

Connect Anywhere with Niagara Remote

February 1, 2024

Q&A

1. What happens when a new version of Niagara is released and the on-prem system moves to an "un-supported" version? Do the cloud suite features stop working until that site can be upgraded?

This is a more complex question than could be quickly and easily answered here. Tridium will provide guidance shortly on the behavior of NCS services as non-LTS versions move through their support lifecycles.

2. To be clear, we deploy on N4.13 today and it is 'supported'. If N4.14 is released next week and is N4.13 suddenly no longer 'supported'?

As you've seen with Niagara, not being "supported" does not mean the station stops working. While we encourage you to stay current with your Niagara software version using the SMA, Tridium will provide guidance on how NCS services will behave for previously supported versions of Niagara as newer versions are released.

3. Is Niagara cloud already available with supported Niagara version and an active SMA? no additional cost?

The 90-day trial programs offer subscriptions to Niagara Recover and Niagara Remote at no additional cost for 90 days. After that period, there will be additional cost to renew the subscriptions.

4. How much does Niagara remote subscription cost? Is the subscription price based on the number of Niagara network connections?

The subscription cost is "per device / supervisor". In other words, the total cost is based on the number of Niagara devices that are configured to use Niagara Remote for remote access. I believe the list pricing will be provided as part of the presentation.

5. What does JACE mean?

A JACE is Tridium's embedded controller that runs Niagara. The acronym "JACE" stands for Java Application Control Engine.

6. Does the remote site with the JACE or Supervisor have an internet service with public IP for this to connect?

No, the local JACE or Supervisor only requires outbound access to our cloud services.



7. If we have an existing SAML based cloud iDP would we be able to utilize that database or is the user database required to be handled through NCS?

This is possible and has been tested internally. The key thing to note here is that each device will get its own unique hostname like {device_id}.remote.niagara-cloud.com. Your SAML IdP would need to be configured to work with these hostnames.

8. Does Niagara remote ONLY present the HTML5 views and no workbench views or workbench based administrative tasks??

Niagara Remote automatically configures itself for the port that your station's web service is running on.

9. Is this only for connection to supervisors?

It can also be used for JACEs.

10. While Niagara Remote allows remote station application management, is remote Platform management on the roadmap? If so, when is projected to be supported??

Remote Platform management is part of our larger remote Niagara instance management strategy. It is in the plan, although we are not prepared to provide expected timelines yet.

11. The station access is accessing Niagara via browser, correct? So it might be a challenge to utilize plug-ins (I'm thinking Distech Wizard Service) without having a "proper" workbench connection. Is that correct??

That's correct, Niagara Remote only supports Niagara web views at the moment. We are working on adding Workbench fox and platform connections to our roadmap.

12. Asset Manager and Cloud Backup Service are still going to be separate and available at no additional cost? As long as the SMA on the JACE/supervisor is active??

The legacy Backup as a Service (BaaS) product is expected to be discontinued sometime before the end of 2024. The time frame will be announced beforehand, but we encourage users to consider utilizing Niagara Recover instead.

13. We appreciate the move of services and data to the cloud. Our focus is wanting the supervisor being in the cloud. All these solutions still require an on-prem supervisor. Is a cloud supervisor on the roadmap?

Yes, a cloud supervisor is on the roadmap.

14. Are the accesses via Niagara Remote logged in the station audit logs?

Yes, Niagara Remote access is logged just like local access.

15. Is Niagara Remote only meant for contractors or can it be deployed for end user customers to access their site?

It is meant for use by anyone who would need / like access to the Niagara station web interface. In other words, it can be used by both contractors and end users.



16. What version do you have to have to use this? What is you have 4.10 - 4.12?

https://www.niagara-community.com/s/article/CloudLink-version-matrix-for-Niagara-Cloud-Suite-features shows the versions required for the various NCS features. Niagara Remote requires 4.10.7 or higher for the LTS version. For a non-LTS version, it is available with 4.13 or higher.

17. Does accessing through remote allows to do all the same configuration we do connecting regular way?

Remote allows access to all Niagara web views, so anything you can do through your browser traditionally can be done through Remote. We currently do not support Workbench connections but will be putting this on our roadmap.

18. Can you provide us documentation on this remote connection, to give respective IT departments to educate them on the security and encryption of the remote connections?

Yes. We have security documentation available. All the data is encrypted using TLS 1.2 with mTLS (Mutual TLS) authentication.

19. Does the Supervisor or JACE still needs access to the internet?

Correct, whatever device you are using Niagara Remote with would need internet access, although it does not need to be completely unrestricted internet access. And to be clear, the JACE does not need to be exposed directly on the Internet. No inbound access to the JACE is necessary.

20. Can you access Edge10 devices remotely?

This is not currently a supported configuration.

21. With 2FA, can each Technician have their mobile device set as access approval or does the 2FA authentication have to go to a single device per company?

Niagara Cloud uses the Niagara Community login through SSO. 2FA will be configured for each user's Niagara Community login.

22. Are you using SSH to connect to the JACE?

No. SSH is not used to connect to the JACE.

23. Is the hostname portion of the URL configurable or is it auto-generated and static?

The hostname portion is auto-generated when the device is first registered with Niagara Cloud, but once registered, it remains static. In other words, once the device is registered with Niagara Cloud, the device will always have the same URL.

24. Are there plans to enable connections to the Niagara host via foxs or to the platform via https?

Yes, we are working on adding this to our roadmap but do not have a timeline yet.



25. So webservice ports still need to be open through firewall?

It is not necessary to open any firewall ports for inbound access. The Niagara Station utilizes a single outbound connection to https://api.niagara-cloud.com, and tunnels all requests over that connection.

26. Does NCS have the same functionality as workbench? or is this just a portal to the JACE web gui?

Currently it is just the station web views. We are working on adding workbench access to our roadmap.

27. How does this compare specifically to the networking and security feature sets offered by folks like Tailscale and Zerotier?

One of the main benefits of Niagara Remote is that it is all Niagara native and self-contained to the Niagara station. There is no additional hardware or networking setup required.

28. Is there a way for our customers to manage their "profile" through NCS user database so they can add/edit/remove their own personnel, or will it require our intervention?

Users need to be added to the organizations by the Tridium operations team. Once users are added, permissions can be granted by the SI or end customer depending on the permissions they have.

29. Could someone, not me, but could someone put the FoxService on 443 and connect to that remote FQDN through WorkBench?

That won't be possible through Niagara Remote at the moment since Fox uses a custom protocol. The current Niagara Remote offering only allows HTTP. We are working on adding Fox and Platform support to our roadmap.

30. Can this be used to facilitate station to station Niagara connections through the internet?

No, but that is on the roadmap.

31. Will it still rely on the client allowing access to their IT network?

The Niagara Station only requires outbound access to our cloud services, no inbound access is required.

32. Is there a documentation for us to follow setting this up for multiple sites and have them access as a portfolio?

The individual sites are organized under a project, and projects are organized under a customer, so you could see multiple stations all under that one project.

33. Is Px view editing available?

This is planned for Niagara 4.15.



34. Is this basically an Application Proxy? Do you use a 3rd party provider to provide this?

This is more complex than an application proxy, as proxy traffic would not be able to reach a JACE behind a firewall. We do not use a 3rd party service.

35. Is a Supervisor running 4.10 compatible with "Remote"?

You would need to update to the current LTS version of 4.10.7, but then, yes.

36. Program service?

Running program objects can be done through Niagara web views and Niagara Remote, but writing and compiling program objects is currently not possible through the Niagara web views or Niagara remote.

37. Can you install new drivers via Software Manager?

Not through Niagara Remote now, as that would require platform access. That access is on our roadmap, as we plan to provide a comprehensive remote station management solution in the future.

38. Can Niagara Remote be a server that we can bring multiple buildings into? Or does this only connect to one premise devices? Do you have to have a supervisor onsite?

Each Jace or Supervisor needs to be registered individually to be accessed through Niagara Remote, but there is no additional infrastructure required, All the services are hosted in Tridium's cloud.

39. Can you update a 3rd party JAR remotely?

Not yet, but stay tuned, it's on the roadmap.

40. Am I able to commission the JACE from Remote (commissioning wizard)?

Not yet, as this provides only station access. It is on the roadmap to provide a remote platform management solution that would address what you're asking though.

41. Is the Wiresheet view on 4.13 and greater, or could you do all of these features (BACnet discover, wiresheet engineering, etc.) on a 4.10 or 4.11 station?

Web wiresheet is available in Niagara 4.11, but Niagara 4.13 is the earliest NCS supported release that also supports web wiresheet.

42. Will this remove the need for me buying and deploying SSL certification for the connected supervisor/JACE.

If you are buying SSL certificates to make a supervisor / JACE directly accessible on the Internet, then yes, this would remove the need to do that. Also, for security reasons, we highly recommend that customers do not ever expose a JACE or supervisor directly on the Internet. Niagara Remove provides additional security capabilities that allow remote access to devices without those devices being directly accessible.



43. Does NCS work on AX?

Unfortunately, no. We would really like to encourage users to migrate from AX to N4 to take advantage of all the benefits it provides.

44. Is there any limitation on no of user access per device subscription?

No, there is no limit on the number of users per device / subscription.

45. Are the users on the Supervisor separate from the users created on the cloud?

Yes, the users on the supervisor and cloud are managed separately. We have "federated identity" on our roadmap.

46. I heard that only Outbound 443 is necessary. Is that complete or are there other ports and protocols required to communicate with the Niagara Cloud? Also, what is the MFA solution that is being used? Okta?

Yes, the only outbound access required from the device is to https://api.niagara-cloud.com. User accounts are managed through Salesforce, so we use the Salesforce MFA solution. It's very similar to Okta.

47. Does our remote PC create a direct connection to the remote JACE, or is traffic tunneled through a Tridium server(s)?

The connection is tunneled through Tridium servers.

48. Is it pure HTML page e.g. ".html" page?

Niagara's web views are rich HTML5 web views, not just static HTML pages.

49. In the demo, it was observed the accessibility to the backups. Where are the backups stored? Are these on the JACE or supervisor on site?

The backups for Niagara Recover are stored in the cloud. They are protected by a security key defined by the customer, so Tridium/Honeywell does not have access to the backup information.

50. Can we do Platform connection?

Not currently, but it's on the roadmap.

51. Will it be possible to plug and play a JACE to use with Niagara Remote without having to login to the station locally first?

You will need to install the Cloud Connection Service into the station and get it registered with NCS to use Niagara Remote. This will require station access. It would be possible to minimize the interaction required by using such technologies as station templates.

52. Will I be able to access controllers using 3rd party program i.e. JCI, CCT?

This is currently not possible through Niagara Remote.



53. When a user is viewing reflow through Niagara Remote, does the Reflow point history link only view the trend data that is held on the JACE or can it access the trend data that is held in the cloud?

If you use the Cloud Archive History Provider per the NDS documentation, it should be able to view the data from the cloud.

54. If a site has a proxy firewall filtering outbound "web" traffic how will Niagara remote work?

Niagara Remote will work through a proxy if it does not block connections to https://api.niagara-cloud.com.