

## EDIT - task #6745

feature request # 7431 (New): [MASTER] remaining E4 migration issues

### Investigate how e4 model changes affect the cached application model in existing Taxeditor installation

06/21/2017 07:22 AM - Patrick Plitzner

Status:	New	Start date:	
Priority:	Highest	Due date:	
Assignee:	Katja Luther	% Done:	0%
Category:	taxeditor	Estimated time:	0:00 hour
Target version:	Reviewed Next Major Release		
Severity:	normal		

#### Description

The application model of the Taxeditor is stored in {home}/.cdmLibrary/.metadata/.plugins/org.eclipse.e4.workbench/workbench.xmi. This stores all parts, menu items, commands, etc.

While we are still migrating from e3 to e4 and make a lot of changes to the model there could be situation when after installing a new taxeditor (for developers: after git pull) new GUI objects do not show up because of the existing application model cache. Deleting the workbench.xmi file solves this problem (developers can also add -clearPersistedState to the program arguments in the launch configuration of the taxeditor).

We could think about about delivering an extra a batch file that starts the editor with the -clearPersistedState parameter in order to once reset the application model. Afterwards the editor could be started normally. Having this parameter set for every launch would always lead to a fresh application model i.e. none of the layout of the windows are opened editors would be restored.

We should look at the parameter apply in the org.eclipse.e4.workbench.model extension point which defines when a model fragment should be applied to the cached one.

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This ticket may also include restore functionality of name editors ([#7071](#))

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a lot of eclipse initialization and lifecycle management is defined in plugin.xml of taxeditor.application

The screenshot shows the Eclipse Extensions view. On the left, the 'All Extensions' list displays a tree structure of available extensions. A specific entry under 'org.eclipse.core.runtime.products' is selected: 'EDIT Taxonomic Editor (product)'. This entry has several properties listed under it, including 'appName', 'aboutImage', 'aboutText', 'windowImages', 'startupForegroundColor', 'startupMessageRect', 'startupProgressRect', 'lifeCycleURI', 'modelResourceHandler', and 'preferenceCustomization'. The 'modelResourceHandler' property is currently highlighted. On the right, the 'Extension Element Details' panel shows the properties for the selected element. The 'name\*' field is set to 'modelResourceHandler' and the 'value\*' field is set to 'bundleclass://eu.etaxonomy.taxeditor.application/eu.etaxon...'. There are also 'Add...', 'Remove', 'Up', and 'Down' buttons for managing the list of properties.

#### Related issues:

Related to EDIT - task #6839: remove old workbench.xmi from .cdmlibrary	<b>Rejected</b>
Related to EDIT - feature request #7071: Reenable restore functionality	<b>New</b>
Related to EDIT - feature request #7007: Migrate IMemento functionality	<b>Rejected</b>
Related to EDIT - bug #7997: Some editor windows do not open at the expected ...	<b>New</b>

## Associated revisions

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### Revision 1818a5f4 - 07/06/2017 11:47 AM - Patrick Plitzner

fix #6776 ref #6745 Parts with tag "nonRestore" will not be persisted

- they will be removed from the application model before it is saved

### Revision 0cf9635f - 07/06/2017 02:55 PM - Patrick Plitzner

fix #6776 ref #6745 Parts with tag "nonRestore" will not be persisted

- they will be removed from the application model before it is saved

### Revision f8f1f3fe - 07/10/2017 10:18 AM - Patrick Plitzner

ref #6745 Change save location of workbench.xmi

- Register own copy of ResourceHandler to handle loading and storing of the application model

### Revision 8c8d24e5 - 07/10/2017 01:55 PM - Patrick Plitzner

ref #6745 Change location of workbench.xmi to {install}/configuration

## History

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### #1 - 06/21/2017 07:36 AM - Patrick Plitzner

- Tags set to eclipse4

### #2 - 06/21/2017 10:20 AM - Andreas Müller

Ja, das ist ein wichtiges Thema. Insbesondere wenn man nightly häufig neuinstalliert, bekommt man beim ersten mal immer Probleme, weil er irgendwas öffnen will was irgendwo wohl mal geöffnet war, obwohl ich in der Zwischenzeit der Editor schon sehr häufig mit anderem Layout geschlossen habe.

Ich habe das noch nicht systematisch untersucht, aber sollten wir machen.

### #3 - 06/29/2017 10:38 PM - Patrick Plitzner

- Subject changed from Investigate how e4 model changes affect the cached application model in existing Taxeditor installation to Investigate how e4 model changes affect the cached application model in existing Taxeditor installation

### #4 - 07/04/2017 01:43 PM - Andreas Müller

This is a general problem when working with >1 installations of the editor. We should try to store instance specific xmi files

### #5 - 07/06/2017 04:02 PM - Patrick Plitzner

This article might help. Seems like you can programmatically store and load the application model.

<http://www.vogella.com/tutorials/Eclipse4ModelPersistence/article.html>

### #6 - 07/31/2017 07:40 PM - Andreas Müller

- Related to task #6839: remove old workbench.xmi from .cdmlibrary added

### #7 - 09/15/2017 12:30 PM - Patrick Plitzner

After implementing #6847 the launch flag -clearPersistedState does not seem to work anymore. During development you have to manually delete the workbench.xmi in {workspace}/.metadata/.plugins/org.eclipse.pde.core/.bundle\_pool/configuration

Maybe we can implement a switch for dev and release

### #8 - 10/25/2017 02:37 PM - Patrick Plitzner

Andreas:

"[Im Editor] der noch keine Verbindung zu einer DB hat, wird versucht, einen Nameeditor zu öffnen. Das scheint mir nicht sinnvoll. Es sollte erst nach öffnen der Verbindung passieren."

Wenn ich dann in den ausgegrauten Nameeditor klicke, bekomme ich zudem folgende NPE:

Ich habe das jetzt nochmal beobachtet. Es passiert immer, wenn man mehrere TaxEditor Instanzen parallel auf hat. Dann übernimmt er die Information von der bereits geöffneten Instanz. Da müssen wir uns noch was ausdenken."

```
login :  
  
editor version : 4.11.0.201710181800  
  
server : ()  
  
schema version :  
  
os : Windows Server 2012 R2 6.3 amd64  
  
java : 1.8.0_121  
  
org.eclipse.swt.SWTException: Failed to execute runnable (org.eclipse.e4.core.di.InjectionException: java.lang.NullPointerException)  
  
        at org.eclipse.swt.SWT.error(SWT.java:4533)  
        at org.eclipse.swt.SWT.error(SWT.java:4448)  
        at org.eclipse.swt.widgets.Synchronizer.runAsyncMessages(Synchronizer.java:185)  
        at org.eclipse.swt.widgets.Display.runAsyncMessages(Display.java:4211)  
        at org.eclipse.swt.widgets.Display.readAndDispatch(Display.java:3827)  
        at org.eclipse.e4.ui.internal.workbench.swt.PartRenderingEngine$4.run(PartRenderingEngine.java:1121)  
        at org.eclipse.core.databinding.observable.Realm.runWithDefault(Realm.java:336)  
        at org.eclipse.e4.ui.internal.workbench.swt.PartRenderingEngine.run(PartRenderingEngine.java:1022)  
        at org.eclipse.e4.ui.internal.workbench.E4Workbench.createAndRunUI(E4Workbench.java:150)  
        at org.eclipse.ui.internal.Workbench$5.run(Workbench.java:693)  
        at org.eclipse.core.databinding.observable.Realm.runWithDefault(Realm.java:336)  
        at org.eclipse.ui.internal.Workbench.createAndRunWorkbench(Workbench.java:610)  
        at org.eclipse.ui.PlatformUI.createAndRunWorkbench(PlatformUI.java:148)  
        at eu.etaxonomy.taxeditor.Application.start(Application.java:24)  
        at org.eclipse.equinox.internal.app.EclipseAppHandle.run(EclipseAppHandle.java:196)  
        at org.eclipse.core.runtime.internal.adaptor.EclipseAppLauncher.runApplication(EclipseAppLauncher.java:134)  
        at org.eclipse.core.runtime.internal.adaptor.EclipseAppLauncher.start(EclipseAppLauncher.java:104)  
        at org.eclipse.core.runtime.adaptor.EclipseStarter.run(EclipseStarter.java:388)  
        at org.eclipse.core.runtime.adaptor.EclipseStarter.run(EclipseStarter.java:243)  
        at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)  
        at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)  
        at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)  
        at java.lang.reflect.Method.invoke(Method.java:498)  
        at org.eclipse.equinox.launcher.Main.invokeFramework(Main.java:673)  
        at org.eclipse.equinox.launcher.Main.basicRun(Main.java:610)  
        at org.eclipse.equinox.launcher.Main.run(Main.java:1519)  
  
Caused by: org.eclipse.e4.core.di.InjectionException: java.lang.NullPointerException
```

```
        at org.eclipse.e4.core.internal.di.MethodRequestor.execute(MethodRequestor.java:65)
        at org.eclipse.e4.ui.internal.di.UIEventObjectSupplier$UIEventHandler$1.run(UIEventObjectSupplier.java:56)
        at org.eclipse.swt.widgets.RunnableLock.run(RunnableLock.java:35)
        at org.eclipse.swt.widgets.Synchronizer.runAsyncMessages(Synchronizer.java:182)
        ... 23 more

Caused by: java.lang.NullPointerException
        at eu.etaxonomy.taxeditor.navigation.navigator.e4.TaxonNavigatorE4.updateCurrentTaxon(TaxonNavigatorE4.java:210)
        at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
        at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
        at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
        at java.lang.reflect.Method.invoke(Method.java:498)
        at org.eclipse.e4.core.internal.di.MethodRequestor.execute(MethodRequestor.java:55)
        ... 26 more
```

#### #9 - 05/16/2018 02:15 PM - Patrick Plitzner

- Related to feature request #7071: Reenable restore functionality added

#### #10 - 05/16/2018 02:15 PM - Patrick Plitzner

- Related to feature request #7007: Migrate IMemento functionality added

#### #11 - 05/18/2018 01:43 PM - Andreas Müller

- Parent task set to #6565

#### #12 - 05/18/2018 02:06 PM - Andreas Müller

- Parent task changed from #6565 to #7431

#### #13 - 05/18/2018 02:25 PM - Andreas Müller

- Description updated

#### #14 - 08/22/2018 11:26 AM - Andreas Müller

- Target version changed from Unassigned CDM tickets to Release 5.4

#### #15 - 10/19/2018 03:05 PM - Patrick Plitzner

- Target version changed from Release 5.4 to Release 5.5

#### #16 - 10/23/2018 10:36 AM - Patrick Plitzner

- Target version changed from Release 5.5 to Release 5.6

#### #17 - 01/17/2019 08:20 AM - Patrick Plitzner

- Related to bug #7997: Some editor windows do not open at the expected location added

#### #18 - 02/20/2019 03:42 PM - Patrick Plitzner

- Priority changed from New to Highest

#### #19 - 02/20/2019 03:47 PM - Patrick Plitzner

- Target version changed from Release 5.6 to Reviewed Next Major Release

#### #20 - 11/18/2019 01:14 PM - Andreas Müller

- Tags changed from *eclipse4* to *eclipse4, pp\_uebergabe*

**#21 - 11/18/2019 01:15 PM - Andreas Müller**

- Assignee changed from *Patrick Plitzner* to *Katja Luther*

**#22 - 12/06/2019 12:16 PM - Patrick Plitzner**

- Tags changed from *eclipse4, pp\_uebergabe* to *eclipse4*

- File *picture298-1.png* added

- Description updated

**Files**

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picture298-1.png	75.9 KB	12/06/2019	Patrick Plitzner
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