OPERATIONS GUIDE | PUBLIC
Document Version: 1.4 – 2019-10-17

SAP Extended Warehouse Management 9.5 Operations Guide

THE BEST RUN **SAP**

Content

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: http://help.sap.com/ewm.

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

Version	Date	Description
1.4	2019-10-17	Chapter *Data Growth and Data Archiving Monitors* updated for SAP Extended Warehouse Management 9.5 SP05
1.3	2018-10-10	Chapter *Interface Monitors* updated for SAP Extended Warehouse Management 9.5 SP03
1.2	2018-04-04	Chapters *Data Growth and Data Archiving Monitors* and *Scheduled Periodic Tasks* updated for SAP Extended Warehouse Management 9.5 FP02
1.1	2018-01-17	Updated with integration details for SAP Global Batch Traceability
1.0	2017-11-30	Initial version of the Application Operations Guide for SAP Extended Warehouse Management 9.5

1 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.

1.1 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.

1.2 Important SAP Notes

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

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	
2163060	Prerequisites and Restrictions of Zero Downtime Option of SUM	
2293063	Restrictions of ZDO Upgrade for SAP EWM by SCM Basis	
2251678	Restrictions for ZDO Upgrade for SAP EWM	
2232718	Business Application Restrictions During ZDO Upgrade in EWM: LDP	

1.3 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 28]
- Problem Message Handover [page 34]

2 Technical System Landscape

2.1 Scenario/Component Matrix

For more information about the components necessary for business scenarios and processes, see the SAP Extended Warehouse Management (SAP EWM) Master Guide at http://help.sap.com/ewm.

2.2 Related Documentation

> **i Note**
>
> This Application Operations Guide only covers SAP EWM. If you run SAP EWM as part of an SAP SCM Server installation, use the Application Operations Guide at http://help.sap.com/scm.

You can find more information about the technical system landscape as follows:

- See the SAP EWM Master Guide at http://help.sap.com/ewm for the following information:
  - Application-specific and industry-specific components such as SAP for Automotive or SAP Retail
  - Technology components such as SAP NetWeaver
  - Technical configuration
  - Scalability
  - High availability
- See information about the Quick Sizer Tool at http://www.sap.com/about/benchmark/sizing.quick-sizer.html .
- See operations information for SAP NetWeaver at http://help.sap.com/nw.

For more information, see SAP Solution Manager at http://help.sap.com/ewm. The following documents provide additional information for the system setup and monitoring:

Guide	Navigation Path
Integration of SAP ERP with SAP EWM	*Solution Manager for Implementation*
Integration of SAP Transportation Management with SAP EWM (multiple guides available)	*Solution Manager for Integration with Transportation Management*

3 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 NetWeaver at http://help.sap.com/nw
📬 under ▐▶ *Technical Operations for SAP NetWeaver* ◗.

3.1 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 Extended Warehouse Management (SAP EWM) as quickly as possible.

3.1.1 Monitoring Installation and Setup

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

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

3.1.2 SAP 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.

3.2 Detailed Monitoring and Tools for Problem and Performance Analysis

You can find more information about the underlying technology for SAP NetWeaver at http://help.sap.com/nw under ▌▶ *SAP NetWeaver Platform* ❯ *Technical Operations for SAP NetWeaver* ▌ and under ▌▶ *SAP Process Integration* ❯ *SAP NetWeaver Process Integration* ▌.

3.2.1 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 NetWeaver at http://help.sap.com/nw under ▌▶ *Technical Operations for SAP NetWeaver* ❯ *Administration of Application Server ABAP* ❯ *Monitoring and Administration Tools for Application Server ABAP* ▌.
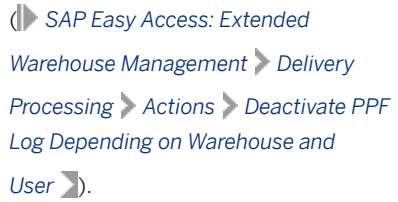
Additionally, SAP EWM uses the application log (part of SAP NetWeaver) to store application error, warning, and success messages issued in critical processes (for example, the delivery interface between SAP ERP and SAP EWM) or in UI transactions. For UI transactions, the user must save the application log explicitly.

For general information on application logs, see SAP NetWeaver at http://help.sap.com/nw under ▌▶ *Function-Oriented View* ❯ *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* ▌.

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* ▌).

Log Object	Detailed Description	Activation/Deactivation
/SCWM/ACC	Log for import of accounting objects from SAP ERP	Log must 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 must be saved explicitly in the SAP EWM UI transactions.
/SCWM/WME	Warehouse Logistics Processing: Log for SAP EWM operations	Log must 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 must 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 must be activated in transaction /SCWM/PSLOG. The log for uploading packaging specifications must 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*).

Log Object	Detailed Description	Activation/Deactivation
/SEHS/ALE	EH&S Master Data: log for importing master data (dangerous goods, hazardous substances and phrases)	
/SCTM/TM	Transportation Management	
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, the log 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 22].

3.2.2 Workload Monitors

SAP EWM uses the standard tools available in SAP NetWeaver and does not require a component-specific tool. For more information, see SAP NetWeaver at http://help.sap.com/nw under ▶ *Technical Operations for SAP NetWeaver* ❯.

3.2.3 Other Important Problem Analysis and Monitoring Tools

SAP EWM uses the standard tools available in SAP NetWeaver and does not require a component-specific tool. For more information, see SAP NetWeaver at http://help.sap.com/nw under *Technical Operations for SAP NetWeaver*.

3.2.4 Interface Monitors

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

Interface	Description	Technology Used
Delivery Processing	SAP ERP and SAP EWM Communication based on ERP deliveries/SAP EWM warehouse requests as foundation for logistics execution in SAP 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 SAP 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	Not applicable
Transportation Integration (SAP ERP)	SAP ERP and SAP EWM Communication based on SAP ERP shipment (including SAP ERP Shipment created by SAP TM)/SAP EWM transportation unit Optional business process	IDoc

Interface	Description	Technology Used
Transportation Integration (SAP TM)	SAP ERP and SAP TM Web Services Optional business process	XI + web service
Warehouse Billing	SAP TM Web Services Optional business process	XI + web service
Quality Inspection	SAP ERP and SAP EWM Integration of quality inspection in SAP ERP and SAP EWM Optional business process	qRFC
Global Trade Compliance Check	SAP Global Trade Services and SAP EWM Optional business process	RFC, qRFC
Material Flow System	Not applicable	Not applicable
Yard Management	Web Services for Non-SAP systems Optional interface	XI + web service
Delivery Notifications	Web Services for Non-SAP systems Optional interface	XI + web service
Transportation Integration with External Planning System	Integration with Non-SAP systems Optional interface	IDoc
Global Batch Traceability Integration (SAP Global Batch Traceability)	SAP Global Batch Traceability and SAP EWM communication based on events created in SAP EWM	XI + web service

Monitor tools for these interfaces are:

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 SAP 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.
Goods Movement	SMQ1 / SMQ2	Standard qRFC monitoring as described in the application help for SAP NetWeaver Queues beginning with EWM-GOODSMVT, WMPGR, WMPGI For the monitoring of queues in SAP ERP, see Delivery Processing above.	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 Related Documentation [page 7]).
Distribution of Master Data	SMQ1 / SMQ2	Standard qRFC monitoring as described in the application help for SAP NetWeaver Queues beginning with CF, PS, CS4, and EWMDRFINI-TIALLOAD	Create settings for qRFC scheduling and administration in transactions SMQE, SMQS and SMQR as described in the Integration Guide.

Interface	Monitor	Description	Prerequisites
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 (SAP ERP)	`WEINQUEUE/WEOUTQUEUE`	Standard IDoc monitoring as described in the application help for SAP NetWeaver IDocs SHPMT05, SHPMT06	
Transportation Integration (SAP 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	

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, and 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 SAP 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	

Interface	Monitor	Description	Prerequisites
Global Batch Traceability Integration (SAP Global Batch Traceability)	`SXMB_MONI`	Standard XI monitoring as described in the application help for SAP NetWeaver	

> → 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 SAP EWM monitor (transaction `/SCWM/MON`) under node ▌ *Tools* ▶ *Message Queue* ▌ you can get a list of SAP EWM-relevant queues in the SAP EWM and SAP 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* ▶ *Warehouse Management Monitor* ▶ *Message Queue Monitoring* ▌.
>
> From SAP EWM 9.1 and higher, you can configure e-mail and SMS alerts for failed queues. Therefore, you do not need to monitor the queues actively. For more information, see SAP EWM at http://help.sap.com/ewm under ▌ *Monitoring* ▶ *Warehouse Management Monitor* ▶ *Message Queue Monitor* ▌.
>
> 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 SAP EWM monitor to display the queues with additional business data as described above.

3.2.5 Data Growth and Data Archiving Monitors

SAP EWM uses the standard tools available in SAP NetWeaver and does not require a component-specific tool. For more information, see operations information for SAP NetWeaver at http://help.sap.com/nw.

You can archive the following data in SAP EWM:

Application Component	Business Object/Document Category	Archiving Object	Re-Schedule Report After Upgrade to EWM 9.5*
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

Application Component	Business Object/Document Category	Archiving Object	Re-Schedule Report After Upgrade to EWM 9.5*
Stock Management	Handling Unit	`WME_HU`	
Warehouse Logistic Processing	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 Documents	`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 Documents	`WME_EPD`	X
	Business Partners (Processors) – only if created originally in SAP EWM	`CA_BUPA`	

Application Component	Business Object/Document Category	Archiving Object	Re-Schedule Report After Upgrade to EWM 9.5*
	Change Documents (for Employee Performance Documents and Time & Attendance entries that were deleted manually) can be archived or deleted. Selection criteria: object classes `/SCWM/EPD` and `/SCWM/TATT`.	`CHANGEDOCU`	
Transportation Management in EWM	Shipments	`TM_SHP`	
	Freight Documents	`TM_FRD`	
Express Shipping Interface	Manifest	`EWM_ESI_MF`	
	Parcel	`EWM_ESI_PA`	
Warehouse Billing	EWM Warehouse Billing Measurements	`EWM_WBM`	
Shipping and Receiving	Change Documents (for Transportation Units, Transportation Unit Assignments, and Vehicles) can be archived or deleted. Selection criteria: object classes `/SCWM/TU`, `/SCWM/TUDLV`, and `/SCWM/VEH`.	`CHANGEDOCU`	

> ⚠ Caution
>
> The archiving reports for the archiving objects marked with * were improved in SAP EWM 9.3. After an upgrade from SAP EWM 9.2 or lower to SAP EWM 9.5 you must adapt your existing background jobs for those archiving objects with new variants.
>
> The affected archiving object reports are the following:
>
> | 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` |

Archiving Object	Report
	`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`

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 in which it was originally created, for example, SAP ERP or SAP Customer Relationship Management (SAP CRM).

⚠ 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 22], to control data growth and to ensure the performance of your SAP EWM system.

3.3 Data Consistency

SAP EWM exchanges data with SAP ERP using asynchronous messages. Monitor the qRFC messages in the SAP EWM system and in the SAP ERP system as described in Interface Monitors [page 12].

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

4 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 NetWeaver at http://help.sap.com/nw under *Technical Operations for SAP NetWeaver* .

4.1 Starting and Stopping

SAP Extended Warehouse Management (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 NetWeaver at http://help.sap.com/nw under *Function-Oriented View* > *Solution Life Cycle Management* > *Starting and Stopping SAP Systems Based on SAP NetWeaver* .
- SAP EWM as part of SAP SCM: SAP EWM is started/stopped together with the SCM Server (`STARTSAP`/ `STOPSAP`). For more information, see the Application Operations Guide at http://help.sap.com/scm.
- SAP EWM as an add-on to SAP ERP: SAP EWM is started/stopped together with SAP ERP (`STARTSAP`/ `STOPSAP`). For more information, see the Application Operations Guide at http://help.sap.com/erp.

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 at http://help.sap.com/ewm.

4.2 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 NetWeaver at http://help.sap.com/nw under *Function-Oriented View* > *Solution Life Cycle Management* > *SAP NetWeaver Configuration* .

4.3   Administration Tools

SAP EWM and the underlying components are all technically based on SAP NetWeaver. For information about the relevant administration tools, see SAP NetWeaver at http://help.sap.com/nw under ▐▶ *Technical Operations for SAP NetWeaver* ▌.

4.4   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 9.5 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 9.5. For more information on backup and recovery, see operations information for SAP NetWeaver at http://help.sap.com/nw. If you need to recover your system you can check the consistency with the SAP ERP system after the recovery as described in Data Consistency [page 19].

4.5   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.

4.5.1 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 at http://help.sap.com/ewm.

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	Archives archiving objects mentioned in Data Growth and Data Archiving Monitors [page 16] ⚠ Caution After the upgrade to EWM 9.5, the jobs that you scheduled before the upgrade will not work anymore. You must schedule them again. For further information see Data Growth and Data Archiving Monitors [page 16].
Transaction `SLG2` (report `SBAL_DELETE`)	Definition of Background Jobs	Weekly or monthly	Deletes application logs described in Trace and Log Files [page 9]
Report `RSPPF_SWJCLEAN`	Definition of Background Jobs	Weekly or monthly	Deletes technical data from PPF actions. See note 1890845📄.
Report `/SCWM/PI_PERS_PPF_DEL`	Not applicable	Periodicity analogous to archiving periods of the physical inventory documents	Warehouse logistics processing: Deletes SAP EWM-specific PPF action data
Report `/LIME/COLLECTION_DELETE`	Not applicable	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

Program Name/Task	Task Scheduling Tool	Recommended Frequency	Detailed Description
Report `/LIME/ BACKGROUND_ DELETE_EXEC`	Not applicable	Weekly or 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`	Not applicable	Periodicity analogous to archiving periods of the warehouse tasks	Warehouse logistics processing: Deletes SAP EWM-specific PPF action data
Report `/SAPAPO/ DELETE_PRODUCTS`	Not applicable	Monthly	Master data: Deletes products with deletion flag
Report `/SAPAPO/ DELETE_LOCATIONS`	Not applicable	Yearly	Master data: Deletes locations with deletion flag
Report `/SCWM/ R_EWM_AUDIT_DELET E_DATA`	Not applicable	Monthly or yearly	Deletes data that is no longer required for audit purposes
Report `/SCMB/ ALEN_ALERT_DELETE`	Not applicable	Weekly or monthly	Deletes alerts older than x days
Report `/SCWM/R_MS_ RESULT_DELETE`	Not applicable	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`	Not applicable	Monthly	Master data: Deletes routes with deletion flag

Program Name/Task	Task Scheduling Tool	Recommended Frequency	Detailed Description
Report `/SCTM/ DELETE_ZONE`	Not applicable	Monthly	Master data: Deletes transportation zones with deletion flag
Report `/SCTM/ CLEANUP_PPF`	Not applicable	Yearly	Freight order processing: Deletes the PPF actions without corresponding business objects (actions to publish the deletion of the objects)
Transaction `/SCWM/ VALUATION_SET`	Not applicable		Determines and sets prices from SAP ERP
Report `/SCWM/ R_BW_COLLECTIVE_R UN`	Not applicable		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`	Not applicable		Posts differences (for example, warehouse task differences) to the SAP ERP system
Report `/SCWM/ R_PDO_COMPLETE`	Not applicable	Daily	Completes outbound delivery order items with zero quantity
Report `/SCWM/ R_REORG_EXCEPTION _SOLVED`	Not applicable	Monthly or yearly	Warehouse logistics processing: Deletes the object-related history records of exception code processing

Scenario-Specific Scheduled Periodic Tasks

Required for Scenario(s)	Program Name/Task	Recommended Frequency	Description
Queue Alerting	Report `/SCWM/ R_QRFC_QUEUE_ALERT`	Every 30 – 120 minutes	Creates alert for failed qRFC message
Queue Alerting	Report `RSALERTPROC`	Monthly	Deletes old alerts
Dock Appointment Scheduling	Report `/SCWM/ R_DAS_DELETE`	Monthly	Deletes old DAS time slots and loading appointments If you also use report `/SCWM/ DSAPP_DES` to delete loading appointments (see below), choose the *Delete Only Time Slots* checkbox in this report

Required for Scenario(s)	Program Name/Task	Recommended Frequency	Description
Dock Appointment Scheduling	Report /SCWM/DSAPP_DES	Monthly or yearly	Data destruction program for loading appointments
Proof of Delivery	Report /SCWM/RPOD_IMP Option Create	Daily	Imports proof-of-delivery (POD) data from SAP 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 *Delete Planned Shipping HUs* checkbox 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	Deletes historical workload data
Labor Management	Report /SCWM/RLM_EWL_COMPLETE	Daily (hourly if Customizing for asynchronous completion is active)	Processes incomplete executed workload records
Using BRFplus in EWM (Labor Management)	Report /SCWM/R_LEAN_TRACE_DELETE	Daily, weekly or monthly, depending on the use of BRFplus and the size of the warehouse	Deletes SAP EWM-specific lean trace records
Labor Management with Time and Attendance Data	Report /SCWM/R_TATT_UPLOAD	Daily	Uploads time and attendance data

Required for Scenario(s)	Program Name/Task	Recommended Frequency	Description
Labor Management with Time and Attendance Data	Report `/SCWM/TATT_DES`	Monthly or yearly, depending on the growth rate of the TATT database table and retention needs for TATT entries	Deletes time and attendance data
Transportation Integration (ERP)	Report `RBDMANI2`	Hourly	Processes 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
Delayed completion of inbound 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	Deletes obsolete snapshot data
Warehouse Billing	Report `/SCWM/WB_WBMR_DELETION`	Yearly	Deletes 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

Required for Scenario(s)	Program Name/Task	Recommended Frequency	Description
SAP Global Batch Traceability in SAP EWM	Report `/SCWM/GBT_R_EVENT_TRANSFER`	Depends on the desired frequency and the number of events that are created during a business day	Transfers the events for handling units (HUs), which are relevant for SAP Global Batch Traceability, from SAP EWM to the configured receiver system, which is SAP Global Batch Traceability The data transfer uses Web Services runtime for service-oriented architecture (SOA). The communication is based on the notification communication pattern.
SAP Global Batch Traceability in SAP EWM	Report `/SCWM/GBT_R_EVENT_DELETION`	Depends on the run frequency of report `/SCWM/GBT_R_EVENT_TRANSFER`	Deletes events from the EWM-GBT transfer database table that have the status *Transmitted*

4.5.2 Required Manual Periodic Tasks

This section describes all manual tasks required to run periodically 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.

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

4.6 Load Balancing

SAP EWM uses standard SAP NetWeaver functions for logon and load balancing.

For more information, see SAP NetWeaver at http://help.sap.com/nw under ▶ *Function-Oriented View* ❯
Solution Life Cycle Management ❯ *SAP Business Continuity* ❯ and under ▶ *Technical Operations for SAP*
NetWeaver ❯ .

4.7 Management of Outdated Technical Data

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

4.8 Scenario Administration Concept

SAP EWM uses standard SAP NetWeaver functions. There are no specifics for administration in SAP EWM
scenarios. The behavior of SAP EWM in different deployment options for starting and stopping the system is
described in Starting and Stopping [page 21].

5   High Availability

SAP EWM uses standard SAP NetWeaver functions for high availability.

For more information about high availability, see SAP NetWeaver at http://help.sap.com/nw under
 Function-Oriented View > *Solution Life Cycle Management* > *SAP Business Continuity* .

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 for SAP Extended Warehouse Management (SAP EWM).

6.1 Transport and Change Management

For transport and change management issues, the procedures of SAP NetWeaver apply for SAP EWM. For more information, see SAP NetWeaver at http://help.sap.com/nw under ▶ *Technical Operations for SAP NetWeaver* ▶ *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 Business Add-In (BAdI) filters in your SAP EWM system, you must ensure that the filter values are disjunctive for all clients.

6.2 Development Requests and Development Release Management

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

6.3 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 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.

The RIN and support packages for SAP EWM are available at http://support.sap.com/patches . Use the search function to find `SAP EWM 9.5`.

Use the maintenance planner (previously known as the Maintenance Optimizer) 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:

- User guide for SAP Solution Manager's maintenance planner at https://help.sap.com/viewer/p/ MAINTENANCE_PLANNER
- SAP Community Network at http://wiki.scn.sap.com/wiki/x/VIwqCw

For more information about implementing support packages as well as possible side effects, see http:// support.sap.com/patches .

For more information about the tools necessary for implementing patches, see SAP NetWeaver at http:// help.sap.com/nw under ▶ *Technical Operations for SAP NetWeaver* ❯ *Administration of Application Server ABAP* ❯.

> ℹ Note
>
> If you use SAP EWM with the deployment option SAP EWM as SAP NetWeaver Add-On, you can select the zero downtime option of the Software Upgrade Manager (SUM). See SAP Notes 2163060 and 2251678 for details.

7 Troubleshooting

For information about troubleshooting SAP NetWeaver, see SAP NetWeaver at http://help.sap.com/nw⬈ under ❭ *Technical Operations for SAP NetWeaver* ❭.

The following tools are available for troubleshooting SAP Extended Warehouse Management (SAP EWM):

- Application logs
  For more information, see Trace and Log Files [page 9].
- 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 EWM at http://help.sap.com/ewm⬈ under ❭ *SCM Basis* ❭ *SCM Basis Master Data* ❭ *General Master Data Functions* ❭ *Deleting Master Data* ❭ *Where-Used List for Master Data* ❭.

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

For information about remote support setup, see http://support.sap.com/remoteconnection .

8.2 Problem Message Handover

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

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
SCM-EWM-EH	Exception Handling

Component	Description
SCM-EWM-GM	Goods Movements
SCM-EWM-IF	Interfaces
SCM-EWM-LM	Labor Management
SCM-EWM-MD	Master Data
SCM-EWM-MFS	Material Flow System
SCM-EWM-MON	Monitoring
SCM-EWM-PI	Physical Inventory
SCM-EWM-PMR	Production Material Request
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 in EWM
SCM-EWM-UIF	User Interface Framework
SCM-EWM-VAS	Value Added Services
SCM-EWM-WAV	Wave Management
SCM-EWM-WB	Warehouse Billing
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 SAP 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.

Content	Link
Master Guide, Installation Guide and Upgrade Guide	http://help.sap.com/ewm
Related SAP Notes	http://support.sap.com/notes
Released Platforms	http://support.sap.com/pam
Network Security	Security Guide at http://help.sap.com/ewm
Technical Infrastructure	http://help.sap.com/nw
SAP Solution Manager	http://help.sap.com/ewm

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