

How to Convert EAR to SDA File



Applies to:

SAP Net Weaver Process Integration 7.1 or 7.0. For more information, visit the [Service Bus-based Integration homepage](#).

This document caters to the needs of those XI/PI developers/consultants who are using module development etc. in which EAR to SDA file conversion are required

Summary

EAR file to SDA file conversion is used frequently while developing adapter modules or other NWDS projects for XI/PI which needs to be deployed on PI server.

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Table of Contents

Introduction	3
Prerequisites	3
Converting EAR to SDA and Deploying it using JSPM	3
Convert EAR to SDA.....	3
Step 1:	3
Step 2:	3
Step 3:	4
Step 4:	4
Step 5:	4
Step 6:	5
Step 7:	5
Logs of Deployed SDA file.....	6
Step 1:	6
Step 2:	6
Step 3:	8
Related Content.....	9
Disclaimer and Liability Notice.....	10

Introduction

In PI, whenever we develop a custom adaptor module, java proxy or we want to deploy external JDBC/JMS drivers to the server, we need SDA (Software Delivery Archive) file to be deployed on PI Server using JSPM (Java Support Package Manager) in PI 7.1 and using SDM (software deployment manager) in older versions. In this document conversion of EAR file (created using NWDS or any IDE) to SDA file has been explained.

[JSPM \(Java Support Package Manager\)](#)

[Custom Adapter Module](#)

[Java Proxy](#)

[External Driver Configuration in Process Integration 7.1 Using JSPM](#)

Prerequisites

Net weaver Developer Studio (NWDS) 7.1 should be installed on the local system.

Converting EAR to SDA and Deploying it using JSPM

Convert EAR to SDA

Step 1:

Export EAR project onto the local system. Right click on EAR Project, select Export and then select SAP EAR file.

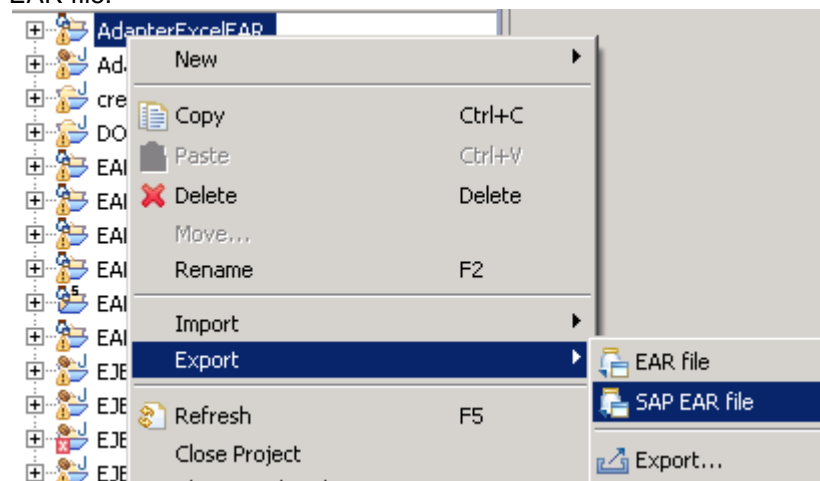


Fig. 01

Step 2:

Delete all SAP specific jar files from the EAR file by unzipping the ".ear" file and then again zip the files. SAP jar files are deleted because all these files are already available on PI server and the references to them have been given in application-j2ee-engine.xml file.

Step 3:

Using nwcetool (or CECTL i.e. [Composition Environment Command Line Tool](#)) provided with NWDS 7.1, convert .ear file to .sda file. Use createsda command and command prompt to create the SDA file.



Documentation for using this tool is available on NWDS installed location.

E.G. C:\Program Files\SAP\IDE\CE\eclipse\tools\nwcetool

Step 4:

Run Command Prompt and go to the nwcetool location and run the file "nwcetool.bat" to start nwcetool.

Step 5:

Execute the createsda command to convert .ear to .sda file.

Syntax for createsda:-

```
createsda -n <application name/ JNDI Name> -v <Vendor name> -l <application name/ JNDI Name> -c 2 -type J2EE <source file location> <Target file location>
```

```
createsda -n ExcelAdapter -v pi.adapter.poc -l ExcelAdapter -c 2 -type J2EE C:\EAR_ExcelAdapter.ear c:\result16\SDA_ExcelAdapter
```

```
C:\SYSROOT\system32\cmd.exe - nwcetool.bat
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Mayank_Gupta14>cd C:\Program Files\SAP\IDE\CE\eclipse\tools\nwcetool

C:\Program Files\SAP\IDE\CE\eclipse\tools\nwcetool>nwcetool.bat
nwce>createsda -n ExcelPOCAdapter -v pi.adapter.poc -l ExcelPOCAdapter -c 2 -type J2EE C:\EAR_ExcelAdapter.ear c:\result15\SDA_ExcelPOC
Conversion of C:\EAR_ExcelAdapter.ear to a SDA of type J2EE
--
Info: JarSAPProcessing version 20070123.1200 / JarSL version 20070507.1400
Building: c:\result15\SDA_ExcelPOC.ear with compression
nwce>_
```

Fig. 02

Application Name Should not be more than 20 characters!!!!

```
createsda -n ExcelPOCAdapter123456 -v pi.adapter.poc -l ExcelPOCAdapter123456 -c 2 -type J2EE
C:\AdapterExcelEAR.ear c:\result15\SDA_AdapterExcel1
```

```

c:\SYSROOT\system32\cmd.exe - nwcetool.bat
Building: c:\result15\SDA_ExcelPOC.ear with compression
nwce>createsda -n ExcelPOCAdapter -v pi.adapter.poc -l ExcelPOCAdapter -c 2 -type J2EE C:\AdapterExcelEAR.ear c:\result15\SDA_adapterExcel
Conversion of C:\AdapterExcelEAR.ear to a SDA of type J2EE
--
Info: JarSAPProcessing version 20070123.1200 / JarSL version 20070507.1400
Building: c:\result15\SDA_AdapterExcel.ear with compression
nwce>
nwce>createsda -n ExcelPOCAdapter -v pi.adapter.poc -l ExcelPOCAdapter -c 2 -type J2EE C:\AdapterExcelEAR123456.ear c:\result15\SDA_adapterExcel
Conversion of C:\AdapterExcelEAR123456.ear to a SDA of type J2EE
--
Info: JarSAPProcessing version 20070123.1200 / JarSL version 20070507.1400
Building: c:\result15\SDA_AdapterExcel.ear with compression
nwce>
nwce>createsda -n ExcelPOCAdapter123456 -v pi.adapter.poc -l ExcelPOCAdapter123456 -c 2 -type J2EE C:\AdapterExcelEAR.ear c:\result15\SDA_adapterExcel1
Conversion of C:\AdapterExcelEAR.ear to a SDA of type J2EE
--
Info: JarSAPProcessing version 20070123.1200 / JarSL version 20070507.1400
Error consistencyCheck: location in component definition ==> the value length must be between 1 and 20
==>
ERROR: Wrong attribute combination!
nwce>

```

Fig. 03

Step 6:

Files present in the SDA file:

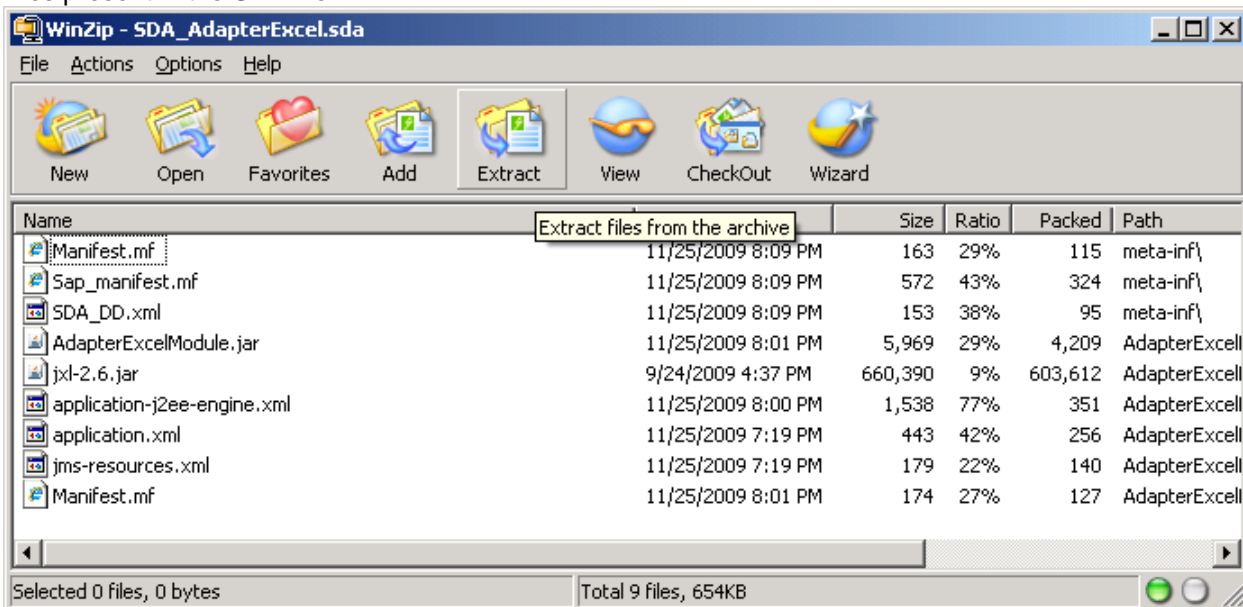


Fig. 04

Step 7:

Now SDA file is ready to be deployed. Deploy it using JSPM.

Deploy using JSPM:

Refer to Section 1.3 of document: [External Driver Configuration in Process Integration 7.1 Using JSPM](#)

Logs of Deployed SDA file

Step 1:

After Deploying the SDA file, the logs for our module deployment (SDA file) can be seen to check if it is deployed properly or not. The logs can be seen both from the current logon session and from previous sessions. Logs from every session are written to a subdirectory whose name contains the time stamp of the session.

Logs are stored at /usr/sap/<SID>/<Instance name>/j2ee/JSPM/log directory

Step 2:

Success or failure of EJB module deployment can be checked in NWA (Net Weaver Administrator):-

JNDI Browser -> EJB_AdapterModule



Fig. 05

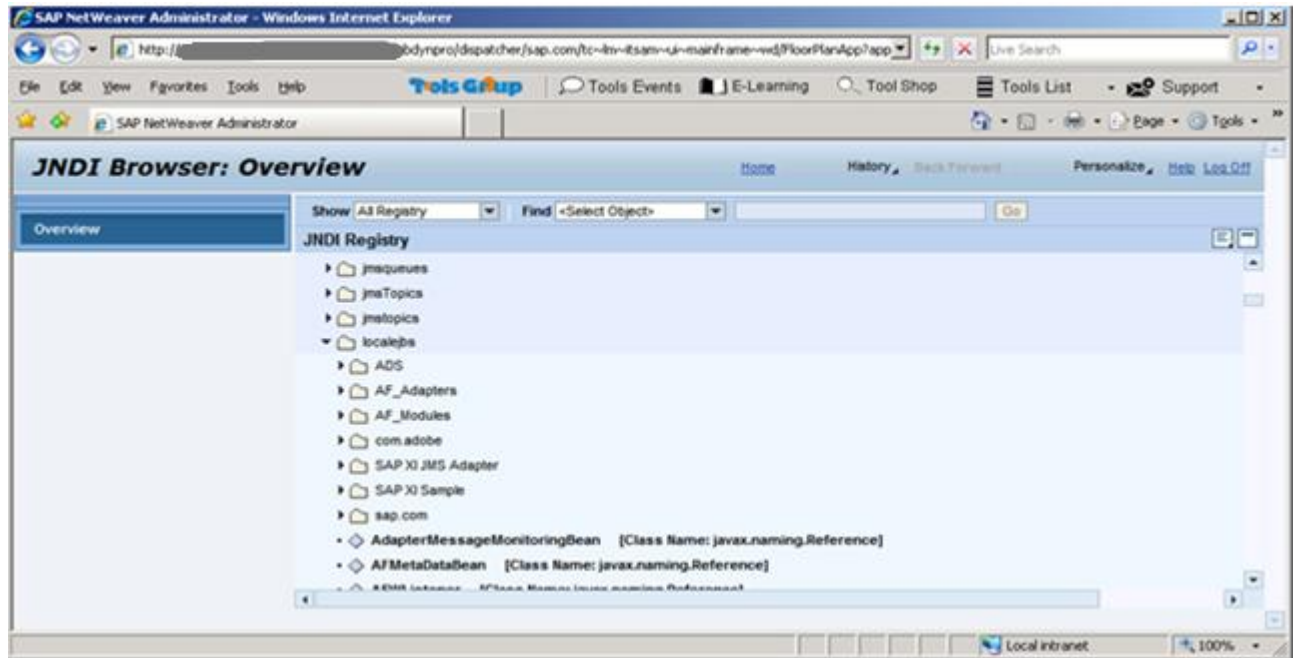


Fig. 06

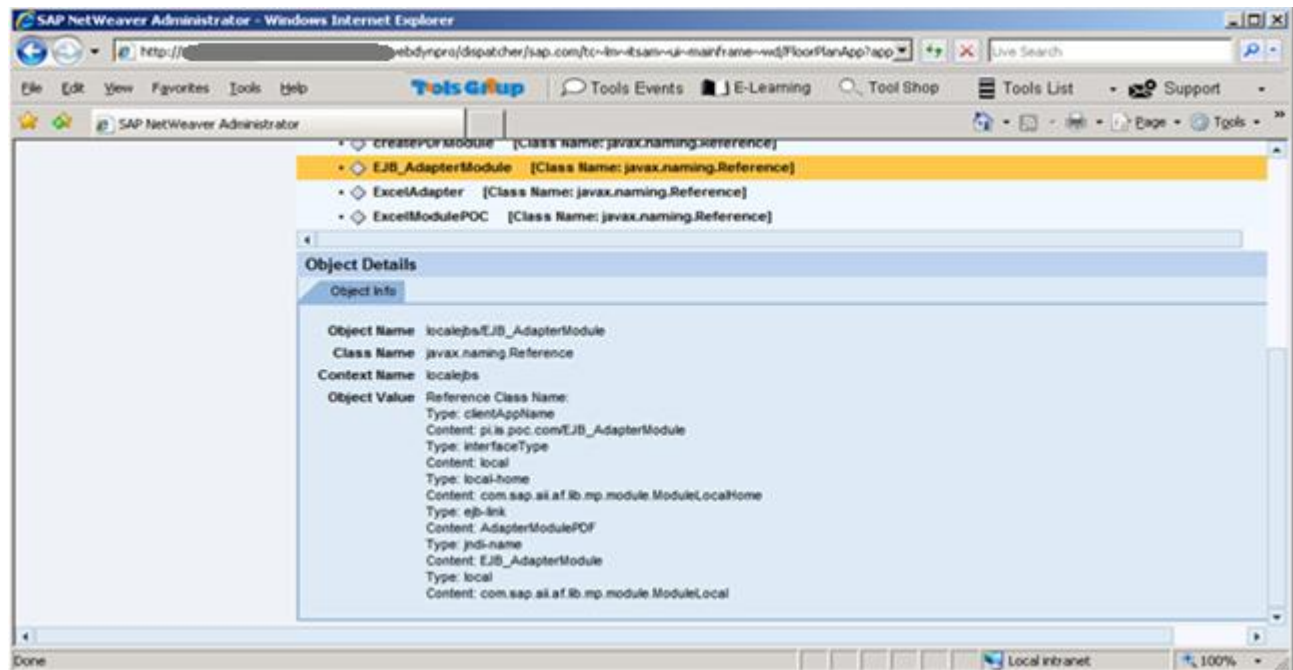


Fig. 07

Step 3:

The cause of any exception while executing the module, can be checked in logs and traces -> Log Viewer -> Java trace

The screenshot shows the SAP NetWeaver Administrator interface. The main window is titled "Log Viewer: Overview" and displays a list of log records under the "Default Trace (Java)" view. The records are filtered to show errors. The detailed view for a selected error record is shown below the list.

Severity	Date	Time	Message
error	2009-11-16	11:35:37.648	Trying to access a role that doesn't exist ROLE.PCD_ROLE_PERSISTENCE.VvVvKEGjW9zPFaxR/4pd2bX5Q=
error	2009-11-16	11:35:03.661	Cannot get aliases for [sap.com/caf-eu-gp-ui-support] application. The error is: com.sap.engine.services.deploy.exceptions.ServerDeploymentException: [ERROR CODE DPL_DS.5005] Application sap.com/caf
error	2009-11-16	11:35:03.661	Cannot get aliases for [sap.com/caf-eu-gp-ui-support] application. The error is: com.sap.engine.services.deploy.exceptions.ServerDeploymentException: [ERROR CODE DPL_DS.5005] Application sap.com/caf
error	2009-11-16	11:28:28.120	Failed (javax.management.MBeanPermission,"*")_ZeeType=trace,name=EndToEndCentralMBean,_jIsActive,getGui
error	2009-11-16	11:27:20.850	Cannot get aliases for [sap.com/caf-eu-gp-ui-support] application. The error is: com.sap.engine.services.deploy.exceptions.ServerDeploymentException: [ERROR CODE DPL_DS.5005] Application sap.com/caf
error	2009-11-16	11:27:20.850	Cannot get aliases for [sap.com/caf-eu-gp-ui-support] application. The error is: com.sap.engine.services.deploy.exceptions.ServerDeploymentException: [ERROR CODE DPL_DS.5005] Application sap.com/caf
error	2009-11-16	11:27:20.381	Failed (javax.management.MBeanPermission,"*")_ZeeType=trace,name=EndToEndCentralMBean,_jIsActive,getGui
error	2009-11-16	10:49:03.398	Trying to access a role that doesn't exist ROLE.PCD_ROLE_PERSISTENCE.VvVvKEGjW9zPFaxR/4pd2bX5Q=
error	2009-11-16	10:49:03.398	Trying to access a role that doesn't exist ROLE.PCD_ROLE_PERSISTENCE.VvVvKEGjW9zPFaxR/4pd2bX5Q=
error	2009-11-16	10:49:03.226	Trying to access a role that doesn't exist ROLE.PCD_ROLE_PERSISTENCE.VvVvKEGjW9zPFaxR/4pd2bX5Q=

Log Record Details

Message: Cannot get aliases for [sap.com/caf-eu-gp-ui-support] application. The error is: com.sap.engine.services.deploy.exceptions.ServerDeploymentException: [ERROR CODE DPL_DS.5005] Application sap.com/caf

Date: 2009-11-16

Time: 11:35:03.661

Category: com.sap.engine.services.servlets_jsp.server.DeployContext

Location: com.sap.engine.services.servlets_jsp.server.DeployContext

Application: sap.com/cto-itsam-co-ui-nwa-localnavigation-wd

Thread: HTTP Worker [11]

Fig. 08

Related Content

[External Driver Configuration in Process Integration 7.1 Using JSPM](#)

[Composition Environment Command Line Tool](#)

[Create your own SCA](#)

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