Open liberty

How we use OSGi to build Open Liberty

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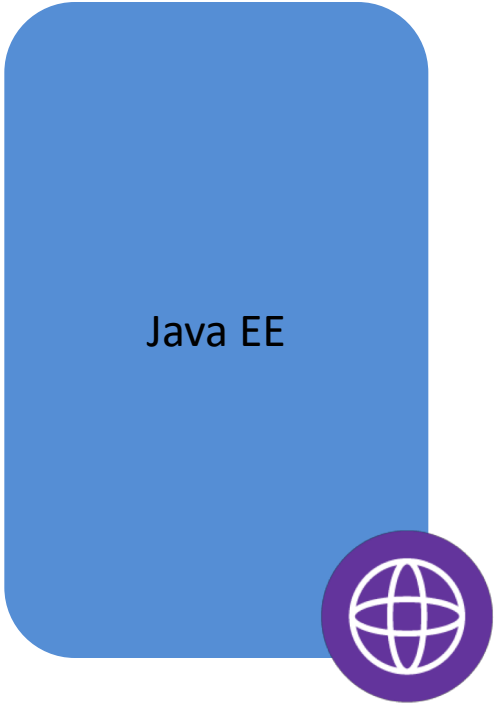
Project goals

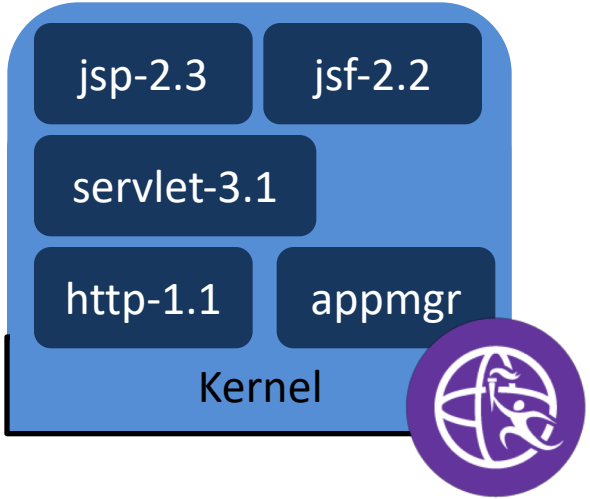
- Implement Java EE
- Small Footprint
- Start fast
- Composible
- Dynamic
- Easy to use

Fit-for-purpose server

- You control which features are loaded into each server instance




```
<feature>jsf-2.2</feature>
```



Server configuration

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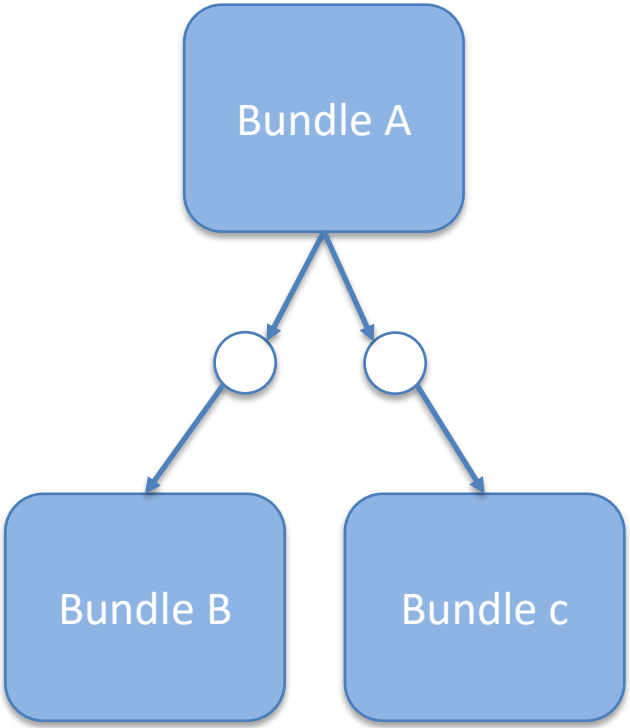
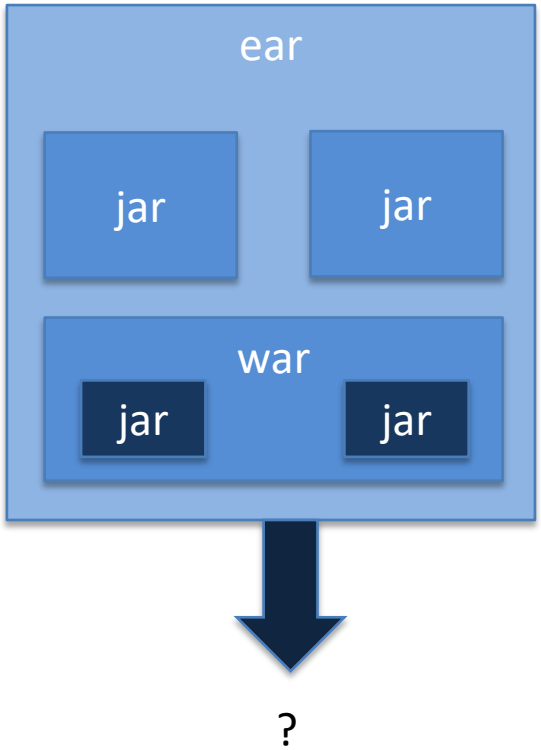
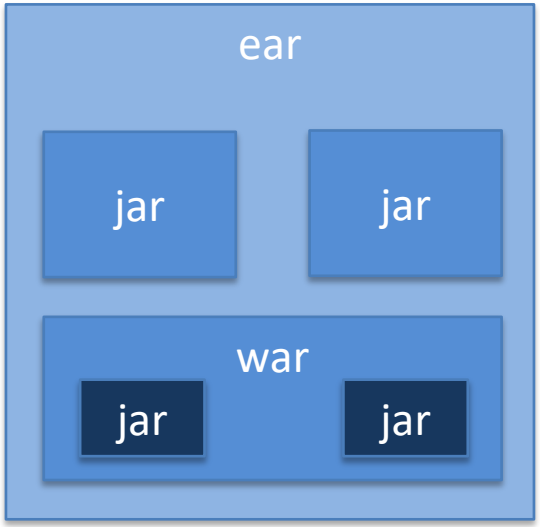
```
<server>
   <featureManager>
      <feature>javaee-8.0</feature>
   </featureManager>

   <httpEndpoint id="defaultHttpEndpoint" httpPort="8080"/>

   <webApplication location="myWeb.war" contextRoot="/"/>
</server>
```

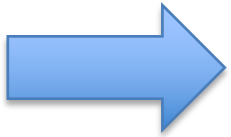
Modularity - OSGi vs Java EE

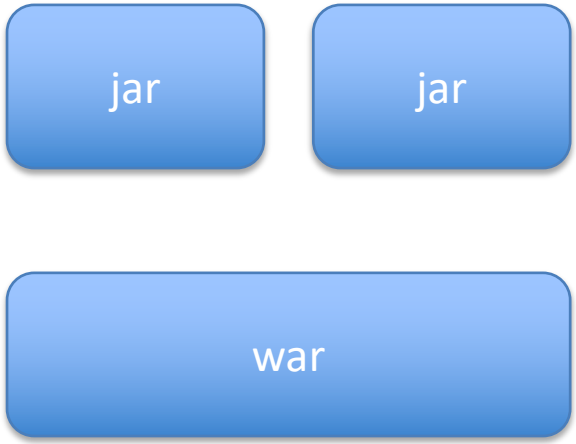




Java EE -> OSGi

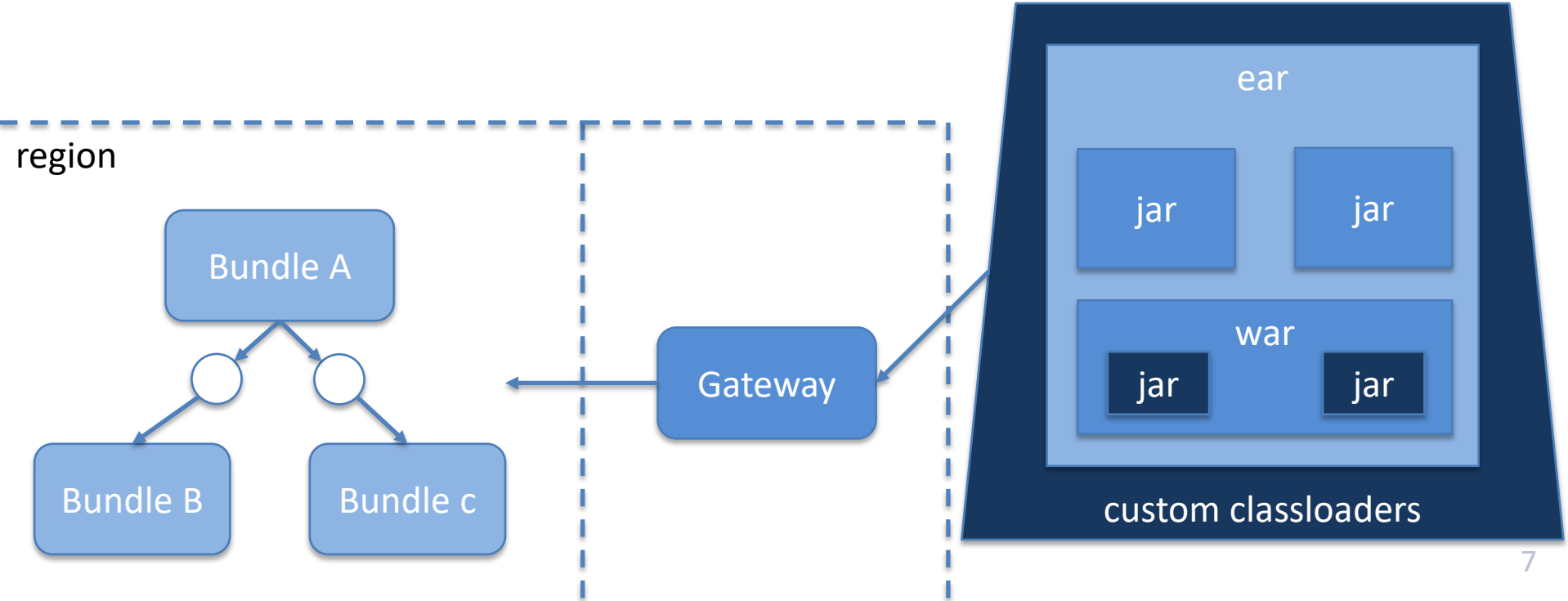






Java EE on OSGi

Open Liberty



Key OSGi Technologies

- Equinox (duh)
- Metatype
- Declarative Services
- Config Admin
- Subsystem Features
- Regions

Things we learned

- Shutdown is not as simple as stopping the framework
- Statics and service do not mix & match
- Use the build tools
- Very powerful for large complex software
- DS and ConfigAdmin together are brilliant
- High learning curve
- Java SE classloading assumptions don’t mix well in OSGi