WDEBU7 Workshop
Chapter 06

Setting up BEx Web -
Short Track

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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
### Milestones Implementation NetWeaver 7.0 BI-Java

<table>
<thead>
<tr>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation of Java (sep. Instance)</td>
</tr>
<tr>
<td>Patching Java with JSPM</td>
</tr>
<tr>
<td>Configure the local SLD</td>
</tr>
<tr>
<td>Run the Template Installer for BI-Java</td>
</tr>
<tr>
<td>Check the Result with the BI Diag. tool</td>
</tr>
<tr>
<td>Check the usage of the Abap HTTP/S</td>
</tr>
<tr>
<td>Functional Checks in the Portal</td>
</tr>
<tr>
<td>Migration Web Objects to NetWeaver 7.0</td>
</tr>
<tr>
<td>(only with Upgrade)</td>
</tr>
<tr>
<td>Adapt new Monitoring to NetWeaver 7.0</td>
</tr>
<tr>
<td>(with the Installation)</td>
</tr>
</tbody>
</table>

#### Follow these overall Guidelines:

- Installation AS-Java Add-In or separate Instance with Usage Types BI-Java and EP
  - Apply the latest Java Support Packages Stack
  - Check for Patches for the Java Support Package Stack
- Check for Roles in the Java User Management which have enough permission to run the Template Installer successfully
- Run Transaction RS_PERS_ACTIVATE in the Abap Backend (check for corrections first)
- Activate Web Templates in the Abap Backend according Notes 990321 and 1048857
- Activation BEx Web, Note 917950
  - Run the Template Installer for BI-Java from the NetWeaver Administrator (CTC), see Note 983156
  - Check the result with the BI Diagnostics and Support tool, see Note 937697
- Activating the Monitoring for NetWeaver 7.0 SR2 or higher
  Guides can be find under: [http://service.sap.com/operationsnw2004s](http://service.sap.com/operationsnw2004s)

- Note 964988 - BIPostInstallProcess not visible in template installer
- Note 895736 - Configuration Template for BI-JAVA usage type
- Note 983156 - BI configuration w. Template Installer
- Note 945055 - Transporting Web templates in NetWeaver 7.0
Check for the latest Patches of the actual SPS

• Note 1011241 - Patches for NetWeaver 7.0 BI Java Support Package
  See the attached HowTo for downloading BI-Java Patches from SMP (Service Marketplace)
• Note 1055581 - Recommendations for Support Package Stacks for BI 7.0
• Note 1112361 - PCD Check for inconsistencies before upgrades
• Note 1030279 - Reports with very large result sets/BI Java
Only the J2EE Engine will be restarted (>=SPS11) ...

Support Packages > Check Queue

Validation of the dependencies of the selected support packages

The J2EE Engine will be restarted during deployment. If you have an open Microsoft Management Console, close it.

The following support packages will be applied:

<table>
<thead>
<tr>
<th>Order</th>
<th>VendorName</th>
<th>Current SPL/SP Level</th>
<th>Target SPL/SP Level</th>
<th>Status</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>sap.btsqfe</td>
<td>10.0</td>
<td>11.0</td>
<td>OK</td>
<td>Show Details</td>
</tr>
<tr>
<td>2</td>
<td>sap.saps1ap</td>
<td>13.2</td>
<td>13.4</td>
<td>WARNING</td>
<td>Show Details</td>
</tr>
<tr>
<td>3</td>
<td>sap.saps1ap</td>
<td>13.0</td>
<td>13.1</td>
<td>OK</td>
<td>Show Details</td>
</tr>
<tr>
<td>4</td>
<td>sap.caf</td>
<td>13.0</td>
<td>13.1</td>
<td>OK</td>
<td>Show Details</td>
</tr>
<tr>
<td>5</td>
<td>sap.saps1ap</td>
<td>13.0</td>
<td>13.1</td>
<td>OK</td>
<td>Show Details</td>
</tr>
<tr>
<td>6</td>
<td>sap.saps1ap</td>
<td>13.0</td>
<td>13.2</td>
<td>OK</td>
<td>Show Details</td>
</tr>
</tbody>
</table>
Check for the right Permissions of the Java User

Note the:

- if the User J2EE_ADMIN is used for various configuration steps and is used as the default user for the JCo connection, please make sure that the user J2EE_ADMIN has at least the following Profile in Abap: \texttt{S\_BW\_RFC} (to admin RFC connections)
Assign Abap Roles to Portal Roles automatically

Additional Notes:


Übersicht über die beiden Punkte in der Doku: http://help.sap.com/saphelp_nw70/helpdata/en/4c/6c0f40763f1e07e10000000a1550b0/frameset.htm

In dem Zusammenhang auch noch relevant ist die "Verwendung des ABAP Usermanagements als UME Java Userrepository": http://help.sap.com/saphelp_nw70/helpdata/en/49/9dd53f779c4e21e10000000a1550b0/frameset.htm
Hierbei wird die ABAP Rolle als UME Gruppe abgebildet, welche die entsprechenden User-assignments beinhaltet, an die dann die Portalrollen gehängt werden können.
J2EE CN must differ from Abap CN (common name)

- e.g. in this Example Abap CN=N4S and J2EE CN=N4S / OU=J2EE
- Note that this Step is not necessary, when you have different ABAP and Java Instances, or only if the Ticket is expired
Check the Logon Group (PUBLIC) with SMLG

### CCMS: Maintain Logon Groups

<table>
<thead>
<tr>
<th>Logon Group</th>
<th>Instance</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC</td>
<td>0166f_j1w_79</td>
<td></td>
</tr>
<tr>
<td>ZON</td>
<td>0166f_j1w_79</td>
<td></td>
</tr>
</tbody>
</table>

### Change Assignment

**Assignment**

- **PUBLIC**
  - or166f_j1w_79
  - IP address

**Group-dependent**

- PUBLIC
  - DB RFC-enabled

**Instance-dependent**

- or166f_j1w_79
  - Response Time
  - User
Check that the Java Applications are started

- Check also the SLD Application via DEPLOY ➔ Application ➔ *SLD*

- Note 1057720 - Missing configuration for JCO/RFC destinations of the SLD
- Note 768452 - Troubleshooting SLDCHECK
Settings in RZ70 and in the SLD (Note 1057720)

Use the same server name, especially when using virtual host names.
Check SSO/SSF with Settings from Note 1249794
Start the NetWeaver Administrator /nwa

http://nwa2142.nw.corp.sap.com/nwa

SAP NetWeaver

Benutzername *

Kennwort *

Anmelden

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THE BEST-RUN BUSINESSES RUN SAP
Go to “Deploy and Change”

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.
Configuration BI-Java: repeatable, reproducible

- Note 517484 - Inactive services in the Internet Communication Framework
- Note 853505 - Release Restr.: Usage Type BI-Java of SAP NetWeaver 7.0
- Note 895736 - Configuration Template for BI-JAVA usage type
- Note 917950 - SAP NetWeaver 7.0: Setting Up BEx Web
- Note 923359 - Collective Note: Template Installer (CTC)
- Note 945055 - Transporting Web templates in NetWeaver 7.0
- Note 983156 - BI configuration w. Template Installer
- Note 937697 - Usage of SAP NetWeaver BI Diagnostics & Support Desk Tool
- Note 1026840 - List of corrections for SP09, 10, 11 NW04s CTC Template BI-Java
- Note 1055581 - Recommendations for Support Package Stacks for BI 7.0
New Template Installer (CTC) from SPS12 onwards

[Diagram showing a New Template Installer (CTC) interface with steps and options]

Description

BI Java Postinstallation Steps
Carry out the basic configuration steps required for the functional BI Java.

Details

Process State

Legend: Not executed [ ] In progress [ ] Finished successfully [ ] Incompletely executed [ ] Finished unsuccessfully [ ]

Process Description

- BI_00_This wizard will execute Postinstall steps of technical configuration of BI Java
- Setting Parameters for BI User input
- Binding of Parameter ABAP_USER
- Binding of Parameter ERP and LOUCONGROUP
- SAP BUSINESS INTELLIGENCE
- Creating Destinations in ABAP
- Update Table RSPCR_T_PORTAL
- Create RFC Destinations in JAVA
- Creating System-specific Cache Folder
- Creating BI System SAP_BI
- Set System Alias SAP_BI
- Set System Alias Logical System
- Add ACL to SAP_BI
- Add ACL to high safety
- Add ACL to low safety
- Add ACL to BIU Launcher
- Set Monitor System to true
- Export Engine Certificates
- Import Engine Certificates To ABAP
- Export the ABAP Certificates
- Import ABAP Certificate To Engine
- Configure repository Manager
- VDI_JCC Dest BI_METADATA
- VDI_JCC Dest BI_MODELDATA
- VDI_JCC Dest VDI_ALY_METADATA DEST
- VDI_JCC Dest VDI_ALY_MODELDATA DEST
Choose: “Start” or “Retry” on the configuration Wizard

Please make sure that the correct Version of the CTC Template for BI-Java is used:

- SPS 09: LMTOOLS Patch 9.4 (backwards availability with SR2)
- SPS 10: LMTOOLS Patch 10.1
- SPS 11: LMTOOLS Patch 11.1 (11.0 - first mayor Improvements)
- SPS 14: LMTOOLS Patch 14.4 (14.0 - further enhancements, simplify usage, SR3)
- SPS 15: LMTOOLS Patch 15.4 (15.0 - change in accessing templates and SLD)
- SPS 15: LMTOOLS Patch 16.1 (16.0 - change in accessing SMOZ and SLM)

Check the latest Patches for your Support Package Stack:

- 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
Choose: “Next” (Improved screen since SPS13/14)

Please choose the same user which is valid in Abap and Java and with enough permissions and check carefully the Domain entry.

Highly recommended by leading SAP consultants: “…I think the checking time is over, let the Template Installer BI-Java do the work!”

Less then 1MB coding!

Note 983156 - BI configuration w. Template Installer

You can start the Template Installer with the BI-Java Template at any time, if you delete the following items before restarting:

- delete the RFC connection for the EP in SM59 and Visual Administrator => JCo Connections
- delete the exchanged tickets for EP in STRUSTSSO2 and for Abap in the Visual Administrator => Key Storage
- delete the SAP_BW entry in the EP System Landscape configuration
- delete the Portal Entry RSPOR_T_PORTAL with SM30 in Abap

This is to prevent errors when restarting the Template Installer again

When recreating the Tickets please make sure that you choose the right Algorithms:

- Abap Ticket: Type RSA
- Java Ticket: Type DSA

The SAPCryptoLib must be available at any time on the Abap side.

If you came to the conclusion to change the “default client” (000) on the portal runtime, please make that this is switched back to the standard setting before the usage of the CTC template.

- with the configtool (offline): cluster-data ➔ Instance_IDxxx ➔ server_IDxxx ➔ services ➔ com.sap.security.core.ume.service
- with the visual admin (online): <SID> ➔ Server0 ➔ Services ➔ UME Provider
Diagnostics & Support Desktop Tool (optional)

- Note 937697 - Usage of SAP NetWeaver BI Diagnostics & Support Desk Tool
- Note 983683 - Report-report interface: Access denied
- Note 988484 - RC=12 in After Import Methode for Objects BTMP and BITM
- Note 945055 - Transporting Web templates in NetWeaver 7.0
- Note 746666 - OutOfMemory or slowdown due to http response compression
- Note 721815 - New configuration needed for systems using SAP Logon Ticket
- Note 989525 - BI 7.0: Checking Java Connections Web Application Designer
- Note 1011241 - Patches for NetWeaver 7.0 BI Java Support Package
- Note 1026733 - Logon and assertion tickets with "DDIC" as ABAP user ID
- Note 1026840 - List of corrections for SP09, 10, 11 NW04s CTC Template BI-Java
Activate necessary Business Content (Note 925351)

Additional Notes:
Please Note also that you have to activate the Web templates according your applied Support Stack. You might also have to apply some correction notes.

- Note 918565 - Required incompatible metadata changes in NetWeaver 7.0 BI
- Note 970221 - Changes to standard Web templates for NetWeaver 7.0 SPS9
- Note 990321 - Changes to standard Web templates for NetWeaver 7.0 SPS10
- Note 989525 - BI 7.0: Checking Java Connections Web Application Designer
- Note 1026591 - Web Template saving not possible in system with object lock
- Note 1048857 - Activating the default Web templates
- Note 1071338 - Report Designer: Activate Default Theme 0TRADESHOW

Additional hints for the activation of the necessary business content:

- Transaction RSORBCT
- Choose on the left side “Object Type”: BEx Web Template, BEx Web Item (reusable) and “More Types” ➔ “Theme” ➔ 0TRADESHOW
- Choose on the top of the right side “select all” and use “Start Manual Collection” to collect the business content manual with the checkbox in the menu.
The BEx Broadcaster is still a call from the ABAP HTTP which is embedded in the Portal Runtime (JAVA HTTP), the functionality is Independent from the Portal Application.

More Notes to consider/check:
- Note 925351: Necessary incompatible metadata changes in NW 7.0 BI
- Note 938134: Pre-SPS7: Chart Item editing in BEx WAD with Pre-FEP7
- Note 924312: Chart item parameter changes with parameter LEGEND_VISIBLE
Test the Portal Application – BEx Web Analyzer

Please Note:
For the Port use the Abap HTTP, and not the Java HTTP Port.
• Note 989525 - BI 7.0: Checking Java Connections Web Application Designer
• Note 805344 - How URLs are generated automatically in BW

Examples:
• http://server.domain.ext:<port>/sap/bw/bex? sap-language=DE&template_id=0analyzer
• http://pwdf2142.wdf.sap.corp:8001/sap/bw/bex?&sap-language=EN&template_id=0analyzer
Please Note that there might additional corrections necessary depending on your SPS level on Abap and Java and there is no direct link between them.
Test the Portal Application - Planning Modeler

Please Note:
The Help can be now displayed from the WebDynpro and from R/3 system.
As result, the transaction SR13 has now 2 entries:

- **dynpro** NONE IWBHELP help.sap.com saphelp_nw70ehp1/helpdata DE
- **saphelp** WN32 IWBHELP help.sap.com saphelp_nw70ehp1/helpdata DE

Please consider for future customization of Application Help in other systems, that all WebDynpro / BSP applications require the entry with the platform 'NONE' and '/' as separator (note 901385) R/3 system itself (menu: Help -> Application Help / SAP Library) requires the entry for platform 'WN32', if a frontend, where user is working, has Windows OS

The area depends on the help links used by Application. In your case it is a 'Documentation' area (IWBHELP).
Test the Portal Application - Planning Wizard

Planning Wizard

Detailed Navigation
- Overview
  - Planning Wizard
  - Planning Modeler
  - BDC Web Analyzer

Portal Favorites

InfoProvider Aggregation Level Filter PlanningFunction Test Frame

InfoProvider Selection

InfoProvider description InfoProvider Type Last changed by Date Time
- Authorised/Author/Functional Equipment MultiProvider E24420 11.4.2005 11:37:06 AM
- Authorised/Author/Functional Equipment MultiProvider E24420 11.4.2005 11:37:06 AM
- DI Trace Test - Detailed Events from the Test Log Real-time InfoCube E08591 17 5/4/2005 9:02:01 AM

The Best-run Businesses Run SAP
Test the web dynpro call from Transaction RSPLAN

You can provide the end user the access to the integrated planning without showing them the logon to a portal runtime.

Check for these corrections (included in SPS10):

- Note 969503 - RSPLAN: Start of Planning Modeler with SSO does not work
- Note 973587 - Transaction authorization check in DWB modeling BI7.0 SP10
- Note 979499 - Calling the browser in BPS with Single Sign On
- Note 805344 - How URLs are generated automatically in BW
Configuration of the Adobe ALV service with EhP1

With a fresh EhP1 Java Installation this configuration is done automatically.
Adobe ALV service is needed for SNOTE service (PDF)

<table>
<thead>
<tr>
<th>Process State</th>
<th>Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe ALV - AS ABAP (ALV list printing with Adobe) Maintain</td>
<td>☑</td>
</tr>
<tr>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>Process State</td>
</tr>
<tr>
<td>✔ Finished successfully [Adobe ALV - AS ABAP (ALV list printing with Adobe) Maintain]</td>
<td></td>
</tr>
<tr>
<td>View Log</td>
<td>Return to task list</td>
</tr>
</tbody>
</table>
Switch to HTTPS if needed (new in CTC SPS14)

- Table RSPOR_T_PORTAL (new settings with SPS14)
- RSCUSTV15
- SICF ➔ Service ➔ /sap/bw/bex
- SE80 ➔ Settings ➔ ITS
- Portal ➔ SAP_BW

Details of the SAP_BW entry and KMC in the Systemlandscape of the portal runtime:

Property Editor - SAP_BW
- ITU Description: [Content]
- ITU Host Name: [Content]
- ITU Path: [Content]
- ITU Protocol: [Content]

Property Editor - SAP_BW
- Web Application Server (Web AS)
- Web AS Description: [Content]
- Web AS Host Name: [Content]
- Web AS Path: [Content]
- Web AS Protocol: [Content]
Fine tuning the EP for NetWeaver 7.0

- Note 934808 - Further configuration of Oracle10g for SAP Enterprise Portal
  - connect SAP:<SID>:DB:<password>
  - ALTER TABLE "EP_PRT_CACHE" MODIFY LOB ("CONTENT") (CACHE);
- Note 1017324 - EP on Oracle: Poor portal performance
- Note 1261901 - Switching off the compression of http responses
- With the Visual Administrator change the defaults for the HTTP provider:
  - Update the settings on the General Tab:
    - Log Responses = false
    - Use Cache = true
    - Keep Alive = true
    - Directory List = false
  - CacheControl = 604800 ➔ 2149200
  - CacheTimeout = -1
  - CacheSize = 9000
  - SapCacheControl = 604800 ➔ 2149200
  - NeverCompressed = see Note page
  - MinimumGZipLength = 8192 ➔ 1024
  - EnableChunkedResponse = true
- With the Configtool deactivate unused services (switch to manual start):
  - telnet, trex, dsr (check this for instance, dispatcher and all server nodes)

Additional Notes:
- Note 1055581 - Recommendations for Support Package Stacks BI 7.0
- Note 1025307 - Composite note for NetWeaver 7.0 performance: Reporting
- Note 1030279 - Reports with very large result sets/BI Java
- Note 823906 - Oracle database parameters tuning - EP in NW
- Note 763789 - Improve Portal Performance by Changing Log Levels
- Performance Best Practices Guide for SAP NetWeaver Portal 7.0:
  https://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/f0f1358d-0812-2c10-b58c-c7bdd7a0cdce

Additional Settings:
- NeverCompressed = .zip,.cs,.rar,.arj,.gz,.tar,.lzh,.cab,.hqx,.ace,.jar,.ear,.war,.gzip,.uue,.b2z,.iso,.sda,.sar,application/x-compressed,application/zip,application/x-gzip,content/unknown,[unknown]
- (online) if no CCMS Monitoring needed set the CCMS monitoring to false (CCMS_mapping = false)
- (online) in the servlet_jsp set ➔ InternalCompiler = false
- (online) in the com.sap.portal.prt.sapj2ee set ➔ async.response.pool.size = 100
- (offline) navigate to Global Dispatcher Configuration ➔ Services ➔ SSL provider
  - HANDSHAKE_SO_TIMEOUT = 30000
  - RUNTIME_SO_TIMEOUT = 30000
Optional Checks for BI-Java connectivity

If the CTC for BI-Java was running successfully, these steps are for Background Information only and all done with the CTC for BI-Java.
Activation of Client Side Logging and Receipts (Note 596698):

1) Start the DSM logger component as portal administrator.
   Choose "System Administration -> Support ->Support Desk"
   Choose “SAP Application”.
   Test and configure the "Dsm Logger" tools.

2) Activate the logger and receipts by using all “Attach” buttons; The traffic lights must turn green.

3) Open a new portal window (with either "CTRL-N" or "File -> New" in the browser menu).

4) Start your application again (i.e. an application based on IAC, MiniApp or R/3 transaction in SAPGUI for HTML). If you as the administrator do not yet have access to such iViews or pages, first assign the corresponding role to the admin user.

5) When your application is displayed, you should get a browser popup with the Receipt on Session info. This popup is the confirmation that the Session Release Agent knows about the session on the server side and will handle this session later.

6) When you close the application window or navigate away, a new window called "DSM Terminator" is opened with a transmission protocol.
Note:

- 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 J2EE Engine after you change the role assignment.

- 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**
  **NWIDI_DEV**
  **SAPJSF** ➔ for the Java Communication with Abap
  **SLDAPIUSER** ➔ for the SLD Administration/Communication
  **SLDDSUSER**
Note 815904 - Check Security Zones (prior to SPS8)

Additional Remarks for the user DDIC:

- Note 1026733 - Logon and assertion tickets with "DDIC" as ABAP user ID
- 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).
Check the result with Transaction STRUSTSSO2

- for detailed check go to ➔ Environment ➔ SAP Logon Ticket and use for Destination the Value NONE. The correct SSO settings will be shown.
- Note 177895 - Refitting the mySAP.com Single Sign-On capability
- Note 701205 - Single Sign-On using SAP Logon Tickets
- Note 812047 - NW04: SSO to J2EE 6.40 fails
- Note 991505 - Single Sign-On with assertion tickets fails on J2EE Engine
- Note 1015179 - SSO ticket expired or connection timeouts
- Note 1013230 - JC0.Client not connected/system received expired SSO ticket
- Note 1166096 - Illegal SSO authentication check of JCo RFC Provider Service
**For Java Add-In Installations recreate the Portal ticket**

**Note:**
Details for this Step can also be found in the configuration guide for the PI based on NetWeaver 7.0.

This is due to the fact that the existing Abap Installation will be enhanced with the Java Add-in Installation to a Doublestack Installation.

You must recreate the Java Ticket with the EXACT Name `SAPLogonTicketKeypair`.

**Please always Note:**
Abap Tickets are using the RSA encryption and Java Tickets the DSA encryption. Unfortunately the default settings are vice versa when you create the tickets the first time, or when you recreate the ticket on the Java side.

<table>
<thead>
<tr>
<th>Alias</th>
<th>Issuer DN</th>
<th>Subject DN</th>
<th>Signature algorithm OID</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIS_certificate</td>
<td>CN=ICA</td>
<td>CN=ICA</td>
<td>1.2.840.113540.1.1.5</td>
</tr>
<tr>
<td>SAPLogonTicketKeypair</td>
<td>CN=ICA,C=DE</td>
<td>CN=ICA,C=DE</td>
<td>1.2.840.10030.4.3</td>
</tr>
<tr>
<td>SAPLogonTicketKeypair-cert</td>
<td>CN=ICA,C=DE</td>
<td>CN=ICA,C=DE</td>
<td>1.2.840.10030.4.3</td>
</tr>
</tbody>
</table>
**Single Sign-On between BI and Portal**

- BI trusts SAP Logon Tickets from Portal because public key of Portal’s certificate was imported into BI

- Portal trusts SAP Logon Tickets from BI because public key of BI’s certificate was imported into Portal

1. **BI**
   - Trust Manager … (STRUSTSSO2)
   - System PSE
     - BI certificate with private and public key
   - EP certificate with public key
   - Single Sign-On Access Control List (ACL)
     - EP System ID
   - SAP Logon Ticket signed with private key of BI’s certificate
   - SAP Logon Ticket signed with private key of EP’s certificate

2. **Portal**
   - SAP J2EE Visual Administrator
     - TicketKeystore
       - BI certificate with public key
     - EP certificate with public key
   - EvaluateTicketLoginModule
     - BI System ID, Client
   - SAP Logon Ticket signed with private key of EP’s certificate

---

Handwritten notes:

```
Abap  Java

Ticket

RSA Algorithm DSA
```
Check the Entry SAP_BW (Note 986641)

Additional Remarks for the Entry SAP_BW (<SID>CLNT<MANTNR>):

- Check also the System Aliases and create an additional System alias, e.g. the logical System name like <SID>CLNT<MANTNR> (example: N4SCLNT001)
- replace the HTTP message server Port with the HTTP Port in the setting “Web AS Host Name. Then you will have no error in the Connection Tests.
- check the Permission Settings (add the Group “everyone” with read access to the entry SAP_BW
- Check the following ITS Settings:
  - ITS Path  wap.ITS.path = /sap/bc/gui/sap/its/webgui
- Note 808347 - ITS 6.40 - preclarification and basic problem analysis
Please Note:

- If there a problems with the connection through Load Balance Server Group please make sure that your /etc/service file is not overwritten with regularly updates from authorization which are not reflecting the new port specification from NetWeaver 7.0.

- In particular make sure the following ports are not blocked:
  - 32$$ dispatcher port
  - 33$$ gateway port
  - 36$$ message server port
  - 39$$ internal message server port (new with NetWeaver 7.0)

- If you have different hosts or server zones make also sure that these ports are not blocked by firewall settings and that the ports are opened bidirectional.

- Example: Abap runs with Instance Number 00 and Java on Instance Number 01 and the SCS Instance on Number 02:

  - Abap: 3200, 3300, 3600, 3900
  - Java: 3201, 3301, 3601, 3901
  - SCS: 3202, 3302, 3602, 3902

- Note 805344 - How URLs are generated automatically in BW
Check the UME Configuration - Reference System

Additional Remarks for the Entry SAP_BW (<SID>CLNT<MANTNR>):

**Property Category:** Web Application Server (Web AS)

- ▶ Web AS Description: N4SCLNT001
- ▶ Web AS Host Name: owdf2142.wdf.sap.corp:8001
- ▶ Web AS Path: /sap/bw/BEx
- ▶ Web AS Protocol: http

**Defined Aliases**

<table>
<thead>
<tr>
<th>Default</th>
<th>Alias Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔️</td>
<td>N4SCLNT001</td>
</tr>
<tr>
<td>✔️</td>
<td>SAP_BW</td>
</tr>
</tbody>
</table>

User Mapping Status: ✔️ (Ready for user mapping configuration)

Alias name: N4SCLNT001

**Assigned Permissions**

- □ Authenticated Users: Read ✔️, End User ✔️, Description: Built-in Group Authenticated Users
- □ Everyone: Read ✔️, Description: built-in Group Everyone
- □ super_admin_role: Owner ✔️, Description: Super Administration

- Note 812047 - NW04: SSO to J2EE 6.40 fails
- Note 888687 - BEx Web Java: Analysis of communication/logon problems
- Note 945055 - Transporting Web templates in NetWeaver 7.0
- Note 1026733 - Logon and assertion tickets with "DDIC" as ABAP user ID
Please Note:

• **ticket** Properties is for the Ticket Security

• **evaluate_assertion_ticket** is for secured RFC connection (Transportation of Webtemplates, see Note 945055 for details)

• Go to the Visual Administrator ➔ Security Provider ➔ Ticket and add the following settings manually for client 000 in the **evaluate_assertion_ticket** module (Note 721815):
  - trustedsys2 ➔ <SID>,000
  - trustediss2 ➔ CN=<SID>
  - trusteddn2 ➔ CN=<SID>

• If eventually someone deletes the whole login module, e.g. EvaluateTicketLoginModule without notice the following „strange Effect“ will happen: you will see the logon window and you able to logon, but the window will reset and you see the logon screen again.

  If you run the CTC several times it is not necessary to delete the settings here, they will be overwritten every time.
Check and correct the BI Document Repository

How to get there:

- Navigate to System Administration \ System Configuration \ Knowledge Management \ Content Management \ Global Services

- Select Show Advanced Options

- remove also the following setting for Cluster Installation (only valid with one server knot):
  - Navigate to System Administration \ System Configuration \ Knowledge Management \ Content Management \ Global Services
  - Select Show Advanced Options
  - Select the System Landscape Service

System Landscape Service

Edit "landscape"

Object remains locked until you click OK or Cancel

Cluster Installation:
Cluster Caching Timeout: 10

OK Cancel Show Advanced Options
Check the KMC URL generator settings

URL Generator Service - Creating and deleting configurations is done by running the Web Dynpro application. The URL generator service generates URLs for applications and various internal resources. It is accessible via the following link:

http://<hostname>/sap/bi/cpui/50100/import

Check the KMC URL generator settings.
Check the JCo Destinations (edit/test) Note 919850

![SAP NetWeaver Web Dynpro Content Administrator](image)

<table>
<thead>
<tr>
<th>Name</th>
<th>Status</th>
<th>Create</th>
<th>Remove</th>
<th>Call</th>
<th>Test</th>
<th>Print</th>
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<tr>
<td>BI_MODEL_METADATA</td>
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</tr>
</tbody>
</table>
Change logon data for METADATA JCo's
Note 919850 - Problems with the planning modeler and the planning wizard

The system issues the error message "Password missing".

BI_METADATA and BI_MODELDATA, WD_ALV_METADATA_DEST and WD_ALV_MODELDATA_DEST

To do this, use the test function in the Web Dynpro Content Administrator for JCo connections. The following settings are required for the two JCo connections BI_METADATA and WD_ALV_METADATA_DEST:

- The data type must be set to Dictionary MetaData.
- The connection type must use load balancing.
- Authentication must be set using a user/password.
- The user defined in the authentication must have authorization for the adaptive RFC (see Note 677732 for further information).

The following settings are required for the two JCo connections BI_MODELDATA and WD_ALV_MODELDATA_DEST:

- The data type must be set to Dictionary MetaData.
- Delete any incorrect JCo connections that may exist and create them again.
Check the Security Settings for MODELDATA JCo’s

- Note 895736 - Configuration Template for BI-JAVA usage type
- Note 983156 - BI configuration w. Template Installer
- Note 1026840 - List of corrections for SP09, 10, 11 NW04s CTC Template BI-Java
Activate the AdobeDocumentServices (Note 934276)

Example:

Additional Notes:
- Note 783185 - Adobe document service is not started
- Note 838111 - How to configure SSL for Adobe Document Services (!)
- Note 842353 - ReadTimeOut exception from Adobe document service (!)
- Note 867502 - Read Timeout using AdobeDocumentService in Web Dynpro
- Note 894009 - Adobe Document Services: Configuration Guide (SAP NW 7.0)
- Note 925741 - Adobe document services (ADS) with non-supported platforms
- Note 952796 - Generating the issue unit summary as a PDF
- Note 934276 - Print preview in SAP NetWeaver 7.0 BI does not work
- Note 811342 - Time Out exception when rendering to Adobe document service
- Note 934275 - Timeout settings NW 7.0 BI PDF
- Note 934276 - Print preview in SAP NetWeaver 7.0 BI does not work
- Note 990321 - Changes to standard Web templates for NetWeaver 7.0 SPS10
- Note 1025835 - Executing broadcasting settings terminates with DomReadError
- Note 1052659 - Requirements for customer messages concerning export to PDF
Activate the AdobeDocumentServices in NW 7.0

Make sure that the user is not locked in Abap and that the Role ADSCallers is created.

Please Note: switch the user ADSUSER from “Dialog” to “System” in the Abap UME.

Please Note also, that HTTS for ADS is not necessary due to the fact, that this functionality is called only on the localhost. With SPS13 this is then also possible.
Create an external alias with WSCONFIG (optional)

Please note that the transactions WSCONFIG and WSADMIN replaced by SOAMANAGER since SR3

- Note 517484 - Inactive services in the Internet Communication Framework
- Note 754604 - SOAP: Log in the call address in the WSDL
- Note 973675 - After Import for Object WEBI not working during upgrade
- Note 946658 - "Access to Web Service Registry failed" in syslog
Test your Web Service (VC related) with WSADMIN

**SOA Management**

- Technical Configuration
- Application and Scenario Communication
- Logs and Traces
- Monitoring

**Single Service Administration**
- Provide functions for administration and configuration of single web services and web service clients.

**Business Scenario Communication**
- Configure the communication of a whole business scenario.

**Publication Rules**
- Create publication rules that define the set of services and consumer groups that has to be published in a Services Registry.

**User Account Management**
- Manage user accounts and their assignment to provider systems and interfaces.

**Activation Requests Management**
- Manage all requests for the activation/deactivation of profiles, destinations, and configuration requests.
How to start and use the Diagtool:

• download the Diagtool from Note 957666
• go.bat conf\authentication.conf D:\usr\sap\N4S\DVEBMGS01\j2ee\configtool
• go.bat conf\authentication.conf D:\usr\sap\J2E\JC01\j2ee\configtool (standalone)

• go.bat conf\sso2.conf D:\usr\sap\N4S\DVEBMGS01\j2ee\configtool
reproduce the error and check the output file

Additional Notes:

• Note 1008847 - BEx Web Applications Java: Proper logoff URLs
• Note 1021921 - BEx Web Applications Java: Analysis of Session Management Details about the correct disconnection of Java session together with SM04 (Abap)
• Note 957707 - Using Diagtool for Troubleshooting Single Sign-On