

# CNV-1047 Batch Characteristics of Class Type: 023

|              |                             |
|--------------|-----------------------------|
| Status       | Approved                    |
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| Stakeholders |                             |

## Purpose

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

In both legacy systems, batch characteristics (class type 023) are used to hold key information related to Logistics & Quality information. Currently, there are more than 1,000 characteristics where these are duplicated with identical descriptions and assigned to different classes. To enable effective global utilization and reporting purposes, these characteristics need to be standardized. SyWay program to harmonize and standardize these characteristics across the organization.

## Conversion Scope

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

SAP Batch Characteristics are specific data fields used within the SAP system to describe and manage the properties of a batch of materials. They are part of the SAP Classification System and are typically associated with **class type 023** (Batch Class).

Material Batches capture detailed information about each batch, such as production date, quality parameters, supplier details, or any other relevant property and enable traceability; allow track and trace batches throughout the supply chain with structured data for analysis and reporting.

### The data from legacy system includes:

1. Characteristics assigned to Classes with below Class Type
  - 023 – Batch Class (PF2, WP2)
2. Batch Characteristics assigned to Active Classes of 023.
3. Valid from [Current Date]
4. Status = 1 (Released)

### The data from legacy system excludes:

1. Characteristics for Deletion (Deletion Indicator = X)

List of source systems and approximate number of records

| Source | Scope  | Source Approx No. of Records | Target System | Target Approx No. of Records |
|--------|--|------------------------------|---------------|------------------------------|
| PF2    | Batch Characteristics will be collected via DCT. An extract of the relevant Characteristics will be provided to assist business in standardizing the Characteristics from PF2 and WP2.<br>If Any additional Characteristics that need to be created to support the new design may be added in the DCT. | 4285                         | SAP S/4 HANA  |                              |
| WP2    | Batch Characteristics will be collected via DCT. An extract of the relevant Characteristics will be provided to assist business in standardizing the Characteristics from PF2 and WP2.<br>If Any additional Characteristics that need to be created to support the new design may be added in the DCT. | 1179                         | SAP S/4 HANA  |                              |

## Additional Information

### Multi-language Requirement

Characteristics descriptions are maintained in different languages. TBD on the Language Keys

### Document Management

NA

### Legal Requirement

NA

## Special Requirements

NA

## Target Design

The technical design of the target for this conversion approach.

### Characteristics Definitions

| Table | Field    | Data Element      | Field Description       | Data Type | Length | Requirement   |
|-------|----------|-------------------|-------------------------|-----------|--------|---|
| CABN  | ATNAM    | ATNAM             | Characteristic          | CHAR      | 30     | Mandatory   |
| CABN  | DATUV    | <u>DATUV</u>      | Valid From              | DATS      | 8      | Mandatory   |
| CABNT | ATBEZ    | TEXT30            | Description             | CHAR      | 30     | Mandatory   |
| CABN  | ATKLA    | ATKLA             | Characteristic Group    | CHAR      | 10     | Conditional   |
| CABN  | ATMST    | ATMST             | Status                  | CHAR      | 1      | Mandatory   |
| CABN  | ATFOR    | ATFOR             | Data Type               | CHAR      | 4      | Mandatory   |
| CABN  | ANZST    | <u>ANZST</u>      | Number of Characters    | INT2      | 5      | Mandatory   |
| CABN  | ATKLE    | <u>ATKLE</u>      | Case Sensitive          | CHAR      | 1      | Optional  |
| CABN  | ATSCH    | <u>ATSCH</u>      | Template                | CHAR      | 30     | Optional  |
| CABN  | ANZDZ    | <u>ANZDZ</u>      | Decimal places          | INT2      | 5      | Optional<br>But if Data Type is CURR, this is Mandatory     |
| CABN  | CURRENCY | <u>WAERS_CURC</u> | Currency                | CUKY      | 1      | Mandatory (For Currency related Characteristics) / Optional |
| CABN  | ATEIN    | <u>ATEIN</u>      | Value Assignment        | CHAR      | 1      | Mandatory   |
| CABN  | MSEHI    | <u>MSEHI</u>      | Unit of Measure         | UNIT      | 3      | Mandatory   |
| CABN  | ATDIM    | ATDIM             | Exponent display        | INT2      | 5      | Mandatory   |
| CABN  | ATINT    | ATINT             | Interval values allowed | CHAR      | 1      | Optional  |
| CABN  | ATVOR    | ATVOR             | Negative values allowed | CHAR      | 1      | Optional  |
| CABN  | ATERF    | ATERF             | Entry Required          | CHAR      | 1      | Optional  |
| CABN  | ATGLA    | ATGLA             | Restricted              | CHAR      | 1      | Optional  |
| CABNT | SPRAS    | SPRAS             | Language                | LANG      | 1      | Mandatory   |
| CABN  | ATSON    | ATSON             | Additional Values       | CHAR      | 1      | Optional  |
| CABN  | ATPRT    | ATPRT             | Check Table             | CHAR      | 30     | Conditional   |
| CABN  | ATTAB    | ATTAB             | Reference Table         | CHAR      | 30     | Optional  |
| CABN  | ATFEL    | <u>ATFEL</u>      | Reference Field         | CHAR      | 30     | Optional  |
| CABN  | ATINP    | ATINP             | Not ready for input     | CHAR      | 1      | Optional  |
| CABN  | ATVIE    | ATVIE             | No display              | CHAR      | 1      | Optional  |
| CABN  | ATWRD    | ATWRD             | Display Allowed Values  | CHAR      | 1      | Optional  |
| CABN  | ATFOD    | ATFOD             | Unformatted Entry       | CHAR      | 1      | Optional  |
| CABN  | ATVSC    | ATVSC             | Propose Template        | CHAR      | 1      | Optional  |

### Characteristics Values (SAP Standard and Custom Defined)

| Table | Field    | Data Element  | Field Description                | Data Type  | Length | Requirement      |
|-------|----------|---------------|----------------------------------|------------|--------|------------------|
| CAWN  | ATINN    | ATINN         | Internal characteristic          | NUMC       | 30     | Mandatory        |
| CAWN  | ATZHL    | ATZHL         | Int counter                      | NUMC       | 4      | System Generated |
| CAWN  | ATWRT    | ATWRT         | Characteristic Value             | CHAR       | 70     | Optional         |
| CAWN  | DEC_FROM | CAWN_DEC_FROM | Lower Boundary for Numeric Field | DECFLOAT34 | 34     | Optional         |
| CAWN  | DEC_TO   | CAWN_DEC_TO   | Upper Boundary for Numeric Field | DECFLOAT34 | 34     | Optional         |

There are certain characteristics in system which are assigned as a Function Module (For Eg: Characteristic: LOBM\_UDCODE) and these Characteristics values are deriving from Configuration. TBD to discuss with Functional for detail design.

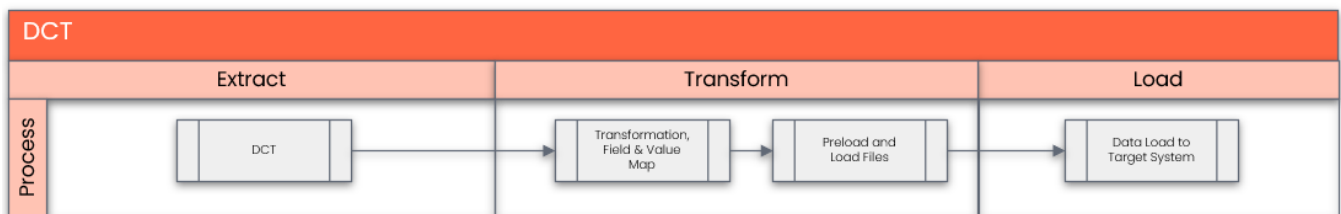
## Data Cleansing

No data cleansing is required within the source systems. Standardization and cleansing activities will be carried out outside of the Syniti tool, and the finalized characteristics will be populated in the DCT.

| ID | Criticality | Error Message/Report Description | Rule | Output | Source System |
|----|-------------|----------------------------------|------|--------|---------------|
|    | NA          | NA                               | NA   | NA     | NA            |

## Conversion Process

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



## Data Privacy and Sensitivity

NA

## 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 the Relevancy Rules from Table: CABN & CABNT | SyWay Data Team  |
|       |  |                  |

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |

## Selection Screen

NA

| Selection Ref Screen | Parameter Name | Selection Type | Requirement | Value to be entered/set |
|----------------------|----------------|----------------|-------------|-------------------------|
| NA                   |                |                |             |                         |

## Data Collection Template (DCT)

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

### Batch Characteristics Definition - DCT Rules

| Field Name | Field Description  | Rule   |
|------------|--|--|
| ATNAM      | <p>Characteristic Name</p> <p>Name that uniquely identifies a characteristic.</p> <p>Follow the naming convention which will distinguish across different functions</p> <p>For Eg:</p> <p>QM_00001 (QM Related Characteristics)</p> <p>SC_00001 (Supply/Logistics Related Characteristics)</p> | <p>Mandatory</p> <p>TBD</p> <p>Characteristics Name - Need to follow the naming Convention which will distinguish across different functions (Eg; Vendor Classification or EAM Characteristics)</p>  |
| DATUV      | <p>Valid From</p> <p>The class validity starts from this date. If it is not set the current system date will be used as valid-from date.</p>   | <p>Mandatory</p> <p>When the Load File is generated, Current Date should be captured</p>   |
| ATBEZ      | <p>Description</p> <p>Language-dependent description of characteristic.</p>  | <ul style="list-style-type: none"> <li>• Descriptions need to follow a standard naming convention across all characteristics.</li> <li>• Use similar formats for similar types of characteristics</li> <li>• Avoid abbreviations unless they are commonly accepted by Syensqo</li> </ul> |
| ATKLA      | <p>Characteristic Group</p> <p>The characteristics group can be used to group together similar characteristics. It is used to make finding characteristics easier.</p>   | <p>Conditional</p> <p>Need to select the appropriate characteristics group for the batch characteristics. As these are configurable values, these are TBD until Functional defines it.</p>   |
| ATMST      | <p>Status</p> <p>The characteristic status gives information on the processing status of the characteristic and determines whether it can be used elsewhere in the system.</p> <p>Possible values:</p> <p>0 = in preparation</p> <p>1 = released</p> <p>2 = locked</p>                         | <p>Mandatory</p> <p>Fixed Value as 1 - Released</p>  |

|              |  |   |
|--------------|--|---|
| ATFOR        | <p>Data Type</p> <p>The data type defines whether a characteristic value is a character string, a number, a date, or a time.</p> <p>CHAR Character Format<br/> CURR Currency Format<br/> DATE Date Format<br/> NUM Numeric Format<br/> TIME Time Format<br/> UDEF User-Defined Data Type</p>   | <p>Mandatory</p> <p>Below are list of values used:</p> <ul style="list-style-type: none"> <li>• Character format (CHAR): for characteristic values that consist of a character string</li> <li>• Numeric format (NUM): for numeric characteristic values</li> <li>• Date format (DATE): for characteristic values that represent a date</li> <li>• Time format (TIME): for characteristic values that represent a time</li> <li>• Currency format (CURR): for characteristic values that are entered in a currency</li> </ul> |
| ANZST        | <p>Number of Characters</p> <p>Total number of characters that you can enter when you assign a value to this characteristic. This figure includes the number of decimal places.</p> <p>This figure does not include plus or minus signs or decimal points.</p> <p>Important:<br/> In the S/4HANA cloud system, the number of characters, in a character format (CHAR) characteristic, max to 30.</p>                         | <p>Mandatory</p> <ul style="list-style-type: none"> <li>• If a characteristic has data type "character" (CHAR), you can maintain a language-dependent description for values. This description can be up to 30 characters long, regardless of the number you enter here.</li> <li>• If a characteristic has data type "Currency" (CURR), No of Characters to be maximum 15</li> <li>• If a characteristic has data type "Number" (CURR), No of Characters to be maximum 15</li> </ul>   |
| ATKLE        | <p>Case Sensitive</p> <p>This indicator determines whether lower-case letters can be entered in characteristic values.<br/> If this field is blank, the characteristic values entered are automatically converted into upper-case letters.<br/> 'X' = Case sensitive</p>   | <p>Conditional</p> <p>Indicator to set the characteristic values entered are automatically converted into upper-case letters.</p>   |
| ATSCH        | <p>Template</p> <p>Entries for this characteristic are checked against this template.<br/> Character format (CHAR): You can only define template characters which have been defined in Customizing. These settings determine whether a template can contain only letters, figures, figures or letters, or special characters.<br/> Numeric format (NUM): Numeric template characters can also be defined in Customizing.</p> | <p>Optional</p> <p>If these are defined in Configuration for "character" (CHAR)for Need to use the specific template for this Characteristics.</p> <p>If these are defined in Configuration for "Currency" (CURR), it is automatically populated.</p>   |
| ANZDZ        | <p>Decimal places</p> <p>Total number of characters that you can enter when you assign a value to this characteristic. This figure includes the number of decimal places.</p> <p>This figure does not include plus or minus signs or decimal points</p>  | <p>When CURR is selected, Decimal Places are automatically populated</p>  |
| CURRE<br>NCY | <p>Currency</p> <p>Key for the currency in which the amounts are managed in the system (in ISO code).<br/> The field is mandatory if the data type is currency (CURR).</p>   | <p>Mandatory</p> <p>If CURR Data type is selected, Fill in the Currency of the characteristic.</p>  |
| ATEIN        | <p>Value Assignment</p> <p>The possible entries for value assignment(Single/Multiple Value):<br/> Value Descriptions<br/> S Single-value<br/> M Multiple value</p>   | <p>Two options are possible:</p> <ul style="list-style-type: none"> <li>• Single Values</li> <li>• Multiple Values</li> </ul>   |
| MSEHI        | <p>Unit of Measure</p> <p>Unit in which a numeric characteristic value is entered. When you assign a value to the characteristic, you can enter a different unit if it can be converted to the unit entered in characteristics maintenance. The dimension (such as length or volume) determines which units can be converted to which</p>  | <p>Conditional.</p> <p>This can be filled, when data type chosen NUM</p>  |

|              |  |   |
|--------------|--|---|
| <p>ATDIM</p> | <p>Exponent display</p> <p>Specifies how the numerical value of a characteristic is to be displayed with an exponent.<br/>Possible values:<br/>0 = Display w/o an exponent<br/>1 = Exponent set automatically.<br/>There's always one place before the decimal point<br/>Example: __,____E+__<br/>2 = Display w/ exponent entered.<br/>Example: __,____E+33<br/>3 = Display in scientific format (3,6,9)<br/>There are always three places before the decimal point<br/>Example: __,____E+SS</p> <p>Exponent used when characteristic value is displayed.<br/>Can only be used for numerical characteristics</p> | <p>Conditional.</p> <p>This can be filled, when data type chosen NUM</p> <p>List of Values:<br/>0: No exponent<br/>1: Standard<br/>2: Exponent entered<br/>3: Scientific exponent</p> |
| <p>ATINT</p> | <p>Interval values allowed</p> <p>This indicator determines whether you have the option of entering an interval as a value for a numeric characteristic.<br/>'X' = Interval values allowed</p>   | <p>Conditional.</p> <p>Indicator (check box).<br/>This can be marked, when data type chosen CURR, DATE, NUM, TIME</p>   |
| <p>ATVOR</p> | <p>Negative values allowed</p> <p>Defines whether negative values can be assigned to a characteristic.<br/>'X' = negative values can be assigned</p>   | <p>Conditional.</p> <p>Indicator (check box).</p>   |
| <p>ATERF</p> | <p>Entry Required</p> <p>Determines whether you are required to assign a value to a characteristic.<br/>'X' = entry is required</p>  | <p>Conditional.</p> <p>Indicator (check box).</p>   |
| <p>SPRAS</p> | <p>Language</p> <p>Please enter here the language of your description (ISO format).</p> <p>Sy-Way Program Languages Scope:<br/>English, French, Italian, Mandarin, Brazilian Portuguese, German and Spanish.</p>   | <p>English, French, Italian, Mandarin, Brazilian Portuguese, German and Spanish.</p>  |
| <p>ATSON</p> | <p>Additional Values</p> <p>This indicator determines whether values that are not defined as allowed values can be assigned to a characteristic.<br/>'X' = no value check<br/>The additional values indicator can be set to 'X' in the following value check types:<br/>1. Allowed values<br/>2. Function module</p>   | <p>Conditional.</p> <p>Indicator (check box).</p>   |
| <p>ATGLA</p> | <p>Restrictable characteristic</p> <p>This indicator shows that the allowed values of this characteristic can be restricted during Variant Configuration, depending on the configuration environment.<br/>Note:<br/>You can only use this indicator in constraints.<br/>This indicator is not relevant to classification.</p> <p>This is an indicator field. If the criterion is met, enter X. If not, leave the field empty.</p>  | <p>Conditional</p> <p>Indicator (check box).</p>  |

|       |   |   |
|-------|---|---|
| ATTAB | <p>Reference Table</p> <p>Name of a table that contains the allowed values for the characteristic.</p> <p>This table can have exactly one key field. Tables that do not conform to this specification are not accepted.<br/>This can also contain a client.</p> <p>If you want to check values using a table that does not conform to this specification, you can use a function module to define the check table.</p>  | <p>Conditional</p> <p>If the format of the Characteristics need to refer from Table, this is filled in</p>  |
| ATPRT | <p>Check Table</p> <p>To get the Characteristics values from Reference Table, Need to select this option so that we can reference the table to get the Characteristics Value. For Eg: UD Code Etc.,</p>   | <p>Conditional</p> <p>Transparent Table ( Check Table is maintained so that Characteristics Values are used from the Table in Transaction Data)</p>   |
| ATFEL | <p>Reference Field</p> <p>This table can have exactly one key field</p>   | <p>Conditional</p> <p>If the format of the Characteristics need to refer from Table-Field, this is filled in</p>  |
| ATINP | <p>Not ready for input</p> <p>This indicator determines whether the characteristic is shown as available for entry on the characteristic value assignment screen.</p> <p>If you do not want a value to be assigned to a characteristic, you must select this indicator. For example, the value may be inferred from object dependencies.</p>  | <p>Conditional - If Reference Table and Field are not provided</p> <p>Mandatory - If the format of the characteristics needs to be referenced from a table, this information should be provided here.</p> |
| ATVIE | <p>No display</p> <p>Characteristic Not to be Displayed</p> <p>If you select this indicator, the characteristic is not shown on the characteristic value assignment screen. You see the <b>Hidden characteristics</b> pushbutton on the characteristic value assignment screen. Choose this pushbutton to see the characteristic.</p> <p>If the <b>Entry required</b> indicator is set for the characteristic, you must assign a value to the characteristic, even if it is not shown on the screen. You see a dialog box before you leave the characteristic value assignment screen, in which you can assign a value to the characteristic.</p> | <p>Conditional.</p> <p>Indicator (check box).</p>   |
| ATWRD | <p>Display Allowed Values</p> <p>Display allowed values defined in characteristic<br/>Determines whether the allowed values for a characteristic are displayed after the characteristic when you assign values to a characteristic.</p>   | <p>Conditional.</p> <p>Indicator (check box).</p>   |
| ATFOD | <p>Unformatted Entry</p> <p>Unformatted entry control</p> <p>Used to define the length of the entry field when assigning values to a characteristic.</p> <p>If this field is not selected, the entry field is shortened to the number of characters in the format for the characteristic. Otherwise, a 30-character field is available for entry, so that you can enter intervals or several values, separated by a semicolon.</p>  | <p>Conditional.</p> <p>Indicator (check box).</p>   |

|       |  |   |
|-------|--|---|
| ATVSC | <p>Propose Template</p> <p>If we use template to populate the Characteristics Values using the Template.</p> <p>Indicator: display template when assigning values<br/>Indicator: defines whether the template is displayed in the characteristic value field as an aid to entry.</p> <p>For Eg:</p> <p>If we use template, Example: __,___E+__</p> | <p>Conditional.</p> <p>Indicator (check box).</p> |
|-------|--|---|

Characteristics Values - DCT Rules

| Field Name      | Field Description   | Rule   |
|-----------------|---|--|
| ATINN           | <p>Internal characteristic</p> <p>Name that uniquely identifies a characteristic.</p>   | <p>Mandatory</p> <p>TBD</p> <p>This should be assigned from CABN-ATNAM</p>   |
| <u>ATZHL</u>    | <p>Int counter</p> <p>The item number is only an additional technical key to allow multiple values in the file and to prevent errors by the duplicate record check. It must be unique over all "Value" structures because it is also a key field for the "Value Descriptions". It is not mapped to a target field. Please maintain a number from 0001 to 9999 per multiple value.</p>   | <p>System Generated.</p> <p>System creates a internal sequential number for each Characteristic Value</p>  |
| <u>ATWRT</u>    | <p>Characteristic Value</p> <p>The language-dependent long value of a characteristic. You must either maintain the language-dependent value (description) here in this column.</p> <p>Important:<br/>In the S/4HANA cloud system, the length of the characteristic value, in a character format(CHAR) characteristic, max to 30.</p>  | <p>Optional</p> <p>Characteristics values are defined here if these are created in Characters.</p>   |
| <u>DEC_FROM</u> | <p>Lower Boundary for Numeric Field</p> <p>Internal Floating Point From</p> <p>Numerical Value from (Floating point)<br/>Ignore the automatically set decimals.<br/>NUM values can be entered with or without a decimal separator, for example 1000 or 1000.99.<br/>Missing Decimals are automatically set when pressing Enter.<br/>The value is related on the Unit of measure (UoM) maintained on the header data of the characteristics.<br/>For example, if the UoM of the characteristic is JHR, '2' means two years.<br/>The system ignores units in the fields UNIT_FROM and UNIT_TO here. These are used only for later display.<br/>It is important that the UoM according to ISO 639 in the field VALUE_FROM_ISO is the same as the characteristic that was defined for the characteristic.</p> | <p>Optional</p> <p>From Characteristics values are defined here if these are created in Numeric For Eg: 0 % - 100% Etc.</p> <p>Relational operators to define the intervals with the following input options:<br/>Code Operator Value1(Value From) Operator Value2 (Value To)<br/>1 EQ =<br/>2 GE &gt;= LT &lt;<br/>3 GE &gt;= LE &lt;=<br/>4 GT &gt; LT &lt;<br/>5 GT &gt; LE &lt;=<br/>6 LT &lt;<br/>7 LE &lt;=<br/>8 GT &gt;<br/>9 GE &gt;=<br/>For example:<br/>VALUE_FROM: 20<br/>VALUE_TO: 28<br/>VALUE_RELATION: 2<br/>Imported value: 20 - &lt; 28</p> |

|        |   |  |
|--------|---|--|
| DEC_TO | Upper Boundary for Numeric Field<br><br>Internal Floating Point To<br><br>Numerical Value to (Floating point) (only used in intervals)<br>Ignore the automatically set decimals.<br>NUM values can be entered with or without a decimal separator, for example 1000 or 1000.99.<br>Missing Decimals are automatically set by the Spreadsheet, when pressing Enter.<br>The value is related on the characteristic's Unit of measure. | To Characteristics values are defined here if these are created in Numeric For Eg: 0 % - 100% Etc. |
|--------|---|--|

## Extraction Dependencies

| Item # | Step Description   | Team Responsible     |
|--------|--|----------------------|
| 1      | Extract data from source systems PF2 and WP2   | Syniti               |
| 2      | Populate in a report in a Downloadable format  | Syniti               |
| 3      | Data is populated in the DCT or uploaded from downloaded Excel template  | Business/Data Owners |
| 4      | If the data is uploaded to DCT in bulk via excel template, any upload errors need to be reviewed and corrected | Business/Data Owners |
| 5      | The data which has passed validation checks in DCT will be used for transformation/further processing          | Business/Data Owners |

## 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.                                 | SCM Data Team       |
| 2      | In dspMigrate, select the wave – S4/HANA – P2F-SCM                 | Syniti              |
| 3      | Go to Process Area Launch and Process the Object – Characteristics | 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 error reports                      | Business/Data owner |
| 7      | Generate load files  | Syniti              |

## Transformation Rules

### Batch Characteristics Definition - DCT Rules

| Rule # | Source system | Source Table | Source Field | Source Description | Target System | Target Table | Target Field | Target Description | Transformation Logic  |
|--------|---------------|--------------|--------------|--------------------|---------------|--------------|--------------|--------------------|---|
| 1      | DCT           | CABN         | ATNAM        | Characteristic     | S/4 HANA      | CABN         | ATNAM        | Characteristic     | Direct Mapping  |
| 3      | DCT           | CABN         | DATUV        | Valid From         | S/4 HANA      | CABN         | DATUV        | Valid From         | If has value in DCT, Direct Mapping.<br>If blank, default to Creation Date. |
| 4      | DCT           | CABNT        | ATBEZ        | Description        | S/4 HANA      | CABNT        | ATBEZ        | Description        | Direct Mapping  |

|    |     |       |          |                         |          |       |          |                         |  |
|----|-----|-------|----------|-------------------------|----------|-------|----------|-------------------------|--|
| 5  | DCT | CABN  | ATKLA    | Characteristic Group    | S/4 HANA | CABN  | ATKLA    | Characteristic Group    | Direct Mapping   |
| 6  | DCT | CABN  | ATMST    | Status                  | S/4 HANA | CABN  | ATMST    | Status                  | Direct Mapping   |
| 8  | DCT | CABN  | ATFOR    | Data Type               | S/4 HANA | CABN  | ATFOR    | Data Type               | Direct Mapping<br>Need Dropdown in DCT.<br>1) CHAR<br>2) NUM<br>3) CURR  |
| 9  | DCT | CABN  | ANZST    | Number of Characters    | S/4 HANA | CABN  | ANZST    | Number of Characters    | Direct Mapping   |
| 10 | DCT | CABN  | ATKLE    | Case Sensitive          | S/4 HANA | CABN  | ATKLE    | Case Sensitive          | Direct Mapping   |
| 11 | DCT | CABN  | ATSCH    | Template                | S/4 HANA | CABN  | ATSCH    | Template                | Direct Mapping   |
| 12 | DCT | CABN  | ANZDZ    | Decimal places          | S/4 HANA | CABN  | ANZDZ    | Decimal places          | Direct Mapping<br>Valid for only Data Type CURR  |
| 13 | DCT | CABN  | CURRENCY | Currency                | S/4 HANA | CABN  | CURRENCY | Currency                | Direct Mapping   |
| 14 | DCT | CABN  | ATEIN    | Value Assignment        | S/4 HANA | CABN  | ATEIN    | Value Assignment        | Direct Mapping   |
| 15 | DCT | CABN  | MSEHI    | Unit of Measure         | S/4 HANA | CABN  | MSEHI    | Unit of Measure         | Direct Mapping   |
| 16 | DCT | CABN  | ATDIM    | Exponent display        | S/4 HANA | CABN  | ATDIM    | Exponent display        | Direct Mapping   |
| 17 | DCT | CABN  | ATINT    | Interval values allowed | S/4 HANA | CABN  | ATINT    | Interval values allowed | Direct Mapping   |
| 18 | DCT | CABN  | ATVOR    | Negative values allowed | S/4 HANA | CABN  | ATVOR    | Negative values allowed | Direct Mapping   |
| 20 | DCT | CABN  | ATERF    | Entry Required          | S/4 HANA | CABN  | ATERF    | Entry Required          | Direct Mapping   |
|    | DCT | CABN  | ATGLA    | Restricted              | S/4 HANA | CABN  | ATGLA    | Restricted              | Direct Mapping   |
| 21 | DCT | CABNT | SPRAS    | Language                | S/4 HANA | CABNT | SPRAS    | Language                | Direct Mapping   |
| 22 | DCT | CABN  | ATSON    | Additional Values       | S/4 HANA | CABN  | ATSON    | Additional Values       | Direct Mapping   |
| 23 | DCT | CABN  | ATTAB    | Reference Table         | S/4 HANA | CABN  | ATTAB    | Reference Table         | Direct Mapping   |
| 24 | DCT | CABN  | ATFEL    | Reference Field         | S/4 HANA | CABN  | ATFEL    | Reference Field         | Direct Mapping   |
| 25 | DCT | CABN  | ATPRT    | Check Table             | S/4 HANA | CABN  | ATPRT    | Check Table             | Direct Mapping<br>If check table is assigned then Characteristics Values are not populated in Characteristic Values DCT. |
| 26 | DCT | CABN  | ATINP    | Not ready for input     | S/4 HANA | CABN  | ATINP    | Not ready for input     | Direct Mapping   |
| 27 | DCT | CABN  | ATVIE    | No display              | S/4 HANA | CABN  | ATVIE    | No display              | Direct Mapping   |
| 28 | DCT | CABN  | ATWRD    | Display Allowed Values  | S/4 HANA | CABN  | ATWRD    | Display Allowed Values  | Direct Mapping   |
| 29 | DCT | CABN  | ATFOD    | Unformatted Entry       | S/4 HANA | CABN  | ATFOD    | Unformatted Entry       | Direct Mapping   |
| 30 | DCT | CABN  | ATVSC    | Propose Template        | S/4 HANA | CABN  | ATVSC    | Propose Template        | Direct Mapping   |

### Characteristics Values - DCT Rules

| Rule # | Source system | Source Table | Source Field | Source Description               | Target System | Target Table | Target Field | Target Description               | Transformation Logic |
|--------|---------------|--------------|--------------|----------------------------------|---------------|--------------|--------------|----------------------------------|----------------------|
| 1      | DCT           | CAWN         | ATINN        | Internal characteristic          | S/4 HANA      | CAWN         | ATINN        | Internal characteristic          | Direct Mapping       |
| 2      | DCT           | CAWN         | ATZHL        | Int counter                      | S/4 HANA      | CAWN         | ATZHL        | Int counter                      | Direct Mapping       |
| 3      | DCT           | CAWN         | ATWRT        | Characteristic Value             | S/4 HANA      | CAWN         | ATWRT        | Characteristic Value             | Direct Mapping       |
| 4      | DCT           | CAWN         | DEC_FROM     | Lower Boundary for Numeric Field | S/4 HANA      | CAWN         | DEC_FROM     | Lower Boundary for Numeric Field | Direct Mapping       |
| 5      | DCT           | CAWN         | DEC_TO       | Upper Boundary for Numeric Field | S/4 HANA      | CAWN         | DEC_TO       | Upper Boundary for Numeric Field | Direct Mapping       |

### 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                     | Syniti           |
| 2      | Ensure all Transformation mappings are up to date. | Syniti           |
|        |  |                  |
|        |  |                  |

## Pre-Load Validation

### Project Team

### Completeness

| Task                         | Action   |
|------------------------------|--|
| Verify DCT & Load File Count | SCM Data Team to verify that the total number of relevant records from the DCT is equal to the total number of records in the Preload and Load Sheets. |
| Verify Consent               | Verify the appropriate consents for the records have been obtained by the business/Data Owners and properly recorded                                   |

### Accuracy

| Task                 | Action  |
|----------------------|---|
| Conversion Accuracy  | SCM Data team to verify that all the data in the load table/file is accurate as per signed-off DCT contents and transformation rules with below checks: <ol style="list-style-type: none"> <li>1. Mandatory Fields</li> <li>2. Field and Value Mapping Correctness</li> <li>3. Null Checks</li> </ol> |
| 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 the the DCT is equal to the total number of records in the Preload and Load Sheets. |
| Verify Consent      | Verify that the appropriate consents for the records have been obtained by the business and properly recorded  |

## 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
3. Load approach: Migration Cockpit using Staging Tables

## Load Run Sheet

| Item # | Step Description  | Team Responsible |
|--------|---|------------------|
| 1      | Ensure Pre-load sign-offs are obtained.   | SCM Data team    |
| 2      | Go to the load tool and select the correct load Program.  | SCM Data team    |
| 3      | Proceed with Data load.   | SCM Data team    |
| 4      | Validate few records loaded by accessing standard transactions.   | SCM Data team    |
| 5      | Generate the post load reports in the tool.   | SCM Data team    |
| 6      | Log errors as defects, if any and address resolutions. Close defects.   | SCM Data team    |
| 7      | Resolve defects by re-upload and re-generate post load reports if necessary.  | SCM Data team    |
| 8      | Business to validate the post load files as part of post-load validation, raise data defects or provide the post-load sign-off. | Business         |
| 9      | Repeat steps 5 to 7 if necessary.   | SCM Data team    |

## Load Phase and Dependencies

Pre Cutover

### Configuration

| Item # | Configuration Item            |
|--------|-------------------------------|
| 1      | V_CMG - Characteristics Group |
| 2      | T002 - Language Keys          |

### Conversion Objects

| Object # | Preceding Object Conversion Approach |
|----------|--------------------------------------|
| NA       | NA                                   |
|          |                                      |
|          |                                      |

## Error Handling

| Error Type      | Error Description   | Action Taken  |
|-----------------|---|---|
| Configuration   | <configuration> is not valid/missing                          | If it is a missing configuration item, then engage Functional team to expedite and fix the error in the system.   |
| Invalid Data    | <parameter> is not valid.                                     | The parameter entry needs to be reviewed<br>If it is an invalid data, business needs to review and correct the source of the data either in PE1 or if it's mapped in DCT. |
| Technical Setup | Interface / Connection issue within target system's landscape | N/A – the data will be loaded directly to S/4HANA environment   |

## Post-Load Validation

### Project Team

#### Completeness

| Task             | Action  |
|------------------|---|
| Verify the count | Verify that the record count in the post-load file is the same as the record count based on the relevancy (including any deduplication) results |

#### Accuracy

| Task             | Action  |
|------------------|---|
| Data Accuracy    | SCM Data team to verify that all the data in the post load table/file is accurate as per signed-off transformation rules and DCT contents |
| Error Reports    | Verify that all necessary error reports have been validated, and that errors have been addressed.   |
| Data Consistency | Verify that the data loaded is correctly reflected in T-Code: CT04 or Table: CABN/CABNT.  |

### Business

#### Completeness

| Task                 | Action  |
|----------------------|---|
| Verify Count         | Verify that the record count in the post load file is the same as the record count based on the relevancy (including deduplication) results |
| Validate Loaded Data | Validate, as per the load files signed-off, that all records were created   |

#### Accuracy

| Task                 | Action  |
|----------------------|---|
| Data Accuracy        | Verify that all the data in the S/4HANA table is accurate as per signed-off DCT contents and transformation rules<br><br>For mock loads, the post load data validation will be as per scrambled data, thus data accuracy is not to be checked against DCT which holds the actual data. Post-load data to be validated against the pre-load report (scrambled data). |
| Verify Relationships | Verify that each Vendor have been assigned to the appropriate Business Partner correctly  |

## Key Assumptions

- The Master Data Standards document is a evolving document where value mappings/validation checks are still being finalized as we are currently in the detailed phase as of September 2025.
- Batch Characteristics is in scope based on data design and any exception requested by business.

## See also





## Change log

| Version                | Published           | Changed By                                  | Comment   |
|------------------------|---------------------|---|---|
| <b>CURRENT (v. 29)</b> | Nov 19, 2025 15:29  | <a href="#">RAYUDU-ext, Narasimha Kumar</a> |   |
| <a href="#">v. 28</a>  | Nov 18, 2025 17:48  | <a href="#">RAYUDU-ext, Narasimha Kumar</a> |   |
| <a href="#">v. 27</a>  | Nov 18, 2025 17:05  | <a href="#">RAYUDU-ext, Narasimha Kumar</a> |   |
| <a href="#">v. 26</a>  | Oct 30, 2025 18:23  | <a href="#">RAYUDU-ext, Narasimha Kumar</a> | Field ATPRT added.  |
| <a href="#">v. 25</a>  | Oct 15, 2025 13:54  | <a href="#">RAYUDU-ext, Narasimha Kumar</a> | Copy Paste Issue for Char Values  |
| <a href="#">v. 24</a>  | Oct 08, 2025 14:15  | <a href="#">RAYUDU-ext, Narasimha Kumar</a> | Added CAWN as there are standard and non standard Characteristics values in system. |
| <a href="#">v. 23</a>  | Sept 26, 2025 13:14 | <a href="#">RAYUDU-ext, Narasimha Kumar</a> |   |
| <a href="#">v. 22</a>  | Sept 26, 2025 12:36 | <a href="#">RAYUDU-ext, Narasimha Kumar</a> |   |
| <a href="#">v. 21</a>  | Sept 26, 2025 12:33 | <a href="#">RAYUDU-ext, Narasimha Kumar</a> |   |
| <a href="#">v. 20</a>  | Sept 26, 2025 12:30 | <a href="#">RAYUDU-ext, Narasimha Kumar</a> |   |

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## Workflow history

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

| May 08, 2026                             | Actor   | Type  | Activity   | Version |
|--|---|-------|--|---------|
| Approved                                 |  MCARDLE-ext, Edward         | State | changed state to <b>Approved</b> at 11:14 am                 | v29     |
| Revision under Review                    |  MCARDLE-ext, Edward         | State | gave <i>Minor change</i> approval at 11:14 am                |         |
|  |   | State | changed state to <b>Revision under Review</b> at 11:14 am    | v29     |
| <b>Mar 18, 2026</b>                      |   |       |  |         |
| Revision in Progress                     | WENNINGER-ext, Sascha   | State | changed state to <b>Revision in Progress</b> at 5:42 pm      | v29     |
| <b>From Nov 18, 2025 to Nov 19, 2025</b> |   |       |  |         |
| Edited following Approval                |  RAYUDU-ext, Narasimha Kumar | Edit  | updated the page at 5:05 pm                                  |         |
|  |  RAYUDU-ext, Narasimha Kumar | State | changed state to <b>Edited following Approval</b> at 4:05 pm | v27     |