

What's new in Plug-in Development?

"In PDE we do tooling, but our business is people"

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Agenda

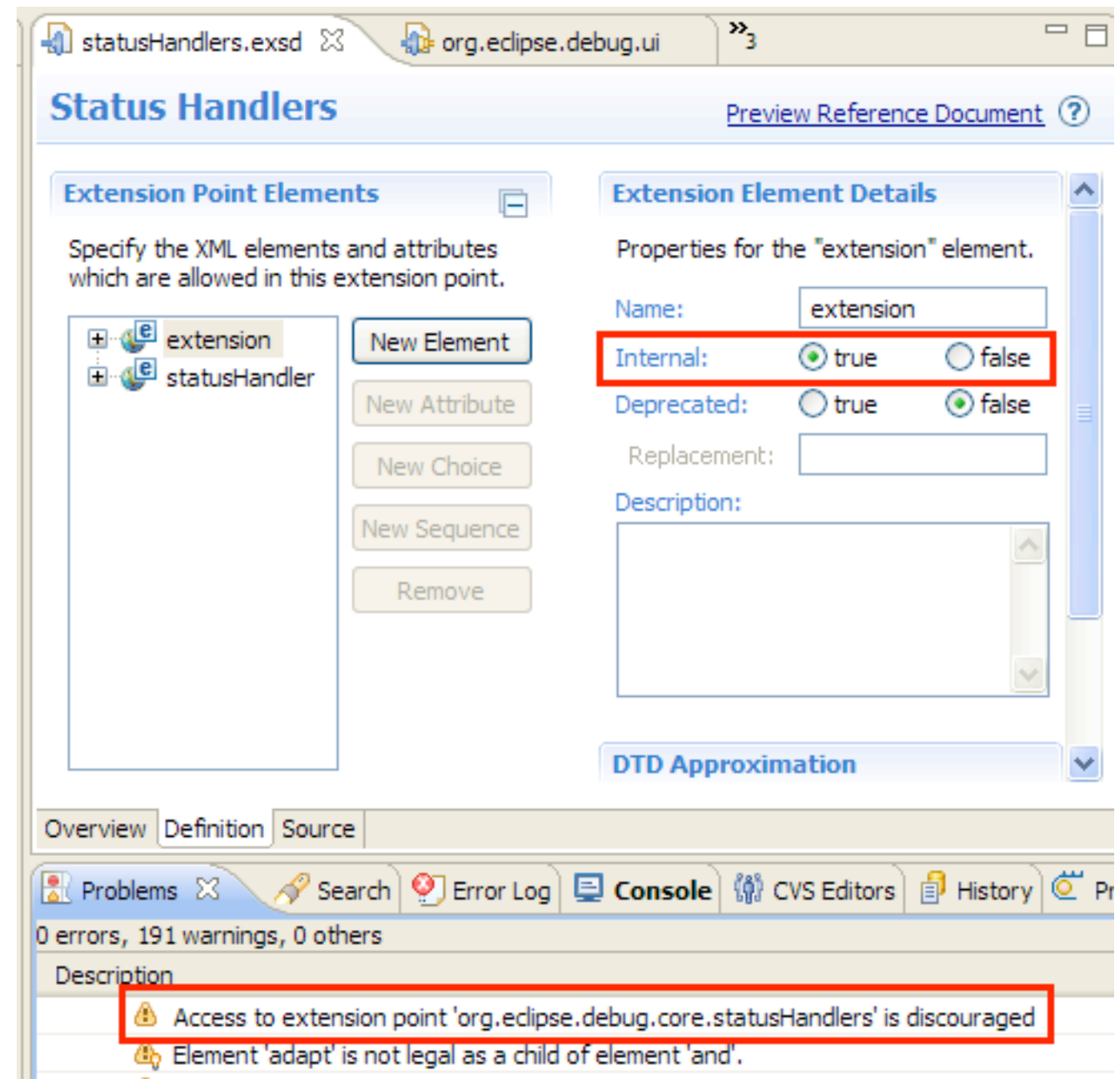
- The Past (Ganymede)
- The Future (Galileo)
- Q&A

Agenda

- **The Past (Ganymede)**
- The Future (Galileo)
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Internal Extension Points

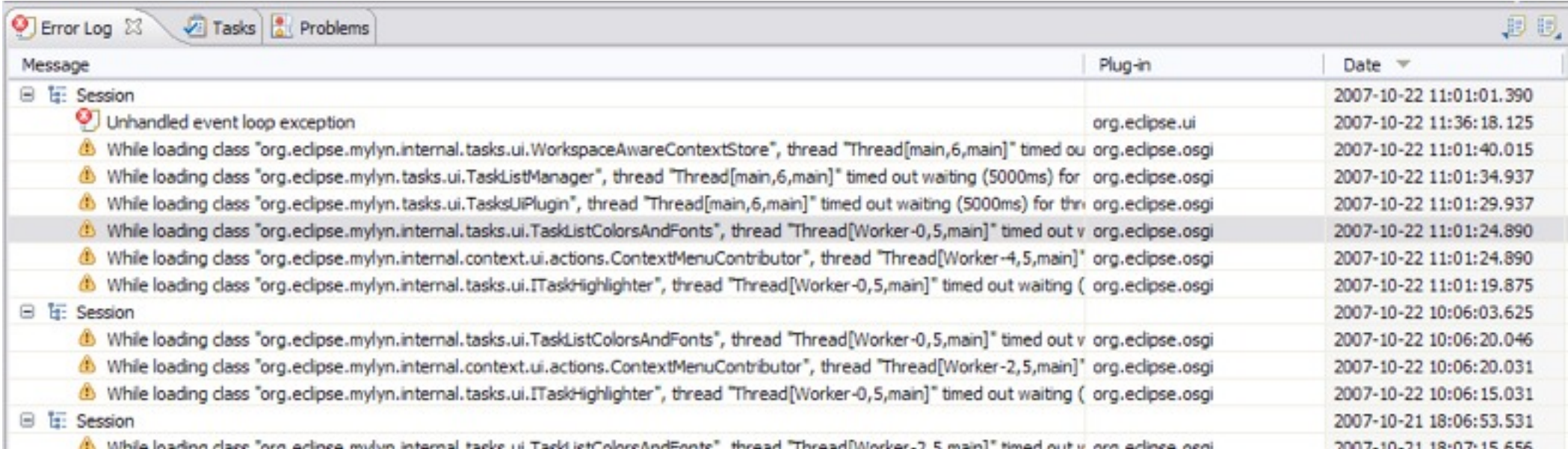
- Extension points can be marked as internal now, similar to how you mark packages internal



The screenshot shows the Eclipse IDE's 'Status Handlers' dialog box. The 'Extension Point Elements' section on the left lists 'extension' and 'statusHandler' elements. The 'Extension Element Details' section on the right shows properties for the 'extension' element, with 'Internal' set to 'true' and 'Deprecated' set to 'false'. The 'Description' section at the bottom shows a warning message: 'Access to extension point 'org.eclipse.debug.core.statusHandlers' is discouraged'.

Error Log Enhancements

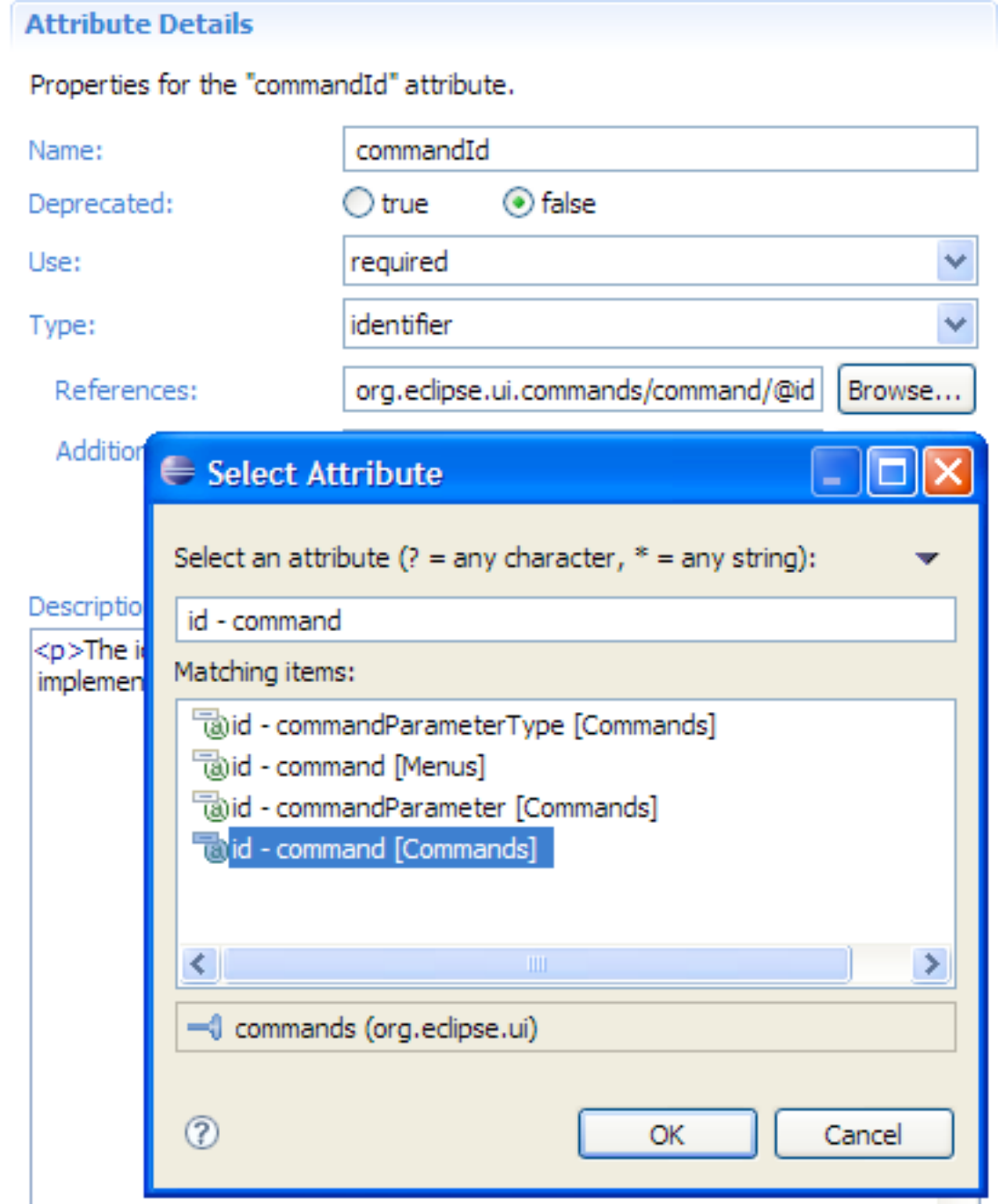
- More than meets the eye... browse launch configuration logs...
- Group log entries by
 - Session
 - Plug-in



Message	Plug-in	Date
Session		2007-10-22 11:01:01.390
Unhandled event loop exception	org.eclipse.ui	2007-10-22 11:36:18.125
While loading class "org.eclipse.mylyn.internal.tasks.ui.WorkspaceAwareContextStore", thread "Thread[main,6,main]" timed out waiting (5000ms) for the class loader to finish	org.eclipse.osgi	2007-10-22 11:01:40.015
While loading class "org.eclipse.mylyn.tasks.ui.TaskListManager", thread "Thread[main,6,main]" timed out waiting (5000ms) for the class loader to finish	org.eclipse.osgi	2007-10-22 11:01:34.937
While loading class "org.eclipse.mylyn.tasks.ui.TasksUIPlugin", thread "Thread[main,6,main]" timed out waiting (5000ms) for the class loader to finish	org.eclipse.osgi	2007-10-22 11:01:29.937
While loading class "org.eclipse.mylyn.internal.tasks.ui.TaskListColorsAndFonts", thread "Thread[Worker-0,5,main]" timed out waiting (5000ms) for the class loader to finish	org.eclipse.osgi	2007-10-22 11:01:24.890
While loading class "org.eclipse.mylyn.internal.context.ui.actions.ContextMenuContributor", thread "Thread[Worker-4,5,main]" timed out waiting (5000ms) for the class loader to finish	org.eclipse.osgi	2007-10-22 11:01:24.890
While loading class "org.eclipse.mylyn.internal.tasks.ui.ITaskHighlighter", thread "Thread[Worker-0,5,main]" timed out waiting (5000ms) for the class loader to finish	org.eclipse.osgi	2007-10-22 11:01:19.875
Session		2007-10-22 10:06:03.625
While loading class "org.eclipse.mylyn.internal.tasks.ui.TaskListColorsAndFonts", thread "Thread[Worker-0,5,main]" timed out waiting (5000ms) for the class loader to finish	org.eclipse.osgi	2007-10-22 10:06:20.046
While loading class "org.eclipse.mylyn.internal.context.ui.actions.ContextMenuContributor", thread "Thread[Worker-2,5,main]" timed out waiting (5000ms) for the class loader to finish	org.eclipse.osgi	2007-10-22 10:06:20.031
While loading class "org.eclipse.mylyn.internal.tasks.ui.ITaskHighlighter", thread "Thread[Worker-0,5,main]" timed out waiting (5000ms) for the class loader to finish	org.eclipse.osgi	2007-10-22 10:06:15.031
Session		2007-10-21 18:06:53.531
While loading class "org.eclipse.mylyn.internal.tasks.ui.TaskListColorsAndFonts", thread "Thread[Worker-2,5,main]" timed out waiting (5000ms) for the class loader to finish	org.eclipse.osgi	2007-10-21 18:07:15.656

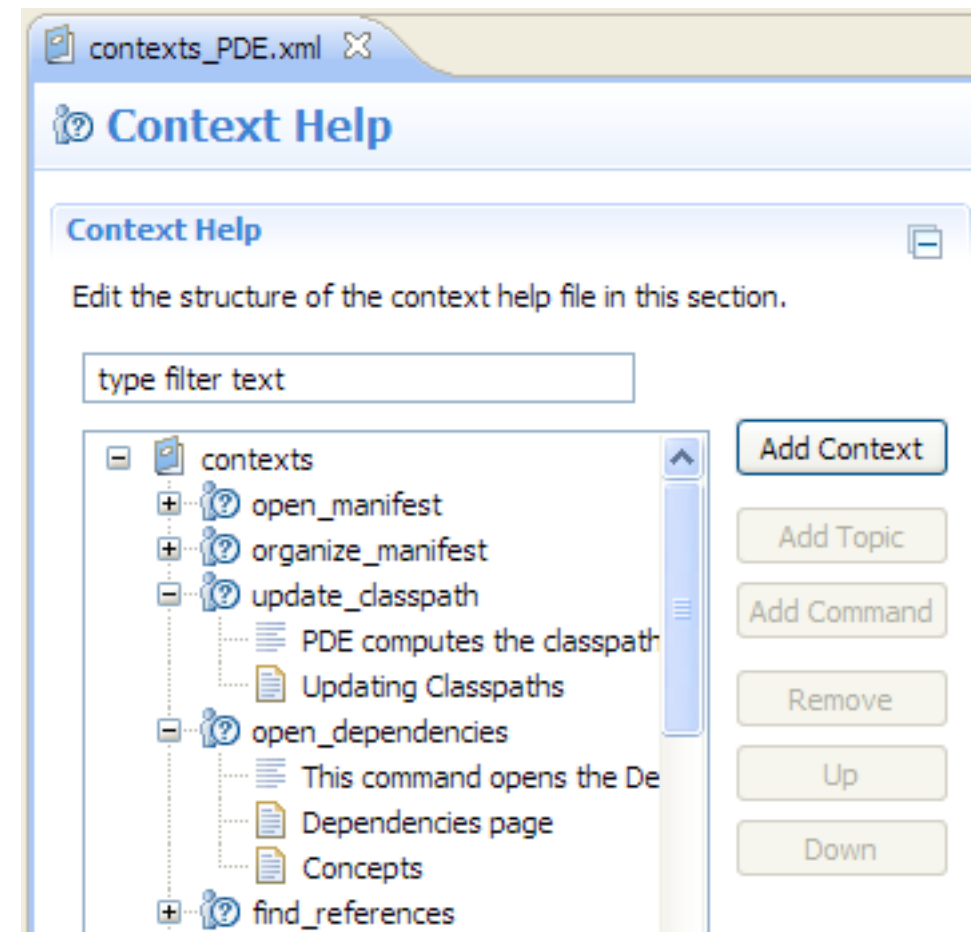
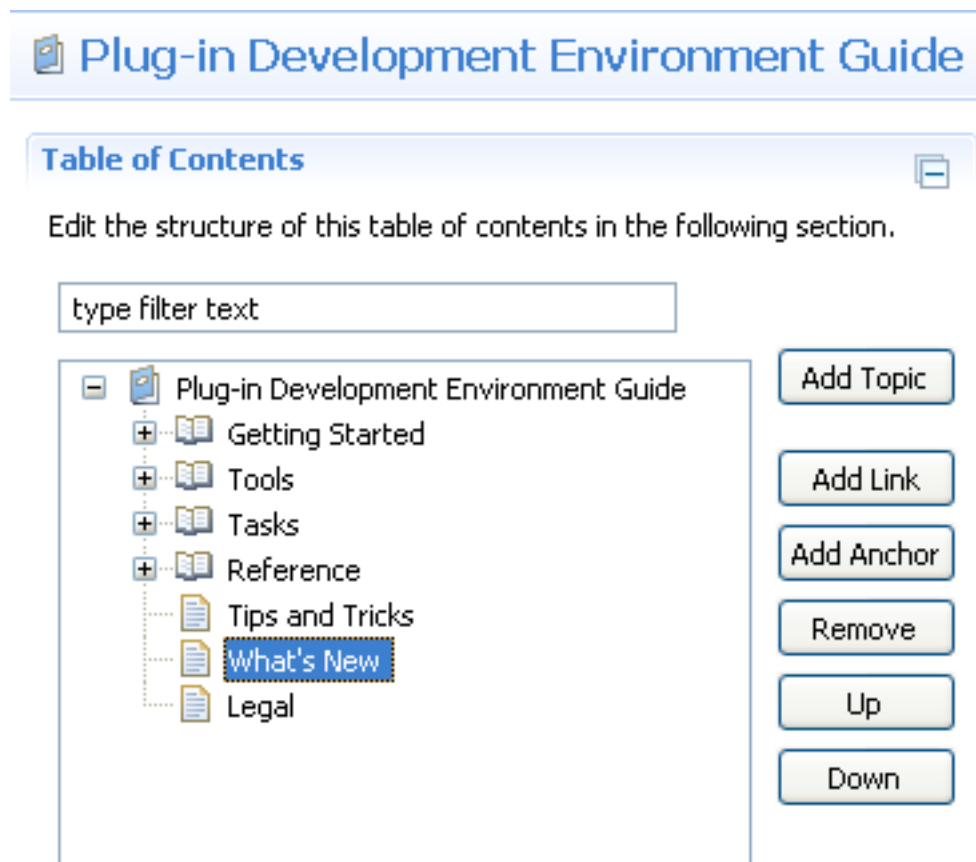
Schema Identifiers

- A new type was introduced in extension points: identifier
- Identifiers allow you to reference other extensions
- e.g., perspective extensions refer to a perspective id that is defined in another extension point



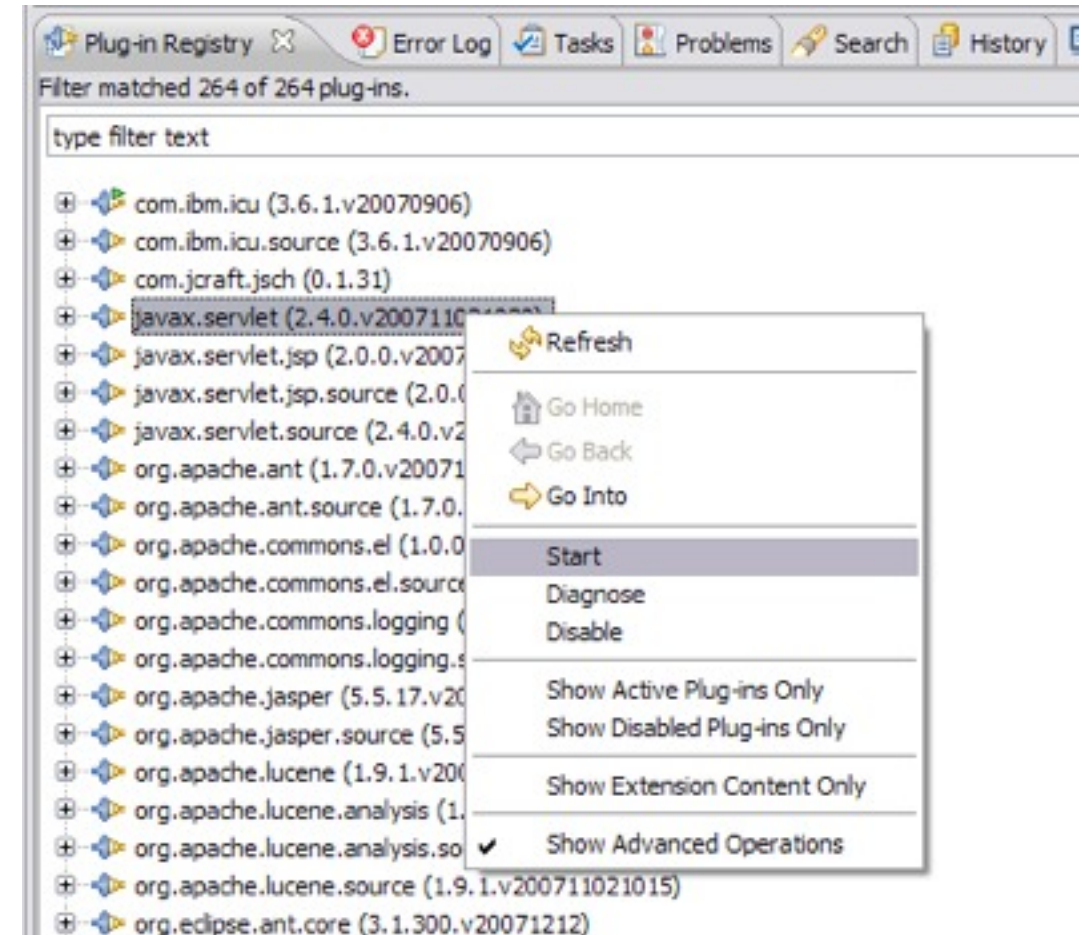
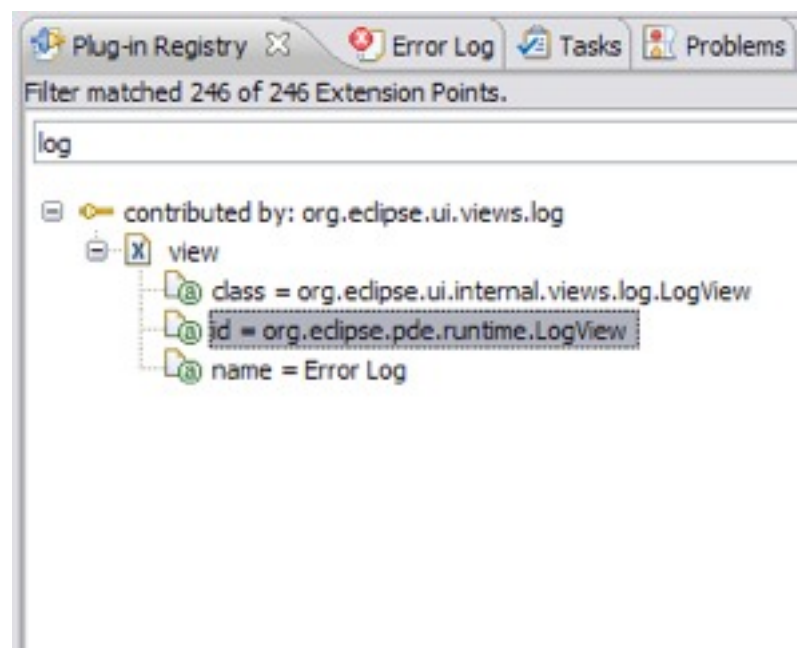
New User Assistance Editors

- Table of Contents Editor
- Context Help Editor



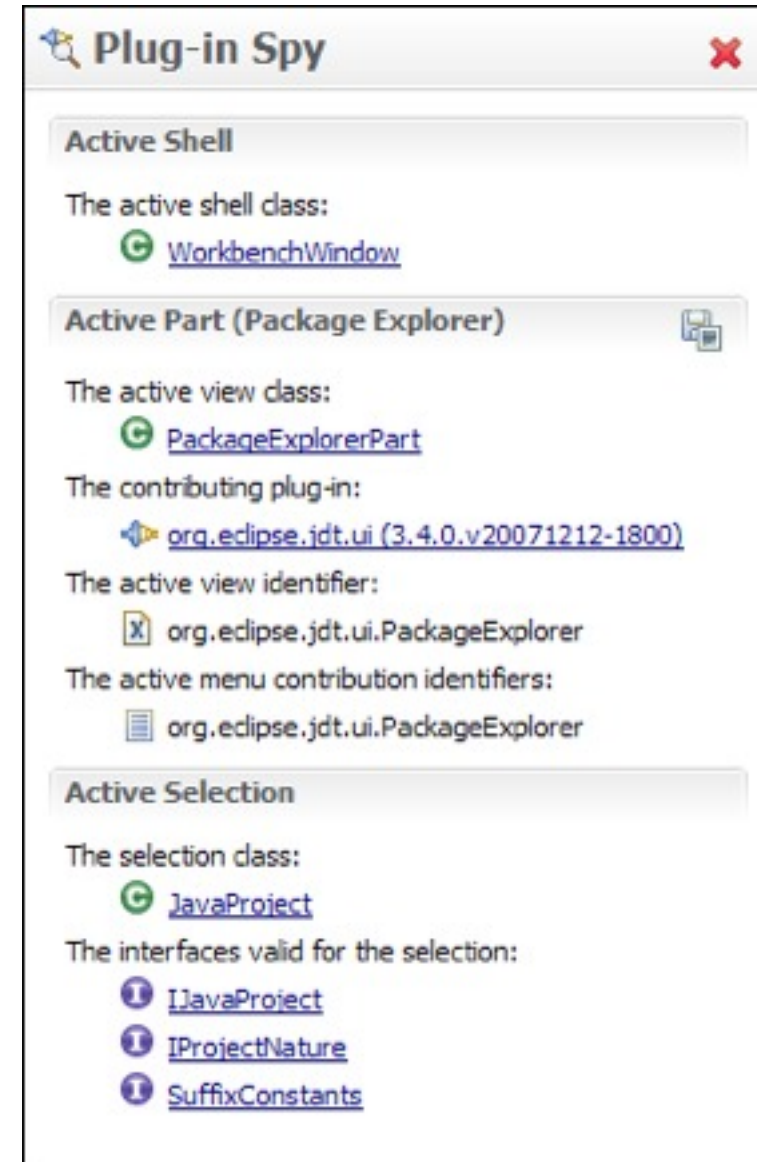
Plug-in Registry View Enhancements

- The **Plug-in Registry** view is your eye into the runtime
- Show Advanced Operations
 - start/stop bundles
- Show Extension Content Only
 - quickly browse extensions



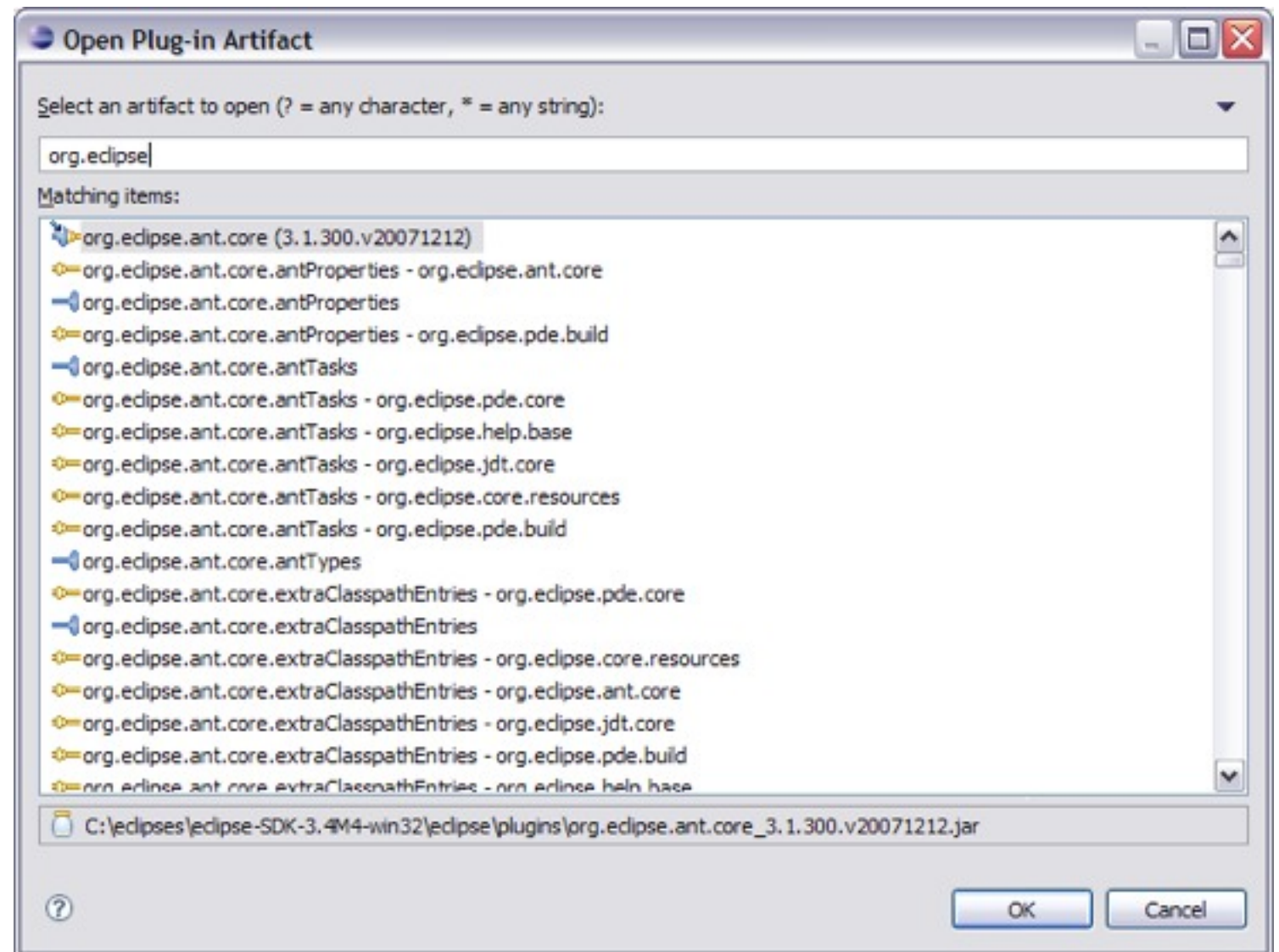
Plug-in Spy (3.4M3)

- ALT+SHIFT+F1
- Allows you to introspect what you're looking at...
- Hyperlinking
- Shows contributing plug-ins



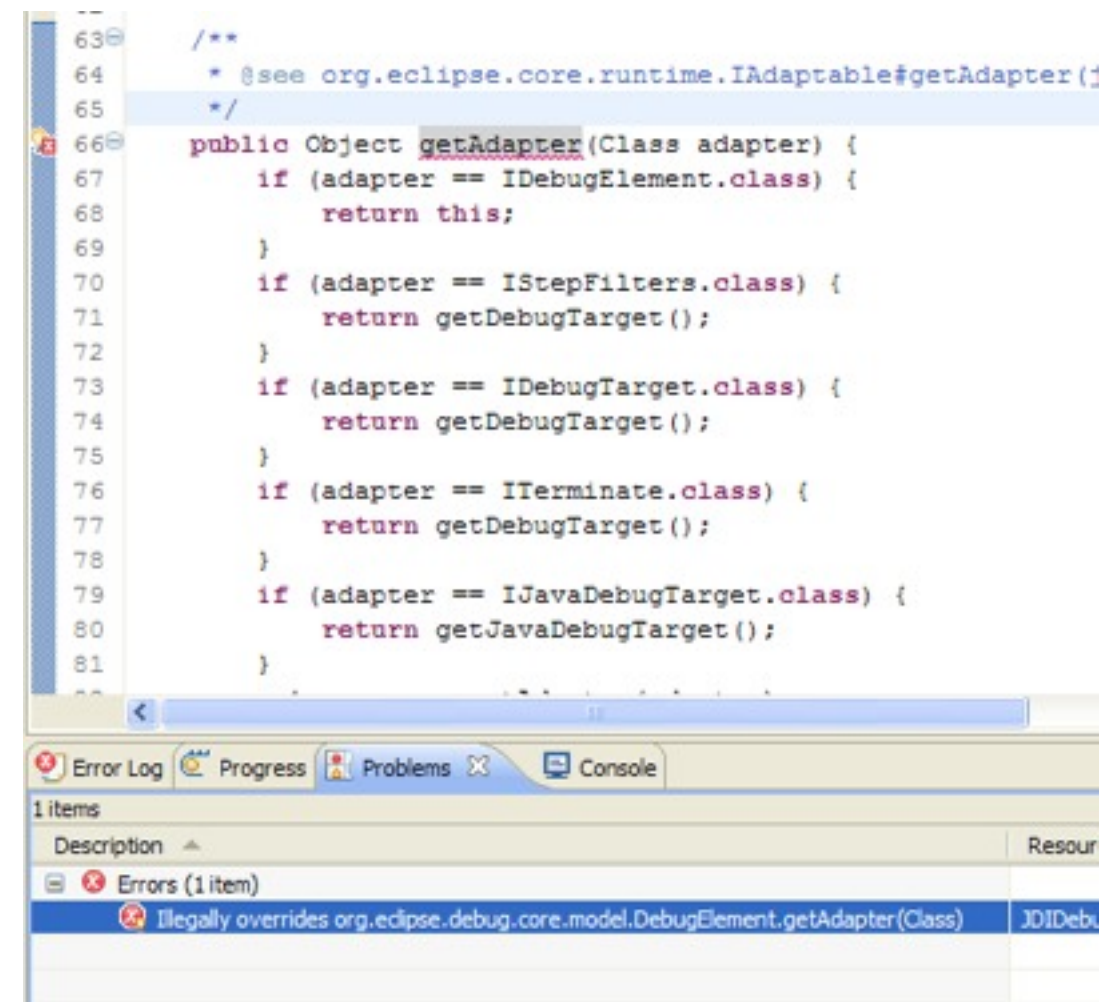
Open Plug-in Artifact (3.4M4)

- Ctrl+Shift+A
- Quickly browse plug-ins, extensions and extension points, features (3.5)



API Tooling (3.4M6)

- API tooling will assist developers in API maintenance by reporting...
 - API defects such as binary incompatibilities
 - incorrect plug-in version numbers
 - missing or incorrect @since tags
 - usage of non-API code between plug-ins



```
63  /**
64   * @see org.eclipse.core.runtime.IAdaptable#getAdapter(Class)
65   */
66  public Object getAdapter(Class adapter) {
67      if (adapter == IDebugElement.class) {
68          return this;
69      }
70      if (adapter == IStepFilters.class) {
71          return getDebugTarget();
72      }
73      if (adapter == IDebugTarget.class) {
74          return getDebugTarget();
75      }
76      if (adapter == ITerminate.class) {
77          return getDebugTarget();
78      }
79      if (adapter == IJavaDebugTarget.class) {
80          return getJavaDebugTarget();
81      }
82  }
```

1 items

Description	Resource
Errors (1 item)	
Illegally overrides org.eclipse.debug.core.model.DebugElement.getAdapter(Class)	JDIDebugElement

Agenda

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*EE Library Validation Access (3.5M5)

- Validate references to system library based on EE (J2SE-1.4, etc).
- A 1.4 project should not reference 1.5/1.6 methods/classes
- Targetting 1.4... or lower...
 - and use `Boolean.parseBoolean(String)...` `@#%^!`
 - and use `StringBuilder... new String(StringBuilder)...` `W#$%`

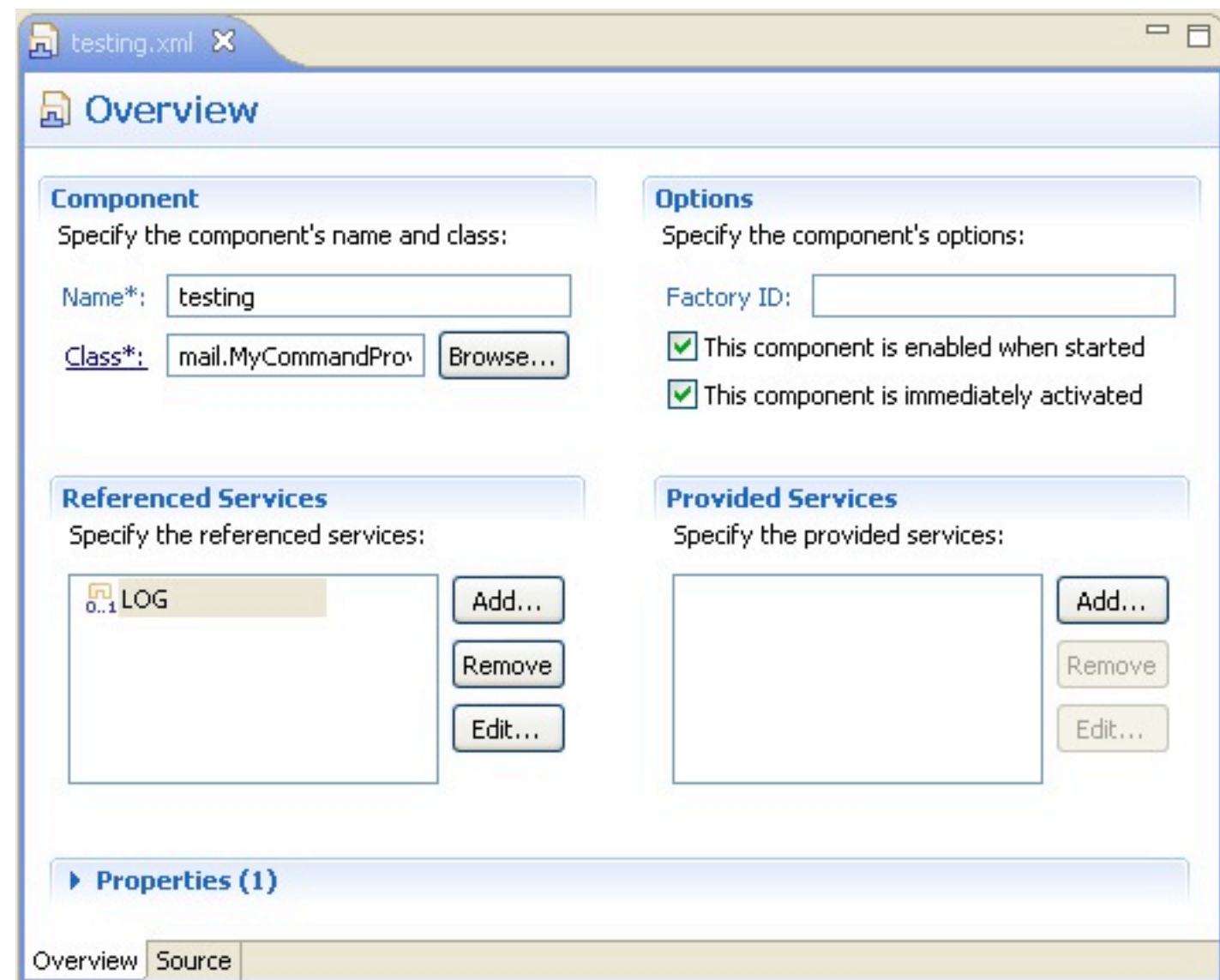


*API Tooling for Extension Registry (3.5M5)

- What do you consider API in extensions?
- View ids? Perspective ids?
- Goal is to provide same functionality as we have for Java but for extensions

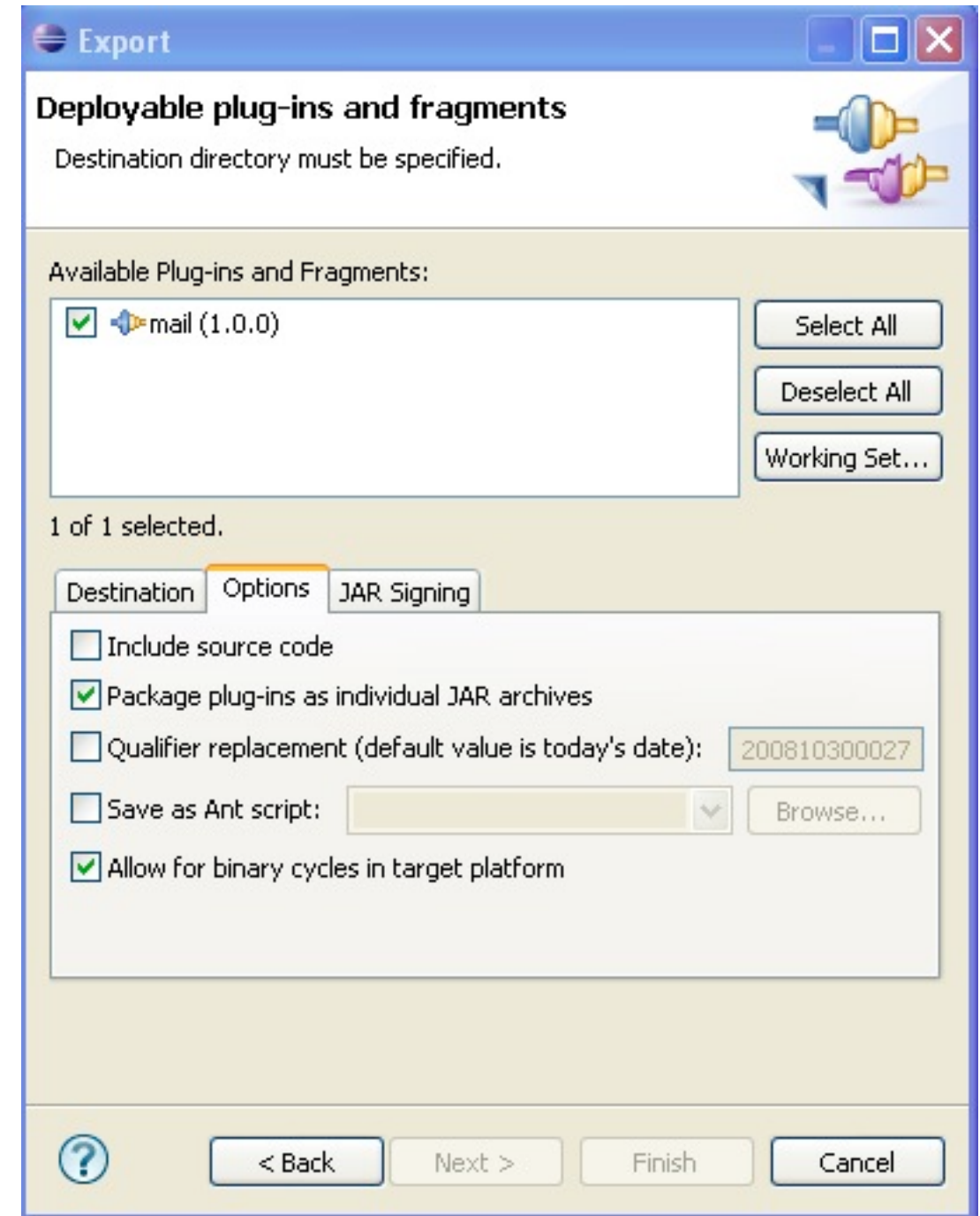
Declarative Services Tooling (3.5M2)

- DS Tooling
 - Editor
 - Validation
 - Code Completion
 - Sample Templates



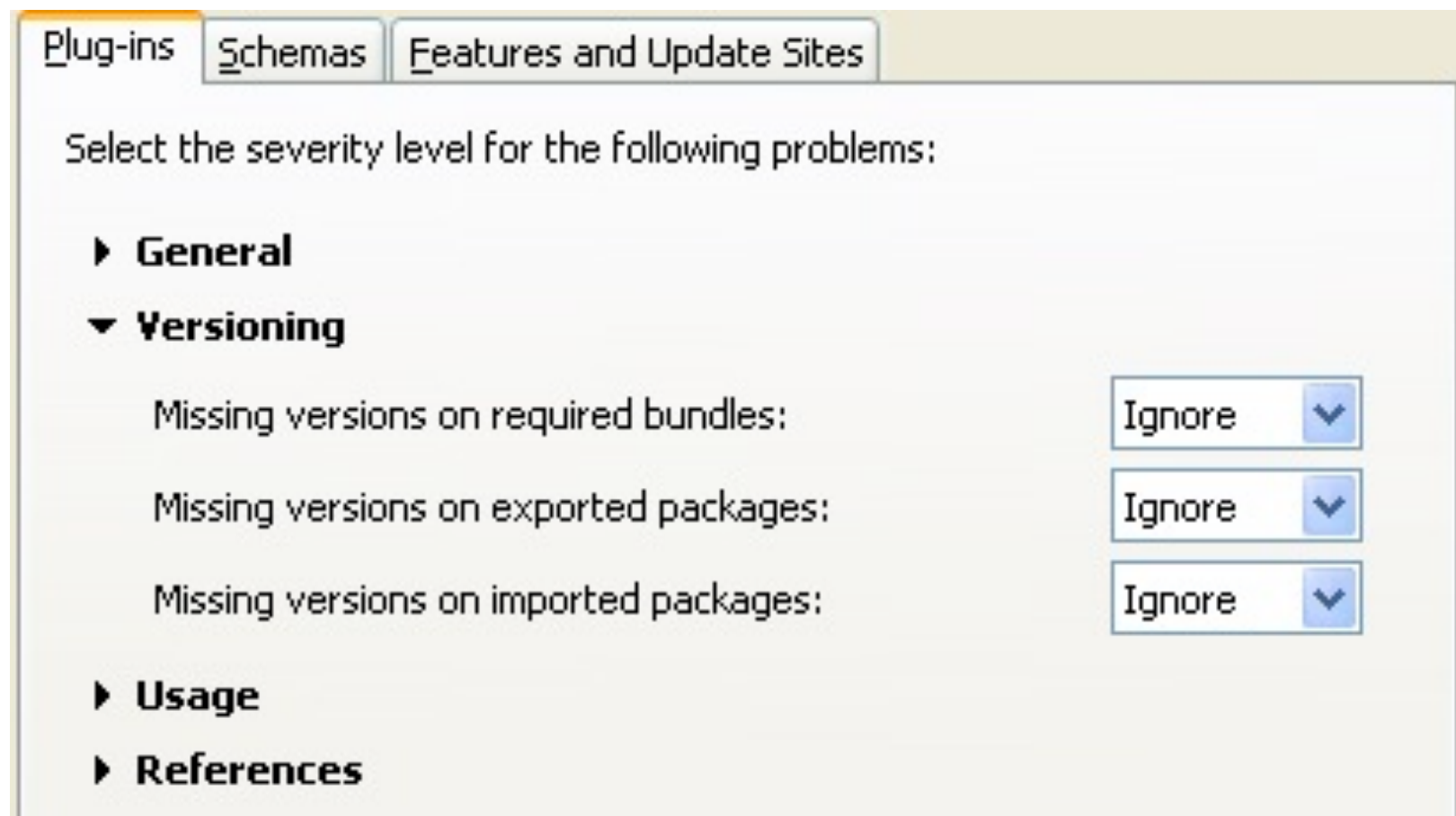
Binary Cycles (3.5M3)

- PDE UI and Build supports binary cycles in the target platform
 - Note: PDE Build supports this in 3.4



Versioning Checks (3.5M3)

- PDE can now help you validate information around versions

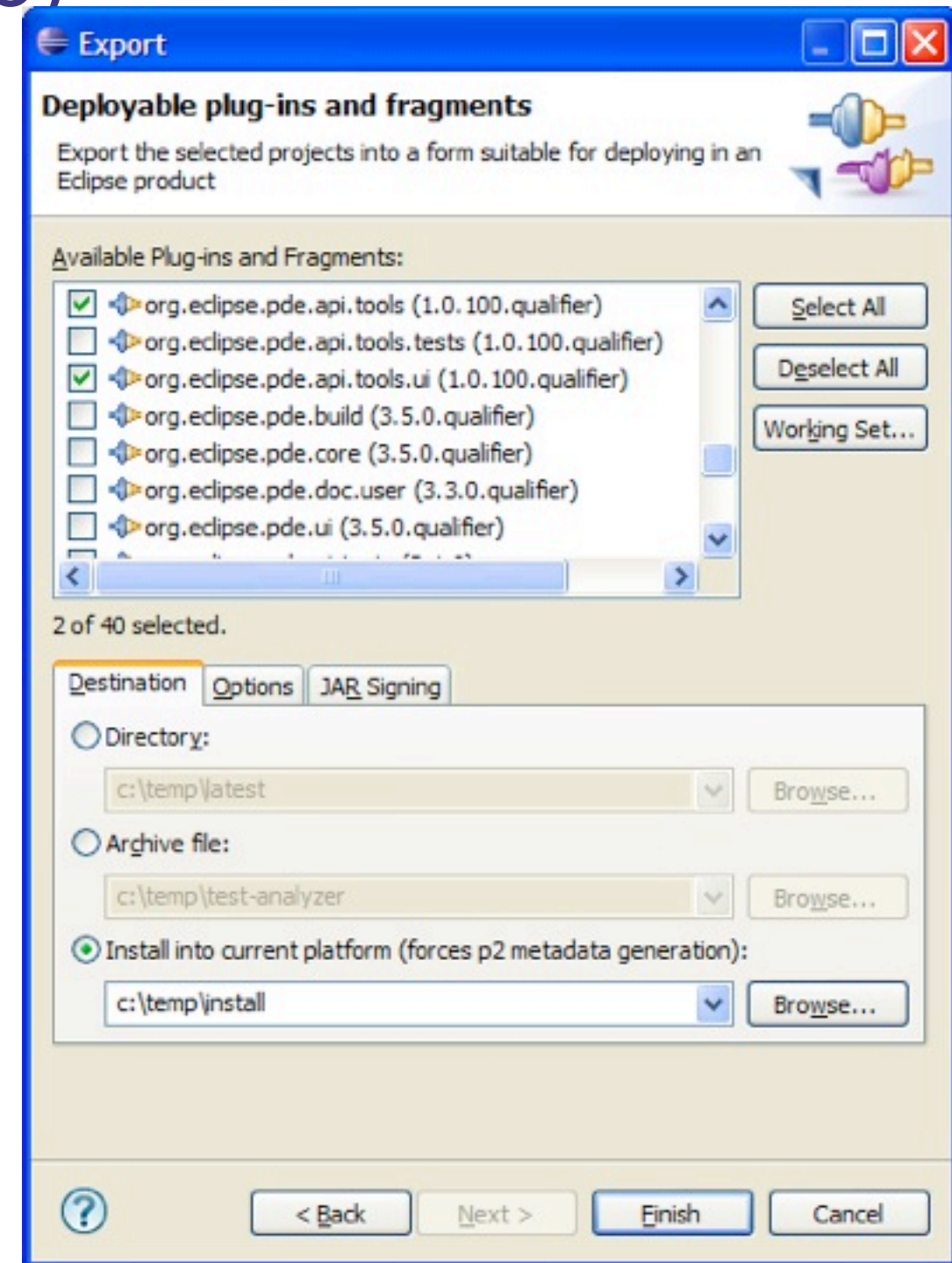


Parallel Compilation (3.5M3)

- PDE Build now supports parallel compilation
 - `parallelCompilation=true` in your top-level `build.properties` file

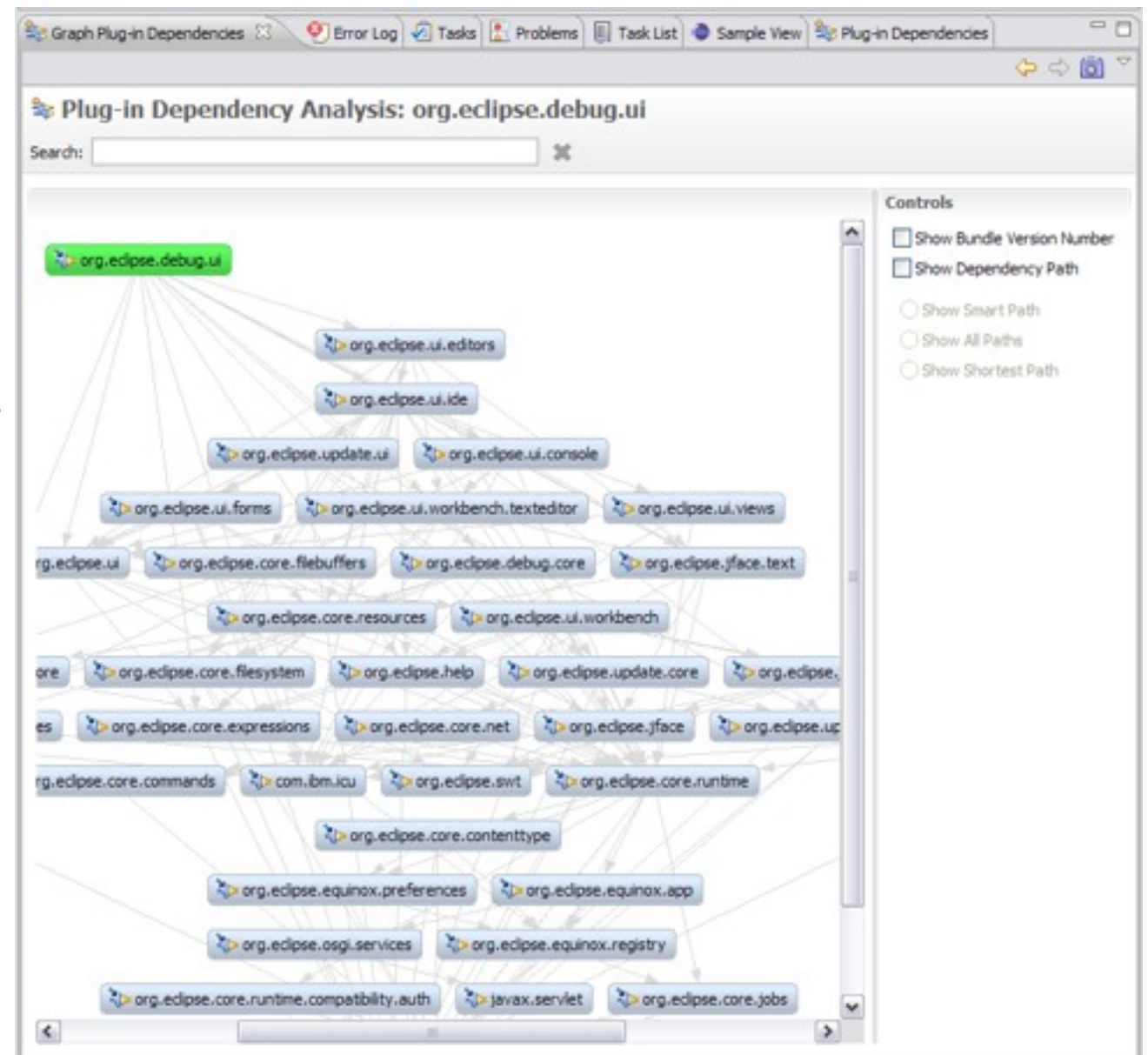
Export to Running Instance (3.5M3)

- PDE now supports exporting to the current running platform



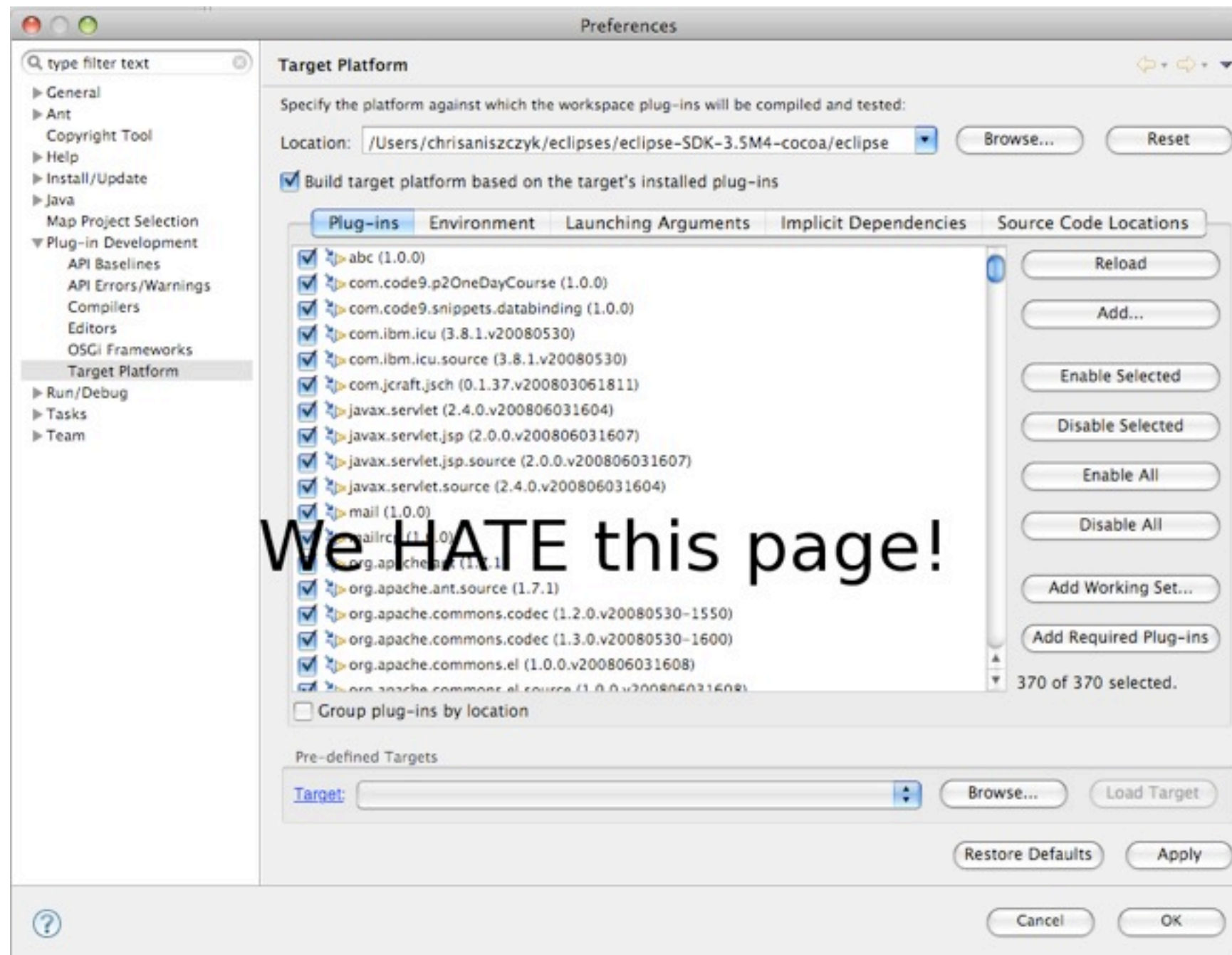
*Graph Plug-in Dependencies View (3.5M5)

- PDE Incubator Project
- Visualize your dependencies
- Pictures are worth a thousand words
- Looking to graduate in 3.5



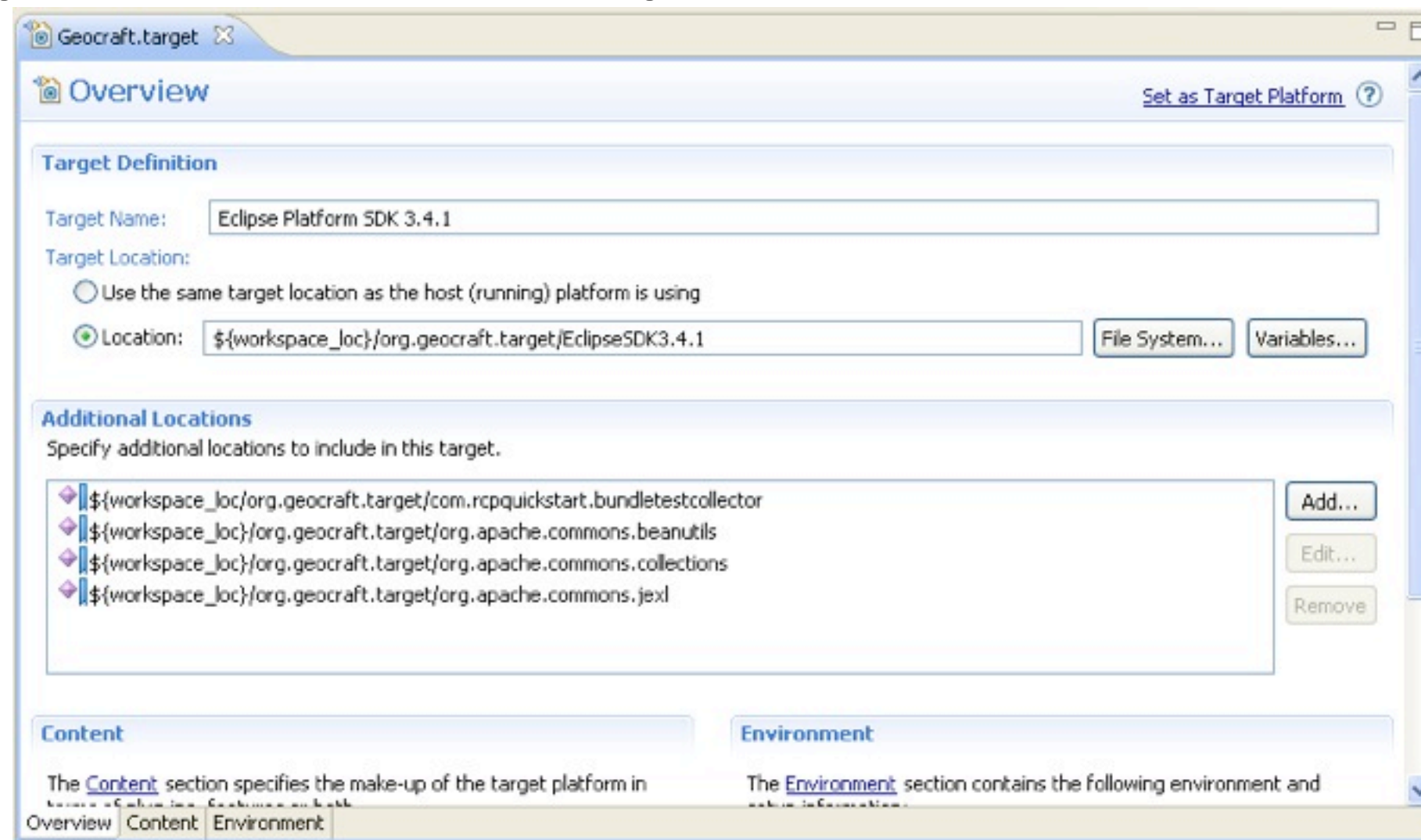
* <http://www.eclipse.org/pde/incubator/dependency-visualization/>

*Target Management Improvements (3.4M5)



*Target Management Improvements (3.4M5)

- Target definitions to be used by default
- *Target itself will be managed by p2
- *Target can be self-provisioned using p2



Custom Schema Types (3.5M5)

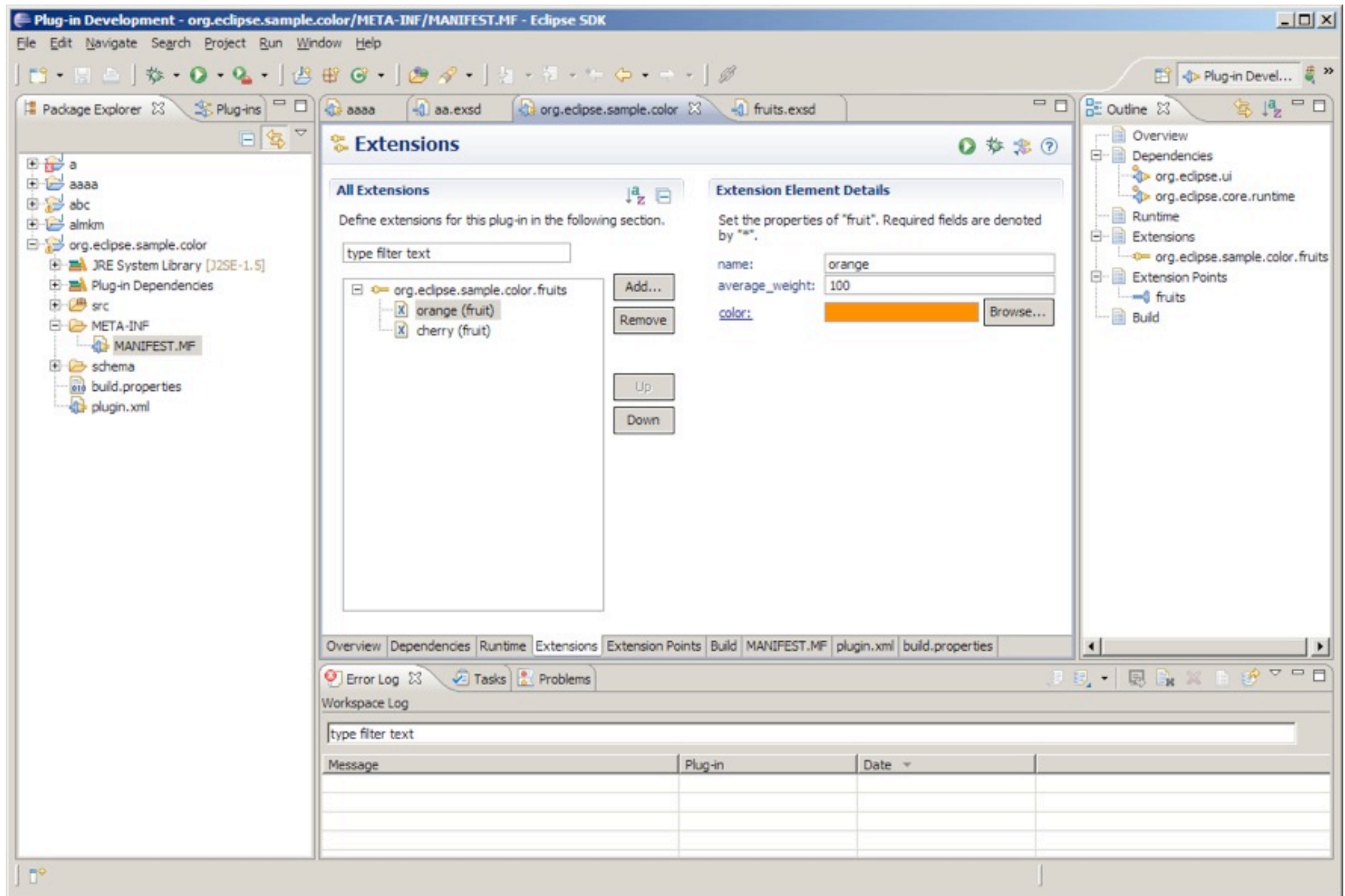
- Currently, there are five types of attribute types:
 - Resource
 - Java
 - Identifier
 - String
 - Boolean
- This will allow people to plug-in their own types in... what does that mean?

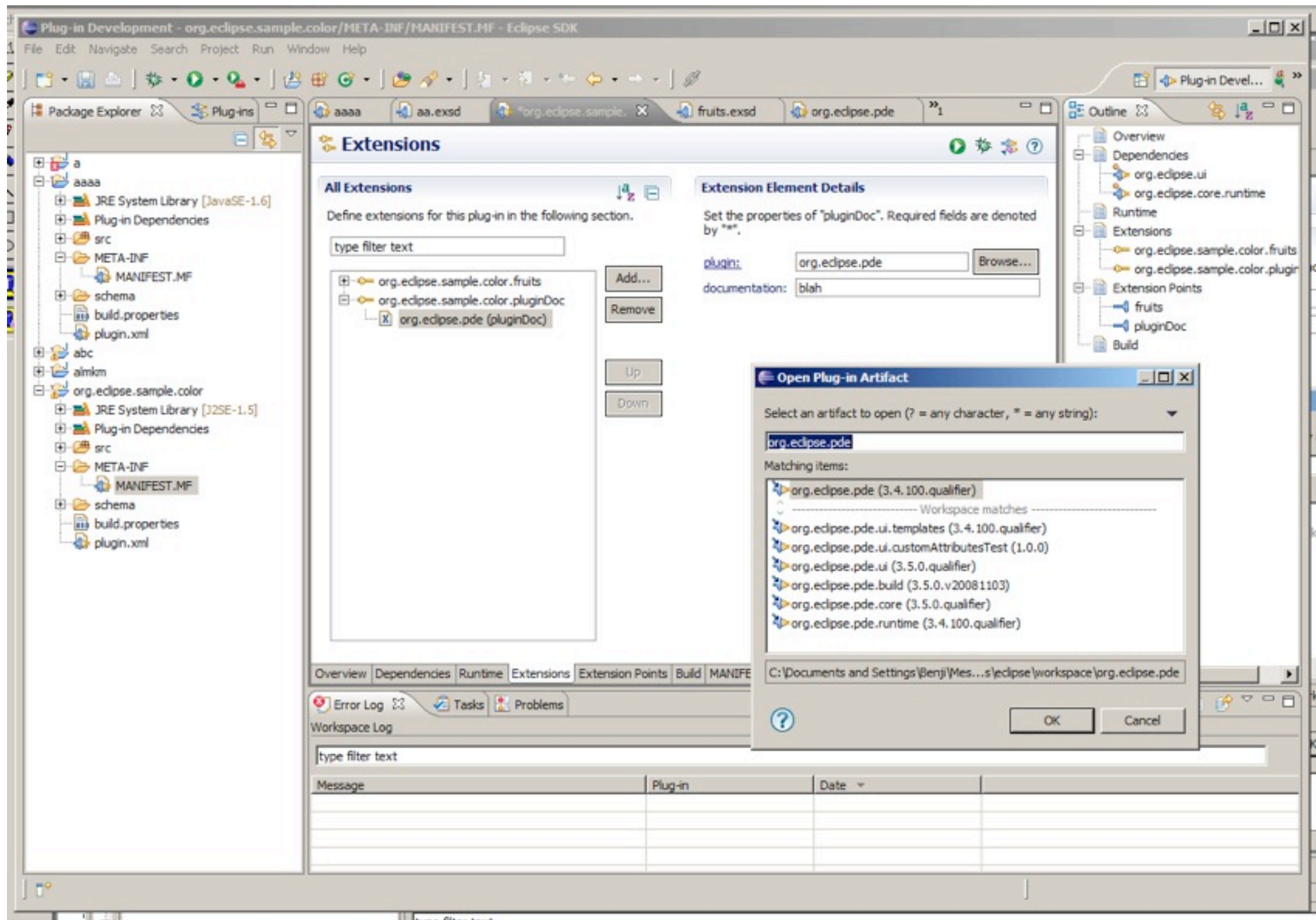
Extension Element Details

Set the properties of "new_element". Required fields are denoted by "*".

Platform*: ☒ win32 ☐ wpf ☒ carbon ☐ cocoa
☐ gtk ☒ motif ☒ photon

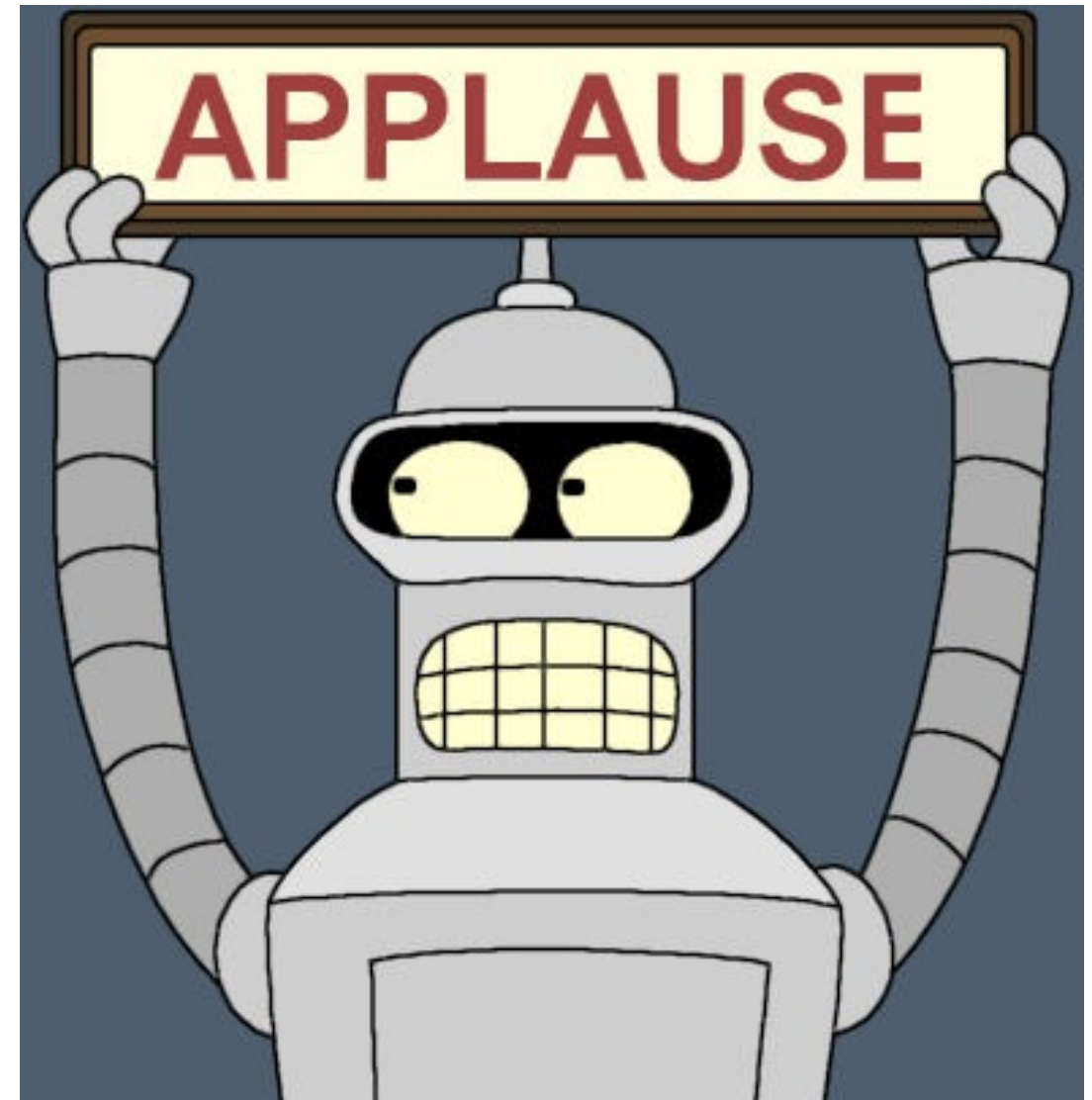
Preview:





Conclusion

- <http://www.eclipse.org/pde>
- PDE is only as good as you want it to be... so please file bugs for influence!
- Want to contribute?
 - PDE Bug Day
 - <http://wiki.eclipse.org/BugDay>
- Thank you!



Questions?

Suggestions?

Requests?

Suggestion Box

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