SAP Extended Warehouse Management Operations Guide Release 9.3

SAP

Content

1 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: service.sap.com/instguides ↗ .

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

Table 1:

Version	Date	Description
1.2	2017-03-02	"SAP CRM" updated to "SAP Global Trade Services" in *the Interface Monitors* chapter
1.1	2015-07-17	- Report *RSPPFCLEAN* removed and report */SCWM/PI_PERS_PPF_DEL* added to the *Mandatory Scheduled Periodic Tasks* section - Section *Task Scheduling Tool* modified
1.0	2015-05-28	Initial Version of the Application Operations Guide for SAP EWM 9.3

2   Getting Started

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

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 need other guides such as the Master Guide, Technical Infrastructure Guide, and SAP Library.

2.1   Global Definitions

SAP Application:

An SAP application is an SAP software solution that serves a specific business area such as ERP, CRM, PLM, SRM, or SCM.

Business Scenario:

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

Component:

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

2.2 Important SAP Notes

⚠️ Caution

Check regularly to see which SAP Notes are available for the Application Operations Guide.

Table 2: Important SAP Notes

SAP Note Number	Title	Comment
1515223	SAP NetWeaver Process Integration: Release Recommendation	Information about which PI release to use
1721448	Service connection "SAPGui+Browser Connect."	Remote log on for SAP Support
812732	R/3 Support service connection	Remote log on for SAP Support when all affected UIs are based on SAP GUI
1423066	Optimization of the performance in EWM	N/A

2.3 Dock Appointment Scheduling

If you are using SAP Dock Appointment Scheduling without integration with SAP EWM, you need only refer to the following sections of this document:

- Scheduled Periodic Tasks [page 22]
- Required Manual Periodic Tasks [page 26]
- Problem Message Handover [page 32]

3 Technical System Landscape

3.1 Scenario/Component Matrix

For more information about the components necessary for business scenarios and processes, see the SAP EWM Master Guide on SAP Service Marketplace at http://service.sap.com/instguides ⤤▶ *SAP Business Suite Applications* ❯ *SAP EWM* ❯ *Using SAP EWM 9.3* ❯.

3.2 Related Documentation

> ⓘ **Note**
>
> This Application Operations Guide only covers SAP EWM. If you run SAP EWM as part of an SAP SCM Server installation, use the SAP SCM Operations Guide on SAP Service Marketplace at http://service.sap.com/instguides ⤤▶ *SAP Business Suite Applications* ❯ *SAP SCM* ❯ *SAP SCM Server* ❯ *Using SAP enhancement package 3 for SAP SCM 7.0 Server* ❯.

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

Table 3:

Topic	Guide/Tool	Quick Link on SAP Service Market-place (service.sap.com)
Application-specific and Industry-specific Components such as SAP for Automotive or SAP Retail	Master Guide	instguides
Technology Components such as SAP NetWeaver	Master Guide	instguides
Sizing	Quick Sizer Tool	sizing
Technical Configuration	Master Guide	instguides
Scalability	Master Guide	instguides
High Availability	Master Guide	instguides
Security	Security Map	security
	Application Security Guide	instguides

Topic	Guide/Tool	Quick Link on SAP Service Market-place (service.sap.com)
SAP NetWeaver Operations	Operations Guides	operationsnw74

For more information, go to www.service.sap.com⏩, and ▐ *Products* ❯ *SAP SCM* ❯ *SAP SCM in Detail* ❯ *Warehousing* ❯ *Information on Extended Warehouse Management in SAP SCM* ❯ *07_Solution Manager Content, EWM_910* ❯. The following documents provide additional information for the system setup and monitoring:

Table 4:

Guide	Link
ERP Integration Guide	https://websmp207.sap-ag.de/~sapidb/011000358700000102632013E/IntegrationERPEWM.pdf⏩
CRM Integration Guide	
TM Integration Guide	

4 Monitoring of SAP EWM

Within the management of SAP technology, monitoring is an essential task. A section has therefore been devoted solely to this subject.

You can find more information about the underlying technology in SAP Library for SAP NetWeaver under http://help.sap.com/nw74 ▶ *Technical Operations for SAP NetWeaver* ▶.

4.1 Alert Monitoring

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 EWM as quickly as possible.

4.1.1 Monitoring Installation and Setup

To enable the auto-alert mechanism of CCMS, see SAP Note 617547 .

You can find the EWM-relevant CCMS monitor sets in the EWM system in transaction *CCMS Monitor Sets* (`RZ20`). Choose ▶ *CCMS monitor sets* ▶ *SAP EWM Monitor templates* ▶.

4.1.2 EWM-Specific Monitoring

SAP EWM provides the warehouse monitor as a central place to monitor your business processes from the business and the technical perspective. You can start the monitor on the *SAP Easy Access* screen by choosing ▶ *SCM Extended Warehouse Management* ▶ *Extended Warehouse Management* ▶ *Monitoring* ▶ *Warehouse Management Monitor* ▶ (transaction `/SCWM/MON`). The following chapter will give you more detailed information.

4.2 Detailed Monitoring and Tools for Problem and Performance Analysis

You can find more information about the underlying technology in SAP Library for SAP NetWeaver under http://help.sap.com/nw74 ▶ *Technical Operations for SAP NetWeaver* ▶ and under *SAP NetWeaver Process Integration*.

4.2.1 Trace and Log Files

Trace files and log files are essential for analyzing problems.

The standard SAP NetWeaver tools such as transactions `ST22` and `SM21` can be used to monitor trace and log files. For more information, see SAP Library for SAP NetWeaver at http://help.sap.com/nw74 . In SAP Library, choose ▶ *Technical Operations for SAP NetWeaver* ▶ *English* ▶ *Administration of Application Server ABAP* ▶ *Monitoring and Administration Tools for Application Server ABAP* ▶.

Additionally, SAP EWM uses the application log (part of SAP NetWeaver) to store application error, warning, and success messages issued in critical processes (for example, the delivery interface between SAP ERP and SAP EWM) or in UI transactions. For UI transactions, the user has to save the application log explicitly.

For general information on application logs, see SAP Library for SAP NetWeaver at http://help.sap.com/nw74 . In SAP Library, choose ▶ *Function-Oriented View* ▶ *English* ▶ *Solution Life Cycle Management* ▶ *Application Log –* *(BC-SRV-BAL)* ▶.

You can monitor the application logs with transaction `SLG1` or in the Warehouse Management Monitor under ▶ *Tools* ▶ *Application Log* ▶.

Table 5:

Log Object	Detailed Description	Activation/Deactivation
`/SCWM/DLV_ERP`	Delivery Processing: Stores error messages issued during the qRFC communication of deliveries between SAP ERP and SAP EWM with an expiry time of seven days.	The system saves the log automatically when the qRFC fails. If you need a log for messages that were processed without error for test purposes, , you can change the settings in transaction */SCWM/ ERPLOG* (▶ *SAP Easy Access* ▶ *Extended Warehouse Management* ▶ *Settings* ▶ *Configure Log for ERP* *Messages* ▶).
`/SCWM/ACC`	Log for import of accounting objects from SAP ERP	Log has to be saved explicitly in transaction `/SCWM/ACC_IMP_ERP` (▶ *SAP Easy Access: Extended Warehouse Management* ▶ *Interfaces* ▶ *ERP Integration* ▶ *Administration of Account Assignment Data* ▶)
`/SCMB/PATTERN_UI`	Log for UI messages	Log has to be saved explicitly in the SAP EWM UI transactions.

Log Object	Detailed Description	Activation/Deactivation
/SCWM/WME	Warehouse Logistics Processing: Log for SAP EWM operations	Log has to be activated with transaction /SCWM/ACTLOG (▐▶ *SAP Easy Access: Extended Warehouse Management* ❯ *Settings* ❯ *Activate Application Log* ❯) You can activate the application log on subobject level.
/SCWM/SHP_RCV	Site Logistic Processing: Log for shipping and receiving transactions	—
/SCWM/EPD	Labor Management: Log for sending performance documents to HR	Log has to be saved explicitly by the user in transaction /SCWM/EPD_TRANSFER (▐▶ *SAP Easy Access: Extended Warehouse Management* ❯ *Labor Management* ❯ *Employee Performance* ❯ *Send Performance Document to HR* ❯)
/SCMB/MD	Master Data: Log for deleting supply chain units	-
/SCWM/PACKSPEC	Master Data: Log for packaging specifications	The log for the determination analysis has to be activated in transaction /SCWM/PSLOG. The log for uploading packaging specifications has to be saved explicitly by the user in transaction /SCWM/IPU (▐▶ *SAP Easy Access: SCM Basis* ❯ *Master Data* ❯ *Packaging Specification* ❯ *Initial Data Transfer of Packaging Specifications* ❯
/SEHS/ALE	EH&S Master Data: log for importing master data (dangerous goods, hazardous substances and phrases)	-
/SCTM/TM	Transportation Management	-

Log Object	Detailed Description	Activation/Deactivation
PPF	Post Processing Framework	The log is always active. You can deactivate the log for delivery processing in transaction /SCWM/DLVPPFLOG (*SAP Easy Access: Extended Warehouse Management* > *Delivery Processing* > *Actions* > *Deactivate PPF Log Depending on Warehouse and User*)
/SCMB/RG	Routing Guide	-
/SCWM/CHM	EWM Check Monitor	-
/SCWM/DAS	Dock Appointment Scheduling	The log is used for asynchronous processes and reports in Dock Appointment Scheduling. By default it is written for errors and warnings. You can change the activation of the log in transaction /SCWM/DSLOG.

During the implementation and test phase, or when you need to investigate an issue, you should activate the related logs. Once the system is running smoothly, you can improve the performance if you configure the logs to record only *Important* or *Very Important* messages or deactivate them completely.

For descriptions of the recommended tasks to contain data growth, see Periodic Tasks [page 21].

4.2.2 Workload Monitors

SAP Extended Warehouse Management uses the standard tools available in SAP NetWeaver and does not require a component-specific tool. For more information, see SAP Library for SAP NetWeaver under http:// help.sap.com/nw74 > *Technical Operations for SAP NetWeaver* .

4.2.3 Other Important Problem Analysis and Monitoring Tools

SAP Extended Warehouse Management uses the standard tools available in SAP NetWeaver and does not require a component-specific tool. For more information, see SAP Library for SAP NetWeaver under http:// help.sap.com/nw74 > *Technical Operations for SAP NetWeaver* .

4.2.4 Interface Monitors

Interface monitors are essential for analyzing problems with interfaces such as RFC, IDoc, and HTTP.

Table 6:

Interface	Description	Technology Used
Delivery Processing	SAP ERP and SAP EWM Communication based on ERP deliveries/ EWM warehouse requests as foundation for logistics execution in EWM Relevant for all systems with integration to SAP ERP	qRFC
Goods Movement	SAP ERP and SAP EWM Goods movements that are not directly related to an ERP delivery document Relevant for all systems with integration to SAP ERP	qRFC
Distribution of master data	SAP ERP and SAP EWM Relevant for all systems with integration to SAP ERP	qRFC
BI Data Sources	SAP BW and SAP EWM	—
Transportation Integration (ERP)	SAP ERP and SAP EWM Communication based on ERP shipment (including ERP Shipment created by SAP TM)/ EWM transportation unit Optional business process	IDoc
Transportation Integration (TM)	SAP ERP and SAP TM Web Services Optional business process	XI + WEBservice
Warehouse Billing	SAP TM Web Services Optional business process	XI + WEBservice
Quality Inspection	SAP ERP and SAP EWM Integration of quality inspection in SAP ERP and SAP EWM Optional business process	qRFC

Interface	Description	Technology Used
Global Trade Compliance Check	SAP Global Trade Services and SAP EWM Optional business process	RFC, qRFC
Material Flow System	—	—
Yard Management	Web Services for Non-SAP systems Optional interface	XI + WEBservice
Delivery Notifications	Web Services for Non-SAP systems Optional interface	XI + WEBservice
Transportation Integration with external planning system	Integration with Non-SAP systems Optional interface	IDoc

Monitor tools for these interfaces are:

Table 7:

Interface	Monitor	Description	Prerequisites
Delivery Processing	SMQ1/ SMQ2	Standard qRFC monitoring as described in the application help for SAP NetWeaver Queues beginning with DLVS, DLWS The queue on the ERP side should be monitored within one month as a goods movement can only be posted in the current and previous period (for example, a goods movement sent to the queue on July 15 must be posted on August 31 at the latest)	Create settings for qRFC scheduling and administration in transactions SMQE, SMQS and SMQR as described in the Integration Guide

Interface	Monitor	Description	Prerequisites
Goods Movement	SMQ1/ SMQ2	Standard qRFC monitoring as described in the application help for SAP NetWeaver Queues beginning with EWM-GOODSMVT, WMPGR, WMPGI SeeFor the monitoring of queues in SAP ERP. For the monitoring of queues in SAP ERP see Delivery Processing	Create settings for qRFC scheduling and administration in transactions SMQE, SMQS and SMQR as described in the Integration Guide
Production (Production Material Request)	SMQ1/ SMQ2	Standard qRFC monitoring as described in the application help for SAP NetWeaver Queues beginning with PR	Create settings for qRFC scheduling and administration in transactions SMQE, SMQS and SMQR as described in the Integration Guide (see chapter 2.2)
Distribution of master data	SMQ1/ SMQ2	Standard qRFC monitoring as described in the application help for SAP NetWeaver Queues beginning with CF, PS	Create settings for qRFC scheduling and administration in transactions SMQE, SMQS and SMQR as described in the Integration Guide
BI Data Sources	SMQ1/ SMQ2	Standard qRFC monitoring as described in the application help for SAP NetWeaver Queues beginning with WMBB, WMDB, WMTB, WMOB, WMVB	-
Transportation Integration (ERP)	WEINQUEUE/ WEOUTQUEUE	Standard IDoc monitoring as described in the application help for SAP NetWeaver IDocs SHPMT05, SHPMT06	-
Transportation Integration (TM)	SXMB_MONI	Standard XI monitoring as described in the application help for SAP NetWeaver	-
Warehouse Billing	SXMB_MONI	Standard XI monitoring as described in the application help for SAP NetWeaver	-

Interface	Monitor	Description	Prerequisites
Quality Inspection	SMQ1/ SMQ2 SWEQADM, SWETYPV, SWELS	Standard qRFC monitoring as described in the application help for SAP NetWeaver Queues beginning with QI,DLVS, DLWS, EWMSQPO	Create settings for qRFC scheduling and administration in transactions SMQE, SMQS and SMQR as described in the Integration Guide
Material Flow System	/SCWM/MON, node ▌ *Material Flow System* ❯ *Telegram Buffer* ❯	Communication between EWM and PLC	-
Yard Management	SXMB_MONI	Standard XI monitoring as described in the application help for SAP NetWeaver	-
Delivery Notifications	SXMB_MONI	Standard XI monitoring as described in the application help for SAP NetWeaver	-
Transportation Integration with external planning system	WEINQUEUE/ WEOUTQUEUE	Standard IDoc monitoring as described in the application help for SAP NetWeaver IDocs TMSHP01, TMFRD2	-

➡ Recommendation

As an alternative to the technical monitoring, you can monitor the qRFC messages between SAP EWM and SAP ERP in a business context. In the EWM monitor (transaction /SCWM/MON) under node ▌ *Tools* ❯ *Message Queue* ❯ you can get a list of EWM-relevant queues in the EWM and ERP systems. The system enriches the list with relevant information for a business user such as the warehouse number and texts. You can use this additional option for monitoring queues without additional configuration, but you can also adapt the selection to the needs of your users in Customizing for *Extended Warehouse Management* under ▌ *Monitoring* ❯ *Message Queue Monitoring* ❯.

SAP EWM uses the qRFC for internal messages to achieve minimal response time for users who need to work with a high throughput. These queues also need to be monitored. You can do the monitoring as described for the interfaces above, using transaction SMQ2/SMQ1 for queues starting with WM, EWM, or DLV. Alternatively, you can use the EWM monitor to display the queues with additional business data as described above.

4.2.5 Data Growth and Data Archiving Monitors

SAP Extended Warehouse Management uses the standard tools available in SAP NetWeaver and does not require a component-specific tool. For more information, see the SAP NetWeaver Operations Guide on SAP Service Marketplace at http://service.sap.com/operationsnw74 .

You can archive the following data in SAP EWM:

Table 8:

Application Component	Business Object/ Document Category	Archiving Object	Re-Schedule Report After Upgrade to EWM 9.3*
Delivery Processing	Internal Warehouse Requests (Inbound Delivery)	`DLV_INB`	X
	Internal Warehouse Requests (Outbound Delivery)	`DLV_OUT`	X
	Warehouse Requests from External Systems	`DLV_REQ`	X
Stock Management	Handling Unit	`WME_HU`	
Warehouse Logistic Process-ing	Warehouse Tasks and Goods Movement Documents	`WME_TO`	X
	Warehouse Orders	`WME_WO`	X
	Waves	`WME_WAVE`	X
	Telegram Flows	`WME_MFS`	X
	Relevant Resource Data	`WME_RSRC`	X
	Value-Added Service Orders (VAS Orders)	`WME_VAS`	X
	QIE Inspection Documents	`QIE_INSP`	
	Physical Inventory Docu-ments	`LIME_PI`	
	LIME Log Entries (goods movements and confirmed warehouse tasks). Periodicity analogous to `WME_TO`	`LIME_NLOG`	
Site Logistic Processing	Door Activities	`WME_DOOR`	X
	Vehicle Activities	`WME_VEH`	X
	Transport Unit Activities	`WME_TU`	X
Labor Management	Indirect Labor Tasks	`WME_ILT`	X
	Executed Workloads	`WME_EWL`	X
	Employee Performance Docu-ments	`WME_EPD`	X

Application Component	Business Object/ Document Category	Archiving Object	Re-Schedule Report After Upgrade to EWM 9.3*
	Business Partners (Processors) – only if created originally in SAP EWM	CA_BUPA	
Transportation Management in EWM	Shipments	TM_SHP	
	Freight Documents	TM_FRD	
Warehouse Billing	EWM Warehouse Billing Measurements	EWM_WBM	

> ⚠️ **Caution**
>
> The archiving reports for the archiving objects marked with * were improved in EWM 9.3. After an upgrade from EWM 9.2 or lower to EWM 9.3 you have to adapt your existing background jobs for those archiving objects with new variants.
>
> The affected reports are:
>
> Archiving Object Report WME_TO WME_ARCH_TO_WRITE WME_WO WME_ARCH_WO_WRITE WME_WAVE WME_ARCH_WAVE_WRITE WME_MFS WME_ARCH_MFS_DELETE WME_ARCH_MFS_WRITE WME_RSRC WME_ARCH_RSRC_WRITE WME_TU WME_ARCH_TU_MARK WME_ARCH_TU_WRITE WME_VEH WME_ARCH_VEH_MARK WME_ARCH_VEH_WRITE WME_DOOR WME_ARCH_DOOR_MARK WME_ARCH_DOOR_WRITE DLV_INB /SCDL/DLV_INB_ARCH_WRITE DLV_OUT /SCDL/ DLV_OUT_ARCH_WRITE DLV_REQ /SCDL/DLV_REQ_ARCH_WRITE WME_VAS WME_ARCH_VAS_WRITE WME_EPD /SCWM/EPD_ARCH_WRITE WME_EWL /SCWM/EWL_ARCH_WRITE WME_ILT WME_ARCH_ILT_WRITE
>
> Table 9:
>
> | Archiving Object | Report |
> |---|---|
> | WME_TO | WME_ARCH_TO_WRITE |
> | WME_WO | WME_ARCH_WO_WRITE |
> | WME_WAVE | WME_ARCH_WAVE_WRITE |
> | WME_MFS | WME_ARCH_MFS_DELETE |
> | | WME_ARCH_MFS_WRITE |
> | WME_RSRC | WME_ARCH_RSRC_WRITE |
> | WME_TU | WME_ARCH_TU_MARK |
> | | WME_ARCH_TU_WRITE |
> | WME_VEH | WME_ARCH_VEH_MARK |

	WME_ARCH_VEH_WRITE
WME_DOOR	WME_ARCH_DOOR_MARK
	WME_ARCH_DOOR_WRITE
DLV_INB	/SCDL/DLV_INB_ARCH_WRITE
DLV_OUT	/SCDL/DLV_OUT_ARCH_WRITE
DLV_REQ	/SCDL/DLV_REQ_ARCH_WRITE
WME_VAS	WME_ARCH_VAS_WRITE
WME_EPD	/SCWM/EPD_ARCH_WRITE

> i Note
>
> Replicated master data (for example, products, locations, supply chain units, business partners, and batch data) does not have to be archived in SAP EWM. Master data is deleted by the solution (for example SAP ERP or SAP CRM) in which it was originally created.

> ⚠ Caution
>
> SAP EWM also creates data that is not subject to archiving. Make sure to schedule periodic deletion jobs as described in Periodic Tasks [page 21], to control data growth and to ensure the performance of your EWM system.

4.3 Data Consistency

SAP EWM exchanges data with SAP ERP using asynchronous messages. Monitor the qRFC messages in the EWM and in the ERP system as described in Interface Monitors [page 13].

You can check the consistency of your EWM system using the transaction /SCWM/CHM_PRF (*Maintain Check Monitor Profile*). The particular checks are documented in the transaction.

5 Management of SAP EWM

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.

For more information on the underlying technology, see SAP Library for SAP NetWeaver under http://help.sap.com/nw74 ▶ *Technical Operations for SAP NetWeaver* ▶.

5.1 Starting and Stopping

SAP EWM is provided either as a standalone component on SAP NetWeaver, as part of SAP SCM or as an add-on to SAP ERP.

- SAP EWM as a standalone component on SAP NetWeaver is started/stopped together with SAP NetWeaver. For more information about `STARTSAP/STOPSAP` and `SAPMMC`, see SAP Library for SAP NetWeaver on SAP Help Portal at http://help.sap.com/nw74 ▶. In SAP Library, choose ▶ *Function-Oriented View* ▶ *English* ▶ *Solution Life Cycle Management* ▶ *Starting and Stopping SAP NetWeaver ABAP and Java* ▶.
- SAP EWM as part of SAP SCM: SAP EWM is started/stopped together with the SCM Server (`STARTSAP/STOPSAP`). For more information, see SAP Service Marketplace at http://service.sap.com/instguides ▶ *SAP Business Suite Applications* ▶ *SAP SCM* ▶ *SAP SCM Server* ▶ *Using SAP enhancement package 3 for SAP SCM Server 7.0* ▶ *Application Operations Guide for EHP3 for SAP SCM 7.0* ▶.
- SAP EWM as an add-on to SAP ERP: SAP EWM is started/stopped together with SAP ERP (`STARTSAP/STOPSAP`). For more information, see 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 7 for SAP ERP 6.0* ▶ *EHP 7 for SAP ERP 6.0 — Operations Guide* ▶.

In all cases, we recommend that you start the interface components CIF and SAP XI (if used) after starting SAP EWM and that you stop them before stopping SAP EWM.

For more information about the components necessary for business scenarios and processes, see the SAP EWM Master Guide on SAP Service Marketplace at http://service.sap.com/instguides ▶ *SAP Business Suite Applications* ▶ *SAP EWM* ▶ *Using SAP EWM 9.3* ▶.

5.2 Software Configuration

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

All technical configuration that is required for running SAP EWM is part of SAP NetWeaver. For information about the relevant technical configuration, see SAP Library for SAP NetWeaver on SAP Help Portal at http://

help.sap.com/nw74 . In SAP Library, choose *Function-Oriented View* › *English* › *Solution Life Cycle Management* › *Configuring SAP NetWeaver* .

5.3 Administration Tools

SAP Extended Warehouse Management and the underlying components are all technically based on SAP NetWeaver. For information about the relevant administration tools, see SAP Library for SAP NetWeaver under http://help.sap.com/nw74 › *Technical Operations for SAP NetWeaver* .

5.4 Backup and Restore

You need to back up your system landscape regularly to ensure that you can restore and recover it in case of failure.

The backup and restore strategy for the application consists of the following:

- Backup and restore coverage for each component
- Cross-system data dependencies and handling

The backup and restore strategy for your system landscape must not only consider SAP systems but must also be embedded in the overall business requirements and incorporate your company's entire process flow. In addition, the backup and restore strategy must cover disaster recovery processes, such as the loss of a data center through fire. In this context, it is essential that you ensure that backup devices are not lost together with normal data storage, by using separate storage locations.

SAP EWM 9.3 is based on SAP NetWeaver technology. All related SAP NetWeaver backup procedures also work for SAP EWM. Therefore, there is no special procedure for SAP EWM 9.3. For more information on backup and recovery see http://help.sap.com/nw74 › *System Administration and Maintenance Information* › *Operations Information* . If you need to recover your system you can check the consistency with the ERP system after the recovery as described in Data Consistency [page 19].

5.5 Periodic Tasks

5.6 Periodic Tasks

In addition to the standard jobs mentioned in *Technical Operations for SAP NetWeaver* in SAP Library, you must schedule SAP EWM-specific jobs in your SAP system.

All jobs, unless otherwise specified, must be run at times of minimal system activity, so as not to affect performance or otherwise disrupt your daily operations. All jobs can be restarted.

5.6.1 Scheduled Periodic Tasks

This section describes all tasks that can be automated and that must be run periodically to keep the application running smoothly. Such tasks may be required on component level and are, therefore, relevant in each scenario that uses the component. 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 more information about the components necessary for business scenarios and processes, see the SAP EWM Master Guide on SAP Service Marketplace at http://service.sap.com/instguides ⤤ ▮ *SAP Business Suite Applications* ❯ *SAP SCM* ❯ *SAP EWM* ❯ *Using SAP EWM 9.3* ▮ .

Table 10: Scheduled Periodic Tasks for SAP EWM

Program Name/Task	Task Scheduling Tool	Recommended Frequency	Detailed Description
Transaction `SARA`	Transaction SARA and Definition of Background Jobs	Depends on the archiving object and the DB growth	Archiving of archiving objects mentioned in Data Growth and Data Archiving Monitors [page 16] ⚠️ **Caution** Caution: After the upgrade to EWM 9.3 the jobs that you have scheduled before the upgrade will not work anymore. You have to schedule them again. For further information see chapter 3.2.5
Transaction `SLG2` (report `SBAL_DELETE`)	Definition of Background Jobs	Weekly/monthly	Deletion of application logs described in Trace and Log Files [page 10]
Report `RSPPF_SWJCLEAN`	Definition of Background Jobs	Weekly/monthly	Deletion of technical data from PPF actions. See note 1890845 ⤤ .
Report `/SCWM/PI_PERS_PPF_DEL`	-	Periodicity analogous to archiving periods of the physical inventory documents	Warehouse Logistic Processing: Deletes SAP EWM-specific PPF action data

Program Name/Task	Task Scheduling Tool	Recommended Frequency	Detailed Description
Report `/LIME/ COLLECTION_DELETE`	-	Periodicity analogous to archiving periods of the confirmed warehouse tasks	Warehouse Logistics Processing: Deletes the dispatch message log for goods movements between SAP EWM and SAP ERP. • *Planning System* • *Business Warehouse* • *Financial System* • *Inventory System* • *External System* • *R/3 Inventory Mngmt* • *GI_W2IM*: **X** • Minimum Age in Days • End Date of Deletion Run: **fill in actual date** All processed records will be deleted
Report `/LIME/ BACKGROUND_ DELETE_EXEC`	-	Weekly/monthly To delete zero quantities, set no other parameter.	Inventory: Deletes DB entries for zero stock quantities and – on request – index entries without stock. SAP EWM index tables: `/SCWM/ STOCK_IW01, _IW02, _IW03 and _IW04` The index table entries are only deleted if this is allowed in Customizing. For more information, see Customizing for SAP EWM under ▶ *SCM Basis* ❯ *Logistics Inventory Management Engine (LIME)* ❯ *Basic Settings* ❯ *Index Tables and Hierarchy* ❯ *Determine Index Tables* ▶.
Report `/SCWM/ R_REORG_ HU_WO_PRINT`	-	Periodicity analogous to archiving periods of the warehouse tasks	Warehouse Logistic Processing: Deletes SAP EWM-specific PPF action data
Report `/SAPAPO/ DELETE_PRODUCTS`	-	Monthly	Master data: Deletes products with deletion flag
Report `/SAPAPO/ DELETE_LOCATIONS`	-	Yearly	Master data: Deletes locations with deletion flag
Report `/SCMB/ ALEN_ALERT_DELETE`	-	Weekly/monthly	Deletes alerts older than x days

Program Name/Task	Task Scheduling Tool	Recommended Frequency	Detailed Description
Report `/SCWM/R_MS_RESULT_DELETE`	-	Depends on the usage of Measurement Services	Labor Management (Analytics): Deletes Measurement Service Results (*SAP Easy Access* screen ▶ *Extended Warehouse Management* ❯ *Settings* ❯ *Measurement Services* ❯ *Periodic Processing* ▶)
Report `/SCTM/DELETE_ROUTE`	-	Monthly	Master data: Deletes routes with deletion flag
Report `/SCTM/DELETE_ZONE`	-	Monthly	Master data: Deletes transportation zones with deletion flag
Report `/SCTM/CLEANUP_PPF`	-	Yearly	Freight order processing: deletes the PPF actions without corresponding business objects (actions to publish the deletion of the objects)
Transaction `/SCWM/VALUATION_SET`	-	-	Determines and sets prices from SAP ERP
Report `/SCWM/R_BW_COLLECTIVE_RUN`	-	-	Transfers extracted data from qRCF-Queue WMTB (warehouse task), WMOB (warehouse order), WMBB (storage bin), WMDB (delivery item), or WMVB (Value Added Service) to the BI Delta Queue.
Report `/SCWM/R_WM_ADJUST`	-	-	Posts differences (for example, warehouse task differences) to the SAP ERP system
Report `/SCWM/R_DAS_DELETE`	-	-	Deletes old DAS time slots and appointments
Report `/SCWM/R_PDO_COMPLETE`	-	Daily	Completes outbound delivery order items with zero quantity

Table 11: Scenario-Specific Scheduled Periodic Tasks

Required for Scenario(s)	Program Name/Task	Recommended Frequency	Description
Dock Appointment Scheduling	Report `/SCWM/R_DAS_DELETE`	Monthly	Deletes old DAS time slots and appointments

Required for Scenario(s)	Program Name/Task	Recommended Frequency	Description
Proof-of-Delivery	Report `/SCWM/RPOD_IMP` Option Create	Daily	Imports POD data from ERP
Proof-of-Delivery	Report `/SCWM/RPOD_IMP` Option Delete	Monthly	Deletes POD data
Cartonization Planning	Transaction `/SCWM/CAPDEL`	Depends on how often planned shipping HUs are used in the outbound process. Weekly, monthly or yearly.	For goods issue posted outbound delivery orders the planned shipping can be deleted. Alternatively you can also delete PSHUs before wave creation with the report `/SCWM/R_WAVE_PLAN_BACKGROUND`. To do so, select the checkbox *Delete Planned Shipping HUs* of the report.
Labor Management	Report `/SCWM/R_MS_RESULT_DELETE`	Depends on the usage of Measurement Services	Labor Management (Analytics): Deletes Measurement Service Results (SAP Easy Access screen ▶ *Extended Warehouse Management* ❭ *Settings* ❭ *Measurement Services* ❭ *Periodic Processing* ▶)
Labor Management	Report `/SCWM/R_REORG_LDP_HIST`	Depends on the amount of data needed for Labor Demand Planning Forecast and the DB growth	Deletion of historical workload data
Transportation Integration (ERP)	Report `RBDMANI2`	Hourly	Processing of Idocs which are not yet posted
Transportation Management in EWM	Report `/SCTM/CLEANUP_PPF`	Yearly	Freight order processing: deletes the PPF actions without corresponding business objects (actions to publish the deletion of the objects)
Transit Warehouse	Report `/SCWM/R_REORG_HU_TW_PPF`	Monthly	HU Processing in transit warehouse: Deletes SAP EWM-specific PPF action data

Required for Scenario(s)	Program Name/Task	Recommended Frequency	Description
Delayed completion of in-bound deliveries	Report /SCWM/ R_DELETE_DWM_VARI	Daily	Deletes obsolete variants for report /SCWM/ R_PRDI_SET_DWM. When you schedule the job, ensure that the job to reorganize the background jobs (RSBTCDEL2) deleted the corresponding job logs.
Warehouse Billing	Report /SCWM/ WB_SNAPSHOT_DELETION	Monthly	Delete Obsolete Snapshot data
Warehouse Billing	Report /SCWM/ WB_WBMR_DELETION	Yearly	Delete obsolete request for warehouse billing measurement and specifications of warehouse billing measurement
Transit Warehouse	Report /SCWM/ R_REORG_HU_TW_PPF	Monthly	HU Processing in transit warehouse: Deletes SAP EWM-specific PPF action data

5.6.2 Required Manual Periodic Tasks

This section describes all manual tasks required to run periodically in order to keep the application running smoothly over time. A manual task needs a user to execute each task, as opposed 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. 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 12: Scenario-Specific Manual Tasks

Required for Scenario(s)	Tool(s) Supporting this Task	Recommended Frequency	Description
Dock Appointment Scheduling	Web Dynpro Application / SCWM/DSSLOT_GEN	Depends on the usage of time slots in Dock Appointment Scheduling (DAS) Weekly or monthly	For the creation of time slots in the graphical view of Dock Appointment Scheduling

5.7 Load Balancing

SAP Extended Warehouse Management uses standard SAP NetWeaver functions for logon and load balancing.

For more information, see SAP Library for SAP NetWeaver on SAP Help Portal at http://help.sap.com/nw74 .
In SAP Library, choose ▌ *Function-Oriented View* ▶ *English* ▶ *Solution Life Cycle Management* ▶ *SAP Business Continuity* ▌.

For more information, see SAP Library for SAP NetWeaver under http://help.sap.com/nw74 ▌ *Technical Operations for SAP NetWeaver* ▌.

5.8   Management of Outdated Technical Data

The deletion of technical data is included in Scheduled Periodic Tasks [page 22].

5.9   Scenario Administration Concept

SAP EWM uses standard SAP NetWeaver functions. There are no specifics for administration in EWM scenarios. The behavior of EWM in different deployment options for starting and stopping the system is described in Starting and Stopping [page 20].

6 High Availability

SAP EWM uses standard SAP NetWeaver functions for high availability.

For more information about high availability, see SAP Library for SAP NetWeaver on SAP Help Portal at http://
help.sap.com/nw74 . In SAP Library, choose ▶ *Function-Oriented View* ❭ *English* ❭ *Solution Life Cycle Management* ❭ *SAP Business Continuity* ❭.

7 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 for SAP EWM.

7.1 Transport and Change Management

For transport and change management issues, the procedures of SAP NetWeaver apply for SAP EWM. For more information, see SAP Library for SAP NetWeaver on SAP Help Portal at http://help.sap.com/nw74 . In SAP Library, choose ▶ *Technical Operations for SAP NetWeaver* ▶ *English* ▶ *Administration of Application Server ABAP* ▶ *Change and Transport System* ▶ .

You can use SAP EWM with multiple clients. This is a useful option for test systems if you want to test different warehouse-independent settings in parallel. For your production system you must ensure that the sizing of your system is sufficient for all warehouses on all clients.

If you are using multiple clients and BAdI filters in your EWM system, you must ensure that the filter values are disjunctive for all clients.

7.2 Development Requests and Development Release Management

SAP EWM uses standard SAP NetWeaver procedures. For more information, see SAP Library for SAP NetWeaver under http://help.sap.com/nw74 ▶ *Technical Operations for SAP NetWeaver* ▶ .

7.3 Support Packages and Patch Implementation

We recommend that you implement Support Package Stacks (SP Stacks), which are sets of Support Packages and patches for the respective product version that must be used in the given combination. The technology for applying Support Packages and patches will not change.

For more information about the availability of SP Stacks, see SAP Service MarketPlace at http://service.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.

The RIN and Support Packages for SAP EWM are available on SAP Service Marketplace at http://service.sap.com/patches 🔗 . Use the search function to find `SAP EWM 9.3`.

Use the Maintenance Optimizer (transaction `DSWP`) in SAP Solution Manager to select, download, and install the required software layers, or software components and required Support Packages. For more information, see the following:

- SAP Library for SAP Solution Manager on SAP Help Portal at http://help.sap.com/solutionmanager 🔗 . In SAP Library, choose ▶ *Change Request Management and Change Control* ▶ *Maintenance Optimizer* ▶.
- SAP Service Marketplace at http://service.sap.com/solman-mopz 🔗
- The documentation for transaction `SAINT` (SAP Add-On Installation Tool)

For more information about implementing Support Packages as well as possible side effects, see http://service.sap.com/patches 🔗 ▶ *SAP Support Packages in Detail* ▶.

For more information about the tools necessary for implementing patches, see SAP Library for SAP NetWeaver on SAP Help Portal at http://help.sap.com/nw74 🔗 . In SAP Library, choose ▶ *Technical Operations for SAP NetWeaver* ▶ *English* ▶ *Administration of Application Server ABAP* ▶.

8 Troubleshooting

For information about troubleshooting SAP NetWeaver, see SAP Library for SAP NetWeaver under http://
help.sap.com/nw74 ▶ *Technical Operations for SAP NetWeaver* ▶.

The following tools are available for troubleshooting SAP EWM:

- Application logs
  For more information, see Trace and Log Files [page 10].
- Where-used list
  The where-used list informs you about where a product is used in SAP EWM. This enables you, for example, to determine whether a product is still used in a document and to identify inconsistencies in the product data.
  For more information, see SAP Library for SAP EWM on SAP Help Portal at http://help.sap.com/ewm and choose the relevant release. In SAP Library, choose ▶ *SCM Basis* ▶ *SCM Basis Master Data* ▶ *General Master Data Functions* ▶ *Deleting Master Data* ▶ *Where-Used List for Master Data* ▶.

9 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.

9.1 Remote Support Setup

SAP support must be able to work remotely for highest efficiency and availability and, therefore, requires remote access to all necessary support tools. For SAP EWM, the standard SAP procedures for setting up remote support apply.

For information about Remote Support Setup, see SAP Service Marketplace at http://service.sap.com/access-support .

9.2 Problem Message Handover

To send problem messages or tickets to SAP, choose the appropriate component (or subcomponent) name from the SAP component hierarchy:

Table 13:

Component	Description
SCM EWM	Extended Warehouse Management
SCM-EWM-ANA	Analytics
SCM-EWM-ARC	Archiving
SCM-EWM-AUT	Authorization
SCM-EWM-CD	Cross-Docking
SCM-EWM-CAP	Cartonization Planning
SCM-EWM-DLP	Delivery Processing
SCM-EWM-DAS	Dock Appointment Scheduling

Component	Description
SCM-EWM-EH	Exception Handling
SCM-EWM-GM	Goods Movements
SCM-EWM-IF	Interfaces
SCM-EWM-LM	Labor Management
SCM-EWM-MD	Master Data
SCM-EWM-MD	Fulfillment Coordination
SCM-EWM-MFS	Material Flow System
SCM-EWM-MON	Monitoring
SCM-EWM-PI	Physical Inventory
SCM-EWM-PRC	Preconfigured Processes
SCM-EWM-PRN	Printing
SCM-EWM-QM	Quality Management
SCM-EWM-RF	Radio Frequency Processing
SCM-EWM-RG	Routing Guide
SCM-EWM-SR	Shipping and Receiving
SCM-EWM-TM	Transportation Management
SCM-EWM-UIF	User Interface Framework
SCM-EWM-VAS	Value Added Services
SCM-EWM-WAV	Wave Management
SCM-EWM-WC	Work Center
SCM-EWM-WOP	Warehouse Order Processing

For information about safeguarding, see http://service.sap.com/safeguarding .

→ Recommendation

When you send a message to SAP for one of the EWM components, always provide the warehouse number together with the technical key (document number) in the description.

If you want to use a predefined role for read-only access for remote support, you can use the role `SAP_RCA_SAT_DISP`. It is available in the STPI plug-in and is generated when a managed system is connected to SAP Solution Manager.

A Appendix

A.1 Appendix

A.1.1 Related Guides

For more information about installation and configuration, see the Master Guide.

A.1.2 Related Information

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

Table 14:

Content	Quick Link on SAP Service Marketplace
Master Guide, Installation Guide and Upgrade Guide	http://service.sap.com/instguides
Related SAP Notes	http://service.sap.com/notes
Released Platforms	http://service.sap.com/platforms
Network Security	http://service.sap.com/securityguide http://service.sap.com/network
Technical Infrastructure	http://service.sap.com/installNW74
SAP Solution Manager	http://service.sap.com/solutionmanager

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