



# The DBAs' realm: Deployment of JDev ADF Applications to OC4J

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# Agenda

- What is ADF?
- Standalone OC4J demo
- JDeveloper ADF Runtime Installer
- App Server connections within JDeveloper
- J2EE archive file types
- Deployment profiles & deployment
- Running your web app from the OC4J
- Configuring OC4J database connections
- A consideration of software dependencies and change control



# What is ADF?

- Application Development Framework
- A set of Java APIs that JDeveloper uses for creating & running web applications (among other things)
- Includes persistence layer technologies including ADF Business Component, web page UI toolkits such as ADF Faces (JavaServer Faces), web services etc.
- It is a separate concept to JDeveloper and can be used independently, but is bundled and heavily integrated into JDev to increase developer productivity
- Core component of Oracle's Fusion and EBS 12 architecture



# ADF Faces application demo



# The insidious OC4J-JDev relationship

- JDev ADF applications run in any J2EE compliant app server
- OC4J is Oracle's flavour contained within OAS
- ADF 10.1.3.x runs under OC4J 10.1.3.x or 10.1.2.x (see Metalink)
- Don't bother with earlier versions of JDev
- OC4J 10.1.3.x utilises a JVM from JDK 1.5\_05
- ADF is free to use, but there is a license caveat



# Standalone OC4J

- Cut the OAS *mess* and experiment with a Standalone OC4J
- Obtainable via OTN, v10.1.3.2
- Standalone OC4J setup demo



# Prereqs for deploying ADF applications

- Specific version of JVM
- Java archive files
- ADF runtime libraries installed
- JDev deployment profile
  
- + for automated deployment: app server connection



# J2EE Archive Types

- JAR files (.jar)
  - Containing source and/or bytecode (compiled source)
  - For standard Java libraries, not specifically an application
- WAR files (.war)
  - Single J2EE web application
  - Contains defined “standardised” directory structure
  - + certain files including web.xml
- EAR files (.ear)
  - Same as WAR but can contain many WAR applications
- All files are potentially zipped





# Install ADF Runtime libraries demo



# Creating JDeveloper deployment profiles & deployment & running demo



# Manual deployment

- Rather than automating deploying apps via JDev, manual deployment is allowed
  1. Developer creates ear/war file
  2. Placed in change control system
  3. DBA extracts and deploys via OC4J OEM
- Doesn't actually require JDeveloper
- Be cautious of the data sources created



# Manual deployment demo



# OC4J data sources

- J2EE applications connect to db using *data sources* (named connection).
- ADF utilises data sources and connection pools
- Traditional per database user connections are obsolete (and not scalable)
- Security is maintained via the app or LDAP/SSO



# Software configuration management

- There are natural software dependencies
- ADF from JDev 10.1.3.x requires:
  - OC4J 10.1.2.x or 10.1.3.x
  - JVM JDK v1.5\_05 (v5.0)
  - ADF Runtime libraries 10.1.3.x
- Only let your developers upgrade in controlled fashioned
- It's possible to have multiple OC4Js on OAS with different ADF Runtime libraries
- Alternatively use the OC4J 10.1.3.x shared library feature



# Question & Answers!

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