

How to Build LCA Executables

by

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The objective is to create executables for the LCA project.

The target platforms are:

- macosx(cocoa/x86_64)
- win32 (win32/x86)
- win32 (win32/x86_64)

The generation of macosx(cocoa/x86_64), win32 (win32/x86) and win32 (win32/x86_64) executables is documented for the LCA project.

I start with a clean install of Eclipse 4.3.2 (Kepler) for the Mac OSX.

In this example, I start with a fresh install of Eclipse Kepler 4.3.2
`eclipse-rcp-kepler-SR2-macosx-cocoa-x86_64.tar.gz`

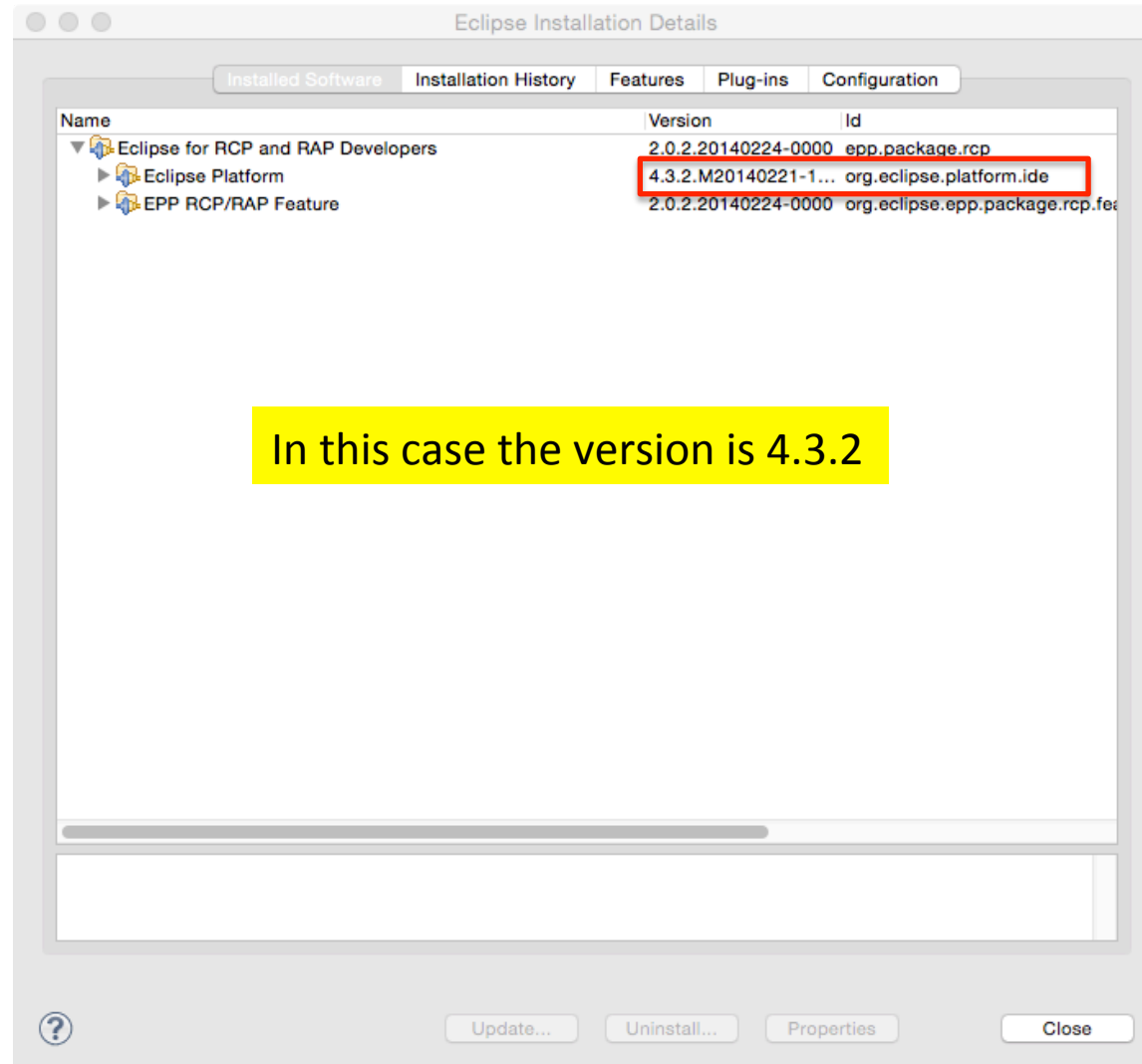
What version of Eclipse are you using?

If you already have an install of Eclipse you are using, then you can find the exact version you are using by following steps. You will need to know the exact version of Eclipse in order to download the correct Delta Pack. The Delta Pack version and the Eclipse IDE version must match exactly.

Eclipse -> About Eclipse



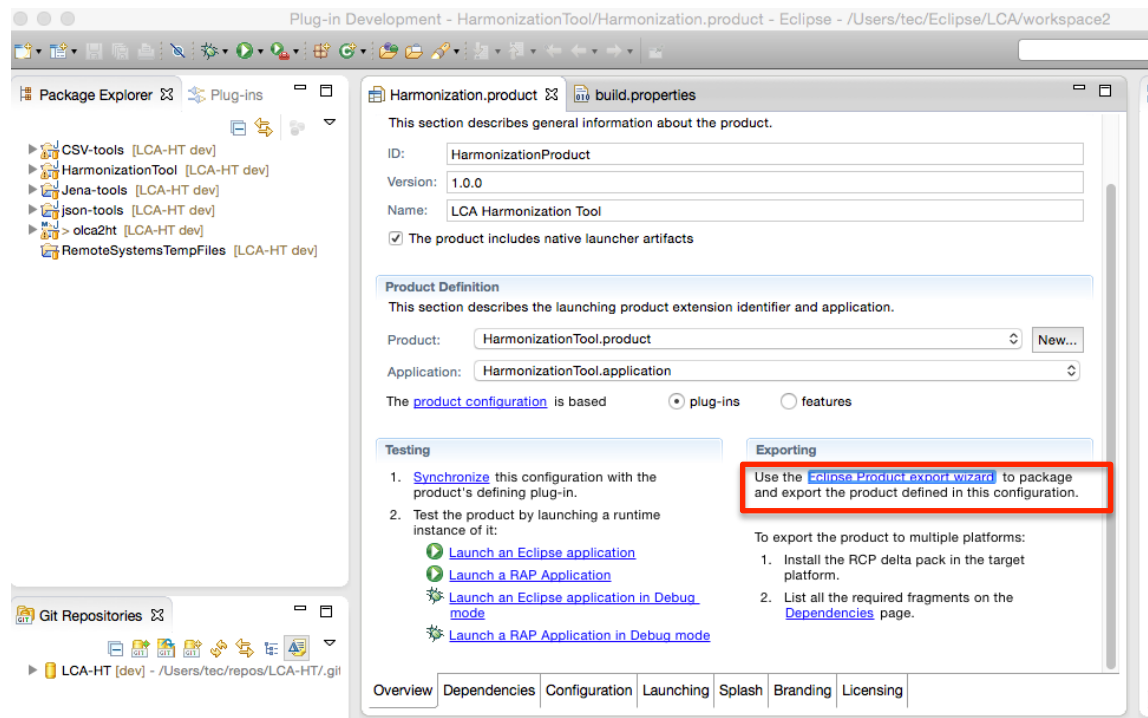
What version of Eclipse are you using?



Generating Executables without Delta Pack

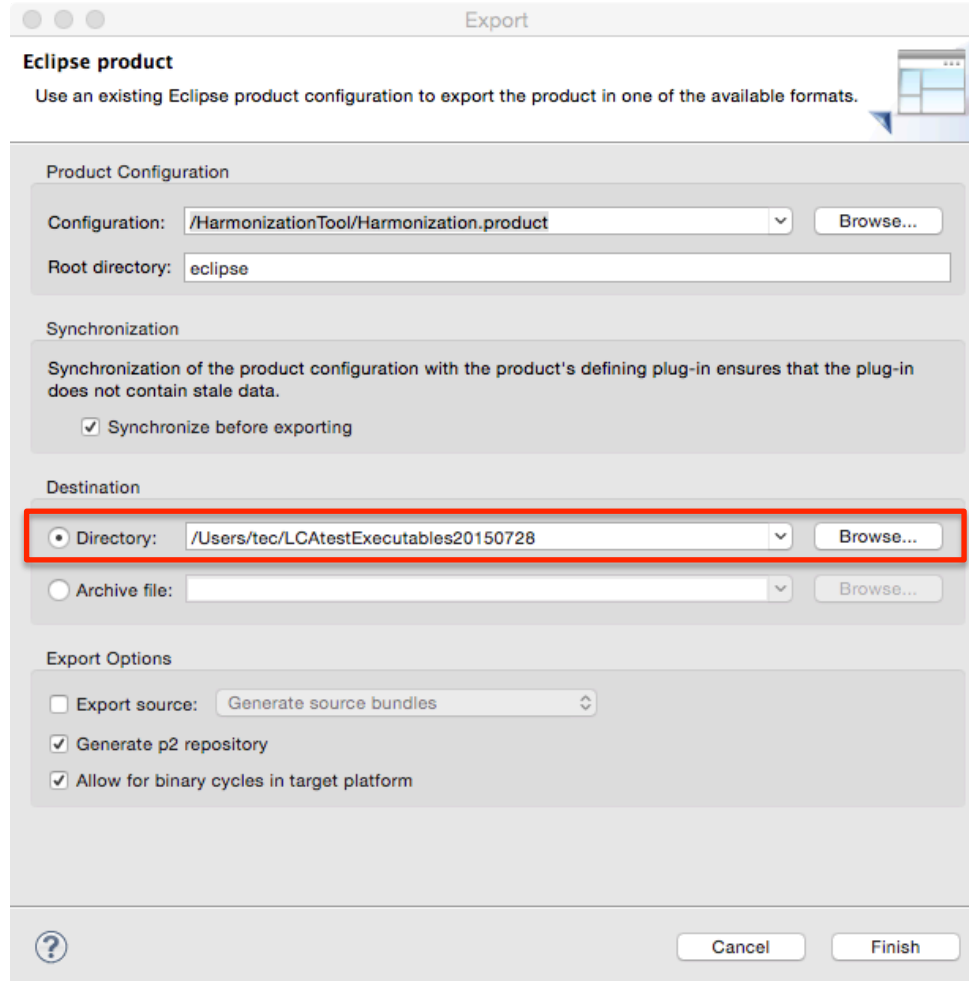
You can generate an executable without the Delta Pack but only for your current operating system. If you are using a Mac, then you can generate only a Mac executable without installing the Delta Pack.

From the “Harmonization Product” choose “Eclipse Product Export Wizard”



Generating Executables without Delta Pack

set the Destination directory



The image shows the 'Export' dialog box in Eclipse. The title bar says 'Export'. Below the title bar, there's a section 'Eclipse product' with a sub-header 'Eclipse product' and a description 'Use an existing Eclipse product configuration to export the product in one of the available formats.' with a small icon. The main area is divided into sections: 'Product Configuration', 'Synchronization', 'Destination', and 'Export Options'. In the 'Product Configuration' section, 'Configuration' is set to '/HarmonizationTool/Harmonization.product' and 'Root directory' is 'eclipse'. In the 'Synchronization' section, 'Synchronize before exporting' is checked. In the 'Destination' section, 'Directory' is selected with the path '/Users/tec/LCAtestExecutables20150728', which is highlighted by a red rectangle. In the 'Export Options' section, 'Export source' is set to 'Generate source bundles', 'Generate p2 repository' is checked, and 'Allow for binary cycles in target platform' is checked. At the bottom, there are buttons for '?', 'Cancel', and 'Finish'.

Export

Eclipse product
Use an existing Eclipse product configuration to export the product in one of the available formats.

Product Configuration
Configuration: /HarmonizationTool/Harmonization.product
Root directory: eclipse

Synchronization
Synchronization of the product configuration with the product's defining plug-in ensures that the plug-in does not contain stale data.
☒ Synchronize before exporting

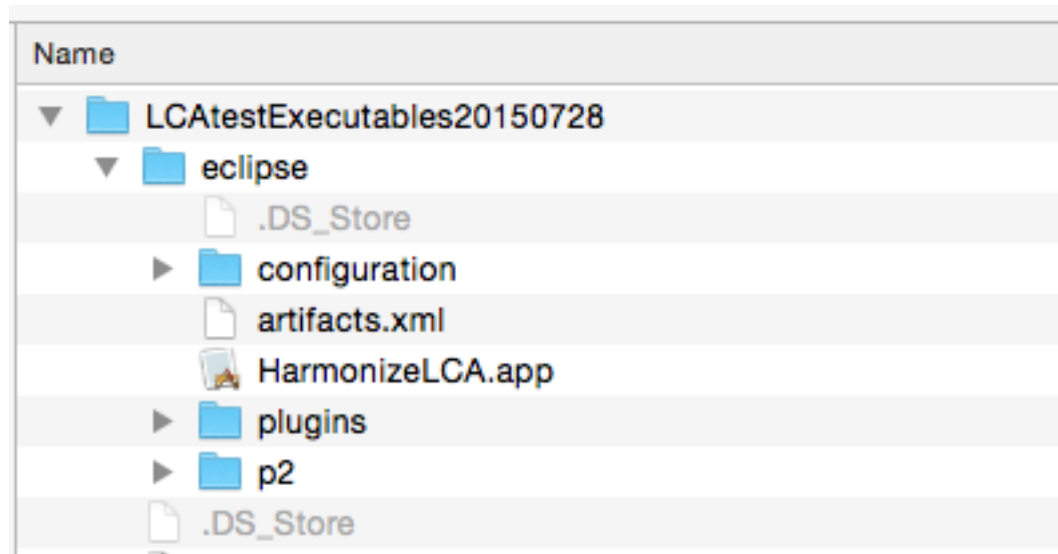
Destination
☒ Directory: /Users/tec/LCAtestExecutables20150728
☐ Archive file:
☐ Archive file:

Export Options
☐ Export source: Generate source bundles
☒ Generate p2 repository
☒ Allow for binary cycles in target platform

? Cancel Finish

Generating Executables without Delta Pack

This should generate the executable

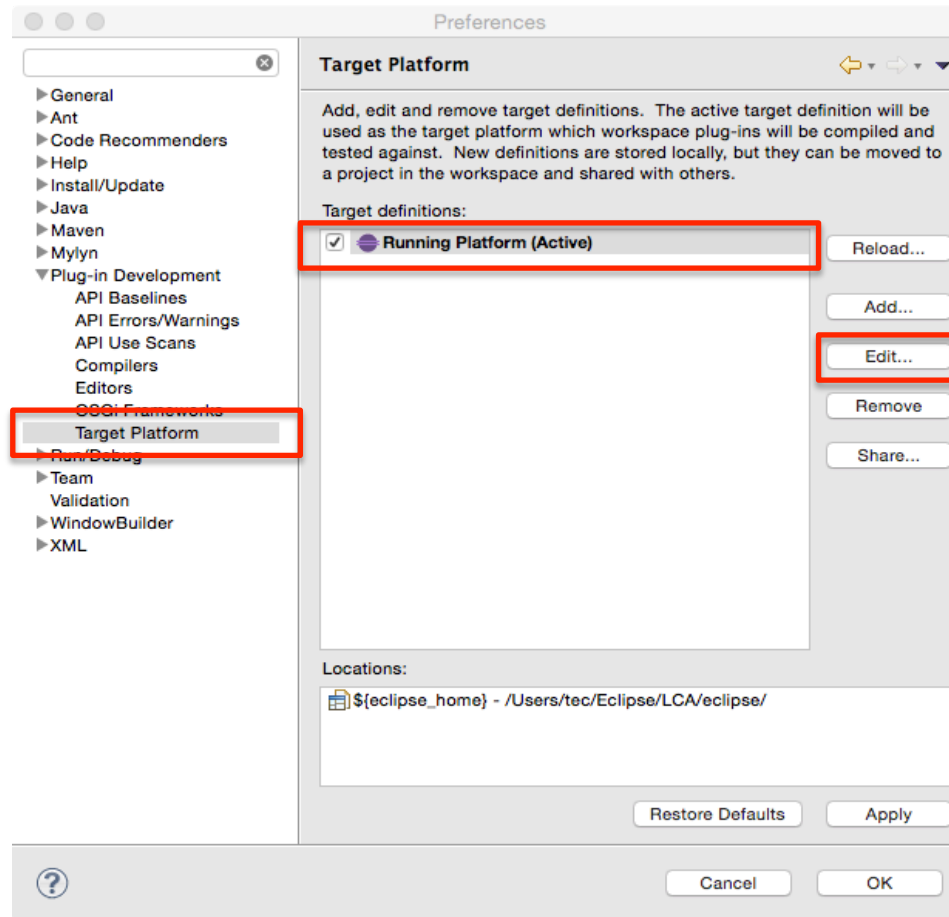


Installing the Delta Pack

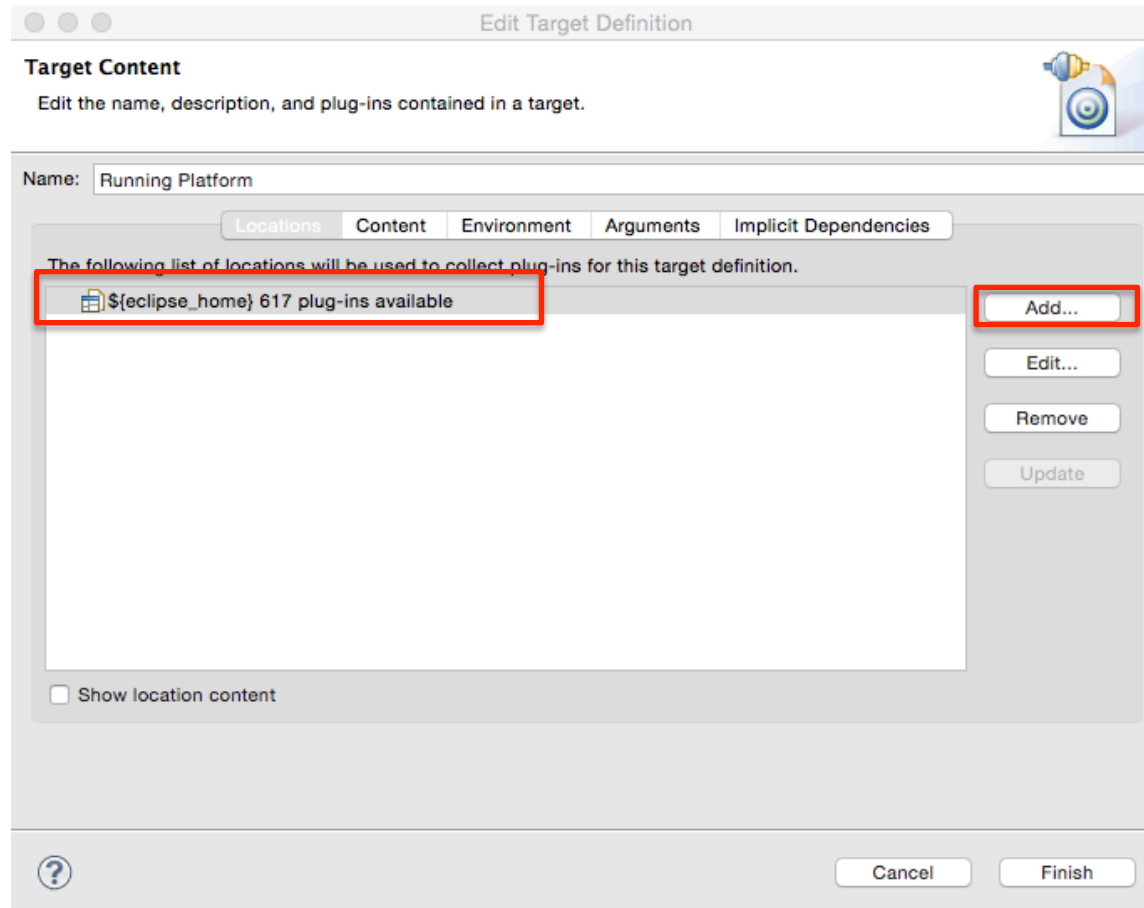
The Delta Pack is installed in your workspace. If you delete your workspace or simply change workspaces then you will have to re-install the Delta Pack for the new workspace.

Installing the Delta Pack

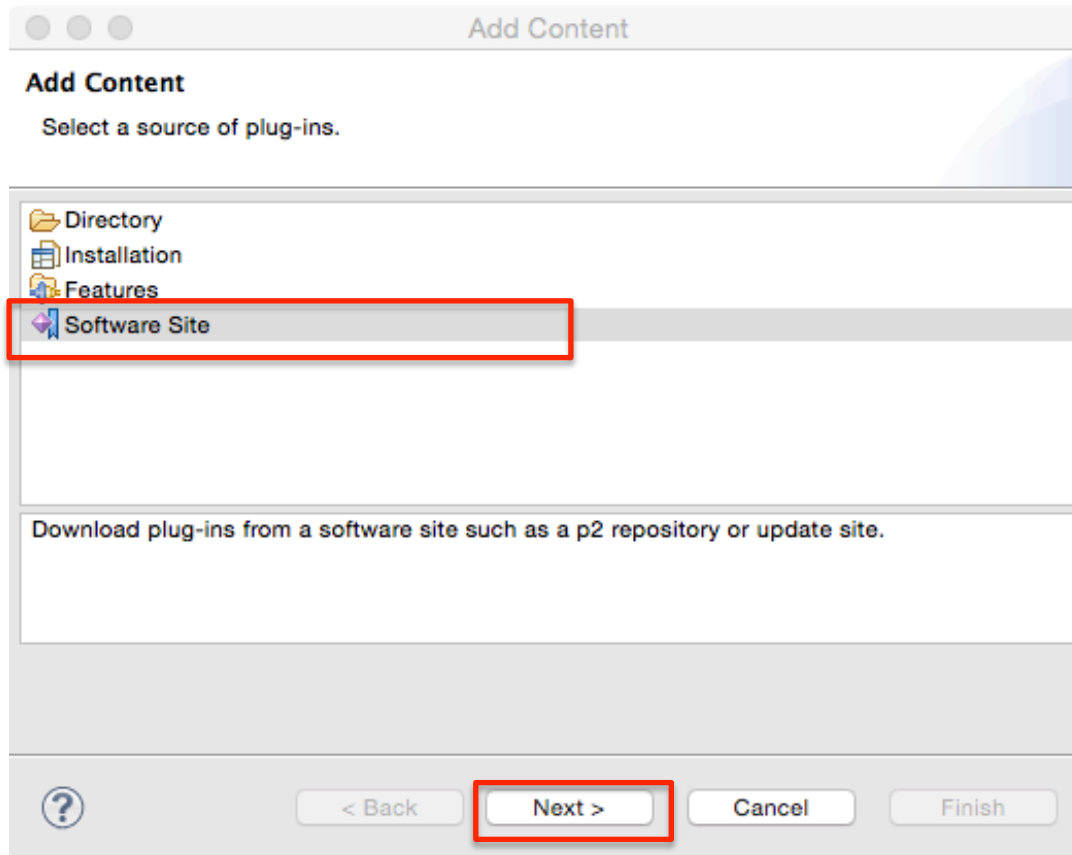
Select Eclipse -> Preferences to open the Preferences dialog.
Select the “Running Platform (Active)”
Select “Edit”



Installing the Delta Pack



Installing the Delta Pack



Installing the Delta Pack

Add Content

Add Software Site

Select content from a software site to be added to your target

Work with: type or select a site

Add...

[Work with the list of software sites](#)

Name	Version
<input type="checkbox"/> ⓘ There is no site selected.	

0 items selected

Details

Properties...

☒ Group by Category

☒ Show only the latest version

Included Software

By default, all required software is added to the target based on its environment settings. Turning this option off allows software to be added with missing requirements and multiple environments. This setting applies to the entire target definition.

☒ Include required software

☐ Include all environments

☒ Include source if available

☒ Include configure phase

?

< Back

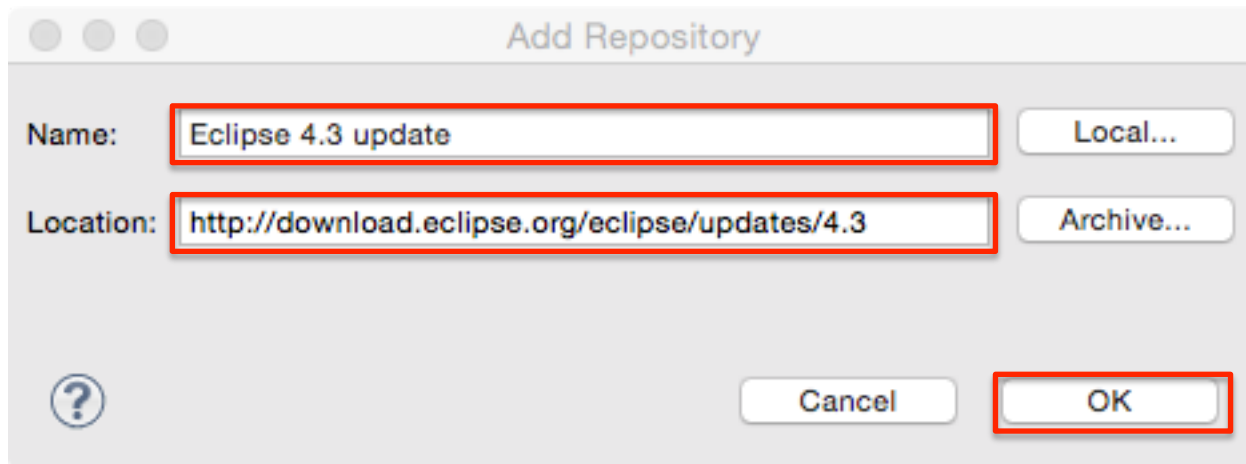
Next >

Cancel

Finish

Installing the Delta Pack

Enter a name and location
Select "OK"

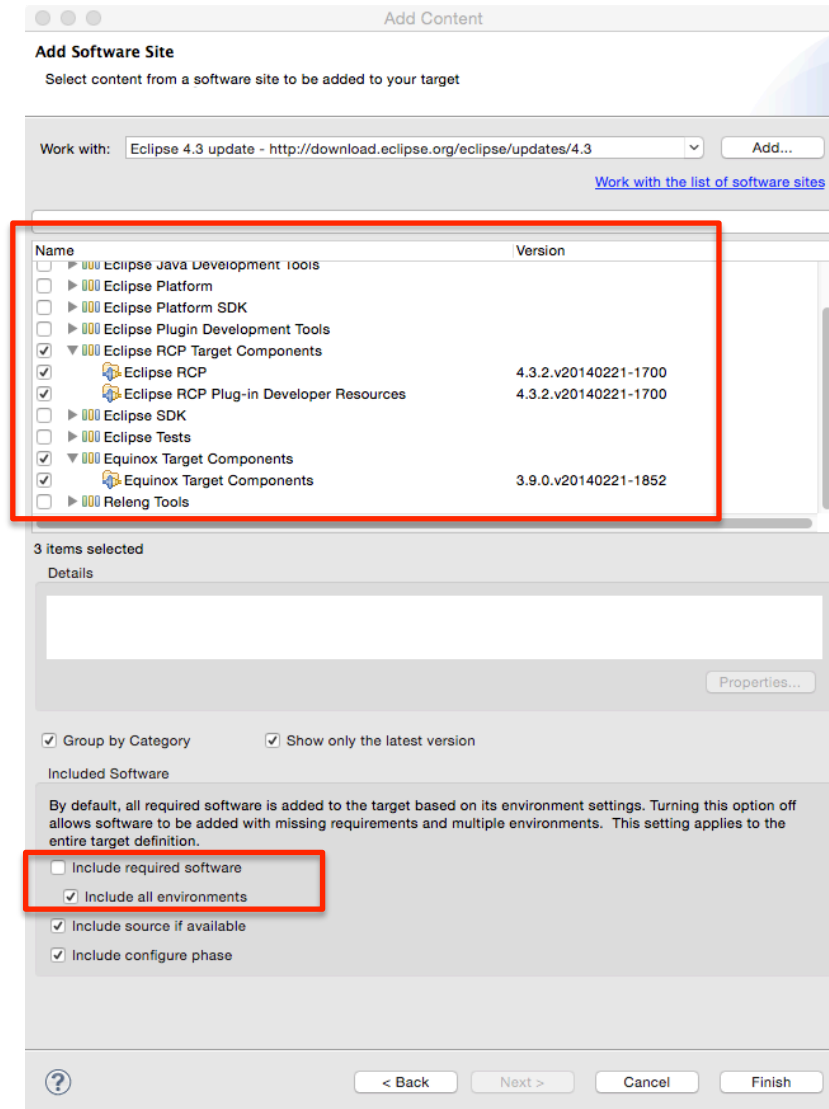


The screenshot shows a standard macOS-style dialog box titled "Add Repository". It has two text input fields: "Name:" and "Location:". The "Name:" field contains the text "Eclipse 4.3 update". The "Location:" field contains the URL "http://download.eclipse.org/eclipse/updates/4.3". To the right of the "Name:" field is a button labeled "Local...". To the right of the "Location:" field is a button labeled "Archive...". At the bottom left is a help icon (a question mark inside a circle). At the bottom right are two buttons: "Cancel" and "OK". Red rectangular boxes are drawn around the "Name:" and "Location:" input fields, and around the "OK" button, to highlight the required information and the confirmation step.

Field	Value	Button
Name:	Eclipse 4.3 update	Local...
Location:	http://download.eclipse.org/eclipse/updates/4.3	Archive...
		Cancel
		OK

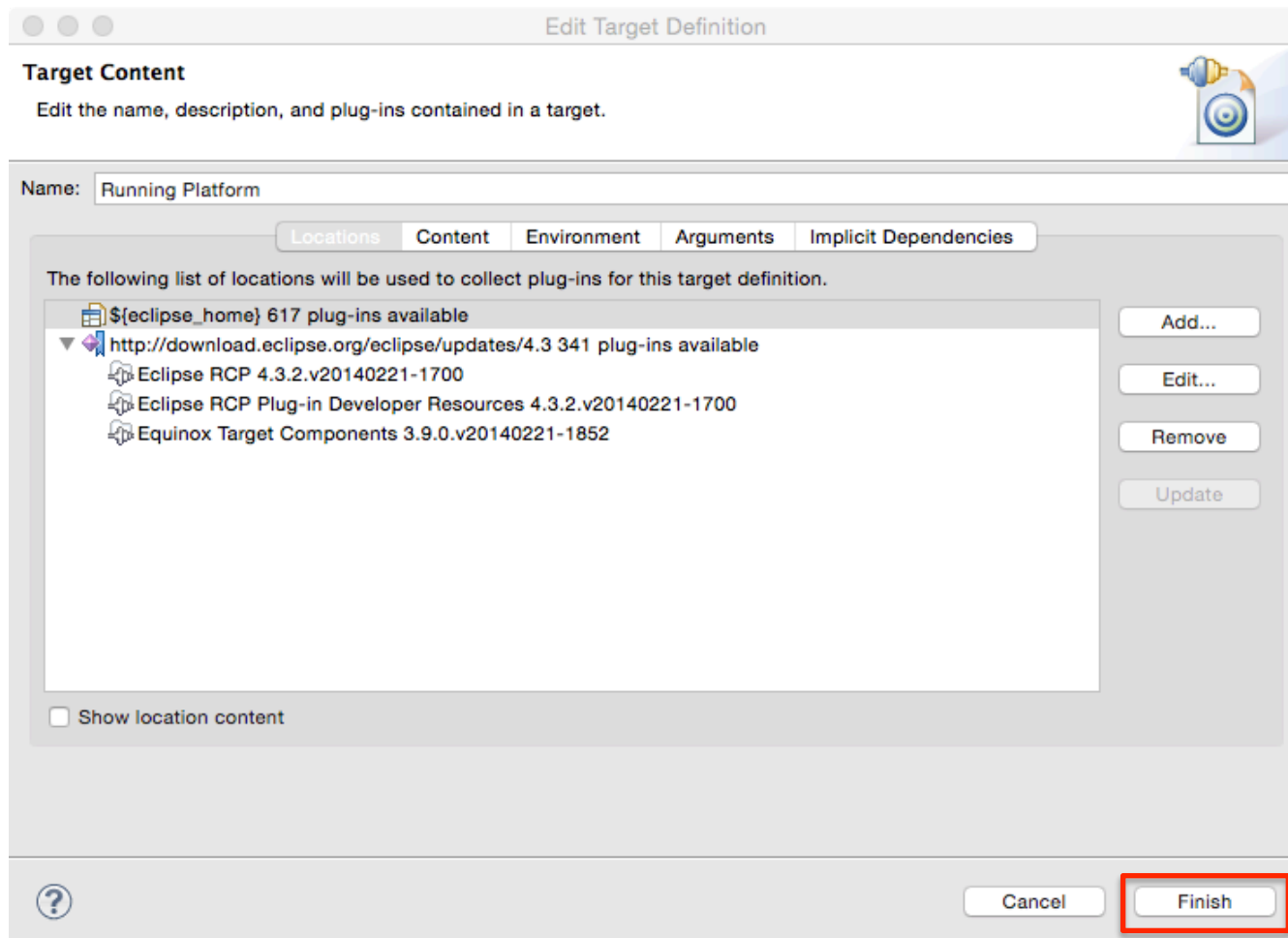
Installing the Delta Pack

Check and uncheck
The items shown
Select "Finish"



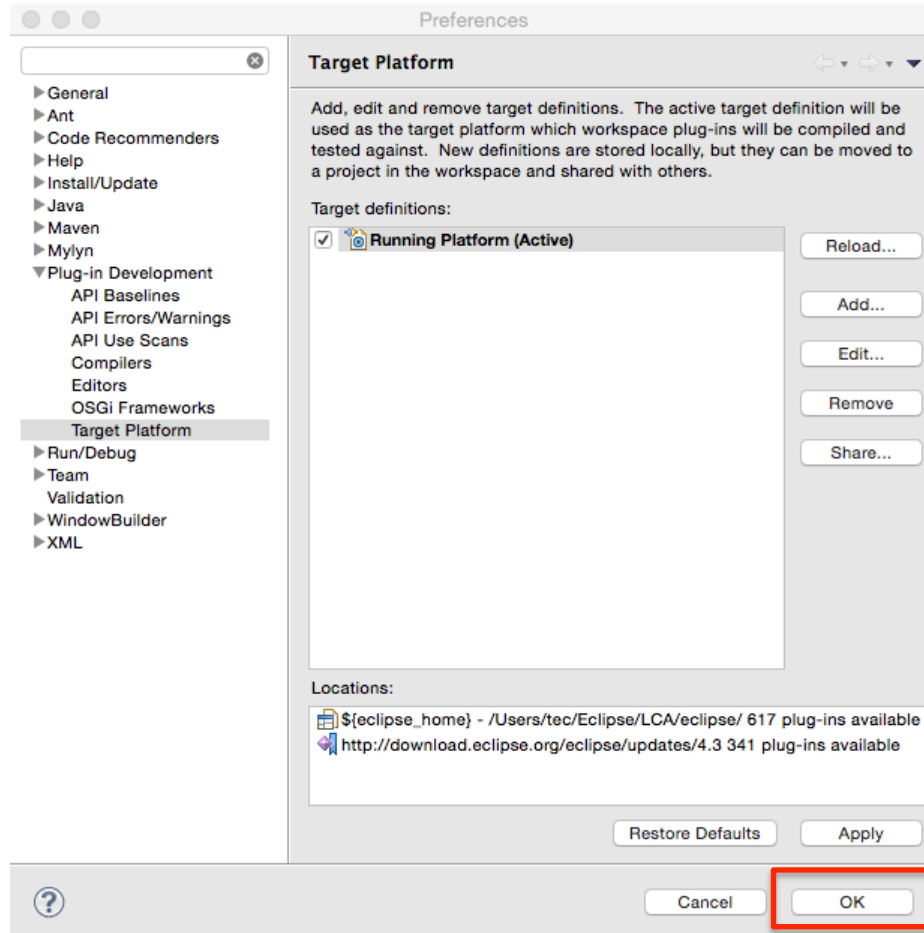
Installing the Delta Pack

You should now have the following screen



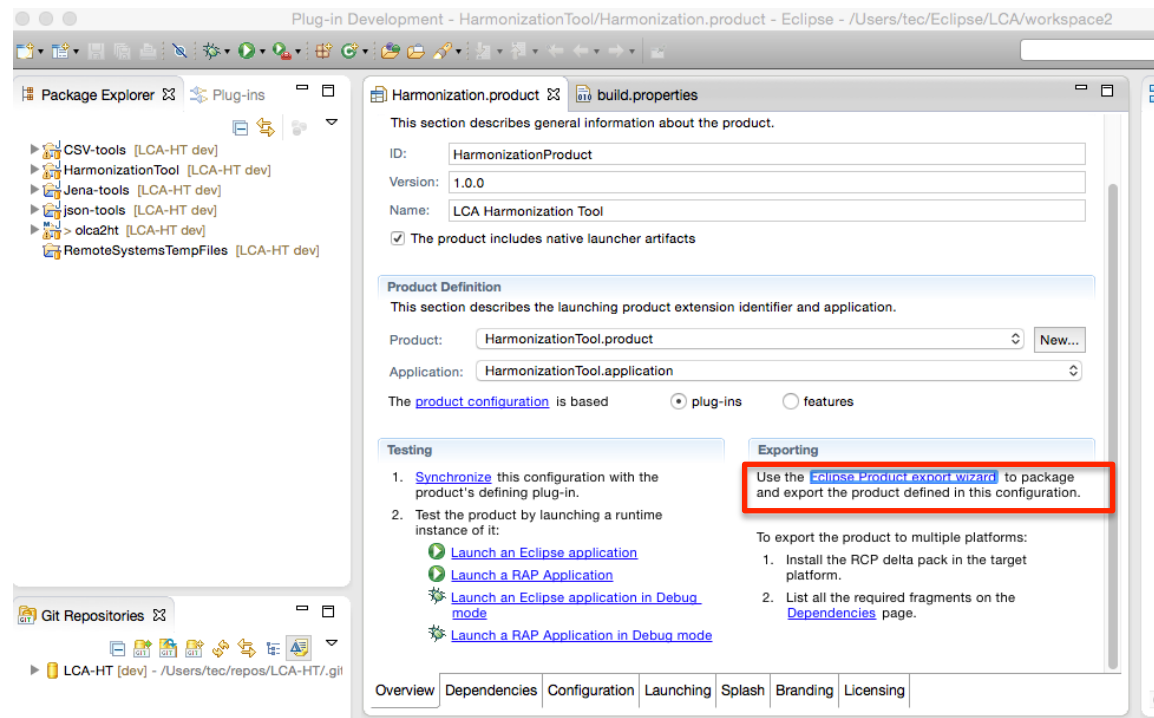
Installing the Delta Pack

Click "OK"



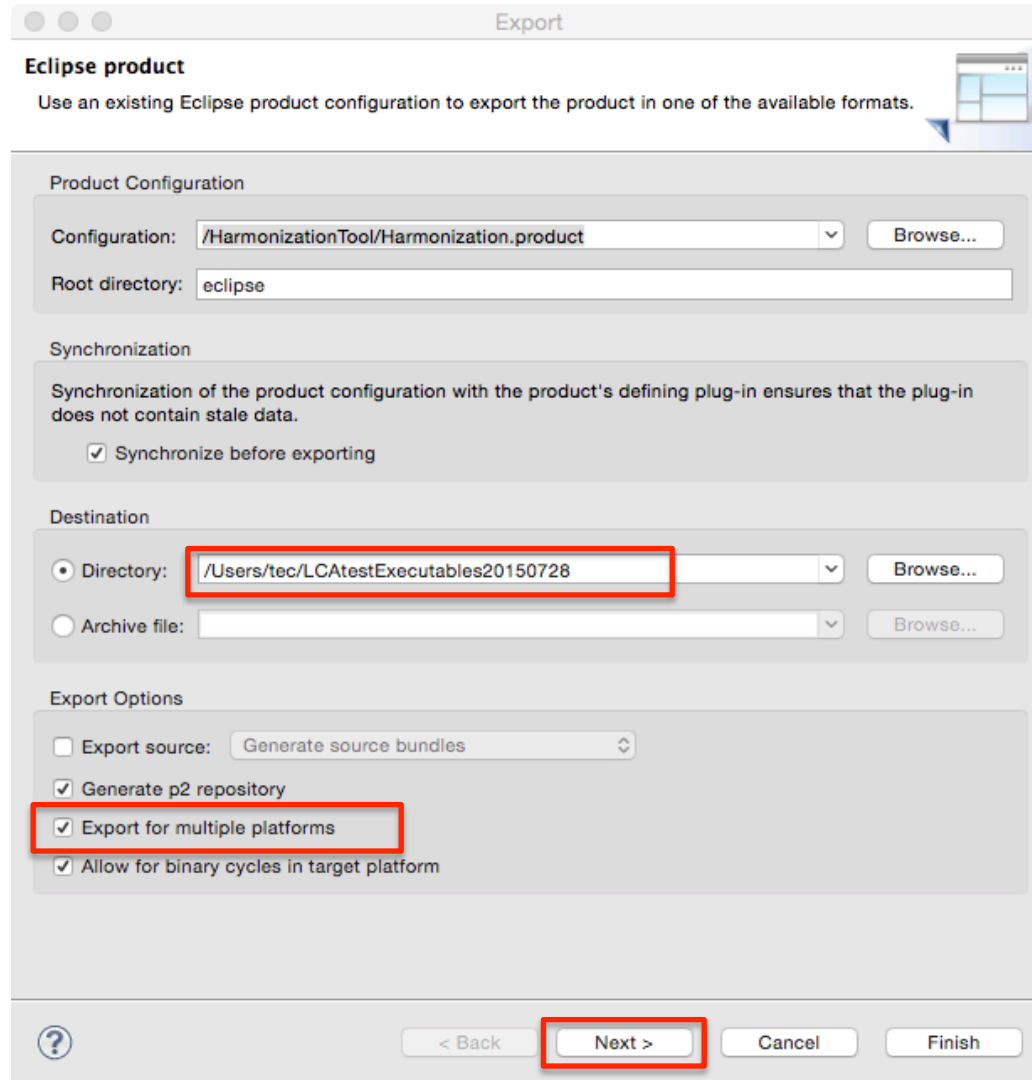
Generating Executables with the Delta Pack

From the “Harmonization Product” choose
“Eclipse Product Export Wizard”



Generating Executables with the Delta Pack

Select a destination directory and select "Export for multiple platforms". If the multiple option is not present then the delta pack is not installed correctly.



The screenshot shows the "Export" dialog box in Eclipse. The "Eclipse product" section at the top indicates that an existing Eclipse product configuration is used. Below this, the "Product Configuration" section shows the "Configuration" set to "/HarmonizationTool/Harmonization.product" and the "Root directory" set to "eclipse". The "Synchronization" section has a checked option for "Synchronize before exporting". The "Destination" section has the "Directory" radio button selected, with the path "/Users/tec/LCAtestExecutables20150728" entered in the text field. The "Export Options" section has three checked options: "Export source" (set to "Generate source bundles"), "Generate p2 repository", and "Export for multiple platforms". The "Next >" button at the bottom is highlighted with a red box.

Eclipse product
Use an existing Eclipse product configuration to export the product in one of the available formats.

Product Configuration
Configuration: /HarmonizationTool/Harmonization.product
Root directory: eclipse

Synchronization
Synchronization of the product configuration with the product's defining plug-in ensures that the plug-in does not contain stale data.
☒ Synchronize before exporting

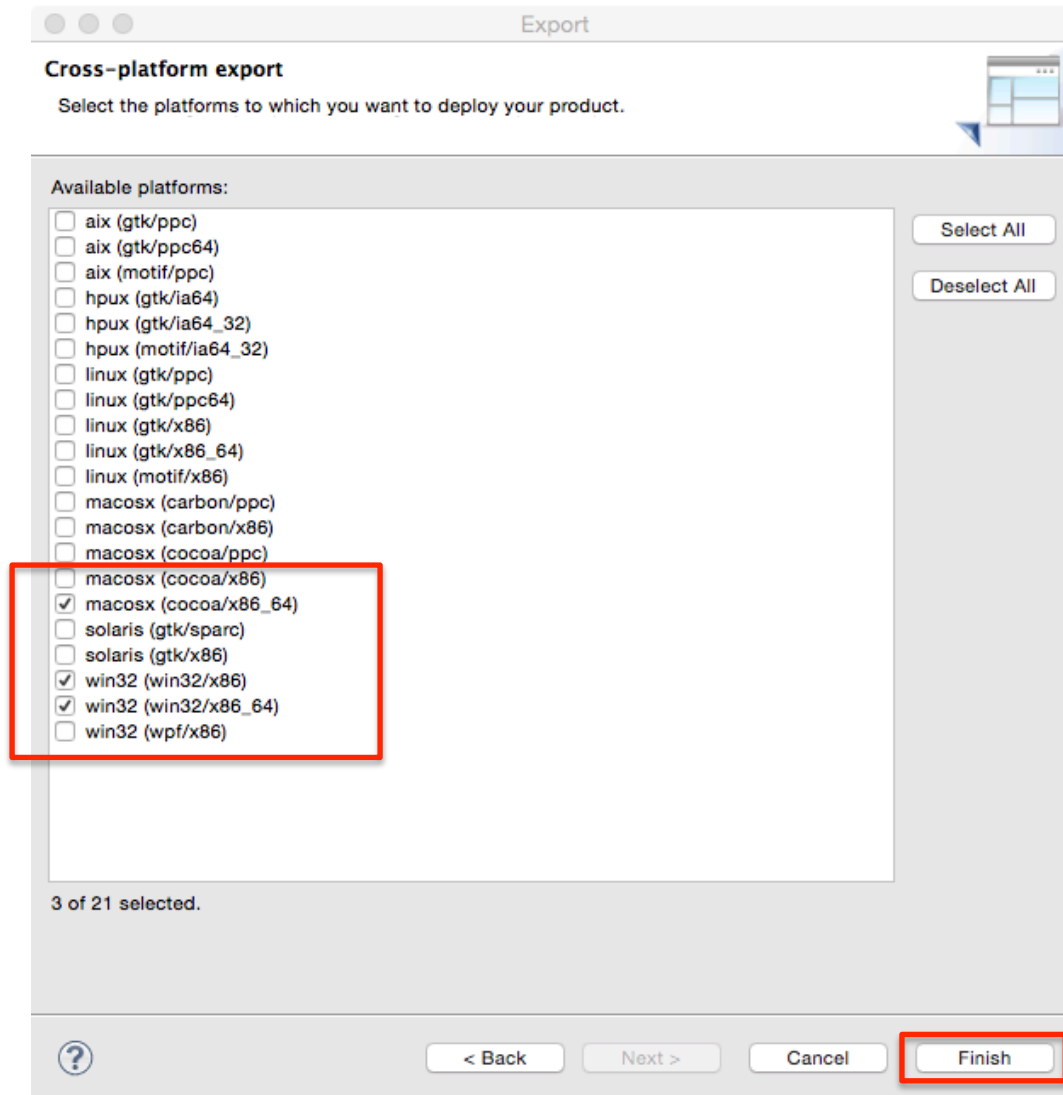
Destination
☒ Directory: /Users/tec/LCAtestExecutables20150728
☐ Archive file:

Export Options
☐ Export source: Generate source bundles
☒ Generate p2 repository
☒ Export for multiple platforms
☒ Allow for binary cycles in target platform

< Back Next > Cancel Finish

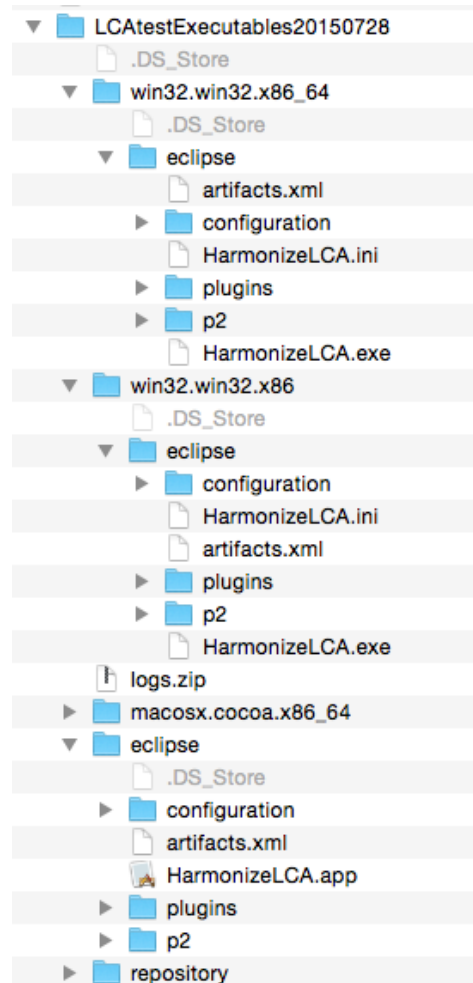
Generating Executables with the Delta Pack

Make the
following
selections



Generating Executables with the Delta Pack

You should now have the following files generated.



Issue with the Mac OS version

The HarmonizeLCA.app will not launch from the Finder window. This is a bug in Eclipse. I have not found a fix or work around for this problem yet. However, you can run from the command line by cd-ing to

`HarmonizeLCA.app/Contents/MacOS`

Typing

`./HarmonizeLCA`

Issue with the Windows version

You might have a case where the Windows version fails to start. This might be because the HarmonizeLCA.exe is requesting more memory than allowed.

You can solve this problem by editing the HarmonizeLCA.ini file and changing -Xmx2048m to -Xmx1048m

