

EDIT - bug #7046

replace open session per view pattern by DTO strategy

11/02/2017 10:35 AM - Andreas Kohlbecker

Status:	Closed	Start date:	
Priority:	Highest	Due date:	
Assignee:	Andreas Kohlbecker	% Done:	40%
Category:	cdm-vaadin	Estimated time:	0:00 hour
Target version:	Release 4.11	Found in Version:	
Severity:	critical		
Description			
<p>In #6687 the open session per view pattern has been implemented for the cdm-vaadin mvp framework.</p> <p>It turned out that this approach is causing problems since a session opened in one view needs to be reused in multiple request threads. In order to accomplish this it is always required to have a transaction open for the whole lifetime of the view which causes an open database connection for the same time. The database connection pool is limited to a maximum amount of open connections and can thus run out of available connections when too many views are opened at the same time. This situation is becoming worse if vaadin views are not destroyed fast enough so that the resource are being freed quickly (#7047).</p> <p>As explained in VaadinNotes the best way to avoid LazyInitializationExceptions is to use DTOs or entity bean initialization strategies. This will not only allow to free database connections as quickly as possible but also avoids managing long transactions logs at in the database itself.</p> <p>TODO:</p> <ul style="list-style-type: none">• remove all open session per view pattern code• use bean init-strategies to avoid LazyInitializationExceptions• in order to save edited entities, open a new clean session, merge the modified entity and flush and commit<ul style="list-style-type: none">◦ In future we may want to check for intermediate modifications of the entity by other users. I case a modification by someone else is detected the application will present a dialog to inform the user that someone else work will be overwritten. The dialog should present a table of all conflicting properties allowing the user to resolve the conflict. #7050			
Related issues:			
Related to EDIT - bug #6687: Multiple representations of the same entity merg...		Closed	
Related to EDIT - bug #7047: Vaadin UI and View scope beans are not always de...		Closed	
Related to EDIT - bug #7036: correctly release vaadin view resources when the...		Closed	

Associated revisions

Revision 2f02081c - 11/02/2017 12:42 PM - Andreas Kohlbecker

ref #7046 completely removing open session per view implementation and adding init strategies for Name and Typedesignation editor

Revision daf5d5b4 - 11/03/2017 12:05 PM - Andreas Kohlbecker

ref #7046 removing request start and end listener classes

Revision d6bdb890 - 11/03/2017 03:10 PM - Andreas Kohlbecker

ref #7046 removing prepareAsFieldGroupDataSource() which was opening connectinos which where never closed and adding missing initStrategies

Revision c986e218 - 11/03/2017 04:16 PM - Andreas Kohlbecker

ref #7046 load by id method in service base class

Revision 02ec8d6b - 11/14/2017 11:39 AM - Andreas Kohlbecker

ref #7059 ref #7046 using kindOfunit for TypeDesisgnations instead of DerivationEvent type and fixing save and LIE problems:

- introducing EntityCache to allow re-using previously loaded entities
- CdmEntityCache implements EntityCache
- ToOneRelatedEntityReloader to replace entities loaded by the LazySelect
- SpecimenTypeDesignationWorkingsetEditorPresenter implements CachingPresenter so that EntityCache and ToOneRelatedEntityReloader can interact
- completing init strategies in RegistrationWorkingSetService
- SpecimenTypeDesignationWorkingsetEditorPresenter.saveBean reuses entities stored in entityCache

- introducing SpecimenTypeDesignationWorkingSetService

History

#1 - 11/02/2017 10:46 AM - Andreas Kohlbecker

- Description updated

#2 - 11/02/2017 11:05 AM - Andreas Kohlbecker

- Related to bug #6687: Multiple representations of the same entity merge problem added

#3 - 11/02/2017 11:05 AM - Andreas Kohlbecker

- Description updated

#4 - 11/02/2017 11:07 AM - Andreas Kohlbecker

- Related to bug #7047: Vaadin UI and View scope beans are not always destroyed correctly added

#5 - 11/02/2017 12:34 PM - Andreas Kohlbecker

- Related to bug #7036: correctly release vaadin view resources when the browser windows has been closed added

#6 - 11/03/2017 10:45 AM - Andreas Kohlbecker

- Status changed from New to In Progress

- % Done changed from 0 to 40

#7 - 11/03/2017 12:28 PM - Andreas Kohlbecker

- Description updated

- Status changed from In Progress to Resolved

- Assignee changed from Andreas Kohlbecker to Fabian Reimeier

@Fabian: The refactoring is completed now. can you please do an in depth check on the distribution editor to confirm that nothing has been broke by these commits? All changes are in a feature branch which will be merged to develop once we know that there are no problems.

#8 - 11/03/2017 03:55 PM - Andreas Kohlbecker

Andreas Kohlbecker wrote:

@Fabian: The refactoring is completed now. can you please do an in depth check on the distribution editor to confirm that nothing has been broke by these commits? All changes are in a feature branch which will be merged to develop once we know that there are no problems.

I fixed some remaining problems and did a fast forward merge of the feature branch into develop. So you can test on develop directly.

#9 - 11/06/2017 05:05 PM - Andreas Müller

I have tested the distribution app intensively and couldn't find an problem, especially no LIE. Even after logout and login again. So maybe we can close this ticket.

#10 - 11/06/2017 05:17 PM - Andreas Kohlbecker

- Status changed from Resolved to Closed

- Assignee changed from Fabian Reimeier to Andreas Kohlbecker

Great thank you for this confirmation, i also could not produce any error. So i am closing this ticket now.