How to build the HRE Main Window

Revision History

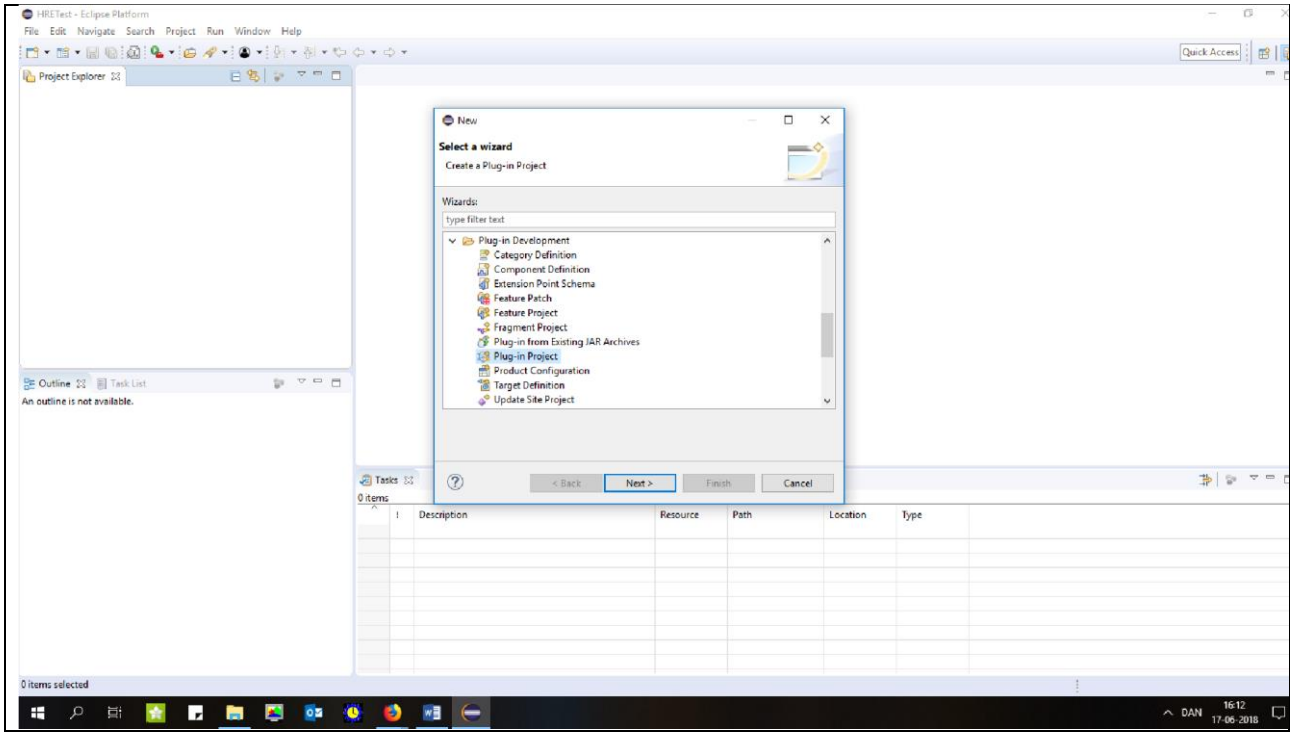
2018-06-17	Michael Erichsen	Original draft
2018-07-02	Don Ferguson	Added extra assistance notes at end, based on email of 27 June from Michael E

HRE is an Eclipse e4 Rich Client Platform (RCP) application.

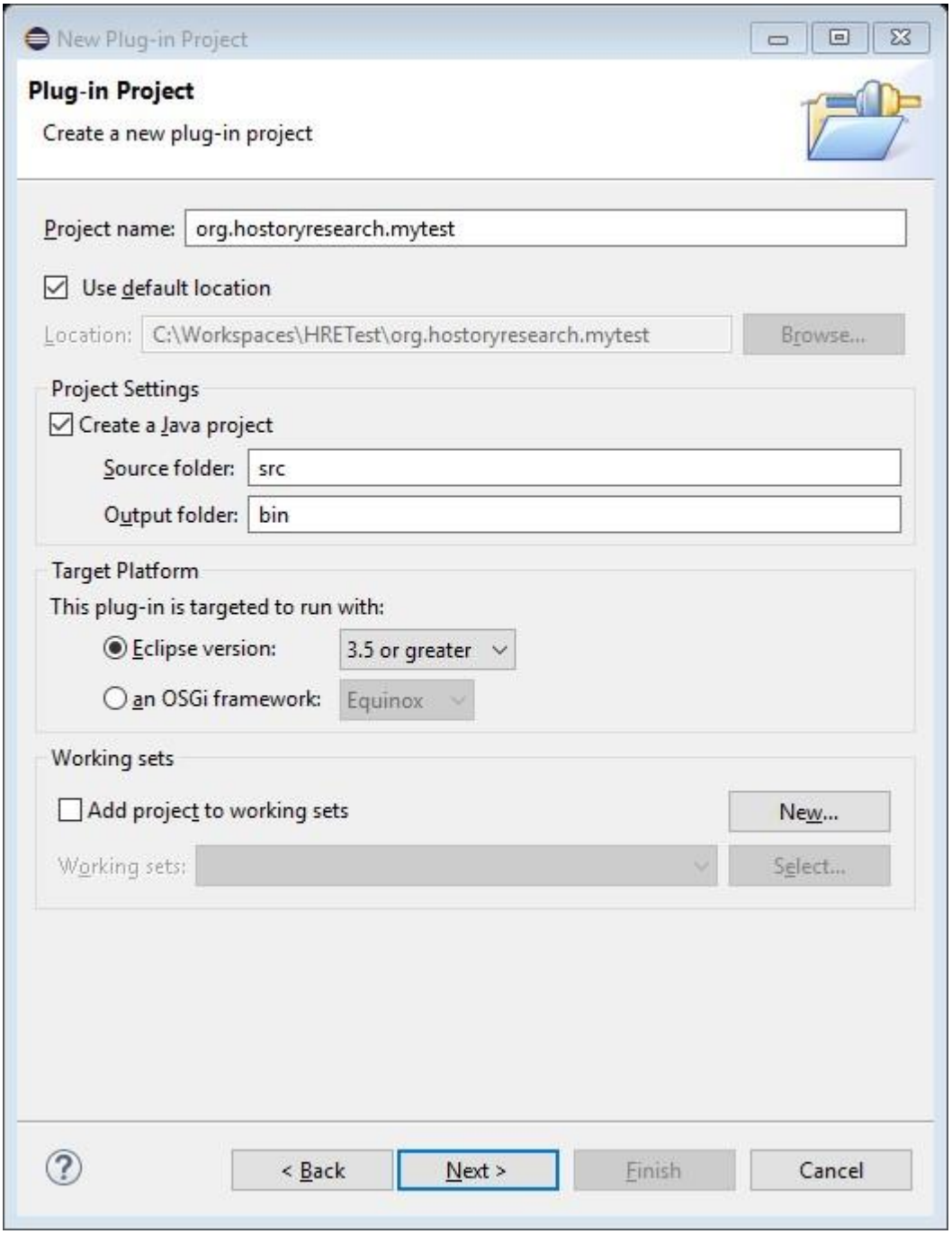
Tooling

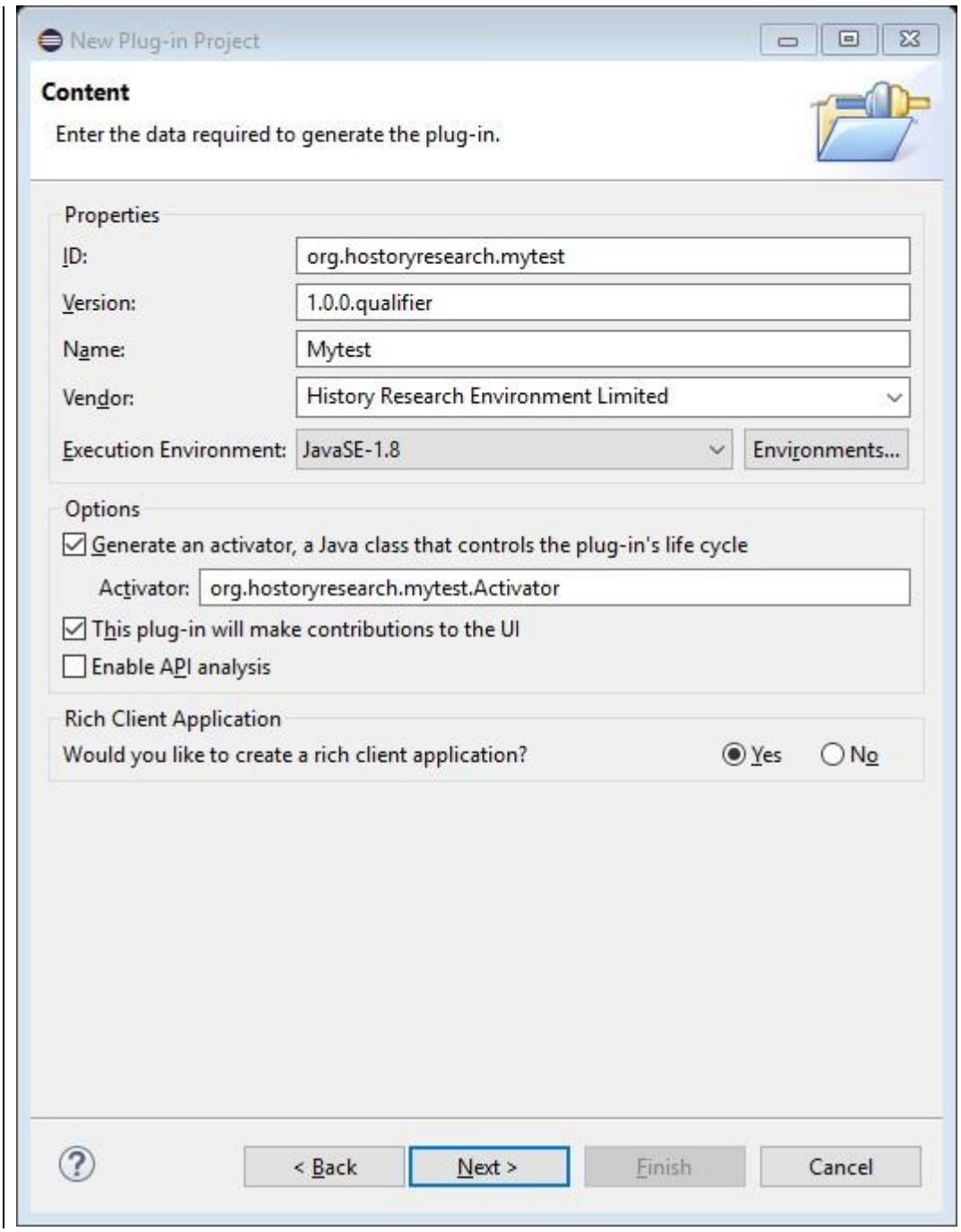
You need an Eclipse 'Workbench for RCP programmers' set up.

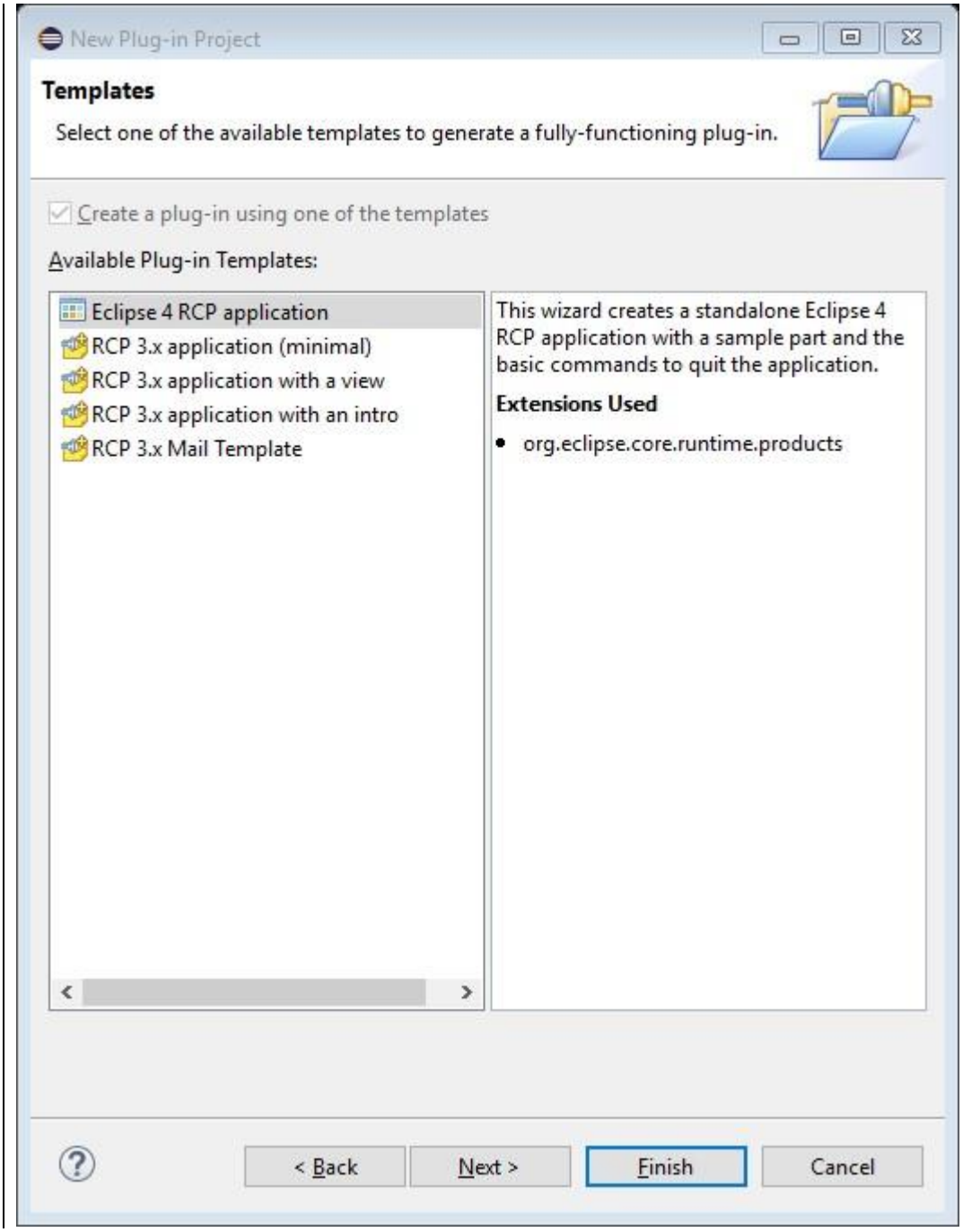
Look and feel

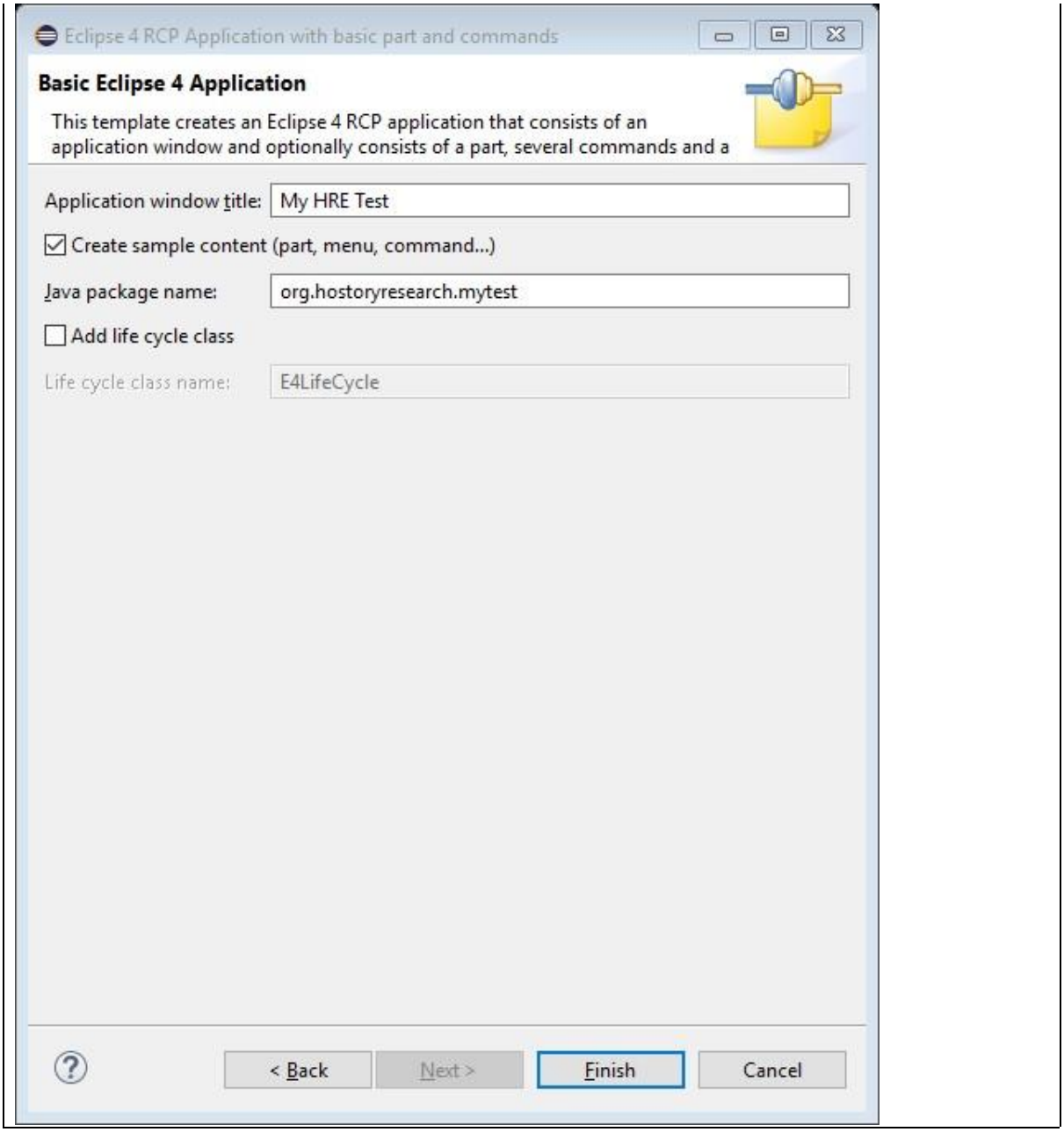


You can get to know the tool by building the default e4 RCP application:


New Plug-in Project
Plug-in Project
Create a new plug-in project
Project name: org.hostoryresearch.mytest
Use default location
Location: C:\Workspaces\HRETest\org.hostoryresearch.mytest
Browse...
Project Settings
Create a Java project
Source folder: src
Output folder: bin
Target Platform
This plug-in is targeted to run with:
Eclipse version: 3.5 or greater
an OSGi framework: Equinox
Working sets
Add project to working sets
New...
Working sets:
Select...
< Back
Next >
Finish
Cancel

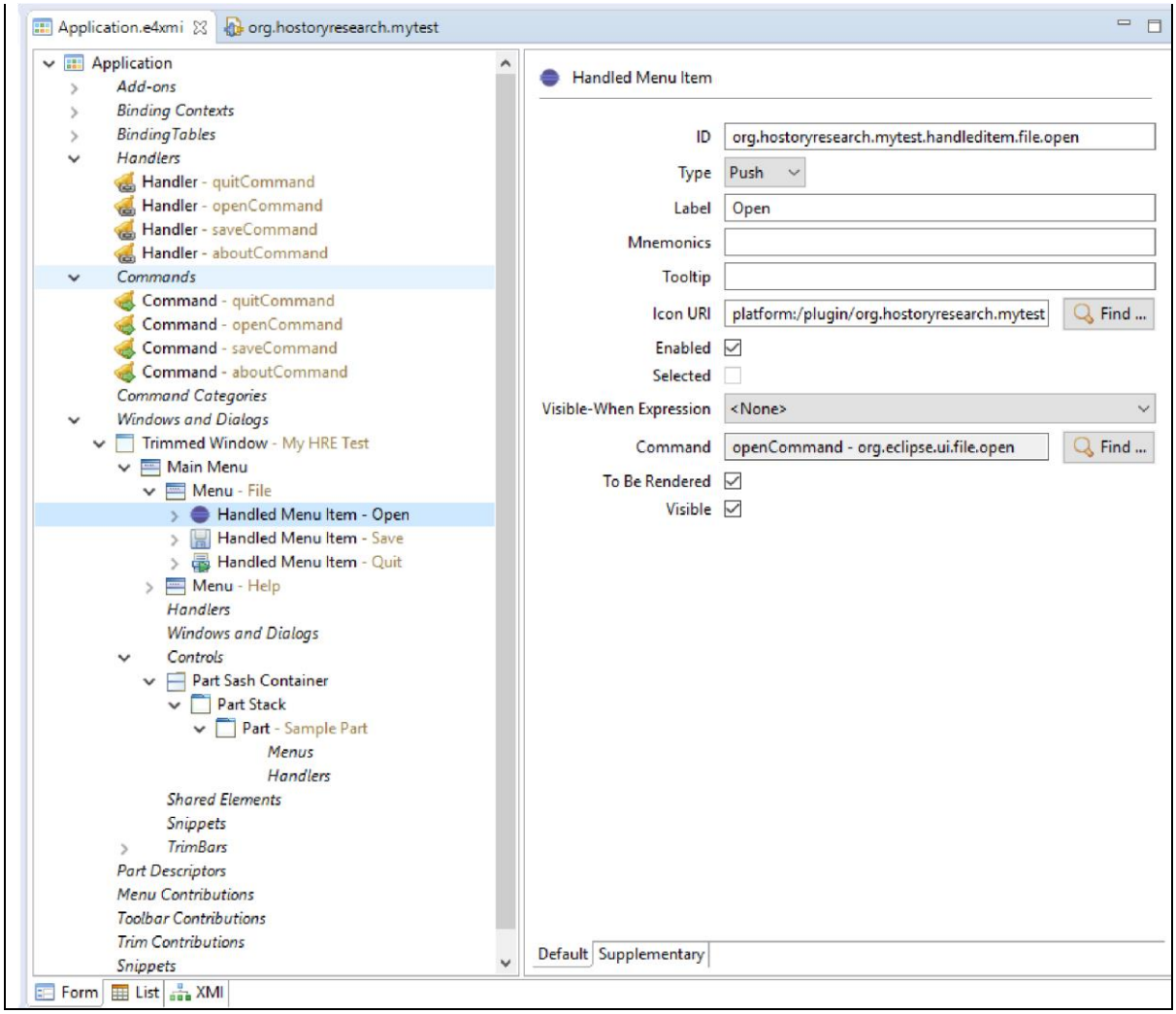

New Plug-in Project
Content
Enter the data required to generate the plug-in.
Properties
ID:
org.hostoryresearch.mytest
Version:
1.0.0.qualifier
Name:
Mytest
Vendor:
History Research Environment Limited
Execution Environment:
JavaSE-1.8
Environments...
Options
Generate an activator, a Java class that controls the plug-in's life cycle
Activator:
org.hostoryresearch.mytest.Activator
This plug-in will make contributions to the UI
Enable API analysis
Rich Client Application
Would you like to create a rich client application?
Yes
No
< Back
Next >
Finish
Cancel


New Plug-in Project
Templates
Select one of the available templates to generate a fully-functioning plug-in.
Create a plug-in using one of the templates
Available Plug-in Templates:
Eclipse 4 RCP application
RCP 3.x application (minimal)
RCP 3.x application with a view
RCP 3.x application with an intro
RCP 3.x Mail Template
This wizard creates a standalone Eclipse 4 RCP application with a sample part and the basic commands to quit the application.
Extensions Used
org.eclipse.core.runtime.products
< Back
Next >
Finish
Cancel

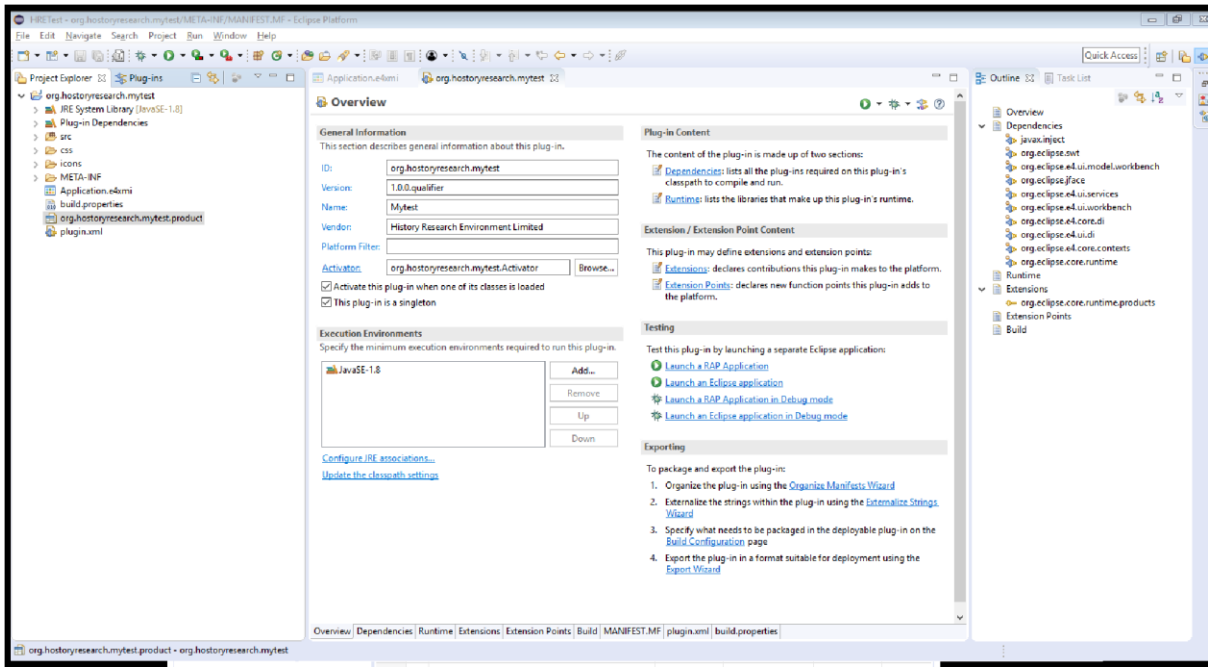


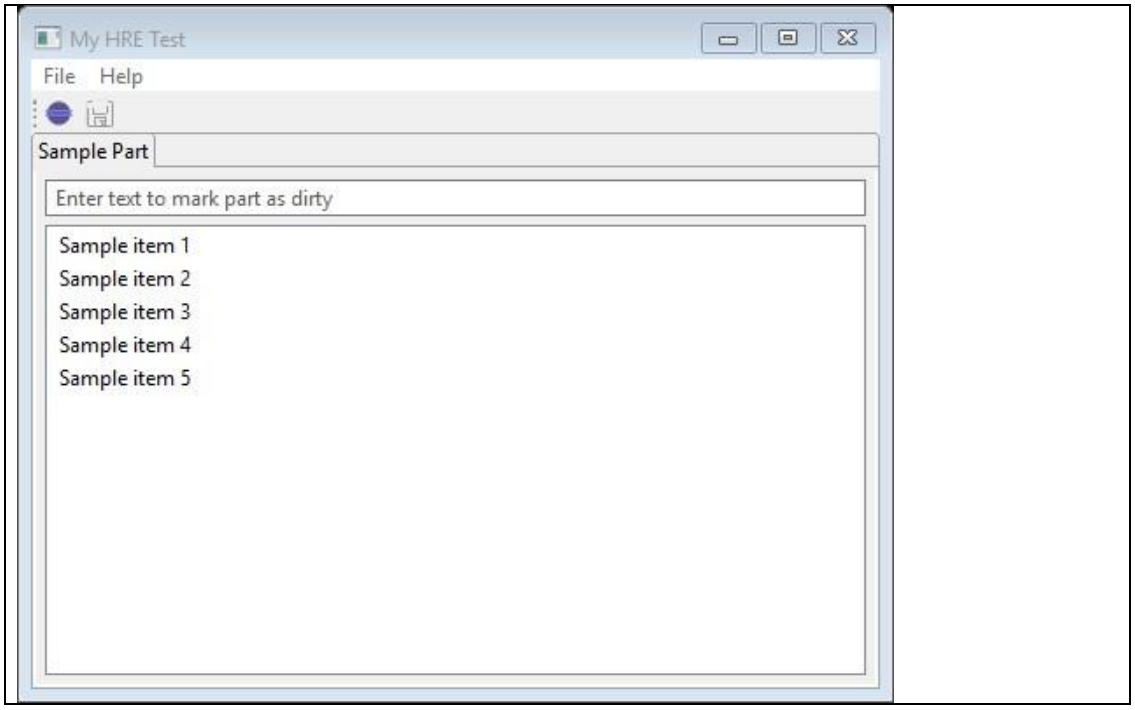
Two views are opened when clicking Finished.

Application.e4xmi defines menus, perspectives, view parts etc. You can play around with this.



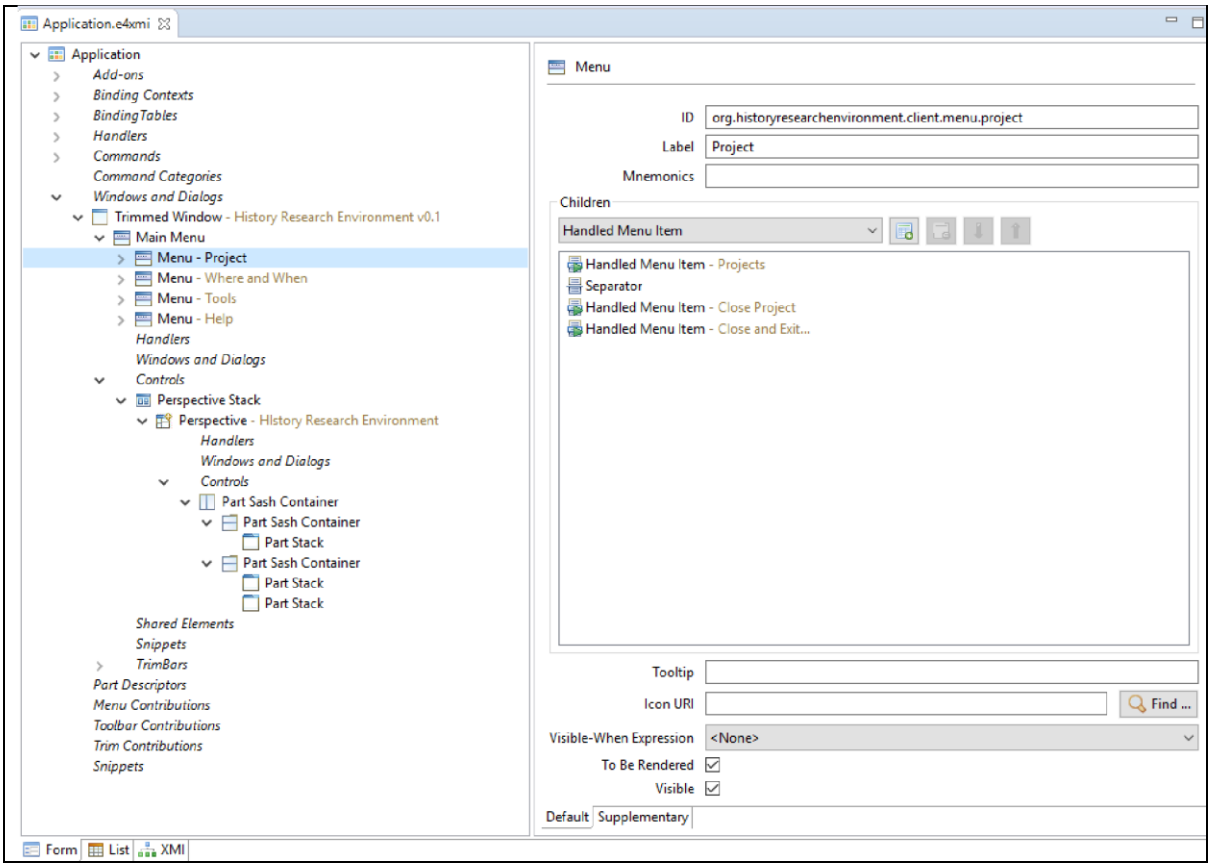
You can launch the Eclipse application from the product file, which is also opened -


Launch a RAP Application
Launch an Eclipse application
Outline



The HRE Main Window

The main window has a hierarchy of perspective stack, perspective etc.:



None of the current view parts are visible here, as they are created dynamically by handler code.

Extended Installation Checks

Prerequisite: Eclipse for RCP installed.

Expand the releng (Release Engineering) folder.
Expand the org.historyresearchenvironment.client.product folder.
Open the org.historyresearchenvironment.client.product file.

Click the green "Run" arrow in the Product Configuration Editor and make sure that it starts an Eclipse application, not a RAP application.

If a "Validation" dialog opens with "The following problems were detected", we need to handle some required bundles. We will park that for now.

If you get a message dialog saying "Java Virtual Machine Launcher. Error: Could not create the Java virtual machine. Error: A fatal exception has occured. Program will exit", then we have a mismatch between Eclipse and Java versions.

Do as follows:

- Close the message dialog.
- Select the run menu item in Eclipse and select "Run Configurations".

There will be a newly created configuration, probably called "org.historyresearchenvironment.client.product".

Open that for editing.

On the main tab select "Clear" and "Workspace" and unselect "Ask for confirmation before clearing"
On the Arguments tab remove all VM arguments. They are only valid for Java 9, not Java 8.
On the plug-ins tab, note the number of selected plug-ins, e.g. "75 of 1520 selected".

Click "Add required plug-ins" several times, until the number is constant.
Click "Validate Plug-ins", which should reply "No problems were detected"

Click "Apply"
Click "Run".

Read more

http://www.vogella.com/tutorials/eclipse.html