20277	In prior versions of Niagara, if you did not have write permission on a Complex slot, then when expanding that Complex inline, the HTML5 Property Sheet would mark all of its field editors as readonly, even if you had write permissions on child slots of that Complex. This has now been fixed, so a readonly Complex slot will no longer mark its child slots as readonly as well.	Bajaux Property Sheet incorrectly limits permissions to expanded children with different permissions
NCCB-48878	When changing the "enabled" Property of a bajaux Widget, the Widget's isEnabled() status would always update itself to match. But when constructing the Widget with an initial Property of enabled=false, isEnabled() would not initially return false. This has been corrected.	Widget.isEnabled() returns incorrect value when Widget is constructed with property of enabled=false

Issue key	Release Notes	Summary

NCCB-47725	When resolving multiple ORDs within the same hierarchy, even if those ORDs were batched together into a BatchResolve, the hierarchy would be unnecessarily re-resolved one per ORD. For instance:
	
	``
	{code}
	
	baja.BatchResolve.resolve([
	
	  'hierarchy:foo|slot:a',
	
	  'hierarchy:foo|slot:b',
	
	  'hierarchy:foo|slot:c',
	
	  'hierarchy:bar|slot:a',
	
	  'hierarchy:bar|slot:b',
	
	  'hierarchy:bar|slot:c'
	
	]);
	
	{code}
	``
	
	would cause the hierarchies named {{foo}} and {{bar}} to be re-resolved three times each. That was six hierarchy queries when two would do. This could become a major performance problem.
		BajaScript duplicates hierarchy: ORD resolutions

Issue key	Release Notes	Summary
	Now, when the same hierarchy is being resolved multiple times at once, all duplicate resolutions will coalesce into a single request. The code above will now only cause two hierarchy queries, one each for {{foo}} and {{bar}}.	

Issue key	Release Notes	Summary
NCCB-44523	The template Configuration Properties dialog should now utilize the available space of a monitor better for both small and large amounts of configuration properties.	Configuration Properties dialog when deploying application template does not resize to fit content
NCCB-45737	Currently, if a BJsBuild file, that correctly loads a required javascript resource, has an updated JAVA source location, for e.g. moved to a different package, throws an exception with a message that may not give any useful information to the user. This has been fixed now and a more friendlier message is shown to the user while the original issue is logged appropriately.	JsBuilds that fail to load will prevent unrelated bajaux widgets from loading
NCCB-21199	Previously, CompositeAbsTimeEditor did not respect the ordering of date/time for the user's date/time format. A format with the time first did not display properly in this editor. This has been fixed.	A time format with the time before the date is not supported in CompositeAbsTimeEditor

Issue key	Release Notes	Summary
NCCB-40637	In previous versions of Niagara, workbench would allow for core Tridium update build modules (for example baja 4.9.1.28) to be installed to an earlier version of Niagara in that long term release cycle (for example baja 4.9.0.198) without requiring commissioning. This behavior has now been corrected.	'Update' builds allow modules to be upgraded to potentially broken, unpatched states
NCCB-48399	In previous versions of Niagara, an OPC UA server would cache namespace index values. This behavior has now been corrected, as the OPC UA client will get the updated namespace index based on namespace URI if there are any changes to the namespace index on the server side.	OPC UA should not cache namespace index values
HAREMB-1567	In Niagara 4.9, the BACnet MSTP driver did not exit wait for reply state if there was no reply. This issue has now been fixed.	MSTP does not exit wait for reply state if there is no reply

Issue key	Release Notes	Summary
NCCB-45069	In previous versions of Niagara, there was an unclear error message for Bacnet ststing that the enum facet range non-contiguous. The fault now shows the proper cause "State Range supports only contiguous ordinal" in place of "Range must be 1-N for export to BACnet." This behavior has been corrected.	Unclear error for Bacnet enum facet range non-contiguous
NCCB-48968	It has been reported that an OPCUA server does not start or respond to requests when not licensed. If the user tries to start the server in absence of OPCUA server license, the user will notified of the fault cause as "OPCUA Server capability not licensed".	OPCUA Server should not start when not licensed
NCCB-48958	During BTL certification, it was noted AE-AVN-A Alarm Record should display the correct Boolean value of the 'Ack Required' for BACnet Objects. This issue has now been fixed, as alarm record now sets properly the property of Ack Required to correct Boolean state.Â	AE-AVN-A Alarm Record should display the correct Boolean value of the 'Ack Required' for BACnet Objects.

Issue key	Release Notes	Summary
NCCB-47646	In Niagara 4.9, a deadlock has been observed between the FoxDispatcher and Bacnet WriteWorker. This issue has now been fixed.	Deadlock between FoxDispatcher and Bacnet WriteWorker
NCCB-45241	In previous versions of Niagara, the Bacnet Event Handler change breaks public API for custom Event Processors. This issue has now been fixed, as alarms are now passed out to Event Processor before being submitted to alarmDb in order to allow third-party handling of event.	Bacnet Event Handler change breaks public API for custom Event Processors
NCCB-47388	In Niagara 4.9, a security vulnerabilityÂ was noted in the ffmpeg 4.2.1. library. This issue has now been fixed, as the ffmpeg module uses the latest n 4.3 ffmpeg library version.	FFmpeg Vulnerable to Denial-of-Service (DoS) via Heap-Based Buffer Overflow in 'cbs_jpeg.c' File

Issue key	Release Notes	Summary
NCCB-45866	In previous versions of Niagara, the Bacnet Poll Service continues sending original poll after splitOnFailure. This issue has now been fixed, as for cases when the remote device goes down several times while corresponding to different running process, it checks & prevents for any duplicate entries of the Poll List Entry (PLE) that were added to any Poll List, & thus maintains only one entry of the PLE to the list. This greatly helps during the unsubscribing process, as it now has to remove only one entry of this PLE.	Bacnet Poll Service continues sending original poll after splitOnFailure

Issue key	Release Notes	Summary
NCCB-51356	Added the ability to validate the 'Host' header for incoming HTTP/S requests to the station. Disabled by default, this can be enabled in the Web Service > Host Header Validation Settings. Once enabled, any incoming HTTP/S request will have its 'Host' header validated against the list specified in the Host Header Validation Settings. In addition to the items specified in the list, the various local IP addresses corresponding to the station will also be considered valid. Any request that does not pass validation will be rejected with a 400 error.	Validate Host header field in HTTP/S requests

Issue key	Release Notes	Summary
NCCB-22811	In prior versions of Niagara, multiple errors to conversions and symbols were resident in units.xml. These issues have now been fixed, and include the following: * revolutions per minute * grams per kilogram * grams per gram * kilograms per kilogram * milligrams per cubic meter * grams per cubic centimeter * milliliters per minute * liters per minute Additionally, the following units were added in Niagara 4.10: * revolutions per second * lumen per square meter * lumen per square foot * candle power	multiple errors in Units.Xml

Issue key	Release Notes	Summary
	* joules per hour * kilojoules per hour * millikelvin * gallons per second * imperials gallons per second & hour * milliliters per hour	

Issue key	Release Notes	Summary
NCCB-48392	In prior versions of Niagara, users were logged out of stations approximately every 30mins, despite having auto-logoff disabled. This affected all authentication schemes, but was particularly an issue for kiosk-type modes which are supposed to stay logged in all the time. This issue has now been fixed.	Kiosk-like mode will no longer stay logged in

Issue key	Release Notes	Summary
NCCB-37939	In prior versions of Niagara, when using the Alarm Orion Service with the MS Sql driver, the connection pool would continue to increment until it became unusable and triggered a station restart. This issue has now been fixed, as changes have been made to explicitly close open resources using automatic resource management. A new spy OrionCursorManager is now available under sysManager (along with OrionSessionManager), which enables the ability to spy on the open and closed cursors. To access the new spy, use the following steps: i. Turn on FINE LOGGER for â€œorion.cursorManagerâ€ ii. Restart the Station iii. Monitoring: go to the station's spy "spy:/sysManagers/orionCursorManager". There could be a few open cursors/sessions/connections that stay open for active threads. Look for resources open for a prolonged time.	Hanging connection pool with Orion Alarm Service

Issue key	Release Notes	Summary
NCCB-48405	In Niagara 4.9, FIPS or non-FIPS Workbench were both unable to connect withÂ a FIPS platform using a TLS connection. This issue has now been fixed, as users are now able to make a secure local platform connection in FIPS mode.	FIPS platform connection not working
NCCB-47727	In previous versions of Niagara, the Orion and BajaUx Alarm Consoles views operated inconsistently, especially when compared to Ax view. This issue has now been fixed, as the Alarm Console views are consistent now when the user has only the operator read access on the alarm space.	Orion and BajaUx Alarm Console operate inconsistently, especially when compared to Ax view

Issue key	Release Notes	Summary
NCCB-46699	In previous versions of Niagara, when an AlarmClass was deleted from the AlarmService, alarms for that AlarmClass would disappear from the AX and UX AlarmConsoles. When new alarms for these deleted AlarmClasses were raised, they would appear on the AX and UX AlarmConsoles that were linked to the DefaultAlarmClass. However, when the UX AlarmConsole was refreshed, the alarms for these deleted AlarmClasses would disappear. Now in Niagara 4.9u1, alarms for these deleted AlarmClasses will appear and be retained on the AX and UX AlarmConsoles that are linked to the DefaultAlarmClass	Alarms for deleted AlarmClasses are missing on the AX and UX AlarmConsoles

Issue key	Release Notes	Summary
NCCB-49590	When using the Niagara Point Manager view against a NiagaraStation in the NiagaraNetwork, after point discovery, if you selected a lot of discovered points in the 'Discovered' table and clicked the 'Add' command, it would often take a long time to respond and display the 'Add' dialog for confirming the Niagara proxy point creation details. This performance issue has now been addressed, so that you should experience much faster performance when adding discovered points using the Niagara Point Manager view. In order to get this performance improvement, the station doing the discovery needs to be upgraded with this fix (along with upgrading Workbench), but the remote NiagaraStation being discovered needs to be at least Niagara version 3.7 or later.	Niagara Network point discovery 'Add' pop-up takes a long time to load
NCCB-50378	BHsqlDatabase handles database connection resources better now.	Coverity Finding for RdbHsqDb

Issue key	Release Notes	Summary
NCCB-49183	The performance of Haystack smart equipRef (EquipRelation) and siteRef (SiteRelation) relations has been improved so they may be used in the station without a significant increase in SystemDb index time. These smart relations are included in the Haystack tag dictionary in the haystack palette under the folder named "Includes smart relations (recommended)".Â The version property of this dictionary will be set to "3.0.2 N.2 w/ SmartRefs (import)" once it is added to a station.Â Also, while SystemDb indexing may cause the CPU to run at 100%, it should no longer result in engine watchdog or fox connection timeouts.Â Finally, the smart siteRef relation has been fixed so an outbound relation on a point to a component without the site tag will not be implied; an inbound relation on the component without the site tag was never implied.	System index with haystack smart relations takes too long and interferes with other controller operations

Issue key	Release Notes	Summary
NCCB-49501	Prior to this fix, certain query ORDs (e.g. those containing NEQL or BQL queries with a relative slot path base) would not resolve when viewed from Workbench. For example, this problem could have manifested in Px views for ORD bindings containing relative slot paths followed by NEQL or BQL queries (widgets with such ORD bindings wouldn't resolve). Displaying the same Px view in the browser view would typically not have this problem. This defect is now fixed, so that these ORDs will resolve properly in Workbench.	Relative SlotPath with query ORD does not resolve in Workbench in 4.9
NCCB-48805	Prior to this fix, NEQL traverse queries like "hs:ahuRef->" would work as expected but negated traverse queries like "not hs:ahuRef->" would have an empty result set even when there shouldn't be. Now negated traverse queries behave as expected.	Not does not work with TraverseExpressions in NEQL

Issue key	Release Notes	Summary
NCCB-47366	In prior versions of Niagara, when using "nspace" ORD bindings, it did not resolve locally when opened in Niagara Virtual Px views. This behavior has now been fixed, as any ORD bindings in a Px view that use the "nspace" ORD scheme will not be changed when rendered in a Niagara Virtual Px view and will always resolve against the local station.	"nspace" ORD bindings should resolve locally when opened in Niagara Virtual Px views
NCCB-47192	In Niagara 4.9, the SAML provisioning job step does not provide a warning entry in the job log if a station is not in a configured circle of trust. This behavior has been fixed, as the "Configure Niagara IdP and SAML Scheme" provisioning job log will now have a warning entry for each station selected in the job that is not contained in at least one SAML IdP Circle of Trust. Â Additionally, the station log will also contain a warning message.	SAML provisioning job does not provide warning if a station is in no circle of trust

Issue key	Release Notes	Summary
NCCB-49427	Fixed an issue where the configured Entity ID on a SAML Authentication Scheme was not being applied properly when building a SAML AuthnRequest and processing a SAML Response.	SAML: Issuer not matching the Entity ID
NCCB-47631	In order to use the MySQLDatabase in Niagara, the MySQL Connector must be manually installed. The connector jar file needs to be installed in $niagara.home/jre/lib/ext/ and renamed to "mysql-connector-java.jar". An appropriate fault cause is now displayed under the MySQLDatabase's 'Health' property in the event that the connector is not installed properly. A station console log message is also now displayed during such an event.	No fault cause set when MySQLDatabase connector cannot be loaded

Issue key	Release Notes	Summary
NCCB-44057	In prior versions of Niagara, virtual Px views on a subordinate station (running Niagara 4.2 or earlier, including Niagara AX) were not accessible at the Niagara 4.3+ supervisor until after the initial loading of the Niagara virtual (e.g. after loading its Property Sheet view at least once). This was also problematic for bookmarks and hyperlinks directly to a virtual Px view on an older versioned subordinate station, as they would sometimes fail to load when first accessed. Prior to this fix, the workaround was to upgrade the subordinate station to a Niagara version at 4.3 or later. This defect has now been fixed so that upgrading the subordinate station is not required (only requires upgrading the supervisor).	Virtual Px Views from pre-4.3 or AX Station Fail on Initial Load in Supervisor

Issue key	Release Notes	Summary
NCCB-47633	In order to use the MySQLDatabase in Niagara, the MySQL Connector must be manually installed. The connector jar file needs to be installed in $niagara.home/jre/lib/ext/ and renamed to "mysql-connector-java.jar". An appropriate fault cause is now displayed under the MySQLDatabase's 'Health' property in the event that the connector is not installed properly. A station console log message is also now displayed during such an event.	Unhelpful fault cause when MySQL connector installed to the wrong location
NCCB-47323	In Niagara 4.9, if a program object triggered the route action of a JSONPath component after station start, but before the route action was invoked by other means, all JSONPath components would fail for the lifetime of that station. This issue has now been fixed.	Permissions error due to slf4j when JsonPath components triggered by program objects

Issue key	Release Notes	Summary
NCCB-48154	OrionCursorManager shows timed stack traces of where OrionCursor was opened and closed. The spy works as per the set Log level: * Level.FINE: Displays the top *K* Orion Cursor records, where *K*Â is the value set for system property _orion.OrionCursorManager.openStackCapacity_, by default it is set to 1024 * Level.FINEST: Limit the size of the open stack to 131,072 cursors. The station restart is required to reflect the change in the open stack capacity.	Optimize OrionCursorManager to keep the size small
NCCB-46381	Disabling and Enabling the AlarmService does not stop the alarm routing anymore. Alarm Data is persisted when the service is stopped.	Disable and enable of AlarmService causes alarm routing to stop

Issue key	Release Notes	Summary
NCCB-46344	In previous versions of Niagara, the documentation for nss:StationSecurity was missing. This issue has been fixed, as the correct help guide base for the nss module has been added accordingly. Additionally, using 'Guide on Target' on nss components should now link to the correct documentation location.	Missing documentation for nss:StationSecurity
NCCB-44420	A severe performance degradation that affected typical AX to N4 migration has been addressed. Before this fix, execution time for a migration could take several hours but now should complete in several minutes or less depending on the size of the backup.	n4mig takes 11000% longer in 4.8

Issue key	Release Notes	Summary
NCCB-32263	Previously, the query "neql:a:tag" would return entities that had the tag "a:tag" but only if that tag's value was not BBoolean.FALSE. Â Â Now, entities will be returned if they contain the tag regardless of the tag's value. This makes NEQL more consistent with Haystack filters (https://project-haystack.org/doc/Filters). If a user needs the previous behavior, however, they can set a new system property, niagara.neql.legacyGetTagExpression, to true.	NEQL GetTagExpression should return true if tag is present regardless of its value
NCCB-45623	Fixed an issue where a nuisance IllegalParentException was sometimes being printed out during the SAML IdP configuration provisioning job.	IllegalParentException during SAML IdP provisioning job
NCCB-46568	If SAML IdP Circle of Trust(s) are configured, they are now being updated correctly when any user's authentication scheme is changed.	Updating User Authentication Scheme Does Not Trigger BSAMLCoTPrototypesMixIn Update
NCCB-45392	Under certain exception boundary conditions, calling flush on serial ports could cause a tight infinite loop. This was observed in the SMS driver.	SMS driver hangs using BSerialPortQnx.flush0 on N4 JACE 8000

Issue key	Release Notes	Summary
NCCB-45295	Previous versions of Niagara lacked a default lexicon entry for certain certificate generation failures in the Certificate Wizard, resulting in an error message of "CertWizard.status.server.selectionError.message". This has been corrected with a relevant error message.	Using the Certificate Wizard to set the server cert to be used by all services when there are no server certificates available results in unhelpful error message
NCCB-46521	The Niagara Station may have throw Page overflow exceptions when creating LogHistory entries for extremely large log messages. This has now been corrected so that log messages are truncated where necessary to fit.	Module permissions log message can produce messages too large for LogHistory