

# Plug Your JavaServer Faces Application into the GlassFish v3 Admin Console

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#### Agenda

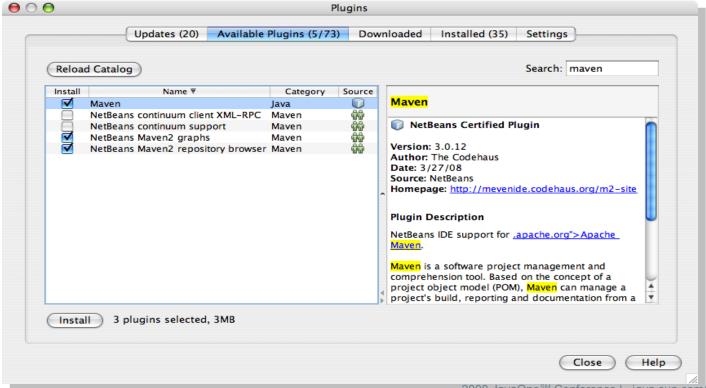
- Lab Setup
- Introduction
- Plugging into GlassFish
- Charting with jMaki
- Templating your Plugin
- > Q & A





#### Lab Setup

- Unzip 4520\_gfplugin.zip
- Install Maven 2
- Configure NetBeans (optional)

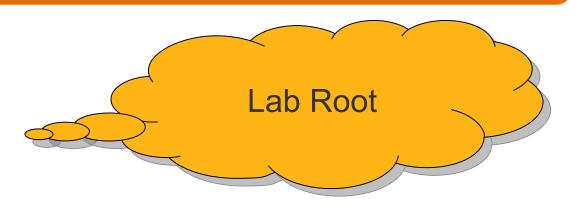








gfplugin/





index.html



myplugin/



solution/









gfplugin/



index.html

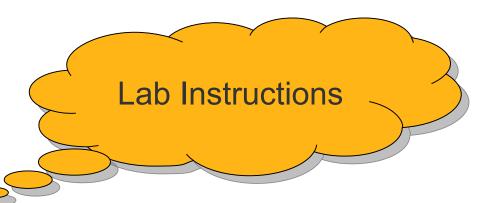


myplugin/



solution/











gfplugin/



index.html

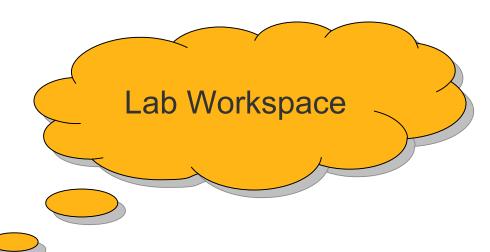


myplugin



solution/











# gfplugin/



index.html

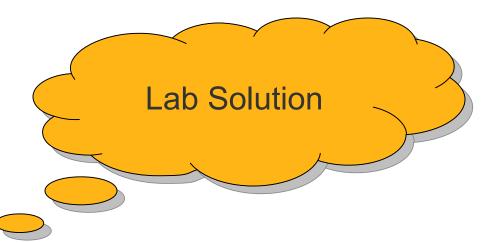


myplugin/



solution/











### gfplugin/



index.html



myplugin/



solution/









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#### What Is GlassFish?

- A Java EE 5 compliant Application Server
  - Can run J2EE applications too
- Enterprise Quality
  - Sun Java System Application Server 9.x
  - Use it in production!
- Open Source
  - CDDL (like OpenSolaris, NetBeans)
  - GPLv2 (like Java and NetBeans)
  - Use it in production!

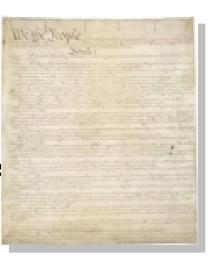






### What Is GlassFish? (Cont.)

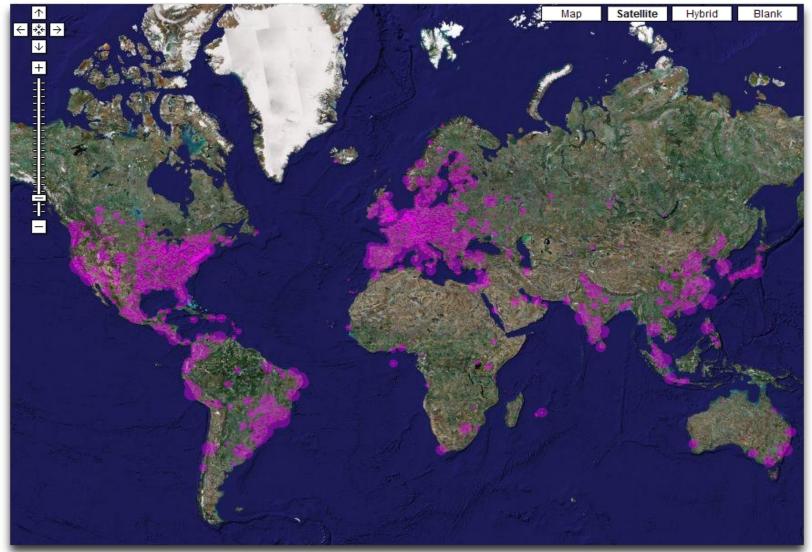
- Community Awards Program
  - \$1M to reward contribution to Open Source projects
  - GlassFish one of 6 communities to award \$175k
  - More at http://glassfish.org/GAP
- > TBD: Change picture... award ribbon?







# GlassFish around you







#### Frameworks and Applications





#### Agenda

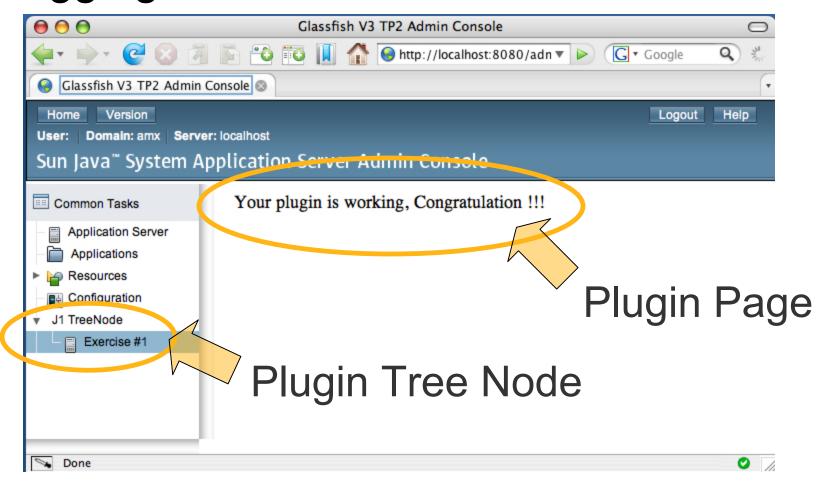
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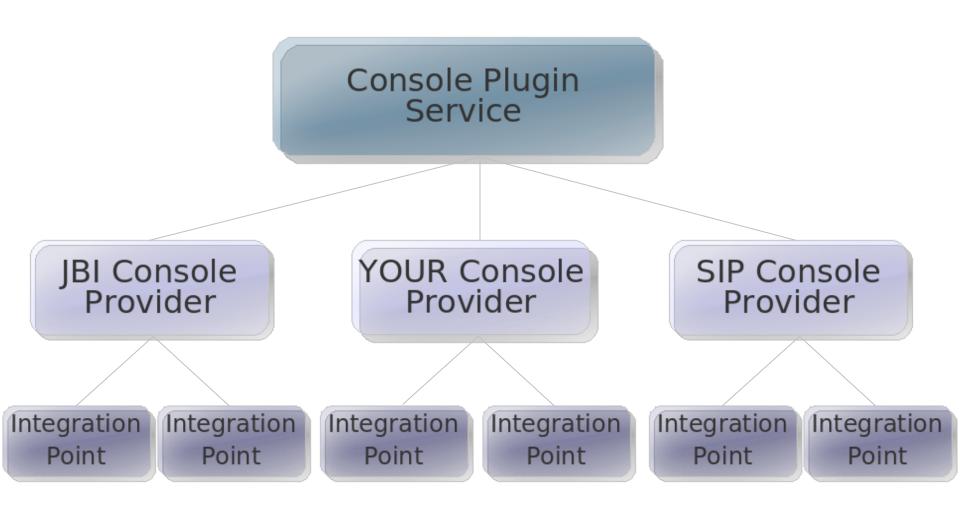
#### Plugging into GlassFish







# Plugin Design





#### Console Provider

- Marker for HK2
- Provides console-config.xml URL
- Default: META-INF/admingui/console-config.xml

```
@Service
public class JavaOnePlugin implements
   ConsoleProvider {
     public URL getConfiguration() {
        return null;
     }
}
```



#### **Integration Points**

Defined inside console-config.xml:

```
<?xml version="1.0" encoding="UTF-8"?>
<console-config id="javaone">
  <integration-point</pre>
      id="JavaOneNode"
      type="tree"
      priority="210"
      parentId="tree"
      content="treenode-ex1.jsf" />
</console-config>
```



#### The Tree Node

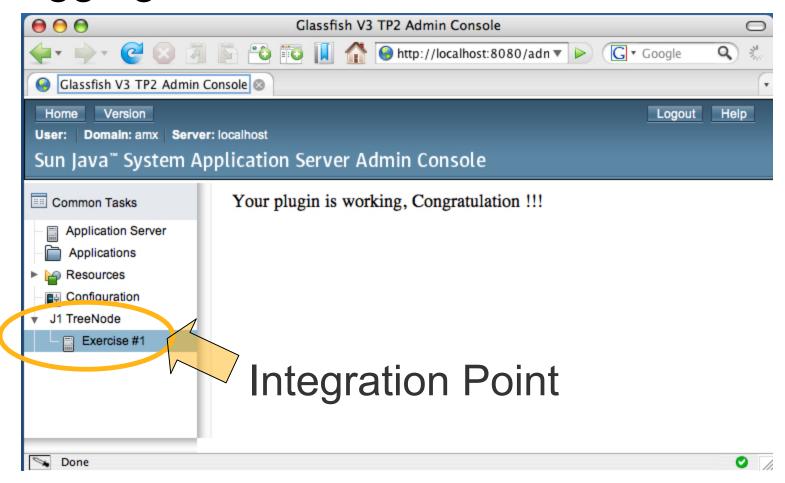
IntegrationPoint "content" refers to JSFTemplating page fragment:

```
<sun:treeNode
id="first"
  text="Exercise #1"
  url="javaone/hello.jsf"
  imageURL=
      "resource/images/instance.gif"
  target="main" />
```





#### Plugging into GlassFish







Lab Exercise #1
Create your first GlassFish plugin



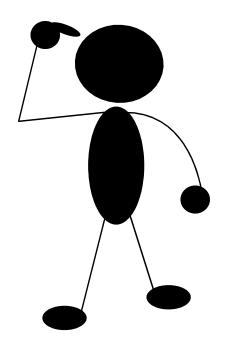




# Plugging into GlassFish

- Lab Time!
- Estimated Working Time: 45 min









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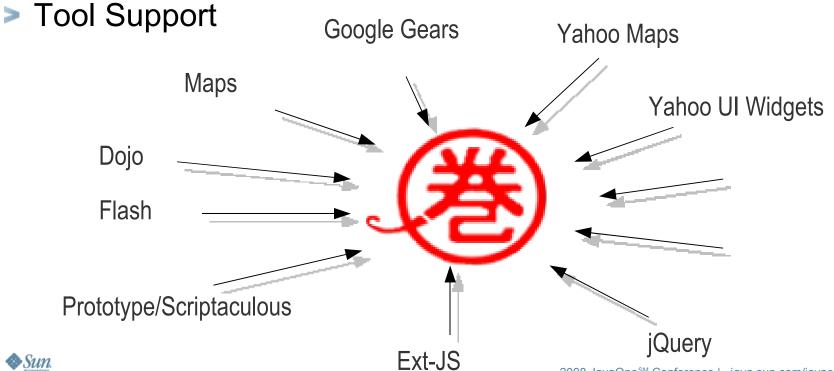
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#### What is jMaki?

- Lightweight Open Source Framework
- Integrates best of breed JavaScript technology
- Server-side support for Java, PHP, Ruby, JavaScript
- Standard Event / Data Model

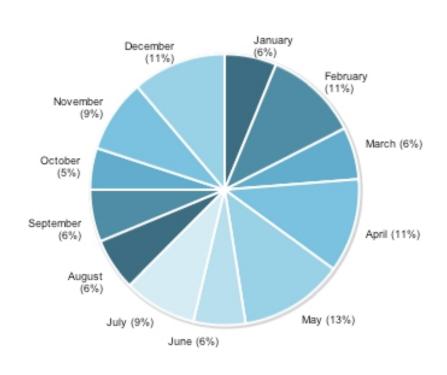




### Charting with jMaki

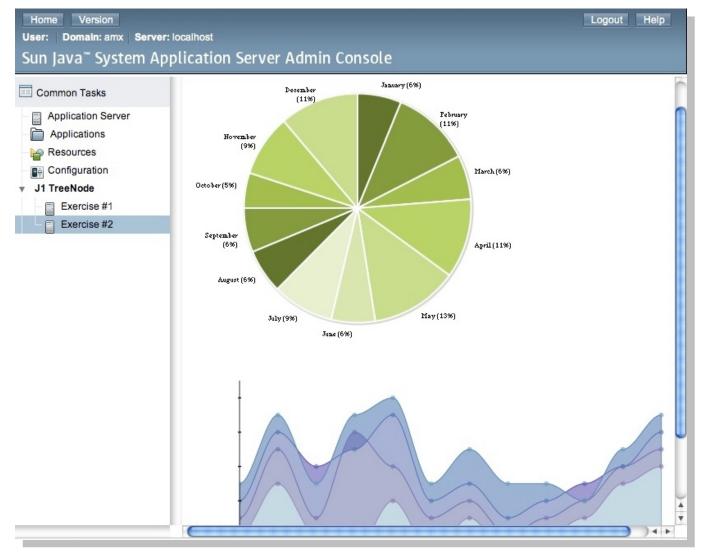
- Abstraction for a Charting Data Model
- Multiple Charting Frameworks to Render Charts
  - Yahoo!
  - Dojo
  - Google
  - Plotkit
- Works with jMaki Publish / Subscribe Event Model
- Lowers the effort required for Charting
- Supports:
  - Area Charts
  - Line Charts
  - Pie Charts







# Charting with jMaki







# Lab Exercise #2 Charting with jMaki

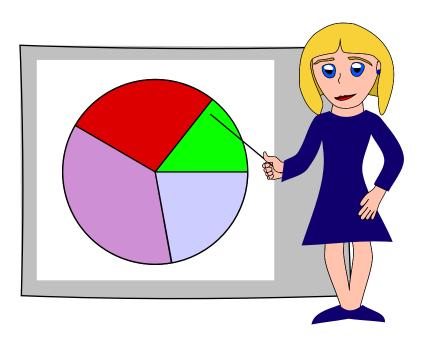
DEMO





# Charting with jMaki

> Exercise length – 25 minutes







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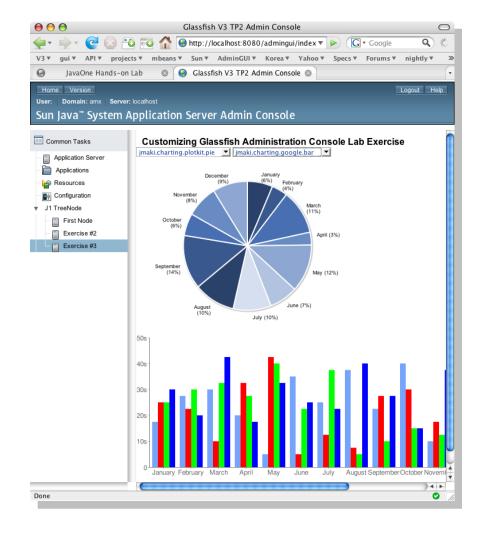






# Templating your Plugin

- Templating in JavaServer Faces
- Template Example







#### Templating in JavaServer Faces

```
<sun:page>
<!beforeCreate
  setResourceBundle(key="i18n" bundle="core.Strings")
setResourceBundle(key="help" bundle="core.Helplinks")
#include "/shared/restart.inc"
<sun:html>
    <!insert name="head">
         <sun:head title="Default Title" />
    </insert>
    <sun:body onLoad="synchRestartRequired('#{restartRequired}')">
    <sun:body>
    <sun:form id="form">
#include "/treeBreadcrumbs.inc"
         <!insert name="pageTitle">
             <sun:title title="Default Page Title" />
         </insert>
        <!insert name="content">
             "Content Goes Here
         </insert>
         <!insert name="helpkey" />
    </sun:form>
    </sun:body>
</sun:html>
</sun:page>
"baseTemplate.xhtml"
```





#### Templating in JavaServer Faces

```
<!composition template="/templates/propertySheet.tpl">
<!define name="pageTitle">
   </define>
<!define name="head">
   <sun:head
       title="Customizing Glassfish Administration Console Lab Exercise" />
</define>
</composition>
"javaOneTemplate.tpl"
```





Lab Exercise #3
Templating Your Plugin

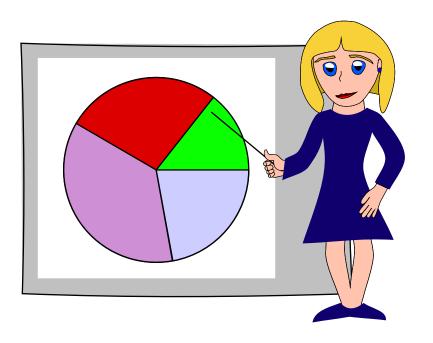
DEMO





#### Templating in JavaServer Faces

- Exercise length 25 minutes
- Tip: Try different chart types







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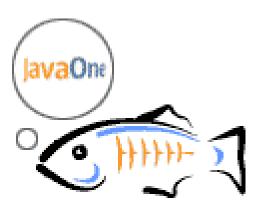
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#### Summary

- GlassFish v3
- GlassFish Administration Console Plugin
- > jMaki
- JSFTemplating
- Get Involved!





#### References

- https://jsftemplating.dev.java.net
- https://glassfish.dev.java.net
- https://jmaki-charting.dev.java.net
- https://ajax.dev.java.net
- https://woodstock.dev.java.net

# All Open Source Get Involved!









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