

EDIT - bug #9356

Comparison method violates its general contract for SourceComparator and TypeDesignationComparator

12/10/2020 02:02 PM - Katja Luther

Status:	Closed	Start date:	
Priority:	Highest	Due date:	
Assignee:	Katja Luther	% Done:	70%
Category:	taxeditor	Estimated time:	0:00 hour
Target version:	Release 5.19	Found in Version:	
Severity:	normal		
Description			
There are two comparators violating the contract: SourceComparator in taxeditor and typeDesignationComparator in cdmlib			
<pre>last remote method : http://api.cybertaxonomy.org:80/casearia/remoting/common.service last remote request client time : 2020-12-10T09:49:21.702 last remote request response header time : Thu, 10 Dec 2020 09:49:21 GMT client error time : 2020-12-10T09:49:21.745 login : a.demestier editor version : 5.18.0 server : api.cybertaxonomy.org (cybertaxonomy.org) / casearia schema version : 5.18.6.0.20201124 os : Windows 7 6.1 amd64 java : 1.8.0_121 java.lang.IllegalArgumentException: Comparison method violates its general contract! at java.util.TimSort.mergeLo (TimSort.java:777) at java.util.TimSort.mergeAt (TimSort.java:514) at java.util.TimSort.mergeForceCollapse (TimSort.java:457) at java.util.TimSort.sort (TimSort.java:254) at java.util.Arrays.sort (Arrays.java:1512) at java.util.ArrayList.sort (ArrayList.java:1454) at java.util.Collections.sort (Collections.java:175) at eu.etaxonomy.taxeditor.ui.section.AbstractEntityCollectionSection.renderContent (AbstractEntityCollectionSection.java:230) at eu.etaxonomy.taxeditor.ui.section.AbstractEntityCollectionSection.expansionStat eChanged (AbstractEntityCollectionSection.java:316) at org.eclipse.ui.forms.widgets.ExpandableComposite.fireExpanding (ExpandableComp osite.java:1089) at org.eclipse.ui.forms.widgets.ExpandableComposite.toggleState (ExpandableCompos ite.java:1075) at org.eclipse.ui.forms.widgets.ExpandableComposite.access\$5 (ExpandableComposite.j ava:1071) at org.eclipse.ui.forms.widgets.ExpandableComposite\$2.linkActivated (ExpandableComp osite.java:569) at org.eclipse.ui.forms.widgets.AbstractHyperlink.handleActivate (AbstractHyperlink .java:228) at org.eclipse.ui.forms.widgets.AbstractHyperlink.handleMouseUp (AbstractHyperlink. java:322) at org.eclipse.ui.forms.widgets.AbstractHyperlink.access\$2 (AbstractHyperlink.java: 306) at org.eclipse.ui.forms.widgets.AbstractHyperlink\$4.handleEvent (AbstractHyperlink. java:129) at org.eclipse.swt.widgets.EventTable.sendEvent (EventTable.java:84) at org.eclipse.swt.widgets.Display.sendEvent (Display.java:4418) at org.eclipse.swt.widgets.Widget.sendEvent (Widget.java:1079) at org.eclipse.swt.widgets.Display.runDeferredEvents (Display.java:4236) at org.eclipse.swt.widgets.Display.readAndDispatch (Display.java:3824) at org.eclipse.e4.ui.internal.workbench.swt.PartRenderingEngine\$4.run (PartRenderin gEngine.java:1121) at org.eclipse.core.databinding.observable.Realm.runWithDefault (Realm.java:336) at org.eclipse.e4.ui.internal.workbench.swt.PartRenderingEngine.run (PartRenderingE</pre>			

```

ngine.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:20)
            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)

```

Associated revisions

Revision 40d48f6f - 12/11/2020 09:48 AM - Katja Luther

ref #9356: hotfix solution

Revision 56cf64f7 - 12/11/2020 10:02 AM - Katja Luther

ref #9356: hotfix solution

Revision 8e507020 - 01/15/2021 10:00 AM - Katja Luther

ref #9356: adapt TypeDesignationComparator

Revision c018f269 - 01/15/2021 10:11 AM - Katja Luther

ref #9356: remove hotfix workaround

Revision 9c187406 - 01/21/2021 07:23 PM - Andreas Müller

ref #9356 adapt TypeDesignationComparator to fix case when both type status are null ; and cleanup null compare part above

Revision 56613858 - 01/21/2021 08:35 PM - Andreas Müller

ref #9356 clean up SourceComparator

History

#1 - 12/10/2020 03:29 PM - Andreas Müller

- Status changed from *New* to *In Progress*
- Target version changed from *Unassigned CDM tickets* to *Release 5.19*

#2 - 01/15/2021 10:12 AM - Katja Luther

- Status changed from *In Progress* to *Resolved*
- Assignee changed from *Katja Luther* to *Andreas Müller*
- % Done changed from *0* to *50*

adapted the comparator in cdmlib and removed hotfix workaround, please review.

#3 - 01/21/2021 07:34 PM - Andreas Müller

- Status changed from *Resolved* to *Feedback*
- Assignee changed from *Andreas Müller* to *Katja Luther*

For TypeDesignationComparator the line

```
return o1.getUuid().compareTo(o2.getUuid());
```

will never be reached as if any of the type status are null 1 or -1 is returned before.

I adapted the code to make the different cases clearer.

Can you please review the code?

It would be good to have tests on such tests so these errors can be found easily.

#4 - 01/21/2021 08:16 PM - Andreas Müller

- % Done changed from 50 to 70

The SourceComparator looks fine. I only cleaned it up a bit.

#5 - 01/22/2021 09:14 AM - Katja Luther

- Status changed from Feedback to Closed

Andreas Müller wrote:

For TypeDesignationComparator the line

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```

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Can you please review the code?

It would be good to have tests on such tests so these errors can be found easily.

looks fine