Netbinox

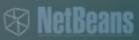
The fastest OSGi Container on the Planet

Jaroslav Tulach NetBeans Platform Architect



Agenda

- Being Fast!?
- A bit of history
- Demo
- Technical details
- Q/A



Slow I/O During Startup

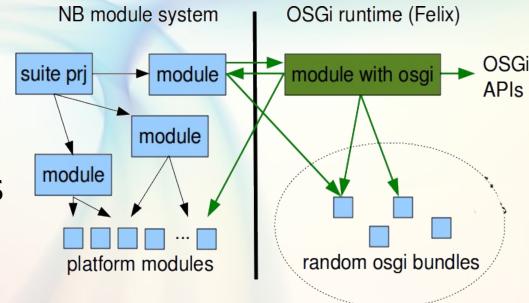
Demo



History 1 - Experiments

The Garage Days

- Sun and OSGi
 - Slassfish adopted OSGi in 2008
- Netigso
 - > Friday project
 - > Felix based
 - > Parallel mode
 - > Reuse of bundles
- Glassfish in Nb
 - > Middle of 2009



Problem: How to get this into release?



History 2 - Acquisition

18 months of despair

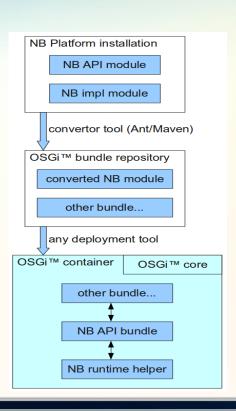
- Sun collapsed in Spring 2009
 - > Acquired by Oracle
 - > Approved in January 2010
 - > Czech Republic LEC on Sep 1, 2010
- JDeveloper
 - > Primary IDE for Oracle Enterprise Technologies
- Eclipse Foundation
 - > Member and Contributor
- Problem: Can NetBeans be useful for Oracle?



History 3 - NetBeans 6.9 Theme

The public plan

- NetBeans Platform based on standards
 - > Standard UI Swing
 - > Adopt OSGi as de-facto standard
- OSGi interoperability
 - > Reuse existing bundles
 - > Use bundles on server/client side
 - Use NetBeans APIs in OSGi mode
- Problem:
 - > Is that enough to align with JDev?



JDeveloper

Going the same direction

- JDev converted to OSGi meanwhile
 - > Most of the work done
 - > Big Bang rewrite
 - > Using Equinox
- Long term synergy vs. short term benefits
 - > Reuse pieces of NetBeans in future
 - More speed right now
- Netbinox on the rise
 - "Just" reuse NetBeans "startup caches"



Being Fast with Caches

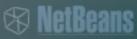
Demo



Caches & Speed

Avoid I/O

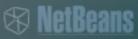
- 40% faster
- Useful for desktop applications
 - Start speed is important
 - "Morning" launch
- Intercept I/O queries
 - > loadClass, getResource
 - > File.exists()
- Modular vs. monolithic apps
 - > Deployment modular
 - > Start is monolithic



The Differences

What is different in Netbinox?

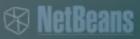
- 100% compatibility for bundles
- Class and resource loading
 - ZipBundleFile replaced by JarBundleFile
 - > Thread Context Class Loader
- Equinox hooks
 - > Registered slightly differently
- OSGi APIs in Separate JARs
 - Shared by Felix & Equinox
- Own Launcher
 - Configuration files use NetBeans format



The Presence

With future outlook

- NetBeans IDE 7.1 uses Netbinox
 - > Mylyn + Bugzilla Connectors
 - Orbit bundles (JSCh, Apache)
- JDeveloper on Netbinox
 - Other features than a speed
- The common ground
 - > OSGi as lingua franca
 - > How do we share?



Give Feedback on the Sessions

