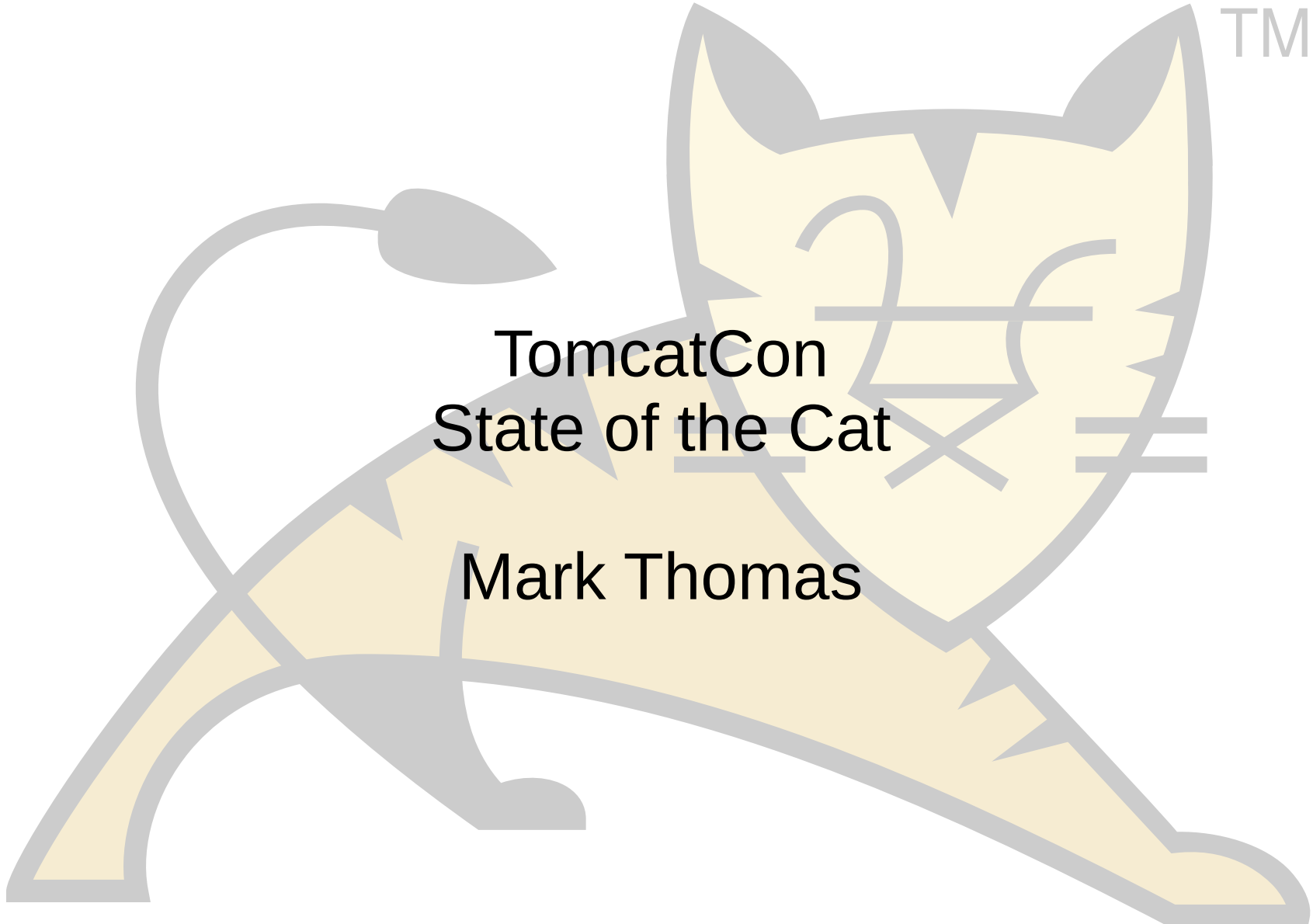


TM

TomcatCon  
State of the Cat

Mark Thomas



TM



**Welcome**

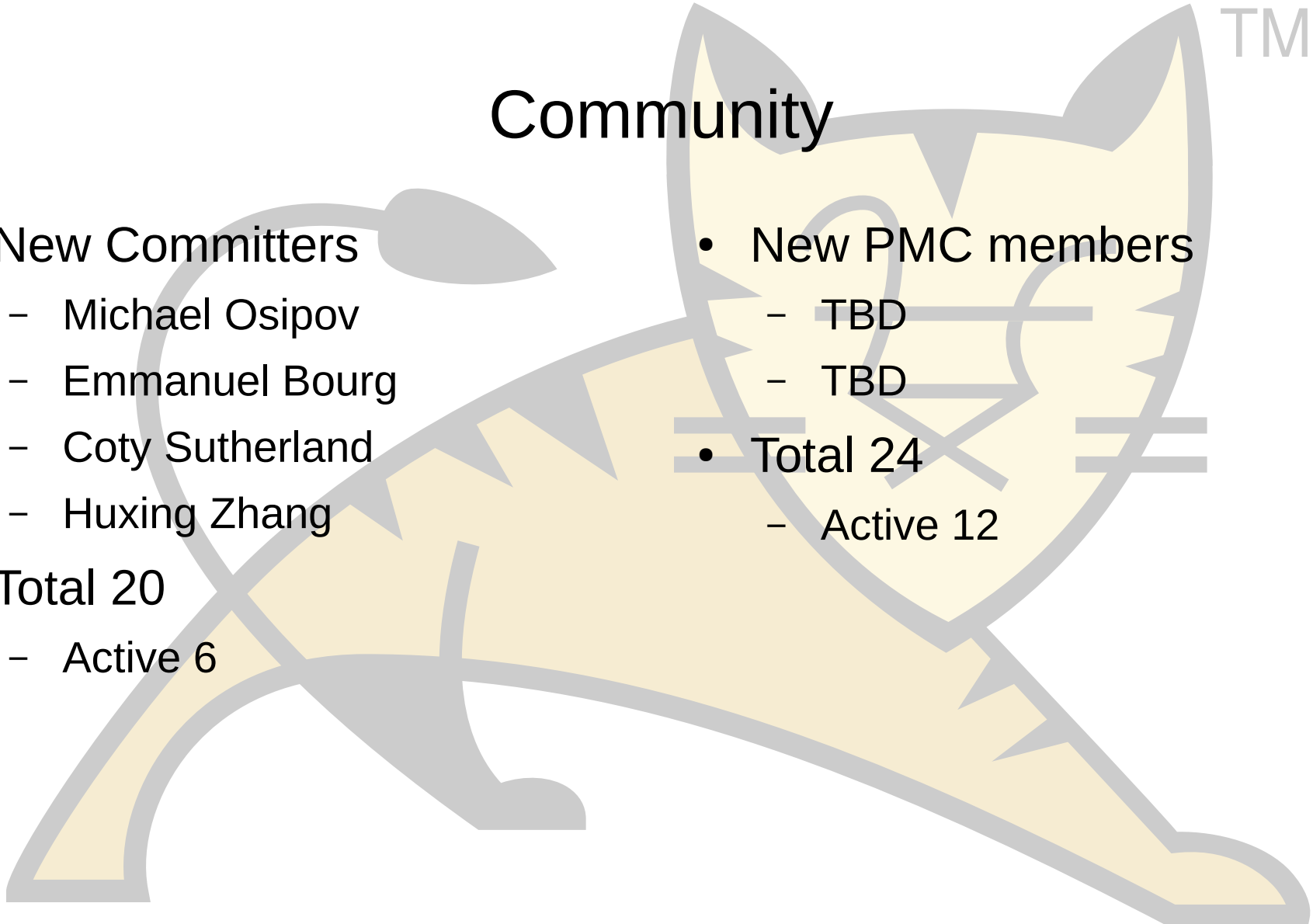
TM



**Retrospective**

# Community

- New Committers
  - Michael Osipov
  - Emmanuel Bourg
  - Coty Sutherland
  - Huxing Zhang
- Total 20
  - Active 6
- New PMC members
  - TBD
  - TBD
- Total 24
  - Active 12



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Trademark

Tomcat®



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# Releases

	'16 Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	'17 Jan	Feb	Mar	Apr
6.0.x													
7.0.x													
8.0.x													
8.5.x													
9.0.x													
native													
JK													

The background of the image features a stylized yellow Tomcat logo with grey outlines, including its ears, whiskers, and tail. The logo is partially obscured by a dark grey, tombstone-shaped graphic in the center.

TM

# Tomcat 6 EOL

Apache Tomcat 6  
Rest In Peace

First Release  
21 October 2006

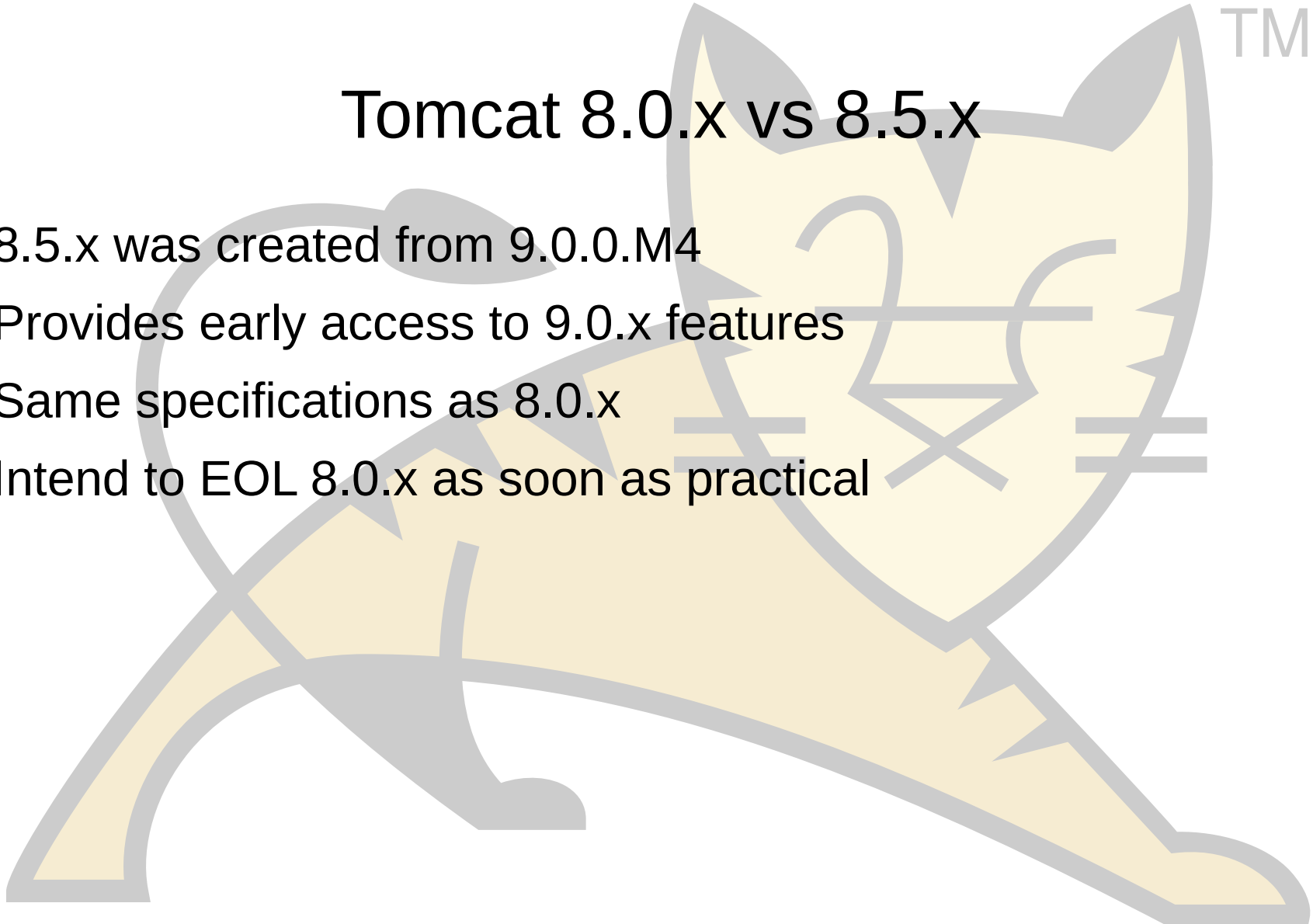
EOL  
31 December 2016

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

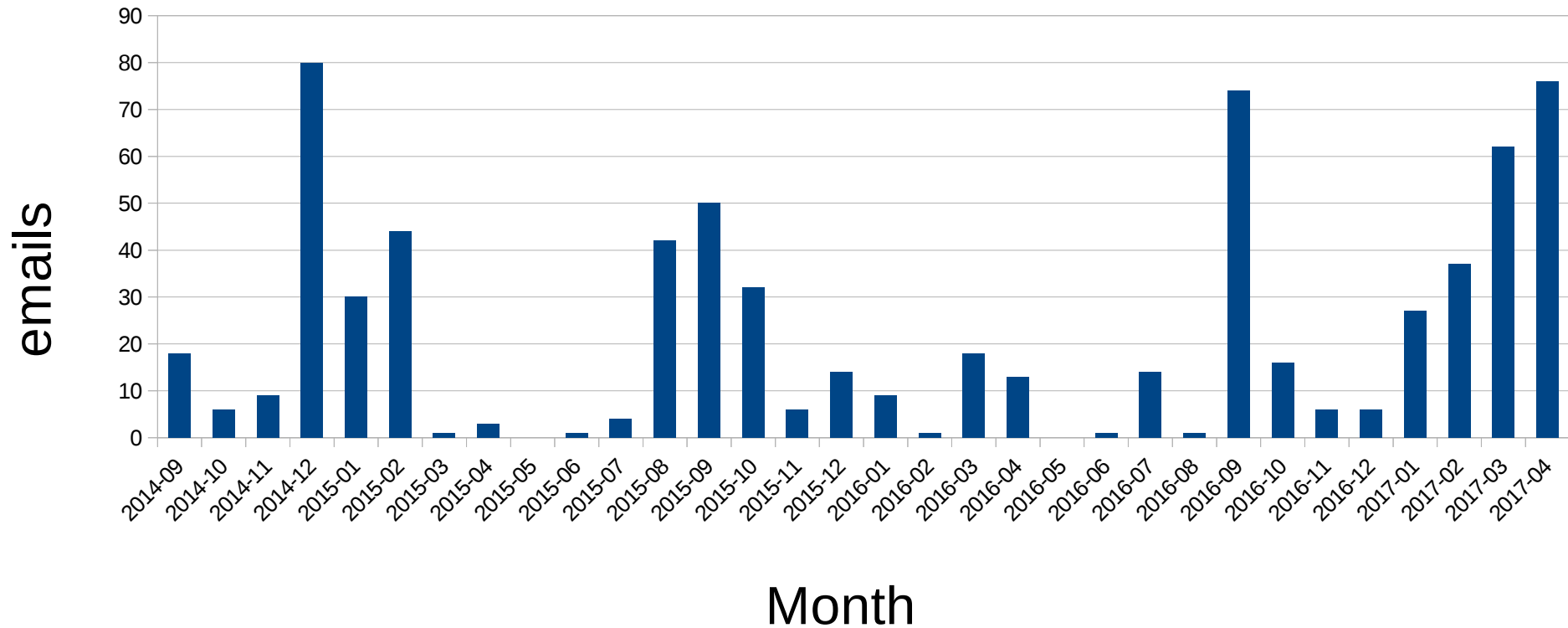




# Java EE 8

TM

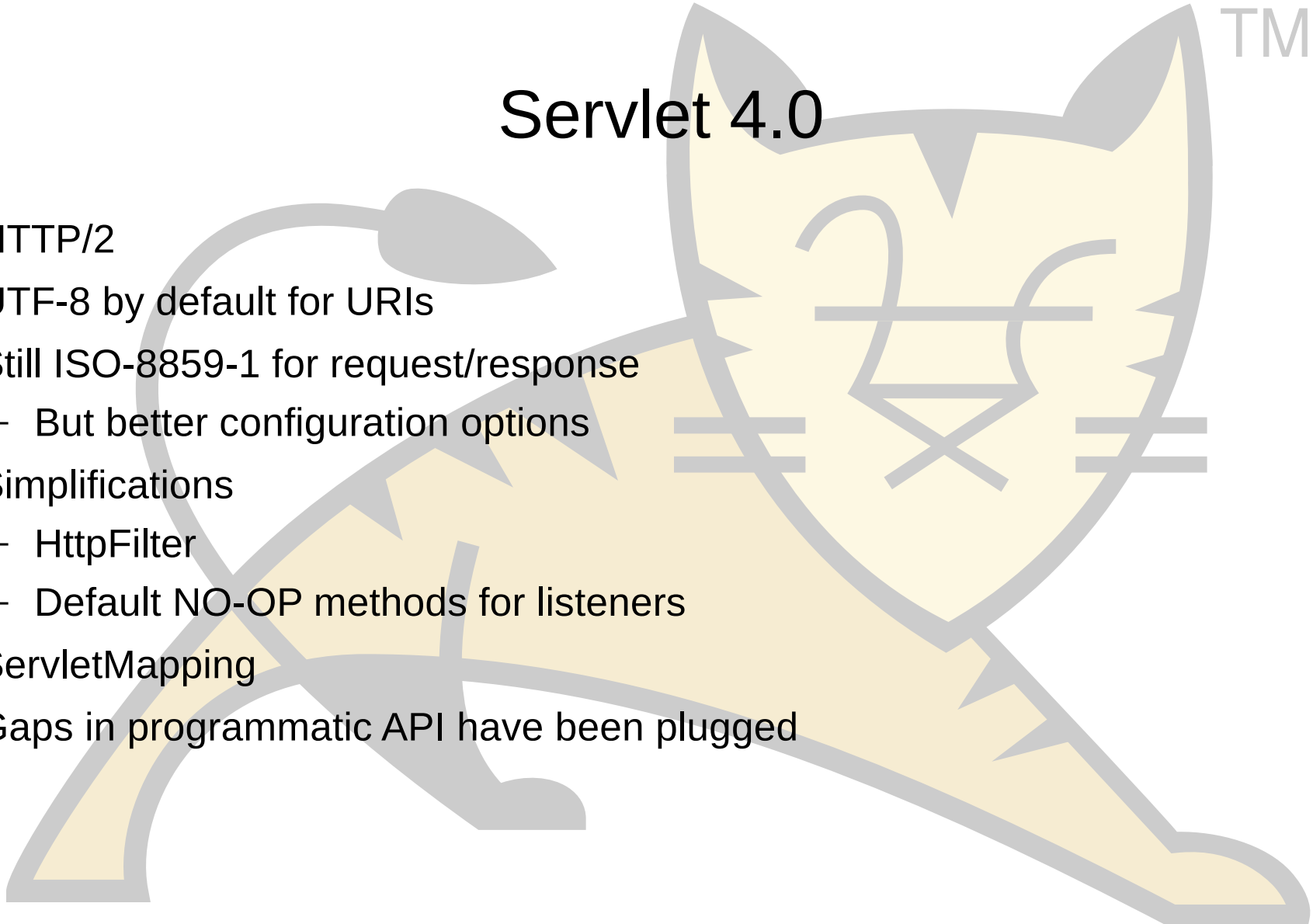
## Servlet 4.0 EG email traffic



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# Servlet 4.0

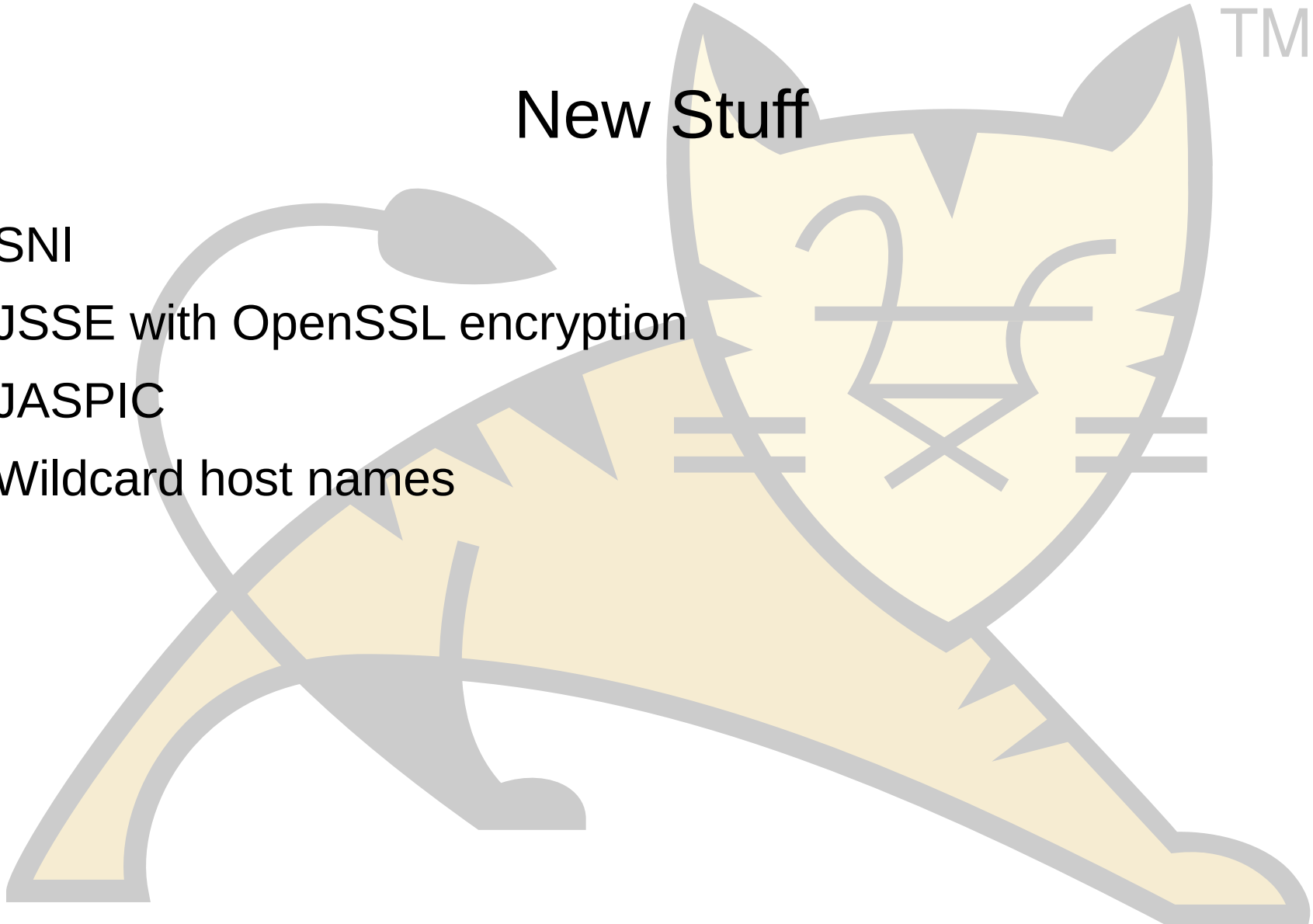
- HTTP/2
- UTF-8 by default for URIs
- Still ISO-8859-1 for request/response
  - But better configuration options
- Simplifications
  - HttpFilter
  - Default NO-OP methods for listeners
- ServletMapping
- Gaps in programmatic API have been plugged



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## New Stuff

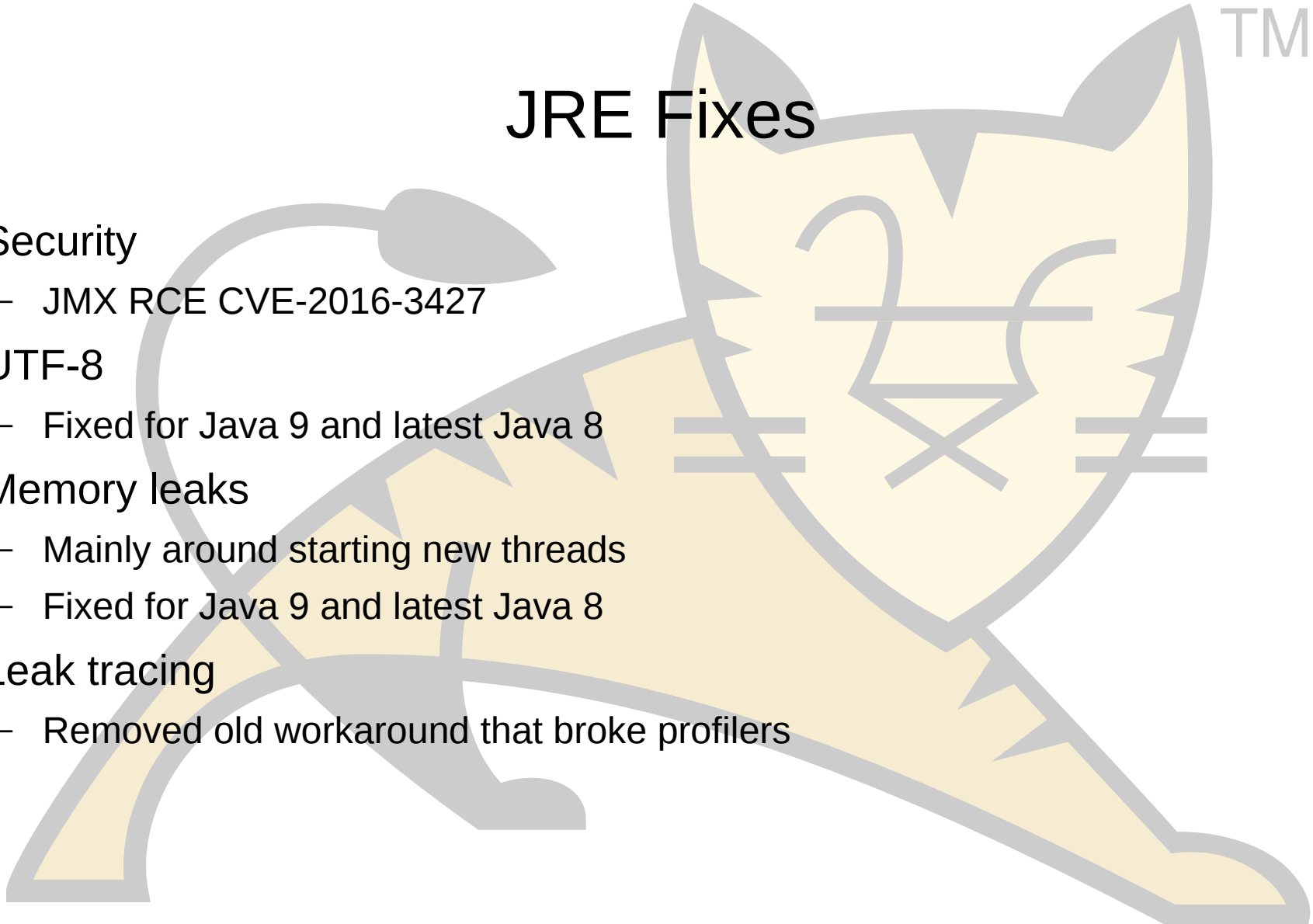
- SNI
- JSSE with OpenSSL encryption
- JASPIC
- Wildcard host names



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# JRE Fixes

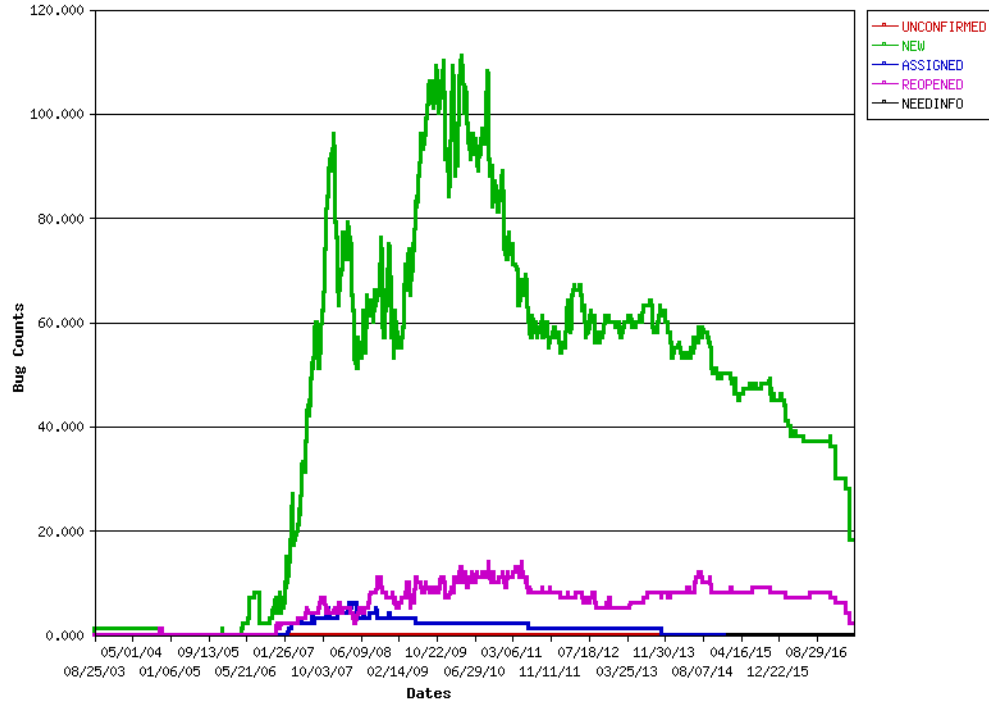
- Security
  - JMX RCE CVE-2016-3427
- UTF-8
  - Fixed for Java 9 and latest Java 8
- Memory leaks
  - Mainly around starting new threads
  - Fixed for Java 9 and latest Java 8
- Leak tracing
  - Removed old workaround that broke profilers



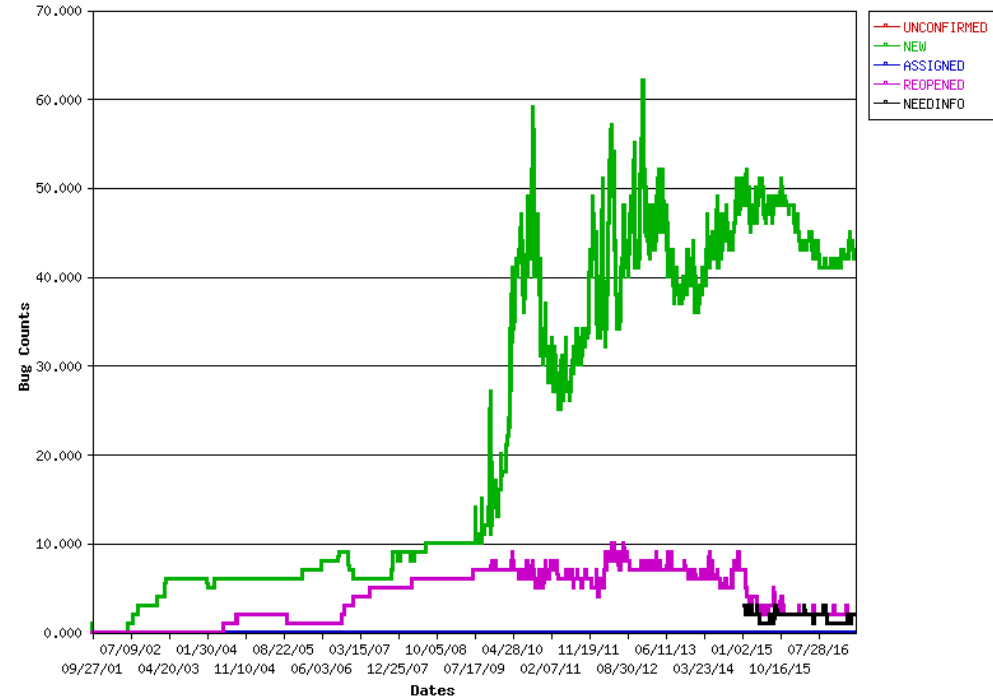
# Metrics

TM

Status Counts for Tomcat 6

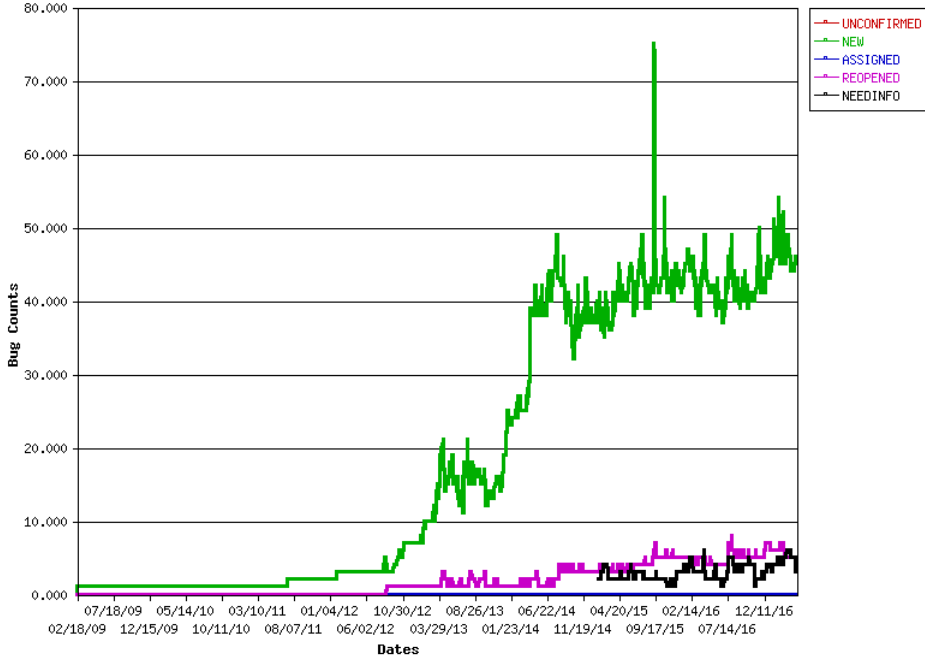


Status Counts for Tomcat 7

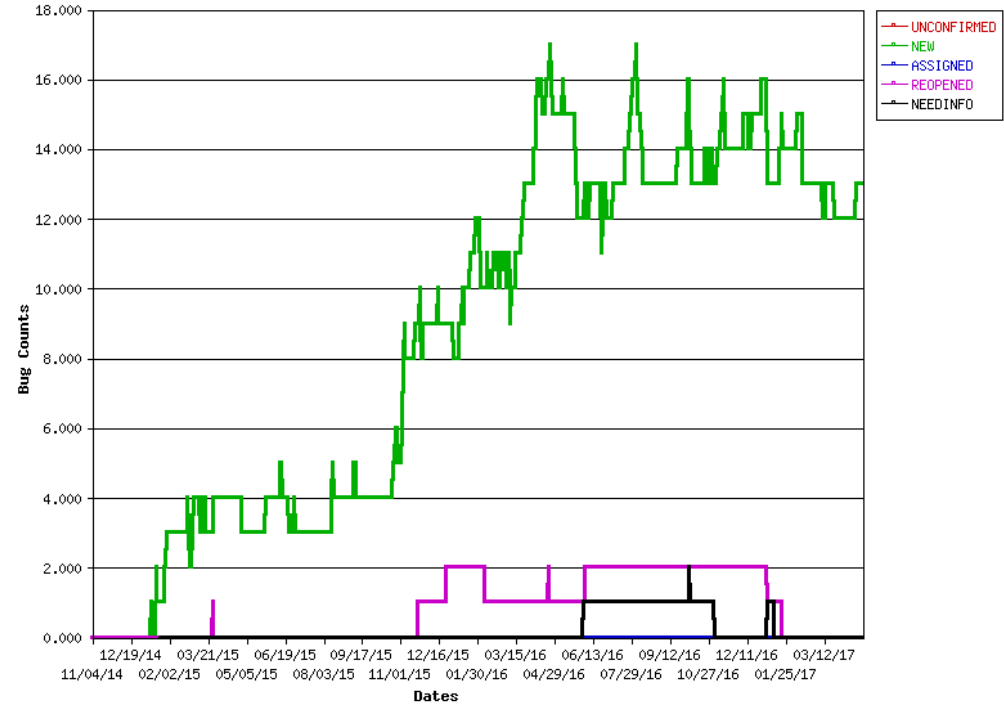


# Metrics

Status Counts for Tomcat 8

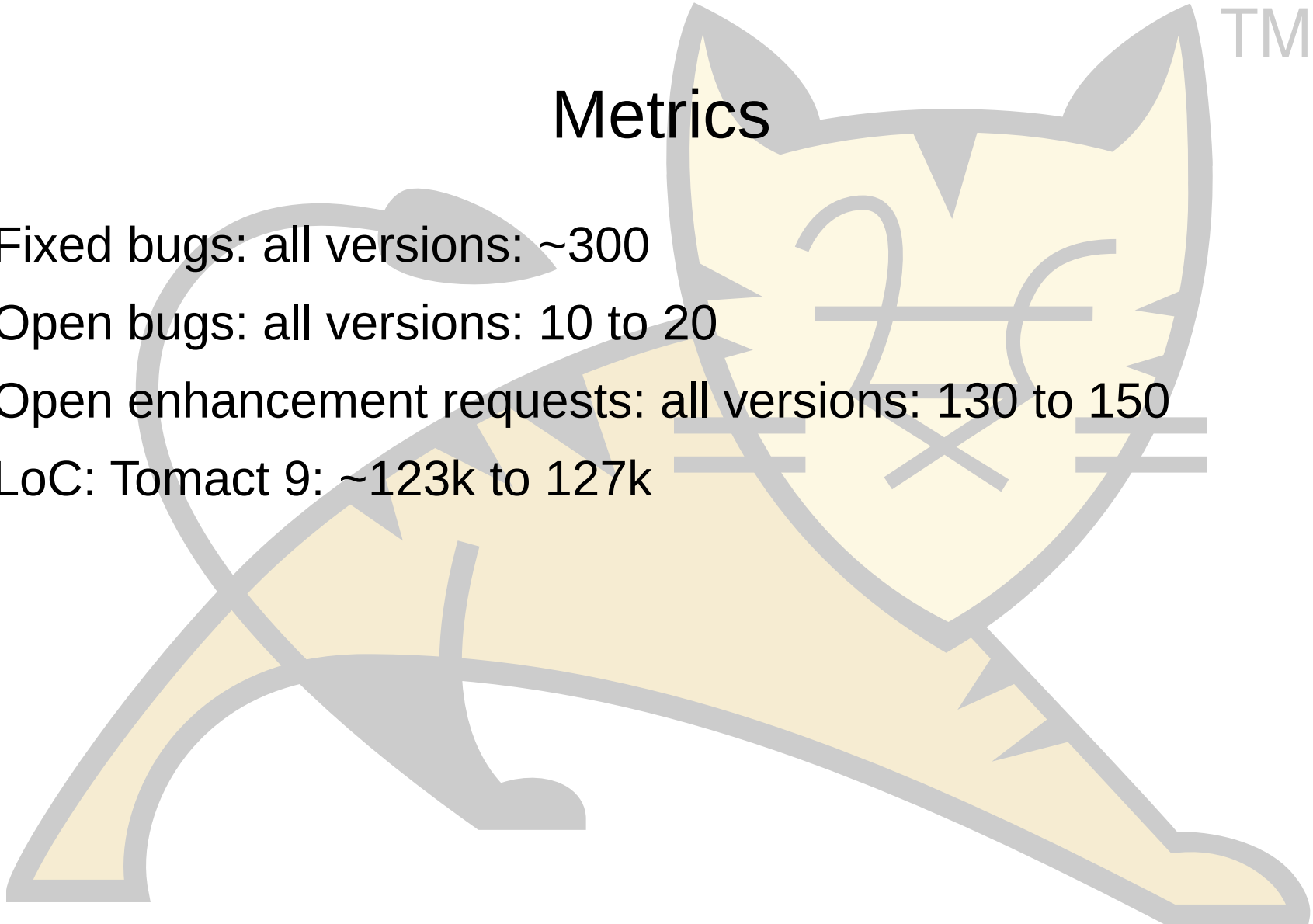


Status Counts for Tomcat 9



# Metrics

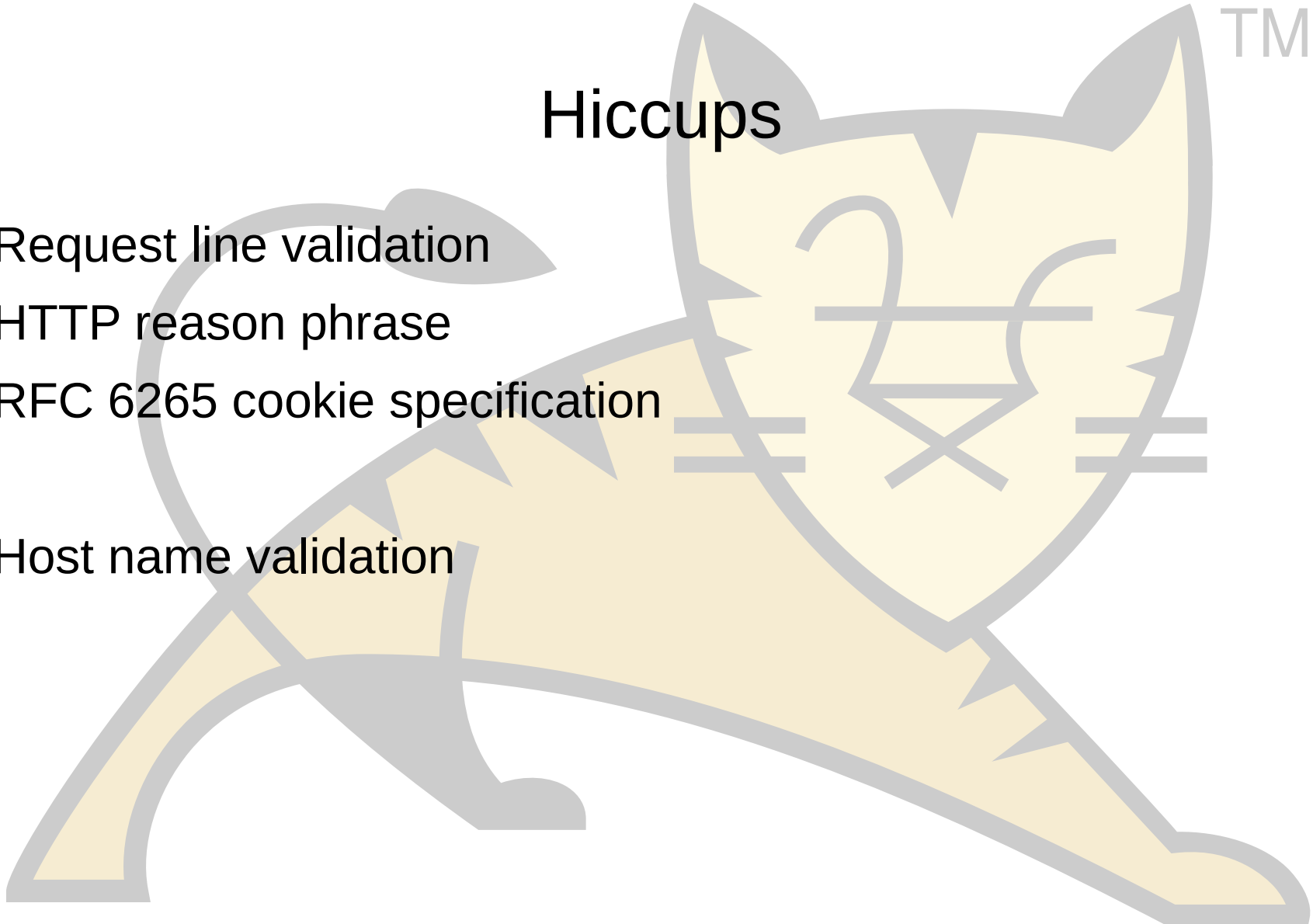
- Fixed bugs: all versions: ~300
- Open bugs: all versions: 10 to 20
- Open enhancement requests: all versions: 130 to 150
- LoC: Tomact 9: ~123k to 127k



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# Hiccups

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

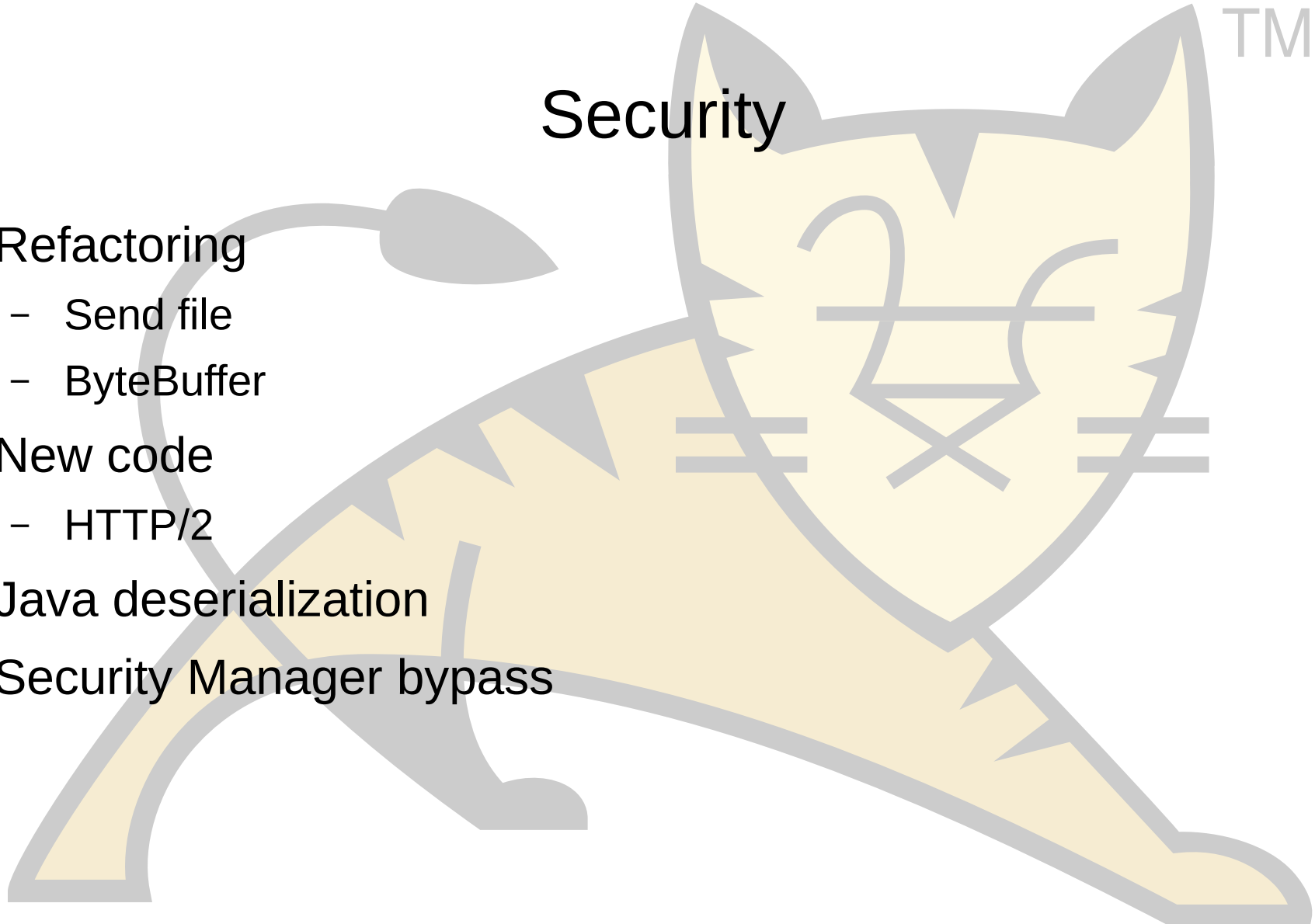




# Security

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



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# Conference Highlights

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

