THE ADVENTUROUS DEVELOPERS GUIDE TO APP SERVERS

SIMON MAPLE
@SJMAPLE

YOUR SPEAKER

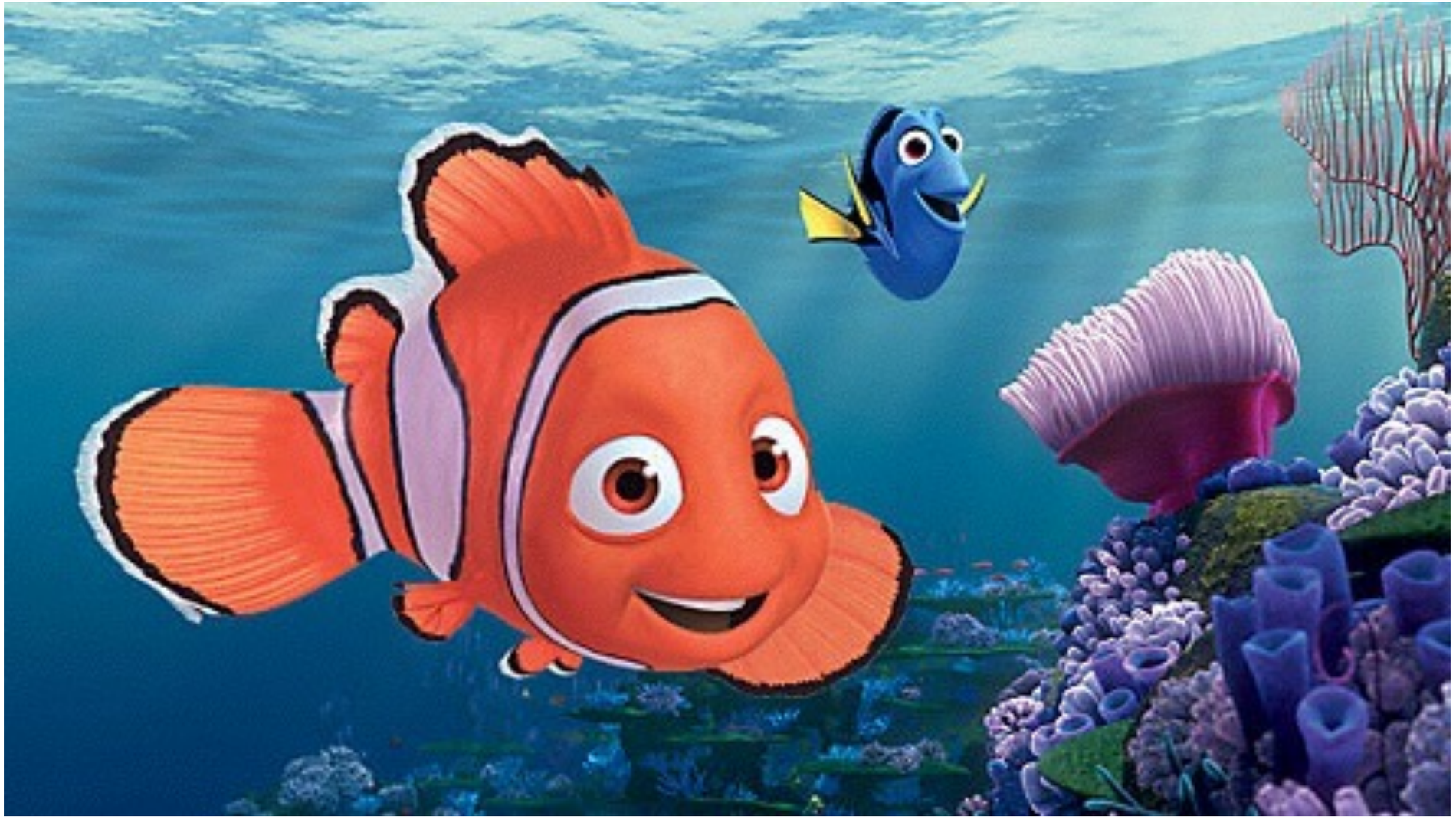
SIMON MAPLE
@SJMAPLE

ZEROTURNAROUND

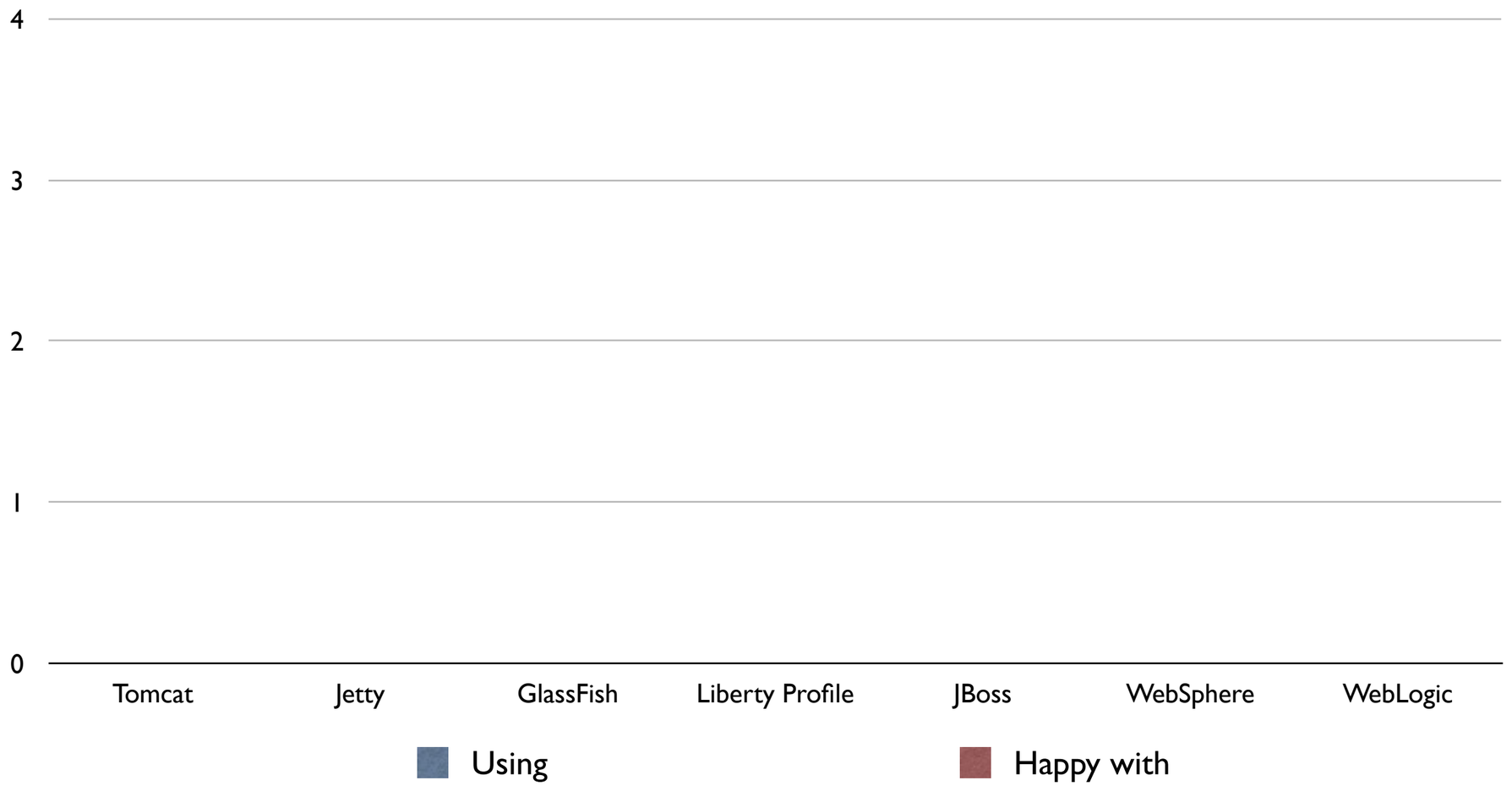
Name That Film

MURDER OF OVER 400 LIVES
KIDNAPPING
SHARK ATTACK
NEAR ELECTROCUTION
NEAR SUFFOCATION

Name That Film



MY AUDIENCE


4
3
2
1
0
Tomcat
Jetty
GlassFish
Liberty Profile
JBoss
WebSphere
WebLogic
Using
Happy with

WHAT IS AN APPLICATION SERVER?

WIKIPEDIA

"JAVA PLATFORM, ENTERPRISE EDITION OR JAVA EE DEFINES THE CORE SET OF API AND FEATURES OF JAVA APPLICATION SERVERS"

jetty://

JBoss™

RebelLabs - rebellabs.org

METRICS

DOWNLOAD & INSTALLATION

TOOLING SUPPORT

SERVER CONFIGURATION

DOCS AND COMMUNITY

PERFORMANCE METRICS

FEATURES

ADMIN & MANAGEMENT/UI

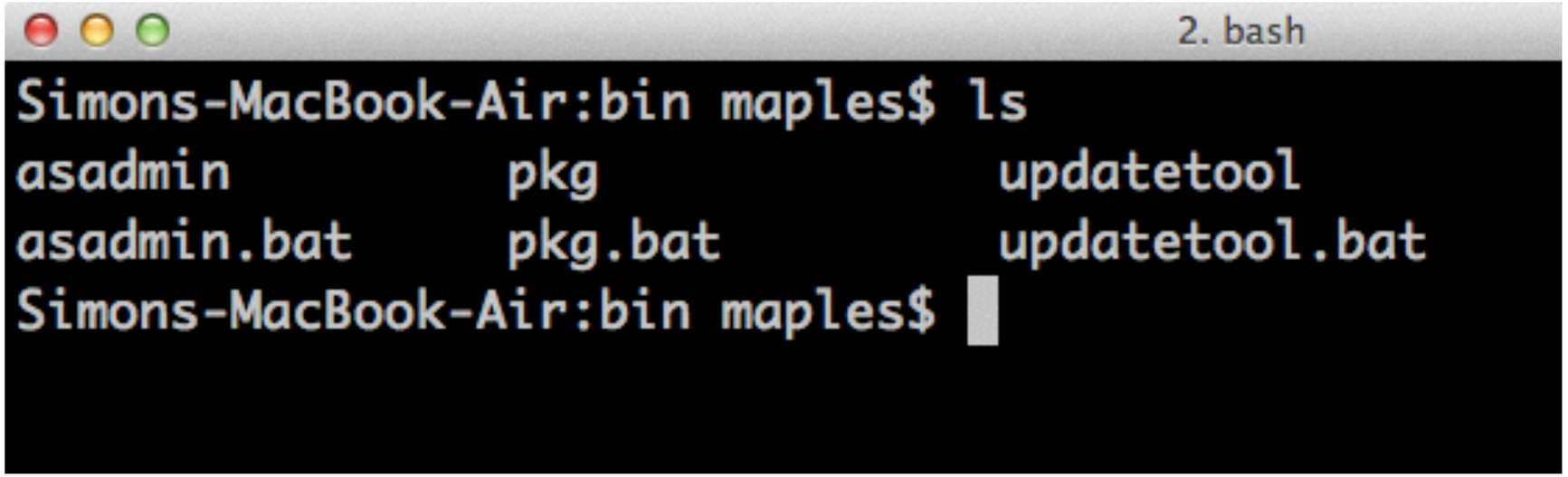
COST & LICENSING

DOWNLOAD & INSTALLATION

DOWNLOAD

GO!

POWER


2. bash
Simons-MacBook-Air:bin maples$ ls
asadmin pkg updatetool
asadmin.bat pkg.bat updatetool.bat
Simons-MacBook-Air:bin maples$

Safari File Edit View History Bookmarks Develop Window Help

Java Productivity Tools by ZeroTurnaround – JRebel & LiveRebel

zeroturnaround.com

Gmail Calendar Marketing GoToMeeting

Inbox (... ZeroTu... My Fol... My Fol... My Fol... Video P... Social... Jetty bl... CloudB... DevOp... The Gr... Apache... Java Pr...

ZEROTURNAROUND

HOME JREBEL LIVEREBEL REBEL LABS BLOG FORUM COMPANY

UNICORNS + BEER

STILL NOT BETTER THAN
OUR FREE TECHNICAL REPORTS

REBELLABS

Log in

DEVELOP What do you do? RELEASE

JRebel

Instant Reload

See all changes to Java code instantly in the browser. Save and refresh! The same is true for your other project files.

Ecosystem Support

All major IDEs, application servers, servlet containers and frameworks are supported out of the box.

Local or Remote

LiveRebel

Release Code + Database + Config

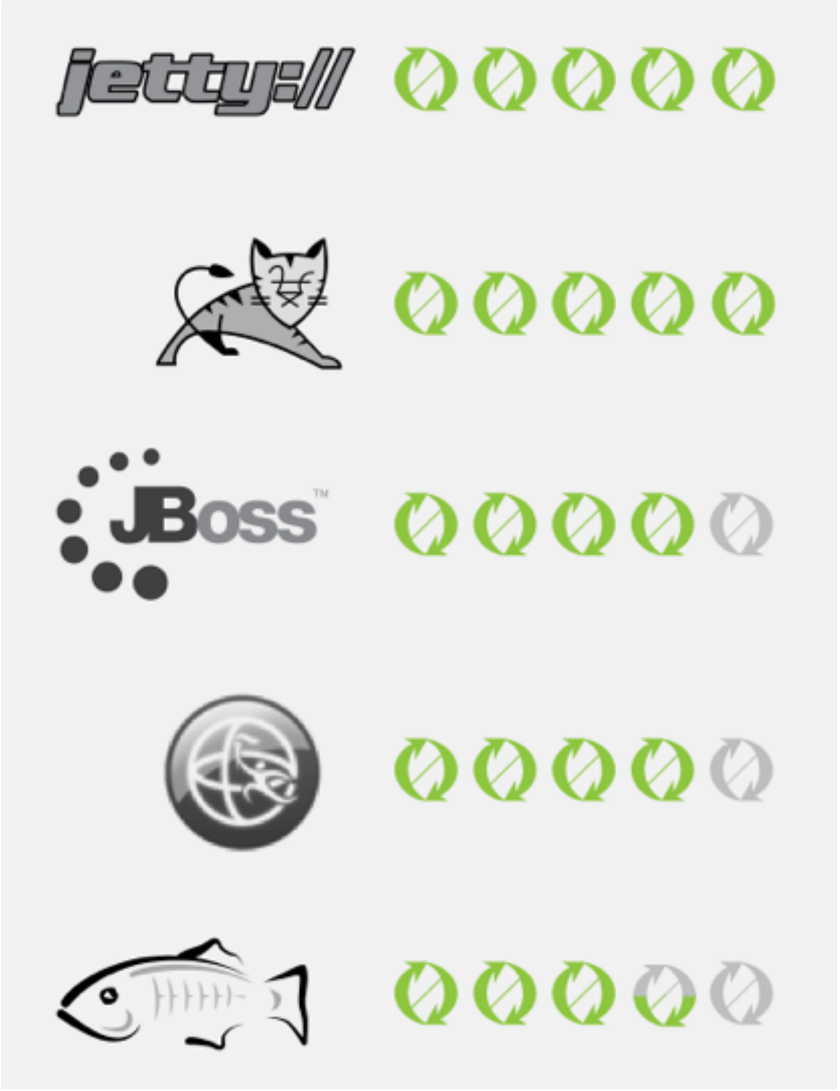
Through testing, staging and production environments on hardware or in the cloud with no additional prep. All with zero downtime and no overhead.

Failsafe, One-Click Releases

Deployments are versioned, automated, fully reversible and testable. Failed rollouts are fully rolled back before users are impacted.

One-Stop Management Console

DOWNLOAD & INSTALLATION



TOOLING SUPPORT

NetBeans

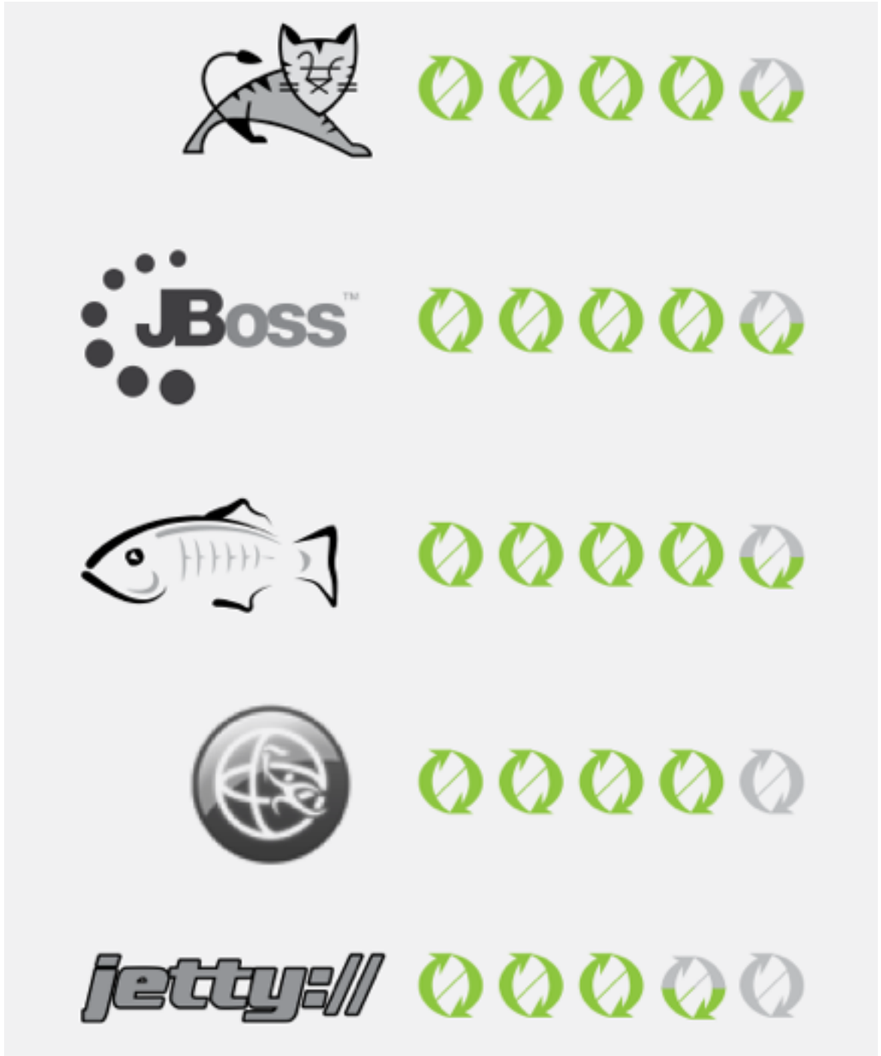
eclipse

NetBeans

maven

eclipse

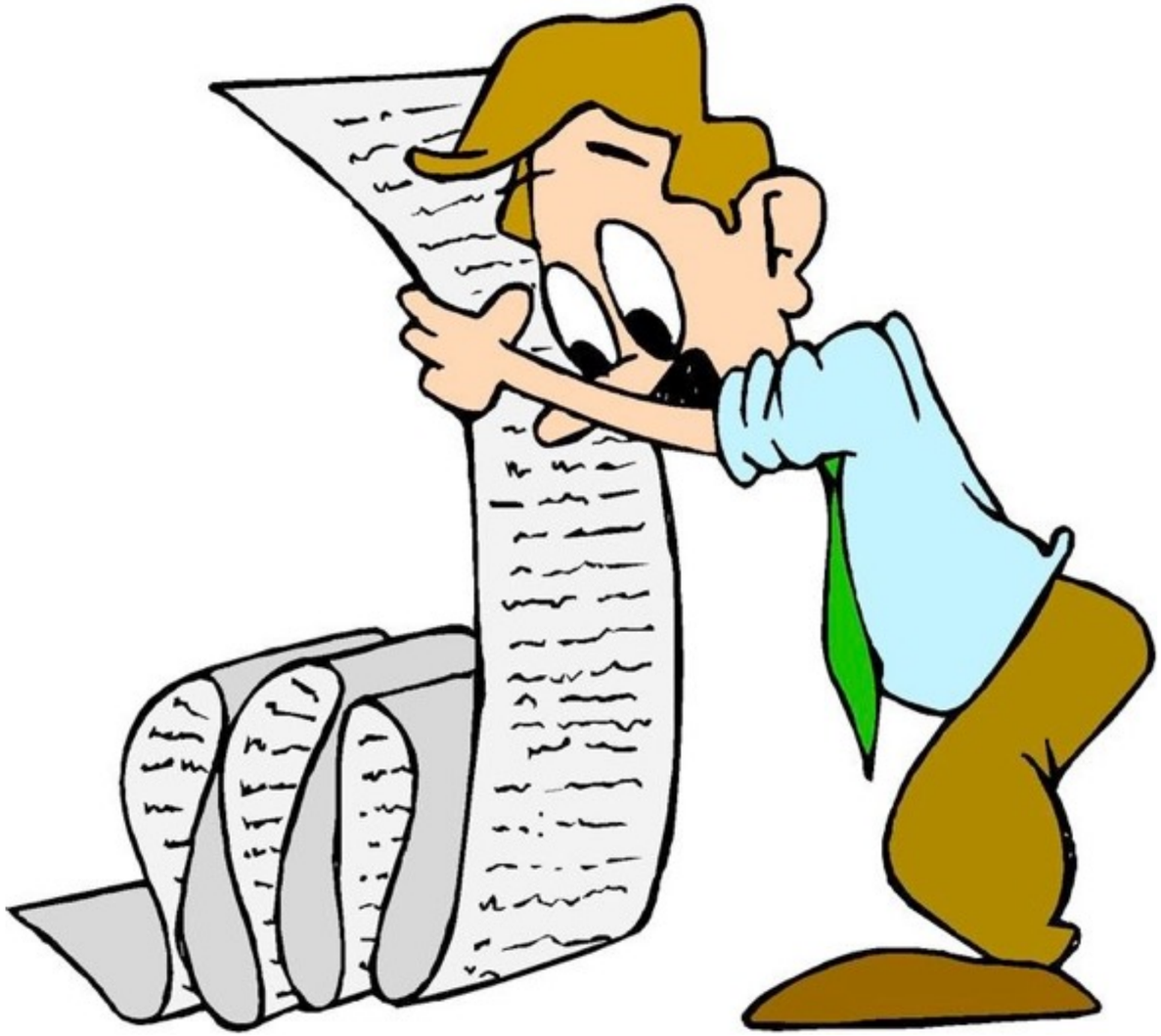
TOOLING SUPPORT



SERVER CONFIGURATION

<?xml?>

WEBSPHERE



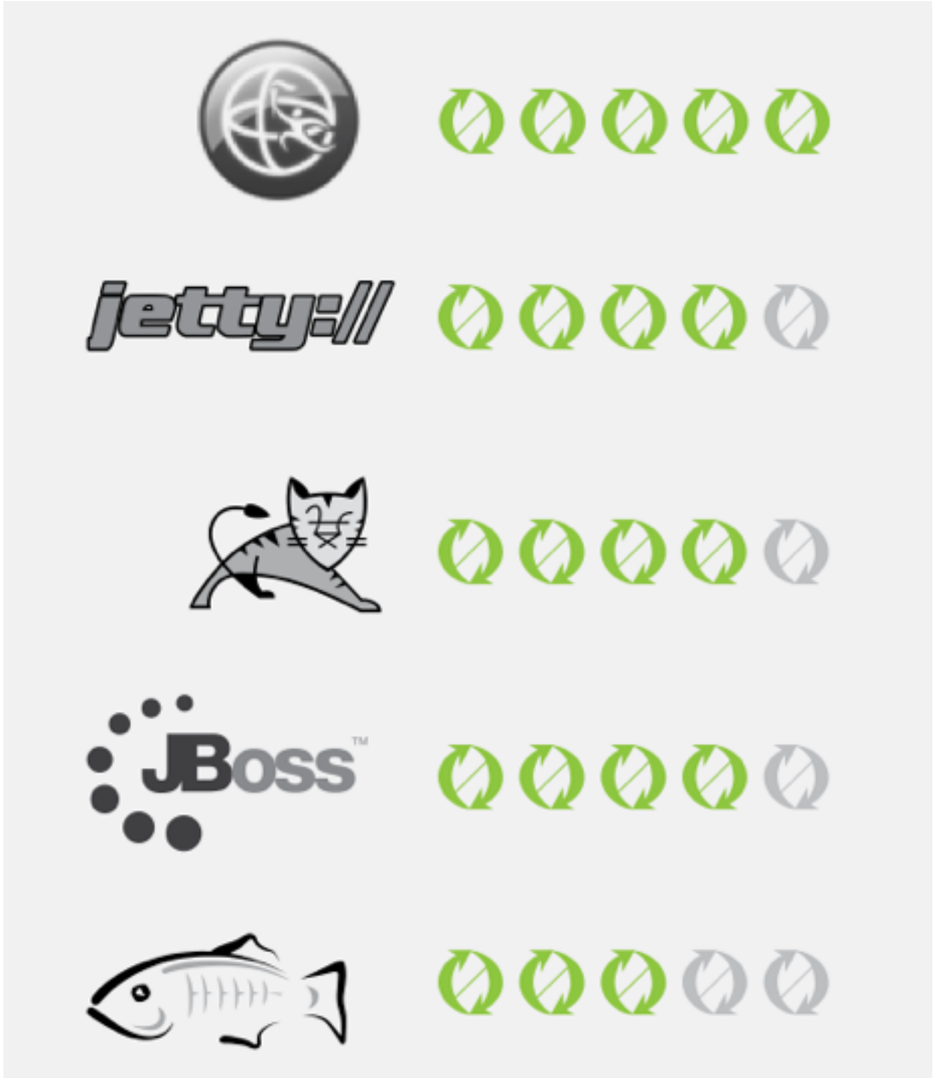
LIBERTY PROFILE

```
<server description="new server">
    <featureManager>
        <feature>servlet-3.0</feature>
    </featureManager>
</server>
```

LIBERTY PROFILE

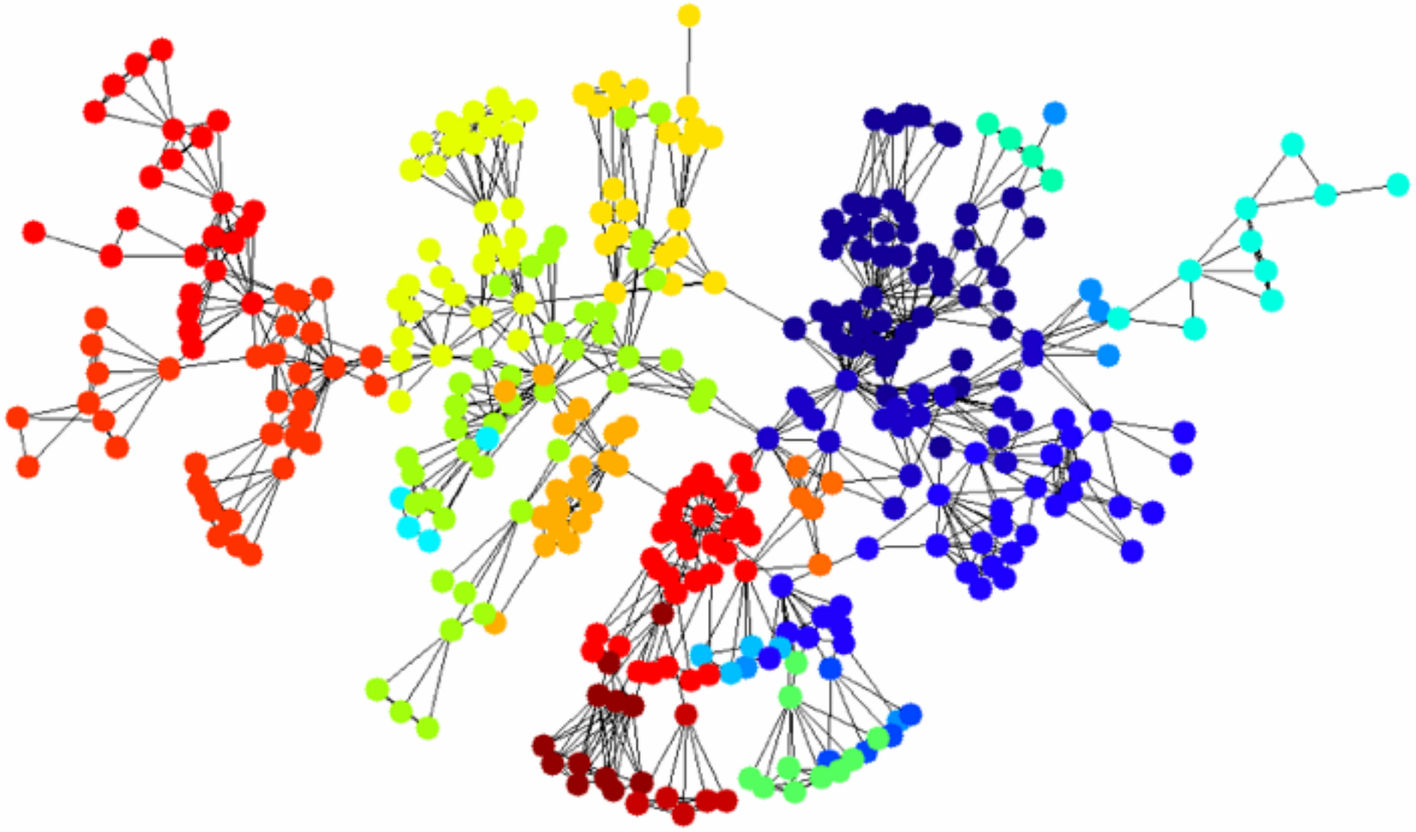
```
<server description="new server">
    <featureManager>
        <feature>servlet-3.0</feature>
        <feature>blueprint-1.0</feature>
    </featureManager>
</server>
```

SERVER CONFIGURATION



DOCS AND COMMUNITY

Google Search I'm Feeling Lucky



NEVER HAVE I FELT SO CLOSE TO ANOTHER SOUL

AND YET SO HELPLESSLY ALONE

AS WHEN I GOOGLE AN ERROR

AND THERE'S ONE RESULT

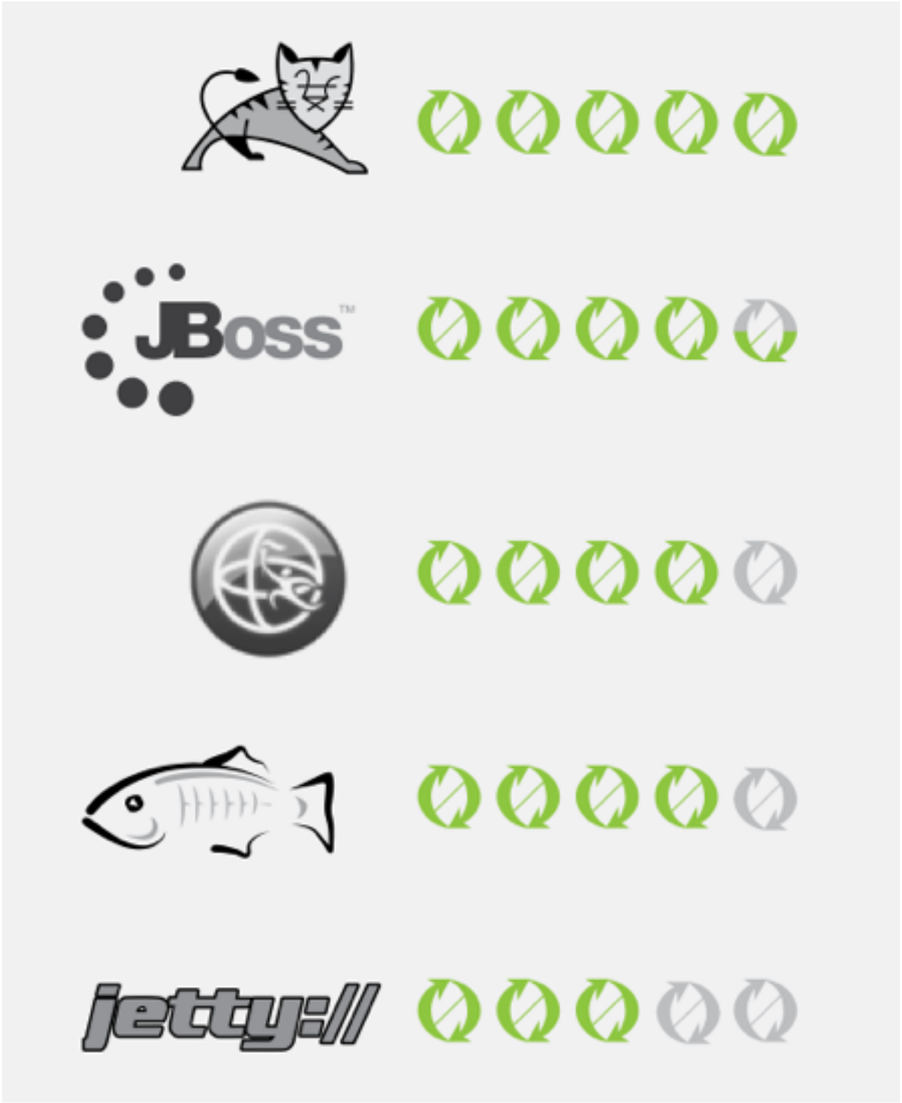
A THREAD BY SOMEONE WITH THE SAME PROBLEM

AND NO ANSWER

LAST POSTED TO IN 2003

http://xkcd.com/979/

DOCS AND COMMUNITY



PERFORMANCE METRICS

	LP	TC	GF	JETTY	JB
Empty Server Startup time	**2**	2	+2.5	+2	+1
Server Startup time w/ petclinic app installed	**2.5**	+3.5	+6.5	+8.5	+4.5
Server Restart time with petclinic installed	**4.5**	+3.5	+8.5	+9	+6
Server Startup time with jenkins app installed	**4**	+5	+6	+8	+11
Server Restart time with jenkins installed	**6**	+6	+13	+8.5	+15

	LP	TC	GF	JETTY	JB	AVG
Petclinic app deploy time	**1**	5	5	6	3	4
Jenkins app deploy time	**2**	8	8	8	13	7.8

	LP	TC	GF	JETTY	JB	AVG
Startup with app & invoke petclinic	10.5	**7.5**	11	12.5	8.5	10
Startup, deploy & invoke petclinic	11	8.5	11.5	11.5	**7.5**	10
Startup with app & invoke jenkins	25	**11.5**	14	15	17	16.5
Startup, deploy & invoke jenkins	25	**12.5**	16.5	15	18	17.4

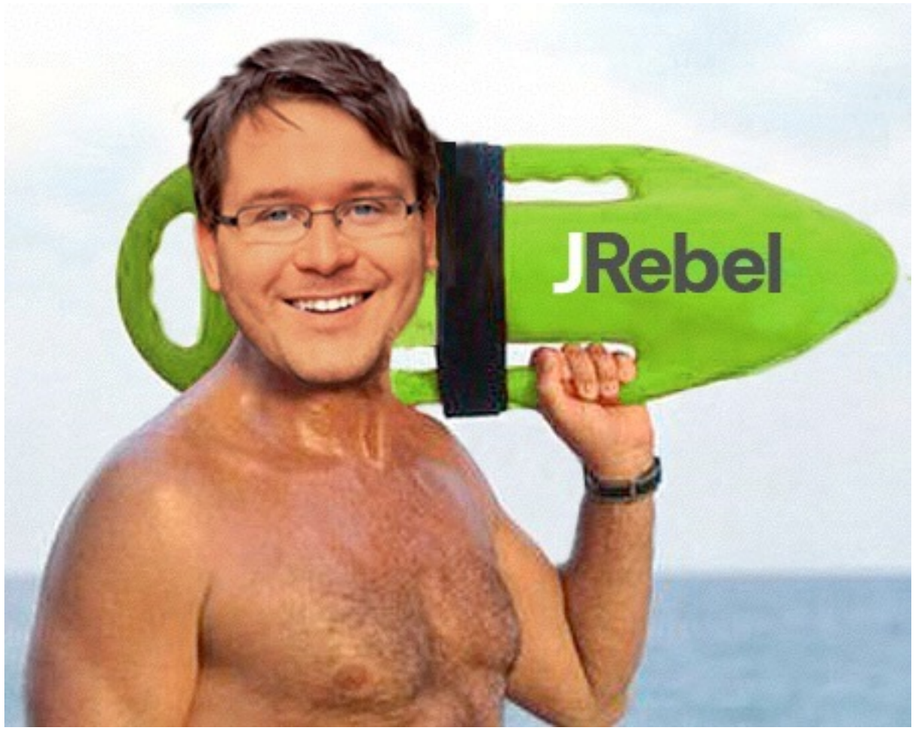
**N.B* This has improved in version 8.5.5 since this report has been released. For more info, check out the WASdev site's review and commentary of this report :)*

PERFORMANCE METRICS

LIBERTY PROFILE 8.5.5.4

Task	Liberty Profile 8.5.0.0	Liberty Profile 8.5.5.4
Empty server startup	2	2
Server startup time with petclinic installed	2.5	3
Server startup time with jenkins installed	4	8
Petclinic app deploy time	1	2.5
Jenkins app deploy time	2	5.5
Petclinic init time (1st req)	8	4
Jenkins init time (1st req)	21	8
Server startup, deploy petclinic & invoke	11	10
Server startup, deploy jenkins & invoke	25	16

YEH, WE SAVE LIVES



Founder/CEO Jevgeni "Hosselhuff" Kabanov gets ready to save more Java developers from redeploy madness with JRebel

FEATURES

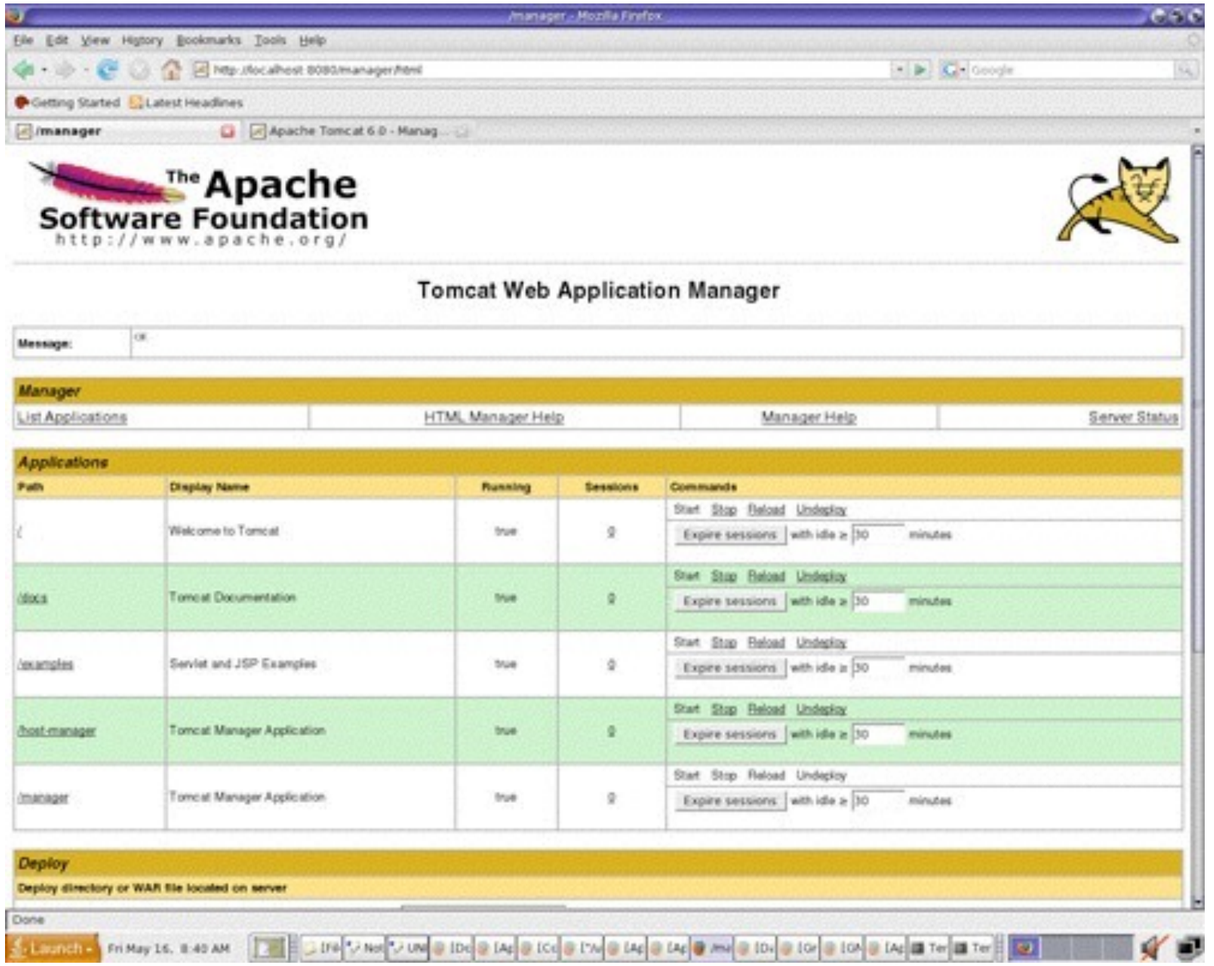
Java™

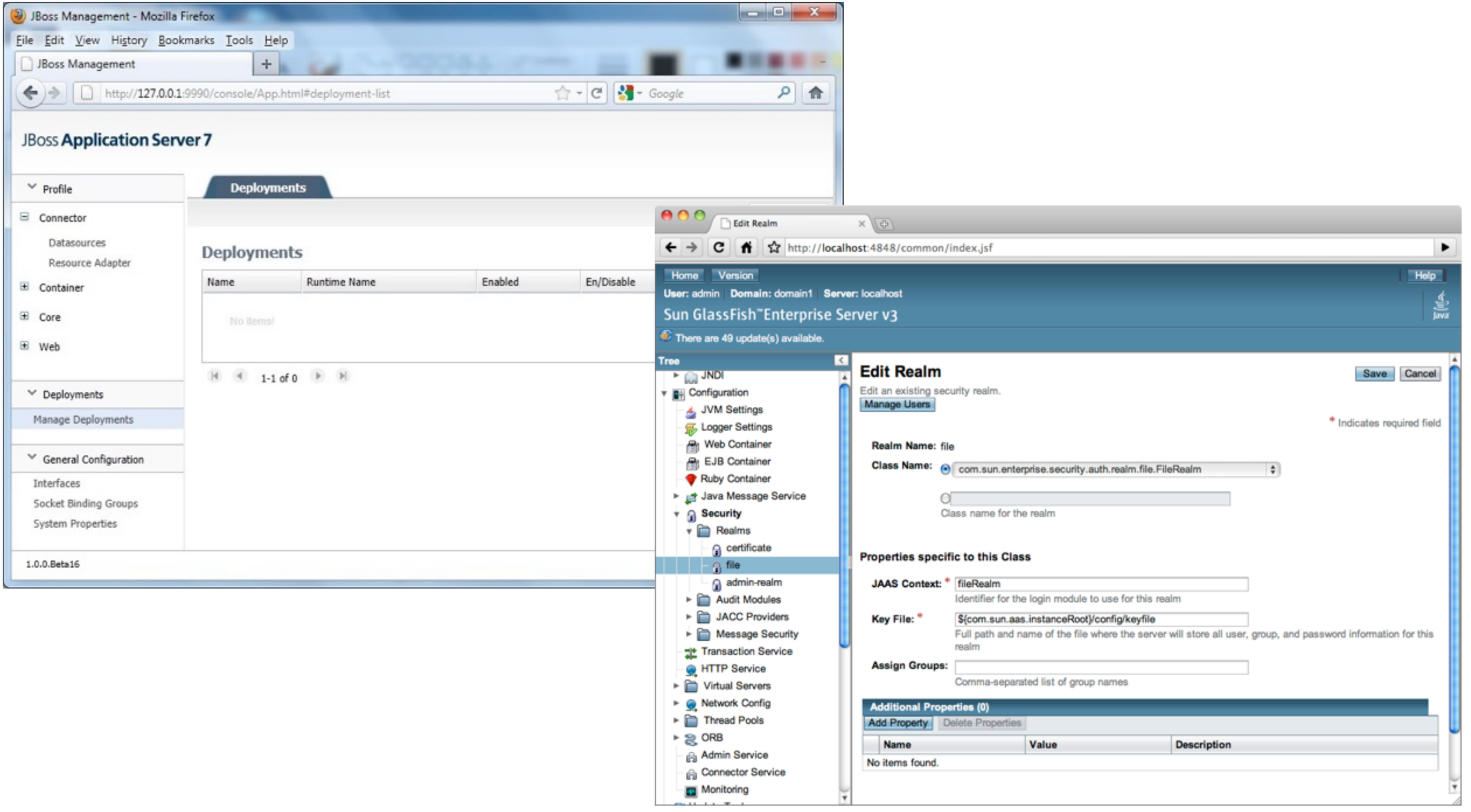
WENGER

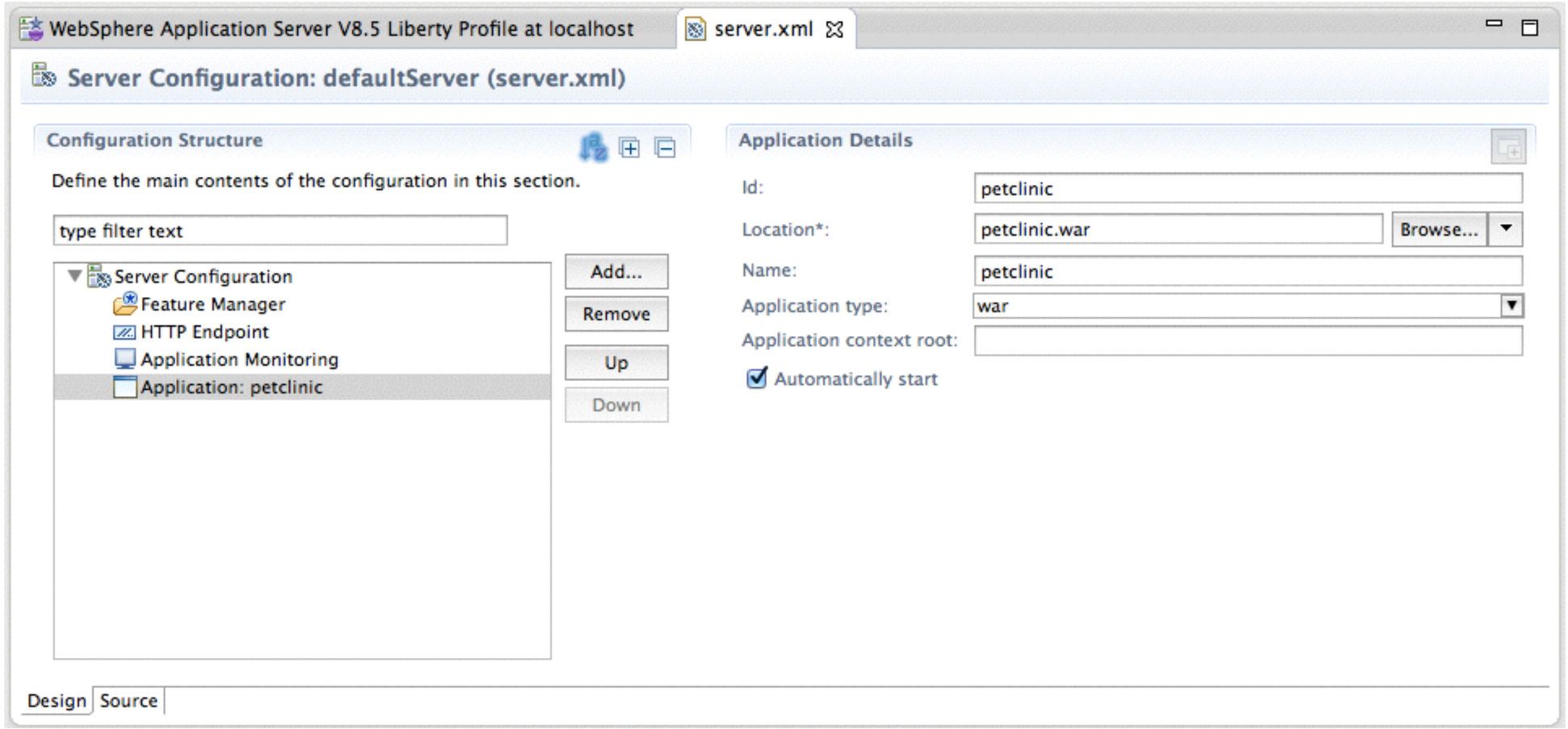
http://tomee.apache.org/

FEATURES & OS COMPATIBILITY

ADMIN & MANAGEMENT/UI


/manager - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://localhost:8080/manager/html
Getting Started Latest Headlines
/manager
Apache Tomcat 6.0 - Manag...
The Apache Software Foundation
http://www.apache.org/
Tomcat Web Application Manager
Message: OK
Manager
List Applications
HTML Manager Help
Manager Help
Server Status
Applications
Path
Display Name
Running
Sessions
Commands
/
Welcome to Tomcat
true
0
Start Stop Reload Undeploy
Expire sessions with idle ≥ 30 minutes
/docs
Tomcat Documentation
true
0
Start Stop Reload Undeploy
Expire sessions with idle ≥ 30 minutes
/examples
Servlet and JSP Examples
true
0
Start Stop Reload Undeploy
Expire sessions with idle ≥ 30 minutes
/host-manager
Tomcat Manager Application
true
0
Start Stop Reload Undeploy
Expire sessions with idle ≥ 30 minutes
/manager
Tomcat Manager Application
true
0
Start Stop Reload Undeploy
Expire sessions with idle ≥ 30 minutes
Deploy
Deploy directory or WAR file located on server
Done
Launch
Fri May 16, 8:40 AM


JBoss Management - Mozilla Firefox
File Edit View History Bookmarks Tools Help
JBoss Management
http://127.0.0.1:9990/console/App.html#deployment-list
Google
JBoss Application Server 7
Profile
Connector
Datasources
Resource Adapter
Container
Core
Web
Deployments
Manage Deployments
General Configuration
Interfaces
Socket Binding Groups
System Properties
Deployments
Deployments
Name
Runtime Name
Enabled
En/Disable
No items!
1-1 of 0
1.0.0.Beta16
Edit Realm
http://localhost:4848/common/index.jsf
Home
Version
Help
User: admin
Domain: domain1
Server: localhost
Sun GlassFish™Enterprise Server v3
There are 49 update(s) available.
Tree
JNDI
Configuration
JVM Settings
Logger Settings
Web Container
EJB Container
Ruby Container
Java Message Service
Security
Realms
certificate
file
admin-realm
Audit Modules
JACC Providers
Message Security
Transaction Service
HTTP Service
Virtual Servers
Network Config
Thread Pools
ORB
Admin Service
Connector Service
Monitoring
Edit Realm
Save
Cancel
Edit an existing security realm.
Manage Users
* Indicates required field
Realm Name: file
Class Name: com.sun.enterprise.security.auth.realm.file.FileRealm
Class name for the realm
Properties specific to this Class
JAAS Context: * fileRealm
Identifier for the login module to use for this realm
Key File: * ${com.sun.aas.instanceRoot}/config/keyfile
Full path and name of the file where the server will store all user, group, and password information for this realm
Assign Groups:
Comma-separated list of group names
Additional Properties (0)
Add Property
Delete Properties
Name
Value
Description
No items found.

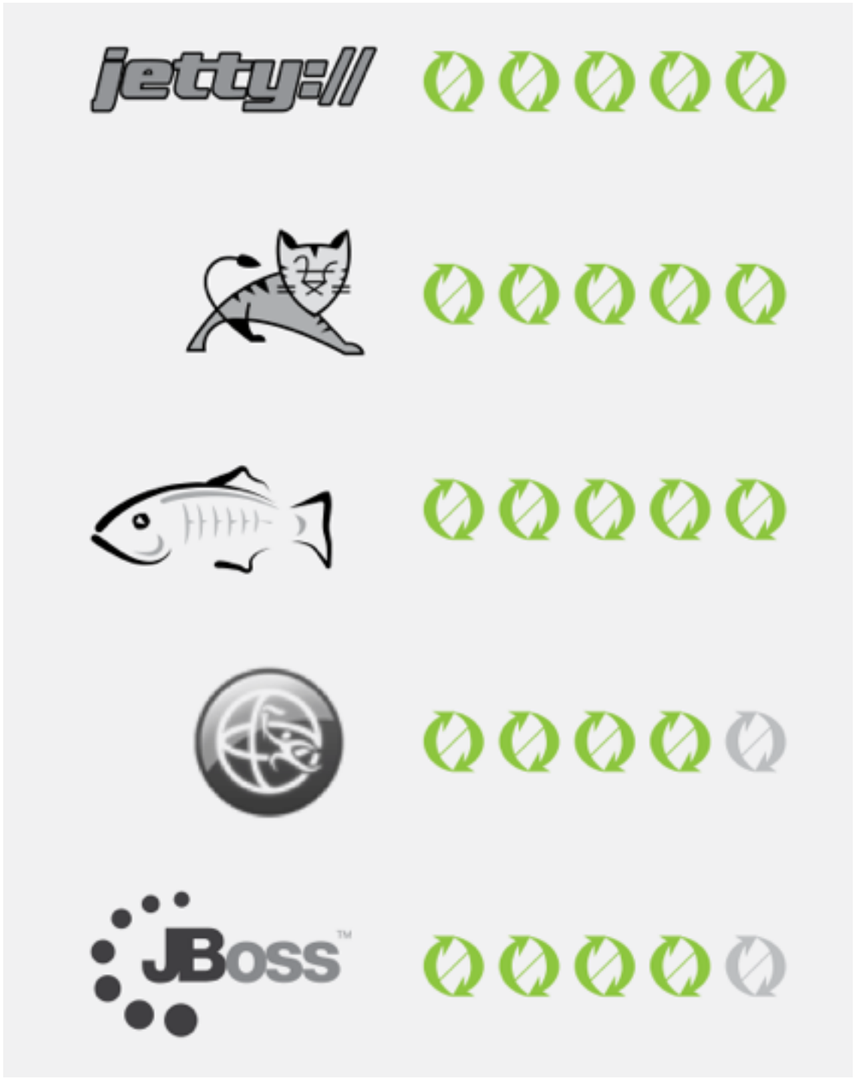

WebSphere Application Server V8.5 Liberty Profile at localhost
server.xml
Server Configuration: defaultServer (server.xml)
Configuration Structure
Define the main contents of the configuration in this section.
type filter text
Server Configuration
Feature Manager
HTTP Endpoint
Application Monitoring
Application: petclinic
Add...
Remove
Up
Down
Application Details
Id:
petclinic
Location*:
petclinic.war
Browse...
Name:
petclinic
Application type:
war
Application context root:
Automatically start
Design
Source

ADMIN & MANAGEMENT/UI

COST & LICENSING

SERVER	LICENSE	PRODUCTION	DEVELOPMENT	COMMERCIAL SUPPORT
Jetty	Apache 2.0 / EPL	Free	Free	No
Tomcat	Apache 2.0	Free	Free	No
JBoss AS	GNU LGPL	Free	Free	Yes (EAP)
JBoss EAP	GNU LGPL	$$$	Free	Yes
GlassFish OSE	CDDL 1.1	Free	Free	OOPS!
Oracle GlassFish Server	Commercial	$$$	Free	Yes
WAS Liberty Profile	Commercial	$$$	Free	Yes

COST & LICENSING

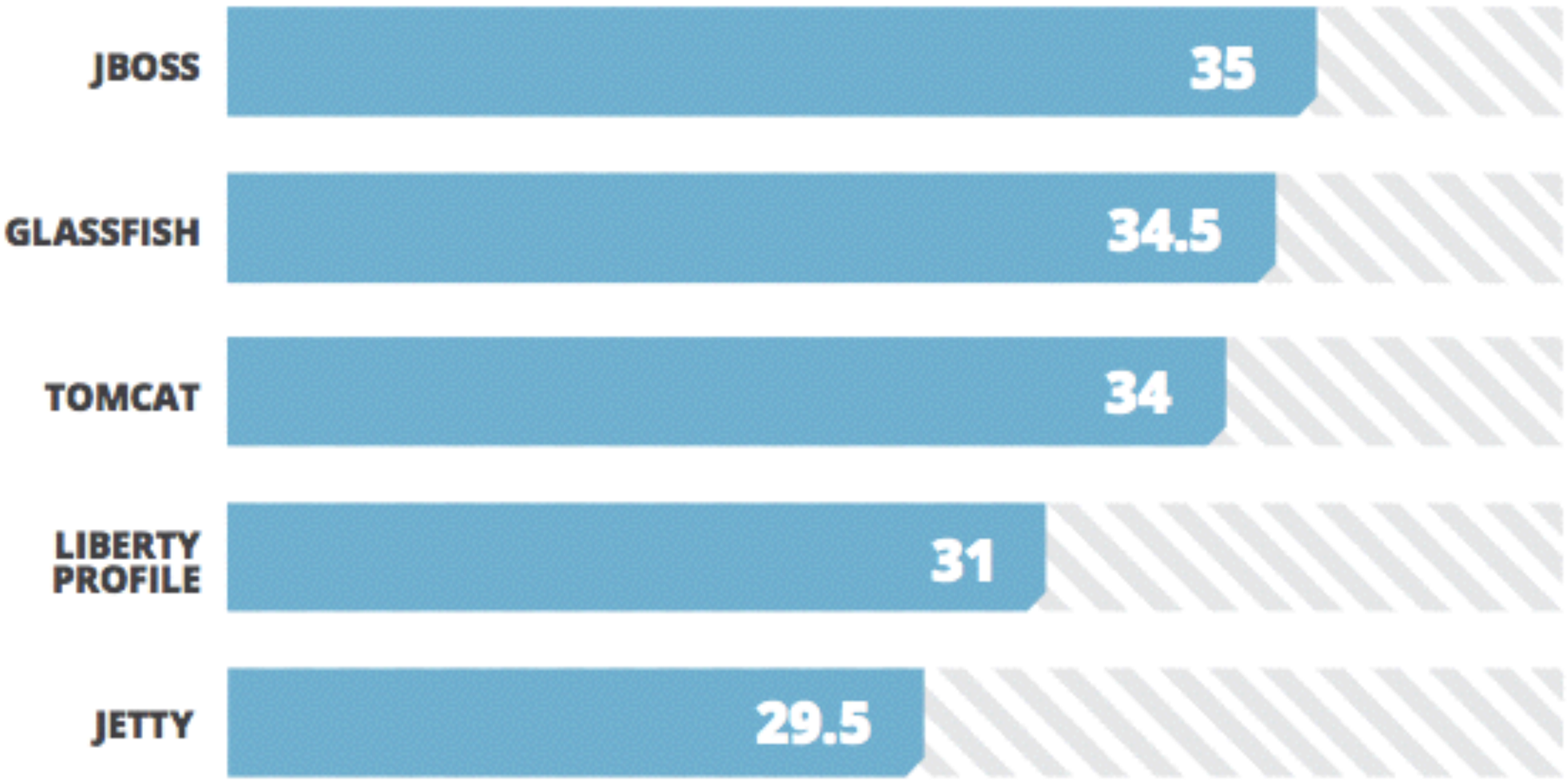


IGNORE
ME

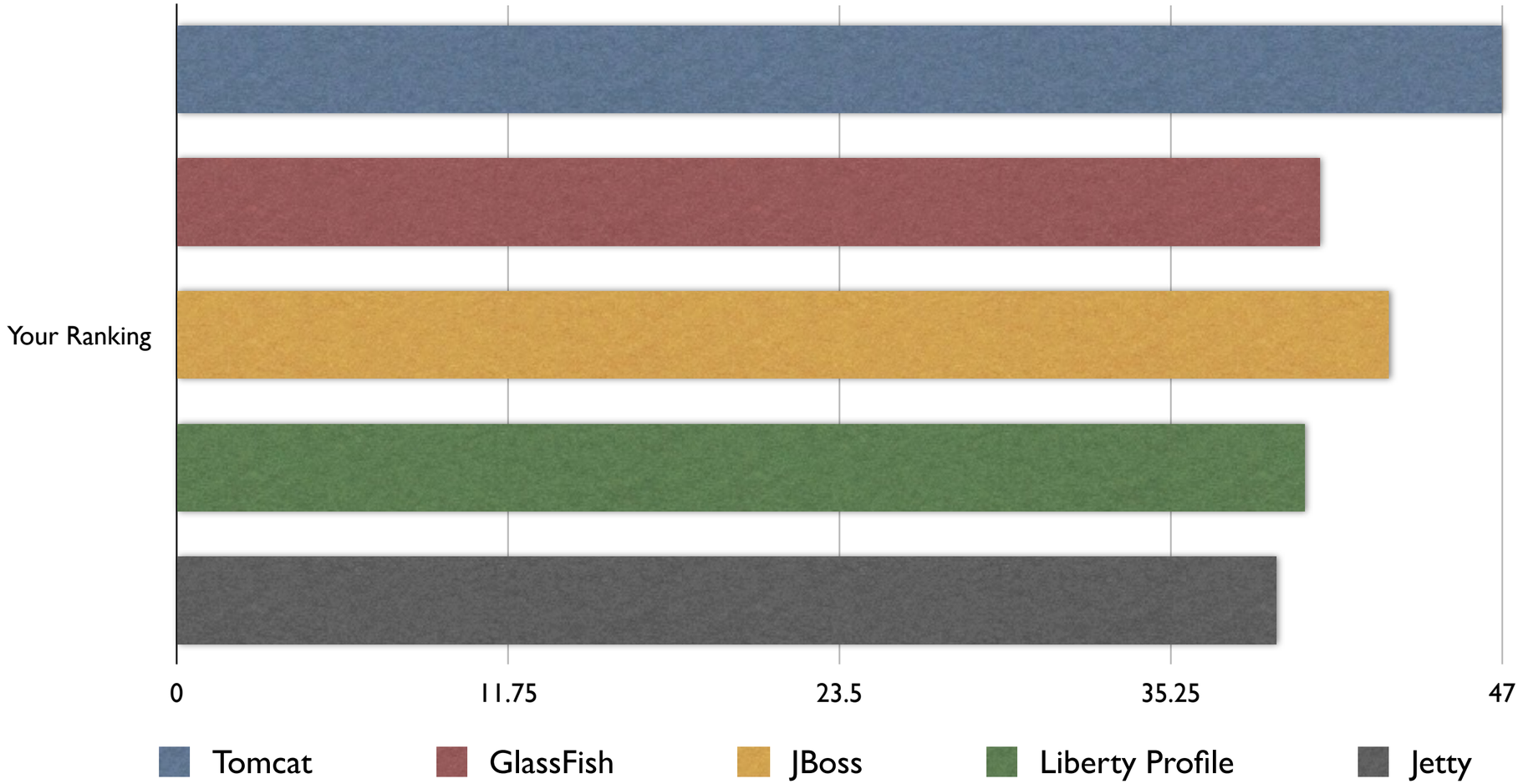
RESULTS

	LP	TC	GF	JETTY	JB
Download and Installation	4	5	3.5	5	4
Tooling support	4	4.5	4.5	3.5	4.5
Server Configuration	5	4	3	4	4
Real performance metrics	3.5	5	4.5	4	4.5
Features & Open Standards compliance	4	3	5	3	5
Documentation & community	3.5	5	4	3	4.5
Administration & Management/UI	3	2.5	5	2	4.5
Cost $$$/Licensing	4	5	5	5	4
Total	**31**	**34**	**34.5**	**29.5**	**35**

RESULTS


JBOSS
35
GLASSFISH
34.5
TOMCAT
34
LIBERTY PROFILE
31
JETTY
29.5

WHAT DO YOU REALLY CARE ABOUT?


Your Ranking
0
11.75
23.5
35.25
47
Tomcat
GlassFish
JBoss
Liberty Profile
Jetty

RebelLabs - rebellabs.org

FREE STUFF - BOOTH 8

FREE STUFF - ONLINE

bit.ly/tshirt-sjm

SIMON MAPLE

@SJMAPLE