





BOF5806

Doing JSF Development in NetBeans IDE

MAKE THE
FUTURE
JAVA

ORACLE®

Program Agenda

- Introduction
- The Challenge:
 - Semantic Search & Navigate (Johannes Weigend)
 - Small Team, Lots of Sites (Glenn Holmer)
 - Build an Application in 3 Weeks (David Heffelfinger)

Speaker: Johannes Weigend

The Challenge: Semantic Search & Navigate

- CTO of QAware GmbH, Munich, Germany
- 20 years of experience building individual software solutions for enterprise customers
- Worked as trainer, architect, consultant and developer
- Focus on Java, JEE since 1996

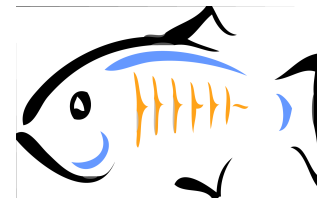
About



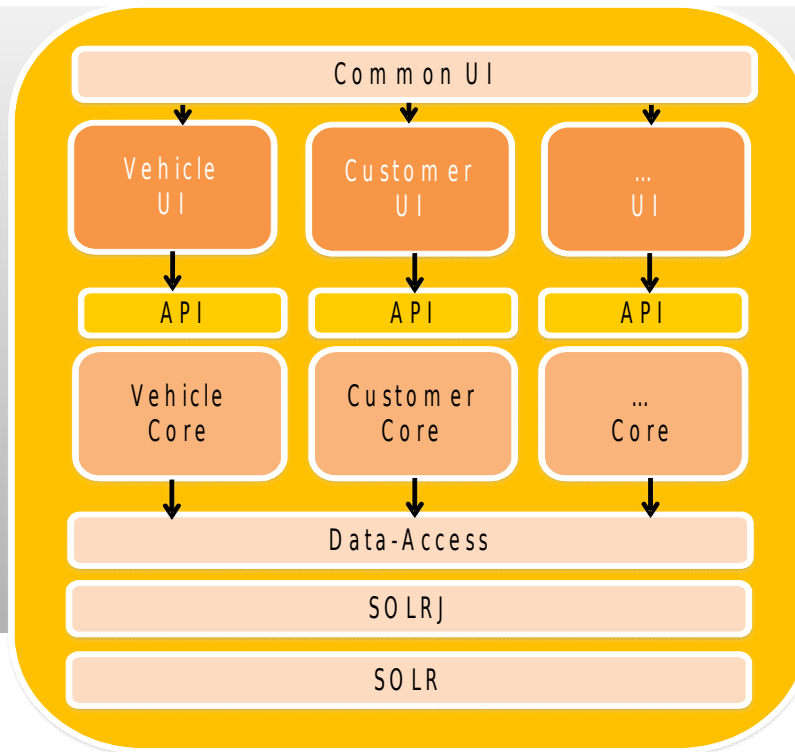
- Aftersales Information Research
- “Google”++ for BMW workshops and others
- **Search and navigate through a sematic network of information (technical and business)**



AiR Architecture in a Nutshell



Glassfish 3.1



- Primefaces 3.4
- JSF 2.1
- CDI

• JEE6 / OSGi

• apache.commons.*

• SOLRJ (Client)

• Apache SOLR (WAR)





Cool in PrimeFaces: AutoComplete

Kunde:

- Thomas Niederle
- Taylor Higgins
- Finianor Jackson
- Tanek Brooks
- Naida Cardenas
- Jeremy Jordan
- Asher Tucker
- Emerald Atkins
- Paul Ken
- Talon Stevens

Suche

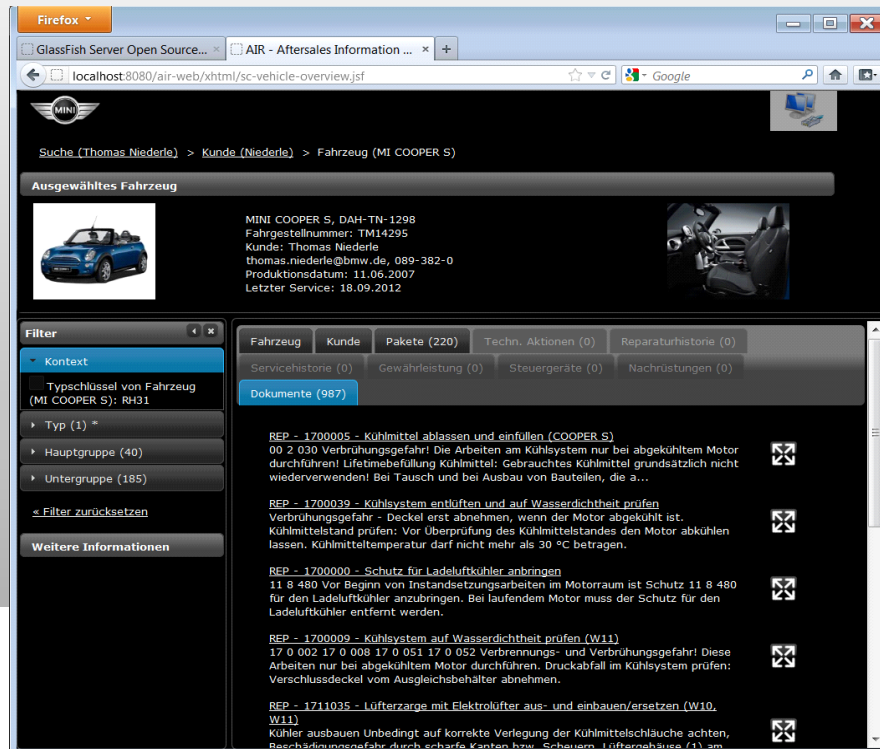
```
95 <h:form id="custSearch">
96   <h:panelGrid columns="3" columnClasses="searchmainTd1">
97     <h:outputLabel for="queryCustomer" value="Kunde:"/>
98     <p:autoComplete id="queryCustomer" queryDelay="400"
99       value="#{sc_search.queryCustomer}" effect="blind"
100       completeMethod="#{sc_search.completeCustomer}" global="false" size="35"
101       styleClass="defaultInput"
102       onFocus="clearInput(['plateSearch:queryPlate_input', 'vinSearch:queryVin'])"/>
103     <p:commandButton value="Suche" action="#{sc_search.doCustomerSearch}" ajax="false"/>
104   </h:panelGrid>
105   <input type="text" style="display:none"/>
106 </h:form>
```

Cool in PrimeFaces: Smart-looking Components

Fullpage Layout

Panel

Accordeon



Tabcontrol

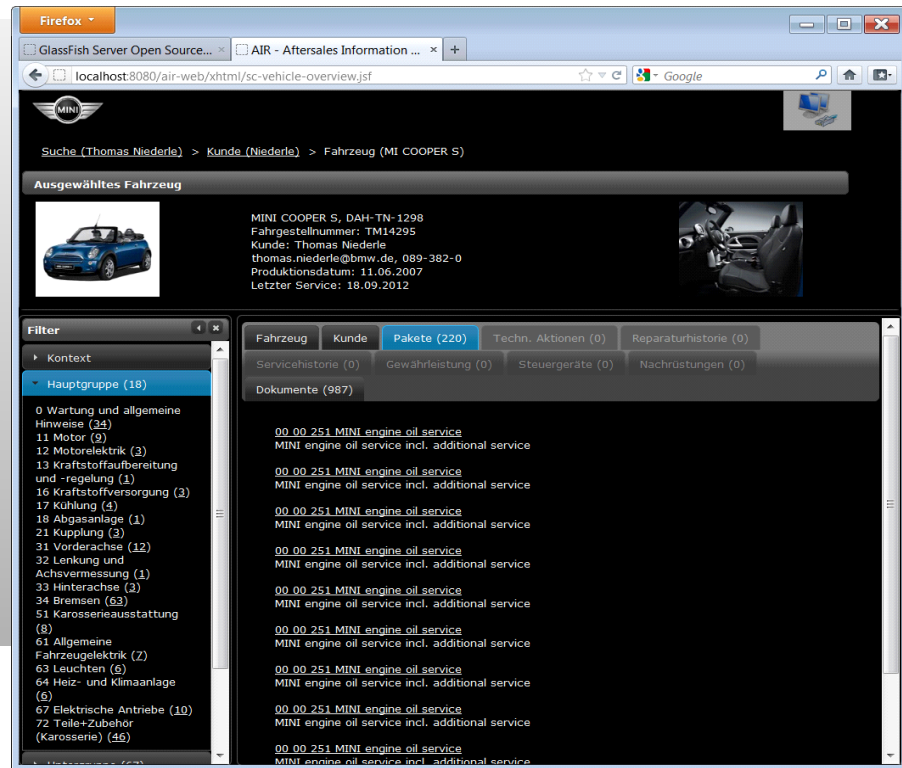
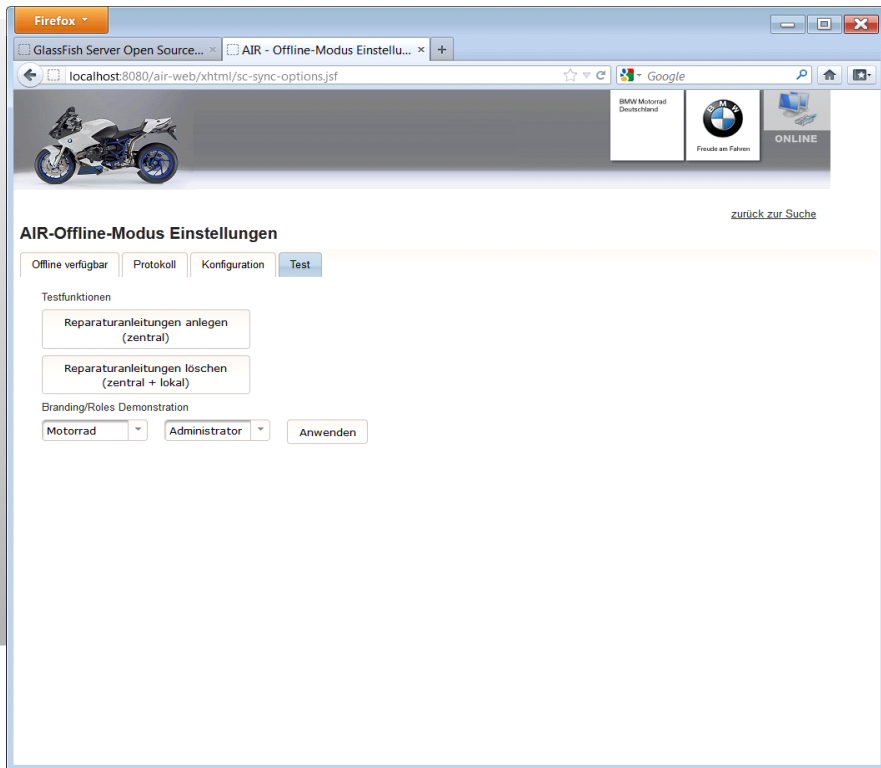
Cool in PrimeFaces: ajaxStatus

Seite aktualisieren		Niederle
Nachname		
Vorname	Thomas	
Adresse	BMW Group Lilienthalallee 32	
Plz	80939	
Ort	München	
Land	Deutschland	

```
<p:ajaxStatus onStart="statusDialog.show();"
onsuccess="statusDialog.hide();"
onerror="alert('Daten konnten nicht vollständig geladen werden.');"
statusDialog.hide();"
/>
```

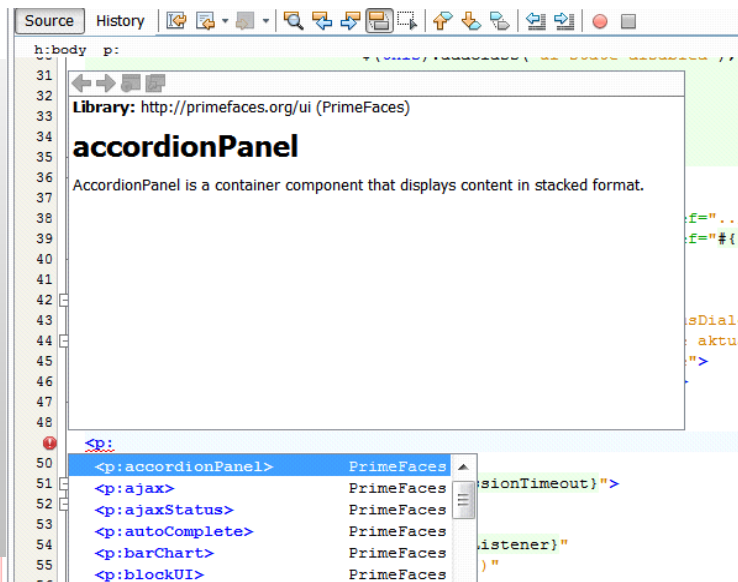
```
<p:dialog modal="true"
widgetVar="statusDialog"
header="Seite aktualisieren"
draggable="false" closable="false" resizable="false">
<p:graphicImage value="../../../resources/ajaxloadingbar.gif"/>
</p:dialog>
```

Cool in PrimeFaces: Runtime Theme Changes



Why We Use NetBeans for JSF Development!

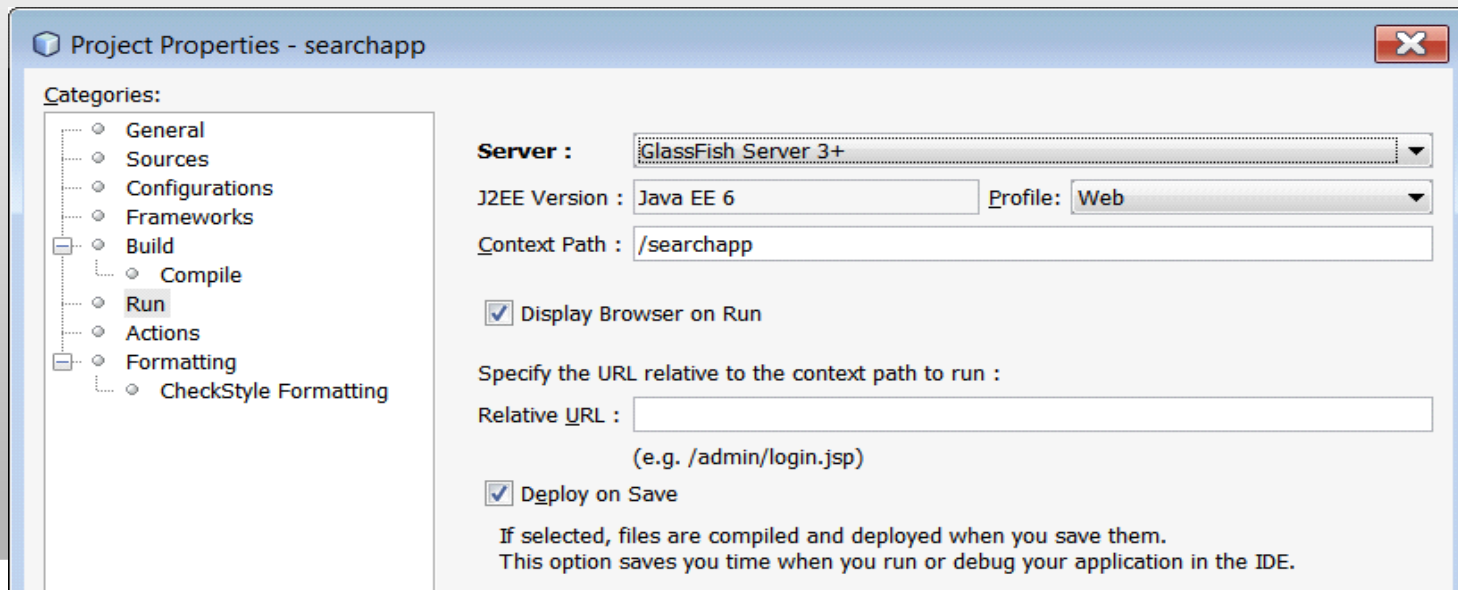
- Code Completion and Navigation



```
<p:panel>
  <h:form>
    Find documents:
    <p:inputText size="20" value="#{searchController.query}"></p:inputText>
    <p:commandButton action="#{searchController.doSearch}" value="Search"/>
  </h:form>
</p:panel>
```

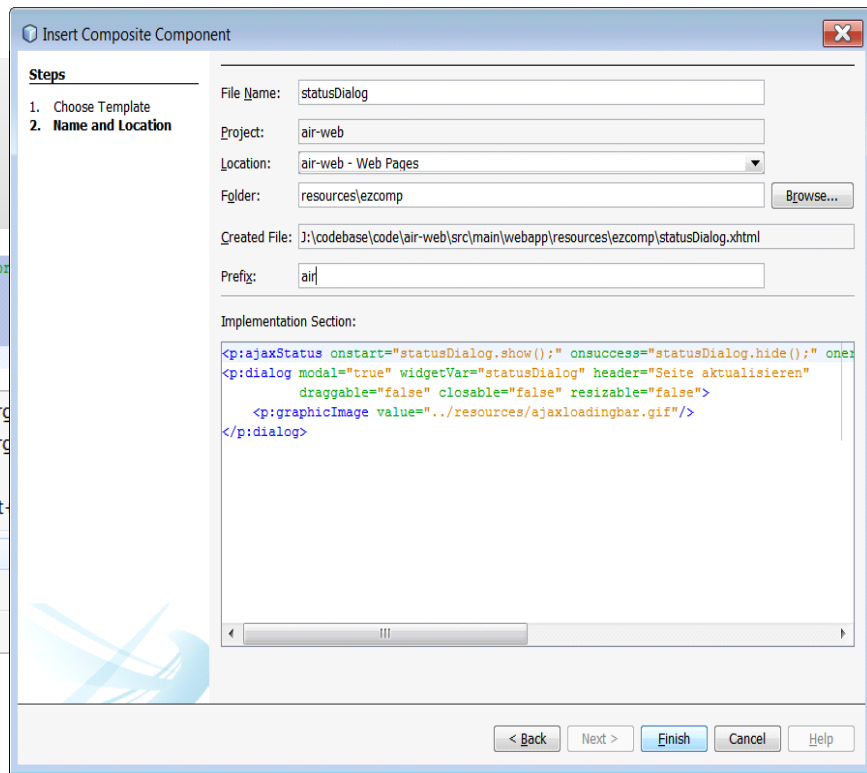
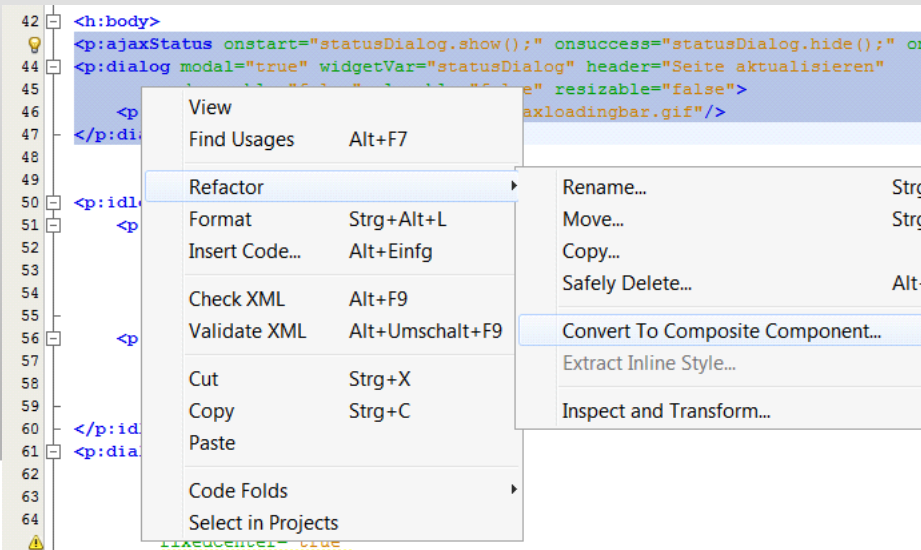

Why We Use NetBeans for JSF Development!

- Deploy on Save



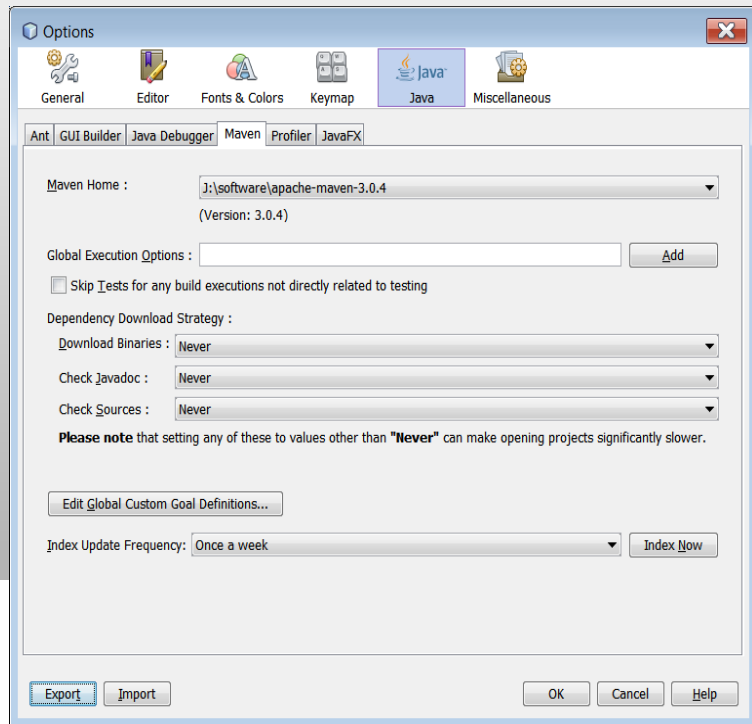
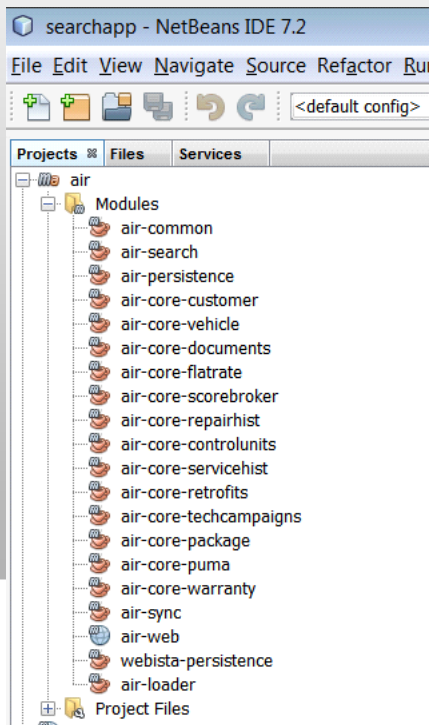
Why We Use NetBeans for JSF Development!

- Refactor Composite Components



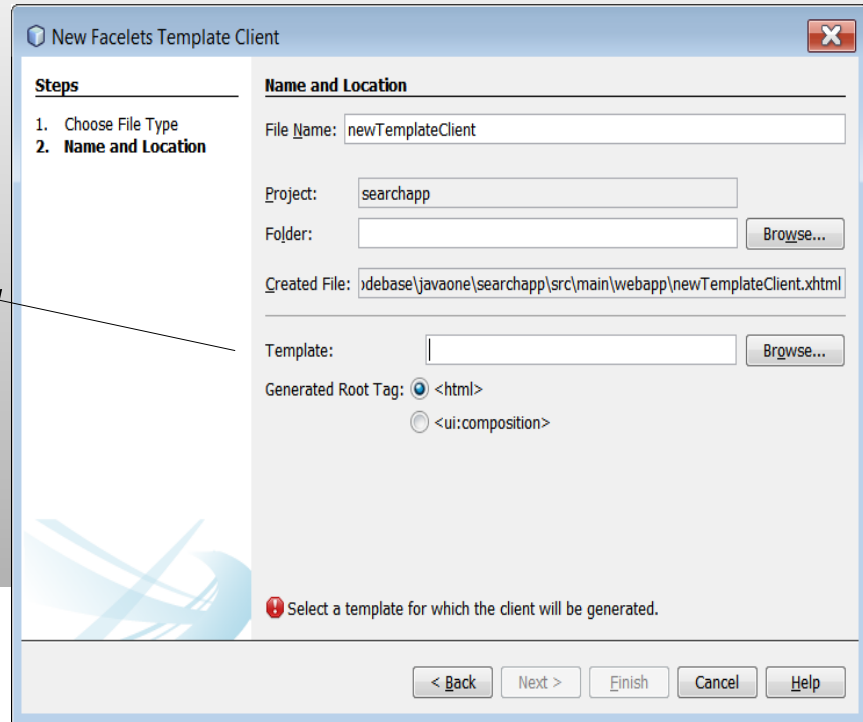
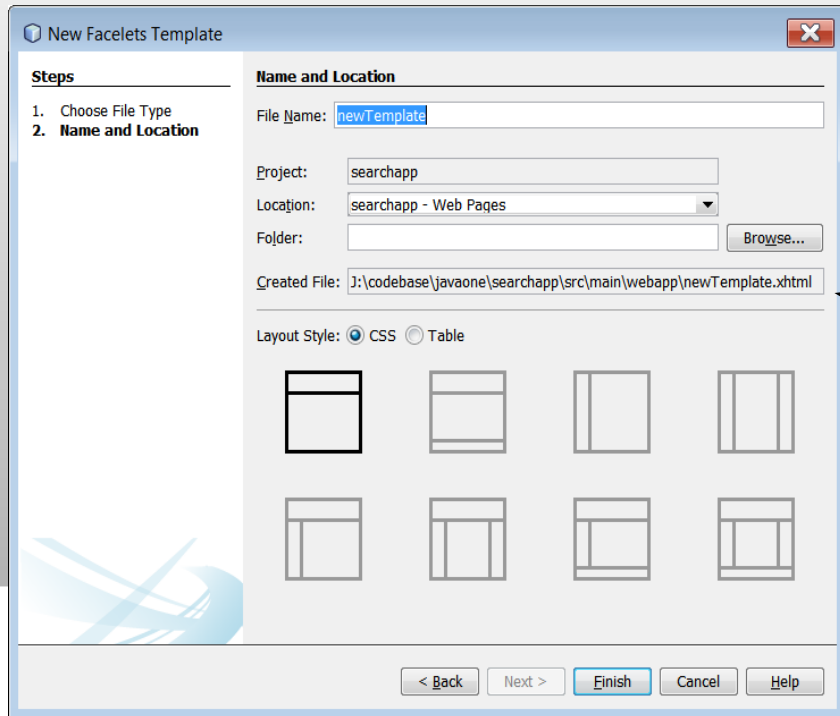
Why We Use NetBeans for JSF Development!

- Very strong Maven Support



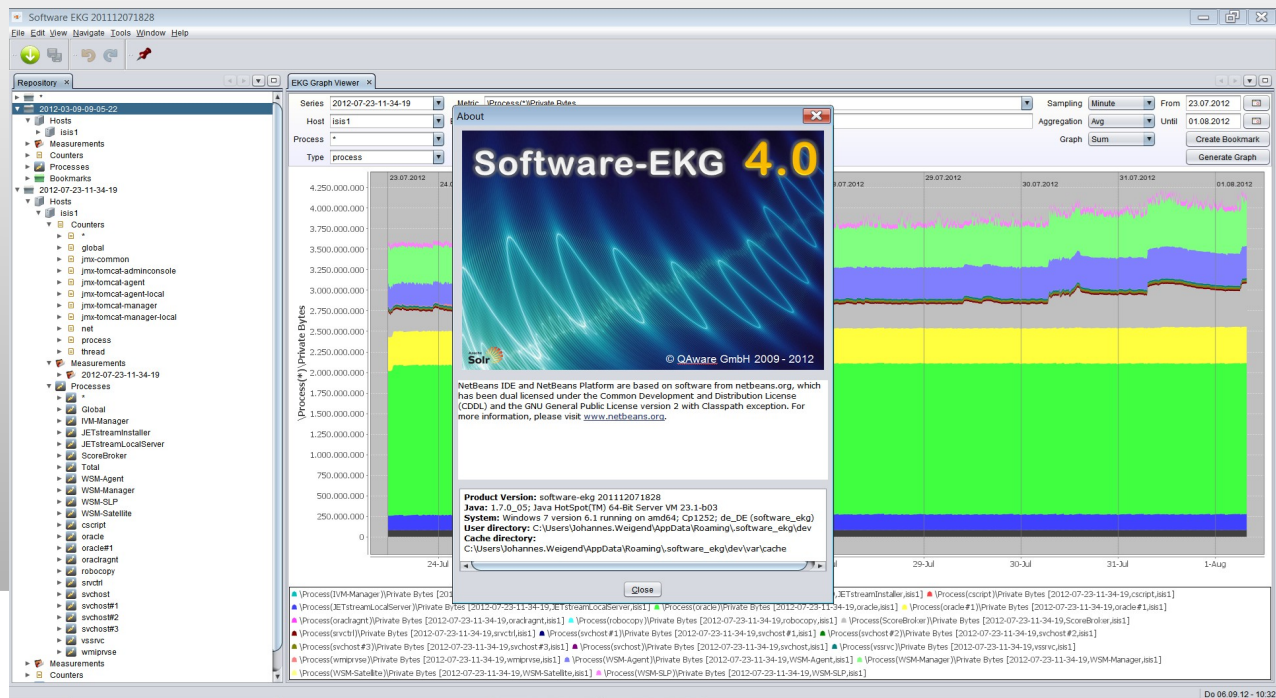
Why We Use NetBeans for JSF Development!

- Facelet Template Support



Why We Use NetBeans for JSF Development!

- NetBeans Platform is open for custom plugins



Why We Use NetBeans for JSF Development!

- More consistent than other open source IDEs
 - Functionality is well tested and works as intended.
 - This is more important than a feature battle.
 - We have been IntelliJ users for years, Eclipse does not work for us, while NetBeans does a perfect job.



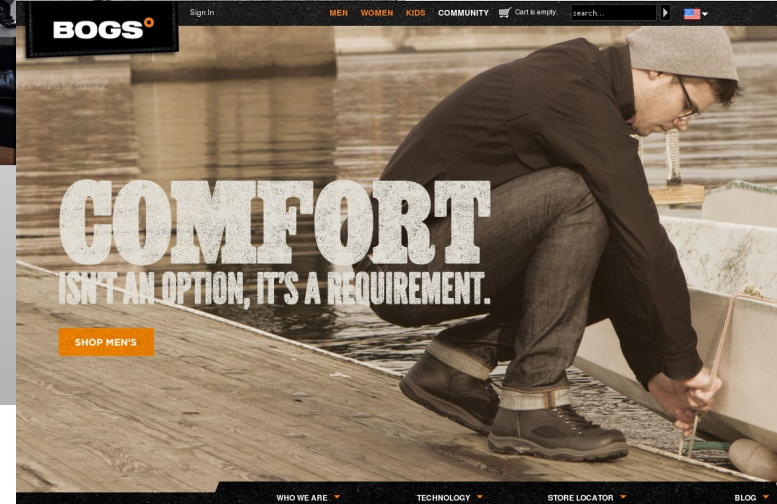
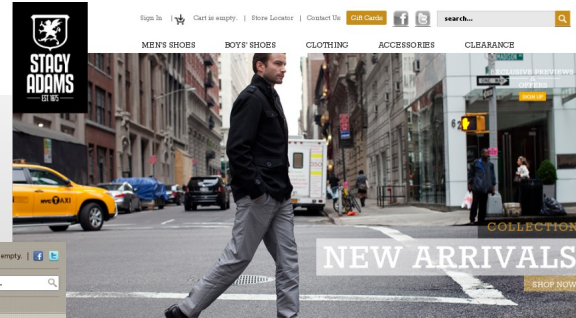
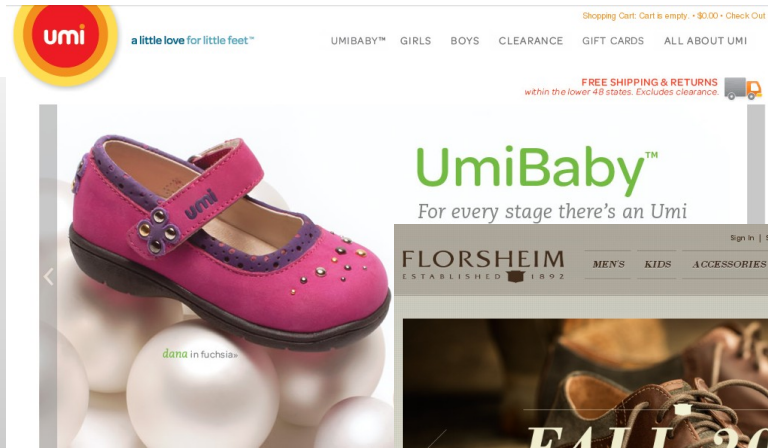


Speaker: Glenn Holmer

The Challenge: Small Team, Lots of Sites

- Team Leader at Weyco Group, Inc.
- Linux systems administrator for our web sites
- Java developer since 1997
- Member of NetCAT testing community

The Challenge: Small Team, Lots of Sites



JSF 2.0 and Facelets to the Rescue

- templating
- view parameters
- component library recognition
- all made manageable by NetBeans!

Facelets Templating

styleGrid.xhtml



mainHeader.xhtml

topCategoryMenu.xhtml

subCategoryMenu.xhtml

search.xhtml, pageMenu.xhtml

"main-content" (ui:insert)

mainGridTemplate.xhtml

Facelets Templating: enclosing page

styleGrid.xhtml

```
1 ui:composition ui:define ice:outputText
2 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
3 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
4 <!-- styleGrid.xhtml -->
5 <ui:composition template="/mainGridTemplate.xhtml">
6     xmlns:ui="http://java.sun.com/jsf/facelets"
7     xmlns:f="http://java.sun.com/jsf/core"
8     xmlns:h="http://java.sun.com/jsf/html"
9     xmlns:ice="http://www.icesoft.com/icefaces/component">
10     <ui:define name="main-content">
11         <f:view>
12             <f:metadata>
13                 <f:viewParam name="topCategoryCode" value="#{categoryAction.topCategoryCode}" />
14                 <f:viewParam name="subCategoryCode" value="#{categoryAction.subCategoryCode}" />
15                 <f:viewParam name="pageNumber" value="#{categoryAction.pageNumber}" />
16             </f:metadata>
17             <f:event type="preRenderView" listener="#{categoryAction.loadGrid}" />
18             <ui:include src="includes/styleGridLayout.xhtml" />
19         </f:view>
20     </ui:define>
```

Facelets Templating: main template

mainGridTemplate.xhtml

```
<h:body>
  <f:view contentType="text/html">
    <ice:form id="mainGrid">
      <div id="wrapper">
        <ui:include src="includes/mainHeader.xhtml"/>
        <ui:include src="includes/subCategoryMenu.xhtml"/>
        <!-- START main area -->
        <ui:insert name="main-content" > main-content (default contents) </ui:insert>
        <ui:include src="includes/mainFooter.xhtml"/>
      </div>
    </ice:form>
  </f:view>
</h:body>
```

View Parameters



customer searches by style

View Parameters: source

search.xhtml

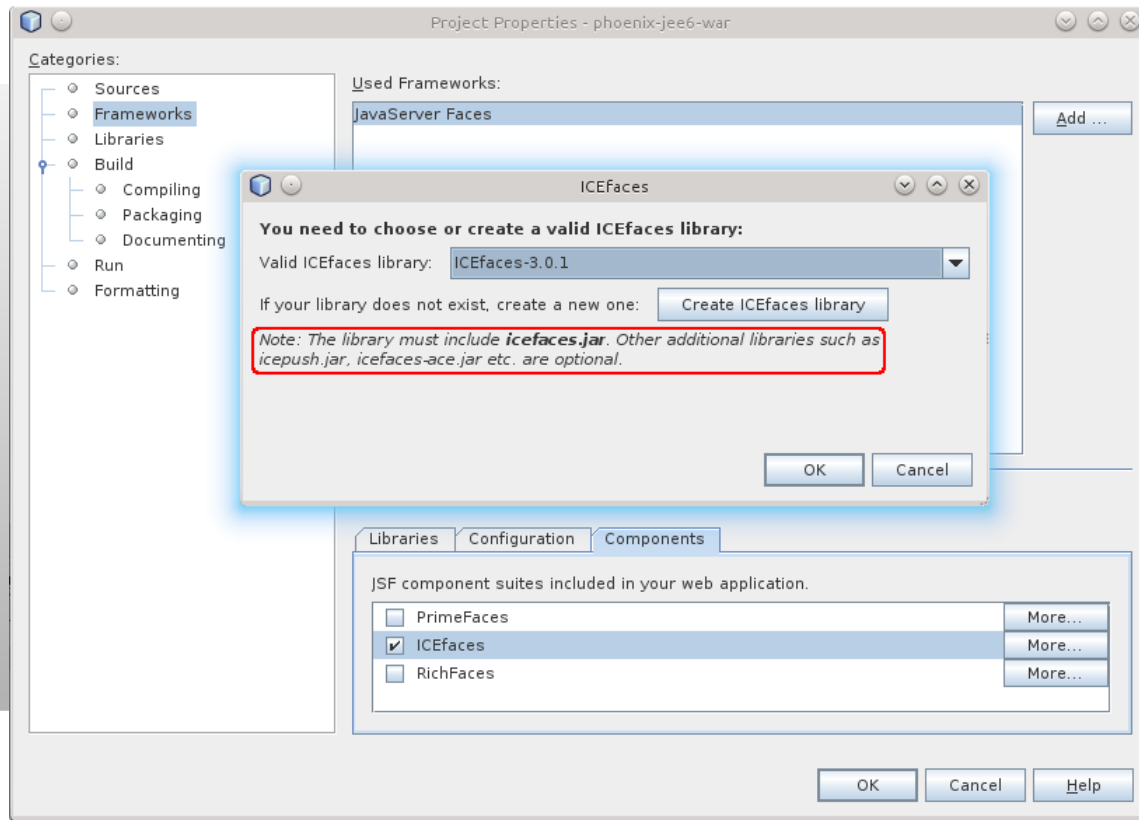
```
<ui:fragment rendered="#{!empty gridView.searchObjects['style']}">
  <div id="filtercolumns" class="offfilter" onmouseover="this.className='onfilter'" onmouseout="th
    <ui:repeat value="#{gridView.searchObjects['style']}" var="topMenuItem">
      <div class="iceMnuBarSearch" id="#{topMenuItem.field}SearchMenu" onmouseout="Ice.Menu.hideOr
        <div class="iceMnuBarItem" id="#{topMenuItem.field}SearchMenu:#{topMenuItem.rowIndex}" onmou
          <span class="iceMnuBarItemLabelSearch">#{!empty categorySearchAction.params[topMenuItem.
        </div>
        <div class="iceMnuBarSubMenuSearch" id="#{topMenuItem.field}SearchMenu:#{topMenuItem.rowIn
          <ui:repeat value="#{topMenuItem.children}" var="subMenuItem">
            <div class="iceMnuItemSearch" id="#{topMenuItem.field}SearchMenu:#{topMenuItem.rowIndex}
              <h:button outcome="styleGridSearch" includeViewParams="true" onmouseover="this.classNa
                value="#{subMenuItem.text}" class="shoefinderLeaf">
                  <f:param name="#{subMenuItem.field}" value="#{subMenuItem.value}" />
                  <f:param name="text" value="" />
                  <f:param name="pageNumber" value="0" />
                  <f:param name="subCategoryCode" value="#{gridView.subCategoryCode}" />
                  <f:param name="price" value="#{gridView.searchDisplayPrice}" />
                  <f:param name="reset" value="#{empty subMenuItem.value ? subMenuItem.field : ''}" />
                </h:button>
              </div>
            </ui:repeat>
          </div>
        </div>
      </ui:repeat>
    </div>
  </div>
</div>
```

View Parameters: target

styleGridSearch.xhtml

```
<ui:define name="main-content">
  <f:view>
    <f:metadata>
      <f:viewParam name="text" value="#{categorySearchAction.searchText}" />
      <f:viewParam name="style" value="#{categorySearchAction.params['style']}" />
      <f:viewParam name="size" value="#{categorySearchAction.params['size']}" />
      <f:viewParam name="width" value="#{categorySearchAction.params['width']}" />
      <f:viewParam name="color" value="#{categorySearchAction.params['color']}" />
      <f:viewParam name="pageNumber" value="#{categorySearchAction.pageNumber}" />
      <f:viewParam name="subCategoryCode" value="#{categorySearchAction.subCategoryCode}" />
      <f:viewParam name="price" value="#{categorySearchAction.price}" />
      <f:viewParam name="styleName" value="#{categorySearchAction.styleName}" />
      <f:viewParam name="reset" value="#{categorySearchAction.reset}" />
    </f:metadata>
    <f:event type="preRenderView" listener="#{categorySearchAction.loadGrid}" />
    <ui:include src="includes/styleGridLayout.xhtml" />
  </f:view>
</ui:define>
```

Component Library Recognition





Speaker: David Heffelfinger

The Challenge: Build an Application in 3 Weeks

- Author of **Java EE 6 Development of NetBeans 7**
- CTO of Enode Technology, LLC
- MS Software Engineering, Southern Methodist University

Building an Enterprise Java EE Application in 3 Weeks With NetBeans

- The kickoff meeting
 - Application employed standard Java EE Technologies (JSF 2, EJB 3.1, JPA, CDI)
 - Demo of the initial prototype plus initial architecture was done using NetBeans
 - NetBeans was recommended, but not required

NetBeans Adoption Within the Team

- Most developers in the team were Eclipse users
- After seeing the demo, **97%** of the development team adopted NetBeans (we had one stubborn IntelliJ Idea user)



Project Was Delivered on Time

- In an astounding feat, we were able to deliver
 - With a less than experienced team
 - In the three weeks allocated

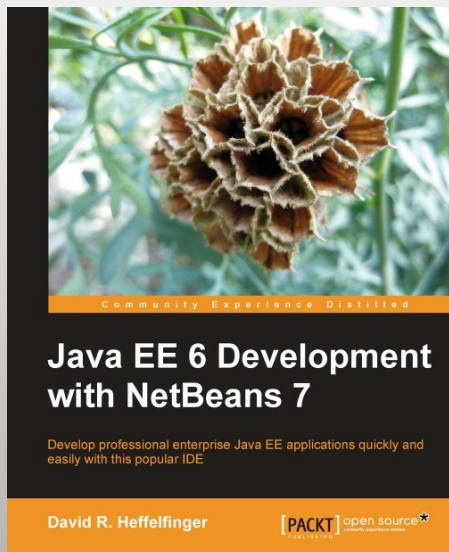


NetBeans Features that Made it Possible

- GlassFish integration
- Eclipse keybindings
- Generation of Facelets template clients
- JPA entity generation
- Facade (DAO) generation



Want to Know More?



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