

Introduction to Niagara 4.9

July 23, 2020

Q&A

 How does dropping support for the 32-bit version on Workbench on Windows affect support for the Echelon U10 USB adapter?
Will Lonworks iLON USB interface lose functionality with the loss of 32-bit support? Since 64-bit is the new norm for 4.9, are there LON drivers that will work with 64bit?

What about using a Lon USB adapter with Niagara and only being able to install 64bit?

It's important to note that we have not officially supported or guaranteed the results of the LON USB adaptor functionality with 32-bit workbench, however, we have made provisions in 4.9 to enable this functionality on 64-bit operating systems.

2. Will the 32-bit Workbench installation file still be offered with 4.9? Is there a 32-bit 4.9 for techs to use on laptops? What bit Workbench should be installed as a demo 32/64?

32-bit support has been completely deprecated. Installation on a 32-bit operating system will result in an error and the installation will not be allowed to continue.

3. Has support for 64-bit Modbus registers been included in 4.9? This is a daily problem with newer energy metering networks.

At this point, 64-bit Modbus registers have not been included in 4.9. We are tracking this issue and will add your comments to the enhancement.

4. With support being added for ESXi, will this require the virtual machines to be x64 as well? A number of VM systems are still 32-bit based.

Tridium is only testing on 64-bit operating systems and has not tried this combination.

5. Are there any plans to add compatibility for ONVIF cameras?

ONVIF camera integration is on our roadmap but not yet prioritized.

6. Can 2 IO-R-34 daisy chain (quick connect) with Edge 10?

From the Edge 10 Mounting and Wiring Guide it is recommended that an Edge 10 have its own power source. All of our verification testing is done with one transformer per device and our approvals are based on that configuration.

7. Is the Edge 10 refresh for 2-34 modules free? What releases 4.7/8?

The refresh for 2 IO-R-34 modules is now included with the Edge 10 license. Simply update the license for your Edge 10 and you will be able to utilize 2 IO-R-34s on 4.7, 4.8, and now 4.9. Note that 4.9 supports IO-R-34s with ACE! Check out the free session on ACE and IO-R-34 in <u>Tridium University</u>.



8. Now that Niagara can be deployed from Cloud to Edge, does/will Tridium support provisioning of wiresheet logic/programs?

Since 4.7, Niagara has supported the provisioning of both templates and Application Templates. This capability allows you to install and run wiresheet logic on a remote station with specific configuration. Please see the following resources for more information on these key features.

Free <u>Tridium University</u> courses on Application Templates and Provisioning. <u>Tridium Talk</u> on provisioning.

9. Can tags be used to build graphics on a third-party graphics palette, or does it just work on the Tridium ones? Does graphic tagging only use the svg module or can it use other graphics modules?

Tags can be used to build graphics with stock Tridium palettes, third-party graphics palettes or custom images.

10. Does tag based graphics utilize Niagara tagging, Haystack, or both?

Tag based graphics can utilize any supported tagging mechanism. For more information on Tag Based Graphics please check out the <u>Tridium Talk</u> and <u>Tridium University</u> session on this exciting feature.

11. Do you have a live example of SSO to get better understanding?

We have a <u>Tridium University</u> demonstration of SSO to help with getting an understanding the value and application of this great new feature.

12. Will JSON Toolkit be available on third-party Niagara Portability controllers, or just the JACE8000?

Will the JSON Toolkit be made available for CIPer 30s and 50s?

The JSON toolkit has been configured as an option for most standard portability controllers that include MQTT as a standard open driver. In the case of the referenced CIPer 30 and 50, only the 50 has this option.

13. Is JSON Toolkit standard or optional cost?

The JSON toolkit is an additional cost and does require a valid SMA. Please review the course in <u>Tridium University</u> as well as the <u>JSON Toolkit announcement</u>. Contact your Niagara dealer for pricing.

14. Does JSON support IBM Watson Cloud server?

JSON in general does not support a specific set of applications. The Toolkit is capable of building JSON formatted payloads to meet the needs of any 3rd party application. For more information on the JSON Toolkit, please reference <u>Tridium University</u> as well as the <u>JSON Toolkit announcement</u>



15. Are MQTT point counts limited by license?

MQTT points (publisher and subscriber) are limited by global capacity just like other Niagara drivers.

16. Can MQTT only be used with AWS integration? Can you setup your own MQTT - like Mosquitto or Google Cloud?

The MQTT driver can be used with any MQTT provider. In 4.9, we have created a specific authenticator for AWS IoT Hub as it is common end point. The Authenticator can connect to AWS IoT using certificate authentication.

17. What sort of authentication is supported for AWS? Is it certificate based or only Access Key / Secret Key?

The AWS Authenticator for MQTT supports certificate-based authentication.

18. Can the Edge devices program be viewed live when it is tied into DHCP on the secondary Port?

When a Niagara station (Edge 10 or other portability device) is tied to the secondary port of a JACE via DHCP, there is no way to directly access the station via Workbench. All programming and management must be done through provisioning on the JACE. Note that the Edge 10 and other portability devices can be accessed directly if they are available via the main network.

19. Regarding video, does 4.9 support other vendors beside Milestone and Axis?

Niagara also supports Honeywell Maxpro which includes some Java dependencies.

20. Any intention to port HTTPS proxy to earlier Niagara versions?

At the moment there is not a plan to support HTTPS proxy on an earlier version of Niagara.

21. Will all "Community Modules" cease to function when upgrading past 4.9?

Third Party module signing functionality will have an effect on all modules that are not signed. For unsigned modules, we highly recommend contacting the 3rd party and requesting that their modules be signed. In the case that modules are not able to be signed, self-signing on behalf of the module owner is available as well as lowering the verification mode to low in 4.9. Module signing is an industry best practice, not only in relation to Niagara but to vendors such as Microsoft and Apple and is done to protect the consumer of said modules.

22. Are there any plans to audit the platform access in addition to the station? (ex: to monitor software modules updates)

Great question. I have added that enhancement to our backlog for future consideration. Today you can find that information in the daemon output, however, this may not be sufficient.



23. Does ACE under Edge10/N4.9 work under NPSDK/Linux, not just QNX? ACE on 3rd Party HW: Does ACE as under Edge10/N4.9 work under Linux, not just QNX?

ACE will work for our portability partners under Linux. It is important to note that Linux is not a real-time operating system and thus the real-time/determinism feature may be affected. However, fast startup time to control should behave as designed. For more information on ACE, please see this <u>Tridium University free course</u>.

24. Are there plans to support other Red Hat offshoots such as CentOS?

We are interested in learning what Linux distributions our customers are interested in for future versions of Niagara. Please see the thread on the <u>Niagara Community</u> regarding this topic and chime in as appropriate.

25. When accessing via browser, there is a link for "Niagara Web Start" or "Java Web Start". Is it preferred to log in via browser, or "Niagara Web Start"? As JWS is deprecated, are all applet AND Workbench GUIs now in N4.9 as DHTML5?

Java Web Start is now deprecated in 4.9. Please utilize Niagara Web Start for any Java Applet based views. Tridium has been working to convert applet-based views to HTML5, however there are some views that have not been converted. We would be interested in hearing your feedback on which views that you utilize and their use cases. Please email <u>TridiumBetaTest@tridium.com</u> with your feedback.

26. Is there any redundancy option like hot standby system in server level?

No, there is not failover capability in Niagara. This is something on our roadmap. Please email <u>TridiumBetaTest@tridium.com</u> with any use cases you may have for this feature.

27. It's listed that mobile browser Chrome on Android 6 and 7 is not supported on Niagara 4.9 Why are you not just testing on the version of Chrome and ignoring the version of Android? e.g. My phone is running Chrome 84/0.4147.89 (on Android 6).

In general, we are testing with the latest release of browsers on the latest releases of mobile operating systems to limit the number of combinations that we must test.

28. What properties are available to use to "tune" the new net scanner functionality?

Information on changes added to Niagara 4.9 to change the manner in which Niagara behaves when interrogated by a network scanner can be found in the <u>Niagara</u> <u>Community Knowledge Base</u>. Specific tuning parameters relate to the engine watchdog timeout or using the new QoSFilter on the webserver to limit the simultaneous requests.

29. Does the new security log capture file edits?

Information on what the security log captures can be found in our <u>4.9 documentation</u>.



30. What about the issues with the jetty service on 4.8?

Multiple changes were made to the Jetty Webservice in 4.9, including an upgrade to a latest release. Our beta partners have reported that issues with Jetty have been resolved, but we would need to understand the specific use case that is being discussed. Please email <u>TridiumBetaTest@tridium.com</u> and we can dig in further.

31. How is video bandwidth calculated for proper streaming while integrating with N4?

Streaming limits are affected by Network bandwidth, Supervisor resources, video resolution, frame rates, and number of streams. We have validated that we can view up to 64 simultaneous video streams at 1080p resolution, at 5 frames per second with our lab setup.

32. Is alarm portal software available for 4.9?

Yes, alarm portal is available for 4.9,

33. How many points allowed in Edge 10?

The Edge 10 allows for 50 total points not including onboard or remote IO-R-34 points. To learn more about the Edge 10, please see the Free Edge 10 training at <u>Tridium</u> <u>University</u>.

34. Has 4.9 fixed hover over polygons locking up in web graphics?

Yes, this issue has been resolved in Niagara 4.9.

35. Where is the best place to learn more about Tagging?

The <u>Niagara Tagging Guide</u> located in our resource center is a great place to start.

36. There were complaints about N4.8 as being too heavy which caused the JACE to slow down. Does N4.9 address this issue?

Niagara 4.9 has addressed a number of performance concerns regarding 4.8. As every station and integration is different we cannot guarantee specific performance gains, however, our beta testing results did show improvement.. If you have specific issues, please contact us at <u>TridiumBetaTest@tridium.com</u> for further evaluation.

37. What ACE hardware specs are required for custom hardware?

For portability requirements, please contact your Niagara distributor.

38. Is it possible to have a video on self-signing the modules?

We are discussing the possibility of doing a Tridium Talk on 3rd Party Module signing in general.

39. Does the trade up program cover demo Jace 600E?

No, the trade up program does not cover a demo JACE. For full program details please visit the resources on the <u>Tridium website</u> for more details.



40. Is there a way to purchase more MSTP device licenses for the Edge 10?

At the moment there is not a way to increase the capacity on the Edge 10. The Edge 10 is capable of serving up to 3 devices (MSTP or IP) and 50 total points.

41. How are the module security settings changed to high? Is there an option in 4.9 to lower the code signing policy for 3rd party modules back to low or is that locked in?

In 4.9, the module verification mode is set to Medium. An administrator may set the verification mode to low or high by editing the system properties file as detailed in the <u>documentation</u>.

42. Can you tell us more about the Amazon cloud sever uses?

Many of our customers use Amazon IoT Hub for various applications. The updates in Niagara 4.9 to the MQTT driver help ease the authentication requirements and facilitate a more seamless experience.

43. Is there a plan to enforce signing of individual programs later on (not just modules)?

Yes, we have a roadmap item for enforcing the signing of individual program objects.

44. How can I sign my Niagara Modules? Where Can I find that information?

If you are a Niagara Developer, documentation for signing your own Niagara Modules can be found at local:|module://docDeveloper/doc/security/codeSigning.html

45. When upgrading from 4.6 or earlier, do you recommend making a direct jump to 4.9 or doing a sequential upgrade?

You are welcome to upgrade as you wish, for the most value we recommend you go directly to 4.9.

46. Are there any future plans to support more VMS/video systems?

Support for ONVIF is on our backlog, if you have specific integrations in mind please let us know via email at <u>TridiumBetaTest@tridium.com</u>.

47. Is there any support for Bacnet SC?

BACnet/SC is a very important standard that Niagara will support in a future release.

48. Are there any plan to allow reciprocal Niagara connections through NAT without VPN or port forwarding?

There have been discussions around enabling this technology but nothing firm on the roadmap.



49. Can we export the alarms/histories from the Web (HTML5) view, same functionality is available in WB?

While the functionality is not explicitly duplicated, you can export alarms from the Web View. For Histories, however, we are not able to configure their import/export from the Browser as we have to use Workbench for that functionality.

50. Will Brick Schema tagging be an added feature in the future?

Adding the Brick Schema in Niagara is in our backlog but not currently being worked at this time. Look for it in a future release of Niagara.

51. Does the AX migration require any manual steps in application updates for tags, or you can just port your AX station in 4.X without any manual intervention?

The AX to N4 Migration guide located in the <u>Resource Center</u> details the steps necessary to port your AX station to N4.

52. How does my data logs transfer to 3rd party Security operation control SIEM?

Good question. We have done some research in the past on this subject, but it has not made it into our immediate roadmap.

53. When upgrading from a (for example) JACE 600 to a JACE 8000 is it only the hardware (JACE 8000) that needs to be bought and the license is transferred?

Both the Hardware and Software need to be purchased. For full program details please visit the resources on the <u>Tridium website</u> for more details.

54. Is there any solution for certificates having to be self-signed for https?

Not fully sure I understand the question here, however, the <u>Niagara 4 Hardening Guide</u> details how one can utilize CA signed certificates.