

ERP-793 Mobility-Stock Overview

Approved

Status	Approved
Owner	BIRSE-ext, Gary
Stakeholders	PALMER, Francine RIZOS, Antonios VENKAT-ext, Rama
Jira Request ID	 ERP-401 - Jira project doesn't exist or you don't have permission to view it.
Jira Development ID	 ERP-793 - Jira project doesn't exist or you don't have permission to view it.

High- Level Specification

Parameter	Value
Application System	SAP S4/HANA SyWay
Business Process Reference	06.10 Manage Inventory and Logistics 06.11 Manage Warehouse and Logistics

Functional Overview

This mobile app will allow stock overview information to be displayed. This can be all stock for a storage location or limited to stock for a specific material, batch or storage bin etc. Drill down options will allow the user to see the information by stock type, batch, handling unit or storage bin level.

Scope and Objectives

This app will support stock overview reporting in IM and EWM.

Process Flow Diagram

Step	Description	Comment
1.	Initial screen	The field selection for the report offers fields for material, batch and storage location. For plants with EWM, the user can additionally select on storage type, storage section and storage bin. There will also be a checkbox to allow empty storage bins to be reported. If the empty storage bin option is not used, empty storage bins will not be reported. The user can scan or enter the values for the selection fields. When the user presses the OK button, if a storage type of storage bin has been entered, the EWM stock screen will be shown (Step 6), otherwise the Stock Overview screen will be shown (Step 2). For plants with EWM, a button will allow the user to go directly to the EWM Stock screen (Step 6). This button will not show for IM only plants.
2.	Stock Overview screen	Shows all stock by Material/Storage Location with the ability to search by material. Clicking on a material will branch to the Stock Type screen (Step 3)

3.	Stock Type screen	Shows all stock for the selected material/storage location by stock type. For IM HUM storage locations, buttons will allow the user to display stock information per batch (Step 4) or per top level Handling Unit (Step 5). For EWM storage locations buttons will allow the user to display stock information per batch (Step 4) or the EWM stock details (Step 6).
4.	Batch screen	Shows the same information as the stock overview screen, but per Material/Batch. Has a button to branch to the HU details screen for a selected batch, for IM HUM storage location or to the EWM Stock screen for EWM managed storage location.
5.	Handling Unit screen (IM)	Shows the details of HU's for material or material/batch in a given IM storage location with the ability to search the list for a given HU. Include a button to branch to the HU Display transaction.
6.	EWM Stock screen	Shows the stock per storage bin, listing storage type, storage section, storage bin, handling unit, material, batch and EWM stock type.

Assumptions

There will be no more than one EWM warehouse assigned to a plant.

Dependencies

None

Security, Integrity and Controls

The user must have material document display access for the selected plant. Check object M_MSEG_WMB for Activity 03 and the selected plant. If no access, show the message "No authorization for plant <9999>".

Configuration Requirements

None

Language Requirements

This app will be available in all SyWay languages.

See [KDD055 - Multi-Language Support](#).

Special Requirements

None

Design Rationale

Functional Requirements

Initial Screen

The first screen will prompt to enter Material, Batch and Storage Location. The values for these fields can be scanned or typed.

If the plant of the user is using EWM there will be additional fields to enter Storage Type, Storage Section and Storage Bin. For EWM there will also be a checkbox to allow the user to report empty bins. These fields will not show for IM only plants.

If at least one storage location of the plant is active for EWM, then the plant is considered as an EWM plant.

For scanning, the field input needs to support the 2D GS1 Data Matrix barcode format or other agreed formats. Material numbers will use application ID 240. Batch will use application ID 10. Barcodes for storage bin will have no application ID.

Any combination of values can be entered with the following exceptions:

- Batch can only be entered in conjunction with a material number.
- Storage Location can only be left blank if a material or material and batch are entered.
- Storage Section can only be entered if a Storage Type has been entered.
- The empty storage bins option can only be used with all selection fields blank, or only storage type and or storage section populated.

The plant and EWM warehouse for the user have already been established at the time of logon to the handheld solution.

Once the selection screen has been entered, an OK button will take the user to:

- The Stock Overview Screen when the selection is not for a specific material
- The Stock Types Screen when the selection is for a specific material/batch

If the plant of the user is using EWM, an EWM Stock button will allow the user to go directly to the EWM Stock Screen.

Initial Screen Validation

Field	Table-Field name	Comments / Calculation / Field Manipulation / Input / Output / Validation rule / Value help
Material	MARD-MATNR	A valid material from the plant of the user must be entered, otherwise display an error "Material <x> does not exist for plant <y>"
Batch	MCHB-CHARG	Batch can only be entered in conjunction with a material number. This field should be greyed out until a batch managed material is entered.
Storage Location	MARD-LGORT	Dropdown will only list storage locations for the plant of the user.
Storage Type	/SCWM /AQUA-LGTYP	Dropdown will only list storage types for the EWM warehouse of the user.
Storage Section	/SCWM /T302-LGBER	Drop down will only list storage sections for the storage type entered.
Storage Bin	/SCWM /AQUA-LGPLA	When a storage bin is selected, clear any values entered for storage type and storage section. A valid storage bin for the warehouse must be entered, otherwise display an error "Storage bin <x> does not exist".
Empty Bins	/SCWM /LAGP-KZLER	Checkbox. Can only be switched on when all other selection fields are blank, or when only storage type and/or storage section are populated, otherwise display an error "Empty bins by warehouse, storage type of storage section only."

Stock Overview

<

Material

Batch

Storage Location

Storage Type

Storage Section

Storage Bin

Empty bins

☐

EWM Stock

OK

Stock Overview screen

The Stock Overview screen will display a list of material stock based on the selection. The quantity displayed will be the total quantity of the material in stock per storage location across all stock types. This is the same information reported in SAP transaction MB52, selecting by plant, batch and storage location and no zero stock lines.

The fields to be displayed for the Stock Overview are:

- Material number
- Material description
- Storage Location
- Quantity and UOM (Total for plant for all stock types)

A counter will show the total number of selected records.

Sort by Material Description.

Stock Overview

<

Search

Count (3)

1014802	T300 3K 309 ST	9,245.268 KG
Storage Location 1001		
1014913	T300 3K 309 ST LS	47.625.905 KG
Storage Location 1001		
1010023	T300 3K OX L004 GP2	2,533.809 KG
Storage Location 1001		

The Search field will give the user the ability to filter the list. e.g. to allow searching for a specific material description.

Selecting a row in the table will take the user to the Stock Type screen.

Stock Type screen

The Stock Type screen will show the quantity of the material by stock type, based on the selection. This is the same selection as the MMBE transaction, selecting by material, plant, storage location, also select special stocks and special stock numbers e.g. Vendor consignment stock: K, Vendor: 29899, no zero stock lines and display level for plant and storage location.

If the location is handling unit managed (T001L-XHUPF = X) and the material exists in handling units, then a "Handling Units" button is displayed allowing the same material stock information to be displayed per handling units. This is the same selection as transaction HUMO selecting by material / plant / storage location. If the location is not handling unit managed, then this button will not be displayed.

If the material is batch managed (MARC-XCHPF), and the initial report selection was not by batch, a button "Batches" will allow the same material stock information to be displayed per batch. This is the same as the previous selection on MMBE but with the batch level selection switched on.

The fields to be displayed for the Stock Overview are:

- Material number
- Material description
- Storage Location

- Batch number (When selection is for a specific batch)
- Batch ID (When selection is for a specific batch)
- Expiry Date (When selection is for a specific batch)
- Unrestricted stock Quantity and UOM
- Quality stock quantity and UOM
- Blocked stock quantity and UOM
- Restricted stock quantity and UOM

Based on the selection, the stock quantities will either be the total for the storage location or the values for a specific batch.

Stock Overview

<
Stock Types

1014802
T300 3K 309 ST
 Storage Location 1001

Unrestricted	9,245.268 KG
Quality	0 KG
Blocked	0 KG
Restricted	0 KG

Batch
HU

Batch Screen

The Batch Screen will list of all batches in stock for the material, based on the selection. If the storage location is handling unit managed, then a button “>” will also be available on the batch record, to allow branching to the Handling Unit screen for the selected batch.

If the same batch has stock in different stock types, then the batch will be listed per stock type.

The material number and description will show at the top of the screen.

The fields to be displayed for the handling unit are:

- Batch number

- Batch ID
- Stock Type
- Quantity and UOM
- Expiry Date

Sort by Batch number.

Stock Overview	
Search	
Count (35)	
1014802	
T300 3K 309 ST	331.976 KG
Batch PM02DN018	
Batch ID	
1014802	
T300 3K 309 ST	329.254 KG
Batch PM02DN019	
Batch ID	
1014802	
T300 3K 309 ST	331.068 KG
Batch PM02DN020	
Batch ID	
1014802	
T300 3K 309 ST	331.522 KG
Batch PM02DN021	
Batch ID	
1014802	

The Search field will give the user the ability to filter the list. e.g. to allow searching for a specific material description.

Handling Unit Screen (IM)

This screen will list of all handling units in stock for the material in an IM storage location, based on the selection. Only the highest-level handling units are displayed so if a box is on a pallet only the handling unit for the pallet is displayed.

The fields to be displayed for the handling unit are:

- Handling Unit
- Packaging Material. E.g. Pallet

- HU System status
- Material
- Batch number
- Batch ID
- Stock Type
- Quantity and UOM
- Expiry Date

Sort records by Material/Batch

Stock Overview	
Handling Units	
Search	
Count (35)	
354012361000012813 BOX T300 3K 309 ST Material 1014802 Batch PM02DN018 Batch ID	Status PHEX WHSE 331.976 KG Stock Type Unrestricted Expiry 19-Dec-2027
354012361000012820 BOX T300 3K 309 ST Material 1014802 Batch PM02DN019 Batch ID	Status PHEX WHSE 329.254 KG Stock Type Unrestricted Expiry 19-Dec-2027
35401236100001283 BOX T300 3K 309 ST Material 1014802 Batch PM02DN020 Batch ID	Status PHEX WHSE 331.068 KG Stock Type Unrestricted Expiry 19-Dec-2027
354012361000012844 BOX T300 3K 309 ST	Status PHEX WHSE 331.522 KG

A button ">" per HU, will allow branching to the HU app, covered in FS ERP-788.

The Search field will give the user the ability to filter the list. e.g. to allow searching for a specific batch

EWM Stock Screen

This screen will list of all stock for the material in the EWM warehouse, based on the selection.

For HU managed materials, only the highest-level handling units are displayed so if a box is on a pallet only the handling unit for the pallet is displayed.

The fields to be displayed for each storage bin are:

- Storage Type

- Storage Section
- Storage Bin
- Handling Unit
- Material
- Batch
- Batch ID
- EWM stock type
- Quantity and UOM
- Expiry Date

When there is mixed stock in a bin, show separate records per material/batch.

Sort Records by Storage Type/Storage Section/Storage Bin.

Show a header record per Storage Type/Storage Section.

A total record count will show and also a record count per Storage Type/Storage Section.

When the empty bins option is used, this screen will also be displayed but only the empty storage bin information will be displayed.

Stock Overview	
EWM Stock	
Search	
Total Count (18)	
Y001/YS01 (10)	
011.01.01.05 Y001/YS01	HU 354012361000012813
T300 3K 309 ST	331.976 KG
Material 1014802	Stock Type F2
Batch PM02DN018	Expiry 19-Dec-2027
Batch ID	>
011.01.01.05 Y001/YS01	HU 354012361000012820
T300 3K 309 ST	329.254 KG
Material 1014802	Stock Type F2
Batch PM02DN019	Expiry 19-Dec-2027
Batch ID	>
011.01.02.01 Y001/YS01	HU 354012361000012837
T300 3K 309 ST	331.068 KG
Material 1014802	Stock Type F2
Batch PM02DN020	Expiry 19-Dec-2027
Batch ID	>
011.01.02.02 Y001/YS01	HU 354012361000012844
T300 3K 309 ST	331.068 KG
Material 1014802	Stock Type F2
Batch PM02DN021	Expiry 19-Dec-2027
Batch ID	>
011.01.02.03 Y001/YS01	HU 354012361000012868

For storage bins with HUs, a button ">" will allow branching to the HU Display app, covered in FS ERP-788.

The Search field will give the user the ability to filter the list. e.g. to allow searching for a specific storage bin.

Recommended UI Technology

This app will be developed using Neptune DXP Open Edition. The app will appear on the Neptune launchpad.

Application Screen

Wireframe or Mock-Up

See example screens in Functional Requirements section.

Screen Behavior

No special behavior required.

Screen Navigation

Standard navigation.

Data Integration

Stock Overview Screen

Field	Table-Field Name	Comments / Calculation / Field Manipulation / Input / Output / Validation rule / Value help
Material	MARD-MATNR	
Material Description	MAKT-MAKTX	In language of user, as per the allowed system languages shown in KDD055.
Storage Location	MARD-LGORT	
Quantity	Total of MARD-LABST, MARD-INSME, MARD-SPEME and MARD-	
UOM	MARA-MEINS	In language of user, as per the allowed system languages shown in KDD055.

Stock Type Screen

Field	Table-Field Name	Comments / Calculation / Field Manipulation / Input / Output / Validation rule / Value help
Material	MARD-MATNR	
Material Description	MAKT-MAKTX	In language of user, as per the allowed system languages shown in KDD055.
Storage Location	MARD-LGORT	
Batch	MCHB-CHARG	When selection is for a batch
Batch ID	From CDS	When selection is for a batch
Expiry Date	MCH1-VFDAT	When selection is for a batch
Unrestricted-Use Stock	MARD-LABST (Sloc) MCHB-CLABS (Batch)	
Quality Inspection Stock	MARD-INSME (Sloc) MCHB-CINSM (Batch)	

Blocked Stock	MARD-SPEME (Sloc) MCHB-CSPED (Batch)	
Restricted Stock	MARD-EINME (Sloc) MCHB-CEINM (Batch)	
UOM	MARA-MEINS	In language of user, as per the allowed system languages shown in KDD055.

Batch Screen

Field	Table-Field Name	Comments / Calculation / Field Manipulation / Input / Output / Validation rule / Value help
Material	MCHB-MATNR	Header section
Material Description	MAKT-MAKTX	In language of user, as per the allowed system languages shown in KDD055.
Storage Location	MCHB-LGORT	Header section
Batch	MCHB-CHARG	
Batch ID	From CDS view	
Expiry Date	MCH1-VFDAT	
Stock Type	Depending on quantity	"Unrestricted", "Quality", "Blocked" or "Restricted" depending on quantity. In language of user, as per the allowed system languages shown in KDD055.
Quantity	MCHB-CLABS (Unrestricted), MCHB-CINSM (Quality), MCHB-CSPED (Blocked) or MCHB-CEINM (Restricted)	
UOM	MARA-MEINS	In language of user, as per the allowed system languages shown in KDD055.

Handling Unit Screen (IM)

Field	Table-Field Name	Comments / Calculation / Field Manipulation / Input / Output / Validation rule / Value help
HU	VEKP-EXIDV	
Packaging Material	VEKP-VHILM	
Material	VEPO-MATNR	For material selected
Material Description	MAKT-MAKTX	In language of user, as per the allowed system languages shown in KDD055.
Storage Location	VEPO-LGORT	
Batch	VEPO-CHARG	
Stock Type	VEPO-BESTQ	If MCH1-ZUSTD for the batch is "X" show stock type as "Restricted".
Quantity		Cumulated quantity for HU/Material. See ERP-1003 for logic.
UOM	VEPO-VEMEH	In language of user, as per the allowed system languages shown in KDD055.
Expiry Date	MCH1-VFDAT	

EWM Stock Screen

Field	Table-Field Name	Comments / Calculation / Field Manipulation / Input / Output / Validation rule / Value help
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Storage Type	/SCWM/AQUA-LGTYP	
Storage Section	/SCWM/LAGP-LGBER	For storage bin
Storage Bin	/SCWM/AQUA-LGPLA	
HU	/SCWM/AQUAHUIDENT	
Material	/SCWM/STOCK_IW02-MATID	
Material Description	MAKT-MAKTX	In language of user, as per the allowed system languages shown in KDD055.
Batch	/SCWM/STOCK_IW02-BATCHID	
Quantity	/SCWM/AQUA-QUAN	
UOM	/SCWM/AQUA-VFDAT	In language of user, as per the allowed system languages shown in KDD055.

Custom Tables

None

Master data

None

Configuration table

None

Tooltips

None

Front-End

This app can be executed on a mobile device or in desktop mode.

Mobile Services

Not applicable.

Authentication & Authorization

The user must have material document display access for the selected plant. Check object M_MSEG_WMB for Activity 03 and the selected plant. If no access, show the message "No authorization for plant <9999>".

Accessibility

Not applicable.

Volumetrics

This solution will be used at approximately 100 plants. The total users is estimated to be around 800.

Error Handling

Errors to appear in a pop up window that needs to be acknowledged by the user.

Testing

How to Test

Test Conditions and Expected Results

ID	Condition	Expected Result
1	Display stock for a IM Non-HU storage location. (Stock Overview Screen)	All stock in storage location is listed correctly, sorted by material description and batch.
2	Display stock for an IM HU storage location. (Stock Overview Screen)	All stock in storage location is listed correctly, sorted by material description.
3	Display stock for an EWM storage location. (Stock Overview Screen)	All stock in storage location is listed correctly, sorted by material description.
4	Display stock for a specific material batch in an IM HU storage location. (Stock Overview Screen)	All stock in storage location is listed correctly, sorted by material description and batch.
5	Go to stock types screen	Stock information is displayed correctly by stock type
6	Go to batch screen	Stock information is displayed correctly by batch, sorted by batch
7	Go to HU screen	Stock information is displayed correctly by batch, sorted by material /batch
8	Display stock for a specific material batch in an EWM storage location. (Stock Overview Screen)	All stock in storage location is listed correctly, sorted by material description and batch.
9	Go to the EWM stock screen	All stock in storage location is listed correctly, sorted by storage type, storage section and storage bin.
10	Display stock for a specific storage type (EWM stock screen)	All stock in storage location is listed correctly, sorted by storage type, storage section and storage bin.
11	Display stock for a specific storage bin (EWM stock screen)	All stock in storage location is listed correctly, sorted by storage type, storage section and storage bin.
12	Display empty storage bins in a specific storage type (EWM stock screen)	All empty bins are listed for the storage type.

Test Considerations/Dependencies

None

Other Information

Development Details

Package

Package Name	Parent Package

UI Implementation

UI Type	UI Name	Fiori Catalogue	Design Rationale Reference

API Implementation

API Type	API Name	Purpose / High Level Logic	API Product	Design Rationale Reference

Other Development Objects

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

Appendix

See also

None

Change log

Version	Published	Changed By	Comment
CURRENT (v. 21)	Jan 16, 2026 11:32	BIRSE-ext, Gary	
v. 20	Jan 14, 2026 15:59	BIRSE-ext, Gary	
v. 19	Jan 14, 2026 15:54	BIRSE-ext, Gary	
v. 18	Jan 14, 2026 15:34	BIRSE-ext, Gary	
v. 17	Jan 14, 2026 15:07	BIRSE-ext, Gary	
v. 16	Jan 14, 2026 09:19	BIRSE-ext, Gary	
v. 15	Jan 14, 2026 09:15	BIRSE-ext, Gary	
v. 14	Jan 14, 2026 08:48	BIRSE-ext, Gary	
v. 13	Jan 13, 2026 11:24	BIRSE-ext, Gary	
v. 12	Dec 19, 2025 16:48	BIRSE-ext, Gary	

[Go to Page History](#)

Workflow history

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

Jan 29, 2026	Actor	Type	Activity	Version
Approved	 VENKAT-ext, Rama	State	changed state to Approved at 5:26 pm	v21
Lead Approval	 VENKAT-ext, Rama	State	gave <i>POD Lead Review</i> approval at 5:26 pm	
Jan 28, 2026				
	MAKKAY-ext, Kas	State	changed expiry date to '04 Feb, 2026 07:11 am' at 7:11 am	
		State	changed state to Lead Approval at 7:11 am	v21

Tech Review	MAKKAY-ext, Kas	State	gave <i>Tech Review</i> approval at 7:11 am
From Jan 14, 2026 to Jan 16, 2026			
	BIRSE-ext, Gary	Edit	updated the page at 3:54 pm