



Third-Party J2EE / EE 5 Software Product Certification based on

- SAP NetWeaver 7.0 -

- SAP NetWeaver Composition Environment (CE) 7.1 - What are the main and minor differences?

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(Complete bio appears on page 6)

Short Introduction

J2EE-STD 7.0 and J2EE-DEP 7.0 (certification scenarios based on SAP NetWeaver 7.0) and JAVA-EE-STD 7.1 and JAVA-EE-ADV 7.1 (certification scenarios based on SAP NetWeaver (CE) 7.1) are third-party software product certifications based on different SAP NetWeaver Java™ application servers. Each certification scenario addresses two different levels of certification quality and harmonization on either SAP NetWeaver 7.0 or SAP NetWeaver (CE) 7.1.

So what are the differences between the scenarios within each pair of certifications offered on either SAP NetWeaver 7.0 or SAP NetWeaver (CE) 7.1? How do you know or how can you decide which scenario within a pair to choose from and with what SAP NetWeaver platform (7.0 or CE 7.1)? You will find answers to those questions and others below.

What is J2EE-STD 7.0 and J2EE- DEP 7.0 deployment certification based on the SAP NetWeaver 7.0 Java Application Server?

It's a third-party J2EE application (one software product) which can be certified on the SAP NetWeaver 7.0 Java application server. Thus, you can have your <u>J2EE 1.3</u> compliant applications either certified via an **entry** level certification called **J2EE-STD 7.0** or an **advanced** version called **J2EE-DEP 7.0**. If you are used to developing J2EE code in an <u>Eclipse</u> environment, then you can make use of the <u>SAP</u>

NetWeaver <u>Developer Studio</u> (NWDS) which is based on <u>Eclipse 2.1.12</u> in order to code a complete new J2EE application from scratch, or via our free <u>SAP (NWDS) migration plug-in kit</u>, migrate existing J2EE code running on another J2EE 1.3 compliant application server on to the <u>SAP NetWeaver J2EE</u> 1.3 compliant application server.

What is JAVA-EE-STD 7.1 and JAVA-EE-ADV 7.1 deployment certification based on the SAP NetWeaver (CE) 7.1 Java EE Application Server?

With the certified SAP NetWeaver Application Java Server EE5, you can develop Java EE applications based on the new Java EE 5 standard or migrate existing Java EE 5 / J2EE applications over to the SAP NetWeaver (CE) 7.1 Java application server and then have your product certified on the SAP NetWeaver (CE) 7.1 64 bit Java application server. Thus, you can have your J2EE 1.4 / EE 5 compliant application either certified via an entry level certification called JAVA-EE-STD 7.1 or an advanced version called JAVA-EE-ADV 7.1. If you are used to developing J2EE / EE 5 code in an Eclipse environment, then you can make use of the SAP NetWeaver Developer Studio (NWDS) which is based on Eclipse 3.3 in order to code a complete new application from scratch, or via a free SAP (NWDS) migration plug-in kit, migrate existing J2EE / EE 5 code running on another J2EE 1.4 / EE 5 compliant application server over to the SAP NetWeaver (CE) 7.1 Java application server. The great thing about the SAP NW (CE) 7.1 Java server is that the Java application server now contains it's own SAP JVM (SAP Java Virtual Machine) allowing you to install right out of the box a complete Java server from SAP which you need to use in order to have your product certified. You no longer need to read through a bunch of SAP notes from the SAP support portal located on the SAP service market place in order to make sure you have the correct Java Virtual Machine installed from different third-party software vendors.

How do you know whether to choose the entry or the advanced certification scenario independent of the SAP release involved? What are the "main" technical factors influencing the decision which scenario to use?

Well that's easy. <u>In general</u>, you can select the <u>entry</u> level certification (either <u>J2EE-STD 7.0</u> or <u>JAVA-EE-STD 7.1</u>)

- ☑ if you have an existing J2EE / EE 5 application running another J2EE / EE 5 application server
- if you previously certified your <u>J2EE 1.3</u> compliant application on <u>SAP NetWeaver 2004 (6.40)</u> with the integration scenario called **J2EE-DEP 6.40** (please note, this certification scenario has been retired) and would like to <u>recertify</u>
- if you previously certified your <u>J2EE 1.2</u> compliant application on the <u>SAP Web Application</u> <u>Server 6.20</u> with the integration scenario called **J2EE-DEP 6.20** (please note, this certification scenario has been retired) and would like to <u>recertify</u>.

Thus, with the entry level certification scenarios, we reach out to those software vendors who have an existing J2EE / EE 5 application making use of standard <u>J2EE</u> / <u>EE 5</u> technology.

By **not** making use of SAP technology such as

- SAP WebDynpro (in NW 7.0 or NW (CE) 7.1)
- SAP JCO (SAP Java Connector in <u>NW 7.0</u> or <u>NW (CE) 7.1</u>). See also the <u>SAP endorsed integration technologies</u>.
- SAP ABAP (Advanced Business Application Programming in NW 7.0. (Please note, NW CE 7.1 does not contain SAP ABAP, but some software vendors make use of SAP ABAP via their NW CE 7.1 J2EE / EE 5 application requiring possibly an ABAP Add-on certification in addition to the J2EE / EE 5 application certification).
- SAP NetWeaver Developer Studio for deployment purposes with the integration scenario J2EE-STD 7.0 available with SAP NetWeaver 7.0.

Thus, your J2EE / EE 5 software product or software component is eligible to be certified via an entry level certification scenario, simply because the above mentioned SAP technologies are not available with other J2EE / EE 5 software application server providers and then you could let's say just migrate (via "free" SAP J2EE / EE 5 migration kits for NW 7.0 and NW CE 7.1) your existing J2EE / EE 5 application over to SAP and then have your application certified on the SAP Java platform.

SAP ICC 2009 2/6

In general, you can select the advanced level certification (either <u>J2EE-DEP 7.0</u> or <u>JAVA-EE-ADV 7.1</u>)

- if you have an existing J2EE / EE 5 application running another J2EE / EE 5 application server
- if you previously certified your <u>J2EE 1.3</u> compliant application on <u>SAP NetWeaver 2004 (6.40)</u> with the integration scenario called **J2EE-DEP 6.40** (please note, this certification scenario has been retired) and would like to <u>recertify</u>
- if you previously certified your <u>J2EE 1.2</u> compliant application on the <u>SAP Web Application</u> <u>Server 6.20</u> with the integration scenario called **J2EE-DEP 6.20** (please note, this certification scenario has been retired) and would like to <u>recertify</u>

and if you want to use SAP technology such as

- ☑ SAP WebDynpro (in NW 7.0 or NW (CE) 7.1)
- SAP JCO (SAP Java Connector in <u>NW 7.0</u> or <u>NW (CE) 7.1</u>). See also the <u>SAP endorsed integration technologies</u>.
- SAP ABAP (Advanced Business Application Programming in NW 7.0. (Please note, NW CE 7.1 does not contain SAP ABAP, but some software vendors make use of SAP ABAP via their NW CE 7.1 J2EE / EE 5 application requiring possibly an ABAP Add-on certification in addition to the J2EE / EE 5 application certification).
- ☑ SAP NetWeaver Developer Studio 7.0 or SAP NetWeaver Developer Studio 7.1

and if you want your application to make use of

- ☑ clustering, failover or load balancing with NW 7.0
- ☑ clustering, failover (for HTTP web applications or RMI-P4) or load balancing with NW CE 7.1.

We all know with **clustering**, **failover** and **load balancing** technology there are two sides of the coin. The one side is the **software** side and the other the **hardware** side. Whenever you go through Product certification, we only test your product at the software level in order to determine if it can be certified.

Currently in the <u>SAP Integration and Certification Center</u> (ICC), we do not test clustering, failover and load balancing in conjunction with software product certification. In order to also test the <u>hardware</u> side, we would need to take into consideration such things as the <u>server hardware</u>, <u>disks</u>, <u>controller(s)</u> and <u>caching configurations</u>, <u>RAID technology</u>, <u>memory</u>, <u>network card(s)</u>, <u>network bandwidth</u>, <u>network infrastructure</u> etc. These topics are beyond the scope of what we can test during software product certification. Thus, we leave clustering, failover and load balancing at a <u>discussion level during the certification process</u> in order to document who should be responsible for each of those individual technical parts (you, SAP or the SAP customer). Whatever conclusion we come to, all relevant information is then documented accordingly within your certification documents.

Last but not least, if you feel comfortable about **clustering**, **failover** or **load balancing** and how these technologies can be utilized with your product, you can demonstrate this to us during certification. However, it is <u>not mandatory</u> in order to pass product certification, and if you did show us how your product utilizes these technologies, we will only document what we discussed with you.

SAP ICC 2009 3/6

What are the main and minor differences between the entry and the advanced certification scenarios?

That's also easy to answer since we already explained the <u>main</u> parts above. There are also some <u>minor</u> differences. So really the best thing to do is just simply look at the big picture, both the **main** and **minor** parts, and then use this information to decide what you wish to accomplish and what you exactly need to use from the different technologies available. Furthermore, do your business and technical expectations match those of your SAP customer and the additional value the customer is expecting to get when purchasing a certified solution?

So the real challenge now is where to find the technical things which differentiate the scenarios. Yes, these things are indeed technical, but that's the way it is in life. Knowing where to look makes life easier. The information is out there and you already at one point or the other have run across it while preparing for your NW 7.0 J2EE or NW CE 7.1 J2EE / EE 5 integration work.

For the <u>J2EE-STD 7.0</u> and <u>J2EE-DEP 7.0</u> certification scenarios, the differences can be found in the following documents, which are contained either in the <u>j2eestd70.zip</u> or <u>j2eedep70.zip</u> files you downloaded.

- 1) Documentation and Test Catalog (see pages 4 to 7 of 25).
- 2) Technical Product Profile (see pages 11 to 14 of 15, notice starting on page 14 questions 1 to 10 apply only to J2EE-STD 7.0 and all questions 1 to 15 apply to J2EE-DEP 7.0).
- 3) <u>J2EE-STD 7.0</u> sample Test Report (see page 4 of 5 and notice the comments in the column called "Test Cases". These test cases are relevant only for the integration scenario called **J2EE-STD 7.0** and do not apply to **J2EE-DEP 7.0**).
- 4) <u>J2EE-DEP 7.0</u> sample Test Report (see <u>mandatory</u> section page 4 of 7 and <u>optional</u> section page 6 of 7 and notice the comments in the column called "Test Cases". These test cases are relevant only for the integration scenario called **J2EE-DEP 7.0** and <u>do not</u> apply to **J2EE-STD 7.0**. Mandatory test cases on page 4 of 7 have to be all fulfilled and you can also elect to test the optional test cases on page 6 of 7).

For the <u>JAVA-EE-STD 7.1 and JAVA-EE-ADV 7.1</u> certification scenarios, the differences can be found in the following documents, which are contained in the file <u>java_ee5_nw_ce_71.zip</u> file you downloaded.

- 1) Documentation and Test Catalog (see pages 4 to 6 of 12).
- 2) <u>Technical Product Profile</u> (see pages 16 to 28, questions 1 to 14 apply only to **JAVA-EE-STD** 7.1 and all questions 1 to 39 apply to **JAVA-EE-ADV** 7.1).
- 3) <u>JAVA-EE-STD 7.1 and JAVA-EE-ADV 7.1</u> sample Test Report (see pages 5 to 6 of 7 and notice the comments in the column called "Test Cases". These test cases are relevant for <u>both</u> integration scenario called <u>JAVA-EE-STD 7.1</u> and <u>JAVA-EE-ADV 7.1</u>).

SAP ICC 2009 4/6

Certification Fee, Consulting and Testing

For the above mentioned integration certification scenarios the following certification fees, consulting and testing days apply.

Certification Scenario	Certification Fee *	Consulting and Testing
J2EE-DEP 7.0	 7,000 USD (for ISVs in the Americas and Japan) 5,000 Euro (for all others) 	3 days at SAP facility or remotely
JAVA-EE-ADV 7.1	 7,000 USD (for ISVs in the Americas and Japan) 5,000 Euro (for all others) 	3 days at SAP facility or remotely
J2EE-STD 7.0	 7,000 USD (for ISVs in the Americas and Japan) 5,000 Euro (for all others) 	1 day at SAP facility or remotely
JAVA-EE-STD 7.1	 7,000 USD (for ISVs in the Americas and Japan) 5,000 Euro (for all others) 	1 day at SAP facility or remotely

^{*} This one-time certification fee includes:

- ☑ Certificate, logo(s), online listing for customer and SAP sales awareness
- ☑ Entry-level marketing support (e.g. press release review)

♣ Conclusion / Summary

So there is much technical information to digest before deciding which integration scenario meets your business and technical needs. But, that's the way it is in life.

The best rule of thumb to apply in order to make the proper decision is to think about your business and technical expectations and how those match with what an SAP customer is expecting and looking for by purchasing a certified software product. SAP customers not only expect additional value by purchasing a certified software product, but also expect that you as a <u>SAP software partner</u> can <u>support your product while it is being utilized by the SAP customer in production</u>. Thus, taking SAP customer expectations into account, you will have to weigh the trade-offs by selecting either an **entry** or **advanced** level certification keeping in mind the additional value the SAP customer is expecting and looking for. We make sure your certification will be geared towards what you need and what your SAP customer expects of your product. Remember, SAP customers or prospects looking for pre-tested integrated solutions can search through 2,500 integrated products in the <u>SAP Partner Information Center</u>. You can be listed there!

Whichever certification scenario you select, all are of course designed to have your product SAP Solution manager ready without needing to install and configure the SAP solution manager. We tell you what needs to be done and how to do it efficiently and effectively in order to have your product SAP certified soon. Your SAP customer will really appreciate this, since all SAP customers in one form or the other have to make use of the SAP solution manager.

Anytime you feel exhausted or are unsure how to proceed, there is always a light at the end of the tunnel, and if you want to get there quickly and make it, you can contact LCC who will assign an experienced and dedicated ICC integration consultant to sit down with you and decide which integration scenario best fits your business and technical needs. Just ask us. That's our job and that's what we are here for.

Good luck and we look forward to certifying your entry or advanced level J2EE / EE 5 application soon.

SAP ICC 2009 5/6

Bernhard Weiss joined SAP during August 1989.

He currently works for the Integration and Certification Center at SAP in Walldorf, Germany

Prior to joining SAP, he worked as a financial analyst and controller and in management information systems for 3 years with a US multinational and UK based corporation. After joining SAP in 1989, he worked 4 1/4 years as a support engineer in R/2 hotline - SAP QSA, in the area R/2 RF. Subsequently, before joining the department ICC, he worked 9 years as a system administrator within SAP IT, in the areas of OS/2, Windows, Linux, Lotus Notes/Domino, training and internal production systems, VMware, 7x24 support, networking, hardware, monitoring. Bernhard's current focus within ICC are SAP NetWeaver integration technologies, for example, J2EE and CCMS, lowering TCO, outsourcing, server and system consolidation of ICC test systems utilizing VMware. In addition to his SAP expertise, Bernhard holds/obtained an MBA (Master of International Business Administration from Thunderbird, The American Graduate School of International Management), BA (Bachelor of Science in Business Administration from Bowling Green State University), and Arts (Associate of Arts from Cuyahoga Community College). Bernhard lived 16 years in the United States and is bilingual in English and German.

Should you have further questions please contact your regional Integration & Certification Center:

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SAP ICC 2009 6/6