



L-mobile solutions GmbH & Co. KG



V9.1 Public release notes

L-mobile industry

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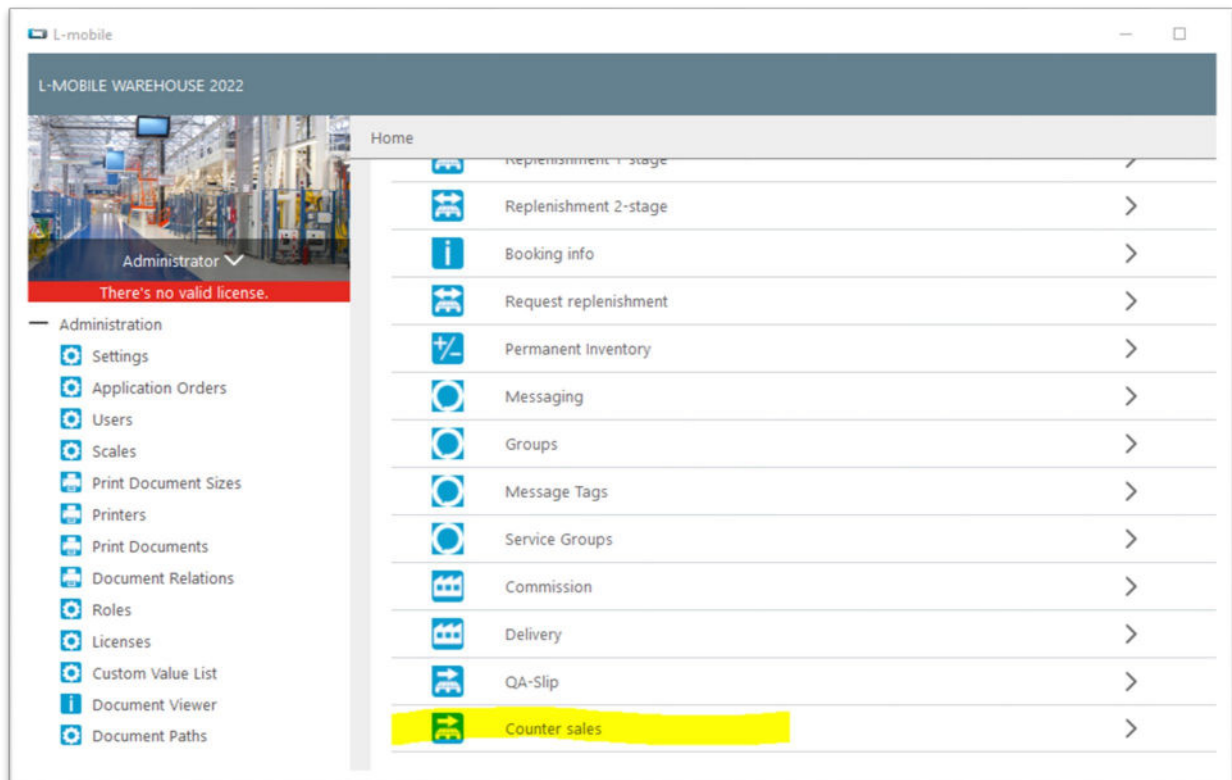
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1 9.1 ALPHAPLAN COUNTER SALES MODULE IMPLEMENTATION

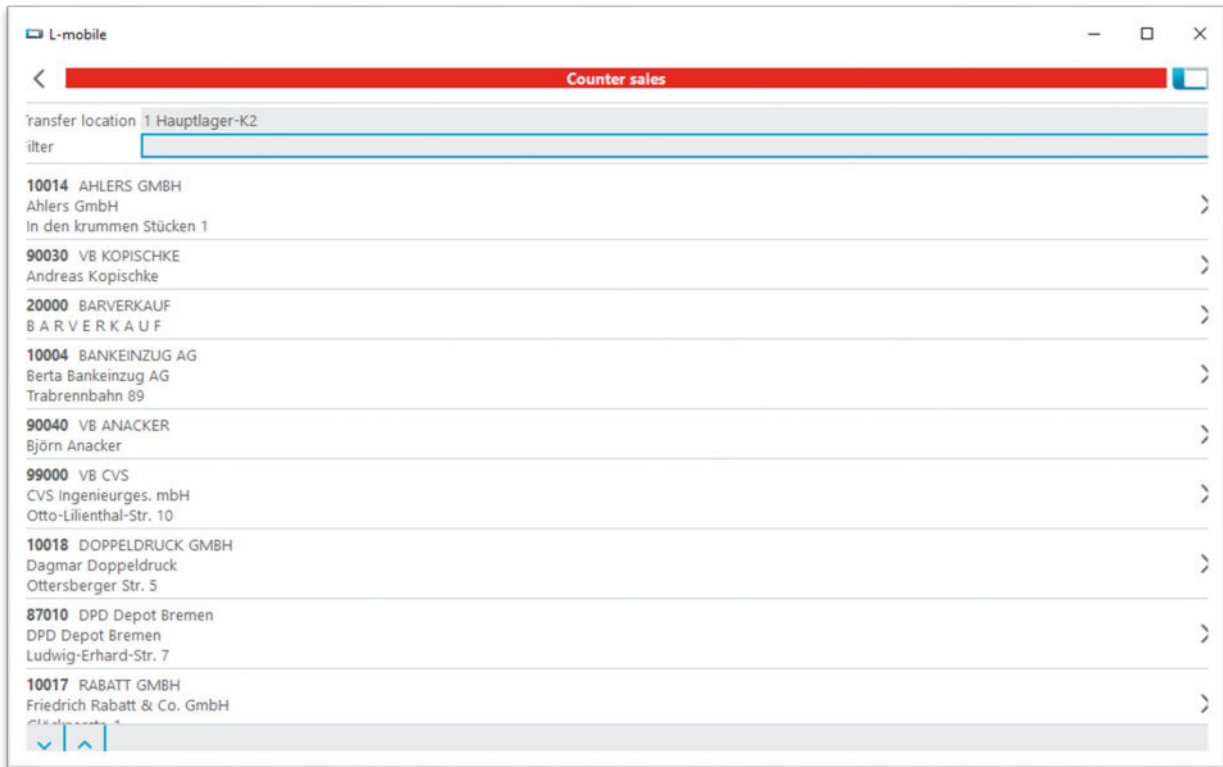
1.1 USER DOCUMENTATION

This feature branch adds the module Counter Sales to the Alphaplan ERP standard modules.



1.2 CUSTOMER LIST VIEW

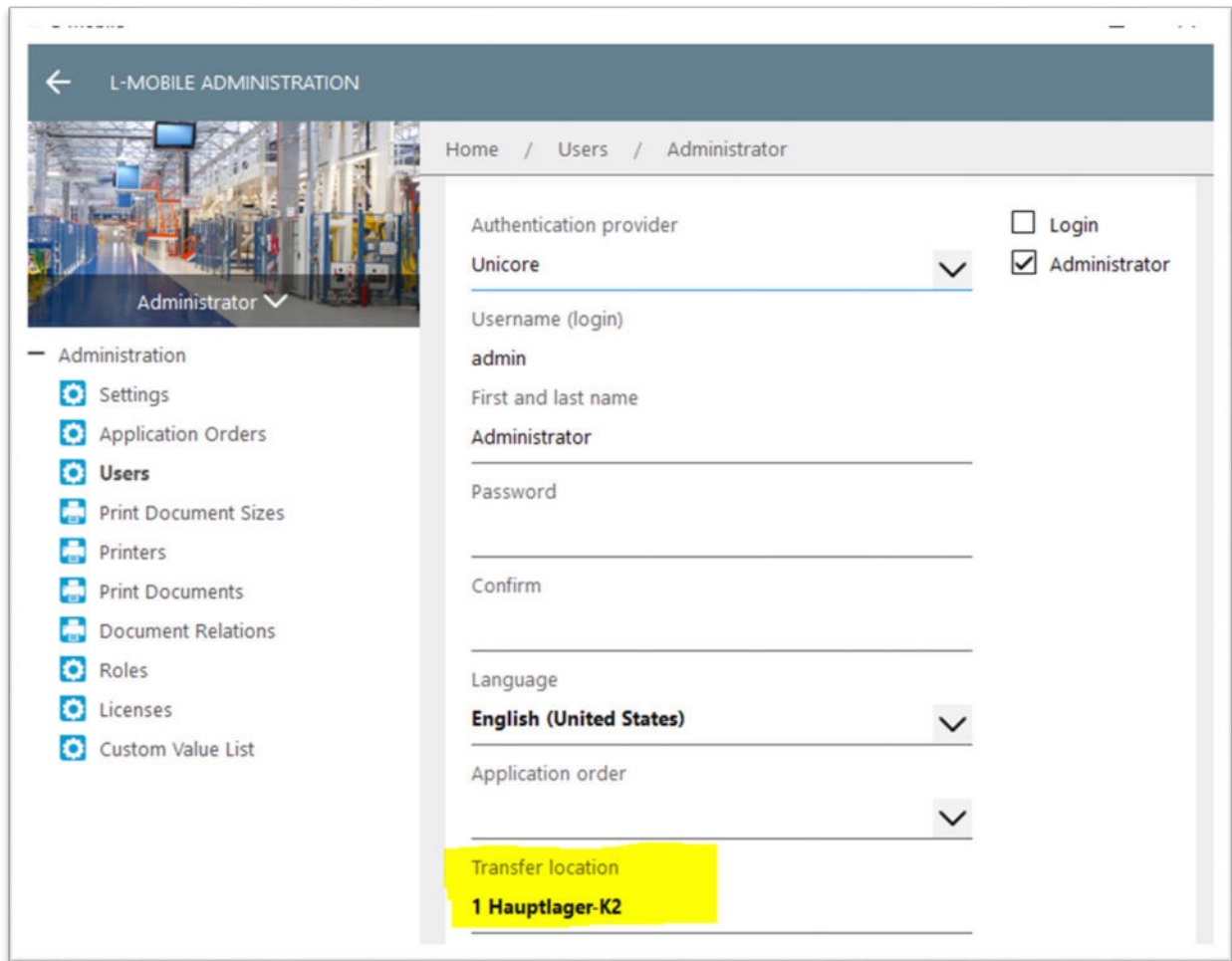
When the user enter to the module, the list of all customers is displayed , the focus is on the Filter input:



For each customer we display the following information :

- Customer Number
- Customer Name
- Customer Name1
- Customer Address

The Transfer storage location input is preset with the transfer location from the user settings.



← L-MOBILE ADMINISTRATION

Home / Users / Administrator

Authentication provider: Unicore

Username (login): admin

First and last name: Administrator

Password:

Confirm:

Language: English (United States)

Application order:

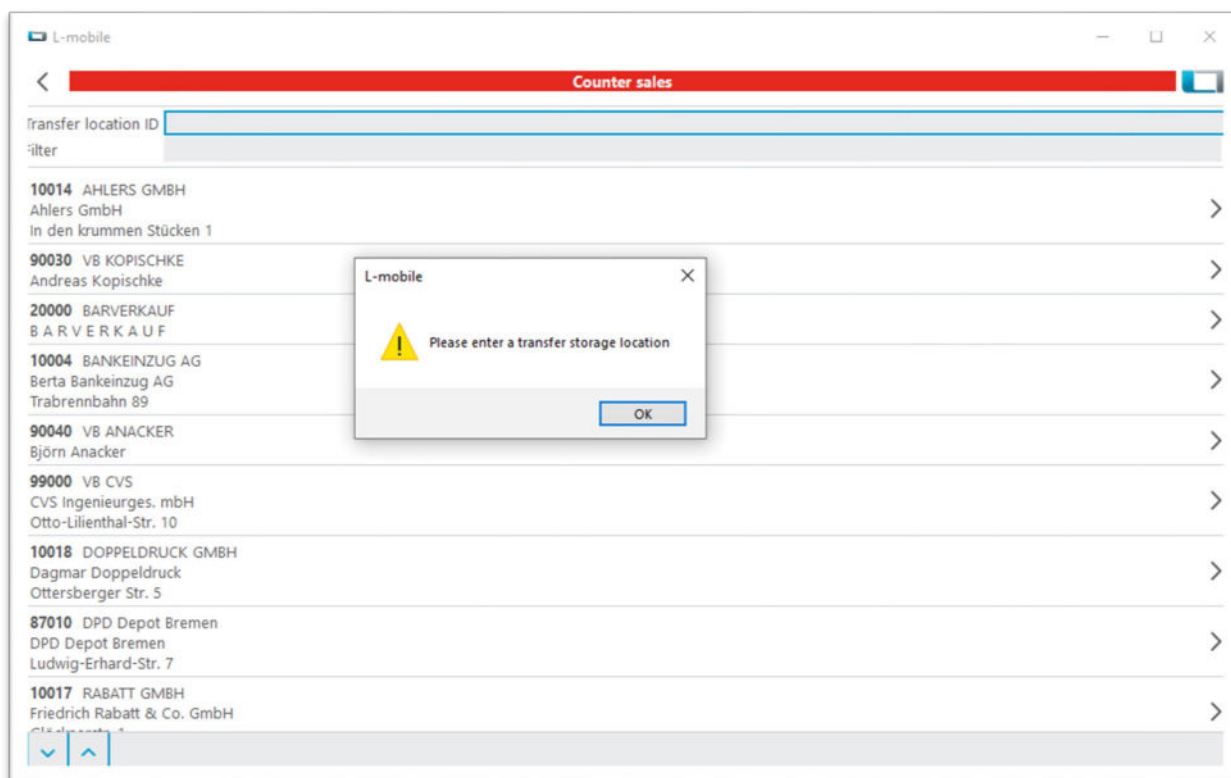
Transfer location: 1 Hauptlager-K2

☐ Login

☒ Administrator

Note: Without entering a transfer storage bin, no processing is possible in the counter sales module.

If no transfer bin has been entered, an error message "Please enter a transfer location" appears when a "customer" is selected:



1.3 CUSTOMER VIEW

We have then the possibility either to select a customer by clicking on the chevron button of each customer row or by searching for a specific one by the filter input :

Accepted search input are :

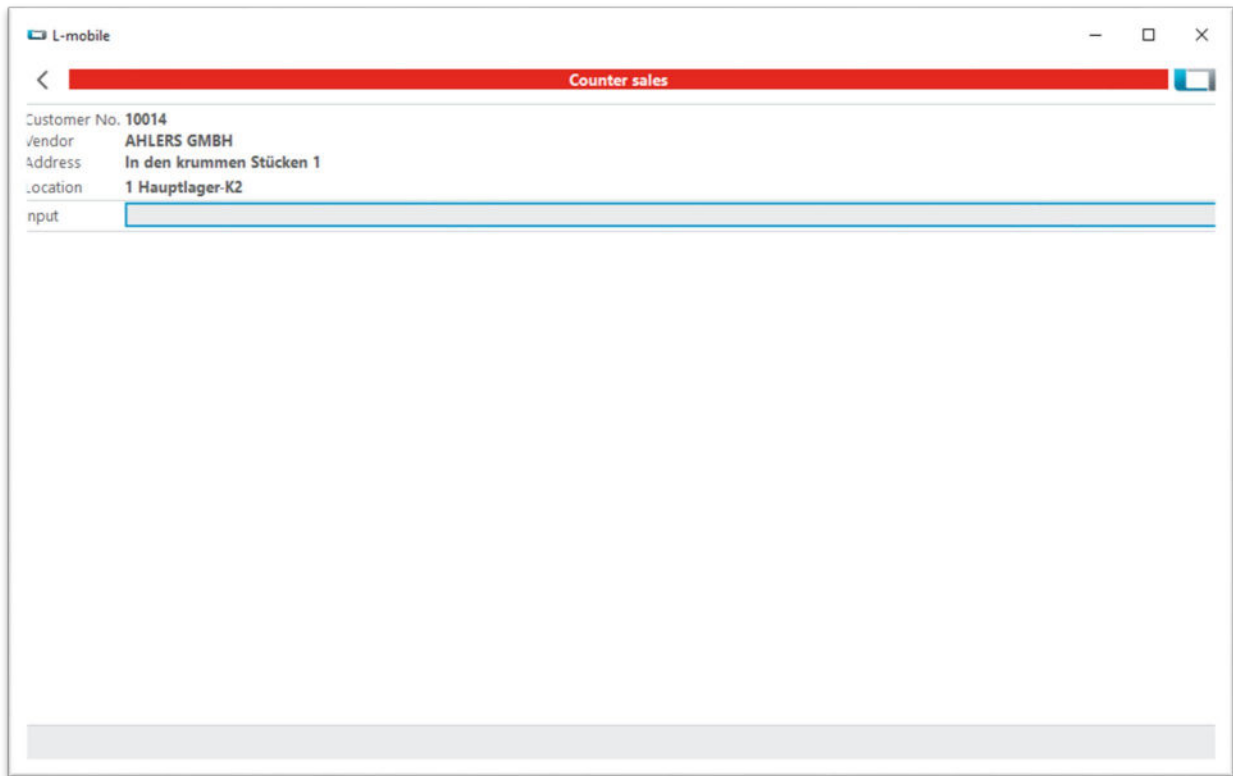
- Customer number
- Customer name

The customers matching the entered criteria are displayed, if one matching result is found, we navigate to the customer found .

Counter sales	
Transfer location	1 Hauptlager-K2
Filter	10014
10014	AHLERS GMBH Ahlers GmbH In den krummen Stücken 1
90030	VB KOPISCHKE Andreas Kopischke
20000	BARVERKAUF B A R V E R K A U F
10004	BANKEINZUG AG Berta Bankeinzug AG Trabrennbahn 89
90040	VB ANACKER Björn Anacker
99000	VB CVS CVS Ingenieurges. mbH Otto-Lilienthal-Str. 10
10018	DOPPELDRUCK GMBH Dagmar Doppeldruck Ottersberger Str. 5
87010	DPD Depot Bremen DPD Depot Bremen Ludwig-Erhard-Str. 7
10017	RABATT GMBH Friedrich Rabatt & Co. GmbH

Filter by Customer number and navigate to customer view and display the following information :

- Customer number
- Customer name
- Customer address
- Transfer location defined in the entry
- Input for stock selector



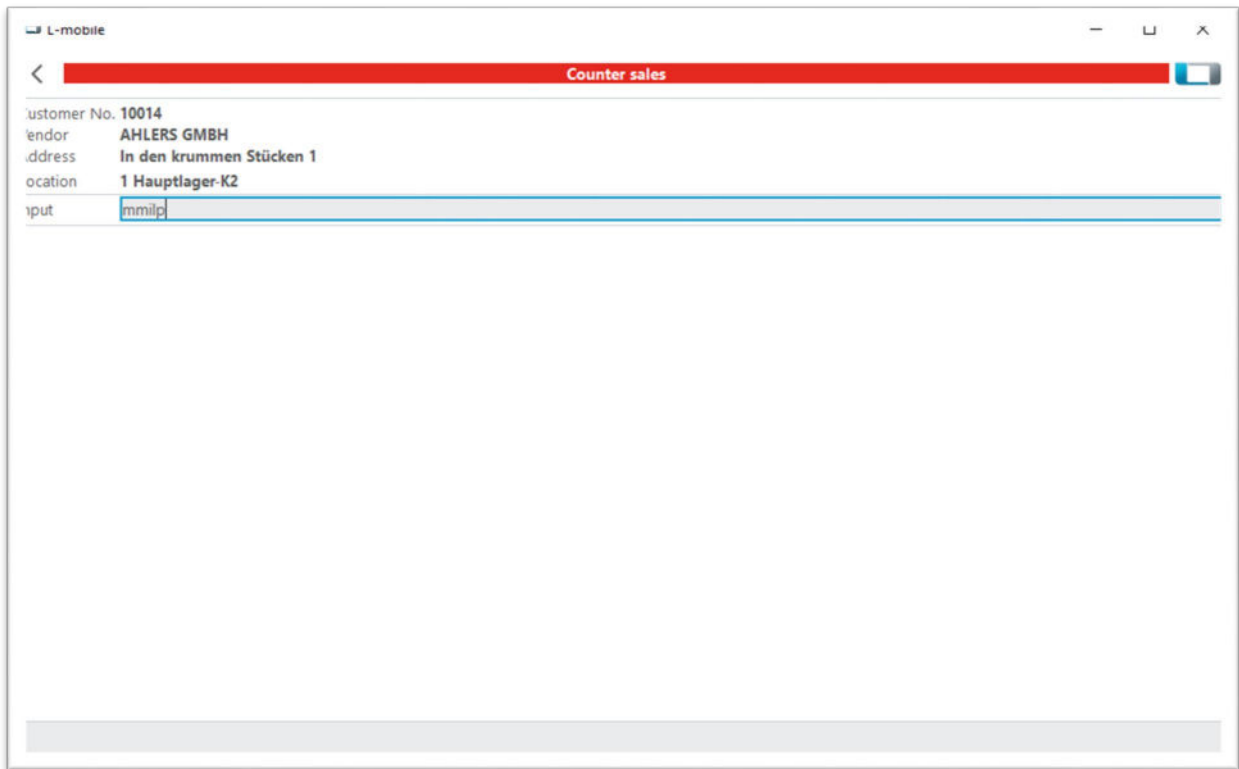
The screenshot shows a mobile application window titled "L-mobile" with a red header bar labeled "Counter sales". Below the header, the following information is displayed:

- Customer No. 10014
- Vendor AHLERS GMBH
- Address In den krummen Stücken 1
- Location 1 Hauptlager-K2
- Input: (An empty text input field)

In the stock selector input , the following values can be scanned :

- Article number/Article Barcode/Article matchCode
- GTIN/EAN
- Storage location

If selection is unique so we navigate directly to the Relocation Position View to relocate the selected stock , otherwise if selection contains multiple values , we display selection dialog of stocks.



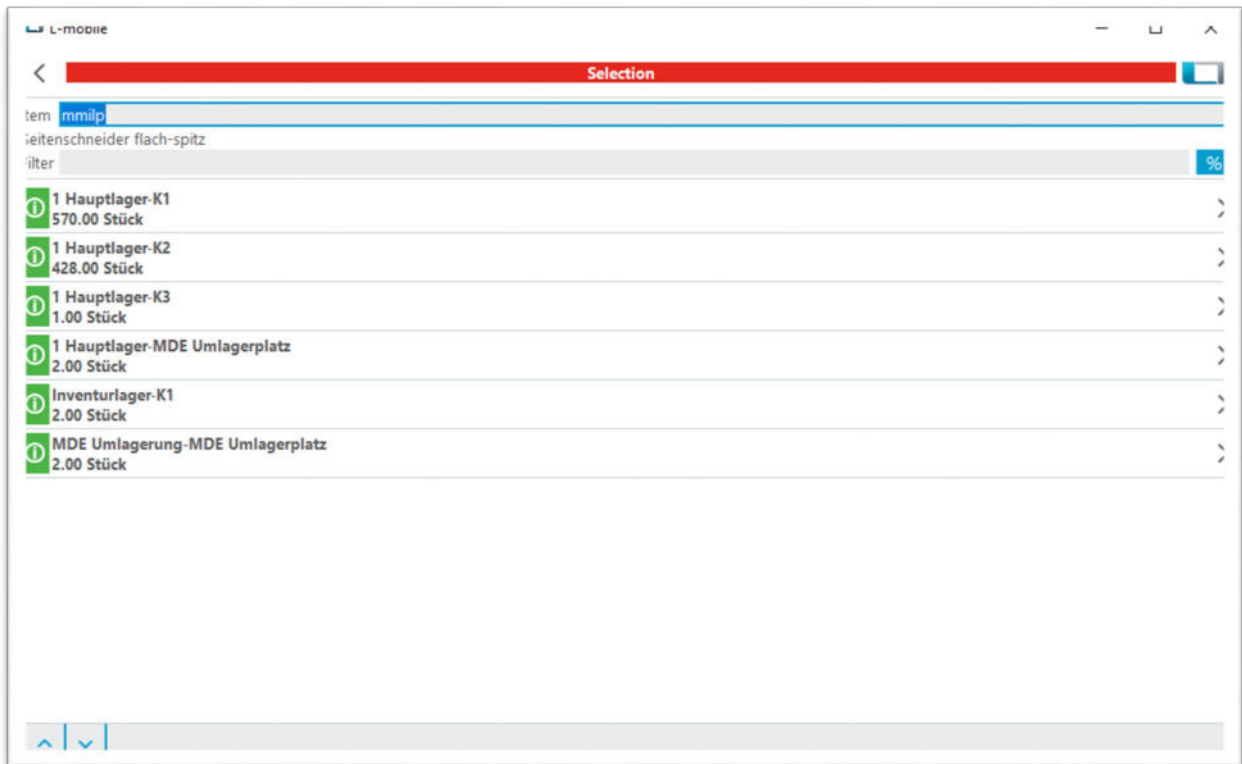
The screenshot shows a mobile application window titled "L-Mobile" with a red header bar labeled "Counter sales". Below the header, the following information is displayed:

- Customer No. 10014
- Vendor: AHLERS GMBH
- Address: In den krummen Stücken 1
- Location: 1 Hauptlager-K2
- Input: mmilp

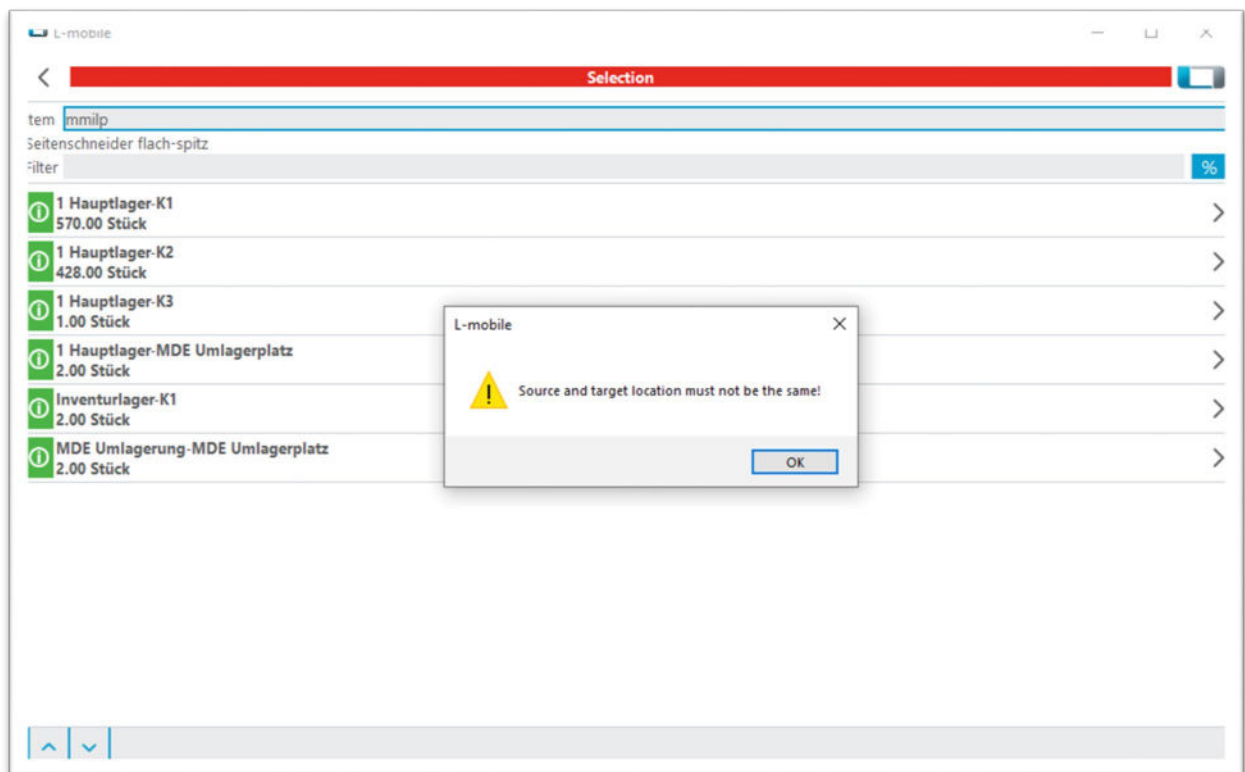
The input field "mmilp" is highlighted with a blue border. The rest of the screen is empty.

In the stock selector , we display for each stock :

- Source storage location
- Available quantity
- Batch number (for article subject to batch management).



If we select a stock that is contained in the same transfer location defined in the entry , we display an error message:



- Match Code:

We have the possibility to enter search stocks by Matchcode of the article:

L-mobile

<

Counter sales

Customer No. 90030

/endor VB KOPISCHKE

.ocation 1 Hauptlager-K2

nput

▼

▲

L-mobile

<

Selection

Filter

%

45550	Seitenschneider flach-spitz	
	1 Hauptlager-HR1 B1 E1	>
	13.00 Stück	
45550	Seitenschneider flach-spitz	
	1 Hauptlager-K1	>
	549.00 Stück	
45550	Seitenschneider flach-spitz	
	1 Hauptlager-K2	>
	448.00 Stück	
45550	Seitenschneider flach-spitz	
	MDE Umlagerung-MDE Umlagerplatz	>
	3.00 Stück	
mmi	Seitenschneider flach-spitz	
	2 Aussenlager Lüers	>
	2.00 Stück	
mmi	Seitenschneider flach-spitz	
	Starnberg	>
	10.00 Stück	
mmich		

^

|

v

After selecting a stock, we navigate to the Relocation Position View, and we initialize the Target location with the transfer location defined in the entry:

back to the selected customer position view and display the list of stocks picked for that customer and also the Booking button:

L-mobile

Counter sales

Customer No. 10014

Vendor: AHLERS GMBH

Address: In den krummen Stücken 1

Location: 1 Hauptlager-K2

Input:

mmilp

Seitenschneider flach-spitz

10.00 Stück

×

book

We pick another 2 stocks:

L-MOBILE

Counter sales

Customer No. 10014

Vendor: AHLERS GMBH

Address: In den krummen Stücken 1

Location: 1 Hauptlager-K2

Input:

mmilp

Seitenschneider flach-spitz

10.00 Stück

×

mmilp

Seitenschneider flach-spitz

5.00 Stück

×

mmilp

Seitenschneider flach-spitz

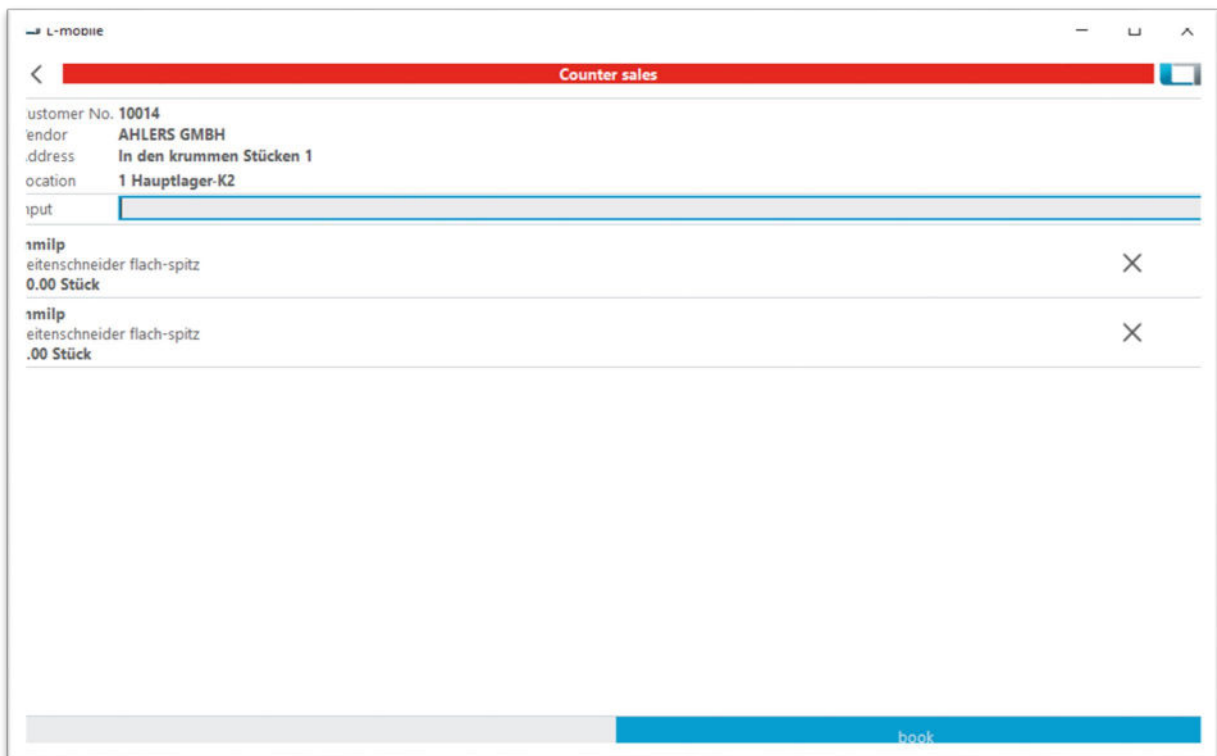
1.00 Stück

×

book

We have the possibility to remove or select a stock to return it back to its source location.

- By clicking the chevron: 'X' , we remove the picked stock from the customer stock list and the record of that stock from the table 'CustomerStockList' and list is refreshed.



The screenshot shows the 'Counter sales' interface in the L-Mobile application. At the top, there's a red header bar with the title 'Counter sales'. Below this, customer details are listed: 'Customer No. 10014', 'Vendor: AHLERS GMBH', 'Address: In den krummen Stücken 1', and 'Location: 1 Hauptlager-K2'. There is an empty input field below the location. The main area contains a list of two stock items, each with a quantity of '0.00 Stück' and a chevron 'X' icon for removal. The first item is '1milp eitenschneider flach-spitz' and the second is '1milp eitenschneider flach-spitz'. At the bottom, there is a blue bar with a 'book' button.

By selecting the stock, we navigate back to Relocation application to return back the stock, the default location is initialized then with the default source location of the picked stock:

L-mobile

Counter sales

tem

mmilp

zeitenschneider flach-spitz

DPE-SF-Abdeckhaube 100my,

350+1100x2400mm,

opak weiß, UV stabil für 1 Jahr,

perforiert auf Rollen a 100 Stück

100 Stück per Palette

<

>

location

1 Hauptlager-K2

available

10.00 Stück

default

1 Hauptlager-K1

target location

quantity

Stück

▼

^

v

Post

At this step, we have 2 possibilities:

- We return a partial pieces of the picked stock

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L-mobile

Counter sales

mmilp

tem

seitenschneider flach-spitz

DPE-SF-Abdeckhaube 100my,

1350+1100x2400mm,

opak weiß, UV stabil für 1 Jahr,

verforiert auf Rollen a 100 Stück

100 Stück per Palette

location

1 Hauptlager-K2

available

10.00 Stück

Default

1 Hauptlager-K1

target location

1 Hauptlager-K1

Quantity

3.00

Stück

Post

Then we make a relocation posting, update the selected stock and insert a new record in Standalone table : 'CustomerStockList' , we refresh the picked stock list and navigate back to customer stock list

L-mobile

Counter sales

Customer No. 10014

Vendor: AHLERS GMBH

Address: In den krummen Stücken 1

Location: 1 Hauptlager-K2

Input:

mmilp

Seitenschneider flach-spitz

7.00 Stück

×

mmilp

Seitenschneider flach-spitz

5.00 Stück

×

book

We return the whole picked quantity, in that case we delete the picked stock and insert a new record of the returned stock in the standalone table 'CustomerStockList' , we refresh the picked stock list and navigate back to customer stock list:

Counter sales

Item: mmilp
 Seitenschneider flach-spitz
 DPE-SF-Abdeckhaube 100my,
 350+1100x2400mm,
 opak weiß, UV stabil für 1 Jahr,
 perforiert auf Rollen a 100 Stück
 100 Stück per Palette

Location:	1 Hauptlager-K2
Available:	7.00 Stück
Default:	1 Hauptlager-K1
Target location:	1 Hauptlager-K1
Quantity:	7.00 Stück

L-mobile

<

Counter sales

Customer No. 10014

Vendor AHLERS GMBH

Address In den krummen Stücken 1

Location 1 Hauptlager-K2

Input

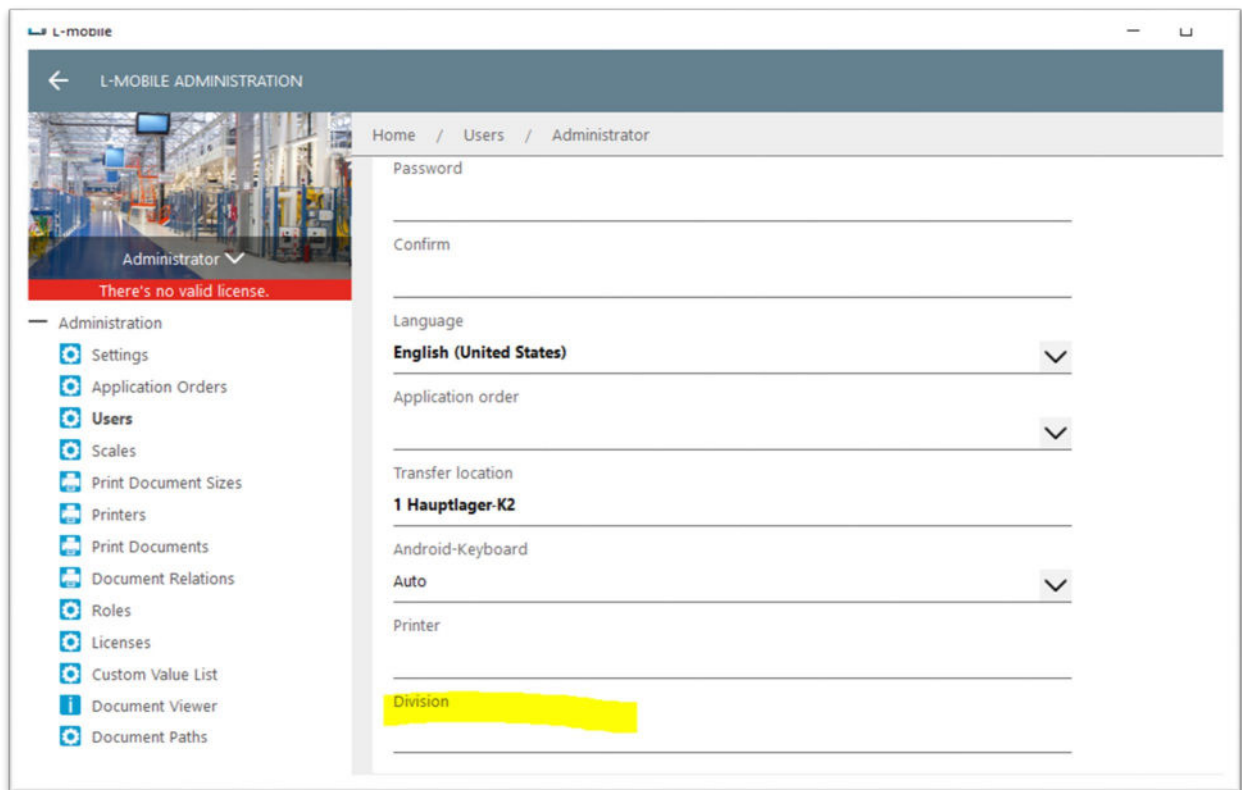
mmilp

Seitenschneider flach-spitz

5.00 Stück

book

Finally, after finishing the pick process, on clicking on book button, we send a AlphaplanOutgoingGoods-Posting containing the selected customer stock list and the User Division user data which is defined in user settings below:



The screenshot shows the L-MOBILE ADMINISTRATION interface. The top navigation bar includes a back arrow, the title "L-MOBILE ADMINISTRATION", and a breadcrumb trail: "Home / Users / Administrator". Below the breadcrumb, there is a "Password" field, a "Confirm" field, a "Language" dropdown menu set to "English (United States)", an "Application order" dropdown menu, a "Transfer location" field set to "1 Hauptlager-K2", an "Android-KeyBoard" dropdown menu set to "Auto", and a "Printer" field. At the bottom, there is a "Division" field highlighted in yellow. On the left side, there is a sidebar menu with the following items: Administration, Settings, Application Orders, Users, Scales, Print Document Sizes, Printers, Print Documents, Document Relations, Roles, Licenses, Custom Value List, Document Viewer, and Document Paths. A red banner at the top of the sidebar menu states "There's no valid license."

In the XMLPosting , we use the AlphaplanOutgoingGoodsPoster for filling the required information and insert the KMDEJob ='301'

1.4 DEVELOPER DOCUMENTATION

Modified Applications

AlphaplanLoginApplicationExtension

New applications

AlphaPlanCounterSalesApplication

New Views

AlphaPlanCounterSalesCustomerListView

AlphaPlanCounterSalesCustomerView

New applications Extensions

AlphaplanRelocationApplicationExtension

AlphaplanRelocationPositionViewExtension

Registry

New

AlphaplanCounterSalesApplicationRegistration

AlphaplanCounterSalesApplicationRegistration

AlphaPlanCounterSalesModule

Modified

StockFinderAppComponent

AlphaplanApplicationRegistry

AlphaplanMDEJobSettings

AlphaplanModuleRegistry

AlphaplanPermissionRegistry

AlphaplanSettingRegistry

AlphaplanUserDataRegistry

PluginRegistration

New Settings

AlphaplanCounterSalesShowPostingSuccessMessage

AlphaPlanCounterSalesIsUnprocessedDelayMessage

AlphaplanCounterSalesWaitingPostingWaitingTime

New BusinessObjects

AlphaplanCustomer

AlphaplanCustomerStock

New Mappings

AlphaplanCustomerMapping

AlphaplanStandaloneCustomerStockListMapping

New Contracts

IAphaplanCustomerDao

IAphaplanStandaloneCustomerStockListDao

New Services

AlphaplanCustomerDao

AlphaplanCustomerDirectDao

AlphaPlanStandaloneCustomerStockListDao

New IManipulator

IAphaplanCustomerStockListManipulator

New Manipulator

AlphaplanStandaloneCustomerStockListManipulator

AlphaplanManipulatorAdapter

AlphaplanStandaloneAdapter

New Posting

AlphaplanOutgoingGoodsPosting

AlphaplanOutgoingGoodsPostingHandler

New poster

AlphaplanOutgoingGoodsPoster

Modified Services

AlphaplanStockDao

Modified WarehouseFactory

AlphaplanWarehouseFactory

AlphaplanStandaloneWarehouseFactory

Modified Adapter

AlphaplanAdapter

New resources in Bundle Alphaplan :

Name	English	German	Spanich
M_CounterSales	Counter sales	Thekenverkauf	Venta en mostrador
Adress	Address	Adresse	Dirección
E_EmptyTransferLocation	Please enter a transfer storage location	Bitte geben Sie ein Transferlagerplatz ein	Por favor, introduzca un lugar de almacenamiento de transferencia
M_Division	Division	Abteilung	Departamento
E_NoCustomerHasBeenFound	No Customer has been found	Es wurde kein Kunde gefunden	No se ha encontrado a ningún cliente
S_Synchron_CounterSales	Synchron Counter Sales	Synchron : Thekenverkauf	Sincrónico: Venta de contadores
S_Timeout_CounterSales	Time-out: Counter Sales	Time-out: Thekenverkauf	Tiempo de espera: Venta de contadores

New resources in Data Access Alphaplan:

AlphaplanStandaloneManipulatorResources

AlphaplanStandaloneManipulatorResources.de

AlphaplanStandaloneManipulatorResources.es

AlphaplanStandaloneManipulatorResources.fr

AlphaplanStandaloneManipulatorResources.hu

Name	English	German	Spanich
E_ErrorDelete-Stock	Cannot delete stock	Bestand konnte nicht gelöscht werden	No se puede eliminar el stock

2 9.1 ALPHAPLAN INTEGRATION STORAGE CONTROL CENTER

2.1 USER DOCUMENTATION

This feature branch adds the module storage control center to the Alphaplan erp for the following applications:

- Goods receipt
- Delivery
- Picking slip
- Production issue
- Production receipt

2.2 STORAGE CONTROL CENTER

2.2.1 ORDER HEAD LIST VIEW

The first view displays the processes that order pool monitor administrates in SBO, list of users and the list of the orders.

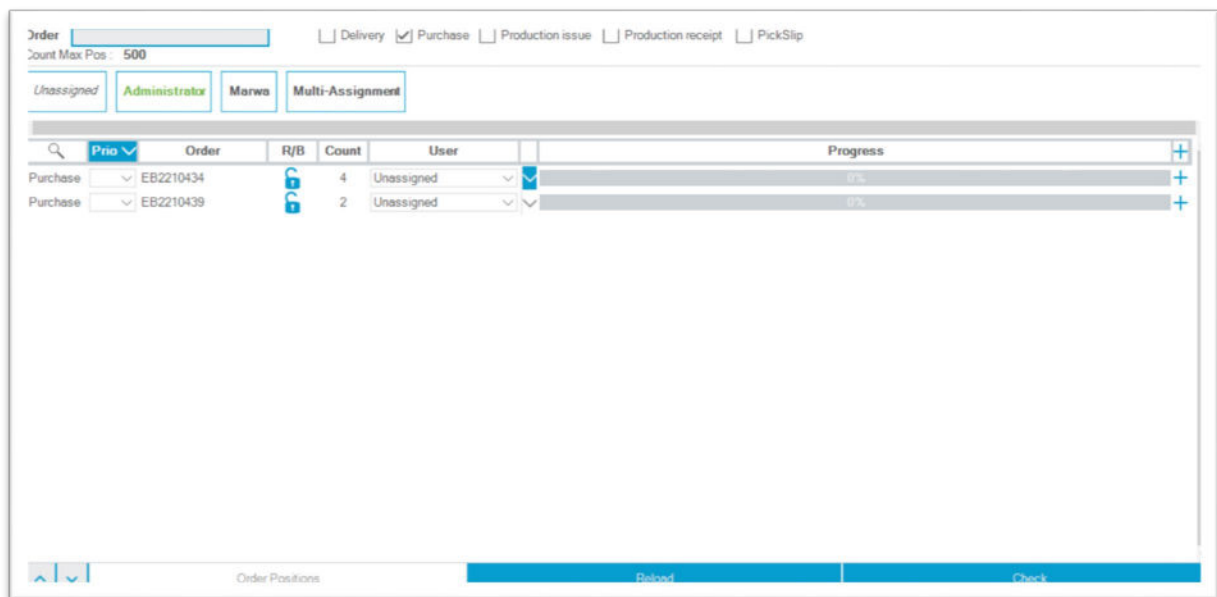
The processes that are implemented in the erp are delivery, picking slip, production issue, production receipt and purchase receipt.

For each order, the application shows:

- Process
- Priority
- Order number
- Availability

- Total positions count
- Status
- Deadline
- Assigned user
- Order progress

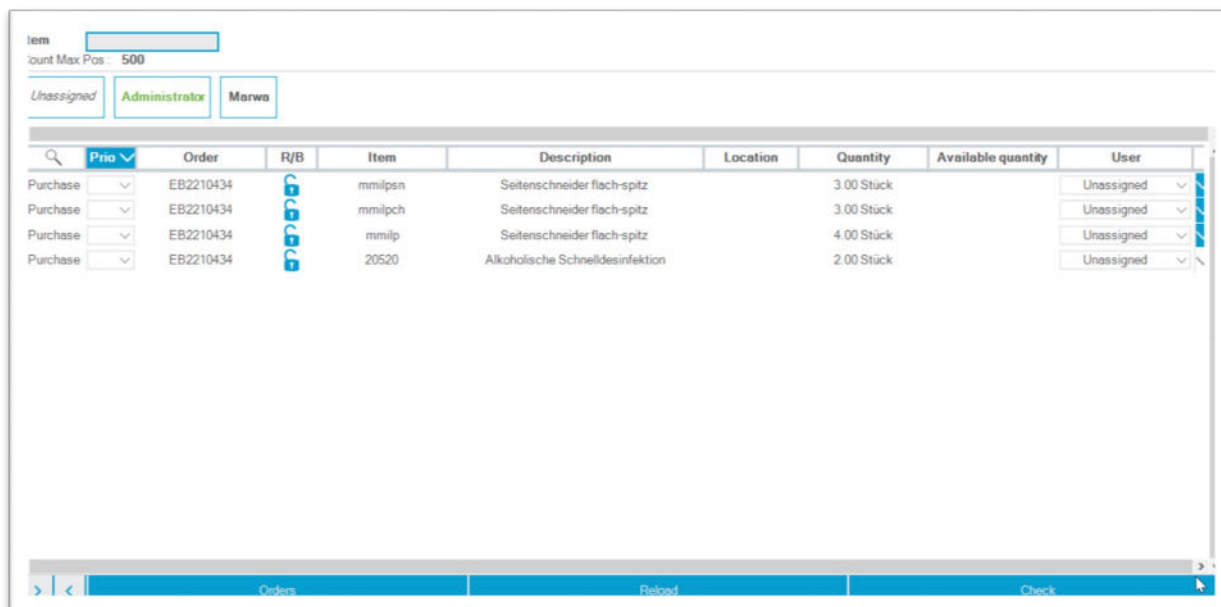
In the order list view, the user can choose a process, block, release, assign user and priority for each order.



Prio	Order	R/B	Count	User	Progress
Purchase	EB2210434		4	Unassigned	0%
Purchase	EB2210439		2	Unassigned	0%

By selecting one or more lines and clicking then on "Order Positions" button, the view switches directly to the position list view.

2.2.2 ORDER POSITIONS LIST

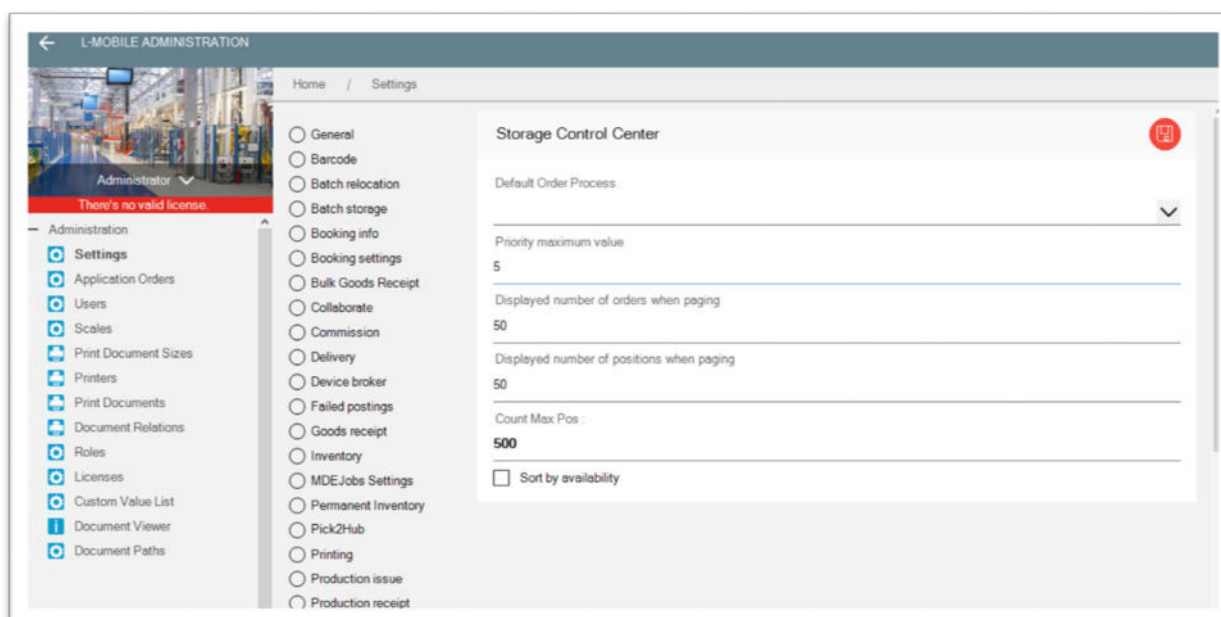


Prio	Order	R/B	Item	Description	Location	Quantity	Available quantity	User
Purchase	EB2210434		mmilpsn	Seitenschneider flach-spitz		3.00 Stück		Unassigned
Purchase	EB2210434		mmilpch	Seitenschneider flach-spitz		3.00 Stück		Unassigned
Purchase	EB2210434		mmilp	Seitenschneider flach-spitz		4.00 Stück		Unassigned
Purchase	EB2210434		20520	Alkoholische Schnelldesinfektion		2.00 Stück		Unassigned

In the order positions list, the user can assign a user, block, release and assign a priority to each position.

2.2.3 STANDARD SETTINGS

In settings of storage control center, the user can choose the default order process, the maximum value of priority, the paging number, the maximum positions to be counted and if list would be sorted by availability.



L-MOBILE ADMINISTRATION

Home / Settings

Storage Control Center

Default Order Process: [Dropdown]

Priority maximum value: 5

Displayed number of orders when paging: 50

Displayed number of positions when paging: 50

Count Max Pos: 500

☐ Sort by availability

2.3 MODULES

The affected modules with the storage control center are the goods receipt, delivery, picking slip, production issue and production receipt modules. The administrator can do a full or partial assignment, block or release orders and positions and gives the needed priority.

In this documentation, the process of the storage control center would be applied on the goods receipt application and the same process is working on the other modules too.

Order ☐ Delivery ☒ Purchase ☐ Production issue ☐ Production receipt ☐ PickSlip

Count Max Pos : 500

Unassigned Administrator Marwa Multi-Assignment

Prio	Order	R/B	Count	User	Progress
Purchase	EB2210434	4	Multi-Assignment	0%	
Purchase	EB2210439	2	Marwa	0%	

Order Positions Release Check

Item

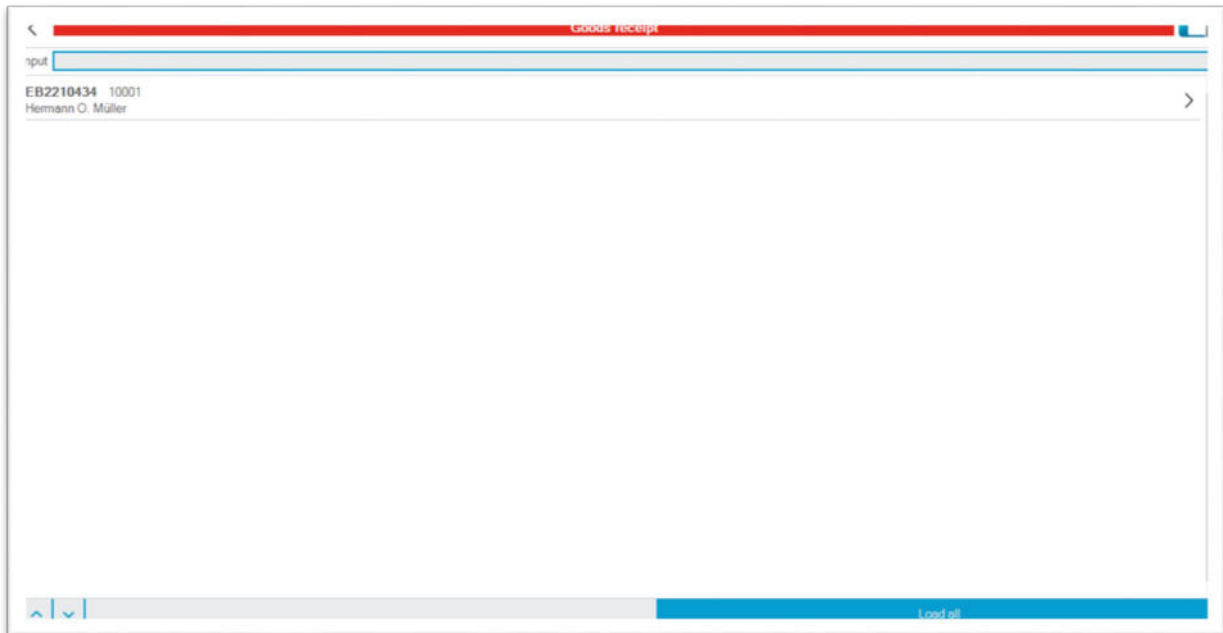
Count Max Pos : 500

Unassigned Administrator Marwa

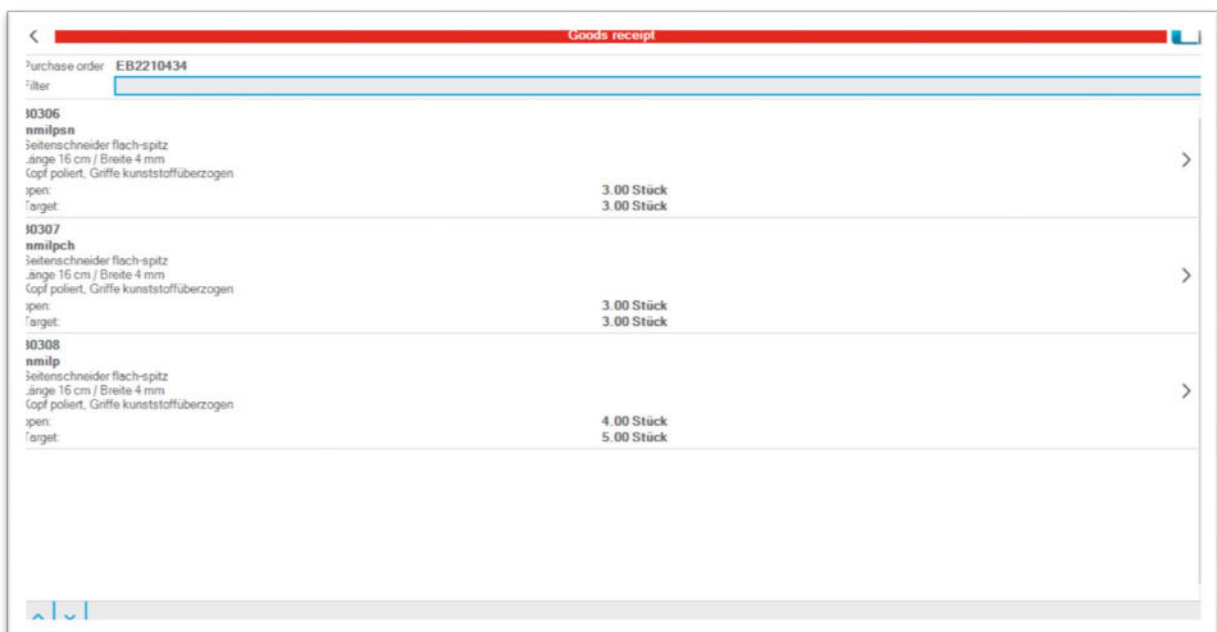
Prio	Order	R/B	Item	Description	Location	Quantity	Available quantity	User
Purchase	EB2210434	3.00 Stück	mmilpsn	Seitenschneider flach-spitz		3.00 Stück	Unassigned	
Purchase	EB2210434	3.00 Stück	mmilpch	Seitenschneider flach-spitz		3.00 Stück	Unassigned	
Purchase	EB2210434	4.00 Stück	mmilp	Seitenschneider flach-spitz		4.00 Stück	Unassigned	
Purchase	EB2210434	2.00 Stück	20520	Alkoholische Schnelldeinfektion		2.00 Stück	Marwa	

Order Release Check

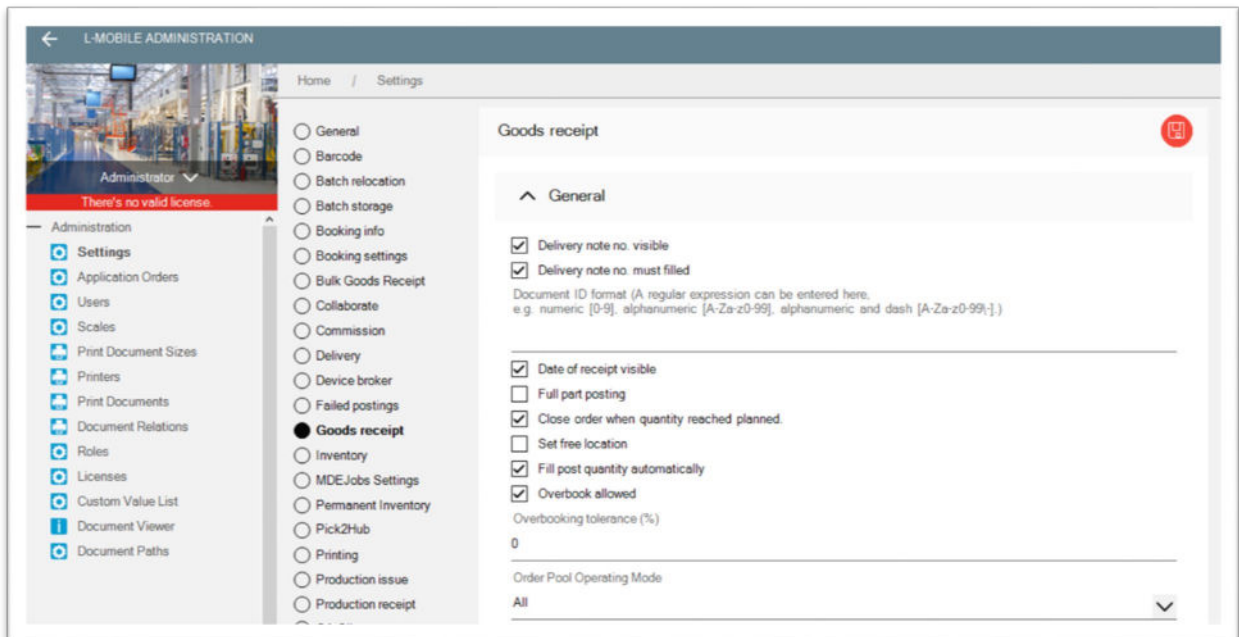
In the setting of the goods receipt, the setting order pool operation mode is checked with the value "Only assigned + free". In this case only the order EB2210434 would be displayed in the module goods receipt and the order EB2210439 would not be listed.



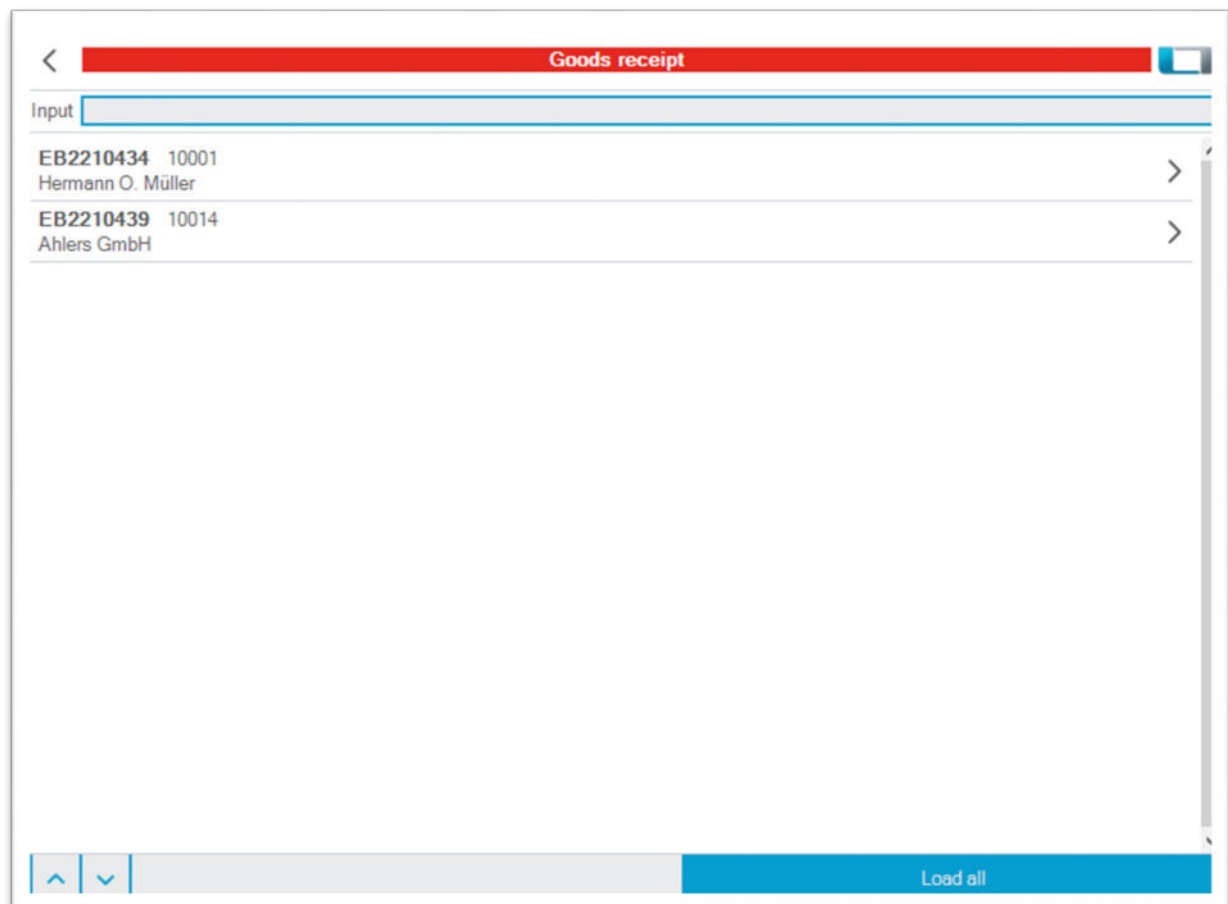
By selecting the order, the item 20520 would not be displayed since it is assigned to another user.



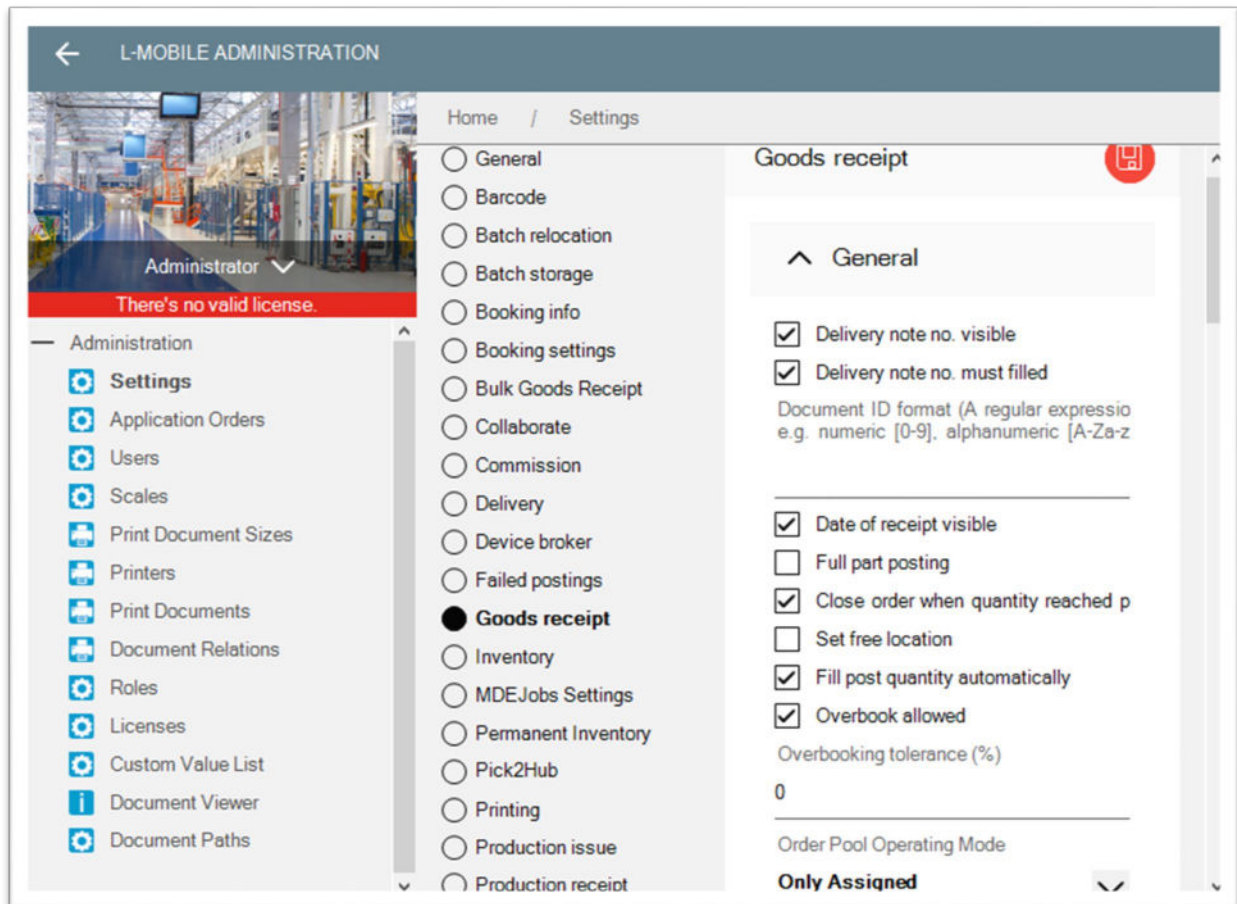
In the next view, the administrator would change the setting of goods receipt to "All".



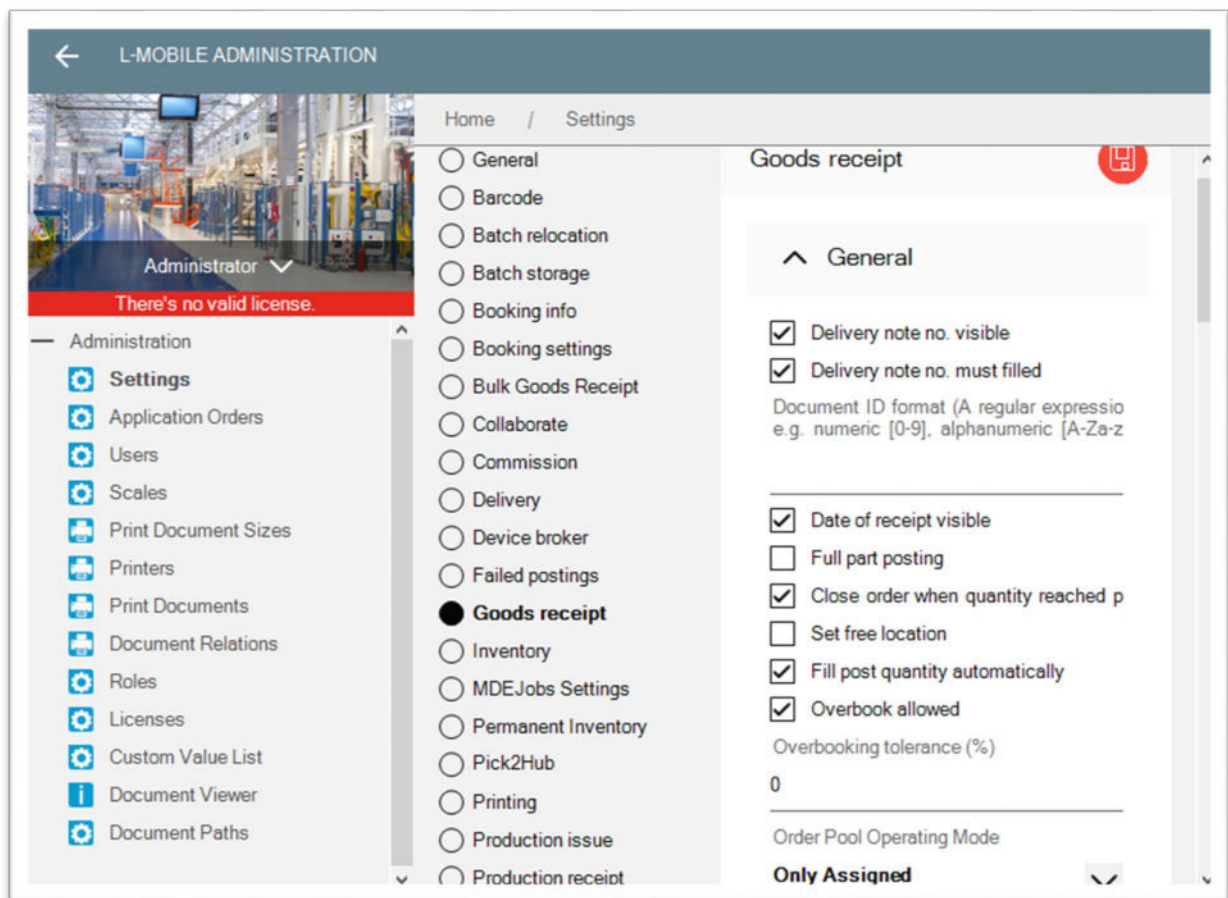
In this case, all the orders and positions would be displayed in the module except the blocked one.



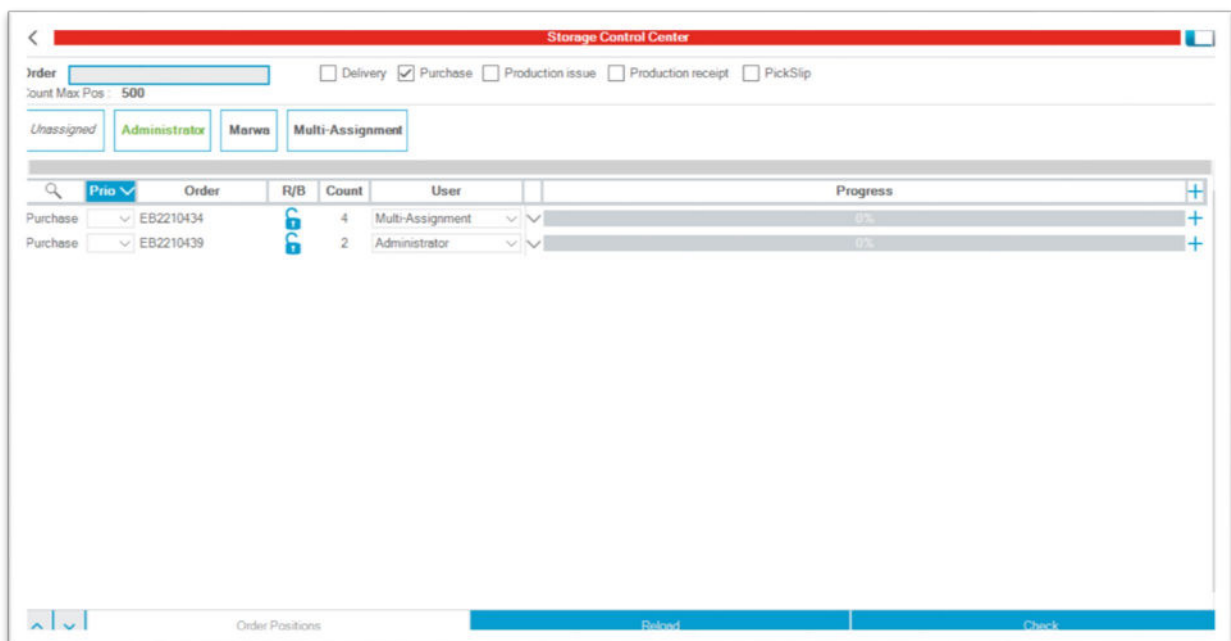
When the user changes the setting to "Only Assigned" for the module ML from store list, the list would be filtered according to the current picker session. In our case, he is the user "Administrator".

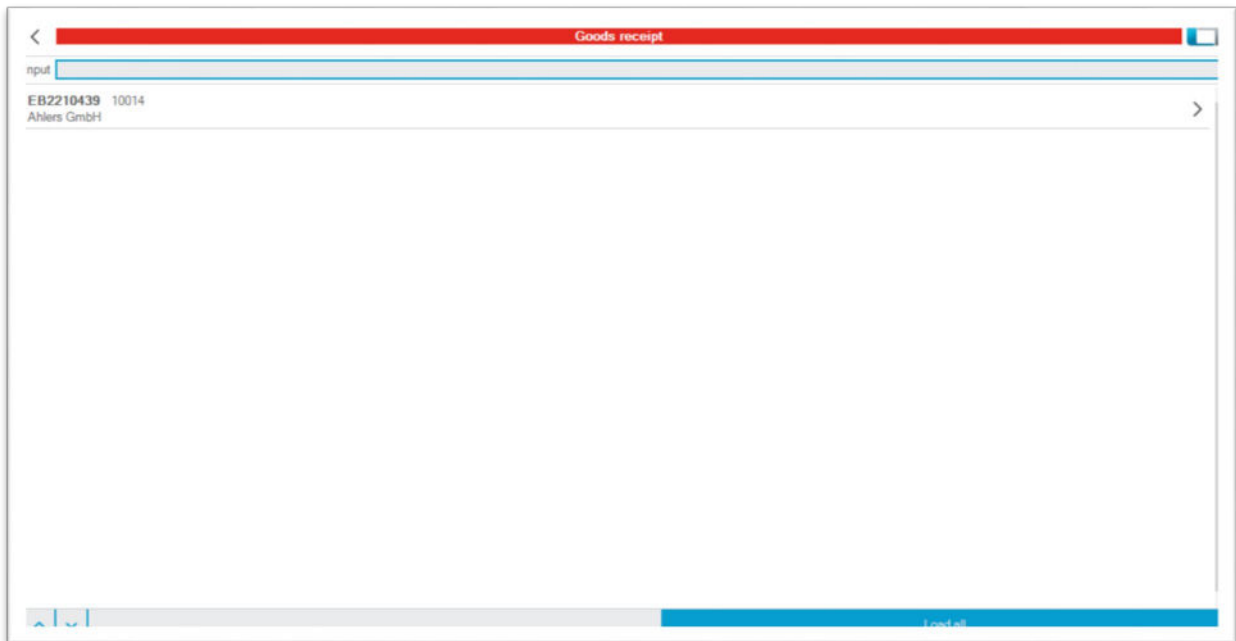


At this stage, no order would be displayed since all orders are fully assigned to another user or free.



After assigning an order to the current user "Administrator" the order would be displayed.





2.4 DEVELOPER DOCUMENTATION

Application

AlphaplanProductionReceiptApplicationExtension

AlphaplanProductionIssueApplicationExtension

AlphaplanDeliveryApplication

AlphaplanPickingSlipApplication

Setting

AlphaplanOrderPoolOperatingModeForProductionReceipt

AlphaplanOrderPoolOperatingModeForProductionIssue

AlphaplanOrderPoolOperatingModeForDelivery

AlphaplanOrderPoolOperatingModeForPickSlip

Business object

AlphaplanOrderPoolProcesses

Container

AlphaplanPickSlipOrderHeadWithPositionCountContainer

Interface

IAphaplanPickSlipDao

Service

AlphaplanOrderPoolDao

AlphaplanPurchaseDao

AlphaplanProductionOrderDao

AlphaplanPickSlipBaseDao

AlphaplanPickSlipDao

Helper

AlphaplanOrderPoolProcessSourceExtension

AlphaplanOrderPoolProcessHelperExtension

Registry

AlphaplanApplicationRegistry

AlphaplanPermissionRegistry

AlphaplanSettingRegistry

3 9.1 PROALPHA 9.0.X INTEGRATION

3.1 TECHNICAL DOCUMENTATION

A new proALPHA 9.0 DLL is integrated.

The connection data are the following:

connectionString="<http://dev-pa03:14064/external/apsv>" userName="system" password="kompakt" app-ServerInfo="" serviceID="QLMOBILE"

Or:

```
connectionString="http://172.20.2.195:14064/external/apsv"  userName="system"  password="kompakt"  
appServerInfo="" serviceID="QLMOBILE"
```

Additional information :

The DLL was generated from a **9.0.2** proALPHA version but named **pAMobileInterface9** so that the same DLL would support the different 9.0 versions like 9.0.0 or 9.0.1.

However, for proALPHA **9.0.0** or **9.0.1** a downgrade package is necessary from the proALPHA component side.

4 9.1 PROALPHA MOVE CLOSE ORDER HEAD

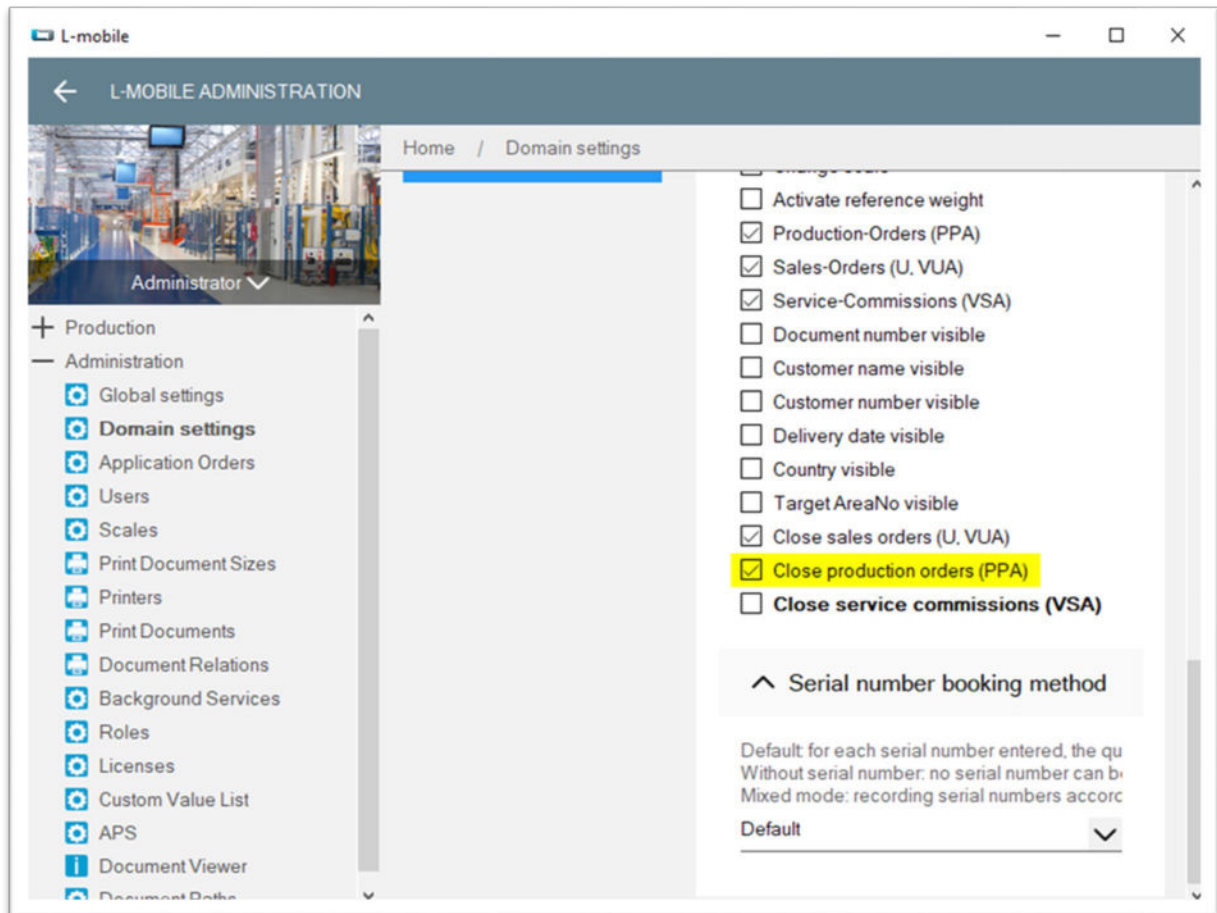
4.1 USER DOCUMENTATION

In this feature allows the L-mobile user to choose either close the order automatically after booking the last commission position or keep it open.

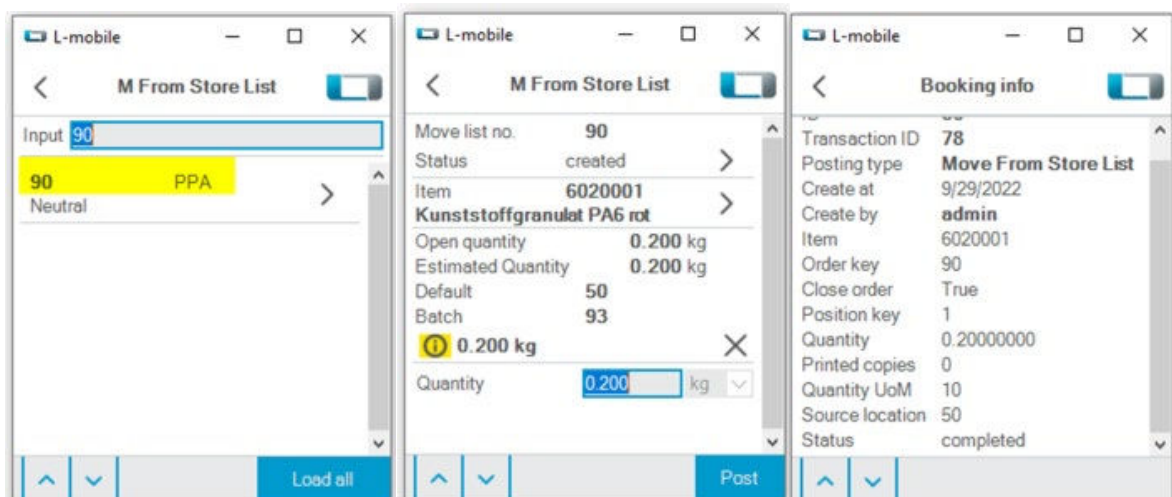
For this matter, 6 settings are created in **move from store** and **move from multi-picking** modules to close the production, sales and service orders after booking the last position.

4.2 MOVE FROM STORE & MOVE FROM MULTI-PICKING MODULES

Close production order setting - activated.



→ The user select the order and book last position, then the order will automatically be closed and disappeared in proALPHA.



→ Result in the ERP : the order is finished and disappear from the commission list.

Kommissionierungsvorschläge

Datei Bearbeiten Funktion Extras Stamm Info

mark Hinweis

Belegdatum

KoZone

Bezeichnung

KommissZone

HBA

Pavh

Kommissionierstatus

KoLg

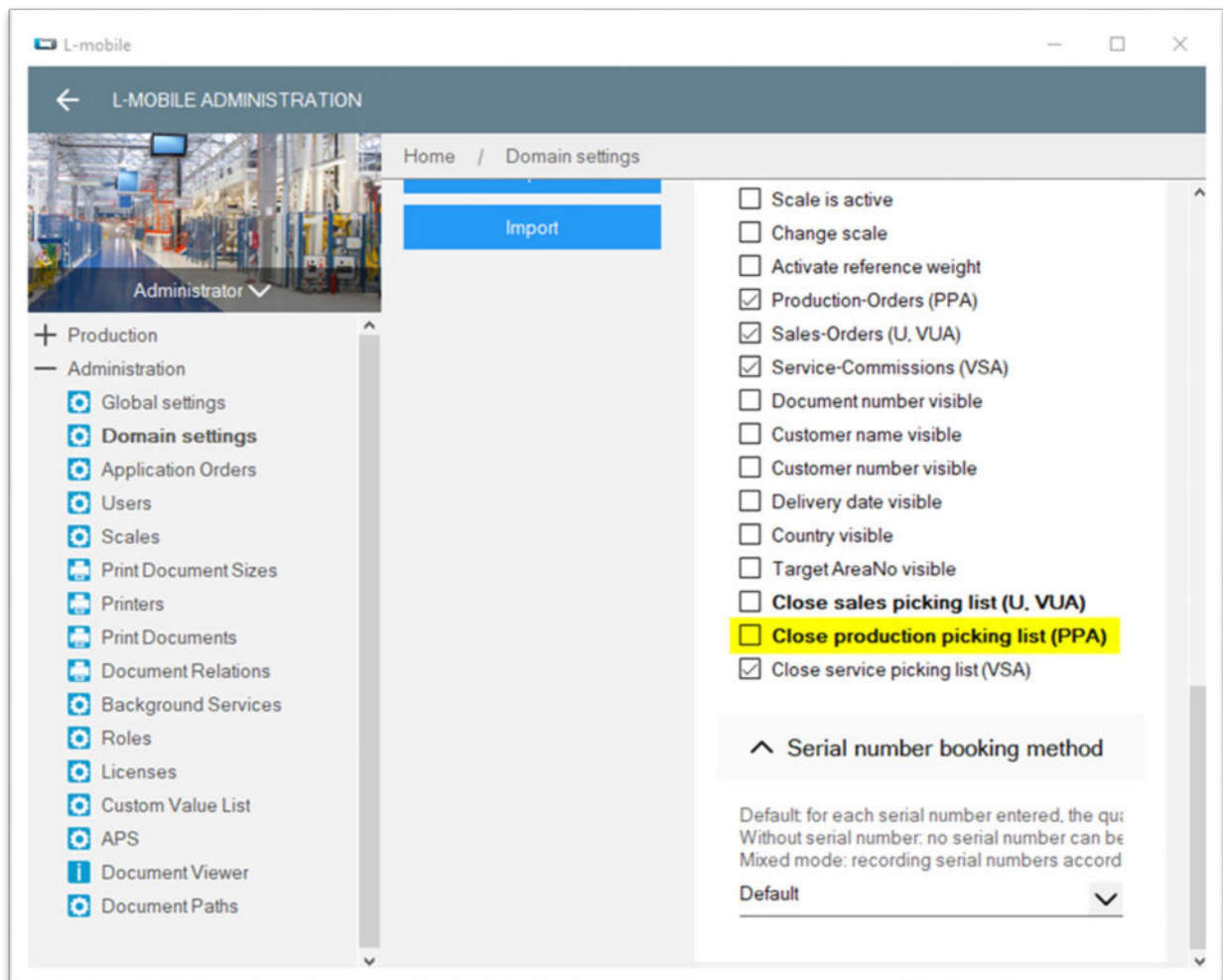
Termin

Bezeichnung KommLager

Kommissionierplatz

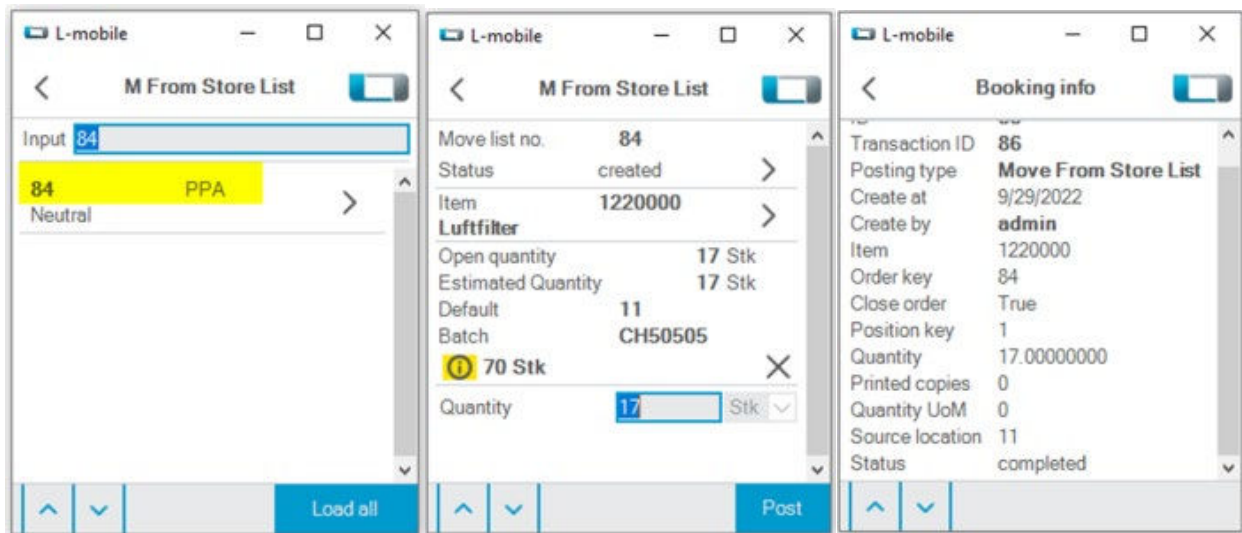
#Drk FN

Close production order setting - deactivated.



The screenshot shows the 'L-MOBILE ADMINISTRATION' interface. The left sidebar contains a menu with 'Production' and 'Administration' sections. Under 'Administration', 'Domain settings' is selected. The main content area shows 'Domain settings' with a list of checkboxes. The 'Close production picking list (PPA)' checkbox is highlighted in yellow and is currently unchecked. Other checkboxes include 'Scale is active', 'Change scale', 'Activate reference weight', 'Production-Orders (PPA)', 'Sales-Orders (U, VUA)', 'Service-Commissions (VSA)', 'Document number visible', 'Customer name visible', 'Customer number visible', 'Delivery date visible', 'Country visible', 'Target AreaNo visible', and 'Close sales picking list (U, VUA)'. Below the checkboxes, there is a section for 'Serial number booking method' with a dropdown menu set to 'Default'.

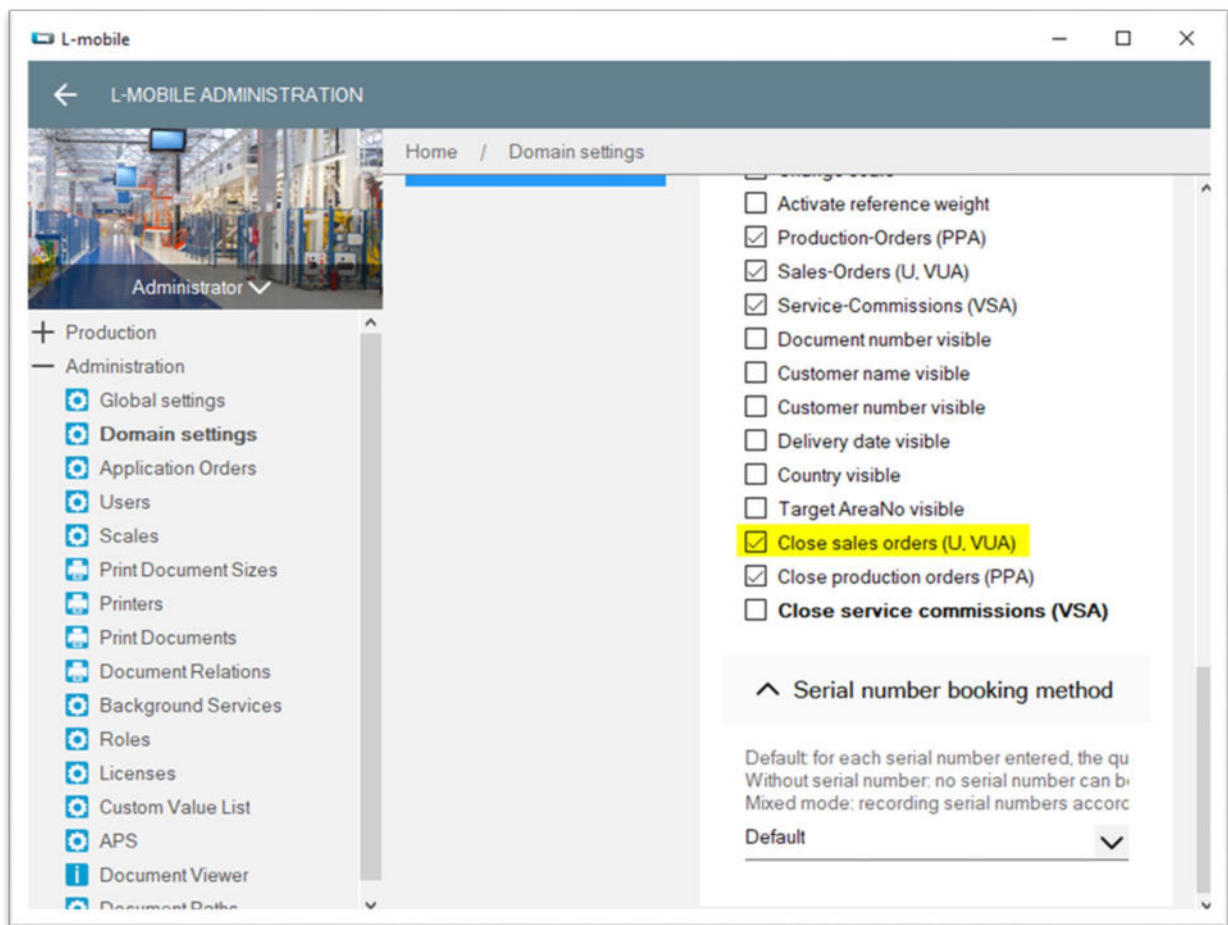
→ Then the user select the order and book last position but the order will remain in proALPHA with the status "Picked".



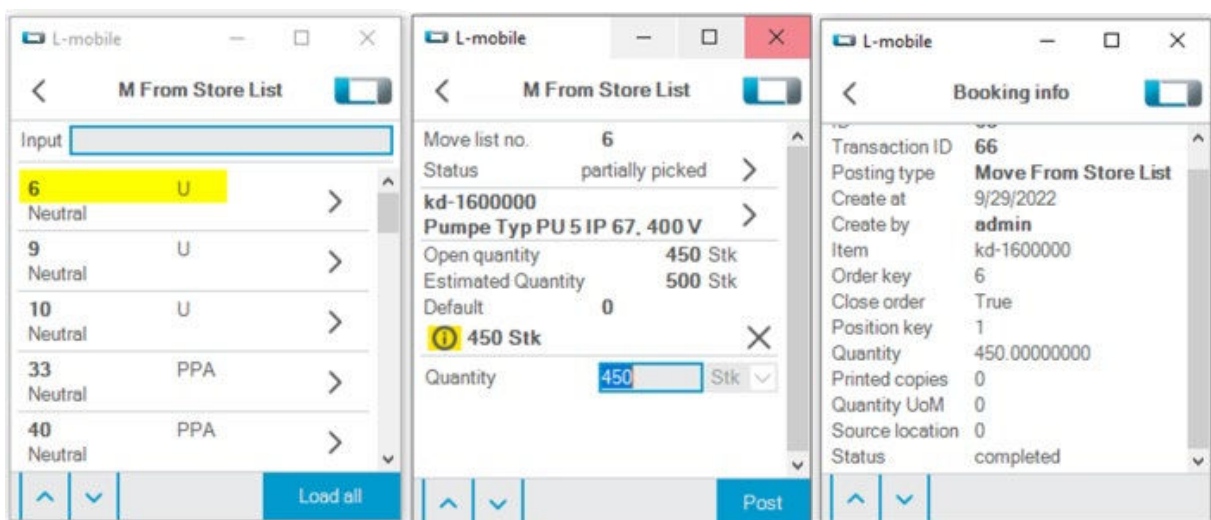
→ Result in the ERP : The order remained in the commission order list with status "**Picked**".

Kommissionierungsvorschläge										
Datei Bearbeiten Funktion Extras Stamm Info										
mark	Hinweis	ammirN	Belegdatum	KoZone	Bezeichnung	KommissZone	HBA	Pavh	Kommissionierstatus	KoLg Termin
		84	23.11.2020	K1	Bereitstellung Versand	PPA			kommissioniert	11 17.10.2021
										Bezeichnung KommLager
										Kommissionierplatz
										#Drk FN
										0 50

Close sales order setting - activated.



→ The user select the sales order (U or VUA) and book the last position, then the order will automatically be closed and disappeared in proALPHA.

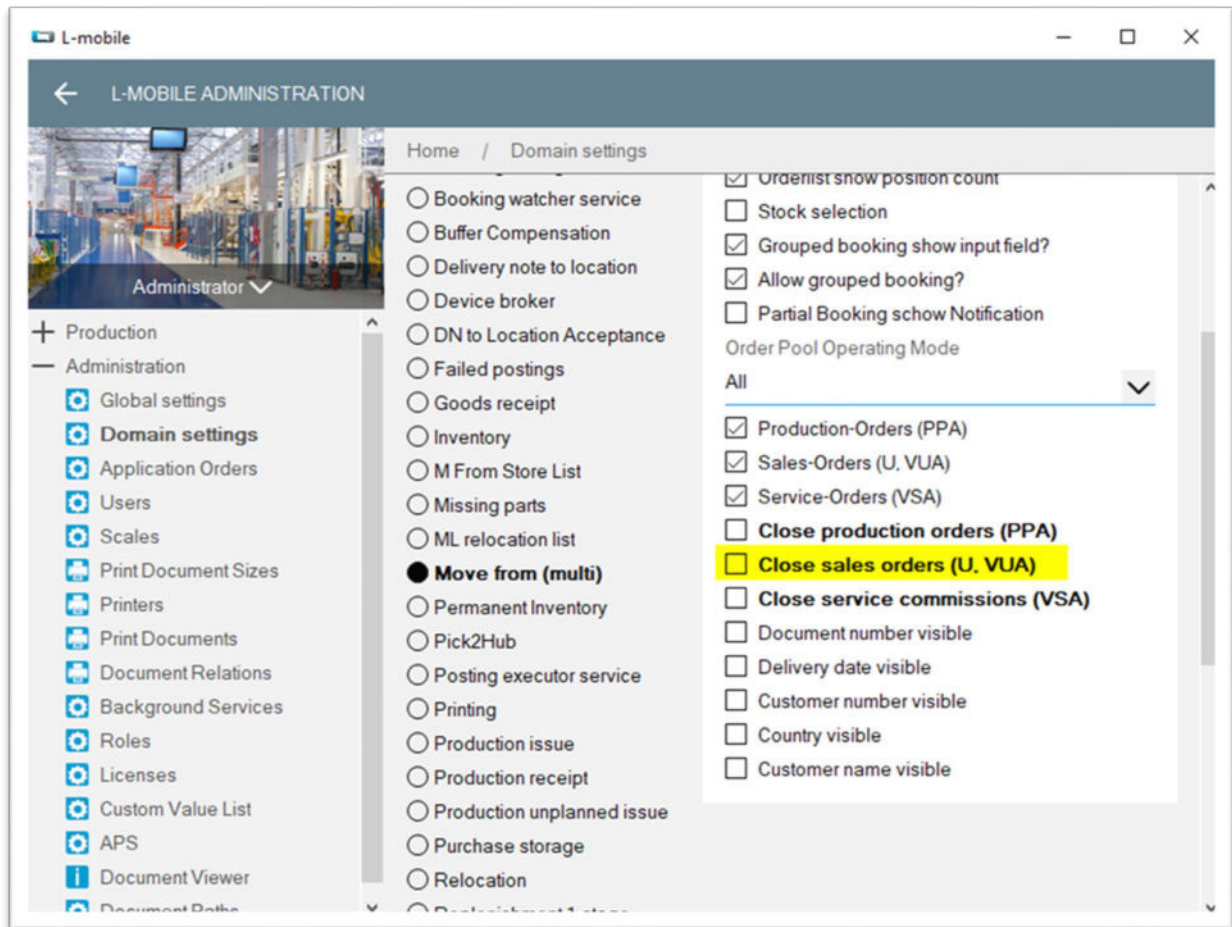


→ Result in the ERP: The order is finished and disappears from the commission list.

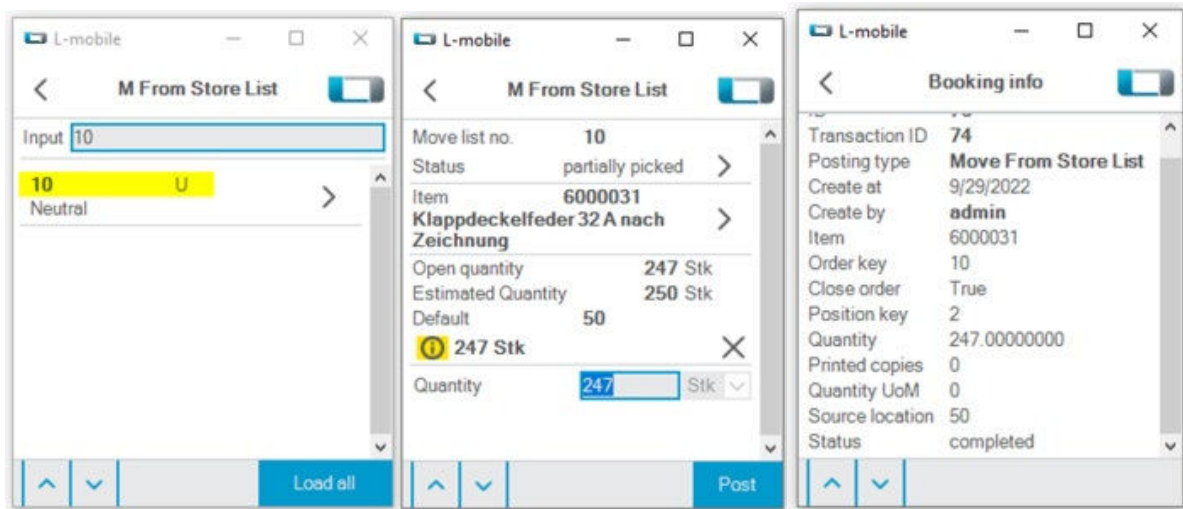
Kommissionierungsvorschläge

Datei Bearbeiten Funktion Extras Stamm Info

Close sales order setting - deactivated.



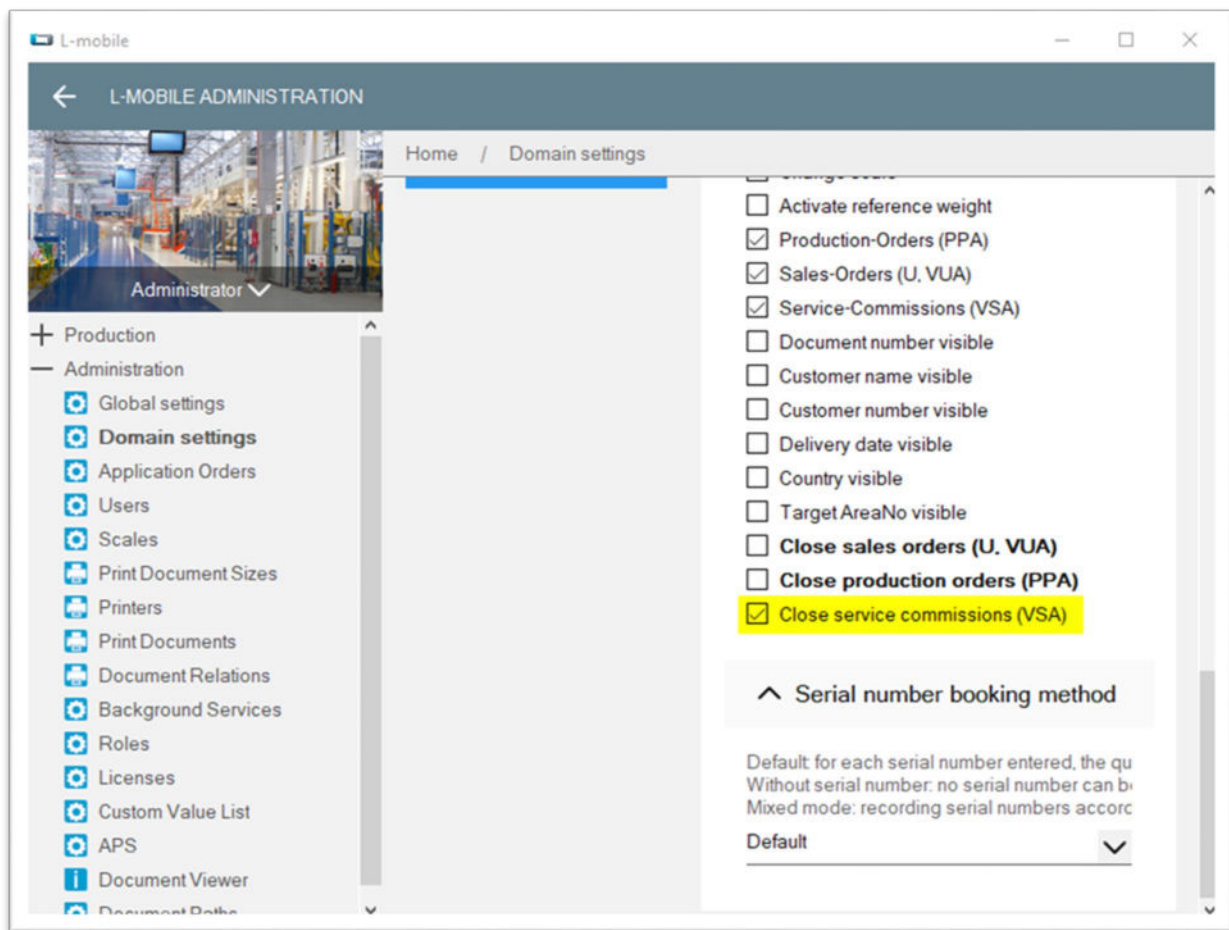
→ The user select the order and book the last position, then the order will remain in proALPHA with the status "Picked".



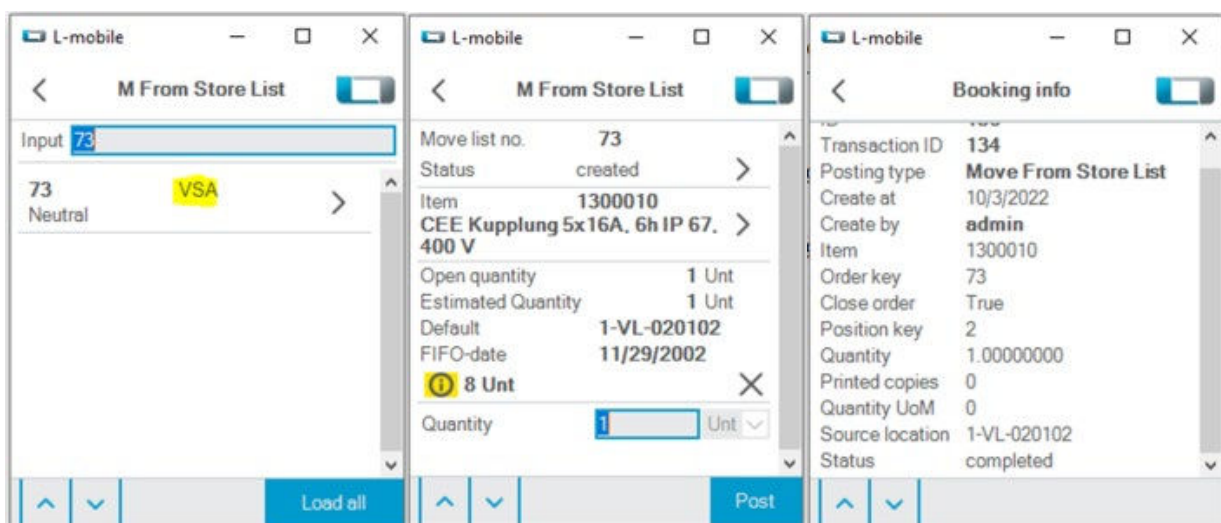
→ Result in the ERP : The order remains in commission list with status "**Picked**".

mark	Hinweis	mmiNr	Belegdatum	KoZone	Bezeichnung	KommissZone	HBA	Pavh	Kommissionierstatus	KoLg	Termin	Bezeichnung	KommLager	Kommissionierplatz	#Drk	FN
			10.23.05.2016	K1	Bereitstellung	Versand	AUF		kommissioniert		11.31.05.2016	Kommissionierlager	Versand		1	50

Close service order setting - activated.



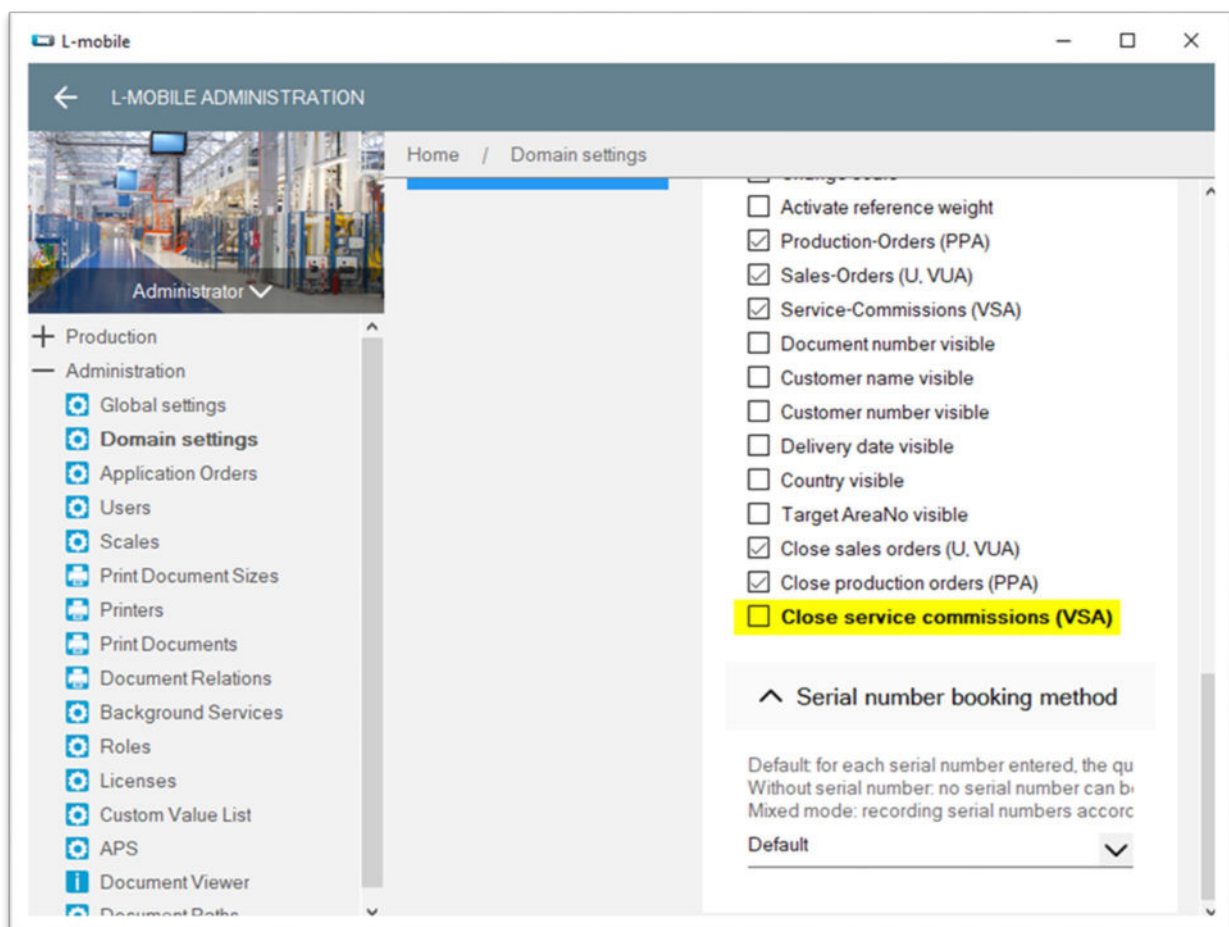
→ The user select the service order and book last position, then the order will automatically be closed and disappeared in proALPHA.



→ Result in the ERP: The order is finished and disappears from commission list.

Kommissionierungsvorschläge																					
Datei Bearbeiten Funktion Extras Stamm Info																					
 																					
mark	Hinweis	mmiNr	Belegdatum	KoZone	Bezeichnung	KommissZone	HBA	Pavh	Kommissionierstatu	KoLg	Bezeichnung	KommLager	Komm	Termin	#Drk	FN	#Fom	FoMKBL	Sachbearb	VertGr	dum
			72.11.08.2021	K1	Bereitstellung Versand	UML		neu		11	Kommissionierlager Versand		16.08.2021	0	50	1	nein	Zander		nein	
			74.23.09.2016	K1	Bereitstellung Versand	PPA		neu		11	Kommissionierlager Versand		28.07.2021	0	50	1	nein	Zander		?	
			75.23.09.2016	K1	Bereitstellung Versand	PPA		neu		11	Kommissionierlager Versand		15.08.2021	0	50	1	nein	Zander		?	

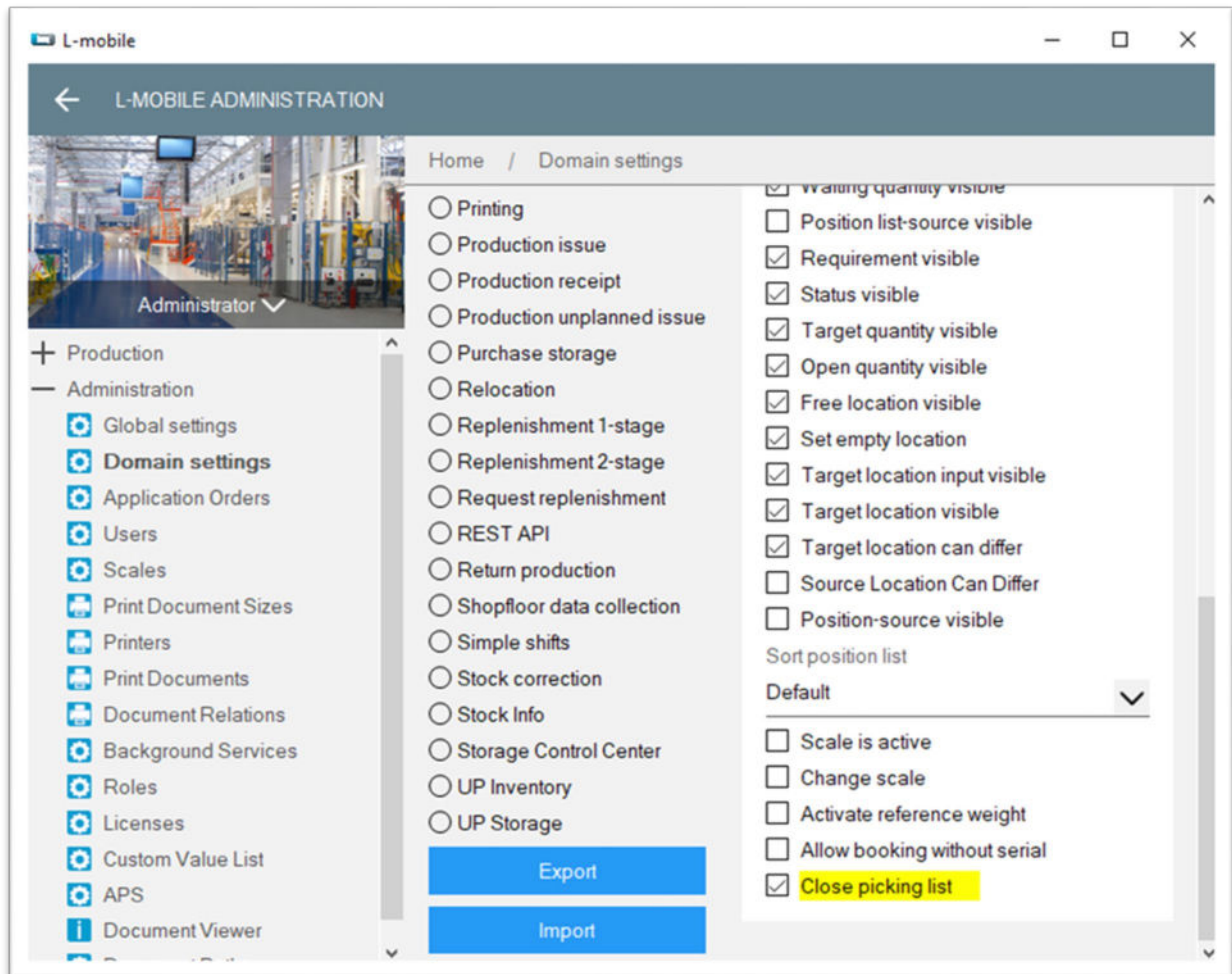
Service order setting - deactivated.



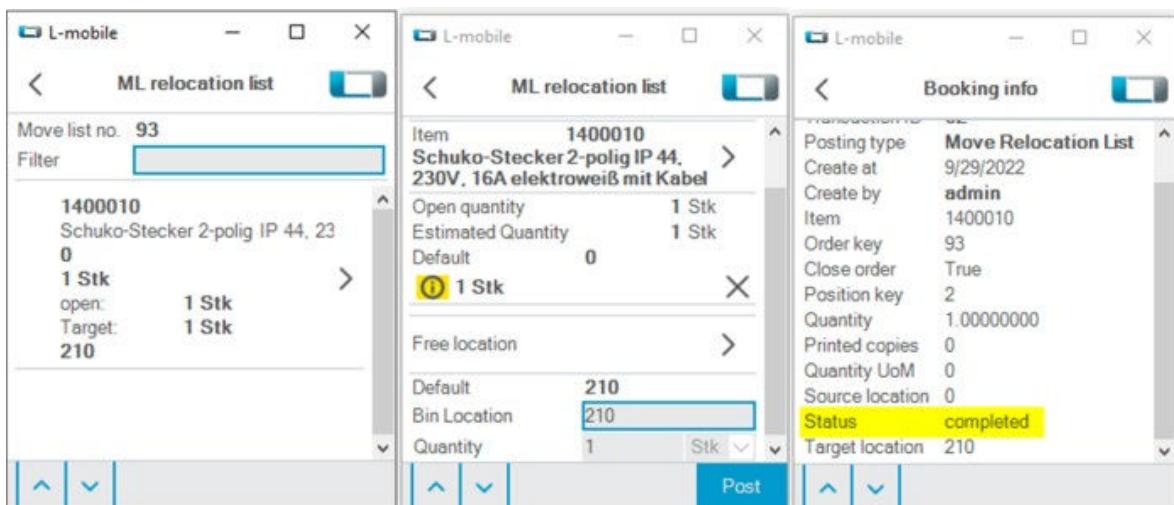
→ The user select the order and book the last position, then the order will remain in proALPHA with the status **"Picked"**.

Kommissionierungsvorschläge																					
Datei Bearbeiten Funktion Extras Stamm Info																					
       																					
mark Hinweis	mmnni	Belegdatum	KoZone	Bezeichnung	KommisZone	HBA	Pavh	Kommissionierstatus:	KoLg	Bezeichnung	KommLager	Komm	Termin	#Drk	FN	#Fom	MKB	L Sachb	verb	Gr	dium
		53 12.03.2020	K1	Bereitstellung Versand		VSA		kommissioniert	11	Kommissionierlager Versand			12.03.2020	0 50	1	nein		Zander		?	

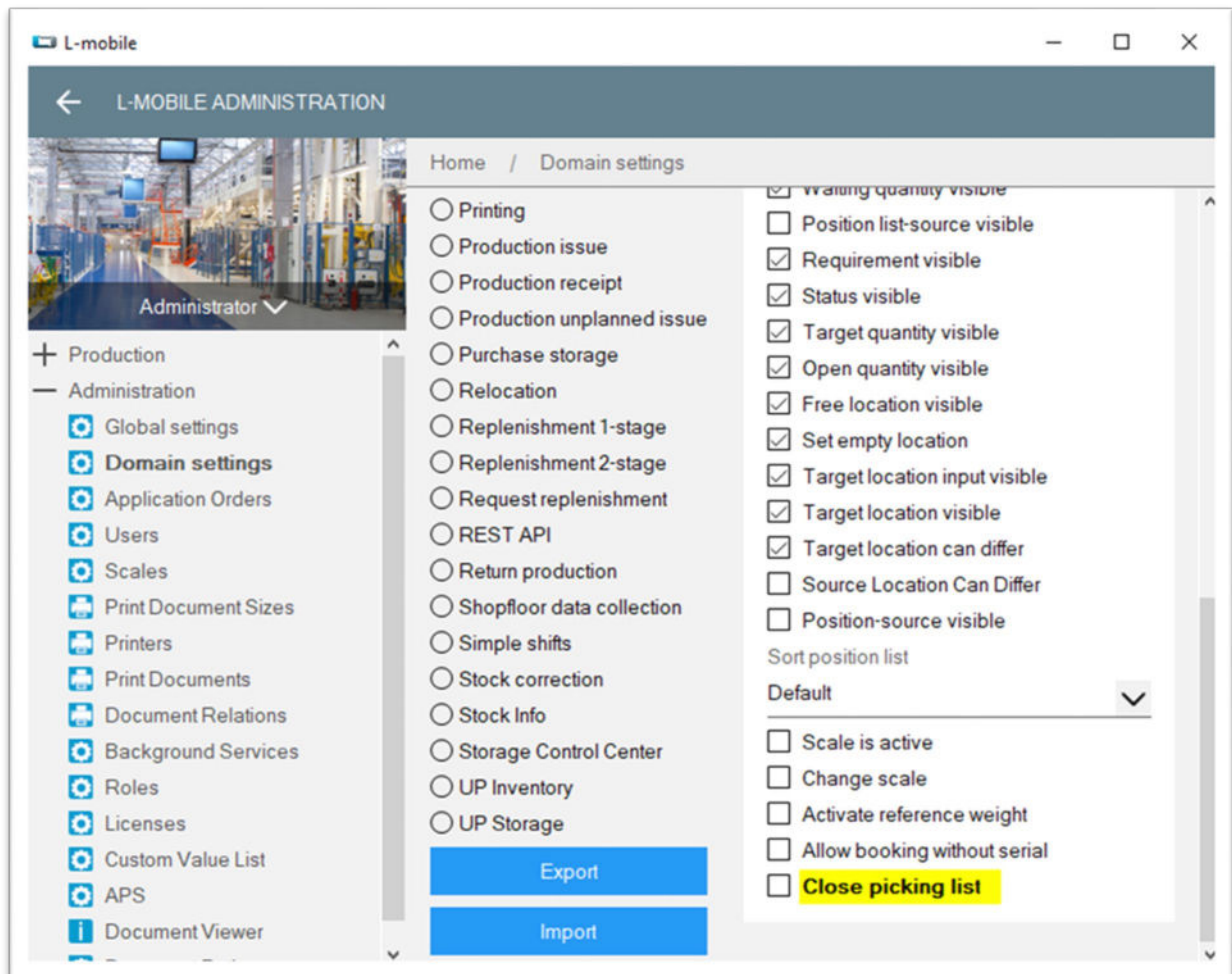
Close picking list setting - activated



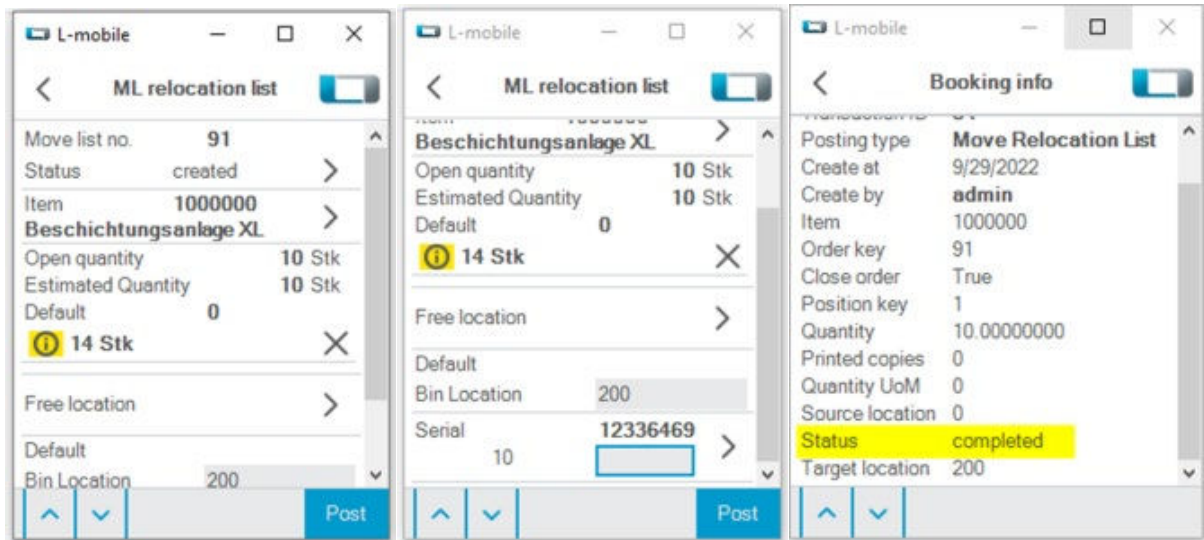
→ The user select the service order and book last position, then the order will automatically be closed and disappeared in proALPHA.



Close picking list setting - deactivated



→ The user select the order and book the last position, then the order will remain in proALPHA with the status "**Picked**".



The first screenshot shows the 'ML relocation list' form with fields for Move list no. (91), Status (created), Item (1000000), Open quantity (10 Stk), Estimated Quantity (10 Stk), Default (0), Free location, and Bin Location (200). The second screenshot shows the 'Beschichtungsanlage XL' form with fields for Open quantity (10 Stk), Estimated Quantity (10 Stk), Default (0), Free location, Bin Location (200), and Serial (10). The third screenshot shows the 'Booking info' form with fields for Posting type (Move Relocation List), Create at (9/29/2022), Create by (admin), Item (1000000), Order key (91), Close order (True), Position key (1), Quantity (10.00000000), Printed copies (0), Quantity UoM (0), Source location (0), Status (completed), and Target location (200).

→ Result in the ERP: The order remains in commission list with status **"Picked"**.

mark	Hinweis	KommiNr	Belegdatum	KoZone	Bezeichnung	KommissZone	HBA	Pavh	Kommissionierstatus	KoLg	Termin	Bezeichnung	KommLager	Kommissionierplatz	#Drk	FN
		91	29.09.2022	K1	Bereitstellung Versand	UML			kommissioniert		11.29.09.2022	Kommissionierlager Versand			0	50

4.4 DEVELOPER DOCUMENTATION

New Settings

ProAlphaMoveFromStoreCloseSalesOrdersSetting
 ProAlphaMoveFromStoreCloseProductionOrdersSetting
 ProAlphaMoveFromStoreCloseServiceOrdersSetting
 ProAlphaMoveFromMultipickingCloseProductionOrdersSetting
 ProAlphaMoveFromMultipickingCloseSalesOrdersSetting
 ProAlphaMoveFromMultipickingCloseServiceOrdersSetting
 ProAlphaMoveRelocationCloseOrderSetting

New Helpers

MoveListDocumentTypesHelper
 ProAlphaMoveListHelper

Modified Applications

ProAlphaMoveFromMultiPickingApplicationExtension

ProAlphaMoveFromStoreApplicationExtension

ProAlphaMoveRelocationApplicationExtension

Modified BusinessObjects

ProAlphaPickingOrderHeadExtension

Modified Posting

ProAlphaMoveRelocationListPositionPostingExtension

ProAlphaMoveFromStoreListPositionPostingExtension

Modified Posting Handler

ProAlphaMoveFromStoreListPositionPostingExtension

ProAlphaMoveRelocationListPositionPostingHandler

New warehouse resource

Name	English	German	Hungarian	French	Spanish
ProAlpha-ClosePickingOrders	Close picking list	Kommissionier-liste verbuchen	Gyűjtőlista lezárása	Clôturer les listes de prélèvement	Cerrar lista de selección
ProAlpha-CloseProductionOrder	Close production orders (PPA)	Produktions-KommScheine Verbuchen (PPA)	Gyártási rendelések lezárása (PPA)	Clôturer les commandes de production (PPA)	Cerrar Pedidos de producción (PPA)
ProAlpha-CloseSalesOrder	Close sales orders (U, VUA)	Vertriebs-KommScheine Verbuchen (U, VUA)	Vevői rendelések lezárása (U, VUA)	Clôturer les commandes de vente (U, VUA)	Cerrar Pedidos de Venta (U, VUA)

Name	English	German	Hungarian	French	Spanish
ProAlpha-CloseServiceOrder	Close service commissions (VSA)	Service-Komm-Scheine Verbuchen (VSA	Szolgáltatás kommissiók lezárása	Clôturer les commandes de service (VSA)	Cerrar Pedidos de Servicio (VSA)

5 9.1 PROALPHA MOVE CLOSE POSITION

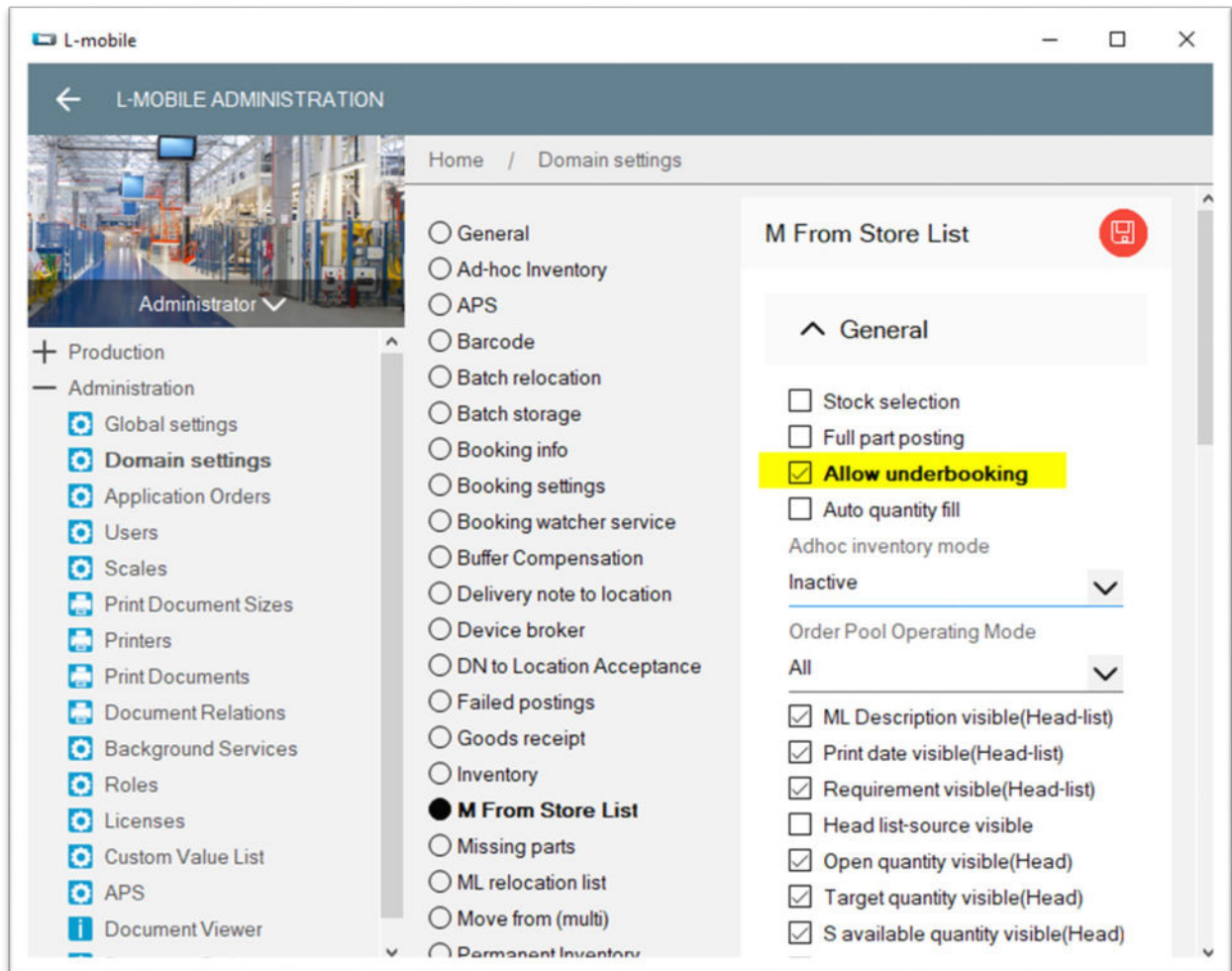
5.1 USER DOCUMENTATION

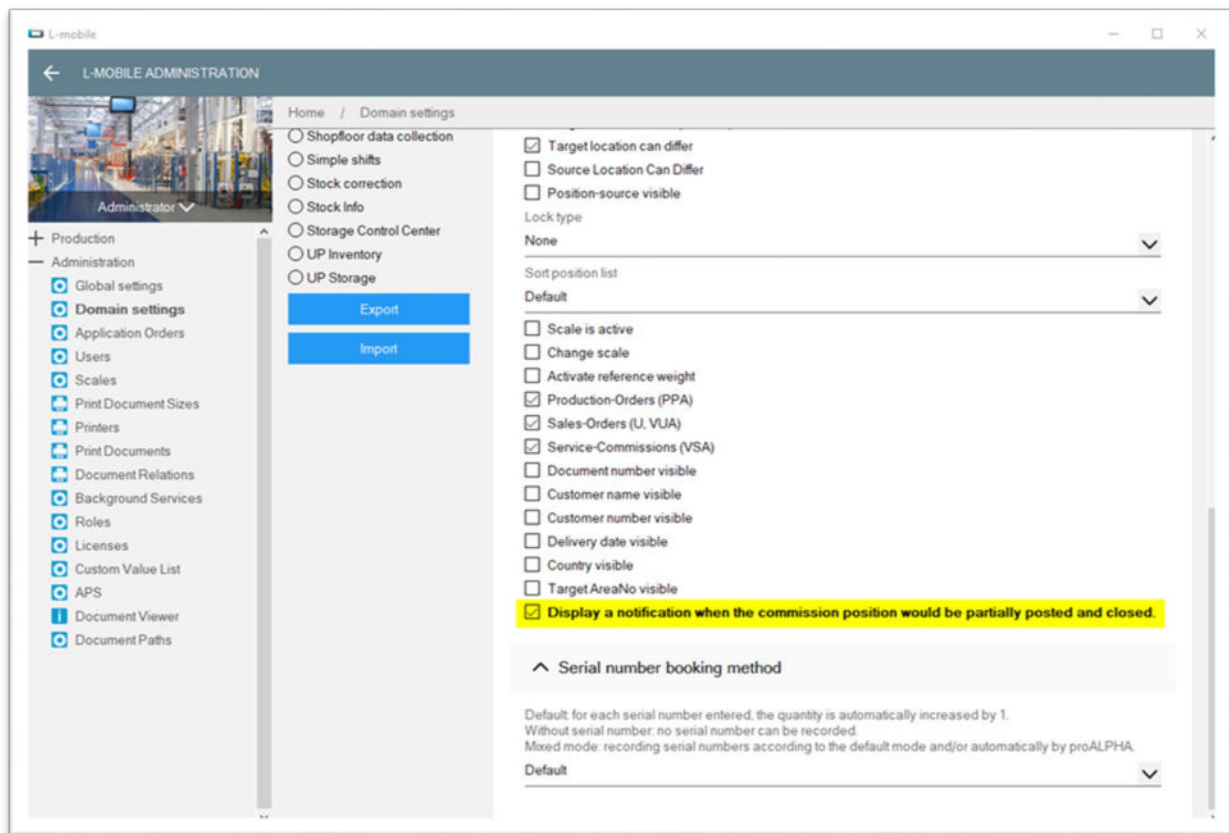
Our Goal in this feature is to allow the user to close the commission position even when the open quantity is not reached.

For that we have create two settings one for move from store Module and one for move relocation.

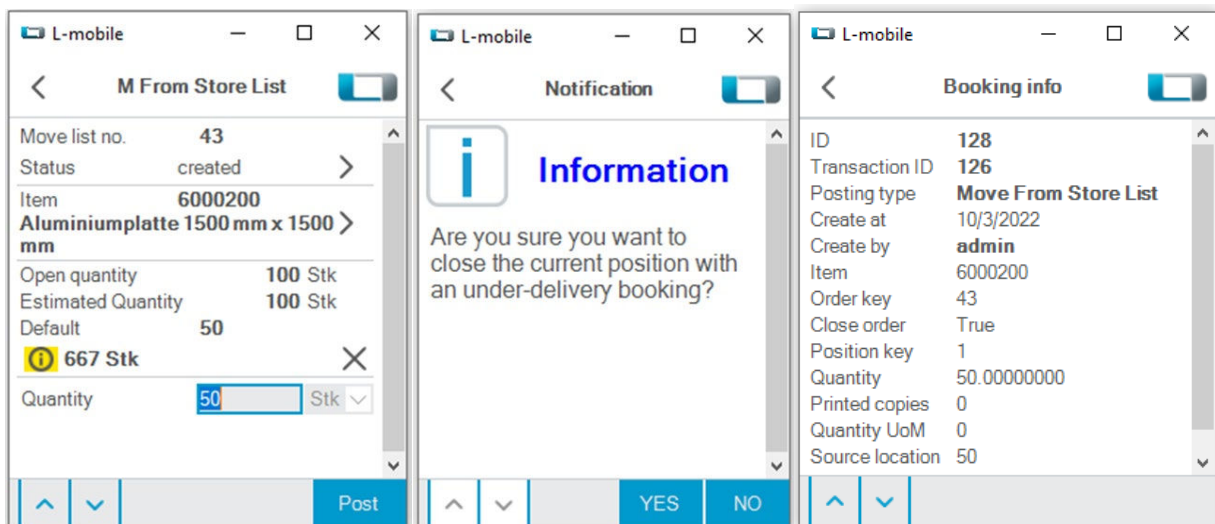
5.1.1 MOVE FROM STORE MODULE

If the new setting and allow under booking settings are checked.





Then the user select the order in Move from store module and select the required position and under book. A notification will display to user to inform the user that the position is partially picked and if he want to close the position.



If the user click on "YES" then the position will be closed with status "Picked" in the ERP.

Kommissionierungsvorschläge

Datei Bearbeiten Funktion Extras Stamm Info

mark Hinweis omminNr Belegdatum KoZone Bezeichnung KommissZone HBA Pavh Kommissionierstatus: KoLg Bezeichnung KommLager Komm Termin #Drk FN #Fom FoMKBL Sachbearb VertGr dium

43 21.02.2020 K2 Bereitstellung Produktion PPA in Bearbeitung 12 Kommissionierlager Produktion 17.02.2020 0 50 1 nein Zander ?

Positionen Kommissionierungsvorschlag

Datei Extras Info

Str	Pos	SetPos	Teil	Var	Lagerort	Lber	Lagerplatz	Kommissionierstatus	offene Menge	entnommene Menge	reservierte Mng	Chargennummer	KommNr
-	1,0		6000200				?	kommissioniert	100,000	?	50,000		
-	2,0		6000104				?	neu	799,000	?	800,000		
-	3,0		6000371				?	neu	80,000	?	80,000		
-	4,0		6000656				?	neu	80,000	?	49,000		

If the new setting and allow under booking settings are unchecked.

L-mobile

L-MOBILE ADMINISTRATION

Home / Domain settings

Administrator

Production

Administration

Global settings

Domain settings

Application Orders

Users

Scales

Print Document Sizes

Printers

Print Documents

Document Relations

Background Services

Roles

Licenses

Custom Value List

APS

Document Viewer

Document Paths

Shopfloor data collection

Simple shifts

Stock correction

Stock Info

Storage Control Center

UP Inventory

UP Storage

Export

Import

Target location can differ

Source Location Can Differ

Position-source visible

Lock type

None

Sort position list

Default

Scale is active

Change scale

Activate reference weight

Production-Orders (PPA)

Sales-Orders (U. VUA)

Service-Commissions (VSA)

Document number visible

Customer name visible

Customer number visible

Delivery date visible

Country visible

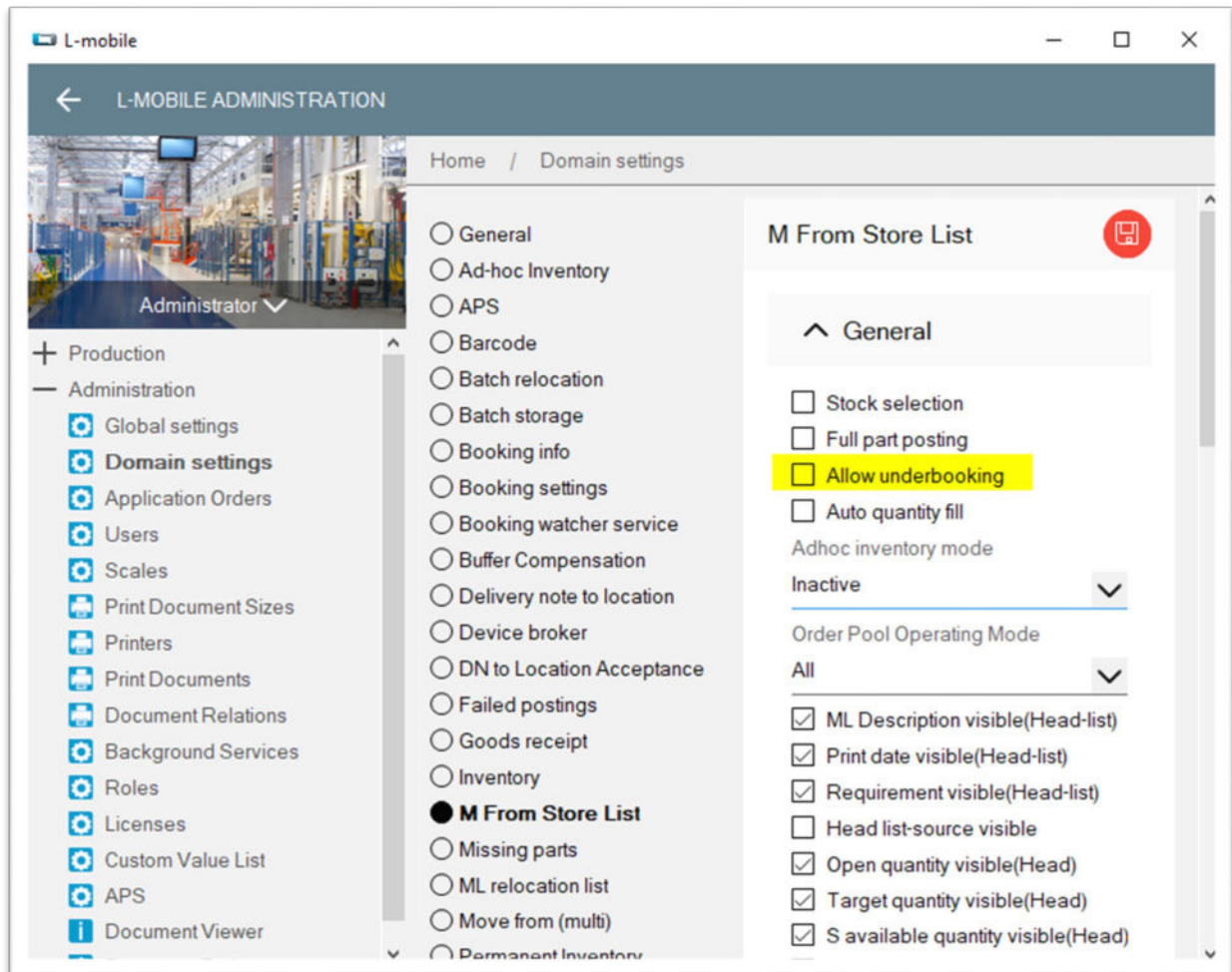
Target AreaNo visible

Display a notification when the commission position would be partially posted and closed.

Serial number booking method

Default for each serial number entered, the quantity is automatically increased by 1.
Without serial number: no serial number can be recorded.
Mixed mode: recording serial numbers according to the default mode and/or automatically by proALPHA.

Default



Then the user select the order in Move from store module and select the required position and under book.

L-mobile M From Store List

Move list no. **43**

Status **created**

Item **6000104**
Zylinderschraube mit Innensechskant M8x30, DIN 912

Open quantity **800 Stk**

Estimated Quantity **800 Stk**

Default **50**

4.959 Stk

Quantity Stk

Post

L-mobile Booking info

ID **132**

Transaction ID **130**

Posting type **Move From Store List**

Create at **10/3/2022**

Create by **admin**

Item **6000104**

Order key **43**

Position key **2**

Quantity **400.00000000**

Printed copies **0**

Quantity UoM **0**

Source location **50**

Status **completed**

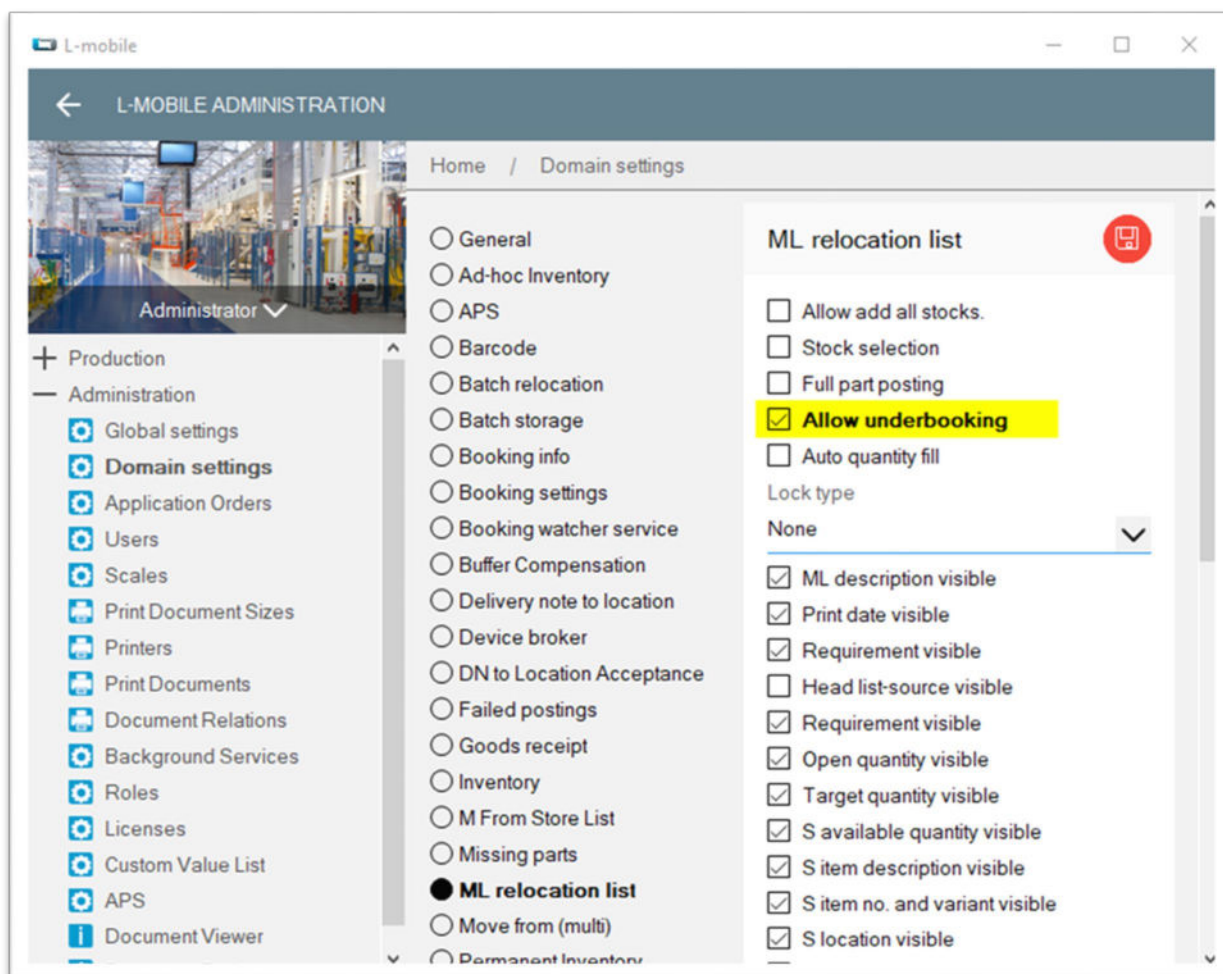
then the position will be remained open with status "Partially Picked" in the ERP.

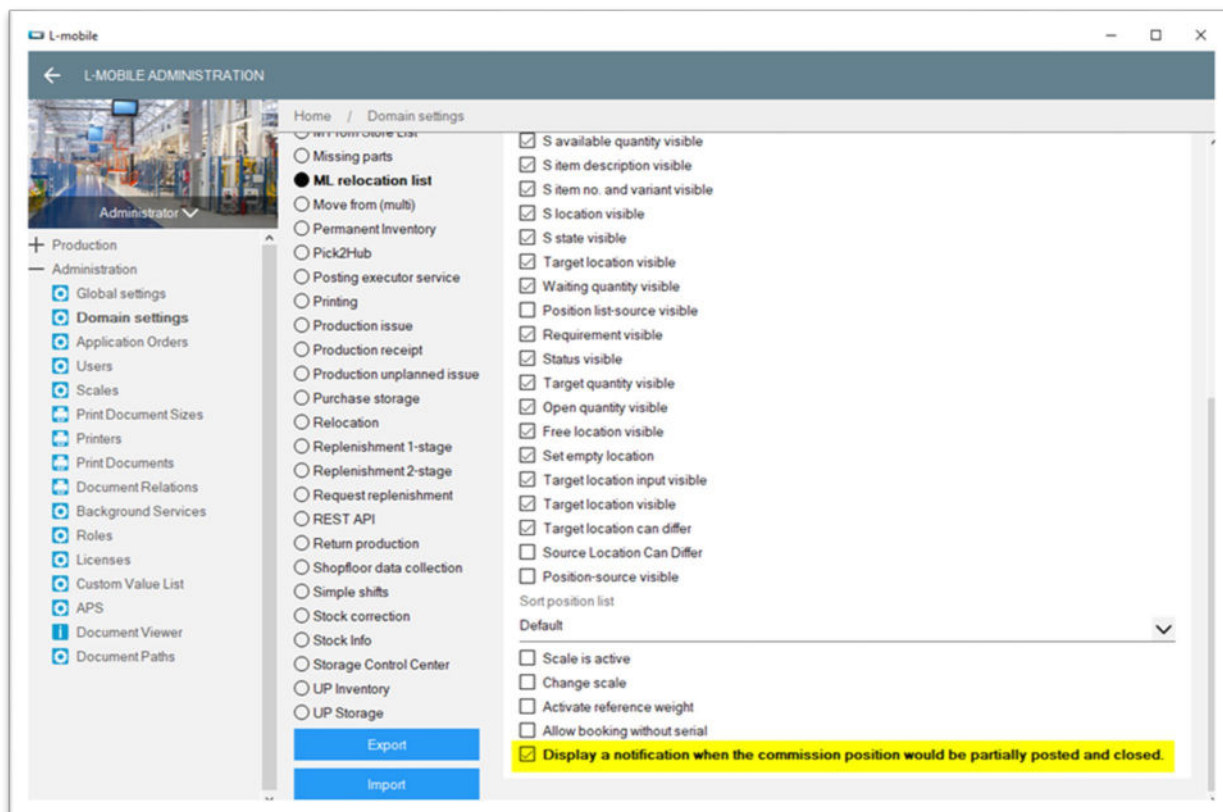
Kommissionierungsvorschläge													
Datei Bearbeiten Funktion Extras Stamm Info													
mark Hinweis	mmnr	Belegdatum	KoZone	Bezeichnung	KommZone	HBA	Pavh	Kommissionierstatus	KoLg	Bezeichnung	Kommlager	Komm Termin	#Dirk FN #Fom FoMKBL Sachbearb
43	21.02.2020	K2	Bereitstellung	Produktion	PPA		in Bearbeitung		12	Kommissionierlager	Produktion	17.02.2020	0 50 1 nein Zander

Positionen Kommissionierungsvorschlag													
Datei Extras Info													
Str	Pos	SetPos	Teil	Var	Lagerort	LBer	Lagerplatz	Kommissionierstatus	offene Menge	entnommene Menge	reservierte Mng	Chargennummer	KommNr
-	1,0		6000200		?			kommissioniert	100,000	?	50,000		
					50			kommissioniert	?	50,000	50,000		
-	2,0		6000104		?			teilkommissioniert	799,000	?	800,000		
					50			kommissioniert	?	400,000	400,000		
					50			in Bearbeitung	?	0,000	400,000		
-	3,0		6000371		?			neu	80,000	?	80,000		
					50			neu	?	0,000	80,000		
-	4,0		6000656		?			neu	80,000	?	49,000		
					50			neu	?	0,000	49,000		

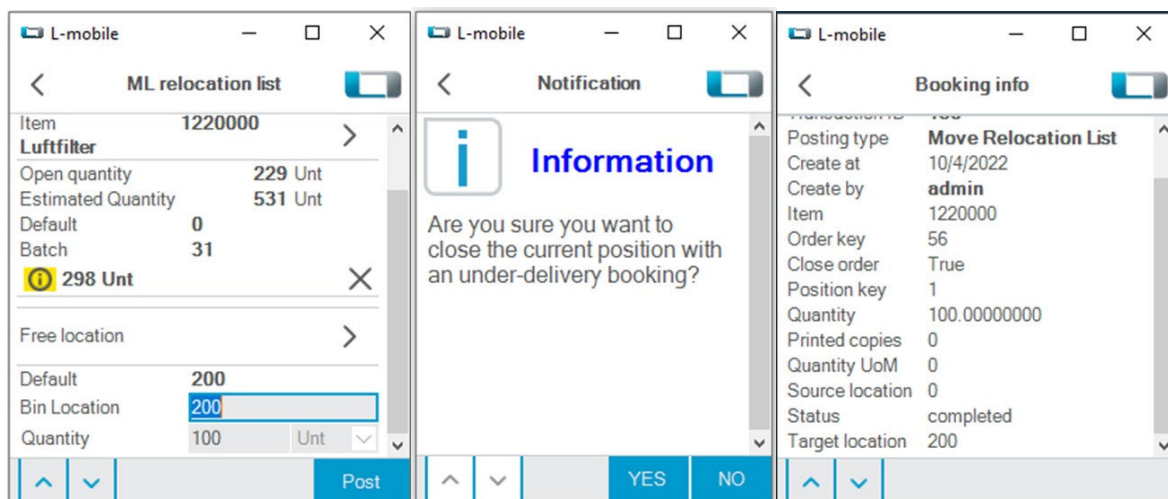
5.1.2 MOVE RELOCATION MODULE

If the new setting and allow under booking settings are checked.





Then the user select the order in Move Relocation module and select the required position and under book. A notification will display to user to inform the user that the position is partially picked and if he want to close the position



If the user click on "YES" then the position will be closed with status "Picked" in the ERP.

Kommissionierungsvorschläge														
Datei Bearbeiten Funktion Extras Stamm Info														
mark Hinweis	3mmirNr	Belegdatum	KoZone	Bezeichnung	KommissZone	HBA	Pavh	Kommissionierstatus	KoLg	Bezeichnung	Kommlager	Komm Termin	#Drk FN	#Fom FoMKBL
56	18.03.2020	K1	Bereitstellung	Versand	UML			in Bearbeitung	11	Kommissionierlager	Versand	18.03.2020	0 50	1 nein
														Zander
														nein

Positionen Kommissionierungsvorschlag														
Datei Extras Info														
Str	Pos	SetPos	Teil	Var	Lagerort	LBer	Lagerplatz	Kommissionierstatus	Chargennummer	KommNr	reservierte Mng	entnommene Menge	offene Menge	Bereitstelltermin
-	1,0		1220000				?	kommissioniert			0,000	?	72,000	18.03.2020
							0	kommissioniert			0,000	402,000	?	18.03.2020
-	2,0		1300010				?	kommissioniert			0,000	?	227,000	18.03.2020
							0	kommissioniert			0,000	200,000	?	18.03.2020
							G15-01-01-01							

If the new setting and allow under booking settings are unchecked.

L-mobile

←

L-MOBILE ADMINISTRATION

Administrator

+

 Production

-

 Administration

Global settings

Domain settings

Application Orders

Users

Scales

Print Document Sizes

Printers

Print Documents

Document Relations

Background Services

Roles

Licenses

Custom Value List

APS

Document Viewer

Home / Domain settings

General

Ad-hoc Inventory

APS

Barcode

Batch relocation

Batch storage

Booking info

Booking settings

Booking watcher service

Buffer Compensation

Delivery note to location

Device broker

DN to Location Acceptance

Failed postings

Goods receipt

Inventory

M From Store List

Missing parts

ML relocation list

Move from (multi)

Permanent Inventory

ML relocation list

Allow add all stocks.

Stock selection

Full part posting

Allow underbooking

Auto quantity fill

Lock type

None

ML description visible

Print date visible

Requirement visible

Head list-source visible

Requirement visible

Open quantity visible

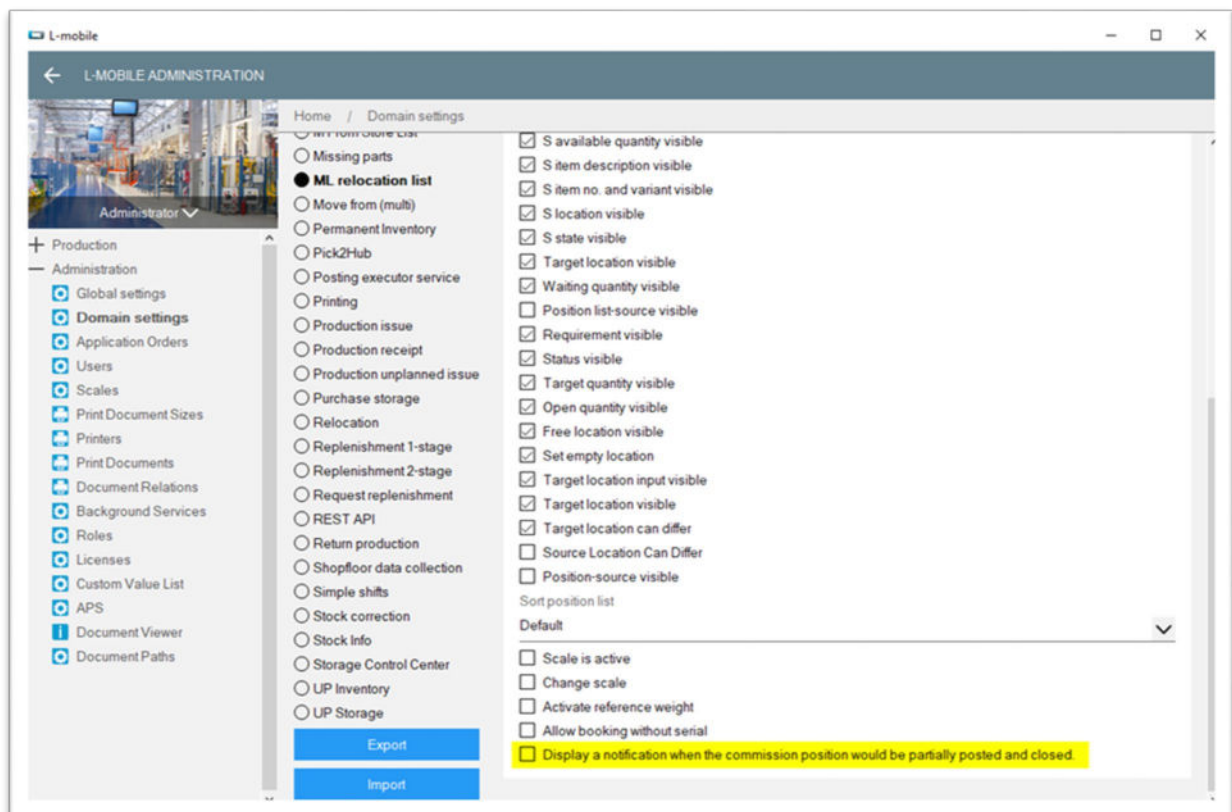
Target quantity visible

S available quantity visible

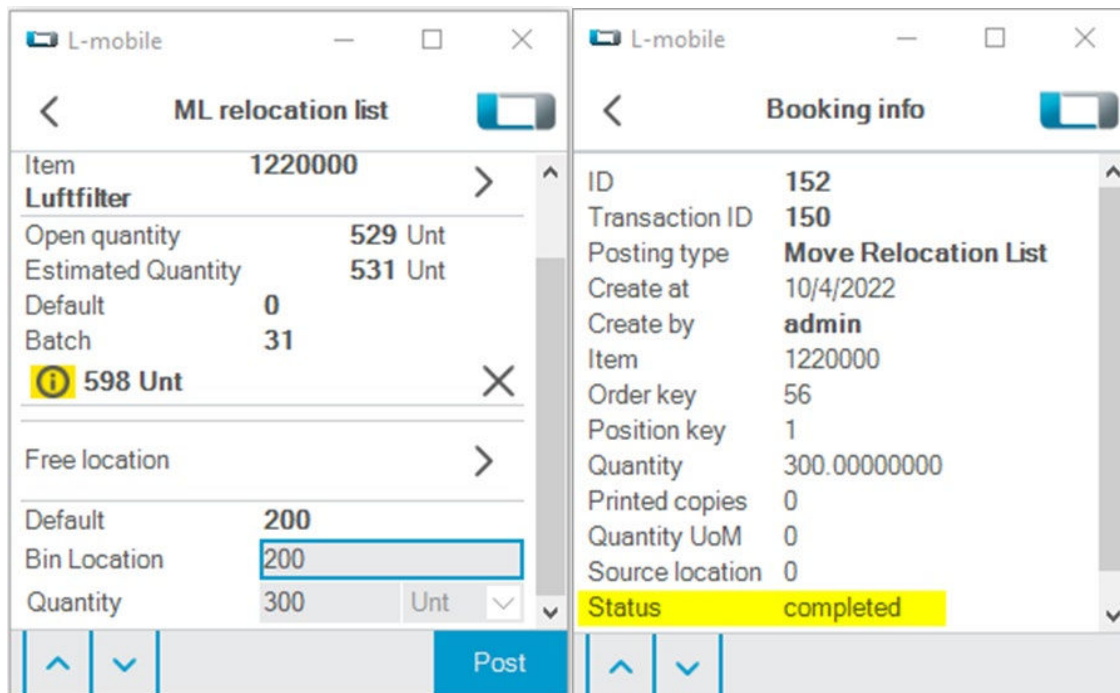
S item description visible

S item no. and variant visible

S location visible



Then the user select the order in Move Relocation module and select the required position and under book.



Then the position will be remained open with status "Partially Picked" in the ERP.

Kommissionervorschläge

Datei Bearbeiten Funktion Extras Stamm Info

</

5.1.3 MOVE FROM MULTIPICKING

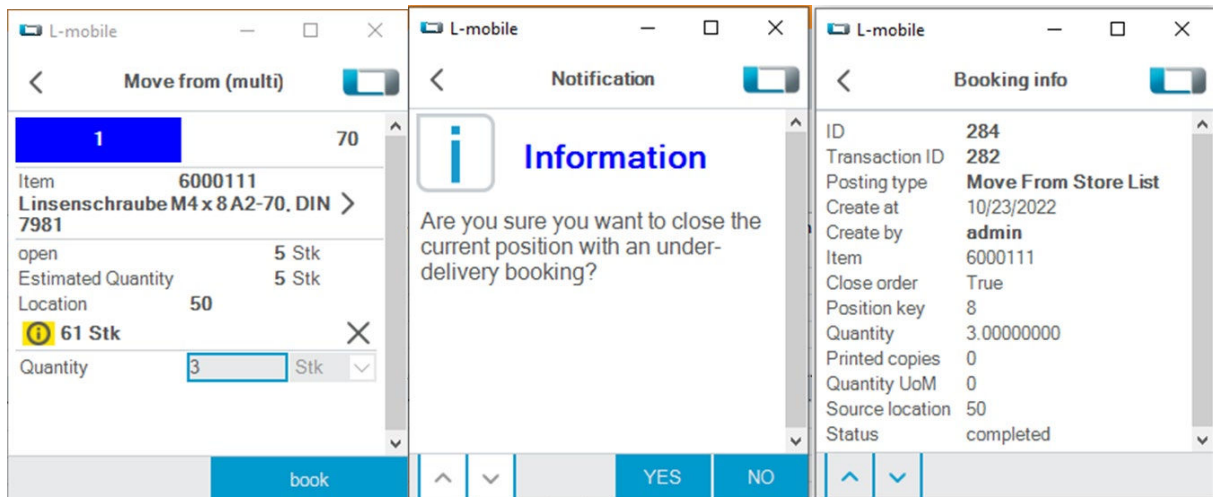
If the new setting and allow under booking settings are checked.

Home / Domain settings

☐ APS
☐ Barcode
☐ Batch relocation
☐ Batch storage
☐ Booking info
☐ Booking settings
☐ Booking watcher service
☐ Buffer Compensation
☐ Delivery note to location
☐ Device broker
☐ DN to Location Acceptance
☐ Failed postings
☐ Goods receipt
☐ Inventory
☐ M From Store List
☐ Missing parts
☐ ML relocation list
☒ **Move from (multi)**
☐ Permanent Inventory
☐ Pick2Hub
☐ Posting executor service
☐ Printing
☐ Production issue

Color schema (comma delimited list)
Red,Yellow,Blue
☒ Navi show button load all
☒ Orderlist show item
☒ Orderlist show target location
☒ Orderlist show position count
☐ Stock selection
☒ Grouped booking show input field?
☒ Allow grouped booking?
Order Pool Operating Mode
All
☒ Production-Orders (PPA)
☒ Sales-Orders (U, VUA)
☒ Service-Orders (VSA)
☐ Document number visible
☐ Delivery date visible
☐ Customer number visible
☐ Country visible
☐ Customer name visible
☒ **Display a notification when the commission position would be partially posted and closed.**
☒ **Allow underbooking**

Then the user select the order in Move from multipicking module and select the required position and under book. A notification will display to user to inform the user that the position is partially picked and if he want to close the position

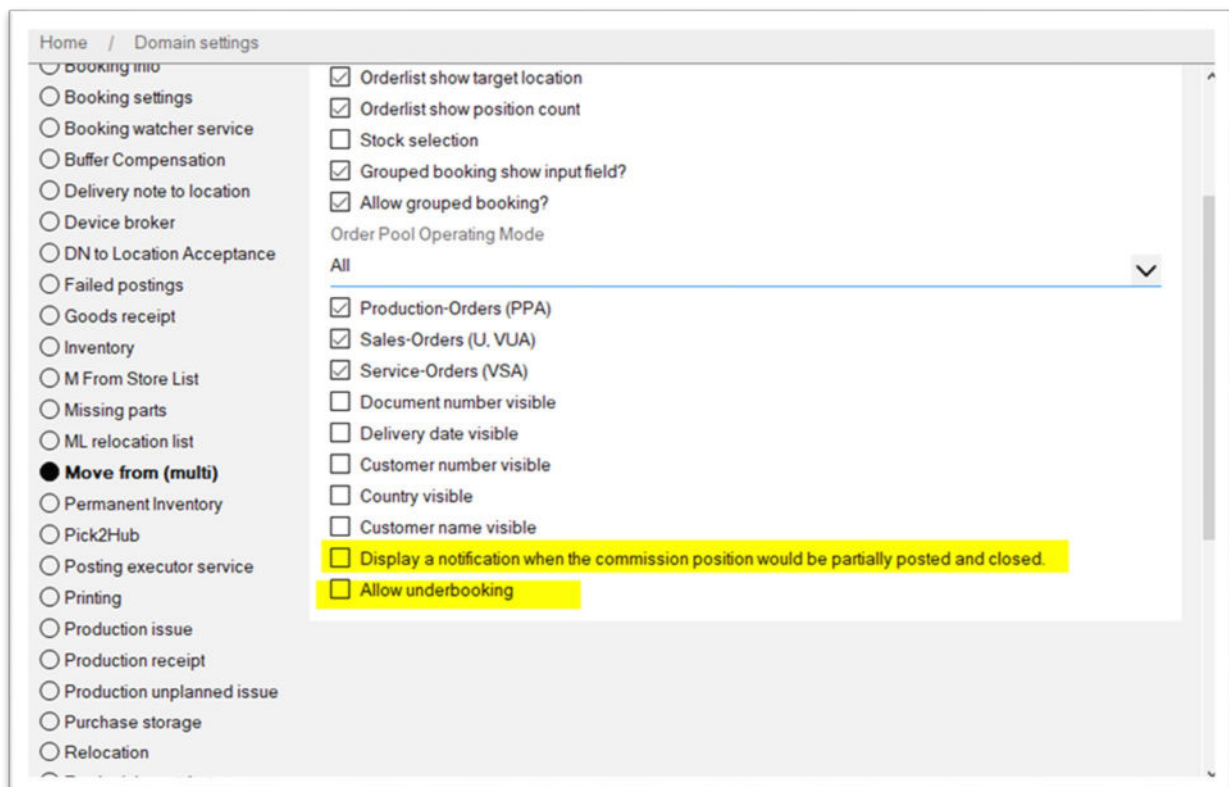


The first screenshot shows the 'Move from (multi)' screen with item 6000111 (Linsenschraube M4 x 8 A2-70, DIN 7981) and a quantity of 3 Stk. The second screenshot shows a 'Notification' dialog asking 'Are you sure you want to close the current position with an under-delivery booking?'. The third screenshot shows the 'Booking info' screen with details like ID 284, Transaction ID 282, and Status completed.

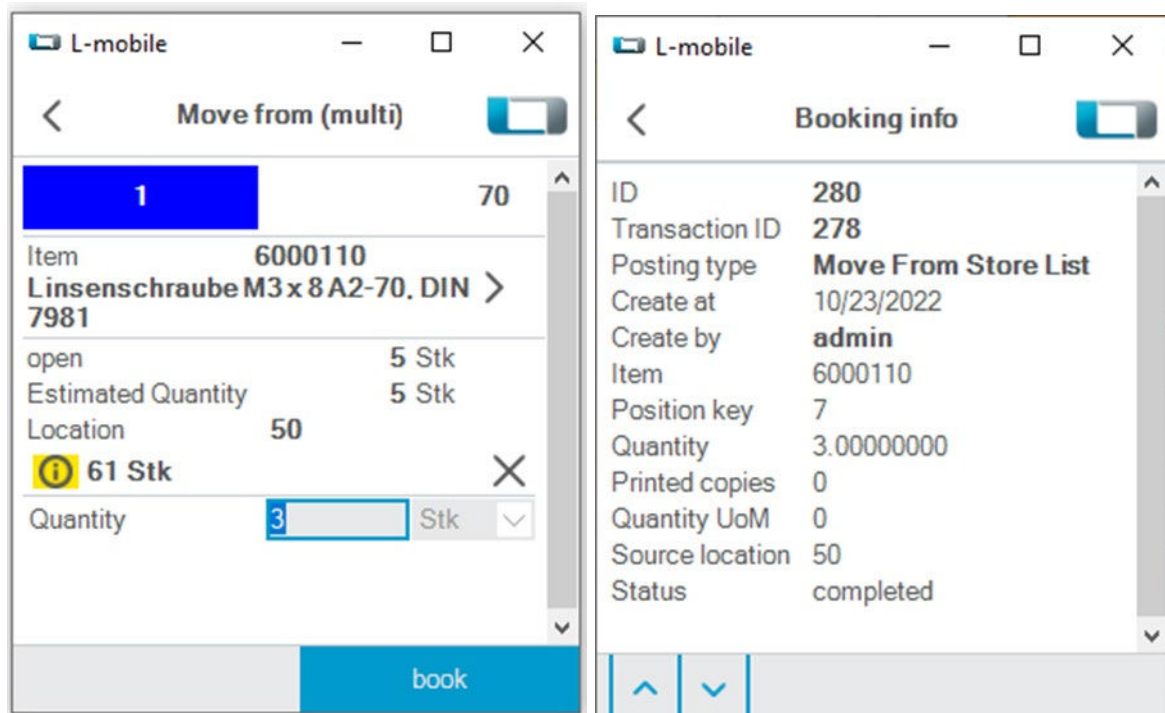
If the user click on "YES" then the position will be closed with status "Picked" in the ERP.

Positionen Kommissioniervorschlag										
Datei Extras Info										
Str	Pos	SetPos	Teil	Kommissionierstatus	entnommene Menge	Var	Lagerort	LBer	Lagerplatz	Cha
-	5,0		6000010	kommissioniert	?		?			
				kommissioniert	9,000		50			
-	6,0		6000020	kommissioniert	?		?			
				kommissioniert	10,000		50			
-	7,0		6000110	teilkommissioniert	?		?			
				kommissioniert	3,000		50			
				in Bearbeitung	0,000		50			
-	8,0		6000111	kommissioniert	?		?			
				kommissioniert	3,000		50			
-	9,0		6000390	neu	?		?			
				neu	0,000		50			
-	10,0		6000360	neu	?		?			
				neu	0,000		50			
-	11,0		6000341	neu	?		?			

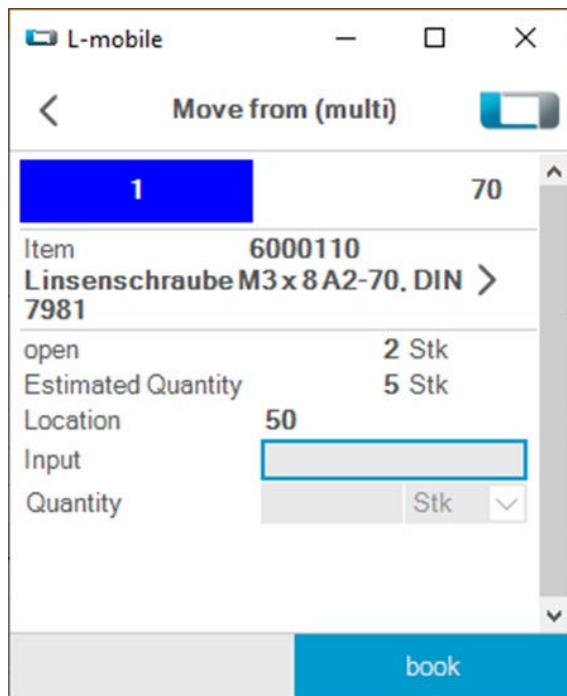
If the new setting and allow under booking settings are unchecked.



Then the user select the order in Move from store module and select the required position and under book.



Then the position will be remained open.



5.2 DEVELOPER DOCUMENTATION

New Settings

ProAlphaMoveFromStoreNotificationClosePositonSetting
 ProAlphaMoveRelocationNotificationClosePositonSetting
 ProAlphaMoveFromMultipickingNotificationClosePositonSetting
 ProAlphaMoveFromMultipickingAllowUnderbook

New Helpers

ProAlphaMoveListHelper

Modified Applications

ProAlphaMoveFromStoreApplicationExtension
 ProAlphaMoveRelocationApplicationExtension
 ProAlphaMoveFromMultiPickingApplicationExtension

Modified Posting Handler

ProAlphaMoveFromStoreListPositionPostingExtension

ProAlphaMoveRelocationListPositionPostingHandler

New warehouse resource

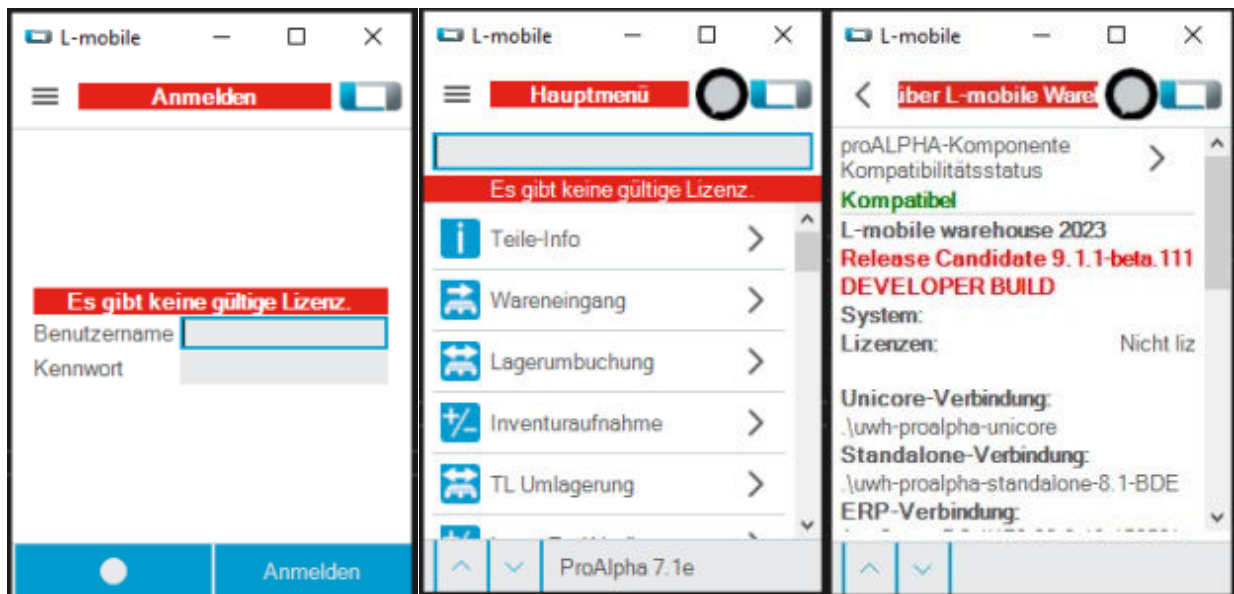
Name	English	German	Hungarian	French	Spanish
NotificationClosePositionWhenUnderBooking	Display a notification when the commission position would be partially posted and closed.	Anzeige einer Hinweismeldung, wenn die Kommissionsposition teilweise gebucht und geschlossen würde. Kommissionierliste verbuchen	Értesítés megjelenítése amikor a komissiópozíció részlegesen könyvelésre és lezárásra kerül.	Message d'information lorsque la quantité ouverte n'est pas atteinte et si l'utilisateur souhaite fermer la position de la commission.	Mensaje de aviso si no se alcanza la cantidad abierta y si el usuario quiere cerrar la posición de la comisión.
QuestionWhenUnderBooking	Are you sure you want to close the current position with an under-delivery booking?	Sind Sie sicher, dass Sie die aktuelle Position mit einer Unterlieferungsbuchung schließen wollen?	Biztosan lezárja az aktuális pozíciót aluteltjesítéses könyveléssel?	La quantité ouverte n'est pas atteinte. Voulez-Vous continuer et clôturer la position de commission?	No se alcanza la cantidad abierta. Quieres continuar y cerrar la posición de la comisión?

6 9.1 PROALPHA PROALPHA COMPONENT AND L-MOBILE COMPATIBILITY

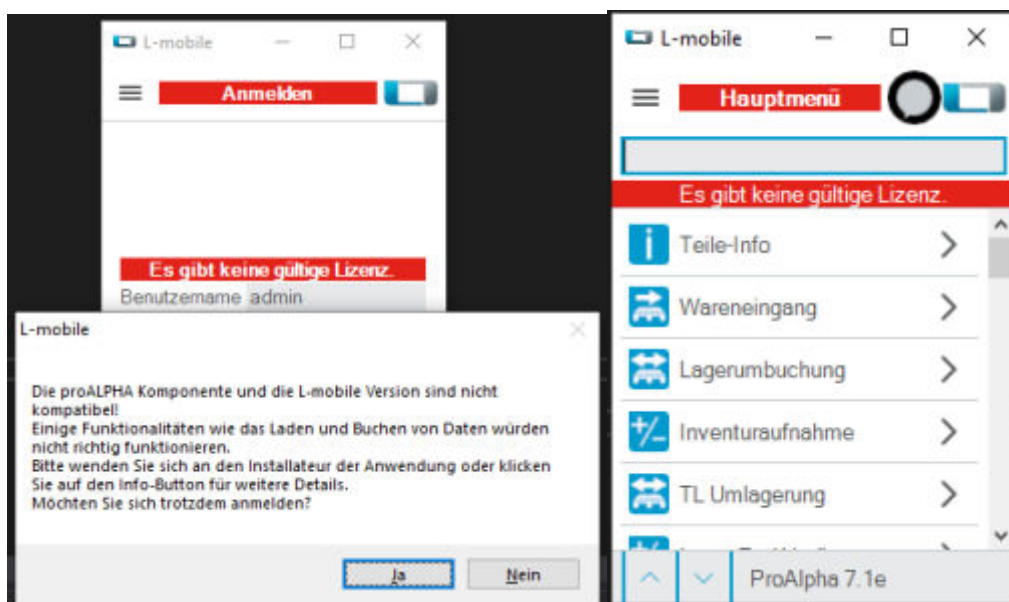
The target of this feature is to evaluate the compatibility of L-mobile UWH version with proALPHA Component installation to make sure that anomalies are detected in early stages of the installation.

6.1 USER DOCUMENTATION

→ If the user logs on and no error message has appeared. This means that the installation is fine and this could be checked by clicking in the info button where the status is set to "**Compatible**" in green color.

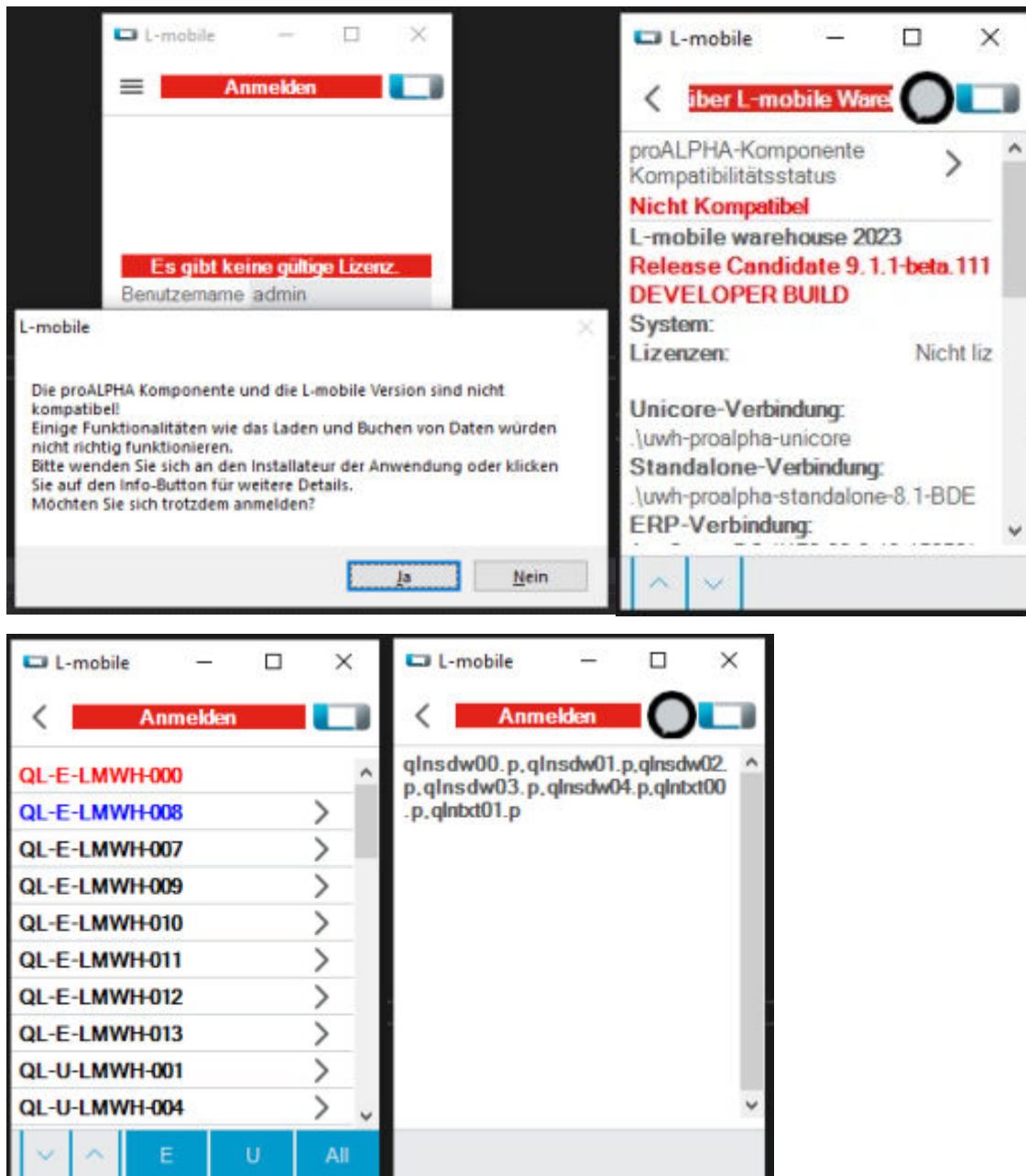


→ In the case the following error message has appeared while logging in, the installed tasks have to be checked. In this case, the user is still able to log in by clicking on "Yes".

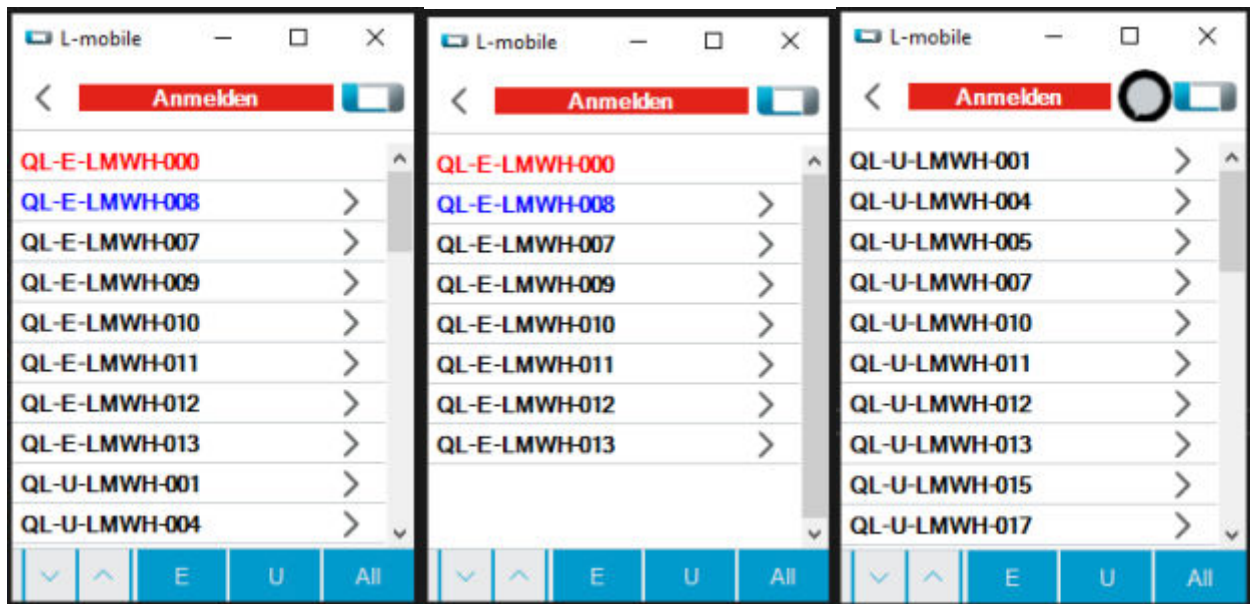


→ The status is set in "**Incompatible**" in the information view and the user can check the installed tasks and the related L-mobile warehouse services.

→ The **red** colored tasks are the missing tasks for the given L-mobile version and the **blue** ones should be removed.



→ The tasks are sorted by task name and the installer can also filter via the buttons "E" or "U" to make the list shorter if needed.



6.2 DEVELOPER DOCUMENTATION

Modified applications:

ProAlphaLoginApplicationExtension

Modified views:

ProAlphaLoginInfoViewExtension

New views:

LoginPATasksInfoView

LoginPATasksDetailView

New Helpers:

ProAlphaComponentTasksHelper

Modified DAOs:

ProAlphaLoginDao

New business objects:

ProAlphaTask

Modified warehouse factory:

ProAlphaWarehouseFactoryOptions

Configuration file:

CheckTasksInstallation option added

```
<connector name="ProAlpha71e" type="LMobile.Warehouse.DataAccess.ProAlpha71eConnector, LMobile.Warehouse.DataAccess.ProAlpha"
connectionString="AppServerDC://172.20.2.19:15050/pa-de-71e00-test2.sfe" userName="Lmobile" password="kompakt" appServerInfo="" serviceID="QLMOBILE" reuseConnections="false"/>
<factory name="ProAlpha71e" type="LMobile.Warehouse.DataAccess.ProAlphaWarehouseFactory, LMobile.Warehouse.DataAccess.ProAlpha" connector="ProAlpha71e"
cacheTimeout="0:30">
  <option name="HandleWaitingPostings" value="true"/>
  <option name="WaitingPostingFactory" value="ProAlpha71eStandalone"/>
  <option name="StandaloneFactory" value="ProAlpha71eStandalone"/>
  <option name="NumberingConnector" value="ProAlpha71eStandalone"/>
  <option name="Firma" value="110"/>
  <option name="DescriptionLanguageKey" value="0"/>
  <option name="CoordinateSeparator" value="-"/>
  <option name="PurchaseStorageLocation" value="10"/>
  <option name="CheckTasksInstallation" value="true"/>
</factory>
```

New resources:

Name	English	German	Hungarian	French	Spanish
LmobileV-SproALPHA	proALPHA component compatibility status	proALPHA-Komponente Kompatibilitätsstatus	proALPHA komponens kompatibilitás állapot	État de compatibilité du composant proALPHA	Estado de compatibilidad de componentes proALPHA

Name	English	German	Hungarian	French	Spanish
InstallationNotCompatibleWithL-mobileVersion	The proALPHA component and the L-mobile version are not compatible! Some functionalities like loading and booking data would not work properly. Please contact the application installer or click on the info button for more details. Do you still want to log in?	Die proALPHA Komponente und die L-mobile Version sind nicht kompatibel! Einige Funktionalitäten wie das Laden und Buchen von Daten würden nicht richtig funktionieren. Bitte wenden Sie sich an den Installateur der Anwendung oder klicken Sie auf den Info-Button für weitere Details. Möchten Sie sich trotzdem anmelden?	A proALPHA komponens és az L-mobile verziója nem kompatibilis egymással! Egyes funkciókban, például az adatok betöltésében és könyvelésében problémák léphetnek fel. További részletekért forduljon az alkalmazás telepítőjéhez, vagy kattintson az infó gombra. Biztosan be akar jelentkezni?	Le composant proALPHA et la version L-mobile ne sont pas compatibles ! Certaines fonctionnalités comme la lecture et le posting de données ne fonctionneraient pas correctement. Veuillez contacter l'installateur de l'application ou cliquez sur le bouton info pour plus de détails. Voulez-vous quand même vous connecter ?	¡El componente proALPHA y la versión L-mobile no son compatibles! Algunas funcionalidades como la carga y la reserva de datos no funcionarían correctamente. Póngase en contacto con el instalador de la aplicación o haga clic en el botón de información para obtener más detalles. ¿Todavía quieres iniciar sesión?
Compatible	Compatible	Kompatibel	Kompatibilis	Compatible	Compatible
Incompatible	Incompatible	Nicht Kompatibel	Inkompatibilis	Incompatible	Incompatible

7 9.1 SAGE - POEM INTEGRATION

7.1 USER DOCUMENTATION

There are no GUI related changes

7.2 DEVELOPER DOCUMENTATION

7.3 NOT SUPPORTED FEATURES

- Complex day models
- Production sub contraction
- Rough planned production
- Rough planned purchase
- Production transport times
- Stock reservations
- Order assignments
- Person absences
- Writing back Sales order

7.4 UPLOADING TO POEM

Material

Poem	Sage	UWH
strUserKey	KHKArtikelVarianten.Artikelnummer, KHKArtikelVarianten.AuspraegungID	Item.ID
strSearch-Key	KHKArtikelVarianten.Artikelnummer, KHKArtikelVarianten.AuspraegungID	Item.ID
strName	KHKArtikel.Matchcode	Item.Description
nInitialStock	Sum(KHKLagerplatzbestaende.Bestand)	GetAvailableSumByItemNoVariant-Code()

Poem	Sage	UWH
nMinimum-StockLevel	KHKArtikelVarianten.Meldebestand	Item.MinStockLevel
nOptimum-StockLevel	KHKArtikelVarianten.Meldebestand	Item.MinStockLevel
bIntegerValue	KHKArtikel.Lagermengeneinheit	unitOfMeasure?.DecimalPlaces == 0

PersonGroup

Poem	Sage	UWH
Description	KHKGruppen.Bezeichnung	PersonGroup.Name

Person

Poem	Sage	UWH
strName	KHKMitarbeiter.Vorname+ KHKMitarbeiter.Nachname	Person.Name + Person.SurName
PersonGroup	KHKMitarbeiter.Gruppe	Person.PersonGroupKey
strUserKey	KHKMitarbeiter.Nummer	Person.PersonKey
strSearchKey	KHKMitarbeiter.Nummer	Person.ID

DayModel + ShiftModel / ShiftSchedule + ShiftSchedulePeriod

Complex day models are not supported. Only simple shifts are supported.

DayModel

Poem	Sage	UWH
StrUserKey	KHKPpsSchichtplan.PlanTag	group.Key
strSearchKey	KHKPpsSchichtplan.PlanTag	group.Key

Operation

Poem	Sage	UWH
strUserKey	KHKPpsFaBelegePositionen.RessourceNummer	Operation.OperationKey
strSearch-Key	KHKPpsFaBelegeAGPositionen.BelID, KHKPpsFaBelegeAGPositionen.BelPosID	Operation.ID
strName	KHKPpsFaBelegeAGPositionen.Matchcode	Operation.Description

Operation / SubcontractedManufacturingOperation

Not supported

Qualification / Qualification

Poem	Sage	UWH
strUserKey	KHKPpsFaBelegePositionen.RessourceNummer	Operation.OperationKey
strSearch-Key	KHKPpsFaBelegeAGPositionen.BelID, KHKPpsFaBelegeAGPositionen.BelPosID	Operation.ID
strName	KHKPpsFaBelegeAGPositionen.Matchcode	Operation.Description

Capacity Group

Poem	Sage	UWH
strUserKey	KHKPpsKapGruppen.KapGruppe	workplaceGroup.WorkplaceGroupKey
strSearchKey	KHKPpsKapGruppen.KapGruppe	workplaceGroup.ID
strDescription	KHKPpsKapGruppen.Bezeichnung1	workplaceGroup.Description

Partner

Poem	Sage	UWH
strUserKey	KHKKontokorrent.Kto	partner.PartnerKey
strSearchKey	KHKKontokorrent.Kto	partner.ID
strSearchKey	KHKKontokorrent.Kto	partner.ID
strName	KHKKontokorrent.Kto	partner.PartnerKey
strUserKey	KHKMitarbeiter.Nummer	Person.PersonKey
strSearchKey	KHKMitarbeiter.Nummer	Person.ID
strName	KHKMitarbeiter.Vorname, KHKMitarbeiter.Nachname	Person.Name Person.SurName
pPersonGroupSearchKeyReference	KHKMitarbeiter.Gruppe	Person.PersonGroupID

TransportTimeRule / ProductionTransportTime

Not supported

CapacityDayModel

Complex day models are not supported. Only simple shifts are supported.

Partner / Partner

Poem	Sage	UWH
strUserKey	KHKKontokorrent.Kto	partner.PartnerKey
strSearchKey	KHKKontokorrent.Kto	partner.ID
strName	KHKKontokorrent.Kto	partner.PartnerKey

Sales Demand/ SalesOrderPosition

Poem	Sage	UWH
strUserKey	KHKVKBelege.Belegjahr KHKVKBelege.Belegnummer KHKVKBelegePositionen.Artikelnnummer, KHKVKBelegePositionen.AuspraegungID KHKVKBelegePositionen.BelPosID	Head.OrderKey::OrderPosition.Main.ItemID::OrderPosition.Main.PositionKey
strSearchKey	HKVKBelege.Belegjahr KHKVKBelege.Belegnummer KHKVKBelegePositionen.BelPosID	OrderPosition.Main.OrderKey,OrderPosition.Main.PositionKey
nOriginalQuantity	KHKVKVorgaengePositionen.GGBestellt	OrderPosition.Main.PlannedQuantity
nQuantity	KHKVKVorgaengePositionen.GGGe-liefert	OrderPosition.Main.PlannedQuantity - OrderPosition.Main.ActualQuantity

Poem	Sage	UWH
dtDeadline	KHKVKBelege.Liefertermin	Head.DesiredDeadline
dtConfirmedDeadline	KHKVKBelege.Liefertermin	Head.Deadline
bConsiderInMrp	KHKVKBelegePositionen	true
pSalesOrderSearchKeyReference	KHKVKBelege.BelID	Head.ID
pMaterialSearchKeyReference	KHKVKBelegePositionen.Artikelnnummer, KHKVKBelegePositionen.AuspraegungID	OrderPosition.Main.ItemID
pPartnerSearchKeyReference	KHKVKBelege.A0Empfaenger	Head.CustomerID

Purchase

Poem	Sage	UWH
dtDeadline	KHKEKBelegePositionen.Liefertermin	OrderPosition.Main.Deadline.ToLocalTime()
strUserKey	KHKEKBelege.Belegjahr, dboKHKEKBelege.Belegnummer KHKEKBelegePositionen.Artikelnnummer, KHKEKBelegePositionen.AuspraegungID KHKEKBelegePositionen.BelPosID	OrderPosition.Main.OrderKey, OrderPosition.Main.ItemID, OrderPosition.Main.PlannedPurchaseKey

Poem	Sage	UWH
nQuantity	KHKEKVorgaengePositionen.GGBestellt-KHKEKVorgaengePositionen.GGgeliefert	convertedOpenQuantity

ProductionProject / ProductionOrderHead

Poem	Sage	UWH
strUserKey	KHKPpsFaBelege.BelID KHKPpsFaBelege.BelID KHKPpsFaBelege.Artikelnummer	orderHead.OrderKey::orderPart.PartKey::item.ItemNo
strSearchKey	KHKPpsFaBelege.BelID KHKPpsFaBelege.BelID	orderPart.ID, orderProduct.ID
nPlannedQuantity	KHKPpsFaBelege.Fertigungsmenge	orderProduct.PlannedQuantity
nPlannedScrapQuantity	0	orderProduct.PlannedScrapQuantity
dtDeadline	KHKPpsFaBelege.Sollendtermin	OrderPart.Deadline

Recipe / ProductionOrderProduct

Poem	Sage	UWH
strUserKey	KHKPpsFaBelege.BelID KHKPpsFaBelege.BelID KHKPpsFaBelege.Artikelnummer	OrderHead.OrderKey::OrderPart.PartKey::Item.ID
strSearchKey	KHKPpsFaBelege.BelID KHKEKBelegePositionen.BelPosID	OrderPart.ID, OrderPosition.ID

Poem	Sage	UWH
strName	KHKPpsFaBelegeAGPositionen.Matchcode	OrderPosition.Description

RecipeltemVariant / ProductionOrderOperation

Poem	Sage	UWH
iPreparation-Time	KHKPpsFaBelegePositionen.IstRuestzeit	OrderOperation.PlannedSetupDuration.TotalSeconds
iFinalization-Time	KHKPpsFaBelegePositionen.Pufferzeittext	OrderOperation.PlannedBufferTime.TotalSeconds
dOperation-Time	KHKPpsFaBelegePositionen.Stueckzeittext	OrderOperation.PlannedCycleDuration.TotalSeconds

Capacity / ProductionOrderOperation

Poem	Sage	UWH
strUserKey	KHKPpsArbeitsplaetze.Arbeitsplatznummer	workplace.WorkplaceKey
strSearchKey	KHKPpsArbeitsplaetze.Arbeitsplatznummer	workplace.ID
strName	KHKPpsArbeitsplaetze.Arbeitsplatznummer	workplace.WorkplaceKey

CapacityGroup/ ProductionOrderOperation

Poem	Sage	UWH
strUserKey	KHKPpsKapGruppen.KapGruppe	workplaceGroup.WorkplaceGroupKey

Poem	Sage	UWH
strSearchKey	KHKPpsKapGruppen.KapGruppe	workplaceGroup.ID
strDescription	KHKPpsKapGruppen.Bezeichnung1	workplaceGroup.Description

MaterialDemand / ProductionOrderMaterial

Poem	Sage	UWH
pMaterialSearchKeyReference	KHKPpsFaBelegePositionen.RessourcenNumme	ProductionOrderMaterial.ItemNo

OrderAssignment

not supported

StockReservation

not supported

7.5 WRITING BACK TO SAGE

Sales posting

not implemented

Production posting

Posting: SageProductionApsPostingHandler

Poem	Sage	UWH	Note
dtSetupStartTime	KHKPpsFaBelegePositionen.Sollstarttermin	PlannedStart	
	KHKPpsFaBelegePositionen.IstFixtermin	true	Update in Sage

Poem	Sage	UWH	Note
	KHKPpsFaBelegePositionen.BelID	OrderKey	Used for getting the order position
	KHKPpsFaBelegePositionen.BelPosID	PositionKey	Used for getting the order position
	KHKPpsFaBelegePositionen.ResourceNummerAg	WorkplaceKey	The selected workplace alternative

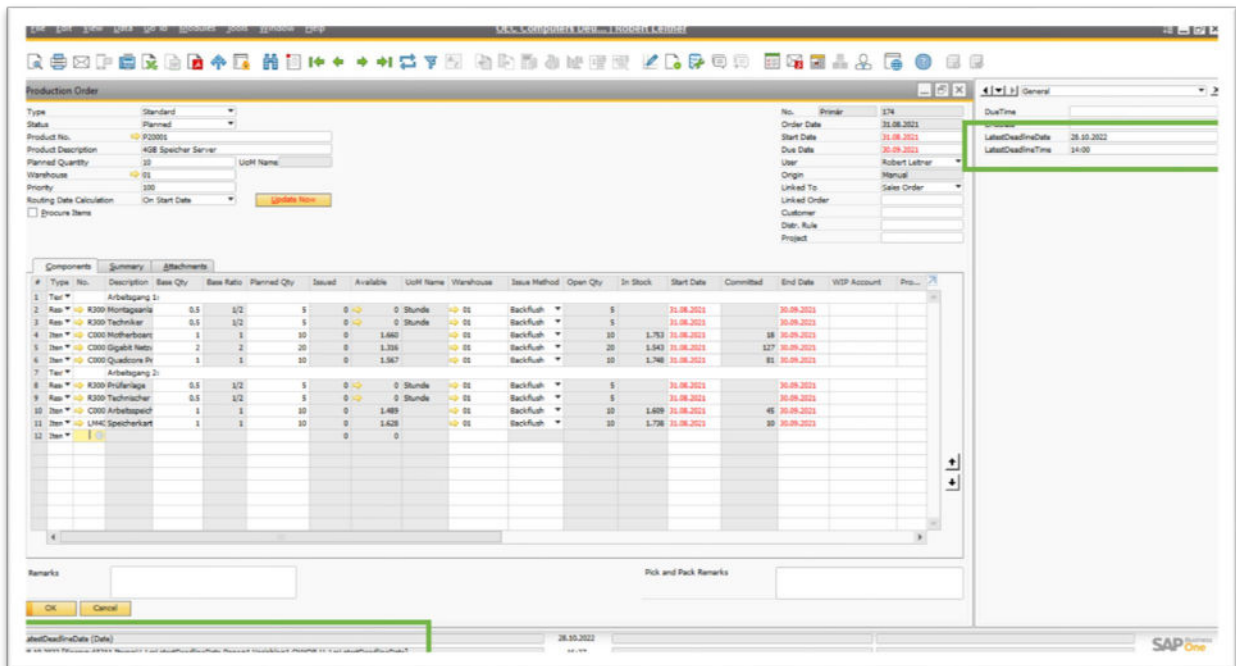
8 9.1 SBO LATEST DEADLINE IN PRODUCTIONORDER FOR APS

8.1 USER DOCUMENTATION

This feature is closely related to the [SBO's Poem integration \(released in v8.3\)](#). With the help of a new custom database field in the production order product (Database table OWOR, ULMLatestDeadlineDate / ULMLatestDeadlineTime), it is possible to that we store the original deadline of the production order, i.e. the latest deadline by which it must be completed.

This is necessary because when the production order rescheduled by POEM is written back to SBO, the Start / DueDate is overwritten with the dates in the production order items (earliest start of all positions => start date, latest end of all positions => DueDate)

By the next POEM data transfer, we will transfer this stored value to the POEM schedule.



The screenshot shows the SAP One Production Order (PO) interface. The top section displays order details: Type (Standard), Status (Planned), Product No. (P20001), Product Description (4GB Speicher Server), Planned Quantity (10), Warehouse (01), Priority (100), and Routing Date Calculation (On Start Date). The right sidebar shows order metadata: No. (174), Order Date (31.08.2021), Start Date (31.08.2021), Due Date (30.09.2021), User (Robert Lettner), Origin (Manual), Linked To (Sales Order), Customer, Distr. Rule, and Project. The main table lists components with columns for Type, No., Description, Base Qty, Base Ratio, Planned Qty, Issued, Available, UoM Name, Warehouse, Issue Method, Open Qty, In Stock, Start Date, Committed, End Date, WIP Account, and Proj. The table includes entries for various components like K200 Montagesatz, K200 Techniker, C200 Motherboard, C200 Gigabit Netz, C200 Quadcore PC, K200 Prüflinje, K200 Techniker, C200 Arbeitsspeicher, and LMAC Speicherkart. The bottom section has a Remarks field and a Pick and Pack Remarks field. The SAP One logo is visible in the bottom right corner.

8.2 DEVELOPER DOCUMENTATION

Changes

`SboProductionOrderProductMapping` changed where the `LatestDeadline` is extended with a composition of new custom properties (date and time) from OWOR `ULmLatestDeadlineDate` / `ULmLatestDeadlineTime`

`BX.LMobile.SAP.Data`, `BX.LMobile.SAP.Interfaces` nuget packages upgraded to version 3.9.2, where the changed behaviour of POEM data transfer is supported. This mostly only has a symbolic meaning, since the `DataApi` has not changed. The version number indicates to developers which version of the `Bxp` component should be installed in `RequetBroker`

`LMobile.SboDao` is upgraded to v1.1.3, where the new properties are supported

`LMobile.SboDao.Sbo100` added to project to support the SBO v10.0 thus `Lmobile.*.config` can refer to the new Factory by

```
<factory name="Sbo100Mapping" type="LMobile.SboDao.Sbo100.Sbo100Factory, LMobile.SboDao.Sbo100" />
```

9 9.1 STD - APS IMPROVEMENTS

9.1 USER DOCUMENTATION

Features:

- Upgrade to POEM v2.3.1
- Show transfer history (data ups and downs)
- Area's disposable flag controls the stock sum transfer to POEM
- Allow POEM multiple instances on the same server

9.2 DEVELOPER DOCUMENTATION

Changes

- Redesigned production material quantity calculation
The material quantity can be taken over from Erp production order position. It will be not recalculated. The feature is controlled by the new setting **PoemCalculateMaterialQuantityViaEndProductSetting**
- Infor - No production cooperation dates when in planned state
- Exclude quantities less than 0.0001 (poem does not handle them)
- Prevent PoemProxy from loading plugin dlls ([PRJ-821-84 Prevent PoemProxy from loading plugin dlls](#))
- Leavind sales deadlines empty when not filled
- Fixed DbPartZbKnz flag usage at relCb
- Load items in batches preventing sql parameter limit excess
- Transfer only disposable stock sums

New warehouse resource

Name	English	German	Hungarian
S_PoemCalculateMaterialQuantityViaEndProduct	Calculate material quantity via end product	Materialmenge über Endprodukt berechnen	Anyagmennyiség kiszámítsa a végterméken keresztül

10 9.1 STD - IMAGE GALLERY

- This feature contains the implementation of two applications: `PhotoCaptureApplication` and `ImageGalleryApplication`.
- This feature is implemented in the goods receipt base application but is only available in the `PurchaseReceiptApplication`.

10.1 DEVELOPER DOCUMENTATION

10.1.1 OVERVIEW

The possibility of capturing and storing photos was added to the `PurchaseReceiptApplication`.

The `ImageGalleryApplication` has a setting and permission. It can be easily added to any goods receipt application by changing the override of `CalculateImageGalleryAvailable()`.

10.1.2 BACKEND

Storing Images

These applications use `UnicoreDocumentService`. **The images are stored as documents in the unicore database.** An `ImageContainer` is built up from the following stored data:

Document	
Description	The description provided by the user
File extension	.jpg
Content	The image itself, stored as binary in the database
Thumbnail	Thumbnail created by the <code>UnicoreDocumentService</code>
Purchase order key	Stored as a document property. The order key related to the image
Purchase order position key	Stored as a document property. The order position key related to the image

Document	
Create date	Stored as a document property. The Key is in <code>DocumentPropertyHelper</code> . Current time at the user (<i>UtcNow</i>)
Creator ID	Stored as a document property. The Key is in <code>DocumentPropertyHelper</code> . User ID (<i>GUID</i>)

10.2 FRONTEND

Settings

ImageGalleryApplicationAvailable

Controls the availability of the `ImageGalleryApplication` in the `GoodsReceiptApplication`.
Default value: `false`.

Applications

Photo capture application

The `PhotoCaptureApplication` is based on the MiniForms camera API.

This application is an internal one, and only available through the `ImageGalleryApplication`. It uses the default camera application of the mobile device if it is supported.

Image gallery application

The image gallery is available from the position view of `PurchaseReceiptApplication`.

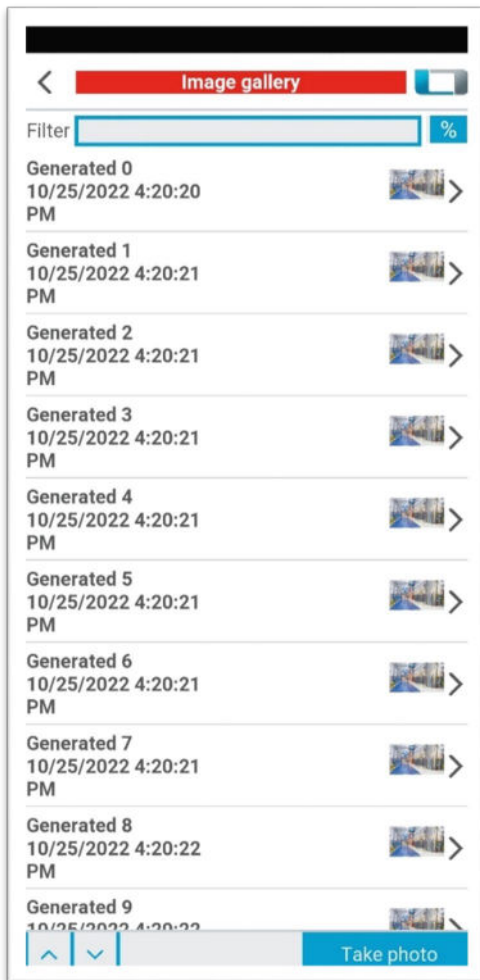
10.3 USER DOCUMENTATION

Functionality

The image gallery is available only when the related setting is checked.

The list is filtered by the current order and position key and the user can it filter by description.

The photo capture application is available from the list view through the Take photo button.



The image detail view is available by clicking on a row in the list view. The user can find here the size of the original image, the name and username of the user who captured the photo, and the original photo in full size.

Unfortunately, deleting an image is not possible yet due to technical barriers.



11 9.1 STD - LOCATION FIXED ITEM INTEGRATION

11.1 USER DOCUMENTATION

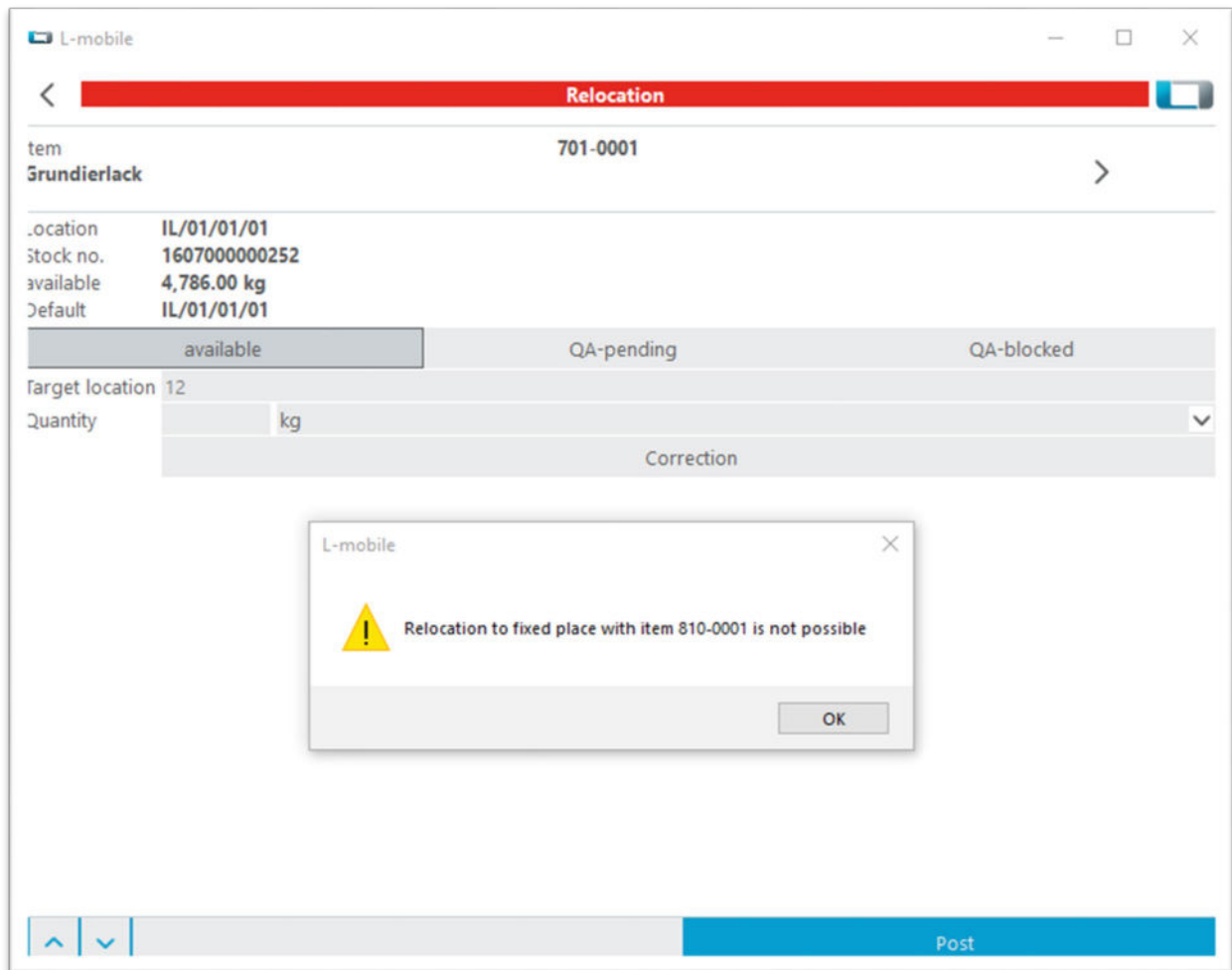
In this feature, we added 3 new general settings to allow or disable the newly added validations:

- ☐ **Validate Inventory blocked locations**
- ☐ **Validate Incoming blocked locations**
- ☒ **Validate Fixed Item for Locations**

- Validate Inventory blocked locations: When set true, we'll not load under inventory locations in the Free location application.
- Validate Incoming blocked locations: When set true, we'll not load incoming blocked locations in the Free location application.

- Validate Fixed Item for locations: When set true, we'll not load locations with other fixed items in the Free location application and we'll have an error message in case we put a location with other fixed items in the target location input component.

This feature add validation of the fixed item in the location input app component.



The screenshot shows the L-mobile Relocation application interface. The main window has a red header bar with the title "Relocation". Below the header, the item name "Grundierlack" and item ID "701-0001" are displayed. The application shows various input fields for location, stock number, and quantity. A modal dialog box is open in the center, displaying a yellow warning triangle icon and the message: "Relocation to fixed place with item 810-0001 is not possible". The dialog has an "OK" button at the bottom right. The background application is dimmed, showing fields for "location", "stock no.", "available", "Default", "Target location", "Quantity", and "Correction".

We also added validation over the incoming blocked, inventory blocked and fix item in the load of the free locations in the free location application.

11.2 DEVELOPER DOCUMENTATION

New - Settings

FreeLocationInventoryBlockedLocationSetting

FreeLocationIncomingBlockedLocationSetting

FixItemLocationSetting

Modified - Application

GoodsIssueApplication

GoodsReceiptApplication

RelocationApplication

BatchRelocationApplication

BatchStorageApplication

ProductionReceiptApplication

StockCorrectionApplication

MoveToStoreApplication

ReturnProductionApplication

MoveRelocationApplication

ReplenishmentFirstStageApplication

ReplenishmentSecondStageApplication

AmLoadListsApplication

EProcurementReceiptApplication

MaterialProvisionApplication

DeliveryNoteToLocationApplication

DeliveryNoteToLocationAcceptanceApplication

MultiPickingApplication

RequestReplenishmentApplication

FreeLocationApplication

ProAlphaPurchaseStorageApplication

FreeLocationBaseApplication

LocationInputAppComponent

Service

StoreDao

NavisionBCStoreDao

ProAlphaStoreDao

SapStoreDao

Interface

IStoreDao

11.3 NEW WAREHOUSE RESOURCE

Name	English	Spanish	French	German	Hungarian
FixItemLocation	Validate Fixed Item for Locations	Validar artículo fijo para ubicaciones	Valider les articles fixes pour les emplacements	Fixe Artikel für Standorte validieren	Rögzített cikk megerősítése a tárhelyen
FreeLocationIncomingBlockedLocation	Validate Incoming blocked locations	Validar las ubicaciones bloqueadas entrantes	Valider les emplacements entrants bloqués	Prüfe Lagerplatz auf Einlagerungssperre	Bevételt tiltott tárhely ellenőrzése
FreeLocationInventoryBlockedLocation	Validate Inventory blocked locations	Validar las ubicaciones bloqueadas del inventario	Valider les emplacements bloqués de l'inventaire	Prüfe Lagerplatz auf Inventursperre	Leltárra tiltott tárhely ellenőrzése
RelocationToFixPlaceNotPossible	Relocation to fixed place with item {0} is not possible	La reubicación en un lugar fijo con el artículo {0} no es posible	La relocalisation à un endroit fixe avec l'article {0} n'est pas possible.	Fixplatz ist Artikel {0} zugeordnet !	A {0} cikkel való áttárolás fix tárhelyre nem lehetséges

12 9.1 STD - NEW PROJECT FORMAT

In this release we have switched to the new project format if Visual Studio. It will make the build more reliable and merging project files much easier. Field and framework projects have already done this and the result is quite satisfactory.

An overview of the new project format can be found here: <https://learn.microsoft.com/en-us/dot-net/core/project-sdk/overview>

The key differences are the following:

- .csproj files are much simpler and don't change too often, and they can be - and if necessary should be - edited manually.
- Source files aren't listed any more in the .csproj file, all files in the directory are included by default.
- packages,config files are not needed any more; NuGet packages are listed in the .csproj files instead.
- The packages which are already used in references packages and projects don't have to listed, they are included in the actual project automatically
- Example from LMobile.Warehouse.DataAccess.csproj:

```
<ItemGroup>
```

```
  <PackageReference Include="LMobile.Gida" Version="3.25.1" />
```

```
</ItemGroup>
```

- This also includes LMobile.Toolbox because the LMobile.Gida package requires it itself.
- There is a new batch file called **consolidate.cmd**: it consolidates the package versions throughout the solution.

All ERP and plugin projects are referenced from the listener. If you don't need all of these, you can add a **BuildOptions.targets** file to your config folder (<root>\config\<specific config folder>) to exclude ERPs and the customer plugin from the final build. When the solution is updated with the given config the BuildOptions.targets file is copied into the "<root>\src" folder.

Note that the **BuildOptions.targets** file is ignored from version control. When you check out the repository from Mercurial, the project won't build because this file is not in "<root>\src" (just like how l-mobile.Debug.config is missing). Use build.cmd - Update with the desired environment to copy it there.

BuildOptions.targets

```
<?xml version="1.0" encoding="utf-8" ?>
```

```
<Project>
```

```
  <PropertyGroup>
```

```
    <!-- Comment out the ERPs / features / databases which are unnecessary
```

```
for the project -->

<!-- ERPs -->
<IncludeAlphaplan>-include-</IncludeAlphaplan>
<IncludeAutonomous>-include-</IncludeAutonomous>
<IncludeInforCom>-include-</IncludeInforCom>
<IncludeNavision>-include-</IncludeNavision>
<IncludeProAlpha>-include-</IncludeProAlpha>
<IncludeSage>-include-</IncludeSage>
<IncludeSAP>-include-</IncludeSAP>
<IncludeSbo>-include-</IncludeSbo>

<!-- Features -->
<IncludePoem>-include-</IncludePoem>
<IncludePlugin>-include-</IncludePlugin>

<!-- Databases-->
<IncludeOdbc>-include-</IncludeOdbc>
<IncludeOracle>-include-</IncludeOracle>
<IncludePostgres>-include-</IncludePostgres>
<IncludeSQLite>-include-</IncludeSQLite>
<IncludeSqlServer>-include-</IncludeSqlServer>

</PropertyGroup>

</Project>
```

The extension section in l-mobile.config for the customer plugin (**<load assembly>** etc) is not needed any more; the registration functions are called from the listener (unless **IncludePlugin** is switched off in **BuiltOptions.targets**).

When the resources files are edited, they will not be generated automatically any more; you have to run **generateResources.cmd** to generate the code for the resources.

If you reference external DLLs from the customer plugin (that are not NuGet packages but explicit references to files), please put the references into **src\LMobile.Warehouse.Plugin.DataAccess\LMobile.Warehouse.Plugin.References.targets**. This makes sure that they are properly copied to the listener. (The ProAlpha, Sage and SAP projects have similar .targets files for the libraries they have in the **lib** directory.)

The extensible code generator now puts all generated files into an **_Imxcg** directory in each project, so the code files are not intermingled with generated files.

13 9.1 STD - ORDERPOOL CHECK PARTIAL DELIVERY BLOCK OF SALES ORDERS

13.1 USER DOCUMENTATION

A check was added if not all articles of a sales order have been marked for release, then we validate whether a partial delivery is allowed for the sales order. If partial delivery block is set an error message must come.

If we try to Navigate back to the Position List:

L-mobile

<

Storage Control Center

item

Unassigned

Administrator

ahmed

aymen

	Prio	Order	R/B	Item	Description	Location	Quantity	ailable quant
Sales		8010003		MOB01	Make Or Buy mit		0 Stk	
Sales		8010003		MOB02	Standardverw. Fienfert.		0 Stk	
Sales		8010003		MOB01	Make Or Buy mit		0 Stk	
Sales		8010003		MOB02	Standardverw. Fienfert.		0 Stk	
Sales		KA1002		CT-2000	Chargenteil/Einkaufsmaterial		0 Stk	
Sales		KA1002		810-1005	Bremse		0 Stk	
Sales		KA1002		978-3892	Tragrolle 650 ohne Halter		0 Stk	
Sales		KA1002		965-1295	Federpaket		0 Stk	
Sales		KA1002		965-1310	Hydraulikanlage		0 Stk	
Sales		KA1004		965-1310	Hydraulikanlage		0 Stk	
Sales		KA1004		965-1295	Federpaket		0 Stk	
Sales		KA1004		978-3892	Tragrolle 650 ohne Halter		0 Stk	
Sales		KA1004		965-1322	Bremsbacke mit Sicherung		0 Stk	

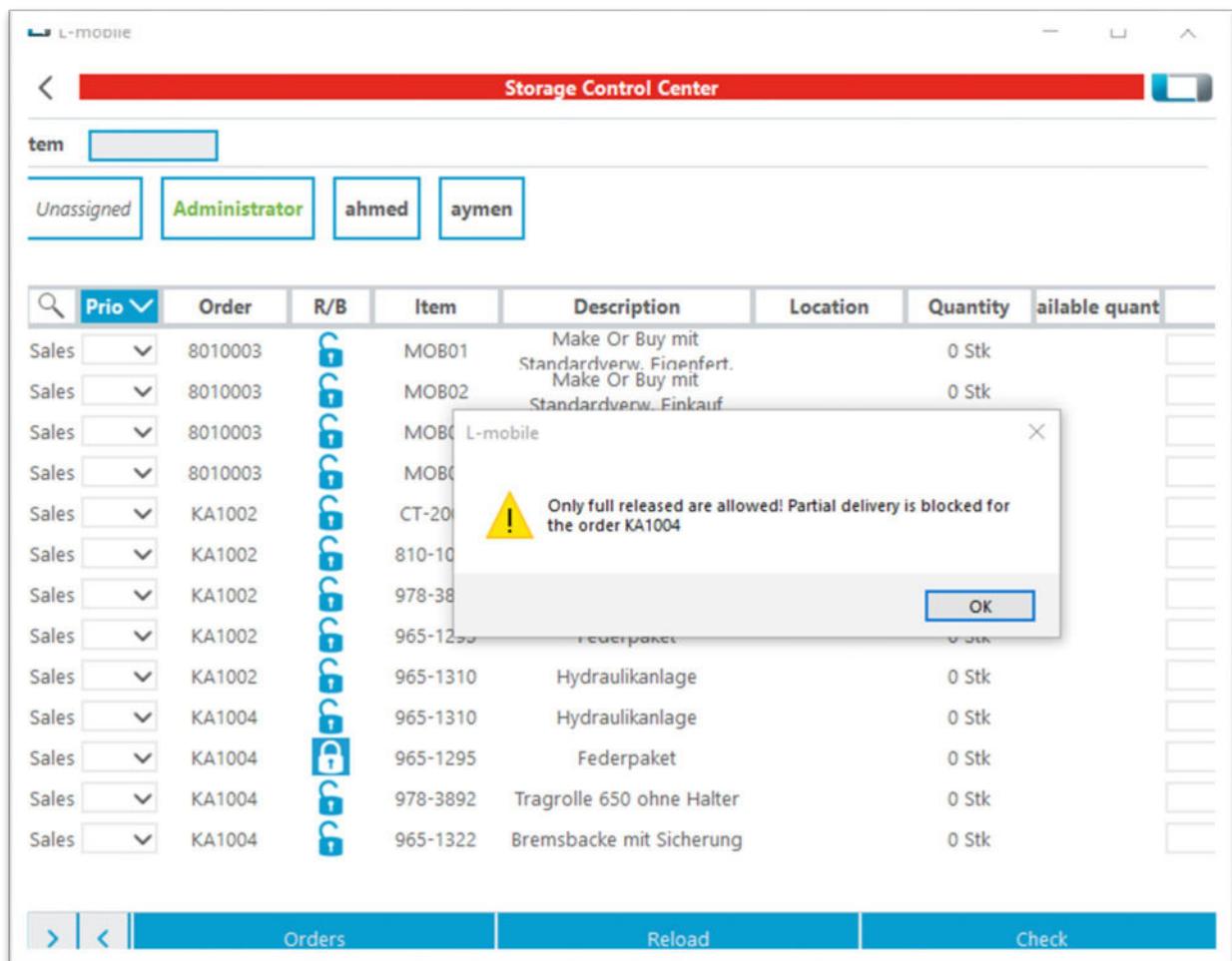
>

<

Orders

Reload

Check



13.2 DEVELOPER DOCUMENTATION

Modified Applications

OrderPoolMonitorApplication

InforSalesOrderPickApplicationExtension

Modified Views

OrderPoolMonitorOrderPositionsListView

Modified Dao

InforOrderPoolDao

Modified Business Objects

OrderPoolHead

OrderPoolPosition

StoredSalesOrderBase

Modified Mapping

InforSalesOrderHeadMapping

14 9.1 STD - PACKAGING FEATURE ADDITIONS

15 9.1 STD - CLOSE PACKAGES BY DEFAULT

- This feature extends the functionality of [9.0 STD - Stock Unit Infrastructure / Sales Packaging](#).
- The changes are standard but the integration is only done in WMS domain.

15.1 DEVELOPER DOCUMENTATION

Frontend - Settings

SalesPackagingClosePackageByDefault

Sets the default value of the of the package closure checkbox in the packaging view of Sales Packaging (OrderPositionPackingView.ClosePackageRow).

Default value: true

15.2 USER DOCUMENTATION

Settings - Sales Packaging\Close package

Determines whether the *Close package* checkbox should be checked/unchecked by default in the *Packaging* view of *Sales Packaging* application.

Whenever the view is entered or re-entered (after posting) the checkbox is initialized by this setting. Checked by default.

16 9.1 STD OPEN/CLOSE PACKAGES IN STOCK UNIT DETAIL VIEW

- This feature extends the functionality of [9.0 STD - Stock Unit Infrastructure / Sales Packaging](#).
- The changes are standard but the integration is only done in WMS domain.

16.1 DEVELOPER DOCUMENTATION

Overview

A new posting handler was implemented to manage the `Status` of `HandlingUnitHead`. There is no restriction in the handler on which state can be set but currently only `Closed` and `InPacking` states are managed by the packaging functionality. The `Closed/InPacking` states can be toggled in the `StockUnitModelInfoDetailApplication`.

Backend

`StoredPostingRecord/StandalonePostingRecordMapping`

A new property/mapping was added: `PalletStatus`.

`HandlingUnitHeadStateManagementPostingHandler`

Handler: `AutonomousStandaloneHandlingUnitHeadStateManagementPostingHandler` :
`StandaloneHandlingUnitHeadStateManagementPostingHandler` : `HandlingUnitHead-`
`StateManagementPostingHandler`

Result: the given head's state (`Status`) is set based on the value of property `PalletStatus` in the posting.

HandlingUnitHeadStateManagementPosting			
Property	Description	Mandatory	Validation
HandlingUnitHeadID		Yes	Handling unit head must exist.
PalletStatus	Default value: Planned	No	

HandlingUnitHeadManipulator

A new update method was added (available via the `IInternalHandlingUnitHeadManipulator` interface):

```
ResultOrError Update (HandlingUnitHead handlingUnitHead)
```

Frontend

Permissions

`StockUnitModelInfoPackageStateManagementPermission`

A dedicated permission that allows state management in the stock unit detail view.

Settings

`StockUnitModelInfoDetailHandlingUnitHeadStateManagementEnabled`

Controls the availability of the package closure/open functionality in stock unit detail.

Default value: `false`

`StockUnitModelInfoDetailShowHandlingUnitHeadStateManagementPostingSuccessMessage`

Determines whether a success message should be shown or not after successful state management postings.

Default value: `false`

StockUnitModelInfoDetail

The application was extended with a new button responsible for the execution of the closure/opening of a package.

StockUnitModelInfoDetailApplication

- `HandlingUnitHeadStateManagementEnabled`

Extensible proxy property for setting [Settings\StockUnitModelInfoDetailHandlingUnitHeadStateManagementEnabled](#).

- `PackageClosed`

This property is used to keep track of the current state of the package. Instead of using `HandlingUnitHead.State` directly this property is needed for now as the current model cannot be reloaded at the moment hence the state of the head stays intact after closure/opening.

There is also a todo in the code about this. See also task "Additional getter methods to `StockUnitModelDao`" in [Sales packaging improvement plans and ideas](#).

- `TogglePackageClosure()`

Executes state toggling logic.

StockUnitModelInfoDetailView

- `PackageClosureToggleButton`

Executes method `TogglePackageClosure()`.

It is only visible when

- the related setting is checked ([Settings\StockUnitModelInfoDetailHandlingUnitHeadStateManagementEnabled](#))
- the related permission is allowed ([Permissions\StockUnitModelInfoPackageStateManagementPermission](#))
- the given stock unit is not an unpacked one
- and `HandlingUnitHead.State` is either `InPacking` or `Closed`.

HandlingUnitHeadStateManagementService

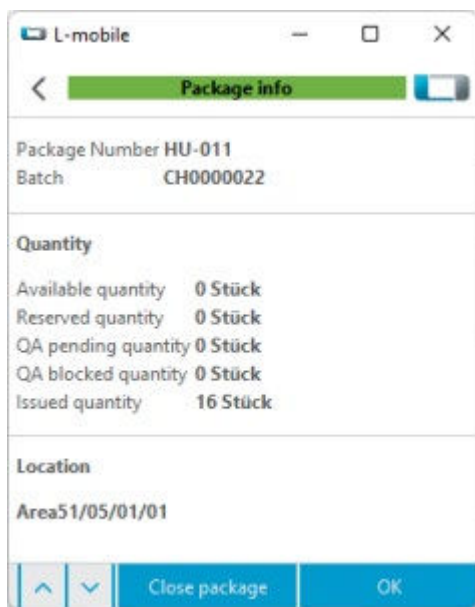
The state management posting execution logic is extracted to a service for reusability reasons. It is responsible for the composition a `HandlingUnitHeadStateManagementPosting` and the execution of the posting transaction.

16.2 USER DOCUMENTATION

Stock Unit Info Detail

After the packaging process closure of packages was not possible. As only closed packages can be shipped (see: [Packaging\Sales Packaging\Shipping](#)) it was not possible to set not closed packages to "shippable" state.

From now on the closure/opening of a package can be handled in [Stock Units\Stock Unit Info](#) detail view with the help of a button in the footer:



Package info

Package Number HU-011
Batch CH0000022

Quantity

Available quantity 0 Stück
Reserved quantity 0 Stück
QA pending quantity 0 Stück
QA blocked quantity 0 Stück
Issued quantity 16 Stück

Location

Area51/05/01/01

Close package OK

The button acts as a toggle button. When a package is closed it can be reopened and vice-versa. Its visibility is controlled by a setting, see [Settings\Stock Unit Info Detail\Package state management](#).

A package can be either closed or open completely. So independently from which part of the package is opened in the detail view the close/open action will be applied to the whole package.

Permissions

Package state management

A dedicated permission that allows state management in the stock unit detail view.

Settings

[Stock Unit Info Detail\Package state management](#)

Controls the visibility of the package closure/open functionality in stock unit detail. Unchecked by default.

[Booking settings\Package state management success message](#)

Determines whether a success message should be shown or not after successful package closure/opening.

Unchecked by default.

17 9.1 STD - PACKING INSTRUCTIONS LIST

- This feature extends the functionality of [9.0 STD - Stock Unit Infrastructure / Sales Packaging](#).
- The changes are standard but the integration is only done in WMS domain.

17.1 DEVELOPER DOCUMENTATION

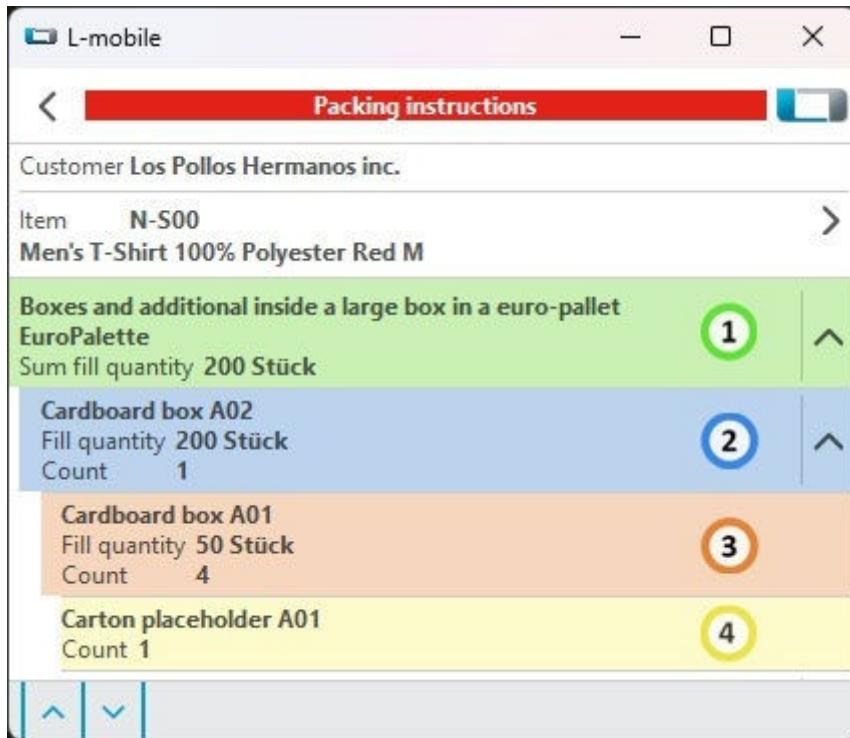
Overview

The foundation of packing instructions infrastructure was included along with an internal (without module and permissions) listing [application](#).

The functionality is available from [SalesPackagingApplication](#), the availability is controlled by a dedicated [setting](#)

17.2 BACKEND

Structure example



Packing instruction head

ID	Description
1	Boxes and additional inside a large box in a euro-pallet

Packing instruction structures

	Packing-MaterialID	ID	RootID	ContainerID	HeadID	Fill-Quantity	PackageCount	RoleInPackage
①	EuroPallet	10	NULL	NULL	1	200	1	Container
②	Cardboard box A02	20	10	10	1	200	1	Container

	Packing-MaterialID	ID	RootID	ContainerID	HeadID	Fill-Quantity	PackageCount	RoleInPackage
3	Cardboard box A01	30	10	20	1	50	4	Container
4	Carton placeholder A01	40	10	20	1	NULL	1	Additional

Package based on the instruction



BUSINESS OBJECTS AND MAPPINGS

PACKINGINSTRUCTIONHEAD

STORED MAPPING

WMS mapping: AutonomousStandaloneStoredPackingInstructionHeadMapping

Business Object	Standalone Mapping
StoredPackingInstructionHead	StandaloneStoredPackingInstructionHeadMapping
ID	Populated from the NumberingSequences.PackingInstructionHeadID sequence.
ItemID	FK: Item.ID
PartnerID	FK: Partner.ID
Description	
PackingInstructionNo	Not in use at the moment.

VIEW MAPPING

WMS mapping: AutonomousStandalonePackingInstructionHeadMapping

Business Object	Standalone Mapping
PackingInstructionHead	StandalonePackingInstructionHeadMapping
ID	StoredMapping.ID
ItemID	StoredMapping.ItemID
PartnerID	StoredMapping.PartnerID
Description	StoredMapping.Description

Business Object	Standalone Mapping
PackingInstructionNo	StoredMapping.PackingInstructionNo

PACKINGINSTRUCTIONSTRUCTURE

STORED MAPPING

WMS mapping: AutonomousStandaloneStoredPackingInstructionStructureMapping

Business Object	Standalone Mapping
StoredPackingInstructionStructure	StandaloneStoredPackingInstructionHeadMapping
ID	Populated from the NumberingSequences.PackingInstructionStructureID sequence.
RootID	The ID of the root structure. Null for root structures.
ContainerID	The ID of the (direct) container structure. Null for root structures.
HeadID	FK: PackingInstructionHead.ID
PackingMaterialID	FK: PackingMaterial.ID
FillQuantity	The quantity of sub-stocks inside the current structure (indirectly or directly).
FillQuantityUoM	FK: UnitOfMeasure.Code
LabelCreationType	Not in use at the moment.
PackageCount	The required amount of the current structure.
RoleInPackage	See <u>Stock Units\Enumerations\RolesInPackage</u> .

Business Object	Standalone Mapping
SortKey	

VIEW MAPPING

WMS mapping: AutonomousStandalonePackingInstructionStructureMapping

Business Object	Standalone Mapping
PackingInstructionStructure	StandalonePackingInstructionStructureMapping
ID	StoredMapping.<counterpart column>
RootID	
ContainerID	
HeadID	
PackingMaterialID	
FillQuantity	
FillQuantityUoM	
LabelCreationType	
PackageCount	
RoleInPackage	
SortKey	

DATA ACCESS OBJECTS

PACKINGINSTRUCTIONMODELDAO

List<PackingInstructionModel> OnFinding-ByFilter(FindPackingInstructionModelArgs args)	Find packing instructions+heads by criteria and map them into <u>PackingInstructionModel</u> instances. When nothing is found returns an empty list.
--	--

FindPackingInstructionModelArgs		
ItemID	Ignored when null.	
PartnerID	Ignored when null.	
PackingInstructionModel		
Property	Source object	Source field
HeadID	PackingInstructionHead	ID
ItemID		ItemID
PartnerID		PartnerID
Description		Description
ItemNo	PackingInstructionHead > Item	ItemNo
VariantCode		VariantCode
PartnerName	PackingInstructionHead > Partner	Name
StructureID	PackingInstructionStructure	ID
RootStructureID		HeadID

FindPackingInstructionModelArgs		
ContainerStructureID		ContainerID
PackingMaterialID		PackingMaterialID
RoleInPackage		RoleInPackage
FillQuantity		FillQuantity
FillQuantityUoM		FillQuantityUoM
PackageCount		PackageCount
PackingMaterialKey	PackingInstructionStructure > Packing-Material	PackingMaterialKey

PACKINGINSTRUCTIONHEADDAO

Not yet in use.

PackingInstructionHead Get(CompositeKey id)	Returns a head by ID. When nothing found returns null.
---	---

PACKINGINSTRUCTIONSTRUCTUREDAO

Not yet in use.

PackingInstructionStructureGet(CompositeKey id)	Returns a structure by ID. When nothing found returns null.
---	--

TEST DATA

See `TestDataCreator.CreatePackingInstructions()`.

17.3 FRONTEND

SETTINGS

SALESPACKAGINGSHOWPACKINGINSTRUCTION

Controls the availability of the packing instruction listing functionality in [SalesPackagingApplication](#).

Default value: false.

APPLICATIONS

PACKINGINSTRUCTIONLIST

The application is an internal one (no module or permission belongs to it) so it is not available from the main menu, only from a host application.

It is responsible for listing the packing instructions mapped into the model [PackingInstructionModel](#) in a hierarchical way.

The `Start` method with parameters can narrow down the instructions based on the optional search parameters in `PackingInstructionListSearchParameters`.

Search parameters are listed in the header of the list view, when search parameter `PartnerID` is not null the caption of the header row can be changed from the outside with the `partnerCaption` start parameter.

PACKAGING/SALESPACKAGING

The packing instruction list is available from the packaging view of [SalesPackagingApplication](#). See `ShowPackingInstructionsButton` in `OrderPositionPackingView`.

COMPONENTS

PACKINGINSTRUCTIONLISTMANAGER

This component is responsible for the hierarchical data construction from the `PackingInstructionModel` instances.

The result is a list of the root structures wrapped into `PackingInstructionListItem` instances.

PACKINGINSTRUCTIONLISTTREERENDERER

This view helper class is responsible for the rendering of the list items in a hierarchical way. Its binding source is the context which implements the `IPackingInstructionListContext` interface.

There is not depth limitation.

The actual rendering is done by the `PackingInstructionListItemRenderer`.

PACKINGINSTRUCTIONLISTITEMRENDERER

This view helper class is responsible for the rendering of a given list item.

17.4 USER DOCUMENTATION

OVERVIEW

Packing instructions are the prescriptions of packaging, they have been made available in the [Sales Packaging](#) application.

See also [Structure example](#).

- No packing instruction maintenance application exists yet.
- Only listing is possible the packaging logic is not yet influenced by the instructions yet.

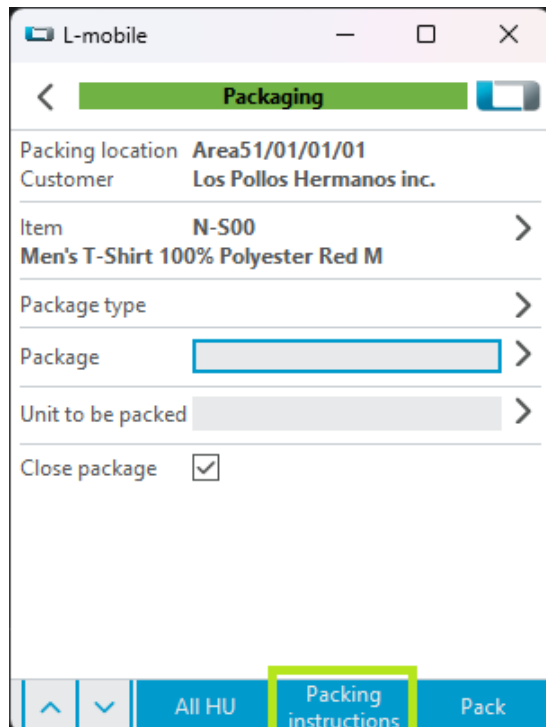
SETTINGS

ADMINISTRATION\DOMAIN SETTINGS\SALES PACKAGING\SHOW PACKING INSTRUCTIONS

Controls the availability of the packing instruction listing functionality in [Sales Packaging](#) application.
Default value: checked.

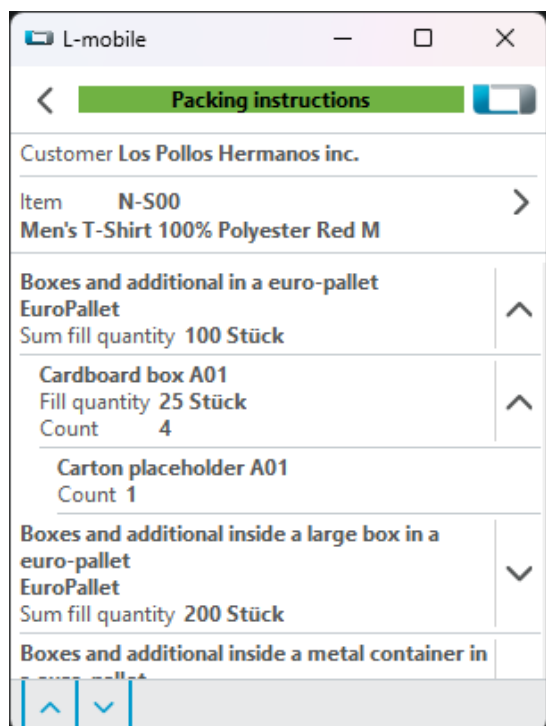
FUNCTIONALITY

The packing instructions are available only when the related [setting](#) is checked.



The instructions are listed in a hierarchical form. Child list items can be opened/collapsed with the down/up chevrons on the right side.

The list is filtered by the customer and the item of the current order position.



18 9.1 STD - SET PREVIOUS PACKAGE AFTER PACKAGING

- This feature extends the functionality of [9.0 STD - Stock Unit Infrastructure / Sales Packaging](#).
- The changes are standard but the integration is only done in WMS domain.

18.1 DEVELOPER DOCUMENTATION

Overview

The packaging functionality of [SalesPackagingApplication](#) was extended with an additional initialization logic.

Depending on the value of two new [Settings](#) and the value of the `OrderPositionPackingStageManager.ClosePackage` property the previously filled package remain selected or set as the unit to be packed after the packaging is executed.

Frontend - Settings

SalesPackagingFillUnitToBePackedWithPreviousClosedPackage

When its value is `true` and property `OrderPositionPackingStageManager.ClosePackage` is also `true` the previous package is set as the unit to be packed (`OrderPositionPackingStageManager.UnitToBePackedStockUnitModelPickAppComponent`) after packaging.

Default value: `false`.

SalesPackagingKeepPreviousOpenPackageSelected

When its value is `true` and property `OrderPositionPackingStageManager.ClosePackage` is `false` the package remains selected after packaging.

Default value: `false`.

StockUnitModelPickAppComponent

The ability to select a specific stock unit was added in the form of a new method: `SelectStockUnit(CompositeKey selectedModelId);`

PackagingService

The `Pack` method returns the ID of the newly created handling unit head from now on.

PackagingApplication

The initialization logic was adjusted so the new settings are taken into account. See `OrderPositionPackingStageManager.Initialize()`.

18.2 USER DOCUMENTATION

Overview

The packaging functionality of [Sales Packaging](#) was extended with an additional initialization logic. Depending on the value of two new [settings](#) and the value of the "Close package" checkbox the previously filled package remain selected or set as the unit to be packed after the packaging is executed.

Settings

Administration\Domain settings\Sales Packaging\Packaging view\Set the previous closed package as the unit to be packed

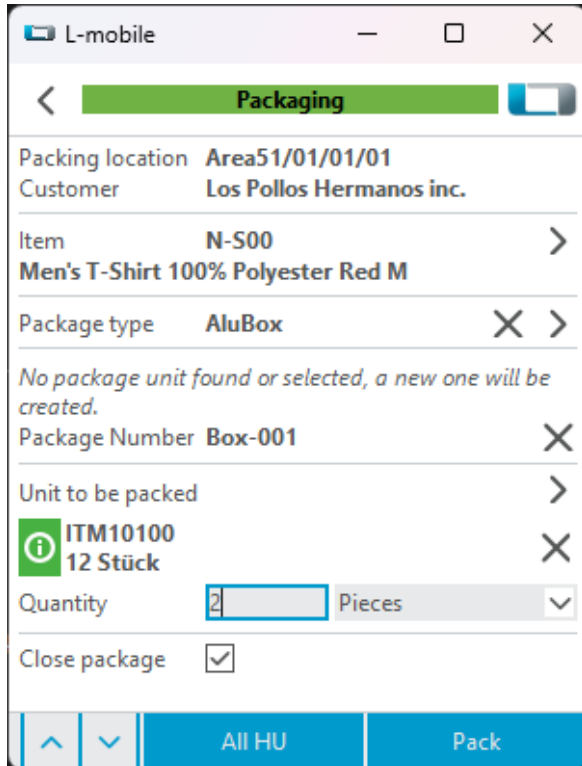
When it is checked and the checkbox "Close package" is also checked in the packaging view of the [Sales Packaging](#) application the previous package is set as the unit to be packed after packaging. Default value: unchecked.

Administration\Domain settings\Sales Packaging\Packaging view\Keep previous open package selected

When it is checked and the checkbox "Close package" is unchecked in the packaging view of the [Sales Packaging](#) application the package remains selected after packaging. Default value: unchecked.

Functionality

Set the previous closed package as the unit to be packed



Packaging

Packing location **Area51/01/01/01**

Customer **Los Pollos Hermanos inc.**

Item **N-S00**
Men's T-Shirt 100% Polyester Red M

Package type **AluBox**

No package unit found or selected, a new one will be created.

Package Number **Box-001**

Unit to be packed

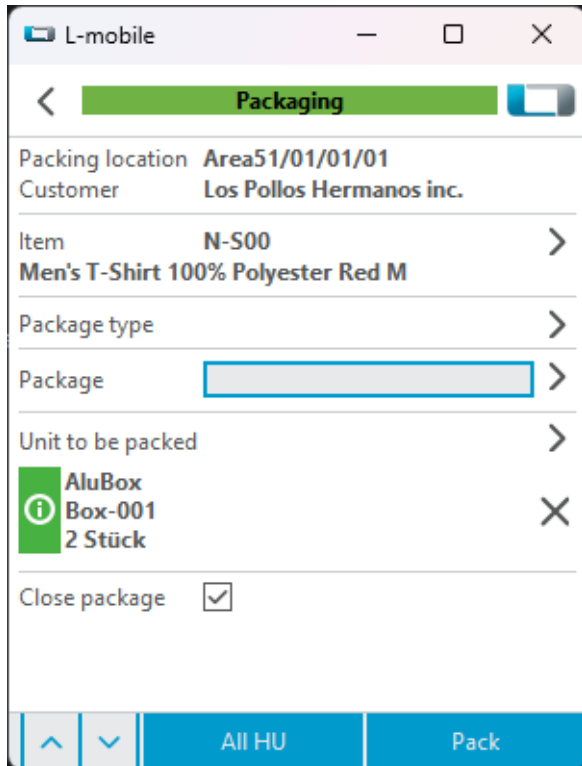
ITM10100
12 Stück

Quantity Pieces

Close package ☒

All HU **Pack**

After the packaging is executed the view is reset and the "Unit to be packed" is filled with the new package:



Packaging

Packing location **Area51/01/01/01**

Customer **Los Pollos Hermanos inc.**

Item **N-S00**
Men's T-Shirt 100% Polyester Red M

Package type

Package

Unit to be packed

AluBox
Box-001
2 Stück

Close package ☒

All HU **Pack**

Keep previous open package selected

L-mobile

<

Packaging

Packing location

Area51/01/01/01

Customer

Los Pollos Hermanos inc.

Item

N-S00

>

Men's T-Shirt 100% Polyester Red M

Package type

AluBox

✕

>

Package

>

AluBox

Box-001

✕

Unit to be packed

>

ITM10100

10 Stück

✕

Quantity

3

Pieces

▼

Close package

☐

⬆

⬇

All HU

Pack

After the packaging is executed the view is reset except the "Package" and "Package type" inputs:

L-mobile

<

Packaging

Packing location

Area51/01/01/01

Customer

Los Pollos Hermanos inc.

Item

N-S00

>

Men's T-Shirt 100% Polyester Red M

Package type

AluBox

✕

>

Package

>

AluBox

Box-001

✕

Unit to be packed

>

Close package

☒

⬆

⬇

All HU

Pack

19 9.1 STD - STOCK UNIT LIST APPLICATION ADDITIONAL HEADER INFO

- This feature extends the functionality of [9.0 STD - Stock Unit Infrastructure / Sales Packaging](#).
- The changes are standard but the integration is only done in WMS domain.

19.1 DEVELOPER DOCUMENTATION

Overview

Possibility to display further external info in the header of both views of `StockUnitModelListApplication` is added.

At the moment customer name is the only additional info. It is shown when the `StockUnitModelListApplication` is directly or indirectly executed from the `SalesOrderPackagingApplication`.

Frontend

`StockUnitModelListAdditionalHeaderInfo`

The container structure for additional information.

An instance of this container can be passed in both parameterized start methods of `StockUnitModelListApplication`: `StartWithSearchParameters`, `StartWithFixedSource`. It is then used as the binding source in the component.

When `StockUnitModelListApplication` is used via `StockUnitModelPickAppComponent` an instance of the container can be passed into the `Initialize` method and then it is propagated to the application.

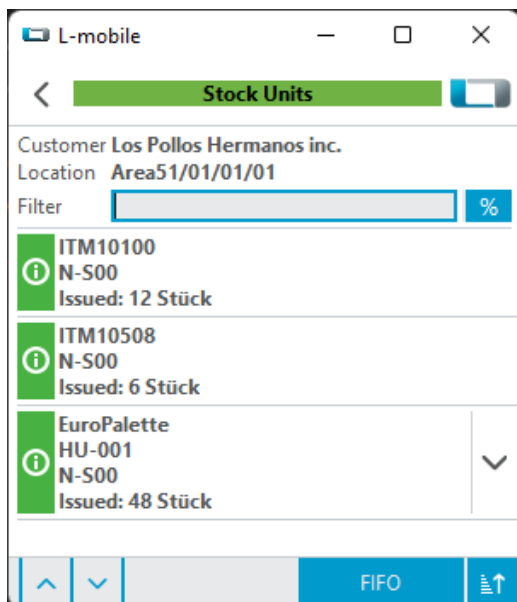
`StockUnitModelListAdditionalHeaderInfoViewComponent`

A dedicated component was added to display additional info about the context (parent application) where the given `StockUnitModelListApplication` is used. It is integrated into `StockUnitModelListListView` and `StockUnitModelListFilterView`.

19.2 USER DOCUMENTATION

Customer name is displayed in the *Stock Units* application.

Example 1: *Stock Units* application entered from *Sales Packaging* application\Delivery Positions view:

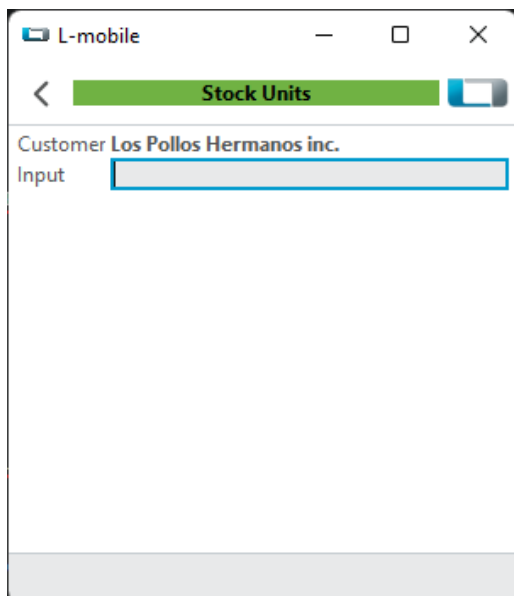


The screenshot shows the 'Stock Units' application window. At the top, the title bar says 'L-mobile'. Below it, a green bar contains a back arrow and the text 'Stock Units'. The main content area displays the following information:

- Customer: Los Pollos Hermanos inc.
- Location: Area51/01/01/01
- Filter: %
- A list of stock units:
 - ITM10100 N-S00 Issued: 12 Stück
 - ITM10508 N-S00 Issued: 6 Stück
 - EuroPalette HU-001 N-S00 Issued: 48 Stück

At the bottom, there is a navigation bar with arrows, a 'FIFO' button, and a list icon.

Example 2: *Stock Units* application entered from *Sales Packaging* application\Packaging view (Unit to be packed selector):



The screenshot shows the 'Stock Units' application window. At the top, the title bar says 'L-mobile'. Below it, a green bar contains a back arrow and the text 'Stock Units'. The main content area displays the following information:

- Customer: Los Pollos Hermanos inc.
- Input:

The rest of the screen is empty, indicating that the stock units list is not yet populated.

20 9.1 STD - STOCKUNITMODELDAO GETTERS

- This feature extends the functionality of [9.0 STD - Stock Unit Infrastructure / Sales Packaging](#).
- The changes are standard but the integration is only done in WMS domain.

20.1 DEVELOPER DOCUMENTATION

Overview

The possibility to query a given stock unit model instance was added to the [StockUnitModelDao](#). At the moment only the following [unit kinds](#) can be queried. Further kinds can be added later as needed.

- SubStock
- HandlingUnitStructureItem

Backend

StockUnitModelDao

StockUnitModel GetPackedSubStockModel(CompositeKey subStockId)	Returns null or a sub stock wrapped into a StockUnitModel instance.
StockUnitModel GetHandlingUnitStructureItem-Model(CompositeKey handlingUnitStructureId)	Returns null or a handling unit structure wrapped into a StockUnitModel instance.

SubStockDao

`FindSubStocksArgs` of [SubStockDao](#) was extended with a new property: `HandlingUnitStructureID`. It is ignored when it is null.

21 9.1 STD - UNPACKING

- This feature extends the functionality of [9.0 STD - Stock Unit Infrastructure / Sales Packaging](#).
- The changes are standard but the integration is only done in WMS domain.

21.1 DEVELOPER DOCUMENTATION

Overview

A new posting handler was implemented to add the ability of unpacking a package or a subset of a package.

Note: partial unpacking of a given sub-stock is not possible at the moment.

The functionality is available indirectly from the [SalesPackagingApplication](#) at the moment. It can be integrated later to any stock unit list with multi selection capability (requirement: `StockUnit-ModelListSelectAppComponent`).

Backend

StandaloneUnpackagingPostingHandler

Handler: `AutonomousStandaloneUnpackagingPostingHandler : StandaloneUnpackagingPostingHandler : UnpackagingPostingHandler`

Result: the given package structure or sub-stock is unpacked. In the former case the given package structure and all of its child structures (recursively) are removed. All of the sub-stocks under the removed structures became unpacked.

UnpackagingPosting				
Property	Description	Man-datory	Validation	
HandlingUnitStructureID	The ID of the structure to be removed (with all of its child structures recursively).	No	Handling unit head must exist.	When both are null the booking fails.
SubStockID	The ID of the sub-stock to be unpacked.	No	Sub-stock must exist.	

When a sub-stock is unpacked its `HandlingUnitHeadID` and `HandlingUnitStructureID` properties are set to null.

As the stock unit infrastructure does not support packages without sub-stocks the structures are removed during the unpacking process. This way the identifiers are freed up so the same package identifiers can be used again.

StockUnitHelper

Common complex query logic of the `StandalonePackagingPostingHandler` and `StandaloneUnpackagingPostingHandler` were extracted to this class.

Frontend

UnpackagingOptions

This class is used to pass down the unpackaging options from the host app to the unpackaging logic.

- `Enabled`
- `ShowPostingSuccessMessage`

UnpackagingService

This service is responsible for the unpackaging posting composition and execution.

Settings

SalesPackagingUnpackagingEnabled

This setting controls the availability of the unpackaging functionality inside the [SalesPackagingApplication](#).

Default value: `false`.

SalesPackagingShowUnpackagingPostingSuccessMessage

This setting determines whether a message should be shown after each successful unpackaging booking inside the [SalesPackagingApplication](#).

Default value: `false`.

StockUnitModelListSelectAppComponentUnpackWrapper

With the help of this class the unpackaging functionality can be attached to an instance of `StockUnitModelListSelectAppComponent`.

- `Initialize()`: sets the `ShowPostingSuccessMessage` property.
- `AttachFunctionality()`: attaches the unpackaging functionality to the `StockUnitModelListSelectAppComponent` instance passed in the ctor.
- `DetachFunctionality()`: detaches the unpackaging functionality from the `StockUnitModelListSelectAppComponent` instance passed in the ctor. Currently not in use, added for extensibility/deviation reasons.

Integration

StockUnitModelListApplication

- `StartWithSearchParameters()`: an instance of [UnpackagingOptions](#) can be passed into this start overload method. The unpackaging functionality is controlled by this.
- `StockUnitModelListListView`: the caption of the button that toggles between the no selection/multi selection mode is set to "Unpack" when the unpackaging functionality is enabled and the selection mode is [StockUnitModelListSelectionMode.Multi](#).
- `StockUnitModelListListStageManager`: the unpackaging functionality is attached to the `StockListSelectAppComponent` using the [StockUnitModelListSelectAppComponentUnpackWrapper](#) when the functionality is enabled and the selection mode is [StockUnitModelListSelectionMode.Multi](#).
- `PackagingApplication` + [SalesPackagingApplication](#)
- The unpackaging functionality is available from the `OrderPositionList` and the `OrderPositionPacking` views. See method `ShowAllHandlingUnits()` in `OrderPositionListStageManager` and `OrderPositionPackingStageManager`.
- [Settings](#) are assigned to the counterpart properties in the stage managers of the [SalesPackagingApplication](#) descendant.

21.2 USER DOCUMENTATION

Overview

A complete package or parts of it can be disassembled with the unpackaging functionality. It is available from the [Sales packaging application](#).

Settings

Settings can be found under *Administration\Domain settings*.

Administration\Domain settings\Sales Packaging\General\Unpackaging enabled

This setting controls the availability of the unpackaging functionality inside the [Sales packaging application](#).

Unchecked by default.

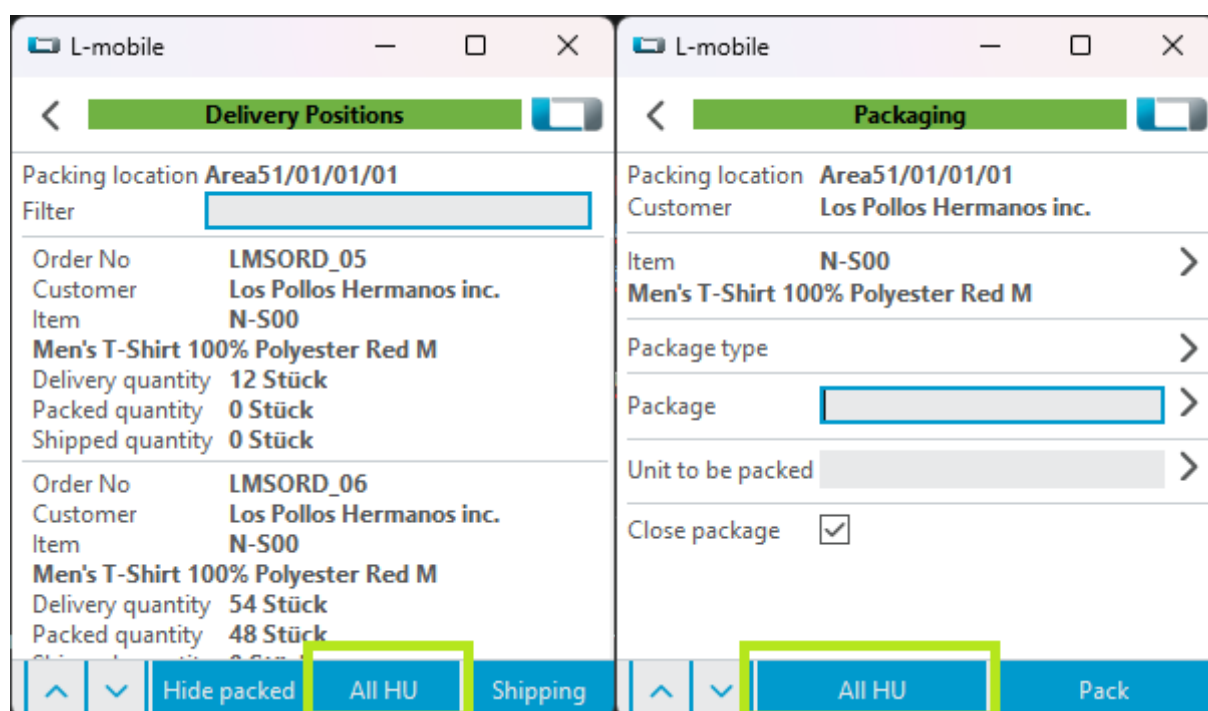
Booking settings\Sales unpackaging success message

This setting determines whether a message should be shown after each successful unpackaging booking inside the [Sales packaging application](#).

Unchecked by default.

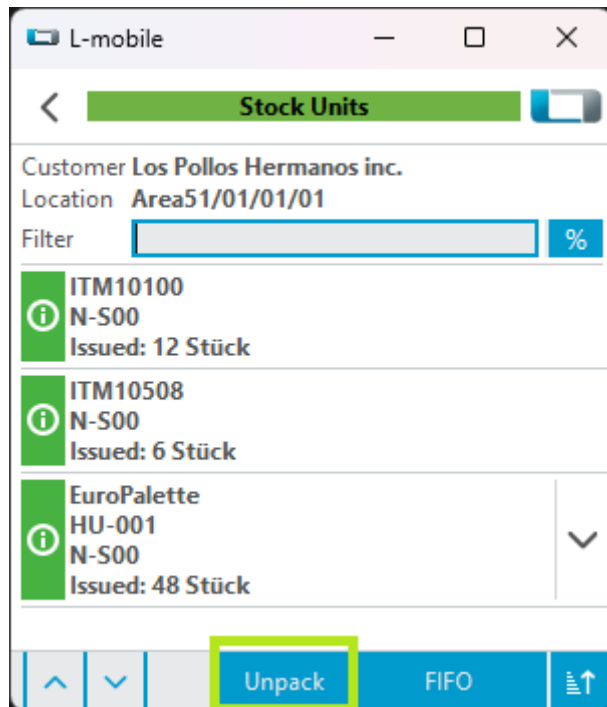
Functionality

Unpackaging is available from the *Delivery Positions* and the *Packaging* views of [Sales packaging application](#) by entering the *Stock Units* view.

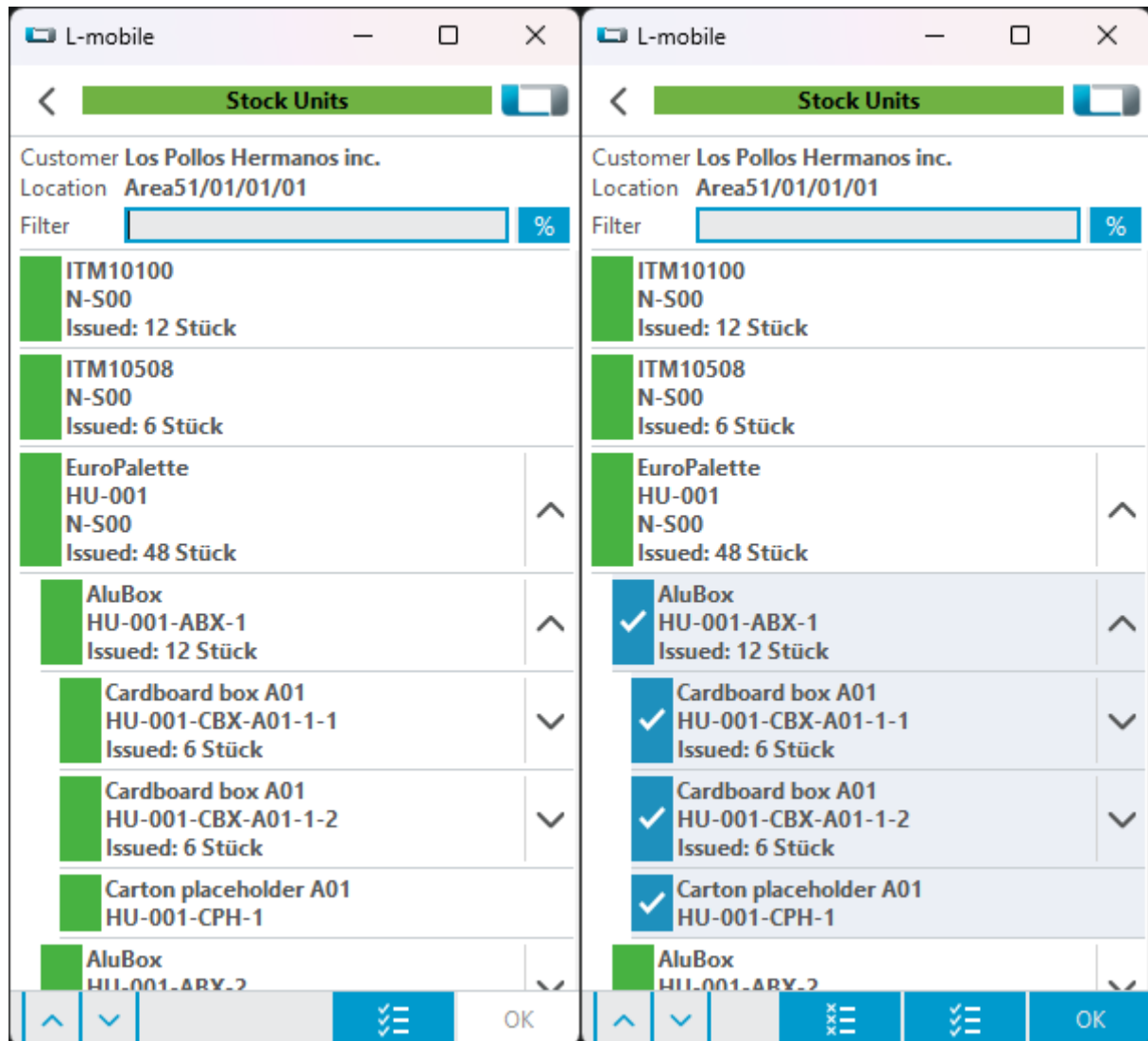


The image displays two side-by-side screenshots of the L-mobile application interface, both showing the 'Delivery Positions' and 'Packaging' views respectively. Both views show a list of orders for 'Los Pollos Hermanos inc.' with item 'Men's T-Shirt 100% Polyester Red M'. The 'Delivery Positions' view shows delivery quantities, while the 'Packaging' view shows packed and shipped quantities. Both views have a yellow box highlighting the 'All HU' button in the footer.

When the [Unpackaging enabled](#) setting is checked an "Unpack" footer button is available in the view.



It switches the view into multi select mode.



- The selected state of a given list item can be toggled by clicking on it.
- Unpacked sub-stocks cannot be selected.
- When a package is selected all of its sub-packages and sub-stocks are selected automatically.
- More than one unit can be selected for unpackaging.
- Multi select mode can be deactivated with the left chevron on the top left.
- Footer actions

	Deselect all list items (recursively).
	Select all list items (recursively).
OK	Execute unpackaging process (booking).

Unpackaging process/notes:

- Independently from the selection when a given package is selected and the packaging is executed all of its sub-packages and sub-stocks will be unpacked also.
- Unpackaging means that the package elements are removed from the database and the sub-stocks will become unpacked sub-stocks and can be packed again.
- When no sub-stock remains under a package the given package is removed from the database and its container packages are also if no other package with sub-stock remains under those.
- Partial sub-stock unpackaging is not possible at the moment.
- After the unpackaging is executed the *Stock units view* is reinitialized.

22 9.1 STD - WEB CORE

23 9.1 WMS - APS MINIMAL INTEGRATION

23.1 USER DOCUMENTATION

There are no new UI applications.

There are no new settings/user data.

23.2 DEVELOPER DOCUMENTATION

Upload to Poem

The following business objects are passed to the Poem.

BusinessObject	Notes
Site	
PersonGroup	
Person	
PersonAbsence	

BusinessObject	Notes
AbsenceReason	
Partner	
Operation	
Qualification	
WorkplaceGroup	
Workplace	
Tool	
SchiftSchedule	
SchiftSchedulePeriod	
ProductionOrderHead	only fine planned
ProductionOrderPart	only fine planned
ProductionOrderProduct	only fine planned
ProductionOrderOperation	only fine planned
ProductionOrderMaterial	only fine planned
ProductionOrderTool	only fine planned
ProductionOrderAssembly	only fine planned
ProductionOrderSubcontractedManufacturing	only fine planned
ProductionOrderQualification	only fine planned

BusinessObject	Notes
PlannedPurchase	
PurchaseOrderHead	
PurchaseOrderPosition	
SalesOrderHead	
SalesOrderPosition	

Missing implementations

- OrderAssignment (not implemented mapping)
- ProductionTransportTime (not implemented mapping)
- Workplace/Tool shift assignments

These data should be managed on Poem side manually in the current state.

Building production order tree

There is a new implementation for building production order tree, This new implementation is taken as standard in the future. However the already existing erp specific implementations will continue to override this building procedure.

Tree building process

There can be multiple order part in an order. Every part is built separately containing the positions of the part.

Every part has a root node with the main product.

Root product	Condition
ProductionOrderProduct	ID = ProductionOrderPart .MainProductionPositionID

The following positions are inserted under the root node.

Business objects under root	Condition
ProductionOrderOperation	not IsAlternativeOperation && SubcontractionPositionID = null && AssemblyPositionID = null
ProductionOrderAssembly	ParentAssemblyPositionID = null
ProductionOrderSubcontracted-Manufacturing	1 = 1 (all go under the root)

The following positions are inserted under a tool node.

Business objects under root	Condition
ProductionOrderOperation	IsAlternativeOperation && MainOperationPositionID = <i>ProductionOrderOperation.ID</i>
ProductionOrderTool	not IsAlternativeTool && OperationPositionID = <i>ProductionOrderOperation.ID</i>
ProductionOrderMaterial	OperationPositionID = <i>ProductionOrderOperation.ID</i>
ProductionOrderProduct (by product)	OperationPositionID = <i>ProductionOrderOperation.ID</i>
ProductionOrderAssembly (assembly material)	OperationPositionID = <i>ProductionOrderOperation.ID</i>

The following positions are inserted under an operation node.

Business objects under root	Condition
ProductionOrderTool	IsAlternativeTool && MainToolPositionID = <i>ProductionOrderTool.ID</i>

The following positions are inserted under a subcontraction node.

Business objects under root	Condition
ProductionOrderOperation	not IsAlternativeOperation && SubcontractionPositionID = <i>ProductionOrderSubcontractedManufacturing</i> .ID && AssemblyPositionID = null
ProductionOrderProduct (by product)	SubcontractionPositionID = <i>ProductionOrderSubcontractedManufacturing</i> .ID
ProductionOrderAssembly (assembly material)	OperationPositionID = <i>ProductionOrderOperation</i> .ID

The following positions are inserted under an assembly node.

Business objects under root	Condition
ProductionOrderOperation	not IsAlternativeOperation && SubcontractionPositionID = null && AssemblyPositionID = <i>ProductionOrderAssembly</i> .ID
ProductionOrderAssembly	ParentAssemblyPositionID = <i>ProductionOrderAssembly</i> .ID

Writing back

New standalone implementation for production and sales aps postings.

If a posting does not change any data row, the posting is set to Abandoned state, so it will not be persisted.

StandaloneProductionApsPostingHandler

ProductionOrderHead

Order end time is written into `Deadline` property.

ProductionOrderMaterial

Start time of the consuming operation is written into `Deadline` property.

ProductionOrderOperation

Original workplace/workplace group is written into `OriginalWorkplaceOrWorkplaceGroupKey` property.

Operation start time is written into `PlannedStart` property.

`WorkplaceKey/WorkplaceGroupKey` is filled with the scheduled workplace.

If an alternative operation is scheduled the operation positions are switched and the dependent positions are attached to the new main operation position.

ProductionOrderTool

Start time of the consuming operation is written into `Deadline` property.

If an alternative tool is scheduled the tool positions are switched and the dependent positions are attached to the new main tool position.

StandaloneSalesApsPostingHandler

SalesOrderPosition

Order position deadline is written into `Deadline` property.