Master Guide CUSTOMER

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# SAP Enhancement Package 8 for SAP ERP 6.0 Powered by SAP NetWeaver

Using SAP Enhancement Package 8 for SAP ERP 6.0 and SAP NetWeaver 7.5



# **Document History**



## Caution

Before you start the implementation, make sure you have the latest version of this document. You can find the latest version at the following location: &FP\_URLSAPServiceMarketplace; / &FP\_AliasInstallationGuide; / . We strongly recommend that you use the documents there. The guides are updated regularly.

The following table provides an overview of the most important document changes.

#### Table 1

Version	Date	Description
1.0	2016-01-20	Initial version
1.1	2016-03-11	Chapter "Integration of SAP Customer Relationship Management" added
1.2	2016-04-22	Correction: EHP8 only contains the software component Central Application

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# 1 Getting Started

# **SAP Enhancement Packages for SAP ERP** 6.0

#### **Enhancement Package Key Concept** 2.1

We have adapted our major release strategy to better fit your adoption cycle. To ensure that you benefit from new developments and innovations while minimizing the impact on your core operational systems, SAP uses enhancement packages to speed up the delivery of new functions.

With SAP enhancement packages, you can install and activate new functions depending on your business needs without having to perform a system upgrade.

You can selectively implement the new functions and activate the software upon business demand. As a result, you can isolate the impact of software updates and make new functions available faster due to shortened test cycles.

## **Implementation**

There are three different scenarios to implement an enhancement package:

- Installation of an enhancement package on an existing SAP system (update)
- New installation of an SAP system including an enhancement package (installation)
- Upgrade of an SAP system including an enhancement package (upgrade)

To implement new business functions you carry out the following two steps:

- Technical installation of an enhancement package
- Activation of business functions using the switch framework technology

#### i Note

Keep in mind that you cannot mix the installation of different enhancement package versions in your ABAPbased SAP system. You can have just one enhancement package version in the SAP system.

From a business point of view, functional enhancements are grouped into business functions (BFs). The technical installation of the business functions does not change the system behavior. The new functions are available in the system, but are not active. After the installation, no user interface or process change takes place. You must explicitly activate new functions so that they become visible in the system. As a result, changes are predictable and there are no side effects as only the activated areas change.

With the switch framework technology (transaction SFW5), it is possible to control the activation of new SAP objects in ABAP-based SAP systems. The activation process triggers a background job that automatically performs all changes in the SAP system.



## Caution

You cannot reverse most business function once they are activated. Due to technical restrictions, only a limited number of business functions are reversible.

After you have activated a business function, you can see the changes and new developments in the SAP system, for example:

- Menu entries
- New screens
- New fields on the application user interfaces
- IMG activities required for the implementation
- New table entries in Customizing tables and system tables

You can create a transport request with the current settings of the switch framework. You can check functional changes and the impact of an activated business function in advance in the business function documentation.



#### Recommendation

Test the installation and activation on a sandbox system.

#### Maintenance

SAP enhancement packages have Support Packages of their own that are equivalent to the Support Package versions of the underlying SAP system. We highly recommend installing the enhancement package in combination with the latest available Support Package stack. This approach reduces installation, modification adjustment, and testing effort. Using this strategy, you can install SAP enhancement packages as a normal maintenance activity together with Support Package stacks.

An enhancement package requires a specific Support Package stack level in the source release SAP system.

## Note

If the SAP system is on a lower Support Package stack level, all relevant Support Package stacks for the EHP installation are automatically included into the download queue by the Maintenance Planner, as well as the latest available Support Packages for the enhancement package.

## Tools

The enhancement package installation requires the following tools:

## SAP Solution Manager

Use of SAP Solution Manager is mandatory.

SAP recommends that you use SAP Solution Manager 7.1, SPS 10 or higher.

For more information, see SAP Support Portal at | support.sap.com/solutionmanager / ].

#### Maintenance Planner

Through Maintenance Planner, SAP Solution Manager allows you to maintain your system landscape and plan changes in the system landscape.

To ensure availability of landscape data in Maintenance Planner, follow the steps described in the SDN Maintenance Planner - Prerequisites and Initial Setup at scn.sap.com/community/it-management/alm/ blog/2015/07/10/maintenance-planner-prerequisites-and-initial-setup &.

## Installation and Update Tools

Installation or upgrade tools (depending on your scenario).

For the new installation of an SAP system including an enhancement package you use the standard installation tool Software Provisioning Manager (SWPM).

To install an enhancement package on an existing SAP system, as well as for the upgrade of an SAP system to a higher release including an enhancement package, you use the Software Update Manager (SUM).

For more information about SWPM and SUM, see the documentation at help.sap.com/sltoolset / ].

## 2.2 Key Facts About Enhancement Pakages

The following list summarizes important facts about the enhancement package concept and recommended approaches:

- You cannot mix the installation of different enhancement package versions in your ABAP-based SAP system. You can have just one enhancement package version in the SAP system. This means, if you have already updated technical usages to a previous EHP you need to apply the current EHP to those components as well.
- SAP enhancement packages are cumulative, meaning that each new enhancement package includes new innovations of its own as well as all innovations delivered with prior packages.
- We recommend installing the latest available enhancement package version.
- Install enhancement packages and Support Packages in one single step (this includes the preconditioned Support Packages).
- SAP enhancement packages have Support Packages of their own that are equivalent to the Support Package versions of the underlying SAP system.
- SAP enhancement packages have the same maintenance period as the underlying core application.
- The installation of an enhancement package is irreversible.
- As long as you do not activate a business function, the installation of an enhancement package has no impact on existing business processes or user interfaces.
  - You can only activate business functions in ABAP-based systems, not in Java-based SAP systems.
- The activation of most business functions and extension sets is irreversible. Only a small number of business functions is reversible.
  - Test the installation process and activation of new functions in advance on a sandbox system. Ensure that you evaluate the runtime and the SAP system behavior, its dependencies and impacts. Make sure that your SAP system is free of errors before going live.

# 2.3 Software Component Overview of Enhancement Package 8 for SAP ERP 6.0

Understanding the architecture of Enhancement Package 8 for SAP ERP 6.0 software is key to understanding the enhancement package concept.

Enhancement Package 8 for SAP ERP 6.0 is based on SAP NetWeaver 7.5 and consists of different product instances and software components (see Enhancement Packages and Software Components: Architecture Overview [page 11]). Each of them represents a particular functional component of the software.

The following tables give an overview of the software components included in Enhancement Package 8 for SAP ERP 6.0. The list of components provided here only represents an excerpt and is **not** complete.

## **ABAP Technology EHP8 of SAP ERP 6.0**

The following table contains the ABAP technology components required to run Enhancement Package 8 for SAP ERP 6.0:

Software Compon	ent	Release

MDG FOUNDATION	749
SAP_BS_FOUNDATION	748
SAPAP	750
SAP WEB UIF	748

The following table contains the components of SAP NETWEAVER 7.5 – Application Server ABAP required to run Enhancement Package 8 for SAP ERP 6.0:

#### Table 3

Software Component	Release		
SAP ABA	7.50		
SAP BASIS	7.50		
SAPBW	7.50		
SAP HOST AGENT	7.21		
SAPIGS	7.20_EXT		
SAP IGS HELPER			
SAP KERNEL 64-BIT und alternative SCV	7.45 64 BIT UNICODE		
SAP NW GATEWAY FOUNDATION	7.50		
ST-PI	7.40		
USER INTERFACE TECHNOLOGY	7.50		

The following table gives **examples** of component versions provided by Enhancement Package 8 for SAP ERP 6.0; the list of components is **not** complete:

Table 4

Table 4				
Software Component	Release			
Central Applications				
SAP_APPL	6.18			
EA-IPPE	618			
SEM-BW	748			
FINBASIS	748			
Human Capital Management				
EA-HR	608			
SAPHR	6.08			
Enterprise Extensions				
Financial Services				
EA-FINSERV	618			
Retail				

EA-RETAIL	618			
Industry Solutions				
Oil & Gas				
IS-OIL	618			
IS-PRA	618			
Catch Weight Management				
IS-CWM	618			
Utilities/Waste&Recycl./Telco				
FI-CA	618			
IS-UT	618			

## Java Technology EHP8 for SAP ERP 6.0

The following table contains the Java components of the SAP ERP Central Component required to run Enhancement Package 8 for SAP ERP 6.0:

#### Table 5

Table 5							
Java Components							
Java Web Applications	Portal Content	XI Content					
SAP FSCM - Biller Direct	BP* (Business Packages for ERP)	XI CONTENT* (XI Content for ERP)					
SAP Learning-Sol Frontend CP							
SAP XSS (Self Services)							
SAP XECO (ERP E-Commerce)							

To run these Java applications, SAP NETWEAVER 7.5 or higher is required.

Java components include the general Java Web applications such as SAP XSS on the one hand, and content packages on the other hand. The content packages are available for the product instances SAP NetWeaver - EP Core/Enterprise Portal. The content is installed in addition to product instance SAP NetWeaver - EP Core.

If you want to install one or more Java components, you need the Application Server Java, which is installed by SAPinst

The software components of SAP ERP Central Component (SAP ECC 6.0, product instance SAP ECC Server) cannot be installed individually, they are always installed as one instance. For more information, see SAP Service Marketplace at support.sap.com/sp-stacks.

The SAP ERP Central Component 6.0 comprises the following components:

- SAP ECC Server
- SAP XSS (Self Service)
- SAP XECO (ERP E-Commerce)
- XI Content

With SAP ERP you also receive a series of industry business solutions that were formerly delivered as Industry Solution add-ons. With release 6.00 these add-ons were integrated into the product instance SAP ECC Server. The following industry business solutions are available with SAP ECC 6.0:

- SAP Catch Weight Management
- Defense Forces & Public Security
- SAP Discrete Industries and Mill Products
- SAP Healthcare/SAP Ambulatory Care Management/i.s.h.med
- SAP for Insurance
- SAP Media
- SAP for Mining
- SAP Oil & Gas
- SAP for Professional Services
- SAP Public Sector Collection and Disbursement
- SAP Retail
- Student Lifecycle Management
- SAP Telecommunications
- SAP Utilities
- Contract Accounts Receivable and Payable

You can use many of the industry business solutions by activating the corresponding business functions and business function sets. You use them to configure your ECC system to the requirements of the industry business solution.

To find out which industry business solutions you can use, refer to the Product Availability Matrix at support.sap.com/pam&.

## **More Information**

For more information about the SAP ERP 6.0 technology or about the architecture of the Switch Framework, see the *Master Guide for SAP ERP 6.0* on SAP Service Marketplace at service.sap.com/erp-inst > SAP ERP 6.0 > Planning .

Important SAP Notes you need to consider when installing the enhancement package are summarized in SAP Note 2171334 (EHP8 for SAP ERP 6.0 SP Stacks - Release & Information Note).

For more information about the limitations for SAP enhancement packages for SAP ERP 6.0, see SAP Note 998833 (Release Restrictions SAP ERP 6.0 – Enhancement Packages).

# 2.4 Enhancement Packages and Software Components: Architecture Overview

Prior to the availability of the enhancement package delivery architecture, it was necessary to upgrade the complete SAP system instance to a new release, for example, from SAP R/3 4.6C to SAP ERP 6.0. With enhancement packages, it is now possible to update individual software components of your SAP ERP system or to install new software components, always based on your choice of technical usage.

#### 1 Note

Make sure to check the SAP NetWeaver Upgrade Master Guide of the SAP NW upgrade target release if you are planning a NetWeaver upgrade. It contains specific information about SAP NetWeaver prerequisites, upgrade

paths and upgrade dependencies. You find the guides for the SAP NetWeaver Platform on the SAP Help Portal at //http:help.sap.com/netweaver ...

SAP ERP 6.0 ECC Server consists of two different types of software components:

- Application-related software components, such as SAP-APPL
- SAP NetWeaver-related software components, such as SAP BASIS or SAP ABA

After an update to enhancement package 8, which consists of the technical usage *Central Application*, all software components have been updated to 6.18, and SAP NetWeaver 7.5 Application Server ABAP.

A verification of your own component version can be evaluated by logging into your SAP ERP ABAP system and choosing System Status in the menu. The Component Information pushbutton displays the details. In addition, each software component has its own support packages. For more information, see SAP Service Marketplace at support.sap.com/sp-stacks.

The business functions, and thus the business-related features that you plan to use, dictates which software components you must install in your existing system instances. The following figure helps you to understand the relationship between business functions, technical usages, software components, and product instances:

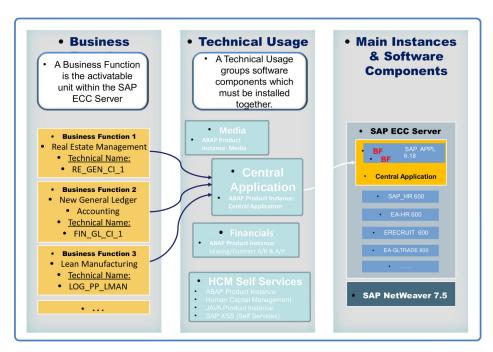


Figure 1: Example for Mapping Process: Relationship Between Technical Usages, Business Functions, and Software Components

#### Business Function

The business functions in an enhancement package define the functional scope, which you can activate and use in the supported business process. A business function has two meanings:

- It is the business entity that provides information about process enhancements and information about what you have to install to use those process enhancements.
- It is the technical entity in the ABAP instance that can be switched on using the switch framework transaction (SFW5).

## 1 Note

Business Functions are available for ABAP-based systems only, not for JAVA based systems. There are no business functions for JAVA systems or instances.



## 📫 Example

The business function New General Ledger Accounting, with the technical name FIN GL CI 1, comprises the enhancements within the new general ledger accounting functions. This business function is part of the technical usage Central Applications.

## Note

For SAP ERP, transaction SFW5 covers the following three types of business functions:

#### **Enterprise Extension**

These business functions are available for full releases of SAP ECC (up to SAP ERP 6.0). You use them to activate a number of industry-independent and industry-specific applications and business processes for each business function.

## **Enterprise Business Functions**

You use these business functions to activate the developments for the enhancement packages. SAP ERP contains both industry-independent and industry-specific enterprise business functions.

### Industry business functions

These business functions contain functions that belong to the industry enhancements introduced with SAP ERP 6.0.

You cannot activate industry business functions of an industry business function set in parallel to other industry business functions in the same ABAP-based system or instance. Therefore, some business function sets are available where the requirements of several industries are linked with one another, for example, the SAP Oil and Gas with the Utilities business function

Each business function has its specific documentation and also test cases that allow you to test the new functionality.

## **Business Function Sets**

Business functions are grouped in business function sets in your ABAP-based ERP system. There are two types of business functions sets:

#### **General Business Function Set**

A general Business Function Set contains the enterprise business functions and the Enterprise Extensions. These contain functions for the standard applications of Accounting, Logistics, Human Capital Management, and some additional industry-specific applications.

## **Industry Business Function Set**

You use industry business function sets to change your clients of an ERP system over to the applications and solutions tailored for an industry. This business function set covers all industry business functions that can be used for an industry solution to be implemented exclusively on one system or one instance.



## Recommendation

A business function set is activated when you have activated at least one of the related business functions. We therefore recommend that you activate the business function set when you start configuring your

system, since the required industry-specific view of your Implementation Guide is only created once you have activated the related business function.

## **Technical Usage**

A technical usage refers to a set of product instances. All product instances of a technical usage have to be installed to enable a business function. Each business function is dedicated to a technical usage. In EHP8 for SAP ERP 6.0 all business functions are included in the technical usage Central Applications which is installed by default. For more information, see SAP Note 2258099 ...



## Example

- The technical usage Central Applications refers to the product instance SAP ECC Server, which is an ABAP main instance.
- The technical usage Human Capital Management refers to two different product instances: the first one is Human Capital Management, which is an ABAP main instance, and the second one is SAP Portal Content, which is a JAVA main instance. A technical usage tells you which software component must be installed in your SAP ERP 6.0 system. The main instance tells you where to install it, in the ABAP or Java part of your system. The technical usage can also include content for a SAP Portal or SAP NetWeaver Exchange Insfrastructure (SAP NetWeaver XI) system.

### Main Instances and Software Components

A software component is the smallest maintainable unit within the SAP software model; thus, the basis for support packages. For installation purposes, a software component is assigned to one or several product instances. All content (BI, EP, PI content) is shipped as software components.



## Example

The technical usage Central Applications consists of several software components (see above Figure: EA-FINSERV 618 and SAP APPL 6.18). From a technical point of view, both software components must be installed to launch the new function New General Ledger Accounting.

The product instance (or main instance) comprises a set of software components.



## Example

The product instance in figure 1 is SAP ECC Server, which consists of several application-specific software components such as SAP APPL, SAP HR, or EA-Retail.

With enhancement packages, new or enhanced objects that are contained in special content product instances are shipped. The following types of content are available:

- Role Content provides a single point-of-access for SAP business applications, reports and technologies. For example, it allows a seamless integration of classic SAP GUI-based transactions and Web Dynpro-based applications. There are two different options to run role content:
  - SAP Netweaver Business Client (NWBC)

The NWBC enables you to directly access PFCG roles on the SAP NetWeaver Application Server ABAP. Note that the NWBC is automatically installed with your ABAP installation.

#### **SAP Netweaver Enterprise Portal**

The Enterprise Portal (EP) enables you to run portal roles, which are captured in business packages. The EP allows an easy integration of JAVA applications and supports complex multi-system scenarios.

Business Intelligence content (BI content - previously known as SAP NetWeaver Business Warehouse content or SAP NetWeaver BW content)

In your BW system, new or changed objects as part of the enhancement packages are stored in own InfoAreas.

SAP NetWeaver Exchange Infrastructure content (XI content) and enterprise services

As part of the enhancement packages you receive additional enterprise services. The implementations of these enterprise services are in the software component versions of your ABAP-based system. In the XI system, these enterprise services are grouped in their own software components and namespaces for the enhancement packages. For more information about these enterprise services, see the documentation of the business function and the related release notes.

### **Industry Business Solutions**

As mentioned in the previous chapter [page 8], industry business solutions have been integrated into the SAP ECC Server. There are different ways to make the functionality for an industry business solution available. SAP ERP therefore distinguishes between the following types of industry business solutions:

Industry business solutions delivered as central component

These industry business solutions are available immediately after the installation of the product instance SAP ECC; you do not have to activate a business function.

Industry business solutions available as business function set (industry enhancement)

You use the business function set to activate the industry-specific functions that change your ECC system over to the requirements of a specific industry. These business function sets are also available with SAP ECC; you do not have to install an add-on.

Industry-specific business processes or industry business solutions delivered as Enterprise Extension or **Enterprise business function** 

From a technical point of view Enterprise Extensions are delivered and installed as an add-on. You have to install these industry business solutions separately.

You activate Enterprise Extensions using the switch framework (Transaction SFW5). Once activated they cannot be deactivated. Enterprise Extensions are the precursors of business functions.

## More Information

- For more information about the different industries, refer to the individual Master Guides for each industry. You find them at service.sap.com/instguides ... Note that the Master Guides for the industries cover industry scenarios running in the entire SAP Business Suite, not just SAP ERP.
- For more information on the individual business functions, see | help.sap.com/erp > SAP ERP Central Component > <Release> > Application Help > <Language> > Business Functions (SAP Enhancement Package 8 for SAP ERP 6.0) > Business Functions in SAP ERP \(\).
- For more information about roles, refer to SAP Note 1621361 ...

#### 2.5 **Technical Changes in SAP Enhancement Package 8 for** SAP ERP 6.0

This section gives an overview of the technical changes in the latest enhancement package version:

Use of SAP Solution Manager is mandatory.

SAP recommends that you use SAP Solution Manage SAP Solution Manager 7.1, SPS 10 or higher.

Make sure that you have correctly defined and maintained your system landscape in SAP Solution Manager (transaction SMSY). To verify and correct your system landscape, SAP highly recommends that you use Landscape Verification 1.0 for SAP Solution Manager 7.0, which is an add-on to your SAP Solution Manager 7.0 system. This add-on allows you to identify and correct issues in your SAP Solution Manager landscape before they cause problems, for example during a system update. Examples of errors are missing connections or wrong assignments of products to technical systems. For each type of error, a generic description for the solution is provided.

For more information about the landscape verification add-on, see SDN at www.sdn.sap.com/irj/sdn/alm? rid=/webcontent/uuid/70fc3790-7ec9-2d10-57ad-95b2d0d1185d ...

## Recommendation

Before installing the enhancement package, we recommend that you install the landscape verification addon to check your landscape setup and your data and to correct data should it be necessary.

Business Process Change Analyzer (BPCA) available as of Solution Manager 7.0 EHP1

The BPCA allows you to identify critical business processes affected by planned change events. It helps you decide, which support package, enhancement package or custom-triggered changes are suitable for your SAP system.

## Note

You can use the BPCA for enhancement packages only, if you work with defined business processes and have created a technical bill of material for each relevant process step.

Direct installation of add-ons

During the Design Phase and when using Maintenance Planner (apps.support.sap.com/sap/support/mp/b/) you can install add-ons directly. You can select or deselect individual add-ons.

## Note

You can skip the selection of add-ons during the Design Phase and select add-ons at a later stage in a separate step.

Introduction of the Software Logistics Toolset 1.0

With the Software Logistics Toolset 1.0 SAP delivers improvements to the software logistics tool for your current system landscape on a continuous basis. One component of the Software Logistics Toolset 1.0 is the Software Update Manager (SUM), which evolved from upgrade and enhancement package tools for SAP Netweaver-based system maintenance. The Software Update Manager (SUM) encapsulates functions of SAP ehpi, SAP Jup and JSPM.

For more information, see central release note for SL Toolset 1.0 – SAP Note 1563579 / and help.sap.com/ sltoolset />

- For the release upgrade SAP produced a **new ECC Server export** comprising AS ABAP 7.50, ECC Server 6.0, and the technical usage Central Applications. Using this export, you can directly create a real EHP 8 system by installation or upgrade without including EHP 8 parts. Beneath AS ABAP 7.50 it comprises the EHP 8 components, as well as SAP APPL 6.18, SAP BS FOUNDATION 748 and SAP WEP UIF 748.
- Human Capital Management requires SAP APPL version 6.18

If you are using Human Capital Management, that is, if, for example, you have installed the instance Human Capital Management, and you update to EHP 8, the software component SAP APPL is automatically updated to version 6.18 as well, when you install EHP 8 for SAP ERP 6.0. To maintain consistency, software components EA-HR, SAP HR, and SAP APPL all have to be updated to the enhanced versions of EHP 8, which are:

- EA-HR 608
- SAP HR 6.08
- SAP APPL 618

This might increase the runtime of the EHP installation.

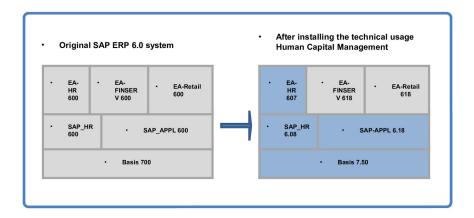


Figure 2: Update of SAP APPL When Updating Human Capital Management to EHP 8

## More Information

- For important SAP Notes you need to consider when installing an enhancement package, see SAP Note 2171334 (SAP ERP Enhancement Package 8 - Release Information Note).
  - For more information about the limitations of SAP enhancement packages for SAP ERP 6.0, see SAP Note 998833 / (Release Restrictions SAP ERP 6.0 – Enhancement Packages).
- For further details on the landscape verification for Solution Manager, refer to the Component Installation Guide for ERP at |> service.sap.com/erp-inst /> SAP Business Suite Applications > SAP ERP > SAP enhancement packages for SAP ERP 6.0 > SAP Enhancement Package 8 for SAP ERP 6.0 ].

## 2.6 Landscape Options

For more information about the setup of your system landscape, see the *Planning Guide — SAP Business Suite Landscape Implementation* at service.sap.com/erp-ehp8-inst ...

In this planning guide you find information on different installation options for SAP NetWeaver, as for example, hub system or side car system.

For information on the interoperability of different SAP NetWeaver and SAP Business Suite versions, see SAP Note 1388258.

## i Note

Be aware, that if you are currently using Enterprise Portal, Business Warehouse and/or Process Integration in conjunction with SAP Business Suite applications, you will have to upgrade those SAP NetWeaver Hubs to 7.31 or higher before you can upgrade SAP ERP to SAP Enhancement Package 8 for SAP ERP 6.0.

For general information on the system landscape, see Tools and Resources for Planning Your System Landscape [page 42].

#### **Business Suite Enablement**

If you are using SAP Business Suite applications that are based on an Application Server Java and on hub systems such as Enterprise Portal Hub, BW Hub, or PI Hub, the following table shows which releases of SAP ERP you can install with which release of the SAP Application Server JAVA:

Table 6

					T	T	T	
	SAP ERP	EHP2 for	EHP3 for	EHP4 for	EHP5 for	EHP6 for	EHP7 for	EHP8 for
	6.0	SAP ERP						
		6.0	6.0	6.0	6.0	6.0	6.0	6.0
SAP NW 7.00	Х	Х	Х	Х	Х	Х		
SAP NW 7.01	Х			Х	Х	Х		
SAP NW 7.02	Х			Х	Х	Х		
SAP NW 7.03	Х			Х	Х	Х		
SAP NW 7.30				Х	Х	Х	Х	
SAP NW 7.31				Х	Х	Х	Х	Х
SAP NW 7.40							Х	Х
SAP NW 7.5								Х

The following table shows which releases of SAP ERP you can install with which release of the SAP Application Server ABAP when you are using sidecar or embedded systems:

Table 7

	SAP ERP 6.0	EHP2 for SAP ERP 6.0	EHP3 for SAP ERP 6.0	EHP4 for SAP ERP 6.0	EHP5 for SAP ERP 6.0	EHP6 for SAP ERP 6.0	EHP7 for SAP ERP 6.0	EHP8 for SAP ERP 6.0
SAP NW 7.00	Х	Х	Х					
SAP NW 7.01				X				
SAP NW 7.02					X			
SAP NW 7.03						Х		
SAP NW 7.40							Х	
SAP NW 7.5								Х

## 2.7 System-Wide Solutions and Third-Party Software

## 2.7.1 Service-Oriented Architecture (SOA)

SAP's delivery on SOA (service-oriented architecture) differs from the pure architectural concept of SOA in the delivery of ready-to use enterprise services. Enterprise services are SAP-defined Web services which provide end-to-end business processes or individual business process steps that can be used to compose business scenarios while ensuring business integrity and ease of reuse. SAP designs and implements enterprise service interfaces to ensure semantic harmonization and business relevance. This section deals with the service-enablement of SAP Business Suite 7.

## 2.7.1.1 Service Enablement

The service enablement of SAP Business Suite consists of one or more of the following SAP components:

## SAP Business Suite 7

Enterprise services are an integral part of the software components of the SAP Business Suite applications. Enterprise services are the technical interfaces to the functionality available in the business application.

## • SAP NetWeaver PI 7.0 or higher

SAP NetWeaver Process Integration (SAP NetWeaver PI) is an open integration and application platform that provides tools enabling you to set up a service-oriented architecture for business applications. You can use the platform for providing, discovering, and consuming services, integrating applications using the

integration server, and managing business processes. Process integration is required in a runtime environment to consume enterprise services in a mediated scenario.

We recommend that you use the highest version of SAP NetWeaver Process Integration (PI). For more information, see SAP Note 1515223 and SAP Note 1388258 c.

## i Note

Starting with SAP NetWeaver Process Integration (PI) 7.3, SAP provides a new installation option Advanced Adapter Engine Extended (AEX). Since AEX is based on AS Java alone, it is easier to install and maintain as well as it needs less memory and data storage. Therefore, AEX is a cost-saving option compared to a full installation of SAP NetWeaver PI. For more information about the AEX, enter the phrase Advanced Adapter Engine Extended in the documentation of SAP NetWeaver Process Integration at help.sap.com/nw73 and see SAP Note 1573180 a.

## i Note

Asynchronous services that are enabled for *Web Services Reliable Messaging (WS-RM)* can be called in a point-to-point communication scenario. Otherwise asynchronous services can only be consumed in a mediated scenario.

### • Enterprise Services Repository

The Enterprise Services Repository (ES Repository) is the central repository that contains the definition of all enterprise services and models. The ES Repository is shipped with SAP NetWeaver PI and with SAP NetWeaver Composition Environment (CE) starting with SAP NetWeaver PI 7.1 and with SAP NetWeaver CE 7.1. The Enterprise Services Repository is a design time environment that enables you to create and enhance enterprise service definitions.

#### 1 Note

In a SAP NetWeaver 7.0x landscape you use the Integration Repository to create and enhance enterprise service definitions.

## Services Registry

The Services Registry is shipped with SAP NetWeaver PI and SAP NetWeaver CE starting with SAP NetWeaver PI 7.1 and SAP NetWeaver CE 7.1. The Service Registry is only required for the publication of enterprise service end-points (Web services) that have been configured and activated in the SAP Business Suite.

#### SAP NetWeaver CE 7.1 or higher

The SAP NetWeaver Composition Environment (SAP NetWeaver CE) provides a robust environment for the design and implementation of composite applications.

The design time environment of SAP NetWeaver CE can be used for the model-driven design and development of composite applications based on enterprise services. SAP NetWeaver CE offers the tools and the environment necessary for running composite applications fast and efficiently in a runtime environment.

# 2.7.1.2 Installation of the Service-Oriented Architecture (SOA)

The installation of service interfaces, and therefore the service enablement of SAP Business Suite, consists of one or more of the following phases:

## • Identification of software components and required business functions

You use the technical data section of the enterprise service documentation to identify the following data for each enterprise service:

- the software component version with which the service was shipped
- the business function(s) required to be activated
- Identification of technical usages (relevant for SAP ERP only)

SAP Note 1818596 provides a mapping of business functions and software component versions to technical usages. You use this documentation to identify the required technical usages for your list of software component versions and business functions.

## • Installation of the software component ECC-SE (relevant for SAP ERP only)

The software component ECC-SE contains service implementations for ECC (the ERP Central Component). This component must be explicitly installed if you intend to use enterprise services for ECC functionality. In this case you must also select the technical usage "ESA ECC-SE" during the enhancement package installation.

#### Selection and installation together with the other parts of the enhancement package

In the enhancement package installation process you must select all the technical usages you have identified for service enablement together with the technical usages you identified for enhanced features in SAP Business Suite. The selected technical usages will install the corresponding software components that contain the enterprise services interfaces and implementations.

#### Import of ESR Content (aka XI Content) (optional)

To install the content required for the enterprise service definitions you must select the technical usage "XI Content" in the enhancement package installation process. This downloads the content files for SAP NetWeaver PI 7.0 or higher. Unpack the ZIP file and copy the tpz files corresponding to your SAP NetWeaver PI version into the import directory of your Integration Repository (for SAP NetWeaver PI 7.0x) or Enterprise Services Repository (for SAP NetWeaver ES Repository 7.1 or higher). Use the import function to import the content files into the corresponding repository (Integration Repository or Enterprise Services Repository). (Choose \( \bar{\rmathbb{D}} \) Tools \( \rmathbb{Import Design Objects \( \rmathbb{D} \))

## • Services Registry (optional)

The services registry is shipped starting with SAP NetWeaver PI 7.1 and CE 7.1. You must configure the services registry and then publish the enterprise services from the Business Suite application to the registry using the transaction SOAMANAGER in the backend.

For further information regarding the SAP NetWeaver PI, CE and ES Repository, refer to the corresponding SAP NetWeaver Installation and Master Guides.

## 2.7.1.3 Related Documentation

For more information about the service-oriented architecture (SOA), see the following information sources:

- SCN Community in the SAP Network at scn.sap.com/community/soa / (registration required)
- SAP Note 1359215 : Technical prerequisites for using enterprise services (relevant for ERP only)
- SAP note 838402 : Problems with non-Unicode system landscapes

## 2.7.2 Integration of SAP BusinessObjects

The integration of SAP BusinessObjects SAP Crystal Reports and SAP BusinessObjects Xcelsius in SAP Business Suite provides you with analysis functions that are integrated in the user interface and processes: Embedded Analytics.

Predefined reports and dashboards provide a detailed, graphical, or interactive display of (transaction) data from SAP Business Suite or from SAP Business Warehouse.

Embedded Analytics contains the following integrations:

- SAP Crystal Reports as an alternative for displaying simple lists in SAP GUI ALV Grid, Web Dynpro ABAP ALV, and POWER list (not in SAP CRM)
- SAP Crystal Reports for the formatted display of data from queries
- Xcelsius for the graphical or interactive display of data from queries in dashboards

Users can call these functions in SAP NetWeaver Business Client, SAP Enterprise Portal, or SAP CRM.

## **Technical Requirements**

• SAP Crystal Reports for Displaying Simple Lists

You require SAP Crystal Reports viewer for Business Suite Applications 1.0 or higher. Note the corresponding license terms.

SAP Crystal Reports with Queries

To display the SAP Crystal Reports provided, you require SAP BusinessObjects Enterprise XI 3.1 (SP02) and SAP BusinessObjects Integration for SAP XI 3.1 (SP02). Note the corresponding license terms for SAP BusinessObjects.

To create your own SAP Crystal Reports, you require SAP Crystal Reports 2008 V1 (SP02). Note the corresponding license terms.

Xcelsius Dashboards with Queries

To display the Xcelsius dashboards provided, you require Adobe Flash Player version 9. You must also check the license terms for SAP BusinessObjects.

To create your own dashboards, you require SAP BusinessObjects Xcelsius Enterprise 2008 (SP03, FP1). Note the corresponding license terms for SAP BusinessObjects.

For displaying data from queries via the predefined content, the following system requirements also apply:

- SAP NetWeaver 7.0 including enhancement package 2 (SP04) or higher
- SAP NetWeaver 7.0 BI Content Add-On 5 or higher
- Extension for SAP NetWeaver 7.02 BI Content Add-On 5 or higher

#### More Information

For more information about the different topics, see the information sources in the following table.

#### Table 8

Topic	Information Source			
General Information	<ul> <li>SAP Library for SAP ERP on SAP Help Portal at</li></ul>			
Installation Information	SAP Help Portal at help.sap.com > Analytics - All Products			
Configuration Information	SAP Solution Manager under Solutions/Applications  Basic Configuration Configuration Structures Embedded  Analytics			
Installation Instructions	<ul> <li>SAP Note 1353044</li> <li>SAP Note 1345320</li> </ul>			

# 2.7.3 Integration of SAP Customer Relationship Management

As of SAP enhancement package 8 (SP02) for SAP ERP 6.0, you can install SAP enhancement package 4 for SAP CRM 7.0 as an add-on to SAP ERP.

Consequently, some data dictionary objects regarding marketing target groups that exist in SAP ERP with the same name as in SAP CRM but with a different structure need to be renamed in the SAP ERP system.

The tables in question are automatically renamed during the upgrade to SAP enhancement package 8 (SP02) for SAP ERP 6.0, or a higher SP or release, using the XPRA (program) ERP MKTTG XPRA 618.

Regarding the renaming of the tables, interdependencies have to be taken into account to prevent data loss, and post-processing steps may be required.

before running the upgrade, see SAP Note 2222314 for more information.

If you are planning to use the Zero Downtime function for the upgrade to SAP enhancement package 8 (SP02) for SAP ERP 6.0, or a higher SP or release, and if you are using an SAP CRM system and replicate marketing target groups to the SAP ERP system, you need to install SAP Note 2221330 or on your system before the upgrade.

# 3 Main Implementation Processes and Related Documentation

The following processes are the most important implementation processes for installing, updating, and upgrading SAP NetWeaver server-based SAP applications:

- New installation of an SAP system including an enhancement package (installation)
- Installation of an enhancement package on an existing SAP system (update)
- Upgrade to an SAP system including an enhancement package (upgrade)

Each of the implementation processes consists of a planning phase and an implementation phase. Each phase is divided into several steps that describe the processes in detail. Each step contains references to the corresponding documentation to ensure that you can easily find the information you need.

The process sequences give a comprehensive overview of all possible steps. You only need to select the steps that are relevant for your requirements.

## i Note

If you have already decided which business scenarios and business functions to implement, you can ignore the corresponding step in the planning phase of the installation, update, or upgrade process sequences.

The following figure shows the Application Lifecycle Management phases, the associated user profiles, and how they map to the slightly simplified planning and implementation phases described in the sections linked below.

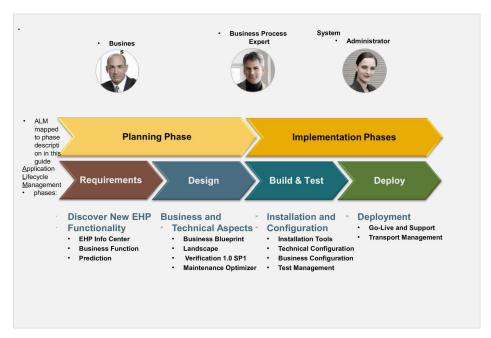


Figure 3: Application Lifecycle Management

For more information about Application Lifecycle Management, see support.sap.com/solution-manager/processes.html ...

The processes are described in the following sections:

- Planning for Installation, Update, and Upgrade Processes [page 25]
- Implementation of the Installation Process [page 28]
- Implementation of the Update Process [page 31]
- Implementation of the Upgrade Process [page 34]

#### 3.1 Planning for Installation, Update, and Upgrade Processes

The planning phase is the general starting point for any kind of enhancement package implementation project. The detailed definition of your scope and requirements is the key success factor for a smooth project. You discover new developments and functions to find out which solution best suits your needs and you cover the business aspects as well as the technical aspects of your implementation.

The following table lists the topics you need to consider in the planning phase with references to relevant documentation. You have to look into those steps that are relevant for your requirements.

#### Note

How to read the table in this section:

- The first column contains the name of the process step.
- The middle column contains a short description of the step and some documentation references that are always followed by a number in square brackets, for example, [1]. This number corresponds with the same number in a list in the third column, for example 1.
- The third column contains the full title of the documents referred to in the middle column, as well as where to find them. The documents are numbered in the same way as in the middle column.

Table 9

Steps	Step Description	Documentation
Scope and Requirements	Define your business scope, such as business scenarios and business functions you want to use. You can find information about scope topics at the <b>Enhancement Package Info Center</b> [1]. The SAP Solution Browser Tool gives you a summary of key functional changes between two releases or SAP enhancement packages [2]. You can find detailed information about business functions on the SAP Help Portal [3].	<ol> <li>service.sap.com/erp-ehp</li> <li>solutionbrowser.erp.sap.fmpmedia.com</li> <li>help.sap.com/erp608 &gt; Application</li> <li>Help &gt; Business Functions (SAP Enhancement Package 8 for SAP ERP 6.0)</li> </ol>
Dependencies to Other Systems in the Landscape	Note Only relevant for upgrades	service.sap.com/uda //

Steps	Step Description	Documentation
	The upgrade of one SAP system might have an impact on other systems in your system landscape. Check whether such dependencies exist using the Upgrade Dependency Analyzer.	
Landscape Planning	If you want to change or modify your existing system landscape, make yourself familiar with the available system landscape options.  For detailed information about business landscape options, use the <i>Planning Guide - SAP Business Suite Landscape Implementation</i> [1].	service.sap.com/erp-ehp8-inst // For more information, see SAP Note 1388258 //.
Business Functions	It is not possible to uninstall an enhancement package. Furthermore, you cannot revoke the activation of most business functions and it is only possible to transport complete business function switch settings across your system landscape. For these reasons, we recommend testing the business functions thoroughly in a dedicated evaluation system (not the development system), until you are sure that you definitely want to use them. It makes sense to use a copy of your production system as evaluation system.	<ol> <li>SAP Note 2258099</li> <li>I help.sap.com/erp &gt; SAP ERP Central Component &gt; SAP ERP Enhancement Packages &gt; ERP Central Component Enhancement Package 8 &gt; Business Functions</li> </ol>
Hardware & Software Prerequisites	Check the availability of the required SPs or SP stack of the application as well as for the corresponding SAP NetWeaver release are available. The upgrade stops if the equivalent support package of the target release is missing. It is not a prerequisite and not recommended to implement the latest SP stack in your source system before doing an upgrade or EHP implementation.  The support package equivalence levels are described in SAP Notes [1].	<ol> <li>SP Stack notes:         <ul> <li>SAP Note 1064635</li></ul></li></ol>

Steps	Step Description	Documentation
	The SP stack implementation is also described in the Software Update Manager guide [2]  For more information about SP stack strategy and the release schedule, see the SAP Service Marketplace [3].	
	Check which platforms are supported for your target release (OS/DB dependencies) with the Product Availability Matrix.	support.sap.com/pam
	Check which hardware sizing is required for your target release.	service.sap.com/sizing
Solution Manager Prerequisites	Make sure that your SAP Solution Manager system has one of the following support package (SP) levels with the associated content release:  ■ SAP Solution Manager 7.01 SPS 23 or higher  ■ SAP Solution Manager 7.1 SPS 10 or higher  ■ Content: ST-ICO 150_700 SP 31  All SAP Solution Manager guides  ■ SAP Compone  Manager   ■ Release 7.0 EHP1 (or II  1. Upgrade Guide — SAP Solution  Enhancement Package 1  2. Update Guide SAP Enhanced  SAP Solution Manager 7.0  3. Solution Operations Guide —  Manager 7.0 EHP1.	Enhancement Package 1  2. Update Guide SAP Enhancement Package 1 for SAP Solution Manger 7.0  3. Solution Operations Guide – SAP Solution
	Check if you need to do an update or upgrade of your SAP Solution Manager application or content and select your required upgrade or update:  • Upgrade from source releases SAP Solution Manager 3.1 and 3.2. [1]  • Update from source releases SAP Solution Manager 7.0. [2]  After an upgrade or update to SAP Solution Manager 7.0 EHP1, you need to do follow-up actions described in the section Software Change Management of the Solution Operations Guide. [3]	

Steps	Step Description	Documentation
Add-on Compatibility	If you want to use add-ons, check their compatibility with your target release.	SAP Note 1820906 🏕
Testing	You perform regression and acceptance tests.  You find information about test cases on the SAP Service Marketplace [1].  After the installation of an SAP enhancement package, you find additional information with the help of the Impact Analyzer tool [2] and you can access test cases for individual business functions [3].	<ol> <li>service.sap.com/erp-ehp</li> <li>Choose the functional area you require and navigate to the business function table. The table contains links to test catalogs.</li> <li>To use the Impact Analyzer call transaction SFW5 and right-click a business function.</li> <li>To access test cases, call transaction SFW 5 and view the test cases in column SAP Test Catalog.</li> </ol>
	Note Switch BC Sets are also delivered with business functions. They are automatically unpacked when you activate the business function.	

# 3.2 Implementation of the Installation Process

The following table lists the steps for a new installation of an SAP system including an enhancement package. The table lists all possible steps with references to the documentation relevant for each step. You have to look into those steps that are relevant for your requirements.

#### 1 Note

How to read the table in this section:

- The first column contains the name of the process step.
- The middle column contains a short description of the step and some documentation references that are always followed by a number in square brackets, for example, [1]. This number corresponds with the same number in a list in the third column, for example 1.
- The third column contains the full title of the documents referred to in the middle column, as well as where to find them. The documents are numbered in the same way as in the middle column.

#### Table 10

14510-10			
Sequence of Steps	Ste	p Descriptions	Documentation
1	Prep	pare your host systems, for example:	You find all guides at service.sap.com/erp-
System Preparation	•	Install and update your operating system.	ehp8-inst
	•	Create the file systems.	
	•	Check database requirements.	

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Sequence of Steps	Step Descriptions	Documentation
	You can find this information in the <i>Planning</i> and <i>Preparation</i> sections of the relevant installation tool guides [1] and in the installation information of this document (the application Master Guide [2].	
2 Installation Media	Make the required installation media (physical or downloaded media) available.	You find the installation guide at service.sap.com/erp-ehp8-inst .
3 Installation	If required, install the database with the DB-specific installer. Run SAP Software Provisioning Manager to install your system. This is described in the relevant installation tool guides [1]. Check also the SAP application-specific installation information of this document (the application Master Guide) [2].	<ul> <li>service.sap.com/erp-ehp8-inst</li> <li>help.sap.com/sltoolset</li> <li>Software         Logistics Toolset 1.0 Documentation         section: System Provisioning Installation:         Systems Based on SAP NetWeaver 7.1 and         Higher</li> </ul>
	If the system displays a NW error during the generation of the Stack XML in the Maintenance Planner in a Java installation process, see SAP Note 1783476.	
4 Post-Installation Steps	Check the relevant installation tool guides [1] and the SAP application-specific installation information of this document (the application Master Guide) [2] for post-installation tasks.	You find all guides at service.sap.com/erp-ehp8-inst .
5 Content Installation	If required, you install BW Content as an add-on as described in the relevant SAP Note.	SAP Note 1000822 🏕
6 Add-On Installation	You find information on compatible add-ons in the SAP Note.	SAP Note 2167814 🖢
7 Solution Manager Set- Up	To set up your SAP Solution Manager application, perform the following steps:  1. Maintain system data in the SAP System Landscape Directory (SLD).  2. Transfer system data from SLD to the SAP Solution Manager.  3. Check the landscape data with the Landscape Verification tool.  4. Create a maintenance transaction in SAP Solution Manager to calculate support packages and packages for technical usages.	wiki.scn.sap.com/wiki/x/VIwqCw

Sequence of Steps	Step Descriptions	Documentation
	These steps are described in this document (the application Master Guide) [1].  For more information, see the SAP Developer Network:  SLD information [2]  Landscape Verification tool [3]. For additional information, see SAP Note 1791023	
8 Support Package Installation	The support package (SP) equivalence levels are described in SAP Notes [1].  Create a maintenance transaction in SAP Solution Manager to calculate support packages and packages for technical usages. Install them as needed.  For more information about SP stack strategy, see the SAP Service Marketplace [2].	SP Stack notes:  SAP Note 1064635 (SAP ERP)  SAP Note 789220 (SAP NetWeaver)  support.sap.com/sp-stacks
	If you have modified SAP code in your system, do not separate the installation of the SP stack and the installation of the SAP enhancement package into two steps. This would mean having to perform the modification adjustment twice (and partially for the same objects).	
9 Installation of Additional Technical Usages	If you want to install additional technical usages, you need to register your system in SAP Solution Manager.	For more information, see step 7 (Solution Manager Set-Up).
10 Configuration	Configure new functions, for example new business functions, with the Solution Manager content [1].  1 Note The use of the Solution Manager Content is recommended, not mandatory.  How to use the Solution Manager Content is described in the SAP Library documentation for SAP Solution Manager [2].	<ol> <li>See the step Solution Manager         Prerequisites in the planning [page 25]         section for the correct SAP Solution         Manager content release.</li> <li>I help.sap.com SAP Solutions SAP         Solution Manager SAP Solution Manager         Release Implementing and Upgrading         SAP Solutions SAP Solutions</li> </ol>
11 Testing	Perform regression and acceptance tests.	For more information, see the table entry  Testing in the section on Planning for

Sequence of Steps	Step Descriptions	Documentation
		Installation, Update and Upgrade
		Processes [page 25] in this guide.

# 3.3 Implementation of the Update Process

The following table lists the steps for an installation of an enhancement package on an existing SAP system (update). The table lists all possible steps with references to the documentation relevant for each step. You have to look into those steps that are relevant for your requirements.

## 1 Note

How to read the table in this section:

- The first column contains the name of the process step.
- The middle column contains a short description of the step and some documentation references that are always followed by a number in square brackets, for example, [1]. This number corresponds with the same number in a list in the third column, for example 1.
- The third column contains the full title of the documents referred to in the middle column, as well as where to find them. The documents are numbered in the same way as in the middle column.

Table 11

Sequence of Steps	Step Descriptions	Documentation
Solution Manager Preparation	To set up your SAP Solution Manager application, perform the following steps:  1. Maintain system data in the SAP System Landscape Directory (SLD).  2. Transfer system data from SLD to the SAP Solution Manager.  3. Check the landscape data with the Landscape Verification tool.  4. Create a maintenance transaction in SAP Solution Manager to calculate support packages and packages for technical usages.  These steps are described in this document (the application Master Guide)  [1].  For more information, see the SAP Developer Network:  • SLD information [2]	<ol> <li>Maintenance Planner at wiki.scn.sap.com/wiki/x/VlwqCw.</li> <li>www.sdn.sap.com/irj/sdn/nw-sld.</li> <li>www.sdn.sap.com/irj/sdn/alm?rid=/webcontent/uuid/70fc3790-7ec9-2d10-57ad-95b2d0d1185d.</li> </ol>

Sequence of Steps	Step Descriptions	Documentation	
	Landscape Verification tool [3]. For additional information, see SAP  Note 1791023		
2 System Preparation	Prepare your system as described in the documentation, for example perform OS / DB-specific preparations.  This is described in the relevant Software Update Manager (SUM) guide [1]. Check also the SAP application-specific update guide [2].	<ul> <li>service.sap.com/erp-ehp8-inst</li> <li>help.sap.com/sltoolset</li> <li>Software Logistics         Toolset 1.0 Documentation section: System         Maintenance Updating SAP Systems Using         Software Update Manager <version></version></li> <li>Note         You always need to use the latest version of the         SUM tool and guide. Only the latest guide         version is available at the SAP Service         Marketplace.</li> </ul>	
3 Software Calculation & Download	Create the maintenance transaction in the Maintenance Planner to calculate the required software packages.  You can also select additional software packages (for example add-ons or additional product instances or software units).  Download the software packages using the Download Manager.	Maintenance Planner at wiki.scn.sap.com/wiki/x/ VIwqCw	
4 Enhancement Package Installation	Run Software Update Manager (SUM) to update your system with the software packages calculated in step 3.  This is described in the relevant SUM guide [1]. Check also the SAP application-specific update guide [2].	<ul> <li>service.sap.com/erp-ehp8-inst</li> <li>help.sap.com/sltoolset</li> <li>Software Logistics         Toolset 1.0</li> <li>Documentation section: System         Maintenance</li> <li>Updating SAP Systems Using         Software Update Manager <version></version></li> <li>Note</li> <li>You always need to use the latest version of the         SUM tool and guide. Only the latest guide         version is available at the SAP Service         Marketplace.</li> </ul>	
5 Follow-Up Steps	Perform technical and application- specific follow-up activities (for example, activating business functions) after the enhancement package installation is done. This is described in the relevant Software Update Manager (SUM) guide [1]. Check	<ul> <li>service.sap.com/erp-ehp8-inst</li> <li>help.sap.com/sltoolset</li> <li>Toolset 1.0 Documentation section: System Maintenance Updating SAP Systems Using Software Update Manager &lt; Version S</li> </ul>	

Sequence of Steps	Step Descriptions	Documentation
	also the SAP application-specific update guide [2].	You always need to use the latest version of the SUM tool and guide. Only the latest guide version is available at the SAP Service Marketplace.
6 Content Update	Check if you need to update content related to:  SAP NetWeaver Portal [1] You use the Java Support Package Manager to update portal content.  SAP Business Warehouse [2]  SAP NetWeaver Process Integration [3]  For more information, see SAP Note 1388258	<ol> <li>help.sap.com SAP Solutions SAP         NetWeaver SAP NetWeaver Release         Functional View SAP NetWeaver by Key         Capability Solution Life Cycle Management by         Key Capability Software Life Cycle         Management Software Maintenance Java         Support Package Manager         SAP Note 1000822</li></ol>
7 Configuration	Configure newly installed enhancement package functions, for example new business functions, with the Solution Manager content [1].  I Note The use of the Solution Manager Content is recommended, not mandatory.  How to use the Solution Manager Content is described in the SAP Library documentation for SAP Solution Manager [2].	<ol> <li>See the step Solution Manager Prerequisites in the planning [page 25] section for the correct SAP Solution Manager content release.</li> <li>  help.sap.com &gt; SAP Solutions &gt; SAP Solution Manager &gt; SAP Solution Manager Release &gt; Implementing and Upgrading SAP Solutions &gt;</li> </ol>
8 Testing	Perform regression and acceptance tests.	For more information, see the table entry <i>Testing</i> in the section on Planning for Installation, Update and Upgrade Processes [page 25] in this guide.

# 3.4 Implementation of the Upgrade Process

The following table lists the steps for a new installation of an SAP system including an enhancement package. The table lists all possible steps with references to the documentation relevant for each step. You have to look into those steps that are relevant for your requirements.

### 1 Note

How to read the table in this section:

- The first column contains the name of the process step.
- The middle column contains a short description of the step and some documentation references that are always followed by a number in square brackets, for example, [1]. This number corresponds with the same number in a list in the third column, for example 1.
- The third column contains the full title of the documents referred to in the middle column, as well as where to find them. The documents are numbered in the same way as in the middle column.

Table 12

I doic 12				
Sequence of Steps	Step Descriptions	Documentation		
Solution Manager Preparation	<ol> <li>To set up your SAP Solution Manager application, perform the following steps:</li> <li>Maintain system data in the SAP System Landscape Directory (SLD).</li> <li>Transfer system data from SLD to the SAP Solution Manager.</li> <li>Check the landscape data with the Landscape Verification tool.</li> <li>Create a maintenance transaction in SAP Solution Manager to calculate support packages and packages for technical usages.</li> <li>These steps are described in this document (the application Master Guide) [1].</li> <li>For more information, see the SAP Developer Network:         <ul> <li>SLD information [2]</li> <li>Landscape Verification tool [3]. For additional information, see SAP Note 1791023</li> </ul> </li> </ol>	<ol> <li>Maintenance Planner at wiki.scn.sap.com/wiki/x/VlwqCw</li> <li>www.sdn.sap.com/irj/sdn/nw-sld</li> <li>www.sdn.sap.com/irj/sdn/alm?rid=/webcontent/uuid/70fc3790-7ec9-2d10-57ad-95b2d0d1185d</li> </ol>		
2 System Preparation	Prepare your system as described in the documentation, for example perform OS/DB-specific preparations.  This is described in the relevant Software Update Manager guide [1]. Check also the SAP application-specific upgrade guide [2].	<ul> <li>service.sap.com/erp-ehp7-inst</li> <li>help.sap.com/sltoolset</li> <li>Documentation</li> <li>section: System Maintenance</li> <li>Updating</li> <li>SAP Systems Using Software Update</li> <li>Manager &lt; Version&gt;</li> </ul>		

Sequence of Steps	Step Descriptions	Documentation
		You always need to use the latest version of the SUM tool and guide. Only the latest guide version is available at the SAP Service Marketplace.
3 Software Calculation & Download	Create the maintenance transaction in the Maintenance Planner to calculate the required software packages.  You can also select additional software packages (for example add-ons or additional product instances or software units).  Download the software packages using the Download Manager.	Maintenance Planner at wiki.scn.sap.com/ wiki/x/VIwqCw
4 SAP System Upgrade	Run Software Update Manager to upgrade your system to the target release including the selected software packages.  This is described in the relevant Software Update Manager guide [1]. Check also the SAP application-specific upgrade guide [2].	<ul> <li>service.sap.com/erp-ehp7-inst</li> <li>help.sap.com/sltoolset &gt; Software         Logistics Toolset 1.0 &gt; Documentation         section: System Maintenance &gt; Updating         SAP Systems Using Software Update         Manager &lt; Version &gt; </li> </ul>
		You always need to use the latest version of the SUM tool and guide. Only the latest guide version is available at the SAP Service Marketplace.
5 Post-Upgrade Steps	Perform technical and application-specific follow-up activities after the upgrade is finished.  This is described in the relevant Software Update Manager guide [1]. Check also the SAP application-specific upgrade guide [2].	<ul> <li>service.sap.com/erp-ehp7-inst</li> <li>help.sap.com/sltoolset &gt; Software         Logistics Toolset 1.0 &gt; Documentation         section: System Maintenance &gt; Updating         SAP Systems Using Software Update         Manager &lt; Version &gt; Image: Name of the property of th</li></ul>
		You always need to use the latest version of the SUM tool and guide. Only the latest guide version is available at the SAP Service Marketplace.
6 Content Upgrade	Check if you need to update content related to:     SAP NetWeaver Portal [1]     You use the Java Support Package     Manager to update portal content.	help.sap.com    SAP Solutions    SAP     NetWeaver    SAP NetWeaver Release     Functional View    SAP NetWeaver by Key     Capability    Solution Life Cycle

Sequence of Steps	Step Descriptions	Documentation
	<ul> <li>SAP Business Warehouse [2]</li> <li>SAP NetWeaver Process Integration [3]</li> <li>For more information, see SAP Note 1388258</li> </ul>	Management by Key Capability > Software Life Cycle Management > Software Maintenance > Java Support Package Manager ■  2. SAP Note 1000822 →  3. SAP Note 836200 → and   help.sap.com
7 Configuration	Configure upgraded or new functions, for example new business functions, with the Solution Manager content [1].	See the step Solution Manager     Prerequisites in the planning [page 25]     section for the correct SAP Solution     Manager content release.
	Note The use of the Solution Manager Content is recommended, not mandatory.	2.   help.sap.com > SAP Solutions > SAP Solution Manager > SAP Solution Manager Release > Implementing and Upgrading
	How to use the Solution Manager Content is described in the SAP Library documentation for SAP Solution Manager [2].	SAP Solutions 】
8 Testing	Perform regression and acceptance tests.	For more information, see the table entry Testing in the section on Planning for Installation, Update and Upgrade Processes [page 25] in this guide.

# A Appendix

## A.1 Installation Media

You obtain the DVDs and archives required for the installation of the required software units as part of the installation package from SAP. However, you can also download installation media from the SAP Software Download Center (SWDC) on the SAP Service Marketplace at support.sap.com/swdc.

## i Note

Since the material numbers of DVDs, CDs, and archives may change when they are updated, we recommend that you visit the SWDC to make sure that you always use the most recent version of the indicated data carriers.

## A.2 Related SAP Notes

The SAP Notes listed in the following table contain the most recent installation information, as well as corrections to the existing installation documentation.

For each SAP Note a short content description is given, which indicates the functional area or topic the SAP Note relates to.

You can find up-to-date versions of each SAP Note on SAP Service Marketplace at support.sap.com/notes  $\sim$  or by following the links below.

Table 13

SAP Note Number	Title	Content
Related to SAP ERP		
838402 🖢	Problems with Non-Unicode System Landscapes	Non-Unicode code pages support only a small portion of the character sets existing world-wide.  Any character conversion based on these code pages therefore bears the risk of silent data loss.
849887	SAP ERP 6.0: Support Package Stacks Release and Info Note	Lists all SAP ERP 6.0 Release and Information Notes (RIN) issued for SAP ERP 6.0
998833	Release Restrictions SAP ERP 6.0 - Enhancement Packages	Gives Information about the limitations for SAP Enhancement Packages for SAP ERP 6.0

SAP Note Number	Title	Content
1000009 🏕	ASU Toolbox 2008	When you update a SAP system, you must often perform additional, application-specific steps before and after the update, in addition to the actual technical update. The ASU Toolbox enables you to recognize the necessary steps and perform them in the system in a controlled manner.
1064635	SAP ERP Enhancement Packages: SP Stacks Release Info Note	Lists all Release Information Notes for:  SAP ERP Enhancement Package Releases  SAP ERP Enhancement Package Support Package (SP) Stacks  Corresponding, or equivalent SAP ERP 6.0 Support Package Stacks
1450179	Employee Self Services (ESS) Component Based on Web Dynpro ABAP	Gives details and explains the strategy of the Web Dynpro ABAP version of ESS, Employee Self-Service (WDA).
2171334	Release Info SAP Enhancement Package 8 for SAP ERP 6.0	Provides information and references to notes regarding Support Package (SP) Stacks for SAP Enhancement Package 8 for SAP ERP 6.0. This SAP Note is updated regularly.
2258099 🖢	Enhancement package 8 for SAP ERP 6.0: Required SWC	Provides information about the relation between business functions and the technical usage for the current enhancement package.
2167814	SAP Enhancement Package 8 for SAP ERP 6.0: Compatible Add-ons	If you plan to run SAP Enhancement Package 8 for SAP ERP 6.0 together with an Add-On on the same system, this SAP Note points out what you have to consider.
1524246 🖢	Relationship of Licenses and Business Functions	Explains which licenses you require when you activate a business function.
1631422 🚱	EHP6 FOR SAP ERP 6.0 - Additional Information for HCM	Contains information about the automatic update of SAP_APPL to version 6.06 when updating the HCM part of EHP6.
1815263 🏕	Upgrade to EHP7 or EHP8 FOR SAP ERP 6.0 Java (start release < EHP4)	Explains how you upgrade from ERP 6.0 Java to EHP7 for SAP ERP 6.0 or EHP8 for SAP ERP 6.0.
1742750	Upgrade from SAP ERP 2004 to EHP7 FOR SAP ERP 6.0 (Java)	Explains how you upgrade from SAP ERP 2004 to EHP7 for SAP ERP 6.0, if you are using Java and ABAP instances assigned to your ERP product system in SMSY.
1816819	Dual Stack support for Suite7i2013	As of SAP Business Suite 7i2011 you will no longer be able to upgrade a SAP dual-stack system to a higher release. This SAP Note explains how to run

SAP Note Number	Title	Content
		a dual-stack split on the source system before starting the upgrade.
1965692	HR Renewal 2.0: Release Information Note	Release Information Note (RIN) for HR Renewal 2.0
1976498	HRSP Information for HR Renewal 2.0	Provides important information on HR Support Packages of HR Renewal 2.0.
Related to SAP NetW	/eaver	
1388258 💪	Version Interoperability within the SAP Business Suite	Gives information about the version interoperability within a SAP Business Suite System Landscape.
1515223 🖢	SAP NetWeaver Process Integration: Release Recommendation	Gives SAP's recommendation on which release of SAP NetWeaver PI you should use.
1783476	Additional NetWeaver Product System for Suite Java	Addresses problems that occur, when you upgrade an ERP product system and are preparing the stack XML file with the Maintenance Optimizer.
Related to Enterprise	Services	
1224284	Enterprise Services, Installing and Accessing the SOA Docu	If you want to use enterprise services, this SAP Note gives an overview of which sets of services are available, how to install and access the documentation and which product versions, software components, technical usages, and business functions they require.
1359215	Technical prerequisites for using enterprise services	If you want to install an enhancement package and/or use enterprise services, this SAP Note explains how you ensure that the services are available and can be activated in your system.
Related to BI Conten	t	
1345320 🖢	Business Objects Enterprise Integration to NetWeaver BI	Explains which components to install, if you want to use the Crystal Reports delivered by SAP with NetWeaver BI.
1353044	Installation Guide Crystal Report Adapter	If you want to use the integration of Crystal Report into the Advanced List Viewer (ALV) you have to install a frontend component on the client / desktop machine. This SAP Note describes the supported platforms, the prerequisites and the installation steps.

# **A.3** Related Documentation

The following table lists additional documentation for your reference:

Table 14

Table 14		
Title	Location	
ERP Guides		
SAP ERP Master Guide	service.sap.com/erp-ehp8-inst	
<ul> <li>Installation Tool Guides</li> <li>Installation Guide — SAP Systems Based on the Application Server ABAP of SAP NetWeaver 7.5 &lt; Operating System&gt;: <database></database></li> <li>Installation Guide — SAP Systems Based on Application Server Java of SAP NetWeaver 7.5 &lt; Operating System&gt;: <database></database></li> </ul>	service.sap.com/erp-ehp8-inst	
<ul> <li>Software Update Manager Tool Guides</li> <li>Update Guide — Update of SAP Systems Using the Software Update Manager <latest version=""></latest></li> <li>Upgrade Guide — Upgrade of SAP Systems Using the Software Update Manager <latest version=""></latest></li> </ul>	help.sap.com/sltoolset Software Logistics Toolset  1.0 Documentation section: System Maintenance Updating SAP Systems Using Software Update Manager  Version>	
SAP ERP-application specific upgrade and update guides: Upgrade & Update Guides: SAP Enterprise Resource Management 6.0 Enhancement Package 8 < ABAP or Java>	service.sap.com/erp-ehp8-inst	
Planning Guide — SAP Business Suite Landscape Implementation	service.sap.com/erp-ehp8-inst	
SAP Master Data Governance: Master/Upgrade Master Guide	▶ service.sap.com/instguides ► SAP Business Suite Applications ► SAP Master Data Governance ► SAP Master Data Governance (ERP 6.0 EHP8)	
Implementation Information for SAP Fiori Apps	▶ help.sap.com/businesssuite  > SAP Fiori for SAP Business Suite > SAP enhancement package 8 of SAP ERP 6.0	
Additional Industry Guides		
SAP Industry Master Guides	service.sap.com/instguides > Industry Solutions	
Additional NetWeaver Guides		
SAP NetWeaver 7.5 Guides	service.sap.com/instguidesNw75	
SAP NetWeaver Installation Guides (including Master Guide)	service.sap.com/installNw75	
SAP NetWeaver Upgrade (and Migration) Guides	service.sap.com/upgradeNw75	
SAP NetWeaver Maintenance	service.sap.com/MaintenanceNw75	

Title	Location
SAP NetWeaver — Notes	service.sap.com/SAPNotesNw70 🍲
Additional Sources for Information	
SAP Terminology Database	sapterm.sap.com
General Information on SAP ERP	service.sap.com/erp/>
Hardware Sizing	service.sap.com/sizing
Planning the System Infrastructure (Technical Infrastructure)	service.sap.com/network
Security Guide	service.sap.com/securityguide 🌽
Overview of platform and technology related topics	service.sap.com/platforms
Support Package Stack Strategy	support.sap.com/sp-stacks
Product Availability Matrix	support.sap.com/pam
Safeguarding Services for Upgrade	service.sap.com/safeguardingupgrade/
Upgrade Adjustments with SAP/SPDD	support.sap.com/release-upgrade-maintenance/upgrade-info/tools.html
SAP Solution Browser	solutionbrowser.erp.sap.fmpmedia.com
Business Continuity	scn.sap.com/community/business-continuity
SAP Note Search	support.sap.com/notes 🏕
SAP Solutions	go.sap.com/solution.html
SAP NetWeawer Portal	scn.sap.com/docs/DOC-23055
Upgrade Road Map (latest version)	▶ service.sap.com/solutionmanage ►> Downloads > Other Content
SAP Software Download Center	support.sap.com/swdc
R/3 Plug-in	service.sap.com/r3-plug-in/
SAP Enterprise Portal	scn.sap.com/community/enterprise-portal
	help.sap.com/nwep
SAP NetWeaver Rapid Installer	service.sap.com/nw-ri
SAP Business Warehouse	help.sap.com/nwbw
SAP Learning Solution documentation	service.sap.com/learningsolution
SAP Product Lifecycle Management	service.sap.com/plm

# A.4 Tools and Resources for Planning Your System Landscape

To plan your system landscape, you can use a few tools and resources that are available to you as SAP customer.

#### **Tools**

On SAP Service Marketplace, we provide the Business Process Repository (BPR) Viewer to look up descriptions of business scenarios and business processes.

In addition, there are tools in SAP Solution Manager that support you before, during, or after the installation of your SAP product or SAP enhancement package.

These tools include:

Table 15: Tools for Supporting Installations and Upgrades

Tool	Purpose
Solution Manager System Landscape (transaction SMSY)	To model and set up your system landscape
Maintenance Planner	To install support packages and SAP enhancement packages
Business Process Repository	To access configuration documentation, links to Customizing activities and master data transactions, specifically tailored for individual business processes, business scenarios, or implementable steps
Business Process Change Analyzer (available with SAP enhancement package 1 for SAP Solution Manager 7.0)	To analyze the effects of transports and support packages as well as activation logs for business functions

## i Note

SAP recommends that you use SAP Solution Manager 7.1, SPS 10 or higher.

## **SAP Solution Manager: Implementation Content**

To get implementation content that supports you during the configuration of your business processes and business scenarios, you need the SAP Solution Manager add-on *Implementation Content* ST-ICO 150\_700 (SP38).

## **Landscape Verification for SAP Solutions Manager**

To verify and correct your system landscape SAP highly recommends that you use Landscape Verification 1.0 for SAP Solution Manager 7.0, which is an add-on to your SAP Solution Manager 7.0 system. This add-on allows you to identify and correct issues in your SAP Solution Manager landscape (transaction SMSY) before they cause problems, for example during a system update. Examples for errors are a missing connection to the System Landscape Directory or the wrong assignment of products to technical systems. For each type of error, a generic description for the solution is provided.

For more information about the landscape verification add-on, see SDN at www.sdn.sap.com/irj/sdn/alm? rid=/webcontent/uuid/70fc3790-7ec9-2d10-57ad-95b2d0d1185d 2.

## Planning Guide - SAP Business Suite Landscape Implementation

To get an overview of the necessary steps for planning a system landscape, use the *Planning Guide - SAP Business Suite Landscape Implementation* on SAP Service Marketplace at service.sap.com/instguides under SAP Business Suite Applications. The guide also provides you with more information about the following:

- Examples of reference system landscapes
- Planning tools such as the business process repository
- Deployment options
- Typical implementation process

## A.4.1 Business Process Repository (BPR) Viewer

The business process repository viewer (BPR viewer) is a tool on SAP Service Marketplace that allows you to preview the existing business scenarios, business processes that are shipped as part of SAP Solution Manager content. You can make use of the information in SAP Solution Manager during your implementation project by taking the pre-delivered implementation content as the starting point for your project scope. The implementation content is delivered with the following assigned information:

- Description of the business scenario, process, or implementable step
- Configuration content (Customizing activities or configuration documentation)

## A.4.2 Using the BPR Viewer

## **Procedure**

## **Calling Up the BPR Viewer**

You can call up the BPR viewer directly using the Internet address implementationcontent.sap.com/bpr &.

## **Working with the BPR Viewer**

To call up information about business scenarios, business processes, or implementable steps, navigate the following paths in the BPR viewer:

#### Table 16

BPR Object	Location
Business scenario	Under Solutions/Applications
Business process	Under Organizational Areas
Implementable step	Under Solutions/Applications

For each business scenario, business process, or implementable step, you can select between different versions that depend on varying components and releases. To display the descriptions of a business scenario, business process, or implementable step, choose the *Documentation* tab page. To display configuration documentation, choose the *Configuration* tab page.

## 1 Note

The BPR Viewer displays all descriptions, but only a selection of the configuration documentation. To view all configuration documentation, install and use SAP Solution Manager at your customer site.

## A.5 SAP Solution Manager

SAP provides the SAP Solution Manager as the highly recommended platform to efficiently support the implementation of your solution. Using SAP Solution Manager will significantly accelerate the implementation process and help you to achieve your business goals. At the same time, SAP will be able to deliver Support Services based on the business scenarios designed and documented in SAP Solution Manager. SAP Best Practice content for your solution may further accelerate the implementation process. For information about availability of content specifically tailored to your solution, see SAP Service Marketplace under service.sap.com/public/bestpractices.

# **Typographic Conventions**

## Table 17

Table 17	
Example	Description
<example></example>	Angle brackets indicate that you replace these words or characters with appropriate entries to make entries in the system, for example, "Enter your <b><user name=""></user></b> ".
Example > Example	Arrows separating the parts of a navigation path, for example, menu options
Example	Emphasized words or expressions
Example	Words or characters that you enter in the system exactly as they appear in the documentation
www.sap.com	Textual cross-references to an internet address
/example	Quicklinks added to the internet address of a homepage to enable quick access to specific content on the Web
123456	Hyperlink to an SAP Note, for example, SAP Note 123456
Example	Words or characters quoted from the screen. These include field labels, screen titles, pushbutton labels, menu names, and menu options.
	Cross-references to other documentation or published works
Example	Output on the screen following a user action, for example, messages
	Source code or syntax quoted directly from a program
	File and directory names and their paths, names of variables and parameters, and
	names of installation, upgrade, and database tools
EXAMPLE	Technical names of system objects. These include report names, program names,
	transaction codes, database table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE
EXAMPLE	Keys on the keyboard



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Material Number: n/a

