Andy Gumbrecht - @AndyGeeDe

# How to Boil an Egg in a Microwave Oven

Things not to do when bored, no matter how dangerously fun they sound!

Andy Gumbrecht - @AndyGeeDe

# Apache Tomcat to Apache TomEE in 1 to n Steps

A guide on opening a door to Java EE in Apache TomEE
from an Apache Tomcat perspective

# Who are the tribe?

- Tomitribe Corporation founded in Spring 2013

- CEO David Blevins – Project lead on Apache- TomEE, OpenEJB and Geronimo projects. Member of the EJB 3.0 / 1 / 2 and Java EE 6 / 7 and 8 expert groups

- Employees are Apache TomEE / OpenEJB developers

- OpenWebBeans, DeltaSpike, Camel, CXF, Sirona, BatchEE and CREST committers

- Community leaders

# Who is This Guy?

**Apache TomEE™**

- He's Andy Gumbrecht, @AndyGeeDe

- Does anyone else remember the Sinclair ZX81? He does!

- Employed developer since 1997

- Unemployed developer as long as he can remember

- User and abuser of OpenEJB since 2007

- Apache OpenEJB / TomEE committer since 2010

- Hopes he's a nice guy, nobody's perfect right.

- Only his mum calls him Andrew

- He's not such a nice guy if you call him Andrew

**Is Apache TomEE for Me?**

You Yourchoice

Jonathan Archer

James T. Kirk

Jean-Luc Picard

Benjamin Sisko

Kathryn Janeway

The New Guy Who is Going to Die,

The One in the Red Top!

# A Look at Apache Tomcat

**Apache TomEE**™

A Legacy Application, Maybe Yours...

JSP

Servlets

**?** The scary stuff everyone said

**?** was the next big thing...

Apache Tomcat

**Apache TomEE**™

A Legacy Application, Maybe Yours...

| JSP | CDI | WS | REST |

| Servlets | JPA | EJB | JMS |

Apache Tomcat

**Apache TomEE**

A Legacy Application, Maybe Yours…

| JSP | CDI | WS | REST |
| --- | --- | --- | --- |

| Servlets | JPA | EJB | JMS | JTA |
| --- | --- | --- | --- | --- |

Apache Tomcat

More…

# Apache TomEE™

# Maintaining 'Status quo' - EE6

Latin phrase meaning 'the existing state of affairs'

- JSR-245 JavaServer Pages 2.2
- JSR-344 JavaServer Faces 2.2
- JSR-341 Expression Language 3.0
- JSR-339 The Java API for RESTful Web Services 2.0
- JSR-340 Java Servlet 3.1
- JSR-250 Common Annotations for Java Platform 1.1
- JSR-318 Interceptors 1.1
- JSR 346 Contexts and Dependency Injection for Java EE 1.1
- JSR-345 Enterprise JavaBeans 3.2

- JSR-322 Java EE Connector Architecture 1.7
- JSR-338 Java Persistence 2.1
- JSR-907 Java Transaction API 1.2
- JSR-343 Java Message Service 2.0
- JSR-349 Bean Validation 1.1
- EJB Entity Beans Support
- JAX-RPC 1.1 Support
- JAXR 1.0
- Java EE Application Deployment 1.2

# Moving on, 'Tempora mutantur'

**Apache TomEE**

Latin phrase meaning 'times change'

- JSR-245 JavaServer Pages 2.2
- JSR-344 JavaServer Faces 2.2
- JSR-341 Expression Language 3.0
- JSR-339 The Java API for RESTful Web Services 2.0
- JSR-340 Java Servlet 3.1
- JSR-250 Common Annotations for Java Platform 1.1
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- JSR-338 Java Persistence 2.1
- JSR-907 Java Transaction API 1.2
- JSR-343 Java Message Service 2.0
- JSR-349 Bean Validation 1.1
- ~~EJB Entity Beans Support~~
- ~~JAX-RPC 1.1 Support~~
- ~~JAXR 1.0~~
- ~~Java EE Application Deployment 1.2~~

# Apache TomEE™

## Focus on the Future – EE7, EE8

### Roadmap EE7

- JSR 356 - Java API for WebSockets

- JSR 353 - Java API for JSON Processing (JSON-P)

- JSR 352 - Batch Applications for the Java Platform

- JSR 236 - Concurrency Utilities for Java EE

- JSR-299 - CDI Portable Extensions

### Roadmap EE8

- JCache (JSR-107)

- Java API for JSON Binding (JSR-TBD)

- Java Configuration (JSR-TBD)

# Still Thinking "Is it for Me"?

- Jakarta Tomcat, aka Apache Tomcat is quite old (1999)

- It is basically just a Web Server and Servlet Container

- Tomcat extension is Ad-hoc at best

- Old is actually good! Apache Tomcat is a very stable platform

- Tomcat is 'the' platform upon which Apache TomEE sits

- Apache TomEE is not in competition with Apache Tomcat

- Apache TomEE is the opposite of Ad-hoc, it's certified

# Apache TomEE ™

GEEK CHOICE AWARDS
2014 WINNER
APP SERVER

RebelLabs released an annual study with awards to recognize Geeky Excellence for 2014. Tomcat and TomEE were named as one of the 10 Geek Choice Awards winner. For a complete list of winners, check out the report "10 Kick-Ass Technologies Modern Developers Love".

Read the Report

Apache TomEE, pronounced "Tommy", is an all-Apache Java EE 6 Web Profile certified stack where Apache Tomcat is top dog. Apache TomEE is assembled from a vanilla Apache Tomcat zip file. We start with Apache Tomcat, add our jars and zip up the rest. The result is Tomcat with added EE features - TomEE.

Download Apache TomEE Now »  and get started today!

## TomEE+

Apache TomEE Plus has all the features of TomEE with the addition of JAX-RS (RESTfull Services), JAX-WS (Web Services), JMS (Java Message Service) and JCA (the Java Connector Architecture). The additional functionality is delivered via Apache CXF, Apache ActiveMQ and the Geronimo Connector library

View details »

## OpenEJB

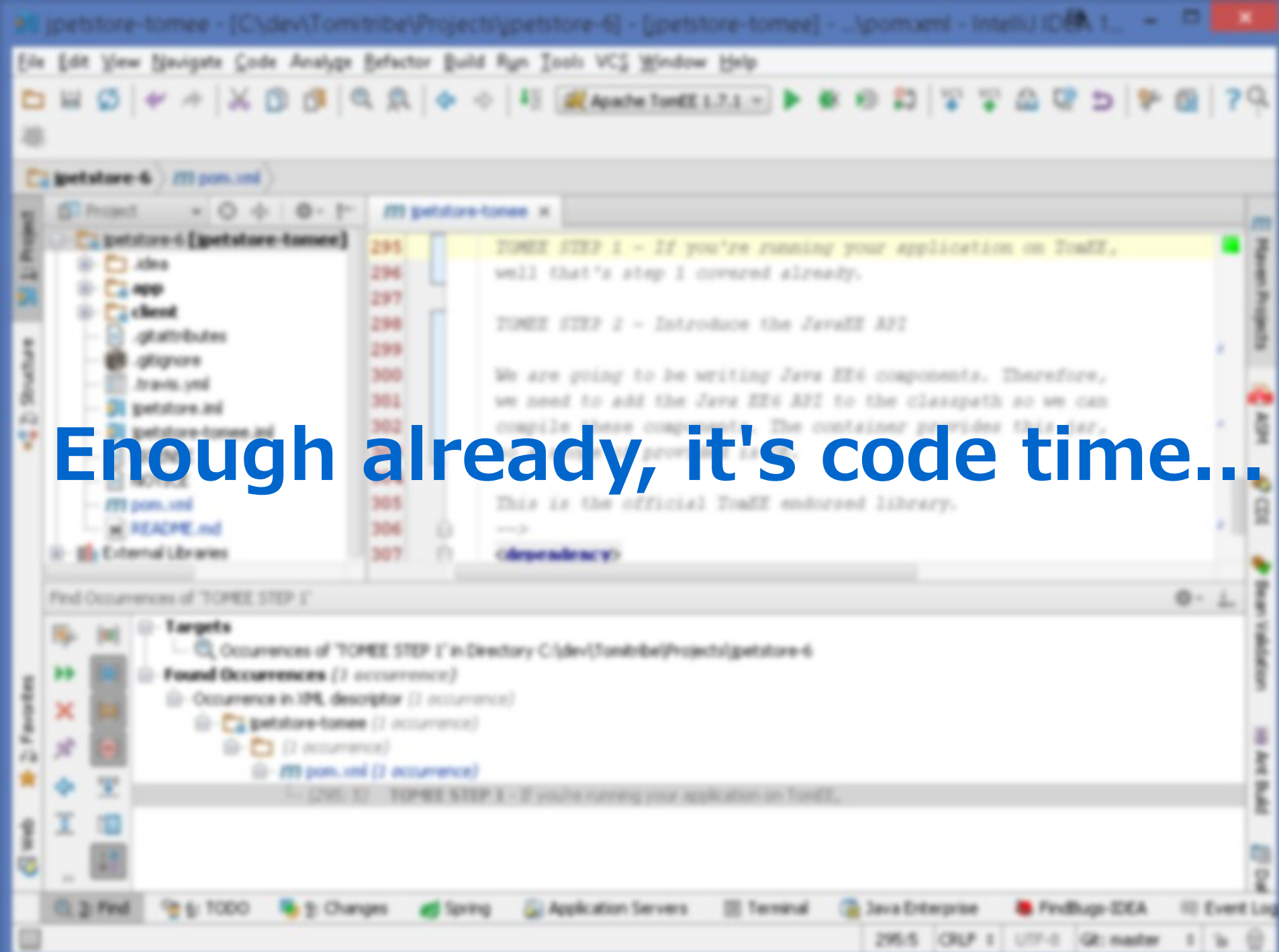Apache OpenEJB is a standalone EJB 3.1 container. It can also be used for adding EJB 3.1 capabilities to Tomcat.

View details »

## Examples

See the extensive list of examples being developed for Java EE 6. All are functional and tested before publishing. Some are documented. These also stream from the continuous integration system.
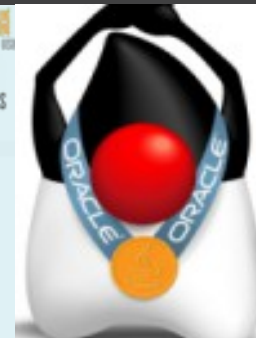
View details »

Enough already, it's code time...