

CNV-1018 Production Resource & Tools

In Progress

Status	In Progress
Owner	TEE-ext, Paul
Stakeholders	

Purpose

The purpose of this document is to define the conversion approach to create Product Resource & Tools in S/4 HANA.

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

Conversion Scope

The scope of this document covers the approach for converting active Production Resources & Tools from Legacy Source Systems into S/4HANA following the Production Resources & Tools Master Data Design Standard.

The data from legacy system includes:

1. PRT Category: E-Equipment, P-Measuring Point, Not Marked for Deletion (Tcode: CF03 (All from Selection list)

The data from legacy system excludes:

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).	2	S/4HANA	2

Additional Information

Multi-language Requirement

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

The technical design of the target for this conversion approach.

PLFH : Task list - production resources/tools details

Table	Field	Data Element	Field Description	Data Type	Length	Requirement
PLFH	MANDT	MANDT	Client	CLNT	3	T000
PLFH	PLNTY	PLNTY	Task List Type	CHAR	1	Check table: TCA01
PLFH	PLNNR	PLNNR	Key for Task List Group	CHAR	8	
PLFH	PZLFH	PZLFH	Item counter for production resources/tools	NUMC	8	
PLFH	ZAHL	CIM_COUNT	Internal counter	NUMC	8	
PLFH	DATUV	DATUV	Valid-From Date	DATS	8	
PLFH	TECHV	TECHV	Technical status from	CHAR	12	
PLFH	LOEKZ	LKENZ	Deletion Indicator	CHAR	1	
PLFH	PARKZ	PARKZ	Indicator: inactive changes	CHAR	1	
PLFH	AENNR	AENNR	Change Number	CHAR	12	AENR
PLFH	DATUI	ANDAT	Date record created on	DATS	8	
PLFH	USERI	ANNAM	User who created record	CHAR	12	
PLFH	DATUC	AEDAT	Changed On	DATS	8	
PLFH	USERC	AENAM	Name of Person Who Changed Object	CHAR	12	
PLFH	OBJTY	CR_OBJTY	Object types of the CIM resource	CHAR	2	
PLFH	OBJID	CR_OBJID	Object ID of the resource	NUMC	8	CRID
PLFH	OBJCT	OBJCT_D	Object of a task list	CHAR	1	
PLFH	PLNAL	PLNAL	Group Counter	CHAR	2	
PLFH	PLNFL	PLNFOLGE	Sequence	CHAR	6	
PLFH	PLNKN	PLNKN	Number of the task list node	NUMC	8	
PLFH	PSNFH	PSNFH	Item Number for Production Resource/Tool	NUMC	4	
PLFH	STEUF	STEUF	Control key for management of production resources/tools	CHAR	4	TCF10
PLFH	KZKBL	KZKBL	Indicator: Create load records for prod. resources/tools	CHAR	1	
PLFH	BZOFFB	BZOFFB	Reference date to start of production resource/tool usage	CHAR	2	TCA54
PLFH	OFFSTB	OFFSTB	Offset to start of production resource/tool usage	QUAN	5	
PLFH	EHOFFB	EHOFFB	Offset unit for start of prod. resource/tool usage	UNIT	3	T006
PLFH	BZOFFE	BZOFFE	Reference date for end of production resource/tool usage	CHAR	2	TCA54
PLFH	OFFSTE	OFFSTE	Offset to finish of production resource/tool usage	QUAN	5	
PLFH	EHOFFE	EHOFFE	Offset unit for end of production resource/tool usage	UNIT	3	T006
PLFH	MGEINH	MGEINH	Quantity unit of production resource/tool	UNIT	3	T006
PLFH	MGVGW	MGVGW	Standard value for the PRT quantity	QUAN	9(3)	
PLFH	MGFORM	CF_MGFORM	Formula for calculating the total quantity of PRT	CHAR	6	TC25
PLFH	EWEINH	EWEINH	Usage value unit of the production resource/tool	UNIT	3	T006
PLFH	EWVGW	EWVGW	Standard usage value for production resources/tools	QUAN	9(3)	
PLFH	EWFORM	CF_EWFORM	Formula for calculating the total usage value of PRT	CHAR	6	TC25
PLFH	TXTSP	SPRAS	Language Key	LANG	1	T002
PLFH	KTSCH	CF_KTSCH	Standard text key for production resources/tools	CHAR	7	T435
PLFH	TXTZ1	TXTZ1	First line of text for production resources/tools	CHAR	40	
PLFH	KNOBJ	KNOBJ	Number of Object with Assigned Dependencies	NUMC	18	
PLFH	GP_KRIT1	PLOBJ	Planning object	CHAR	18	

CRVE_A : Assignment PRT data - equipment

Table	Field	Data Element	Field Description	Data Type	Length	Requirement
CRVE_A	OBJTY	CR_OBJTY	Object types of the CIM resource	CHAR	2(0)	
CRVE_A	OBJID	CR_OBJID	Object ID of the resource	NUMC	8(0)	CRID
CRVE_A	EQUNR	EQUNR	Equipment Number	CHAR	18(0)	EQUI

AFFH : PRT assignment data for the work order details

Table	Field	Data Element	Field Description	Data Type	Length	Requirement
AFFH	MANDT	MANDT	Client	CLNT	3	T000
AFFH	AUFPL	CO_AUFPL	Routing number of operations in the order	NUMC	10	
AFFH	PZLFH	PZLFH	Item counter for production resources/tools	NUMC	8	
AFFH	LOEKZ	LKENZ	Deletion Indicator	CHAR	1	
AFFH	PARKZ	PARKZ	Indicator: inactive changes	CHAR	1	
AFFH	DATUI	ANDAT	Date record created on	DATS	8	
AFFH	USERI	ANNAM	User who created record	CHAR	12	
AFFH	DATUC	AEDAT	Changed On	DATS	8	
AFFH	USERC	AENAM	Name of Person Who Changed Object	CHAR	12	
AFFH	OBJTY	CR_OBJTY	Object types of the CIM resource	CHAR	2	
AFFH	OBJID	CR_OBJID	Object ID of the resource	NUMC	8	CRID
AFFH	PLNTY_KEY	PLNTY	Task List Type	CHAR	1	TCA01
AFFH	PLNNR_KEY	PLNNR	Key for Task List Group	CHAR	8	
AFFH	PZLFH_KEY	PZLFH	Item counter for production resources/tools	NUMC	8	
AFFH	ZAHL_KEY	CIM_COUNT	Internal counter	NUMC	8	
AFFH	OBJECT	OBJECT_D	Object of a task list	CHAR	1	
AFFH	APLZL	CIM_COUNT	Internal counter	NUMC	8	
AFFH	PSNFH	PSNFH	Item Number for Production Resource/Tool	NUMC	4	
AFFH	OBJNR	J_OBJNR	Object number	CHAR	22	ONR00
AFFH	STEUF	STEUF	Control key for management of production resources/tools	CHAR	4	TCF10
AFFH	KZKBL	KZKBL	Indicator: Create load records for prod. resources/tools	CHAR	1	
AFFH	BZOFFB	BZOFFB	Reference date to start of production resource/tool usage	CHAR	2	TCA54
AFFH	OFFSTB	OFFSTB	Offset to start of production resource/tool usage	QUAN	5	
AFFH	EHOFFB	EHOFFB	Offset unit for start of prod. resource/tool usage	UNIT	3	T006
AFFH	BZOFFE	BZOFFE	Reference date for end of production resource/tool usage	CHAR	2	TCA54
AFFH	OFFSTE	OFFSTE	Offset to finish of production resource/tool usage	QUAN	5	
AFFH	EHOFFE	EHOFFE	Offset unit for end of production resource/tool usage	UNIT	3	T006
AFFH	FSFHD	CF_FSFHD	Earliest scheduled start (date) for PRT usage	DATS	8	
AFFH	FSFHZ	CF_FSFHZ	Earliest scheduled start (time) for PRT usage	TIMS	6	
AFFH	FEFHD	CF_FEFHD	Earliest scheduled finish (date) of PRT usage	DATS	8	
AFFH	FEFHZ	CF_FEFHZ	Earliest scheduled end (time) of PRT usage	TIMS	6	
AFFH	SSFHD	CF_SSFHD	Latest scheduled start (date) for PRT usage	DATS	8	
AFFH	SSFHZ	CF_SSFHZ	Latest scheduled start (time) for PRT usage	TIMS	6	
AFFH	SEFHD	CF_SEFHD	Latest scheduled finish (date) of PRT usage	DATS	8	
AFFH	SEFHZ	CF_SEFHZ	Latest scheduled end (time) for PRT usage	TIMS	6	
AFFH	ISFHD	CF_ISFHD	Actual start (date) of PRT usage	DATS	8	
AFFH	ISFHZ	CF_ISFHZ	Actual start (time) of PRT usage	TIMS	6	
AFFH	IEFHD	CF_IEFHD	Actual finish (date) of PRT usage	DATS	8	
AFFH	IEFHZ	CF_IEFHZ	Actual finish (time) of PRT usage	TIMS	6	

AFFH	DAUFL	CF_DAUFL	Duration of PRT usage	FLTP	16(16)	
AFFH	DAUEH	CF_DAUEH	Time unit for duration of PRT usage	UNIT	3	T006
AFFH	MGEINH	MGEINH	Quantity unit of production resource/tool	UNIT	3	T006
AFFH	MGVGW	MGVGW	Standard value for the PRT quantity	QUAN	9(3)	
AFFH	MGSOLEH	MGEINH	Quantity unit of production resource/tool	UNIT	3	T006
AFFH	MGSOL	MGSOL	Total planned quantity of production resource/tool	QUAN	9(3)	
AFFH	MGISTEH	MGEINH	Quantity unit of production resource/tool	UNIT	3	T006
AFFH	MGIST	MGIST	Confirmed quantity of production resource/tool	QUAN	9(3)	
AFFH	MGRSTEH	MGEINH	Quantity unit of production resource/tool	UNIT	3	T006
AFFH	MGRST	MGRST	Remaining quantity of the production resource/tool	QUAN	9(3)	
AFFH	MGAUSEH	MGEINH	Quantity unit of production resource/tool	UNIT	3	T006
AFFH	MGAUS	MGAUS	Quantity of checked-out production resources/tools	QUAN	9(3)	
AFFH	MGFORM	CF_MGFORM	Formula for calculating the total quantity of PRT	CHAR	6	TC25
AFFH	EWEINH	EWEINH	Usage value unit of the production resource/tool	UNIT	3	T006
AFFH	EWVGW	EWVGW	Standard usage value for production resources/tools	QUAN	9(3)	
AFFH	EWSOLEH	EWEINH	Usage value unit of the production resource/tool	UNIT	3	T006
AFFH	EWSOL	EWSOL	Total planned usage value of production resource/tool	QUAN	9(3)	
AFFH	EWISTEH	EWEINH	Usage value unit of the production resource/tool	UNIT	3	T006
AFFH	EWIST	EWIST	Actual usage value for production resource/tool	QUAN	9(3)	
AFFH	EWRSTEH	EWEINH	Usage value unit of the production resource/tool	UNIT	3	T006
AFFH	EWRST	EWRST	Remaining usage value of the production resource/tool	QUAN	9(3)	
AFFH	EWFORM	CF_EWFORM	Formula for calculating the total usage value of PRT	CHAR	6	TC25
AFFH	TXTSP	SPRAS	Language Key	LANG	1	T002
AFFH	KTSCH	CF_KTSCH	Standard text key for production resources/tools	CHAR	7	T435
AFFH	TXTZ1	TXTZ1	First line of text for production resources/tools	CHAR	40	
AFFH	OBJTYPE	OCM_OBJ_TYPE	Change indicator	CHAR	1	
AFFH	CH_PROC	OCM_CH_PROC	Process that has lead to the change of an object	CHAR	1	
AFFH	AENNR	AENNR	Change Number	CHAR	12	Assigned to domain

Data Cleansing

ID	Criticality	Error Message/Report Description	Rule	Output	Source System
1018-001	C1	Invalid or Inactive Material linked to Production Resources & Tools	Production Resources & Tools as per Relevancy Criteria assigned with a Material which does not belong below: 1. Material Master (S2P) as per Relevancy Criteria	Material	PF2, WP2
1018-002	C1	Invalid or Inactive Document Info Record linked to Production Resources & Tools	Production Resources & Tools as per Relevancy Criteria assigned with a Document Info Record which does not belong below: 1. Document Info Record as per Relevancy Criteria	Document Info Record	PF2, WP2
1018-003	C1	Production Resources & Tools UOM Missing / incorrect.	Production Resources & Tools as per Relevancy Criteria with no UoM Assigned or Invalid UoM (T006)	Unit of Measure	PF2, WP2
1018-004	C1				PF2, WP2

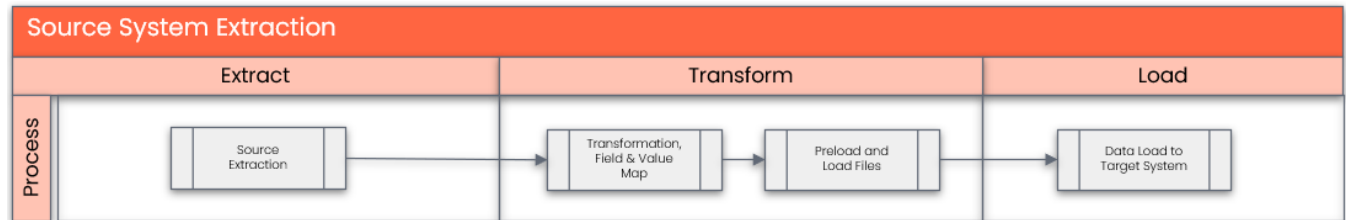
Informal Words **

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

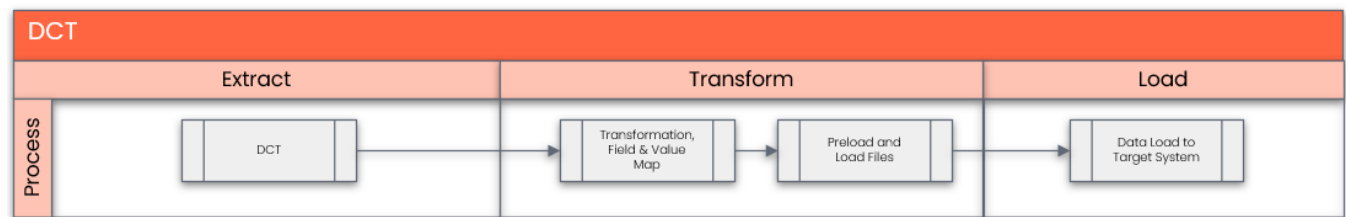
Conversion Process

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



For legacy data 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
2	Google Sheet report pre-populated with PF2 and WP2 information to be generated based on relevancy criteria.	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 data with exception of some fields which require transformation as mentioned in the transformation rule.

Production Resources & Tools DCT Rules

Field Name	Field Description	Rule

Extraction Dependencies

Item #	Step Description	Team Responsible
1	Ensure Syniti has the necessary connection and access to legacy servers	Data
2	Ensure that the necessary cleansing activities in legacy sources are complete	Data / Business
3	Ensure that create, change and deletion of master data is freeze in legacy Production system	Legacy IT

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	Obtain DCT Sign-off from Business	SyWay A2D Data Team
2	<Add steps from Syniti Migrate here>	SyWay A2D Data Team
3	Review and Validate Error and Preload Reports	SyWay A2D Data Team
4	Generate Load Files	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

Transformation Mapping

Mapping Table Name	Mapping Table Description

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	Value Mappings are according to the latest design -<List of Value Mappings>	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
Conversion Accuracy	SyWay A2D Data Team to verify that all fields below meet pass the checks: 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: 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

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)

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Error Handling

Error Type	Error Description	Action Taken

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

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 EAM Work order 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.
- Production Resources & Tools is in scope based on data design and any exception requested by business.
- All data cleansing and preparation has been completed.

See also

Change log

Version	Published	Changed By	Comment
CURRENT (v. 5)	Jul 10, 2025 13:00	TEE-ext, Paul	
v. 4	Jul 10, 2025 11:39	TEE-ext, Paul	
v. 3	Jul 08, 2025 12:23	TEE-ext, Paul	
v. 2	Jul 08, 2025 12:22	TEE-ext, Paul	
v. 1	Jun 10, 2025 12:48	TEE-ext, Paul	

Workflow history

Title	Last Updated By	Updated	Status
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.

From Jul 08, 2025 to Jul 10, 2025	Actor	Type	Activity	Version
	 TEE-ext, Paul	Edit	updated the page at 12:22 pm	
Jun 10, 2025	 TEE-ext, Paul	Edit	created the page at 12:48 pm	