J2EE Application Technical Product Profile

J2EE Application Deployment on SAP NetWeaver Application Server 7.0

Deployment Certification for Third-Party Java Applications

J2EE-DEP 7.0 & J2EE-STD 7.0



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Vendor Data

Vendor Name (SAP internal):<ICC enter CRM ISV name>Vendor Number (SAP internal):<ICC enter CRM ISV number>

Vendor Product Name: <ISV product name> Vendor Product Release: <ISV product release>

Vendor Product Number (SAP internal): <ICC enter CRM ISV product number>

Vendor Interface Name: <ISV interface name> Vendor Interface Release: <ISV interface release>

Date: Month Day, Year

<u>Please answer the following question in the column to the right before you start.</u>

<u>J2EE-DEP 7.0 Technical Product Profile. Why is it needed?</u>

The purpose of this document is to get an overview of your technical system and your J2EE product. Please fill in all information properly, in order to speed up your certification work. This document will be used by your designated integration consultant either before or at the latest during your integration work. The document below is divided into two sections called

- 1) **Technical System Information** contains information about your hardware and software (operating system, database, J2SE, SAP licensing etc.)
- 2) J2EE Product Information contains information about your J2EE application (J2EE specification adherence, J2SE support, description of your J2EE application components, such as JAR and WAR files, descriptor files, configuration needed within the SAP J2EE environment for your J2EE application to work, EAR file description and descriptor files, whether or not your J2EE application supports clustering, failover, load balancing, why you want your J2EE product to be certified, expectations your customers have in regards to your product certification etc.)

As of SAP NetWeaver 7.0, <u>at least one SAP NetWeaver development license</u> will be mandatory in order to go through the certification process. We will check if you have a valid SAP license before you begin with your integration work. It is a requirement to use the <u>SAP NetWeaver Developer Workplace</u> environment (http://service.sap.com/swdc -> <u>Support Packages and Patches</u> -> <u>SAP NetWeaver</u> -> <u>SAP NETWEAVER</u> -> <u>SAP NETWEAVER</u> -> <u>SAP NETWEAVER</u> 2004S -> <u>Entry by Component</u> -> <u>Developer Workplace</u>) in order to prepare and go through certification based on SAP NetWeaver 7.0, and once certification has been achieved, to have a development environment in place enabling you to support your product you are planning to sell to an SAP customer.

Please note: If you already have a SAP NetWeaver 7.0 Java environment installed, then this is also fine to use (must contain the SAP J2EE engine, SAP NetWeaver Developer Studio, along with a SAP supported database, and optionally but also recommended the SAP JDI -> Java Development Infrastructure). See also SAP note 883948 in regards to SAP NetWeaver 7.0 usage types.

With the proper SAP development environment installed <u>before, during, and after</u> successful certification, not only enables you as an **SSP** (**Software Solution Provider**) to support your product running on the **SAP NetWeaver 7.0** platform, but entitles you to have access to SAP support, in order to resolve technical issues encountered within SAP software or to obtain newer SAP support package stacks as they become available. For example, when you purchase a **SAP NetWeaver development license**, you will:

- 1) Have access to the SAP support portal on the SAP Service Marketplace (http://service.sap.com). For example, in the SAP Support Portal, SAP customers can obtain their software via download or other important information relating to SAP software.
- 2) Request a development Name space for your Java development -> http://service.sap.com/namespaces.
- 3) Have access to valuable information in regards to SAP SLD (SAP System Landscape Directory -> http://www.sdn.sap.com/irj/sdn/nw-sld).
- 4) Have access to SAP supported software covered under your license agreement.
- 5) SAP support packages as they become available.
- **6)** SAP notes (they help you solve technical problems).
- 7) The capability to open up a trouble ticket and submit it to SAP support in order to resolve SAP errors.

To use the SAP NetWeaver Developer Workplace you will need <u>at least "one" SAP NetWeaver development license</u>.

Please get in touch with SAP ICC (icc@sap.com) to find out more about SAP software licensing options available to you.

Technical System Information

License Check:

Please provide information below in regards to your SAP development license.

You obtain this information from the server which has your J2EE engine installed.

First, please record in the table below your server's host name (the machine which has your SAP NetWeaver 7.0 J2EE engine installed), operating system and database used to start the SAP J2EE engine, the number of CPU's and the name of the CPU and the RAM (physical memory of the server) the server has. Also, record the SAP Installation Number according to the results of your license check.

Hostname>	?
Operating system>	?
Database>	?
Number of CPU's>	?
Name of CPU>	?
Amount of RAM (physical memory)>	?
SAP System ID (SID)>	?
SAP Installation Number>	? This entry is mandatory

<u>Second</u>, proceed with the license check which is applicable for your environment (ask your system administrator how your system was installed). When a license check is not applicable, just copy and paste these texts -> <u>LICENSE CHECK NOT APPLICABLE</u> directly under the title which does not apply to your type of license check. For example, if "License check SAP NetWeaver Developer Workplace installed on the above mentioned host" is not applicable for you, then copy and paste <u>LICENSE CHECK NOT APPLICABLE</u> below the title.

<u>A - License check SAP NetWeaver Developer Workplace installed on the above mentioned host.</u>

Please proceed as follows.

1) After you have installed the SAP NetWeaver Developer Workplace, please use the SAP Visual Administrator (go.bat) tool and copy and paste the licensing information below. The licensing information can be found under the Cluster tab within the Visual Administrator -> Server -> Services -> Licensing Adapter -> select the Installed Licenses tab. Please provide a hard copy of the information contained under the Installed Licenses tab and paste it below.

B - License check ABAP (usage type AS ABAP) and the J2EE stack (usage type AS Java) are installed on the above mentioned host. Each use a separate database.

Please proceed as follows.

1) Use the SAP Visual Administrator (go.bat) tool and copy and paste the licensing information below. The licensing information can be found under the Cluster tab within the Visual Administrator -> Server -> Services -> Licensing Adapter -> select the Installed Licenses tab. Please provide a hard copy of the information contained under the Installed Licenses tab and paste it below

C - License check ABAP (usage type AS ABAP) and the J2EE stack (usage type AS Java) are installed on the above mentioned host. The J2EE stack was added "after" the ABAP installation. Both ABAP and J2EE use "one database". J2EE is considered an "add-on" installation.

Please proceed as follows.

1) Proceed as indicated in SAP note 607141 -> The SAP J2EE Engine is released using the license key for the ABAP stack. Ignore the display in the SAP Visual Administrator, which informs you that your temporary license is running out, or that your J2EE Engine does not have a license. For an add-on installation, it is only important that the ABAP part has a valid license key.

Within the ABAP system, select within the SAP menu bar -> System -> Status and provide a hard copy of the information displayed.

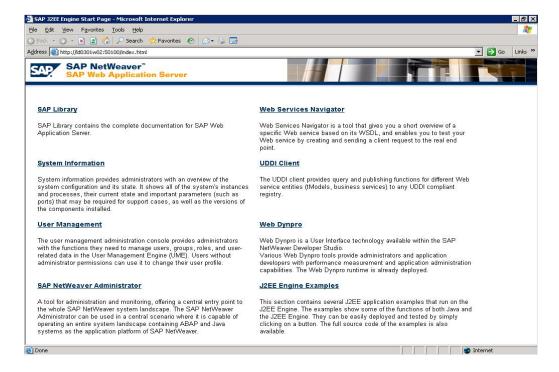
System Information Check:

Please provide information below in regards to your installed J2EE SAP system.

You obtain this information from the server which has your J2EE engine installed. Replace the example below, with your System Information.

Please proceed as follows:

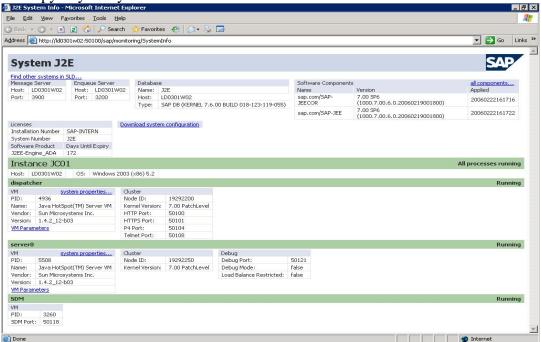
1) Within your web browser, enter http://<host name which you mentioned above:port number, for example 50100>. You will then be directed to the SAP NetWeaver SAP Web Application Server screen (see example figure depicted below).



2) Select System Information, and when you are prompted to logon on, enter a User name and password (see example figure depicted below) and then select OK.



3) You should then see something as depicted below. Please replace the figure below with a copy of your system information.



J2EE Product Information

Please provide information below in regards to your J2EE application (J2EE specification adherence, J2SE support, description of your J2EE application components, such as JAR and WAR files, descriptor files, configuration needed within the SAP J2EE environment for your J2EE application to work, EAR file description and descriptor files, whether or not your J2EE application supports clustering, failover, load balancing, why you want your J2EE product to be certified, expectations your customers have in regards to your product certification etc.).

In the left hand column you are asked a question which you must answer in English in the right hand column.

Questions	Answers
1. What J2EE specification do you adhere to? Please don't confuse this with J2SE. With SAP NetWeaver 7.0, the J2EE SAP NetWeaver Application Server is J2EE 1.3 compliant. If you are not familiar with J2EE specifications, then please check http://java.sun.com/javaee/reference/	?
What J2SE do you support? Please don't confuse this with the J2EE specification. You must adhere to what SAP says according to SAP note number 716604 . Please use Sun J2SE 1.4.2_11 SDK (or higher 1.4.2 versions after they will become available). It is not recommended to use versions lower than 1.4.2_11. Please also do not use J2SE 5.0. The J2SE 1.4.2 SDK for general released platforms is available from http://java.sun.com .	?
Also, please see other important SAP notes on the SAP service market place (http://service.sap.com) and make sure you are using the recommended JDK version for your Platform. Check the following notes for the recommended JDK versions and how to obtain them:	
Note 716604 for the Sun JDK (Windows, Linux, Solaris) Note 716926 for the HP JDK (HP-UX) Note 722520 for the HP JDK (Tru64)	
Note 716927 for the IBM JDK (AIX) Note 717376 for the IBM JDK (iSeries, OS/400) Note 746299 for the IBM JDK (zSeries) Note 746203 for the IBM JDK (zOS) Note 810008 for the IBM JDK (Linux on POWER)	
Note 861215 for the IBM JDK (Linux on AMD64/EMT46) 3. If you have an existing J2EE application, what J2EE application server does it run on?	?
What J2EE specification does your existing application adhere to when it is running on another J2EE application server?	?
What J2SE does your application support when it is running on another J2EE application server?	?
Please look at our "free" SAP J2EE migration kit, located at https://www.sdn.sap.com/irj/sdn/java?rid=/webcontent/uuid/e081a4b6-0801-0010-7fa4-c3c7a0454815 and familiarize yourself with the tools https://media.sdn.sap.com/html/submitted_docs/sap_j2ee_migration_kit_webpages/index.html offered in order to migrate your existing J2EE application over to the SAP NetWeaver Application Server. Any questions which you have in regards to the SAP J2EE migration kit can be entered in the J2EE migration kit forum -> https://www.sdn.sap.com/irj/sdn/forum?forumID=113	
Please also check http://help.sap.com -> SAP NetWeaver -> SAP NetWeaver 7.0 -> select for Languages -> English (see SAP NetWeaver 2004s SPS 09,10) and in the SAP menu bar type in the Search field J2EE migration as depicted below, hit the enter key Address	
and then view the information displayed in regards to J2EE migration. Summarize in a few sentences, what you found interesting about the J2EE migration kit.	
4. What is the name of your J2EE application (EAR file name and converted SCA file name)? Size? What are the name(s) of the JAR and/or WAR archive(s) which are used by your J2EE application (EAR file)? Size?	? ? (For example, myfavorite.ear file 40 MB) ? (For example, myfavorite.jar 25 MB + myfavorite.war 15 MB file) myfavorite.sca file 10 MB
For J2EE-DEP 7.0 only please note: If you developed an application within the SAP NetWeaver Developer Studio (irrelevant if you have the SAP JDI installed or not) the J2EE application will not have an EAR file name extension, but rather SCA (Software Component Archive) if you developed a SAP WebDynpro within the SAP NetWeaver Developer Studio. Please list the names of the SCA files and their size?	? (For example, myfavoriteWebDynpro.sca file 5 MB)

Are you familiar with so called "checklists" in regards to your J2EE development work? Please also check http://help.sap.com -> SAP NetWeaver -> SAP NetWeaver 7.0 -> select for Languages -> English (see SAP NetWeaver 7.0 SPS 09,10...) and in the SAP menu bar type in the Search field checklists as depicted below, hit the enter key Address http://help.sap.com/saphelp_nw2004s/helpdata/en/43/2eb83277d02182e10000000a114cbd/frameset.htm Feedback Survey Discussion Search: checklists and then view the information displayed in regards to checklist for your area of interest. For example, see checklist EJB Applications, if you are designing an EJB J2EE application. The following might be of help to you: Checklist for J2EE Toolset Checklist for J2EE Web Applications Checklist for EJB Applications Checklist for Java Persistence Checklist for Web Services Checklist for JMS Development Checklist for SDM Checklist for Deploy Tool ? (For example, need to define a JDBC data source Please describe what needs to be configured within the SAP J2EE engine via the Config Tool, utilizing the SAP Visual Administrator, need to load Visual Administrator, SAP NetWeaver Administrator, SAP NetWeaver Developer Studio etc., in and deploy some libraries first in order to make them available to my J2EE application etc.) order for your J2EE application to work? Does your J2EE application make use of any other third-party software products/tools in order for your application to work properly? If yes, please list the name, version/release etc. For example, your J2EE application when it is deployed and started makes use of a third-party product called xyz with release 1.0 which you obtained from company xyz. You successfully passed SAP J2EE-DEP 7.0 certification. Five months later, company xyz brings out for the product called xyz, a new release, for example 1.5, which includes a lot of new functionality. You elect to use the product xyz with the new release 1.5. If this is the case, then you would need to recertify your product if it makes use of the product xyz based on release 1.5.

Does your application make use of any logging mechanisms? For example, log4j or your own logging features? SAP logging and error handling will be mandatory during certification. You will have to generate some error messages, which can be identified and resolved making use of SAP logging features. SAP logging classes are described at http://help.sap.com/javadocs/NW04S/current/index.html Please also check http://help.sap.com -> SAP NetWeaver -> SAP NetWeaver 7.0 -> select for Languages -> English (see SAP NetWeaver 7.0 SPS 09,10...) and in the SAP menu bar type in the Search field J2EE logging as depicted below, hit the enter key Address 👸 http://help.sap.com/saphelp_nw2004s/helpdata/en/d2/5c830ca67fd842b2e87b0c341c64cd/frameset.htm Feedback and then view the information displayed in regards to J2EE logging. You will need to use the SAP NetWeaver Administrator tool to analyze the errors and resolve The SAP NetWeaver Administrator (NWA) unifies the most important administration and monitoring tools both for Java and for ABAP systems in a new, browser-based user interface. The most important advantages of the NWA are You no longer need to switch between different tools for administration, troubleshooting, and problem analysis of your entire SAP NetWeaver system landscape. · There is now a central administration tool available to you landscape-wide for both Java and ABAP systems for starting and stopping instances, checking configuration settings and logs, and monitoring error-free functioning of · The interface follows the current guidelines for interface design, is easy-to-use, task-oriented, and complete. By using Web Dynpro, it runs in a normal browser. · The interface allows seamless navigation to other SAP NetWeaver administration tools (User Management Engine, in the future also System Landscape Directory, Adaptive Computing). For Java, the NWA represents the crossover from various expert tools to an integrated, simple, and clear solution. The NWA also completes the integration of the data sources for monitoring. For ABAP, the NWA represents the crossover from many different expert transactions, some of which are difficult to use, to integrated, centrally available The NWA is delivered for the first time for SAP NetWeaver 04 SP Stack 12. A more advanced version is delivered with SAP NetWeaver 2004s. It is intended to deliver an advanced version with SAP NetWeaver 2004s. The NWA will also be continually further developed in later releases, and extended with additional administration and monitoring functions. Q Are you familiar with the SAP SLD, its purpose, how to configure a SAP SLD, and where to find third-party software product and software component information on your SAP J2EE engine? You can familiarize yourself in regards to SAP SLD at https://www.sdn.sap.com/irj/sdn/nw-sld and by checking http://help.sap.com -> SAP NetWeaver -> SAP NetWeaver 7.0 -> select for Languages -> English (see SAP NetWeaver 7.0 SPS 09,10...) and in the SAP menu bar type in the Search field J2EE SLD as depicted below, hit the enter key ldress 🥘 http://help.sap.com/saphelp_nw2004s/helpdata/en/d2/5c830ca67fd842b2e87b0c341c64cd/frameset.htm and then view the information in regards to J2EE SLD. Are you familiar with important SAP technical web sites and what you can do or find there? http://service.sap.com Please describe briefly, the purpose of this site, and how it can help you? Please describe making using of a small example. http://help.sap.com Please describe briefly, the purpose of this site, and how it can help you? Please describe making using of a small example. http://www.sdn.sap.com Please describe briefly, the purpose of this site, and how it can help you? Please describe making using of a small example.

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11. For J2EE-DEP 7.0 only!	?
Do you know how to J2EE troubleshoot and conduct problem analysis? If not, please check http://help.sap.com -> SAP NetWeaver -> SAP NetWeaver 7.0 -> select for Languages -> English (see SAP NetWeaver 7.0 SPS 09,10) and in the SAP menu bar type in the Search field J2EE troubleshooting as depicted below, hit the enter key Address	
SAP Library BI Content Glossary Help on Help Feedback Survey Discussion Search: [22ee troubleshook] >> and then view the information displayed in regards to J2EE troubleshooting.	
Alternatively, you can find information to J2EE troubleshooting via http://help.sap.com -> SAP NetWeaver 7.0 -> select for Languages -> English (see SAP NetWeaver 7.0 SPS 09,10) -> from the SAP Library select from the Administrator's Guide the Technical Operations Manual -> General Administration -> Troubleshooting for SAP Web Application Server -> Web AS Java -> J2EE Engine Problem Analysis Scenarios.	
If you have an error which is preventing you from continuing with your integration work, you can also open up a SAP problem ticket, search for SAP notes, search for existing SAP problem tickets describing the type of error which you encountered. Just use your S-user account and if needed "Create a Customer Message" via the SAP service market place. If you remember, an S-user account is made available after purchasing a SAP NetWeaver development license.	
You can also make use of the SAP Software Developer Network (SDN) and search in the forums or add a question in a forum in regards to the problem you are having. However, it is not mandatory for anybody to answer your question in regards to the problem you are having. Utilizing the official SAP support structure via the SAP service market place "guarantees you" that someone will reply in regards to your technical problem.	
12. For J2EE-DEP 7.0 only!	?
What is the name of your J2EE application descriptor file ? What are the name(s) of the JAR and/or WAR archive(s) descriptor file(s) ?	
Please note: If you developed a application within the SAP NetWeaver Developer Studio (irrelevant if you have the SAP JDI installed or not) the J2EE application will not have an EAR file name extension, but rather SCA (Software Component Archive) if you developed a SAP WebDynpro within the SAP NetWeaver Developer Studio, the deployment descriptor files are included in the packaged SCA file. Please list the names of these deployment descriptor files which are packaged with the SCA file.	?
13. For J2EE-DEP 7.0 only!	?
Are is/can your J2EE application make use of clustering and/or failover (HTTP sessions -> EJB and/or WAR) and/or load balancing ? If yes, please describe in detail, including any descriptor files which need to be adjusted, anything else etc.	?
What are your customer expectations in regards to your application supporting or not supporting clustering and/or failover and or/load balancing? Who should handle theses tasks? SAP J2EE engine? Your J2EE application? The hardware infrastructure in place at your customer's site etc.?	
14. For J2EE-DEP 7.0 only!	?
Do you know the purpose of the JSPM (Java Support Package Manager) tool ? You will need to understand it, how to use it, and demonstrate during the certification test that you can upgrade an existing SAP JDI (SAP Java Development Infrastructure) based on Support Package Stack SPS06 to SPS09. Your designated integration consultant will supply you with a machine containing all the things needed in order to test this. The test will be conducted remote on a machine supplied to you by your designated integration consultant.	
15. For J2EE-DEP 7.0 only!	?
Does your certifiable solution contain any self-developed ABAP objects (e.g. function modules, transactions etc.)?	?
If yes, are they located in your own registered namespace?	List all ABAP objects below 1.
In any case, please give us a complete list of all your ABAP objects. We will review this internally within ICC and if there is exclusive use of ABAP development, eventually recommend an <u>ABAP</u> add-on certification.	2

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16. Functional product description / main features Please provide a brief overview in English of the product you will deploy on SAP NetWeaver Application Server 7.0.		
	e 5 functional test cases for your product. They are part of the certification test, called the nal test.	
Test 1	Type in here	
Test 2		
Test 3		
Test 4		
Test 5		
	,	
17.		
	t error handling and logging description	
	provide a <u>brief overview in English</u> of how error handling and logging of your J2EE product are ed once your J2EE application has been deployed on the SAP NetWeaver Application Server 7.0.	
	ом стоо усм. с—— аррисаног тако жост, сортоусм ст. т.с. т.с. т.с. т.ррисаног. сст. т.с.	
Propose	e 5 error and logging test cases for your product. They are part of the certification test, called	
the erro	or and logging functional test. The test cases will be verified using the SAP NetWeaver	
	strator tool (not to be confused with the SAP Visual Administrator, which we will not support	
	test during certification). See also http://help.sap.com -> SAP NetWeaver -> SAP NetWeaver 7.0 -> r Languages -> English (see SAP NetWeaver 7.0 SPS 09,10) -> from the SAP Library -> select Release	
	Release Notes by IT Scenarios -> SAP NetWeaver Operations -> Support Package Stack 06 ->	
	te Installer for SAP NetWeaver Administrator (New)	
Test 1	Type in hereerror xyz should bring in the log the message xyz error 1234 encountered etc.	
Test 2		
Test 3		
Test 4		
Test 5		
	·	