

Why do you need to test undeploying (removing) your EE 5 application during certification in order to complete the JAVA-EE-NW 7.4 certification scenario based on [SAP NetWeaver 7.4 SPS03](#) (SAP JAVA HANA enabled)?



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Short Introduction

The **JAVA-EE-NW 7.4** certification scenario based on the SAP NetWeaver 7.4 Application Server Java™ EE 5 Edition allows you to have your Java EE 5 application certified on the SAP Java EE application server.

This means you deploy the application, start it and make sure it runs / functions properly. However, the need might arise, requiring the certified product to be removed from a SAP customer environment or infrastructure. Maybe a business or technical decision at the SAP customer site requires removal of the certified product, which has been running stable all along. Below are the details, why we need to conduct such a test during certification. Will the SAP system still remain stable and behave reliably, after the product has been [undeployed](#) (removed)?

Why do you need to remove (undeploy) your product, software components and any configuration changes made to the SAP NetWeaver 7.4 EE application server during JAVA-EE-NW 7.4 deployment certification?

As mentioned in the **EE 5 Documentation and Test Catalog**, with the SAP NetWeaver Application Java Server EE 5, you can develop J2EE 1.4 and / or Java EE compliant applications based on the new Java EE 5 standard, or migrate existing compliant J2EE 1.4 and / or EE 5 applications on to our platform and have these applications (products) [certified](#).

From time to time, you or the SAP customer might be required to remove the certified product which has been running (deployed) stable and reliably in production at the SAP customer site. Maybe you have a new product version available with new features which the SAP customer would like to purchase? Maybe some type of standard, specification or change in law requires a removal? Once purchased, maybe the existing certified product needs to be removed since it can't be easily upgraded or from a technical perspective it is better to do a clean install (deployment)? Or possibly a business decision at the SAP customer site requires the removal of the product?

Whatever the reasons are, undeploying (removing) the product which you want to have certified will be mandatory during the certification test.

If we think a little further, the following questions arise:

1. After the product has been undeployed, will the SAP NetWeaver 7.4 Application Server Java EE 5 still run?
2. If you made configuration changes to the SAP NetWeaver 7.4 Application Java Server EE 5 in order for your product to deploy successfully and then removed these changes, will the Java server still run?
3. If the Java server was stopped and restarted after you removed everything (your product was undeployed and any configuration changes made were deleted), will the Java server still work?

These are indeed not only important questions to think about, but also need to be considered and tested ahead of time.

Just think about it what would happen, if all along you always backed up your daily work from your office PC via some type of backup mechanism and the next day your PC stopped working? No problem, just get another PC if it can't be repaired, and restore your data. But what if the data you backed up all along successfully can't be restored since the saved data can't be read for some reason? Maybe it could have been avoided, if a restore test would have been conducted?

Well it's not about backing up, restoring or getting new hardware, but the idea is that you can continue to work reliably without jeopardizing an existing stable working environment when things are changing.

What do you need to do during the JAVA-EE-NW 7.4 deployment certification test in order to successfully remove (undeploy) your product without jeopardizing an existing SAP system environment?

Just follow the steps below. **Since the undeployment test is the last part in the certification process, make sure you have a backup of your complete test environment before you continue with the steps mentioned below.** In case needed, you should be able to restore your complete test environment quickly and reliably in order to finish the certification process (in case the undeployment fails during certification and puts the SAP NetWeaver 7.4 Application Server Java EE 5 in an unresponsive state and the undeployment needs to be repeated).

1. [Undeploy](#) via the **SAP NetWeaver 7.4 Developer Studio** your successfully deployed application. Please note, you will need to undeploy your successfully deployed SCA file, and not your EAR file.

See also in the **EE_5_Documentation_and_Test_Catalog on page 3 of 9, "Mandatory test criteria relevant for JAVA-EE-NW 7.4", section number 3....."The EAR file must be packed into an SCA file (your final EE 5 certifiable software application)....."An undeployment test will also be conducted..."**

2. Check if the Java server still works (use a familiar tool like SAP NetWeaver Administrator).
3. Remove any configuration changes you made and check if the Java server still works.
4. [Shutdown the Java Server](#) and any databases and then restart them afterwards.
5. Use the SAP NetWeaver Administrator (SAP NWA) tool to determine if the Java Server still works. Select some entries, for example, as depicted in the figure below from the Configuration tab.

The screenshot displays the SAP NetWeaver Administrator interface. The top navigation bar includes 'Personalize', 'Back Forward', 'History', 'Site Map', 'Help', and 'Log Off'. The main content area is divided into two columns of configuration options, each with an icon and a brief description. The left column includes: Adobe Document Services, Application Resources, Destinations, Internationalization, JCo RFC Provider, Licenses, Message Server, SLD Data Supplier Configuration, and Java System Properties. The right column includes: Application Modules, Java Configuration Browser, Java HTTP Provider Configuration, Java Class Loader Viewer, JMS Server Configuration, Log Configuration, Services Registry Management, and System Information. The 'System Information' link is highlighted in the right sidebar.

6. Check, that the successfully undeployed EE 5 application (SCA file) is no longer visible via the SAP NetWeaver Administrator (NWA) tool -> `http://<server>:<port>/nwa/sysinfo` -> System Information -> Components Info -> Software Components.

Summary

At the SAP customer site, you will not only find different SAP products in use, but also certified Third-Party software products being used in production. What's important today is the ability to adapt quickly to changing business requirements in order to meet and accommodate ongoing business needs. Changes in technologies, specifications, standards and laws can be the driving factors behind these changes. This means, in any SAP system environment running 7 days and 24 hours a day, technical changes will become necessary in order to accommodate changing business requirements. With the above mentioned changes, the existing environment will have to continue to operate stable and reliable. It may not be obvious at first, but is extremely important, that after successfully removing your application, once it has been deployed during the certification process, will the existing SAP system environment continue to run or not? Finally, the undeployment test does not guarantee or state anything about high availability, since this would be way beyond the scope of **JAVA-EE-NW 7.4** product certification.

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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 SAP Integration and Certification Center (icc@sap.com)