

Softera.



SOFT4Inventory User Manual

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1. ABOUT SOFT4INVENTORY

Congratulations on your purchase of perhaps the most effective inventory manager's assistant, Soft4Inventory.

This tool is designed so that you:

- would complete daily inventory management tasks faster
- plan inventory quantities more accurately
- avoid lost sales
- would curb the scale of illiquid inventory occurrence
- find faster solutions to supply and inventory problems

This manual will help you quickly prepare the system for work and perform daily inventory management tasks.

2. SOFT4INVENTORY PREPARATION FOR WORK

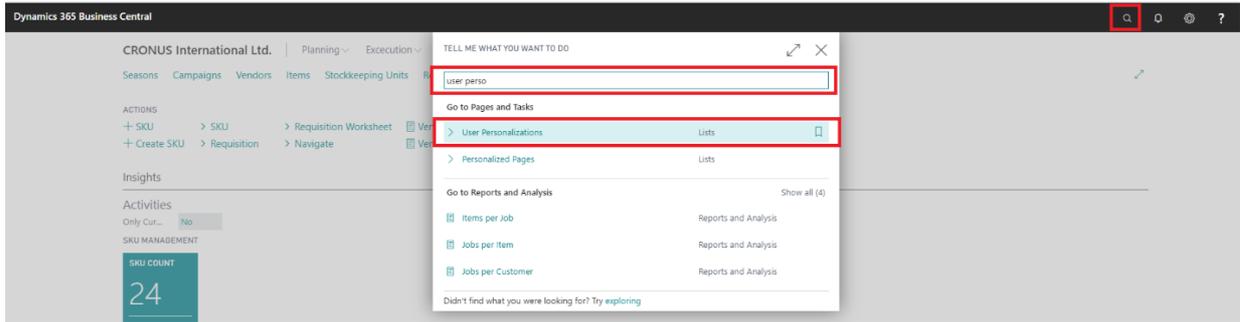
These setup works must be performed at each BC365 company where inventory will be managed using Soft4Inventory tools.

2.1. User Setup

Start the preparation of the Soft4Inventory system from the user setup. You will be able to enter additional users later, but first enter the necessary setup for at least one user to log in to continue other system preparations.

2.1.1. Soft4Inventory Role Assignment

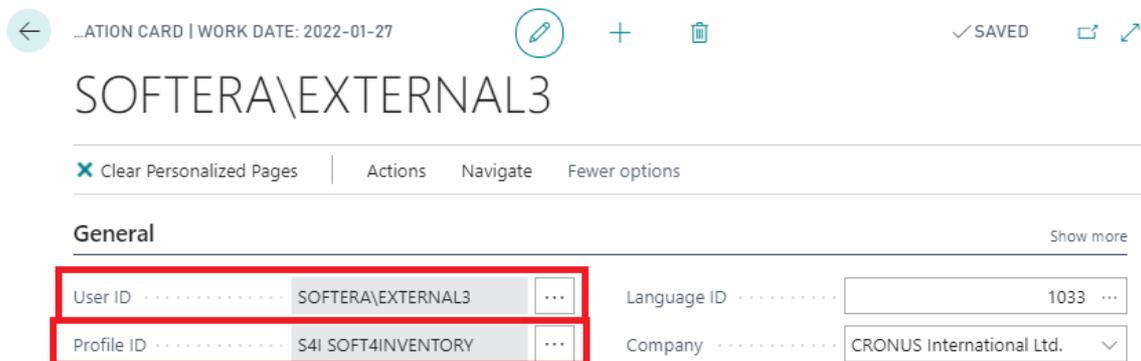
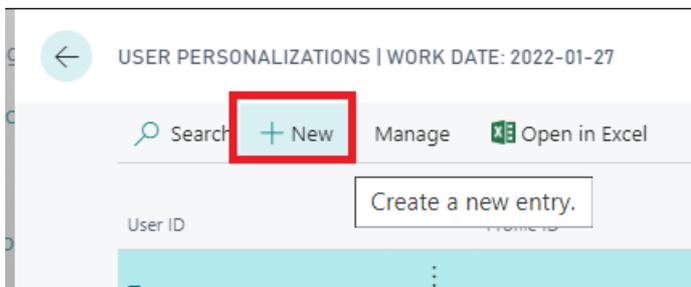
In the search box, enter: User Personalizations.



Click New and enter in the User Personalizations form:

User ID - of the user who will use or administer the Soft4Inventory system.

Profile ID - S4I SOFT4INVENTORY



This person will see the Soft4Inventory Role Center on his / her Home Screen.

Before continuing work, please update the BC365 window Shift + F5

2.1.2. Parameters of Responsible Persons

Soft4Inventory Role Menu Setup > Responsible persons

In this list, create and describe persons' codes who will work with inventory management tasks with Soft4Inventory.

Code ↑	Description	User ID	Administrative	Chart Filename
GN	Giedrius Norkevičius	SOFTERA\GIENOR	<input checked="" type="checkbox"/>	
LA	Lukas Aušišūra	SOFTERA\LUKAUS	<input checked="" type="checkbox"/>	
VN	Valentinas Nabijėbas	SOFTERA\VALNAB	<input checked="" type="checkbox"/>	
ZL	Žilvinas Lapačinskas	SOFTERA\EXTERNAL3	<input checked="" type="checkbox"/>	

Click New to enter:

- Code - a freely chosen unique code of the person responsible for the inventory management
- Description - a freely chosen description of the person responsible for the inventory management
- User ID - the User ID corresponding to the Responsible Person's code is selected from the BC365 user list
- Administrator - select YES if you want the User to be able to see the items assigned to all responsible persons, and NO if you want him /her to see only the items assigned to his / her code and the tasks related to them

2.2. System Setup

First, run the Create Level Colors feature.

It will only take a second.

Soft4Inventory Role Center Menu Setup > S4I Setup

Enter the parameters on the form as shown in the figure below. Later in this manual, you will find their detailed descriptions and recommendations on how to better adapt them to your needs.

S4I Setup

New | More options

General

Use Transaction Date	<input type="checkbox"/>	Buffer Decrease %	30,00	Forecast Min. Buffer Change %	5
Yesterday Till Time	08:00:00	Replenishment Time Reference	14	State Days To Keep	0
Green Check Accuracy %	95	Small Buffer Level	100	Default Assortment Code	MTS1
Red Level %	33,00	Small Buffer Interval Ratio	1,50	Buffer Calc. Max Coefficient	1,1
Green Level %	66,00	Receipt Lookback Days	5	Buffer Calc. Change Degree, %	30,0
Buffer Increase %	30,00				

Charting

Chart Filename		Chart Max. Days	180	Chart Buffer Threshold %	100,00
Chart Min. Days	180	Chart Period Multiplier	20		

Replenishment

MOQ Threshold %	70	CW Location Code	BLUE	Create Purch. Order for Ext. Data	<input type="checkbox"/>
Order Upper Bound %	125	Fill Need Threshold %	70		
Order Lower Bound %	80	Default Resp. Person Code	ZL		

General

- Use Transaction Date - NO
- Yesterday Till Time- 08:00:00
- Green Check Accuracy % - 95
- Red Level % - 33
- Green Level % –66
- Buffer Increase % - 30
- Buffer Decrease % - 30
- Replenishment Time Reference - 14
- Small Buffer Level - 100
- Small Buffer Interval Ratio - 1.5
- Receipt Lookback Days - 5
- Forecast Min. Buffer Change % - 5
- State Days to Keep - 0
- Default Assortment Code - Do not fill in yet
- Buffer Calc. Max. Coefficient - 1.5
- Buffer Calc. Change Degree,% - 30

Charting

- Chart Filename - Empty
- Chart Min. Days - 60

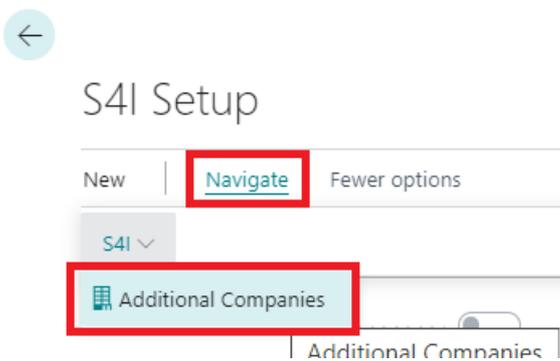
- Chart Max. Days - 400
- Chart Period Multiplier - 10
- Chart Buffer Threshold, % - 1

Replenishment

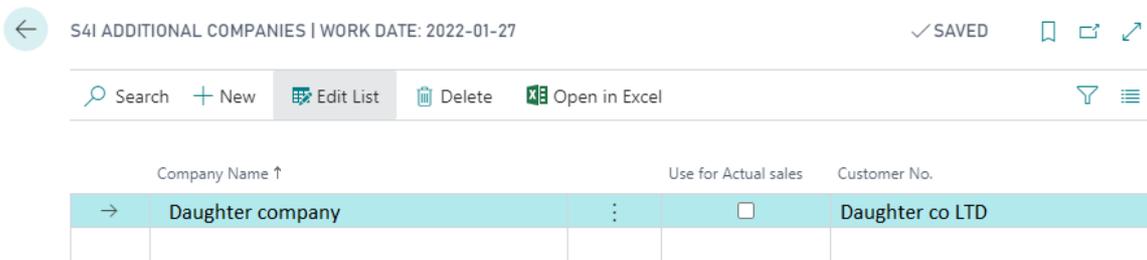
- MOQ Threshold, % - 70
- Order Upper Bound % - 125
- Order Lower Bound % - 80
- Central Warehouse Location Code - The Central Warehouse Location Code from the location code list. If there is no unambiguous Central Warehouse - leave it blank
- Fill Need Threshold % - 70
- Default Responsible Person code – administering Responsible Person from the list of Responsible Persons
- Create Purchase Order for External Data - NO

If the BC365 company you are setting up has a Central Warehouse from which inventory is replenished to warehouses in other BC365 companies, in addition follow these steps.

S4I Setup Menu>Navigate>S4I>Additional Companies



In the table, enter the codes of all BC365 companies that have warehouses replenished from this company, indicate the corresponding Client No. and for the Use for Actual Sales set to YES.



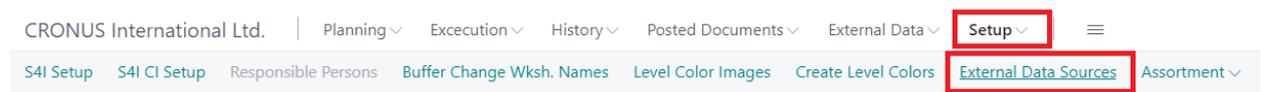
2.3. Integration with External Data

Soft4Inventory makes it possible to use for the inventory management not only to the data on the movement of items in the BC365 transaction board, but also in other systems or companies, hereinafter referred to as "External Data".

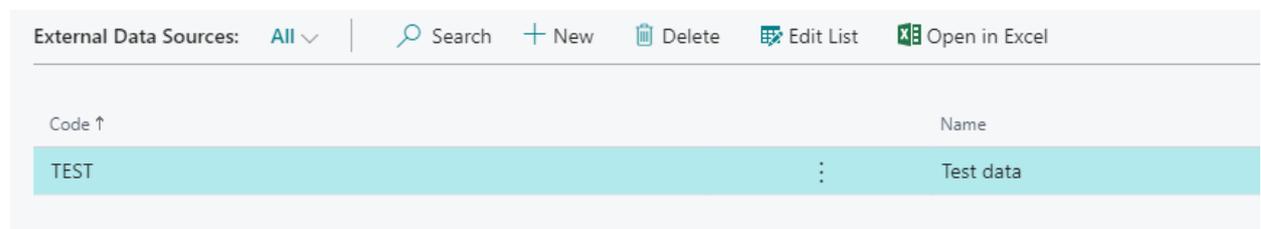
With the help of External Data functionality, you can:

- address the centralized inventory management tasks of a franchise network or a group of companies when inventory movement transactions are recorded in several different accounting systems
- transfer historical inventory movement data important for the inventory management from the old accounting system to the newly installed BC365
- use Soft4Inventory without BC365 installed for the inventory movement accounting

To connect an External Data Source, in the Soft4Inventory Role Center Menu Setup> External Data Sources



Create Data Source / Sources Code / Codes and Names



BC365 Create the Location Codes corresponding External Warehouses.

In the Location Setup, in the Soft4Inventory section, select the appropriate data Source Code and tick the External Data YES check box. All items movement data recorded by BC365 in this location will be ignored and only External Data will be used, so do not organize items movement accounting in the BC365 system in the Locations specified as External.

← ...ATION CARD | WORK DATE: 2022-01-27 ✓ SAVED

BLUE · Blue Warehouse

Process | Location | More options

General > BLUE

Soft4Inventory

Green Check Accurac... <input type="text" value="0"/>	Only Sales Count as R... <input type="checkbox"/>
Replenishment Time ... <input type="text" value="0"/>	Purchase-To Location ... <input type="text"/>
Small Buffer Level <input type="text" value="0"/>	External Data <input checked="" type="checkbox"/>
Small Buffer Interval R... <input type="text" value="0,00"/>	External Data Source <input type="text" value="TEST"/>
Additional Inventory L... <input type="text"/>	

Soft4Inventory integrates with External Data Sources with the help of specially designed tables. See the Appendix of this manual "Integration with External Data"

Also make sure that:

- the Transfer Routes among the warehouses would be set if the used SKU replenishment type is Transfer

← ✎ + 🗑

Transfer Routes

◀ Previous Set ▶ Next Set

Options

Show Column Set

Show Transfer-to Name

Transfer Routes Matrix	Manage					
Transfer- from Code ↑	2041	20410	20411	20412	20413	20414
2043
2024
203
2040	OWN LOG.	OWN LOG.	...	OWN LOG.	OWN LOG.	OWN LOG.
2041

- in table S4I External Field Exceptions, the fields that do not need to be updated from the import data would be described

Table No. ↑	Table Caption	Field No. ↑	Field Caption
17025857	TOC External Item	17025970	Assortment Code
17025857	TOC External Item	17025960	Min. Qty. (MOQ)
17025857	TOC External Item	17025950	Item Qty. per Pallet
17025857	TOC External Item	17025940	No. of Boxes in a Row
→ 17025857	TOC External Item	17025930	Quantity in Box
17025857	TOC External Item	17025920	Qty. per Micro Package

- import templates for Items and Vendors would be set

TOC CI Setup

TOC

Item Sync. Process Co... : ITEM Zero Lines not Manda... :

Vendor Sync. Process ... : VENDOR

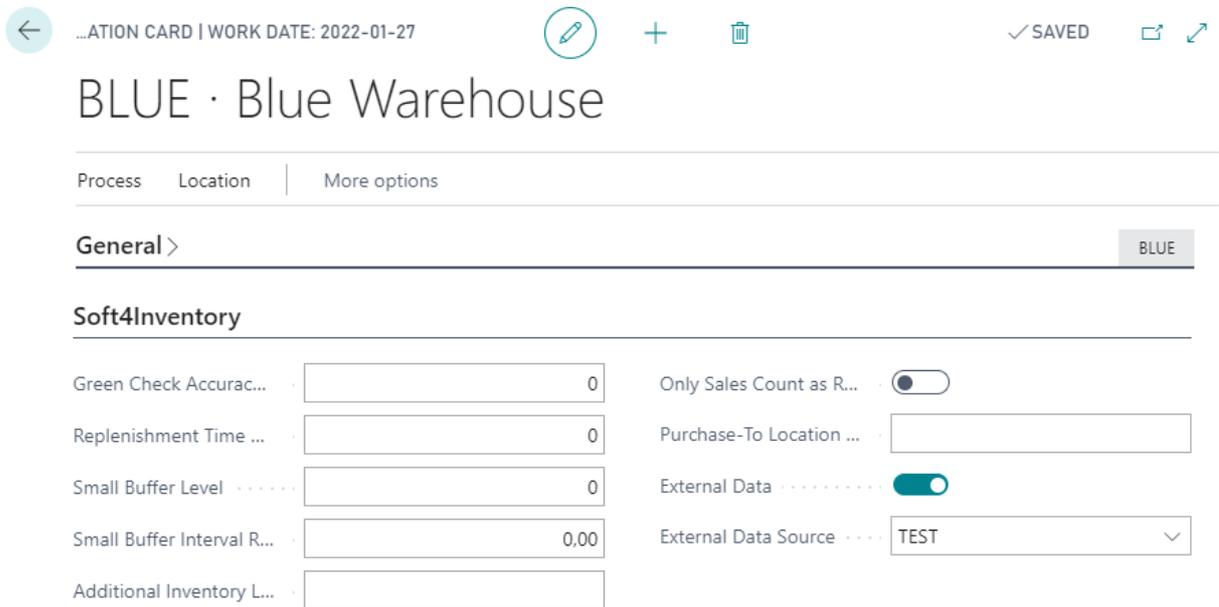
- Zero Lines not Mandatory is enabled in cases where in the table the S4IExternalDatashoot, records for items for which all daily data is zero are not created.

2.4. Location (Warehouses) Setup

Soft4Inventory provides the ability to customize general inventory management parameters depending on the Location, if necessary, they are set in the Location Setup section of Soft4Inventory.

- Green Check Accuracy, Replenishment Time Reference, Small Buffer Level, Small Buffer Interval - these parameters correspond to analogous parameters in the S4I Setup form
- Additional Inventory Location - indicates the Warehouse Code whose data must be connected to the data of this warehouse when planning inventory
- Only Sales Count as Read as Output - set to YES if you only want to see consumption transactions for the Sales and Production components as consumption. If NO is set, transfer operations will also appear in the consumption information
- Purchase-to Location Code - specifies the Location Code if the purchase order is to be created in the Location other than the planned inventory

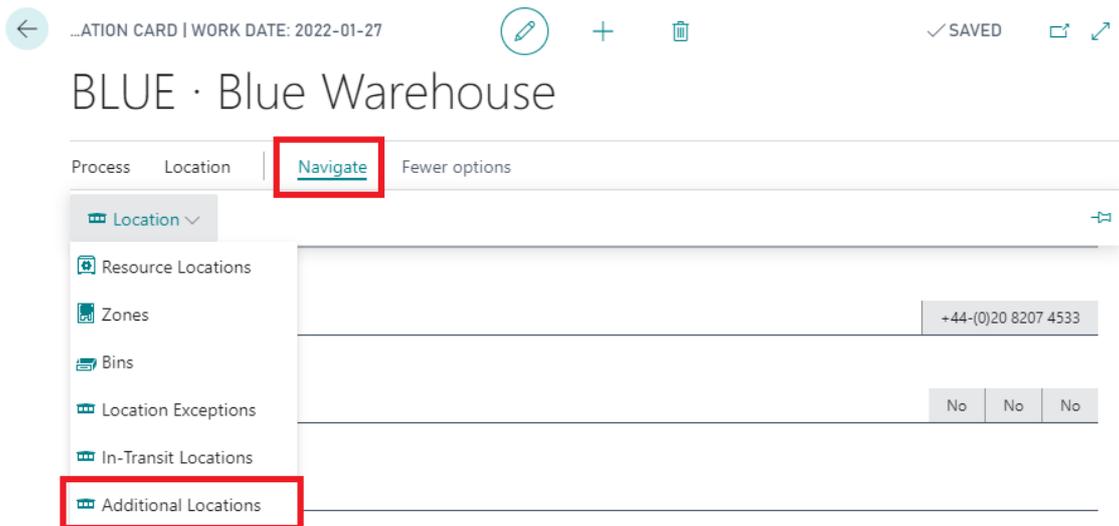
- External Data and External Data Source - as described in Section 2.3.



2.4.1. Inclusion of Additional Location Data

If data from multiple locations (both external and accounted for by BC365) needs to be connected to the planning location data when planning inventories, they must be entered:

Navigate > Additional Locations



In the list, the codes must be entered of all locations whose balance and movement information must be added when planning inventory for the Selected Location

← S4I ADDITIONAL LOCATIONS | WORK DATE: 2022-01-27 NOT S.

Search + New Edit List Delete Open in Excel

Additional Location Code ↑	
→	GREEN

2.4.2. Exceptions to Local Interconnections

If you want to restrict the inclusion of transfer operations to certain warehouses in the information on the releases and receipts of the planning location, you need to describe such cases Navigate > Location Exceptions

← ...ATION CARD | WORK DATE: 2022-01-27 ✓ SAVED

BLUE · Blue Warehouse

Process Location **Navigate** Fewer options

- Location
 - Resource Locations
 - Zones
 - Bins
 - Location Exceptions**
 - In-Transit Locations

+44-(0)20 8207 4533
No No No

In the table, those warehouses and those types of transactions that should not be included in the planning of planning location inventories are indicated.

← S4I LOCATION EXCEPTIONS | WORK DATE: 2022-01-27 ✓ SAVED

Search + New Edit List Delete Open in Excel

Transaction Type ↑		Destination Location Code ↑	
	Outbound Transfer		RED
→	Inbound Transfer	:	GREEN

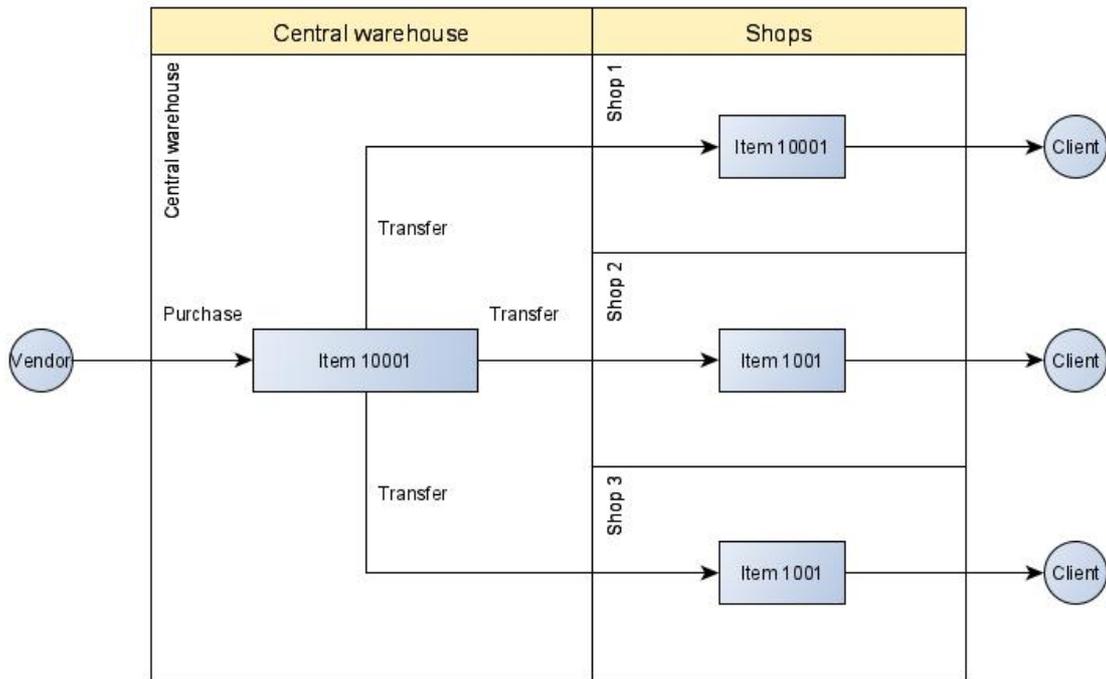
2.5. Compiling a List of SKUs

2.5.1. Supply Chain Configuration

The supply chain is a series of inventory planning points connected by inventory movement routes. Soft4Inventory planning points are described by specifying the

Location Code, Item Code, and Item Variant (if divided to variants). The planning point identified by the Warehouse Code, Item Code and Variant Code is hereinafter referred to as the SKU (Stock Keeping Unit).

The diagram below shows an exemplary single-item supply chain with four planning points (4 SKUs)



Such a supply chain in the Soft4Inventory system is described by four SKUs as shown in the table below. The item in this case is not divided into variants.

Location Code	Item Code	Variant	Replenishment System	Vendor Code	Additional Location Code
Central Warehouse	10001	-	Purchase	Vendor	
Shop 1	10001	-	Transfer		Central Warehouse
Shop 2	10001	-	Transfer		Central Warehouse
Shop 3	10001	-	Transfer		Central Warehouse

2.5.2. Assortment Features for the SKU List Management

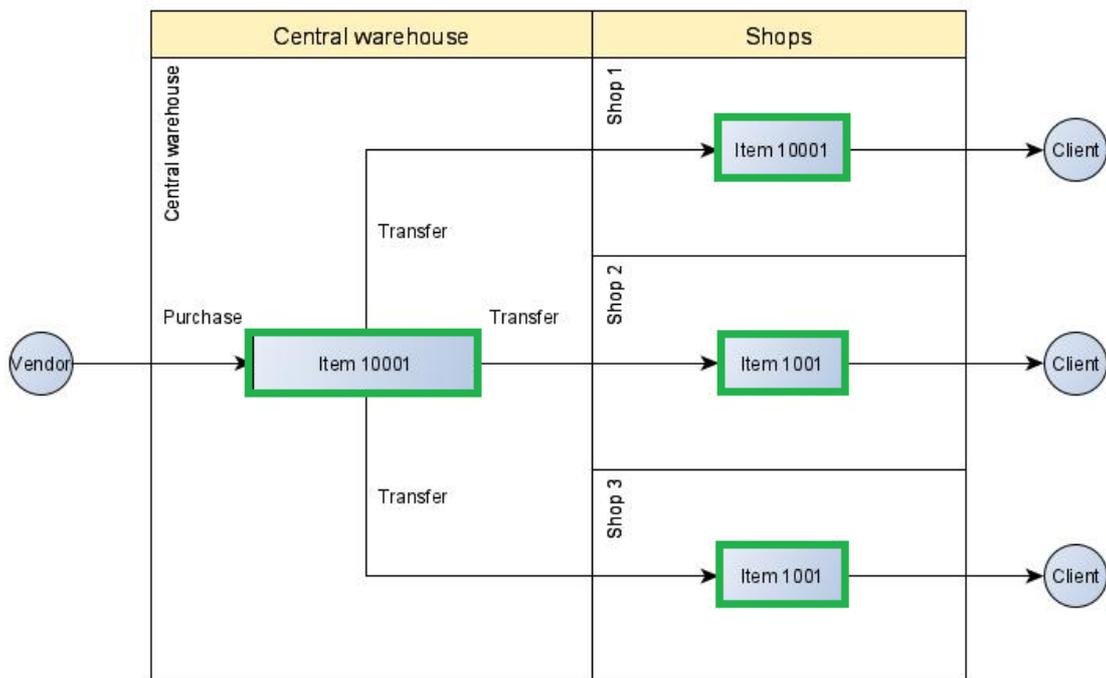
The functionality of the Soft4Inventory assortment features is used to facilitate the management of the SKU list and the control of its parameters.

The assortment feature is determined for the item. Its parameters describe the exact structure of the supply chain, which must be valid only for the items marked with that assortment feature.

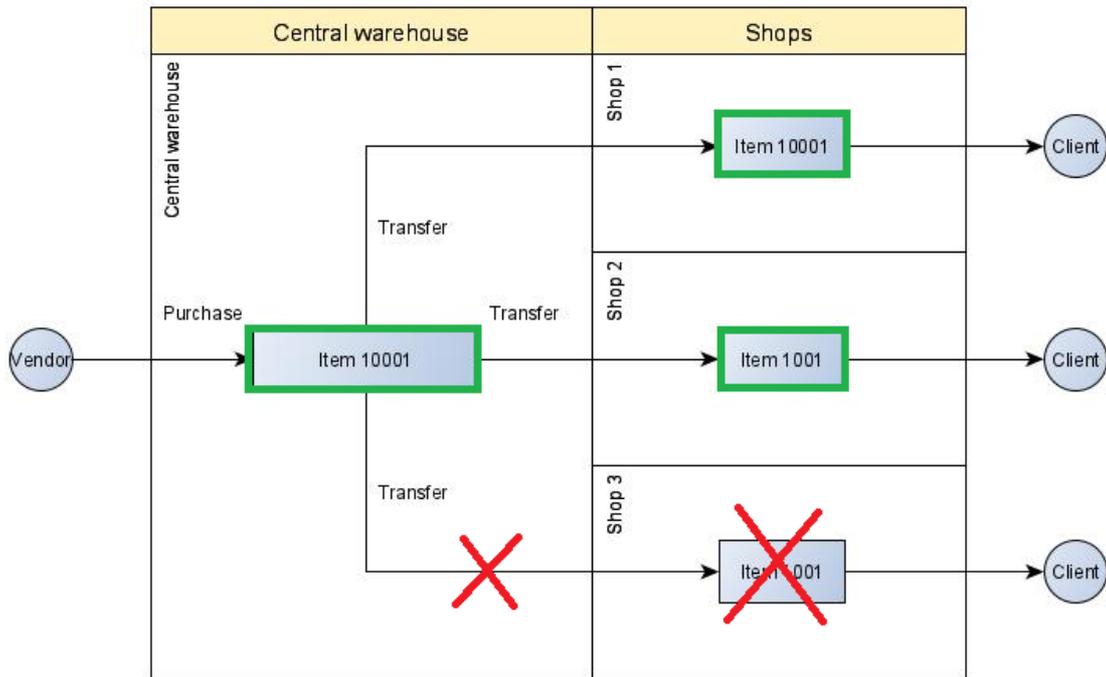
Suppose in the supply chain described above, different items may have different numbers of points of sale. Suppose there are two or three types of items:

- MTS1 - those that must be traded in all three shops that require the replenishment of the inventory in the Central Warehouse
- MTS2 - those that must be traded only in the first and second shop and that require the replenishment of the inventory in the Central Warehouse
- SALE – items whose inventory in the Central Warehouse are sold out through the first shop and do not need to be replenished in the Central Warehouse.

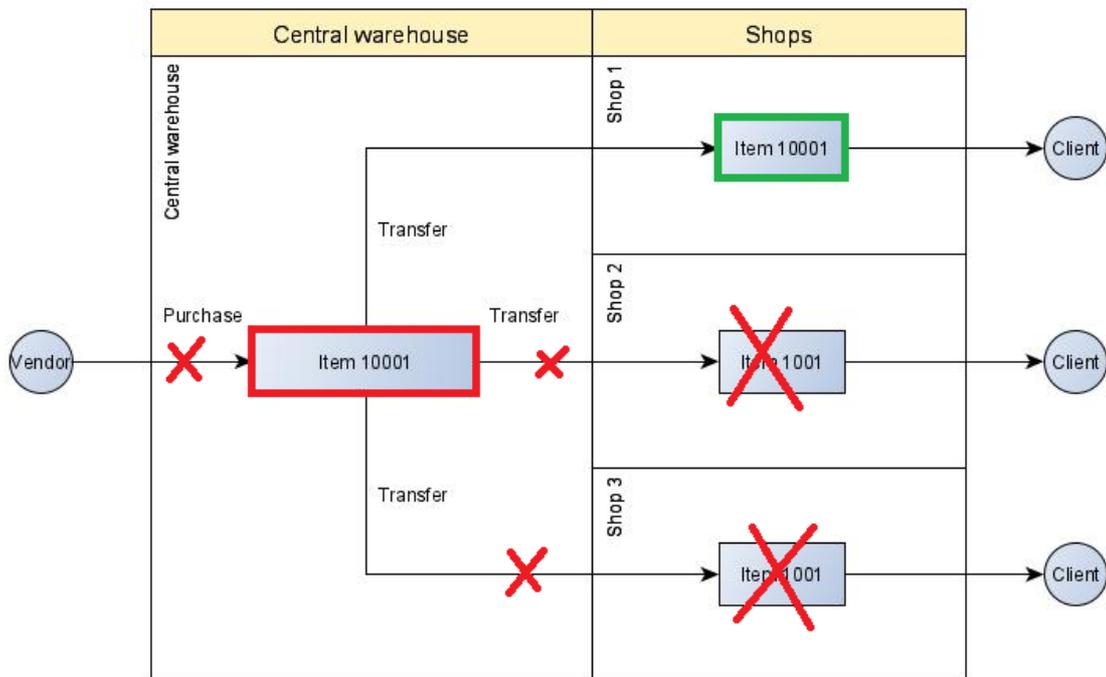
MTS1 supply chain



MTS2 supply chain

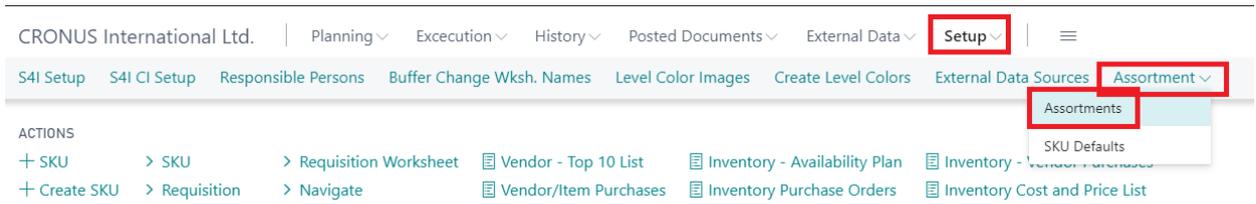


SALE supply chain



Thus, it starts with a grouping of scenarios for the movement of all items in the supply chain, assigning to each group a freely chosen assortment feature.

Soft4Inventory Assortment Features are described in Setup> Assortment> Assortments

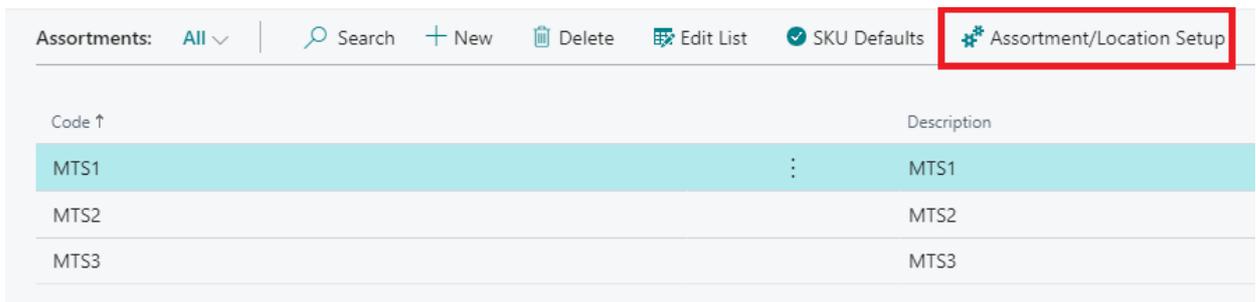


In the table, the freely chosen codes and names of the assortment features are listed.

Code ↑	Description
MTS1	MTS1
MTS2	MTS2
MTS3	MTS3

For each assortment feature, it is necessary to describe the locations and indicate the possibilities to replenish inventory.

Standing on the selected assortment feature, go to the Assortment / Location Setup



Enter in the table:

← ASSORTMENT/LOCATION SETUP | WORK DATE: 2022-01-27

Location Code ↑	CW Replenishment Active	Block CW Replenishment	External Replenishment Active	Block External Replenishment
→ BLUE	No	<input type="checkbox"/>	Yes	<input type="checkbox"/>
RED	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

- Location Code - enter the Location Codes that must contain the planning points (SKUs) of the items marked with this assortment feature
- CW Replenishment is Active - if the Replenishment from the Central Warehouse is allowed
- Block CW Replenishment - Block the Replenishment from the Central Warehouse even when a specific item is needed (e.g., a Client's order)

- External Replenishment is Active - is it allowed to purchase from the Vendor)?
- Block External Replenishment - Block the purchase from the Vendor) even if there is a specific need for the item (e.g., a Client's order)

E.g., the parameters of the MTS2 assortment would look like this:

Location Code	CW Replenishment is Active	Block CW Replenishment	External Replenishment is Active	Block External Replenishment
Central Warehouse	No	Yes	Yes	No
Shop 1	Yes	No	No	Yes
Shop 2	Yes	No	No	Yes
Shop 3	No	No	No	Yes

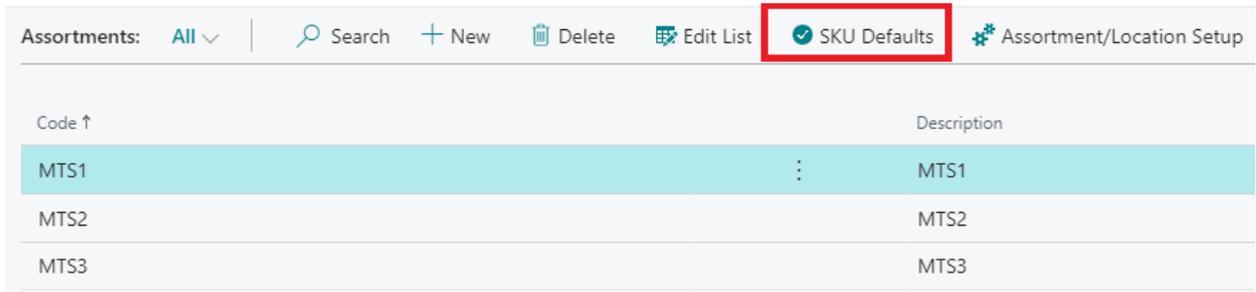
Note: the location of Shop 3 is left with the option to receive MTS2 inventory of the item from the Central Warehouse for a specific need (e.g. a Client's order) so CW replenishment is not blocked.

Meanwhile, the parameters of the SALE assortment would look like this:

Location code	CW Replenishment is Active	Block CW Replenishment	External Replenishment is Active	Block External Replenishment
Central warehouse	No	Yes	No	Yes
Shop 1	Yes	No	No	Yes
Shop 2	No	No	No	Yes
Shop 3	No	No	No	Yes

Also, for the each assortment feature, it is necessary to describe the default values of the SKU to fill the parameters of the created SKUs. At the same time, this description indicates under what conditions and for which locations it is necessary to create a SKU of the item marked with the appropriate assortment feature.

Standing on the selected assortment feature, go to the values of the SKU Defaults



Enter in the table:

Location Code ↑	Assortment Code ↑	Check Open Inventory	Check Prod. Components	Check Sales Order Quantity	Vendor No.	Default Replenishment System	Default Transfer-from Code	Default Repl. Time (days)	Default S4I Management Type	Default Resp. Person Code	Default Sell-from Code
BLUE	MTS1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Purchase		0	S4I	ZL	
RED	MTS1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Transfer	BLUE	1	S4I	ZL	

- Location Code - we enter the Location Codes that must contain the planning points (SKUs) of the items marked with this assortment feature
- Assortment Code - will be filled in automatically
- Check the Inventory - SKUs will only be created when the inventory appears at a specified location
- Check the need for the manufactured components - SKUs will be created only when the need for the item arises from the planned production orders
- Check the need for sales orders - SKU will be created only in the specified location when the need for the item arises from the received sales order
- Default Replenishment System - The Replenishment System of items of this Assortment Feature at a specified location
- Default Sender Code - If the Replenishment System is a transfer, the location from which the transfers are made is specified
- Default Management Type - one of the S4I control types is selected.
- Default Responsible Person Code -The Responsible Person to whom the newly created SKU must be assigned. The person's code can be changed later.

E.g., MTS2 The default values for the MTS2 SKU would look like this:

Location Code	Check Inventory	Check the Need for Manufactured Components	Check the Need for Sales Orders	Default Replenishment System	Default Sender Code	Default Management Type	Default Code of the Responsible Person
Central warehouse	No	No	No	Purchase		S4I	ZL

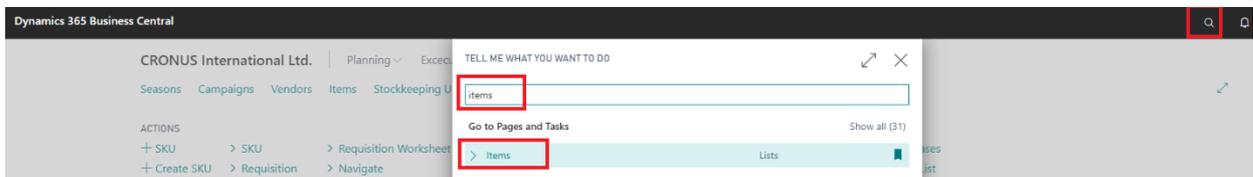
Shop 1	No	No	Neo	Transfer	Central warehouse	S4I	ZL
Shop 2	No	No	No	Perkélimas	Central warehouse	S4I	ZL
Shop 3	Yes	No	Yes	Transfer	Central warehouse	S4I	ZL

Note: Because it is allowed to bring the inventory to Shop 3 when a specific client order is received, we ask the SKU creation algorithm to check if the need arises from sales orders or if the inventory already exists at that location and only then create a SKU. In other cases, the SKU is not created at this location.

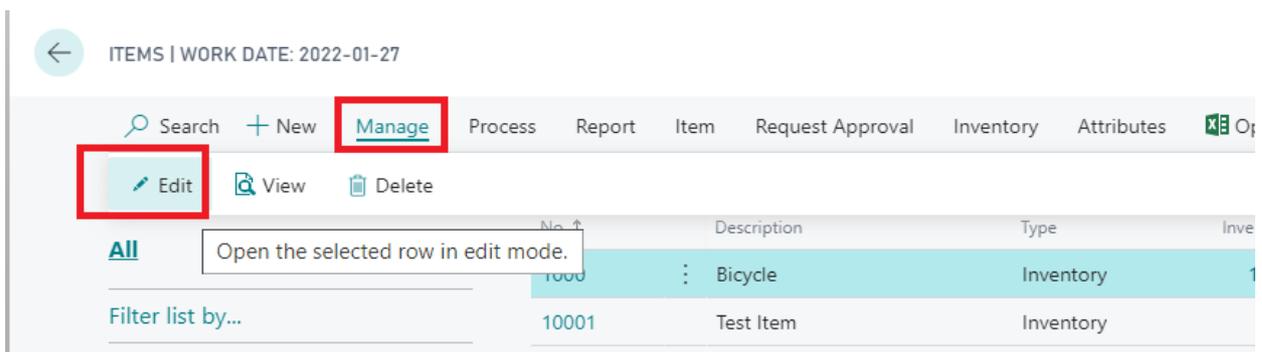
2.5.3. Creating a SKU

After describing the Assortment Features as described in Section 2.5.2, SKUs are created automatically. For the automatic creation feature to work, you need to:

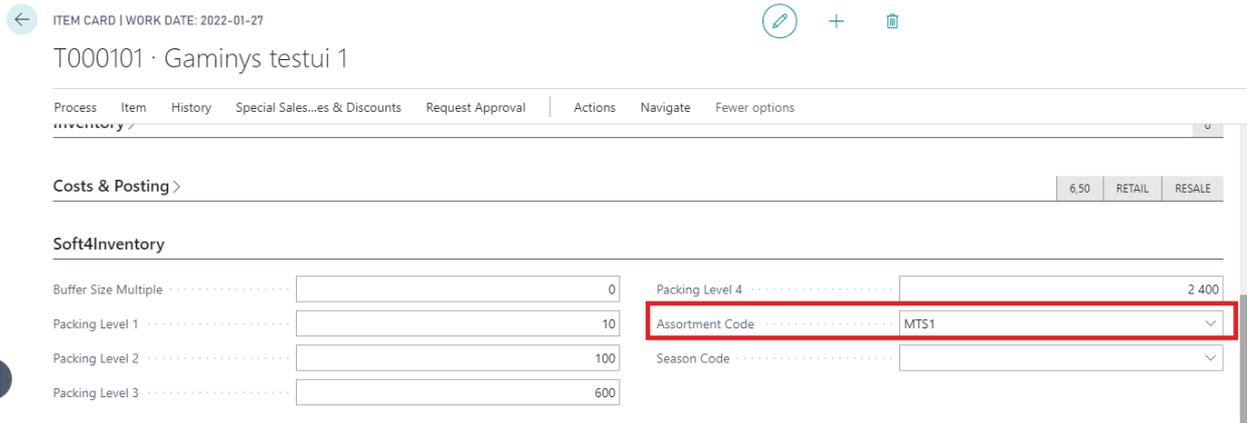
Assign the Assortment Features to the items. Enter Items in the search:



Go to the list of items, find the desired item and click Edit



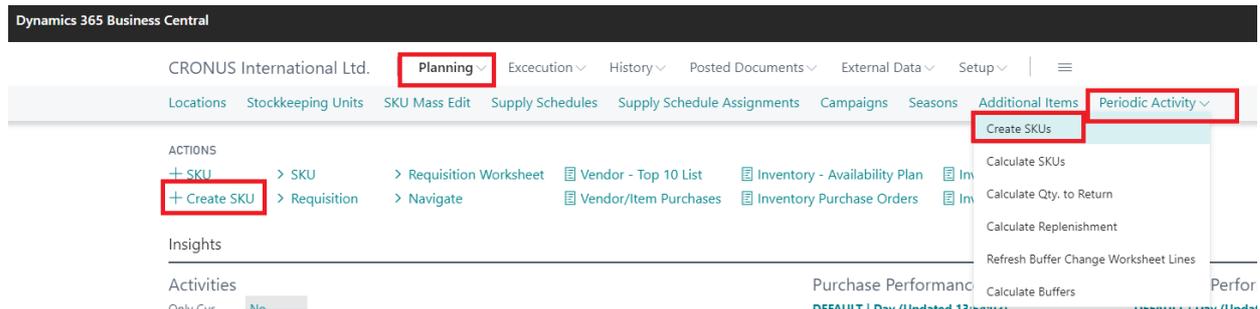
Assign the Assortment Feature in the section Soft4Inventory > Assortment Code



It is more convenient to import a larger number of the assortment features from Excel using BC365 Configuration Packages (see Microsoft manual BC365 Configuration Packages)

The required SKUs will be created by running Planning> Periodic Activity> Create SKUs

If this function is run periodically, then new SKUs will be created at the set periodicity and no manual run of the function will be required.



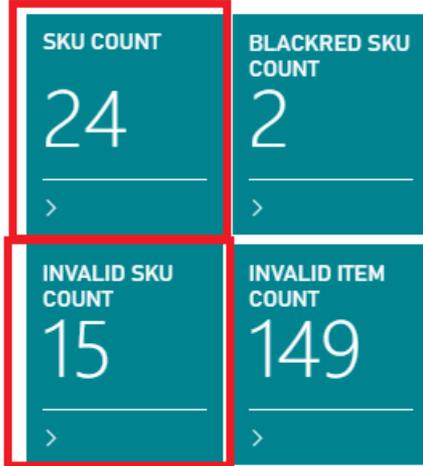
The SKU list is available from the Role Center. All SKUs are displayed in the Number of Warehouse Units controller, and newly created and those for which the parameterization has not been completed yet – the Number of Invalid Warehouse Units.

Activities

Only Cur...

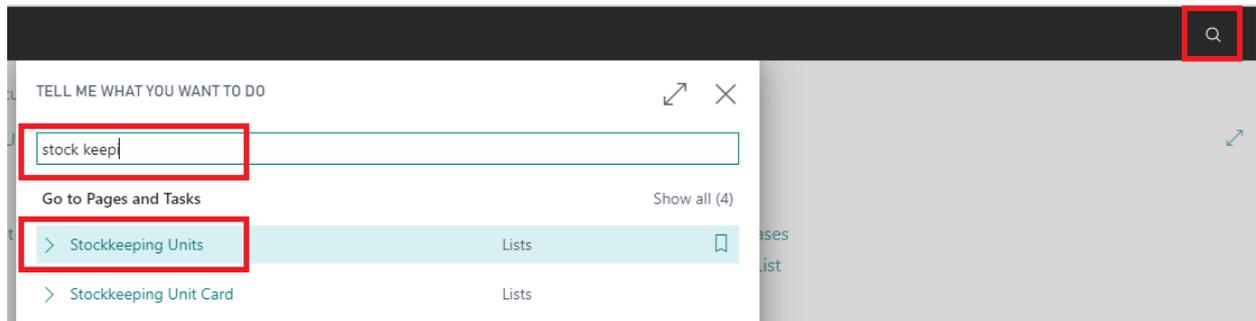
No

SKU MANAGEMENT

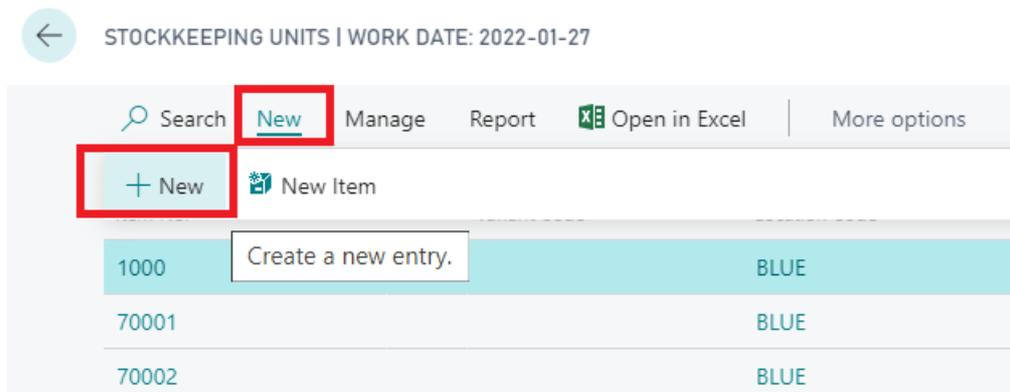


Manual creation of additional SKUs is also possible. Enter in the BC365 search:

The List of Stockkeeping Units



Click New in the List



We enter the Item Code, the Location Code and, if necessary, the Variant, and select one of the S4I management types.

SKU parameterization can be completed in this form or as described in Section 2.5.4.

← STOCKKEEPING UNIT CARD | WORK DATE: 2022-01-27

BLUE · T000101

New Item Navigate | More options

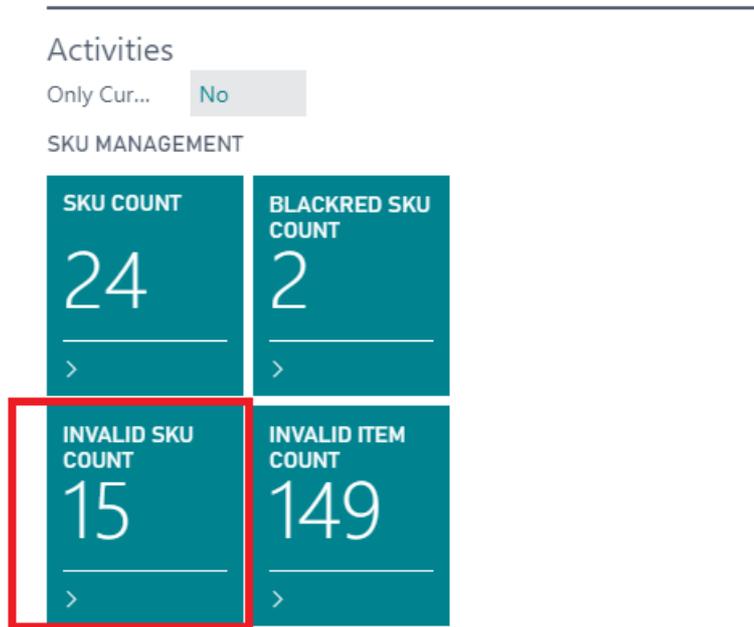
General

Item No.	T000101
Description	Gaminys testui 1
Location Code	BLUE
Variant Code	
Assembly BOM	No
Shelf No.	
Last Date Modified	2020-09-25
Qty. on Purch. Order	0

2.5.4. SKU Parameters

Once you have created a list of SKUs, it is important to set their parameters properly. The information described in this section will help you do this.

Soft4Inventory Role Center Controller The Number of Invalid Warehouse Units indicates the number of SKUs for which mandatory parameters are not filled in or there are critical parameter errors.



S41 Validation Status field seen in the SKU list provides more information about discrepancies in the parameters of each SKU

Chart | Actions | Navigate | Fewer options

EDIT - SKU MASS EDIT

S41 Validation Status ▼	Item No. ↑	Location Code ↑	Description	Additional Item Count	Item C Code
Missing Set...	T000101	BLUE	Gaminys testui 1	1	ŽALIA'
Missing Set...	T000103	BLUE	Gaminys testui 3	0	ŽALIA'
Buffer >0	T000111	BLUE	Gaminys testui 11	0	ŽALIA'
Missing For...	T000112	BLUE	Gaminys testui 12	0	ŽALIA'
Missing Set...	T000101	RED	Gaminys testui 1	1	ŽALIA'
Buffer =0	T000102	RED	Gaminys testui 2	2	ŽALIA'
Missing Set...	T000103	RED	Gaminys testui 3	0	ŽALIA'
Check Setti...	T000104	RED	Gaminys testui 4	0	ŽALIA'
Buffer >0	T000105	RED	Gaminys testui 5	0	ŽALIA'
Check Setti...	T000106	RED	Gaminys testui 6	0	ŽALIA'
Check Setti...	T000107	RED	Gaminys testui 7	0	ŽALIA'
Check Setti...	T000108	RED	Gaminys testui 8	0	ŽALIA'
Check Setti...	T000109	RED	Gaminys testui 9	0	ŽALIA'

The following messages are displayed:

- Missing Settings - Unfilled SKU required fields (see table below for a list of required fields)

- Incorrect setup:
 - Minimal Packing Level is specified, but there are no packing values.
 - Green Zone Check Time is shorter than the Replenishment Period.
 - Specified Season Parameters are not or not fully described.
- Buffer=0 - The buffer must be=0;
- OK – there are no critical parameterization errors

Only SKUs whose Check Status is OK enter in the order and management worksheets, so it is important to resolve any parameterization discrepancies as soon as possible.

Table: SKU parameters

Field Name	Input Type	Description
Required Fields		
Warehouse (Location code)	Automatically during SKU creation	The unit where the balance of the items is managed. Together with the Item code and the Variant Code, it forms a unique combination.
Item (Item No)	Automatically during SKU creation	Managed Item Code. Together with the Warehouse Code and the Variant Code, it forms a unique combination.
Type code (Variant Code)	Automatically during SKU creation	Managed Item Variant. Together with the Warehouse Code and the Item Code, it forms a unique combination.
(Replenishment system)	Automatically during SKU creation	According to the specified replenishment system, different types of order documents are created when placing orders. Possible values: Purchase - purchase orders are created; Transfer - transfers are created; Sales - sales orders are created Production - production orders are being created (Sales orders for production)
(Vendor No)		Purchase - only Vendor No is filled in; Transfer - only the Sender's code is filled in;

(Transfer-from Code)	Automatically during SKU creation	Production - Transfer-from Code is filled in;
(Management Type)	Automatically during SKU creation	<p>None - SKU is not managed by Soft4Inventory tools</p> <p>S4I - Inventory is managed by Soft4Inventory. Proposals according to S4I logic are provided for changing buffers.</p> <p>S4I Forecast - Inventory is managed by Soft4Inventory. The buffers are changed automatically according to the forecasts.</p> <p>S4I auto - inventory is managed by Soft4Inventory. The buffers are changed automatically according to S4I logic.</p>
(Buffer valid from (date))	Automatically during SKU creation	The proposed order quantities, buffer change proposals, lost sales are not calculated for the invalid SKUs.
(Responsible Person Code)	Automatically during SKU creation	The Responsible Person for SKU inventory management is assigned.
Repl. Time (Days)	According to the parameters of the assigned supply schedule. Details are provided in the section "Supply Schedules and their Assignment"	Order fulfillment time. Calculated from the moment the order is created until the items are received. If this amount is not specified in the supply contract, a time limit should be set within which at least 85% of the quantity ordered can be obtained.
Repl. Period (Days)	According to the parameters of the assigned supply schedule. Details are in the section "Supply	Periodicity at which orders are scheduled to be placed. The choice of this term depends on the desired batch size and the Vendor's ability to unload at the selected frequency.

	Schedules and their Assignment"	
Green Zone Period (Days)	Entered by the user	The amount of time the balance stays in Green, the proposal is provided to decrease the buffer. The shorter this time is, the more proposals will be provided. The longer, the slower the system will respond to declining demand. The Green Zone Period cannot be shorter than the Replenishment Period .
Optional Fields		
(Buffer size)	Entered by the user	<p>When adding new items to the assortment or checking the existing buffers, the formula can be followed:</p> $\text{Buffer} = \text{Max. Demand Forecast via } (T_{\text{period}} + T_{\text{lead}} + T_{\text{rez}} - T_{\text{known}})$ <p>T_{rez} – the Reserve is Equal to the Size of the Red Zone (by Default 33% of $T_{\text{period}} + T_{\text{lead}} - T_{\text{known}}$)</p> <p>$T_{\text{known}}$ – the Period for which Demand is Known with ~ 95% Accuracy</p> <p>For small buffers (values 1-2) it is not necessary to add a Red Zone Reserve.</p>
(Buffer size multiple)	From the item card	<p>Specifies when the buffer can only be a multiple of the number entered. E.g., if the buffer can only be an even number 2,4,6 ... a multiple of the buffer size is entered 2.</p> <p>This parameter solves the problems of quantitative completeness, when items are usually sold in sets of 2, 3, and so on. The size of the most commonly sold set is then determined as a multiple.</p>

(Minimal Buffer size)	Entered by the user	The size below which buffer decrease is not allowed. This parameter solves the problems of quantitative completeness, when it is necessary to ensure a certain quantity of the item without which sales are not possible.
(Fixed Buffer)	Entered by the user	The buffer value is fixed. The buffer management does not occur
(Untouchable Quantity)	Entered by the user	Additional quantity to be held at the point of sale irrespective of the balance available for trading. E.g., to fill the exposition.
(Minimal Order Quantity)	Entered by the user	<p>This is the minimal quantity required to purchase for the Vendor to fulfill the order. This parameter is used only when it does not match the order multiple (package).</p> <p>If the calculated order quantity is less than x% of the Minimal Order Quantity - it is proposed to order 0, if higher - it is proposed to order not less than the Minimal Order Quantity. The X parameter is entered in the basic setup form S4I Setup / MOQ Treshhold%</p>
(Packing Level 1)	Loads automatically from the item card	The smallest packing
(Packing Level 2)		Larger than Packing Level 1
(Packing Level 3)		Larger than Packing Level 2
(Packing Level 4)		Quantity per Pallet
(Packing Level Limit)	Entered by the user	<p>The quantity proposed to be ordered is rounded according to the most suitable packing, but not less than the Packing Level Limit.</p> <p>0, 1, 2, 3 or 4.</p> <p>Where 0 - no packing limit</p> <p>1, 2, 3, 4 - the smallest packing level that can be used to calculate the order</p>

Auxiliary and Informational		
(Red Level %)	Entered by the user	In an exception, the SKU may be set differently than the whole system or buffer group set, Red Level % .
(Green Level %)	Entered by the user	In an exception, the SKU may be set differently than the whole system or buffer group set, Green Level % .
(Buffer Increase %)	Entered by the user	In an exception, the SKU may be set differently than the whole system or buffer group set, Buffer Increase % .
(Buffer Decrease %)	Entered by the user	Exceptionally, the SKU may be set different from the% for the whole system or group of buffers, Buffer Decrease % .
(Season Code)	From the item card	The season code is assigned as described in the Seasons section
(Pre-Season Buffer)	Counted by the system, the user can change	The value to which the buffer is decreased at the end of the season for items of low seasonality. The operation of this parameter is described in the section Campaigns.
(SKU Assortment)	From the item card	The value of the field describes the dependence of the item on the Unit Assortment. Selecting No value removes the item from the Unit's Assortment. Default value is Yes.
Information Fields		
(S4I Validation Status)	Calculated by the system	The following messages are displayed: Missing Setup - SKU required fields are missing Incorrect Setup - Minimal Packing Level is specified but there are no packing values. The Green Zone Validation Period is shorter than the Replenishment Period. There are no parameters for the specified season or they are not fully described. Buffer > 0 - The Buffer must be > 0;

		Buffer = 0 – The Buffer must be = 0;
(Last Hist. Calc. Date)	Calculated by the system	Date showing when the last buffer calculations and data loading were performed.
(Inventory)	Calculated by the system	The inventory that was at the time of the last calculation of the buffer. The inventory located at the SKU location and at locations assigned to the SKU location as auxiliary
(Buffer %)	Calculated by the system	An indicator showing the level of adequacy of the item balance. The ratio of the balance to the buffer size is expressed as a percentage.
(Level)	Calculated by the system	An indicator showing the level of adequacy of the item balance. Ratio of balance to the buffer zones.
(Planned Receipt)	Calculated by the system	The quantity ordered to be purchased or ordered to be transferred to the unit was at the time of the last calculation of the buffer. In addition, quantities ordered to be purchased in the additional places assigned to the SKU place are also taken
(Buffer % With Planned Receipt)	Calculated by the system	An indicator showing the level of adequacy of the item balance together with the ordered quantity. The ratio of the amount of the balance and the ordered quantity to the size of the buffer is expressed as a percentage.
(Level with Planned Receipt)	Calculated by the system	An indicator showing the level of adequacy of the item balance together with the ordered quantity. The ratio of the balance to buffer zones.
(S4I Production components)	Calculated by the system	The production plan quantity is calculated from the Production Order Component Lines. Component Lines are taken with the SKU item where consumption is provided at the SKU Location and at Additional Locations assigned to the SKU Location. Lines are taken whose Due Date Is <= Current Date

		+ (Replenishment time + Replenishment period) x the Order Multiplier.
(S4I Planned release sales)	Calculated by the system	S4I Planned Released Sales is calculated from the Sales Order Lines. Lines are taken with the SKU item where the consumption is provided at the SKU Location and at Additional Locations assigned to the SKU Location. Lines are taken for which S4I Planned Release Date Is <= Current Date + (Replenishment time + Replenishment period) x Order Multiplier.
(Shortage)	Calculated by the system	The Shortage shows the Shortage in planned production and planned sales during the Replenishment Period.
(Campaign Count)	Calculated by the system	Campaign Count currently in progress. Campaigns with a Start Date earlier than or equal to today and an End Date is later than or equal to today.
(Future Campaign Count)	Calculated by the system	Campaigns with Start Dates <= Replenishment time + Replenishment Period
(Season Status)	Calculated by the system	<p>The feature is only displayed for items with assigned seasonality.</p> <p>For items of high seasonality:</p> <ul style="list-style-type: none"> • IN, if orders currently being created will arrive during the trading season; • IN_SALE if orders currently being created arrive during the sales period • OUT if orders currently being created will arrive out of season. <p>For low season items:</p> <ul style="list-style-type: none"> • HI, if orders currently being created will arrive during the trading season; • LOW if orders currently being created arrive out of season.

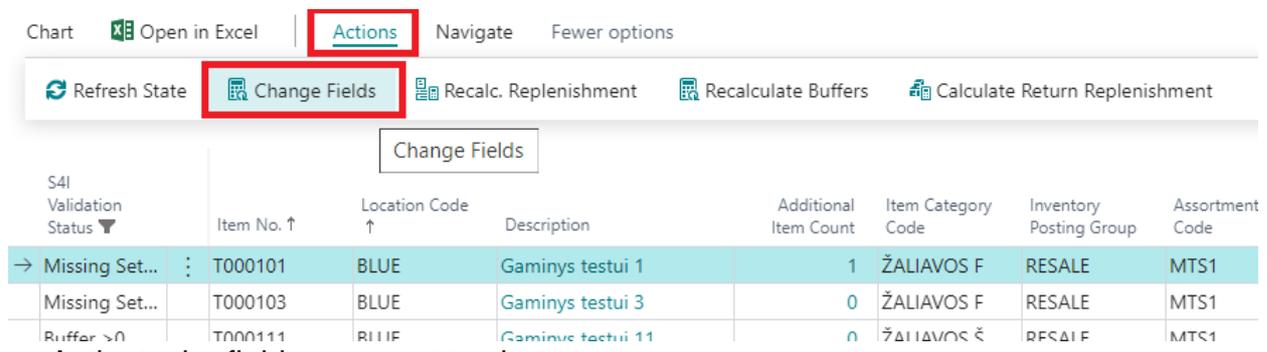
		The calculation logic is described in the Seasons section.
Assortment Code	Loads automatically from the item card	<p>The list of possible values is described in the Assortment Setup in Soft4Inventory.</p> <p>The parameters of the Assortment Features determine where the item SKU needs to be created and when to allow the Buffer to be set > 0</p>

2.5.5. Editing SKU Parameters

The parameter editing function is used for quick editing of SKU parameters

Instructions:

- Open the form SKU Count
- Filter SKUs to which you want to give the same value to a field
- Actions> Change Fields



- Activate the fields you want to change
- Save field values
- OK



SKU setup can also be adjusted in the SKU Count or the SKU Card form when editing mode is enabled.

← ...G UNIT CARD | WORK DATE: 2022-01-27  +  ✓ SAVED   

BLUE · T000101

Process | Chart | More options

General

Item No.	T000101	Qty. on Prod. Order	0
Description	Gaminys testui 1	Qty. in Transit	0
Location Code	BLUE	Qty. on Component L... ..	0
Variant Code		Qty. on Sales Order	0
Assembly ROM	No	Qty. on Service Order ...	0

2.5.6. Supply Schedules and their Assignment

The SKU parameter The Replenishment Period is automatically calculated according to the supply schedule assigned to the SKU. If you want to change the Replenishment Periodicity or its value is 0, do one or both of the following:

- create a new Supply Schedule;
- assign it to the required SKU group.

Soft4Inventory / Planning / Supply Schedules. The card is called up and New is pressed

CRONUS International Ltd. | **Planning** ▾ | Execution ▾ | History ▾ | Posted Documents ▾

Locations | Stockkeeping Units | SKU Mass Edit | **Supply Schedules** | Supply Schedule Assignments

ACTIONS

MONTH

Navigate

General

Code	<input type="text" value="MONTH"/>	Rhythm	<input type="text" value="1,00"/>
Name	<input type="text"/>	Rhythm Start	<input type="text" value="1,00"/>
Rhythm Type	<input type="text" value="Month"/>	Month Week	<input type="text" value="1"/>

Schedule

MONDAY <input checked="" type="checkbox"/> <input type="text" value="120"/>	FRIDAY <input type="checkbox"/> <input type="text" value="0"/>
TUESDAY <input type="checkbox"/> <input type="text" value="0"/>	SATURDAY <input type="checkbox"/> <input type="text" value="0"/>
WEDNESDAY <input type="checkbox"/> <input type="text" value="0"/>	SUNDAY <input type="checkbox"/> <input type="text" value="0"/>
THURSDAY <input type="checkbox"/> <input type="text"/>	

Fill in the Supply Schedule Parameters:

Field Name	Field Functionality
(Code)	Freely chosen 10-character code
(Name)	Freely chosen name of the Supply Schedule
(Rhythm type)	Available rhythm types: <ul style="list-style-type: none"> • Day • Week • Month This is a multiple of the time interval in which the Rhythm will be calculated. E.g., if you select Rhythm Type Week and Rhythm 2, orders will be generated every two weeks.
(Rhythm)	Indicates how many Rhythm type multiple make up the Replenishment Period. E.g., if you select Rhythm Type Week and Rhythm 2, orders will be generated every two weeks.
(Rhythm start)	The Rhythm is always calculated from the beginning of the year. If Rhythm Start is 1, then it is the first order of the year, depending on the Rhythm Type selected, will be created on the first Day, Week, or Month of the year, respectively. By choosing a different Rhythm Start parameter, we move the first order away from the beginning of the year.
(Month week)	If the Rhythm Type Month is selected, you must additionally specify which week of the month the order is to be created
Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday	Indicates the day or days of the week on which the order is to be created
Supply Time Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday	Supply Time in calendar days must be indicated for the marked order day.

The Supply Schedule is assigned to SKU groups. The SKU group for assigning a Supply Schedule consists of a unique set of the following parameters:

- SKU Location Code
- Replenishment System
- Replenishment Code: Vendor Code or Replenishment Warehouse Code depending on the Replenishment System
- Responsible Person Code
- Replenishment Period Group: If items from the same Vendor are supplied on a different schedule

The Supply Schedule can be assigned to the SKU group:

1. Soft4Inventory / Planning / Supply Schedule Assignments. By creating a new grouping parameter line and filling in all the required fields.

CRONUS International Ltd. | **Planning** ▾ Execution ▾ History ▾ Posted Documents ▾ External Data ▾

Locations Stockkeeping Units SKU Mass Edit Supply Schedules **Supply Schedule Assignments** Campaigns Seasons

Supply Schedule Assignments: All ▾ | Search + New Delete Edit List Open in Excel More options

Location Code	Replenishment System ↑	Replenishment Code	Responsible Person Code	Schedule Code	Schedule Name
BLUE	Purchase	01587796	ZL	WEEK MON	WEEKLY Monday
BLUE	Purchase	01863656	ZL	MONTH	
RED	Purchase	01254796	ZL	WEEK MON	WEEKLY Monday
RED	Transfer	BLUE	ZL	WEEK MON	WEEKLY Monday

2. The SKU Count, in BlackRed or in SKU forms, by selecting any SKU belonging to the desired group and calling up the Supply Schedule Assignment with the Navigate / Supply Schedule Assignments button

← SKU COUNT | WORK DATE: 2022-01-27

Chart Open in Excel Actions **Navigate** Fewer options

Card Entries ▾ Statistics ▾ Item Availability By ▾ Bin Contents Comments Supply Schedule **Supply Schedule Assignments** Car

Validation Status	Item No.	Location Code	Description	Additional Item Count	Item Category Code	Inventory Posting Group	Assortment Code	SKU Ass...	Season Code	Season Status	R	S
→ Missing Set...	T000101	BLUE	Gaminys testui 1	1	ŽALIAVOS F	RESALE	MTS1	<input checked="" type="checkbox"/>				P
Valid	T000102	BLUE	Gaminys testui 2	2	ŽALIAVOS F	RESALE	MTS1	<input checked="" type="checkbox"/>				P

← SUPPLY SCHED. ASSIGNMENTS | WORK DATE: 2022-01-27

Search + New Edit List Delete Open in Excel More options

Location Code ↑ ▾	Replenishment System ↑ ▾	Replenishment Code ↑ ▾	Responsible Person Code ↑ ▾	Schedule Code	Schedule Name
→ BLUE	Purchase	01587796	ZL	WEEK MON	WEEKLY Monday

After assigning the Supply Schedule, click Update Status to update the Replenishment Period and Replenishment Time in the SKU parameters. Or wait for the SKU Data to be recalculated.

2.5.7. Linking of Alternative Items

With this functionality, the selected main item is assigned an unlimited number of additional (alternative) items. After assigning additional items, the data of all SKUs of the main item are summed with the corresponding data of the additional items:

- Inventory
- Planned Receipts

- Planned Sales

Attention: only items with the same unit of measure can be linked!

You can assign additional items to Sofl4Inventory> Planning> Additional Items

Item No.	Item Description	Additional Item No.	Additional Item Description
T000101	Gamins testui 1	10001	Test Item
T000102	Gamins testui 2	T000109	Gamins testui 9
T000102	Gamins testui 2	T000111	Gamins testui 11

In the Soft4Inventory forms, the Stockkeeping Units Count, BlackRed Stockkeeping Units Count, Replenishment Tasks in the field Additional Item Count show how many additional items are assigned to the SKU item. The list of additional items assigned to the SKU item is called up by clicking on the displayed number

S4I Validation Status	Item No.	Location Code	Description	Additional Item Count	Item Category Code	Inventory Posting Group	Assortment Code
Missing Set...	T000101	BLUE	Gamins testui 1	1	ŽALIAVOS F	RESALE	MTS1
Valid	T000102	BLUE	Gamins testui 2	2	ŽALIAVOS F	RESALE	MTS1
Missing Set...	T000103	BLUE	Gamins testui 3	0	ŽALIAVOS F	RESALE	MTS1
Valid	T000104	BLUE	Gamins testui 4	0	ŽALIAVOS F	RESALE	MTS1

2.6. Data Preparation

It is advisable, but not necessary, to upload historical data on the movement of items before starting work with the Soft4Inventory system. Advantages of having historical data:

- Initial Inventory Buffer Sizes can be calculated using the Recalculate Buffers function
- SKU charts will show historical inventory movement information
- Measurement Reports will show inventory changes and trends

In the absence of historical data, the Initial Inventory Buffers must be set by external measures and loaded into the Soft4Inventory system. Data on the movement of items will start to accumulate in the Soft4Inventory system as soon as you create a list of SKUs and set up a periodic SKU recalculation job (see Periodic Calculations).

Historical data on the movement of items is loaded for each SKU individually. They are placed in a table indicating at the end of each day of the previous period:

- Balance
- Quantity Released (transferred to other chains, sold, or consumed)
- Quantity received

Historical data on the movement of items can be loaded in 3 ways:

2.6.1 Soft4Inventory on an Existing BC365 System

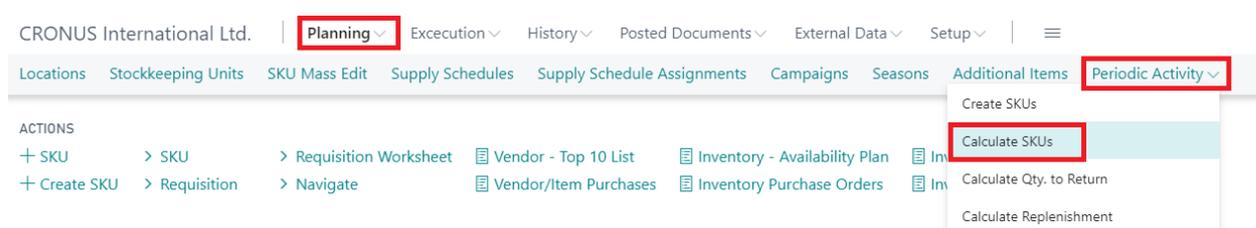
When Soft4Inventory is installed in the BC365 system which already contains all the necessary item movement information for the desired historical period.

During SKU Recalculation, the amount of historical data for the period N days back from the calculation date is automatically loaded for each new SKU using the dashboard data (ItemLedgerEntry).

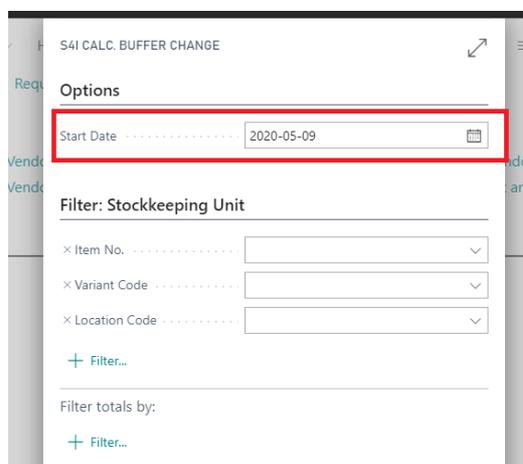
$$N = (\text{SKU Replenishment Time} + \text{SKU Replenishment Period}) \times \text{Schedule Period Multiplier from S4I Setup}$$

If you want to reload the historical data or upload it for a longer period of time, you can start the SKU recalculation manually by specifying the start date of the historical data.

Planning > Periodic Activity > Calculate SKUs



The form indicates the Start Date



Attention: Loading historical data can take time, so avoid unnecessary calculations and limit the calculation sample as accurately as possible.

2.6.2 Soft4Inventory in the New BC365 System

If the BC365 does not have sufficient historical information on the movement of items, the missing part can be submitted as External Data (see 2.3 Integration with External Data)

For this purpose, additional (virtual) locations are created for which the Soft4Inventory data type is specified as External Data. One virtual external data warehouse is created for each real BC365 location. Real location setup specifies a virtual location for external data as an additional location in S4I (see 2.4 Location Setup). The required data is loaded into the External Data table.

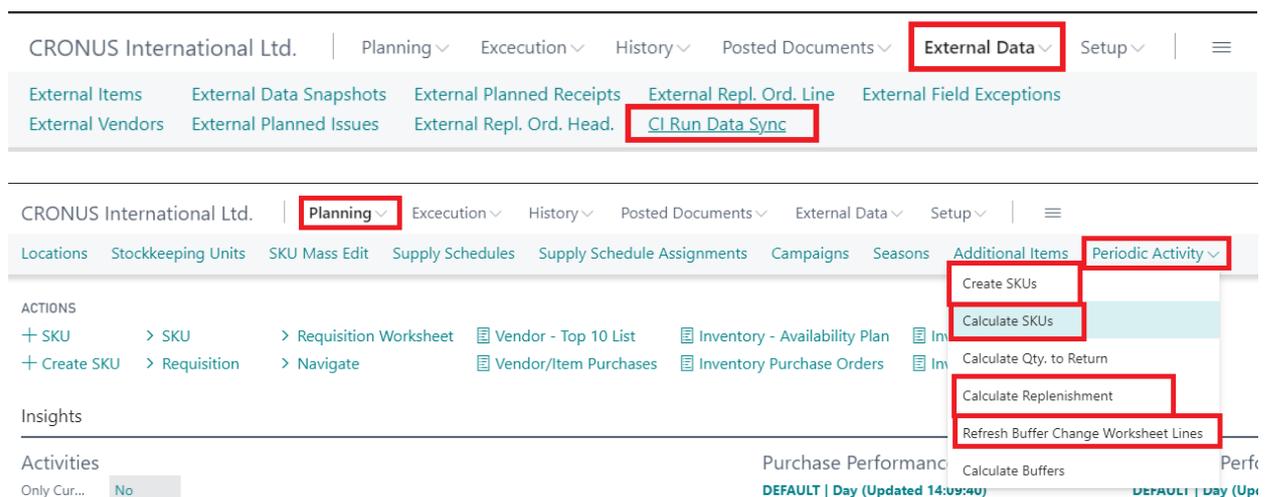
The historical data is then loaded into Soft4Inventory as described in 2.6.1

2.6.3 Using External Data

The required amount of historical data is loaded into the External Data table. The historical data is then loaded into Soft4Inventory as described in 2.6.1

2.7. Periodic Calculations

After performing the initial system preparation work described above, the Soft4Inventory calculation processes must be started to run in Periodic Activity.



The table below lists the processes and their recommended operating frequency

Ref.No.	Name	Purpose	Recommended operating time and frequency
1	Perform data synchronization	Required only when Soft4 uses External Data. Performs data loading from intermediate import boards to the Soft4 data structure	1 time per day between 00:00 and the start of work of inventory management specialists. But not before the data is updated on the intermediate data import boards.
2	Create	Missing Stockkeeping Units are created based on the Assortment Features and their setup	1 time per day between 00:00 and the start of work of inventory management specialists after 1 calculation.
3	Calculate Stockkeeping Units	Basic Soft4 Inventory Recalculation. All recent data is collected from BC and External Data Sources and Buffer States are Recalculated	1 time per day between 00:00 and the start of the work of inventory management specialists after 1 and 2 calculations.
4	Calculate the Replenishment	According to the Supply Schedule, the lines of the application worksheet are created and the quantity to be replenished is calculated	1 time per day between 00:00 and the start of work of inventory management specialists after 1, 2 and 3 calculations.
5	Update Buffer Change Worksheet lines	The lines of the application worksheet for changing inventory buffers are created based on the dynamic inventory buffer management principle	1 time per day between 00:00 and the start of work of inventory management specialists after 1,2,3 and 4 calculations.

2.8. Setup Initial Buffers

For each SKU which stock needs to be maintained, a Stock Buffer Size needs to be set. The size of the stock buffer must correspond to $\pm 25\%$ of the maximum expected SKU consumption over the next nearest Replenishment Cycle.

Replenishment Cycle Length in Days = Replenishment Time in Days + Recharge Period in Days + Reserve Time in Days.

Calculated in calendar days

Replenishment Time is the time from the time of placing the order to the receipt of the remaining goods

Replenishment Period is the time interval between orders or shipments (otherwise known as the order accumulation period).

Reserve Time - usually calculated as half the sum of the Replenishment Time and the Replenishment Period.

E.g., Replenishment Cycle Length when Replenishment Time = 3 and Replenishment Period 7 is $(3 + 7) \times 1.5 = 15$ calendar days

The inventory buffer of such an item must meet $\pm 25\%$ of the maximum expected demand within 15 calendar days

The Soft4Inventory Recalculate Buffers can be used to set the initial buffers.

← SKU COUNT | WORK DATE: 2022-01-27

Chart Open in Excel **Actions** Navigate Fewer options

Refresh State Change Fields Recalc. Replenishment **Recalculate Buffers** Calculate Return Replenishment

Validation Status	Item No.	Location Code	Description	Additional Item Count	Recalculate Buffers	Group	Assortment Code	SKU Ass...
→ Missing Set...	T000101	BLUE	Gaminys testui 1	1	ŽALIAVOS F	RESALE	MTS1	<input checked="" type="checkbox"/>
Valid	T000102	BLUE	Gaminys testui 2	2	ŽALIAVOS F	RESALE	MTS1	<input checked="" type="checkbox"/>
Missing Set...	T000103	BLUE	Gaminys testui 3	0	ŽALIAVOS F	RESALE	MTS1	<input checked="" type="checkbox"/>
Valid	T000104	BLUE	Gaminys testui 4	0	ŽALIAVOS F	RESALE	MTS1	<input checked="" type="checkbox"/>
Valid	T000105	BLUE	Gaminys testui 5	0	ŽALIAVOS F	RESALE	MTS1	<input checked="" type="checkbox"/>
Valid	T000106	RIIIF	Gaminys testui 6	0	ŽALIAVOS F	RESALE	MTS1	<input checked="" type="checkbox"/>

The desired SKUs are filtered in the form The SKUs Count. E.g., it is possible to filter SKUs with Check Status Buffer > 0

← SKU COUNT | WORK DATE: 2022-01-27

Chart Open in Excel | Actions | Navigate | Fewer options

S4I Validation Status	Item No.	Location Code	Description	Assortment Code	Replenish... System	Vendor No.	Transfer-from Code	Vendor Name	Buffer Size
→ Buffer >0	T000111	BLUE	Gaminys testui 11	MTS1	Purchase	01587796		Custom Metals Incorporated	0
Buffer >0	T000105	RED	Gaminys testui 5	MTS1	Transfer		BLUE	-	0

Calculator Setup indicate:

S4I RECALCULATE BUFFERS

Options

Period Start Date 2021-07-31

Period End Date 2022-01-27

Eliminate Number of Peaks ... 5

Eliminate Campaign Perio...

Known Demand Period 0

Filter: Stockkeeping Unit

Buffer Size	Minimal Buffer Size
0	0
0	0

- The period on the data basis of which the initial inventory buffers for the selected SKUs are desired to be determined
- Eliminate Number of Peaks - the specified percentile of days with the highest sales / consumption will be eliminated from the data sequence
- Eliminate Campaign Periods - when enabled, Trading Campaign Periods will be eliminated from the data sequence.
- Known Demand Period - The entered number will shorten the length of the Replenishment Cycle for which the initial buffer value is set.

For more information see Annex 5.2.1.

The calculation results are displayed in the Buffer Change Worksheet in the New Buffer Size field

BUFFER MANAGEMENT

**BUFFER CHAN...
TASKS**

0

>

**CALCULATED ...
TASKS**

10

>

Calculated Buffer Tasks

MISSING FORE...

← CALCULATED BUFFER TASKS | WORK DATE: 2022-01-27

Name ZL

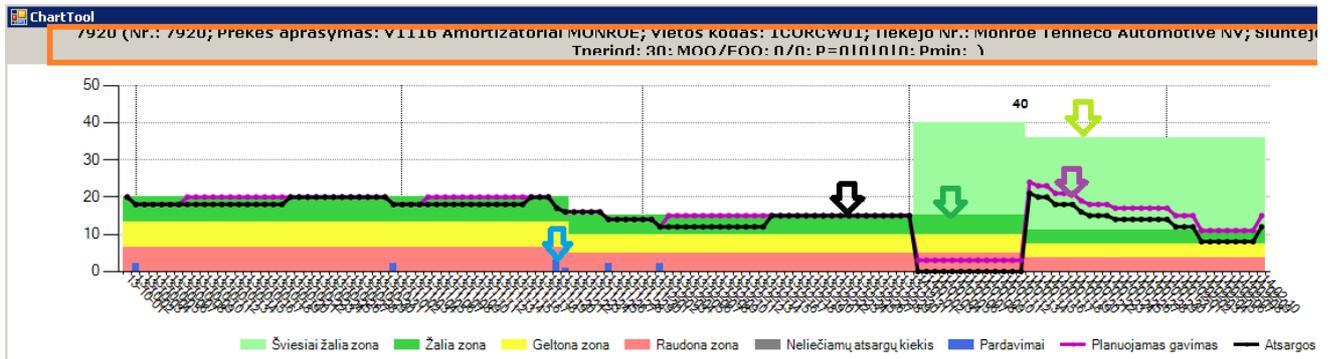
Process Chart Open in Excel | More options

Entry Date	Item No.	Location Code	Item Description	Assortment Code	Current Buffer Size	Action Type	New Buffer Size	Acti... Mes...	Inventory	Current Buffer % ↑	Level Color	Plar
→ 2022-01-27	T000104	BLUE	Gaminys testui 4	MTS1	200	Decrease	73	✓	35	18	Red	
2022-01-27	T000102	BLUE	Gaminys testui 2	MTS1	6	Increase	19	✓	2	33	Yellow	
2022-01-27	T000110	BLUE	Gaminys testui 10	MTS1	2 560	Decrease	1 076	✓	2 042	80	Green	
2022-01-27	T000107	BLUE	Gaminys testui 7	MTS1	24 000	None	24 000	✓	20 000	83	Green	
2022-01-27	T000109	BLUE	Gaminys testui 9	MTS1	780	Increase	1 796	✓	691	89	Green	
2022-01-27	T000108	RIIUF	Gaminys testui 8	MTS1	6 860	Decrease	3 625	✓	7 333	107	Blue	

3. DAILY WORK PROCEDURE

3.1. SKU Chart

The SKU Chart is available to all SKUs at any moment of work. Information displayed on the SKU Chart:



Basic SKU Parameters

Buffer History. The Upper Limit of the Green Zone reflects the Buffer Size

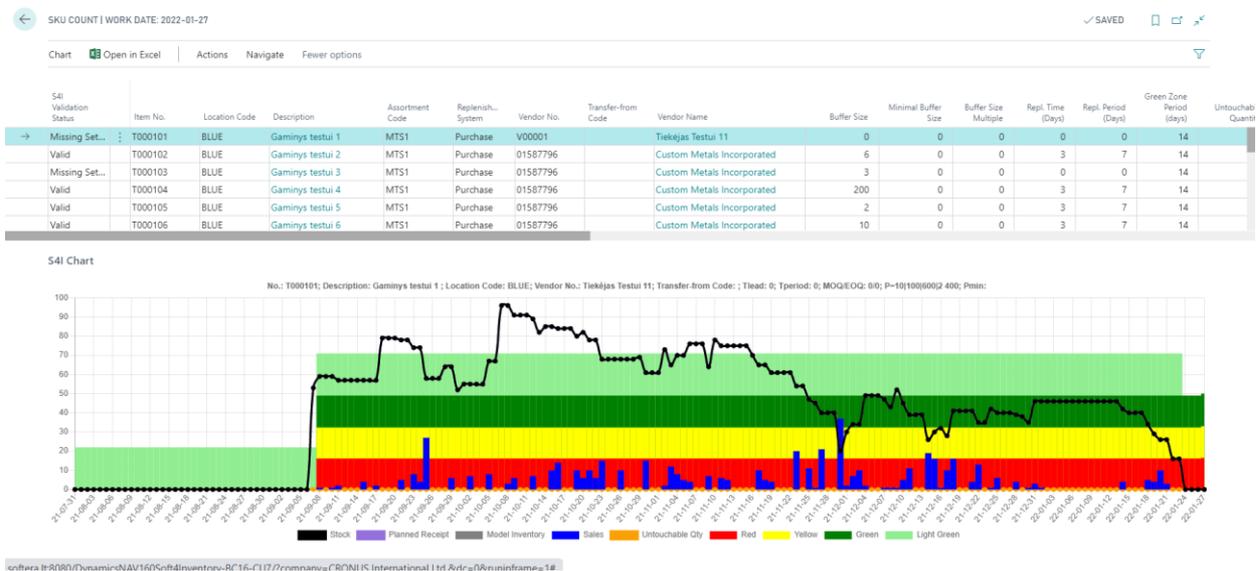
Sales Order History. The Light Green Zone reflects the Additional Quantity.

Inventory History

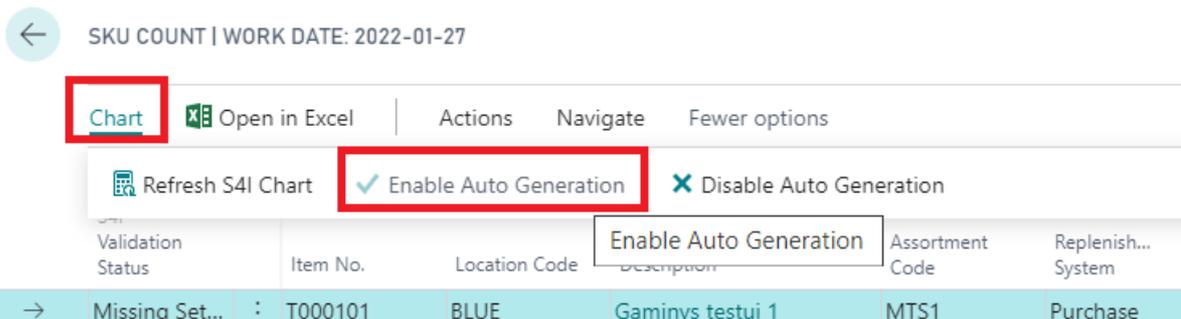
Inventory History with Planned Receipts

Dynamics of Sales per Day

The SKU Chart window is integrated into all major Soft4Inventory forms.



The SKU Chart on which line we stand, can be called up Chart> Enable Auto Generation



Additionally, you can view the webinar on the representation of the Chart Inventory Movement on following the link:

https://youtu.be/3VgCD_fyr_w

The SKU Chart representation can be customized by managing the following Sof4Inventory parameters in S4I Setup > Chart

- Chart min. days - the minimal period in days for which the SKU Chart is displayed
- Chart max. days - the maximal period in days for which the SKU Chart is displayed
- Chart Period Multiplier – according to the SKU Parameters, the Replenishment Time and the Replenishment Period is set in days for which the SKU Chart is shown. $(\text{Replenishment Time} + \text{Replenishment Period}) \times \text{Chart Period Multiplier}$

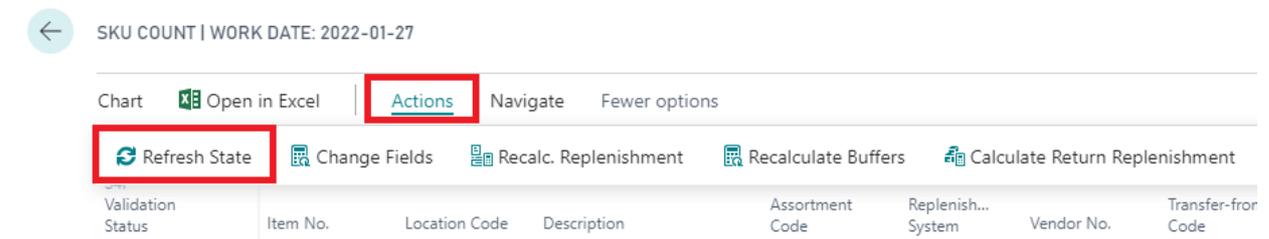
3.2. Data Update

The Soft4Inventory system is configured according to these instructions and it updates the SKU Data once a day at night between 00:00 and the beginning of the working day. If necessary, the user can plan stocks based on more recent information and update the data for the selected SKU in the forms:

- Stockkeeping Unit Count
- BlackRed
- Replenishment Tasks

Update Progress:

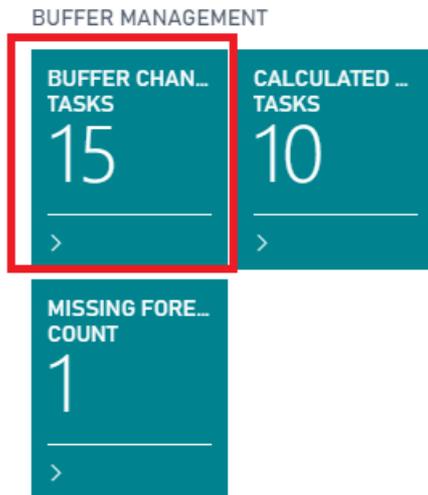
- Filter the desired SKUs (thus reducing the sample of calculations and shortening the time required for recalculation)
- Actions> Refresh Status



When using External Data, it is necessary to pay attention to the External Data Update Chart, SKU Data Update is only possible with Updated External Data.

3.3. Changing Buffers according to Proposals

Role Center **Buffer Change Tasks** displays the number of buffer change proposals:



Pressing the button opens the Buffer Change Worksheet, which provides system proposals for changing the buffer.

3.3.1. Information in the Buffer Change Worksheet

In addition to the data described in the SKU parameters section, the data is also provided:

Field Name	Input Type	Meaning
Current Buffer Size	Calculated by the system	Current Buffer Size
Proposed Buffer Size	Calculated by the system	The proposed buffer size calculated by the system
New Buffer Size	Calculated by the system, the user can change	The value that will be written as the Buffer Size upon receipt of the action message. Until the user changes, this value is equal to the Proposed Buffer Size
Type of Action	Calculated by the system	The direction of the Buffer Change proposed by the system

← CALCULATED BUFFER TASKS | WORK DATE: 2022-01-27

Name ZL

Process Chart Open in Excel More options

Entry Date	Item No.	Location Code	Item Description	Assortment Code	Current Buffer Size	Action Type	New Buffer Size	Acce... Acti... Mes...	Inventory
→ 2022-01-27	T000104	BLUE	Gaminys testui 4	MTS1	200	Decrease	73	<input checked="" type="checkbox"/>	35
2022-01-27	T000102	BLUE	Gaminys testui 2	MTS1	6	Increase	19	<input checked="" type="checkbox"/>	2
2022-01-27	T000110	BLUE	Gaminys testui 10	MTS1	2 560	Decrease	1 076	<input checked="" type="checkbox"/>	2 042
2022-01-27	T000107	BLUE	Gaminys testui 7	MTS1	24 000	None	24 000	<input checked="" type="checkbox"/>	20 000
2022-01-27	T000109	BLUE	Gaminys testui 9	MTS1	780	Increase	1 796	<input checked="" type="checkbox"/>	691

Substitute persons can select a substitute person's worksheet and review the proposals provided there. The proposals are divided into worksheets according to the Responsible Person Code assigned in the SKU parameters.

← CALCULATED BUFFER TASKS | WORK DATE: 2022-01-27 ✓ SAVED

Name ZL

Process Chart Open in Excel More options

3.3.2. Workflow

- Examine the validity of each proposal.
- perform one of 3 actions:
 - ✓ accept the system proposal;
 - ✓ maintain the value that was before the proposal;
 - ✓ save another buffer value.
- Perform Action Message (New Buffer Values take effect from that moment).

3.3.3. Examine the Validity of the Proposal

Information for the decision making can be found in the SKU chart.

3.3.4. If it is Proposed to Increase the Buffer

Situations:

Demand has risen. It is seen in the **Chart** according to the sales curve and the faster fall of the balance curve.

Find out whether the growth in demand is one-time (one-time order, filling shop shelves, etc.) or long-term (the item will continue to be sold in larger quantities):

- if one-time - keep valid the old buffer value;
- if long-term and the proposed buffer increase is sufficient - accept the system proposal;
- if long-term and the proposed increase is not enough - enter another value for the new buffer.

Items are not supplied, not supplied in full or are late. It is seen in the **Chart**. The time between the occurrence of the quantity on the way and the increase in the balance is longer than the **Replenishment time**. The increase in the balance upon arrival of the load is less (or none at all) than the previous amount on the way.

Find out if the supply disruptions are one-time or they are likely to recur in the future (unreliable Vendor):

- If one-time - keep the old buffer value.
- If long-term - accept the system proposal.

Items are ordered late, or less than the system proposal:

- retain the old buffer value;
- return to a regular order schedule;
- order items according to the system's proposals.

The balance decreased after the stock-taking:

- Retain valid the old buffer value.

Note: other reasons are also possible (e.g., new item is not ordered yet, after a significant increase in the buffer, and etc.) but in these cases no proposals to increase the buffer are made.

3.3.5. If it is Proposed to Decrease the Buffer

Situations:

Demand has fallen. Visible in the **Chart** according to the sales curve and the slower fall of the balance curve.

Find out if the fall in demand is short-term (major clients holidays, logistics disruptions) or long-term (the item will continue to be sold in smaller quantities):

- if short-term - keep valid the old buffer value;
- if long-term and the proposed buffer decrease is sufficient - accept the system proposal;
- if long-term and the proposed decrease is not enough, enter another value for the new buffer.

Items are rarely sold. It is seen in the **Chart**. Periodically, high daily sales (or several days) are visible, on other days sales are significantly lower or non-existent. When the **Green Zone Check Period** is set to be shorter than the interval between the sales increase, a **TMG** proposal is possible.

Make a decision whether to keep sufficient reserves for a possible increase in demand in the future:

- if yes, keep valid the old buffer value;
- if not - accept the system proposal or save another buffer value;
- if you want to wait a longer time interval for a new **TMG** proposal, you need to enter a longer **Green Zone Check Period**. To do this, switch to the SKU card Shift + F5. *Note:*

*The longer the **Green Check Period**, the slower the system responds to the fall in demand.*

Items ordered are more than proposed by the system.

- retain valid the old buffer value;
- order items according to the system proposals.

An additional quantity of items was found after the inventORIZATION:

- retain valid the old buffer value.

3.3.6. Seasonal buffers

Situations:

The beginning of the season. All buffer proposals are calculated by multiplying the valid buffer by the coefficient assigned in the season parameters. It makes sense for some items, especially those in less demand (category C according to the ABC classification) to increase the buffer by a lower coefficient or to refuse increasing the buffer at all. Avoid excessive accuracy when making a decision, as it makes no practical sense (see the training material "Optimal Inventory Management"). E.g., when the seasonality coefficient is 2, it makes sense to choose 1 or 1.5 for certain (usually category C) items, but not in more detail.

When viewing the period of the previous season in the buffer chart, try to see how sales change during the season:

- if significantly - accept the value proposed by the system;
- if barely noticeable - adjust the buffer to a smaller half to approximately the intermediate value between the valid and the proposed buffer;
- if you do not see an increase - keep valid the old buffer value.

End of season. It is proposed to reset the buffers to the size that was valid during Pre-season. This value is stored during the season in the SKU parameter field **Pre-seasonal Buffer**, which can be adjusted by the user. If the sales of the item during the season were higher in comparison with the previous season, it is likely that the sales after the season will be higher. Before making a decision, look at how the sales have changed during the season in comparison with last season.

Only such changes are interesting when the sales have changed by 40% and more. Avoid excessive accuracy when making a decision, as it does not make practical sense (see the training material "Optimal Inventory Management"):

if the sales have changed, adjust the value from the new buffer by the appropriate coefficient;

- if the change is up to 40%, accept the system proposal.

If the proposed buffer value is 0, it is possible that the item is new enough and did not have a buffer before the season.

For such a product, the seasonal buffer must be determined according to the formula:

$Buffer = Planned\ Sales\ during\ the\ Period\ (Replenishment\ Time + Replenishment\ Period) \times 1.33$

3.3.7. Accept the System Proposal

There is no need to adjust anything in the line, move on to the next line analysis.

3.3.8. Retain the Value Valid before the Proposal

In the field **New Buffer**, enter a value that appears in the field **Buffer**.

3.3.9. Save another Buffer Value

In the field **New Buffer**, enter the desired buffer value.

Perform the action message at the end.

3.4. Replenishing Forecasts

3.4.1. The Essence of Forecasting Operation.

For the SKUs that are managed on a Forecast basis, the buffer is calculated daily based on the compiled sales forecasts. This management method should be chosen for SKUs with a long Replenishment Cycle, during which the sales can change by more than 30%.

To ensure the smooth operation of the system, it is necessary to compile sales forecasts for "forecasted" SKUs for at least the period Replenishment Time + Replenishment Period + Reserve Time. The Reserve Time is calculated according to the size of the Red Zone (if the Red Zone is 33% of the Buffer Size, the Reserve Time is assigned 33% of the sum of the Replenishment Time and the Replenishment Period).

Order creation, measurement reports, and other functionality remain standard in Soft4Inventory.

3.4.2. Assigning an Attribute of a Forecasted Item in the SKU list.

Form **SKU Parameters Count**

For the items we will manage, select the Management type **S4I Forecast** based on the Forecasts

← SKU COUNT | WORK DATE: 2022-01-27

Chart Open in Excel | Actions | Navigate | Fewer options

S4I Validation Status	Repl. Period (Days)	Green Zone Period (days)	Untouchable Quantity	Minimum Order Quantity	Packing Level Limit	Packing Level 1	Packing Level 2	Packing Level 3	Packing Level 4	Responsible Person Code	Management Type	Buffer Valid from (Date)
Missing Set...	0	14	0	0		10	100	600	2 400		S4I	2022-01-27
→ Valid	7	14	0	0		10	100	600	2 400	ZL	S4I	2020-08-11
Missing Set...	0	14	0	0	Level 1	10	100	600	2 400	ZL	S4I	2020-08-11
Valid	7	14	0	0		10	100	600	2 400	ZL	S4I Forecast	2020-08-11
Valid	7	14	0	0		10	100	600	2 400	ZL	S4I Auto	2020-08-11
Valid	7	14	0	0		44	100	4 444	2 400	ZL	S4I	2020-08-11
Valid	7	14	0	0		10	100	600	2 400	ZL	S4I	2020-08-11
Valid	7	14	0	0		10	100	600	2 400	ZL	S4I	2020-08-11

If you need to do this for many SKUs, use the Change Fields feature.

3.4.3. Historical Data

Soft4Inventory, **S4I_Forecasts** managed SKU sales statistics show the sales excluding movements between company divisions. The sales statistics is shown in the Forecast Input form and in the Green Columns chart. The chart is called up with the F8 or Update Chart check box in the header of the Forecast Input form.

3.4.4. Introduction of Forecasts

The Forecast Input environment can be accessed from the form the SKUs Count. Only the S4I Forecast Management Type SKU needs to be selected or filtered in the form opened in the main menu.

When you open the form through the Role Center, the Missing Forecasts Count, the list is immediately filtered only by the S4I Forecast Management Type and Validity of Missing Forecasts.

Stand on the SKU for which you want to enter a Forecast. Navigate> Enter Forecasts

Enter Forecasts into the Forecast table. Forecasts must be entered for all months marked in red.

You can also enter 0 if you do not plan sales for a certain month.

← MISSING FORECAST COUNT | WORK DATE: 2022-01-27

Chart Open in Excel | Actions | **Navigate** | Fewer options

Card
 Entries
 Statistics
 Item Availability By
 Bin Contents
 Comments
 Supply Schedule
 Supply Schedule Assignments
 Campaign Lines
 Enter Forecast

Validation Status	Item No.	Location Code	Description	Assortment Code	Replenish... System	Vendor No.	Transfer-from Code	Vendor Name	Buffer Size	Minimal Buffer Size	Multiple
→ Missing For...	T000112	BLUE	Gamins testui 12	MTS1	Purchase	01863656		American Wood Exports	0	0	0

← S4I FORECAST ENTRY | WORK DATE: 2022-01-27 ✓ SAVED [🔖](#) [📄](#) [↗](#)

🔍 Search New 🔗 Edit List Chart 📄 Open in Excel More options 🔍 ☰

General

Item No. T000112	Description 2
Variant Code	Base Unit of Measure ... VNT
Location Code BLUE	Vendor Name American Wood Exports
Description Gaminy's testui 12	

Year	Period Name	Sales Forecast	Actual Sales	Campaign Sales	Lost Sales
2021	February	5			
2021	March	15			
2021	April	0			
2021	May	0			

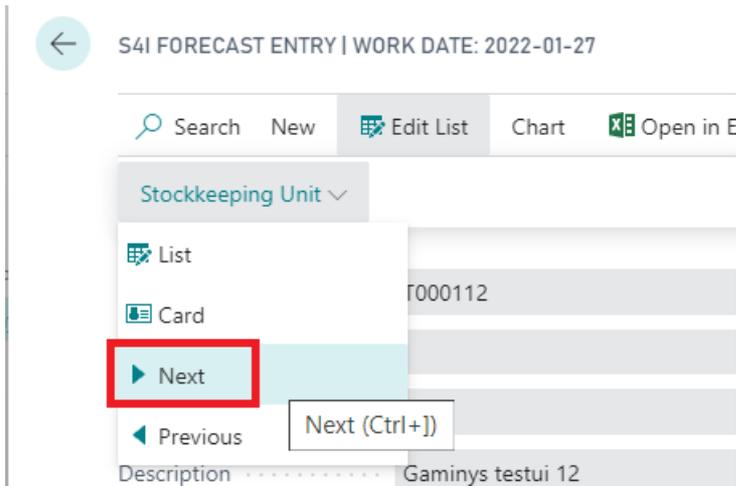
S4I Chart

No.: T000112; Description: Gaminy's testui 12 ; Location Code: BLUE; Vendor No.: American Wood Exports; Transfer-from Code: ; Tlead: 120; Tperiod: 30; MOQ/EOQ: 0/0; P=10|100|600|2 400; Pmin:

Legend: ■ Fact Sales ■ Lost Sales ■ Campaign ■ Forecast

The compiled Forecasts are shown in blue on the chart.

After entering the Forecasts for the selected SKU, move to the next SKU. Use the Navigation buttons on the Forecast Input Form to move to the next or previous entry in the SKU Data Change form.

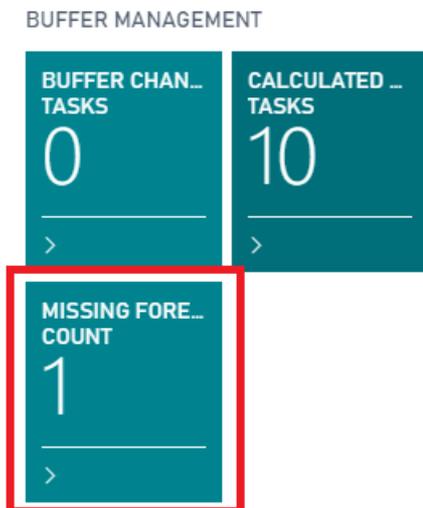


When moving to another SKU, a message is displayed asking whether to immediately recalculate the buffer according to the entered Forecasts. The most common option is Yes. If you select No, the buffer will be recalculated during the next SKU recalculation.

3.4.5. Replenishing and Revising of Forecasts

SKUs for which the Forecasts are compiled for an insufficient number of months are displayed:

The Role Center displays such SKUs Count



SKUs that lack Forecasts are not displayed on the order form, therefore

EVERYDAY it is necessary to see if there are any items that lack Forecasts!

Pressing the button displays a list of such SKUs

Forecasts are replenished as described above Entering Forecasts

Orders are formed according to the standard Soft4Inventory functionality in the form of **Replenishment Tasks**.

3.5. Order Compilation Works

The Role Center Replenishment Tasks displays the SKUs Count that are scheduled to time their order.

INVENTORY REPLENISHMENT



After pressing the button, opens the Applications Worksheet. It shows the quantities proposed to be ordered. Also, those SKUs are shown, for which the order quantity is 0, but the day for the order according to the order schedule has come.

Workflow:

- accept the quantities proposed to be ordered or adjust them;
- adjust the planned supply date;
- form order documents.

The created documents must be provided for execution, in accordance with the company's existing procedures.

It is recommended to send the created documents to the intended addressee (Vendor, warehouse, production unit) on the same working day.

Work is considered to be completed when all scheduled orders are created and submitted for execution.

3.5.1. The Data Displayed in the Form

In addition to the data described in the SKU parameters section, additional fields are displayed in the order form

Field Name	Input Type	Meaning
(Adjustment Quantity)	Entered by the user	This field adjusts the order quantity proposed in the Quantity field. Both positive and negative values can be entered. The proposed to be ordered quantity is recalculated as described below in the Ordered Quantity Calculation Methodology.
(Adjustment Quantity 2)	Calculated by the system	The quantity is required to fill the sales network. If the planned SKU has left stocks from which other SKUs are replenished, when the stocks of additional SKUs are depleted.
(S4I Planned release Sales)	Calculated by the system	S4I Planned Release Sales is calculated from the sales order lines where consumption is provided at the SKU location and at the additional locations assigned to the SKU location. Lines are taken for which Planned Sales Date Is \leq Current Date + (Replenishment Time + Replenishment Period) x order multiplier.
(Campaign Quantity)	Calculated by the system	The Campaign requires an additional quantity. Calculated as described below Campaigns
(Quantity)	Calculated by the system	Quantity proposed to order. Calculated as described below in the Ordered Quantity Calculation Method.
(Multiplier)	Entered by the user, default 1	The multiplier for calculating the quantity proposed to order is displayed. The initial calculation is always done with a multiplier of 1, but if the order quantity needs to be adjusted as described below, the order quantities of the selected SKUs can be recalculated using a different multiplier.
(Consider Stock)	Selected by the user. Default value for the Replenishment system Purchase - Off, Transfer - On	Used Transfer of the Replenishment System for the adjustment of the ordered quantity according to the free balance of the transfer warehouse.

← REPLENISHMENT TASKS | WORK DATE: 2022-01-27 ✓ SAVED

OPTIONS

Name: ZL Amount: ERROR

Set New Multiplier: Weight: 0,85008

Set Consider Stock: Quantity: 17 000

Set New Due Date: Volume: 82,4

Include Adjustment Qty: 2 Pallet: 7,08

Process Chart Open in Excel More options

Item No.	Location Code	Description	Replenish System	Vendor No.	Vendor name	Buffer Size	Inventory	Buffer %	Level Color	Planned Receipt	S41 Planned Rese Sales	Buffer % With Planned Receipt	Level With Planned Receipt Color	Adjustment Quantity	Quantity	Acc. Mes...
→ T000102	BLUE	Gamins testui 2	Purchase	01587796	Custom Metals Incorporated	6	698	11633	Red	1 011	1 000,00	8180	Red		0	✓
T000104	BLUE	Gamins testui 4	Purchase	01587796	Custom Metals Incorporated	200	21	11	Red	24	...	23	Red		200	✓
T000105	BLUE	Gamins testui 5	Purchase	01587796	Custom Metals Incorporated	2	5	250	Blue	4	...	450	Blue		0	✓
T000106	BLUE	Gamins testui 6	Purchase	01587796	Custom Metals Incorporated	10	11	110	Blue	0	...	110	Blue		0	✓
T000107	BLUE	Gamins testui 7	Purchase	01587796	Custom Metals Incorporated	24 000	20 000	83	Green	0	...	83	Green	2 000	9 600	✓
T000109	BLUE	Gamins testui 9	Purchase	01587796	Custom Metals Incorporated	780	691	89	Green	1 000	1 000,00	89	Green		0	✓
T000110	BLUE	Gamins testui 10	Purchase	01587796	Custom Metals Incorporated	2 560	0	0	Black	0	...	0	Black		7 200	✓
T000108	BLUE	Gamins testui 8	Purchase	01587796	Custom Metals Incorporated	6 860	7 333	107	Blue	0	...	107	Blue		0	✓

3.5.2. Selection of SKUs to be Ordered

You can create order documents for all lines at the same time or by filtering lines in smaller samples. Recommended filtering samples:

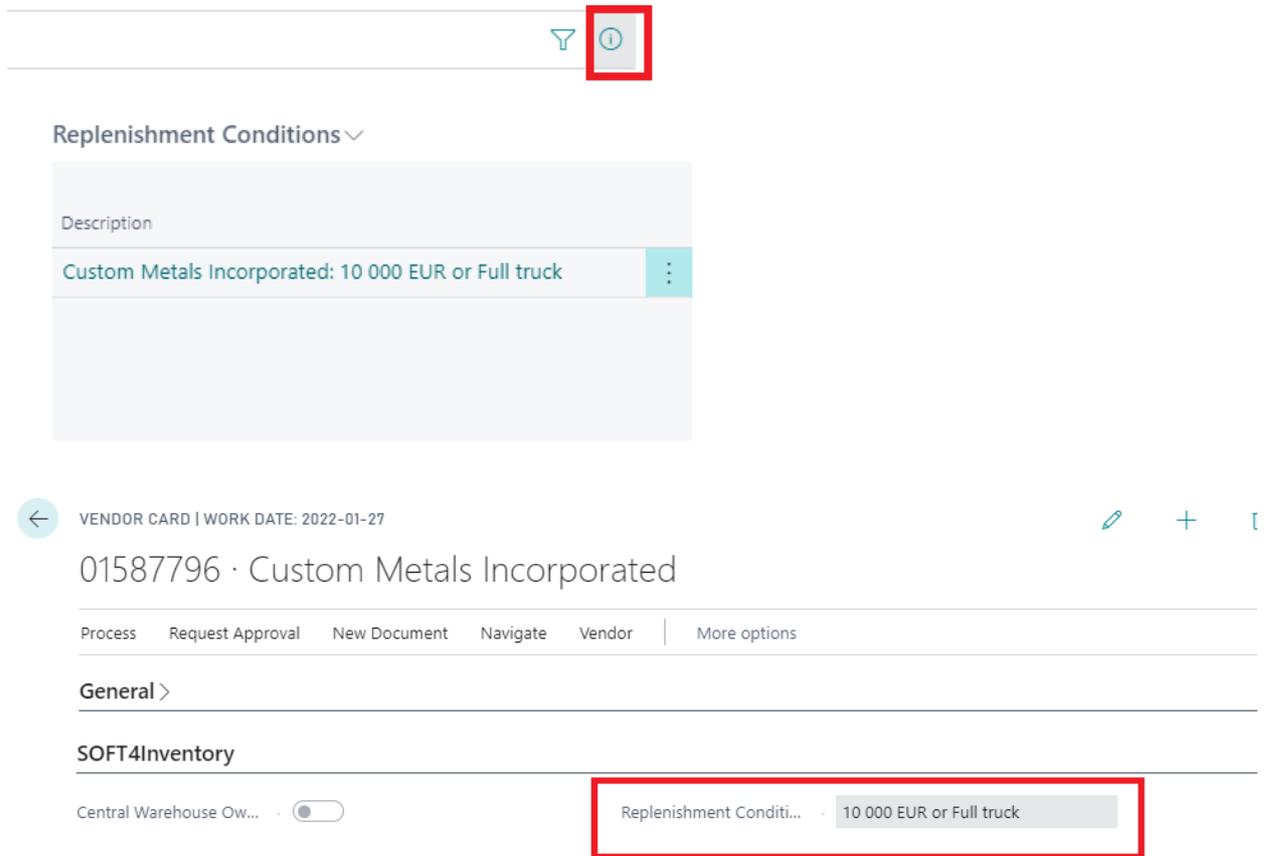
- For Purchases - according to the Warehouse Code and the Vendor Code;
- For Transfers - according to the Warehouse Consignee Code and the Warehouse Consignor Code.

3.5.3. Adjustment of the Quantity Ordered

General order data can be monitored in the fields **Amount, Weight, Volume, Pallets, Quantity**. After adjusting the ordered quantities, update the information with the Update Statistics button. If the corresponding parameter (Price, Weight, Volume, Quantity per Palette) is not specified for at least one item in the filtered sample, the value **ERROR** is displayed.

Amount	ERROR
Weight	0,85008
Quantity	17 000
Volume	82,4
Pallet	7,08

If Vendors have set minimal order volume requirements that apply to the entire order (e.g. at least EUR 10,000 and / or at least 10 pallets), a reminder of such supply requirements can be seen in the FactBox Supply Requirements of the Application Worksheet after specifying them on the Supplier Card / Soft4Inventory Supply Requirements.



The quantity ordered can be adjusted if:

- it is desired to make optimal use of transport and / or fulfill the requirement of the minimum order volume set by the Vendor;
- you want to order items for a longer than standard Replenishment Time. I.e., when it is known in advance that it is not possible to send another order at the usual periodicity (e.g. Vendor holidays). If the time increases due to changes in the basic supply conditions, it is necessary to adjust the times in the SKU setup and change the size of the buffers accordingly;
- it is desired to bring an additional quantity of items for special cases (Client's special order, filling of new store shelves, etc.).

In all other cases, it is necessary to adjust the size of the SKU buffer on the SKU card. After the adjustment, it is necessary to update the quantities. (Update Status)

3.5.4. Adjustment for Optimal Use of Transport or / and Meeting the Minimal Order Volume Requirement Set by the Vendor

To make optimal use of transport, if the proposed quantities are not completely filled or overfilled, it is necessary to recalculate the ordered quantities of all selected SKUs **proportionally**.

It is adjusted by recalculating the ordered quantities according to the selected multiplier.

← REPLENISHMENT TASKS | WORK DATE: 2022-01-27

OPTIONS

Name ZL ...

Set New Multiplier

Set Consider Stock ▾

Set New Due Date 📅

Include Adjustment Qty. 2 ▾

Attention: It is recommended to choose a multiplier in not wider interval than 0.8 - 1.2. If a higher multiplier is chosen, it is necessary to check all the quantities ordered.

The SKU Shedule can be used as a source of information check

After the recalculation, **the Sum, Weight, Volume, Palettes** fields of the form display the summary information of the selected SKU and expected orders.

3.5.5. Adjustment when you Desire to Order Items for a Longer than Standard Replenishment Time

It is adjusted by recalculating the ordered quantities according to the selected multiplier.

The multiplier is selected according to the formula:

$$\text{Multiplier} = \frac{\text{Estimated Replenishment time (Replenishment Time Expected + Replenishment Period_Predict)}}{(\text{Standard Replenishment Time} + \text{Standard Replenishment Period})}$$

Attention: After the recalculation, it is necessary to check all the ordered quantities. Pay special attention and, if necessary, reduce the ordered quantity:

- *items of rare sales with small buffers;*
 - *items with a buffer set higher than optimal due to packing or minimal order quantity restriction;*
 - *items for which demand has fallen significantly or is on a declining trend recently.*
-

The SKU Schedule can be used as a source of information check.

3.5.6. Adjustment for Bringing Additional Quantity

Additionally, the desired quantity to be delivered can be ordered by entering it in the **Adjustment Quantity** field.

Upon the delivery and receipt of the additional quantity, it is necessary to reserve it immediately.

When ordering a SKU, if the **Planned Receipt** field shows an additional order quantity that has not yet arrived yet, it is necessary to enter the additional order quantity in the **Adjustment Quantity** field.

3.5.7. Adjustment of the Planned Delivery Date

Planned delivery date for each line of the Application Worksheet is entered in the Purchase Order in the Due Date field (If you do not see it, insert it in the Select Fields)

For filtered SKUs, it can be changed by selecting the desired date in the Set New Due Date field

REPLENISHMENT TASKS | WORK DATE: 2022-01-27

OPTIONS

Name: ZL Amount: ERROR

Set New Multiplier: Weight: 0,85008

Set Consider Stock: Quantity: 17 000

Set New Due Date: 2022-01-30 Volume: 82,4

Include Adjustment Qty: 2 Pallet: 7,08

Item No.	Description	Replenish... System T	Vendor No. T	Vendor name	Buffer Size	Inventory	Buffer %	Level Color	Planned Receipt	\$41 Planned Release Sales	Buffer % With Planned Receipt	Level With Planned Receipt Color	Adjustment Quantity	Quantity	Acc. Act. Mes.	Due Date
→ T000102	Gaminsys testui 2	Purchase	01587796	Custom Metals Incorporated	6	698	11633	Green	1 011	1 000,00	8180	Green		0	2022-01-30	
T000104	Gaminsys testui 4	Purchase	01587796	Custom Metals Incorporated	200	21	11	Red	24		23	Red		200	2022-01-30	
T000105	Gaminsys testui 5	Purchase	01587796	Custom Metals Incorporated	2	5	250	Blue	4		450	Blue		0	2022-01-30	
T000106	Gaminsys testui 6	Purchase	01587796	Custom Metals Incorporated	10	11	110	Blue	0		110	Blue		0	2022-01-30	
T000107	Gaminsys testui 7	Purchase	01587796	Custom Metals Incorporated	24 000	20 000	83	Green	0		83	Green	2 000	9 600	2022-01-30	
T000109	Gaminsys testui 9	Purchase	01587796	Custom Metals Incorporated	780	691	89	Green	1 000	1 000,00	89	Green		0	2022-01-30	
T000110	Gaminsys testui 10	Purchase	01587796	Custom Metals Incorporated	2 560	0	0	Black	0		0	Black		7 200	2022-01-30	
T000108	Gaminsys testui 8	Purchase	01587796	Custom Metals Incorporated	6 860	7 333	107	Blue	0		107	Blue		0	2022-01-30	

3.5.8. Creating Order Documents

Before creating an order document, you can check the quantities of the most relevant items proposed to the order. The SKU Schedule can be used as a source of information check.

Update the total parameters of the expected order (F7). The **Amount, Weight, Volume, Palettes** fields of the form show the summary information of the selected SKUs and expected orders.

Perform action message.

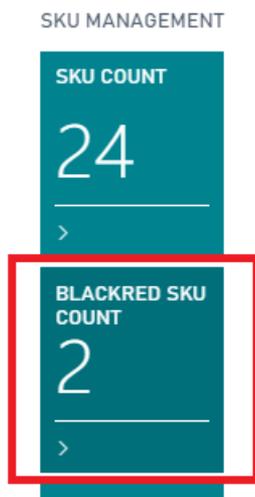
Depending on the Replenishment System specified in the SKU parameters, the corresponding documents are created:

Replenishment system	Created Document
Purchase	Purchase Order
Transfer	Transfer Orders

3.6. Monitoring Works of the Inventory Status

SKUs with a balance fallen into the Red Zone require additional manager attention.

The SKUs, whose stocks have reached a critical level, are displayed in the Role Center, **BlackRed SKU Count**.



After pressing the button, opens a list of **S4I BlackRed forms** in which the SKUs are sorted by the buffer.

Information relevant to the decisions in this form is provided in the fields:

- Stocks;
- Buffer%;
- Level (Color);
- Planned Receipts;
- Buffer% with Planned Receipts
- Level with Planned Receipts (Color)
- Shortage

BLACKRED SKU COUNT | WORK DATE: 2022-01-27

Manage Process Chart Open in Excel More options

Item No.	Location Code	Description	Replenish-System	Vendor No.	Transfer-From Code	Buffer Size	Inventory	Buffer % T	Level Color	Planned Receipt	Planned Release Sales	Buffer % With Planning Receipt	Level With Planned Receipt Color	Shortage	Planned Release Prod.
→ T000110	BLUE	Gaminys testul 10	Purchase	01587796		2 560	0	0	Black	0	0	0	Black	0	0
T000104	BLUE	Gaminys testul 4	Purchase	01587796		200	21	11	Red	24	0	23	Red	0	0
T000110	RED	Gaminys testul 10	Transfer		BLUE	5 000	2 165	43	Yellow	0	0	43	Yellow	0	0
T000107	BLUE	Gaminys testul 7	Purchase	01587796		24 000	20 000	83	Green	0	0	83	Green	0	0
T000109	BLUE	Gaminys testul 9	Purchase	01587796		780	691	89	Green	1 000	1 000	89	Green	0	0
T000108	BLUE	Gaminys testul 8	Purchase	01587796		6 860	7 333	107	Blue	0	0	107	Blue	0	0
T000106	BLUE	Gaminys testul 6	Purchase	01587796		10	11	110	Blue	0	0	110	Blue	0	0
T000103	BLUE	Gaminys testul 3	Purchase	01587796		3	7	233	Blue	1	0	267	Blue	0	0
T000105	BLUE	Gaminys testul 5	Purchase	01587796		2	5	250	Blue	4	0	430	Blue	0	0
T000101	BLUE	Gaminys testul 1	Purchase	V00001		0	0	9999	Blue	0	0	9999	Blue	0	0
T000111	BLUE	Gaminys testul 11	Purchase	01587796		0	5	9999	Blue	10	0	9999	Blue	0	0
T000112	BLUE	Gaminys testul 12	Purchase	01063656		0	3	9999	Blue	0	0	9999	Blue	0	0

3.6.1. Actions

If the balance in Red / Black Zone and quantity on the way = 0:

- order items urgently. Agree with the Vendor on their earlier than usual delivery.

If the balance in the Red / Black Zone and the quantity on the way > 0:

- make sure that the ordered items would be delivered faster than the balance runs out;
- check if the quantity on the way is sufficient so that the balance would not reach a critical level soon. If the Buffer Percentage with Expected Receipt is <45%, it is likely that the ordered quantity will not be sufficient, and an additional order is required.

If a value is displayed in the Shortage field

- order items urgently. Agree with the Vendor on their earlier than usual delivery;
- make sure that the ordered items would be delivered faster than the balance runs out.

3.7. Works on Changing the Assortment

In the event of a change in the Assortment, the emergence of new item cards or the need to dispose of certain stocks of items, the Assortment Features of the required item need to be adjusted accordingly. The following steps are performed in the sequence described in Section 2.5.4.

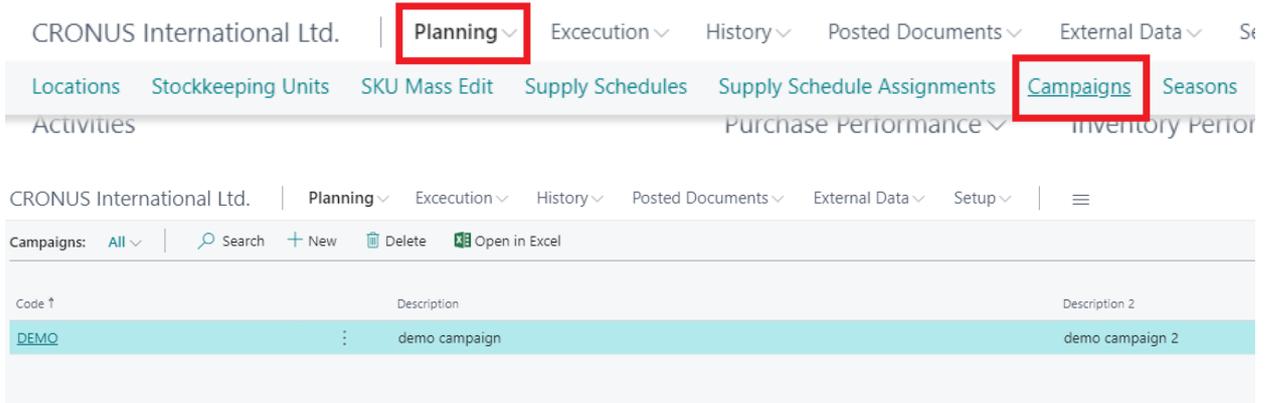
3.8. Inventory Management during the Trading Campaigns Period

Soft4Inventory is a possibility to parameterize Sales Campaigns when Campaign Sales Plans are created for each SKU. It is expedient to parameterize by the Campaign Parameters only those SKUs whose sales increase by > 40% during the Campaign Period.

3.8.1. Campaign Parameterization

A Campaign Title is created for each new Campaign.

The Campaign Title is created in the form S4I Campaign.



Required Parameters

Field Name	Note
Code	Unique sequence of symbols
Description	Text
Description2	Text

Campaign lines

Field Name	Note
Item Code	SKU Identification (Key)
Location Code	SKU Identification (Key)
Campaign Start	Date, the first day of the Campaign Sales
Campaign End	Date, the last day of the Campaign Sales
Campaign Quantity	Quantity planned to be sold during the Campaign
Quantity of initial layout	Optional parameter. The quantity that is required in the unit on the first day of the Campaign. This parameter is useful for items that form the exposition of the Campaign.
Other fields	Filled automatically from SKU parameters

Special functionality can be used for quick editing of the Campaign Line Parameters

S4I CAMPAIGN | WORK DATE: 2022-01-27

DEMO

Update Fields | Actions Fewer options

Campaign

Update Fields

Update Fields

DEMO Description demo campaig

S4I Campaign Subform | Manage More options

Item No.	Variant Code.	Location Code	Start Date	End Date	Description	Description 2
→ 1000	:	BLUE	2020-07-01	2020-08-31	Bicycle	
T000102		BLUE	2022-01-15	2022-02-28	Gaminys testui 2	

Workflow:

- filter the Campaign lines to which you want to give the same value of a certain field;
- Campaign / Change fields;
- tick the fields you want to change;
- save field values.
- OK

SKU Campaign Lines can be viewed from SKU Parameters, SKU Count, Buffer Change Tasks, Replenishment Tasks, Navigate / Campaign Lines

SKU COUNT | WORK DATE: 2022-01-27

Chart Open in Excel | Actions Navigate Fewer options

Card Entries Statistics Item Availability By Bin Contents Comments Supply Schedule Supply Schedule Assignments Campaign Lines Enter Forecast

Validation Status	Item No.	Location Code	Description	Assortment Code	Replenish... System	Vendor No.	Transfer-from Code	Vendor Name	Buffer Size	Min	Max	Campaign Lines
→ Missing Set...	T000101	BLUE	Gaminys testui 1	MTS1	Purchase	V00001		Tiekėjas Testui 11	0	0	0	0
Valid	T000102	BLUE	Gaminys testui 2	MTS1	Purchase	01587796		Custom Metals Incorporated	6	0	0	0

3.8.2. Campaign Feature

The currently running Campaign Count and the future Campaign Count are displayed next to the SKU Parameters, SKU Count, Buffer Change Tasks, and Replenishment Task forms.

← SKU COUNT | WORK DATE: 2022-01-27

Chart Open in Excel | Actions Navigate Fewer options

S4I Validation Status	Item No.	Location Code	Description	Assortment Code	Campaign Count	Future Campaign Count	Replenish... System	Vendor No.
→ Missing Set...	T000101	BLUE	Gaminys testui 1	MTS1			Purchase	V00001
Valid	T000102	BLUE	Gaminys testui 2	MTS1	1		Purchase	01587796
Missing Set...	T000103	BLUE	Gaminys testui 3	MTS1			Purchase	01587796
Valid	T000104	BLUE	Gaminys testui 4	MTS1			Purchase	01587796

3.8.3. Purchase Planning for Campaigns

According to the Campaign Parameters, SKU Replenishment Time and Replenishment Period, the system determines how many replenishments will be possible to perform during the Campaign Period.

SKUs that will be replenished 1 time during the Campaign Period, the entire quantity assigned for the Campaign Sale will be proposed to order before 1 Replenishment Cycle until the Campaign Start.

SKUs that will be replenished 2 or more times during the Campaign Period, the quantity assigned for the Campaign Sale will be divided into the corresponding number of parts, and only the first part of the quantity will be taken out at the Campaign Start and then replenished accordingly for the sales.

The calculated part of the Campaign Quantity or the whole quantity participates in the calculation of the order quantity in the application worksheet (parameter Campaign Count) as described in the Order Creation \ Order Quantity Calculation Methodology.

← REPLENISHMENT TASKS | WORK DATE: 2022-01-27 ✓ SAVED

OPTIONS

Name: ZL Amount: ERROR

Set New Multiplier: Weight: 0.85008

Set Consider Stock: Quantity: 17.000

Set New Due Date: Volume: 82.4

Include Adjustment Qty. 2: Pallet: 7.08

Process Chart Open in Excel | More options

Item No.	Buffer Size	Inventory	Buffer %	Level Color	Planned Receipt	S4I Planned Release Sales	Level With Planned Receipt	Adjustment Quantity	Quantity	Acc. Adj. Mes...	Due Date	Multiplier	S4I Campaign Quantity	Adjustment Quantity 2	Incl. Adj. Qty. 2	S4I Special Order Quantity	S4I Planned Release Prod
→ T000102	6	698	11633	Green	1 011	1 000,00	8180		0	✓	2022-01-30	1,10	210,20232		✓		
T000104	200	21	11	Red	24		23		200	✓	2022-01-30	1,10			✓		
T000105	2	5	250	Blue	4		450		0	✓	2022-01-30	1,10			✓		
T000106	10	11	110	Blue	0		110		0	✓	2022-01-30	1,10			✓		
T000107	34 000	20 000	83	Green	0		83	2 000	9 600	✓	2022-01-30	1,10			✓		

3.8.4. Stopping Buffer Change Calculations

If the SKU has less than the Replenishment Cycle left before the Campaign Start, or the Campaign is currently in progress, all buffer change proposals will be stopped.

3.8.5. Representation of the Campaign Sales Quantities in Forecasting Information

If the sale takes place within the SKU Campaign interval, such a sale is considered to be a Campaign Sales.

Campaign Sales are represented in the Forecast form.

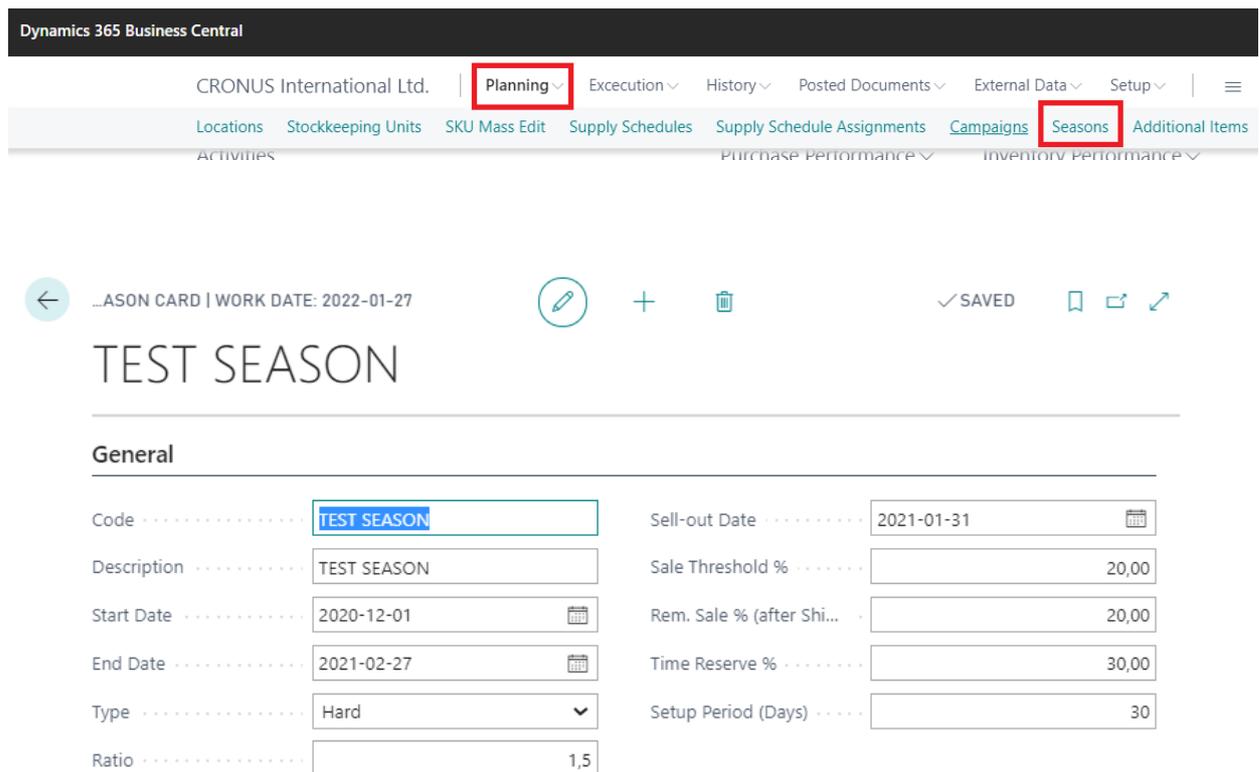
3.9. Seasonal Buffer Management

Soft4Inventory provides the ability to parameterize two types of seasons:

- **Strict Seasons** - when goods are withdrawn from the trade during the off-season;
- **Non-strict Seasons** - when stock levels are reduced during the off-season.

3.9.1. Season Parameters

The season parameters are described in the S4I season card form



Dynamics 365 Business Central

CRONUS International Ltd. | **Planning** | Execution | History | Posted Documents | External Data | Setup

Locations | Stockkeeping Units | SKU Mass Edit | Supply Schedules | Supply Schedule Assignments | **Campaigns** | **Seasons** | Additional Items

ACTIVITIES | PURCHASE PERFORMANCE | INVENTORY PERFORMANCE

← ...ASON CARD | WORK DATE: 2022-01-27

TEST SEASON

General

Code TEST SEASON

Description TEST SEASON

Start Date 2020-12-01

End Date 2021-02-27

Type Hard

Ratio 1,5

Sell-out Date 2021-01-31

Sale Threshold % 20,00

Rem. Sale % (after Shi... 20,00

Time Reserve % 30,00

Setup Period (Days) 30

Parameters

Field	Meaning
Code	Unique sequence of symbols

Description	The name of the season. Description in free form
Start Date	Date (approximate start date of active sales)
End Date	Date (approximate end date of active sales)
Type	Values (Strict, Non-strict). Default value Non-strict
Coefficient	Number 2 decimal places. Only positive or 0. The coefficient is only needed to describe the Non-strict Seasons and must correspond to the approximate increase in sales during the season compared to the off-season, sometimes.
Date of sales	Date. Approximate start date of the sales period. Purchases are suspended for the Strict Season items but Transfers and Sales are allowed.
Replenishment threshold%	For Strict seasons. The part of the season that must have passed in order to re-order. E.g., when it is planned to bring the entire quantity assigned for the season in 2 times, and to calculate the second part of the order by seeing the real demand for the Assortment at the Season Start.
Remaining% of trade	For Strict Seasons. When the Replenishment Period is longer than the active trading period, the release date of the last order in the season is controlled so that it arrives at least the remaining% of trading before the end of the season.
Reserve time%	For Strict Seasons. In the first season, the order release date is controlled so that it would be placed before the Replenishment Time and Reserve Time until the Season Start. <i>Reserve time = Reserve time% * Replenishment Time, but not less than 3 days.</i>
Time for data preparation	For Strict Seasons. The number of days required to prepare the data before the date of order of the first season.

Start, the Sales Start and End Dates are entered with the year. At the end of the season cycle, it is necessary to change the season dates to the next period.

Seasons are added to the SKU parameters from the item card.

It is possible to create different seasons for warehouse purchase and distribution. Also, based on the logic described above, it is possible to create different Non-strict Seasons with different coefficients for different ABC categories.

3.9.2. Season Status in SKU Parameters

The SKU Parameters, the Buffer Change Worksheet, and the Application Worksheet display the Season Status. The Season Status is recalculated during the calculation of each SKU if a season code is assigned to the SKU. Its meanings:

Status Meaning	Season Type	Condition
IN	High	<p>If the order made today would arrive during the active season but not later than the Remaining% of trade before the Start of the Sales</p> <p>Calculated.</p> <p>Today > = the Later of dates (Season Start Date - Replenishment Time - MAX (Reserve Time%* Replenishment Time or 3) - Time for Data Preparation) or (Season Start Date - Replenishment Time – Replenishment Charge Period),</p> <p>and Today <= (the Sales Date - MIN (Length of Active Trading Period * Remaining Trading%, or Replenishment Period) - Replenishment Time</p>
IN_SALE	High	<p>If an order placed today arrives at the time of sales but no later than the Remaining% of Trading before the End of the Sales.</p>

		<p>Today > = (Sales Date - MIN (Length of Active Trading Period* 3 Parameter, or Replenishment Period) - Replenishment Time + 1,</p> <p>and Today <= (the Season End Date - MIN (Length of Sales Period* Remaining% of Trading, or Replenishment Period) - Replenishment Time.</p>
OUT	High	When the IN and IN_SALE conditions are not met.
HI	Low	<p>Today > = the Season Start - Replenishment Time - Replenishment Period, and Today <= Max (the Season End Date - Replenishment Time - Replenishment Period) or (the Season Start Date - Replenishment Time))</p>
LOW	Low	<p>Today < The Season Start - Replenishment Time - Replenishment Period, and Today > Max ((The Season End Date - Replenishment Time - Replenishment Period) or (The Season Start Date - Replenishment Time))</p>

3.9.3. Management of Low Seasons

Low Seasons are such fluctuations in demand, when during the off-season the demand does not disappear completely, but only decreases. Dynamic Buffer Management is sufficient if sales increase to 40% during the Replenishment Cycle or decrease to 40% during the Green Zone Check Period. In the case of a faster change in sales, the buffer needs to be changed by an appropriate degree without waiting for the system to generate a proposal.

E.g., if the Replenishment Time is 1 day and the Replenishment Period is also 1 day, then the Replenishment Cycle is 2 days. Suppose at the Season Start, in a period of about one week, sales increase by 100%. Then $100\% / 7 \text{ (week)} \times 2 \text{ (Replenishment Cycle)} = 28.5\%$ per cycle, which is less than 40%. In this case, seasonality management is not required. When the Replenishment Cycle is 2 days, seasonality management would be required when the expected increase in sales is more than 140% per week.

The Season Start. When the season status changes from LOW to HI, the proposals provided that are calculated by multiplying the valid buffer by the coefficient assigned in the season parameters. It makes sense for some items, especially those in less demand (category C according to the ABC classification) to increase the buffer by a lower coefficient or to refuse to increase the buffer at all. Avoid excessive accuracy when deciding, as it makes no practical sense (see the training material "Optimal Inventory Management"). E.g., when the seasonality coefficient is 2, it makes sense to choose 1 or 1.5 for certain (usually category C) items, but not in more detail.

The Season End. When the season status changes from HI to LOW, it is proposed to reset the buffers to the buffer size that was valid before the season. This value is stored during the season in the SKU parameter field Pre- seasonal Buffer, which can be adjusted by the user. If sales of the item during the season were higher in comparison with the previous season, it is likely that sales after the season will be higher. In this case, it is advisable to change the Pre-seasonal Buffer stored in the SKU parameters. Only such changes are interesting when sales have changed by 40% and more. Avoid over-accuracy when deciding, as it makes no practical sense (see the training material "Optimal Inventory Management")

3.9.4. Management of High Seasons

The management of high seasons is essentially similar to the assortment management, as items are removed from the assortment during the off-season and returned to it during the season. Therefore, strict seasons affect the validity feature of the SKU, indicating that the buffer must be > 0 during the season and 1 for the Replenishment Cycle before its start, and must be $= 0$, out of season and before 1 Replenishment Cycle before its end.

Item Assortment	SKU Assortment	Stocks at the Place of Dispatch	Season State	Replenishment System	Required Buffer Value
Yes	Yes	-	IN, HI, LOW, empty	Purchase, Production	Buffer >0
Yes	Yes	Any	IN, HI, LOW, empty, IN_SALE	Transfer, Sales, Purchase from a Central Warehouse company	Buffer >0
No	Yes	>0	IN, HI, LOW, empty, IN_SALE	Transfer, Sales, Purchase from a Central Warehouse company	Buffer >0
	All the other cases				Buffer = 0

4. ANNEXES

4.1. Integration with External Data

Specialized tables in Soft4Inventory, MS Dynamics Business Central SQL database are used for data integration with external data. Their structure and data exchange principles are described below.

4.1.1. Warehouse Parameter Integration

The integration of warehouse parameters is not an object of data exchange. In Soft4Inventory system, warehouses are parameterized in parallel with external data warehouse parameters. Only warehouse codes and their names are parameterized in the Soft4Inventory system. Warehouse codes must match to the external data warehouse codes.

4.1.2. Product Data Integration

The item data integration table is updated by the external data source at least 1 time a day.

Intermediate board is assigned for the item information integration **S4I External Item**.

The board fields:

Field Name	Format	Note
No.	Code(20)	Unique key
Bar code	varchar(30)	
Description		
Item group code	Yes	
Internal expiry date	Integer	Internal expiry date in days = Full item expiry date - minimal purchase expiry date - longest sale expiry date
Unit of measure of inventory		
Vendor Code		
Direct pcs. prime cost	decimal(38, 20)	
Item pcs. weight		
Product pcs. volume		
Quantity in micro package	decimal(38, 20)	
Quantity of items in the box	decimal(38, 20)	
Number of items in a row	decimal(38, 20)	
Quantity of items per pallet	decimal(38, 20)	
Min. quantity (MOQ)	decimal(38, 20)	

During the import, a new record is created for each new unique key, and the information of the existing unique keys is updated in the same record.

4.1.3. Vendor Data Integration

The data in the vendor data integration table is updated by the external data source at least once a day.

Intermediate board is assigned for the vendor information integration S4I External Vendor. Board fields.

Field	Format	Note
Supplier Code (ID) (Vendor No.)	Code(20)	Unique key
Supplier name (Description) (Name)	Text(50)	

During the import, a new record is created for each new unique key, and the information of the existing unique keys is updated in the same record.

4.1.4. Integration of Information on the Movement of Items

The data in the items movement data integration table is updated by the external data source at least 1 time a day. It is recommended to update this data additionally at least every 2 hours during the working day. Intermediate board is assigned for the integration of items movement information S4I External Data Snapshot. The board fields:

Field	Format	Note
Item Code (Item No.)	Code(20)	Unique key
(Variant Code)	Code(10)	
Warehouse Code (Location Code)	Code(10)	
(Date)	Date	
Time (Record Creation Time) (Time)	DateTime	
Balance (Inventory)	Decimal	The quantity of items in the specified warehouse at the time of data submission is measured in units of stock. Inventories do not include non-marketable goods
(Expiring Inventory)	Decimal	The quantity of the expiring items (calculated according to the current business rules of the data source) in the specified warehouse at the time of data submission in the

		unit of stock measurement.
(Earliest Expiration Date)	Date	The worst expiration date for the expiring quantity of items (calculated according to the current data source business rules) in the specified warehouse at the time of data submission is in the unit of inventory.
(Planned Receipt)	Decimal	Unearned quantity of items according to all open purchase orders in the specified warehouse at the moment of data submission in the unit of stock measurement.
(Received)	Decimal	The quantity accepted to the specified warehouse according to purchase orders on the specified date is measured in stock units.
(Released)	Decimal	The quantity released from a specified warehouse according to sales orders on a specified date is measured in units of inventory.
(Final Releases)	Decimal	To be completed only for the Central Warehouse site. The quantity sold from all warehouses is measured in units of additional stocks from the central warehouse on a given date
Lost sales	Decimal	

The actual source of the transaction must be recorded in the data source system in order to avoid errors when the transactions are recorded backwards (specified in the physical

document). Quantities Received and Sold as of the date are accumulated based on the actual date of the transaction.

Regardless of how many data submission iterations took place during the day, the last record of the day must cover all transactions for that day. It is recommended to make the last record of the day after 24:00 for the previous day.

4.1.5. Integration of Information on Planned Purchases and Sales

The data in the sales data integration tables of planned purchases is updated by an external data source at least 1 time a day. It is recommended to update this data additionally at least every 2 hours during the working day. The update of this data must be synchronized with the update of the movement of items data.

Intermediate board is assigned for integration of planned purchase information S4I External Planned Receipt. The board fields:

Field	Format	Note
(Item No.)	Code(20)	Unique key
(Variant Code)	Code(10)	
Warehouse Code (Location Code)	Code(10)	
Order No. (Document No.)	Code(20)	
(Document Line No.)		
Order type (Document Type)	Option (Quote, Order, Invoice, Credit Memo, Blanket Order, Return Order)	Unearned quantity of items according to open order in the specified warehouse at the moment of data submission in the unit of stock measurement
Order date (Document Date)	Date	
Planned Transaction Date (Expected Receipt Date)	Date	For purchase orders – Expected Receipt Date
(Quantity (Base))	Decimal	The quantity of stock is measured in units

Supplier No. (Vendor No.)	Code(20)	
---------------------------	----------	--

Intermediate board assigned for the integration of planned sales information S4I External Planned Issues. The board fields:

Field	Format	Note
(Item No.)	Code(20)	Unique key
(Variant Code)	Code(10)	
Warehouse Code (Location Code)	Code(10)	
Order No. (Document No.)	Code(20)	
(Document Line No.)		
Order type (Document Type)	Option (Sales Order, Blanket Order) <ul style="list-style-type: none"> (Sales order) Sales proposal 	<ul style="list-style-type: none"> Sales order: The quantity of items not shipped according to the open sales order in the specified warehouse at the moment of data submission in the unit of stock measurement Sales Proposal: The quantity of goods not shipped according to the information on the intermediate sales board (the source of which is the sales order excel board) in the specified warehouse at the moment of data submission in the unit of stock measurement. Only those lines are taken from which NAV sales orders have not yet been created.
Order date (Document Date)	Date	

Planned transaction date (Expected Receipt Date)	Date	For purchase orders - the Expected Receipt Date For sales - the Expected Sales Date
(Quantity (Base))	Decimal	The quantity of stock is measured in units
Recipient No.	Code(20)	

During each iteration of the data update, the old data is completely cleared.

4.1.6. Integration of Purchase Order Information

Purchase orders created by Soft4Inventory are ready for export and are stored on the boards:

Purchase order header S4I External Repl. Ord. Head.

Field	Format	Note
Order Type	Option (Purchase,Transfer)	
Order ID	Integer	Unique key (1,2,3..)
Transfer-from Code	Code(10)	Where to replenish in case of transfer
Sell-to Customer No.	Code(20)	To whom to sell in case of sale
Order No.		
Supplier No. (Vendor No.)	Code(20)	What to buy in case of purchase
(Order Date)	Date	
Planned Receipt Date (Expected Receipt Date)	Date	
Warehouse code (Location Code)	Code(10)	Location Code
Ready for Export (Ready)	Boolean	The feature is placed when all lines have been created

Created by the user (Created by ID)	Code(50)	The user ID of the NAV user who created the order
Processed	Boolean	The export procedure places the feature that the order has been exported

Purchase order lines S4I External Repl. Ord. Line

Field	Format	Note
Order Type	Option (Purchase,Transfer)	Unique key
Order ID	Integer	
Order line ID (Line No.)	Integer	
Item Code (Item No.)	Code(20)	
Variant Code	Code(10)	
Location Code	Code(10)	
(Quantity (Base))	Decimal	
(Creation Date Time)	DateTime	Order creation in Soft4Inventory system time stamp
(Expected Receipt Date)		
Processed		

Orders from the Soft4Inventory order export board are exported to an external data ERP system. Only orders whose header parameter Ready is Yes can be exported. For this purpose, the external data source creates a procedure which, based on the information in the Soft4Inventory purchase order board, creates purchase orders in the data source ERP system. Orders created in the ERP system of the data source are numbered in the selected series of numbers.

The data source informs about the fact that the purchase order has been accepted into the ERP system of the data source by filling in the processed purchase order table S4I External Repl. Ord. Conf.

Field	Format	Note
Order Type	Option (Purchase,Transfer)	
Order ID	Integer	Unique key (1,2,3 ..) Soft4Inventory Order number
Order No.		Purchase order number in the data source ERP system
Process DateTime	DateTime	Processing time
Processed	Boolean	Processed data source ERP

The Soft4Inventory system periodically compares data between the Purchase Order board and the processed Purchase Order board. As soon as an entry with an order number appears in the processed purchase order board, the value of which is also in the order board created by Soft4Inventory, this entry is marked as Imported to the data source ERP. In this way, it is indicated that the calculation of the total quantity to be received should be based on data received from an external source and the Soft4Inventory purchase order information should be ignored.

4.1.7. Data Update Procedure

The exact schedule of data update on Soft4Inventory intermediate boards is determined during the project by performing data integration speed testing. Preliminary planned data update schedule:

00:30	Import of items cards
00:45	Import of vendor cards
01:00	Daily data on the movement of items (final for the previous day)
08:00	Daily data on the movement of items

09:00	Daily data on the movement of items
10:00	Daily data on the movement of items
11:00	Daily data on the movement of items
12:00	Daily data on the movement of items
13:00	Daily data on the movement of items
14:00	Daily data on the movement of items
15:00	Daily data on the movement of items
16:00	Daily data on the movement of items
17:00	Daily data on the movement of items
18:00	Daily data on the movement of items

4.2. Calculation Methodology

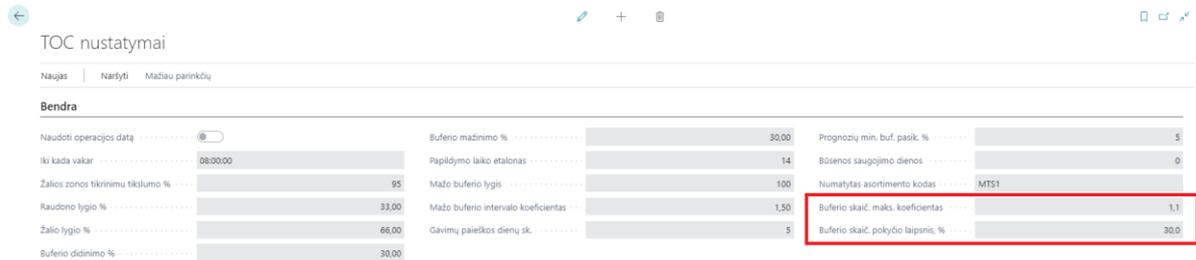
4.2.1. Calculation Methodology of the Function "Recalculate buffers"

1. The function calculates the period in days that the buffer must cover (Buffer Period).
 $\text{Buffer period length} = (\text{SKU Lead time} + \text{SKU Period time}) \times (1 - \text{Red zone}\%) - \text{Known demand period}$
2. Takes SKU historical consumption / sales data for a set period and accumulates them in days. Days from which:
 - a. there was no balance
 - b. a trading campaign took place (if Eliminate Campaign periods is specified)
 - c. if that day's sales are high and fall into the top percentile specified in the Eliminate peaks
3. In the remaining sequence, find the Buffer Period in which consumption / sales were highest. Sales / consumption for that period and offered as a new buffer size
4. Exceptions:
 - a. if, after eliminating the days as specified in point 2, there are no days left with sales - the system will offer the buffer size = 0.
 - b. if the Buffer Period is significantly longer than the data calculated from the days after days (as specified in point 2), the system will not propose a buffer change.
 - c. if the calculated buffer differs slightly from the already set buffer - the system will not propose a buffer change proposal.

b and c performance level is controlled by Soft4Inventory Parameters:

Buffer Count Max. Coefficient: Indicates how many times the buffer period can be longer than the data period

Buffer Count degree of change% indicates more than what percentage the calculated buffer must differ from the current one in order to form an entry in the buffer change worksheet.



4.2.2. Order Quantity Calculation Methodology

The proposed to be ordered quantity is calculated:

1. The initial order quantity is calculated.

$$\text{Primary Quantity} = \text{Buffer} \times \text{Multiplier} + \text{Fixed Stock} + \text{S4I Planned Sales} + \text{Adjustment Quantity} + \text{Campaign Count} - \text{Stocks} - \text{Planned Receipt}$$

2. The initial quantity shall be rounded to the largest possible package. For this purpose, the maximum and minimum order limits are calculated:

$$\text{Max Limit} = \text{Buffer} \times \text{Order upper bound\%} \times \text{Multiplier} + \text{Untouchable Stock} + \text{Adjustment Quantity} + \text{S4I Planned Sales} + \text{Campaign Count} - \text{Stocks} - \text{Expected Receipt}$$

$$\text{Min Limit} = \text{Buffer} \times \text{Order lower bound\%} \times \text{Multiplier} + \text{Untouchable Stock} + \text{Adjustment Quantity} + \text{S4I Planned Sales} + \text{Campaign Count} - \text{Stocks} - \text{Expected Receipt}$$

Max and Min limits are set not lower than the Minimum order quantity

Order upper bound% and Order lower bound% are set in S4I setup form

The initial quantity is rounded according to the Package4 package and checked to fit within the set limits, if so, the result is entered in the Quantity field, if not rounded to the lower level package and so to the package with the Package Level Limit parameter as last possible or to the unrounded quantity.

3. If the Primary quantity is > 0, but rounding has not reached the specified limits for any of the permitted packages, a check shall be made.

If Buffer% <= MOQ treshold%, the ordered quantity is above the Min limit, rounded to the smallest permissible packaging.

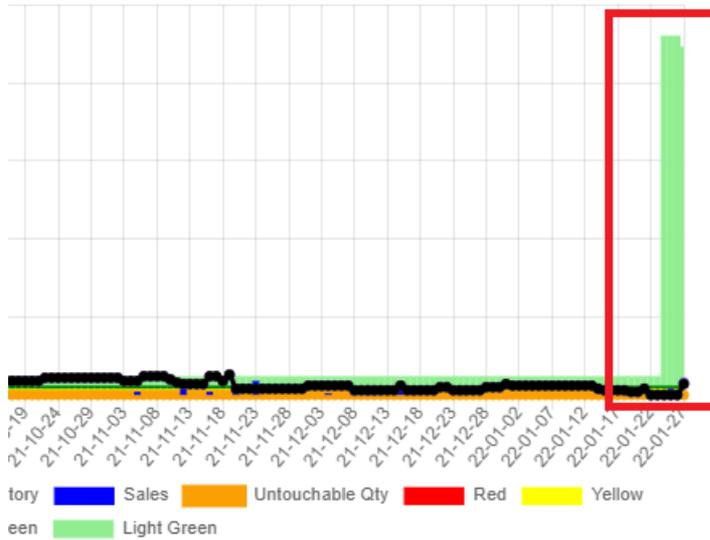
4.2.3. TOC Calculation of the Quantity to be Sold

The planned quantity for sale is calculated from the Sales Order lines. Lines are taken with the SKU item where consumption is provided at the SKU location and at additional locations assigned to the SKU location. Take lines with

Expected Sales Date There is \leq Current Date + (Replenishment Time + Replenishment Period) x order multiplier.

The quantity planned for sale is shown in the SKU chart in light green.

Metals Incorporated; Transfer-from Code: ; Tlead: 3; Tperiod: 7; MOQ/EOQ: 0/0; P=10|100|600|2 400; Pmin:



In the application worksheet, this quantity participates in the calculation of the ordered quantity, as described above in the Methodology for calculating the ordered quantity.

**SOFT4Inventory
User Manual**

If you have any questions,
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