

# **SAP ERP Application Operations Guide**



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# 1 Getting Started

## Caution








This guide does not replace the daily operations handbook that we recommend customers to create for their specific production operations.

## 1.1 About this Guide

Designing, implementing, and running your SAP applications at peak performance 24 hours a day has never been more vital for your business success than now. This guide provides a starting point for managing your SAP applications and maintaining and running them optimally. It contains specific information for various tasks and lists the tools that you can use to implement them.

This guide also provides references to the documentation required for these tasks, so you will sometimes also need other Guides such as the Master Guide, Technical Infrastructure Guide, and SAP Library.

## Note

You can find the SAP ERP 6.0 SR3 Solution Operation Guide on SAP Service Marketplace at <http://service.sap.com/instguides>   *SAP Business Suite Applications*  *SAP ERP*  *SAP ERP 6.0*  *Operations*  *Solution Operation Guide SAP ERP 6.0* 

### Target Groups

- Technical Consultants
- System Administrators
- Solution Consultants
- Business Process Owner
- Support Specialist

The application and release mySAP ERP 2005 was associated with product version SAP ERP 2005. SAP ERP 2005 has been renamed SAP ERP 6.0. This guide exclusively refers to the name SAP ERP 6.0, rather than the formerly used name mySAP ERP 2005.

The following table provides an overview of the most important changes in naming:

Table 1: Changed Names

Release	Former Name	Product Version / Notation in Guide
SAP ERP 6.0	mySAP ERP 2005 / SAP ERP 2005	SAP ERP 6.0

Release	Former Name	Product Version / Notation in Guide
EHP2 for SAP ERP 6.0	SAP enhancement package 2 for SAP ERP 6.0 / SAP ERP Enhancement Package 2005.2	SAP enhancement package 2 for SAP ERP 6.0
EHP3 for SAP ERP 6.0		SAP Enhancement Package 3 for SAP ERP 6.0
EHP4 for SAP ERP 6.0		SAP Enhancement package 4 for SAP ERP 6.0
EHP4 for SAP ERP 6.0 / NW 7.01		SAP Enhancement package 4 for SAP ERP 6.0 / NW 7.01
EHP5 for SAP ERP 6.0 / NW 7.02		SAP Enhancement package 5 for SAP ERP 6.0 / NW 7.02
EHP6 for SAP ERP 6.0 / NW 7.31		SAP Enhancement package 6 for SAP ERP 6.0 / NW 7.31
EHP7 for SAP ERP 6.0 / NW 7.4		SAP Enhancement package 7 for SAP ERP 6.0 / NW 7.40
EHP8 for SAP ERP 6.0 / NW 7.5		SAP Enhancement package 8 for SAP ERP 6.0 / NW 7.50

## 1.2 Global Definitions

Terminology used in this guide.

**SAP Application** A SAP application is an SAP software solution that serves a specific business area like ERP, CRM, PLM, SRM, and SCM.

**Business Scenario** From a microeconomic perspective, a business scenario is a cycle, which consists of several different interconnected logical processes in time. Typically, a business scenario includes several company departments and involves with other business partners. From a technical point of view, a business scenario needs at least one SAP application (SAP ERP, SAP SCM, or others) for each cycle and possibly other third-party systems. A business scenario is a unit which can be implemented separately and reflects the customer's prospective course of business

**Software Component** A component is the smallest individual unit considered within the Solution Development Lifecycle; components are separately produced, delivered, installed and maintained.
















## 1.3 Important SAP Notes

### Caution

Check regularly for updates available for the Application Operations Guide.

Table 2: Global Definitions

SAP Note Number	Title	Comment
<a href="#">998833</a> 	Release Restrictions SAP ERP 6.0 - Enhancement Packages	Describes limitations of SAP enhancement packages for SAP ERP 6.0
<a href="#">1066110</a> 	Composite SAP note: Available SAP Lib. DVDs & download packs	Describes how to install an SAP Library on your customer server.
<a href="#">2171334</a> 	EHP8 for SAP ERP 6.0 SP Stacks - Release & Information Note	Contains information and references to notes for applying Support Package (SP) Stacks of SAP Enhancement Package 8 for SAP ERP 6.0
<a href="#">2258099</a> 	Enhancement package 8 for SAP ERP 6.0: Required SWC	Contains installation information for SAP EHP8
<a href="#">1816819</a> 	Dual Stack Support for Business Suite systems	Should generally address Business Suite systems
<a href="#">1359215</a> 	Technical prerequisites for using enterprise services	You are using or intend to use Enterprise Services provided with SAP Business Suite
<a href="#">2156130</a> 	Add-on compatibility of SAP NetWeaver 7.5 ABAP	You plan to run 'SAP NetWeaver 7.5 - ABAP' as platform for 'SAP Business Suite i2016 (EhP8)' product versions together with ABAP Add-Ons on the same system. Which points do you need to consider?
<a href="#">1514967</a> 	SAP HANA: Central Note	SAP HANA Appliance Software SAP HANA Database
<a href="#">1732276</a> 	High availability limitations of HANA database	Describes current restrictions of failover scenarios in HANA database.
<a href="#">1061242</a> 	High Availability (EH&S WWI and EH&S Expert)	Describes, how to improve the reliability and performance of EH&S Windows Wordprocessor Integration (WWI) servers and Expert servers
<a href="#">1870650</a> 	Environment Health and Safety (EH&S) Application Operations Guides	Information on the EH&S Application Operations Guide.
<a href="#">122400</a> 	EH&S installation: Composite SAP Note	Installation of EH&S, implement corrections to EH&S, or plan an upgrade to a higher ERP Release with EH&S installed.

SAP Note Number	Title	Comment
<a href="#">1394553</a> 	EH&S WWI Server Installation Instructions	Comprehensive description of how to set up an EH&S WWI generation server.

## 2 Technical System Landscape

EHP8 for SAP ERP 6.0 consists of various technical components, each representing a particular function as described in the Master Guide for SAP enhancement package 8 for SAP ERP 6.0.

### Note

You can find the current version of the Master Guide for SAP enhancement package 8 for SAP ERP 6.0 on SAP Service Marketplace at [service.sap.com/instguides](http://service.sap.com/instguides) ► [SAP Business Suite Applications](#) ► [SAP ERP](#) ► [SAP ERP 6.0](#) ► [SAP enhancement packages for SAP ERP 6.0](#) ► [SAP enhancement package 8 for SAP ERP 6.0](#) ► [Master Guide- SAP enhancement package 8 for SAP ERP 6.0](#) ►.

Purpose of the Master Guide for SAP enhancement package 8 for SAP ERP 6.0

The master guide provides a central starting point for the technical implementation of the enhancement packages for SAP ERP. It outlines the basic idea of the enhancement package concept and provides an insight into the overall implementation procedure.

To ensure a smooth technical implementation, the master guide helps you to find further information and links to related documents that outline business processes, scenarios, and software units. Getting a clear picture of the implementation procedure will help you to plan and prepare all required steps of your project. Keep in mind that additional software dependencies, which are not mentioned explicitly in the present document, might exist. These dependencies are described in notes which are linked in the installation and configuration guides.

### Related Information

<http://service.sap.com/instguides> 

<http://help.sap.com>

### 2.1 System Landscape for EHS

You can install Environment, Health and Safety (EHS) Product Safety centrally or distributed. For the central installation, the data is stored centrally on the EHS instance. WWI generation servers (WWI servers) and EH&S Expert servers are connected to the central instance of EHS. All processes that run in EHS are executed in the EHS system. But they can also be triggered from the logistics systems.

For the distributed installation, EHS is installed in a master system and in the distributed logistics systems of the plants. Data is maintained in the master system of EHS and then distributed to the logistics system through ALE. Logistics-dependent processes are executed in the logistics systems of the plants. In the distributed installation, WWI servers must also be installed in the plants.



## 2.1.1 Scenario/Component Matrix

Environment Health and Safety (EHS) runs on SAP NetWeaver AS ABAP.

Additional components for EHS are:

- EH&S Windows Word Processor Integration (EH&S WWI)
- EH&S Expert


EH&S WWI and EH&S Expert are registering RFC servers that read and write EHS specification data via Remote Function Call (RFC) from the SAP system.

## 2.2 Business Functions

To run an individually configured SAP system it is useful to know which Business Functions are active in the system. You can display all active Business Functions using the transaction SFW5.

Each specific business function of EHP8 FOR SAP ERP 6.0 includes distinct software components.





### Note












For current information about the business functions and for further information, see [2258099](#) .

## 2.3 Related Documentation

The following table lists where you can find more information about the technical system landscape.

Table 3: Global Definitions

Topic	Guide/Tool	Quick Link on SAP Service Marketplace (service.sap.com)
Information about business and technical aspects of SAP ERP including news, services, events, demos, education, and workshops	Master Guide	<a href="http://service.sap.com/erp">http://service.sap.com/erp</a> 
Comprehensive information about the installation and upgrade of SAP ERP	Master Guide	<a href="http://service.sap.com/erp-inst">http://service.sap.com/erp-inst</a> 
Tailored information to facilitate the preparation of the upgrade decisions and the execution of the upgrade project	Master Guide	<a href="http://service.sap.com/erp-upgrade">http://service.sap.com/erp-upgrade</a> 
Sizing	Quick Sizer Tool	<a href="http://service.sap.com/sizing">http://service.sap.com/sizing</a> 

Topic	Guide/Tool	Quick Link on SAP Service Marketplace (service.sap.com)
Detailed information about the technical system landscape of EHP8 for SAP ERP 6.0	Master Guide	<a href="http://service.sap.com/instguides">http://service.sap.com/instguides</a>  ▶ <i>SAP Business Suite Applications</i> ▶ <i>SAP ERP</i> ▶ <i>SAP ERP 6.0</i> ▶ <i>SAP enhancement packages for SAP ERP 6.0</i> ▶ <i>SAP enhancement package 8 for SAP ERP 6.0</i> ▶ 
Information about the application and integration platform SAP NetWeaver	Master Guide	<a href="http://service.sap.com/netweaver">http://service.sap.com/netweaver</a> 
Security	Security Map	<a href="http://service.sap.com/security">http://service.sap.com/security</a> 
SAP Master Data Governance	Operations Guide	<a href="http://service.sap.com/instguides">http://service.sap.com/instguides</a>  ▶ <i>SAP Business Suite Applications</i> ▶ <i>SAP Master Data Governance</i> ▶ <i>SAP Master Data Governance (ERP 6.0 EHP08)</i> ▶ 
Application- and Industry-specific Components such as SAP Financials and SAP Retail	Master Guide	<a href="http://service.sap.com/instguides">http://service.sap.com/instguides</a> 
Technology Components such as SAP Web Application Server	Master Guide	<a href="http://service.sap.com/instguides">http://service.sap.com/instguides</a> 
Technical Configuration	Master Guide	<a href="http://service.sap.com/instguides">http://service.sap.com/instguides</a> 
Scalability	Master Guide	<a href="http://service.sap.com/instguides">http://service.sap.com/instguides</a> 
High Availability	Master Guide	<a href="http://service.sap.com/instguides">http://service.sap.com/instguides</a> 

## 3 Monitoring of EHP8 for SAP ERP 6.0

All ERP applications use the NetWeaver technology for all monitoring tasks. Only specialties are described in detail in this guide.

You can find more information about the underlying technology in the *SAP NetWeaver Administrator's Guide - Technical Operations Manual* in the SAP Help Portal at <http://help.sap.com> *SAP NetWeaver SAP NetWeaver 7.5 System Administration and Maintenance Information Technical Operations for SAP NetWeaver*.

### 3.1 Alert Monitoring with CCMS

Proactive, automated monitoring is the basis for ensuring reliable operations for your SAP system environment. SAP provides you with the infrastructure and recommendations needed to set up your alert monitoring to recognize critical situations for SAP Product Lifecycle Management as quickly as possible.

SAP enhancement package 8 for SAP ERP 6.0 is based on SAP NetWeaver technology, so you can use standard SAP NetWeaver monitoring tools. This includes the Computing Center Management System (CCMS). With the monitoring architecture of the CCMS, SAP provides an infrastructure with which you can monitor your IT landscape centrally. The monitoring architecture is delivered with every SAP NetWeaver Application Server. The architecture runs on every SAP NetWeaver Application Server and can be extended to include additional SAP and non-SAP components. The concept of the monitoring architecture is to make all required information available in a central monitoring system, such as alerts or log files.

In the Alert Monitor, you can find a number of monitor sets delivered by SAP. These contain the most important monitors that allow you to easily monitor your IT landscape. The SAP CCMS Monitor Templates monitor set contains the most important monitors for your daily monitoring tasks. For SAP ERP, a set of templates with the name *SAP ERP Monitor Templates* is available. You can either use the monitors from this set directly or as templates for your own monitors.

#### Note

For more information about the CCMS, see SAP Help Portal at <http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP NetWeaver* ► *Administration of Application Server ABAP* ►

#### 3.1.1 Monitoring Installation and Setup

In order to enable the auto-alert mechanism of CCMS, see [617547](#) ►.

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## 3.1.2 Detailed Monitoring and Tools for Problem and Performance Analysis

The technology of SAP Product Lifecycle Management is based on SAP NetWeaver 7.0. For more information about technical problem analysis (such as with a database, the operating system, or workload analysis), see SAP Help Portal at <http://help.sap.com/nw75/> ► *System Administration and Maintenance Information* ► *Technical Operation Guide* ►.

## 3.1.3 Component-Specific Monitoring for SAP Product Lifecycle Management (PLM)

There are no additional CCMS monitor templates specific for SAP Product Lifecycle Management. However, we recommend that you monitor the RFC connections between an SAP PLM system in a demilitarized zone (DMZ) and within a firewall (see section Technical System Landscape). You can use the SAP CCMS monitor templates in the SAP CCMS Monitor Sets transaction, for example transaction code RZ20 and SAP NetWeaver tools for monitoring RFC connections. For more information about monitoring RFC connections, see SAP Help Portal at <http://help.sap.com/nw75/> ► *System Administration and Maintenance Information* ► *Technical Operation Guide* ► *Administration of SAP NetWeaver Systems and Components* ► *SAP NetWeaver Gateway Foundation Technical Operations Guide* ►.

The SAP Product Lifecycle Management user interface is an ABAP Web Dynpro application. For more information about monitoring ABAP Web Dynpro applications, see SAP Help Portal at <http://help.sap.com/nw75/> ► *System Administration and Maintenance Information* ► *Technical Operation Guide* ► *Administration of SAP NetWeaver Systems and Components* ► *AS ABAP (Application Server ABAP)* ► *Administration* ► *Web Dynpro ABAP Administration* ►.

If you use TREX in your system landscape, you can also use monitoring tools specific for TREX. For more information, see SAP Help Portal at <http://help.sap.com/nw75/> ► *System Administration and Maintenance Information* ► *Technical Operation Guide* ► *Administration of SAP NetWeaver Systems and Components* ► *AS ABAP (Application Server ABAP)* ► *Administration of Standalone Engines* ► *Search and Classification (TREX)* ► *Monitoring* ►.

Business Context Viewer (BCV) is an analytic application that does not produce actively used data. For this reason, there is no need for CCMS monitoring or alerts.

## 3.1.4 Component Specific Monitoring for SAP FS-CM

There are no additional CCMS monitor templates specific for SAP FS-CM. However, we recommend that you monitor the RFC connections between SAP FS-CM and SAP FS-PM. A description how to maintain RFC connections is available in the SAP Help Portal at <http://help.sap.com/nw75/> ► *Administration of SAP NetWeaver Systems* ► *Administration of SAP NetWeaver Systems and components* ►.

## Trace and Log Files

Logging and tracing for ABAP components is done using transaction SLG1. An Application Log comprises a log header and a set of messages. The log header contains general data (type, created by/on, etc.). Each log in the database also has the attributes Object and Sub object. These attributes describe the application which wrote the log, and classify this application. This guide outlines new categories and sub-categories for logs that have been established with EHP8 for SAP ERP 6.0 only.

### 3.1.5 Component Specific Monitoring for EHS

To monitor the availability of EH&S Windows Wordprocessor Integration servers (EH&S WWI servers) and EH&S Expert servers with CCMS, see [1061242](#).

- To monitor the report shipping under Edit Report Shipping Orders, use transaction CVD1.
- To monitor the report generation and the report shipping, go to WWI Monitor in transaction CG5Z.
- To monitor the status of print requests that are generated in the SAP component Global Label Management in the Labeling Workbench, use transaction CBGLWB.

### 3.1.6 Log objects for IS-Oil and IS-PRA

IS-Oil and IS-PRA provide the following log objects, accessible in transaction SLG1:

Table 4: Log Objects

Component	OBJECT	SUBOBJECT	SUBOBJTXT
IS-OIL	OIO_CROSS	CONS	Logs from consistency reports/tools
IS-OIL	OIO_CROSS	XPRA	Various XPRA logs if necessary (optional use)
IS-OIL	OIG_MASSPROCESS	1	IS-OIL TD: Shipment mass processing with ROIGTRSL
IS-OIL	OIJ	NOM1	Nomination
IS-OIL	OIJ	TICKET	Ticket
IS-OIL	OIR_PROCESS_CONTROL	CMP1	Complaint processing
IS-OIL	OIR_PROCESS_CONTROL	FM01	Fuels meter readings
IS-OIL	OIR_PROCESS_CONTROL	FM02	Fuels meter readings: Clear
IS-OIL	OIR_PROCESS_CONTROL	FPR1	Fuels Pricing
IS-OIL	OIR_PROCESS_CONTROL	FPR1	Fuels Price check results
IS-OIL	OIR_PROCESS_CONTROL	FS01	Fuels dip readings

Component	OBJECT	SUBOBJECT	SUBOBJTXT
IS-OIL	OIR_PROCESS_CONTROL	FS02	Fuels dip readings: Clear
IS-OIL	OIR_PROCESS_CONTROL	FS03	Fuels stocks
IS-OIL	OIR_PROCESS_CONTROL	IS01	SSP Invoicing
IS-OIL	OIR_PROCESS_CONTROL	MM01	Material movements based on meter readings
IS-OIL	OIR_PROCESS_CONTROL	MM02	Material movements based on dip readings
IS-OIL	OIR_PROCESS_CONTROL	PC01	Payment card transaction upload
IS-OIL	OIR_PROCESS_CONTROL	PC02	Clearing house settlement/transmission
IS-OIL	OIR_PROCESS_CONTROL	PC03	PC Reconciliation upload
IS-OIL	OIR_PROCESS_CONTROL	PC04	PC Reconciliation run
IS-OIL	OIR_PROCESS_CONTROL	PRN1	SSR Print Processing
IS-OIL	OIR_PROCESS_CONTROL	PRNL	Location based collective output
IS-PRA	OIU	CA	Contract Allocation
IS-PRA	OIU	PC	Product Control
IS-PRA	OIU	PR	Production volume allocation
IS-PRA	OIU	REP_MMS_2014	Reporting - MMS-2014
IS-PRA	OIU	REP_REG	Regulatory Reporting
IS-PRA	OIU	VL	Valuation
IS-PRA	OIU	XX	Default heading
IS-PRA	OIUX3	STEP_LOG	Reporting Step Log
IS-OIL	OI_PROPT	MARKET_COST	
IS-OIL	OI_PROPT	OWN_PRICE	
IS-OIL	OI_PROPT	OI_PROPT	

### 3.1.7 Log objects for Global Trade Management

Global Trade Management (EA-GLTRADE) provides the application log `Trading Contract Synchronization`. To access this application log in transaction `SLG1`, enter object `WB2_SYNC`. No sub object is defined for it.

Table 5: Log Objects

Component	OBJECT	SUBOBJECT	TXT
LO-GT-TC	WB2_SYNC		Trading Contract Synchronization

The [External Identification](#) field contains the name of the queue for which the log was created. Once the errors are fixed, you can restart the queues in transaction `SMQ1` (qRFC Monitor). Reversely, you can also select the erroneous queues in transaction `SMQ1` and then display the logs for those queues using transaction `SLG1`. To display the queues enter the queue name in the field [External Identification](#) and choose object `WB2_SYNC`.

### ➔ Tip

We recommend that you do not use any time restrictions. You can select the erroneous queues in transaction `SMQ1` by using the following generic search parameters for the queue names

Table 6: Backup and restore strategy

Generic	WB2_TC_*
Generic for purchase	WB2_TC_M*
Generic for sales	WB2_TC_V*
Single document for purchase	WB2_TC_M_xxx xxx is used for the document number (leading zeroes have to be considered)
Single Document for sales	WB2_TC_V_xxx xxx is used for the document number (leading zeroes have to be considered)

## Creation of Chargeback Requests by Using Post Processing Framework

In Compensation Management (component `LO-GT-CHB`) you can create chargeback requests by using the `Post Processing Framework`. Depending on your Customizing settings in Compensation Management (► [Logistics General](#) ► [Global Trade](#) ► [Management](#) ► [Compensation Management](#) ► [Condition Contract](#) ► [Define and Configure Actions](#) ►), chargeback requests are automatically created in a synchronous or asynchronous way when the document is saved, or manually by calling up report `RSPPFPROCESS`. The processing status is tracked in the log of the `Post Processing Framework`. To select actions with processing errors, go to transaction `WCB_SPPFP`, set the processing time to initial and select action status 2. After execution, the system displays all actions with processing errors. The processing log helps you to analyze the cause of the error.

To select actions that have not been processed yet, select actions status 0. Adding the creation date as an additional search parameter allows you to find successful actions that have not been processed for a long period of time.

Table 7:

Component	OBJECT	SUBOBJECT	SUBOBJTXT
LO-GT-TC			

- Log Object: `WGBT`
- Program name: `WB2_BATCH_CLASS_TC_SYNC`
- External ID: `WB2_BTC_xxx_yyy` (xxx = trading contract number including leading zeroes, yyy = time stamp)

There could be qRFC entries that you can find in transaction `SMQ1`. These entries have the following queue name: `WB2_BTC_xxx` (xxx = trading contract number including leading zeroes).



## 3.1.8 Log objects for SAP FS-CM ABAP

Table 8:

OBJECT	TEXT	Used in Report	Comment
ICL_LOT2GL	Post Reserves to Financial Accounting	ICL_CF_LOT2GL	<p>This report is accessible from the easy access menu</p> <p>► Insurance ► Claims Management ► Claim ► Routine Interface Processes ► Post reserves to Financial Accounting ►</p> <p>Log is saved.</p>
ICL_RES2LOT	Reserve Lot	ICL_CF_CASE_RESERVE2LOT	<p>This report is accessible from the easy access menu</p> <p>► Insurance ► Claims Management ► Claim ► Routine Interface Processes ► Transfer claim reserves to Lot ►</p> <p>Log is saved.</p>
ICL_RTM	Claims Processing - Runtime Analyses		<p>This log is used when Enterprise Search/BRF/BRFplus performance trace is turned on using the checkpoint group</p> <p>ICL_PERFORMANCE_DISPLAY in direct input mode or batch mode.</p> <p>Log is saved.</p>
ICL_VCST			Activation of Versioned Customizing per Switch Framework

Table 9:

Component	OBJECT	SUBOBJECT	SUBOBJTXT
ISCMCLAIM	ISCMCLAIM	OUTBOUND	Outbound Interface
ISCMCLAIM	ISCMCLAIM	POLICYSNAPSHOT	Policy Snapshot
ISCMCLAIM	ISCMCLAIM	RBPO	Role-Based Performer (Automatic Assignment via HR - Organization Management)
ISCMCLAIM	ISCMCLAIM	RI	Reinsurance interface

## 3.1.9 Log objects for SAP ERP Financial Accounting and Operations

Logging and tracing for ABAP components is done using transaction `SLG1`. An Application Log comprises a log header and a set of messages. The log header contains general data (type, created by/on, etc.). Each log in the database also has the attributes `Object` and `Sub-object`. These attributes describe the application which wrote the log, and classify this application.

The SAP ERP Financial Accounting and Operations uses the following log object and sub-object:

Log object: `FI_LOC_CN` (UI Update for China) Sub-object: `BJPRINT` (Background Printing)

## 3.1.10 Log objects for Environment Health and Safety (EHS)

### 3.1.10.1 Trace and Log Files for EHS

Use trace files and log files to analyze problems.

Table 10: Important log and trace files for Report Shipping (EHS-SAF-RSH)

Component	Content	File / log object	Path
EHS-SAF-RSH	Logging EHS Report Shipping	CVDS	SAP Application Log in transaction <code>SLG1</code>

To log the report generation, set the environment parameter `REPORT_GENERATION_PROTOCOL` to `X` in the Customizing of Basic Data and Tools under Specify Environment Parameters.

Table 11: Important log and trace files for Report Generation (EHS-BD-RDF)

Component	Content	File / log object	Path
EHS-BD-RDF	Logging EHS Report Generation	EHRE	SAP Application Log in transaction <code>SLG1</code>

Table 12: Important log and trace files for Global Label Management (EHS-SAF-GLM)

Component	Content	File / log object	Path
EHS-SAF-GLM	Logging EHS Global Label Management	EHGL	SAP Application Log in transaction <code>SLG1</code>
EHS-SAF-GLM	Logging print requests that are processed in EHS Global Label Management	EHPR	SAP Application Log in transaction <code>SLG1</code>

Table 13: Important log and trace files for EH&amp;S Expert (EHS-BD-TLS-EXP)

Component	Content	File / log object	Path
EHS-BD-TLS-EXP	RFC log	Rfc*.log	Configured EH&S Expert log directory
EHS-BD-TLS-EXP	RFC trace	Rfc*.trc	EH&S Expert installation directory
EHS-BD-TLS-EXP	EXP log	Exp*.log	Configured EH&S Expert log directory
EHS-BD-TLS-EXP	Windows Event Log		Windows Control Panel - Event Viewer
EHS-BD-TLS-EXP	Dev_trc	dev_rfc.trc	EH&S Expert installation directory
EHS-BD-TLS-EXP	Application Log	object EHAD	SAP Application Log in transaction SLG1

For more information on EH&S Expert logs and traces and how to enable them, see [1364100](#). For EH&S Expert and EH&S Windows Wordprocessor Integration (EH&S WWI) you must clean up the log and trace files as well as temporary EH&S WWI files. For more information, see Trace and Log Files.

Table 14: Important Log and Trace files for EHS WWI (EHS-BD-RDF-WWI)

Component	Content	File / log object	Path
EHS-BD-RDF-WWI	Logging EHS Report Generation	object EHAD	SAP Application Log in transaction SLG1
EHS-BD-RDF-WWI	WWI err file Trace of one generation	*.err	EH&S WWI root directory
EHS-BD-RDF-WWI	Windows Event Log		Windows Control Panel - Event Viewer
EHS-BD-RDF-WWI	WWI file log	*.log	Windows temp directory
EHS-BD-RDF-WWI	RFC errors from RFC library	dev_rfc.trc	EH&S WWI installation directory
EHS-BD-RDF-WWI	RFC trace	Rfc*.trc	EH&S WWI installation directory


1. To log the report generation, set the environment parameter REPORT\_GENERATION\_PROTOCOL to X in the Customizing of Basic Data and Tools under Specify Environment Parameters Saving the complete log will affect generation performance, therefore this function is switched off by default.
2. To save temporary EH&S WWI files including the err file, set dont\_delete to 1 under [spool] in WWI.INI. Temporary EH&S WWI files are used for error analysis by SAP Support.

### Caution

The amount of disk space that is consumed by the temporary EH&S WWI files can raise very fast. Therefore, set dont\_delete to 0 to switch off this setting. For more information, see [959195](#).

3. You can also check the recent generation logs in the Windows Event Log for each EH&S WWI service.
4. To enable the EH&S WWI file log, set LogToFile to 1 under [Global] in WWI.INI. The EH&S WWI file log is mainly used for long-term error analysis and to analyze crashes of EH&S WWI.

### Caution

The logs can consume a lot of disc space. So, the log to file will slow down the WWI server. For more information, see [778684](#) .

5. dev\_rfc.trc is enabled through Remote Function Call (RFC) by default. dev\_rfc.trc logs RFC connection errors.
6. To enable the RFC traces, set RFC\_TRACE to 1 in the SAPRFC.INI file of the RFC destination. The RFC library logs the complete binary RFC traffic to the file. Generated log files consume a lot of disc space. Therefore, set RFC\_TRACE to 1 in the SAPRFC.INI file when not required

The EH&S WWI logs depend on the trace level that has been configured for EH&S WWI. The EH&S WWI trace level is configured as parameter -T in the WWI service. Trace level ranges from 0 (only fatal errors) to 5 (debug trace). Trace level 3 is set as default.

## 3.1.10.2 Workload Monitors in EHS

Table 15: Important Log and Trace files for EHS WWI (EHS-BD-RDF-WWI)

Component	Monitor	Description	Prerequisites
EH&S Windows Wordprocessor Integration (for EHS Product Safety) EH&S Windows Word Processor Integration (for print requests in EHS Global Label Management)	WWI Monitor in transaction CG5Z	Shows the queue of the report generation and report shipping orders in EH&S WWI.	You have configured the WWI generation in the Customizing of Basic Data and Tools under Specify Generation Servers.
	Labeling Workbench in transaction CBGLWB	You can filter the print request queue by their states.	You have configured the processing of print request in EHS Global Label Management.

Use the following filters in the Labeling Workbench to show the print requests in the respective status:

- Print requests bodies to be processes: status AA (Print request body exists)
- Print requests to be created: status ZS (Print request created, not yet processed)
- Print requests to be printed: status ZD (Print request ready for printing)

### 3.1.10.3 Other Analysis and Monitoring Tool for EHS

Table 16:

Component	Monitor	Description	Prerequisites
EH&S Windows Wordprocessor Integration and EH&S Expert	EH&S WWI and EH&S Expert Server Administration in transaction <code>CGSADM</code>	You can check the configuration and the Windows event log of EH&S WWI servers and EH&S Expert servers, furthermore you can switch on logging and download log files.	EH&S Management Servers are set up (see the Customizing of Basic Data and Tools under Set Up EH&S Management Server)
EH&S Windows Wordprocessor Integration (for EHS Product Safety)	Job selection in transaction <code>SM37</code>	Shows job logs	Use filter the following filters: <ul style="list-style-type: none"><li>• Job Name: <code>WWI *</code></li><li>• User Name: <code>*</code></li><li>• After event: <code>*</code></li></ul>
EH&S Windows Wordprocessor Integration (for print requests in EHS Global Label Management)	Job selection in transaction <code>SM37</code>	Shows job logs	Use filter the following filters: <ul style="list-style-type: none"><li>• Job Name: <code>EHSGLM_PRQ*</code></li><li>• User Name: <code>*</code></li><li>• After event: <code>*</code></li></ul>

## Monitoring EH&S Windows Wordprocessor Integration and EH&S Expert Services

EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert Services must be monitored by a watchdog, so they are restarted in case of a fatal error. We recommend to use EH&S Management Server (in the Customizing of Basic Data and Tools under Set Up EH&S Management Server).

If you are not using EH&S Management Server, configure `EhsStart.exe` as watchdog:

- For EH&S Expert Server: in the Customizing of Basic Data and Tools under Set Up EH&S Expert Server As a Windows Service
- For EH&S WWI: in the Customizing of Basic Data and Tools under Set Up EhsStart As a Windows Service.

## Monitoring EH&S WWI and EH&S Expert File System

Monitor the file system of the EH&S WWI servers and the EH&S Expert servers to make sure they do not run out of free disk space. Archive or delete no longer needed log files regularly. For more information, see Trace Files and Log Files.

## 3.1.10.4 Interface Monitors in EHS

You use interface monitors to analyze problems with interfaces such as Remote Function Call (RFC), IDoc, and HTTP.

Table 17: Important Log and Trace files for EHS WWI (EHS-BD-RDF-WWI)

Interface	Description	Technology Used
REPMAS	Reports are distributed from the EHS system to logistics systems.	IDoc
SUBMAS	Specification data is distributed from the EHS system to logistics systems.	IDoc
PHRMAS	Phrase data is distributed from the EHS system to logistics systems.	IDoc
DANGEROUSGOOD	Dangerous goods data is distributed from the EHS system to logistics systems.	IDoc
WWI*	There are several RFC functions (WWI*) which call the WWI server.	RFC
START_EXPERT_SYSTEM	Calls the Expert rules engine.	RFC
RMS_SOLVE_RXM	Calls the Expert matrix solver.	RFC
OccupationalIncidentERPCreateRequestConfirmation_In	When an occupational incident occurs in a company, the persons involved (or contacted) must record the most important information about it as part of incident processing.	SOA WebService
DisposalNoteERPRequestConfirmation_In DisposalNoteERPRequestConfirmation_Out DisposalNoteURIERPByIDQueryResponse_Out WasteManagementPartnerERPRequestConfirmation_Out	Waste disposal notes	SOA WebService
HazardousMaterialAdministration HazardousMaterialIn HazardousMaterialAdministration HazardousMaterialOut	Collects information about hazardous materials. This information must be available in the company's logistic systems to ensure compliance with all regulations pertaining to hazardous materials.	SOA WebService
International Uniform View of Chemical Substance Replication In International Uniform View of Chemical Substance Replication Requesting Out	Used to replicate or to request international uniform view of chemical substance for IUCLID database.	SOA WebService

For more information, see the Enterprise Services Wiki at <http://wiki.sdn.sap.com/wiki/display/ESpackages> and search for EH&S.

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## 3.1.11 Log objects for SAP Product Lifecycle Management (PLM)

### Trace and Log Files

Trace files and log files are essential for analyzing problems. SAP Product Lifecycle Management uses SAP NetWeaver tools for tracing and logging. There are no SAP PLM specific trace and log files.

For more information about tracing and logging with SAP NetWeaver tools, see the SAP Help Portal at <http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP Netweaver* ► *Administration of SAP NetWeaver Systems and components* ► *AS ABAP (Application Server ABAP)* ► *Monitoring and Administration Tools for Application Server ABAP* ► *Trace Functions* ►

### Workload Monitors

SAP Product Lifecycle Management uses the standard NetWeaver workload monitor. For more information, see SAP Help Portal at <http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP Netweaver* ► *Administration of SAP NetWeaver Systems and components* ► *AS ABAP (Application Server ABAP)* ► *Monitoring and Administration Tools for Application Server ABAP* ► *Statistics* ► *Workload Monitor* ►

### Interface Monitors

Interface monitors are essential for analyzing problems with interfaces such as RFC, IDoc, and HTTP. If you create RFC connections for running your SAP PLM system landscape, use standard SAP NetWeaver tools for monitoring these RFC connections. For more information, see SAP Help Portal at

<http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP Netweaver* ► *Administration of SAP NetWeaver Systems and components* ► *AS ABAP (Application Server ABAP)* ► *Monitoring and Administration Tools for Application Server ABAP* ► *Configuration of System Resources for aRFC, tRFC, qRFC* ► *RFC Resources on the Application Server* ► *Monitoring RFC Resources on the Application Server* ►



## 3.2 Data Growth and Data Archiving Monitors

SAP enhancement package 8 for SAP ERP 6.0 uses the standard tools for archiving and monitoring data archiving available in SAP NetWeaver, and does not require an application-specific tool.

For more information, see the the SAP Help Portal at :<http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP Netweaver* ► *Administration of SAP NetWeaver Systems and components* ► *AS ABAP (Application Server ABAP)* ► *Monitoring and Administration Tools for Application Server ABAP* ► *Monitoring in the CCMS* ► *Data Archiving Monitor* ►

### 3.2.1 Archiving for SAP FS-CM

FS-CM data can be archived using the archiving engine (AR\_ENGINE). Following objects can be archived.

Table 18: Archiving Objects

Object	Text
ICLCLAIM	Claim, is the fastest growing objects
ICLECCEVT	Claim Bundle
ICLINDRES	Reserve Lot
ICLSC	Benefits Catalog

### 3.2.2 Archiving for SAP ERP Financial Accounting and Operations

The following archiving procedures are required:

Table 19: Archiving Objects

Object	Text
FI_VERDOC	Archiving Financial Accounting Verification Documents
FI_VERDOC	Performing Archiving Object-Specific Customizing
FI_VERDOC	Defining Write Variant
FI_VERDOC	Dependencies
FI_VERDOC	Displaying Financial Accounting Verification Document Archived

## 3.2.3 Archiving for SAP EHS

### 3.2.3.1 Data Growth and Data Archiving Monitors in EHS

Most critical regarding database growth are EHS reports. The reports can consume a lot of disc space. The documents are saved in the Document Management System (DMS). If you do not use an external DMS system, data base table DRAO grows fast and consumes considerable space.

- To reduce the consumed database space, see [586293](#).
- To use data archiving see [915854](#) and [1093408](#).

To reduce database space consumed by specification data run report `RC1PHDEL` regularly. Specification data is not deleted by default but marked for deletion. Run report `RC1PHDEL` to delete the data on the database physically.

#### Caution

Consider the applicable data retention policies.

You can define periodic tasks required to contain data growth (that is, to reorganize temporary data). For more information, see Periodic Tasks.

### 3.2.3.2 Data Consistency in EHS

If you store related or identical data in different locations, this can cause data inconsistencies, for example, after restoring a single component (such as EH&S Windows Word Processor Integration or EH&S Expert). The following table describes how you can verify data consistency and how you can repair data inconsistencies.

Table 20: Important Log and Trace files for EHS WWI (EHS-BD-RDF-WWI)

Component / Data Store	Check Tool / Method	Description	Prerequisites
Expert Cache	Initialize cache in transaction CGSADM	See EH&S Expert Cache Initialization under <a href="http://help.sap.com">help.sap.com</a>	You use the EH&S Expert cache.
WWI Print Request Cache	Delete cache	Delete the DMS folder on the WWI server. EH&S WWI will refill this cache.	You have configured the Customizing activity Configure WWI Document Management System.

## 3.2.4 Archiving for SAP Product Lifecycle Management (PLM)

### Data Growth and Data Archiving Monitors

The following tables are the fastest growing tables in SAP Product Lifecycle Management.

Table 21: Fastest Growing Tables in SAP PLM

Technical Name of Table	Description
/PLMB/AUTH_OBSID	The table contains assignments of business objects (for example, materials) to access control contexts.
/PLMB/AUTH_UGSID	The table contains assignments of users and user groups to contexts.
/PLMB/AUTH_SIDRP	This is an SAP ECC table. Monitor this table closely, too, if you use Product Lifecycle Management.

These tables are only filled if you use access control management. Use the archiving object /PLMB/SID to archive this data. For periodic tasks required to contain data growth (that is, to reorganize temporary data), see the Periodic Tasks section in this guide.

## 3.2.5 Archiving for SAP ICM

Business Transaction Exit numbers:

- CACS1900
- CACS1901
- CACS2900
- CACS2901

Function modules providing the sample implementations

- CACS00\_SAMPLE\_ITF\_1900
- CACS00\_SAMPLE\_ITF\_1901
- CACS00\_SAMPLE\_ITF\_2900
- CACS00\_SAMPLE\_ITF\_2901

Content repository defined for Archiving in transaction AOBJ. Default provided by SAP: A7.

### Data Consistency

When you work in a system landscape with one SAP Product Lifecycle Management system installed in a demilitarized zone (DMZ) and another SAP Product Lifecycle Management system serving as back-end system,

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you need to make sure that users in both systems are synchronized. This means that users working with the SAP Product Lifecycle Management system in the DMZ need identical users in the SAP Product Lifecycle Management back-end system. Use central user management to make sure the users are synchronized.

For more information, see the the SAP Help Portal at :<http://help.sap.com/nw75> ►►

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## 4 Management of SAP enhancement package 8 for SAP ERP 6.0

SAP provides you with an infrastructure to help your technical support consultants and system administrators effectively manage all SAP components and complete all tasks related to technical administration and operation. You can find more information about the underlying technology in the Technical Operations Manual in the SAP Library under SAP NetWeaver.

### Related Information

<http://help.sap.com/nw75>

## 4.1 Starting and Stopping

When you start SAP NetWeaver, you start the system database, the application servers, and the respective processes of which the system consists.

You can find general information on starting and stopping of SAP NetWeaver based systems at :<http://help.sap.com/nw75> ► *Application Help* ► *Function-oriented View* ► *Solution Life Cycle Management* ► *Starting and Stopping SAP NetWeaver AS for ABAP and Java* ►

### 4.1.1 Starting and Stopping for SAP Product Lifecycle Manageme

When you start your SAP Product Lifecycle Management system, make sure you follow the order as listed in the table.

Table 22: Start and Stop Sequences and Tools

Software Component	Start Sequence	Tool	Detailed Description
SAP ERP	1	<ul style="list-style-type: none"> <li>STARTSAP/ STOPSAP (Unix)</li> <li>Microsoft Management Console (Windows)</li> </ul>	For more information, see the SAP NetWeaver Technical Operations Manual ► <a href="#">General Administration Tasks</a> ► <a href="#">Starting and Stopping SAP NetWeaver ABAP and Java</a> ►.
SAP Product Lifecycle Management Add-On	2	<ul style="list-style-type: none"> <li>STARTSAP/ STOPSAP (Unix)</li> <li>Microsoft Management Console (Windows)</li> </ul>	For more information, see the SAP NetWeaver Technical Operations Manual ► <a href="#">General Administration Tasks</a> ► <a href="#">Starting and Stopping SAP NetWeaver ABAP and Java</a> ►.

### Note

The stop sequence is in reverse order to the start sequence.

If you work with a system landscape with SAP Product Lifecycle Management running in a DMZ and as a back-end system, make sure you stop the SAP Product Lifecycle Management system in the DMZ first before stopping the back-end system. When you start the systems, start the back-end system first before you start the SAP Product Lifecycle Management system in the DMZ.

## 4.1.2 Starting and Stopping for SAP EHS

Table 23: Start and Stop Sequences and Tools

Software Component	Sequence	Tool	Description
SAP ERP 6.0			
EH&S Windows Word Processor Integration (EH&S WWI)		Windows Services	Start the watchdog service that is used for EH&S WWI (EhsStart or EhsManagementServer).
EH&S Expert		Windows Services	Start the watchdog service that is used for EH&S WWI (EhsStart or EhsManagementServer).

## 4.2 Software Configuration

Which components or scenarios used by this application are configurable and which tools are available for adjusting.

Table 24: Component Configuration Tools

Component	Configuration Tools	Description
SAP ERP	Implementation Guide (IMG)	The IMG is the standard SAP tool for ABAP-based system used for Component Customizing.
SAP ERP	SAP Solution Manager	SAP Solution Manager is the standard SAP tool for process- and scenario-based configuration.
SAP Product Lifecycle Management	Implementation Guide (IMG)	The IMG is the standard SAP tool for ABAP-based system used for Component Customizing.
SAP Product Lifecycle Management	SAP Solution Manager	SAP Solution Manager is the standard SAP tool for process- and scenario-based configuration.
Environment, Health and Safety	Implementation Guide (IMG)	The IMG is the standard SAP tool for ABAP-based system used for Component Customizing.
Environment, Health and Safety	SAP Solution Manager	SAP Solution Manager is the standard SAP tool for process- and scenario-based configuration.

### 4.2.1 Software Configuration for EHS

This chapter explains the configurable components or scenarios that are used by Environment, Health and Safety (EHS) and the tools that are used to configure the settings.

Table 25: Component Configuration Tools

Component	Configuration Tools	Description
EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert	TransactionCGSADM	Offers the most commonly used administration and configuration options that are necessary for EH&S WWI and EH&S Expert.
EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert	SvcAdmin.Exe	Tool to change the Windows service settings.
EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert	File Saprfc.ini	Used to configure the RFC destinations.
EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert	File WWI.INI	Used to configure EH&S WWI.



Component	Configuration Tools	Description
EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert	ConPro.Exe	EH&S WWI configuration program that guides the installation steps you have to proceed manually and that checks the consistency of the configuration.
EH&S Expert	ExpAdmin.Exe	Used to configure the EH&S Expert rule sets and the general EH&S Expert settings.

## 4.3 Administration Tools for EHS

Table 26:

Software Component	Configuration Tools	Description
EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert	EH&S WWI and EH&S Expert Server Administration in transaction CGSADM	Offers the most commonly used administration and configuration options that are necessary to implement EH&S WWI and EH&S Expert.
EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert	SvcAdmin.Exe	Used to change the Windows service settings.
EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert	File WWI.INI	Used to configure EH&S WWI, including the log files.
EH&S Expert	ExpAdmin.Exe	Used to configure the EH&S Expert rule sets and the EH&S Expert settings including the trace levels.

## 4.4 Backup and Restore

Table 27: Backup and restore strategy

Category of System Component	Category Properties	Suggested Methods for Backup and Restore	Example
I	Only software, no configuration or application data	<ul style="list-style-type: none"> <li>No backup, new installation in case of a recovery or</li> <li>Initial software backup after installation and upgrade</li> <li>Backup of log files</li> </ul>	BDOC modeler

Category of System Component	Category Properties	Suggested Methods for Backup and Restore	Example
II	Only software, no configuration or application data	<ul style="list-style-type: none"> <li>• Backup after changes have been applied or</li> <li>• No backup, new installation and configuration in case of a recovery</li> <li>• Backup of log files</li> </ul>	<ul style="list-style-type: none"> <li>• SAP Gateway Comm. Station</li> <li>• SAP Business Connector</li> <li>• SAP IPC (2.0C)</li> </ul>
III	Only replicated application data, replication time is sufficiently small for a recovery	Data <ul style="list-style-type: none"> <li>• No data backup needed</li> <li>• Backup of software, configuration, log files</li> </ul>	<ul style="list-style-type: none"> <li>• SAP IMS/Search Engine</li> <li>• SAP IPC (2.0C)</li> <li>• Webserver</li> <li>• SAP ITS</li> </ul>
IV	Only replicated application data, backup recommended because replication time is too long, data not managed by a DBMS	Data <ul style="list-style-type: none"> <li>• Application specific file system backup or</li> <li>• Multiple instances</li> <li>• Backup of software, configuration, log files</li> </ul>	<ul style="list-style-type: none"> <li>• SAP IMS/Search Engine</li> <li>• Web server</li> </ul>
V	Only replicated application data, backup recommended because replication time is too long, data not managed by a DBMS	Data: <ul style="list-style-type: none"> <li>• Database and log backup or</li> <li>• Multiple instances</li> <li>• Backup of software, configuration, log files</li> </ul>	<ul style="list-style-type: none"> <li>• SAP IMS/Search Engine</li> <li>• Catalog Server</li> </ul>
VI	Original application data, standalone system, data not managed by a DBMS	Data: <ul style="list-style-type: none"> <li>• Application specific file system backup</li> <li>• Backup of software, configuration, log files</li> </ul>	Web server
VII	Original application data, standalone system, data managed by a DBMS, not based on SAP WebAS	Data: <ul style="list-style-type: none"> <li>• Database and log backup or</li> <li>• Backup of software, configuration, log files</li> </ul>	N/A
VIII	Original application data, standalone system, based on SAP WebAS	Data: <ul style="list-style-type: none"> <li>• Database and log backup, application log backup (such as job logs in file system)</li> <li>• Backup of software, configuration, log files</li> </ul>	Standalone SAP ERP

Category of System Component	Category Properties	Suggested Methods for Backup and Restore	Example
IX	Original application data, data exchange with other systems, data not managed by a DBMS	Data: <ul style="list-style-type: none"> <li>• Application specific file system backup, data consistency with other systems must be considered</li> <li>• Backup of software, configuration, log files</li> </ul>	N/A
X	Original application data, data exchange with other systems, data managed by a DBMS, not based on SAP WebAS	Data: <ul style="list-style-type: none"> <li>• Database and log backup, data consistency with other systems must be considered</li> <li>• Backup of software, configuration, log files</li> </ul>	<ul style="list-style-type: none"> <li>• SAP liveCache</li> <li>• SAP Mobile Workbench</li> </ul>
XI	Original application data, data exchange with other systems, based on SAP WebAS	Data: <ul style="list-style-type: none"> <li>• Database and log backup, application log backup (such as job logs in file system), data consistency with other systems must be considered</li> <li>• Backup of software, configuration, log files</li> </ul>	<ul style="list-style-type: none"> <li>• SAP ERP</li> <li>• SAP CRM</li> <li>• SAP BW</li> <li>• SAP APO</li> </ul>

You can find general information on backup and restore of SAP NetWeaver based systems at :<http://help.sap.com/nw75> ► *Application Help* ► *Function-oriented View* ► *Solution Life Cycle Management* ► *Backup* ►.

## 4.4.1 Backup and Restore for SAP FS-CM

FS-CM is based on AS ABAP and uses BI, PI. Use the standard SAP NetWeaver tools to backup and restore. In addition, FS-CM application data can be archived and restored using the archiving engine (Transaction AR\_ENGINE). Refer to section 3.2.1 on FS-CM archiving scenarios.

## 4.4.2 Backup and Restore for SAP EHS

The following table lists the components used by EHS and the suggested methods for backup and restore (see Category of System Component)

Table 28:

Component	Category of System Component
SAP ERP 6.0	XI
EH&S Windows Word Processor Integration (EH&S WWI)	III
EH&S Expert	III

## 4.5 Periodic Tasks

### 4.5.1 Scheduled Periodic Tasks

This chapter describes all automatable tasks required to run periodically in order to keep the application running smoothly over time.

Such tasks may be required on component level and are therefore relevant in each scenario that uses the component. You can find the mapping in the chapter Scenario / Component Matrix. Other tasks may be relevant for certain business scenarios only. It is important that you monitor the successful execution of these tasks on a regular basis.

For each component that requires periodical tasks to be scheduled list all relevant tasks (typically background jobs) per component in a component table below or refer to documentation where these tasks are already well documented.

Additionally for each business scenario that requires specific periodical tasks list and describe them within the Scenario specific tasks table below.

### 4.5.2 Periodic Tasks for SAP Product Lifecycle Management

SAP Product Lifecycle Management uses the standard tools and procedures based on SAP NetWeaver ABAP technology. For more information about periodic tasks, see SAP Help Portal at <http://help.sap.com/nw75>

► *System Administration and Maintenance Information* ► *Technical Operations for SAP NetWeaver* ►

Table 29: Scenario-Specific scheduled Periodic Tasks

Required for Scenario(s)	Program Name/Task	Task Scheduling Tool	Recommended Frequency	
PLM Authorization Checks	/PLMB/ R_UPDATE_RT_FROM_CP	Transaction SM36	Daily for 5 minutes	This report transforms changes to access control contexts or user groups to data base tables that are used by the PLM authorization check. It must be scheduled as a regularly running batch job. Its frequency determines how fast changes to user groups and access control contexts take effect for PLM authorization checks.
PLM Authorization Checks	SBAL_DELETE	Transaction SM36	Weekly	This report deletes old log entries. It should be scheduled regularly to ensure that log entries from report /PLMB/R_AUTH_UPDATE_RT_FROM_CP are deleted when they have reached their expiry date.
PLM Authorization Administration	/PLMB/ R_DEL_CTXT_BO_ASSN GNMT	Transaction SM36	Once a day or depending on archiving runs	This report checks for assignments of contexts to objects that have been archived and deleted recently. The report removes those assignments.

### 4.5.3 Manual Tasks for SAP Product Lifecycle Management

This chapter describes all manual tasks required to run periodically in order to keep the application running smoothly over time.

A manual task needs a person to execute, in contrast to the scheduled tasks listed above, which can be automated using a task scheduler program. Such tasks may be required on component level and are therefore relevant in each scenario that uses the component. You can find the mapping in the chapter Scenario/Component Matrix. Other tasks may be relevant for certain business scenarios only. It is important that you monitor the successful execution of these tasks on a regular basis.

Table 30: Scenario-specific manual tasks

Required for scenario(s)	Task	Tool(s) supporting	Recommended Frequency	Detailed Description
Check for duplicate user groups	/PLMB/ R_DUPLICATE_USRGRPS	Transaction SM6	On demand	This report can be used to check for duplicate user groups.

## 4.5.4 Periodic Tasks for EHS

This chapter describes all automatable tasks required to run periodically in order to keep the application running smoothly over time. Such tasks may be required on component level and are therefore relevant in each scenario that uses the component. You can find the mapping under Scenario / Component Matrix . Other tasks may be relevant for certain business scenarios only. It is important that you monitor the successful execution of these tasks on a regular basis.

Table 31: Scheduled Periodic Tasks for EH&amp;S Windows Word Processor Integration (EH&amp;S WWI) and EH&amp;S Expert

Program Name/Task	Task Scheduling Tool	Recommended Frequency	Description
Windows Update	Windows Update	Once a month	Install the Microsoft security updates on the EH&S WWI servers and EH&S Expert servers

### 4.5.4.1 Manual Periodic Tasks for EHS

This chapter describes all manual tasks required to run periodically in order to keep the application running smoothly. Manual task needs a person to execute it whereas a scheduled tasks can be automated using a task scheduler program. Such tasks may be required on component level and are therefore relevant in each scenario that uses the component. You can find the mapping under Scenario / Component Matrix. Other tasks may be relevant for certain business scenarios only. It is important that you monitor the successful execution of these tasks on a regular basis.

Table 32: Manual Tasks for EH&amp;S Windows Word Processor Integration (EH&amp;S WWI) and EH&amp;S Expert

Task	Recommended Frequency	
Clean up logs and traces	Once a week	For EH&S Expert and EH&S WWI clean up the log and trace files as well as temporary EH&S WWI files. See Trace and Log Files.

## 4.6 Load Balancing

SAP enhancement package 8 for SAP ERP 6.0 uses the standard functionality of SAP NetWeaver for logon and load balancing.

For more information on load balancing, see SAP Help Portal at <http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP NetWeaver* ► General Administration Tasks □ High Availability □ Network High Availability □ Web Server Networks and DMZs

### 4.6.1 Load Balancing for SAP EHS


You can determine load balancing from Environment Health and Safety (EHS) to EH&S Expert servers and EH&S WWI servers through Remote Function Call (RFC). For more information see [1061242](#) .

Table 33: Logging On and Load Balancing Setup/Tools

Scenarios	Description	Tools
EH&S Expert	Connect several EH&S Expert services to one RFC destination. RFC applies the load balancing automatically.	RFC
EH&S WWI	If you use several WWI servers on several RFC destinations, the load balancing is determined by the WWI dispatcher background job.	Customizing
EH&S WWI for EHS Global Label Management	If you connect several WWI services to one RFC destination, RFC applies the load balancing automatically.	RFC
EH&S WWI for print request processing in EHS Global Label Management	If you connect several WWI services to each RFC destination, RFC applies the load balancing automatically. The load is distributed through several decentralized WWI servers.	RFC Customizing

## 4.7 User Management

EHP8 for SAP ERP 6.0 uses the standard functionality of SAP NetWeaver for user management, such as creating users with transaction `SU01` and creating and using roles with transaction `PF08`.

For more information on user management, see SAP Help Portal at <http://help.sap.com/nw75> ► *Security Guide* ► *User Administration and Authentication* ► *User Management* ►.



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## 4.7.1 User Management for SAP Product Lifecycle Management

User management for the PLM uses the mechanisms provided by the SAP NetWeaver Application Server ABAP, for example, tools, user types, and password policies.



For an overview of how these mechanisms apply for the PLM, see sections User Management and User Administration and Authentication in the Product Lifecycle Management Security Guide on SAP Service Marketplace at <http://service.sap.com/securityguide>.

For more information about user management in the Portal, see SAP Help Portal at <http://help.sap.com/nw75>  
► *Application Help* ► *Function-oriented View* ► *Solution Life Cycle Management* ► *Enterprise Portal* ► *Portal* ► *Managing the Portal* ► *User Administration* .

For an overview of the information necessary for operating SAP NetWeaver Identity Management, see the Identity Center - Operations Guide available on SAP Help Portal at <http://help.sap.com/nw74> □ SAP NetWeaver Identity Management 7.1.

## 5 High Availability

EHP8 for SAP ERP 6.0 follows the general high availability concept for all SAP NetWeaver based systems.

For more information on high availability, see SAP Help Portal at <http://help.sap.com/nw75>  


If you plan to implement High Availability EHP8 for SAP ERP 6.0 application, please get in contact with your hardware partner to set up the High Availability scenario.

### 5.1 High Availability for SAP Product Lifecycle Management

SAP Product Lifecycle Management is part of SAP ERP, which means that all high availability measures for SAP ERP also apply for SAP PLM. In particular, you can protect SAP Product Lifecycle Management from downtimes using redundancy approaches such as installations on at least two different runtime environments or physical machines. A load balancing or dispatching mechanism ensures that in case of a downtime of one runtime or physical machine the remaining ones can handle all requests.

When a machine running SAP ERP crashes, users who are logged on to the SAP Product Lifecycle Management Web user interface get error messages that the connection to SAP ERP has been lost. If you plan to implement High Availability in your EHP8 for SAP ERP 6.0 application, please get in contact with your hardware partner to set up the High Availability scenario.

#### Caution



For current High availability limitations of HANA database, see SAP Note [1732276](#) 


For more information, see SAP Help Portal at <http://help.sap.com/nw75>

## 5.2 High Availability for SAP EHS

Environment, Health and Safety (EHS) follows the general high availability concept for all SAP NetWeaver based systems.

Table 34: Components With Single Point of Failure

Component	Description	HA Setup Description
EH&S Windows Word Processor Integration (EH&S WWI)	Creation and printing of reports	<a href="#">1061242</a> 
EH&S Expert	Calculation of secondary specification data	<a href="#">1061242</a> 

Each of the above components can be a single point of failure in this scenario. In order to achieve high availability (HA) for the complete scenario, it is required that all components with single point of failures are setup with HA. For more information, see [1061242](#) .

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## 6 Software Change Management

Software Change Management standardizes and automates software distribution, maintenance, and testing procedures for complex software landscapes and multiple software development platforms. These functions support your project teams, development teams, and application support teams.

The goal of Software Change Management is to establish consistent, solution-wide change management that allows for specific maintenance procedures, global rollouts (including localizations), and open integration with third-party products.

This section provides additional information about the most important software components.

### 6.1 Transport and Change Management

For transport and change management issues, the procedures of SAP NetWeaver apply for SAP enhancement package 8 for SAP ERP 6.0.

For more information, see the Technical Operations Guide for SAP NetWeaver on SAP Help Portal at <http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP Netweaver* ► *Administration of SAP NetWeaver Systems and components* ► *AS ABAP (Application Server ABAP)* ► *Change and Transport System* ►.

#### 6.1.1 Transport and Change Management for SAP Product Lifecycle Management

SAP Product Lifecycle Management uses the transport and change management in SAP NetWeaver. This means that changes to configuration and programs are recorded and transported with the transport and change management.

For more information about transport and change management in SAP NetWeaver systems, see the Technical Operations Guide for SAP NetWeaver on SAP Help Portal at <http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP Netweaver* ► *Administration of SAP NetWeaver Systems and components* ► *AS ABAP (Application Server ABAP)* ► *Change and Transport System* ►.

You can use SAP Product Lifecycle Management with more than one client.

If you use an SAP Product Lifecycle Management system in a demilitarized zone (DMZ) and another SAP Product Lifecycle Management system as back-end system, note the following restrictions:

- Make sure that the DMZ system runs with exactly one SAP Product Lifecycle Management back-end system.

- Make sure that the DMZ system and the back-end system have the same support packages.

## 6.1.2 Transport and Change Management for SAP EHS

You must transfer the configuration files for EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert between systems manually.

Table 35: Component Change Management Tools

Component	Solution Manager Maintenance Optimizer Integration	Transport Management Tool
EHS	Yes	Transport organizer in transaction SE01
EH&S WWI	No	
EH&S Expert	No	

## 6.2 Development Requests and Development Release Management

The standard procedures of SAP NetWeaver apply. See the Technical Operations guide for SAP NetWeaver on SAP Help Portal at <http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP Netweaver* ►.

### **i** Note

For EHS use the transport organizer in transaction SE01.

## 6.3 Support Packages and Patch Implementation

We recommend that you implement support package stacks (SPS), which are sets of Support Packages and patches for the respective product version that must be used in the given combination. You can find detailed information about the availability of SP-Stacks for SAP enhancement package 8 for SAP ERP 6.0 on the SAP Service Marketplace at <https://support.sap.com/sp-stacks> ►. Please read the corresponding Release and Information Notes (RIN) before you apply any Support Packages or Patches of the selected SPS. For more information about the implementation of support packages as well as possible side effects, see <https://support.sap.com/sp-stacks> ► and then SAP Support Packages in detail.

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For more information about the tools necessary for implementing patches, see the Technical Operations guide for SAP NetWeaver on SAP Help Portal at <http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP Netweaver* ►.

### 6.3.1 Support packages for SAP Product Lifecycle Management

You can use SAP Solution Manager Maintenance Planner for applying Support Packages and Patches. Available Support Packages are listed in the Software Distribution Center (SWDC). If you enter through the SAP Developer Network (SDN), the system takes you automatically to the SWDC for the download. You can also search for the business packages directly in the SWDC. To do so, go to <http://support.sap.com/swdc> ►.

You can find the business packages directly in the solution in question at ► *Download* ► *SAP Support Packages and Patches* ► *Entry by Application Group* ►.

In the Support Pack Stack Product Lifecycle Management uses NetWeaver 7.50. You can use the SAP Note assistant to implement SAP Notes in all Product Lifecycle Management components.

### 6.3.2 Support Packages and Patch Implementation for SAP EHS

We recommend that you implement Support Package Stacks, which are sets of Support Packages and patches for the respective product version that must be used in the given combination. You can find detailed information about the availability of SP-Stacks for SAP ERP 6.0 on the SAP Support Portal at <http://support.sap.com/sp-stacks> ►. Read the corresponding Release and Information Notes (RIN) before you apply any Support Packages or Patches of the selected SP Stack.

For Environment, Health and Safety (EHS) the SAP NetWeaver AS ABAP tools apply. You can download the patches for EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert from the SAP Service Market Place. For more information, see [568302](#) ►.

## 6.4 Release and Upgrade Management

Following SAP ERP 6.0 SAP delivers new functions through enhancement packages. With SAP enhancement packages, you can install and activate new functions driven by your business needs without performing a system upgrade. The enhancement package installation requires two different tools – SAP Solution Manager Maintenance Optimizer and the Enhancement Package Installation tool.

As before, corrections are available in Support Packages. SAP provides Support Packages on a regular basis during the defined maintenance period. In parallel, SAP provides equivalent Support Packages for enhancement

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packages. You must install parts of the enhancement packages in combination with the latest available Support Packages. This approach reduces installation, modification adjustment, and testing effort. Using this strategy, SAP enhancement packages can be installed as a normal maintenance activity together with Support Packages.

For more information system landscape and installation, see the Master Guide for EHP8 for SAP ERP 6.0 on SAP Service Marketplace at <http://service.sap.com/instguides> ► *SAP Business Suite Applications* ► *SAP ERP* ► *SAP ERP 6.0* ► *SAP enhancement packages for SAP ERP 6.0* ► *SAP enhancement package 8 for SAP ERP 6.0* ►.

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## 7 Troubleshooting

### 7.1 Problem Analysis Guide (PAG)

Please note that not for all components part of EHP8 for SAP ERP 6.0, detailed troubleshooting information is available. For all WebAS based applications we advise you to have a look at the Problem Analysis Guide (PAG) that can be found at <http://help.sap.com/nw75> ► *System Administration and Maintenance Information* ► *Technical Operations for SAP NetWeaver* ► *Troubleshooting* ►.

The PAG contains a list of problem analysis scenarios which describe all activities and their sequence in order to analyze a problem which might occur with SAP NetWeaver TM (NW). The description of each activity contains:

- A list of the necessary tools or programs as well as the steps in the tools, if necessary
- A description of the problem-specific content semantics (e.g. log or trace messages)

Problem analysis scenarios (PAS) can cover cases of either error analysis or performance analysis. In addition, there can be both component and scenario-oriented PAS:

- Component-oriented PAS Error and performance analysis within single NW components (e.g. XI) or sub-components (e.g. XI-AF)
- Scenario-oriented PAS Error and performance analysis within NW scenarios (e.g. broadcasting)

### 7.2 Troubleshooting for SAP Product Lifecycle Management

If errors occur during the operation of the PLM Web UI applications, we recommend that you create a CSS ticket under the corresponding application component (they all start with `PLM-WUI*`).


For more information about how to operate SAP NetWeaver Enterprise Search, see SAP Help Portal at <http://help.sap.com/nw75> ► *Application Help* ► *Function-Oriented View* ► *Search and Operational Analytics* ► *Enterprise Search* ►.

### 7.3 Troubleshooting for SAP EHS

For information about troubleshooting EH&S Expert, see [1364100](#) ►.



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For information about troubleshooting EH&S Windows Word Processor Integration (EH&S WWI), see [1058521](#) .

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## 8 Support Desk Management

Support Desk Management enables you to set up an efficient internal support desk for your support organization that seamlessly integrates your end users, internal support employees, partners, and SAP Active Global Support specialists with an efficient problem resolution procedure. For support desk management, you need the methodology, management procedures, and tools infrastructure to run your internal support organization efficiently.

### 8.1 Remote Support Setup

SAP support needs to be able to work remotely for highest efficiency and availability. Therefore all required support tools must be remotely accessible for SAP support.

For information about Remote Support Setup, see SAP Service Marketplace at <https://support.sap.com/remotecollection> and 35010.

All support tools are accessible by SAP GUI or web browser using a support role. This role does not allow performing any changes to the component. For ABAP based components e.g. the role `SAP_RCA_SAT_DISP` is shipped via the ABAP add-on component `ST-PI`.

#### Remote Support Setup for SAP EHS

To analyze EH&S Windows Word Processor Integration (EH&S WWI) and EH&S Expert issues you must set up a remote connection to the underlying Windows servers, for example, by Windows Terminal Services (WTS).

### 8.2 Problem Message Handover

For information about processing of internal support messages and forwarding them to SAP, see SAP Help Portal at <http://help.sap.com/solutionmanager71> ► *Application Help* ► *English* ► *SAP Engagement and Service Delivery* ►. To send problem messages to SAP, use the referent ERP application component in the SAP application component hierarchy.

## 9 Appendix







### 9.1 Related Guides

You can find more information about installation and configuration in the Master Guide.

### 9.2 Related Information

The following table contains links to information relating to the Application Operations Guide.

Table 36:

Content	Quick Link to the SAP Service Marketplace or the Service Support Portal
Master Guide, Installation Guide and Upgrade Guide	<a href="http://service.sap.com/instguides">http://service.sap.com/instguides</a> 
Related SAP Notes	<a href="http://support.sap.com/notes">http://support.sap.com/notes</a> 
Released Platforms	<a href="http://service.sap.com/platforms">http://service.sap.com/platforms</a> 
Network Security	<a href="http://service.sap.com/securityguide">http://service.sap.com/securityguide</a> 
	<a href="http://service.sap.com/network">http://service.sap.com/network</a> 
SAP Solution Manager	<a href="http://support.sap.com/solutionmanager">http://support.sap.com/solutionmanager</a> 

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