



GlassFish v3

1er juillet 2009

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GlassFish Team



Timeline of Project GlassFish



Tomcat

Jasper
Catalina
JSTL
Struts

Crimson
XSLTC
Xalan
Xerces

JAXB
JAX-RPC
JSF

*GlassFish
Launch*

v1

v2

**v3
"Prelude"**

v2.1

**v3
(Java EE 6)**

JavaOne
June 1-5, 2009

June
2005

May
2006

Sept.
2007

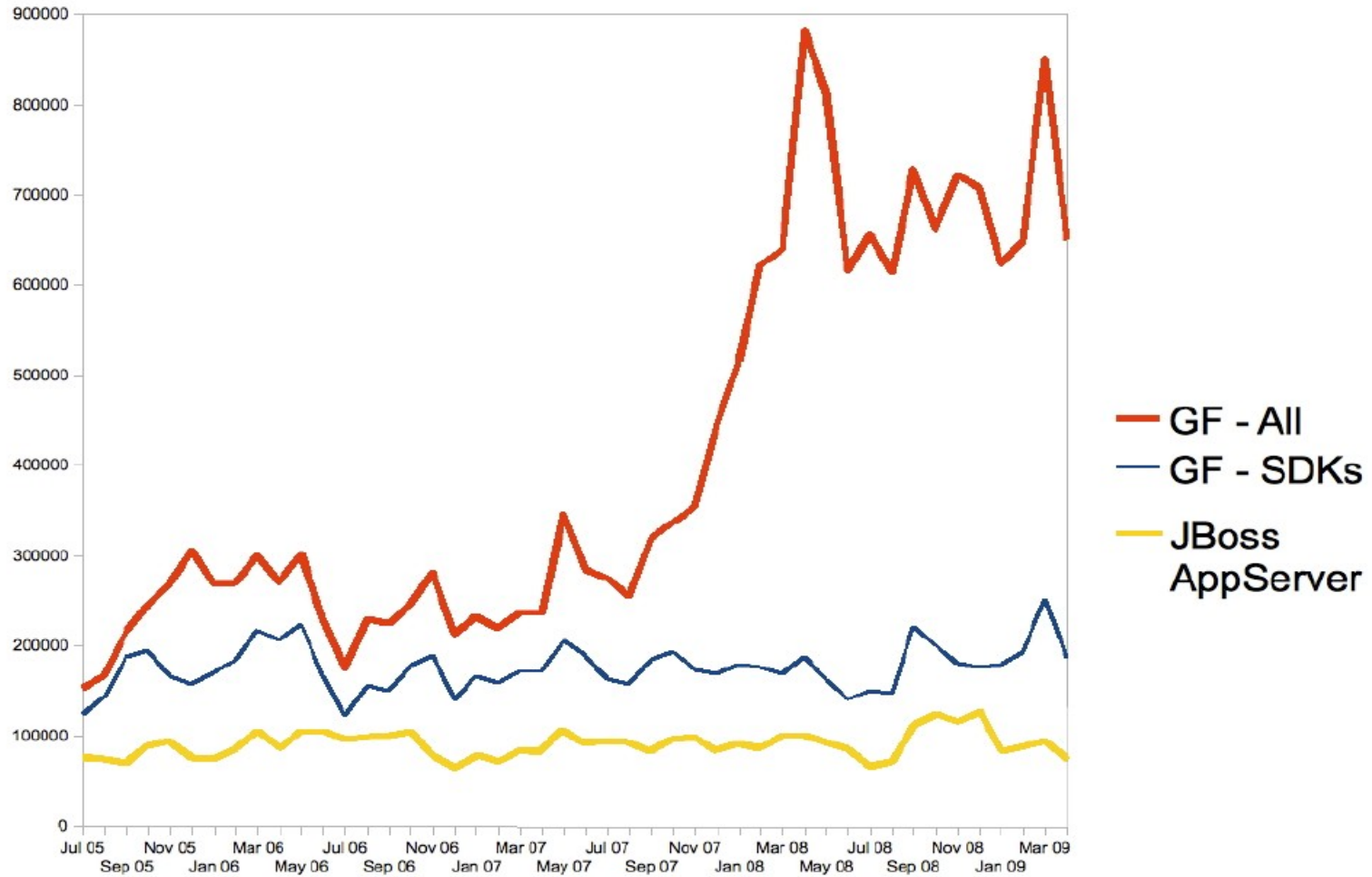
Oct/Nov
2008

Jan
2008

↑
Fall-2009

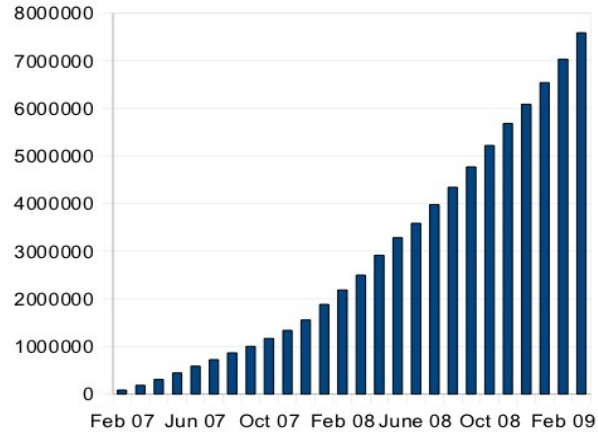
(you are here)

GlassFish Downloads

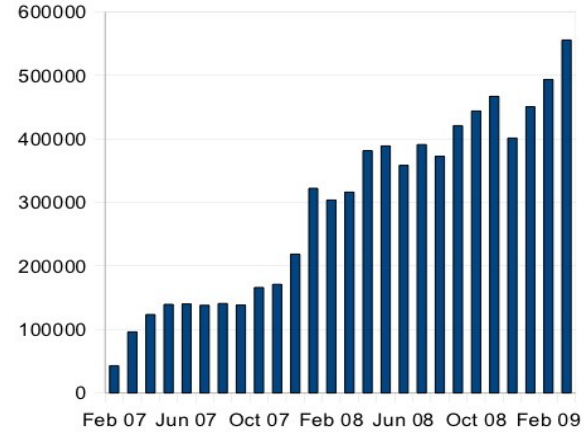


Actual Usage

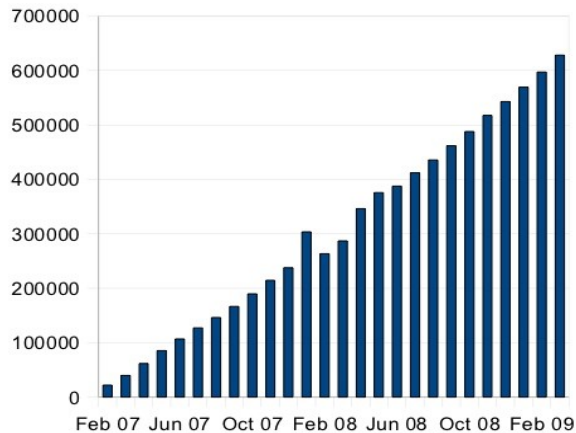
Total Hits



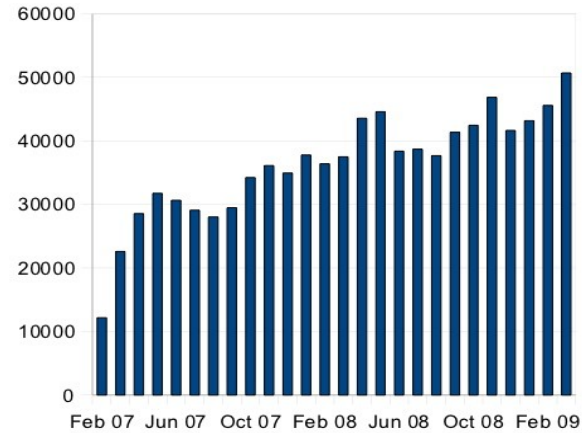
Monthly Hits



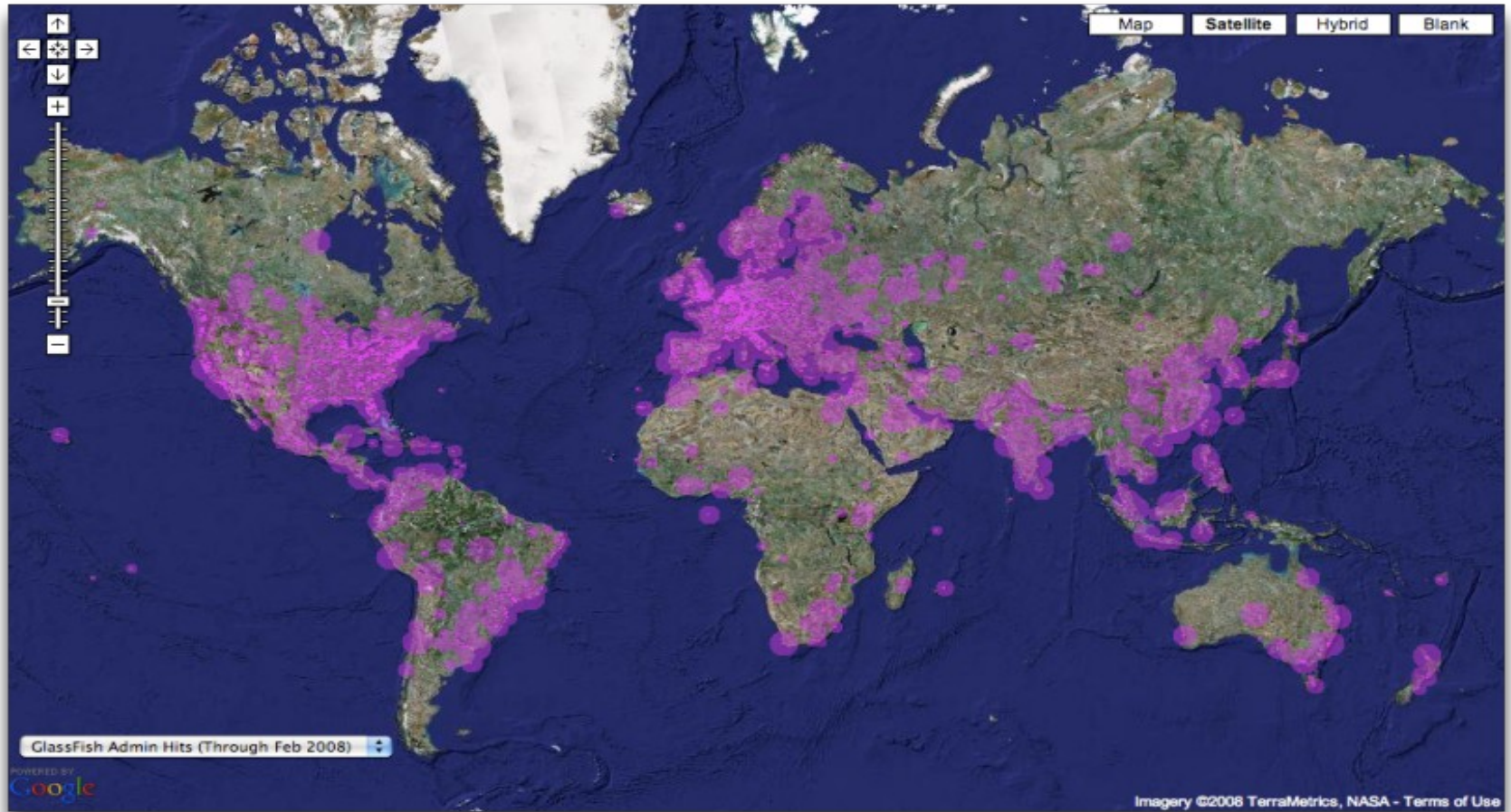
Total IPs



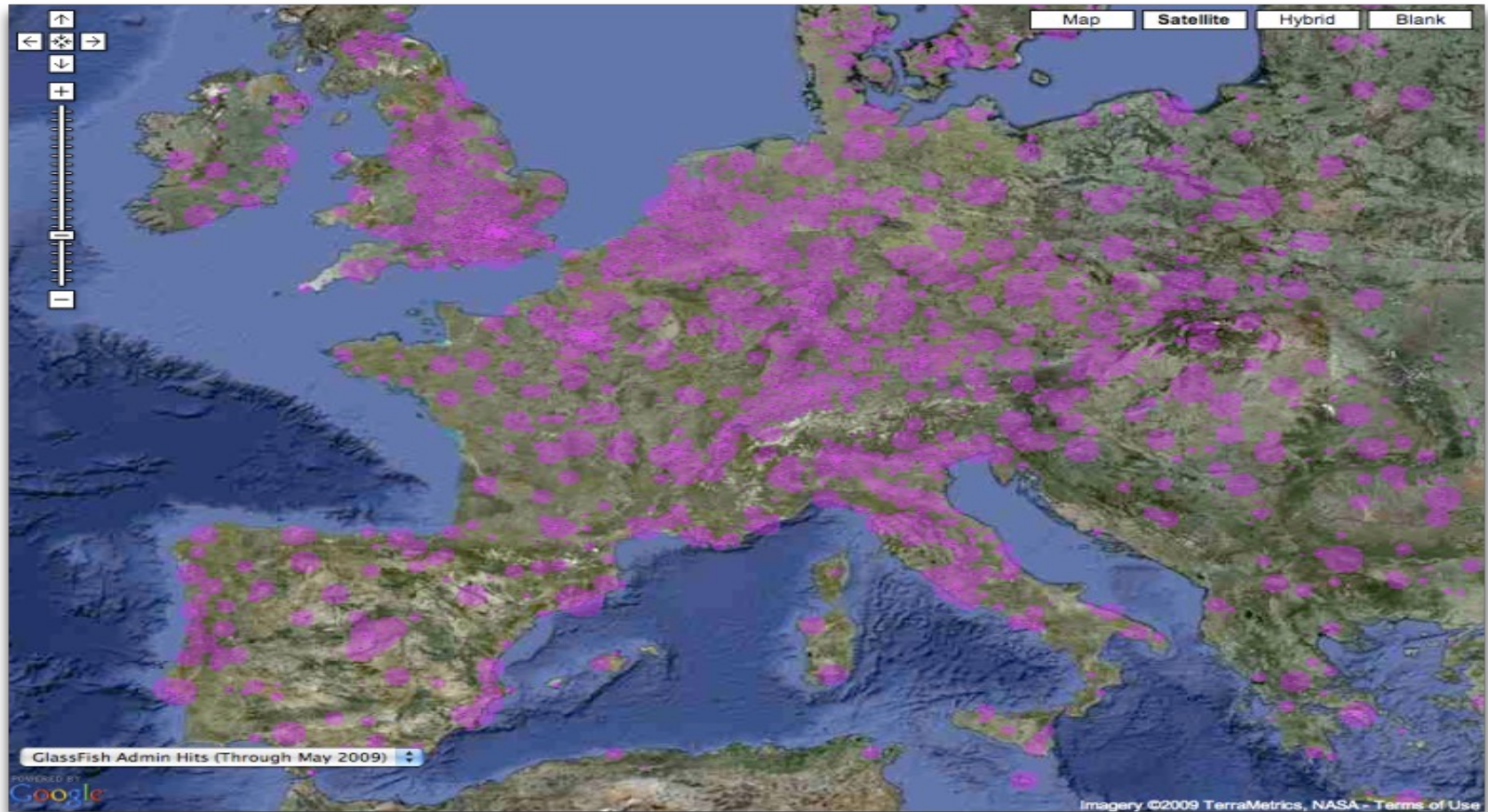
Monthly IPs



GlassFish around you



GlassFish around you (really)

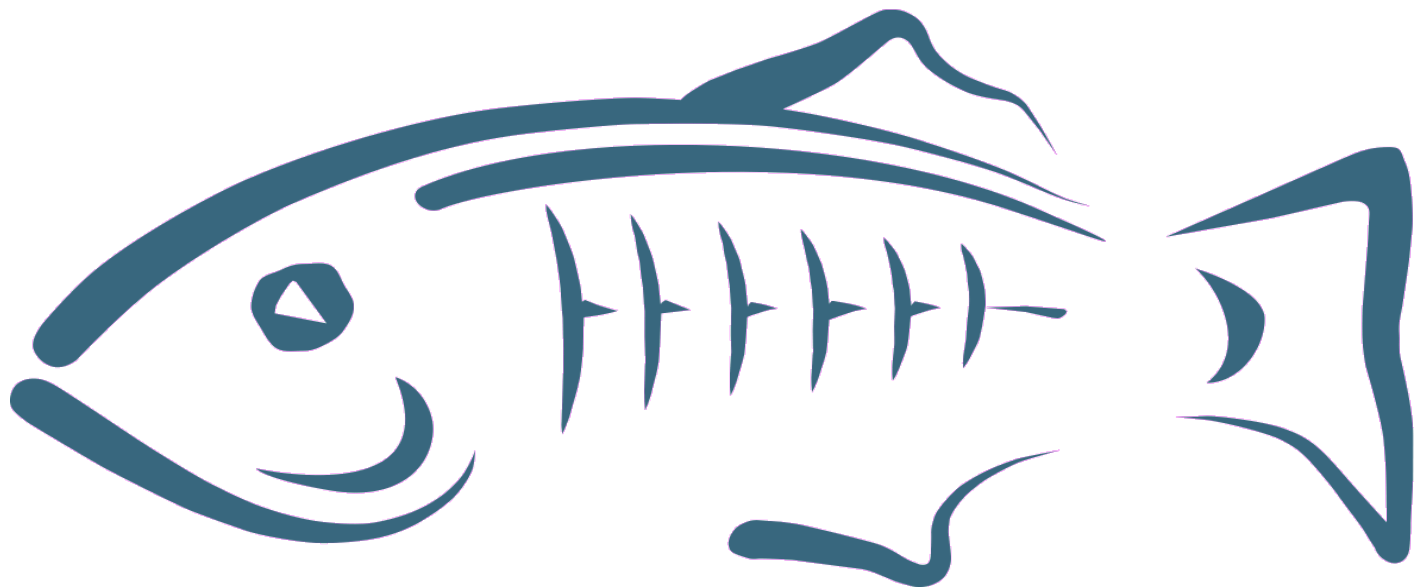


If there was only one reason...



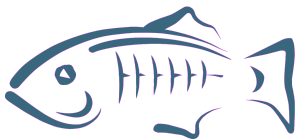
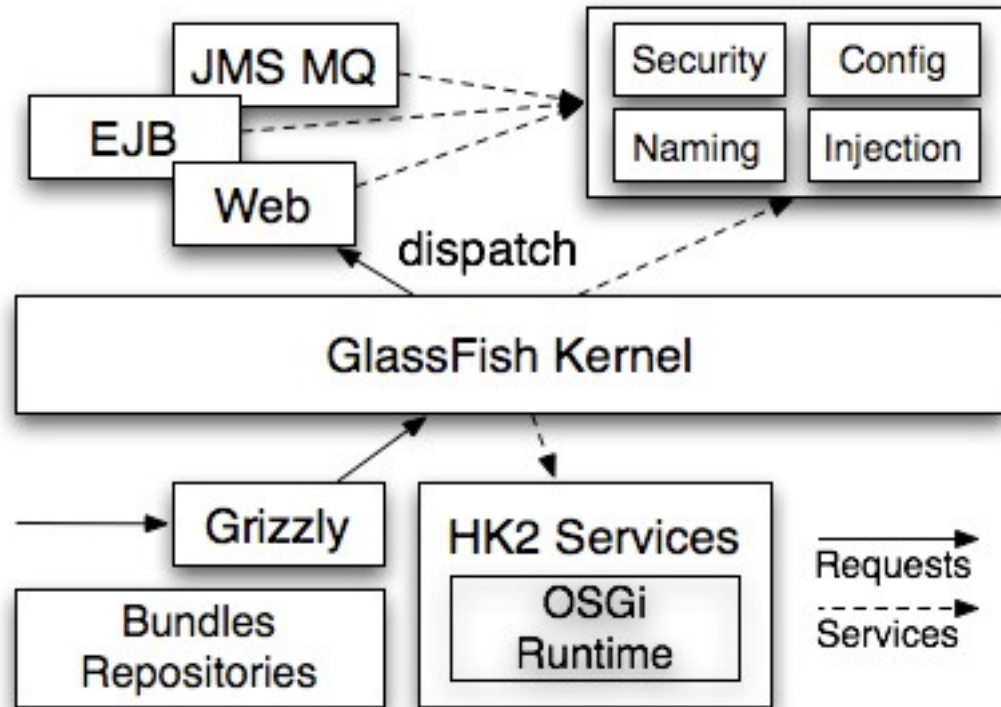
... we care about both

Introducing GlassFish v3



Modular and Dynamic

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



Admin Console

Home
Version

User: anonymous | Domain: domain1 | Server: localhost

GlassFish™ v3 Administration Console

Tree

- Common Tasks
- Registration
- GlassFish News
- Application Server
- Applications
- Resources
 - JDBC
- Configuration
 - Web Container
 - Transaction Service
 - HTTP Service
 - Virtual Servers
 - Thread Pools
 - Network Config
 - Monitoring
 - Security
- System Properties
- Update Tool

Common Tasks

GlassFish News

Registration

GlassFish News

Subscriptions

Deployment

List Deployed Applications

Deploy an Application

Monitoring

View Monitoring Data

Configure Monitoring

Documentation

Quick Start Guide

Administration Guide

Developer's Guide

Application Deployment Guide

Update Center

Installed Components

Available Updates

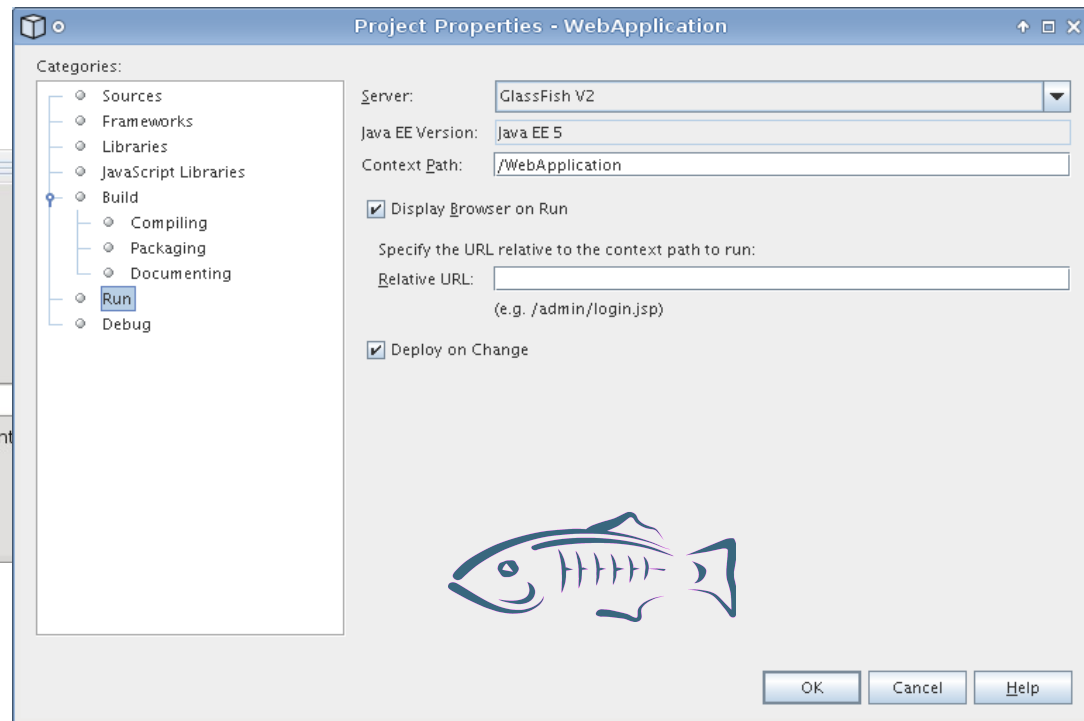
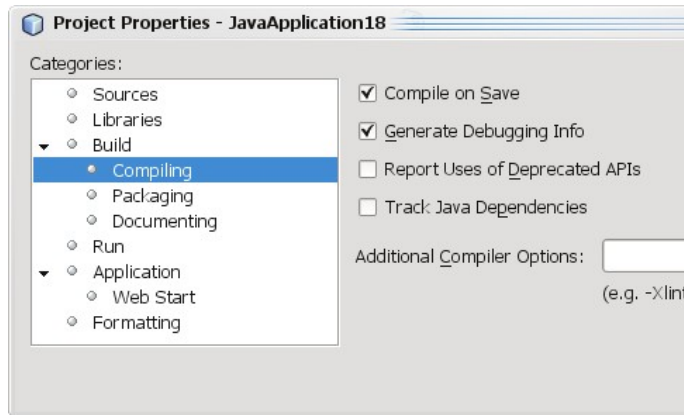
Available Add-Ons

Other Tasks

Create New JDBC Connection Pool

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

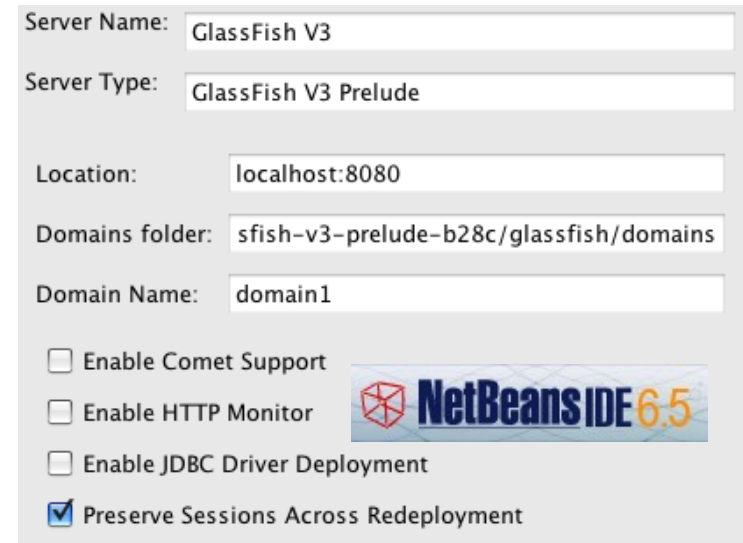


Session Retention

- 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 :



Server Name:


Server Type:

Location:

Domains folder:

Domain Name:

Enable Comet Support
 Enable HTTP Monitor
 Enable JDBC Driver Deployment
 Preserve Sessions Across Redeployment



Yes, Eclipse too !



New Server

New GlassFish v3 Prelude Server
Create a new GlassFish v3 Prelude server

Domain Name:

Domain Directory:

Administrator Id:

Administrator Password:

Use Anonymous Connection for Admin Commands

Preserve Sessions Across Redeployment

MyServlet.java | GlassFish Update Center

Available Add-Ons | Available Updates | Installed Components | Configuration

Available Add-Ons

This page lists the add-on components that are available. Use this page to install any add-on components that you require.

Installation Path: /Users/AlexisMP/glassfishv3-prelude

Available Add-Ons (15)

Component	Category	Version	Install Size	Source
<input type="checkbox"/> jersey	Web Services	1.0-0.3	7MB	dev.glassfish.org
<input type="checkbox"/> glassfish-management-110n	Application Servers	3.0-28.3	96KB	dev.glassfish.org
<input type="checkbox"/> glassfish-web-gui-110n	Application Servers	3.0-28.3	60KB	dev.glassfish.org
<input type="checkbox"/> pkg-extra-tools	System Tools	0.1.0-15.1269	64KB	dev.glassfish.org
<input type="checkbox"/> glassfish-jdbc-gui-110n	Application Servers	3.0-28.3	78KB	dev.glassfish.org
<input type="checkbox"/> jruby-gems	Scripting	2.1.1-1.2	25MB	contrib.glassfish.org
<input type="checkbox"/> glassfish-jts	Application Servers	3.0-28.3	340KB	dev.glassfish.org
<input type="checkbox"/> glassfish-gui-110n	Application Servers	3.0-28.3	3MB	dev.glassfish.org
<input type="checkbox"/> metro	Web Services	1.4-5010	15MB	dev.glassfish.org
<input type="checkbox"/> jmaki	Scripting	1.8.1-2.0	6MB	contrib.glassfish.org

Register

Serv | Glass | Probl | Task | Prop | Data | Snip | Prog | Cons

Server	State	Status
GlassFish V2 Java EE 5 at localhost	Stopped	
GlassFish v3 Prelude at localhost	Started	Synchronized
EclipseWeb		Synchronized

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

Update Tool

Application Images

- GlassFish v3 Preview
 - Available Add-ons
 - Available Updates
 - Installed Components**
 - GlassFish v3 Prelude
 - GlassFish v3 Web Preview

41 components are installed

Component	Category	Version	Installed Size	Source
<input type="checkbox"/> GlassFish Management Extension	Application Servers	3.0-50	1.6 MB	dev.glassfish.org
<input type="checkbox"/> GlassFish Appclient	Application Servers	3.0-50	305.7 kB	dev.glassfish.org
<input type="checkbox"/> GlassFish CMP	Application Servers	3.0-50	2.2 MB	dev.glassfish.org
<input type="checkbox"/> CORBA Code Generation for Glass...	Application Servers	3.0.0-20	897.3 kB	dev.glassfish.org
<input type="checkbox"/> GlassFish Common Components	Application Servers	3.0-50	10.9 MB	dev.glassfish.org
<input type="checkbox"/> GlassFish Commons Full Profile	Application Servers	3.0-50	220.7 kB	dev.glassfish.org
<input type="checkbox"/> CORBA ORB for GlassFish	Application Servers	3.0.0-20	2.0 MB	dev.glassfish.org
<input type="checkbox"/> OMG CORBA APIs for GlassFish	Application Servers	3.0.0-20	325.9 kB	dev.glassfish.org
			172.8 kB	dev.glassfish.org
			751.3 kB	dev.glassfish.org
			943.6 kB	dev.glassfish.org
			9.9 MB	dev.glassfish.org
			565.1 kB	dev.glassfish.org

Home | Version

User: anonymous | Domain: c

GlassFish™ v3 Admin

There are 1 update(s) available

Tree

Common Tasks

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```
% pkg list
NAME (PUBLISHER)          VERSION      STATE      UFIX
felix                    1.8.0-0     installed  ----
glassfish-amx            3.0-50      installed  ----
glassfish-appclient     3.0-50      installed  ----
glassfish-cmp            3.0-50      installed  ----
glassfish-codegen       3.0.0-20    installed  ----
glassfish-common        3.0-50      installed  ----
glassfish-common-full   3.0-50      installed  ----
glassfish-corba         3.0.0-20    installed  ----
glassfish-corba-omgapi  3.0.0-20    installed  ----
glassfish-ej            3.0-50      installed  ----
glassfish-ej            3.0-50      installed  ----
glassfish-gr            3.0-50      installed  ----
glassfish-gu            3.0-50      installed  ----
glassfish-hk            3.0-50      installed  ----
glassfish-jc            3.0-50      installed  ----
glassfish-jc            3.0-50      installed  ----
glassfish-id            3.0-50      installed  ----
```

```
% pkg install hibernate
DOWNLOAD          PKGS      FILES      XFER (MB)
Completed        1/1       13/13      4.87/4.87

PHASE            ACTIONS
Install Phase    21/21
```

```
PHASE
Reading Existing Index
Indexing Packages
```

```
% pkg Usage:
pkg [options] command [cmd_options] [operands]
```


GlassFish Embedded

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

total(1022ms)



```
INFO: GlassFish V3 Prelude startup time : Embedded(430ms) startup services(592ms) total(1022ms)
```

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 () {
    ...
}
```

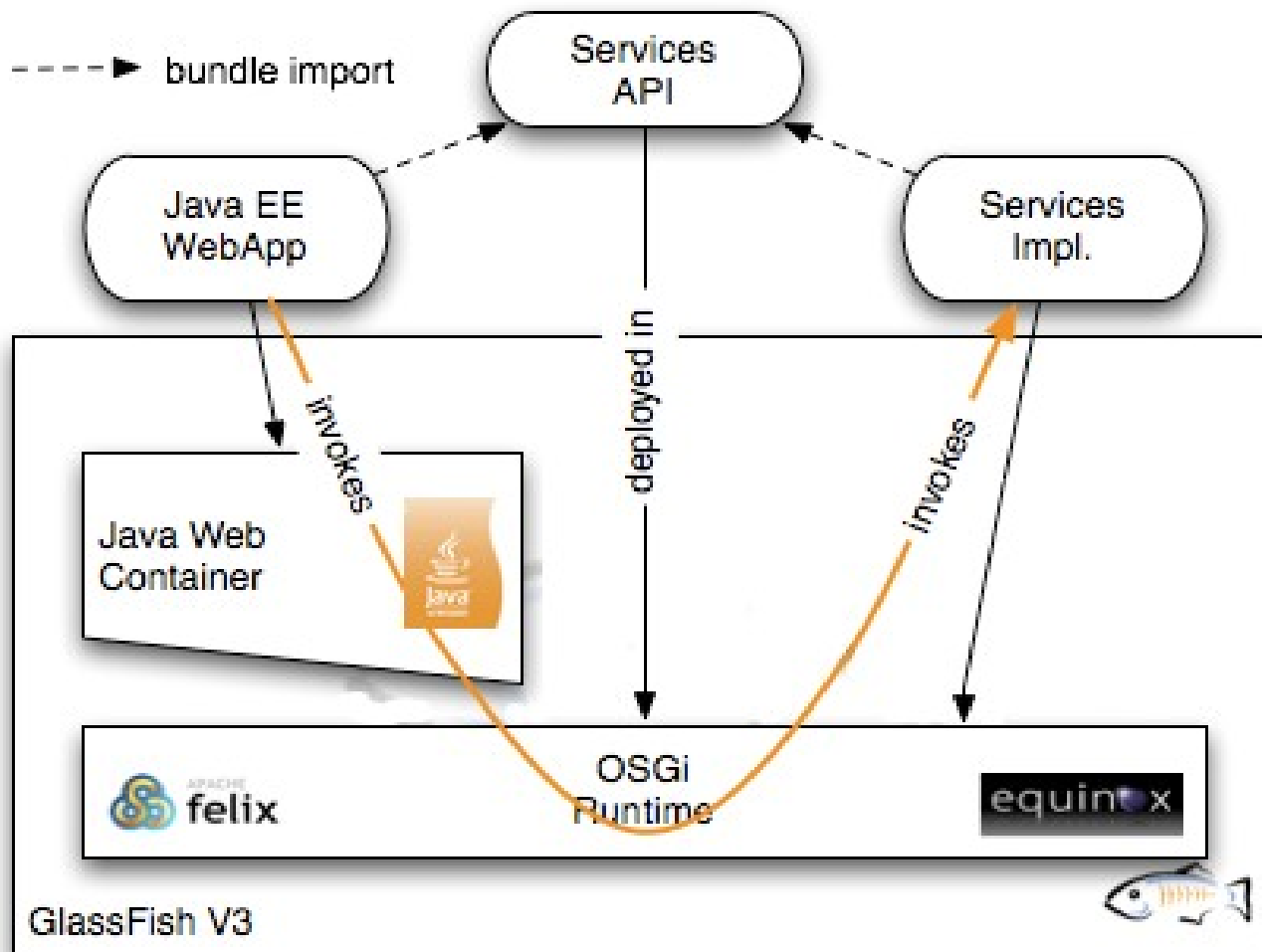
Extending GlassFish v3

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

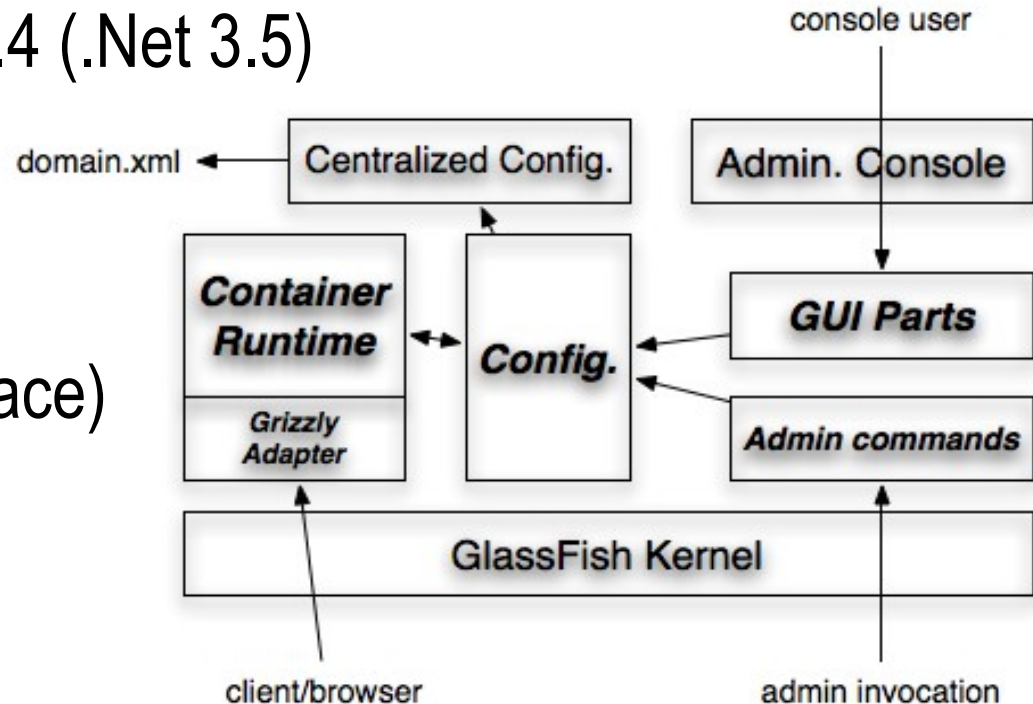
Extending GlassFish v3

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 ?

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alexis.mp@sun.com

