

Portability in J2EE

- ✍ What does it mean?
- ✍ Why is it important?
- ✍ Does it work?
- ✍ "Callista Deploy", a J2EE portability demo
- ✍ A Server Consolidation Test
 - ✍ Linux on S/390

Portability in J2EE

✍ What does it mean?

✍ Freedom of choice!

- Choose between certified J2EE servers
– and supported HW/OS...

✍ Why is it important?

✍ Makes the J2EE market highly competitive

✍ Examples

- Start at low-end move to high-end
when your business grows
- Deploy mission critical applications on high-end
and non mission critical applications on low-end

Portability in J2EE

✍ Does it work?

✍ In J2EE v1.3 – YES!

✍ Not to 100% (software never will...)
but much much better than in earlier releases...

- Maturity of the J2EE server products has improved
- The J2EE Compatibility Test Suite (CTS)
 - 5 000 test cases for J2EE v1.2...
 - 15 000 test cases for J2EE v1.3!
 - 15 J2EE v1.3 compatible servers today

Portability in J2EE

✍ "Callista Deploy", a J2EE portability demo

✍ Focus on J2EE portability issues

- I.e. no focus on 24*7 (HA) nor performance issues
 - This is where the J2EE vendors are expected to compete given that portability works...

✍ J2EE 1.3 test application

- Based on Java Petstore v1.3.1
 - Uses most of the api's and services in J2EE 1.3
 - Some code changes required to make it run on all tested J2EE servers...

Portability in J2EE

✍ "Callista Deploy", a J2EE portability demo

✍ Deployed on four of the most popular J2EE servers

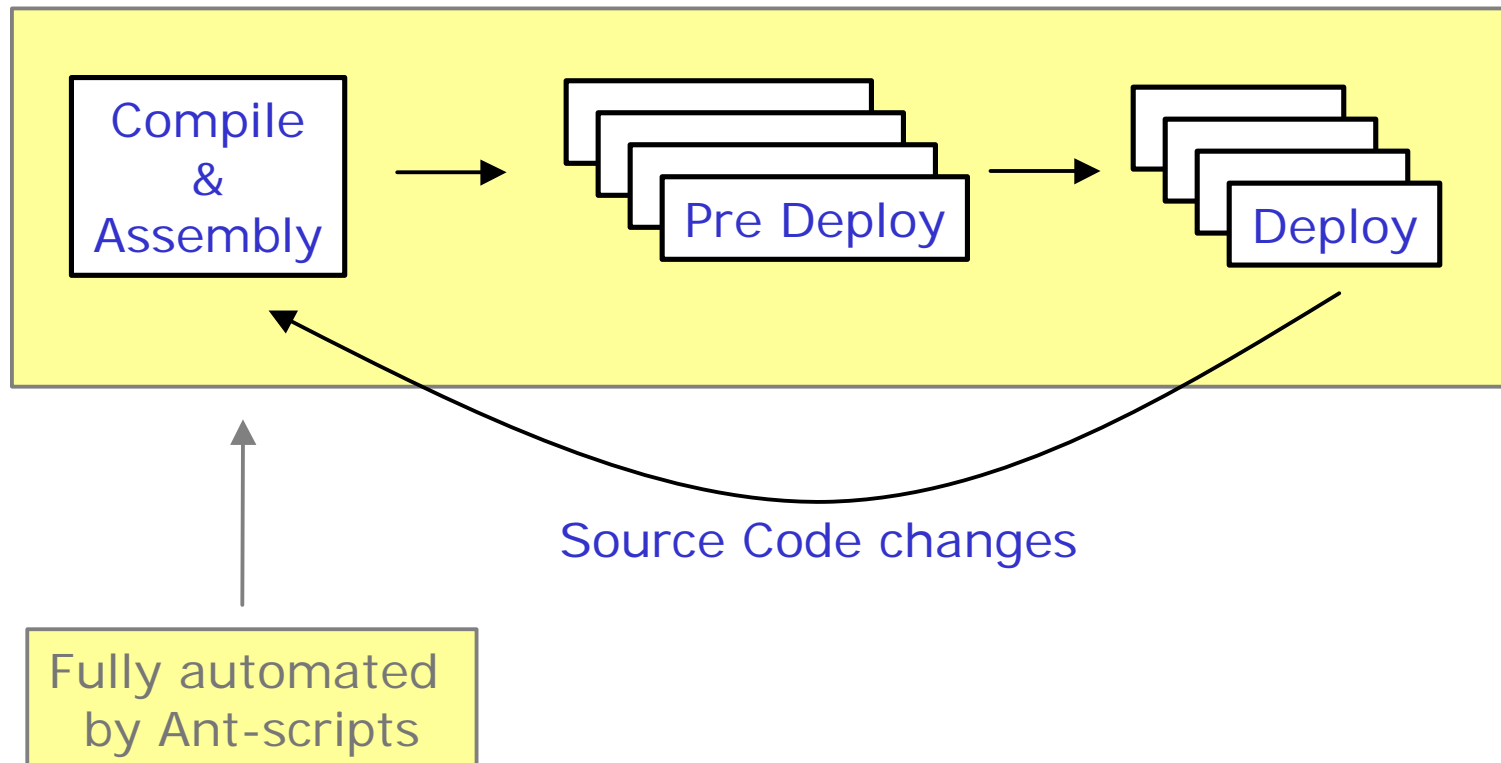
- BEA WebLogic
- IBM WebSphere
- Oracle OC4J
- JBoss

✍ All tasks from a Source Code Change to Deployment in all J2EE servers are fully automated using Ant

✍ <http://www.callista.se/enterprise/resources>

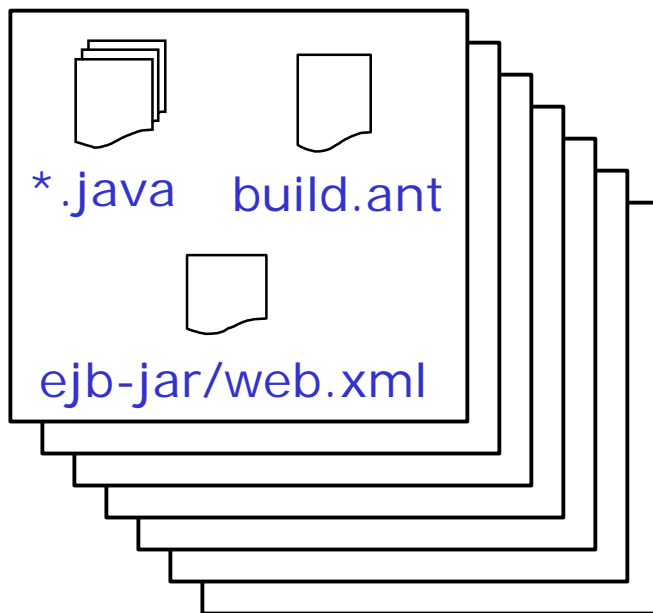
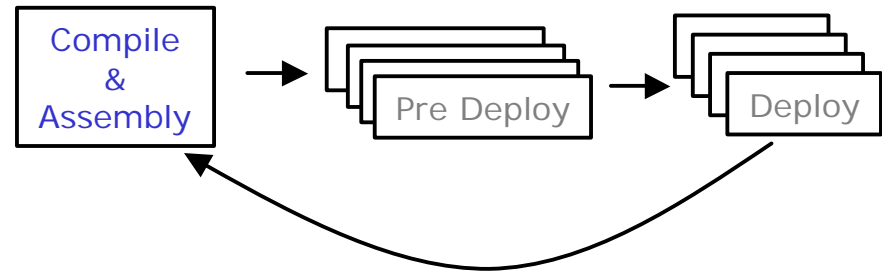
Portability in J2EE Callista Deploy

✍ High Level Build Process



Portability in J2EE Callista Deploy

✎ Compile & Assembly



J2EE modules

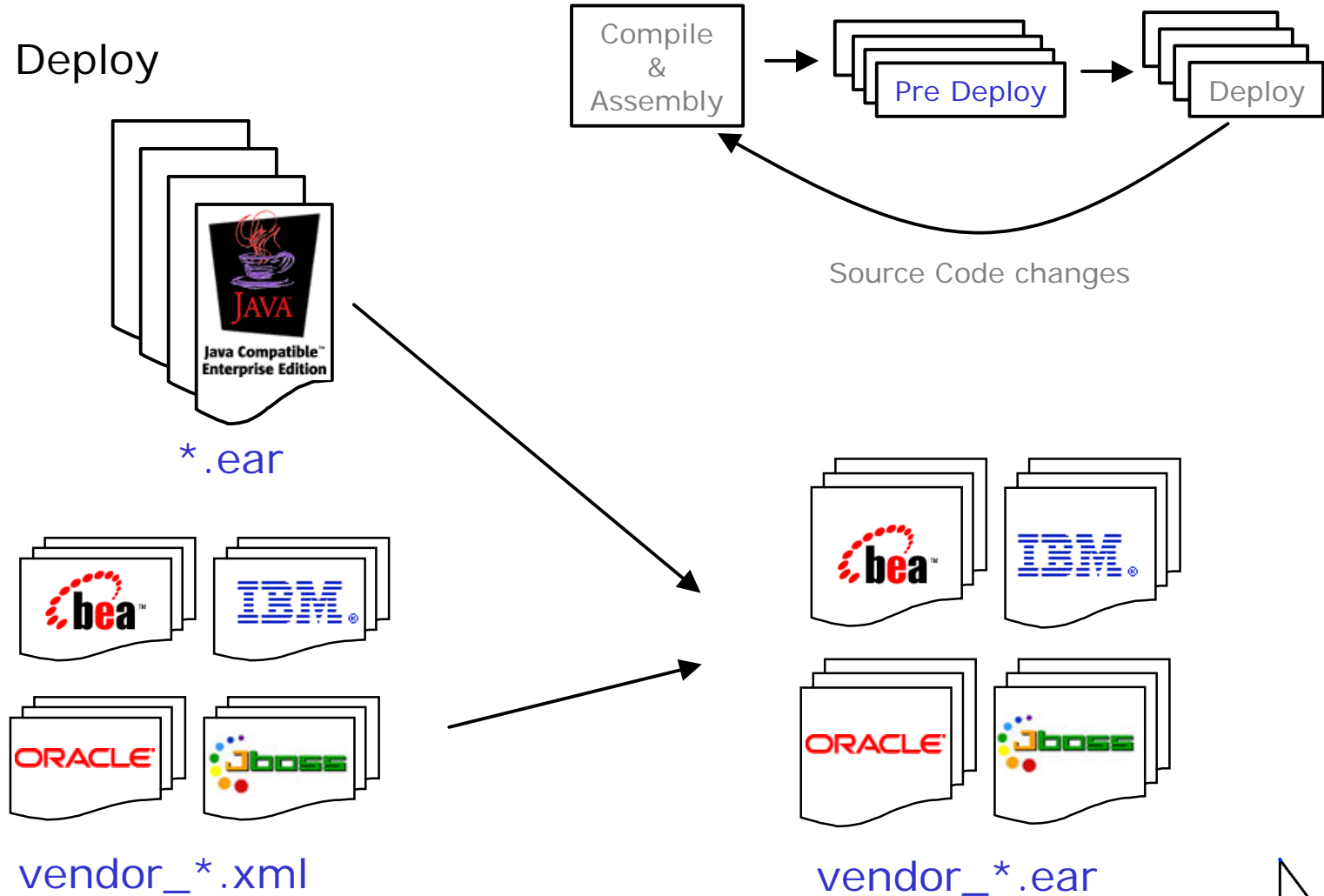


*.ear

J2EE applications

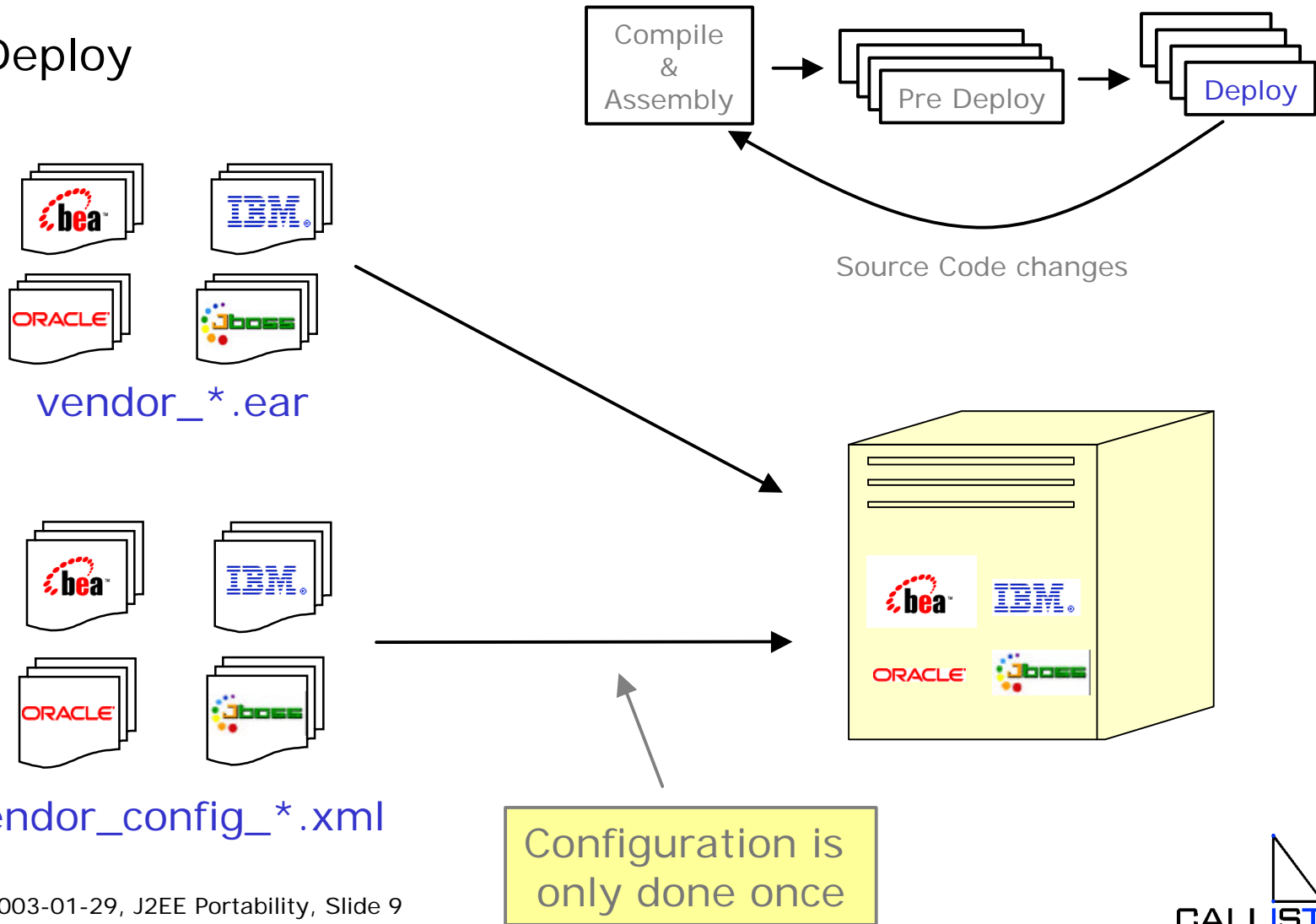
Portability in J2EE Callista Deploy

✍ Pre Deploy



Portability in J2EE Callista Deploy

Deploy



Portability in J2EE

Server Consolidation with Linux on S/390

✍ Linux Community Development System

<http://www-1.ibm.com/servers/eserver/zseries/os/linux/lcds/>

✍ 1000 active Linux partitions on a single mainframe...

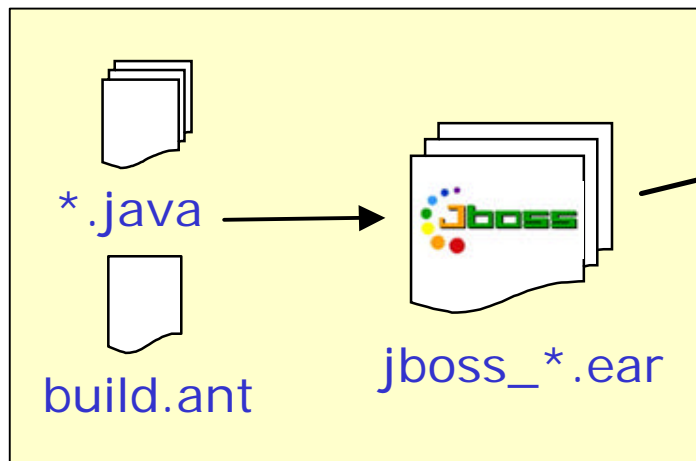
✍ Web-registration of a new Linux partition

✍ 20 minutes after registration,
a new Linux machine is up and running...

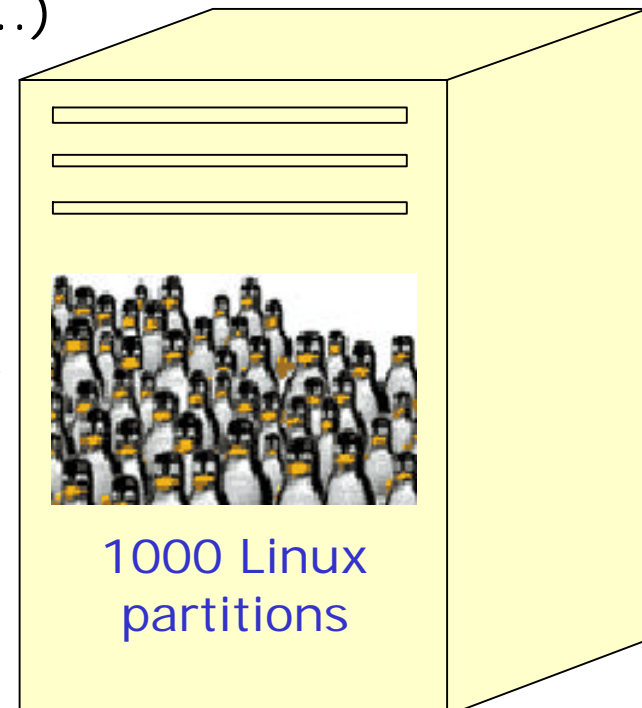
Portability in J2EE

Server Consolidation with Linux on S/390

- ✍ Callista Deploy on Linux for S/390
 - ✍ Linux (Red Hat), JBoss and Petstore installed and configured as on Intel (Except for installation of Linux...)
 - No compatibility issues



Windows PC



IBM S/390 Mainframe