TomcatCon
State of the Cat
Mark Thomas
Welcome
Community

- New Committers
  - Michael Osipov
  - Emmanuel Bourg
  - Coty Sutherland
  - Huxing Zhang
- Total 20
  - Active 6

- New PMC members
  - TBA
  - Total 24
  - Active 10
<table>
<thead>
<tr>
<th></th>
<th>‘16 Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>‘17 Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0.x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.0.x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.0.x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.5.x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.0.x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>native</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tomcat 6 EOL

Apache Tomcat 6
Rest In Peace

First Release
21 October 2006

EOL
31 December 2016

Final Release
7 April 2017

You Served Us Well
Tomcat 8.0.x vs 8.5.x

- 8.5.x was created from 9.0.0.M4
- Provides early access to 9.0.x features
- Same specifications as 8.0.x
- Intend to EOL 8.0.x as soon as practical
Servlet 4.0 EG email traffic
Servlet 4.0

- HTTP/2
- UTF-8 by default for URIs
- Still ISO-8859-1 for request/response
  - But better configuration options
- Simplifications
  - HttpFilter
  - Default NO-OP methods for listeners
- ServletMapping
- Gaps in programmatic API have been plugged
New Stuff

- SNI
- JSSE with OpenSSL encryption
- JASPIC
- Wildcard host names
JRE Fixes

• Security
  – JMX RCE CVE-2016-3427

• UTF-8
  – Fixed for Java 9 and latest Java 8

• Memory leaks
  – Mainly around starting new threads
  – Fixed for Java 9 and latest Java 8

• Leak tracing
  – Removed old workaround that broke profilers
Metrics

- Fixed bugs: all versions: ~300
- Open bugs: all versions: 10 to 20
- Open enhancement requests: all versions: 130 to 150
- LoC: Tomact 9: ~123k to 127k
Hiccups

- Request line validation
- HTTP reason phrase
- RFC 6265 cookie specification
- Host name validation
Security

- Refactoring
  - Send file
  - ByteBuffer
- New code
  - HTTP/2
- Java deserialization
- Security Manager bypass
Conference Highlights

• Today
  – Security
• Tomorrow
  – Networking
  – Performance
  – Reactive Programming
• Thursday
  – Working with Tomcat
  – Wrap up