GlassFish v3

1er juillet 2009

Alexis Moussine-Pouchkine
GlassFish Team

Timeline of Project GlassFish

Tomcat
Jasper
Catalina
JSTL
Struts

Crimson
XSLTC
Xalan
Xerces

JAXB
JAX-RPC
JSF

GlassFish Launch — June 2005

v1 — May 2006

v2 — Sept. 2007

v3 "Prelude" — Oct/Nov 2008

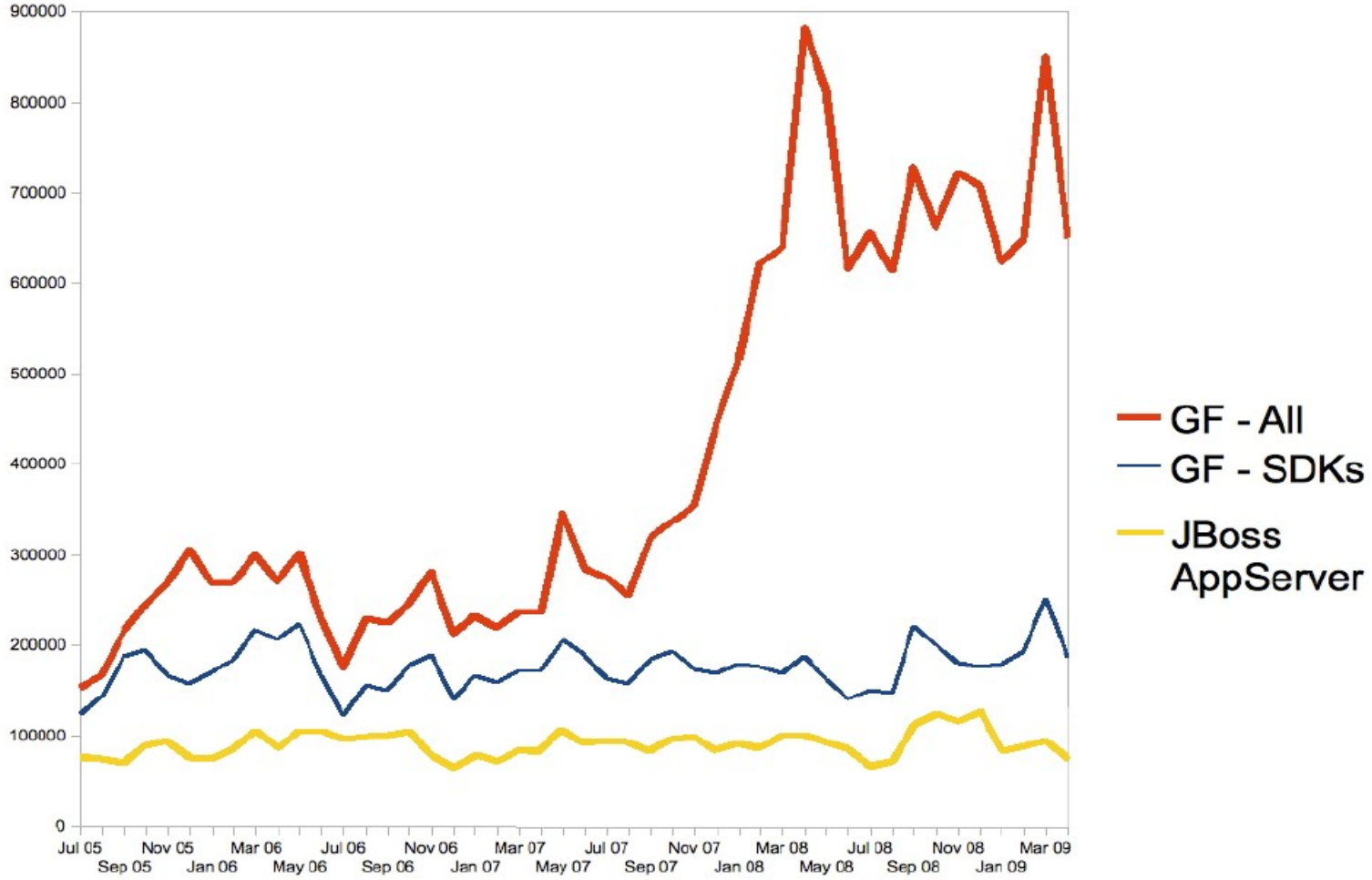
v2.1 — Jan 2008

JavaOne

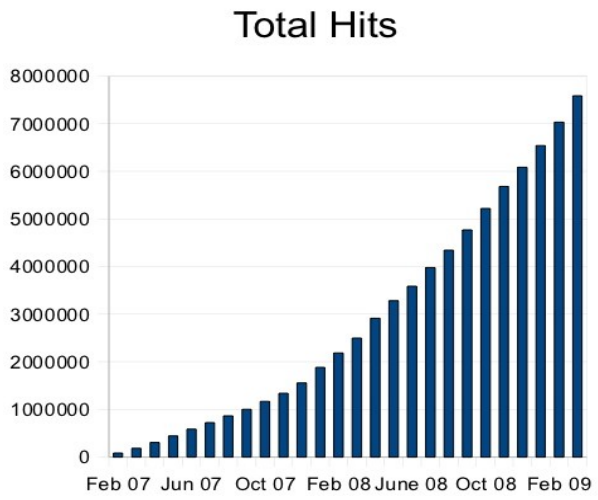
v3 (Java EE 6) — Fall-2009

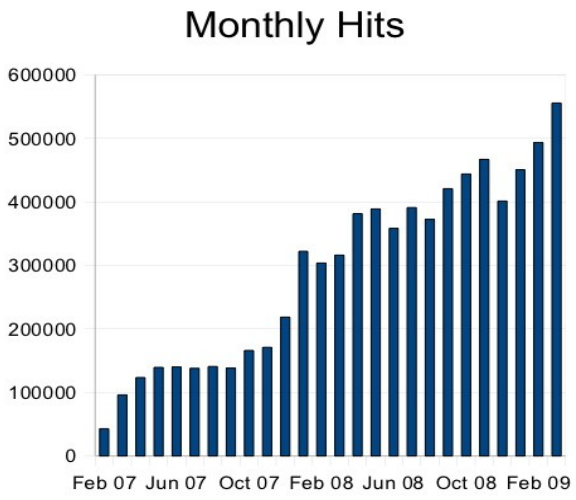
(you are here)

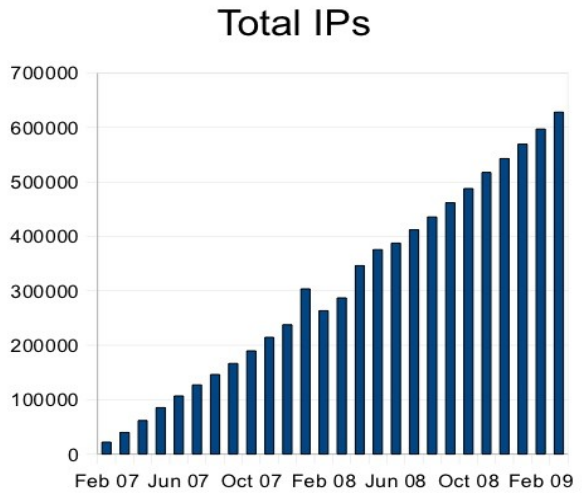
GlassFish Downloads

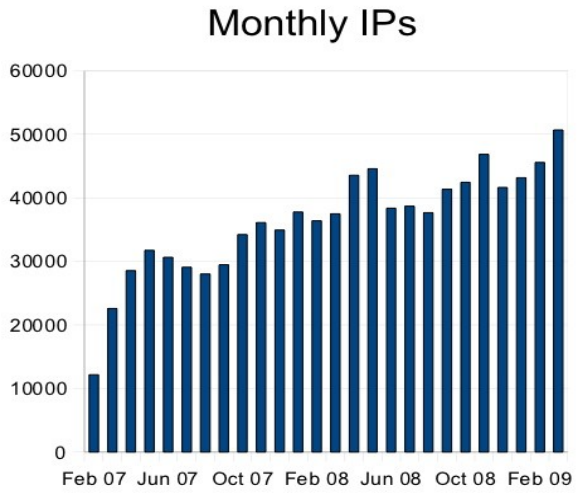


Actual Usage

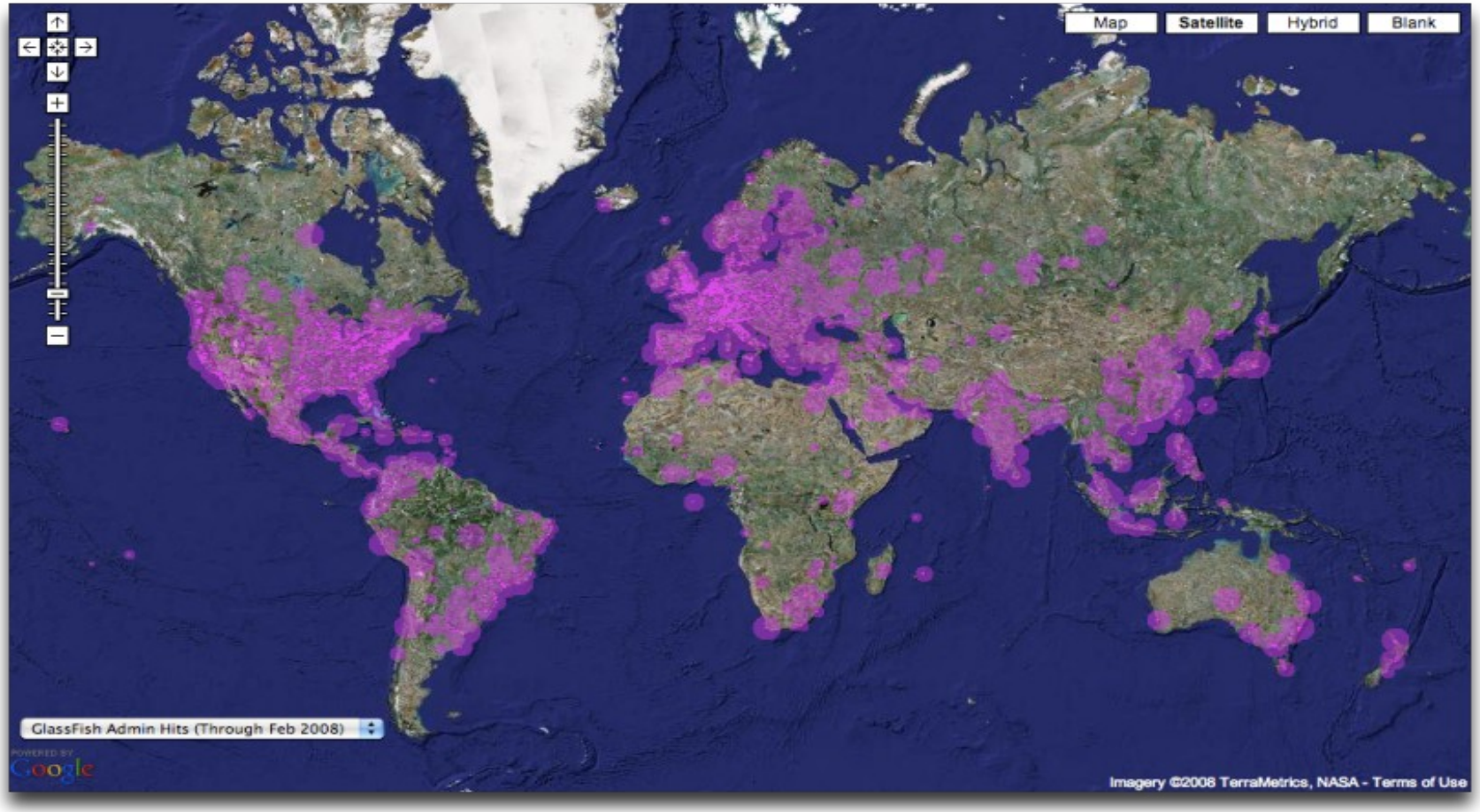




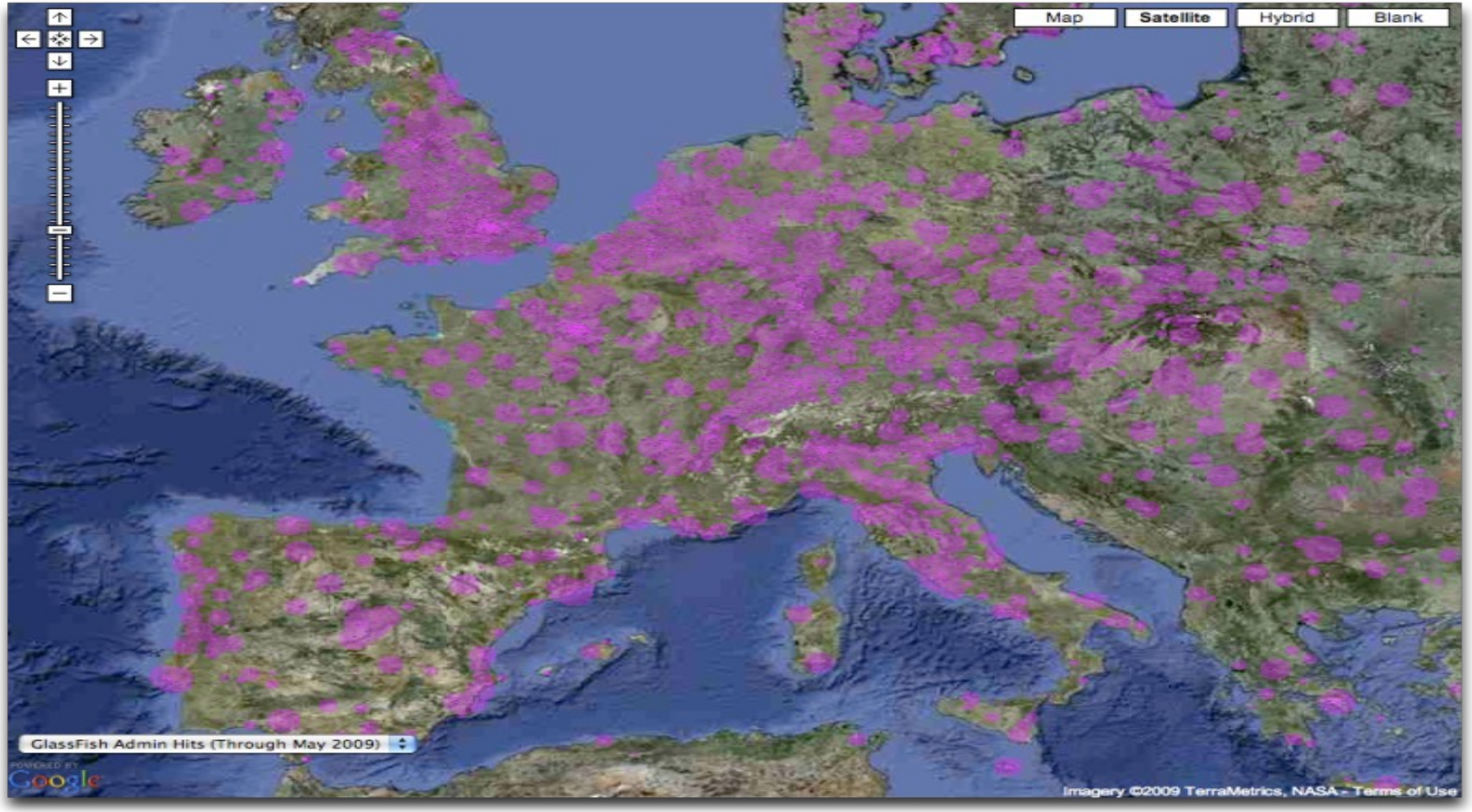




GlassFish around you



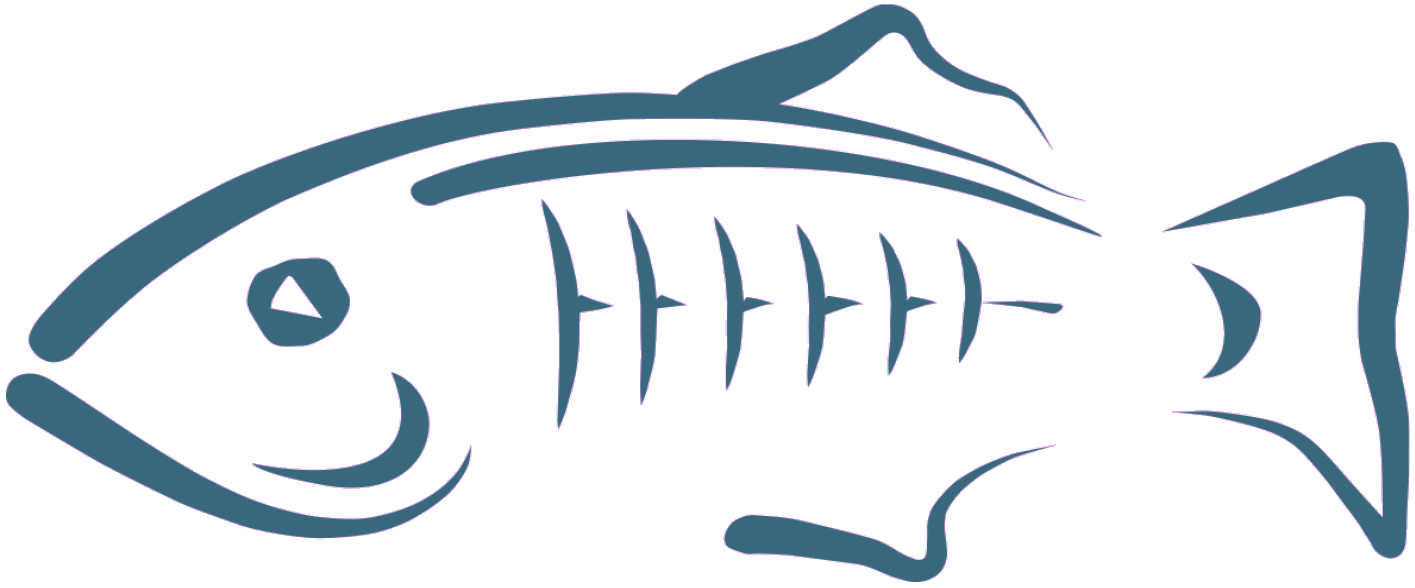
GlassFish around you (really)



If there was only one reason...

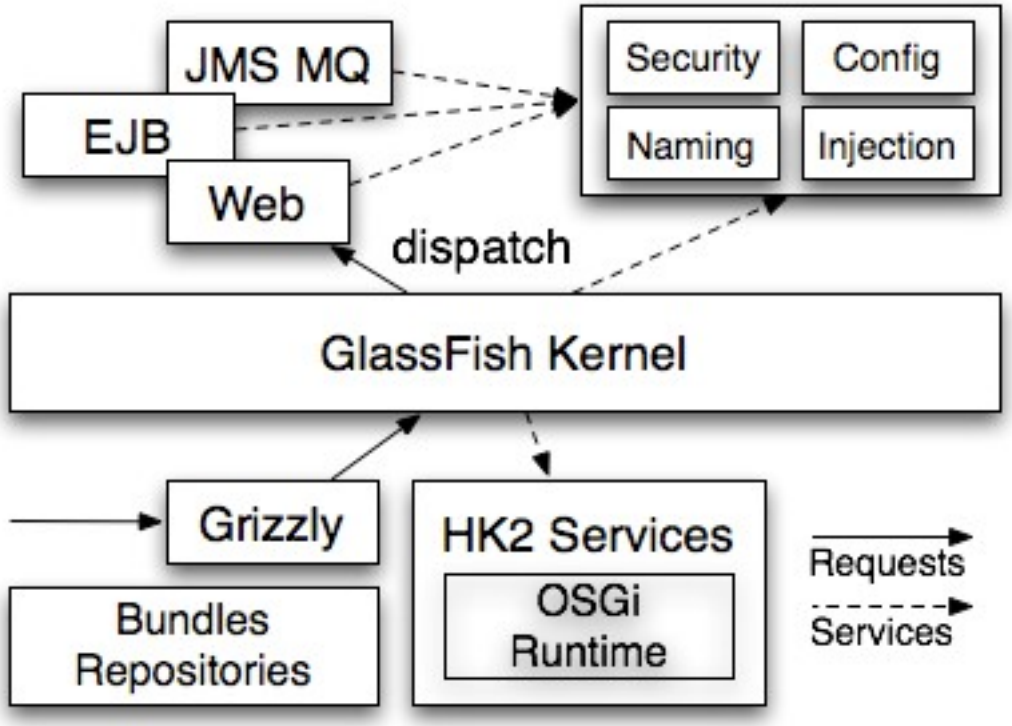
... we care about both

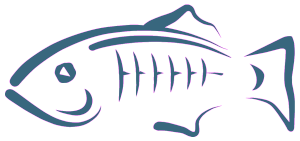
Introducing GlassFish v3



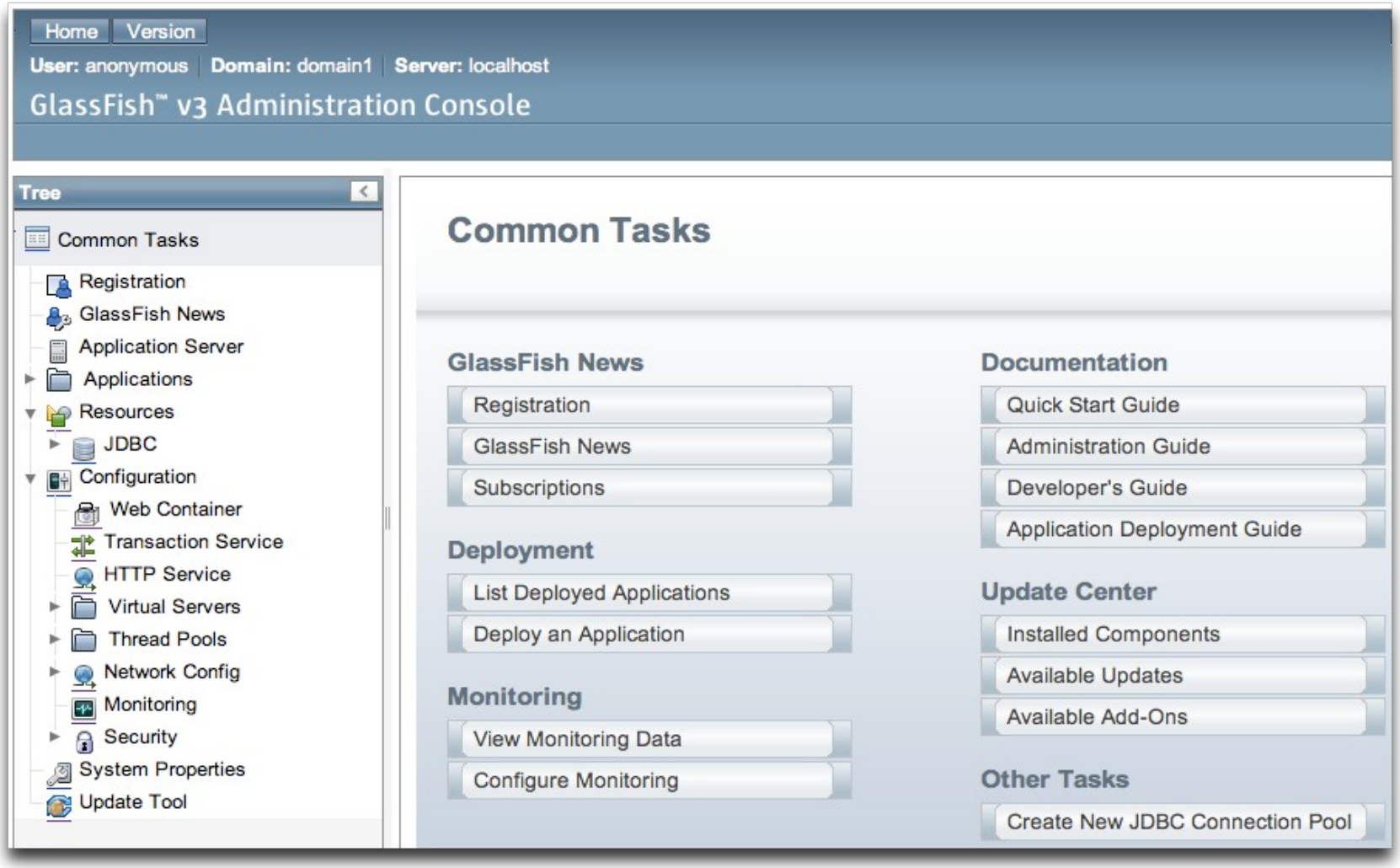
Modular and Dynamic

- Modular : Apache Felix (OSGi)
- Extensible : HK2
- Yet very Fast !



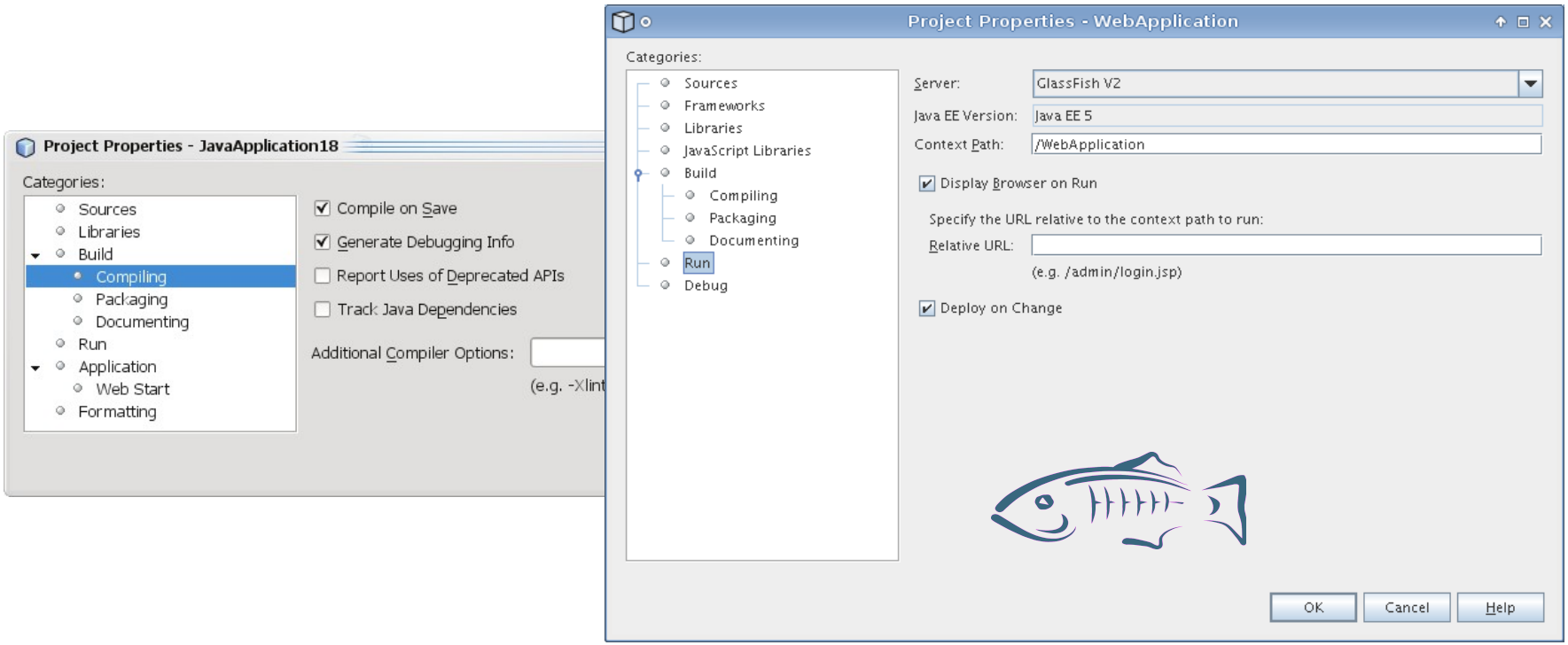


Admin Console



Painless Java EE development !

- Java EE development doesn't have to be painful :)
- Incremental compile of all Java EE artifacts
- Auto-deploy of all Java EE and static artifacts

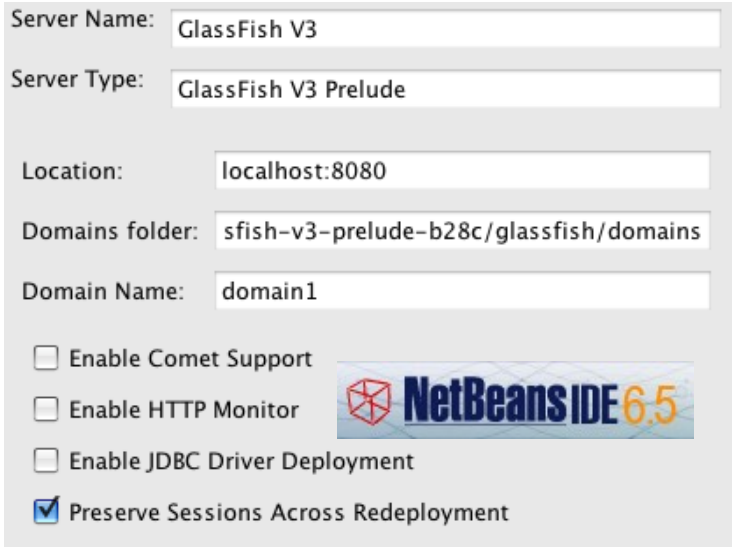


Session Retention

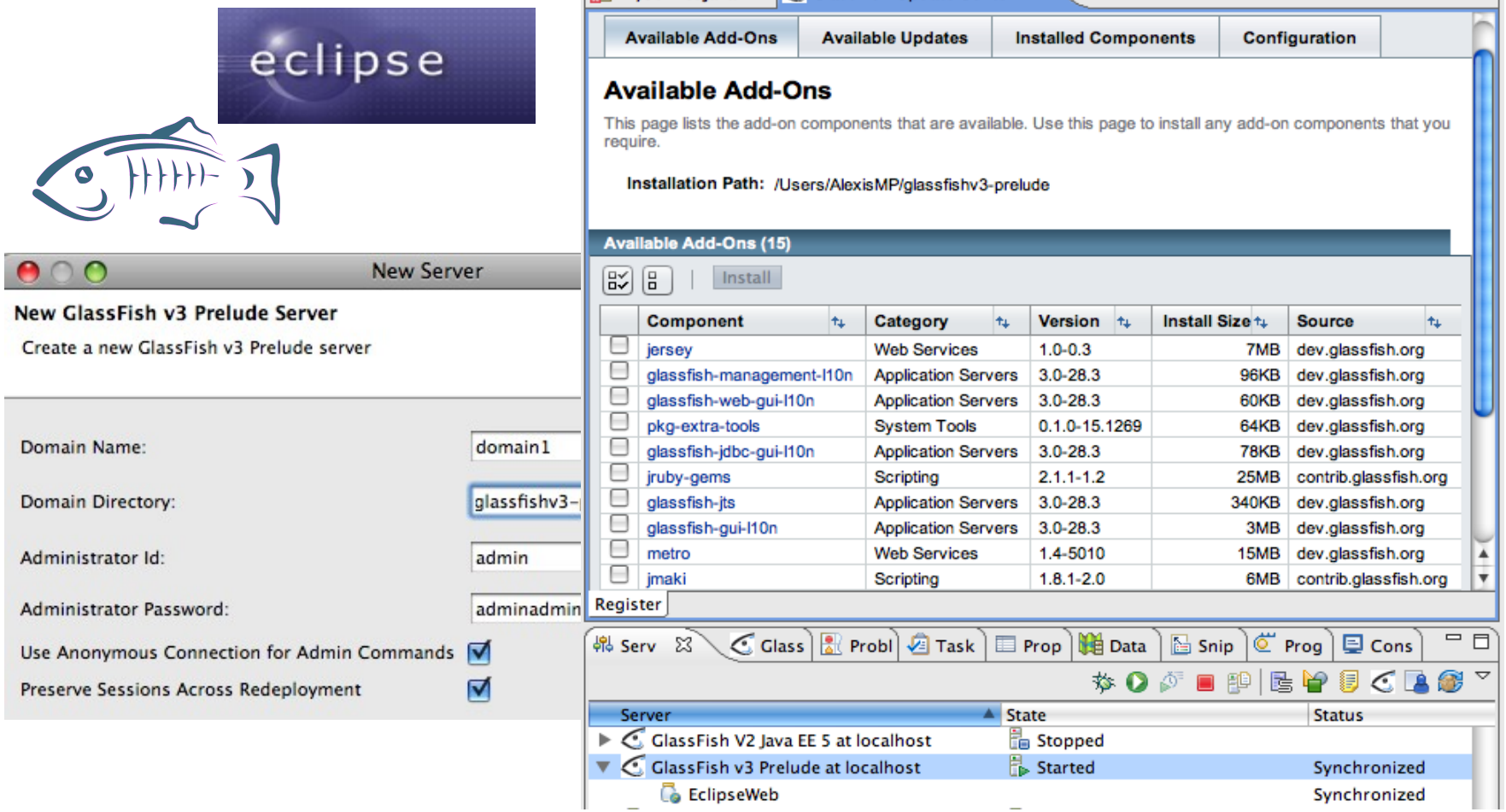
- Deployment option to maintain stateful sessions across re-deployments

```
$ asadmin redeploy --properties
  keepSessions=true myapp.war
```

- Greatly simplifies the development paradigm
- Integrated in NetBeans 6.x :



Yes, Eclipse too !



GlassFish (v2/v3) + Eclipse 3.4 Tools Bundle: http://download.java.net/glassfish/eclipse/

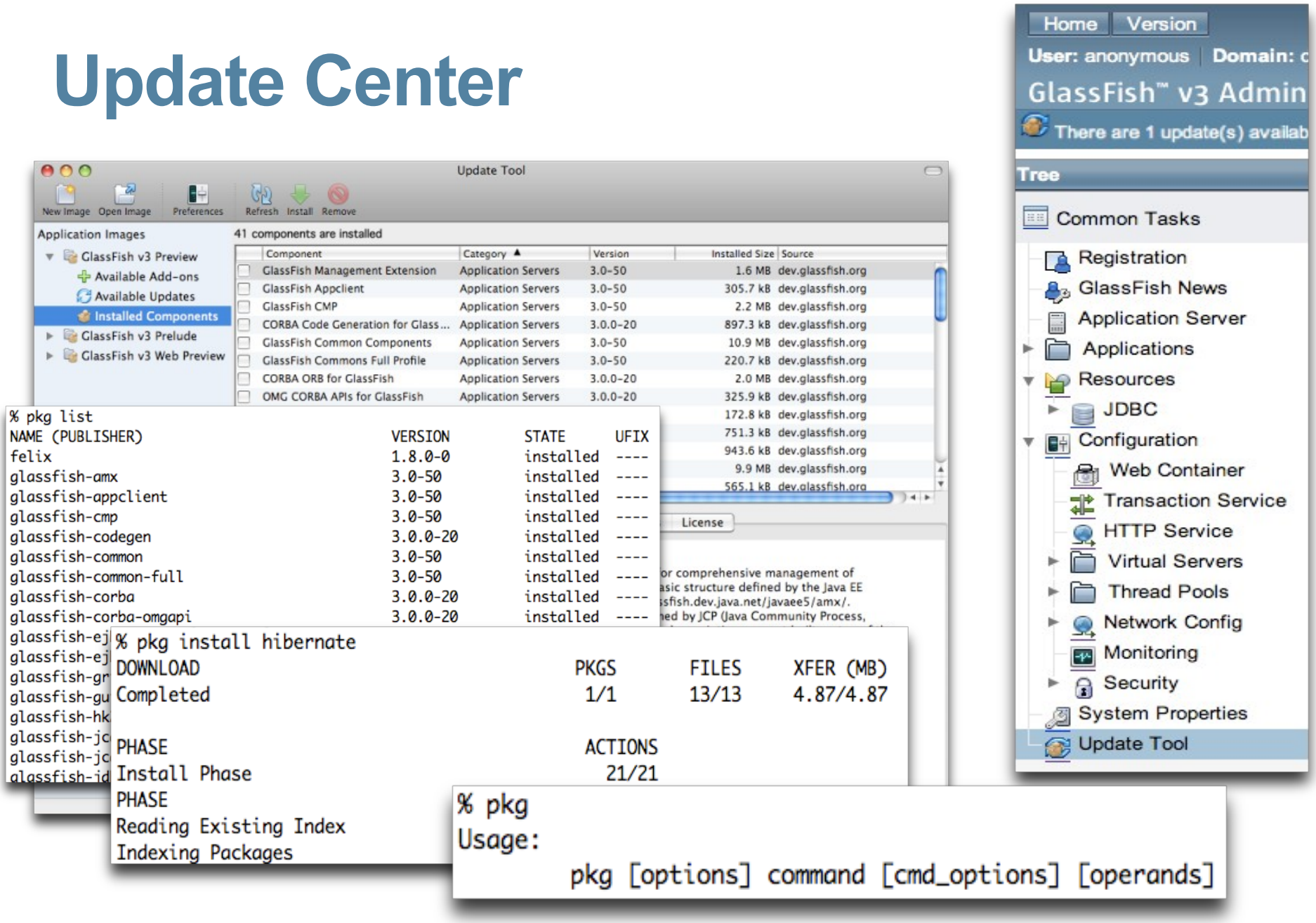
Java EE 6 (JSR 316)

- EJB 3.1
- JPA 2.0
- Servlet 3.0
- JSF 2.0
- Connector Architecture 1.6
- Bean Validation 1.0
- JSR 299 JCDI 1.0 (née Web Beans)*
- JAXB 2.2
- JAX-WS 2.2
- JSR-109 1.3
- JAX-RS 1.1
- JSP 2.2, EL 2.2
- Authentication SPI 1.1
- Common Annotations 1.1 (JSR 250)

Java EE 6 (JSR 316)

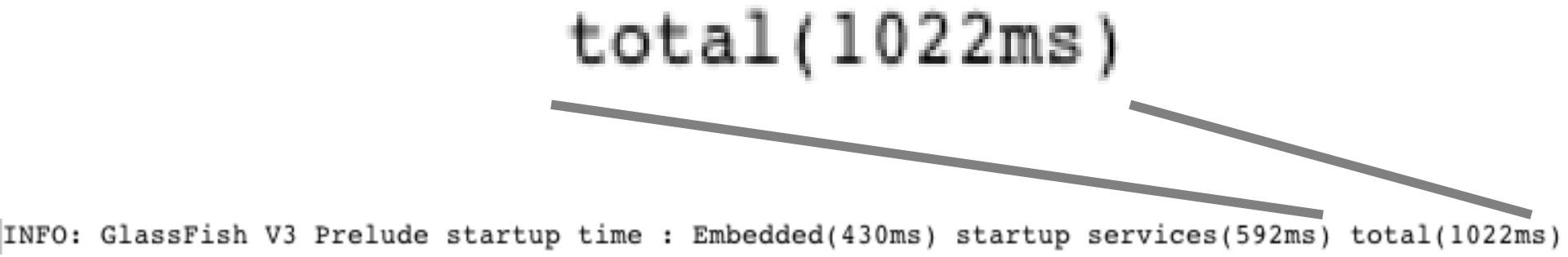
- EJB 3.1, EJB 3.1 lite
- JPA 2.0
- Servlet 3.0
- JSF 2.0
- Connector Architecture 1.6
- Bean Validation 1.0
- JSR 299 JCDI 1.0 (née Web Beans)*
- JAXB 2.2
- JAX-WS 2.2
- JSR-109 1.3
- JAX-RS 1.1
- JSP 2.2, EL 2.2
- Authentication SPI 1.1
- Common Annotations 1.1 (JSR 250)

Update Center



GlassFish Embedded

```
AppServer glassfish = new AppServer(8080);
glassfish.deployWar(warFile);
```



GlassFish Embedded

```
public class Main {
  public static void main (String[] args) {
    AppServer glassfish = new AppServer(8080);
    glassfish.deployWar(a_useful_app);
  }
}
```

GlassFish Embedded

```
@BeforeClass
public static void setUpClass () {
  AppServer glassfish = new AppServer(8080);
  glassfish.deployWar(myApplication);
}

@Test
public void pingApplication () {
  ...
}
```

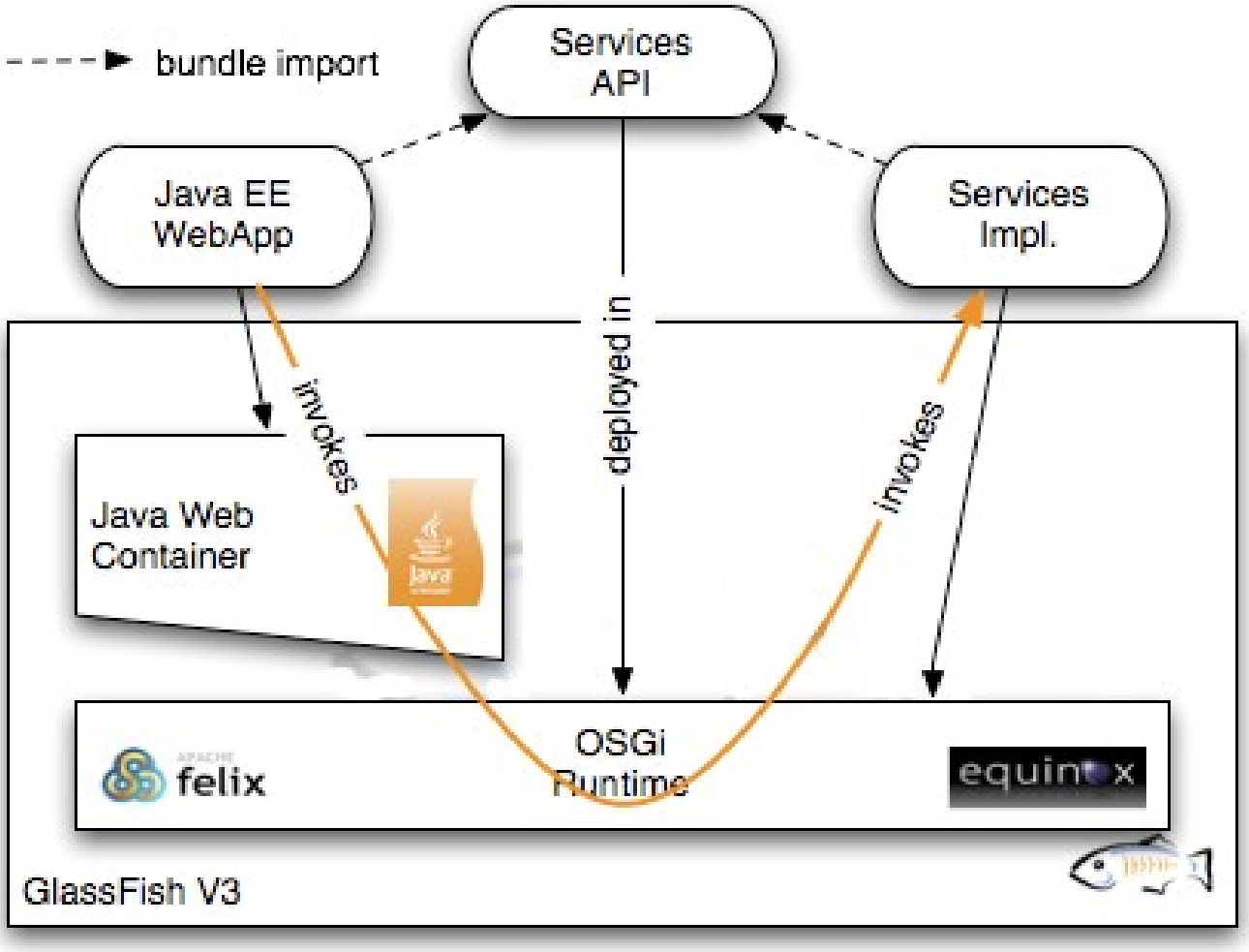
Extending GlassFish v3
An example

- Extend GlassFish with an OSGi declarative service
  - using plain OSGi service with the appropriate Service-Component entry in the JAR Manifest
- Invoke the service from a servlet
  - using standard `@Resource` injection
- Never use a GlassFish API !
- No need to chose between OSGi and Java EE

Step by step: http://blogs.sun.com/dochez/entry/glassfish_v3_extensions_part_4

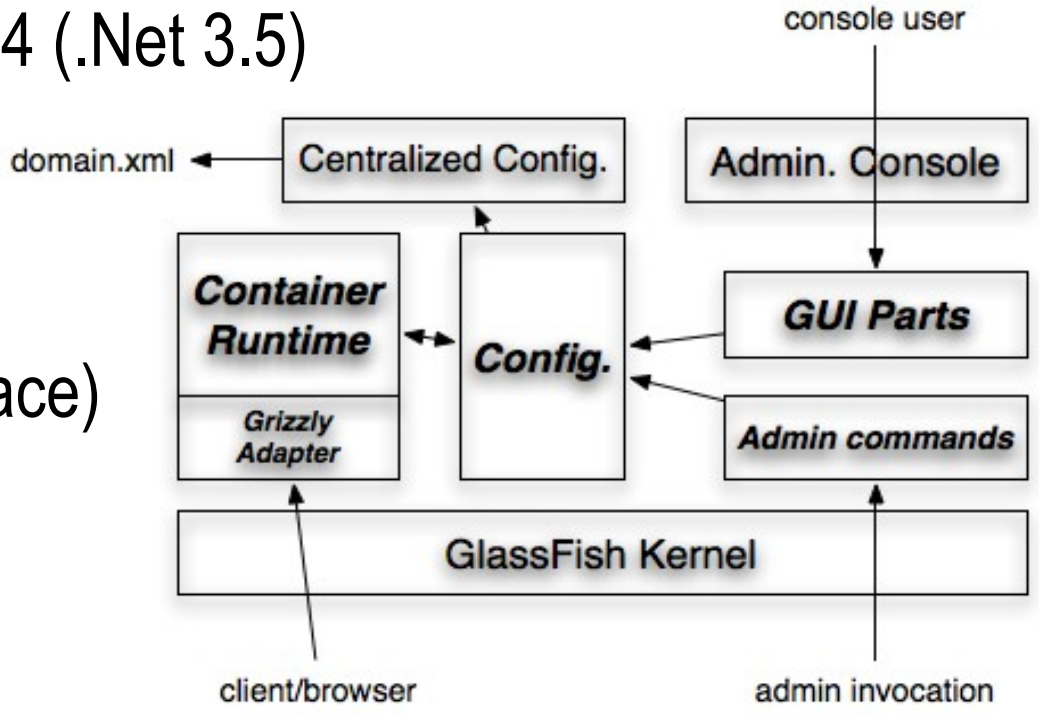
Extending GlassFish v3

An example, a demo and a picture



A lot more ...

- Dynamic languages : Rails, Grails, Django, ...
- Comet, Cometd/Bayeux
- Embedded API
- Full support for mod_jk, WebDAV, CGI, SSI
- Web Services Metro 1.4 (.Net 3.5)
- OpenMQ
- IPS/pkg(5)
- RESTful admin
- Monitoring (btrace, dtrace)
- Extensible !



GlassFish v3 – Practical

- Get it from http://glassfish.org
  - GlassFish v3 Preview today, Final in September
- Choice !
  - Eclipse or NetBeans (or vi...)
  - Felix or Equinox
- Download size: starting at 30MB
  - Graphical Installer, Zip version
  - Can move from Web profile to full (and vice-versa) using pkg/updatetool
  - Can always start from the IPS 5MB bootstrap...

Questions ?

http://blogs.sun.com/alexismp
alexis.mp@sun.com