

---

## Release Notes

### Niagara Release 2.3.5, Build 2.301.515

These release notes explain software changes made between the **initial** release of Niagara 2.3.5 (Build 2.301.511, released in May, 2004) and the **current** 2.3.5 release (Build 2.301.515), known as **Build 515**. Included are enhancements, bug fixes (previously reported issues that are now resolved), and remaining unresolved issues.

These main topics are discussed in the following document sections:

- [IMPORTANT NOTE ABOUT LICENSING in R2.3.5](#)
- [Documentation for Niagara Release 2.3.5](#)
- [Release Highlights](#)
- [Format of Release Notes](#)
- [Release Notes Index](#)
  - [Core Notes](#)
  - [Tridiumx Notes \(Predominately Drivers\)](#)
- [Obtaining Support for Niagara Release 2.3.5](#)

---

### IMPORTANT NOTE ABOUT LICENSING in R2.3.5

As started with Niagara r2.3.5, the license file on any Niagara host is checked upon startup (station or the JDE), for a valid release level. If you are upgrading any host that is currently running any previous r2.3.5 release build (r2.301.511), *it is already properly licensed*.

However, if upgrading a JACE or Web Supervisor **running r2.3.4 or earlier**, you must **first get an updated license** file from Tridium. Otherwise, following the upgrade, the Niagara station or JDE *will not start*. The “release” line in your license is now checked. For details, see the next section “[Release Check Operation](#).”

When upgrading a JACE, after you receive back your updated license file, you can install it in the JACE *during* the upgrade process (Installation Wizard routine, using the Admin Tool).

In the case of a Web Supervisor, copy your updated license file into its folder

```
niagara\<<release>\nre\lib
```

Please contact Tridium to get updated license files.

#### **Notes:**

- As always, do not attempt to directly edit any Niagara license file. This renders Niagara **inoperable**—not only for the newer release, but for any previous/older release as well!
  - If upgrading a **JACE-NX** currently using a pre-2.301.430 build (e.g. r2.301.428 or r2.301.429), its updated license must have Host ID text changed from “**NP-xxxx-xxxx**” to “**NX-xxxx-xxxx**.” Otherwise, this can also keep its station from starting.
-

## **Release Check Operation**

With Niagara r2.3.5, the license file on any Niagara host is checked, upon startup (station or the JDE), for a valid release level. Release-level data has always been present in Niagara license files, but was previously used only for notation.

Release level is defined with the following line in any Niagara license file:

```
release=<feature.scheme.build.(patch)>
```

for example:

```
release=2.301.515.v1
```

where in this case, “515” is the build, and “5” is the leading **build numeral**.

The leading build numeral is compared to the same for the host’s installed “coreRuntime” module.

- If the **license build numeral** is **equal or greater** than the coreRuntime’s level, the license is considered *valid*. The station in the r2.3.5 or later JACE or Web Supervisor will start and run as normal, and when launching the r2.3.5 or later JDE, it will open as normal.
- If the **license build numeral** is **less** than the host’s coreRuntime module, the license is considered *invalid*. Any station in the JACE (or Web Supervisor) **will not start**. If launching the JDE, **it will not open**.

In this case, you will need to upgrade that host’s license for that release.

When an invalid license is detected upon startup, the following message is seen:

```
“You are running <x>, but only licensed for <y>.”
```

For example: “You are running 2.5, but only licensed for 2.4.”

- If trying to start a station, that message is sent to its Standard Output.
- If trying to start the JDE, that message appears in a “License Required” pop-up error message, instead of the JDE.

## **Example**

Your JACE currently has a license file with line: `release=2.301.430.v1`

Depending on platform compatibility, it can run any release/build of Niagara prior to 2.3.5.

However, you will need to get its license updated before it can run 2.3.5.

You have the JACE’s license file updated, and now it reads: `release=2.301.515.v1`

This JACE is now licensed to run *any* build of 2.3.5, *or* any earlier release (2.3.4 for example).

At some future time in 2004, if a later “maintenance” 2.3.5 build is released (say, 2.301.525.v1), this JACE can be upgraded to it without requiring any license update.

When the next major release occurs, say at **2.3.6**, the JACE will then require a license update, because the 2.3.6 coreRuntime will be at release 2.301.6xx. The leading build number, “6” is now greater than the same in the JACE’s license file.

## Documentation for Niagara Release 2.3.5

The Niagara 2.3.5 Release CD includes a `\docs` folder containing all current Niagara technical documentation (at the time of the CD build). Documents are organized in various subfolders under this directory. Included is an `Index.html` file. You can use it to help find and “launch” various documents—just double-click this file to start it in your browser.

- Please note *you must install the **docs** module from the Niagara 2.3.5 Installation CD* in order to have context-sensitive and task-based Help in the JDE (WorkPlace Pro).

When you install the **docs** module, the identical `\docs` folder (including launch document) is created under your `\niagara\2.301.5xx` folder. Included is an “Online\_Help\_Files” folder that contains JDE Help system HTML files. Other folders contain mostly PDF documents.

- PDF documents require the Adobe Acrobat Reader software. If you do not already have this program installed on your PC, you can install it from the Niagara Setup menu on the Niagara 2.3.5 Release CD. Select **Install Adobe Acrobat** to install **Adobe Acrobat Reader 6.0**.

**NOTE:** A newer **Acrobat Reader 7.0** is freely available from Adobe, however, we are not yet distributing it. If desired, you can obtain the latest version of Acrobat Reader directly from Adobe at the following URL: <http://www.adobe.com/products/acrobat/readstep2.html>

If you have Acrobat Reader 7.0 already installed, *do not* install Acrobat Reader 6.0.

- Periodically, various Niagara technical documents are **updated** and new technical documents are added. The most current docs are always available on the Tridium secure web site.

After you log in to the Tridium secure site, select **Technical Support** then **Technical Publications**. You will see the same directory structure that exists in the `\docs` folder on the Niagara 2.3.5 Installation CD. Click on left-side “folder” controls to access documents.

## Release Highlights

Build 515 of the Niagara 2.3.5 release provides number of driver enhancements, resolution to software issues identified in Build 511, and reflects Tridium’s continuous extensive testing of the product. Because some customers received a preliminary Niagara 2.3.5 interim release (Build 514), these release note will identify the build in which each issue was resolved.

## Format of Release Notes

The organization and formatting of these release notes directly reflects how all issues are tracked in Tridium’s internal software development system. Each item includes a unique **issue number** and a “synopsis” description line, for example:

**906 Add absoluteTarget like relativeTarget for hyperlinks.**

When obtaining support, you may refer to any issue simply by its *issue number*.

Issues are divided into major groups according to folder or module, and then within each group, parted into three possible *types*:

- **Enhancements**—New functions or features added since the last release. A brief description of each enhancement is provided in these release notes.

- **Bug Fixes**—Problems identified and fixed by this release. Descriptions for each of these fixes are also provided in these release notes.
- **Open Issues**—Problems known to still exist in this release. All open issues are described using a three-part “Symptom, Condition, Workaround” format in these release notes.

Empty type groups or module/folder groups are not listed. For example, if a driver module had no enhancements, bug fixes, or open issues in this release, it is not listed.

## Release Notes Index

<b>Core Notes</b>	<b>6</b>
<b>coreRuntime</b> .....	<b>6</b>
<b>Bug Fixes</b> .....	<b>6</b>
5066 Log Applet does not display description .....	6
5264 MSTP does not work reliably at 76.8K .....	6
5986 Risk of single time sync server reporting incorrect time .....	6
<b>Open Issues</b> .....	<b>7</b>
505 AnalogOverride and MultistateOverride object commands not recorded in AuditLog. ....	7
845 Interstation links to Bundle fail. ....	7
1690 Database connectionPool closes. ....	7
1403 Backup Service makes backup if Cloudscape appdb is corrupt. ....	8
1763 Backup service makes bad backup on station restart.....	8
2018 Alarm record fields to printer limited to 80 characters.....	8
2027 Down status “sticks” for objects copied under a down container.....	8
<b>coreUi</b> .....	<b>9</b>
<b>Open Issue</b> .....	<b>9</b>
1620 Duplicate container keeping name of original.....	9
<b>nre</b> .....	<b>9</b>
<b>Bug Fixes</b> .....	<b>9</b>
3759 Composite “Expose Properties of” pull-down not painting.....	9
5293 On Windows, logoff from OS stops station.....	9
<b>Tridiumx Notes (Predominately Drivers)</b>	<b>9</b>
<b>amerAutoPUP</b> .....	<b>10</b>
<b>Bug Fixes</b> .....	<b>10</b>
5740 Error in any upload can leave status at Busy .....	10
<b>andoverAC256</b> .....	<b>10</b>
<b>Enhancements</b> .....	<b>10</b>
5863 Ability to use the panel S-Port.....	10
5864 Customer needs ability to enable/disable service via link .....	11
<b>Bug Fixes</b> .....	<b>11</b>
5906 Problem with “learn” in AC-256 driver .....	11
6044 Comm loss during logon sequence leaves poll/ping disabled .....	11
<b>bacnet</b> .....	<b>11</b>
<b>Enhancements</b> .....	<b>12</b>
3708 Better handling of MS/TP token problems.....	12
3709 Upload abort due to segmentation not handled. ....	12
3749 Disable/Re-enable MSTP clears poll list.....	12
5910 User commands not audit logged from GxPage .....	12
<b>Bug Fixes</b> .....	<b>12</b>
5251 Incorrectly detects network layer misconfiguration. ....	12

5252 Device uploads prevent station start.....	13
<b>eib.....</b>	<b>13</b>
<b>Enhancement.....</b>	<b>13</b>
5177 Shadow objects need to be able to listen on alternate group addresses.....	13
5717 Add time offset to EIBDate and EIBTime objects.....	13
<b>Bug Fixes .....</b>	<b>13</b>
5178 Poll traffic on the wire, even when poll is disabled.....	13
5179 No way to link eibDate object.....	14
5180 No way to link eibTime object.....	14
<b>innovatec .....</b>	<b>14</b>
<b>Bug Fix.....</b>	<b>14</b>
3745 DeviceManager and RelayManager no longer work properly effective in r2.301.511 .....	14
<b>lonworks .....</b>	<b>14</b>
<b>Bug Fixes .....</b>	<b>14</b>
3721 “ERR-null” displays at input of Dynamic Object.....	14
5155 Router shows UNKNOWN after learn.....	14
5156 Router service pin listen not working.....	14
5157 Node conflicts with router not recognized.....	14
5158 No pop-up for unmanaged network on router manager.....	15
5159 No error notification when router/node address conflicts.....	15
<b>modbusAsync.....</b>	<b>15</b>
<b>Enhancement.....</b>	<b>15</b>
3728 Need a way to control minimum time between Modbus messages.....	15
<b>Open Issue .....</b>	<b>15</b>
1884 ModbusSlave not returning illegal data address on write.....	15
<b>novus.....</b>	<b>15</b>
<b>Bug Fix.....</b>	<b>15</b>
3739 Novus will not start without modbusTCP in license.properties file.....	15
<b>opcClient .....</b>	<b>16</b>
<b>Enhancements .....</b>	<b>16</b>
4932 Startup performance slow at large sites.....	16
4962 Automatically configure client DCOM security.....	16
<b>Bug Fix.....</b>	<b>16</b>
3844 OPC Client does not work on Chinese version of Windows.....	16
<b>snmp.....</b>	<b>16</b>
<b>Enhancement.....</b>	<b>16</b>
5220 Add multiple network manager IP addresses.....	16
<b>system600 .....</b>	<b>16</b>
<b>Enhancements .....</b>	<b>16</b>
3799 Add “noResponseDelay” and “retryCount” properties.....	16
5639 Support Apogee firmware 2.6 panel addressing.....	17
<b>tunneling.....</b>	<b>17</b>
<b>Bug Fix.....</b>	<b>17</b>
3756 Tunnel servlet can leave connection open if not closed.....	17
<b>Obtaining Support for Niagara Release 2.3.5 .....</b>	<b>18</b>
<b>Contact Information.....</b>	<b>18</b>
<b>Tridium Web Forum.....</b>	<b>18</b>

## Core Notes

This section discusses enhancements and fixes made in Niagara modules considered as “core,” such as coreRuntime and coreUI. Subsections are divided by the following module (or folder), and within each module/folder, are listed by issue type (enhancement, bug fix, open issue):

- [coreRuntime](#)
- [coreUi](#)
- [nre](#)

### **coreRuntime**

- [Bug Fixes](#)
- [Open Issues](#)

### **Bug Fixes**

#### **5066 Log Applet does not display description**

When the description of a log is longer than the field size for the legend on the log applet, the descriptor scrolls to the left, leaving only the last two characters of the units displayed for the name of the value. This issue is fixed in R2.3.5 (Build 514).

#### **5264 MSTP does not work reliably at 76.8K**

When utilizing the MSTP Driver on an embedded JACE, the driver does not work reliably at data rates above 38.4K. Sometimes, the driver is also not reliable at lower data rates. A section of the Niagara core process designed to support the MSTP driver was not executing often enough to support messages running at higher data rates. This issue is fixed in R2.3.5 (Build 514).

#### **5986 Risk of single time sync server reporting incorrect time.**

If a station’s TimeSyncService had only one server configured and that server returned the wrong time, the local time was changed to the incorrect time. This issue is fixed in R2.3.5 (Build 515). A new algorithm was incorporated and a minor enhancement was added.

New TimeSyncService algorithm:

1. All configured time servers must respond.
2. The difference between the responses from each time server must be within the tolerance property value.
3. After all time servers have been successfully polled, each server is polled again 10 seconds later. The difference between the average delta of each poll session must be within the tolerance property value.
4. If the average delta of all poll sessions is greater than the tolerance property, the time is changed by that amount.

TimeSyncService enhancement:

There is a new system property: **timesync.syncTime**. If this property is specified in the host’s **system.properties** file, this is the only time the service will sync against remote timesync servers

each day. The format is hh:mm[:ss] where both digits of each field are required and the seconds are optional. For example:

```
timesync.syncTime=03:01
```

## Open Issues

### 505 AnalogOverride and MultistateOverride object commands not recorded in AuditLog.

Symptom: Override commands issued from AnalogOverride or MultistateOverride objects are not recorded in the station's audit log (AuditLogService).

Condition: Initiating an override, canceling an override, or setting override value or state.

Workaround: None at this time. Note that commands from a BinaryOverride objects *are* recorded in the audit log, except for "cancels."

### 845 Interstation links to Bundle fail.

Symptom: On some jobs, it was noted that values from interstation links are not updated, especially "static" values.

Condition: Bundles were used to receive values, that is, inputs of child objects were exposed through a Bundle container, and the interstation link destination was to the Bundle input. Further investigation revealed that interstation link values were successfully sent between stations, and in fact existed in the receiving station's publication cache, but some Bundle linking boundary condition may be interfering with the pushed values.

Workaround:

- 1) Use Bundles only in the intended manner, that is, to expose **outputs** of child objects for linking to a composited GxPage. Also, be aware that other limitations exist. See the "Bundle" container section in the *Niagara Standard Programming Reference*, specifically, the subsection "Bundle Issues."
- 2) Use the reassert timer to push from the publication cache to the Bundle on a regular basis. Do this by editing the system.properties file on the receiving host side (station with the Bundles) to read something like this:

```
interstationLink.reassert=5
```

### 1690 Database connectionPool closes.

Symptom: Log archiving at Web Supervisor fails, perhaps stopping completely. The following error message appears:

```
ERROR: LogService.archive: Force close of connection!
```

```
WARNING: Closed pooled connection [ConnectionPool]
```

```
ERROR 42X11: The maximum length for an identifier is 128. '<long log swid that becomes table name>' is too long.
```

The "<long log swid that becomes table name>" is the actual SWID (system wide identifier) of the object causing the error.

Condition: One or more log objects to be archived has a SWID over 128 total characters. This typically happens with ModbusTCP devices. When an object exists which is multiple container

levels under a ModbusTCP device, the total length of the object SWID can get too long. This causes the “LogService.archive: Force close of connection!” error.

An example of a long SWID name four levels below a Modbus device follows:  
/Station\_Name/ModbusTCPNetwork/ModbusTCPDevice/LongContainerName\_1/  
LongContainerName\_2/LongContainer\_3/Container\_4/ModbusGenericAO

Workaround: Keep swids for log objects under 128 total characters. Do this by having fewer levels of containers and/or shorter object names. In general, this is a good idea for *all* objects in any Niagara station. Swids that are too long make index views harder to use.

### **1403 Backup Service makes backup if Cloudscape appdb is corrupt.**

Symptom: After restoring a station’s backup.zip file (created by BackupService), the appdb is corrupt.

Condition: Cloudscape appdb, where it was not checked at least every 2 days for correct operation. Note that the BackupService will back up the entire station folder, including the appdb (“app” subfolder), regardless of whether the Cloudscape database has been corrupted. The BackupService creates a *daily* backup zip, storing only 2 copies: the last (**backup.zip**) and previous day’s (**backupOld.zip**).

Workaround: On a daily basis, check the Cloudscape appdb using the DatabaseService or browser-accessible archive servlet. Also, *copy each* day’s **backup.zip** to removable media or another safe file archive location.

### **1763 Backup service makes bad backup on station restart.**

Symptom: The backup.zip file for a station (created by its BackupService) cannot be restored. Winzip reports the file as not a valid zip.

Condition: The station was restarted before the backup operation completed, that is, the new backup.zip was completely written. However, the previous backup.zip was overwritten, and is now backupOld.zip.

Workaround: Be careful not to restart a station during a backup operation. You can check the BackupService’s config property “scheduledBackupTime” to find out when the automated daily backup occurs (default value is midnight). If you issued a manual “ForceBackup” command, allow ample time before restarting the station.

### **2018 Alarm record fields to printer limited to 80 characters.**

Symptom: When routing alarms to a printer using a PrinterRecipient or RemotePrinterRecipient, some records may get truncated, notably object swid or alarmText. In the case of swid, this causes confusion as to the alarm source.

Condition: Alarm record fields longer than 80 characters. Note that this occurs even if using a “wide-carriage” alarm printer.

Workaround: None currently, apart from keeping swids less than 80 characters.

### **2027 Down status “sticks” for objects copied under a down container.**

Symptom: In or under a container, objects may appear with a “down” status, even though the parent object may show with an “ok” status. Following a station restart, all objects appear with an “ok” status, and this does not occur again.

Condition: This can occur when engineering a station. For example, if standard Niagara objects are **added** in (or under) a device container *while* that device is “down,” those objects’ down status is inherited from the parent device container.

Unlike with child “shadow objects” (representing data in that device), this status is *not* cleared when communications are established with that device, in other words, when the device goes from “down” to “ok.” A station restart is needed to synchronize object status at this point, and this symptom will not occur for these objects again.

Note: This behavior is noticed more when working with certain drivers (Modbus TCP or Ndio, for example). A former release note described this “Open Issue” only for Modbus (issue #1427).

Workaround: Note that when adding *standard* Niagara objects under any container that has a “non-ok” status, for example a “down” device or a “fault” Ndio container, that you are essentially working “offline” for those added objects. A station restart is needed to fix this.

## **coreUi**

### **Open Issue**

#### **1620 Duplicate container keeping name of original.**

Symptom: Duplicate names for objects in same container. This is not allowed, yet there is a condition that will produce duplicate names. For now there is only a workaround.

Condition: Duplicating a container that contains an object that is named the same as its parent container, can cause a duplication of the name when that container is duplicated.

Workaround: Make sure that child objects do not have the same name as their parent container.

## **nre**

### **Bug Fixes**

#### **3759 Composite “Expose Properties of” pull-down not painting.**

When in the Windows look-and-feel, the Composite Editor’s pull-down “Expose Properties of” options do not show until the mouse is dragged over them. In the Alloy look-and-feel, the pull-down can only be used one time, and when trying to select another option, the pull-down arrow just changes direction with no selection available. This issue is fixed in R2.3.5 (Build 514)

#### **5293 On Windows, logoff from OS stops station.**

When the user logs off of the Windows operating system on a station running R2.3.5 (Build 511), the station is shut down by the operating system. This issue is fixed in R2.3.5 (Build 514)

## **Tridiumx Notes (Predominately Drivers)**

This section discusses enhancements and fixes made in Niagara tridiumx modules, which are predominately “drivers.” Subsections are divided by the following module (or folder), and within each module/folder, are listed by issue type (enhancement, bug fix, open issue):

- [amerAutoPUP](#)
- [andoverAC256](#)

- [bacnet](#)
- [eib](#)
- [innovatec](#)
- [lonworks](#)
- [modbusAsync](#)
- [novus](#)
- [opcClient](#)
- [system600](#)
- [tunneling](#)

## ***amerAutoPUP***

### **Bug Fixes**

#### **5740 Error in any upload can leave status at Busy**

If one of the managers (NetworkManager, DeviceManager, ChannelManager) encounters an error during its upload, this can leave the PUP learn status as Busy. If the learn status is busy, all polling and pinging will be stopped. This bug is fixed in R2.3.5 (Build 515).

## ***andoverAC256***

- [Enhancements](#)
- [Bug Fixes](#)

### **Enhancements**

#### **5863 Ability to use the panel S-Port**

Tridium has received requests from customers to be able to use the S-Port of an AC256 panel to perform communications.

Typically, the C-Port is used for comm and the S-Port is used as a serial printer port. However, it is possible to log-on through the S-Port and perform almost all of the same functions that can be performed through the C-Port. There are a couple of relevant differences from a driver perspective:

- The logon “device password” needs to be appended with a newline char when using the S-Port. When using the C-Port, the string must not be appended with a newline.
- The S-Port is pre-empted by any activity on the C-Port. In other words, if anyone takes control of the C-Port, the AC-256 will disconnect the S-Port.

A new boolean property **useSPort** has been added to the COMM properties tab of the AndoverService. When true, the logon sequence is modified to allow logon through the comm port. This enhancement was added to R2.3.5 (Build 515).

**5864 Customer needs ability to enable/disable service via link**

Added a new special object type “AndoverServiceControl” which can be copied from the Andover library to any container under/including the AndoverNetwork container. This object has one linkable DsBooleanStatus input called “serviceDisable” which defaults to “false”. When linked, this object controls the “enableAndoverComm” property of the AndoverService as follows:

- if input is “false”, “enableAndoverComm” will be set to “active”
- if input is “true”, “enableAndoverComm” will be set to “disabled”

This enhancement was added to R2.3.5 (Build 515).

**Bug Fixes****5906 Problem with “learn” in AC-256 driver**

The problem is defined as follows:

The AC256 defines a valid point name as:

- maximum 8 characters
- first character must be a alpha
- 2nd through 8th character can be any alpha, number, or special character “.” or “\_”, or “%”.  
However, valid Niagara names contain only alphas, numbers, or “\_” characters, so any instances of “.” or “%” in Andover point names were converted to “\_” in the Niagara point names.

The fix was, before creating the Niagara name, to convert:

- any “.” encountered in the AC256 name to “\_DOT\_”
- any “\_” encountered in the AC256 name to “\_UND\_”
- any “%” encountered in the AC256 name to “\_PER\_”

The PointListManager has been modified to include two new controls:

**useConvertedName** - a checkbox, which if checked, will do the above conversion. If not checked, then the old rules apply and Niagara will attempt to create unique names, leading to names not matching the names in the AC256

**createInContainers** - a checkbox, which if checked, will cause all learned points to be created in a container folder which matches the source location in the AC256 hardware.

This bug is fixed in R2.3.5 (Build 515).

**6044 Comm loss during logon sequence leaves poll/ping disabled**

If a logon sequence is initiated after a device down condition or after a station restart, and the logon sequence accepts the device id, but has an exception on the second step of the logon (sending the personal password and waiting for an “R>” prompt), then the AC256 driver is left with poll and ping disabled. This bug is fixed in R2.3.5 (Build 515).

***bacnet***

- **Enhancements**
- **Bug Fixes**

## Enhancements

### 3708 Better handling of MS/TP token problems.

Although the JACE appears to handle the token properly, customers have run into situations where the other devices on the network mismanage the token. This causes the MS/TP trunk to be temporarily unavailable, until the devices can sort out the token passing scheme for themselves. The trunk can be unavailable for periods of several seconds to several minutes, depending on how things work out. In general, this does not cause problems for the unitary devices, because they usually don't care about talking to any other device. However, as the BACnet client trying to extract data out of the system, it is a big problem—it causes devices to go down, and the JACE is unable to poll objects.

The following two properties have been added to the **bacnet.properties** file:

```
maxMSTPPingFailures=n
```

```
maxIpEthPingFailures=n
```

The respective property will be interpreted by the BACnetService to configure the number of failures that will be tolerated before the device will be marked down. MSTP devices that are on the far side of a BACnet Router will be treated as IP/Ethernet devices, because the JACE connects to these devices through its IP or Ethernet port. This is why there is a separate configuration for IP/Ethernet properties. This enhancement was added to R2.3.5 (Build 514).

### 3709 Upload abort due to segmentation not handled.

BACnet devices do not retain most of their configuration information across restart. The device will try to reload it on startup. However, this might fail, due to MSTP communications issues. Therefore, users frequently need to manually upload the device. Sometimes a ReadPropertyMultiple fails if the device's information won't fit into one packet. The JACE needs to fall back to retrieving this information via ReadProperty if RPM fails.

This enhancement was added to R2.3.5 (Build 514).

### 3749 Disable/Re-enable MSTP clears poll list.

If you disable an MSTP trunk, and then re-enable the trunk, the list of objects and devices is cleared. It does not appear to get repopulated. This was fixed in R2.3.5 (Build 514).

### 5910 User commands not audit logged from GxPage

User actions were not logged to the audit log when the action was invoked from a GxPage. The command is now logged at the time it is executed. This enhancement was added to R2.3.5 (Build 515).

## Bug Fixes

### 5251 Incorrectly detects network layer misconfiguration.

When a JACE receives a packet from a device whose MAC address is the same on its network segment as the JACE MAC address on one of our network segments (this is allowed if the network numbers are different), we incorrectly identify this as a router loop situation, and disable routing. This issue is fixed in R2.3.5 (Build 514).

**5252 Device uploads prevent station start.**

If there are a lot of BACnet devices in the station, and the communication to these devices is slow (for example, if they are on MSTP, or several router hops away), the uploads that are posted to the client queue can prevent the station from starting. The station appears to be working okay, but is marked failed in the Admin Tool. Now, this process is passed off to another asynchronous task, which allows the stationReady() function to continue processing. This issue is fixed in R2.3.5 (Build 514).

***eib*****Enhancement****5177 Shadow objects need to be able to listen on alternate group addresses.**

Some customers have an EIB network, which has one light controlled from multiple group addresses (that is, mocks a three-way switch). In order for the eibObject that shadows the light to maintain correct state, the eibObject must be able to update its value based on unsolicited messages from any one of the three switches.

Added a new property to all eibObjects called “alsoListensOnGroupAddresses” in which multiple alternate group addresses can be specified. If an incoming unsolicited message corresponds to any of these group addresses, then the shadow object will process the message.

Alternate address are semi-colon separated strings of the form “x1.y1.z1;x2.y2.z2[;xn.yn.zn]” where x.y.z is an alternate group address. This enhancement was added to R2.3.5 (Build 514).

**5171 Add time offset to EIBDate and EIBTime objects**

Added a time offset property “adjustWrittenTimeBy” to the EIBTime object. This will provide an offset for syncing clocks on the bus to some offset of the current system clock (to set UTC time, for instance). Note that this offset only applies to values written to the bus, not to values read from the bus. This enhancement was added to R2.3.5 (Build 515).

**Bug Fixes****5178 Poll traffic on the wire, even when poll is disabled.**

EIB shadow object polling can be collectively disabled using the “pollDisable” on the eibService, or can be individually disabled using “pollDisable” on the individual shadow object properties. However, when the poll is disabled, messages are still generated and sent to the EIB devices. This issue is fixed in R2.3.5 (Build 514).

The messages were being generated as a result of the “ping” process, not the “poll” process. This was because all objects were subscribed as ping devices.

Tridium has removed the subscription of shadow objects to the ping service. The tradeoff here is that in an EIB network that is based only on unsolicited messages (polling is disabled in the service or for all individual shadow objects) if any individual EIB device goes down it will never be indicated until a command is sent to that object.

**5179 No way to link eibDate object.**

There are no input properties on the eibDate object, therefore there is no way to programmatically send the date onto the eib bus. This is needed to set objects on the bus that require time/date sync.

This issue is fixed in R2.3.5 (Build 514) by adding a new input trigger property to the object.

**5180 No way to link eibTime object.**

There are no input properties on the eibTime object, therefore there is no way to programmatically send the time onto the eib bus. This is needed to set objects on the bus that require time/date sync.

This issue is fixed in R2.3.5 (Build 514) by adding a new input trigger property to the object..

***innovatec*****Bug Fix****3745 DeviceManager and RelayManager no longer work properly effective in r2.301.511**

The issue was introduced by incorporating the HotSpot VM. There are some subtle differences between the JView VM's implementation of Swing versus the HotSpot VM's implementation of Swing. HotSpot does not favor having empty Swing tables. The DeviceManager and RelayManager start up with empty tables before learning their respective equipment. This issue is fixed in R2.3.5 (Build 514).

***lonworks*****Bug Fixes****3721 "ERR-null" displays at input of Dynamic Object.**

In some situations, dynamic objects such as a DynamicDemux or DynamicCmd may display the string "ERR-null" at the object input. This is a visualization error only. The functional operation of the object in the station database is not effected. This issue is fixed in R2.3.5 (Build 514).

**5155 Router shows UNKNOWN after learn.**

Router status is "unknown" after performing a learn. The JACE should have set the status like it does with the LON nodes. This issue is fixed in R2.3.5 (Build 514)..

**5156 Router service pin listen not working.**

The service pin listen does not work for routers. Works fine for LON nodes. This issue is fixed in R2.3.5 (Build 514).

**5157 Node conflicts with router not recognized.**

There is a problem where the LEARN function for an unmanaged network does not correct conflicts in subnet node addresses between routers and LON nodes. This issue is fixed in R2.3.5 (Build 514).

**5158 No pop-up for unmanaged network on router manager.**

When in the router manager, and you select LEARN, the pop-up does not allow the user to select unmanaged network, so it will always treats the learn process as a managed network. When in the device manager, the pop-up does display. This issue is fixed in R2.3.5 (Build 514).

**5159 No error notification when router/node address conflicts.**

When there is a router/node address conflict after a learn process, there is no error to alert the user of the condition. This issue is fixed in R2.3.5 (Build 514).

**modbusAsync**

- **Enhancement**
- **Open Issue**

**Enhancement****3728 Need a way to control minimum time between Modbus messages.**

Modified modbusAsyncDriver's output method to look for a new **drivers.properties** entry of "modbusAsync.minSendInterval". If no entry is found, or value entered is an invalid value, no minSendInterval will be applied.

If an entry is found and it is a valid positive number, the driver will prevent a new Modbus message from being sent to the serial port until the minSendInterval has passed since the last message was sent.

This enhancement was added to R2.3.5 (Build 514).

**Open Issue****1884 ModbusSlave not returning illegal data address on write.**

Symptom: Modbus master device receives no exception code 2 (ILLEGAL DATA ADDRESS) from a ModbusSlave station upon writing to a coil or holding register that is not mapped. From the remote Modbus device, the write appears successful, however, the ModbusSlave station found no place to store the value.

Condition: 2.301.4xx and earlier version of ModbusSlave service or ModbusTCP Slave service.

Workaround: None, apart from configuring remote Modbus master to *not write to unmapped* coils or holding registers.

**novus****Bug Fix****3739 Novus will not start without modbusTCP in license.properties file.**

When trying to utilize the NovusEdge driver, the station has the following error:

```
Tridium Niagara Station, r2.301.431.v1 [platform]
ERROR: Feature not licensed: modbusTCP[ /stationName/services/NovusService]
MESSAGE: ErrorLogService installed [/stationName/services/ErrorLogService]
```

This issue is fixed in R2.3.5 (Build 514).

## ***opcClient***

### **Enhancements**

#### **4932 Startup performance slow at large sites.**

In previous releases, it can take up to 30 minutes to register all groups and points at a site with 6000+ points. The startup process has now been optimized to reduce the time it takes to the points and groups. This enhancement was added to R2.3.5 (Build 514).

#### **4962 Automatically configure client DCOM security.**

Utilizing the new Java VM (Sun Microsystems Hotspot), the OPC Client now automatically configures DCOM security, rather than relying on a fully manual process. This enhancement was added to R2.3.5 (Build 514).

### **Bug Fix**

#### **3844 OPC Client does not work on Chinese version of Windows.**

The client on a Chinese version of Windows is able to connect to and learn OPC servers, but can not read data synchronously or asynchronously. This issue is fixed in R2.3.5 (Build 514).

The native character buffer for storing localized timestamps was too small. The size has been doubled and client now works as it should on Chinese versions of Windows.

## ***snmp***

### **Enhancement**

#### **5220 Add multiple network manager IP addresses.**

There has been a request to add a second (multiple) network manager IP address to the SnmpService in order to send alarm traps to a backup alarm monitoring station.

To accommodate this, two additional network manager IP address (and port) fields have been added to the SnmpService. These are optional fields that can be used to provide up to 3 total network manager IP addresses where alarms (traps) are sent.

This enhancement was added to R2.3.5 (Build 514).

## ***system600***

### **Enhancements**

#### **3799 Add “noResponseDelay” and “retryCount” properties.**

There is a need to have the ability to wait for a user-defined amount of time on a “no response” from a System600/Apogee cabinet. A retry count is also needed to determine when the cabinet is in a down state (no response).

Two new properties have been added to the System600Service’s **Device Status > Config** property sheet:

- A “noResponseDelay” property specifies the minimum amount of time (in seconds) to wait before attempting a ping (point log poll) to a cabinet that is not responding (in a down state).

- A “retryCount” property specifies the number of times to retry a ping to a cabinet after the first no response from the cabinet. If, after all of the retries, the cabinet is still not responding, then it will be considered down, and the “noResponseDelay” will be enforced.

The “pingDelay” property was also fixed, so that it specifies the amount of time to delay between cabinet pings (during normal pinging). It now defaults to 0 ms, so that cabinet pings will occur as fast as possible.

This enhancement was added to R2.3.5 (Build 514).

### **5639 Support Apogee firmware 2.6 panel addressing.**

Apogee firmware changes have caused problems with report parsing. In particular, Apogee firmware version 2.6 and later allows for field panels to be addressed using a String identifier (prior to that, panels were addressed using an integer value).

Support was added for the String addressing used by field panels in Apogee firmware 2.6 and later. This has been accomplished by adding a property called “apogeeVersion”, located in the property sheets under **System600Network > Serial Driver > Config**. If this new “apogeeVersion” property is set to a value of “2.6,” the driver will key on this 2.6 apogee version string in order to parse the cabinet reports differently on a network learn (any other value for “apogeeVersion” will default to use the old parsing method)

There is also a new *ApogeeFieldPanel* object (a subclass of System600Cabinet) that uses a String cabinet identifier instead of the old cabinet number (integer based). This object will automatically be instantiated on a successful network learn.

This enhancement was added to R2.3.5 (Build 514).

## ***tunneling***

### **Bug Fix**

#### **3756 Tunnel servlet can leave connection open if not closed**

Loss of communication to the Vlon or Vserial tunneling service in the JACE could leave the tunneling service active. In this scenario, the tunneling service would not work again until the JACE was restarted. This situation was corrected by adding a “ping” feature to these tunneling services, such that the service will ping the client periodically. If the ping is not returned, the service will automatically terminate.

## Obtaining Support for Niagara Release 2.3.5

The Tridium secure website contains a “Technical Support” page with several links, including:

- Problem Reports Form
- Technical Publications

There is also a “Download Software” page that lists Niagara software modules and programs available for download.

### **Contact Information**

Contact information for Tridium Inc. is included below:

Tridium, Inc.  
3951 Westerre Parkway, Suite 350  
Richmond, VA 23233  
USA

Phone: (804) 747-4771

FAX: (804) 747-5204

For **technical support** email: [techsupport@tridium.com](mailto:techsupport@tridium.com)

For **suggestions** email: [development@tridium.com](mailto:development@tridium.com)

For **documentation feedback** email: [documentation@tridium.com](mailto:documentation@tridium.com)

For **training information** email: [training@tridium.com](mailto:training@tridium.com)

### **Tridium Web Forum**

An on-line forum for Niagara Framework users is now available for users to share information and ideas. Once registered, users can join a wide variety of discussion groups, and receive emails when new postings to a particular topic are posted.

Because many forum visitors may be friendly competitors, users are allowed to use an alias or unidentifiable user name.

The web URL for this forum is: <http://webforum.tridium.com>