

Deployment User Experience Sept 2006

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Overview

The focus of 9.1 is user experience

- Performance
- Error message
- Enhancements

Deployment Performance (1)

- AS 9.1 goal: replace Tomcat as the default web container in the NetBeans bundle.
 - No more than 2x slower on a "kick-the-tires" scenario: start appserver, deploy hello-world JSP, access first JSP page.
 - No more than 1.5x slower to deploy a big application using frameworks and accessing several of its pages.
- Redeployment performance
- EE deployment performance

Deployment Performance (2)

Deployment performance

- XML parsing
validations (grammar caching)
- Use Config Beans instead of Config MBeans
register element, query element
- Exclude list for annotation processing
javax.servlet.GenericServlet
javax.servlet.http.HttpServlet

Deployment Performance (3)

Redeployment performance

- Avoid re-loading deployment descriptor
- Combine create/delete application-reference to update application-reference
- Send a combined Redeploy event for unload/load module

Deployment Performance (4)

Optimization for netbeans requirement

- Netbeans doing directory deployment for web application
 - Work with them to get other module type directory deploy
- Avoid reloading deployment descriptor

Deployment Performance (5)

EE Deployment Performance

- Multicast event to cluster instance instead of sending events sequentially
- Use web path and nio instead of jmx for synchronizing bits
- Use web path instead of jmx for uploading application
- Remove bits after undeployment

Error Message (1)

Examine all deployment clients:

- Admin-cli
 - Admin-gui
 - JSR88/netbeans
 - Autodeploy
- Status propagated back properly (no false success)
 - Exception/cause propagated back properly (no information get lost)

Error Message (2)

Quality of the error message

- Identify the most common use cases
 - user feedback: forum, mailing list, bugs/issues
 - work with sqe-team
- Provide better, meaningful, diagnostic message

Examples:

- @Entity is mistaken as an EJB component level annotation
- typo in DTD Doctype
- Users don't see stack trace

Enhancements (1)

File Locking problem

- Utility to identify code opening JAR but never closed
http://blogs.sun.com/quinn/entry/tool_for_diagnosing_failed_glassfis
- Symlinks affecting the directories of un/redeployment
- Handle the situation even with the locked jar
 - third-party code locking the jar
 - locked jar can be overwritten

Enhancement (2)

Autodeploy of sun-resource.xml

- sun-resource.xml packaged inside application
- standalone sun-resource.xml

Enhancement (3)

Deployment framework for other archive types

- JBI archive
- SIP archive
- Phobos archive

Other

How to programmatically deploy

- JSR88 sample

Q & A

- Continue monitoring forum mailing/issue list closely
- <https://glassfish.dev.java.net/javaee5/deployment/>
- Write to s1as-deployment-dev@sun.com for any comments/questions.