



UPCOMING CHANGES TO JACE® 8000 PRODUCT PACKAGE

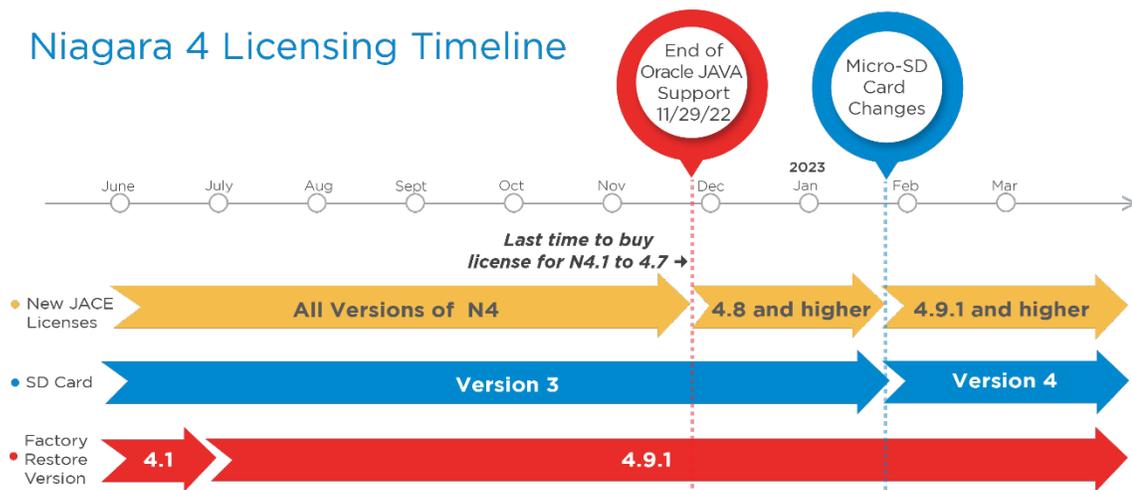
Frequently Asked Questions

July 22, 2022

1. What are the upcoming changes to the JACE package? Why are they necessary and when will they happen?

In response to supply chain adjustments and component end-of-life situations, Tridium's JACE® 8000 product package is being updated. On November 29, 2022, Tridium support for Oracle's version of JAVA on the JACE 8000 will end. Also, Tridium has contracted with a new micro-SD card vendor. Thus, by approximately February 1, 2023, a JACE delivered new from the factory will have a different brand of micro-SD card inserted when compared to previous devices. The combination of these changes necessitates an update to the JACE 8000 factory-restore version and sets new limitations regarding Tridium's ability to continue to sell licenses for older releases of Niagara Framework®. Here is a timeline to illustrate the upcoming changes:

Niagara 4 Licensing Timeline



2. Does this mean customers cannot buy licenses for early versions of Niagara 4?

These component changes mean that the last time to buy a license for Niagara 4.1 through Niagara 4.7 is Monday November 28, 2022. After this, the earliest Niagara 4 release that can be purchased with a JACE is Niagara 4.9u1. Niagara users benefit the most when they are on the most current release of Niagara Framework which gives them access to the most up-to-date productivity features and the latest cyber defenses. While we understand that not all customers can be on the newest release all the time, we do recommend releasing on the latest long-term supported release as a best practice.



3. What is the background on Tridium's end of support for the Oracle version of Java and how is this change going to impact Niagara users?

As Tridium continues to maintain and update the JACE 8000 platform, certain changes in firmware and hardware have been necessary. With the Niagara 4.8 release, Tridium moved away from Oracle as its JACE 8000 Java provider to Azul. To complete this transition, Tridium will end support of Oracle Java on JACE 8000 November 29, 2022.

Impact: Tridium will no longer be able to sell N4 licenses that will permit running a version below 4.8 for JACE 8000. There will be no impact to existing licenses or hardware running lower versions. Warranty and RMA replacement for already licensed JACE 8000s will not be impacted. Niagara 4 Supervisor licensing and permitted versions will not be impacted by this change.

4. What is the impact of the change in Micro-SD Card provider for Niagara partners and end-customers?

JACE 8000 currently uses a micro-SD card that is near its end-of-life, so Tridium will be phasing in a replacement. The new micro-SD card will only support Niagara version 4.9u1 and higher. This change in providers is anticipated to take place in Q1 of 2023.

Impact: After this change is implemented, JACE 8000s shipped from Tridium will not run any Niagara versions lower than 4.9u1. These changes do not affect the ability of existing JACE 8000s to run older Niagara versions or to upgrade to the latest version. This change has no impact on licensing or host-id scheme. Note: There will be a stock of the previous version of micro-SD cards reserved for RMAs and replacement.

5. How will these changes impact the version of Niagara Framework® imaged on a new JACE 8000 delivered from the factory?

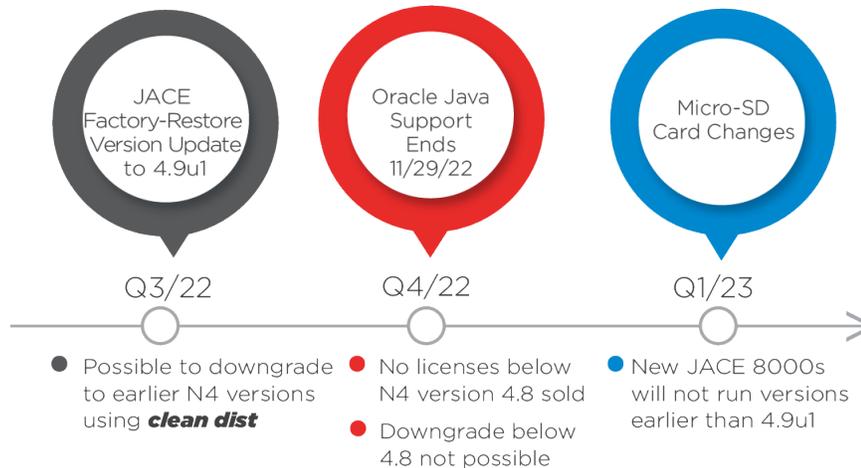
As a result of these Java and Micro-SD Provider changes, Tridium has updated the JACE 8000 factory-restore version to Niagara 4.9u1. This change was rolled out across all factory-installed images, including OEM-specific and appliance images.

Impact: This image update should have no impact on the normal process of commissioning a JACE sent from the factory to Niagara 4.9u1 or higher.

Temporary Work-Around: If there are special circumstances that require JACE commissioning to a version lower than 4.9u1, there is a clean dist routine available until November 29, 2022:

Step #1: Use Workbench and clean dist version 4.1.27.28.1 to set the JACE back to Niagara 4.1

Step #2: After this is complete, the JACE can be commissioned to any version of N4



6. What products are impacted by these changes?

These changes will only impact JACE-8000's sold after the dates described in the licensing timeline above (Question #1). There are no hardware changes to the JACE itself.

The required updates will not impact Niagara Supervisor licensing. However, Supervisors will only support JACEs running the same or lower versions of Niagara Framework as themselves. In other words, a Supervisor running Niagara 4.9.1 will be able to connect to a JACE running Niagara 4.9.1 or lower.

7. Does this impact JACEs that have already been purchased, licensed, or deployed?

No, this only impacts new JACE sales that are licensed after the dates shown in the licensing timeline above.

8. How do I know which version SD card is in my JACE?

The easiest method to verify micro-SD card version is via the QR code label on the SD card itself.



Previous: Panasonic Micro-SD Version 2.0 ended use Q1 2021

Current: Panasonic Micro-SD Version 3.0 will end use Q1 2023

Next: Swissbit Micro-SD Version 4.0



You may also check the hardware revision reported to Niagara Workbench:

- Micro-SD version 2.0 = hardware revision 4.8.0
- Micro-SD version 3.0 = hardware revision 4.8.0
- Micro-SD version 4.0 = hardware revision 4.9.1

Check the Hardware Revision number from the JACE, under the Platform Administration view:

	Java Virtual Machine azul-zre-compact3-qnx7-arm-dev (Azul Systems, Inc. 1.8.0.312.14)															
	Niagara Stations Enabled enabled															
	Number of CPUs 1															
	Current CPU Usage 17%															
	Overall CPU Usage 15%															
	Filesystem															
	<table border="1"><thead><tr><th></th><th>Total</th><th>Free</th><th>Files</th><th>Max Files</th></tr></thead><tbody><tr><td>/</td><td>3,492,848 KB</td><td>3,042,894 KB</td><td>690</td><td>109152</td></tr><tr><td>/mnt/ram0</td><td>8,176 KB</td><td>7,720 KB</td><td>18</td><td>256</td></tr></tbody></table>		Total	Free	Files	Max Files	/	3,492,848 KB	3,042,894 KB	690	109152	/mnt/ram0	8,176 KB	7,720 KB	18	256
	Total	Free	Files	Max Files												
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	<table border="1"><thead><tr><th>Total</th><th>Free</th></tr></thead><tbody><tr><td>1,048,576 KB</td><td>337,964 KB</td></tr></tbody></table>	Total	Free	1,048,576 KB	337,964 KB											
Total	Free															
1,048,576 KB	337,964 KB															
	Other Parts															
	hsm-ecc508 (Tridium 0.1.52)															
	n4-titan-am335x-hs (4.8.0)															
	tridium-qnx7-n4-titan-am335x-hs-maint (2019.3.8)															

Or, from the Station, under Platform Services view:

Filesystem		Total	Free	Files	Max Files
/		3,492,848 KB	3,042,894 KB	690	109152
/mnt/ram0		8,176 KB	7,720 KB	18	256
Physical RAM		Total	Free		
		1,048,576 KB	337,540 KB		
Serial Number		80003852			
Hardware Revision		4.8.0			

9. When will the Version 3.0 Panasonic be phased out in fulfillment?

We cannot forecast the exact date when we will begin using the Version 4.0 Swissbit micro-SD cards. The changeover will most likely occur in late January or early February of 2023. We will communicate with our channel partners before the change is made so they are aware and prepare accordingly.

10. Is there any difference in the new micro-SD card?

The new micro-SD card is the same capacity (4GB) as the Version 3.0 card. It is identical in performance and environmental specifications.

11. Will there be new part numbers assigned to the JACE or SD card?

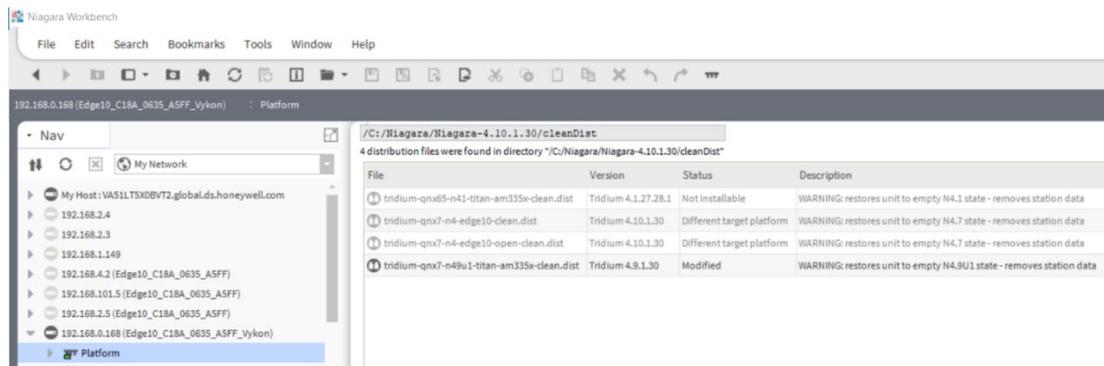
No. Active hardware part numbers will remain the same. A new part number will be created for the Version 3.0 SD card for parts orders and RMAs.

12. How will I be able to order the older micro-SD cards?

A small quantity of version 3.0 cards will be retained only for RMA and parts replacements after Q1 2023. If you need a replacement, please contact customer support (support@tridium.com) and indicate that you need a version 3.0 SD card. You will also need customer support to transfer the license to the new host ID.

13. What will happen if I try to commission an unsupported Niagara version on a Version 4.0 micro-SD card?

Workbench will read the hardware revision of the micro-SD card and only allow a compatible *dist* version to be installed. Invalid options will be grayed out and cannot be selected.



14. What about running an older SD card in a new JACE?

Older SD cards will always be forward-compatible. We will not remove support for previous versions of cards in the system. If a JACE-8000 fails in the future, you will always be able to move the micro-SD card to a brand new JACE regardless of date manufactured.