

EDIT - bug #6673

conceptual problems with vaadin Popup editor presenters (AbstractEditorPresenter)

05/29/2017 12:05 PM - Andreas Kohlbecker

Status:	Closed	Start date:	
Priority:	New	Due date:	
Assignee:	Andreas Kohlbecker	% Done:	100%
Category:	cdm-vaadin	Estimated time:	0:00 hour
Target version:	Release 4.8	Found in Version:	
Severity:	critical		
Description			
<p>In a vaadin application it must be possible to open multiple popup editors of the same type. For example to open an editor for the inReference from within the popupeditor of the contained reference. Therefore implementations of the popup editors are spring prototype beans. Here shown at the example of the ReferencePopupEditor:</p> <pre>@SpringComponent @Scope("prototype") public class ReferencePopupEditor extends AbstractCdmPopupEditor<Reference, ReferenceEditorPresenter> implements ReferencePopupEditorView, AccessRestrictedView {</pre> <p>So a new editor bean is created each time a bean is requested. Each editor should have it's own Presenter, so it seems logically to also make the implementations of AbstractEditorPresenter also prototype beans. But this is not possible since it would break the Event bus. The event bus is build using the org.springframework.context.ApplicationEventPublisher and org.springframework.context.event.EventListener annotation at presenter classes. The events are delegated to the listening beans by the SimpleApplicationEventMulticaster which uses the AbstractApplicationEventMulticaster.getApplicationListeners() method to retrieve the listening beans. But in this method the beanFactory.getBean() call would cause the creation of new instances of the prototype presenters, which are not responsible for the view from where the event was published, these new presenters actually have no view at all. The presenters that already exist are never found and are thus not receiving the event.</p> <p>Potential solution:</p> <ul style="list-style-type: none">• Make editor presenters prototype beans and implement a PojoEventListenerManager which manages the presenter beans that have been created already on behalf of Spring. Presenter beans are created in turn of the calls to NavigationManagerBean.findPopupView() (see also #6562). Therefore the NavigationManagerBean will hold a reference to the PojoEventListenerManager -Bean and will delegate Presenters for registration or removal to the PojoEventListenerManager. The PojoEventListenerManager creates ApplicationListener instances for each method annotated with @EventListener and adds them to the EventMulticaster.• One caveat is that the AbstractApplicationEventMulticaster still will create useless prototype presenter beans. This can be avoided by several optional strategies ...<ol style="list-style-type: none">1. Implement a PopupEditorFactory which is responsible for creating the View and Presenter2. Implement a (Popup)PresenterFactory which is responsible for creating Presenter only. The View uses the factory to create the required Presenter. Presenters must not be annotated as @SpringComponent or the like. This factory could be suitable for all types of views. <p>For now the presenters are having the scope "vaadin-view" (@ScopeView) and are thus one presenter is responsible for all editors which can cause last view wins problems. The presenters are always associated with the last view created. This is not causing a problem as long only the last editor is used. Therefore popup editors should be modal at the moment. this is no longer the case since cdm-vaadin 92d4dbe0</p> <p>Due to the above problem the responsibility of a presenter can not be decided by the view instance, this is only possible by the view class, see `AbstractCdmEditorPresenter.isResponsible(EditorViewEvent event)`</p>			
Related issues:			
Related to EDIT - bug #6562: vaadin mvp framwork presenters without view		Closed	
Related to EDIT - bug #7231: replace the SpringApplicationBus by Vaadin4Sprin...		Closed	

Associated revisions

Revision 837c73ee - 05/30/2017 09:30 AM - Andreas Kohlbecker

ref #6673 PojoEventListenerManager to manage pojoes annotated with @EventLister

Revision 92d4dbe0 - 05/30/2017 12:46 PM - Andreas Kohlbecker

fix #6673 implementing the PopupEditorFactory and making all PopEditors and presenters POJOs

Revision dde59526 - 05/30/2017 01:45 PM - Andreas Kohlbecker

ref #6673 removing hacks no longer needed with the PopupEditorFactory

Revision 3a8b638c - 06/02/2017 10:08 PM - Andreas Kohlbecker

ref #6673 comment on deprecated method

History

#1 - 05/29/2017 12:08 PM - Andreas Kohlbecker

- Related to bug #6562: *vaadin mvp framework presenters without view added*

#2 - 05/29/2017 12:15 PM - Andreas Kohlbecker

- Description updated

#3 - 05/29/2017 12:22 PM - Andreas Kohlbecker

- Description updated

#4 - 05/29/2017 03:55 PM - Andreas Kohlbecker

- Description updated

#5 - 05/29/2017 04:35 PM - Andreas Kohlbecker

- Description updated

#6 - 05/29/2017 04:36 PM - Andreas Kohlbecker

- Description updated

#7 - 05/30/2017 09:21 AM - Andreas Kohlbecker

- Description updated

#8 - 05/30/2017 09:22 AM - Andreas Kohlbecker

- Description updated

#9 - 05/30/2017 09:29 AM - Andreas Kohlbecker

- Description updated

#10 - 05/30/2017 12:46 PM - Andreas Kohlbecker

- Status changed from *New* to *Resolved*

- % Done changed from *0* to *50*

Applied in changeset [cdm-vaadin|92d4dbe04f61beac39395ea88245ecbb845ee1c9](#).

#11 - 05/30/2017 12:47 PM - Andreas Kohlbecker

- Target version changed from *Vaadin Taxon Concept Editor* to *Release 4.8*

#12 - 06/02/2017 10:00 PM - Andreas Kohlbecker

- Description updated

#13 - 07/07/2017 09:19 AM - Andreas Kohlbecker

- Status changed from *Resolved* to *Closed*

- % Done changed from *50* to *100*

#14 - 02/01/2018 07:51 AM - Andreas Kohlbecker

- Related to bug #7231: *replace the SpringApplicationBus by Vaadin4Spring Event Bus in scoped contexts added*