CNV-1062 Batch Search Strategy

Status	Approved
Owner	RAYUDU-ext, Narasimha Kumar VAN NIEKERK-ext, ivan
Stakeholders	

Purpose

The purpose of this document is to define the conversion approach to create active Batch Search Strategies in S/4 HANA based on the Master Data Standards DD-FUN-050 Master Data Standard_1062-Batch Search Strategy
in S/4 HANA.

When entering the goods issue of a material handled in batches, you can enter * in the Batch field in order to initiate automatic batch determination. The system then uses a specific search strategy to find batches with certain characteristic values (such as status, shelf life, etc.) and suggests these batches in a list. In this list, the batches are sorted by specific criteria (sort sequence), and the characteristic values are displayed. The system suggests how to distribute the given quantity to the batches found. You can accept the system's proposal for the goods movement or you can distribute the quantity manually.

The system can only search for batches on the basis of search strategies. Therefore, you have to define these strategies. In a search strategy, you define the values according to which the system is to find batches.

A search strategy is assigned to a strategy type. Strategy types you can define a search strategy at various levels.

The Strategy Type has A few Key Combinations

Conversion Scope

All Active batch search strategies that are valid according to Validity dates in legacy.

1. You choose a strategy type and a key combination. And based on this combination it will determine the table for the strategy

The data from legacy system includes depending on Key Combination:

Material
Customer/Material
Customer/Plant/Material
Movement Type/Plant
Plant/Material
Movement Type/Plant/Material
Plant
Order Type/Plant/Component
Order Type/Plant/ProductionMaterial/Compo
Plant/Ship-to
Customer/Distr. Chl
Plant / Sales Organization
Ship-to/Plant/Material
Ship-to
Sold-to
Ship-to/material
Item Division

Plant / Warehouse Number
Plant/Ship.point
Plant / Material
Plant/Shipping Point/Division in item
Plant/Sales org./Ship Point
Ship-to/Plant/Commercial product
Ship-to/Commercial product
Order type/Plant
Movmt type/Plant/produced material/Component
Movement type plant storage location

The data from legacy system excludes:

1. Deleted Conditions (KONDH LEEVM_KO)
2. Search Strategies which has expired (KODATBI in the Past)

List of source systems and approximate number of records

Source	Scope	Source Approx No. of Records	Target System	Target Approx No. of Records
PF2,WP2	All active Search Strategies with a valid date	Approx. 60k records	S4H	Depending on Plant Consolidation

Additional Information

Multi-language Requirement

Not Applicable

Document Management

Not Applicable

Legal Requirement

Not Applicable

Special Requirements

Not Applicable

Target Design

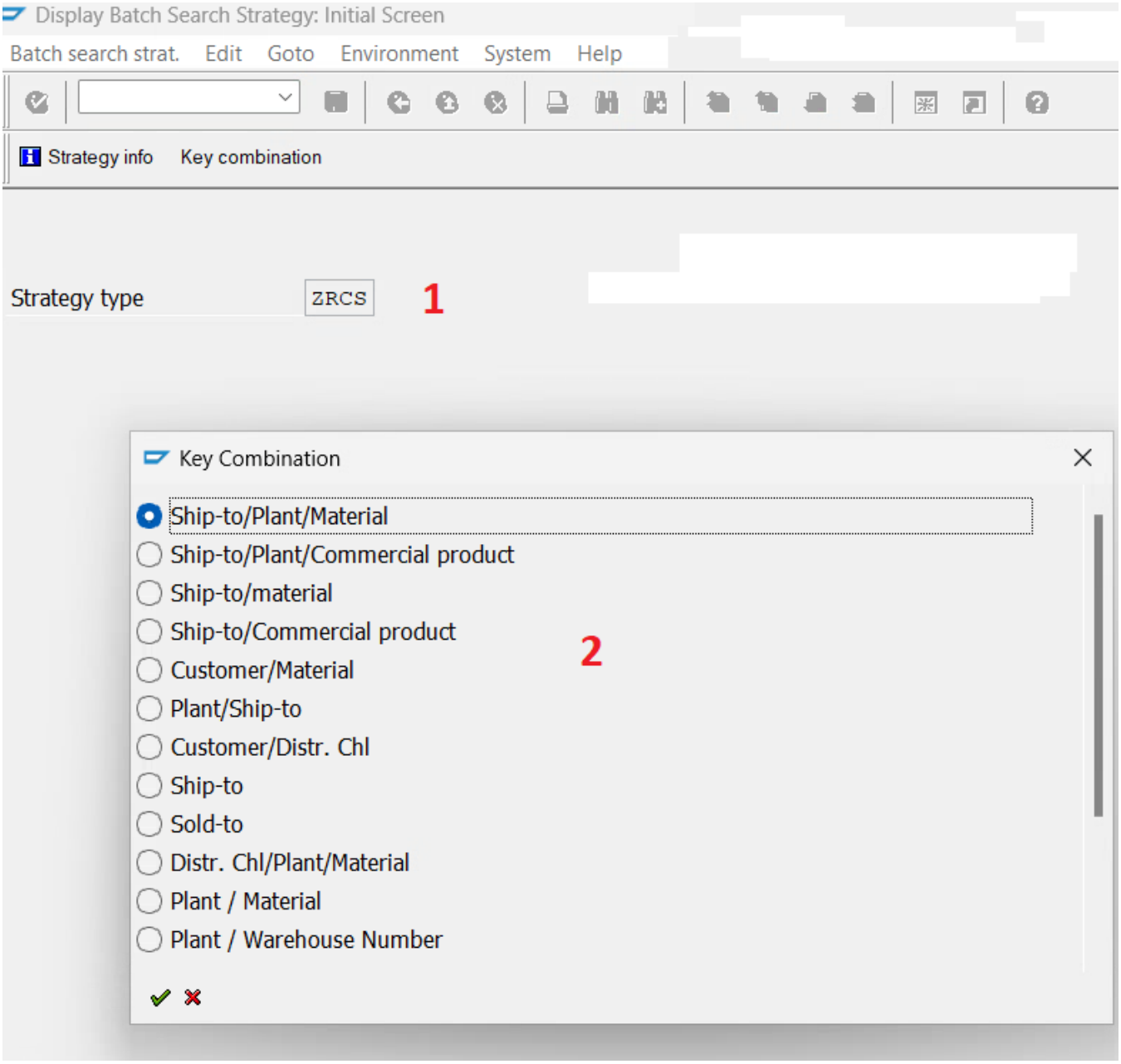
Example of Upload Template: Source data for Condition record for batch determination (for all areas) Example

The technical design of the target for this conversion approach.

Table	Field	Data Element	Field Description	Data Type	Length	Check Table	Requirement	Transformation Notes
KOTHxxx	KSCHL	KSCHL	Condition Key	CHAR	4	T685	Required	(See Matrix)
KOTHxxx	KAPPL	KAPPL	Application	CHAR	2	T681A	Conditional	(See Matrix)
KOTHxxx	KODATAB	KODATAB	Validity start date of the condition record	DATS	8		Mandatory	(See Matrix)
KOTHxxx	KODATBI	KODATBI	Validity end date of the condition record	DATS	8		Mandatory	(See Matrix)
KONDH	CHASP	CHASP	Batches: No. of batch splits allowed	NUMC	3		Conditional	
KONDH	CHSPL	CHSPL	Number of batch splits can be changed	CHAR	1		Conditional	
KONDH	CHMDG	CHMDG	Batches: Dialog batch determination	CHAR	1		Conditional	
KONDH	KZAME	KZAME	ID for display of UoM in batch determination	CHAR	1		Required	
KONDH	CHMVS	CHMVS	Batches: Exit to quantity proposal	NUMC	3		Required	
KONDH	CHVLL	CHVLL	Overdelivery allowed in batch determination	CHAR	1		Conditional	
KONDH	CHVSK	CHVSK	Selection type at start of batch determination	CHAR	1		Required	
KLAH	<By batch characteristics> CLASS	KLASSE_D	Selection Criteria				Required	Dependent on CNV-1047 Batch Characteristics of Class Type: 023 link KONDH to a search strategy in SAP, use the KNUMH (condition record number) to join KONDH and AUSP or INOB tables, which contain characteristic values used in batch search strategies. The link is made through the KONDH-KNUMH and AUSP-OBJEK fields, or INOB-CUOBJ and AUSP-OBJEK fields, to link characteristic values from the AUSP table to the condition record found in KONDH. You can then can then Link AUSP record to KLAH via KSSK/INOB to get the Class name field used for Selection Criteria.
KONDH	<By batch characteristics>		Sort Criteria				Required	Dependent on CNV-1047 Batch Characteristics of Class Type: 023 link KONDH to a search strategy in SAP, use the KNUMH (condition record number) to join KONDH and AUSP or INOB tables, which contain characteristic values used in batch search strategies. The link is made through the KONDH-KNUMH and AUSP-OBJEK fields, or INOB-CUOBJ and AUSP-OBJEK fields, to link characteristic values from the AUSP table to the condition record found in KONDH
KONDH	LOEVM_KO	LOEVM_KO	Deletion indicator for condition item	CHAR	1		Conditional	
AUSP	OBJEK	CUOBN	Key of Object to be Classified	CHAR	90		Conditional	If it has a Characteristic Copy field to the Characteristics tab
AUSP	ATINN	ATINN	Internal Char no.	NUMC	10		Conditional	Copy
AUSP	ATWRT	ATWRT	Internal Characteristic	CHAR	70		Conditional	Copy
AUSP	ITEM_NO (ATZHL)	WZAEHL	Sequence Number	NUMC	4		Conditional	Rule For each sequential Characteristic Number (ATNAM) set row sequentially

Depending On the Strategy Type Various Tables and Columns Come into Scope. (See Figure1)

figure 1



The following Matrix shows which fields are in scope per table:

x designates a copy Action

O Designates copy from xref (Where legacy and Target do not keep the same Numbering use applicable cross reference table)

Note* KOTH9xx series are as per Current "as is" Naming. As the tables are custom numbering dependant on Condition records. the "To Be" numbering may be different. Can only confirm once new condition records are created as to what the table names will be in target

		FIELD	KAPPL	KSCHL	DATBI	DATAB	KNUMH	PMATN	MATNR	KNDNR	WERKS	BWART	AUART	KUNWE	VTWEG	VKORG	SPARP	LGNUM	VSTEL	ZWRKST	LGORT
Table Name	**Key Combination)**	**Field Description**	Application	Strategy Type	Valid To	Valid From	Cond. record no.	Production Material Number	Material	Customer	Plant (As per Xref)	Movement Type	Order Type	Ship-To-Party	Distr. Channel	Sales Org	Division in Item		Shipping Point	Prod com for batch	Storage Location
KOTH 001	Material		x	x	x	x	x		O												
KOTH 002	Customer/Material		x	x	x	x	x		O	O											
KOTH 003	Customer/Plant/Material		x	x	x	x	x		O	O	O										
KOTH 021	Movement Type/Plant		x	x	x	x	x				O	x									

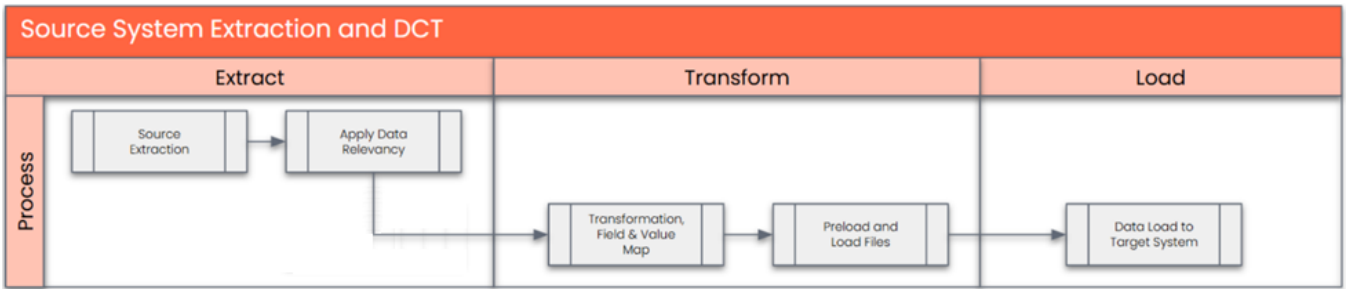
KOTH 023	Plant/Material		x	x	x	x	x		O		O										
KOTH 024	Movement Type/Plant /Material		x	x	x	x	x		O		O	x									
KOTH 025	Plant		x	x	x	x	x				O										
KOTH 030	Order Type/Plant /Component		x	x	x	x	x		O		O		x								
KOTH 031	Order Type/Plant /ProductionMaterial /Compo		x	x	x	x	x	x	O		O		x								
KOTH 501	Plant/Ship-to		x	x	x	x	x				O			x							
KOTH 502	Customer/Distr. Chl		x	x	x	x	x			O					x						
KOTH 503	Plant / Sales Organization		x	x	x	x	x				O					x					
KOTH 900	Ship-to/Plant/Material		x	x	x	x	x		O		O			x							
KOTH 901	Ship-to		x	x	x	x	x			O											
KOTH 902	Sold-to		x	x	x	x	x			O											
KOTH 903	Ship-to/material		x	x	x	x	x		O	O											
KOTH 907	Item Division		x	x	x	x	x										x				
KOTH 908	Plant / Warehouse Number		x	x	x	x	x				O							x			
KOTH 909	Plant/Ship.point		x	x	x	x	x				O								x		
KOTH 911	Plant / Material		x	x	x	x	x		O		O										
KOTH 912	Plant/Shipping Point /Division in item		x	x	x	x	x				O						x		x		
KOTH 913	Plant/Sales org./Ship Point		x	x	x	x	x				O					x			x		
KOTH 914	Ship-to/Plant /Commercial product		x	x	x	x	x				O			x						x	
KOTH 915	Ship-to/Commercial product		x	x	x	x	x							x						x	
KOTH 930	Order type/Plant		x	x	x	x	x				O		x								
KOTH 998	Movmt type/Plant /produced material /Compone		x	x	x	x	x	x	O		x	x									
KOTH 999	Movement type plant storagelocation		x	x	x	x	x				x	x									O

Data Cleansing

ID	Criticality	Error Message/Report Description	Rule	Output	Source System
N/A					

Conversion Process

The high-level process is represented by the diagram below:



Data Privacy and Sensitivity
Not Applicable

Extraction

Extract data from a source into . There are 2 possibilities:

1. The data exists. connects to the source and loads the data into . There are 3 methods:
    a. Perform full data extraction from relevant tables in the source system(s).
    b. Perform extraction through the application layer.
    c. Only if ; cannot connect to the source, data is loaded to the repository from the provided source system extract/report.
2. 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

Extraction Run Sheet

Req #	Requirement Description	Team Responsible
1)	Legacy System Extraction (PF2 & WP2) based on Access Sequence & Strategy Type Key Combination to determine which table is needed.	
	Records with a Valid To Date in the Future(KOTHxxx-KODATBI >= Current /Migration Date)	

Selection Screen

Selection Ref Screen	Parameter Name	Selection Type	Requirement	Value to be entered/set
VCH3	Strategy Type	Key	Mandatory	All strategies (As an example Use ZRCS)
	-> Key Combinations are displayed which determines tables for Strategy and columns available			

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

Field Name	Field Description	Rule
N/A		

Extraction Dependencies

Item #	Step Description	Team Responsible
1)	Connection needs to be setup with the correct Authorisation for extract	Synity
2)	Possible scheduling of AUSP /INOB as size is generally big and may take some time	Synity
3)	Org Structure design needs to be finalised to determine extract package filtering needed for big tables • Legacy Plant to Target Plant as per Plant Consolidation xref • Customer/Vendor/BP as per Legacy-Target xref	Synity

Transformation

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 Run Sheet

Item #	Step Description	Team Responsible
1	Execute Collect to ensure PREP /Snapshot is up to date.	Synity / SyWay S2P Data Team
2	Execute Transform	Synity / SyWay S2P Data Team
3	Review & validate any Error Reports (Config etc)	Synity / SyWay S2P Data Team
4	Generate & validate Preload Report (Ensure proper Business names as per Data Dictionary)	Synity / SyWay S2P Data Team
5	Generate Load files	Synity / SyWay S2P Data Team

Transformation Rules

Rule #	Source system	Source Table	Source Field	Source Description	Target System	Target Table	Target Field	Target Description	Transformation Logic
1	PF2/WG2	KOTHxxx	KSCHL	Condition Key	S4 /HANA	KOTHxxx	KSCHL	Condition Key	Copy from Source to Target (See Matrix) Additional fields become available depending on Key Combination
2	PF2/WG2	KOTHxxx	KAPPL	Application	S4 /HANA	KOTHxxx	KAPPL	Application	Copy from Source to Target (See Matrix) Additional fields become available depending on Key Combination
3	PF2/WG2	KOTHxxx	KODATAB	Validity start date of the condition record	S4 /HANA	KOTHxxx	KODATAB	Validity start date of the condition record	Copy from Source to Target (See Matrix) Additional fields become available depending on Key Combination
4	PF2/WG2	KOTHxxx	KODATBI	Validity end date of the condition record	S4 /HANA	KOTHxxx	KODATBI	Validity end date of the condition record	Copy from Source to Target (See Matrix) Additional fields become available depending on Key Combination

5	PF2/WG2	KONDH	CHASP	Batches: No. of batch splits allowed	S4 /HANA	KONDH	CHASP		Copy from Source to Target
6	PF2/WG2	KONDH	CHSPL	Number of batch splits can be changed	S4 /HANA	KONDH	CHSPL		Copy from Source to Target
7	PF2/WG2	KONDH	CHMDG	Batches: Dialog batch determination	S4 /HANA	KONDH	CHMDG		Copy from Source to Target
8	PF2/WG2	KONDH	KZAME	ID for display of UoM in batch determination	S4 /HANA	KONDH	KZAME		Copy from Source to Target
9	PF2/WG2	KONDH	CHMVS	Batches: Exit to quantity proposal	S4 /HANA	KONDH	CHMVS		Copy from Source to Target
10	PF2/WG2	KONDH	CHVLL	Overdelivery allowed in batch determination	S4 /HANA	KONDH	CHVLL		Copy from Source to Target
11	PF2/WG2	KONDH	CHVSK	Selection type at start of batch determination	S4 /HANA	KONDH	CHVSK		Copy from Source to Target
12	PF2/WG2	KLAH	CLASS	Selection Criteria	S4 /HANA				Rule (link KONDH to a search strategy in SAP, use the KNUMH (condition record number) to join KONDH and AUSP or INOB tables, which contain characteristic values used in batch search strategies. The link is made through the KONDH-KNUMH and AUSP-OBJEK fields, or INOB-CUOBJ and AUSP-OBJEK fields, to link characteristic values from the AUSP table to the condition record found in KONDH. You can then can then Link AUSP record to KLAH via KSSK/INOB to get the Class name field used for Selection Criteria.
12	PF2/WG2	T685H	T685H-CLASS_SRT	Sort Criteria	S4 /HANA	KONDH	T685H		Rule (Copy from T685H) based on Condition
12	PF2/WG2	KONDH	LOEVM_KO	LOEVM_KO	Deletion indicator for condition item	KONDH	LOEVM_KO		Copy from Source to Target

Transformation Mapping

Mapping Table Name	Mapping Table Description
Plants	Mapping of Legacy Plants to Target System value (Value Mapping) Applicable as per Matrix
Storage Location	Mapping of Legacy Storage location to Target System value (Value Mapping) Applicable as per Matrix
Material	Mapping of Legacy Material to Target System Material no. as per Material Basic Data xref
Customer	Mapping of Legacy Customer to Target System Customer no. xref

Transformation Dependencies

List the steps that need to occur before transformation can commence

Item #	Step Description	Team Responsible
1	Ensure all Transformation mappings are up to date	Synity/Data Team
2	Check Tables for fields are up to date & complete	Synity/Data Team
3	• Legacy Plant to Target Plant as per Plant Consolidation xref • Customer/Vendor/BP as per Legacy-Target xref • Legacy vs To Be Material Numbering xref	Synity/Data Team

Pre-Load Validation

Project Team

Completeness

Task	Action
Verify Record Counts	Row counts in PREP (Relevancy) should tie back to Count in Target Table

Accuracy

Task	Action
Conversion Accuracy	SyWay P2F Data Team to verify that all fields pass the following checks: 1. All Mandatory Fields filled out 2. Field and Value Mapping Complete and correct. 3. Nulls need to be verified 4. Field Lengths and data types should be compatible with upload Template
Review Error Reports	Fields that fail checks due to Target Readiness etc. should be highlighted in error reports. These reports need to be flagged & decision can be made to Remediate values in initial Mock cycles but no remediation should be applied when doing final dress rehearsal.

Business

Completeness

Task	Action
Verify Record Counts	Business Data Owner/s to verify that the total number of relevant records from the the Relevancy Reports is equal to the total number of records in the Preload and Load Sheets.

Accuracy

Task	Action
Conversion Accuracy	Business Data Owner/s to verify that all the data in the load table/file is accurate as per endorsed transformation/mapping rules (and signed-off DCT data).

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

Load Run Sheet

Item #	Step Description	Team Responsible
1.	Go to Load tool (Migrate your Data)	Synity/Data Team
2.	Run Simulation & validate if any Errors are encountered	Synity/Data Team
3.	If No errors encountered proceed with Prepare & simulate	Synity/Data Team
4.	Once Approval has been given proceed with Migration	Synity/Data Team
5.	Any Migration Errors need to be highlighted & and depending on volume & criticality of Mock cycle either be fixed & reloaded or Marked for correcting in subsequent Mocks	Synity/Data Team
6.	Generate all Post-load Reports with summary information with counts that clearly show : 1. To be loaded Count (In Target Table) 2. Loaded 3. Failures with **meaningful** error descriptions	Synity/Data Team
7.	Check a sample of a few materials in S/4 HANA	Synity/Data Team
8.	Garner validations/signoffs.	Synity/Data Team

Load Phase and Dependencies

In order to migrate this object the following Dependencies should have been completed before attempting the migration

- **Characteristics**
- **Class**
- **Customer**
- **Product**

Configuration

Item #	Configuration Item

Conversion Objects

Object #	Preceding Object Conversion Approach
	list the exact title of the conversion object of only the immediate predecessor – this will then confirm the DDD (Data Dependency Diagram)

Error Handling

Error Type	Error Description	Action Taken
Missing Config	Plant/Storage Location etc not available	

Post-Load Validation

Project Team

Completeness

Task	Action
Verify Count	SyWay P2FData Team to verify the record count created in target S/4 HANA by accessing post load reports in dspMigrate or standard reports from S/4 HANA

Accuracy

Task	Action
Verify Logs	Check if there is data that failed to load and perform the necessary actions (e.g. register as post load issue or attempt to load the record again, etc.).

Business

Completeness

Task	Action
Verify Count	Download Post Load Reports from dspMigrate and verify that the record count loaded in the target S/4 HANA is the same count as of the endorsed load file.

Accuracy

Task	Action
Conversion Accuracy	Verify that the Material data in target S/4 HANA were loaded correctly via dspMigrate post load reports or standard reports from S/4 HANA.

Key Assumptions

- Master Data Standard is up to date as on the date of documenting this conversion approach and data load.

See also

Change log

Version	Published	Changed By	Comment
CURRENT (v. 27)	**May 08, 2026 17:26**	**RAYUDU-ext, Narasimha Kumar**	
v. 26	May 08, 2026 17:16	**RAYUDU-ext, Narasimha Kumar**	
v. 25	May 08, 2026 13:10	**RAYUDU-ext, Narasimha Kumar**	
v. 24	May 08, 2026 11:54	**RAYUDU-ext, Narasimha Kumar**	
v. 23	May 08, 2026 10:36	**RAYUDU-ext, Narasimha Kumar**	
v. 22	May 05, 2026 08:13	**VAN NIEKERK-ext, ivan**	Updated Value Mapping as covered under (CR0436) Already endorsed.
v. 21	Apr 17, 2026 09:29	**VAN NIEKERK-ext, ivan**	KOTH903 KNDNR correction
v. 20	Apr 17, 2026 08:25	**VAN NIEKERK-ext, ivan**	Correction on Matrix & added config Mapping
v. 19	Mar 11, 2026 12:46	**VAN NIEKERK-ext, ivan**	Updated Matrix with correct Custom Tables for Pf2
v. 18	Nov 20, 2025 15:37	**VAN NIEKERK-ext, ivan**	

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 20, 2025 to May 08, 2026	Actor	Type	Activity	Version
Approved	RAYUDU-ext, Narasimha Kumar and VAN NIEKERK-ext, ivan	Edit	multiple updates from RAYUDU-ext, Narasimha Kumar and VAN NIEKERK-ext, ivan	
Nov 17, 2025				
	TAN-ext, Charmaine	State	changed state to Approved at 12:43 pm (State override) *[PMO Comments] Conversion Spec completed as per CS register and functional review completed*	v15
From Oct 24, 2025 to Nov 06, 2025				

Peer Review	VAN NIEKERK-ext, ivan	Edit	updated the page at 3:22 pm	
	RAYUDU-ext, Narasimha Kumar	State	assigned approval *Peer Review* to OMER-ext, Mohammed at 1:59 pm	
		State	assigned approval *Peer Review* to RAYUDU-ext, Narasimha Kumar at 1:59 pm	
	VAN NIEKERK-ext, ivan	State	changed expiry date to '28 Oct, 2025 02:25 pm' at 1:25 pm	
		State	changed state to Peer Review at 1:25 pm	v6