CNV-1179 EWM Fixed Bins

Status	Approved
Owner	HASSAN-ext, Shamir
Stakeholders	

Purpose

This section explains the reason for creating this document. The purpose of a conversion specification is to define how legacy data will be transformed and migrated into SAP S/4HANA. For fixed bins in EWM, the goal is to ensure warehouse operations continue seamlessly by preserving or redesigning fixed bin assignments in the new system. The purpose of this document is to define the conversion approach to create Fixed Bin assignments in SAP S/4HANA EWM. Fixed bins are maintained in storage types where fixed bin determination is enabled. This document outlines how the data will be prepared and loaded into the target EWM system.

Conversion Scope

This section outlines what is included and excluded from the conversion effort. It also provides information on data volumes and source/target systems. Clear scoping ensures everyone understands the boundaries and expectations of the conversion project.

Included:

- Fixed bin records for warehouse and storage type combinations where `/SCWM/T331-FIXBIN` is flagged.

Excluded:

- Storage types where fixed bin determination is not enabled.

Source Systems and Record Volume:

Source System	Approx. No. of Records
Manual DCT (Syniti)	TBD

Target System and Record Volume:

Target System	Approx. No. of Records
SAP S/4HANA EWM	TBD

Additional Information:

- Multi-language: Not applicable
- Legal Requirements: None
- Special Requirements: None

Multi-language Requirement

N/A

Document Management

N/A

Legal Requirement

N/A

Special Requirements

N/A

Target Design

The technical design of the target for this conversion approach. The target design specifies the structure of the SAP table that will hold the converted data. It defines each field's technical properties and whether it is mandatory or optional. This ensures that the load file is aligned with system requirements.

Table	Field	Data Element	Description	Data Type	Length	Requirement
/SCWM/BINMAT	LGNUM	LGNUM	Warehouse Number	CHAR	4	Mandatory
/SCWM/BINMAT	MATNR	MATNR	Product	CHAR	40	Mandatory
/SCWM/BINMAT	LGTYP	LGTYP	Storage Type	CHAR	4	Mandatory
/SCWM/BINMAT	LGPLA	LGPLA	Storage Bin	CHAR	10	Mandatory
/SCWM/BINMAT	FIX_BIN	CHAR1	Fixed Bin Indicator	CHAR	1	Mandatory
/SCWM/BINMAT	MAXQU	/SCWM/MAXQU	Maximum Quantity	DEC	15	Optional
/SCWM/BINMAT	MINQU	/SCWM/MINQU	Minimum Quantity	DEC	15	Optional
/SCWM/BINMAT	ENTITLED	/SCWM/DE ENTITLED	Party entitled to dispose	CHAR	10	Mandatory

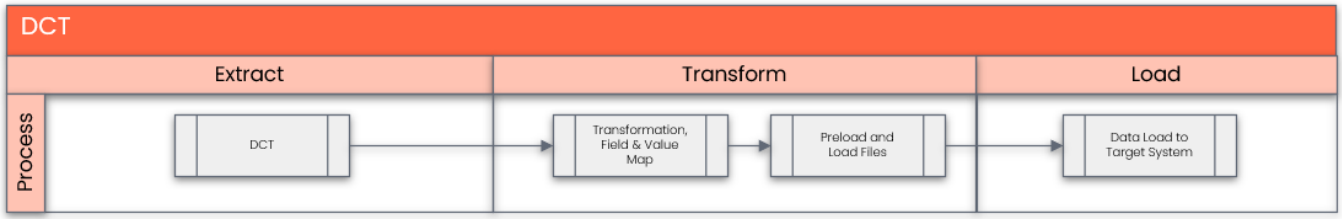
Data Cleansing

Data cleansing is a vital activity to detect and correct errors in the legacy data before conversion. It prevents issues during transformation or loading. The rules listed here help identify incomplete, inconsistent, or invalid records.

ID	Criticality	Error Message	Description	Rule Output	Source System
1	High	Missing Bin	Storage Bin is required when FIX_BIN is flagged	Error	DCT
2	Medium	Invalid Storage Type	Storage Type must be FIXBIN-enabled	Warning	DCT

Conversion Process

This section provides a high-level view of the sequence of steps needed to move the data from the legacy format into SAP. It includes extraction, transformation, validation, and loading steps.



1. Extract fixed bin data from DCT.
2. Validate storage type data exists in `/SCWM/T331 as a pre-req`.
3. Transform data to match load template fields
4. Prepare load file format.
5. Execute load to `/SCWM/BINMAT`.

Data Privacy and Sensitivity

N/A

Extraction

Extract data from a source into .

1. The data does not exist (or cannot be converted from its current state). The data is manually collected by the business directly in . This is to be conducted using DCT (Data Collection Template) in

The agreed Relevancy criteria is applied to the extracted records to identify the records that are applicable for the Target loads

Method: Manual DCT template maintained by business team

Run Sheet:

Req #	Requirement Description	Team Responsible
1	Provide validated DCT file	Business
2	Validate entries using reference tables	Data Migration Team

Selection Parameters:

Parameter Name	Type	Requirement
LGNUM	Warehouse Number	Mandatory
LGTYP	Storage Type	Conditional (if FIXBIN = X)

Data Collection Template (DCT)

Target Ready Data Collection Template will be created for data with exception of some fields which require transformation as mentioned in the transformation rule.

DCT Rules

The DCT is a structured Excel template used when data must be manually gathered. It contains the necessary fields and rules to guide users in submitting complete and valid fixed bin information.

Pre-requisite steps :

Field	Description	Rule
Storage Type	Must be FIXBIN-enabled	Check against `/SCWM/T331`
Product	Must exist in S/4	Check material master
Bin	Mandatory	Must be unique and valid format

The Data Collection Template (DCT) is the primary input mechanism when assigning products to fixed bins. Business teams must complete the template with accurate and validated information.

Column	Field Name	Maps To (Target Design)	Notes
A	EWM_LGNUM	Warehouse Number	Must exist in `/SCWM/LAGP`
B	EWM_PRODNO	Product Number	Must exist in product master
C	EWM_ENTITLED	Party Entitled to Dispose	Must exist in BP master
AY	EWM_LGTYP	Storage Type	Must exist in `/SCWM/T331`
AZ	FIXBIN	Storage Bin	Must exist in `/SCWM/LAGP`
BJ	MAXQTY	Maximum Quantity	Business-defined limit
BM	MINQTY	Minimum Quantity	Business-defined limit
BS	RMMQTY_FIX	Fixed Bin Flag	X = Yes (bin is fixed)

The DCT enforces structured input for fixed bin assignments. Each column has a direct mapping to target EWM fields, ensuring data integrity. Failure to provide these fields accurately will result in rejected records during transformation and load.

Transformation

Please check the attached file for the complete source-to-target field mapping, validation checks and proposed error messages. The validation checks list is not exhaustive and may change over time as the design and configuration of the system evolves.

The Target fields are mapped to the applicable Legacy field that will be its source, this is a 3-way activity involving the Business, Functional team and Data team. This identifies the transformation activity required to allow to make the data Target ready:

1. Perform value mapping and data transformation rules.
    a. Legacy values are mapped to the to-be values (this could include a default value)
    b. Values are transformed according to the rules defined in
2. Prepare target-ready data in the structure and format that is required for loading via prescribed Load Tool. This step also produces the load data ready for business to perform Pre-load Data Validation

Transformation involves converting legacy data values into the formats and structures required by SAP. It can include value mapping, defaulting, or formatting logic to prepare the data for loading.

Rule #	Source Field	Target Field	Transformation Logic
1	Product	MATNR	Pad to 40 chars if required
2	FIX_BIN	FIX_BIN	Default 'X' if provided

Transformation Mapping – Legacy Product SAP Product

Legacy Product Number	Legacy Description	Transformation Rule (Mapping Logic)	New SAP Product Number	SAP Material Description	Notes / Validation Check
MAT-001	Widget Small	Prefix `MAT-` dropped, padded to 8 chars	10000001	Widget Small	Ensure product exists in `/SCWM/MAT1`
123-ABC	Gear Assembly	Remove dashes, convert to upper case	123ABC	Gear Assembly	Cross-check with MARA & /SCWM/MAT1

Transformation Mapping:

- If a new product is generated, mapping of legacy product number to new product number would be necessary.

Transformation Dependencies:

- Product master and storage bin master data must be loaded before fixed bins. Party entitled to dispose must also exist in table BUT000 before it can be referenced in a fixed bin.

List of Custom Target Reports for this object is maintained here: Conversion Specification - Custom Reports Register.

Pre-Load Validation

Pre-load validation is a critical phase that ensures data readiness before it enters the target system. It involves checking for data completeness and accuracy to prevent issues during loading and subsequent warehouse operations. The validation is performed by both the Project Team and the Business Team, each responsible for different aspects of the quality checks.

Project Team

The project team is responsible for verifying the technical integrity of the dataset. This includes ensuring that all mandatory fields are filled and the values conform to expected formats and business rules configured in the system.

Task	Description
Completeness	Ensure DCT is fully populated and all mandatory fields are filled
Accuracy	Validate warehouse, storage type, product and bin information against system tables. Verify record counts to ensure successful load

Business Team

The business team is responsible for ensuring that the content of the data reflects operational reality. This includes checking whether the right bins are assigned to the correct products and validating that the assignments meet the business process expectations.

Task	Description
Completeness	Verify that all required bin assignments for operations are represented
Accuracy	Confirm bin and product assignments reflect actual warehouse setup and process needs. Review relevant error reports generated through automated logs

Load

The load process includes:

1. Execute the automated data load into target system using load tool or product the load file if the load must be done manually
2. Once the data is loaded to the target system, it will be extracted and prepared for Post Load Data Validation

Sample Load file : Standard SAP upload templates - ERP Rebuild Implementation - Google Drive

Steps:

1. Format flat file from validated DCT
2. Load via LTMC or custom program (SCWM/BINMAT)
3. Confirm load completion in system

Load Phase and Dependencies

The load phase focuses on the technical execution of transferring prepared and validated data into the SAP S/4HANA EWM system. This includes the transformation of the source file into the required format, execution of the load using the appropriate tool (e.g. LTMC or custom LSMW), and validation of the load outcome. Dependencies ensure that all required foundational data and configurations are in place before the load begins.

Item #	Step Description	Team Responsible
1	Ensure Product Master data is already loaded and active	Data Migration Team
2	Ensure Storage Bins and Storage Types are configured in the system. Ensure party entitled to dispose also exists before referenced in the fixedbin	Functional Team
3	Confirm load program/tool (e.g. LTMC) is tested and available	Technical Team
4	Upload validated fixed bin load file to the tool	Data Migration Team
5	Execute load and confirm success log/output	Data Migration Team
6	Perform immediate post-load checks in target table `/SCWM/BINMAT`	Project Team

Configuration

N/A

Conversion Objects

Object	Preceding Object	Dependency

Fixed Bins	Product Master	Product must exist in EWM

Error Type	Description	Action
Invalid Product	Product not maintained	Reject record
Invalid Storage Type	Not flagged as FIXBIN	Reject record

Post-Load Validation

Once data is loaded, post-load validation ensures it has been correctly transferred and is usable in the system. Validation checks are performed by both the project and business teams to ensure that the fixed bin data behaves as expected in the EWM environment.

Project Team

The project team is responsible for performing system-level and technical checks to verify data consistency and integrity after the load. This involves confirming that all records were loaded as expected and that the database reflects the input file.

Validation Type	Task
Completeness	Confirm record count between input file and loaded entries
Accuracy	Validate that fields such as warehouse number, product, storage type, and bin match the uploaded dataset exactly

Business Team

The business team verifies that the loaded data aligns with real-world operations. This includes validating that the fixed bins behave correctly during picking, replenishment, and other EWM processes.

Validation Type	Task
Completeness	Spot check that all expected products have bin assignments in the system
Accuracy	Review and confirm functional behavior using RFUI/bin display to ensure correct product-to-bin mapping

Team	Validation Type	Task
Project	Technical	Confirm record count and consistency
Business	Functional	Spot check in EWM bin assignment UI

Completeness

Team	Validation Type	Task
Project	Technical	Confirm record count and consistency
Business	Functional	Spot check in EWM bin assignment UI

Key Assumptions

- Master Data Standard is up to date as on the date of documenting this conversion approach and data load.
- is in scope based on data design and any exception requested by business.
- Configuration of `/SCWM/T331` is complete
- Product and bin data are available and valid

See also

Change log

Version	Published	Changed By	Comment
CURRENT (v. 14)	**Dec 05, 2025 11:43**	**HASSAN-ext, Shamir**	
v. 13	Nov 12, 2025 11:01	**HASSAN-ext, Shamir**	
v. 12	Oct 17, 2025 11:59	**HASSAN-ext, Shamir**	
v. 11	Oct 02, 2025 17:55	**HASSAN-ext, Shamir**	
v. 10	Sept 08, 2025 06:04	**HASSAN-ext, Shamir**	
v. 9	Sept 08, 2025 06:01	**HASSAN-ext, Shamir**	
v. 8	Sept 05, 2025 06:39	**HASSAN-ext, Shamir**	
v. 7	Sept 05, 2025 06:34	**HASSAN-ext, Shamir**	
v. 6	Sept 02, 2025 06:48	**HASSAN-ext, Shamir**	
v. 5	Sept 02, 2025 06:41	**HASSAN-ext, Shamir**	

Go to Page History

Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

From Nov 12, 2025 to Dec 05, 2025	Actor	Type	Activity	Version
Approved	HASSAN-ext, Shamir	Edit	updated the page at 11:01 am	
Nov 03, 2025				
	MUTHUSAMY-ext, Kunalan	State	changed state to Approved at 10:20 am (State override) *[PMO Comments] Conversion Spec completed as per CS register and functional review completed*	v12
Edited following Tech Review	MUTHUSAMY-ext, Kunalan	State	gave *Minor change* approval at 10:20 am *[PMO Comments] Conversion Spec completed as per CS register and functional review completed*	
Oct 17, 2025				
	HASSAN-ext, Shamir	Edit	updated the page at 11:59 am	
		State	changed state to Edited following Tech Review at 9:59 am	v12
Oct 16, 2025				

Lead Approval	OMER-ext, Mohammed	State	changed expiry date to '23 Oct, 2025 07:21 am' at 7:21 am	
		State	changed state to Lead Approval at 7:21 am	v11