

Business Structures management in BFC SYENSQO

Status	Approved
Owner	TEE-ext, Paul
Stakeholders	

Purpose

The purpose of this document is to define the conversion approach to create Notification in S/4 HANA.

Legacy Plant Maintenance Notification is using a diverse range of formats across the different systems. There are instances where the same Notification is duplicated within and across sources, with informal words. This results in data inconsistency. As per SyWay design, EAM Notification will be standardized.

Conversion Scope

The scope of this document covers the approach for converting active Notification from Legacy Source Systems into S/4HANA.

In standard SAP functionality whenever an asset or its component is identified as having suffered a fault or malfunction, a *maintenance notification* is created to report the event and to request maintenance. The appropriate technical object (i.e. functional location or equipment) that represents the asset is referenced on that notification along with the suspected symptom and other information (e.g. priority, short / long description, date, reported by, breakdown indicator, etc.)

In general terms, a notification can be utilised in the following situations:

- Corrective Maintenance work identification - non-breakdown maintenance requests, in-service breakdowns, extra malfunctions uncovered during routine maintenance
- Activity reports during routine maintenance and inspections
- Work order execution and completion - recording of technical data such as failure/cause codes)
- Condition-based / predictive maintenance - creation of notifications when asset reaches an exceptional technical condition (e.g. measurements exceed or fall below a certain tolerance)

Besides capturing maintenance requests and providing a means to track outstanding faults/defects and their current rectification, notifications are also used to capture malfunction and failure data which is crucial for long-term asset reliability analysis.

The data from legacy system includes:

1. Open Notifications within 3 months (based on Creation Date)

APM specific relevancy:

1. Open Notifications - Outstanding; In Process (Historical for Selected Equipment Type)
2. Historical Data for Completed/Closed Notifications for Active Functional Locations and Equipment with Item Codes for the past 3 years, limited to specific technical object types (list to be confirmed).

The data from legacy system excludes:

1. Open Notifications older than 3 months (based on Creation Date) with no Work Order assigned

Reference: [SyWay_Cleansing and Historical Scope - A2D](#)

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	An initial extract will be provided to business to evaluate. Additional data/records may be required and these will be constructed via DCT. Enrichment of in-scope data may be required and will be added via transformation rules (business/technical).	110,000	S/4HANA	110,000

Additional Information

Multi-language Requirement

Notification does not have multi language support. Notification text will be migrated using EN logon.

Document Management

Long text and DIR are not covered in this document as they are defined as another data object.

Legal Requirement

Not Applicable

Special Requirements

Not Applicable

Target Design

EAM Notification Data strictly adheres to the Master Data Standard. The complete information of the key fields that hold the Class information follows the Master Data Standard document that is located here <include hyperlink>.

The technical design of the target for this conversion approach.

1. Notification Header

Table	Field	Data Element	Field Description	Data Type	Length	Requirement
QMEL	QMNUM		Notification Number	CHAR	12	System generated
QMEL	QMART		Notification Type	CHAR	2	
QMEL	SHN_EQUIPMENT		Equipment Number	CHAR	18	
QMEL	SHN_FUNCT_LOC		Functional Location	CHAR	30	
QMEL	SERIALNR		Serial Number	CHAR	18	
QMEL	MATNR		Material Number	CHAR	40	
QMEL	QMTXT		Short Text	CHAR	40	
STXH	LONG_TEXT		Long Text for Header	Text	unrestricted	
QMEL	PRIOK		Priority	CHAR	1	
QMEL	STRMN		Required Start Date	Date		
QMEL	STRUR		Required Start Time	Time		
QMEL	LTRMN		Required End Date	Date		
QMEL	LTRUR		Required End Time	Time		
QMEL	LACD_DATE		Final Due Date	Date		
QMEL	QMGRP		Code Group - Coding	CHAR	8	
QMEL	QMCOD		Coding	CHAR	4	
QMIH	AUSWK		Effect on Operation	Text	1	
QMEL	DETECTIONCODEGROUP		Detection Method Group	CHAR	8	
QMEL	DETECTIONCODE		Detection Method	CHAR	4	
QMEL	ARBPLWERK		Plant Associated with Main Work Centre	CHAR	4	
QMEL	ARBPL		Work Centre for Maintenance	NUMC	8	
QMIH	IWERK		Maintenance Planning Plant	CHAR	4	
QMIH	INGRP		Planner Group	CHAR	3	
QMIH	MSAUS		Breakdown Indicator	CHAR	1	
QMIH	AUSVN		Start of Malfunction (Date)	Date		
QMIH	AUZTV		Start of Malfunction (Time)	Time		
QMEL	QMNAM		Name of Person Reporting Notification	CHAR	12	

QMIH	AUSBS		End of Malfunction (Date)	Date		
QMIH	AUZTB		End of Malfunction (Time)	Time		
QMFE	WERKS		Maintenance Plant	CHAR	4	
QMIH	LOC_DESC		Asset Location	CHAR	50	

2. Notification Item

Table	Field	Data Element	Field Description	Data Type	Length	Requirement
QMFE	QMNUM	QMNUM	Notification Number	CHAR	12	
QMFE	FENUM	FELFD	Item Number in Item Record	NUMC	4	
QMFE	ERNAM	ERNAM	Name of Person who Created the Object	CHAR	12	S
QMFE	ERDAT	ERDAT	Date on Which Record Was Created	DATS	8	S
QMFE	AENAM	AENAM	Name of Person Who Changed Object	CHAR	12	S
QMFE	AEDAT	AEDAT	Changed On	DATS	8	S
QMFE	FETXT	FETXT	Notification Item Short Text	CHAR	40	
QMFE	FEKAT	FEKAT	Catalog Type - Problems/Defects	CHAR	1	
QMFE	FEGRP	FEGRP	Code Group - Problem	CHAR	8	
QMFE	FECOD	FECOD	Problem or Damage Code	CHAR	4	
QMFE	FEVER	QVERSNR	Version Number	CHAR	6	
QMFE	OTKAT	OTKAT	Catalog Type - Object Parts	CHAR	1	
QMFE	OTGRP	OTGRP	Code Group - Object Parts	CHAR	8	
QMFE	OTEIL	OTEIL	Part of Object	CHAR	4	
QMFE	OTVER	QVERSNR	Version Number	CHAR	6	
QMFE	BAUTL	BAUTL	Assembly	CHAR	18	
QMFE	EBORT	EBORT	Installation Point for Subitem	CHAR	20	
QMFE	INDTX	INDLTX	Object Long Text Available	CHAR	1	
QMFE	KZMLA	KZMLA	Primary language indicator for text segment	CHAR	1	
QMFE	ERZEIT	ERZEIT	Time, at Which Record Was Added	TIMS	6	
QMFE	AEZEIT	AEZEIT	Time of Change	TIMS	6	
QMFE	KZORG	KZORG	Originating Defect	CHAR	1	
QMFE	WDFEH	WDFEH	Repetitive Defect	CHAR	1	
QMFE	FEQKLAS	QFEHLKLAS	Defect Class	CHAR	2	
QMFE	FCOAUFN	QCOAUFN	Order Number (CO Order) for Item	CHAR	12	
QMFE	FMGFRD	QMGRD	Defective Quantity for Item (External)	QUAN	13(3)	
QMFE	FMGEIG	QMGEIG	Defective Quantity for Item (Internal)	QUAN	13(3)	
QMFE	FMGEIN	QMGEIN	Unit of Measure for Item	UNIT	3	
QMFE	ANZFEHLER	QANZFEHL4	Number of Defects Found	INT4	10	
QMFE	FEHLBEW	QFEHLBEW	Defect Valuation	FLTP	16(16)	
QMFE	UNITFLBEW	QUNITFLBEW	Unit for Defect Valuation	UNIT	3	
QMFE	FEART	QFEART	Report Type for Defects Recording	CHAR	8	
QMFE	PNLKN	QLFNKN	Current Node Number from Order Counter APLZL	NUMC	8	
QMFE	MERKNR	QMERKNRP	Inspection Characteristic Number	NUMC	4	
QMFE	PROBENR	QPROBENR	Sample Number	NUMC	6	
QMFE	PHYNR	QPHYSRNR	Physical Sample Number	CHAR	12	
QMFE	PRUEFLINR	QPRUEFLINR	Single-Unit Number for the Unit to Be Inspected	CHAR	18	
QMFE	CROBJTY	CR_OBJTY	Object types of the CIM resource	CHAR	2	

QMFE	ARBPL	LGWID	Object ID of the Work Centre	NUMC	8	
QMFE	ARBPLWERK	QARBPWERKS	Plant for Work Centre	CHAR	4	
QMFE	FENUMORG	QFENUMORG	Number of Original Item to Which Reference Is Made	NUMC	4	
QMFE	KZSYSFE	QKZSYSFE	Systematic Defect	CHAR	1	
QMFE	KZLOESCH	KZLOESCH	Delete Data Record	CHAR	1	
QMFE	POSNR	QLFDPOS	Sort Number for Item	NUMC	4	
QMFE	HERPOS	QMFHERK	Origin of Item Record	CHAR	1	
QMFE	AUTKZ	QAUTKZ	Data Record Created with Function 'Create with Copy Model'	CHAR	1	
QMFE	MATNR	MATNR	Material Number	CHAR	18	
QMFE	WERKS	WERKS_D	Plant	CHAR	4	
QMFE	EKORG	EKORG	Purchasing Organization	CHAR	4	
QMFE	INFNR	INFNR	Number of Purchasing Info Record	CHAR	10	
QMFE	KOSTL	KOSTL	Cost Centre	CHAR	10	
QMFE	LSTAR	LSTAR	Activity Type	CHAR	6	
QMFE	PRZNR	CO_PRZNR	Business Process	CHAR	12	
QMFE	MENGE	QMGPOS	Defective Quantity for Item (Internal)	QUAN	13(3)	
QMFE	EQU NR	EQU NR	Equipment Number	CHAR	18	
QMFE	TPLNR	TPLNR	Functional Location	CHAR	30	

Data Cleansing

ID	Criticality	Error Message/Report Description	Rule	Output	Source System
9004-001	C1	Invalid or Inactive Equipment or Functional Location linked to Notification	Notification as per Relevancy Criteria assigned with an Equipment / Functional which does not belong below: 1. Equipment as per Relevancy Criteria 2. Functional Location as per Relevancy Criteria	Equipment, Functional Location	PF2, WP2
9004-002	C1	Invalid or Inactive Business Partner (Customer) linked to Notification	Notification as per Relevancy Criteria assigned with a Business Partner (Customer) does not belong below: 1. Business Partner FLCU01 (SD) as per Relevancy Criteria	Business Partner (Customer)	PF2, WP2
9004-003	C1	Invalid or Inactive Catalog Code Groups & Code linked to Notification	Notification as per Relevancy Criteria assigned with a Catalog Code Groups & Code does not belong below: 1. Catalog Code Groups & Code as per Relevancy Criteria	Catalog Code Groups & Code	PF2, WP2
9004-004	C1	Invalid or Inactive Characteristics linked to Notification	Notification as per Relevancy Criteria assigned with a Characteristic does not belong below: 1. Characteristics as per Relevancy Criteria	Characteristic	PF2, WP2
9004-005	C1	Invalid or Inactive Class linked to Notification	Notification as per Relevancy Criteria assigned with a Class does not belong below: 1. Class as per Relevancy Criteria	Class	PF2, WP2
9004-006	C1	Invalid or Inactive Document Info Record linked to Notification	Notification as per Relevancy Criteria assigned with a Document Info Record does not belong below: 1. Document Info Record as per Relevancy Criteria	Document Info Record	PF2, WP2
9004-007	C1	Invalid or Inactive Maintenance Item linked to Notification	Notification as per Relevancy Criteria assigned with a Maintenance Plan and Item does not belong below: 1. Maintenance Plan and Item as per Relevancy Criteria	Maintenance Item	PF2, WP2
9004-008	C1	Invalid or Inactive Revision linked to Notification	Notification as per Relevancy Criteria assigned with a Revision does not belong below: 1. Revision as per Relevancy Criteria	Revision	PF2, WP2
9004-009	C1	Invalid or Inactive Work Centre linked to Notification	Notification as per Relevancy Criteria assigned with a Work Centre does not belong below: 1. Work Centre as per Relevancy Criteria	Work Centre	PF2, WP2
9004-010	C2	Open Notifications older than 3 months with No Work Order Assigned	Open Notifications older than 3 months with No Work Order Assigned* Status ORAS = Work Order Assigned	Notification Creation Date	PF2, WP2

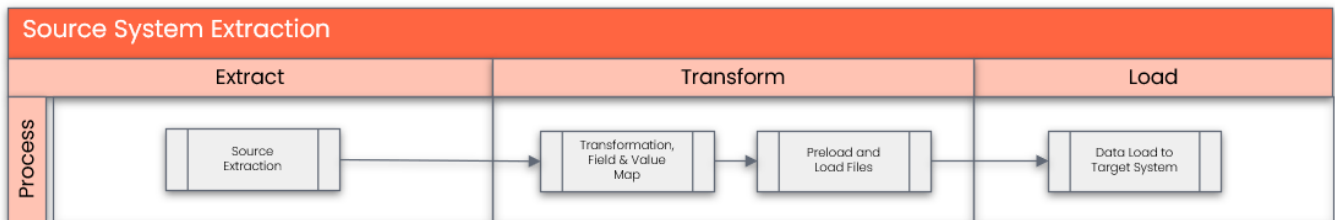
9004-011	C1	Notification Company Code incorrect	Notification as per Relevancy Criteria with Invalid Company Code (T001)	Company Code, Company Code	PF2, WP2
9004-012	C1	Notification Plant incorrect.	Notification as per Relevancy Criteria with Invalid Plant (T001W)	Plant	PF2, WP2
9004-013	C1	Invalid or no Planner Group linked to Notification	Notification as per Relevancy Criteria with no Planner Group Assigned or Invalid Planner Group (T024I)	Planner Group	PF2, WP2
9004-014	C1	Notification Plant Section incorrect.	Notification as per Relevancy Criteria with Invalid Plant Section (T357)	Plant	PF2, WP2
9004-014	C1	Notification Location incorrect.	Notification as per Relevancy Criteria with Invalid Location (T499S)	Location	PF2, WP2
9004-015	C2	Notification Planning Plant and Maintenance Plant are not the same.	Notification as per Relevancy Criteria with Planning Plant <-> Maintenance Plant	Maintenance Plant, Planning Plant	PF2, WP2
9004-016	C2	Notification contains Thai characters	Notification Description with Thai characters	Description	PF2, WP2

Informal Words **

Group 1	Group 2	Group 3	Group 4	Group 5
*DNU	Delete	donot	Formerly	Old #
..	Deletion	DONT USE	From	Old[]
/	DELISTED	DON'T USE	Incorrect	PLEASE USE
?	Discontinued	Dup Use	Invalid	Pls Use
@	Disposable	DUPLICATE	New	Previously
^	DNU	-DUPLICATE	NOT ACTIVE	Replace
+	Do Not	DUPLICATION	not in use	Replaced
++	Do Not Re	Duplicidad	Not Used	RESERVED
£	Do Not Sell	Duplikat	NOT VALID	Retired
Defective	Do Not Use	Former	Obsolete	ZZDEL

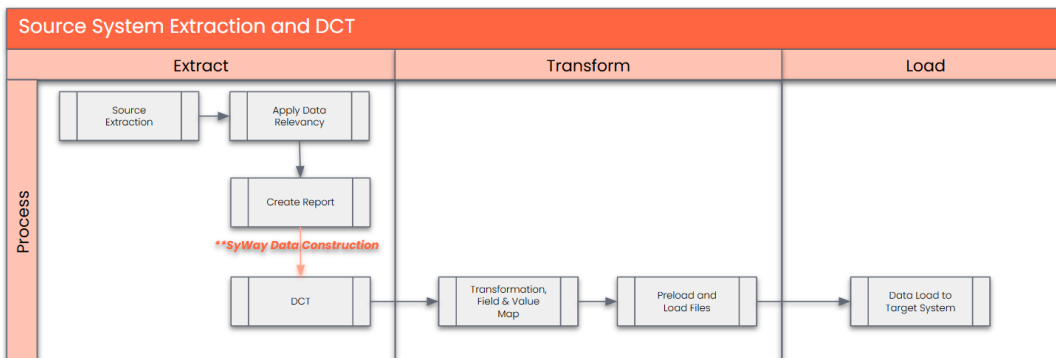
Conversion Process

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



For sites that are not on SAP-PF2 and WP2 systems, collection will be done manually in the data collection template.

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



Data Privacy and Sensitivity

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	Extract data from source system based on relevancy rule	SyWay Data Team

Selection Screen

Selection Ref Screen	Parameter Name	Selection Type	Requirement	Value to be entered/set
Not Applicable				

Data Collection Template (DCT)

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

Notification DCT Rules

Field Name	Field Description	Rule
zLegacyQMNUM	Legacy Notification Number	Conditional: Legacy Notification Number if comes from PF2 or WP2 Legacy Notification Number: For reference only
zLegacyQMTXT	Legacy Short Text	Conditional: Legacy Short Text if comes from PF2 or WP2 Legacy Short Text: For reference only
QMNUM	Notification Number	Mandatory. Ensure no duplicate.
QMART	Notification Type	Must reference to active Notification Type (TQ80)
QMTXT	Short Text	Mandatory. <ul style="list-style-type: none"> Ensure populated with Description as per specified Language. Approach if the description is more than 40 characters: Abbreviate to required length (40 Chars) by eliminating vowels, use '&' for 'and', ensure short text best describes the characteristic.
ARTPR	Priority Type	Must reference to active Priority Type (T356A)
PRIOK	Priority	Must reference to active Priority (T356)
ERNAM	Name of Person who Created the Object	

ERDAT	Date on which the record was created	
AENAM	Name of person who changed object	
AEDAT	Date of Last Change	
MZEIT	Time of Notification	
QMDAT	Date of Notification	
QMNAM	Name of Person Reporting Notification	
STRMN	Required start date	
STRUR	Required Start Time	
LTRMN	Required End Date	
LTRUR	Requested End Time	
WAERS	Currency Key	Must reference to active Currency Key in S4/HANA (TCURC)
AUFNR	Order Number	Must reference to active Order Number in S4/HANA (AUFK)
VERID	Production Version	Must reference to active Production Version in S4/HANA (MKAL)
RM_MATNR	Material number of the production version	Must reference to active Material number of the production version in S4/HANA (MKAL)
RM_WERKS	Plant of Production Version	Must reference to active Plant of Production Version in S4/HANA (MKAL)
SA_AUFNR	Run schedule header number	Must reference to active Run schedule header number in S4/HANA (SAFK)
MATNR	Material Number	Must reference to active Material Number in S4/HANA (MARA)
REVLV	Revision level	
MATKL	Material Group	Must reference to active Material Group in S4/HANA (T023)
PRDHA	Product hierarchy	Must reference to active Product hierarchy in S4/HANA (T179)
KZKRI	Indicator: Critical part	
KZDKZ	Documentation required indicator	
KUNUM	Account Number of Customer	Must reference to active Account Number of Customer in S4/HANA (KNA1)
FEKNZ	Error Records Exist	
MAKNZ	Task Records Exist	
OBJNR	Object Number for Status Management	Must reference to active Object Number for Status Management in S4/HANA (ONR00)
QMDAB	Date for Notification Completion	
QMZAB	Completion Time of Notification	
RBNR	Catalog Profile	Must reference to active Catalog Profile in S4/HANA (T352B)
RBNRI	Origin of Notifications Catalog Profile	
INDTX	Object Long Text Available	
KZMLA	Primary language indicator for text segment	
HERKZ	Origin of Notification	
BEZDT	Notification Reference Date	
BEZUR	Notification Reference Time	

LIFNUM	Supplier Account Number	Must reference to active Supplier Account Number in S4/HANA (LFA1)
BUNAME	Author of a Q/PM Notification	
VBELN	Sales Order Number	Must reference to active Sales Order Number in S4/HANA (VBAK)
BSTNK	Customer Reference	
BSTDK	Customer Reference Date	
SPART	Division	Must reference to active Division in S4/HANA (TSPA)
VKORG	Sales Organization	Must reference to active Sales Organization in S4/HANA (TVKO)
VTWEG	Distribution Channel	Must reference to active Distribution Channel in S4/HANA (TVTW)
ADRNR	Addresses: Address Number	
AEZEIT	Time of Change	
ERZEIT	Time at Which Record Was Added	
MAWERK	Plant for Material	Must reference to active Plant in S4/HANA (T001W)
QMKAT	Catalog Type - Coding	Must reference to active Catalog Type in S4/HANA (TQ15)
QMGRP	Code Group - Coding	Must reference to active Code Group in S4/HANA (QPGR)
QMCOD	Coding	
AUSWIRK	Key for a Scenario	Must reference to active Key in S4/HANA (TQ81)
TEILEV	Usage of Parts	Must reference to active Usage in S4/HANA (TQ81V)
PRUEFLOS	Inspection Lot Number	Must reference to active Inspection Lot Number in S4/HANA (QALS)
CHARG	Batch Number	Must reference to active Batch Number in S4/HANA (MCH1)
LGORTCHARG	Storage Location of Batch	Must reference to active Storage Location in S4/HANA (T001L)
LICHN	Supplier Batch Number	
HERSTELLER	Number of Manufacturer	Must reference to active Number of Manufacturer in S4/HANA (LFA1)
EMATNR	Material number corresponding to manufacturer part number	Must reference to active Material number in S4/HANA (MARA)
EKORG	Purchasing organization	Must reference to active Purchasing organization in S4/HANA (T024E)
BKGRP	Purchasing Group	Must reference to active Purchasing Group in S4/HANA (T024)
LGORTVORG	Storage Location for Inspection Lot Stock	Must reference to active Storage Location in S4/HANA (T001L)
FERTAUFNR	Order Number (Production Order)	Must reference to active Order Number in S4/HANA (AUFK)
FERTAUFPL	Plan Number for Operations in Order (Production Order)	
EBELN	Purchasing Document Number	Must reference to active Purchasing Document Number in S4/HANA (EKKO)
EBELP	Item Number of Purchasing Document	Must reference to active Item Number of Purchasing Document in S4/HANA (EKPO)
MJAHR	Material Document Year	
MBLNR	Number of Material Document	
MBLPO	Item in Material Document	
LS_KDAUF	Sales Order Number	Must reference to active Sales Order Number in S4/HANA (VBAK)
LS_KDPOS	Item number of the SD document	Must reference to active Item number in S4/HANA (VBAP)
LS_VBELN	Delivery	Must reference to active Delivery in S4/HANA (LIKP)

LS_POSNR	Delivery Item	Must reference to active Delivery Item in S4/HANA (LIPS)
CROBJTY	Object types of the CIM resource	
ARBPL	Object ID of the Work Centre	Must reference to active Object ID in S4/HANA (CRID)
ARBPLWERK	Plant for Work Centre	Must reference to active Plant in S4/HANA (T001W)
FEART	Report Type for Defects Recording	Must reference to active Report Type in S4/HANA (TQ86)
PNLKN	Current Node Number from Order Counter	
MGEIG	Defective Quantity (Internal)	
MGFRD	Defective Quantity (External)	
MGEIN	Unit of Measure	Must reference to active Unit of Measure in S4/HANA (T006)
BZMNG	General Reference Quantity	
RKMNG	Complaint Quantity	
RGMNG	Return Delivery Quantity	
RKDAT	Date of Return Delivery	
COAUFNR	Order Number (QM Order)	Must reference to active Order Number in S4/HANA (AUFK)
QWRNUM	Reference Notification Number	Must reference to active Notification Number in S4/HANA (QMEL)
REFNUM	External Reference Number	
KDMAT	Material Number Used by Customer	
IDNLF	Material Number Used by Supplier	
SERIALNR	Serial Number	
KZLOESCH	Delete Data Record	
CVP_XBLCK	Business Purpose Completed Flag	
PRODDAT	Production Date	
DEVICEID	Additional Device Data	
VKBUR	Sales office	Must reference to active Sales office in S4/HANA (TVKBZ)
VKGRP	Sales group	Must reference to active Sales group in S4/HANA (TVBVK)
AUTKZ	Data Record Created with Function 'Create with Copy Model'	
BEDID	ID of the Capacity Requirements Record	
BEDZL	Internal counter	
PROFIL_TYP	Object Type	
PROFIL_ID	Object ID	
HANDLE	Globally unique identifier (linked to time segment, etc)	
TSEGFL	Time segment exists	
TSEGTP	Template	Must reference to active Template in S4/HANA (TTSEGTPH)
TZONSO	Time Zone for Notification	Must reference to active Time Zone in S4/HANA (TTZZ)

TZONID	Origin of Time Zone in Notification	
FUNKTION	Keys for Function in Action Box	
PSP_NR	WBS Element	
ESTIMATED_COSTS	Estimated Costs for a Claim	
CLAIMED_COSTS	Costs Claimed	
RESULT_COSTS	Costs Accepted	
CHANCE	Chance of Completing a Claim	
OPPONENT	Partner Type	
KALNR	Cost Estimate Number for Cost Est. w/o Qty Structure	
KALVAR	Costing Variant for Postprocessing with Unit Costing	
OBJNR_REAL	Object Number of Real CO Account Assignment	Must reference to active Object Number in S4/HANA (ONR00)
OBJNR_STAT	Auxiliary account assignment 1	Must reference to active Object Number in S4/HANA (ONR00)
DUMMY_QMEL_INCL_EEW_PS	Dummy function in length 1	
PHASE	Notification Processing Phase	
CHANGEDDATE	UTC Time Stamp in Short Form (YYYYMMDDhhmmss)	
.INCLU--AP		
.INCLU--AP		
LOGSYSTEM	Logical System	
.INCLU--AP		
SHN_OBJTY	Object types of the CIM resource	
SHN_OBJID	Object ID of the resource	
SHN_FUNCLOC	Functional Location	
SHN_EQUIPMENT	Equipment Number	
SHN_ORIGIN	Origin or Use of Shift Note or Report	
.INCLU--AP		
UII	Unique Item Identifier	

Extraction Dependencies

Item #	Step Description	Team Responsible
1	Ensure that create, change and deletion of master data is freeze in legacy Production system	Legacy IT
2	Relevancy Criteria for Catalog Profile	SyWay A2D Data Team

3	Relevancy Criteria for Catalog Code Groups & Codes	SyWay A2D Data Team
4	Relevancy Criteria for Characteristics	SyWay A2D Data Team
5	Relevancy Criteria for Class	SyWay A2D Data Team
6	Relevancy Criteria for Construction Type	SyWay A2D Data Team
7	Relevancy Criteria for Document Info Record	SyWay A2D Data Team
8	Relevancy Criteria for Equipment	SyWay A2D Data Team
9	Relevancy Criteria for Functional Location	SyWay A2D Data Team
10	Relevancy Criteria for Maintenance Plan and Item	SyWay A2D Data Team
11	Relevancy Criteria for Revision	SyWay A2D Data Team
12	Relevancy Criteria for Task List	SyWay A2D Data Team
13	Relevancy Criteria for Work Centre	SyWay A2D Data Team
14	Relevancy Criteria for Cost Centre	SyWay A2D Data Team
15	Relevancy Criteria for Employee Master	SyWay A2D Data Team
16	Relevancy Criteria for Work Breakdown Structure	SyWay A2D Data Team
17	Relevancy Criteria for Material Master	SyWay A2D Data Team
18	Relevancy Criteria for Business Partner (Customer)	SyWay A2D Data Team

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 Syniti Migrate 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 Syniti Migrate
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	Ensure all mapping tables are up to date.	Syniti
2	In dspMigrate, select the wave –R3 S4/HANA – Plant Maintenance	Syniti
3	Go to Process Area Launch and Process the Object – Work Order	Syniti
4	Review and Validate Error and Preload Reports	Syniti
5	Execute the transformation to prepare the target tables	Syniti
6	Validate data from pre-load and invalid reports by region	Business/Data owner
7	Generate export(load) file (If load tool is not dspIntegrate)	SyWay A2D 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, WP2	QMEL	QMNUM	Notification Number	S/4 HANA	QMEL	QMNUM	Notification Number	Notification will be created based on internal number. The load file will be blank but after loading, this number is retrieved for XREF generation.

2	PF2, WP2	QMEL	AUFNR	Order Number	S/4 HANA	QMEL	AUFNR	Order Number	Based on the design for load program, Notification creation is separate from the Work Order. Blank for Standalone Notification
3	PF2, WP2	QMEL	QMART	Notification Type	S/4 HANA	QMEL	QMART	Notification Type	If Notification is assigned to Work Order: Order PM01: Notification Type M1 if Breakdown Indicator is blank, Notification Type M2 if Breakdown Indicator is assigned Order PM02: M3 If Notification is not assigned to Work Order: Notification Type M1 if Breakdown Indicator is blank Notification Type M2 if Breakdown Indicator is assigned Only if notification does not exist for PM01 Work Order, default to: M1
4	PF2, WP2	QMEL	QMTXT	Short Text	S/4 HANA	QMEL	QMTXT	Short Text	Direct Mapping. Only if notification does not exist for PM01 Work Order, default to: Work Order Description
5	PF2, WP2	QMEL	EQUNR	Equipment Number	S/4 HANA	QMEL	EQUNR	Equipment Number	Value Mapping: Equipment Number Use EQUNR to map from old to new Equipment Number If not blank, Transform based on mapping table for Equipment. Error if cannot be mapped. If blank, and if linked to Work Order, then use Work Order value.
6	PF2, WP2	QMEL	TPLNR	Functional Location	S/4 HANA	IFLO	TPLNR	Functional Location Label	Value Mapping: Functional Location Use TPLNR to map from old to new Functional Location If not blank, Transform based on mapping table for Functional Location Error if cannot be mapped. If blank OR INVALID / ERROR / CANNOT BE MAPPED., and if linked to Work Order, then use Work Order value. Transform to blank if Equipment is not blank (Rationale – the FL will be defaulted from EQ during loading)
7	PF2, WP2	QMIH	INGRP	Planner Group	S/4 HANA	VIQML	INGRP	Planner Group	Value Mapping: Planner Group Use INGRP to map from old to new Planner Group Transform based on mapping table Planner Group. Error if cannot be mapped. If blank OR INVALID / ERROR / CANNOT BE MAPPED., and if linked to Work Order, then use Work Order value. For Turnaround Work Order, Planner Group to be assigned to "TA1" in Work Order and Assigned Notification
8	PF2, WP2	QMFE	IWERK	Maintenance Planning Plant	S/4 HANA	VIQML	WERK	Maintenance Planning Plant	Default to Planning Plant from reference technical object.
9	PF2, WP2	QMFE	ARBPL	Object ID for Work Centre	S/4 HANA			Object ID for Work Centre	This field is derived based on the ARBPL Object ID for the Work Centre. Perform the steps: Transform based on mapping table for Work Centre. Only map Main Work Centre. If blank or cannot be mapped, and if linked to Work Order, then use Work Order value. If not linked to Work Order, then derive the Main Work Centre from the first 4 character of the mapped work Centre. If error, then default to technical object Work Centre. Error if cannot be mapped.
10	PF2, WP2	CRHD	ARBPL	Work Centre	S/4 HANA	CRHD	ARBPL	Work Centre	Value Mapping: [Mapping Name] Use ARBPL to map from old to new Work Centre
11	PF2, WP2	CRHD	WERKS	Work Centre plant	S/4 HANA	CRHD	WERKS	Work Centre plant	Value Mapping: [Mapping Name] Use WERKS to map from old to new Work Centre plant based on S/4 HANA mapped value of ARBPL
12	PF2, WP2	QMEL	QMDAT	Notification Date	S/4 HANA	QMEL	QMDAT	Notification Date	Direct Mapping. Only if notification does not exist for PM01 Work Order, default to: Work Order Basic Start Date
13	PF2, WP2	QMEL	MZEIT	Notification Time	S/4 HANA	QMEL	MZEIT	Notification Time	Direct Mapping. Only if notification does not exist for PM01 Work Order, default to:00:00:00
14	PF2, WP2	QMEL	ERNAM	Reported By	S/4 HANA	QMEL	ERNAM	Reported By	Direct Mapping. Only if notification does not exist for PM01 Work Order, default to: Migration User ID (Name)
15	PF2, WP2	QMEL	STRMN	Required Start Date	S/4 HANA	QMEL	STRMN	Required Start Date	If STRMN is blank, and if linked to Work Order, then use Work Order value for both start and end date If End Date is earlier than Start Date, then default both Start and End Date from Work Order. If Start Date is before 2 years prior to go live date, then default both Start and End Date from Work Order.

16	PF2, WP2	QMEL	LTRMN	Required End Date	S/4 HANA	QMEL	LTRMN	Required End Date	If LTRMN is blank, and if linked to Work Order, then use Work Order value for both start and end date If End Date is earlier than Start Date, then default both Start and End Date from Work Order If End Date is before 2 years prior to go live date, then default both Start and End Date from Work Order. If LTRMN is blank and not linked to Work Order, copy Start Date into End Date. Validation Rule: End Date cannot be earlier than start date
17	PF2, WP2	QMEL	PRIOK	Priority	S/4 HANA	QMEL	PRIOK	Priority	Value Mapping: [Mapping Name] Use PRIOK to map from old to new Priority. Only if notification does not exist for PM01 Work Order, default to: Low
18	PF2, WP2	QMEL	QMGRP	Code Group	S/4 HANA	QMEL	QMGRP	Code Group	For Notification Type - M1: Default to: PMOTH00 M2: Default to: PMBRD00 M3: Default to: PMOTH00
19	PF2, WP2	QMEL	QMCOD	Coding	S/4 HANA	QMEL	QMCOD	Coding	For Notification Type - M1: Default to: 0009 M2: Default to: 0099 M3: Default to: 0099
20	PF2, WP2	QMEL	RBNR	Catalog Profile	S/4 HANA	QMEL	RBNR	Catalog Profile	Catalogue Profile to be derived from the Functional Location
21	PF2, WP2	N/A	N/A	Issue Permit				Issue Permit	Transform – if Notification is assigned to Work Order, then "X".
22	PF2, WP2	QMIH	ILART	Maintenance Activity Type	S/4 HANA	QMIH	ILART	Maintenance Activity Type	Follow Work Order ILART. If Work Order ILART is blank, default to COR.
23	PF2, WP2	QMIH	REVNR	Revision	S/4 HANA	QMIH	REVNR	Revision	Do not transform – just display the legacy revision
24	PF2, WP2	QMIH	MSAUS	Breakdown Indicator	S/4 HANA			Breakdown Indicator	Direct Mapping.
25	PF2, WP2	QMIH	AUSVN	Malfunct. Start Date	S/4 HANA			Malfunct. Start Date	Direct Mapping.
26	PF2, WP2	QMIH	AUZTV	Malfunct. Start Time	S/4 HANA			Malfunct. Start Time	Direct Mapping.
27	PF2, WP2	QMIH	AUSBS	Malfunct. End Date	S/4 HANA			Malfunct. End Date	Direct Mapping.
28	PF2, WP2	QMIH	AUZTB	Malfunct. End Time	S/4 HANA			Malfunct. End Time	Direct Mapping.
29	PF2, WP2	QMIH	AUSZT	Breakdown Duration	S/4 HANA			Breakdown Duration	Direct Mapping.
30	PF2, WP2	QMIH	MAUEH	Breakdown Unit	S/4 HANA			Breakdown Unit	Direct Mapping.

List of Custom Target Reports for this object is maintained here: [Conversion Specification - Custom Reports Register](#).

Transformation Mapping

Mapping Table Name	Mapping Table Description
Work Order	Old to new Work Order
Planner Group	Old to new Planner Group
Revision	Cross Reference table for Revision
Work Centre	Old to new Work Centre
Equipment	Old to new Equipment
Functional Location	Old to new Functional Location
WBS Element	Old to new WBS Element
Cost Centre	Old to new Cost Centre
Profit Centre	Old to new Profit Centre
Vendor	Old to new Vendor
Material Master	Old to new Material Number
Assembly	Old to new Assembly
Outline Agreement	Cross Reference table for Outline Agreement

GL Account	Old to new GL Account
Purchasing Info Record Number	Old to new Purchasing Info Record Number

Transformation Dependencies

List the steps that need to occur before transformation can commence

Item #	Step Description	Team Responsible
1	Ensure DCT tables completeness	SyWay A2D Data Team
2	All XREF tables specified in the mapping table section should be available.	SyWay A2D Data Team
3	AUFK - Work Order tables must be loaded	SyWay A2D Data Team
4	MKAL - Production Versions of Material table must be loaded	SyWay A2D Data Team
5	SAFK - CIM Resource - Entities details table must be loaded	SyWay A2D Data Team
6	MARA - General Material Data details table must be loaded	SyWay A2D Data Team
7	KNA1 - General Data in Customer Master details must be loaded	SyWay A2D Data Team
8	ONR00 - General Object Number details must be loaded	SyWay A2D Data Team
9	LFA1 - Vendor Master (General Section) details must be loaded	SyWay A2D Data Team
10	VBAK - Sales Document: Header Data details	SyWay A2D Data Team
11	QPGR - Inspection catalog code groups details	SyWay A2D Data Team
12	QALS - Inspection lot record details	SyWay A2D Data Team
13	EKKO - Purchasing Document Header details	SyWay A2D Data Team
14	EKPO - Purchasing Document Item details	SyWay A2D Data Team
15	VBAP - Sales Document: Item Data details	SyWay A2D Data Team
16	LIKP - SD Document: Delivery Header Data details	SyWay A2D Data Team
17	LIPS - SD document: Delivery: Item data details	SyWay A2D Data Team
18	CRID - CIM Resource - Entities details	SyWay A2D Data Team

Pre-Load Validation

Project Team

Completeness

Task	Action
Verify Record Count	SyWay A2D Data Team to verify that the total number of relevant records from legacy systems and DCTs (if any) is equal to the total number of records in the Preload and Load Sheets.
Verify Data Integrity	SyWay A2D Data Team to verify that the total number of Operations per Work Oder header extracted from legacy systems and DCTs (if any) should be equal to the total number of operations identified in the Preload and Load Sheets

Accuracy

Task	Action
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Conversion Accuracy	SyWay A2D Data Team to verify that all fields below meet pass the checks: <ol style="list-style-type: none"> 1. Mandatory Fields 2. Field and Value Mapping Correctness 3. Null Checks 4. Text Length Checks
Review Error Reports	Review and correct the errors. Achieve a zero-error record count as much as possible. Raise defects for data remediated and requiring a correction in the source data.

Business

Completeness

Task	Action
Verify Record Count	Business Data Owner/s to verify that the total number of relevant records from legacy systems and DCTs (if any) 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 fields below meet pass the checks: <ol style="list-style-type: none"> 1. Mandatory Fields 2. Field and Value Mapping Correctness 3. Null Checks 4. Text Length Checks

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	Syniti will provide load file	Syniti

Load Phase and Dependencies

Configuration

Item #	Configuration Item
1	TQ80 - Notification Types
2	MCH1 - Batches (if Batch Management Cross-Plant)
3	T001L - Storage Locations details
4	T001W - Plants/Branches details

5	T006 - Units of Measurement details
6	T023 - Material Groups details
7	T024 - Purchasing Groups details
8	T024E - Purchasing Organizations details
9	T179 - Materials: Product Hierarchies details
10	T352B - Technical report details
11	T356 - Priorities details
12	T356A - Priority type table details
13	TCURC - Currency Codes details
14	TQ15 - Inspection catalog type index details
15	TQ81 - Notification Scenario details
16	TQ81V - Usage of parts details
17	TQ86 - Report category for defects recording details
18	TSPA - Organizational Unit: Sales Divisions details
19	TTSEGTPH - Time Segment Template Header details
20	TTZZ - Time zones details
21	TVBVK - Organizational Unit: Sales Groups per Sales Office details
22	TVKBZ - Org.Unit: Sales Office: Assignment to Organizational Unit details
23	TVKO - Organizational Unit: Sales Organizations details
24	TVTWT - Organizational Unit: Distribution Channels details

Conversion Objects

Object #	Preceding Object Conversion Approach
9003	Revision
1030	Work Centre
1002	Equipment
1003	Functional Location
1026/1027	WBS Element
1074	Cost Centre
1073	Profit Centre
3018	Vendor
2019	Material
1010	Assembly
	Outline Agreement
1094	Purchase Info Records (Including Pricing Conditions)
1067	GL Account
1078	Cost Element

Error Handling

Error Type	Error Description	Action Taken
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Invalid Data	Invalid data (Based on master data)	Check whether the master data is available in the system
Invalid Data	Invalid data (Based on non master data)	Review and analyses the errors. Take necessary action to correct the data if possible.
Configuration	Invalid Notification Type	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Batch	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Storage Locations	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Plant	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Units of Measurement	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Material Groups	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Purchasing Groups	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Purchasing Organizations	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Materials: Product Hierarchies	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Technical report	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Priorities	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Priority type table	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid- Currency Codes details	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Inspection catalog type index	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Notification Scenario	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Usage of parts	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Report category for defects recording	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Organizational Unit: Sales Divisions	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Time Segment Template Header	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Time zones	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Organizational Unit: Sales Groups per Sales Office	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Organizational Unit	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Organizational Unit: Sales Organizations	Engage Functional team to expedite and fix the error in the system
Configuration	Invalid Organizational Unit: Distribution Channels	Engage Functional team to expedite and fix the error in the system

Post-Load Validation

Project Team

Completeness

Task	Action
Verify Count	SyWay A2D Data 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.
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.).

Accuracy

Task	Action
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Conversion Accuracy	SyWay A2D Data Team to verify that the Notification data in target S/4 HANA were loaded correctly via dspMigrate post load reports or standard reports from S/4 HANA.
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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 Notification data in target S/4 HANA were loaded correctly via dspMigrate post load reports or standard reports from S/4 HANA.

Key Assumptions

- Notification is in scope based on data design and any exception requested by business.
- Data cleansing has met the required percentage threshold for the specified mock cycle and all preparation activities have been completed.

See also

Change log

Version	Published	Changed By	Comment
CURRENT (v. 56)	Apr 24, 2026 12:25	PUN-ext, Eddy	
v. 450	Apr 20, 2026 08:57	ERGUIZA-ext, Pinky Love	
v. 449	Apr 20, 2026 08:25	ERGUIZA-ext, Pinky Love	
v. 448	Apr 17, 2026 04:28	ERGUIZA-ext, Pinky Love	
v. 447	Apr 06, 2026 15:46	PUN-ext, Eddy	
v. 446	Apr 02, 2026 13:44	ERGUIZA-ext, Pinky Love	
v. 445	Feb 10, 2026 06:54	TEE-ext, Paul	
v. 444	Feb 10, 2026 06:52	TEE-ext, Paul	
v. 443	Feb 09, 2026 15:23	TEE-ext, Paul	
v. 442	Feb 09, 2026 15:20	TEE-ext, Paul	

[Go to Page History](#)






Workflow history

Title	Last Updated By	Updated	Status
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There are no pages at the moment.

Workflow history

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

Mar 25, 2025	Actor	Type	Activity	Version
Published	 STOISSICH, Caroline	Edit	updated the page at 5:33 pm	
		State	changed state to Published at 4:34 pm	v56
Draft	 STOISSICH, Caroline	State	gave <i>Approvers</i> approval at 4:34 pm	
		State	changed state to Draft at 4:33 pm	v56
<hr/>				
Jan 08, 2025				
Published	 STOISSICH, Caroline	Edit	updated the page at 5:01 pm	
		State	changed state to Published at 4:01 pm	v55
Draft	 STOISSICH, Caroline	State	gave <i>Approvers</i> approval at 4:01 pm	
		State	changed state to Draft at 4:01 pm	v55
<hr/>				
Jul 30, 2024				
Published	 STOISSICH, Caroline	Edit	updated the page at 3:19 pm	
		State	changed state to Published at 1:20 pm	v54