



SAP Warehouse Management

Comparing WM, Stock Room Management, EWM and S/4HANA Cloud WM

Functionality	Stock Room Management	Warehouse Management (1)	Basic EWM (2)	Advanced EWM (3)	S/4HANA Cloud WM
Manage stock at storage location	✔	✔	✔	✔	✔
Bin management	●	●	✔	✔	✔
Putaway strategies	●	●	✔	✔	✖
Removal strategies	●	●	✔	✔	✖
Pick logic – Wave Management	✖	✖	(4) License Required	✔	✖
Replenishment	●	●	✔	✔	✔
RF technology (configurable)	✖	✖	✔	✔	✔
Support of modern devices (PickbyVoice, SmartGlasses, ...)	✖	✖	✔	✔	✔
Flexible process modeling	✖	✖	✔	✔	✖
Handling / Storage Unit Management	●	●	✔	✔	●
Serial number support	●	●	✔	✔	●
Task and Resource Management	✖	●	✔	✔	●
Distribution Equipment	✖	✖	✔	✔	✖
Connect to external Material Flow System	✖	✔	✔	✔	✖
Material Flow System	✖	✖	(4) License Required	✔	✖
Value Added Services / Kit-to stock / Kit-to order	✖	●	(4) License Required	✔	✖
Pallet building algorithm	✖	✖	(4) License Required	✔	✖
Cross-docking	✖	●	(4) License Required	✔	✖
Physical Inventory (Bin-level)	●	●	✔	✔	✔
Physical Inventory (HU level)	✖	✖	✔	✔	✔
Managing Transportation Units	✖	✖	(4) License Required	✔	✖
Labor management	✖	✖	(4) License Required	✔	✖


Functionality	Stock Room Management	Warehouse Management ⁽¹⁾	Basic EWM ⁽²⁾	Advanced EWM ⁽³⁾	S/4HANA Cloud WM
Deconsolidation	✗	✗	✓	✓	✗
Multi client/customer warehousing	✗	✗	✓	✓	✗
Stock consolidation	✗	✗	✓	✓	✗
Warehouse Billing	✗	✗	(4) License Required	✓	✗
Slotting / Re-arrangement	✗	✗	(4) License Required	✓	✗
ABC analysis	✗	✗	✓	✓	✗
Advanced Returns Management / E-commerce Returns	✗	✗	✓	✓	●
Managing customs stock / Integration with SAP GTS	✗	✗	✓	✓	✗
Seamless batch & HU tracking (GBT)	●	●	✓	✓	✗
KPIs / Embedded Analytics	✗	✗	✓	✓	✓
Integration to SAP BW (incl. content)	✗	✗	✓	✓	✗
Preconfigured Content / Best Practice	✗	✗	✓	✓	✓
Yard Management	●	●	(4) License Required	✓	✗
Integration with SAP TM	✗	✗	(4) License Required	✓	✗
Direct integration with SAP ME/MII	✗	✗	✓	✓	✗
FIORI	✗	✗	✓	✓	✓
Decentral deployment	✗	✓	✗	✓	✗
Roadmap / last development	No roadmap Coding based on last development: R/3 4.7 2.0 - 2003	No roadmap Last development: R/3 4.7 2.0 - 2003	Roadmap exists Latest release: S/4HANA 1909	Roadmap exists Latest release: S/4HANA 1909	Roadmap exists Latest release: S/4HANA Cloud 2005
⁽¹⁾ Available in S/4HANA in Compatibility mode (till Dec 31, 2025)					
⁽²⁾ Available in S/4HANA in Compatibility mode (till Dec 31, 2025)					
⁽³⁾ Available as embedded and decentral deployment option					
⁽⁴⁾ Functionality is not included in S/4HANA Basic Warehouse Management – to use that, an EWM license is required (Advanced EWM)					
⁽⁵⁾ AddOn planned					
⁽⁶⁾ Yard Logistics AddOn available					

Differences of Decentralized EWM on S/4HANA and Embedded EWM

Considerations for selecting the right Deployment Option

SAP S/4HANA's code line, simplified data model and modern user experience are consistent for both decentral and embedded. Decentral EWM in S/4HANA provides additional deployment flexibility in the IT landscape.

Technical Articles

 Emma Zhou
June 19, 2019 | 5 minute read

Overview of Functional Differences between the different SAP EWM Products and Deployment Options

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The following document contains functional differences between the different SAP EWM deployment options. The information is based on the release of SAP S/4HANA 1809 FPS02 in May 2019 and the latest EWM business suite release SAP EWM 9.5.

The intention of the overview is to provide customers, partners and consultants a guidance to select the right deployment option for the customer projects. Therefore, this document shows major function/feature differences from business perspective, instead of technical details of the single deployment option/production version. For more technical information, please always refer to the respective release note of each product version, for example, SAP Note 2775345 with the release and restriction information of Decentralized EWM on SAP S/4HANA 1809 FPS02, and SAP Note 2668050 for embedded EWM on SAP S/4HANA 1809, etc. In addition SAP recommends to check the SAP Note 1606493 „SAP EWM Deployment Options Best Practices“. In general SAP recommends to start new projects only on the SAP S/4HANA stack as this is the future platform for Extended Warehouse Management and is planned to receive innovations with future releases.

SAP for Me

2840129 - Release information and restrictions of Decentralized EWM on S/4HANA 1909
SAP Note, Version: 19, Released On: 25.02.2022

Description Software Components References Attachments Attributes Available Languages

Symptom

This SAP Note contains release information and restrictions when using Extended Warehouse Management (EWM) on a separate decentralized SAP S/4HANA system, on-premise edition 1909.

This decentralized EWM on SAP S/4HANA does not provide all features and functions which are provided by SAP EWM 9.5. Decentralized EWM on SAP S/4HANA has in some areas less features but in other areas more features than SAP EWM 9.5. Decentralized EWM on SAP S/4HANA also has some differences in features and functions compared to the so-called embedded EWM in SAP S/4HANA which is used in the same system & client like other SAP S/4HANA applications.

This note provides implementation projects guidance before they start their implementation of decentralized EWM on an S/4HANA stack.

Reason and Prerequisites

SAP has recommendations for implementing decentralized EWM on SAP S/4HANA.

Solution

Decentralized EWM on SAP S/4HANA is released for integration with either an SAP ERP system (minimal release: SAP ERP 6.0 EHP 3 or higher) or an SAP S/4HANA on-premise system with ERP role (minimal release: SAP S/4HANA CP 1810).

SAP provides the following documentation as a guidance for the implementation of decentralized EWM on SAP S/4HANA:

- SAP Note 1606493 SAP EWM Deployment Options Best Practices
- Document "EWM Deployment Differences", which is attached to the SAP Note on hand
- Integration guide for decentralized EWM on SAP S/4HANA, which is attached to the SAP Note on hand
- SAP Note 2839077 for guidance on how to integrate with SAP ERP or SAP S/4HANA with active Retail Industry Solution

SAP for Me

1606493 - SAP EWM Deployment Options Best Practices
SAP Note, Version: 20, Released On: 17.08.2022

Component: SCM-EWM-IF-MIG Category: Consulting Corrections: 0
Priority: Recommendations / Additional Info Release Status: Released for Customer Manual Activities: 0
SAP NoteKB4 Number: 63 Prerequisites: 0

Description Software Components References Available Languages

Symptom

Several deployment options exist for SAP EWM:

- Since release 5.1 EWM can be deployed as Add-On on a SAP ERP system
- or it can be used as part of a SAP SCM Server system until EWM 7.02 as being part of SAP SCM EHP2.
- Since release 9.0 EWM can be deployed as Add-On to SAP NetWeaver and as an Add-On to SAP SCM 7.0 EHP2 and higher. Please note that since EWM 9.0 it is required to deploy the EWM Add-On onto SAP SCM if EWM is used in the SAP SCM system. EWM 7.02 (as shipped with versions SCM EHP2 and higher) is only released for usage in SAP SCM 7.0 EHP2, but it is not released for a higher SCM version like SAP SCM 7.0 EHP3 or EHP4. The same holds true for EWM 7.12 which is only released for usage in SAP SCM 7.0 EHP2 or SAP SCM 7.0 EHP2 ON HANA. EWM 7.12 is not released for usage in SCM versions higher than SAP SCM 7.0 EHP2.
- EWM is provided as being part of SAP S/4HANA since version 1810 as embedded EWM which can integrate to local ERP storage locations in the same system & client.
- EWM is provided as decentralized EWM on S/4HANA since SAP S/4HANA 1809 FPS02 which can integrate to storage locations in other systems & clients but not to local ERP storage locations in the same system & client.

A deliberate decision has to be taken when choosing between the available deployment options of SAP EWM.

[Blog on deployment differences between different EWM products](#)

[SAP Note 2840129 \(S/4HANA 1909\) provides information on differences and restrictions compared to embedded EWM in SAP S/4HANA](#)

[SAP Note 1606493 provides information about SAP EWM deployment options best practices](#)



Basic vs. Advanced EWM



Differences of Basic and Advanced EWM¹

Basic warehouse management provides support with and real-time transparency into managing and processing material movements flexibly for optimized warehouse operations

Scope of Basic EWM:²

- Warehouse Structure
- Inventory Management
- Handling Units (incl. nested HUs)
- Inbound Processing
- Outbound Processing
- Internal Warehouse Movements
- Physical Inventory
- Warehouse Management Monitor
- Analytics (CDS views, operational KPIs)
- Resource Management
- Quality Management
- Production Integration (delivery based and advanced production integration, direct production integration in embedded EWM on S/4HANA only)

¹This is only relevant for embedded EWM, for decentral EWM the advanced EWM scope is always applicable.

²Detailed feature descriptions can be found in the Feature Scope Description for S/4HANA Enterprise Management 1909.

Embedded EWM With SAP S/4HANA

Supporting all levels of warehouse complexity

Advanced Warehouse Management

- Inventory Management Optimization (e.g. Slotting)
- Outbound Process Optimization (e.g. Waves)
- Material Flow Control
- Yard Management (e.g. TU handling, Dock Appointment Scheduling)
- Labor Management
- Cartonization Planning
- Value Added Services
- Kitting
- Cross Docking
- Warehouse Billing
- TM Integration

Optimize
warehouse
operations

Basic Warehouse Management

- Warehouse Structure
- Inventory Management
- Handling Units (incl. nested HUs)
- Inbound Processing
- Outbound Processing
- Internal Warehouse Movements
- Physical Inventory
- Reporting (Warehouse Management Monitor, Analytics)
- Resource Management
- Quality Management
- Production Integration

Stock
transparency
and control



Audit Report

- Check if advanced functions are used via two reports

Go to [SE38](#) and run the following reports:

- **/SCWM/RP_COMPLIANCE_CHECK** – to check whether any advanced function is used
- **/SCWM/RP_LICENCE_ANALYSIS** – to check details of the advanced function usage

The screenshot displays two SAP reports. The top report, 'License Compliance Analysis', shows a table with columns for Warehouse Number (WhN), Year/Month, Total Items, Warehouse (Wo.), Average Inventory (Avg. Itc.), Actual Usage (Actl Usage), Acknowledgment Usage (Ackn Usage), Compliance Status, MFS Usage, Wave Usage, S&R Usage, MFS IDoc, and Slotting Usage. The bottom report, 'License Compliance Check', shows a table with columns for Compliance Status and Message.

WhN	Year/M.	Total Items	Wo.	Avg. Itc.	Actl Usage	Ackn Usage	Compliance Status	MFS Usage	Wave Usage	S&R Usage	MFS IDoc	Slotting Usage
WI03	201904	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI03	201905	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI03	201906	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI03	201907	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI03	201908	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI03	201909	0	0	0	Basic	Not Releva	■	0	0	0	0	0
W_	201910	2	1	2	Advanced		●	0	1	0	0	0
WI03	201911	4	2	2	Advanced		●	0	1	0	0	0
WI03	201912	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI03	202001	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI03	202002	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI03	202003	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI04	201904	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI04	201905	0	0	0	Basic	Not Releva	■	0	0	0	0	0
WI04	201906	0	0	0	Basic	Not Releva	■	0	0	0	0	0

Compliance Status	Message
■	Compliant; warehouse W006 used basic functions
■	Compliant; warehouse WED1 used basic functions
■	Compliant; warehouse WI00 used basic functions
■	Compliant; warehouse WI04 used basic functions
■	Compliant; warehouse WI05 used basic functions
■	Compliant; warehouse WI07 used basic functions
■	Compliant; warehouse WI09 used basic functions
●	Not compliant; whse WI01 used advanced functions with no acknowledgment
●	Shipping and Receiving used; count: 14 in warehouse WI01
●	Not compliant; whse WI03 used advanced functions with no acknowledgment
●	Wave used; count: 2 in warehouse WI03
●	Not compliant; whse WI06 used advanced functions with no acknowledgment
●	Wave used; count: 1 in warehouse WI06
●	Not compliant; whse WI08 used advanced functions with no acknowledgment
●	Wave used; count: 2 in warehouse WI08

SAP S/4HANA Cloud - Warehouse Management : Scope: Best Practice Processes

SAP Best Practices for SAP S/4HANA Cloud, public edition

Solution Scenario	Version	Name	External ID
	2308	Mobile RF Devices in Warehousing (63V)	63V
		Mobile RF Devices in Warehousing with Production Integration (63W)	63W
		Mobile RF Devices in Warehousing with Quality Management (63X)	63X
		Produce and Sell Standard Products - Warehouse Managed (54V)	54V
		Quality Management in Warehousing (3M0)	3M0
		Replenishment in Warehousing (4A2)	4A2
		Resource Management in Warehousing (3W0)	3W0
		Retail Logistics with Embedded Warehouse Management (69L)	69L
		Retail Logistics with Third-Party Warehouse Management (69M)	69M
		SAP EWM Integration - Batch Management (2VN)	2VN
		SAP EWM Integration - Customer Returns (2VO)	2VO
		SAP EWM Integration - Delivery-Based Production Integration (2VM)	2VM
		SAP EWM Integration - Inbound Processing from Supplier (2VJ)	2VJ