JBoss Web Server

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Agenda

- Feature overview

- Architecture overview

- Usage

- Next steps

Feature overview

- Tomcat reloaded

- Either standalone or embedded inside JBoss AS

- Effectively handle static data

- High performance HTTPS

- Code stability

Why JBossWeb when we have Tomcat?

- Because we cannot use Tomcat name

- Tomcat lacks version tracking and maintenance

    - No patches for the particular version

- Remove components which are duplicated by other JBoss products

    - We have Industry leading clustering solution in the house

- Bring more stability to the code

    - Include only proven and stable code

Features cont.

- Better integration with the OS

  - Uses JBossNative

  - Extensions to the JRE for better networking

- Effectively handle static content

  - Uses modern OS features for zero copy (sendfile)

  - Decreases CPU load

  - Decreases memory usage

Features cont.

- OpenSSL for SSL support

  - Mature and stable

  - Hardware acceleration

  - Up to 10 times performance increase

Supported operating systems for JBossNative

- Linux
  - 2.4+ kernel
  - IA32
  - IA64
  - AMD64
  - PPC

- Windows
  - XP and later
  - IA32
  - IA64
  - AMD64

- HP-UX
  - Hp-ux 11
  - 9000/800 (PARISC)
  - IA64

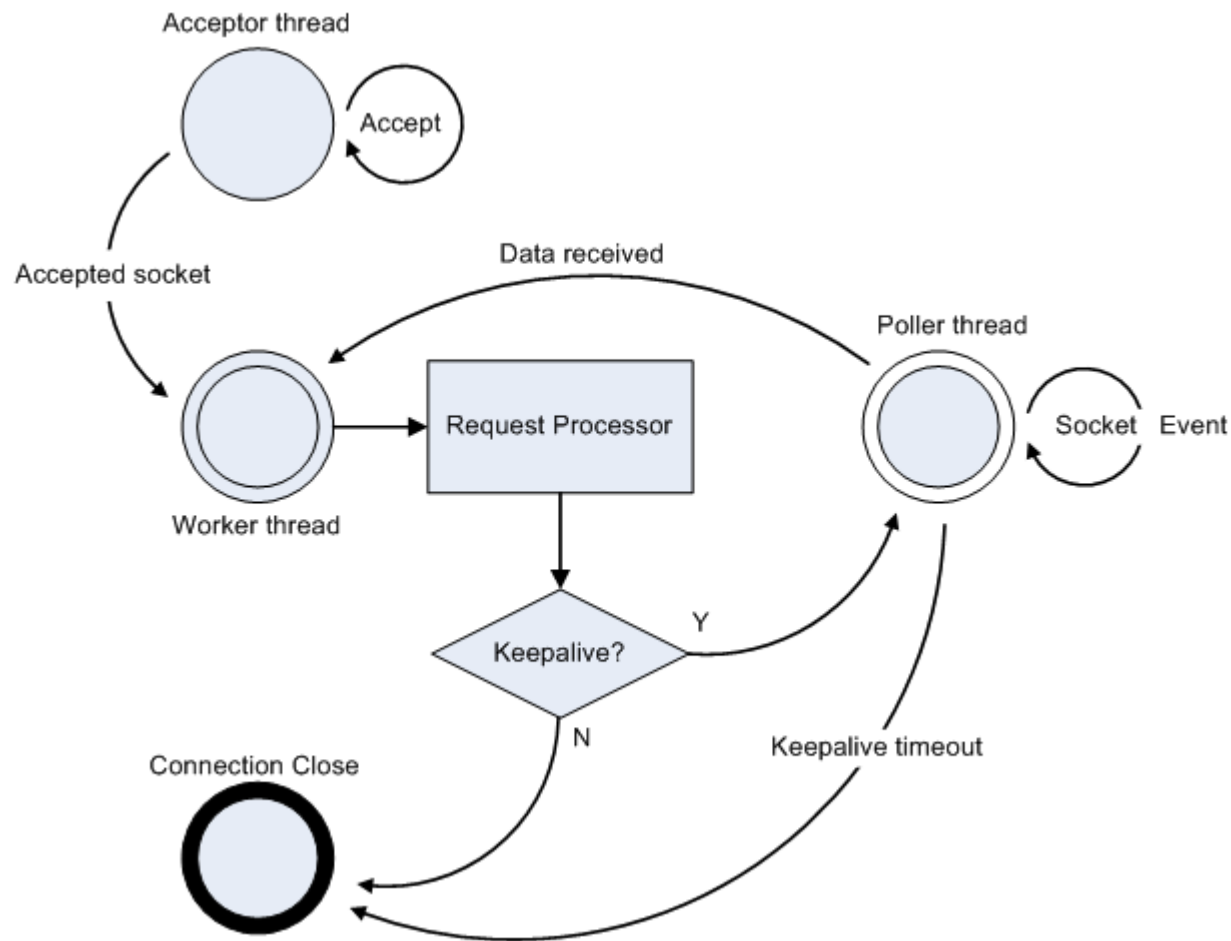- Solaris
  - 2.9+
  - sparc
  - x86

Features cont.

- Windows service

    - Service runner

    - Uses run.bat for running services

    - Thread dump from service

- URL Rewrite

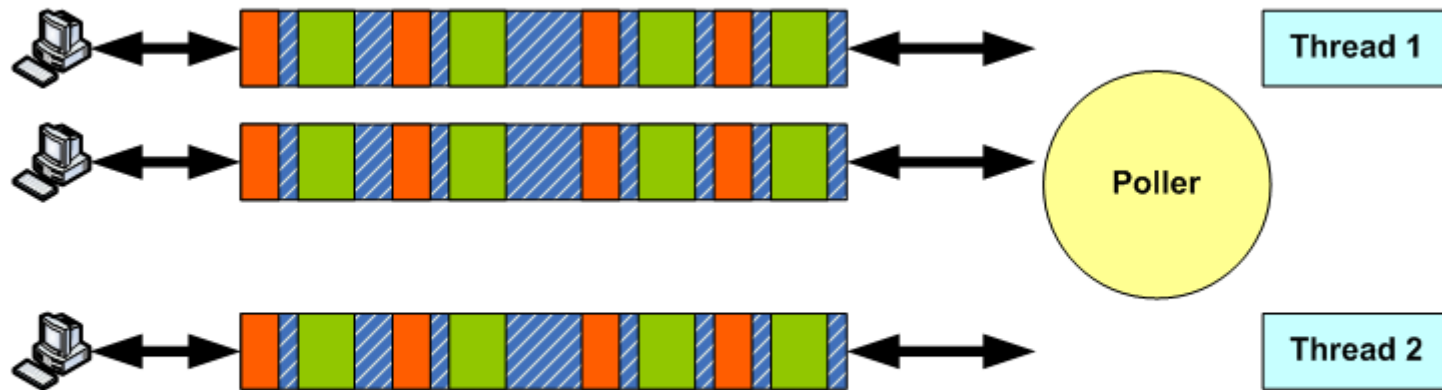   - mod_rewrite implemented in Java

    - On the fly URL rewriting

Native Layer

- High concurrency
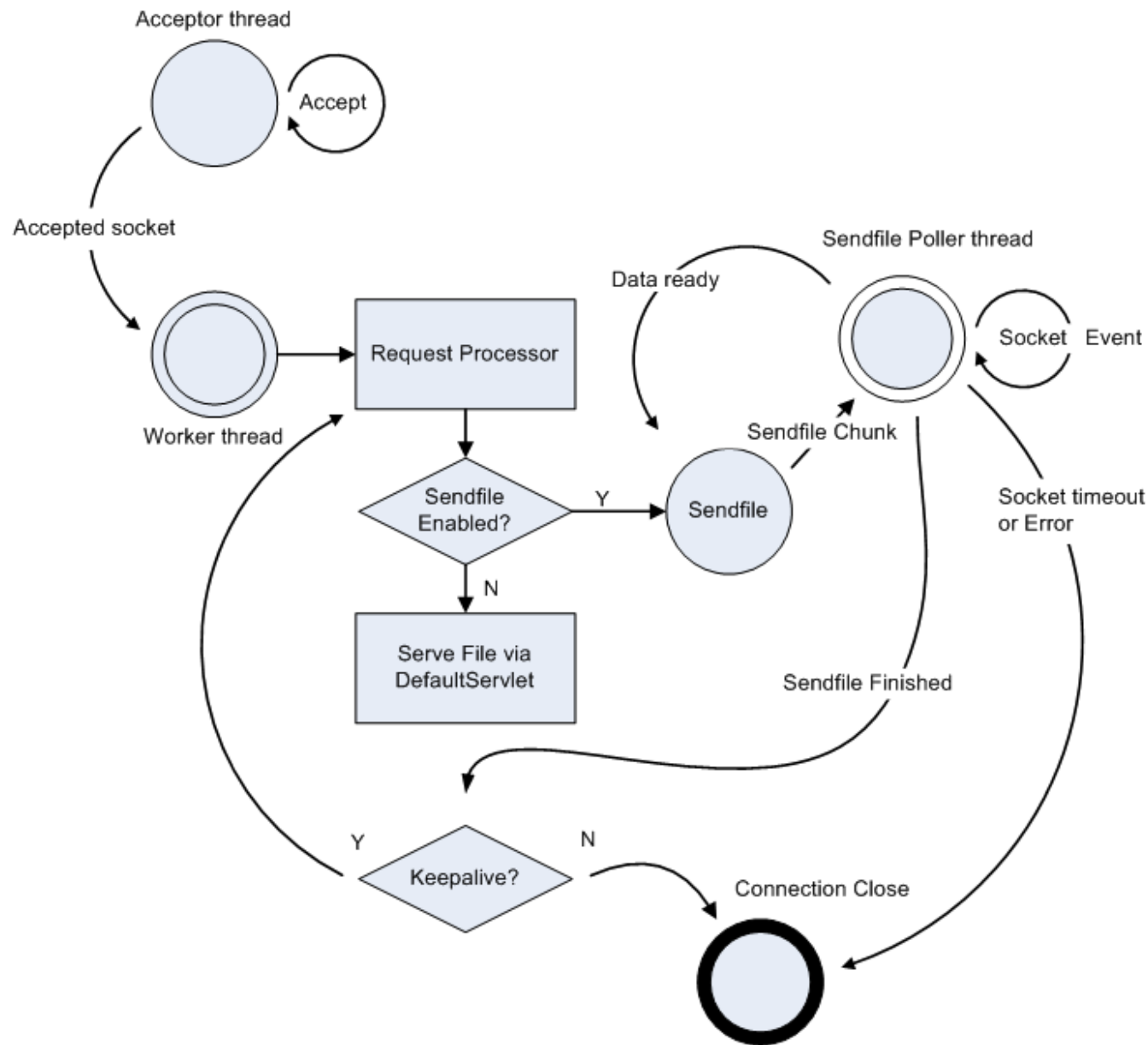
  - Able to handle 10000+ concurrent clients

Native Layer cont

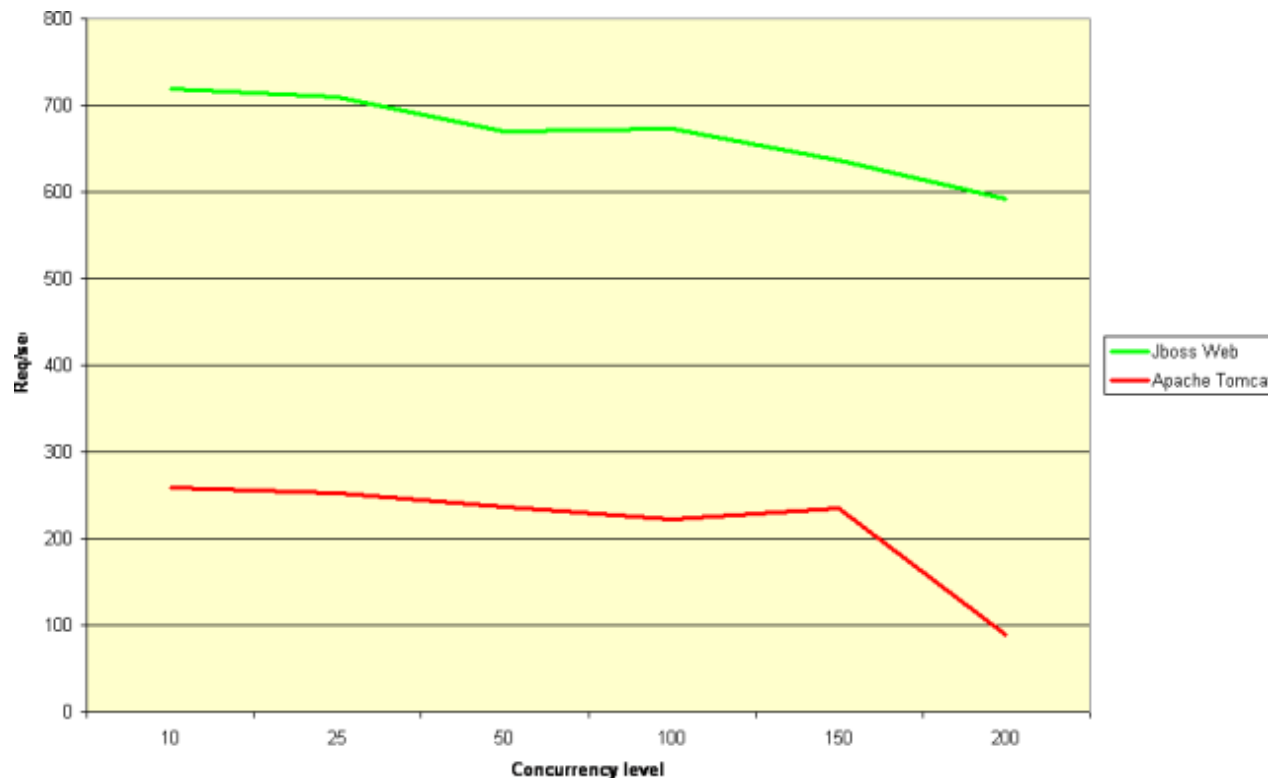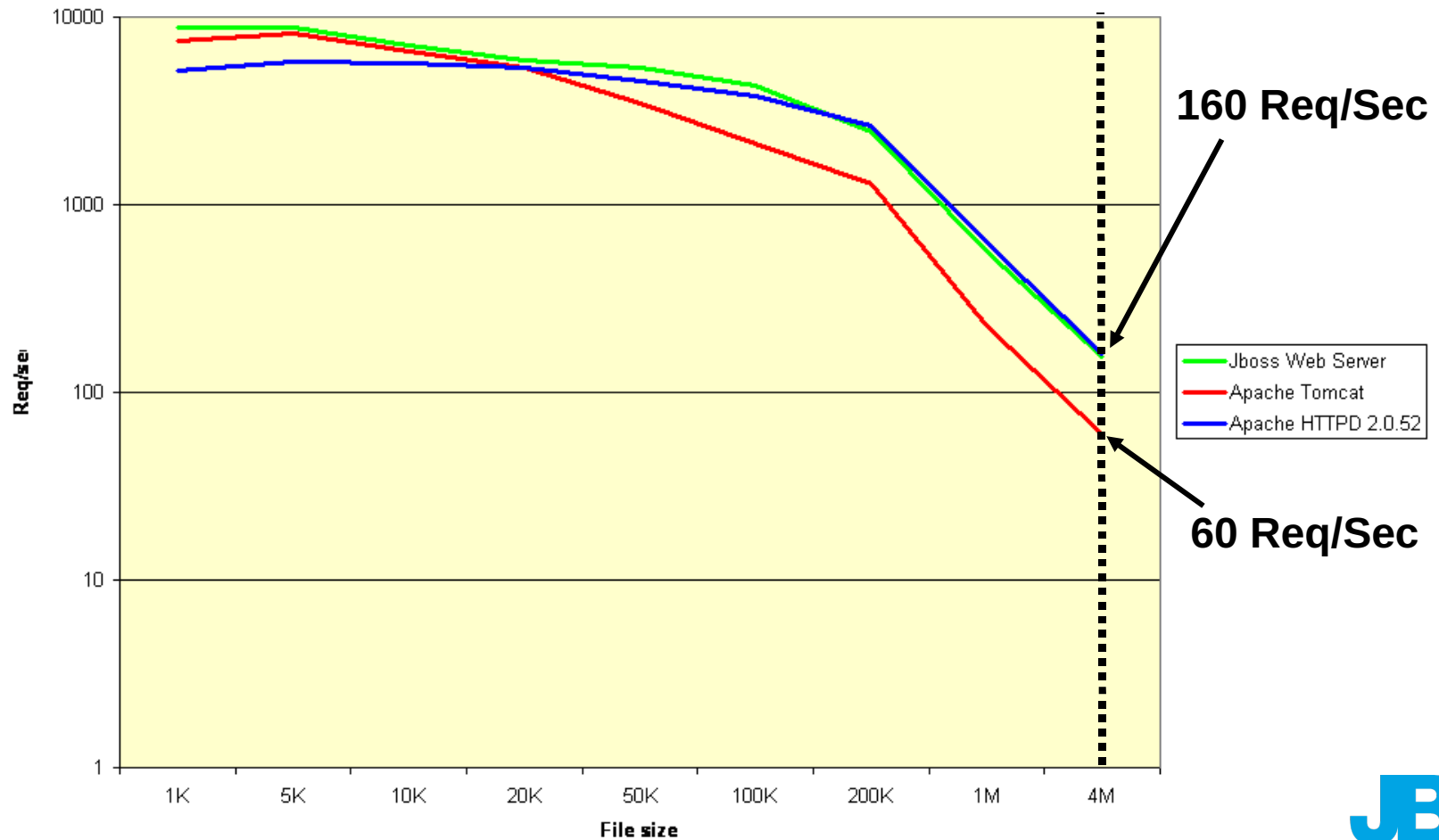- Effectively handles Keep-Alive

Sendfile support

Performance

- OpenSSL

  - Optimized for the OS

  - Support for hardware accelerator cards

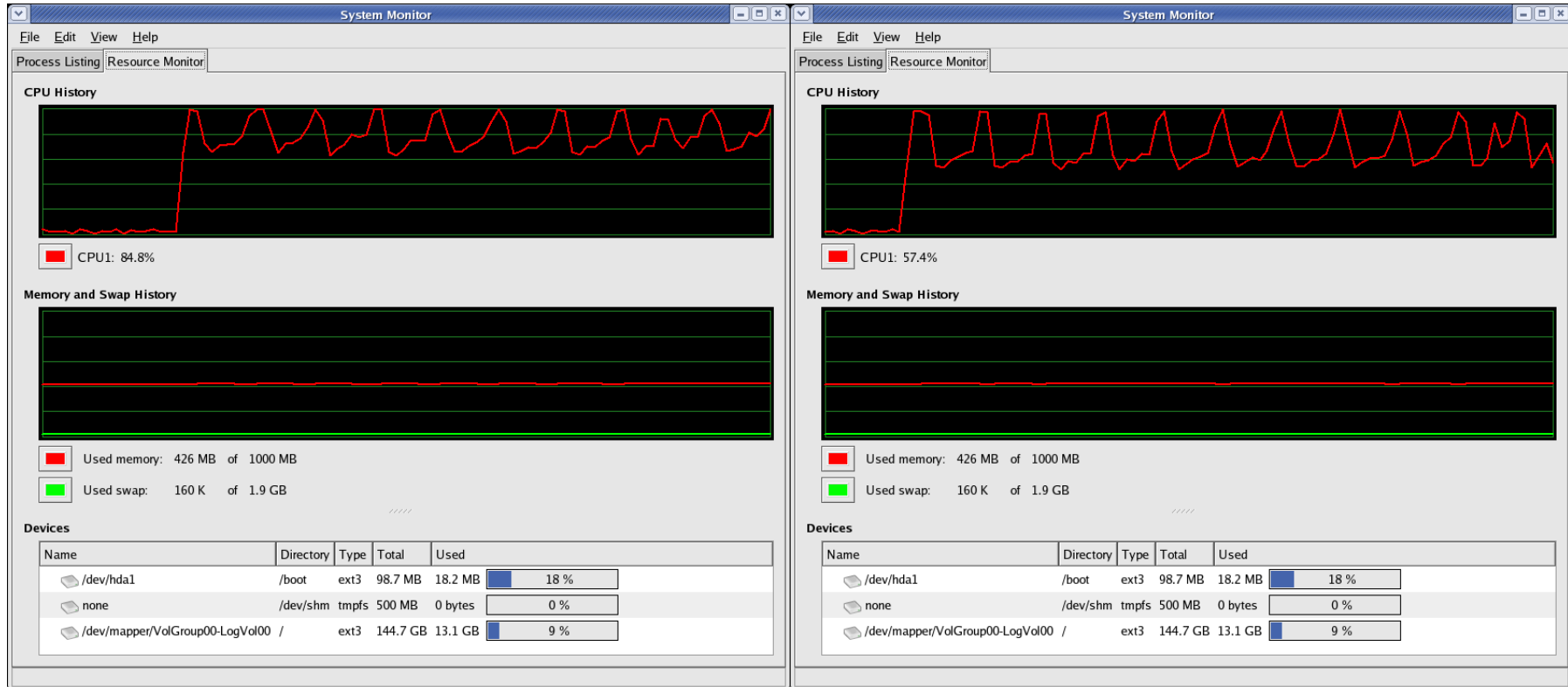 - Fast. 6 times faster without hardware acceleration!

Performance

- ## 50 Concurrent clients

  Log scale: zoom on 4MBytes file serving

160 Req/Sec

60 Req/Sec

Decrease CPU/memory usage

- Sendfile lowers down the memory and CPU usage

What's next

- JBoss Web standalone

    – mid. March 08

    – Replaces standalone Tomcat

- JBoss Web 2.1 GA

    – Included inside JBoss AS 5

- Add more platform to JBossNative

    – AIX, ?

Q & A