

# ERP-1370 Determination of Storage Location for Intercompany Consignment Sales - Sales Order Enhancement

|                     |                                                                                                                                                                                             |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Status              | Approved                                                                                                                                                                                    |
| Owner               | HALL-ext, Simon                                                                                                                                                                             |
| Stakeholders        | Sara Loddo / Yamna Hammacha / Tonya Van Aarde / Francine Palmer                                                                                                                             |
| Jira Request ID     | <div> <a href="#">ERP-1158</a> - Jira project doesn't exist or you don't have permission to view it.</div> |
| Jira Development ID | <div> <a href="#">ERP-1370</a> - Jira project doesn't exist or you don't have permission to view it.</div> |

## High- Level Specification

| Parameter                  | Value                                                    |
|----------------------------|----------------------------------------------------------|
| Application System         | S/4 HANA ROW & S/4 HANA China                            |
| Business Process Reference | <a href="#">02.04.02.01. Manage Standard Sales Order</a> |

## Functional Overview

For the fulfilment of intercompany consignment fill-ups, the line item storage location and supplying plant must be determined in the fill-up (and not the subsequent delivery as per SAP standard) to ensure:

1. The stock passes through the correct storage location as defined by the finance and tax requirements - in this case, a virtual customer specific location specifically for intercompany consignment fill-ups will be used.
2. The subsequent intercompany purchase order can be correctly triggered.

Therefore this development requires:

1. The creation of a custom table in SAP where the storage location & supplying plant can be defined by a combination of sales org, distribution channel, plant, ship-to party & material.
2. When creating a line item or changing the plant in a consignment fill-up, the custom table is checked on save and the line item storage location is updated.

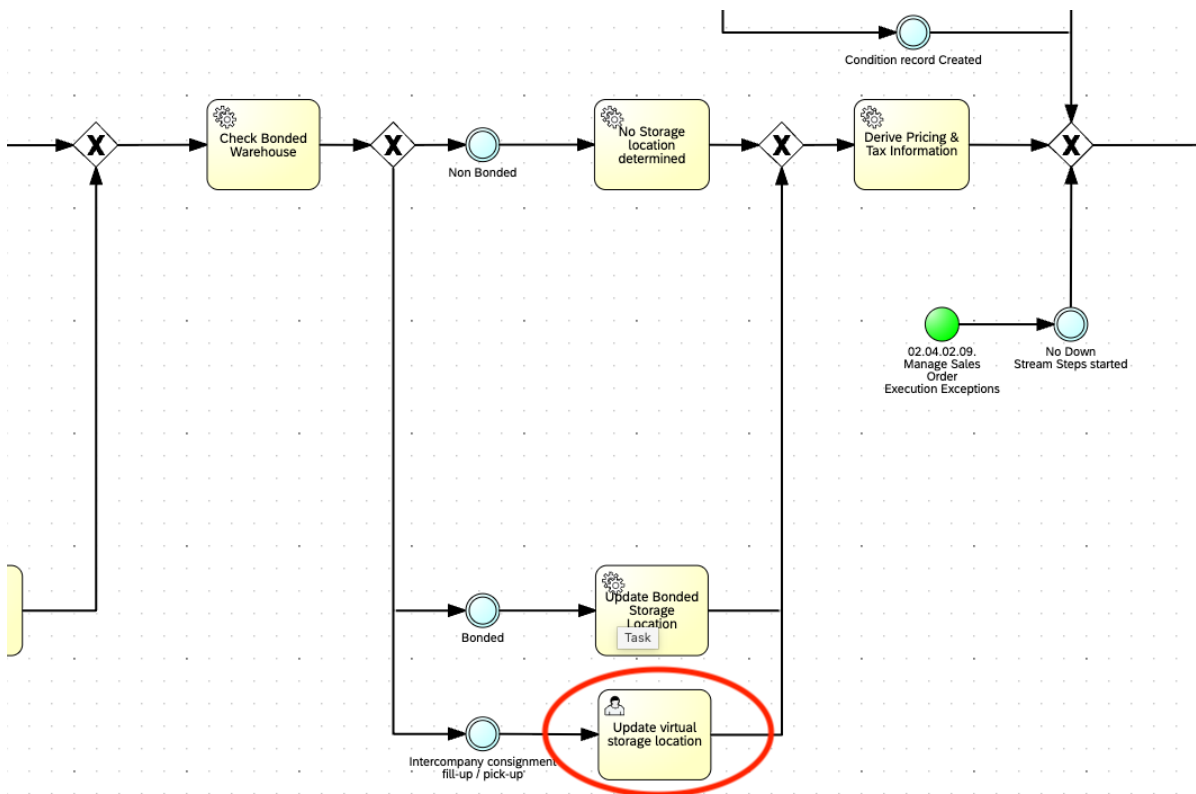
The set up of entries in this custom table will be the trigger for the consignment fill-up to be fulfilled using an intercompany PO. If no entries exist in this table then the consignment fill-up will be fulfilled using the standard non-intercompany process from the default plant and storage location combination.

## Scope and Objectives

The scope of this development will cover all consignment fill-ups created in SAP S/4 - both China and RoW instances.

### Process Flow Diagram

This system enhancement is only applicable for the highlighted L5 step below:



The following SAP applications and transaction codes are in scope for this enhancement:

#### SAP Fiori

- **Manage Sales Orders – Version 2 (app ID - F3893)**
  - Create Sales Orders
  - Change Sales Orders

#### SAP GUI

- **Sales Orders**
  - **VA02** – Change Sales Order

## Assumptions

This development is designed for the expected consignment fill-up type of 'KB'. The consignment fill-up type 'KBB' should not be included here as the process may not be compliant in Brazil.

In the unlikely scenario that new consignment fill-up types added then these need to be added into the logic above.

This development is only intended for use within a single instance - either RoW or China. This will not apply for multi-instance solution - the expectation is that this process will be manual between Row <> China.

The only practical option is to use document type as there are no other indicators that a sales document is for consignment purposes (such as doc category). In theory the movement type associated with the schedule line type could be used - as this is unique for consignment - but this may slow down the speed of the update.

## Dependencies

Definition of the relevant storage locations and plant assignment.

## Security, Integrity and Controls

Should follow the standard authorisation requirements of the sales order

## Configuration Requirements

n/a

## Language Requirements

No Specific language requirement - the solution should support the SYWAY language approach.

## Special Requirements

n/a

## Design Rationale

### Functional Requirements

#### Determine Storage location at sales order item level

- If sales document type (VBAK-AUART) = 'KB' then on the initial creation, if a new line item is added or if plant is changed in the line item read custom table from part 1 and update sales order line item with the defined storage location (VBAP-LGORT).
- Determine the storage location VBAP-LGORT by using:
  - Sales org (VBAK-VKORG)
  - Distribution channel (VTWEG)
  - Plant (VBAP-WERKS)
  - Ship-to party (VBAP-KUNWE\_ANA)
  - Material (VBAP-MATNR)
- Report error message if no entries found in the custom table.
- Save the updated changes.

#### Rational for why standard SAP not sufficient

This enhancement is required because standard SAP only allows the determination of the storage location within the delivery document rather than the sales order. Therefore, if no enhancement implemented each time an intercompany consignment fill-up is created, the user would need to know that this specific ship-to / material combination should be supplied from a cross-company plant and make the necessary updates manually in the line item storage location field. Additionally, any consignment fill-ups created automatically (e.g. from EDI) would need to be manually updated.

## Proposed Technology to Use

Tech team to confirm - fall back plan is user exit - USEREXIT\_SAVE\_DOCUMENT\_PREPARE within standard SAP S/4 program MV45AFZZ.

## Data Source Considerations

n/a

## Data Validation Considerations

n/a

## Custom Tables

Required custom application table entries below using the attributes of the standard SAP object (e.g. VKORG, WERKS etc) as specified. These entries are maintained in FS ERP-1371 within the CSR business role.

| Table | Field | Description          |
|-------|-------|----------------------|
| Z ... | VKORG | Sales Org            |
| Z ... | VTWEG | Distribution Channel |
| Z ... | WERKS | Selling Plant        |
| Z ... | KUNNR | Ship-to Party        |
| Z ... | MATNR | Material No          |
| Z ... | LGORT | Storage Location     |

|       |       |                 |
|-------|-------|-----------------|
| Z ... | WERKS | Supplying Plant |
|-------|-------|-----------------|

## Processing Logic

Before saving the sales order:

1. Check if document type (VBAK-AUART) = 'KB'
2. If true then check custom table above with parameters below to retrieve storage location (LGORT)
  - a. VBAK-VKORG
  - b. VBAK-VTWEG
  - c. VBAP-WERKS
  - d. VBAP-KUNWE\_ANA
  - e. VBAP-MATNR
3. Insert storage location (LGORT) into VBAP-LGORT.

## Volumetrics

Approx 600 consignment fill-ups per year across all GBUs will be intercompany consignment.

## Performance Considerations

n/a

## Error Handling

N/a as error handling only relevant for custom table set up in [FS ERP-1370](#).

## Testing

### How to Test

For the required business function, this test must be run in 2 x parts:

- Part 1 for the master data customer table defined in ERP-1371
- Part 2 for the functional requirement in the intercompany consignment fill-up as specified in this document.

## Test Conditions and Expected Results - Storage location definition

| ID | Condition                                                                                                                                                                                                                                                       | Expected Result                                                                                                             |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 1  | Set up a valid storage location determination in the custom table then create a consignment fill-up for intercompany then save.                                                                                                                                 | On save of sales order the storage location defined in the custom table is added into the line item storage location field. |
| 2  | Create a consignment fill-up for a non-intercompany scenario then save.<br><br>Set up a valid intercompany storage location determination in the custom table then change the plant in the fill-up to trigger the auto storage location determination and save. | On save of sales order the storage location defined in the custom table is added into the line item storage location field. |
| 3  | Set up a valid storage location determination in the custom table then create a consignment fill-up for the ship-to and material specified in the custom table but not the plant then save.                                                                     | On save of the sales order, no storage location is determined.                                                              |

## Test Considerations/Dependencies

*Relevant intercompany storage locations must already be set up against the relevant plants.*

## Other Information

## Development Details

## Package

| Package Name | Parent Package |
|--------------|----------------|
|              |                |
|              |                |

## Enhancement Implementation

| Enhancement Type | Standard Definition Name | Custom Implementation Name | Design Rationale Reference |
|------------------|--------------------------|----------------------------|----------------------------|
|                  |                          |                            |                            |
|                  |                          |                            |                            |

## Other Development Objects

| Object Type | Object Name | Purpose/High Level Logic | Design Rationale Reference |
|-------------|-------------|--------------------------|----------------------------|
|             |             |                          |                            |
|             |             |                          |                            |

## Appendix

### Custom Authorization Group Naming Convention

This table is based on the Syensqo development standards document. It provides the naming conventions for authorization groups to associated with custom reports and tables to comply with security requirements.

|        |      |      |      |      |      |      |      |      |
|--------|------|------|------|------|------|------|------|------|
| ABAP   | ZFI  | ZMM  | ZPS  | ZCO  | ZSD  | ZBC  | ZFI  | ZCA  |
| TABLES | ZFIT | ZMMT | ZPST | ZCOT | ZSDT | ZBCT | ZFIT | ZCAT |

## See also

| File                      | Modified |
|---------------------------|----------|
| No files shared here yet. |          |

## Change log

| Version                | Published                 | Changed By                      | Comment |
|------------------------|---------------------------|---------------------------------|---------|
| <b>CURRENT (v. 63)</b> | <b>May 05, 2026 14:36</b> | <b>HALL-ext, Simon</b>          |         |
| <a href="#">v. 62</a>  | May 05, 2026 14:22        | <a href="#">HALL-ext, Simon</a> |         |
| <a href="#">v. 61</a>  | May 01, 2026 12:18        | <a href="#">HALL-ext, Simon</a> |         |
| <a href="#">v. 60</a>  | May 01, 2026 11:07        | <a href="#">HALL-ext, Simon</a> |         |
| <a href="#">v. 59</a>  | May 01, 2026 11:06        | <a href="#">HALL-ext, Simon</a> |         |
| <a href="#">v. 58</a>  | Apr 29, 2026 13:48        | <a href="#">HALL-ext, Simon</a> |         |
| <a href="#">v. 57</a>  | Apr 29, 2026 13:08        | <a href="#">HALL-ext, Simon</a> |         |
| <a href="#">v. 56</a>  | Apr 29, 2026 12:16        | <a href="#">HALL-ext, Simon</a> |         |

|       |                    |                                 |
|-------|--------------------|---------------------------------|
| v. 55 | Apr 29, 2026 11:10 | <a href="#">HALL-ext, Simon</a> |
| v. 54 | Apr 28, 2026 15:13 | <a href="#">HALL-ext, Simon</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.

| From Apr 20, 2026 to May 05, 2026 | Actor                                                                                                              | Type  | Activity                                                  | Version             |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------------------------|---------------------|
| Approved                          | <a href="#">HALL-ext, Simon</a>                                                                                    | Edit  | updated the page at 1:34 pm                               |                     |
| Apr 17, 2026                      |                                                                                                                    |       |                                                           |                     |
|                                   |  <a href="#">FARIA-ext, Joana</a> | State | changed state to <a href="#">Approved</a> at 11:26 am     | <a href="#">v34</a> |
| Lead Approval                     |  <a href="#">FARIA-ext, Joana</a> | State | gave <i>POD Lead Review</i> approval at 11:26 am          |                     |
|                                   | <a href="#">WEINERT-ext, Patrick</a>                                                                               | State | changed expiry date to '24 Apr, 2026 09:33 am' at 9:33 am |                     |
|                                   |                                                                                                                    | State | changed state to <a href="#">Lead Approval</a> at 9:33 am | <a href="#">v34</a> |
| Tech Review of Updates            | <a href="#">WEINERT-ext, Patrick</a>                                                                               | State | gave <i>Minor change</i> approval at 9:33 am              |                     |