

SOFTWARE DOCUMENT

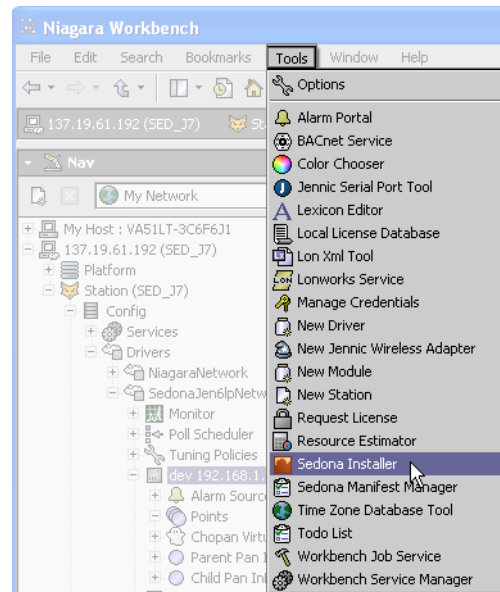
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NiagaraAX Sedona Installer Guide

Beginning in NiagaraAX-3.6, the `sedonaInstaller` module is provided as part of a NiagaraAX Workbench installation. In earlier NiagaraAX versions, Sedona Framework is packaged as part of the Workbench installation. The `sedonaInstaller` module provides a Workbench Tool for installing Sedona Framework using a special software image - the *Sedona Framework Bundle*. The Sedona Installer is available on the Workbench main menu under **Tools**. The Sedona Framework Bundles are available on Niagara-Central.

Figure 1-1 The Sedona Installer menu item



This document describes Sedona Framework installation and licensing requirements and includes the following sections:

- [Licensing Sedona TXS](#)
- [Sedona Framework Terms](#)
- [About Sedona Framework Bundles](#)
- [About sedona.home](#)
- [Bundle upgrades: Workbench, JACE, and devices](#)
- [Installing a Sedona Framework Bundle using the Sedona Installer](#)
- [Document change log](#)

Licensing Sedona TXS

The licensing options for Sedona TXS reflect the flexibility of the Sedona Framework product. Consider the following points about licensing when designing and licensing your Sedona TXS systems.

- **Sedona Framework networks**
For Sedona TXS, each physical network implementation requires a unique Niagara driver network for device integration. For example, separate and independent drivers are provided for Ethernet/WiFi and 802.15.4. The licensing limits of one network do not impinge upon the licensing limits on other networks. For example, limiting the device or point count on an Ethernet network does not affect the device or point count on an 802.15.4 network. Moreover, device and point count limits are imposed independently so that, for example, unused device count does not provide allowance for more points than specified by the “point.limit” value.
- **Device and point limits**
Consider device and point count when designing and licensing your network. If you are planning a Sedona Framework network with a large number of points per device, you may need a smaller device count. However, if you are planning a large number of devices, you may need a smaller number of points per device.
- **Platform**
Licensed features may apply to embedded platforms (also SoftJACE) or to your Workbench installation. Refer to [“Sedona Framework licensed features”](#) for more information about which features apply to particular platforms.

Sedona Framework licensed features

The following features are licensed as part of the Sedona TXS release:

- **sedonaprovisioning**
This feature is relevant for Workbench installations. It enables the use of the Sedona Framework provisioning tools, as follows:
 - Get App
 - Put App
 - Manage Kits
 - Backup App
 - Restore App
- **sox**
This feature is relevant for Workbench installations. It enables Sox connections in Workbench. Without this feature you cannot open a Sox connection (tunneled or direct) to any Sedona Framework device from Workbench.
- **tunneling sox="true"**
This feature is relevant for JACE or Supervisor installations. This is an enhancement to the existing tunneling feature, so you must have the standard tunneling feature in your license. In the “tunneling” feature line, there is a “sox” attribute that is set to “true” to allow the Sox Tunnel service to run. The SoxTunnel service requires this license feature or it goes into fault.
- **sedonanet**
This license feature is used to enable the Sedona Framework Ethernet/Wi-Fi Network and sets the maximum number of Sedona Framework devices and points that are allowed in that network. The limits are expressed using the attributes “point.limit” and “device.limit”. These limits do not affect point and device limits set by the jen6lp license feature. Additionally, if the “export” attribute is set to “export=false”, Chopan Server functionality is disabled (see the following Note).
Note: As of the TXS 1.1 release, Chopan is only supported on Jennic platforms.
- **jen6lp**
This feature is relevant for JACE installations. It enables a Sedona Jen6lp Network and sets the maximum number of Jennic Devices and points that are allowed in that network. The limits are expressed using the attributes “point.limit” and “device.limit”. These limits do not affect point and device limits set by the sedonanet license feature. Additionally, if the “export” attribute is set to “export=false”, Chopan Server functionality is disabled, thus disallowing the proper operation of hibernating devices within the Sedona Jennic network.
- **jennic**
This feature is relevant for JACE installations or possibly for Workbench host platforms. On an embedded controller, the feature is required in order to use the Jennic option card. Workbench does not require this feature unless you are using the USB wireless adapter (coordinator) with the Workbench host. Both the New Jennic Wireless Adapter and the Jennic Serial Port Tool do not function without this feature.

Sedona Framework Terms

The following terms and abbreviations are related to the Sedona Installer.

Bundle A Sedona Framework Bundle is a special image (set of files) that is available from Niagara-Central (www.niagara-central.com). It is used with the Sedona Installer. Sedona TXS (basic) and Sedona TXS represent two bundles that are available on Niagara-Central. See the section, “[About Sedona Framework Bundles](#)”.

Platform Archive (PAR file) PAR files are provided by Sedona Framework device vendors and contain information that Workbench can use to properly provision the device. Workbench cannot provision a device without a PAR file.

Kit Developers build libraries of ready-to-use components and then deploy them as **kits**. Kits are comparable to standard Niagara “modules”. You must have the appropriate kits available on your Workbench platform if you want to change a Sedona Framework device’s “core” software. You can use the Workbench Kit Manager tool to manage kits on a Sedona Framework device.

Manifest The kit manifest contains all the metadata that tools like Workbench need to connect to a Sedona Framework device. See the *Sedona Framework Manifest Manager Engineering Notes* document for more information about working with manifests.

sedona.home This is a property that is set in the `!lib/system.properties` file of the Niagara Workbench installation. `sedona.home` specifies the root directory of the Sedona Framework installation. The Sedona Installer updates the `sedona.home` value as part of the installation process. See “[About sedona.home](#)” on page 4.

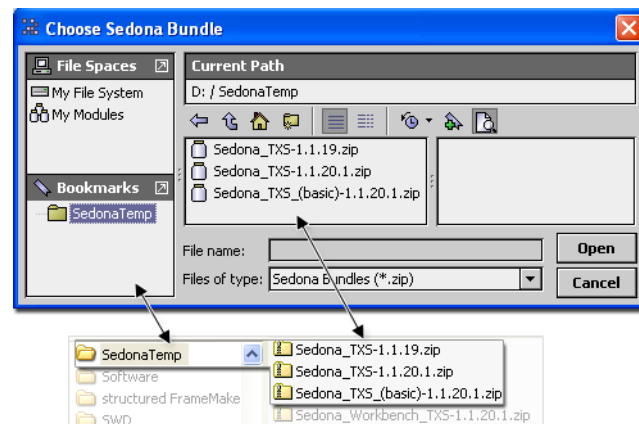
About Sedona Framework Bundles

A Sedona Framework Bundle, typically referred to as simply a “bundle”, is available on Niagara-Central as a downloadable image. Bundles are specifically designed for use with the Sedona Installer. The following bundles are available on Niagara-Central.com as compressed files in *.zip format.

- **Sedona TXS (basic)**
The Sedona TXS (basic) bundle provides a Sedona Framework open source build and the core Niagara modules that are necessary to communicate with and manage Sedona Framework devices.
- **Sedona TXS**
The Sedona TXS bundle contains all the content of the Sedona TXS (basic) bundle plus additional modules that facilitate connecting with Tridium-supported platforms. The Jennic platform is an example of a Tridium-supported platform.

Note: When you download a Sedona Framework Bundle, you need to be able to browse to it and access it from Workbench using Sedona Installer’s **Choose Sedona Bundle** view. It may be helpful to create a folder for Sedona Framework downloads on your platform or memory stick so you can easily find the bundle during installation.

Figure 1-2 Suggested practice for temporary storing Sedona Framework bundles



About sedona.home

The `system.properties` file (located, for example, `c:\niagara\Niagara-3.x.xx\lib`) contains values for Sedona Framework system properties, including the `sedona.home` property. During installation, the Sedona Installer checks the `sedona.home` property to see if there is an existing Sedona Framework installation on the target platform. If there is a `sedona.home` property value specified in the `system.properties` file, the installer looks for that directory.

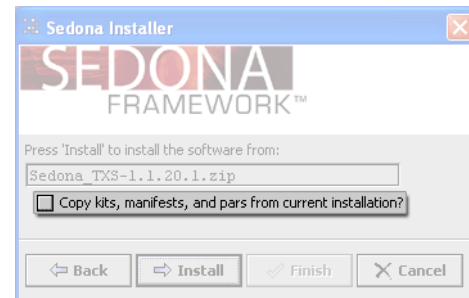
Figure 1-3 *sedona.home is defined in the system.properties file*

```
# Directory of Sedona installation, if undefined, then
# {home}\sedona is the default
# sedona.home=d:\\sedona\\baseline
sedona.home=D:\\niagara\\Niagara-3.6.32\\sedonaBundles\\Sedona_TXS-1.1.19\\sedona
```

If the directory is not specified (or specified and not found) then the installer checks the `D:\niagara\Niagara-3.6.xx\sedona` directory.

If an existing installation directory is found, then the installer uses that directory as a source for your Sedona Framework installation backup and provides an option to copy all kits, manifests, and par files on the final installation view.

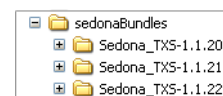
Figure 1-4 *Option for copying existing kits, manifests, and par files*



As part of the installation process, the `sedona.home` property is always updated to reflect the latest Sedona Framework bundle installation location.

Note: Previous bundle installations are not removed by the installer. They remain under your Sedona FrameworkBundles directory (see [Figure 1-5](#)) or wherever you have defined `sedona.home`. You can open the `system.properties` file in Workbench or in a text editor and manually edit the file to set `sedona.home` back to a previous bundle if necessary.

Figure 1-5 *Sedona Framework Bundle installation directories*



Example: Change to a previous Sedona Framework Bundle installation

1. Open the `system.properties` file (located in your Workbench installation's "lib" folder) using Workbench (or a text editor).
2. Scroll or search to find the "`sedona.home`" line in the file.
3. Edit the line to change `sedona.home` to the desired previous Sedona Framework Bundle installation directory.

For example, you might change:

```
sedona.home=D:\\niagara\\Niagara-3.x.xx\\sedonaBundles\\Sedona_TXS-1.1.22\\sedona
```

To:

```
sedona.home=D:\\niagara\\Niagara-3.x.xx\\sedonaBundles\\Sedona_TXS-1.1.20\\sedona
```

4. Save the `system.properties` file and restart Workbench. The new `sedona.home` is set to the previous installation directory.

Bundle upgrades: Workbench, JACE, and devices

Since new NiagaraAX modules may be installed as part of a new Sedona Framework Bundle installation, do the following *after* a Sedona Framework Bundle update to your Workbench installation:

- **Update your JACE modules**
For any JACE that uses Sedona TXS features, recommission that JACE using the Workbench Commissioning Wizard to make sure that it gets the updated NiagaraAX modules.
- **Update your JACE manifests**
For any JACE running a Sedona Network, use the Sedona Framework Manifest Manager to push out any new manifests to the JACE (refer to the *Sedona Framework Manifest Manager Engineering Notes* document).

Installing a Sedona Framework Bundle using the Sedona Installer

This procedure describes how to install a Sedona Framework bundle from NiagaraAX using the Sedona Installer. Prerequisites for installation include the following:

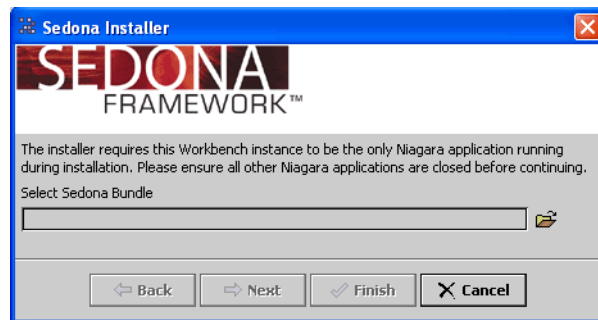
- NiagaraAX-3.6 or later Workbench installed, licensed, and running.
- Close any additional Niagara applications (including stations) that are running on your Workbench platform. During installation, certain files are backed up. Installation cannot complete if these files are in use by another process or application (such as your Niagara station).
- The Sedona Framework Bundle (for example, `Sedona_TXS-1.1.xx.zip`) is accessible from your Workbench platform. You can download bundles from Niagara-Central.com.



Caution You should restart Workbench at the end of the installation process. Save any changes to your files before starting the Sedona Installer.

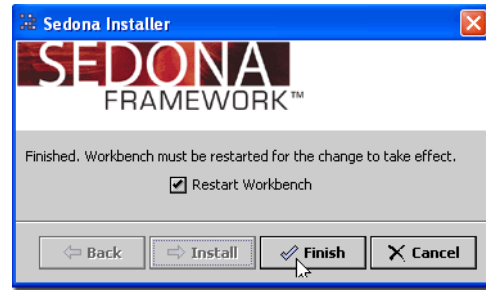
- Step 1 From the Workbench main menu, select **Tools > Sedona Installer**.
The initial **Sedona Installer** dialog box displays.

Figure 1-6 Sedona Installer dialog box



- Step 2 In the initial **Sedona Installer** dialog box, click the folder icon to open the **Choose Sedona Bundle** dialog box.
- Step 3 In the **Choose Sedona Bundle** dialog box, browse to the desired bundle, select it and click the **Open** button.
The **Sedona Installer** dialog box displays again, with the bundle file in the text field.
- Step 4 In the **Sedona Installer** dialog box, click the **Next** button.
The License Agreement view appears.
- Step 5 In the License Agreement view, read the license agreement, select the Yes option and click the **Next** button to proceed.
The Sedona Framework Bundle appears in the text field of the **Sedona Installer** dialog box. If a Sedona Framework installation is detected on your system, the installer provides an option to copy your current kits, manifests, and par files from the current installation.
- Step 6 In the **Sedona Installer** dialog box, select the **Copy . . .** option box, if desired, then click the **Install** button to initiate the final step of the **Sedona Installer** process.
The installation may take a minute, as several processes run in sequential order. When installation successfully finishes, a message indicates that the process is complete and that Workbench should be restarted.

Figure 1-7 Restart Workbench after installation



Step 7 In the **Sedona Installer** dialog box, select the Restart Workbench option box and click the **Finish** button to restart Workbench.

Workbench is restarted and the new Sedona Framework Bundle is installed.

Document change log

Updates (changes/additions) to this *Sedona Installer Engineering Notes* document are listed below.

- Publication: November 7, 2011
Initial Publication.