

Highlights

Warning about Marel.UI framework and Innova

An issue has been discovered with Pluto devices and other devices that use the Marel.UI framework. The Marel.UI framework version was upgraded but Innova was not informed. Therefore, it is unknown what the full effect of the version upgrade will be for Innova installations that generate web pages using Marel.UI framework.

This change affects version 5.8.1 and 5.8.2. Innova Development is working to test affected modules. If you have a customer who has problems with generated web pages and you believe it is because of this version upgrade, please open a ticket in the [Innova Development Service Desk](#).

Free for sale in 5.8.2

The following modules are free-for-sale in version 5.8.2.

- Innova for RoboBatcher Flex

Information about the module will be available in the external release notes. A User Manual for customers is available for distribution in KIS, the User Manual Library or Confluence.

Sequence used for item and pack numbers

Please also read [this release note](#) carefully. Sequence for item and pack numbers **must** be used for new Innova installations. It is also possible to switch over existing installations to use this. See the release note for details.

Base

Sequence used for item and pack numbers

Innova now supports fetching item and pack numbers from an SQL Server Sequence instead of the traditional number fetching from base_sitecounters. The SQL Server Sequence reduces a lot of locking and performance stress. This functionality **must** be enabled for any new systems installed. It is also be nice to have if the switchover to this functionality improves performance in running systems.

To enable this functionality for a new system the following tasks must be performed at a minimum:

1. The system must be running SQL server 2012 or later (verify the SQL server version).
2. The xml configuration switch in Xml Data Store (Marel.Mp5.Process.Services.UnitOperations.UnitOperation.Configuration.UseSqlSequenceforPackNumber / UseSqlSequenceforItemNumber must be set to **true**.
3. The static function Marel.Mp5.Process.Services.UnitOperaitons.CreateItem.GetNextNumberValue(string sequenceName) must be enhanced so that it will create a new sequence if the sequence does not exist. Failure to create the sequence must be clearly logged and traced.

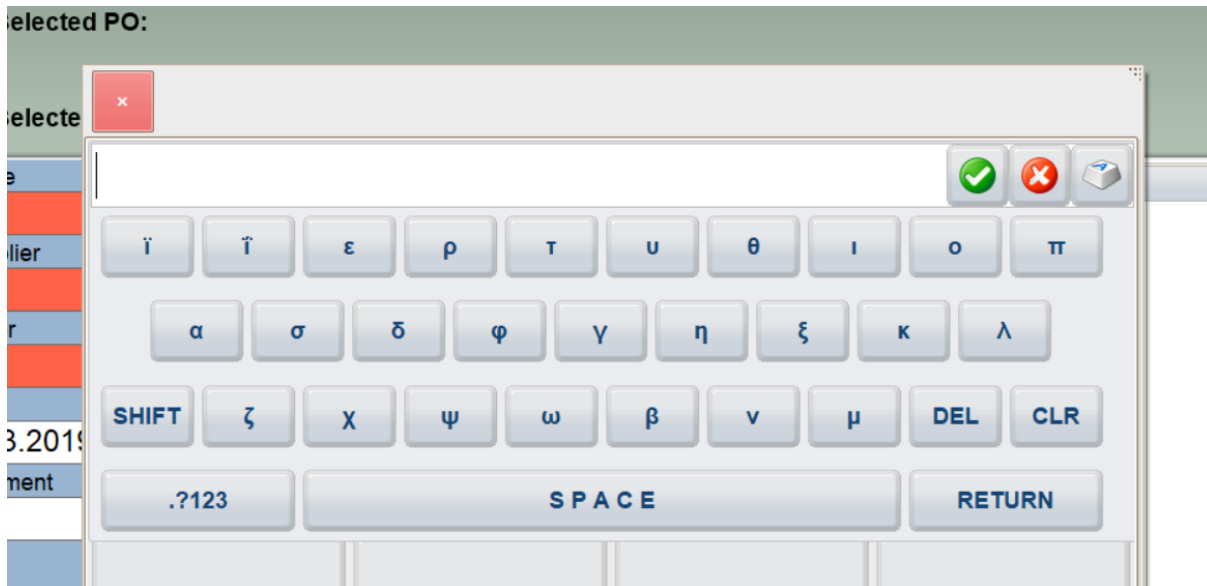
To make it easier to switch over from the old functionality to the new functionality the following task must be performed at a minimum:

If a sequence does not exist, the old number from base_sitecounters must be looked up and the sequence must be created with an initial value (from base_sitecounter) + <some offset> (100000).

A [knowledge base article](#) exists to describe the switchover.

M6000 Greek keyboard layout available

A Greek keyboard layout is now available on the M6000.



Ability to add a column summary field to master and data forms

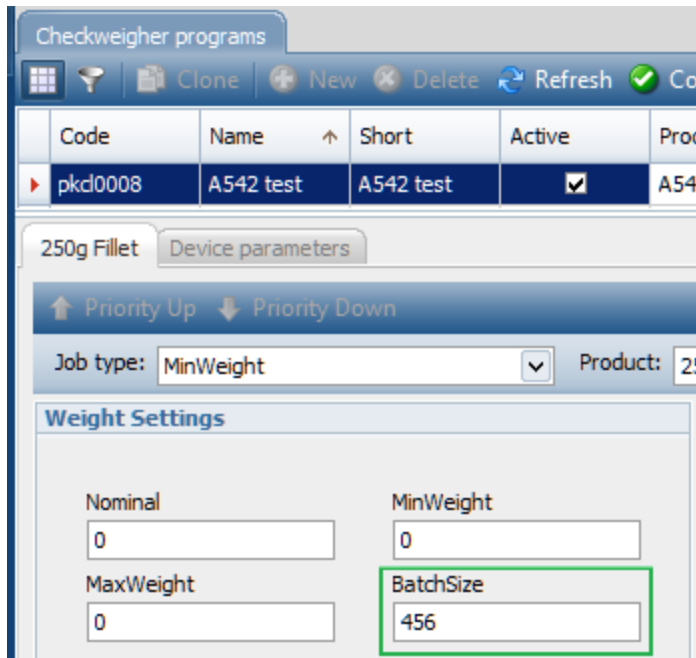
A view extension, GridBottomColumnSum, has been added to add sums to selected grid columns. This field displays the sum of all values in the column at the bottom of the grid.

There is a [knowledge base article](#) that describes how to do configure this.

Checkweighing

Ability to enter batch size for A542 minimum weight jobs

In the Checkweighing program editor it is now possible to enter batch size for A542 programs with minimum weight job types. Previously, this was only possible for programs with e-weighing job types.



Deboning

Improvement to WorkstationCE to allow Automatic mode in the Task view

A new button has been added to the TaskView to allow the operator to switch between manual and automatic mode. This button is only visible if AllowAutoMode in the workstation configuration is set to AllowManual.

Specify number of items being packed in PackingAccumulationWorkstationCE

The packing station now has a configurable option to be able to specify number of pieces being weighed in one. For instance, if there are 10 pending tenderloins on the station, then the operator is able to put 5 tenderloins on a scale, press 5 pieces and do one weighing. The system creates a pack record with correct weighing: it removes the 5 tenderloins from the queue, creates 5 item records with the average tenderloin weight, and links the item records / pack record to the deboning item record.

Integration Services

Timeout configuration added for transfer engine

A configuration parameter has been added to the isman.exe system program XML to configure the client timeout.

Configuration option to generate a new number for packs when importing them using the transfer hub

There is now a configuration option on the TEHubXmlImportHandler to determine whether or not to generate new pack numbers when importing packs. This is false by default.

```
<!--Generate new number when importing packs-->  
<GenerateNewPackNumber>False</GenerateNewPackNumber>
```

Support added for extra header parameters in WsExportHandlerApplication

A list of strings can be added to the configuration of WsExportHandlerApplication on a similar level as the SoapAction. If this list is not null and not empty, then the strings will be propagated to the http header in a similar way as the SoapAction. [This knowledge base article](#) contains more information.

Kill floor

Added ability to create PO and PO lines on incoming station

The PoCE station has been improved so it is now possible to create a Purchase order and purchase order lines on a station when the incoming animals are arriving. Additionally, the station is more stable than previously.

Improvements to slaughter control

A bug was fixed where an error from a grading camera would cause the ManualFlag on the classification record to be set to false always.

A new input control functionality was added. NumberCode is a numeric keyboard that allows 0 prefixes.

A new configuration flag was added in the classification station, IgnoreIncomingWeightRecords, to ignore incoming weight records from scales.

Monitoring

Alarm owner added to standard reports

The standard alarm reports also have the option of showing the alarm owner when displaying alarms for multiple owners. Owner name has been added to all alarm reports but is hidden by default in the configuration. The option of removing the Event description has also been added as in many cases it shows the same data as in the system description.

OEE

Top X alarm report shows alarm owner

The Top X alarm report has been improved to show alarm owner if alarm forwarding is used. There is an option in the report configuration to Show alarm owner. If this is true, the alarm owner column is visible. Alarm owner and alarm forwarding are relevant for lines where OEE measurement is done on one device but is dependent upon other devices.

Top 10 OEE alarm events



Date: 24-01-2018 - 24-01-2019

OeeEntity = I-Slice 3300 Line, Slicer A, Slicer B, Slicer C, 1.WPL-1.1, Mcheck2, SV4700, MHW, Proc_ICut130, SensorX, OEE Device simulator, MS2730 Filleting Machine, FP Revo Portioner, 3.WPL Supervisor.1, Filtered out: Alarms during Unscheduled, NotScheduled and NotScheduled (Idle break) period(s)



	System Descriptions	Event Description	#	Event Duration	Owner:
1	3.Unknown [FP_RevoPortioner] Alarm	Unknown [FP_RevoPortioner] Alarm	1	2223:50:45	OEE Device Simulator
2	Flux capacitor overloaded. The flux capacitor in the control panel has been overloaded with reversed stream	The flux capacitor in the control panel has been overloaded with reversed stream	1	837:31:53	OEE Device Simulator

Alarm owner shown in Entities form

The alarm owner column is shown in the Entities form on the Alarm stop reasons details form. The eases configuration of alarm stop reasons.

Entities							
Clone Autofilter Refresh Confirm Print Operations Configure							
Id	Process unit	Availability target min	Availability target max	Performance target min	Performance target max	Quality target min	Quality target
1		80	100	60	80	90	
2	OEE Device...	90	95	90	95	80	
3	I-Cut 130	90	95	90	95	80	
4	Inweighing	80	100	60	80	90	

Stop reasons Performance loss reasons Quality loss reasons Signal map Signal descriptions Alarm stop reasons Alarm group stop reasons Alarm forwarding				
Alarm	Owner	Sequence	Stop reason	
Emergency Circuit Broken	ICut130	1		
Emergency switch active	ICut130	1		
Emergency switch active	ICut130	1		
Emergency switch active	ICut130	1		
Emergency switch active	ICut130	1		
Emergency switch active	ICut130	1		
Door open	ICut130	1		
Door open	ICut130	1		
24V failure	ICut130	1		
Drive Error	ICut130	1		
Drive Error	ICut130	1		
Drive error	ICut130	1		
Door open	ICut130	1		

New Production Signal event type for generic line inputs

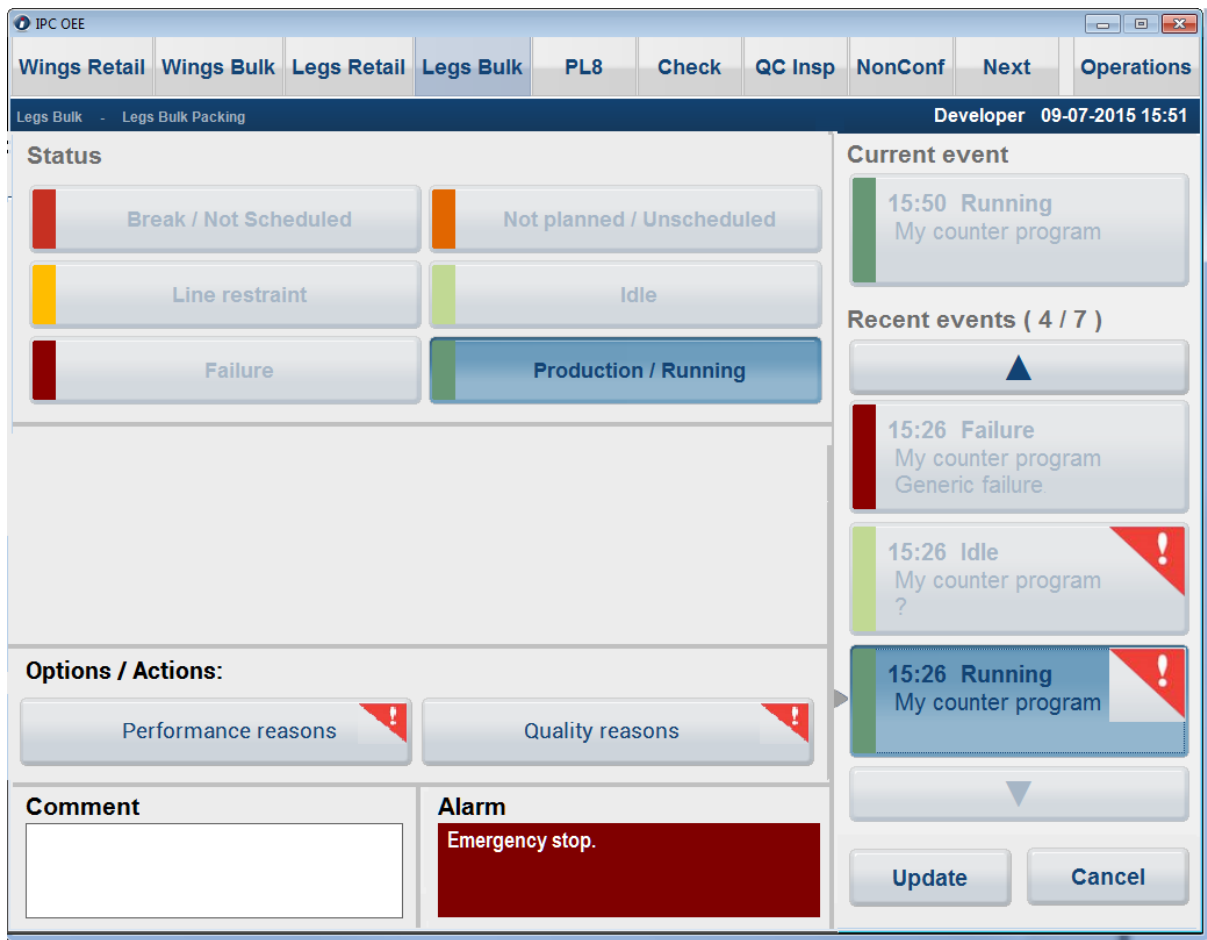
When the only information for measuring availability on a generic line is a Production ON/OFF signal, then it's not enough to control the running signal directly as the ActiveTimeout of the process unit is not used. The entity simply goes straight to Idle as soon as the input goes OFF.

To accomodate this, a new event type, Production Signal, has been added. It uses the same active time monitor as the piece method to control availability. When the signal is High/ON/1, then a one second timer is started that ticks the timemonitor every second. When the signal is Low/OFF/0, then the timer is stopped. This way the active timeout period of the process unit is applied to the production signal coming from the generic line.

Edit performance and quality reasons on the IPC

As part of the running performance and quality monitoring, it is now possible to edit the running event to add performance or quality reasons to the event. When selecting a

Running event the Performance and Quality reasons buttons are shown. The OEE status is still shown in case the operator wants to change that (if allowed to change). Note that the running event now also may require input. The Performance reason button shows the red triangle if the selected event requires performance input and the same applies to the quality reasons button.

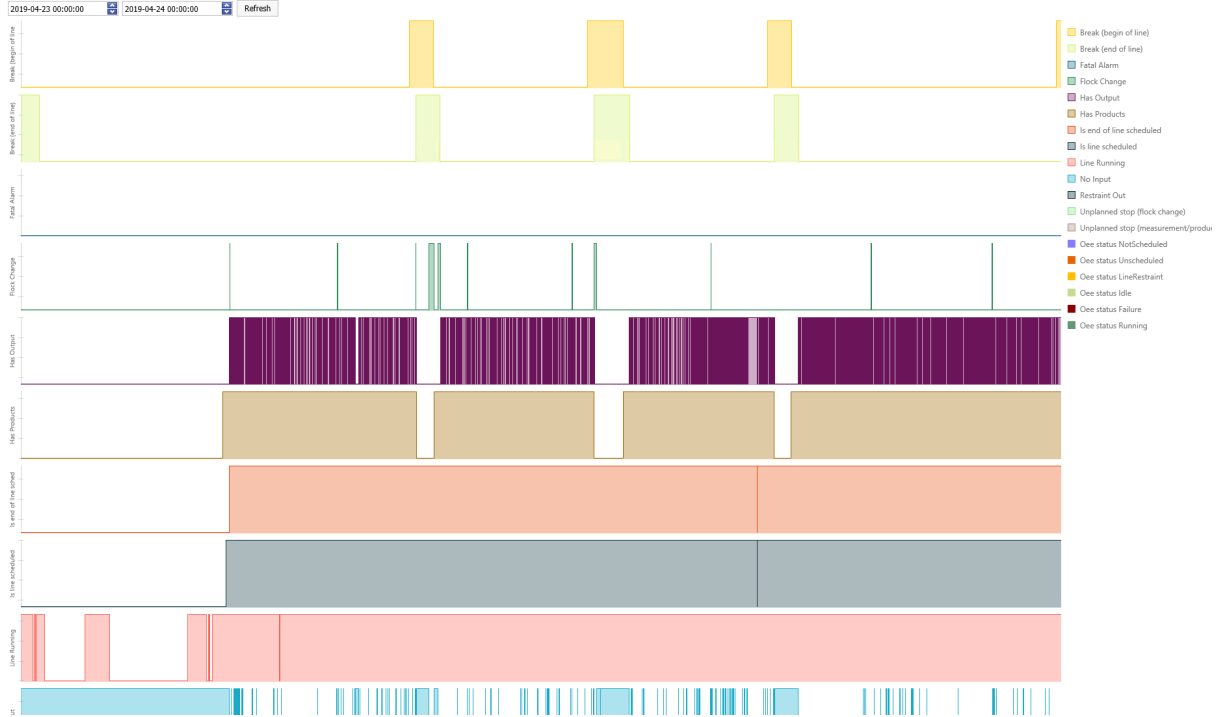


When selecting a non-running event, the performance and quality reason buttons are not shown. The standard IPC event editor screen is shown.

Improvements made to OEE Poultry Signals component

For the developers of OEE systems there is a dashboard component available that displays the state of all the signals and the resulting OEE status. Because it is quite technical, this component is not visible for a customer, but for development it is an important component. The signal states though were very hard to read.

To improve readability, the palette of colors has been changed, each series gets its own pane in the graph and the graph type has become an area.



Packing

Marine Pack scanner on collection central and Scanning overview report

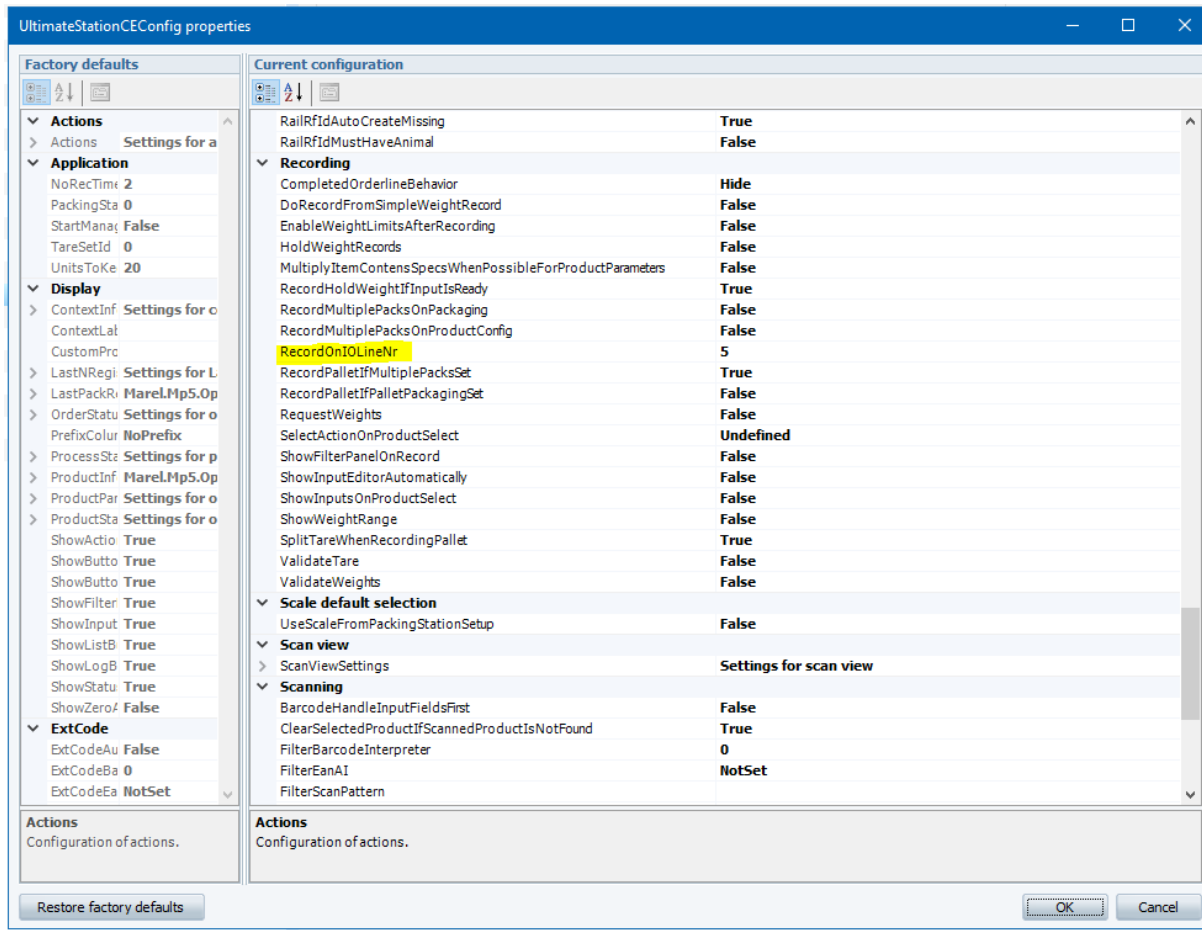
The Collection central scanner is a barcode scanner that is attached to the transport conveyor. Every physical box has a fixed barcode. Every box also has an Innova standard pack label. The collection central scanner reads both barcodes and thus connects the physical box together with the virtual box in Innova. The Innova data (including the physical box ID) is later exported to the auction house. When the auction house scans the physical box's barcode they get full traceability data from Innova.

To support the scanner in collection central, a new report, Scanning overview, has been made. The report shows the number of good scans and the number of bad scans where the box is missing box barcode, missing label barcode, or missing both.

CC scanner overview				INNOVA
Date: 07-05-2019 - 10-05-2019				
Date	Good scan	Missing box label	Missing product label	
07-05-2019	192	12	12	
08-05-2019	552	0	0	
09-05-2019	670	7	7	
10-05-2019	1126	0	0	

Trigger record in UltimateStation when input received from I/O unit

UltimateStationCE has been changed so that it implements the InputChanged method. A new configuration switch has been added to the UltimateStationCE to configure to which input line it should listen.



When the configured input line goes up, the Record button should be pressed. If no product is chosen, a warning is displayed.

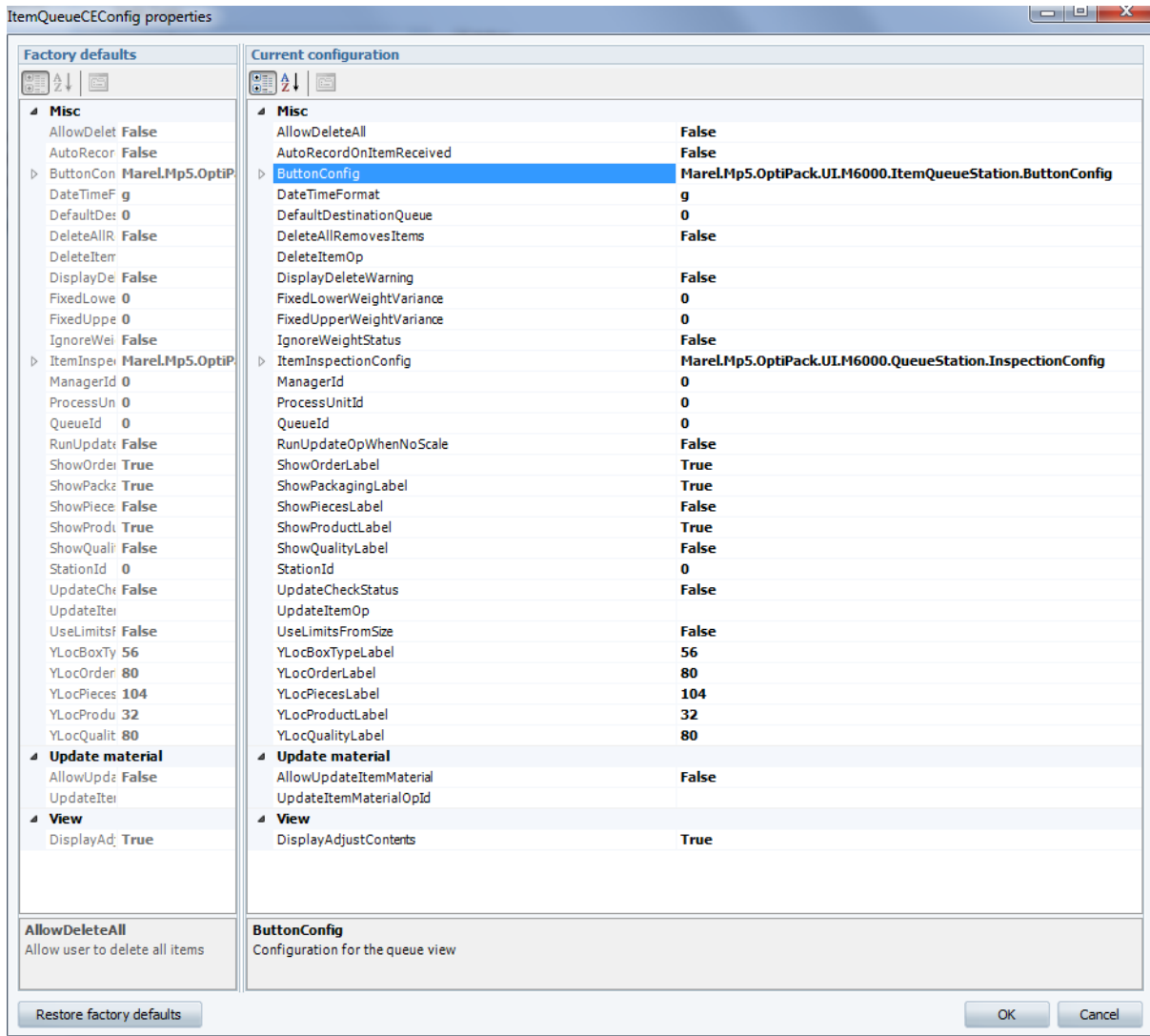
On an UltimateStationCE a request is made to the scale to make a record. On an UltimateFWStationCE a record is created.

You also need to configure the correct I/O device under System programs for the IPC station. The knowledge base article [USB IO Unit board outputs with Innova](#) explains this.

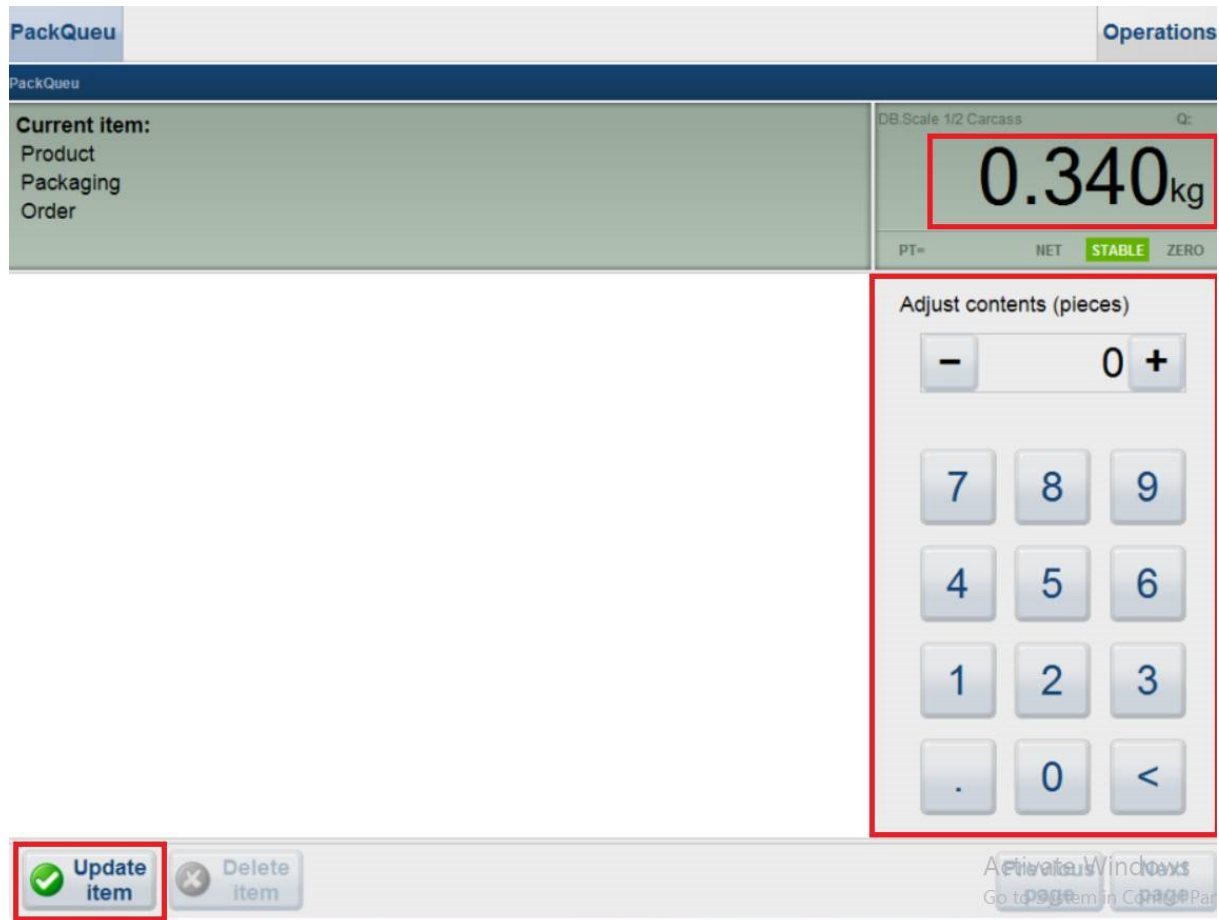
For more information, see [Use IO device with UltimatePackingStation](#).

ItemQueueStation created

A new IPC station, Marel.Mp5.OptiPack.UI.M6000.QueueStation.ItemQueueCE, has been created. This new station is based on Marel.Mp5.OptiPack-.UI.M6000.QueueStation.PackQueueCE but it supports items instead of packs.



There is an option in the XML configuration (Display adjust contents) to turn off the Adjust Contents (Pieces) Side Panel.



The Update Item button in the bottom corner is not available unless the weight is greater than zero and an item has been selected.

Add the ability to format the PoName field on the M2200 TerminalController

To accommodate input in different languages, the ability to format the Po field has been added to the M2200 TerminalController.

UltimateStation improvements

Control the content of Last Packs

The ability to fetch Last units from the database when opening the UltimateStationCE for the first time has been added. Some configurable criteria and order by was also added. You can also configure the format of the buttons on last units views.

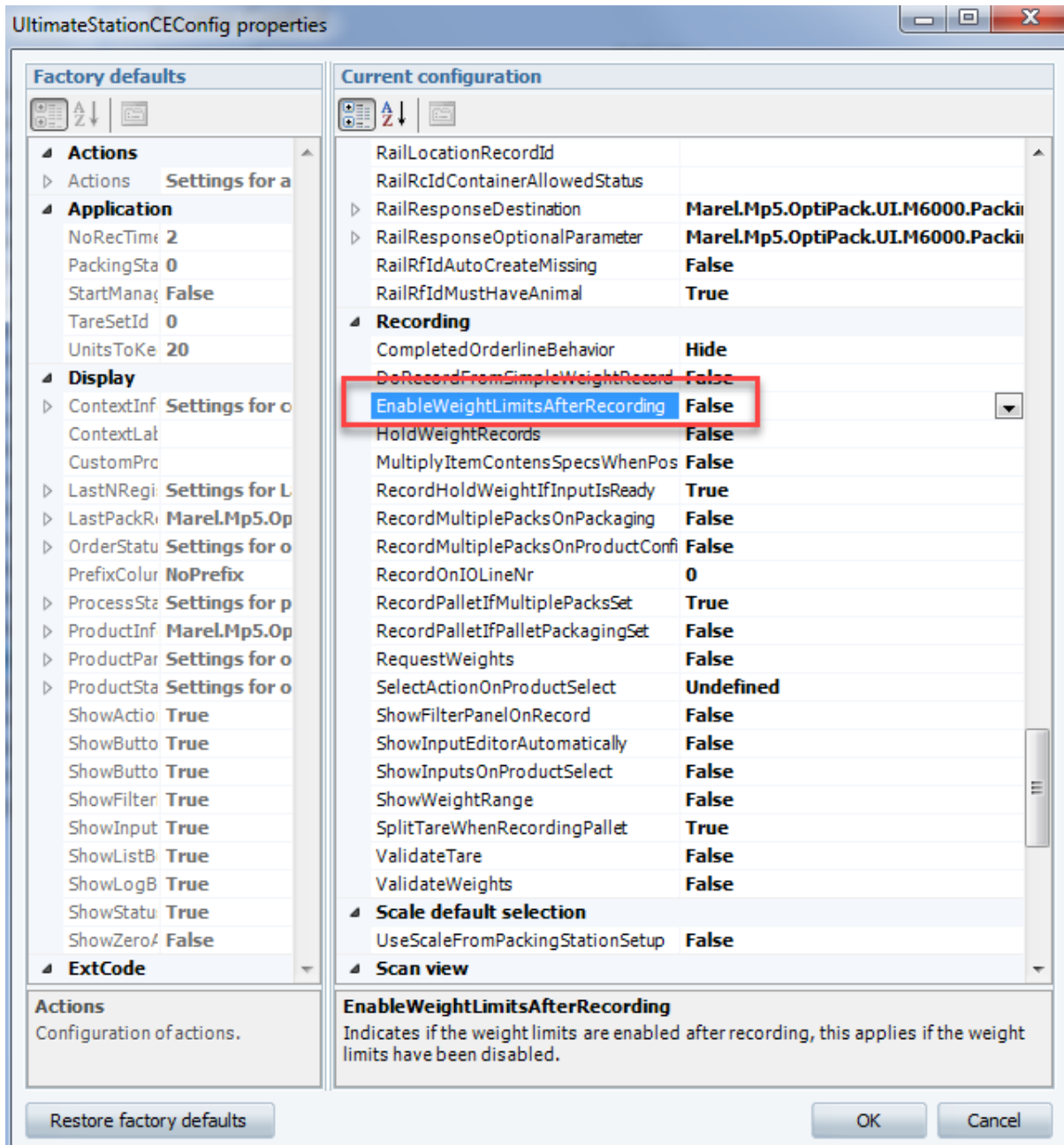
ApplyPurchaseOrderLineToProductEntries was added to fix an issue where the purchase order line wasn't updated if the purchase order line was created in the unit operation. The product purchase order is now invalidated when ApplyPurchaseOrderLineToProductEntries is true.

Set context variables on scan

A configuration parameter called BarcodeHandleInputFieldsFirst has been added to the Ultimate Station. This parameter makes it possible to set the input field values before the product is selected.

Add the ability to re-enable the weight limits after recording

A new configuration property provides the ability to re-enable the weight limits on the packing station after a single recording has been made.



Calculate accepted weight range when using pieces input

It is now possible for Innova to calculate the accepted weight range when using pieces input. MultiplyItemContentsSpecsWhenPossibleForProductParameters now works when typing number of pieces in the input box.

Innova calculates total tare = crate tare + pieces * item tare and accepted weight = pieces * itemcontenspec weight.

Drop station now supports dynamic product lists

The tap gate terminal now supports dynamic product lists. The new screen, when activated in the configuration, displays a list of products from the PackingProductList active on the process unit.

The operator can choose a product from the product list. The operator is not allowed to clear a line or clear all lines.

Once a new activity is activated or an ActivityUpdate event is received from the process unit, the screen displays the correct list of products. If the old, selected product is still in the list, it is automatically selected. If it is not available in the product list, the top product is selected. The lot is not displayed in the list of products.

The new terminal screen also supports downgrades in a similar way as they are already done.

Portioning

Portioning reports available in Russian

The Portioning module reports are available in Russian from version 5.7.2 and up.

Improvement made to employee heatmap

The employee heatmap has been improved so that the values set for minimum and maximum point size and point intensity are respected as initial filtering values. However, a user can filter on higher values than those specified as the default values. For operators on the line using this filtering, a pop-up will be shown with a numeric keypad to make adjustment easier.

Process

Add employee to employee ID

If the `OperationData.Employee` contains an employee ID and the `App.EmployeeId` is not set, the `OperationData.Employee` is added to the `App.EmployeeId` during the execution of the unit operation set. The `App.EmployeeId` is reset after the execution of the unit operation set. This is done to record the correct employee for the record history change record.

Configure audit trail for illegal operation attempts (ToOrder-/ToShipment)

There are three new `UnitOperations`: `SetItemRemarks`, `SetPackRemarks`, and `SetPalletRemarks`.

Each of these unit operations creates a `Remark`. A remark is essentially an `Item`, `Pack` or `Pallet Transaction` that is tied to a `RecordNote` record. And that `RecordNote` record can contain some text. A remark can be created whenever an illegal operation is created, for example. And you can put whatever text you choose in the `Remark`.

A new `OperationData` property has been created to hold the `Remark` text. There are two properties on these new `UnitOperations`.

- `FailIfNoRecordNoteNotesValue`: This flag determines if this unit operation should fail if there is no string in the `RecordNote` notes column.
- `FixedRemarkNote` : If this property is set, this text will be used instead of the `OperationData` text.

Three new global configuration flags will determine if a `Remark` will be created should the following `UnitOperations` fail. If these configuration flags are set to `True` a new `Remark` is created. The configuration flags are stored in `System Administration > Data management > Xml data store in Marel.Mp5.Process.Services.UnitOperations.UnitOperation+Configuration`.

CreateRemarkWhenItemDispatchFails

- If set to true, `ItemToOrder` will create a remark with the order ID.
- If set to true, `ItemToShipment` will create a remark with the shipment ID.

CreateRemarkWhenPackDispatchFails

- If set to true, `PackToOrder` will create a remark when the order ID.
- If set to true, `PackToShipment` will create a remark with the shipment ID.

CreateRemarkWhenPalletDispatchFails

- If set to true, PalletToOrder will create a remark when the order ID.
- If set to true, PalletToShipment will create a remark with the shipment ID.

After changing these flags you must restart the procman system program for the changes to take effect.

A Remark will not be created if the Pack/Item/Pallet is created earlier within the same UnitOperationSet.

Changes to unit operations Marel.Mp5.OptiPack-.Services.UnitOperations.InsertIntoUnitQueue and RemoveFromUnitQueue

InsertIntoUnitQueue and RemoveFromUnitQueue now have support for adding items to a unit queue. A property was added to specify if packs or items should be added. The default is packs.

ModbusProcessUnitPlugin added

The ModbusProcessUnitPlugin is a new process unit plug-in that executes a script when there is a process unit event. This allows the script to communicate with a Modbus device. The Input parameters into the script should be process unit and product. The script returns the values and addresses to be sent to the device.

Supplier added to lot print formatter

The lot print formatter has been improved so that it is possible to show the supplier name instead of supplier ID.

SortBy configuration option added to AssignedOrdersCE

A new XML configuration parameter has been added to the AssignedOrdersCE. The value of the switch should be used to order the order lines in a desired order prior to displaying the order lines in the OrderDisplayView.

AssignedOrdersCEConfig properties

Factory defaults	Current configuration
<p>Misc</p> <ul style="list-style-type: none"> AllowOrderLocatorView: True AssignedOrdersViewConfig: Marel.Mp5.Process.UI.M6000.Orders.As CloseOrderLineOp: 0 CloseOrderOp: 0 CompleteOrderLineOp: 0 CompleteOrderOp: 0 DefaultActiveFlagOnNewAssigned: True ExtraWhere: OnHoldOrderOp: 0 OpenOrderLineOp: 0 OpenOrderOp: 0 OrderDisplayViewConfig: Marel.Mp5.Process.UI.M6000.Orders.Or OrderLocatorCEConfig: Marel.Mp5.Process.UI.M6000.Orders.Or OrderTypeFlags: NotSet Printers: (Collection) ProcessUnitId: 0 SectionId: StationId: 0 	<p>Misc</p> <ul style="list-style-type: none"> AllowOrderLocatorView: True AssignedOrdersViewConfig: Marel.Mp5.Process.UI.M6000.Orders.As CloseOrderLineOp: 0 CloseOrderOp: 0 CompleteOrderLineOp: 0 CompleteOrderOp: 0 DefaultActiveFlagOnNewAssigned: True ExtraWhere: OnHoldOrderOp: 0 OpenOrderLineOp: 0 OpenOrderOp: 0 OrderDisplayViewConfig: Marel.Mp5.Process.UI.M6000.Orders.Or <ul style="list-style-type: none"> AllowAddOrderLines: False AllowAmountChange: False AllowOrderLineStatusChange: False AllowOrderStatusChange: False Columns: 4 CompleteOrderInsteadOfClosing: False CompleteOrderLinesInsteadOfClosing: False OrderBy: OrderLinePostDisplay: None OrderLineWeightDecimalsFormat: 0 Rows: 4 ShowCustomerCode: True ShowCustomerName: True ShowDispatchTime: True ShowOrderCode: True ShowOrderName: True ShowOrderStatus: True ShowTransporterCode: False ShowTransporterName: False UnitOperationId1: UnitOperationId2: OrderLocatorCEConfig: Marel.Mp5.Process.UI.M6000.Orders.Or OrderTypeFlags: NotSet Printers: (Collection) ProcessUnitId: 0 SectionId: StationId: 0

AllowOrderLocatorView
Allow the order locator view (a.k.a. Add button)

AssignedOrdersViewConfig
Configuration for the assigned orders view.

Restore factory defaults
OK
Cancel

Use production orders in ChangePackProduct unit operation

A new configuration parameter, `ActiveOrderType`, can be used in the `ChangePackProduct` and `ChangeltemProduct` unit operations. `ActiveOrderType` determines what order type is allowed in the unit operation. Options are `Customer/Sales` or `Production`. The default is `Customer/Sales`.

There is one new error code and a change to an existing one.

`OrderType (new)` is thrown if the `ActiveOrderType` is not `Customer/Sales` or `Production`.

`OrderType (change)` is thrown if the order does not match the `ActiveOrderType`.

ReservePallet unit operation supports purchase order and production order filter

The `ReservePallet` unit operation now supports purchase order / production order filter.

The `IReservationSelector` includes two properties: `PO` and `ProductionOrder`. If both are filled out, then only pallets with a matching `PO` and production order are reserved. If only `PO` is filled out, then Innova finds matching `PO` pallets. If only `ProductionOrder` is filled out, then Innova finds matching `ProductionOrder` pallets. If both are empty, Innova finds pallets as usual.

The unit operation must be executed multiple times for a single `PO` / `ProductionOrder` at a time.

QC

QC scheduler improvements

A new configuration parameter has been added to the scheduler configuration. DefaultSchedulerViewType makes it possible to configure which view is the default view. Initially, the day view was the default one.

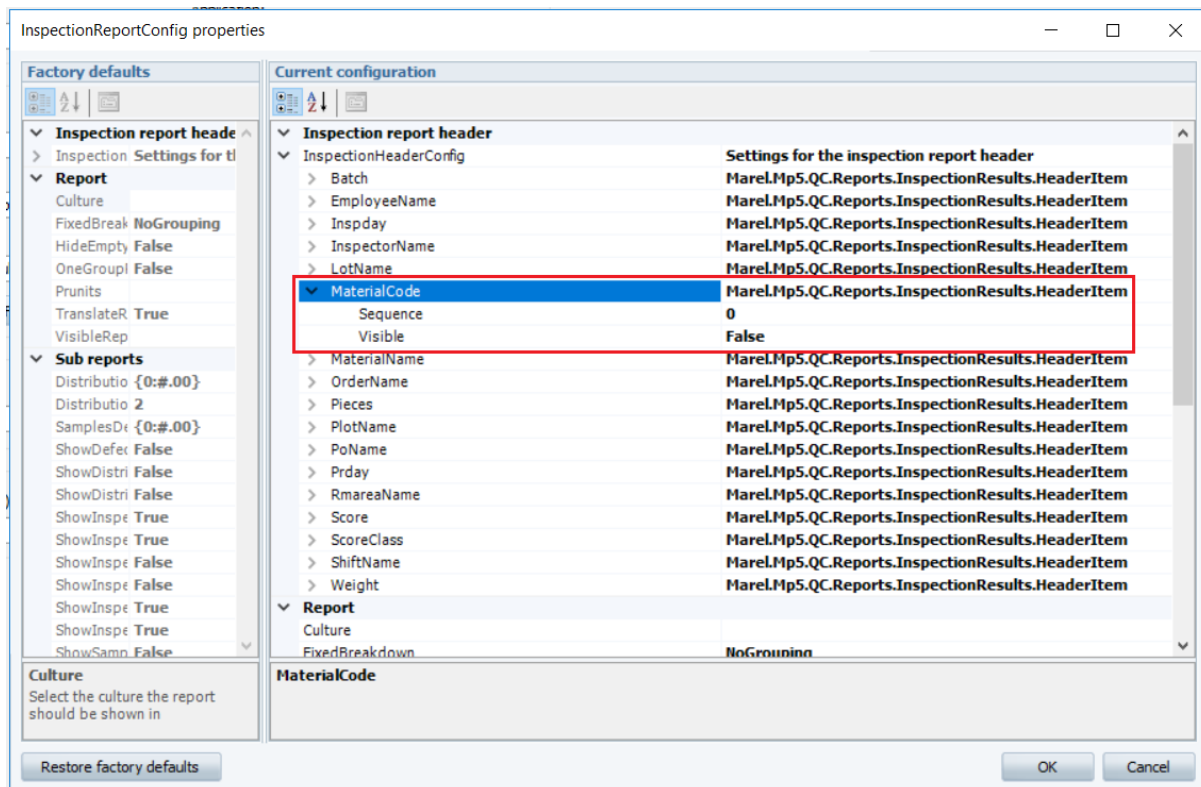
Also, an error in the Scheduler was fixed where the Scheduler initial view defaulted to the day view, and upon opening, a reference error occurred.

Save QC inspection for later

A button has been added to the inspection on the IPC to save and close inspections without finishing them.

Additional fields to add to QC Result report header

An optional Product Code header can be added to QC in the report configuration.



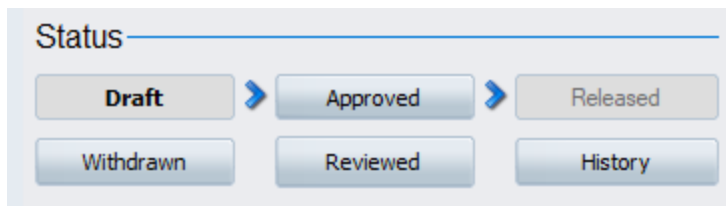
Recipe

New master recipe status introduced

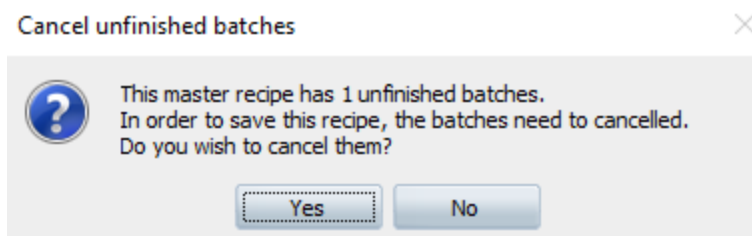
A new master recipe status has been added, the Reviewed status. Master recipes can go from Draft to Reviewed instead of from Draft to Approved, but it is not a mandatory step in the status flow. It allows for batch creation during the Draft status while still being editable. The downside is that a master recipe with a Reviewed status cannot be displayed in some reports because the control recipe cannot be compared to the master recipe while it is still editable.

The possible flows of master recipe statuses are now:

- Draft to Approved/Reviewed/Withdrawn.
- Reviewed to Approved/Withdrawn.
- Approved to Released/Withdrawn/Released to Withdrawn.
- Withdrawn to nothing.

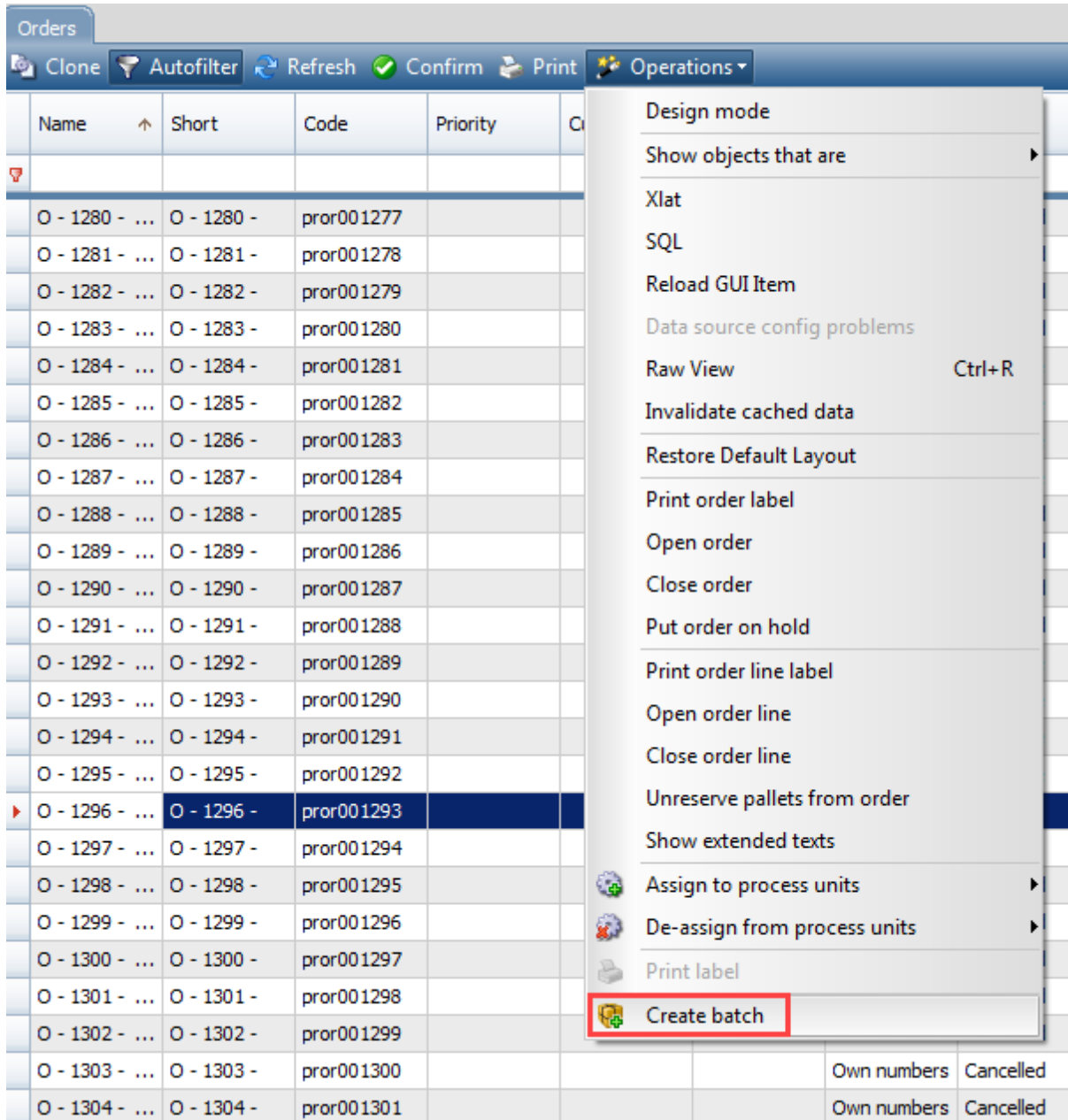


When editing and saving a Reviewed master recipe, it is necessary to cancel any unfinished batches that exist for that master recipe. The user will be prompted to do this in the Recipe editor.

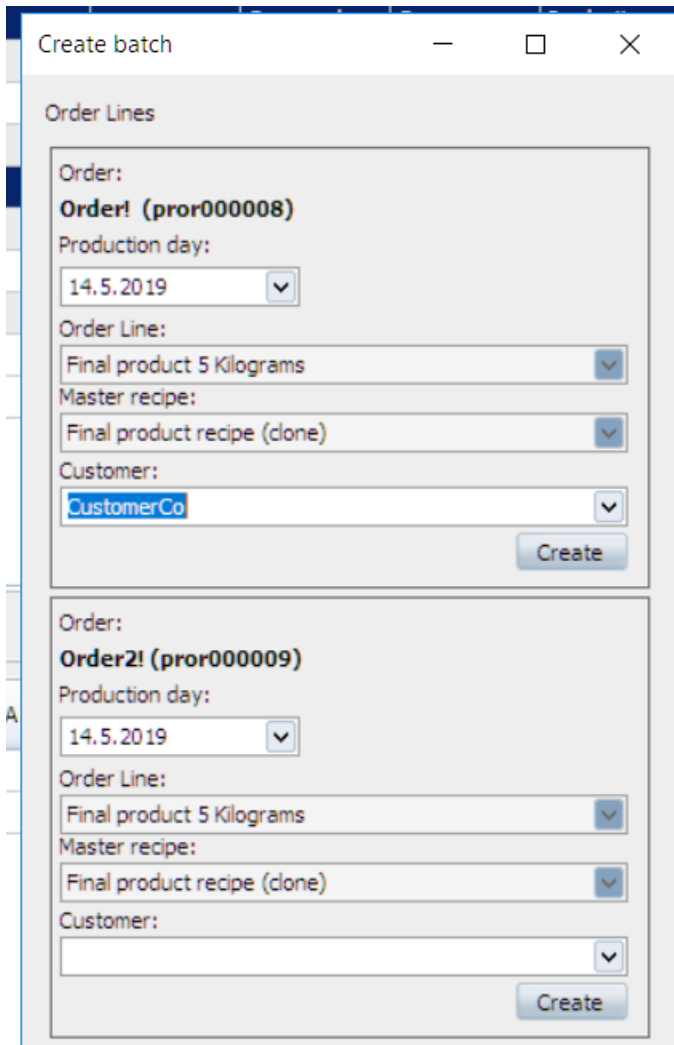


Create batches from Orders form

It is now possible to create batches directly from the Orders form. To do this, you must have the CreateBatchesFromOrders view extension added to the Orders form. When this is configured, the Create batch option is available from the Operations button menu in the Orders form.



When you select one or more orders to create a batch in the Orders form with, and select Create batch, a dialog box appears allowing you to configure the batch for each individual order.



Ability to create subrecipes added

Subrecipes are recipes that are used within a main recipe. You can also create master recipes containing subrecipes using the recipe step in the recipe editor. Subrecipe batches are created and seamlessly integrated into the execution of a recipe batch containing a subrecipe step. The product produced in the subrecipe is used as an input in the main recipe.

For example, to make guacamole you need avocados, tomatoes, onions and a spice mix. For this example the spice mix contains black pepper, garlic powder, salt and paprika powder. Normally, a group would be defined in the main recipe with steps such as weighing black pepper, salt, etc. But since this spice mix is fairly generic, we can use it in other recipes as well. So instead of having an identical group in which we scan or weigh all the spice ingredients within all recipes that use the spice mix, we can create a standalone recipe which produces the spice mix.

First, we create the spice mix recipe. In our main recipe, we will reference the spice mix recipe through a Recipe step.

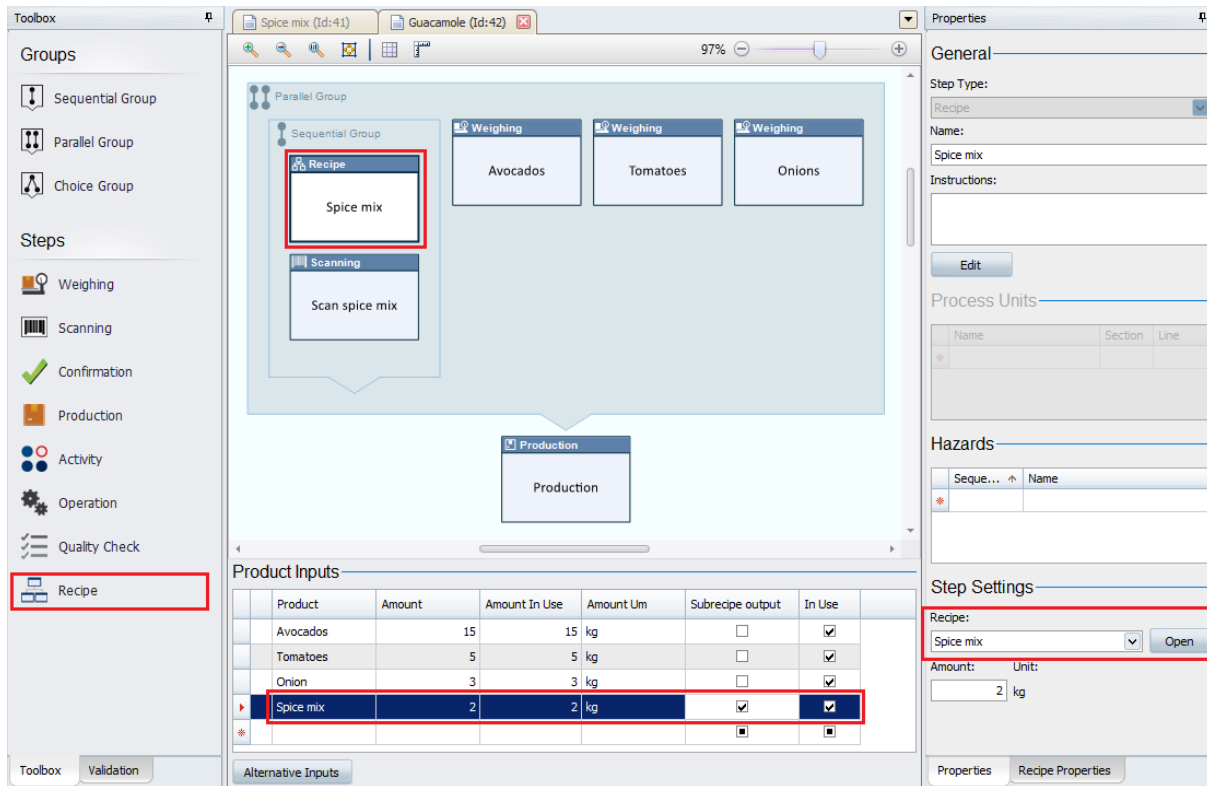
The screenshot shows the 'Spice mix' recipe configuration in the Innova software. The main workspace displays a 'Parallel Group' containing four 'Weighing' steps for Garlic powder, Black pepper, Salt, and Paprika powder, all leading to a 'Production' step. Below this is a 'Product Inputs' table.

Product	Amount	Amount In Use	Amount Um	Subrecipe output	In Use
Black pepper	800	800	g	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Salt	200	200	g	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Paprika powder	700	700	g	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Garlic powder	300	300	g	<input type="checkbox"/>	<input checked="" type="checkbox"/>
*				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

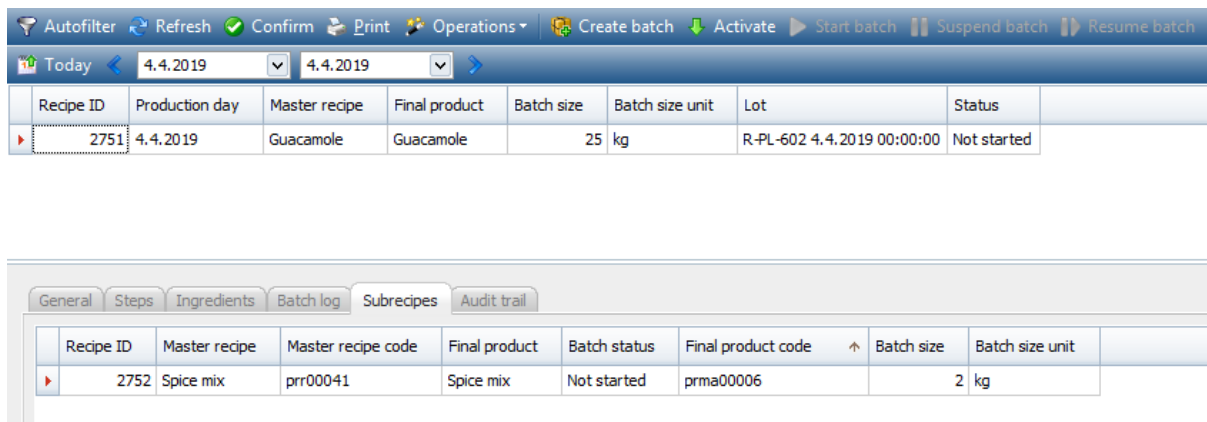
The right-hand panel shows 'Recipe Properties' with the following settings:

- Status: Draft
- General: Name: Spice mix, External Code: <enter recipe external code>, Version: 1, Final Product: Spice mix, Line Profile: <select line profile>
- Batch: Amount: 2, Unit: kg, Min: , Max: , Adjust with first input:

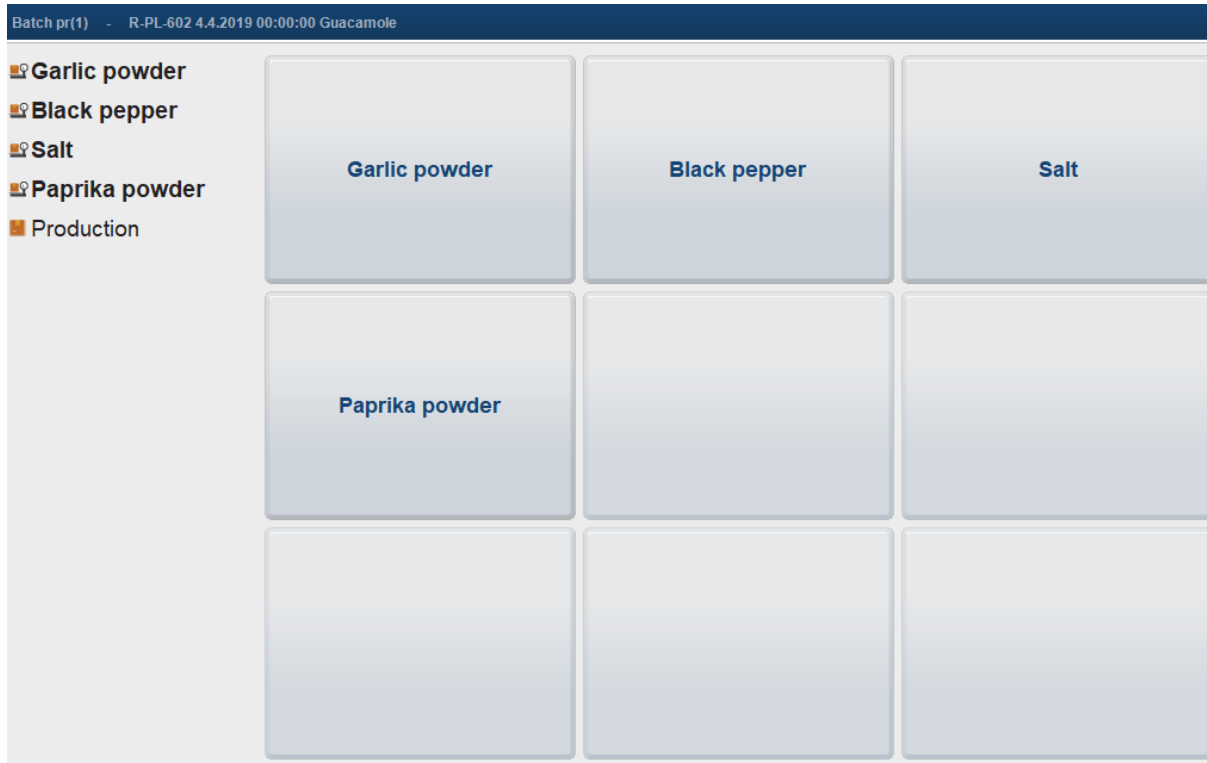
We input Spice mix as a Product input in the guacamole recipe, and mark it as a Subrecipe output.



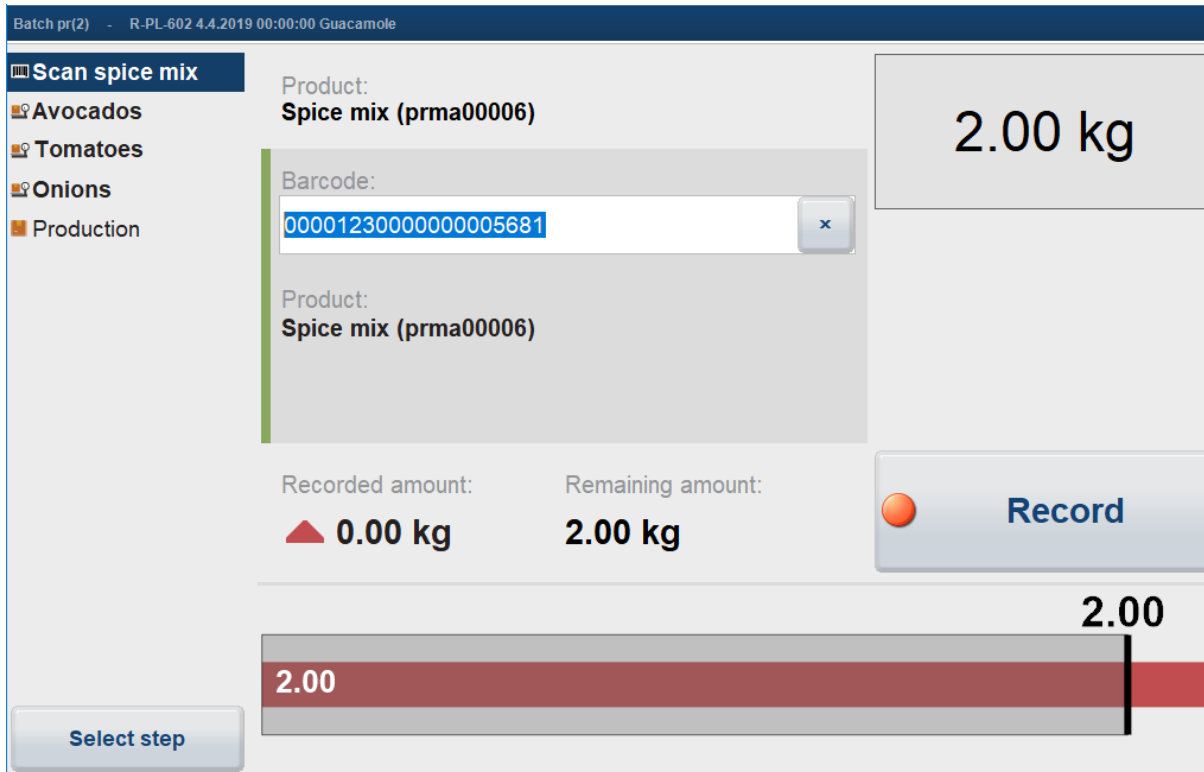
The guacamole batch is created, and you can find the Spice mix recipe in the Subrecipes detail tab.



On the IPC, the subrecipe steps look like normal steps within the main recipe.



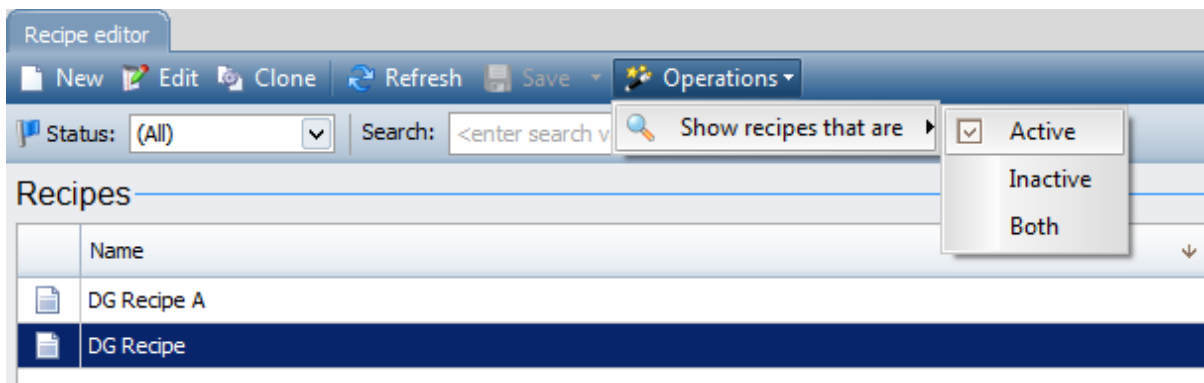
When all the steps of the subrecipe batch are complete, a pack is produced by the sub-recipe. This pack can then be scanned in the main recipe.



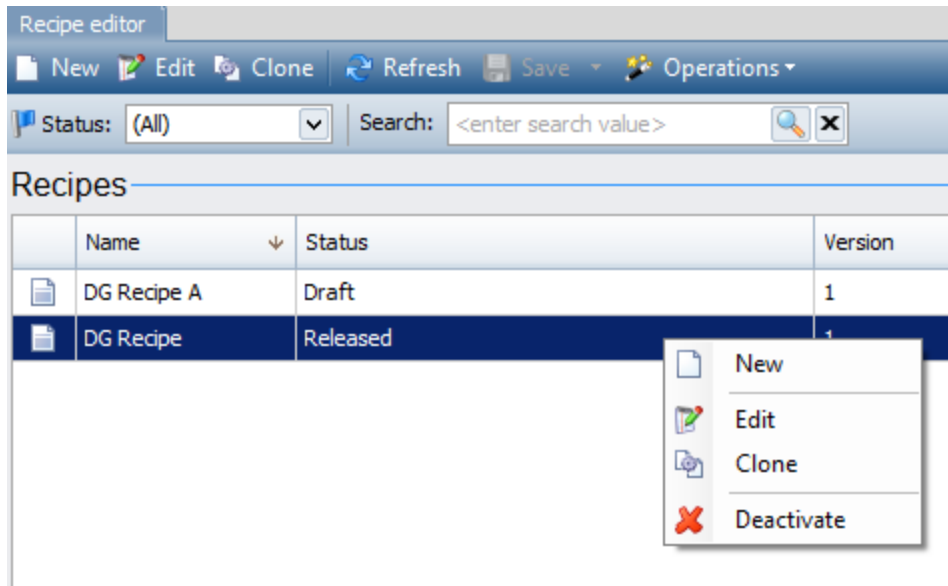
Recipe editor improved

A number of improvements to the Recipe editor were made in this release.

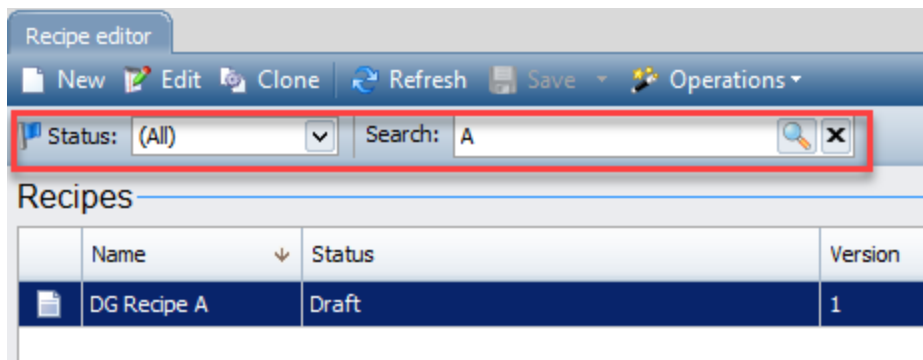
The **Code** column has been added to the Recipe editor Explorer view as a default. The ability to hide inactive recipes has been added to the **Operations** button in the toolbar.



Additionally, it is possible to deactivate released recipes.

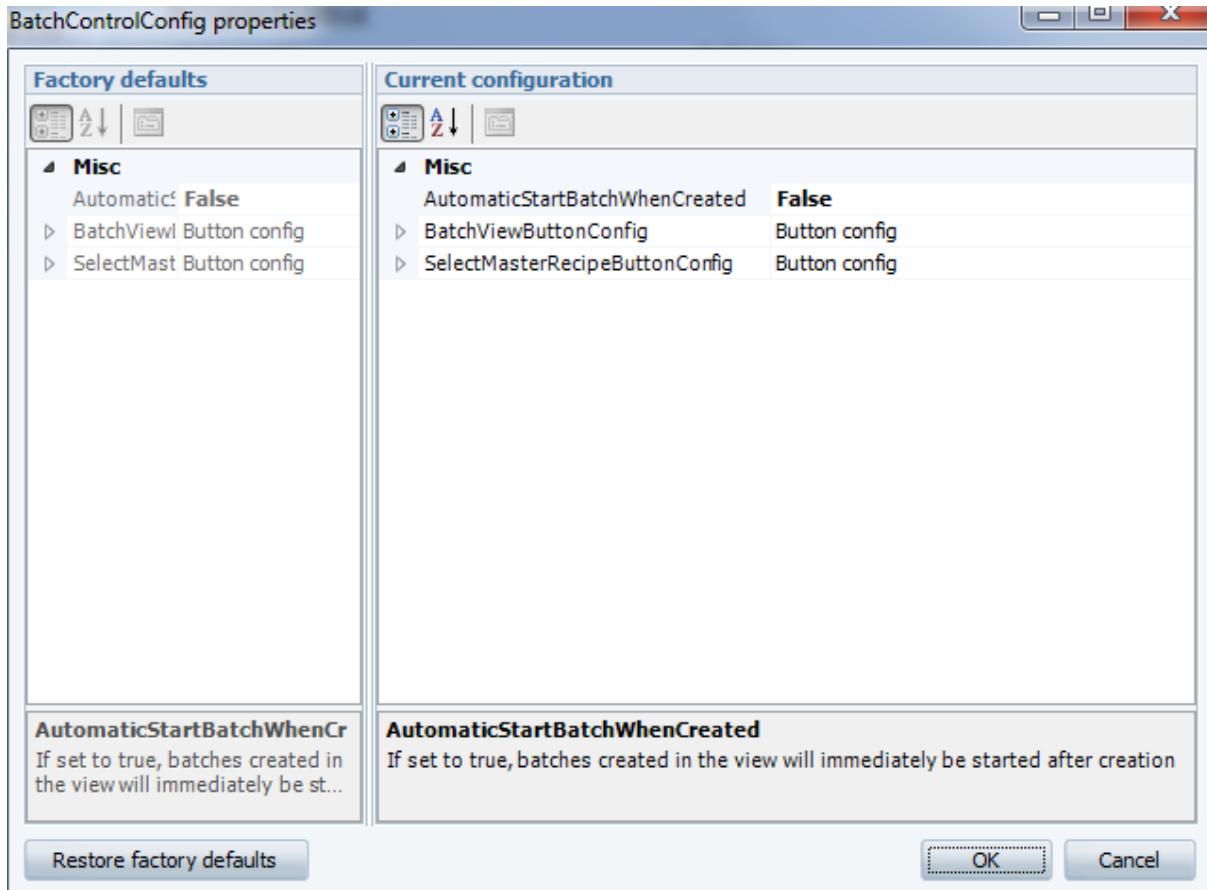


And finally, the two filters at the top of the Recipe editor, Status and Search, have been made independent of each other. Previously, if you had used both filters and wanted to clear one using the X, both filters were cleared. Now you can clear one without affecting the other. When cloning a recipe, the selected filter is kept and the focus is on the clone.



Improvements to Recipe IPC functionality

The BatchManagerCE has a configuration option to start batches automatically on the IPC.



If **AutomaticStartBatchWhenCreated** is true, the batch is put in progress as soon as the batch is created from the BatchManagerCE. Batches created from WinUI must be started on the IPC.

An **Undo** button has been added to the recipe production screen, which deletes the last created pack record.

The screenshot displays the 'Production' screen in the INNOVA software. At the top, there are tabs for 'Recipe' and 'Operations'. Below the tabs, the current recipe is identified as 'Lot-14 Final product'. The main area shows the product name 'Final product (prma00001)'. On the right side, a 'Manual Scale' widget displays a weight of '17.000kg'. Below the scale, there are indicators for 'PACK', 'PT=', 'NET', 'STABLE', and 'ZERO'. A horizontal bar chart below the scale shows a green segment and a red segment. A red box highlights the 'Undo' button, which features a blue circular arrow icon. Below the 'Undo' button is a 'Record' button with a grey circle icon. In the center of the screen, the 'Recorded amount' is shown as '17.90 kg' with a green checkmark. Below this, a larger horizontal bar chart shows a green segment labeled '34.90' and a red segment labeled '5.00'. The x-axis of this chart has markers at '2.00' and '20.00'. At the bottom of the screen, there are 'Exit' and 'Done' buttons.

SensorX

Improvements made to SelectStationUnitInspectionCE

The SelectStationUnitInspectionCE has been improved for readability and functionality. Changes include:

- Colors added to station units where inspections are in progress.
- The InProgress inspection is available to be selected along with any other new Inspection Procedures available to that station unit.
- When the AllowOperatorToChooseProcedure is turned off, the previously started inspection is automatically selected to be continued.
- With the RemoveUnitOnInspectionCompleted option on, the unit is only removed when no in progress inspections are remaining.
- A configuration has been added to choose the ordering of units either OldestFirst or NewestFirst.

The configuration options are shown below.

Property	Value
Behaviour	
AllowContinueInProgressInspections	True
AllowGenericProcedures	True
AllowOperatorToChooseProcedure	True
MaxNumbersOfUnitVisible	6
RefreshInterval	300
RemoveAllPreviousUnitsWithCurrentUnit	True
RemoveCurrentUnitAfterInspectionCompleted	True
RemoveUnitAfterInspectionSaved	False
Display	
InspectionsCompletedColor	Green
InspectionsInProgressColor	Yellow
InspectionsNotStartedColor	Transparent
ProcedureColCount	4
ProcedureRowCount	1
UnitButtonPrintValues	Print values
UnitColCount	2
UnitRowCount	3
UnitsOrderBy	OldestFirst
Misc	
AllowSaveInProgressWithoutSignatures	True

And the inspection screen on the IPC appears below.

The screenshot displays the 'OEE Device Event Editor' software interface. At the top, a navigation bar includes tabs for 'OEE Device Event Editor', 'FP Revo', 'QC Inspections', 'OEE MS2730', 'QC Station Inspections' (which is active), 'Next', and 'Operations'. Below the navigation bar, a status bar shows 'QC Station Inspections - Select unit'. The main area displays '13:17: Units loaded.' on the left and 'Next load: 00:01:55' on the right. The central part of the interface is a grid of inspection units. The top-left unit is highlighted in blue and contains the text 'Pack: 775 prma00216 1'. The top-right unit is highlighted in light gray and contains 'Pack: 777 prma00216 1'. Below these are two more empty gray units. At the bottom, a control bar features a 'Refresh' button on the left, followed by a row of buttons: '25-01-2019 13:15 Test' (highlighted), 'Test', 'test2', 'test3', and a right-pointing arrow. On the far right of the control bar are 'Remove' and 'Continue' buttons.

Slaughter information system (SIS)

Location added to unit operation context

To be able to assign the animal to the correct location (invloc) on the inventory, it needs to get >[locationId]< to get context origin, for example. `OperationData.UnitOrigin` was updated to get location ID.

Solutions

OrderStation for WMS

OrderStation is used in a WMS factory to order a set amount of minced meat. In the screenshot below of the IPC station 100,000 kg of 19-21% meat is being ordered.



The configuration of the order is seen below.

Products																	
Order constraints																	
Id	Sequence	External code	Product	Status	Max amount	Current amount	Line type	Unit type	Line group	Minimum piece...	Maximum piece...	Amount unit	Text 1	No limit	Source owner	Source site	Use customer overrides
3046	1		Final product 20%	Open	100000		Allow production	Pack		19	21	Units	3	<input type="checkbox"/>			<input type="checkbox"/>
3047	2		Raw material A 15%	Open			Allow input	Pack		50	70	Units	2	<input type="checkbox"/>			<input type="checkbox"/>
3048	3		Raw material B 20%	Open			Allow input	Pack		20	40	Units	4	<input type="checkbox"/>			<input type="checkbox"/>
3049	4		Raw material C 100%	Open			Allow input	Pack		0	20	Units	5	<input type="checkbox"/>			<input type="checkbox"/>

The first product is marked with line type **Allow production**. This is the line that controls what is being ordered. Minimum piece and maximum piece columns are used to control the allowed fat percentage range.

Lines 2-4 are used to select what kind of meat can be used in the mix. Minimum piece and maximum piece columns are used to control the minimum % used in the total output. That is, in the example in line 2 at least 50% of the total output should come from "Raw material A" but not more than 70%. Once **Start** is pressed, the order processing starts and the reserved packs are delivered to the station.

Box sorter improvements

The Box sorter OrderLineDestinationPlugin was improved to support blocked gates. Previously, the plug-in was not taking blocked gates into account when making a decision on where to route boxes.

Another change was made to handle the PLC system correctly and send back an acknowledgement message that the message was received.

When the plug-in was used to get a gate, batch handling was not being triggered. This has been fixed.

When executing a unit operation and a gate was full (and batch logic is being executed), the total weight of all boxes was not included. This has now been corrected.

Lookup mode implemented for RailUnitOpCE

Different handling of rail messages is allowed depending on new configuration flag **LookupMode**. Options include: LookupByHookId, LookupByUniquelIdentifier, LookupByHookIdThenUniquelIdentifier, and LookupByUniquelIdentifierThenHookId.

Trimming

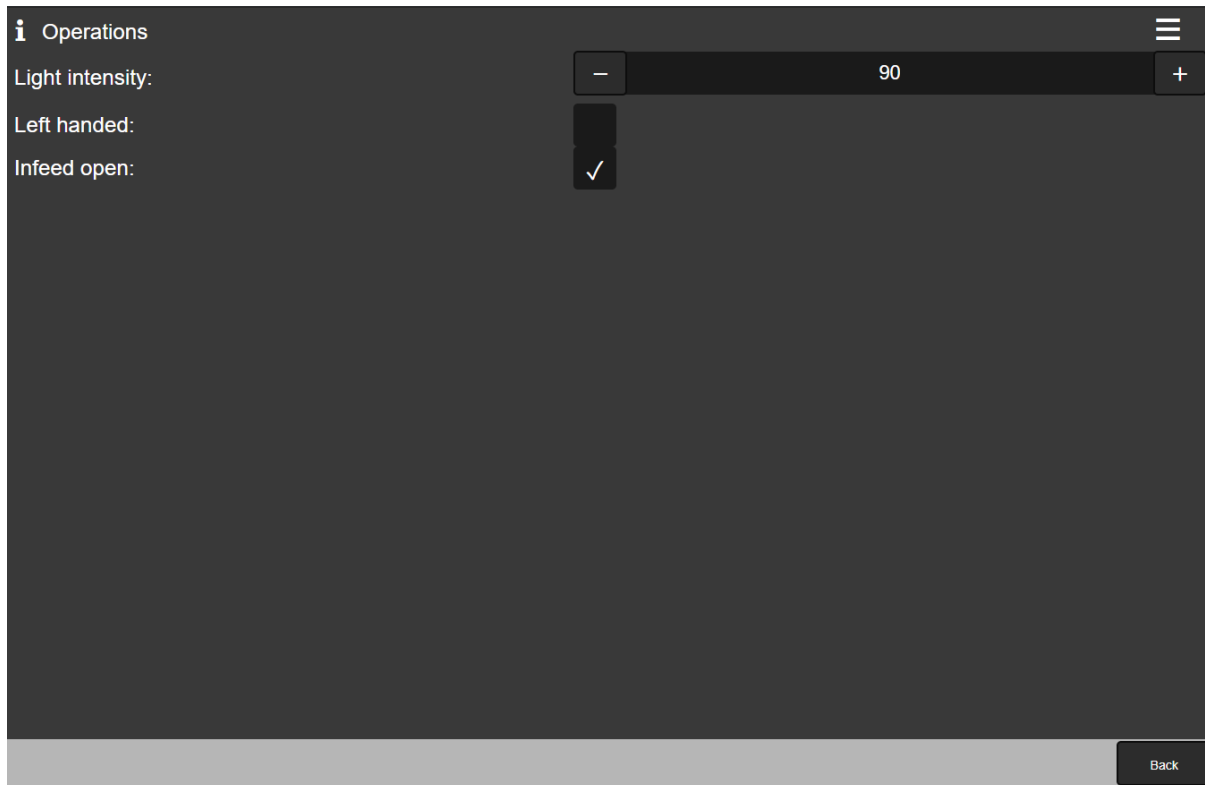
FleXitrim improvements

A Quick Config has been created to enable quick and easy installation of FleXitrim. The Quick Config is available in Software administration > Quick Config. Instructions for using the Quick Config can be found in the [Innova for FleXitrim Installation and Configuration Manual](#).

An improvement to the heatmap means that all data shown on heatmap is filtered for the current process period. Previously, all bones displayed on the heatmap were for the current day. However, using the current process period on the main process unit for the trimming line gives better data quality for the customer.

Control infeed in pre-trim webterminals

It is now possible to stop and start the infeed in the Operations screen in PreTrim web terminals.



This functionality is controlled by a new configuration flag in the Marel.Mp5.Trimming.UI.WebSocket.Applications.PreTrim.Windows.PreTrimCE user interface element. The PreTrimCE.OperationsScreen.CanEnableInfeed determines whether it is possible to enable infeed in the web terminal interface.

Pre-trim terminals updated on completion

A change was made to update PreTrim terminals automatically when an inspection is completed. After this, the terminal navigates automatically to the previous screen.

Unit operation station

Improvements to Unit operations station

The following options have been added to the MultiSelectionOperationParameter:

- BarcodeMatchPath: Object path to use when matching barcode values with records.
- FetchRecordOnScan: An attempt is made to fetch a record on scan from database if a record was not found based on current criteria. This will only fetch one record and will fail if multiple records are found.

A new UnitOperation Station parameter has been created. QueryLook-upOperationParameter allows you to run a custom SQL to return data.

WPL

Ability to label product as outside product specifications

A change has been made to be able to produce a label for packs outside specifications. This allows for packs to be labelled to identify "bad" packs and remove them from the line. The changes are in Innova build 572.2019.423.1 and greater.

In the WPL Station XML the following settings are used to control the filler comformat in connection with e-weighing.

- FillerComformatName defines the names of the single and group filler comformat.
- StandardComformatOverrideDirectory defines the directory where the override comformats are located.
- DownloadOverflowComformats defines if the filler comformat(s) should be downloaded with the eweighing comformat. This is by default "false" to be backwards compatible, but should be set to "true" to override the default filler comformats.
- ForceGroup defines if there should always be a group comformat. This setting should be set to true if the eweighing comformat is printed on print head 1, and the filler comformat should be printed on another print head.

The following is an excerpt of the XML:

```
<!-- Directory containing standard comformat overrides, default empty and using com-
formats embedded in Innova.-->
<Stand-
ardCom-
form-
atOverrideDirectory>d:\temp\eweight\standard</StandardComformatOverrideDirectory>
<!-- Comformat selected when a multi comformat only contains one band.-->
<FillerComformatName>FILLER;FILLGRP</FillerComformatName>
<!-- Set if the overflow comformats should be downloaded for e-weighing products, default
false.-->
<DownloadOverflowComformats>True</DownloadOverflowComformats>
<!-- Set if a group comformat should always be created, default false.-->
<ForceGroup>False</ForceGroup>
```

WPL status view shows only active devices

Previously, the WPL Status View (Marel.Mp5.Wpl.Ui.Windows.WplControl.WplStatusViewCE) showed devices that were inactive. Because this created confusion, the view has been changed to show only active devices.

Bugs

The following bugs were addressed in 5.8.2.

Work item number	Description
74924	Process - Unit Op Station - Multi selection parameter slow when scanning
74925	Process - Unit Op Station - Multi selection parameter slow when scanning
74932	IDS-1136 - Label designer: Components in the tree are shown twice
74927	IDS-1064 - Labelling: Label designer tree for items not being translated or translations missing
74915	Modbus plugin was not initializing Material variable correctly
74840	OEE - Incomplete production data causes data on wrong production day
74841	IDS-1126 Packet_monitor becomes too big and fills up the hard drive
53265	Trlman performance improvements
74867	When using ReceivingCE station in KF2 I'm running into a bug where I can't select an Inventory Location using a Popup Edit.
74630	IDS-1115 - Closing report designer when report not saved causes an exception
74312	Crosses not following left/right feature
70822	Add filters to Employee heatmap - Too big the maximum default weight displayed in the filter.
73315	OEE - LBH incorrect OEE status
73427	IDS - 899 - Bug with Grades tool in Dashboards on TMS?
73528	IDS-992 - External object type filter not working
74119	IDS-878 - Sub reports cannot be renamed in custom report designer
74254	UltimateStation not sending TSOR location when order line was completed
70844	IDS-729 Grading Reports
54267	Tyson - TMO - Follow up work after initial testing
73606	Make sure that new installations of Innova use the sequence for item and pack numbers instead of base counters.
72488	IDS-986 - Portioning Program does not allow the same Weight range with different Length

74043	UltimateItemPackingStation not using configured process unit
74044	UltimateItemPackingStation: Improve error message when activity is missing on process unit.
74161	Slaughter control - Bug fixes and additional changes
74080	IDS-1074 Wrong bitmap name downloaded to OCM
74079	IDS-1074 Issue when formatting a label
74014	IDS-1077 When applying migration, is the migration count unreadable if there is more than 99 pending migrations
74007	Everytime WinUI startup, it will ask the user to allow cookies on the Newsfeed page.
73755	IDS-717 - QC Inspection Data Confirmation
73830	Recipe: Scanning a barcode when a recipe batch has a customer
73391	WeightChecker does not handle nominal unit grams correctly
73157	In 581 you can't find a pack by the last 3 digits in the number field
73398	IDS-1028 WPL UI is very slow when selecting order.
72940	Unit Op station intermittent scale issues
71649	IDS-942 - Alarm configurations form missing from filleting menu package
72656	Salmon Slicer Quick Config fails installation
73085	Bug in ChangeItemProduct and ChangePackProduct
73281	IDS-944 - Grading module translation
73032	IDS-953 - Process.Reports.Inventory.PalletOverview doesn't return any pallets when using order filter
72976	IDS-773 - Unable to substring year in AutomaticLotCreation
72040	OEE stopreason does not appear on the MS2730 control screen
73004	IDS-966 - OEE stopreason does not appear on the MS2730 control screen
72832	Problem getting 9 digits from WPL long sequence number into Innova item
72761	KillFloor2 - Fix ROLA station eartag generation
72105	[IDS-973] RoboFlex quick installer
71347	FP - Bluetooth radio keeps reconnecting
72489	IDS-921 - index on proc_individuals table missing
71464	Notifications with graph display incorrectly.
72447	Trimmingline not sending release sequence down to both controllers

72150	[IDS-894] SQL error in: Marel.Mp5.QC.UI.M6000.NonConformities.NonConformitiesUnresolvedCE
72151	Fix SQL error.
69816	Wrong transaction timeout used in migrator
71940	IDS-961 WPL: Change in behavior of Innova packaging from 5.4.1 to 5.8.1
70269	Grading maintenance IDS-839
71886	IDS-958: WPL: Spacer comformat is not downloaded
71747	IDS-956: WPL: Some comformats are downloaded without being changed at Tyson.
53118	Control recipe State column xml not updated correctly
71169	IDS-104 - Pallet reweigh terminal - Calculate tolerance based on pack content specifications bug fixes
71548	IDS-875 - Process - Fix StockTakeFixCountStatus so that it can handle units which are Reserved for QC
71547	IDS-925 - Process - Context forward a lot (and material) as a supply lot if the supply method is configured as Track Material
69923	IDS-823 Problem importing comformats with macros
67965	Several bugs in OEE custom flock report
71412	IDS-920 QC Scanner - Data template is not loaded when receiving data
69277	OEE - "is scheduled" signal stays high
71220	Innova error when closing a product form (template)
68542	IDS-500 Scripts fail to load Process.Services after procman crashes
71088	OEE - Unknown losses being registered due to not rounding timestamps to sql timestamp resolution
71002	IDS-891 - Edit timed task in QC scheduler, Recurrence don't work
71008	PreTrim heatmap points not visible by operators
70836	IDS-876 Innova Web terminal refresh
53187	FP - BT temp probe - Probe is very slow at connecting
70608	IDS-739 grading packingoverview report shows the "wrong" percentage
69822	IDS-809 Arithmetic Operation resulted in an overflow
70360	IDS-862 Temperature probe shows too many digits.
70020	IDS-837 - Error in scheduler, when i try to create new one.

69783	IDS-813 QC IPC WinUI crash
53872	Make recipe batches grid faster
69107	IDS-733 - QC scheduling view
69958	IDS-833 - Ipmmman.exe system program crashing.
68623	LBH Pluginhost crashes
69774	Handle bitmaps with spaces in the short name
69482	IDS-807 pmcheck sysprograms dies after update
69771	Fix IDS-573 - Cutting pattern status invalid, even though pattern is validated and perfectly fine
67581	OEE primary dashboard LBH no EM notifications
69452	Process - LabelMacros - TextCache fix
69083	IPP-658 Custom flock report - Calculated column problems
53860	Find and fix
69236	IDS-796 Label designer displays RichText incorrectly
69252	IDS-798 5.8.1 issue Clients trying to Load DRE Engine
68679	IDS-735 After closing a pallet the tare of the pallet changes
69180	IDS-785 Problems with WsExportHandlerApplication
69081	Fix filter fields in Pivot grid
69082	Fix dependent parameter fields in pivot grid