

# Component Framework

*How to create a new Component...*

## **Requirements:**

- Eclipse Equinox – can be downloaded at <http://download.eclipse.org/equinox/>
- SVN-Plug-in for Eclipse – use the following update-site:  
<http://download.eclipse.org/technology/subversive/0.7/update-site/>
- SVN Connectors for Eclipse Ganymede or Galileo:  
Galileo: <http://community.polarion.com/projects/subversive/download/eclipse/2.0/galileo-site/>  
Ganymede:  
<http://community.polarion.com/projects/subversive/download/eclipse/2.0/ganymede-site/>
- Plug-ins for the new component wizard can be acquired from the wiki at <http://qe-informatik.uibk.ac.at/trac/cheetah>

## **Creating a new component:**

- ➔ Check out the following bundles from SVN:
  - “at.component”
  - “at.component.group”
  - “at.component.util.manager”
  - “at.component.util.services”
- ➔ Open the “Java” or “Plug-in Development” Perspective
- ➔ Click on the “New” button and select “Component” within the “OSGi Components” folder.
- ➔ Enter a project name, choose a meaningful component name (this name is displayed on the user interface), choose the OSGi Framework (Equinox is preferred) and the execution environment (JavaSE-1.6)
- ➔ Click “Finish”
- ➔ A plug-in with the given project name is created. This plug-in includes some classes from scratch, where only the ComponentUiController has to be edited.
- ➔ Open the ComponentUiController class, hop into the Constructor and create a new UIClass, which takes the given composite as parameter.
- ➔ Open the Manifest.MF-file, go to the Dependencies-Tab, click the “Add”-Button under “Required Plug-ins” and add the org.eclipse.swt-plugin.
- ➔ Go to the UIClass and set the layout (`org.eclipse.swt.layout.GridLayout`) as well as the layoutdata (`org.eclipse.swt.layout.GridData`) of the given composite. Finally you create a Label with the given composite as parent and set the text (“Hello World”)
- ➔ Your first component is finished

## **Launching the Framework:**

- ➔ Go to the “at.component.util.manager” plug-in folder and open the “OSGi Component.product” file
- ➔ Add your newly created plug-in to the “Dependencies”
- ➔ Add your newly created plug-in to the “Configuration”
- ➔ Go to the “Overview”-Tab and “Launch an Eclipse application”

**Have fun**