

Deploying JDBC drivers in PI 7.1x Systems



Applies to:

SAP NetWeaver Process Integration 7.1x.

Summary

This paper describes the procedure to deploy MS SQL 2005 JDBC 3.0 drivers on PI 7.1x systems. Also, the same document can be followed to deploy any other drivers (like OJDBC, JMS, etc.) as well, since the underlying procedure is the same for all drivers.

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Author Bio



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Table of Contents

Introduction3

Procedure3

Related Content10

Disclaimer and Liability Notice11

Introduction

This document describes the deployment steps for MS-SQL JDBC driver 3.0 onto SAP NetWeaver PI 7.1x systems, but can be used for deployment of any drivers since the underlying procedure is the same.

Procedure

1. Download the SQL JDBC 3.0 drivers file from <http://www.microsoft.com/downloads/details.aspx?FamilyID=a737000d-68d0-4531-b65d-da0f2a735707&displaylang=en> (sqljdbc_3.0_1301.101_enu.tar.gz for Unix and sqljdbc_3.0_1301.101_enu.exe for Windows)

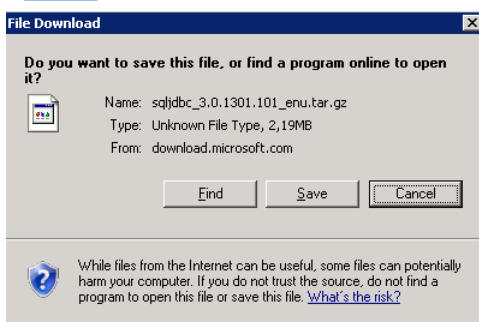


Files in This Download

The links in this section correspond to separate files available in this download. Download the files most appropriate for you.

File Name:	File Size	
1033\license_English.rtf	144 KB	Download
<u>1033\sqljdbc_3.0.1301.101_enu.exe</u>	3.6 MB	Download
<u>1033\sqljdbc_3.0.1301.101_enu.tar.gz</u>	2.2 MB	Download

[↑ Top of page](#)



2. Unzip the Unix version using gunzip command as follows:
gunzip <filename.gz>

```
> gunzip sqljdbc_3.0.1301.101_enu.tar.gz

> ls -l
total 17040
-rwxrwxrwx  1      sapsys   8704000 Jun 15 11:09 sqljdbc_3.0.1301.101_enu.tar
```

3. Untar the .tar file obtained in the previous step:

tar -xvf <filename.tar>

```
> tar -xvf sqljdbc_3.0.1301.101_enu.tar
sqljdbc_3.0/enu/auth/IA64/sqljdbc_auth.dll, 174472 bytes, 341 tape blocks
sqljdbc_3.0/enu/auth/x64/sqljdbc_auth.dll, 86408 bytes, 169 tape blocks
sqljdbc_3.0/enu/auth/x86/sqljdbc_auth.dll, 69000 bytes, 135 tape blocks
sqljdbc_3.0/enu/help/default.htm, 547 bytes, 2 tape blocks
sqljdbc_3.0/enu/help/html/002496f7-8ec0-4267-b4e6-ba095e2ef306.htm, 6971 bytes, 1
sqljdbc_3.0/enu/help/html/0041f9e1-09b6-4487-b052-afd636c8e89a.htm, 7644 bytes, 1
sqljdbc_3.0/enu/help/html/00f9e25a-088e-4ac6-aa75-43eacace8f03.htm, 11700 bytes, 2
```

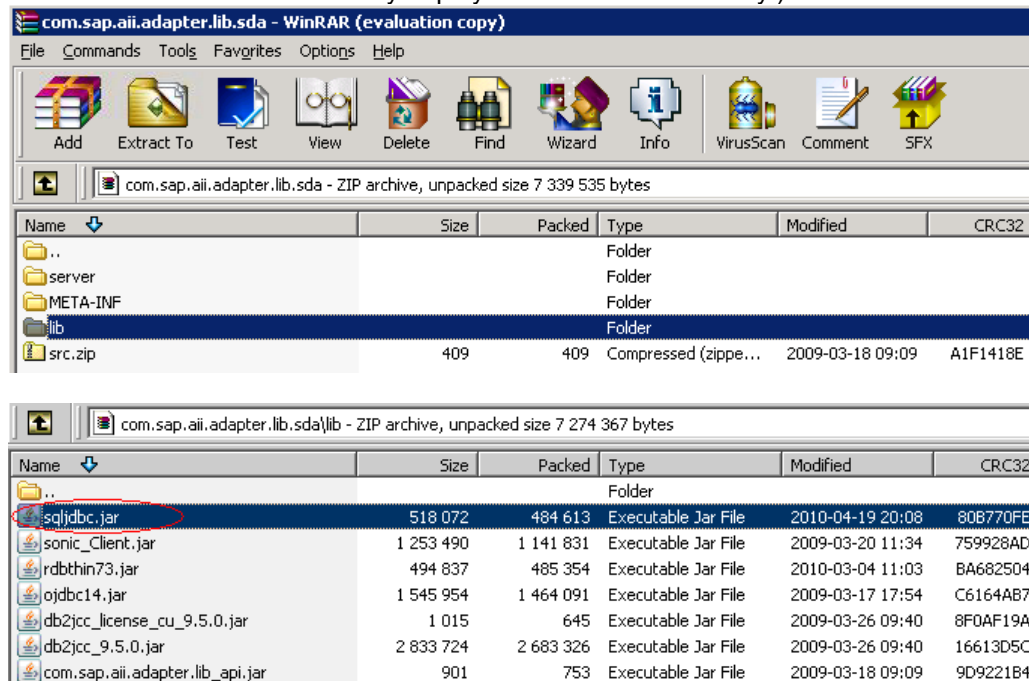
```
> ls -l
total 17048
drwxr-xr-x  3          sapsys      4096 Jun 15 12:15 sqljdbc_3.0
```

4. This extracts the files under the directory **sqljdbc_3.0** and gives you the **sqljdbc.jar** file in the subdirectory **enu**.

/pub.sap/Installmedia/PI_7.1/Drivers/JDBC_3.0/sqljdbc_3.0/enu

```
> ls -l
total 2160
drwxr-xr-x  5          sapsys      4096 Jun 15 12:15 auth
drwxr-xr-x  5          sapsys      4096 Jun 15 12:15 help
-rw-r--r--  1          sapsys      1662 Apr 19 19:08 install.txt
-rw-r--r--  1          sapsys     10312 Apr 19 19:08 license.txt
-rw-r--r--  1          sapsys      5038 Apr 19 19:08 release.txt
-rw-r--r--  1          sapsys     518072 Apr 19 19:08 sqljdbc.jar
-rw-r--r--  1          sapsys     537303 Apr 19 19:08 sqljdbc4.jar
drwxr-xr-x  5          sapsys      4096 Jun 15 12:15 xa
```

5. Add the **sqljdbc.jar** file to the **lib** sub-directory of the sda file **com.sap.aii.adapter.lib.sda**. (You can also see other driver files already deployed in the same directory.)



6. Edit the file **provider.xml** which is in the **server** sub-directory of the sda file and add an entry for the **sqljdbc.jar** file similar to other .jar files:

<jar-name>lib/sqljdbc.jar</jar-name>

com.sap.aii.adapter.lib.sda - ZIP archive, unpacked size 7 339 535 bytes

Name	Size	Packed	Type	Modified	CRC32
..			Folder		
server			Folder		
META-INF			Folder		
lib			Folder		
src.zip	409	409	Compressed (zippe...	2009-03-18 09:09	A1F1418E

com.sap.aii.adapter.lib.sda\server - ZIP archive, unpacked size 7 339 535 bytes

Name	Size	Packed	Type	Modified	CRC32
..			Folder		
provider.xml	698	284	XML Document	2010-03-05 14:08	E1B84216

provider.xml - Notepad

```

File Edit Format View Help
<?xml version="1.0"?>
<provider-descriptor>
  <display-name>XPI Adapter Library</display-name>
  <component-name>com.sap.aii.adapter.lib</component-name>
  <provider-name>sap.com</provider-name>
  <references>
    <reference type="library" strength="strong" provider-name="sap.com">engine.j2ee14.facade</reference>
  </references>
  <jars>
    <jar-name>lib/com.sap.aii.adapter.lib_api.jar</jar-name>
    <jar-name>lib/sonicClient.jar</jar-name>
    <jar-name>lib/ojdbc14.jar</jar-name>
    <jar-name>lib/db2jcc_9.5.0.jar</jar-name>
    <jar-name>lib/db2jcc_license_cu_9.5.0.jar</jar-name>
    <jar-name>lib/rdbth1n73.jar</jar-name>
    <jar-name>lib/sqljdbc.jar</jar-name>
  </jars>
</provider-descriptor>

```

7. Save the updated SDA file **com.sap.aii.adapter.lib.sda** and copy it to the **/usr/sap/trans/EPS/in** directory on the server where it is to be deployed.
8. Start JSPM from **/usr/sap/<SID>/<INSTANCE>/j2ee/JSPM** directory using the following command:
go "-config=/jspm/forceMode=true" "-config=/jspm/deployVersionRule=updateAll"

```

sidadm > ./go "-config=/jspm/forceMode=true" "-config=/jspm/deployVersionRule=updateAll"
Current log directory is /usr/sap/<SID>/DVEBMGS04/j2ee/JSPM/log/log_2010_06_14_10_41_28.
Waiting for SDTServer to connect ...

```

9. Login with J2EE_ADMIN (or other admin user).

10. Select “Hot Fixes” and click **Next**.

11. Under **Specify Queue**, the component sap.com/com.sap.aii.adapter.lib will be listed. Click **Next** on this page.

Start Deployment | Deployed Components | Logs

1 Select Package Type | **2 Specify Queue** | 3 Check Queue | 4 Deploy Queue | 5 Completed

Hot Fixes > Specify Queue

Select hot fixes to apply

Vendor/Name	Current Version	Target Version	Details
sap.com/com.sap.aii...	7.1005.20080514115557...	7.1005.20080514115557.0000	Show Details

Back | Next | Cancel

12. On the **Check Queue** page, make sure the **Status** column is reading **OK** and click **Start** to start the deployment.

Start Deployment | Deployed Components | Logs

1 Select Package Type | 2 Specify Queue | **3 Check Queue** | 4 Deploy Queue | 5 Completed

Hot Fixes > Check Queue

Validation of the selected hot fixes

WARNING:
No valid Maintenance Certificate found on AS Java with SID... Please refer to SAP Note 1236587 for further information.
AS Java will be restarted during deployment

The following hot fixes will be applied:

Order	Vendor/Name	Current Version	Target Version	Status	Details
1	sap.com/com.sa...	7.1005.20080514...	7.1005.20080514...	OK	Show Details

Back | Start | Cancel

13. The deployment is running and AS Java is restarted in the process.

Start Deployment | Deployed Components | **Logs**

1 Select Package Type | 2 Specify Queue | 3 Check Queue | **4 Deploy Queue** | 5 Completed

Hot Fixes > Deploy Queue

Deploying the selected hot fixes

AS Java restart triggered.

Deployment is running

Order	Vendor/Name	Old Version	Target Version	Status
1	sap.com/com.sap.a11...	7.1005.2008051411...	7.1005.200805141155...	IN PROGRESS

Back | Next | Cancel

14. The deployment finishes successfully and the status reads **DEPLOYED**.

Start Deployment | Deployed Components | **Logs**

1 Select Package Type | 2 Specify Queue | 3 Check Queue | 4 Deploy Queue | **5 Completed**

Hot Fixes > Completed

Deployment of hot fixes has finished

Deployment finished successfully.

To view some statistics for your patch procedure and to send your feedback to SAP, open the following [Evaluation Form](#). You can find the Evaluation Form in the http://...:50419/htdocs/jspmResults_54.html file.

Order	Vendor/Name	Old Version	Current Version	Status	Details
1	sap.com/com.sap...	7.1005.200805...	7.1005.200805141...	DEPLOYED	Show Details

Back | New Deployment | Exit

15. The successfully deployed jar files can now be seen under the following path:
/usr/sap/<SID>/<INSTANCE>/j2ee/cluster/bin/ext/com.sap.aii.adapter.lib/lib

```
/usr/sap/<SID>/DVEBMG304/j2ee/cluster/bin/ext/com.sap.aii.adapter.lib/lib

> ls -l
total 13016
-rw-r--r--  1      sapsys      901 Mar 05 07:52 com.sap.aii.adapter.lib_api.jar
-rw-r--r--  1      sapsys 2833724 Mar 05 08:03 db2jcc_9.5.0.jar
-rw-r--r--  1      sapsys  1015 Mar 05 08:03 db2jcc_license_cu_9.5.0.jar
-rw-r--r--  1      sapsys 1545954 Mar 05 07:52 ojdbc14.jar
-rw-r--r--  1      sapsys  494837 Jun 14 10:49 rdbthin73.jar
-rw-r--r--  1      sapsys 1253490 Mar 05 08:03 sonic_Client.jar
-rw-r--r--  1      sapsys  518072 Jun 16 05:32 sqljdbc.jar
```

Related Content

Refer to SAP Note [639702 - JDBC Driver for Microsoft SQL Server](#)

Refer to SAP NetWeaver Process Integration 7.11 Library at
http://help.sap.com/saphelp_nwpi711/helpdata/en/c0/3930405fa9e801e10000000a155106/frameset.htm

Visit SAP SDN Forums <http://forums.sdn.sap.com> for further queries on SAP NetWeaver PI

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