☐ 1. Hardware Sizing

Ensure that Hardware Sizing is performed for Upgrade and Hardware requirements such as CPU, main memory, disk and swap are available before starting the Upgrade. The minimum swap space is 20 GB.

☐ 2. Disk Space Requirements.

Disk space in the file system is required for the SUM directory, the download directory, and directory DIR\_TRANS. The space required depends on the product you are updating and the number of support packages that are included in the Upgrade.

Read the *Master Guide* or *Upgrade Master Guide* for the specific product.

☐ 3.Space requirements in the database:

The Software Update Manager calculates the space requirements for the database. The free space required is in the range from 50 to 200 GB.

☐ 4. Check the software requirements:

Version Upgrade,Release Upgrade, Enhancement Package Installation,Support Package Application,Kernel Upgrade etc.. Source Release of the SAP system

☐ 5. Operating system-specific requirements

Check whether a Plan to Perform the upgrade of the operating system and database system are required .Check Product Availability Matrix on SAP Service Marketplace about which operating system and database versions are currently supported for the Target Release.

☐ 6. SAP Host Agent is used by the SUM (Software Update Manager) during SUM Initialization,So Ensure that SAP Host Agent is installed or updated.

☐ 7. Preparations at the Database Level

Check Oracle Home,SYSTEM Password,Oracle parameters,Oracle Database Backup,Ensure that brtools are working,DB Statistics are Updated,No issues in the Database Health Checks

☐ 8.Preparation at SAP System Level

You check the Central Services requirements such as Message Server and enque Server.Check the profile parameters rdisp/mshost,rdisp/wp\_no\_vb and rdisp/wp\_no\_enq

Check the OS user Authentication (Mostly SIDADM)

Check whether Operation Modes are Set and ensure that sufficient processes for dialog, update and btc are available.

You check the number of background processes which will run the Upgrade/Update.

☐ 9. Modification Adjustments are performed by Developmers in the Development System and Adopt the Changes(resulted through Update/Upgrade) into Transport Requests. These Transport Requests ensure that no Subsequent Changes are manually performed in Quality and Production Systems.

☐ 10. Download the Update/Upgrade Files from SAP Market Place based on the Stack File and Copy them to a Folder which is accesible to SUM Directory.

☐ 11.Preparations for distributed and high availability systems are taken care so that a Kernel Update or a Re-installation of Application Server may be required

**Update Procedure**

Actions for Starting and Using the Software Update Manager

☐ 1.You meet the requirements for the SUM directory (/usr/sap/SID/SUM)

☐ 2.You download and unpack the Software Update Manager on the host where you want to run the Software Update Manager. Typically, this is the host on which the primary application server instance is running. However, you can also use an additional application server instance.

☐ 3.You register SUM in SAP Host Agent .

☐ 4.You start the Software Update Manager.(./startup)

☐ 5.You can start the SUM Observer Monitor in a second browser window or on a mobile device.

**Upgrade Steps:**

☐ **1.Making Entries for the Specify Authentication Mechanism Roadmap Step**

You continue with roadmap step Specify Authentication Mechanism and make the corresponding entries.

☐ **2.User Actions During the Select Target Roadmap Step**

You continue with roadmap step Select Target and make the corresponding entries.

☐ **3.User Actions During the Confirm Target Roadmap Step**

You continue with roadmap step Confirm Target and make the corresponding entries.

☐ **4.User Actions During the Extraction Roadmap Step**

You make the entries for the **Extraction** roadmap step.

For a complete list of all phases, see Using the ABAP Phase List for the Update.

You enter the path to the stack configuration file.(.XML File)

Release upgrade only: You enter the path to the download directory.

Release upgrade only: You enter the password of user DDIC.

You check the configuration of sapcpe.

Enhancement package installation and SPS update: You implement the SAP Notes that the Software Update Manager displays.

You confirm all obsolete notes, reset all non-adjusted objects with active SAP version to SAP standard versions, carry out the outstanding modification adjustments.

**☐ 5. User Actions During the Configuration Roadmap Step**

You continue with roadmap step Configuration.

To perform the roadmap step, the Software Update Manager needs certain information from you. If possible, default values appear that you can confirm or change.

You enter paths and parameters . This includes the following:

Enhancement package installation and SPS update: You enter the password of user DDIC.

You choose your preconfiguration mode.

You enter the port number for internal communication.

You enter the password for user system.

Release upgrade only: You check the versions of the SAP kernel, tp, and R3trans.

Release upgrade only: You check the SAP Notes for the add-ons.

Release upgrade only: If you are running an MCOD system, confirm the question.

If you perform a Combined Upgrade & Unicode Conversion (CU&UC), confirm the question.

You specify the software that you want to include in the update.

Release upgrade only: You enter mount directories for the languages.

You check the SPAM version.

Release upgrade only: You upload additional packages.

You enter the path to the stack configuration file.

You decide about the add-ons.

You confirm the support packages, if necessary.

You include support packages.

You enter the request for the modification adjustment, if necessary.

You make entries for the shadow instance installation [page 140].

Release upgrade only: You decide about reusing the shadow instance profiles.

**☐ 6.User Actions During the Checks Roadmap Step**

You continue with roadmap step Checks and make entries, if necessary.

At the end of the step, perform the requested user actions.

Release upgrade, and enhancement package installation with a preconfiguration mode other than *Single System*: You decide about using the RASUVAR<x> reports to save variants.

You check the results of the system check.

If an error message is displayed during the check for database triggers (SLT) on exchange tables, you correct the error.

Actions After Performing the Preparation Roadmap Steps

You have to perform the following checks that are not supported by the Software Update Manager:

You evaluate the results of the preparation roadmap steps in the window that appears after the *Checks* roadmap step has completed.

**☐ 7. Actions During the Preprocessing Roadmap Step**

You continue with roadmap step Preprocessing

You check the Software Update Manager Note, the application-specific SAP Note, and your database-specific SAP Note for new information and changes.

You confirm any unconfirmed support packages.

You check the list of ABAP Dictionary objects with active SAP versions, which have been modified but not yet adjusted, before they will be reset automatically to the SAP standard versions.

Release upgrade only: You enter the keywords for add-ons, if necessary.

Only valid for 'Target Release': SAP NetWeaver 7.5Release upgrade only: If applicable, you examine and process the results of the consistency checks for custom software components and ABAP repository objects that SUM will rescue for the ABAP repository of the target system.

Release upgrade only: You upgrade your operating system or database to the required version now at the latest, or you import any software you still need.

Release upgrade only: You remove conflicts between customer tables and new views by deleting the customer tables.

You release the locked objects and confirm repairs. You have to do this in the REPACHK2 phase at the latest.

You clean up outstanding updates. You have to do this in the JOB\_RSVBCHCK\_R or JOB\_RSVBCHCK\_D phase at the latest.

You make sure that you can recover the old SAP kernel if this becomes necessary.

You lock the ABAP Workbench.(Lock the Developments)

Release upgrade only: For preconfiguration mode *Standard* or *Advanced*: You can lock the ABAP Workbench in phase LOCKEU\_PRE or in phase REPACHK2, in which you have to perform the step at the latest.

Enhancement package installation and SPS update: For preconfiguration mode *Standard* or *Advanced*: You lock the ABAP Workbench in phase REPACHK\_CLONE. In contrast to the release upgrade, the Software Update Manager requires this action in one phase only.

You release and confirm all open repairs in phase REPACHK2 at the latest.

Release upgrade only: For *downtime-minimized*: You lock the ABAP Workbench in phase REPACHK2 at the latest.

Enhancement package installation and SPS update: You already lock the ABAP Workbench in phase REPACHK\_CLONE. In contrast to the release upgrade, the Software Update Manager requires this action in one phase only.

You process any incompleted conversion requests and restart logs.

Modifications: You confirm the request, if necessary.

Release upgrade only: As of phase START\_SHDI\_FIRST, you can only log on with front-end software [page 71] that is compatible with the target release.

You now clean up outstanding updates, RFC calls, and open data extraction orders as well at the latest.

Release upgrade only: Modifications: If you selected preconfiguration mode *standard resource use* or *high resource use* during the *Configuration* roadmap step, you adjust modified SAP objects with the SAP standard versions.

Enhancement package installation and SPS update: Modifications: You adjust modified SAP objects with the SAP standard versions.

You check if SUM has generated and exported an safety transport request for objects adjusted with SPDD.

You check the RSINDCRE.<SID> log file for any errors that may have occurred during the creation of secondary database indexes.

You perform actions to prepare your SAP system for the downtime, among which you are asked to isolate the primary application server instance [page and back up the /usr/sap/<SID> directory including the complete SUM directory. You may also need a backup of the home directory of user <sid>adm.

**☐ 8. Actions During the Execution Roadmap Step**

You continue with roadmap step Execution . While the processes of the *Execution* roadmap step are running, the system is in downtime.

After the shutdown, you reimport the current version of the profile into your SAP system to adjust the instance profile by using transaction RZ10.

Release upgrade only: Modifications: If you selected preconfiguration mode *low resource use* during the *Configuration* roadmap step, you adjust modified SAP objects with the SAP standard versions.

Changes made to the environment of user <sid>adm before the update are saved. You can repeat them after the update, if necessary.

If you are running the ASCS instance on a separate host, and the operating system on this host is different from that on the primary application server instance, you will be prompted by the Software Update Manager to install the latest SAP kernel on the separate host with the ASCS instance.

The Software Update Manager asks you to perform the following actions:

You back up the database.

You change the database recovery mode.

**☐ 9. Actions During the Postprocessing Roadmap Step**

You continue with roadmap step Postprocessing

Release upgrade only: You configure the automatic start of the SAP start service with the start of the operating system, if required.

If prompted, you can now start to generate loads for your SAP system.

You remove the P errors.

You can perform the modification adjustment for repository objects now and use the related transport request during subsequent updates.

You take into account that the Software Update Manager performs a temporary renaming of SPAU transport request owner and client if you carry out the modification adjustment during the update.

The Software Update Manager performs cleanup activities in the background. However, you can already use the system again.

You take into account that the Software Update Manager saves selected log files and control files in different directories, which SAP Support can use for error analysis if there are problems after the update.