Introducing Apache Tomcat 8.5

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Introduction

- Apache Tomcat committer since December 2003
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- Release manager for Tomcat 9, 8 and 8.5
- Member of the Servlet 4.0 expert group
- Consultant Software Engineer @ Pivotal
- Currently focused on Apache Tomcat 9
Agenda

• Why create Apache Tomcat 8.5?
• What, exactly, is Apache Tomcat 8.5?
• Migration from Apache Tomcat 8.0
• Timescales

• Questions
Why create Tomcat 8.5?
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• Tomcat 9 adds
  – HTTP/2 support
  – OpenSSL encryption for JSSE
  – TLS virtual hosting
  – JASPIC

• These mostly depend on the significant refactoring / clean-up that took place in 9
  – The extent of the changes means back-porting to 8.0 is not viable
Why create Tomcat 8.5?

- Tomcat 9 stable release is tied to the release of Java EE 8
- Java EE 8 has been repeatedly delayed
  - Currently delayed until at least H1 2017
- Don't want users to have to wait another year+ to get access to these new features in production
- Hence, Tomcat 8.5 to make these features available sooner
What, exactly, is Apache Tomcat 8.5
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• Started from Apache Tomcat 9.0.0.M4 release
  – HTTP/2
  – OpenSSL for JSSE
  – TLS virtual hosting
  – JASPIC
  – Remove HTTP BIO and AJP BIO connectors
  – Remove Comet support
  – Remove deprecated code

• Reverted all the Servlet 4.0 API changes
What, exactly, is Apache Tomcat 8.5?

- Refactoring / clean-up may break some apps
  - Mitigation is available
- Still examining options for exposing Servlet 4.0 features
- Currently release as BETA
Migration from Apache Tomcat 8.0
Migration from Apache Tomcat 8.0

• Aiming to make it a seamless process for most users
  – Some users will have some work to do

• Configuration files can be re-used
  – Will need migration to use new TLS features

• Some removed features will not be replaced
  – Comet
  – Stick with final 8.0, revert to 7.0 or migrate to WebSocket
Migration from Apache Tomcat 8.0

• Work arounds may be added for some removed features
  – BIO

• Removed deprecated code may be restored
  – Manager, Context, RealmBase
  – Looked at on a case by case basis
Timescales
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• Expect approximately 6 months of parallel 8.0 and 8.5 releases
  – Will be extended if necessary
• Afterwards, 8.0 releases will cease
• First 8.5 release was 24 March 2016
• Expect last 8.0 release around end September 2016
Get Involved
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• Ask questions
  – users@tomcat.apache.org

• Report bugs
  – https://issues.apache.org/bugzilla

• Provide patches
  – https://issues.apache.org/bugzilla
  – GitHub pull request
Get Involved

• Development
  – https://svn.apache.org/repos/asf/tomcat/trunk (9.0.x)
  – dev@tomcat.apache.org

• Update the wiki
  – https://wiki.apache.org/tomcat

• You don’t need to be an expert

• Documentation needs patches too
Questions