EE 5 Technical Product Profile

JAVA-EE-NW 7.2

Third-Party Software Product Certification based on the

SAP NetWeaver Composition Environment (CE) 7.2



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Vendor Data

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



Please answer the following questions in the column to the right before you start.

Please let us know in the column to the right, why you want to have your <u>J2EE 1.4</u> / <u>EE 5</u> product certified?

Keep in mind and also address the following things in your answer:

What you as an ISV expect to gain from having your product certified?

What are your customer's expectations in regards to why you should have your product certified?

Do your expectations and those of your customers match, don't match, doesn't matter etc?



EE 5 Technical Product Profile. Why is it needed?

The purpose of this document is to get an overview of your technical system and your EE 5 product and software component(s). Please fill in all information properly, in order to speed up your certification work. This document will be used by your designated integration consultant before and during the certification. The document below is divided into two sections called

- 1) **EE 5 Technical System Information** contains information about your hardware and software (operating system, database, SAP EE 5 server, SAP NetWeaver Developer Studio, SAP licensing etc.)
- 2) **EE 5 Product Information** contains information about the following:
 - a) your EE 5 application (EE 5 specification adherence/conformance)
 - b) EE 5 SAP JVM
 - c) description of your EE 5 application components (product and software, such as JAR and WAR files)
 - d) descriptor files if needed
 - e) configuration needed within the SAP EE 5 environment for your EE 5 application to work
 - f) EAR file name and description
 - g) whether or not your application supports clustering, failover, load balancing etc.

As of SAP NetWeaver CE 7.2, at least one SAP NetWeaver Developer User license per developer in your team will be mandatory in order to go through the certification process. Upon request, SAP can check if your company already has purchased named developer user licenses before you begin with your integration work.

Having the proper development environment installed before, during, and after successful deployment certification enables you to support your product running on the SAP NetWeaver CE 7.2 platform and also entitles you to have access to the SAP support infrastructure.

SAP support can be used 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 Developer User license, you will:

- 1) Have access to the SAP support portal on the <u>SAP Service Marketplace</u>. For example, in the SAP Support Portal, SAP customers can obtain their software via download, and also have access to other important information related to SAP software.
- 2) Request a <u>development name space</u> for your Java development.
- 3) Have access to valuable information regarding <u>SAP SLD</u> (SAP System Landscape Directory).
- 4) Have access to SAP supported software covered under your license agreement.
- 5) Have access to SAP support packages as they become available.
- 6) Have access to SAP notes (they help you to analyze and solve technical problems).
- 7) Have the capability to open up a trouble ticket and submit it to SAP support in order to resolve SAP errors.
- 8) Have access to information regarding the <u>SAP Service- and Support Infrastructure</u>.

EE 5 Technical System Information

License Check:

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

You obtain this information from the server which has your SAP NetWeaver CE 7.2 Application Server JavaTM EE 5 Edition installed.

First, please record in the table below your server's host name (the machine which has your **64 bit** (!) SAP NetWeaver CE 7.2 Application Server JavaTM EE 5 Edition installed), the operating- and database system name and version used to start the SAP NetWeaver CE 7.2 Application Server JavaTM EE 5 Edition, the number and name of CPU's and the amount of RAM (physical memory of the server) the server has. Also, record the SAP Installation Number according to the results of your license check.

Hostname>	enter data here
64 bit operating system name and release>	enter data here
Database name and release>	enter data here
Number of CPU's>	enter data here
Name and Type of CPU>	enter data here
Amount of RAM (physical memory)>	enter data here
SAP System ID (SID)>	enter data here
SAP Installation Number>	enter data here This entry is mandatory



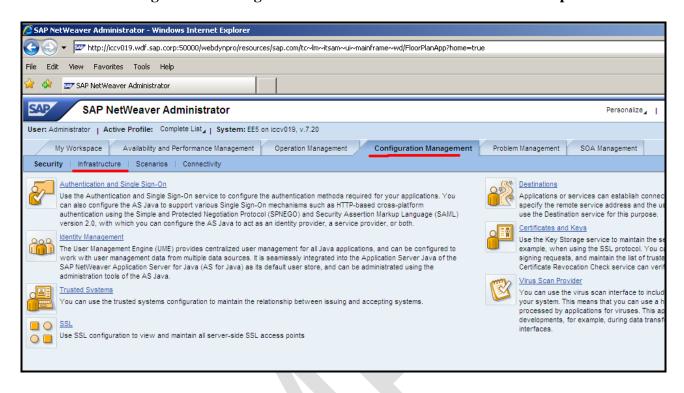
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<u>Second</u>, for certification purposes, and in order to determine if you have the correct license installed, you will have to use the <u>SAP NetWeaver Administrator (NWA)</u> tool in order to view and locate the license information.

1. Within your browser, enter http://<yourservername>:port/nwa. For example, if you have a hostname called wdfd00156398a and are using the default port of 50000, and then the URL syntax would be http://wdfd00156398a:50000/nwa. On the Welcome page as depicted below, enter a User ID and Password. Normally, the User ID is "Administrator" and the Password is the master password which you supplied during the SAP NetWeaver CE 7.2 installation.



2. Select Configuration Management and then the Infrastructure tab as depicted below.



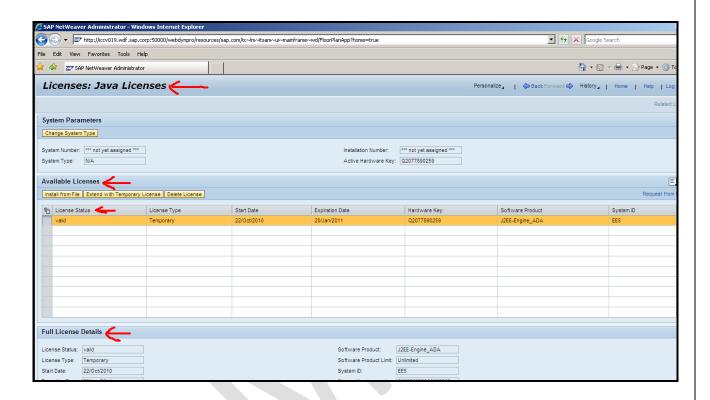


3. Select on the Infrastructure page Licenses as depicted below.





4. The results (Licenses: Java Licenses) by selecting Licenses as described in number 3 above should then look something like the figure depicted below. COPY YOUR LICENSE INFORMATION IN SCREENSHOT FORMAT INTO NUMBER 5 BELOW.



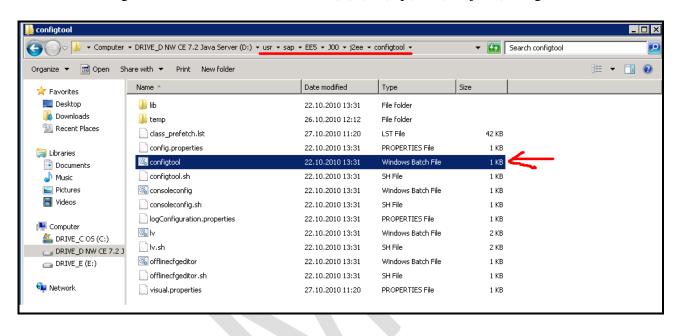
5. Copy your license information below as explained in number 4 above.



System Information Check:

Please provide information below in regards to your installed SAP NetWeaver CE 7.2 Application Server JavaTM EE 5 Edition. Remember, SAP support package 2 (SP2) or higher is needed in order to certify your product.

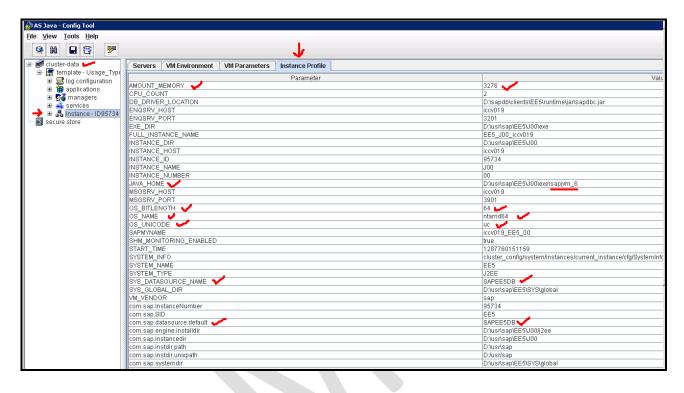
You obtain this information using the **config** tool (filename is configtool.bat when SAP NetWeaver CE 7.2 is installed on a Windows 64 bit operating system). For example, in the figure depicted below, the config tool is located under the folder (D):\usr\sap\EE5\J00\j2ee\configtool.



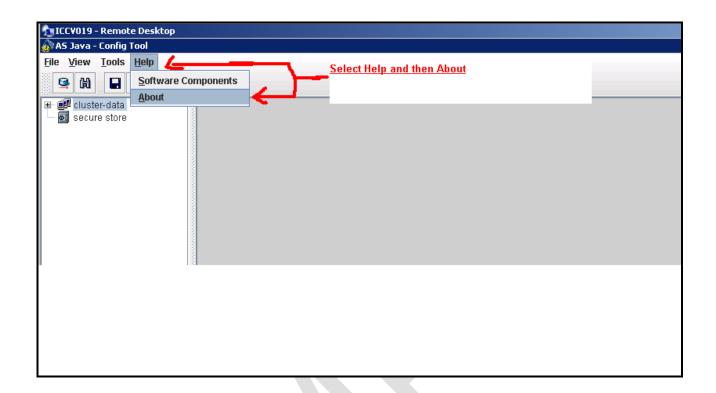
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Once you start the config tool, provide us with the "Instance Profile" and then with the "Help -> About" information as depicted in the sample figures below (don't worry about the comments written in red, they are just a description of what we are looking for). **Replace the examples below, with a screenshot** of your "Instance Profile" and also the "Help -> About" information.

At first how you can retrieve the information for the "Instance Profile":

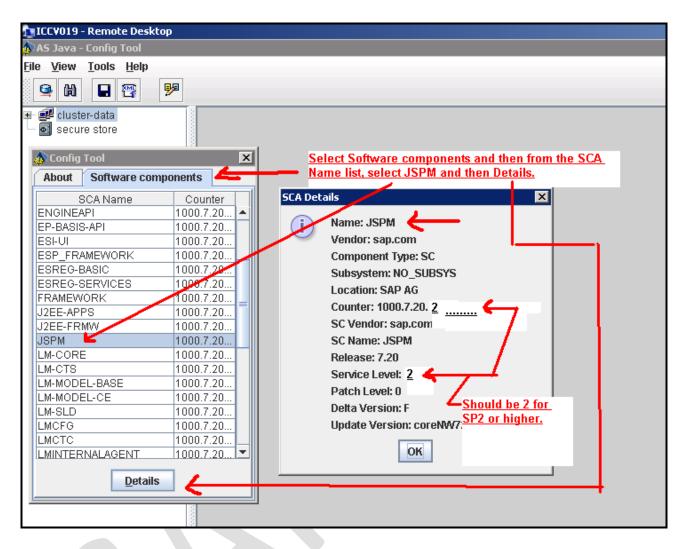


Next is the "Help -> About" dialog:





In the About dialog select the tab "Software components" to gain the information about the Service level:



EE 5 Product Information

Please provide information below in regards to your J2EE / EE 5 application.

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

Questions	Enter Your Answer Below
1. J2EE Specification	
Does your product adhere to the <u>J2EE 1.4</u> or Java <u>EE 5</u> specification? Please don't confuse this with the version of the JDKs available (<u>Java Development Kits</u> , <u>Java Virtual Machines</u> etc.).	Please select here
With the SAP NetWeaver CE 7.2 Application Server Java TM EE 5 Edition, the SAP EE 5 Application Server Java is <u>J2EE 1.4</u> and <u>EE 5</u> compliant.	
2. SAP JVM	
Does your product support the <u>SAP JVM</u> (Java Virtual Machine)? Please note, only the <u>SAP JVM</u> is supported during certification!	Please select here
3. J2EE/EE5 application server	
If you have an existing J2EE / EE 5 application, on which J2EE / EE 5 application server(s) does it run on?	Write your comments below
What J2EE specification does your existing application adhere to when it is either running on a J2EE SAP application server or on another J2EE / EE 5 application servers?	
What Java SDK does your application support when it is running on another J2EE / EE 5 application server? Please note, only the SAP JVM is supported during certification!	
See also "Migrating Existing Java EE Applications to AS Java".	
4. Architectural data	
Provide us with a list of all supported machine architectures, operating systems and databases (names and versions/releases are appreciated) for your (!) product.	Write your comments below

5. SCA/EAR file name

What is the name and size of your J2EE or EE 5 application (SCA/EAR file name)?

What are the name(s) and size(s) of the WAR and/or JAR archive(s) which are used by your J2EE application / EE 5 (EAR file)?

According to <u>SAP note 1223957</u> (you have access to the SAP note via the S user account you obtain by having purchased an SAP NetWeaver Developer User license) and the tool attached within the note, **you will need to pack your EAR file into a SDA file** (if not already available) **and then pack your SDA file into a SCA file** (if not already available). Do you know how to do this and why?

Please note: You must deploy your application in the SCA file format due to SAP support requirements. Thus, you will deploy your application as either in the EAR / SDA file format and you **must** also deploy your application in the SCA file format.

Examples: myfavorite.ear file 40 MB, myfavorite.war 25 MB and / or myfavorite.jar 15 MB file. Write your comments below

6. SAP tools

Are you familiar with the following tools:

- SAP Java EE 5 Development Tools
- Assembling Components into Enterprise Applications
- <u>Tasks</u> you might need to perform throughout the typical development cycle of your Java EE application(s)?

Write your comments below

7. Configuration

Please describe what needs to be configured within the SAP NetWeaver CE 7.2 Application Server JavaTM EE 5 Edition via the <u>Config Tool</u>, <u>SAP NetWeaver Administrator</u>, <u>Application Server Java Configuration</u>, <u>SAP NetWeaver Developer Studio</u> etc, in order for your J2EE / EE 5 application to work?

(For example, need to define a JDBC data source, need to load and deploy some libraries first in order to make them available for your J2EE / EE 5 application etc.). Write your comments below

8. Third-party software

Does your J2EE / EE 5 application make use of any other thirdparty software products/tools in order for your application to work properly?

If yes, please list the name(s), version(s)/release(s) etc.

For example, your J2EE / EE 5 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 **JAVA-EE-NW 7.2** certification. Five months later, company xyz brings out a new release for the product called xyz, for example 1.5, which includes a lot of new functionality. You elect / need to use the third party product xyz with the new release 1.5 in order for your certified product to work. 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!

Write your comments below



9. SAP Logging

Does your J2EE / EE 5 application make use of any logging mechanisms? For example, log4j or your own logging features / framework?

Write your comments below

Please note: Your J2EE / EE 5 application has to make use of the <u>SAP monitoring and logging framework</u> since we will conduct error handling tests during certification, requiring your product to intentionally write log messages into the SAP monitoring and logging framework.

Your application will need to generate intentional error messages making use of the SAP logging framework, which can then be used to identify and resolve problem cases in your application at customer site.

You will need to use the <u>SAP NetWeaver Administrator Tool</u> to view the logs of your deployed application in order to analyze errors and resolve them. See also <u>Developing Logging-Enabled Applications</u>.

See also "What's New in SAP NetWeaver Composition Environment 7.2" -> "What's New in SAP NetWeaver CE 7.2 SP2, SP3 etc., updates and corrections".

See also in the file called **java ee nw 72.zip** which you downloaded and extracted in the subfolder "*Other SAP Documents*" the file called

SAP_Logging_Bridge_NW_CE_7.2.pdf. The document describes how to integrate 3rd party Java logging frameworks into the SAP logging framework.

10. SAP SLD and SAP Solution Manager Ready

Are you familiar with the SAP SLD (System Landscape Directory) and how it works?

Write your comments below

In case you do not have an existing and working SLD in your infrastructure during the time of certification, we then need a screenshot of the following information in the SAP NetWeaver Administrator tool after your SCA file has been successfully deployed:

"Configuration Management" -> Infrastructure -> System Information -> Components Info -> Software Components In the "Software Components" section we must see the vendor, name, version, location of your deployed software component.

11. SAP websites

Are you familiar with important technical SAP web sites and what you can do or find there?

Write your comments below

<u>http://service.sap.com</u> Please describe briefly, the purpose of this site, and how it can help you? Please describe making use of a small example.

<u>http://help.sap.com</u> Please describe briefly, the purpose of this site, and how it can help you? Please describe making use of a small example.

<u>http://www.sdn.sap.com</u> Please describe briefly, the purpose of this site, and how it can help you? Please describe making use of a small example.

12. Troubleshooting

Do you know how to troubleshoot <u>SAP NetWeaver CE 7.2</u>?

Write your comments below

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 Marketplace. If you remember, an S-user account is made available after purchasing a SAP NetWeaver Developer User license.

You can also make use of the <u>SAP Software Developer Network</u> (<u>SDN</u>) 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.

13. Deployment descriptors

Even though it is now optional in native Java EE 5 technology, what XML <u>SAP deployment descriptors</u> do you use in order to <u>Create Enterprise Application Projects</u>?

If applicable, list the names of the descriptors below

14. SAP JSPM

Do you know the purpose of the SAP <u>JSPM</u> (Java Support Package Manager)?

Write your comments below

15. Clustering/Failover/Load Balancing/High Availability

Are/is/can your J2EE / EE 5 application(s) make use of <u>clustering</u>, <u>failover</u> (**XML schema element / attribute called fail-overenable**), <u>load balancing</u>, SAP NetWeaver AS Java <u>high availability</u>?

Write your comments below

Important: What are your customer expectations in regards to your application supporting or not supporting clustering and/or failover and or/load balancing and/or high availability? Who should handle theses tasks? SAP NetWeaver CE 7.2 Application Server JavaTM EE 5 Edition? Your J2EE / EE 5 application? The hardware infrastructure in place at your customer's site etc? Other? Please explain.

16. ABAP objects

Does your certifiable solution **rely on** any self-developed ABAP objects (e.g. function modules, reports, transactions etc.)?

If yes, are they located in your own registered namespace?

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 intensive use of ABAP development, eventually recommend an **ABAP add-on certification**.

Please explain, including namespace, ABAP objects (list all ABAP objects below)

1.

2.....

17. SAP WebDynpro

Do you have a SAP Java WebDynpro application to certify?

Please explain if applicable or not. Also, please include the filename, size in MB etc.

18. Documentation Do you have a "Technical/Component Operations Manual" for Write your comments below your product? The content of this manual should be: - Architecture and Overview of the Technical System Landscape. - Monitoring concept for your product. - Logging and tracing concept of the product. - Description of technical configuration data - Backup and restore procedures for your product - Maintenance of periodic tasks - High availability and load balancing concept - Listing of concepts for restart and monitoring of asynchronous interfaces - Starting and stopping of the component/product release. - Set up of printer(s) for your product. - How to perform Trouble shooting for typical problem situations. 19. Configuration data store

EE5 based components should preferably use the SAP Config Tool. If it is not possible for Java components to use the SAP Config tool, it would be acceptable that EE5 based components provide their configuration in XML or property files (human readable format).

Write your comments below

Is this the case for your product?

20. Backup & Recovery

Is online backup possible for your product and is there a documentation of the backup & recovery concept?

Write your comments below

21. Asynchronous interfaces

Do all asynchronous interfaces have concepts for restart, monitoring and error handling?

Write your comments below

An appropriate monitoring and error handling for asynchronous interfaces must include:

- Interface status.
- Capabilities to consistent stop and start of interface queues.
- Error list showing status and error code of each object.
- Volume statistic.
- Load statistic.

If your product uses asynchronous interfaces then the concepts for consistent restart, monitoring and error handling must be provided. The following information shall be provided by the monitor:

- Status and length of inbound and outbound queues.
- Object status.
- Date and time of action.
- Start/Stop/Restart possibility for the queues.

A restart and recovery concept must guarantee data consistency in case of crash recovery (crash of sending or receiving system). If there are special procedures to be considered, they must be described in detail in the Technical Operation Manual.

22. User management

Will your product provide User Management in the SAP environment?

Write your comments below

See also SAP User Management.

23. Product user/group/roles

Does your product provide any users/groups/roles and if yes are these documented?

Write your comments below

24. Authentication methods

Will your product provide any authentication methods? If yes, please name them on the right column.

Write your comments below

25. Authentication policies

Is it possible to configure authentication policies?

Write your comments below

Authentication policies are something like these ones:

- Minimum password length.
- User locking.
- Password change after first logon.
- Password change. No hard-coded passwords are allowed in the product.

It is required to use the authentication mechanisms provided by SAP Netweaver, if your product runs on <u>SAP NetWeaver CE 7.2</u> Application Server JavaTM EE 5 Edition.

Write your comments below

26. Authorization Mechanisms

Will your product limit authorizations of business and technical users for both administration and productive use to the business related minimum?

The product must provide the capability to separate the authorizations (roles) for different types of users (e.g. administrative and non-administrative users). Users must have the permissions that are required for their work (segregation of duties).

The authorization concept must be documented (e.g. documented and delivered roles per business and technical user).

- Authorizations/roles have to be provided for the technical users like batch users, workflow users, communication users, Web service users.
- All the external callable services of your product running on SAP NetWeaver CE 7.2 Application Server JavaTM EE 5 Edition have to be controlled by access controls (e.g. authority-checks).
- Search results may contain sensitive data and thus have to be displayed based on the access permissions.
- Your product must use or set the minimal necessary privileges on operating system and on file system level.
- It is required to use the authorization management of SAP NetWeaver, if the product release is running on SAP NetWeaver CE 7.2 Application Server JavaTM EE 5 Edition.

27. Auditing

Is it possible to log and archive data which is relevant for system audits (e.g. failed login attempts, start of critical transactions, changes to user data and authorizations, changes to configuration, etc.)?

Write your comments below

Write your comments below
Write your comments below
If yes describe how and if not
why not.
Write your comments below
Write your comments below
write your comments below

32. Customizing & Configuration documentation

Do you have the "Customizing & Configuration" documentation available for your product?

Write your comments below

This document should contain things like:

- Description of purpose and benefits of configuration and customizing a scenario / business process.
- Overview of the scenarios / business processes.
- Provides an overview on how different predefined behavior of the product release can be implemented according to foreseeable customer wishes.
- Description how the scenarios / business processes and the objects of the product release can be realized specifically for a customer requirement. All steps needed to implement the scenarios / business processes. Sequence and description of the individual activities needed to configure and customize the individual business objects and their dependencies.

33. Release Notes

Do you have a "Release Notes" document available for your product?

Write your comments below

If the current release of your product is not the first release, provide information on what has changed versus the previous release of your product.

34. Technical application documentation

Do you have the "Technical application" documentation (no marketing documents) available for your product?

Write your comments below

Explain in this documentation on what the benefits of your software are and how it is used. Specify the target groups of this documentation and make sure that you tailor the documentation to the needs of your target groups (Consultants and system administrators for example need different information from business users).

35. Installation documentation

Do you have the "Installation Information" documentation available for your product?

Write your comments below

It should contain the description of the technical implementation of your product, taking into account the combinations of operating systems and databases. It provides detailed descriptions of preparation, execution and follow-up of an installation.

36. Upgrade documentation

Do you have the "Upgrade Information" documentation available for your product?

Write your comments below

This documentation contains the description of the technical upgrade of the product release, taking into account the combinations of operating systems and databases. It provides detailed descriptions of preparation, execution and follow-up of an upgrade.

37. Master guide documentation

Do you have the "Master Guide" documentation available for your product?

Write your comments below

The documentation is the starting point for implementing the product release:

- Overview on product release, its component versions and its scenarios / business processes from a technical perspective.
- "Software Component Matrix" showing which components are required for which scenario / business process.
- Information if component release is mandatory or optional for a specific scenario / business process.
- Information on system landscape containing a minimal system landscape. Ideally also a typical or maximum deployment landscape. Focus is to show how the installable component releases can be distributed to systems, which instances can be combined in one system and which instances need a separate system.
- Technology that is used by the product release.
- Overall Implementation sequence including a description of preparation, execution, and follow-up of an implementation (possibly scenario specific, if appropriate).
- Lists the steps required to install the component releases in the appropriate order.
- Refers to the corresponding installation or configuration documentation for the individual component release.

38. Terms and definitions documentation	
Do you have the "Terms and definitions" documentation available	Write your comments below
for your product?	-
Here you should mention and publish all important terms and their	
definition. These must then be used consistently throughout the	
software interface and the documentation!	
Software interface and the documentation:	
39. Technical Interface documentation	
Do you have the "Technical Interface" documentation available	Write your comments below
for your product?	
E.g. any programming interfaces that are relevant for customers or	
consultants	
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	actional product description / main features
	provide a <u>brief overview in English</u> of the product you will deploy on your 64 Bit SAP
NetWea	aver CE 7.2 Application Server.
Propos	e at least five functional test cases for your product. They are part of the certification
test, ca	lled the functional test.
Test 1	Type in here
Test 2	
Test 3	
Test 4	
Test 5	
	duct error handling and logging description
	provide a brief overview in English of how error handling and logging of your J2EE / EE 5
	are conducted once your J2EE / EE 5 application has been deployed on your 64 Bit SAP
NetWea	aver CE 7.2 Application Server.
Propos	e at least five error and logging test cases for your product. They are part of the
	ation test, called the error and logging functional test. The test cases will be verified
using t	he <u>SAP NetWeaver Administrator</u> (NWA) tool.
Test 1	Type in hereerror xyz should bring in the log the message "xyz error 1234 encountered"
T 2	" etc.
Test 2	
Test 3	
Test 4	
Test 5	