WDEBU7 Workshop
Chapter 05

SAP NetWeaver 7.0 BI
Installation Java Stack

Roland Kramer - SAP Solutions Business Development, SAP EMEA
Version: October 2009

Java Problems:

- Platz -> filesystem
- Memory Konfiguration
- Berechtigung

SAP, JSF, J2EE, ADMIN
SDN users → please note the following

- The Access of any material in the SAP community network and SAP developer network (SDN) is free of charge with your user login.

- If you see any occurrence of “SAP Note” or “SAP Hinweis” and you want to access this information, you have to logon to the SAP Marketplace (SMP) Note search which needs an additional login to the SMP. The login to SMP is depended to a valid customer contract and the S-user credentials.

- Example for such a link: https://service.sap.com/sap/support/notes/

- You can also add the Note Number directly at the end of the mentioned URL or go to New Note Search
The full documentation can be found in the SDN https://www.sdn.sap.com/irj/sdn/landscapedesign ➔ Knowledge Center ➔ Deployment Options ➔ DualStack Recommendation https://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/d074d7de-8d55-2b10-1e94-fb2e9d2893d1

And in particular the extension for NetWeaver BW http://www.sdn.sap.com/irj/sdn/go/portal/prtroot/docs/library/uuid/70b3f2c0-cbea-2b10-ef9e-90f61c39c1fb
Installation of Java as Add-In within the same Database (Doublestack)

Enhance a single Abap Instance with a Java Add-In Installation to a Doublestack Installation

- SLD - system landscape directory
- SLM - software lifecycle manager
- NWA - NetWeaver Administrator
- BI-Java contains the new NetWeaver 7.0 functionality for Java based BI applications
- EP core (EPC) is a subset of the usage type EP
Installation of Java as separate instance within the same Database (MCOD)

J2EE Unicode requirement implications

SQL Server: installing ABAP and J2EE in one SQL instance

- Each SQL Server instance and each of its SQL server databases has a collation setting. The Instance and the databases must be compatible to ensure normal database operations.

- To install the SAP J2EE engine 7.00 - the SQL Server instance and J2EE database collation must be Unicode compliant (SQL_Latin1_General_CP850_BIN2).

- It should be noted that:
  - With the SQL server instance defined with collation SQL_Latin1_General_CP850_BIN2 - the server can have both Unicode and non-Unicode compliant databases.
  - With a database defined with collation SQL_Latin1_General_CP850_BIN2 - a database is a fully Unicode database.

- Note: Prior to Web AS 6.40 - the default collation setting for all non-unicode SQL Server instances and databases was SQL_Latin1_General_CP850_BIN.

- You must perform the conversion before the SAP J2EE engine 7.00 installation!

-Perform the steps identified in SAP Note 600027 - Installing the Corrected MS SQL Server Collation

- Apply SQL Server 2000 SP3 - minimum version required 8.0.780

- Apply the SQL Server QFE. The QFE is located on the SAP NetWeaver ’04 DVD (Master) and can be installed by SAPInst!
Installation of BO Enterprise as separate Instance within the same Database (MCOD)

J2EE Unicode requirement implications

Other Databases: installing ABAP and J2EE in one database (MCOD)

- UDB/DB2 (all other Platforms)
  - DB2 already supports Unicode and non-Unicode residing the same database.
  - Both installation options are available
  - SAP Note 689538 - Unicode enabling on UDB/DB2

- MaxDB/SAP DB
  - MaxDB/SAP DB already supports Unicode and non-Unicode residing the same database.
  - Both installation options are available
Scenario with ABAP on HANA, JAVA and BI

Installation of BO Enterprise as separate Instance within the same Database (MCOD)

J2EE Unicode requirement implications

Other Databases: installing ABAP and J2EE in one database (MCOD)

- UDB/DB2 (all other Platforms)
  - DB2 already supports Unicode and non-Unicode residing the same database.
  - Both installation options are available
  - SAP Note 689538 - Unicode enabling on UDB/DB2

- MaxDB/SAP DB
  - MaxDB/SAP DB already supports Unicode and non-Unicode residing the same database.
  - Both installation options are available
Installation Options:

- Please Note when you install the Java Add-In in HA clusters or distributed environments you have to start the sapinst with the option SAPINST_USE_HOSTNAME.

- If the virtual hostname from the database server differ from the central instance server you use the following scenario:
  - Central Services Instance (SCS) ➔ ./sapinst SAPINST_USE_HOSTNAME=<ci-server>
  - Database Instance ➔ ./sapinst SAPINST_USE_HOSTNAME=<di-server>
  - Central Instance ➔ ./sapinst SAPINST_USE_HOSTNAME=<ci-server>

- To find out all sapinst options: sapinst -p

- See also Note 774116 for more details. For Unix environments there are basically 2 installation options for installation of the J2EE Add-In:
  1. Install with virtual hostname (recommended) Use SAPINST property SAPINST_USE_HOSTNAME (available as of NW04SR1). Post-Installation tasks should also refer to <virtual host>.
  2. Install with physical hostname (before setup of HA environment) Please refer to SAP note 757692 for a description on the necessary changes when switching the J2EE Engine from physical to virtual hostname.

- Check also the new created file sapservices located under /usr/sap (Note 823941). Note that there are different setting for the variable pf=<DIR_START_PROFILE>/<INSTANCE_START_profile>. With new installation /usr/sap will be used and after Upgrades /sapmnt will be created. This can cause different Problems - if your file system is not the rule /sapmnt/<SID>/profile.
Install Java as separate Instance (Central System Inst.)

Welcome to SAP Installation Master

Before you start the installation, make sure that you have identified the required scenario as described in the Master Guide.

Select the service that you want to install:

- SAP Installation Master
- SAP CRM 5.0 Support/Release 3
- SAP ERP 6.0 Support/Release 3
- SAP SCM 5.0 Support/Release 3
- SAP CRM 5.0 Support Release 3
- SAP Identity Management 7.0 Support Release 3
- SAP BPW 7.0 Support Release 3
- SAP IS 4.0 Support Release 3
- Central Services Instance (CSIS) - with usage types based on AS-Java
- Database Instance
- Central Instance

Software Units / Usage Types:

Software units or usage types can be run together with others in one system or each software unit or usage type can run separately on different systems. Software units and usage types are realized by installing and configuring a collection of software components. The usage types Application Server ABAP/AS ABAP and Application Server AS Java are also used as a foundation for other units.

Central Services Instance:

The central services instance is the main point of communication and synchronization for the Java cluster. A central services instance consists of the message service and the enqueue service.

Central Instance:

The central instance is the core component of an SAP system. Exactly one central instance must exist in each SAP system. The central instance usually provides all SAP system utilities. If you install an SAP system with usage types based on AS-Java, the Software Deployment Manager (SDM) is part of the central instance.

Oracle > Database System

Enter the parameters of the database system:

Database Parameters

SAPinst has detected an already existing database. At this point you can select Install/Mod or Drop database and recreate.

Action for Existing DB:
- Upgrade
- Install MOD
- Drop database and recreate

Instance Memory

Ingres Ram [MB] 1665
Total Ram [MB] 3711

Database Instance Parameters

DB EMail Version 1.0

Database Schema Parameters

The new default for Java Schema is SAPRPODB.

Java Schema [SAPRPODB]

Password of Java Schema

Confirm

...
J2EE Unicode requirement implications

Oracle databases: installing ABAP and J2EE in one database (MCOD)

- Oracle databases can support both Unicode and non-Unicode schemas within one DB.
- The achieve and implement this - the database’s National Character Set must be set to UTF8 prior to the J2EE installation.
- It is a simple process to alter the National Character Set.
- A full Unicode conversion of the database and all it’s schema is not required. A BW Unicode conversion is only required if you need full BW Unicode representation functionality
- Simple scripts and important checks are available in SAP Note 669902 - Setting the national character set to UTF8
- Note: This is not the default National Character Set for newly Oracle 9i databases installed prior to Web AS 6.40 or databases upgraded from Oracle 8i

Additional Notes:
- Note 669902 - Setting the national character set to UTF8
- Note 838402 - Problems within non-Unicode system landscapes
- Note 975768 - Deprecation of Java features with non-Unicode Backend
Additional Remarks:

- It is helpful not to use a Version Number in the Directory Name of the Java SDK - because from time to time there is a need to update the Java SDK. If no Versioning is used the JDK can be replaced very easily without changing various Java configuration files. (e.g. /opt/javasdk142 or c:\javasdk142)

- For the Sun Java JDK refer to the new Homepage
  [http://www.sun.com/software/javaseforbusiness/getit_download.jsp](http://www.sun.com/software/javaseforbusiness/getit_download.jsp)


- [https://java-partner.sun.com/support => sap-jfb@sap.com/DZwqphsV](https://java-partner.sun.com/support => sap-jfb@sap.com/DZwqphsV)

- Please consult the following Notes to find and Install the right Java SDK for you OS:
  - Note 716604 for the Sun JDK (Windows - Linux - Solaris)
  - Note 746666 - OutOfMemory or slowdown due to http response compression
  - Note 716926 for the HP JDK (HP-UX)
  - Note 716927 for the IBM JDK (AIX)
  - Note 810008 for the IBM JDK (Linux on POWER)
  - Note 861215 for the IBM JDK (AMD64/EM64T-Linux)
Please Note that for Linux Installations the JCE File must be downloaded from IBM and not from SUN:

Prerequisites Checker - Data File for Check (Note 855498)

Prerequisites Checker
Your installation host will be checked for compliance with most of the prerequisites defined in the installation guide.
By default, a Data File for Check is located on the Installation Master DVD. SAPinst automatically suggests the path of this file. For updated versions of the Data File for Check, see SAP Note 855498.

Data File for Check: F:\Install32\sw\Nw44s\PREREQUISITE_CHECK_DATA_XML

Browse
Check the result of the Prerequisites Checker

Read the results of the prerequisites analysis carefully.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Result Code</th>
<th>Severity</th>
<th>Message</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM Size</td>
<td>OK</td>
<td></td>
<td>For the selected services at least 1024 MB RAM are required. Current value: 3711 MB. If the current value is much lower than the required value this will significantly slow down the installation or make it even impossible. In this case stop the installation, add more RAM and start it again. (Updated 2005-06-24)</td>
<td></td>
</tr>
<tr>
<td>Domain Controller</td>
<td>OK</td>
<td></td>
<td>Installations on domain controllers are not supported. (Updated 2005-06-24)</td>
<td></td>
</tr>
<tr>
<td>Names of well known groups</td>
<td>OK</td>
<td></td>
<td>Checking the names of some well known groups. Expected result &quot;everyone, users, guests, power users&quot;. Current result &quot;everyone, users, guests, power users&quot;. If this condition does not hold it is most probably because you are not</td>
<td></td>
</tr>
</tbody>
</table>

© "SAP AG 2005" - Install NetWeaver ID: Java | Roland Froemer / 14
Check with the Notes 910318 and 826779 also the new security settings for Java:
rdisp/msserv_internal = 39
rdisp/msserv = 0

and for Abap the Notes:
821875 and 862989
rdisp/msserv_internal = 39
Note:

- Please change all Users created by the Java Add-in Installation from user type “Dialog” to “Service” to prevent unmeant Password changes. These are affected users:
  
  - ADSUSER ➔ for the Adobe Document Service
  - ADS_AGENT
  - J2EE_ADMIN ➔ for the Java Administration
  - J2EE_GUEST
  - NWDI_ADM ➔ If DI is installed
  - NWDI_CMSADM
  - NWDI_DEV
  - SAPJSF ➔ for the Java Communication with Abap
  - SLDAPIUSER ➔ for the SLD Administration/Communication
  - SLDDSUSER
Check the Authorization of the User in the ABAP Stack

Update on the User screen from NetWeaver 7.0 SR3 and above
Please change all Users created by the Java Add-in Installation from user type “Dialog” to “Service” to prevent unwanted Password changes. These are affected users:

The user SAPJSF is dedicated to synchronize the Users between Abap and Java (UME) with the Role SAP_BC_JSF_COMMUNICATION_RO. To assign the “stronger” Role SAP_BC_JSF_COMMUNICATION you should first generate this Role with Transaction SUPC before you can add them in SU01 to the user SAPJSF. See Note 748195 and 891162 for more Details.

You must restart the ABAP/JAVA Engine after you change any role assignment.

<table>
<thead>
<tr>
<th>User</th>
<th>Role</th>
<th>Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADSUSER</td>
<td>PFCG</td>
<td>create Role ADSCallers</td>
</tr>
<tr>
<td>ADS_AGENT</td>
<td>SAP_BC_FP_ICF</td>
<td></td>
</tr>
<tr>
<td>J2EE_ADMIN</td>
<td>SAP_J2EE_ADMIN</td>
<td>S_BW_RFC</td>
</tr>
<tr>
<td></td>
<td>SAP_SLD_ADMINISTRATOR</td>
<td>S_BI-WX_RFCA</td>
</tr>
<tr>
<td>J2EE_GUEST</td>
<td>SAP_J2EE_GUEST</td>
<td></td>
</tr>
<tr>
<td>SAPJSF</td>
<td>SAP_BC_JSF_COMMUNICATION</td>
<td>S_BW_RFC</td>
</tr>
<tr>
<td></td>
<td>SAP_SLD_ADMINISTRATOR</td>
<td>S_BI-WX_RFCA</td>
</tr>
<tr>
<td>SLDAPIUSER</td>
<td>SAP_SLD_CONFIGURATOR</td>
<td></td>
</tr>
<tr>
<td>SLDDSUSER</td>
<td>SAP_SLD_ADMINISTRATOR</td>
<td></td>
</tr>
</tbody>
</table>

On Demand:

- NWDI_ADM Note 840523
- NWDI_CMSADM Note 840523
- NWDI_DEV Note 840523
New with NW 7.0 SR1: Master Password for all Users

SAP System > Master Password

Enter the master password all users

Master Password
The password will be used for all accounts SAPinst creates and for the secure store key phrase. The length has to be 8-14 characters. Depending on your installation scenario there might be more restrictions.

Password for all users of this SAP system

Confirm

Additional Information
You can choose a different value for each Password by choosing to edit the regarding parameter section in summary screen. If you set already some password to a different value and change the Master Password in this dialog afterwards, the individually set passwords are NOT overwritten with the new master password.
Please Note:

- Note 669902 - Setting the national character set to UTF8
- Note 968236 - Installing usage type BI Java subsequently/iView not found
- Note 883948 - Enabling additional usage types / software units
Configure or Register the local/central SLD

SAP System > System Landscape Directory

Enter your SLD destination

Important Information
The SAP System Landscape Directory (SLD) is designed for registering the systems (along with the installed software) of your whole system landscape. For the software units / usage types you selected, an SLD configuration is not required.

We strongly recommend to choose Register in existing central SLD if you want the SLD to be configured. The usual case is to configure one SLD for your complete landscape. Note that Configure a local SLD may take up to several hours.

Registration in System Landscape Directory
The SLD also can be configured manually later on if desired.

- No SLD destination
- Configure a local SLD
- Register in existing central SLD (default)
Register in existing central SLD (default)

SAP System > Central SLD

Enter the parameters of the connection to a central SLD.

Self Registration of the Java Engine in Central SLD
The SLD Data Supplier User is used to perform the self-registration data of your system to the SLD.

SLD HTTP Host: "w12142: wof.sap.corp"
SLD HTTP Port: 8001
SLD Data Supplier User: "SLDDSU00EX"
Password of SLD Data Supplier User: *********

Self Registration of ABAP Engine in Central SLD
The SLD ABAP API User is used to map the landscape data from and to the SLD.

SLD Gateway Host: "w12142"
SLD Gateway Instance Number: 81
Communication with Central SLD
The SLD ABAP API User of your system communicates landscape data from and to the SLD.

SLD ABAP API User: "SLDAPSU00EX"
Password of SLD ABAP API User: *********
Specify the SLD user (local SLD configuration) Note 935245

Please Note:

- Note 909797 - Missing Central Service instance in the SLD
- Note 821904 - Separating SCS instances for ABAP and J2EE
- If you have additional Problems to update the DDIC user together with the user mapping like (user persistence failed or similar) you might want to run the Report RSADRCK2 once to fix the Address mapping of the User DDIC (especially after new Abap Installations).
- Note 976913 - The binaries of a WebDynpro application not synchronized
- Note 1057720 - Missing configuration for JCO/RFC destinations of the SLD
- Note 768452 - Troubleshooting SLDCHECK
Please Note:

- Note 909797 - Missing Central Service instance in the SLD
- Note 821904 - Separating SCS instances for ABAP and J2EE
- If you have additional Problems to update the DDIC user together with the user mapping like (user persistence failed or similar) you might want to run the Report RSADRCK2 once to fix the Address mapping of the User DDIC (especially after new Abap Installations).
- Note 976913 - The binaries of a WebDynpro application not synchronized
- Note 1057720 - Missing configuration for JCO/RFC destinations of the SLD
- Note 768452 - Troubleshooting SLDCHECK
Revise your Parameters if needed or start the Service

Parameter Summary

Use the checkboxes to select parameter sections you would like to revise values or start the execution with given values

- SAP System > ADEP UME
  - Password of Administrator User
  - Password of Communication User
  - Password for IDM

- SAP System > NWEL Landscape
  - SAP system will be under NWDI control

- SAP System > System Landscape Directory
  - SLD Destination
  - Register in existing central SLD (default): [ ]

- SAP System > Central SLD
  - SLD HTTP Host
  - [default: sap.corp]
  - SLD HTTP Port

[ ] Reuse | [ ] Start
Creation of the Java DB (own table space)

Task Progress

Phase 9 of 35

Phase List
- Update system DLLs
- Install J2EE policy file
- Create users for SAP system
- Install common system files
- Unpack SAP archives
- Create and load database
- Install/Check database
- Evaluate database parameters

CREATE TABLESPACE PSAP4JDB ...

Phase is in progress.
In order to remove a J2EE stack or separate J2EE instance please proceed as follows:

1. Deinstall the J2EE DB tablespace - the schema and the SCS instance (the db schema for this one SAP SID) with SAPInst.
2. Remove DIR_GLOBAL/security/data
3. Remove DIR_INSTANCE/SDM
4. Remove DIR_INSTANCE/j2ee
5. Revert CI instance profile to their original state (backup copies should exist in the profile directory)
6. Revert sapservices profile to their original state (backup copies should exist in the /usr/sap)
7. Remove all created User (see page 16 for details) and Restart ABAP

### Instances to Uninstall

<table>
<thead>
<tr>
<th>Remove</th>
<th>Instance Name</th>
<th>Instance Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DYEEM65601</td>
<td></td>
</tr>
<tr>
<td>☑</td>
<td>SCS62</td>
<td>02</td>
</tr>
</tbody>
</table>

### Database Schemas

- SAPN45DB
- SAPN4S

### Database Tablespaces

- PSAPN45DB

[Image: How to uninstall a Java Add-In or separate Instance]

[Image: SAP Installs MPM-2114-2; SAP NetWeaver 2004s Support Release 2; Additional Software Life-Cycle Tasks; Uninstall J2EE Stack or Separate J2EE Instance]

Select the service that you want to install:

- SAP ERP 2005 Support Release 2
- SAP CRM 5.0 Support Release 2
- SAP CRM 5.0 Support Release 2
- SAP NetWeaver 2004s Support Release 2
- Additional Preparation Tasks
- Application Server
- Database Tools
- Java Add-In for ABAP
- Database Copy
- Post-Upgrade
- Uninstall
- Uninstall - Mac/DB Instances

Description: Uninstalls a SAP system, a single SAP system instance, or a standalone engine/optional standalone unit.

Before you start the installation, make sure that you have identified the required scenario as described in the Master Guide.

THE BEST-RUN BUSINESSES RUN SAP™
Some useful Notes for the usage of Java and JSPM:
- Note 756084 - Common met SDM v6.30/6.40/7.0 problems
- Note 739043 - How to Check for Full Strength Jurisdiction Policies
- Note 891983 - JSPM: Central SAP Note SAP NetWeaver 7.0 AS Java
- Note 891983 - JSPM: Central SAP Note SAP NetWeaver 7.0 Java
- Note 891895 - JSPM: required disk space
- Note 860939 - Initial installation/Update of SDM v6.40/v6.45(NW04/NW04s)
- Note 1024539 - Recommended Settings for NW04 >= SP14 for the AIX JVM (J9)
- Note 1086644 - Checking database consistency for the PCD
- Note 1011241 - Patches for NetWeaver 7.0 BI Java Support Package
Additional useful SDM Tasks:

**How to patch the SDM GUI manually prior to SR2 (Note 860939):**

- Go to the directory `<drive>\usr\sap\<sid>\JC\<nr>\SDM\program`
- StopServer.bat (windows) or .sh (unix)
- sdm.bat jstartup "mode=standalone"
- update.bat from the temp directory where SDMKIT.jar is extracted
- sdm.bat jstartup "mode=integrated"
- StartServer.bat (windows) or .sh (unix)

**How to synchronize the SCAs before patching with JSPM (Note 910073):**

- Go to the directory `<drive>\usr\sap\<sid>\JC\<nr>\SDM\program`
- StopServer.bat (windows) or .sh (unix)
- sdm.bat systemcomponentstate "mode=sync"
- sdm.bat systemcomponentstate "mode=activate"
- StartServer.bat (windows) or .sh (unix)

More SDM commands can be found in the following file:

```
<drive>:\usr\sap\N4S\DVEBMGS01\SDM\program\doc\SDMCommandLineDoc_en_final.pdf
```
Description:

[Thr 34955] *****************************************************
*** ERROR => The Java VM terminated with a non-zero exit code.
*** Please see SAP Note 943602 - section 'J2EE Engine exit codes'
*** for additional information and trouble shooting.
******************************************************************************

Solution:

- There is a Problem with the ABAP UME (or - if available the connection to the LDAP Server) during the Installation/restart of the J2EE engine. This is caused by some inconsistencies with the user SAPJSF (User locked due to wrong Password) or one of the Users J2EE_ * is missing or also locked.
Unlock the User or reset the Password of the affected user - mostly SAPJSF

- This will also appear - when the ABAP License is outdated or the startup of ABAP fails unexpected (user has no authorization - etc.)

  ◆ Note 943602 - Analysis of errors within the startup of J2EE Engine 7.0
  ◆ Note 1658911 - J2EE System fails with "exitcode = -11113"
  ◆ Note 748195 - Error when you create/change ABAP users in the UME

  ◆ Note 1659418 - Java Application Server Exitcodes - Composite KB
    ● Role SAP_BC_JSF_COMMUNICATION
  ◆ Note 891162 - User SAPJSF does not have authorization for SYST
    ● Transaction SUPC to activate Role SAP_BC_JSF_COMMUNICATION

Note that when you use the option “SAP Support Package Stacks” you only select the initial SPS - e.g. for Stack 16. Java also releases Patches for the current stack - which will not be covered by the collection process. Download the latest files manually.
### Java Add-On 7.00 (Example Windows):

- \$DIR_CT_RUN = \$(DIR_EXE_ROOT)\\$(OS_UNICODE)\\NTI386
- \$DIR_EXECUTABLE = \$(DIR_INSTANCE)\\exe
- jstartup/trimming_properties = off
- jstartup/protocol = on
- jstartup/vm/home = C:\j2sdk1.4.2
- jstartup/max_caches = 500
- jstartup/release = 700
- jstartup/instance_properties = \$(jstartup/j2ee_properties);\$(jstartup//sdkm_properties)
- j2ee/dbdriver = \$(DIR_EXECUTABLE)\\ojdbc14.jar
- exe/j2ee = \$(DIR_EXECUTABLE)\\jcontrol$(FT_EXE)
- exe/jlaunch = \$(DIR_EXECUTABLE)\\jlaunch.exe
- icm/HTTP/j2ee_0 = PREFIX=/,HOST=localhost,CONN=0-500,PORT=5000
- rdisp/j2ee_libpath = \$(DIR_EXECUTABLE)
- rdisp/j2ee_start_control = 1
- rdisp/j2ee_start = 1
- rdisp/j2ee_timeout = 600
- rdisp/frfc_fallback = on
- j2ee/instance_id = ID0163804
Some useful Notes for the usage of Java and JSPM:

- **Note 314530** - Number of RFC/CPIC connections for external clients
- **Note 890175** - JSPM: Detection of SDM as a single support package
  - Bear in mind that the technical name of the SDM component is SAP_JAVASL and JSPM will detect it by this name.
  - **Solution:** Create a copy of the SDMKit_<version>.jar file and rename it to SDMKit.jar before you start patching the JSPM.
- **Note 893946** - SunJCE provider inconsistency
- **Note 891983** - JSPM: Central SAP Note SAP NetWeaver 7.0 AS Java
- **Note 984683** - Problems with user mapping after engine update with JSPM
- **Note 1006153** - SAPEU SP10 Deployment failed (restart Java and resume JSPM)
- **Note 1006640** - Not active container WebDynpro during deployment
- **Note 1013369** - NW04s BI - In between - Support Packages
- **Note 1011241** - Patches for NetWeaver 7.0 BI Java Support Package
  - See the attached HowTo for downloading BI-Java Patches from SMP
- **Note 1026840** - List of corrections for SP09 - 10 - 11 NW04s CTC Template BI-Java
  - **Note 1033246** - NetWeaver 7.0 BI Java Synchronized Patch Delivery for SPS 16,15,14
  - **Note 1033245** - NetWeaver 7.0 BI Java SPS 15 Patch Delivery Schedule
  - **Note 1033244** - NetWeaver 7.0 BI Java SPS 14 Patch Delivery Schedule
Deployed components after Java Stack Update (example from EhP1 Stack 3):
JSPM always chooses the latest available file

<table>
<thead>
<tr>
<th>VendorName</th>
<th>Current Release SP/Level Patch/Level</th>
<th>Target Release SP/Level Patch/Level</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap.con/KPC-DR</td>
<td>7.09.16.1</td>
<td>7.09.16.2</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/SAP_JTECM</td>
<td>7.09.16.4</td>
<td>7.09.16.7</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/SAP_JTECHS</td>
<td>7.09.16.5</td>
<td>7.09.16.8</td>
<td>Show Details</td>
</tr>
<tr>
<td>hp.con/WINS</td>
<td>1.1.9.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>redwood.con/ETPRJ1...</td>
<td>7.08.13.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/ADDSAP</td>
<td>7.09.16.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/BASE_GDS</td>
<td>7.09.16.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/BC-FES-EGS</td>
<td>7.08.13.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/BI-BASE-S</td>
<td>7.09.16.31</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/BI-SRC</td>
<td>7.09.16.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/BI-REPLPM</td>
<td>7.09.16.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/BI-MOLY</td>
<td>7.09.16.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/BI_MRR</td>
<td>7.09.16.1</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/BI_UDI</td>
<td>7.09.16.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/EWEBAPP</td>
<td>7.09.16.31</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/BP_BAÐDIN</td>
<td>6.0.1.5.1</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/CAT</td>
<td>7.09.16.1</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>sap.con/CAT-KR</td>
<td>7.09.16.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
<tr>
<td>new.con/CAT-JR</td>
<td>7.09.16.0</td>
<td>not found</td>
<td>Show Details</td>
</tr>
</tbody>
</table>

Drain of inflow has finished.

Abap
Java
TMS
L->SIMS
L->tp
Ktein
*.SAR
SAR -.xuf

JSPM *
L->SDM *
L->OS
|cmon
* .SCA
*.jar
Jor -.xuf
Note: until SPS11 both the J2EE Engine and the Abap Engine will be restarted during this process. This is not valid for separate stacks.
Typical JSMP Log after Java Stack Update (example from any SPS12 to any SPS13):

**JSPM - Deploy whole Queue (~ 2h to 3h)**

**Deployment in running**

<table>
<thead>
<tr>
<th>Order</th>
<th>Vendorname</th>
<th>Old Release SPLlevel Patch/Level</th>
<th>Target Release SPLlevel Patch/Level</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>sap.com/SAP_JTCCF</td>
<td>7.00.16.4</td>
<td>7.00.16.7</td>
<td>SCHEDULED</td>
</tr>
<tr>
<td>2</td>
<td>sap.com/ERC-OR</td>
<td>7.00.16.1</td>
<td>7.00.16.2</td>
<td>SCHEDULED</td>
</tr>
<tr>
<td>3</td>
<td>sap.com/SAP_JTCHS</td>
<td>7.00.16.5</td>
<td>7.00.16.8</td>
<td>SCHEDULED</td>
</tr>
</tbody>
</table>

**Process Times**

<table>
<thead>
<tr>
<th>Step</th>
<th>Start Date</th>
<th>End Date</th>
<th>DownTime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007/1/11</td>
<td>2007/1/11</td>
<td>3:15:40</td>
</tr>
</tbody>
</table>

**Deployment (displays only items with runtime higher than 30s) or with aborted components**

<table>
<thead>
<tr>
<th>Component</th>
<th>RuntimetoDC</th>
<th>Runs</th>
<th>Pipeline Time</th>
<th>Pipeline Runs</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap.com/ABSDAP</td>
<td>0:01:00</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSDAP</td>
<td>0:01:23</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCAF</td>
<td>0:01:11</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCAM</td>
<td>0:00:13</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCAM</td>
<td>0:02:45</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCBS</td>
<td>0:01:24</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCBS</td>
<td>0:03:35</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCBS</td>
<td>0:03:30</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCBS</td>
<td>0:01:30</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>redwood.com/TSQL</td>
<td>0:1:30</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSDCP</td>
<td>0:00:24</td>
<td>105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCCTV</td>
<td>0:00:45</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCCTV</td>
<td>0:01:04</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCCB</td>
<td>0:00:36</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCCC</td>
<td>0:01:45</td>
<td>68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSEC</td>
<td>0:01:24</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCDF</td>
<td>0:00:30</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCDF</td>
<td>0:01:30</td>
<td>76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSCDF</td>
<td>0:03:30</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/ABSDIC</td>
<td>0:03:42</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Start page of the Java Instance (HTTP Port 5<\text{nr}>00)

SAP Library
SAP Library contains the complete documentation for SAP Web Application Server.

System Information
System information provides administrators with an overview of the system configuration and its state. It shows all of the system's instances and processes, their current state and important parameters (such as ports) that may be required for support cases, as well as the versions of the components installed.

User Management
The user management administration console provides administrators with the functions they need to manage users, groups, roles, and user-related data in the User Management Engine (UIM). Users without administrator permissions can use it to change their user profile.

SAP NetWeaver Administrator
A tool for administration and monitoring, offering a central entry point to the whole SAP NetWeaver system landscape. The SAP NetWeaver Administrator can be used in a central scenario where it is capable of operating an entire system landscape containing ABAP and Java systems as the application platform of SAP NetWeaver.

Web Services Navigator
Web Services Navigator is a tool that gives you a short overview of a specific Web service based on its WSDL, and enables you to test your Web service by creating and sending a client request to the real end point.

UDDI Client
The UDDI client provides query and publishing functions for different Web service entities (Models, business services) to any UDDI compliant registry.

Web Dynpro
Web Dynpro is a User Interface technology available within the SAP NetWeaver Developer Studio. Various Web Dynpro tools provide administrators and application developers with performance measurement and application administration capabilities. The Web Dynpro runtime is already deployed.

サーバドメイン.ext<\text{port}>サーバドメイン.<\text{port}>

http 5<\text{nr}>00
https 5<\text{nr}>01
smtp 25<\text{nr}>
httpmsgserv 81<\text{nr}>

Java

37
## Check the System Information after the Installation

### System N4J
- **Host:** PWDF2142
- **Port:** 32003
- **Type:** Oracle (Oracle Database 10g Enterprise Edition Release 10.2.0.4.0 - Production With the Partitioning, OLAP, Data Mining and Real Application Testing options)

<table>
<thead>
<tr>
<th>Software Components</th>
<th>Version</th>
<th>Applied</th>
<th>License</th>
<th>Installation Number</th>
<th>System Number</th>
<th>Days Until Expiry</th>
<th>Software Product</th>
<th>J2EE_JRE_JAVA_8</th>
<th>J2EE_JRE_JAVA_8</th>
<th>J2EE_JRE_JAVA_8</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap.com/SAP-JEECOR</td>
<td>7.0.1</td>
<td>3SP5</td>
<td>1000.7.0.1.3.3.20090312124643</td>
<td>20090324202519</td>
<td>20090324202519</td>
<td>000000000001171031</td>
<td>SAP-JEECOR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sap.com/SAP-JEE</td>
<td>7.0.1</td>
<td>3SP5</td>
<td>1000.7.0.1.3.3.20081109163400</td>
<td>20090324202519</td>
<td>20090324202519</td>
<td>000000000001171031</td>
<td>SAP-JEE</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Instance JCO2
- **Host:** PWDF2142
- **OS:** Windows 2000 (Service Pack 3)

<table>
<thead>
<tr>
<th>Component</th>
<th>PD Port</th>
<th>Cluster</th>
<th>Node ID</th>
<th>Kernel Version</th>
<th>HTTP Port</th>
<th>HTTPS Port</th>
<th>N4 Port</th>
<th>TSO Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>dispatcher</td>
<td>2200</td>
<td></td>
<td>23029900</td>
<td>7.0.1 PatchNLevel 56102</td>
<td>50200</td>
<td>50201</td>
<td>50204</td>
<td>50208</td>
</tr>
<tr>
<td>server8</td>
<td>4914</td>
<td></td>
<td>23029950</td>
<td>7.0.1 PatchNLevel 56102</td>
<td>50200</td>
<td>50201</td>
<td>50204</td>
<td>50208</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SDM</th>
<th>PD Port</th>
<th>SDM Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>590</td>
<td>50208</td>
<td></td>
</tr>
</tbody>
</table>
■ Please Note that there is also an Abap correction included in this Note which has to be applied to the connected Abap System.

In order to deploy the tool - follow these steps:

1. Import the correction instruction attached to this note into your SAP NetWeaver BI system.

2. Open the file "tool.zip" attached to this note and extract the file "com.sap.ip.bi.supportdesk.par" to your local harddisk. Please leave the file name all lowercase.

3. Close all open web browsers.

4. Logon to your Portal using <http|https>://<j2ee_server>:<j2ee_port>/irj (e.g. http://myserver.sap.com:50000/irj) with a user belonging to the "Administrators" group. Usually - this is "Administrator" or "j2ee_admin".

5. Change the URL in your browser to


6. Click the "Browse..." button and select the file "com.sap.ip.bi.supportdesk.par" from your local harddisk. Press "Open".

7. Click the "Upload" button to deploy the tool to your SAP NetWeaver Web Application Server Java.
Check the assigned Roles for the usage of the SLD:

<table>
<thead>
<tr>
<th>Role</th>
<th>UME Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>LcrInstanceWriterAll</td>
<td>sap.com_com.sap.lcr.LcrInstanceWriterAll</td>
</tr>
<tr>
<td>LcrAdministrator</td>
<td>sap.com_com.sap.lcr.LcrAdministrator</td>
</tr>
</tbody>
</table>

**Mapping Security Role to User**

1. Log on to the Visual Administrator of the J2EE engine of the SLD host.
3. In the Runtime tab - choose Policy Configurations and then the column Components - and select the component sap.com/com.sap.lcr*sld.
4. Switch to the Security Roles tab to display the assigned roles.
   The user SLDAPIUSER already exists with its security role LcrInstanceWriterLD.
5. Switch to edit mode and add user PIAPPLUSER with the same role LcrInstanceWriterLD.

**Additional Notes to check:**

- Note 669669 - Updating the SAP Component Repository in the SLD
- Note 907897 - Error upgrading the SAP CIM model to Version 1.5
- Note 1087704 - Complete lock of SLD namespace during import
Importing and Updating your SLD Component Information

- The Component Information is a vital part of your SLD. After the activation of your SLD server - you have to import the SAP’s master component information. It is delivered with the Web Application Server as a ZIP-file CR_Content.zip (which is located in the directory <WEBAS-INSTALL-DIR>/<SID>/SYS/global/sld/model) - SAP Exchange Infrastructure 2.0 SP 4 - and any shipments using the SAP’s master component information.

- The SAP’s master component information grows with the time. You can update your own SLD component information by means of importing the delta files of the SAP master component information. You can download the current version of the SAP’s master component information from the SAP Service Marketplace at http://service.sap.com/patches → Enter by Application Group → Additional Components → SAP MASTER DATA FOR SLD → SAP MASTER DATA FOR SLD 2.0 → OS independent. Except for the initial data import - you normally need only the thin delta files or their aggregation for updating your Component Information. At the SAP Service Marketplace - you will also find the CR full export. This file is the same as delivered with the corresponding products mentioned above. For updating your SLD component information - the CR content delta which aggregates all available delta files is sufficient.

- The import process for aggregated delta files will skip versions that have already been imported. For example - your current component information version is 2.4. And you are about to import the aggregated file from 2.4 to 2.9 - the data relevant to version 2.4 will not be processed again.

- It is possible that the component information updates require newer version of the SAP CIM model. A corresponding warning during the import process will indicate this case. You should import the most recent SAP CIM model file first which can be downloaded from the SAP Service Marketplace under the same path as mentioned.

- For more information regarding updating the SLD component information - see SAP Note 669669.
Possible SLD Strategy together other NetWeaver 7.0 Components
To set the required authorizations for the NWA - now choose the **CIM Client Generation Settings** tab page - and activate the following entries in the list:

- sap.com/tc~lm~webadmin~mainframe~wd/webdynpro/public/lib/sap.com~tc~lm~webadmin~mainframe~wd.jar
- sap.com/tc~lm~webadmin~sld~wd/webdynpro/public/lib/sap.com~tc~lm~webadmin~sld~wd.jar

Ensure that the SLD connection data is entered on this tab page - and save your entries by choosing **Save**.

- **Note 964988** - BIPostInstallProcess not visible in template installer
- **Note 1026840** - List of corrections for SP09 - 10 - 11 NW04s CTC Template BI-Java
Check the Patch level of the NetWeaver Portal

http://server.domain.ext:<port>/irj/portal
Create new Plans in the Software Lifecycle Manager (SLM)

http://server.domain.ext:<port>/slm

Note:

- Please make sure that the following Actions are available in the Role LcrInstanceWriterAll to make sure that you can call the Application /slm:

<table>
<thead>
<tr>
<th>Type</th>
<th>Service / Application</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>UME</td>
<td>sap.com_com.sap.i.cr</td>
<td>LcrInstanceWriterAll</td>
</tr>
<tr>
<td>UME</td>
<td>sap.com_tc~slm-permissions</td>
<td>Create</td>
</tr>
<tr>
<td>UME</td>
<td>sap.com.tc~slm-permissions</td>
<td>Configure</td>
</tr>
<tr>
<td>UME</td>
<td>sap.com.tc~slm-permissions</td>
<td>View</td>
</tr>
</tbody>
</table>
Start of SDM (Software Deployment Manager) GUI

- D:\usr\sap\N4S\DVEBMGS01\SDM\program\RemoteGui.bat
- /usr/sap/N4J/JC02/SDM/program/RemoteGui.sh
D:\usr\sap\N4S\DVEBMGS01\j2ee\configtool\configtool.bat
/usr/sap/N4J/JC02/j2ee/configtool/configtool.sh
Comparison between used Abap and "Java Transactions:

Transaction
STRUTS 02
RZ70
SM50
→ Program ID
Table

Visual Administrator
Key Storage
Portal Runtime
SLD Data Supplier
Deploy
No RTC provider
SAP BW
(ABAP)
Menu Based Java Monitor JCMON

jcmont pf=N4J_JC02_PWDF2142