

Teamcenter客户化开发(四)



Ø添加视图到TC系统 Ø通过视图和服务端进行通信 Ø添加透视图(应用)到TC系统 Ø添加透视图到TC系统右键发送菜单



1.在Eclipse中新建插件工程com.origin. myview。

- 2.在 New Plug-in Project对话框Content 面板, 注意以下事项:
 - a.在Options中, 确保 This plug-in will make contributions to the UI 是选中的。
 - b.确保 Would you like to create a rich client application?.选择No c.点击Next.





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Inter the data requ	ired to generate the plug-in.	
Properties		
<u>I</u> D:	com. origin. myview	
<u>V</u> ersion:	1.0.0. qualifier	
N <u>a</u> me:	Myview	
Provi <u>d</u> er:	ORIGIN	
Execution Environm	ent: JavaSE-1.6	Environments
F Enable API Anal	y <u>s</u> is	
Rich Client Applic Would you like to	ation	C Yes C No
	create a rich client application?	



3.清除 Create a plug-in using one of these templates 选择框, 然后点击完成 Finish。









- 5.替换 <u>Activator.java</u>文件代码。
- 6.添加代码到<u>SampleHandler.java</u>文件。
- 7.添加代码到<u>CustomView.java</u>文件。
- 8.在plugin.xml 文件中进行扩展点的添加:
 - 1) org.eclipse.ui.commands的扩展:





2) org.eclipse.ui.handlers的扩展

```
<extension point="org.eclipse.ui.handlers">
        <handler
            commandId="com.origin.myview.commands.sampleCommand"
            class="com.origin.myview.handlers.SampleHandler">
            </handler>
        </extension>
```





3) org.eclipse.ui.menus的扩展

```
<extension point="org.eclipse.ui.menus">
     <menuContribution
             locationURI="menu:org.eclipse.ui.main.menu?after=additions">
             <menu
                  label="Sample Menu"
                   mnemonic="M"
                   id="com.origin.myview.menus.sampleMenu">
                <command
                    commandId="com.origin.myview.commands.sampleCommand"
                    mnemonic="S"
                    id="com.origin.myview.menus.sampleCommand">
                   <visibleWhen>
                          <reference
definitionId="com.origin.myview.inMainView" />
                   </visibleWhen>
               </command>
         </menu>
     </menuContribution>
 </extension>
```





4) org.eclipse.ui.views的扩展

```
<extension point="org.eclipse.ui.views">
     <view name="MyCom Custom View"
        class="com.origin.myview.views.CustomView"
        id="com.origin.myview.views.CustomView">
        </view>
     <//extension>
```



5) org.eclipse.core.expressions.definitions的扩展



6) 扩展后的结构是:

Define extensions for this plug-in in the following section. type filt text org eclipse ui. commands Add ID: ID: ID: Name: ID: ID:	All Extensions	↓ ^a z ⊡	Extensi
type filt text ID: ID: ID: Name: ID:<	Define extensions for this plug—in in the following sect	i on.	Set the j denoted l
Image: Stress org. eclipse. ui. commands Image: Stress org. eclipse. ui. handlers Image: Stress org. eclipse. ui. handlers Image: Stress org. eclipse. ui. menus Image: Stress org. eclipse. ui. menu Image: Stress org.	type filter text		ID:
Sample Command (command) Image: Show org. eclipse. ui. handlers Image: Note of the state of the s	🖃 👓 📻 org. eclipse. ui. commands	Add	Name:
 in org. eclipse. ui. handlers in M (handler) in org. eclipse. ui. menus in M menu: org. eclipse. ui. main. menu?after=additions in M Sample Menu (menu) in org. eclipse. ui. views in M MyCom Custom View (view) 	🛄 🔣 Sample Command (command)		the second s
<pre>(handler) (handler) (</pre>	🚊 📲 org. eclipse. ui. handlers	Remove	
 in the section of the s	(handler)		
 menu: org. eclipse. ui. main. menu?after=additions menu: org. eclipse. ui. main. menu?after=additions menu: Sample Menu (menu) menu	🚊 📲 org. eclipse. ui. menus		Harris Show
E Sample Menu (menu) Down ■ ••••••••••••••••••••••••••••••••••••	👘 🚊 🔣 menu:org.eclipse.ui.main.menu?after=additions	Up	d Open
Down Down MyCom Custom View (view)	🗄 🔀 Sample Menu (menu)		🦃 Find
🛛 🛄 MyCom Custom View (view)	🛱 📲 org. eclipse. ui. views	Down	
	🗌 🛄 MyCom Custom View (view)		



9.现在启动Teamcenter客户端,在 Window→Show View→Others 选择MyCom Custom View. MyCom Custom View 视图页将激活, Sample Menu 菜单栏将在该视图页显示。如下图:



在当前视图页中添加与服务端通信代码

1.打开plugin.xml文件,在依赖页添加以下依赖:

quired Plug-ins	a	Imported Packages	
ecify the list of plug-ins required for the op ug-in.	+ Z eration of this	Specify packages on which this pl identifying their originating plu	ug−in depends without explicit g−in.
porg. eclipse. ui	Add		Add
org. eclipse. core. runtime	Remove		Remove
Com. teamcenter.rac.aifrcp (8000.1.0)	115		Properties
Som. teamcenter.rac.util (8000.1.0)			rropercres.
p com teamcenter.rac.tcapps (8000.1.0)	Down		
Com. (Cameenter, Fac, Common (0000, 1, 0)	Properties		
	.		
	IOTAL: I	2	Total: O
Automated Management of Dependencies	a	(



在当前视图页中添加与服务端通信代码

2.修改CustomView.java 代码。

3.现在启动Teamcenter客户端,在 Window→Show View→Others 选择MyCom Custom View. MyCom Custom View 视图页将激活, Sample Menu 菜单栏将在该视图页显示。如下图:





Ø添加一个新的应用到TC客户端

在Teamcenter客户端添加一个自己定义的应用(透视图),主要是通过扩展Eclipse 插件: org.eclipse.ui.perspectives, org.eclipse.core.expressions.definitions, org.eclipse.ui.views.和 Teamcenter 插件 com.teamcenter.rac.aifrcp.application 而实 现。以下,我们将按步骤进行工程的创建与应用 插件的开发。



1.新建com.mycom.customapp插件项目。

- 2.在New Plug-in Project 对话框 Content 面板,确保This plug-in will make contributions to the UI被选择。Would you like to create a rich client application?.选择为NO。Next后清除Create a plug-in using one of these templates的选择。
- 3.在插件项目中新建**com.mycom.customapp.perspectives**包,并新建 **CustomPerspective**类,该类继承于**CustomPerspective**。



4.在插件项目中新建com.mycom.customapp.views包,并在该包中新建 CustomView类,该类继承于ViewPart。

5.在项目根目录,创建icons文件夹,并拷贝准备好的图标文件到该目录。 6.最后,插件项目显示结构应该如下图所示:



7.修改Activator.java代码。

8.修改CustomPerspective.java代码。

9.修改CustomView.java代码。

10.在plugin.xml中进行扩展点的添加。

a).进行com.teamcenter.rac.aifrcp.application扩展点的添加:



b).进行org.eclipse.ui.perspectives扩展点的添加:

```
<extension point="org.eclipse.ui.perspectives">
    <perspective
    class="com.mycom.customapp.perspectives.CustomPerspective"
    icon="icons/defaultapplication_16.png"
    id="com.mycom.customapp.perspectives.CustomPerspective"
    name="Custom Application"/>
</extension>
```



c).进行org.eclipse.ui.views扩展点的添加:

```
<extension point="org.eclipse.ui.views">
        <view
            allowMultiple="false"
            class="com.mycom.customapp.views.CustomView"
            icon="icons/pview.gif"
            id="com.mycom.customapp.views.CustomView"
                name="Custom View"/>
        </extension>
```



d).进行org.eclipse.core.expressions.definitions扩展点的添加:



11.通过**Eclipse**启动**Teamcenter**,则可以在左边看到我们刚看到的应用。效果 图如下所示:

Custon Application - I	feancenter 8		
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赘未	_	Custon Vien 23	•
输入要提索的零组件 ID	•	Welcome to Custom Application !!	
▼ 快速链接	短期		
Kine a	~		
● 我的已保存就索	»		
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• 打开考照件			
▼ 历史记录			
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1 生命局現在看器			
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添加透视图到TC系统右键发送菜单

Ø添加应用到系统右键菜单

Teamcenter中通会把一个当前对象通过右键菜单中 的Send to发送到另一个应用程序中来进行不同应用之间 的通信。比如发送零组件到结构管理器, My Teamcenter中等等。接下来,我们将我们自己客户化的 应用添加到Send To右键菜单,进行系统中的对象和客户 化的应用之间的通信。Send To右键菜单的添加是通过引 用系统 **com.teamcenter.rac.commom**包下的 SendToHandler类去实现,该类中通过 Activator.setupServices()进行应用的注册,然后通过透 视图ID,使用OpenService.open()方法进行透视图的打 开,该方法在CustomOpenService中进行了实现。接下 来,我们将使用一个完整的插件项目进行这一功能的实现



- 1.在Eclipse中创建插件项目com.mycom.sendtoapp,在New Plug-in Project对话框的Content面板,确保This plug-in will make contributions to the Ul被选择;确保Would you like to create a rich client application?.选择为No,点击Next,确保Create a plugin using one of these templates没有被选择。
- 2.打开插件依赖页,添加com.teamcenter.rac.aifrcp, com.teamcenter.rac.kernel,com.teamcenter.rac.common插件。 如下图:



Required Plug-ins	Jªz	Imported Packages	
Specify the list of plug-ins required for the ope n.	ration of this plug-	Specify packages on which this plug—in de identifying their originating plug—in.	epends without explicitly
🐌 org. eclipse. ui	Add		Add
∰¤org.eclipse.core.runtime ╬⊯com.teamcenter.rac.aifrcp (8000.1.0)	Remove		Remove
🐌 com. teamcenter. rac. kernel (8000, 1, 0)	Up		Properties, .
teamcenter.rac.common (8000.1.0)	Down		
	Presenting		
	Tropercres		
	10(al. 5		Total: O
Automated Management of Dependencies	⊾ la	b Barradaran Arabaria	
	× * 2	Dependency Analysis	



- 3.新建com.mycom.sendtoapp.perspectives包,并在该包中创建 CustomPerspective类,该类实现了IPerspectiveFactory接口。
 4.新建com.mycom.sendtoapp.services包,并在该包中新建 CustomOpenService类。该类实现了IOpenService类。
 5.新建com.mycom.sendtoapp.views包。并在该包中新建 CustomView类。该类继承了ViewPart类。
- 6.新建icons文件夹,并在该文件夹中加入图像文件。最后工程中的结构 如下图所示:







- 7.修改Activator.java</u>文件。
- 8.添加代码到<u>CustomPerspective.java</u>文件。
- 9.添加代码到CustomOpenService.java文件。
- 10.添加代码到<u>CustomView.java</u>文件。
- 11.在plugin.xml中添加各扩展点
 - a)在com.teamcenter.rac.aifrcp.application中扩展应用。代码如下:

```
<extension point="com.teamcenter.rac.aifrcp.application">
        <aif_app_item
        displayMode="Primary"
        groupName="Mycompany"
        icon="icons/defaultapplication_32.png"
        id="com.mycom.sendtoapp"
        name="SendTo Application"
        ordinality="200"

perspective_id="com.mycom.sendtoapp.perspectives.CustomPerspective"
        session="com.teamcenter.rac.kernel.TCSession"
        tooltip="Send To Application"/>
        </extension>
```



b) 在org.eclipse.ui.perspectives中扩展透视图,扩展代码如下:

```
<extension point="org.eclipse.ui.perspectives">
    <perspective
    class="com.mycom.sendtoapp.perspectives.CustomPerspective"
    icon="icons/defaultapplication_16.png"
    id="com.mycom.sendtoapp.perspectives.CustomPerspective"
    name="SendTo Application"/>
</extension>
```



c) 添加透视图到org.eclipse.ui.perspectiveExtensions,代码如下:



d)在org.eclipse.ui.views扩展视图,代码如下:

```
<extension point="org.eclipse.ui.views">
        <view
        allowMultiple="false"
        class="com.mycom.sendtoapp.views.CustomView"
        icon="icons/pview.gif"
        id="com.mycom.sendtoapp.views.CustomView"
        name="Custom View"/>
        </extension>
```



e)在org.eclipse.ui.commands中扩展command,代码如下:

```
<extension point="org.eclipse.ui.commands">
        <command
            name="SendTo Application"
            id="com.mycom.sendtoapp.sendto">
            </command>
        </extension>
```



f) 进行org.eclipse.ui.commandImages插件的扩展,代码如下:

```
<extension point="org.eclipse.ui.commandImages">
        <command>
        <image
            icon="icons/defaultapplication_16.png"
            id="com.mycom.sendtoapp.sendto"/>
            </command>
</extension>
```



g) 进行org.eclipse.ui.handlers插件的扩展,代码如下:



h) 进行org.eclipse.ui.menus插件的扩展,代码如下:



12.通过Eclipse启动Teamcenter,进入系统后,则显示如下效果:



SendTo Application - Te	eancenter 8	
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 → 历史记录 Mome 入门 ① 我的 Teancenter ② SendTo Application 		
★ 全命周期查看器 ★ 特許者書 ★ 特許者書 ★ 小学書 ★ 小学 ★	多該約警理器*用千创建和查看关联及其内容	0

