

## 5.1.3.44. Picklist Controller

Extension: *Picklist Controller - Controls the Picklist*

### Ad Hoc Picking

The following settings apply to the three tasks of the [Ad Hoc Picking Flow](#) ([Customer Collect](#), [Picklist](#) and [Route](#)) on the Mobile Client.

If a setting is task specific, the documentation specifies the task(s) that the given setting applies to. If no task is specified, the given setting applies to all the three tasks.



#### ***Route picking: picklist order by***

The setting applies to Ad Hoc Picking task Route and it defines the sorting of picklists. From the drop-down menu the following options can be selected:

- Order by priority, due date and doc entry
- Order by sequence on route: forward
- Order by sequence on route: reverse

#### ***Ad hoc picking: Keep picking the same item***

If the setting is enabled, the system keeps asking the user to pick the item until everything is picked for the given item.

If the setting is disabled, it is not necessary to pick everything for the selected item. When the quantity to pick is defined, the system goes back to the overview screen of all items and the picking process can be started for another item.

#### ***Ad hoc: Auto fill pick quantity***

If the setting is enabled, the quantity to pick is displayed in the quantity input field of the *Enter the Quantity* screen. If the setting is disabled, the displayed quantity is 1.

Note: If the quantity to pick is below 1, the displayed quantity in the quantity input field is the maximum quantity to pick.

#### ***Ad hoc: Force to scan SSCC***

If the setting is enabled, an SSCC must be scanned when performing the picking.

#### ***Allow ad hoc picking from bulk locations***

If the setting is enabled, items can be picked from bulk locations (non-pick locations) as well.

#### ***Allow confirmation that all goods were picked***

The setting applies to Ad Hoc Picking task Customer Collect.

If the setting is enabled and the picklist does not contain any item managed by serial numbers, the **Confirm all picked goods** button is displayed on the Mobile Client and the user can confirm that all the items are loaded in one step.

### ***Auto move SSCC on a customer-collected related move***

The setting applies to Ad Hoc Picking task Customer Collect.

If the setting is enabled, the SSCC is automatically moved to the dock.

If the setting is disabled, the system asks the user if the SSCC needs to be moved.

### ***Choose dock on ad hoc picking***

The setting applies to Ad Hoc Picking tasks Route and Picklist.

If the setting is enabled, the system asks the user to select a dock where the items are picked to. The selected dock is then saved on the route or picklist.

### ***Express Ad Hoc Picking***

The setting applies to Ad Hoc Picking task Picklist.

If the setting is enabled, step *Scan SSCC / Location* is skipped. Instead, after selecting a product, the user has the following options:

- If the item is available on one single location, the system immediately asks the user to enter the quantity to pick.
- If the item is available on more than one location, the system first asks the user to select a location and then to enter the quantity to pick.

### ***Reason requirements when skipping first location***

The Ad Hoc Picking flow suggests a number of locations where the picking can be performed and the locations are sorted in a way that the first location is the best location to pick the items from. (Docks are not considered first locations.) If the user wants to pick from another location, this setting defines if a reason for skipping the first location is needed.

The following options can be selected from the drop-down menu:

- No reason
- Requires user-entered reason text: Free text, entered by user, minimum 10 characters
- Requires a reason to be selected from a list on the scanner

### ***Show stock for location***

The setting applies to Ad Hoc Picking task Picklist.

If the setting is enabled, the *Select a Pick Location* screen shows the free stock quantity of the selected item for each location listed on the screen.

### ***Function/SP name to get the locations***

The setting refers to the function/stored procedure that is used to get the locations for Ad Hoc Picking.

Input parameters on SQL:

- @pmxWhsCode
- @itemCode
- @batchToPick
- @separator
- @pickListDocEntry

The input parameters can be checked in standard function  
PMX\_FN\_GetAllLocationsForItemForAdHocPicking.

Input parameters on HANA:

- p\_pmxWhsCode
- p\_separator
- p\_pickListDocEntry

The input parameters can be checked in standard SP  
PMX\_SP\_GetAllLocationsForItemForAdHocPickingInTmp.

**Function/SP name to get the location sequence**

The setting refers to the function/stored procedure that is used to get the sequence of the locations.

Input parameters on SQL:

- @pmxWhsCode nvarchar
- @itemCode nvarchar
- @batchToPick nvarchar

The input parameters can be checked in standard function  
PMX\_FN\_GetFirstSequenceForLocationsForItemForAdHocPicking.

Input parameters on HANA:

- p\_pmxWhsCode nvarchar
- p\_pickListDocEntry

The input parameters can be checked in standard SP  
PMX\_SP\_GetFirstSequenceForLocationsForItemForAdHocPicking.

**View name to get the products**

With the setting a separate view can be provided to get the products to be picked. Mandatory columns to be listed for a view:

- DocEntry
- PmxWhsCode
- ProductCode
- ProductDescription
- ManBtchNum
- HasBestBefore
- GTIN
- DefaultLocationCode
- BaseLine
- BaseEntry
- LocationCodes
- Sequence
- batchToPick
- StillToPick
- QuantityPerUom

If no value is entered, the system executes the standard query.

## General



### ***Allow multiple customers on SSCC?***

If the setting is enabled, the system will allow to put stock for multiple customers/delivery addresses on the same SSCC. This means that when you have a wave for multiple customers, the user is not forced to pick on a moveable location and going through the pack station.

### ***Allow to create master SSCC (Y/N)***

If enabled, a master SSCC can be created. A master SSCC is a single logistic unit that contains multiple sub-logistic units.

### ***Auto fill quantity for packaging types?***

If set to true, the quantity to pick will be automatically entered instead of a zero.

### ***Copy non-inventory items to reserve invoice?***

If set to true, the system will copy non-inventory items to the reserve invoice when creating reserve invoices from picklists.

### ***Disable selection of items? (Y/N)***

If set to true, it will not be possible to select items on flows. The user will always have to scan a barcode for the item selection.

### ***Force the user to pick full pallet? (Y/N)***

Allows to define whether or not the user will be forced to pick a full pallet of items that contains the same or a lower quantity than the quantity that has to be picked for the picklist. Example: if a quantity of 60 has to be picked, and if a full pallet of 40 that answers the best before date and batch number criteria is available, this full pallet will be selected by the system for picking.

Picking will occur by scanning the SSCC. The quantity will not be asked. The SSCC will remain the same as the original SSCC.

If this is set to false, the user will need to pick it as 'item picking'.

Please note that this setting does not apply when assigning stock to the picklist.

This setting is only used AFTER the stock is assigned to the pick list, and the user is going to pick the stock on the scanner.

### ***Make picklist ready before print? (Y/N)***

The 'Make pick list ready' functionality allocates stock on location level to the pick list. So if a pick list report needs to have the locations filled in, this option should be enabled.

### ***Only pick items on location on same or lower level as dock? (Y/N)***

If set to true, the system will only create a pick list for items it can find on storage location defined on the same or lower level as the dock selected on the pick list proposal. The levels are defined by the zones those locations are in.

### ***Time to show 'item is picked' message?***

The number of seconds the 'item is picked' message is shown on the scanner:

Possible values:

- Negative values: The message is not shown.
- Value 0: The message will remain visible until the user clicks the 'OK' button
- Positive values: The message will remain visible for the entered number of seconds.

**Create replenishment orders after picking? (Y/N)**

If enabled, a replenishment order is generated after the picking is completed for the source location, if the following conditions are met:

- The location can be replenished
- There is a minimum quantity set for a picked item
- The stock for item on the location reaches the minimum quantity

The replenishment after picking is supported in the following flows:

- Picking
- Zone picking
- Multi picking
- Ad hoc picking

For the item based replenishment generator, system will try to create replenishment orders for all locations. The default replenishment generator will only try to create replenishment orders for the locations where goods were picked from.

**JOIN-sql for custom wave description for scanner**

If the 'Custom wave description fields for scanner' option contains fields that are not used in the default query, the user needs to define the JOIN query here.

This option cannot be used for pick list for production.

**Custom wave description fields for scanner**

Here the user has the possibility to enter a custom wave description that will be shown on the scanner. This text will be added to the select statement to select the waves on the Picking flow.

If the fields in the description are not on tables used by the default query, the option 'JOIN-sql for custom wave description for scanner' need to have the correct join to the table.

The standard available tables are:

- ORDR
- OUSR
- PMX\_OSEL
- PMX\_OSWA
- PMX\_PLHE
- PMX\_PLLI
- PMX\_PLPL
- PMX\_WAVE
- PMX\_WALO (*Zone picking only*)

Make sure the selected fields are casted to nvarchar if required. To add the PMX\_PLHE.PickPackRemarks field for example, fill this in the input box :

`CAST("PMX_PLHE"."PickPackRemarks" as nvarchar (2000))`

This option cannot be used for pick list for production.

## Multi-Picking

Organizational Structure - Produmex Logex AddOn

Search

Code: ProdumexWMS\_Demo  
Name: PMX WMS Demo

General | Defaults | Extension Parameters | Production | SSCC | Reports | Print Events | Zone types | Page size | Qui

Property: Picklist controller (PLCONTR)  
Extension: Pick list controller - Controles the pick list (DPLCONTR)  
Search Parameters:

**Multi-picking**

Multi picking: Allow to select wave? (Y/N) ☒  
Multi picking: Set movable locations at start of picking? (Y/N) ☒

Ok Cancel Export Close

### **Multi picking: Allow to select wave? (Y/N)**

When the setting is enabled, during Multi-Picking the user can select the wave instead of scanning a picklist.

### **Multi picking: Set movable location at start of picking? (Y/N)**

When the setting is enabled, during Multi-Picking all the movable locations need to be assigned to a picklist before starting to perform the picking.

If the setting is disabled, the movable location is asked when the first item of a certain picklist is picked.

## All, except Ad hoc picking

Organizational structure - Produmex Logex AddOn v19.2.0.2976

Search

Code: ProdumexWMS\_Demo  
Name: PMX WMS Demo

General | Defaults | Extension parameters | Production | SSCC | Reports | Print events | Zone types | Page size | Qual

Property: Picklist controller (PLCONTR)  
Extension: Pick list controller - Controls the pick list (DPLCONTR)  
Search parameters:

**All, except Ad hoc picking**

Ad hoc alternate item? (Y/N) ☐

Allow cycle count on alternate picking? (Y/N) ☐

Allow to identify the SSCC to pick on? ☐

Allow to select the item to pick? ☐

Alternate: Show locked quantity for current line? (Y/N) ☐

Auto fill quantity (No packaging types)? (Y/N) ☒

Auto select batch/BBD on picking? ☐

Auto select the wave? ☐

Auto selection of moveable location during picking? (Y/N) ☒

Can the user pick bulk quantity from bulk location? (Y/N) ☐

Can the user pick full pallet from bulk location? (Y/N) ☒

Consolidate items to pick? ☐

Copy batch number when selecting alternate item? (Y/N) ☐

Force first available batch on selecting alternate item? (Y/N) ☐

Item picking: Force user to scan SSCC when stock is on SSCC? (Y/N) ☐

Must the user first pick full pallet from bulk location? (Y/N) ☒

Skip screen to identify the pick location? (Y/N) ☐

Stock order by: **"BIGGEST PALLET FIRST"**

Wave order by: Order by priority, due date, wave key (PriorityDueDateWa)

Only pick on 1 SSCC? (Y/N) ☐

Pick items order by: Order by Full LUID, picked item, locationcode (FullPicked)

Pick items order by - Stored procedure name: PMX\_SP\_PickItemsOrderByLineNum

Ok Cancel Export Close

**Ad hoc alternate item? (Y/N)**

If this is set to false, the system will show a list of alternate items to choose from.

If this is set to true, the system will allow the user to enter any data when performing alternate picking, and the system will check if the entered data is allowed.

**Allow cycle count on alternate picking? (Y/N)**

If this option is enabled, the user has the possibility to perform a cycle count on the original pick location in case of alternate picking form a different location.

**Allow to identify the SSCC to pick on?**

If set to true, the system will allow the user to scan an SSCC number he wants to use to put the picked stock on.

### ***Allow to select the item to pick?***

Enables the option to select an item to pick instead of letting the system choose the first item.

### ***Alternate: Show locked quantity for current line? (Y/N)***

When this is checked, the system will also show the item that was locked for the current pick list line in the list of alternate items.

### ***Auto fill quantity (No packaging types)? (Y/N)***

If set to true, the quantity to pick will be automatically entered.

If set to false, the quantity to pick will be zero. And in case a barcode was scanned in the item identification screen, the quantity will be 1, because there was already an item scanned.

This is for items without packaging types.

### ***Auto select batch/BBD on picking?***

Enables the option to automatically select a Batch/BBD.

### ***Auto select the wave?***

If set to true, the system will select the wave. If set to false, the user can select the wave he wants to pick.

*Please note: This settings does not apply in the 'Multi picking' flow.*

### ***Auto selection of moveable location during picking? (Y/N)***

If set to true, the system will automatically select the moveable location. But this is only when there is 1 available moveable location. In case of full pallets, no moveable location will be used.

### ***Can the user pick bulk quantity from bulk location? (Y/N)***

If ticked the user can pick bulk quantities defined on the item master data from bulk locations.

### ***Can the user pick full pallet from bulk location? (Y/N)***

Normally bulk locations are not considered when allocating stock to a pick list. However this flag makes it possible that full monolot pallets at bulk locations (containing items that match the best before date and batch number criteria) can be picked by the operator.

The sorting of the stock to use depends on this setting and the option 'Must user first pick full pallet from bulk'.

More information at: [Pick list](#).

### ***Consolidate items to pick?***

If the setting is enabled, items that have the same batch number/BBD/Quality status/Location/... are picked in one action instead of a pick action by picklist line.

The setting applies to the Picking flow, the Multi-Picking flow and the Zone-Picking flow.

### ***Copy batch number when selecting alternate item? (Y/N)***

When the user wants to select an alternate batch, does the system need to copy the original batch number from the pick list?

Remark: If on the base document line a batch number is set, the batch will always be copied when selecting alternate items.

### ***Force first available batch on selecting alternate item? (Y/N)***

This setting refers to the process of selecting alternate stock on the fat client during a picking flow and it is based on FEFO (first expired, first out).

If it is set to true, you can select an item only from the batch with the earliest expiry date that is



according to the shelf-life.

This option cannot be used in combination with *Ad hoc alternate item? (Y/N)*. If that setting is enabled, the *Force first available batch on selecting alternate item? (Y/N)* setting is ignored.

#### **Item picking: Force user to scan SSCC when stock is on SSCC? (Y/N)**

When this setting is enabled, the user will have to scan the SSCC if the stock he is picking is on an SSCC.

This setting refers to 'Item picking' and not full pallet picking.

It will show an additional screen to scan the SSCC before proceeding to selection of batch, or entering the quantity.

#### **Must the user first pick full pallet from bulk location? (Y/N)**

Normally bulk locations are not considered when allocating stock to a pick list. However this flag makes it possible that full monolot pallets at bulk locations (*containing items that match the best before date and batch number criteria*) can be picked by the operator.

This option forces to first take full pallets from a bulk location before using pick locations.

The sorting of the stock to use depends on this setting and the option 'Can user pick full pallet from bulk'.

More information at: [Pick list](#).

#### **Skip screen to identify the pick location? (Y/N)**

When this is enabled, the user does not need to identify the pick location.

Users can immediately identify the item to pick. (*The pick location is visible in that screen*)

#### **Stock order by**

Custom 'ORDER BY' clause for when the pick list is allocating stock to the pick list line.

*This is not applicable for ad hoc picking*

It adds the value to the ORDER BY clause of the query to get the stock. The text 'ORDER BY' does not need to be added to the value.

Any text can be entered here, however there are 2 predefined options:

- \*DEFAULT\*
  - This option will use the sorting as it is currently in the system
- \*BIGGEST PALLET FIRST\*
  - The pallet with the biggest quantity will be assigned first.

If there are 2 pallets with the same quantity, the oldest LUID will be taken first.

When stock is not on an SSCC, the quantity not on an SSCC is still regarded as if it would be on an SSCC, and it will be used first in case of equal quantity.

- "Quantity", "IsPickLoc" DESC, "LogUnitIdentKey\_IsNull" DESC, "LogUnitIdentKey", "InternalKey"
  - This option will take lowest quantity, pick location, no LUID, LUID

For more information please see: [1.2. Stock order by](#).

#### **Wave order by**

Sorting of waves on the picking flows

Options:

- Order by Priority, due date, wave key
- Order by due date, priority, wave key

#### **Only pick on 1 SSCC? (Y/N)**

If enabled, the system will auto select an SSCC when there was already an SSCC created for the wave. This is useful for when users need to go out of the picking flow, and continue at a later time.

### **Pick items order by**

How are the items to pick sorted on the scanner?

Options:

- Order by Full LUID, sequence, no location: First full pallet, then the sequence of the location, then all lines without a location.
- Order by Full LUID, picked item, location code: First full pallets, then picked items, then location code. This means that when ItemA and ItemB needs to be item-picked on several locations, the system will first pick all quantities of ItemA, regardless of where it is stored. (*Full pallets are still picked first*)
- Order by Sequence, Location code, Full LUID, : First Sequence of the location, then the code of the location, then full pallets.
- Order by Custom stored procedure: The sorting is based on a custom SP.

It uses the SP defined in the setting below.

### **Pick items order by - Stored procedure name**

The name of the stored procedure that is used for the custom order by.

Used for the picking and zone picking flow.

The input of this stored procedure is the wave key. *SQL: @waveKey, HANA: p\_waveKey*

This SP needs to be in the extra DB.

If this SP does not return all line numbers to pick, the system will still add those lines to be picked, but in the order:

- Order by Full LUID, sequence, no location.

## **Packing**

Organizational structure - Produmex Logex AddOn v19.1.0.2962

Search

Code: ProdumexWMS\_Demo  
Name: PMX WMS Demo

General | Defaults | Extension parameters | Production | **SSCC** | Reports | Print events | Zone types | Page size

Property: Picklist controller (PLCONTR)  
Extension: Pick list controller - Controles the pick list (DPLCONTR)  
Search parameters:

**Packing**

Time to show pick/pack remarks on packing?: -1

### **Time to show pick/pack remarks on packing?**

The number of seconds the pick/pack remarks are shown in a popup window in the packaging client:

Possible values:

- Negative values: The message is not shown.

- Value 0: The message will remain visible until the user clicks the 'OK' button
- Positive values: The message will remain visible for the entered number of seconds.

## Picking

### **Picking: Make pick list ready for selected line? (Y/N)**

If enabled, the status of the pick list lines remain 'Not Ready' and the system does not allocate stock to them up until the user selects the item on the scanner. This setting is used only in the Picking flow.

### **Picking: Keep picking same location (Y/N)**

When this is set to true, the system will not ask the user to identify the pick location again when the next item to pick is in the same location.

## Picking/Multi-picking

### **Select wave - View name**

For the picking and multi-picking flows, it is possible to define a customized view which filters the list of waves to be displayed on your scanner when you have the option of selecting a wave.

It is optional to provide a view name to the field . If you do not need a customized view, you can leave the field empty and the system will use its own query.

#### Mandatory fields:

- InternalKey
- InternalKeyAsString
- DueDate
- Description
- Priority
- SameDelivery
- PmxWhsCode
- ItemLabelsPrinted
- LockedBy
- USER\_CODE
- U\_UseForPicking
- U\_UseForMultiPicking

#### Example view query:

```
SELECT "PMX_WAVE"."InternalKey" AS "InternalKey",
CAST("PMX_WAVE"."InternalKey" AS NVARCHAR) AS "InternalKeyAsString",
"PMX_WAVE"."DueDate" AS "DueDate",
"PMX_WAVE"."Description" AS "Description", "PMX_WAVE"."Priority",
"PMX_WAVE"."SameDelivery", "PMX_OSEL"."PmxWhsCode",
"PMX_WAVE"."ItemLabelsPrinted"
,"PMX_WAVE"."LockedBy", "OUSR"."USER_CODE", MAX("U_UseForPicking") AS
'U_UseForPicking',
MAX("U_UseForMultiPicking") AS 'U_UseForMultiPicking'
FROM "PMX_WAVE" WITH (NOLOCK)
INNER JOIN "PMX_PLHE" WITH (NOLOCK) ON "PMX_WAVE"."InternalKey" =
"PMX_PLHE"."WaveKey"
INNER JOIN "PMX_OSEL" WITH (NOLOCK) ON "PMX_OSEL"."Code" =
"PMX_PLHE"."DestStorLocCode"
LEFT JOIN "@PMX_PLTY" WITH (NOLOCK) ON "PMX_PLHE"."PickListType" =
"@PMX_PLTY"."Code"
LEFT JOIN "OUSR" WITH (NOLOCK) ON "PMX_WAVE"."LockedBy" =
"OUSR"."INTERNAL_K"
LEFT JOIN ( "PMX_PLLI" WITH (NOLOCK)
INNER JOIN "PMX_PLPL" WITH (NOLOCK) ON "PMX_PLPL"."DocEntry" =
"PMX_PLLI"."BaseEntry" AND "PMX_PLPL"."LineNum" = "PMX_PLLI"."BaseLine" AND
"PMX_PLLI"."BaseType" = N'PMX_PLPH'
LEFT JOIN "PMX_OSWA" WITH (NOLOCK) ON "PMX_OSWA"."Code" =
"PMX_PLLI"."StorLocCode"
) ON "PMX_PLLI"."DocEntry" = "PMX_PLHE"."DocEntry" AND "PMX_OSWA"."Code" IS
NULL
AND "PMX_PLLI"."PickListLineStatus" IN ('N','R')

WHERE "PMX_WAVE"."InternalKey"
IN ( SELECT DISTINCT "PMX_PLHE"."WaveKey" FROM "PMX_PLHE" WITH (NOLOCK)
WHERE "PickListStatus" IN ('N' , 'R' , 'A' , 'I' ))
AND "IsCustomerCollect" = N'N' AND "PMX_PLLI"."InvLockLevel" <> 'N'
```

```

AND "PMX_PLHE"."PickObjType" IN (N'Sales', N'WhsTransfer')

GROUP BY "PMX_WAVE"."LockedBy", "PMX_WAVE"."Priority",
"PMX_WAVE"."DueDate", "PMX_WAVE"."InternalKey", "PMX_WAVE"."Description",
"PMX_WAVE"."SameDelivery", "PMX_WAVE"."ItemLabelsPrinted",
"PMX_OSEL"."PmxWhsCode", "OUSR"."USER_CODE"

```

## Prepare carts



### Wave - View name

This view defines the waves to be displayed on the screen of the fat client.

The default view is PMX\_PREPARE\_CARTS\_WAVE. It lists all the waves which involves a pick list type that can be used for multi-picking and to which no movable location has been assigned yet.

Mandatory fields to be provided:

- 1.WaveKey
- 2.Priority
- 3.WaveDescription

### Wave - Order by

This setting defines the order by which the waves are displayed on the screen of the fat client.

### Pick list - Order by

This setting defines the order by which the pick lists are displayed on the screen of the fat client.

## Zone picking

### Lock wave by zone/user (Zone picking)

If this is set to true, the system will lock all items to pick on the zone for the current user instead of only locking the item/zone he is picking from.

This is used in the 'Zone picking' flow.

***Only show completely unlocked waves in case of zone picking?***

If set to true, the user can only see wave that have no locking for a user on it. This is used in the 'Zone picking' flow.

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