Publishing the TorXakis Eclipse Plug-in

# Introduction

This document describes how to make and publish an updated Eclipse plug-in, how to install the plug-in for the first time, and how to retrieve an update when it is available.

# Create the TorXakis Eclipse plug-in update-site artifacts

During development insights on the language, scoping, validation etc. might change and the plug-in gets modified (eclipse project org.torxakis which can be found in the github repository https://github.com/TorXakis/SupportEclipse). After the changes have been approved the new plug-in has to be published which is done via an update-site.zip file.

To create the necessary files for the update site, carry out the following steps:

## Update version numbers

1. In the “Package Explorer” navigate to “org.torxakis/META-INF” and double-click “MANIFEST.MF”.
2. Select the “Overview” tab.
3. In the “General Information” section change the “Version” field so that it reflects the new version of the plug-in. IMPORTANT: the “.qualifier” part should be left untouched.
4. Save the changes.
5. Do the same for the “org.torxakis.ui/META-INF/MANIFEST.MF” and “org.torxakis.ide/META-INF/MANIFEST.MF”. Use the same version number and leave “.qualifier” untouched and save the changes.
6. In the “Package Explorer” navigate to “org.torxakis.feature” and double-click “feature.xml” and change the version number so that it is the same as the version numbers mentioned above and save the changes.

## Build

1. In the “Package Explorer” navigate to “org.torxakis.update-site” and double-click “site.xml”.
2. Select the “Site Map” tab.
3. In the “Managing the Site” section, remove the entry under “torxakis\_language\_editor”: right-click the entry and select “Remove”.
4. Click the “Add Feature…” button. The “Feature Selection” dialog appears.
5. In the text box enter “org.torxakis.feature”.
6. In the “Matching items” list select the entry that shows “.qualifier” and click “OK”.
7. Move the “.feature” feature inside the “torxakis\_language\_editor” category.
8. Click the “Build All” button. This will build all artifacts required by the update-site.

## Configuration Management

Changes are always made in a feature branch but the artifacts of update-site (.jar files) are never added to the git repository as-is since they are binary files. Instead the update-site.zip file is uploaded as a release binary. Follow these steps to make a release:

1. Make sure you delivered all your changes to main repository on GitHub and your changes are merged to *master* branch.
2. Open a Windows Explorer and navigate to the feature branch and then to the folder “org.torxakis.update-site/features”.
3. Verify that a new jar file has been created:

org.torxakis.feature\_<version>.<yyyymmddhhmm>.jar

1. Verify that new jar files have been created in the folder “org.torxakis.update-site\plugins”:
   * org.torxakis\_<version>.<yyyymmddhhmm>.jar
   * org.torxakis.ui\_<version>.<yyyymmddhhmm>.jar
   * org.torxakis.ide\_<version>.<yyyymmddhhmm>.jar
2. There are two options to create the update-site.zip file:
   1. In org.torxakis.update-site folder, select these items and compress them into an update-site.zip file:
      * “features” folder
      * “plugins” folder
      * “artifacts.jar” file
      * “content.jar” file
   2. In Eclipse – Package Explorer, right click on org.torxakis.update-site package and select Export. In Export dialog, select Archive File under General and click Next. Unselect .project and site.xml files. Select “*Create only selected directories*” option. Choose an arbitrary path to save your update-site.zip file. Click Finish.
3. Open your web browser and navigate to <https://github.com/TorXakis/SupportEclipse/releases>
4. Click “*Draft a new release*”
5. Write the new version as new tag version. E.g. if new version is 1.1.3, then tag version should be “v1.1.3”
6. Write “*TorXakis Eclipse Plug-in <v1.1.3>*” as Release title
7. Attach the update-site.zip file to this release as instructed by the page.
8. (Optional) Check “*This is a pre-release*” box if this version is a pre-release version.
9. Click *Publish release*.

**NOTE:** This flow will be replaced by Continuous Delivery ASAP.

# First time install

To install the TorXakis Eclipse Plug-in for the first time, carry out the following steps:

1. Download the update-site.zip file from <https://github.com/TorXakis/SupportEclipse/releases>
2. Save update-site.zip file to a designated location. This location will also be used for updating the plugin so remember it.
3. From the Eclipse “Help” menu select “Install New Software…”. The “Install” dialog appears.
4. Click the “Add…” button. The “Add Repository” dialog appears.
5. In the “Name” field enter “TorXakis Eclipse Plug-in”.
6. Click *Archive…* button and select the update-site.zip file you have downloaded. Click *Open*.
7. Click “OK”.
8. Uncheck “*Group items by category*” checkbox in lower section.
9. Click the “*TorXakisDsl Feature*” checkbox and click “*Next*” twice.
10. Accept the license agreement and click “Finish”. Wait while plug-in is being installed.
11. A “Security Warning” pop-up might appear. Click “OK” to continue installing the plug-in.
12. When the installation has finished a pop-up appears that asks to restart Eclipse. A restart is required to use the plug-in so click “Yes”.

# Check for updates

Updates of the TorXakis Eclipse Plug-in are distributed as new update-site.zip files. The standard Eclipse “Check for updates” mechanism is used here:

1. Download latest update-site.zip file and save it to the designated location.
2. From the Eclipse menu bar select “Help” 🡪 “Check for Updates”. If there are updates a dialog will pop-up.
3. Select the update and click “Next” twice.
4. Accept license agreement and click “Finish”. The plug-in will now be updated.
5. A “Security Warning” pop-up might appear. Click “OK” to continue installing the plug-in.
6. When the installation has finished a pop-up appears that asks to restart Eclipse. A restart is required to use the plug-in so click “Yes”.