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**WebSphere** software

## Application Migration from WebSphere Standard Edition

Deployment  
Configuration Option  
WebContainer

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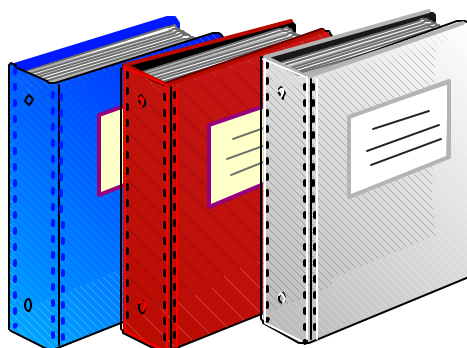
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### Must read !

WebSphere® Application Server V4.0.1 for z/OS and  
OS/390 Migration / GA22-7860-00



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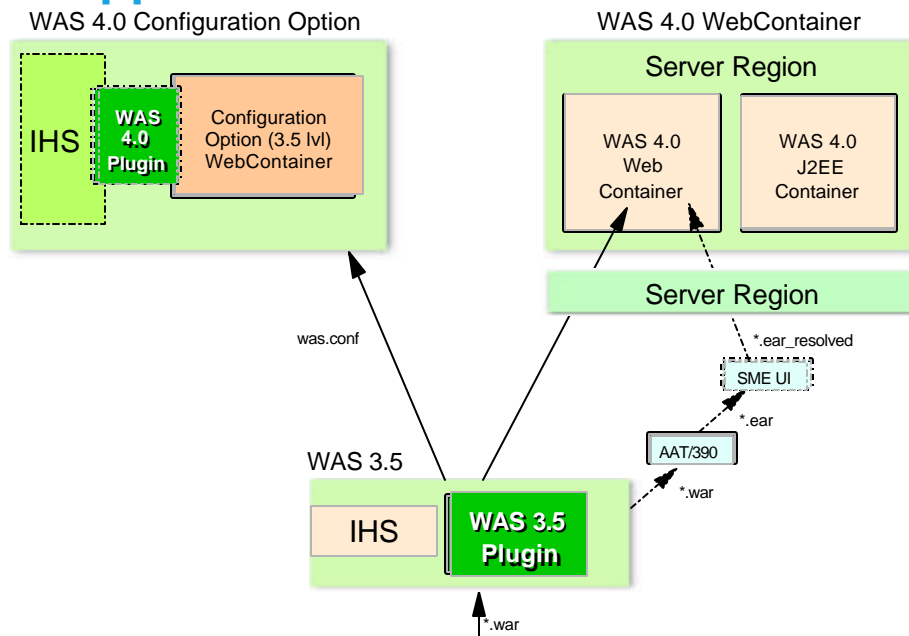
## Migration of WebAppls to WAS 4.0

- Two major options
  - ▶ Migrate .war to the WAS 4.01 Runtime (WebContainer)
    - J2EE deployment
    - .ear files & tooling
  - ▶ Migrate .was to the IHS WAS 4.01 ConfigurationOption
    - configuration work
    - .war has not to be deployed necessarily but is recommenced as an migration step
    - basically runs in a WAS 3.5 RunTime



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## Migrating 3.5 SE WebApplications to 4.0.1



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## Migration to the Configuration Option

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## Migration to WAS 4.0 Plugin (CO)

- was.conf
  - ▶ appserver.version => change from 3.50 to 4.00/4.01
  - ▶ remove all "webapp"-statements
    - webapp statments will be found in Deployment Descriptor
  - ▶ delete all "DeployedWebApp" which should run in the web-container of was4.0-runtime



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## Migration to WAS 4.0 Plugin (CO)

- **http.envars**
  - ▶ change NLSPATH variable  
    /.../was4/WebServerPlugIn/msg/%L/%N
- **was.conf**
  - ▶ Session Persistence with ConnectionPooling
  - ▶ use original was.conf statements, add:  
    **jdbcconnpool.FishPool.connectionidentity=server**

### **connspec (default)**

the identity will be assigned from the userid field of the IBMJDBCConnSpec object.

### **server**

the identity will be that of the Web Server address space.

### **thread**

the identity will be that of the thread on which the JDBC Connection request is made.



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## Migration to WAS 4.0 Plugin (CO)

- **http.conf**
  - ▶ ServerInit: point to "was400plugin.so" and WAS-Install-directory
  - ▶ ServerTerm: point to "was400plugin.so"
  - ▶ Service: point to "was400plugin.so"

ServerInit /.../was35/AppServer/bin/was350plugin.so:init\_exit /.../was35/.../was35.conf

ServerTerm /.../was35/AppServer/bin/was350plugin.so:term\_exit

Service /webapp/\* /.../was35/AppServer/bin/was350plugin.so:service\_exit

ServerInit /.../was4/WebServerPlugIn/bin/was400plugin.so:init\_exit /.../WebSphere/.../was35mig.conf

ServerTerm /.../was4/WebServerPlugIn/bin/was400plugin.so:term\_exit

Service /webapp/\* /.../was4/WebServerPlugIn/bin/was400plugin.so:service\_exit



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## WAS 4.0 CO to DB2 V7

was.conf

appserver.classpath=/usr/lpp/db2/db2710/classes

applserver.libpath=/usr/lpp/db2/db2710/lib

### PROCLIB WEBSERVER

//STEPLIB DD DISP=SHR,DSN=DB2HLQ.SDSNEXIT

// DD DISP=SHR,DSN=DB2HLQ.SDSLODR

// DD DISP=SHR,DSN=DB2HLQ.SDSNLOAD

### db2sqljjdbc.properties (see httpd.envvars)

DB2SQLJSSID=*MyDB2V7SubSystemID*

### httpd.envvars

LD\_LIBRARY\_PATH=/usr/lpp/db2/db2710/lib:

\$LD\_LIBRARY\_PATH



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## Migration to WAS 4.0 Plugin (CO)

- SessionPersistence

- ▶ Objects bound to the http session object must be serializable

```
public class DbServletBean implements Serializable
```

- wartowebapp.sh => \$PATH variable of executing user should contain path to .../java/bin directory



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## Migration to the WebSphere 4.0 Runtime (WebContainer)

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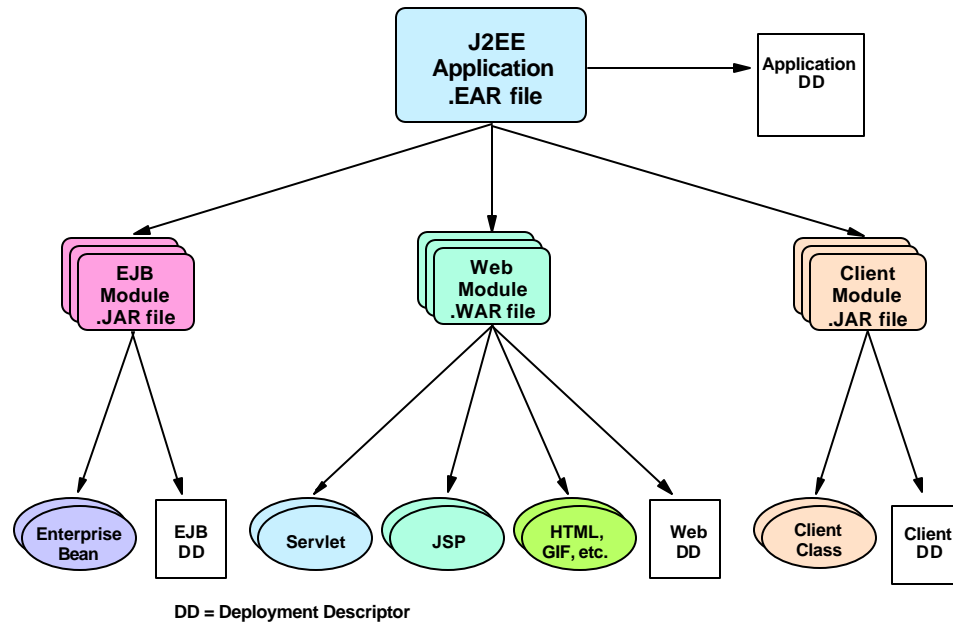
## Migration & Deployment to WAS 4.0 Runtime (WebContainer)

- For WebApps one must use .war files
- .war files have to be placed into EnterpriseArchives (.ear)
- Tooling is necessary
- Steps necessary:
  - ▶ AAT
  - ▶ SMUI
  - ▶ Configuration



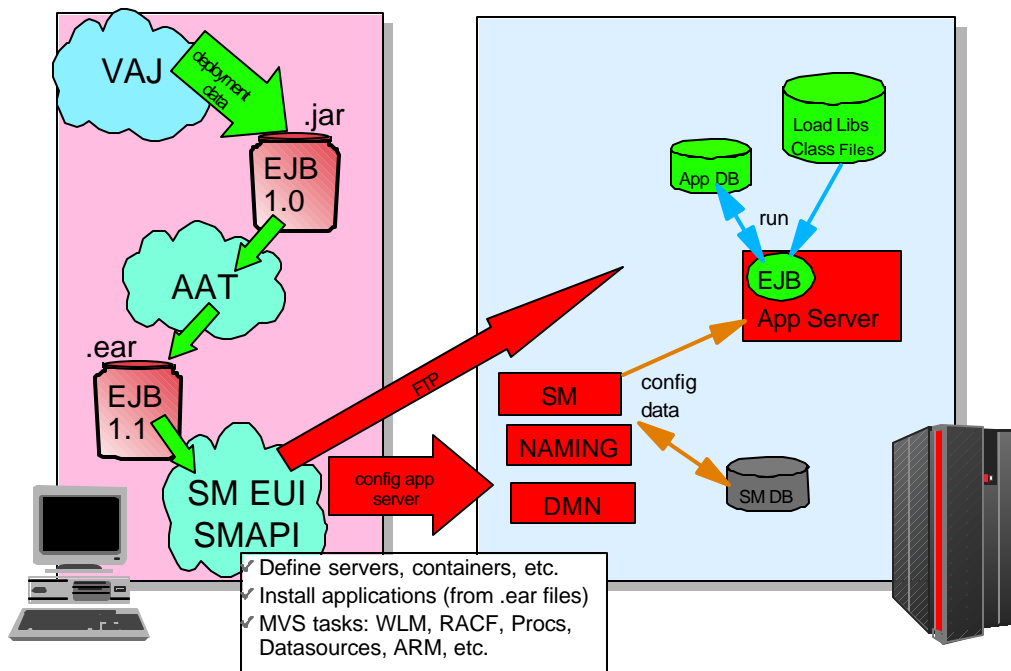
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# J2EE Application Modules Components



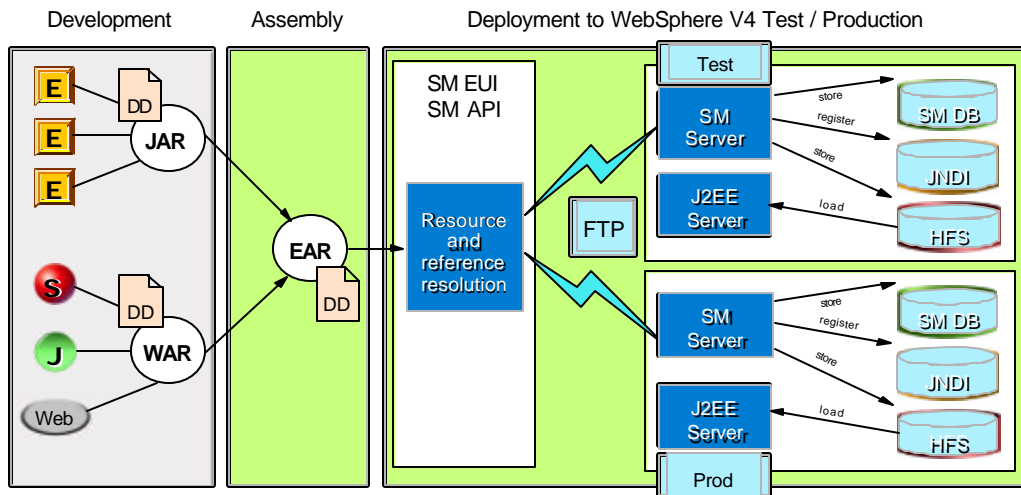
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## Deployment Process



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## .war and WebSphere V4



WebApplications also for WAS 4  
Different deployment  
For change management see SMAPI



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## Configuration Migration to WAS 4.0 Runtime

- Add variables to http.envars of IHS
  - ▶ RESOLVE\_IPNAME = IP host name of WAS 4.0 SMS server system
    - Will be used only if IHS and WAS SMS (used for application lookup) are not on the same z/OS image
  - ▶ RESOLVE\_PORT = port on which SMS-Server is listening
    - Will be used only if SMS server is not listening on the default port 900



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## Configuration

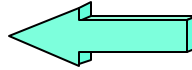
### Migration to WAS 4.0 Runtime

#### ■ SessionPersistence

- ▶ create table for session data in DB7 (same def. as for 3.5)
- ▶ edit "webcontainer.conf"

- ../CB390/controlinfo/envfile/OPPLEX/MyServer/
- (new was.conf for webconainer)

```
session.enable=true
session.urlrewriting.enable=false
session.cookies.enable=true
session.protocolswitchrewriting.enable=false
session.cookie.name=CookieName
session.cookie.comment=comment
session.cookie.maxage=-1
session.cookie.path=/
session.cookie.secure=false
session.tablesize=1000
session.invalidationtime=180000
session.tableoverflowenable=true
session.domain=
session.dbenable=true
session.dbtablename=USER.SESSIONTABLE
```



session.datasourcename not needed

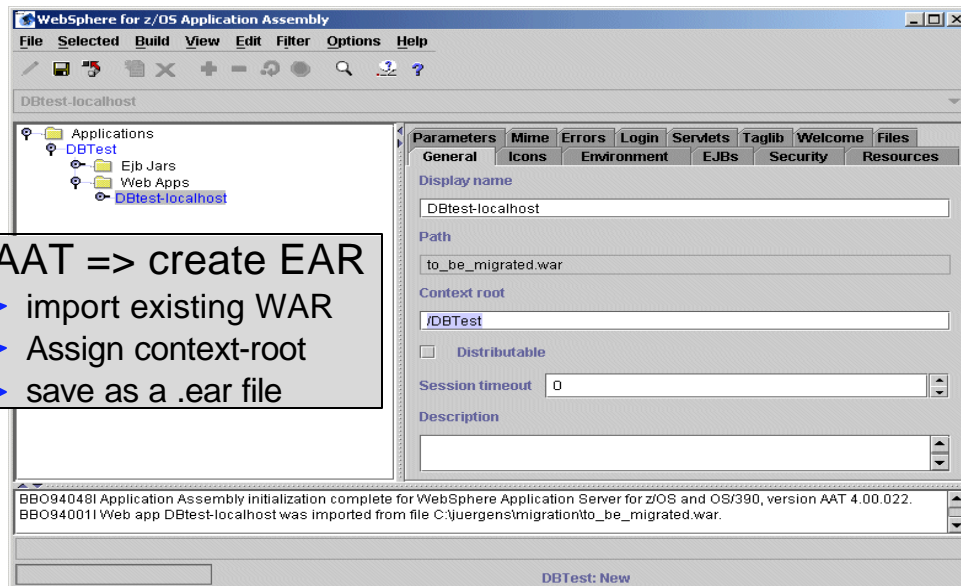


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## AAT

### Migration to WAS 4.0 Runtime

- AAT => create EAR
  - ▶ import existing WAR
  - ▶ Assign context-root
  - ▶ save as a .ear file



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# SMEUI

## Migration to WAS 4.0 Runtime

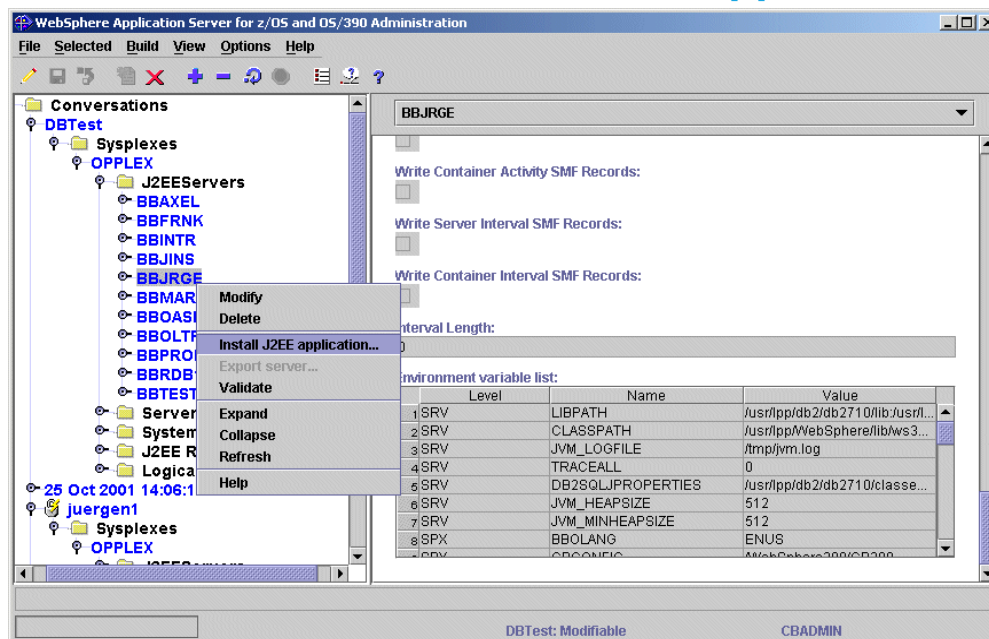
- SM EUI => create resolved EAR => Deployment to WAS 4.0 runtime
  - ▶ new conversation
  - ▶ import EAR
  - ▶ assign default JNDI-Name & Path for WebContainer
  - ▶ make active (deployment)



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# SMEUI

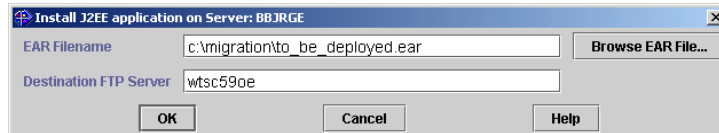
## New Conversation / Install J2EE application



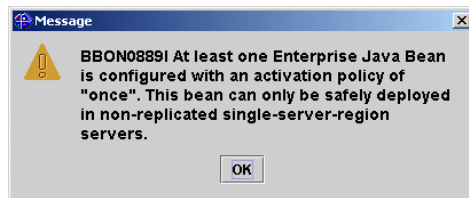
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## SMEUI

### Install J2EE application



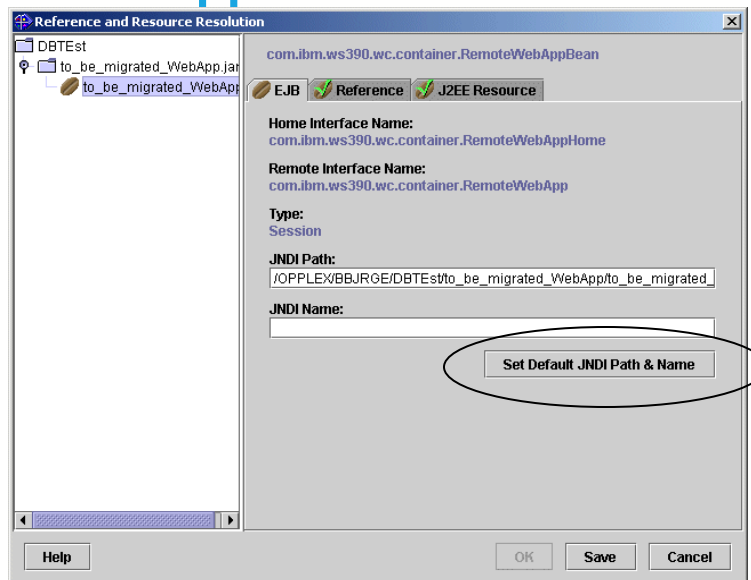
Select .ear file to import,  
you get following notice



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## SMEUI

### Install J2EE application



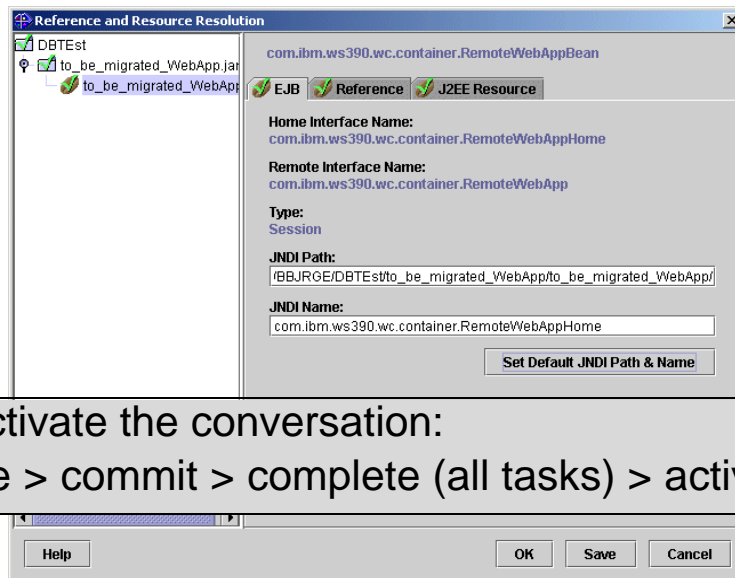
Now set set default JNDI path & name



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# SMEUI

## Install J2EE application



Now activate the conversation:  
validate > commit > complete (all tasks) > activate