

## Niagara Plug-in for Eclipse

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niagaraplugin\_7.1.1.zip

Eclipse is an integrated development environment (IDE) that provides comprehensive support for many computer programming languages, including Java, which is used for Niagara AX development. For this reason, Eclipse can naturally serve as a comprehensive tool for Niagara AX development. The Niagara Plug-in customizes Eclipse by providing additional assistance for Niagara AX Java development.

### Note

The latest version of the Niagara plug-in for Eclipse works with **Eclipse 3.3** (also known as **Europa**) and **Eclipse 3.4** (also known as **Ganymede**) installations that include support for Java development. In addition, the latest version of the Niagara plug-in requires **J2SE 1.5 or later** as the Eclipse JVM.

### Note

If you require support for Eclipse 3.2 then you may download the previous version (7.0.7) of the Niagara plug-in for Eclipse. It is available from the 'Assets' tab of this wiki page.

## Eclipse Installation

If you have not already done so, please download and install Eclipse on your computer.

Eclipse is a free download available from <http://www.eclipse.org>. The Niagara plug-in requires an eclipse installation that includes support for Java development.

### Warning

Eclipse is a relatively large download -- on the order of 70 to 100+ megabytes depending on the selected features. Please choose an Eclipse installation that includes support for Java development.

## Update or add the Niagara plug-in to Eclipse

1. Unzip the niagaraplugin\_7.1.1.zip archive to the *plugins* folder under any Eclipse 3.3 (Europa) or Eclipse 3.4 (Ganymede) installation.
2. (Re)start Eclipse
3. Close any welcome screens that Eclipse may display.

### Tip

When starting or restarting Eclipse, if prompted to select a Workspace, enter the name of a nonexistent folder on your computer. This causes Eclipse to automatically create the new folder with a new Eclipse workspace inside of it.

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## Create a project in Eclipse for your Niagara development effort

In order to provide full support for Java development, Eclipse requires one or more *projects* within the Workspace. For Niagara AX development, one Eclipse project is required for each Niagara AX module (jar file).

The Niagara plug-in for Eclipse provides three ways to configure a project in Eclipse. The *Import Existing* wizard configures Eclipse for development of a Niagara AX module that already exists. The *New AX Driver* wizard creates the basic essentials (java packages, java files, Niagara build.xml file, Eclipse project, etc.) that are required for developing a new field-driver for the Niagara AX framework. The *New AX Module* wizard creates the basic essentials (java packages, Niagara build.xml file, Eclipse project, etc.) that are required for developing any other type of module (jar file) for the Niagara AX framework.

The following three sections explain this in further detail. Please run one or more of the following three sections to get started with Niagara AX Java development in Eclipse.

### Run the "Import Existing" wizard

Choose this option if you have some or all of the source code for a Niagara AX module or field-driver that has already been created.

1. Go to the main menu of Eclipse.
2. Choose *Niagara*
3. Choose *Import Existing AX Module*
4. The *New Java Project* dialog appears (customized for Niagara AX development).
5. Enter the root *Module Dir* of the source for the module.
6. Enter the Location of the version of Niagara AX that you would like to develop for.
7. For additional help, you may click the question mark icon in the lower right-hand of the wizard dialog at any time.
8. Click *Finish*.
9. A project is automatically created in your Eclipse Workspace for the existing Niagara AX module (or driver).

### Run the "New AX Driver" wizard

Choose this option if you would like to create a new field-driver for the Niagara AX framework.

1. Go to the main menu of Eclipse.
2. Choose *Niagara*.
3. Choose *New AX Driver*.
  - a. At this point, you may be asked if you would like to specify the Niagara Home location.
  - b. Choose *Yes*.
  - c. Navigate to the location of the version of Niagara AX that you would like to develop for and click *Ok*.
4. The Niagara AX *Developer Driver Wizard - New Driver* or *New Driver Wizard* appears.
5. Follow the instructions.
6. When prudent, choose *Finish*.
7. A project is automatically created in your Eclipse Workspace for the new Niagara AX driver.

### Run the "New AX module" wizard

Choose this option if you would like to create any other type of module (jar file) for use in the Niagara AX framework.

1. Go to the main menu of Eclipse.
2. Choose *Niagara*.
3. Choose *New AX Module*.
  - a. At this point, you may be asked if you would like to specify the Niagara Home location.
  - b. Choose *Yes*.
  - c. Navigate to the location of the version of Niagara AX that you would like to develop for and click *Ok*.
4. The Niagara AX *Developer Driver Wizard - New Driver* or *New Driver Wizard* appears.
5. Follow the on-screen instructions.
6. When prudent, choose *Finish*
7. A project is automatically created in your Eclipse Workspace for the new Niagara AX driver.

After that the Eclipse project is configured automatically for you. You may review the resulting project in the Eclipse project explorer. It is typically on the left side of the Eclipse application.

### View or edit Java source

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1. Expand the project in the Project Explorer that corresponds to the appropriate Niagara AX module (or driver).
2. Expand the 'src' folder.
3. Expand the appropriate Java package.
4. Double-click a Java file.
5. View or edit the source!

### Build Niagara AX module

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1. Go to the main menu of Eclipse.
2. Choose *Niagara*
3. Choose the *Niagara Tools* side menu.
4. Choose **Build Full** to perform a full build or **Build** to perform an incremental build.
  - a. Notice that Eclipse launches Niagara AX's build.exe, which compiles the Java source code and produces a jar file.
  - b. You can view the results in the *Console* window that is typically located towards the bottom of the Eclipse application.
  - c. If the compilation is successful, then the Niagara AX build utility outputs the resulting jar file into the *modules* folder of the Niagara AX installation.

### Slotomatic

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1. Follow the procedure previously listed to Build Niagara AX module
2. Choose **Slotomatic** instead of **Build Full** from the **Niagara -> Niagara Tools** menu.

### Baja help contents

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1. Press Alt+F2 (or from the main menu in Eclipse, choose Niagara->Baja help contents)
2. The Workbench AX Help system appears.
3. You may navigate through the Baja help system to any Baja help topic of your choice.

## Bajadoc on target

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1. Place the text cursor over any Baja reference in your source code.
2. Press Alt+F3 (or from the main menu in Eclipse, choose Niagara->Bajadoc on target).
3. The Workbench AX Help system appears and reveals the appropriate Baja documentation for the item at the text cursor.

## Find bajadoc

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1. Press Alt+F1 (or from the main menu in Eclipse, choose Niagara->Find bajadoc)
2. A dialog box appears with a text box.
3. Enter a search string.
4. The Workbench AX help system appears and reveals the appropriate Baja documentation for the specified search string.
5. If more than one match is found for the specified search string then the Niagara AX help system allows you to choose between the possible matches.

**Note**

This is equivalent to pressing F1 directly from within the Workbench AX help application.

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