ITEM COVERAGE
Work instructions

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Contents

1. Branch supply planning

On WD4 the agreed forecast will be available in D365 for migrated branches and master planning will have calculated a proposed supply plan taking into account the following:

- Imported management forecast from Arkieva
- Open sales orders
- Existing supply orders
- Supply parameters such as lead time, minimum order quantity, order multiples and item coverage.
- Inventory movements

Until such time as the branch planner is confident that the supply parameters are correct it is good practice to review the supply plan and check that the proposals make sense.

1.1. Set item coverage

There are four available settings for item coverage

1. Manual
2. Requirement
3. Min/Max
4. Period

Item coverage can be set up at branch level to use a single default calculation. It is however rare that one policy will fit all items, therefore further settings can be applied at item level

1.1.1. Understanding the settings

Item coverage will be set to 'Requirement' as default unless a different coverage is selected. An empty box on the item coverage field is the equivalent of 'Requirement'.

1.1.2. Manual

Manual is the most basic setting and although the system will allow you to enter a minimum safety stock volume it will not be taken into account in the master planning. Manual setting simply shows you an overview of demand and the negative stock position it will result in if no action is taken.

In this example there is actually 25 units on stock but the inventory position is not shown, inventory only shows the cumulative shortage against demand. The demand only shows forecast, there is no split between forecast and open sales. Most importantly in manual setting there is no supply proposal.

	Backlog	Month November	Month December	Month January	Month February	Month March	Month April
PERIOD START INVENTORY				-100.00	-600.00	-600.00	-1,850.00
PERIOD END INVENTORY			-100.00	-600.00	-600.00	-1,850.00	-1,855.00
PERIOD END PEGGED INVENTORY							
PERIOD NET SUPPLY			-100.00	-500.00		-1,250.00	-5.00
[-] DEMAND			100.00	500.00		1,250.00	5.00
FORECAST			100.00	500.00		1,250.00	5.00

1.1.3. Requirement

The requirement setting proposes a supply plan based on a one to one relationship between demand and supply whilst taking into account stock.

	Backlog	Month November	Month December	Month January	Month February	Month March	Month April
PERIOD START INVENTORY	25.00	25.00	25.00				
PERIOD END INVENTORY	25.00	25.00					
PERIOD END PEGGED INVENTORY	25.00	25.00					
PERIOD NET SUPPLY			-25.00				
[-] DEMAND			150.00	500.00		1,250.00	5.00
FORECAST				480.00		1,250.00	5.00
SALES			150.00	20.00			
[-] SUPPLY			125.00	500.00		1,250.00	5.00
[-] PURCHASE			125.00	500.00		1,250.00	5.00
[-] PLANNED PURCHASE ORDERS			125.00	500.00		1,250.00	5.00
NOT SUPPLY FORECAST			125.00	500.00		1,250.00	5.00

If the lead time of the item is such that you cannot physically order stock in time the replenishment will propose a supply plan at the next available opportunity which will cover the demand up to that point including any missed demand from the previous periods.

	Backlog	Month November	Month December	Month January	Month February	Month March	Month April
PERIOD START INVENTORY	25.00	25.00	25.00	-125.00			
PERIOD END INVENTORY	25.00	25.00	-125.00				
PERIOD END PEGGED INVENTORY	25.00	25.00	-125.00				
PERIOD NET SUPPLY			-150.00	125.00			
[-] DEMAND			150.00	500.00		1.250.00	5.00
FORECAST				480.00		1.250.00	5.00
SALES			150.00	20.00			
[-] SUPPLY				625.00		1.250.00	5.00
[-] PURCHASE				625.00		1.250.00	5.00
[-] PLANNED PURCHASE ORDERS				625.00		1.250.00	5.00
NOT SUPPLY FORECAST				625.00		1.250.00	5.00

You can set a minimum order quantity to hold as safety stock on the requirement policy and the quantity you need to reach this volume will be shown under the demand as 'Minimum inventory'. The supply proposal will include this as demand that needs to be met ensuring this quantity or more is always in stock at the end of the month.

	Backlog	Month November	Month December	Month January	Month February	Month March	Month April
PERIOD START INVENTORY	25.00	25.00	25.00	100.00	100.00	100.00	100.00
PERIOD END INVENTORY	25.00	25.00	100.00	100.00	100.00	100.00	100.00
PERIOD END PEGGED INVENTORY	25.00	-75.00					
PERIOD NET SUPPLY			75.00				
[-] DEMAND		100.00	150.00	500.00		1.250.00	5.00
FORECAST				480.00		1.250.00	5.00
SALES			150.00	20.00			
MINIMUM INVENTORY		100.00					
[-] SUPPLY			225.00	500.00		1.250.00	5.00
[-] PURCHASE			225.00	500.00		1.250.00	5.00
[-] PLANNED PURCHASE ORDERS			225.00	500.00		1.250.00	5.00
NOT SUPPLY FORECAST			225.00	500.00		1.250.00	5.00

1.1.4. Min/Max

The Min/Max policy allows you to define a minimum quantity of safety stock at which point if the stock falls below this level, master planning will trigger a proposal to replenish the stock up to your defined maximum quantity, taking into account all open requirements first.

In this example there is 0 starting stock, a minimum safety stock of 100 (minimum inventory shows what is needed to meet this volume) set and a maximum of 500.

	Backlog	Month November	Month December	Month January	Month February	Month March	Month April
PERIOD START INVENTORY			500.00	500.00	500.00	500.00	500.00
PERIOD END INVENTORY		500.00	500.00	500.00	500.00	500.00	300.00
PERIOD END PEGGED INVENTORY		400.00	400.00	400.00	200.00	200.00	
PERIOD NET SUPPLY		500.00					-200.00
[-] DEMAND		100.00			800.00		200.00
SALES					800.00		200.00
MINIMUM INVENTORY		100.00					
[-] SUPPLY		500.00			800.00		
[-] PURCHASE		500.00			800.00		
[-] PLANNED PURCHASE ORDERS		500.00			800.00		
NOT SUPPLY FORECAST		500.00			800.00		

1.1.5. Period

The Period policy calculates the stock needed to cover the total demand for the period defined. Currently we have options in the system for 3, 6 and 12 months.

For example below, the policy used is based on a requirement for 3 months worth of stock. It therefore proposes a supply plan based on the demand for 3 months less the starting inventory at which point it will propose another replenishment for the forthcoming 3 months.

	Backlog	Month November	Month December	Month January	Month February	Month March	Month April
PERIOD START INVENTORY	25.00	25.00	25.00	1,750.00	1,250.00	1,250.00	
PERIOD END INVENTORY	25.00	25.00	1,750.00	1,250.00	1,250.00		5.00
PERIOD END PEGGED INVENTORY	25.00	25.00	1,750.00	1,250.00	1,250.00		5.00
PERIOD NET SUPPLY			1,725.00	-500.00		-1,250.00	5.00
[-] DEMAND			150.00	500.00		1,250.00	5.00
FORECAST				480.00		1,250.00	5.00
SALES			150.00	20.00			
[-] SUPPLY			1,875.00				10.00
[-] PURCHASE			1,875.00				10.00
[-] PLANNED PURCHASE ORDERS			1,875.00				10.00
NOT SUPPLY FORECAST			1,875.00				10.00

It is also possible to set a minimum safety stock quantity when using the period policy. In this example a minimum safety stock of 100 has been assigned. The proposed supply plan therefore covers 3 months of demand plus ensuring a minimum of 100 remains in stock at the end of each month.

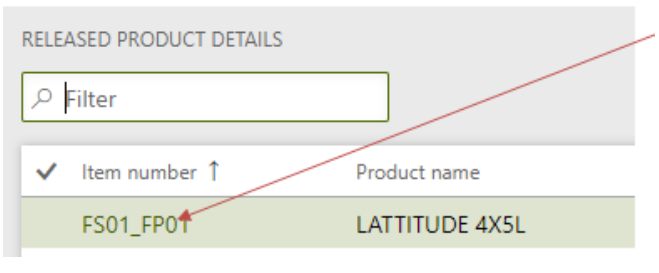
	Backlog	Month November	Month December	Month January	Month February	Month March	Month April
PERIOD START INVENTORY	25.00	25.00	750.00	600.00	100.00	100.00	105.00
PERIOD END INVENTORY	25.00	750.00	600.00	100.00	100.00	105.00	100.00
PERIOD END PEGGED INVENTORY	25.00	650.00	500.00			5.00	
PERIOD NET SUPPLY		725.00	-150.00	-500.00		5.00	-5.00
[-] DEMAND		100.00	150.00	500.00		1,250.00	5.00
FORECAST				480.00		1,250.00	5.00
SALES			150.00	20.00			
MINIMUM INVENTORY		100.00					
[-] SUPPLY		725.00				1,255.00	
[-] PURCHASE		725.00				1,255.00	
[-] PLANNED PURCHASE ORDERS		725.00				1,255.00	
NOT SUPPLY FORECAST		725.00				1,255.00	

1.2. Assign an item coverage policy to an item

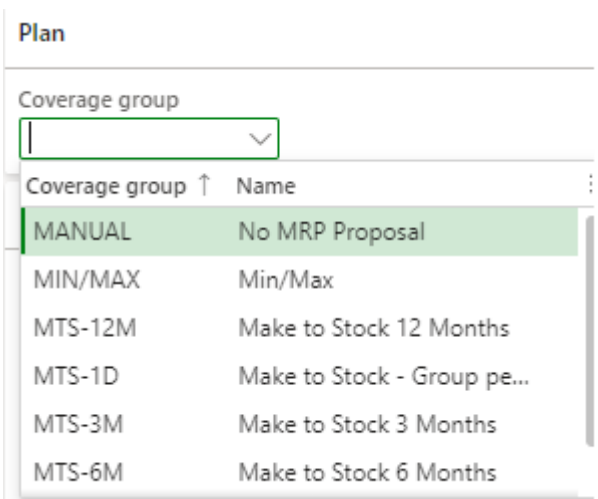
To assign an item coverage policy to an item go to the following path

Product information management > Products > Released products

Select the item you want to assign a policy to by clicking on the item number, this will take you to a new screen for this item.

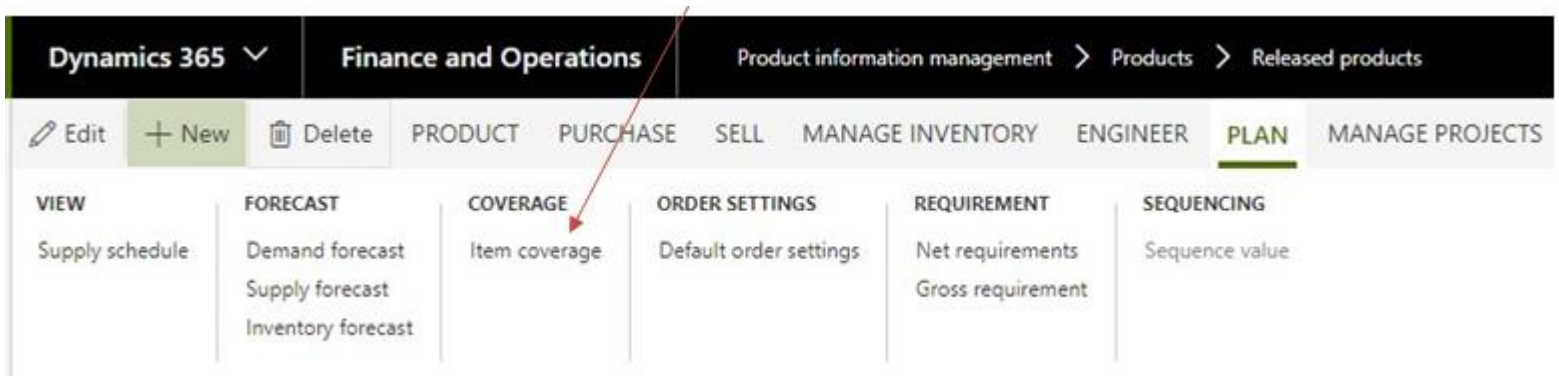


Scroll down to the 'Plan' section and from the drop down menu choose the coverage group for the safety stock policy you want to assign to this item. The coverage group works at item level but if left blank it defaults to the setting selected in the master planning parameters. Currently the default for Certis is 'Requirement' therefore you do not need to enter anything on item level if you wish to use the basic requirement policy.



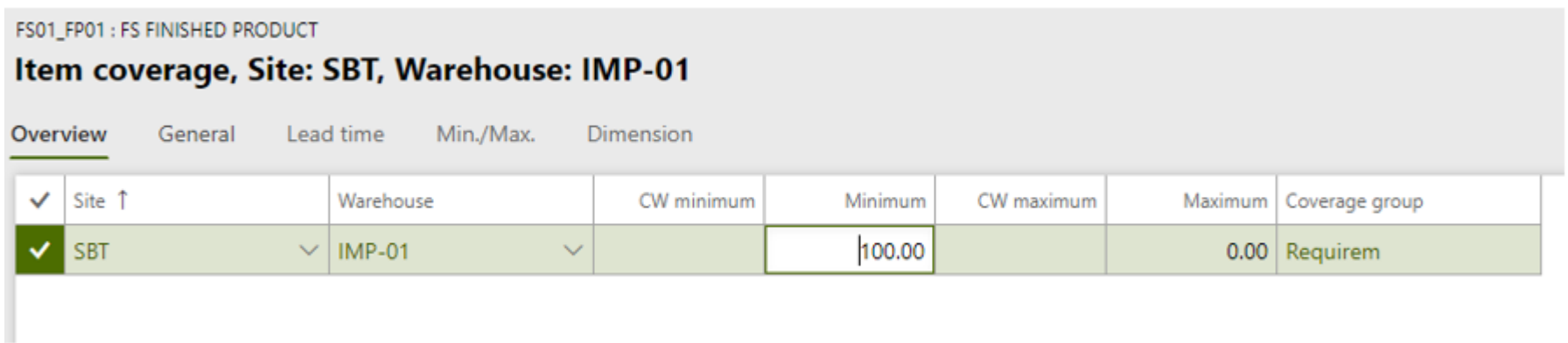
1.3. Set a minimum / maximum safety stock volume

This setting is not available for a 'Manual' item coverage policy.
To set a desired volume for safety stock select your item from the list and 'Item coverage'



Enter the minimum and/or maximum volume of the item that you want to use for your safety stock. As we do not work with warehouses on the supply schedule the warehouse dimension does not need to be selected, if you do select it, the field will default back to an empty field. Once complete select 'SAVE' at the top left of the screen.

Minimum = the quantity of safety stock you always want to carry in your inventory and when used with the Min/Max policy it is the trigger point at which replenishment will be proposed.
Maximum = the maximum quantity of safety stock you want to carry. **Note this can only be entered if the stock policy is set to Min/Max**

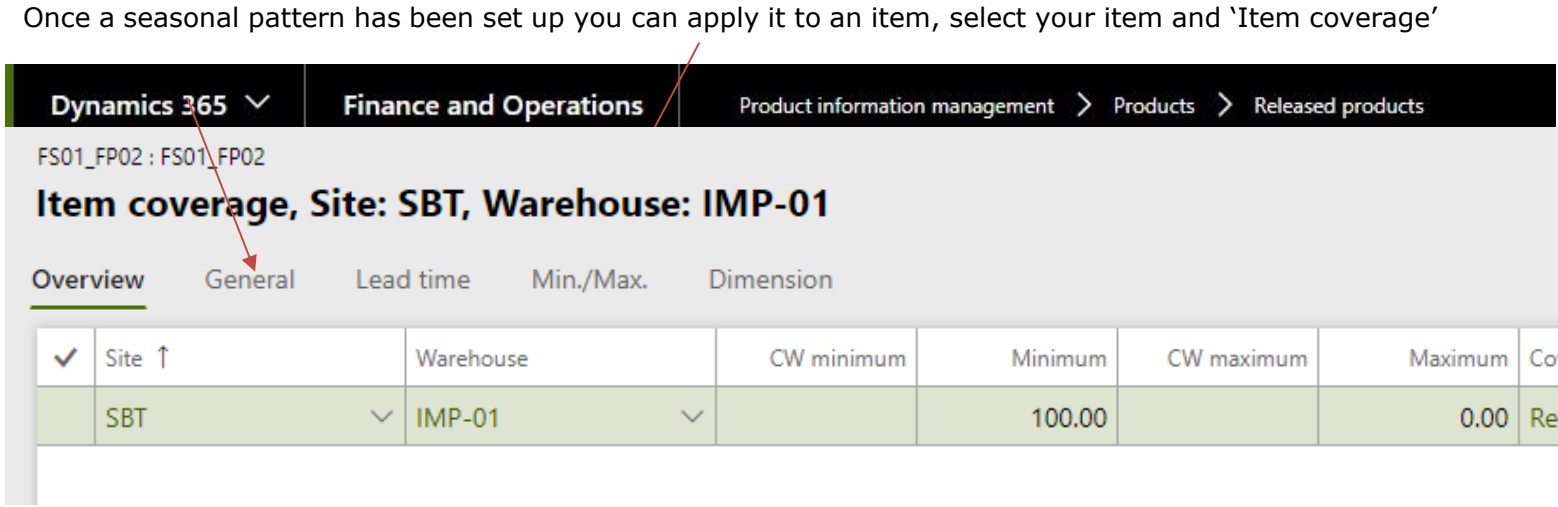


1.4. Set a seasonal safety stock factor

It is possible to set a seasonal pattern for safety stock volumes, this is done at company (branch) level. For example if you have a group of items that follow the same sales period you can set them all to follow the same pattern to increase and decrease safety stock for specific months whilst defining separate minimum volumes. Seasonal patterns can be set for 24 months and then must be updated on a rolling basis for future periods.

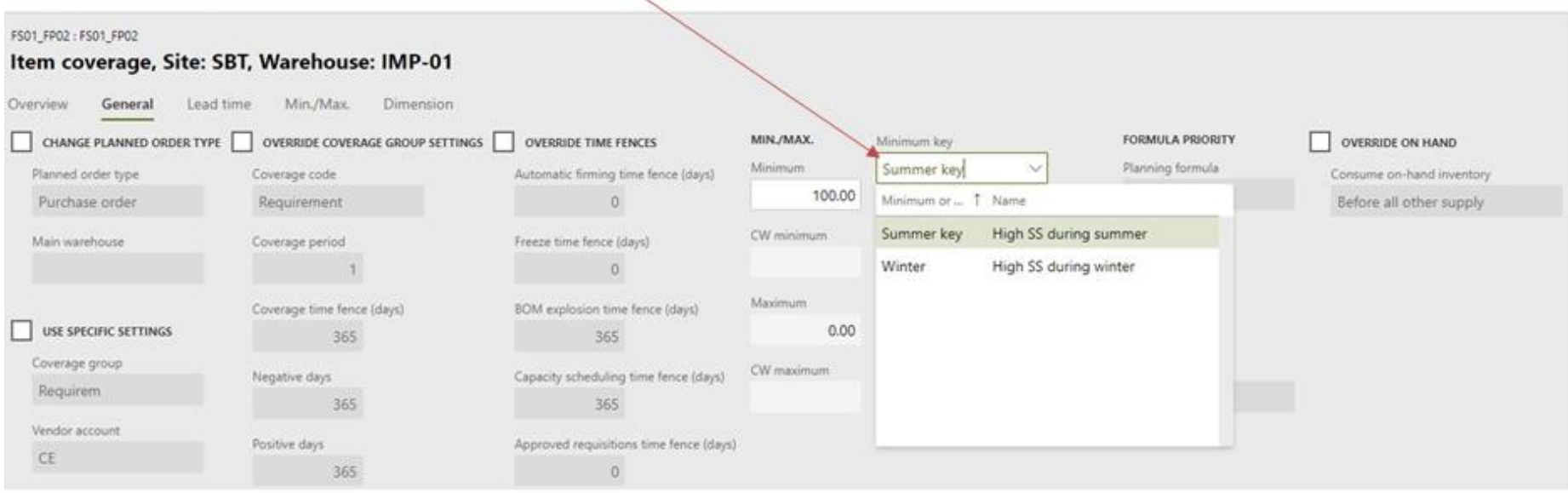
Currently there are no seasonal patterns in the system, if you wish to work in this way please contact the key users to have this set up.

Once a seasonal pattern has been set up you can apply it to an item, select your item and 'Item coverage'

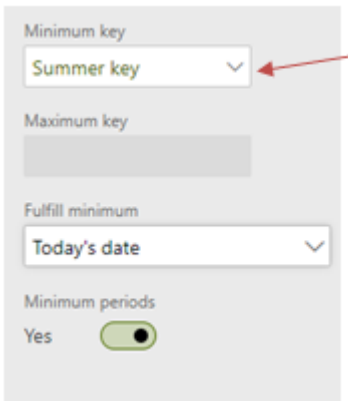


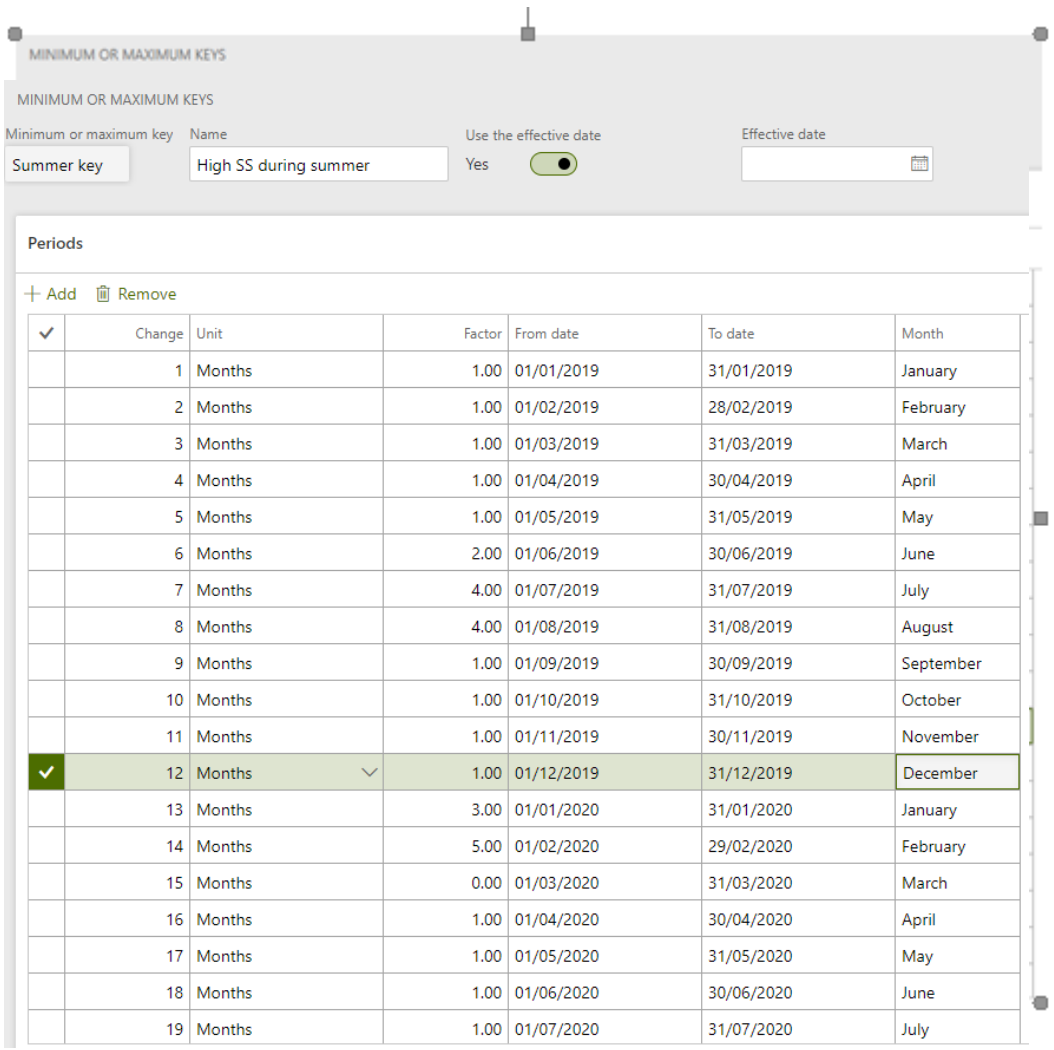
Select 'General'

Choose the pattern you want to apply in the ‘Minimum key’ drop down menu.



Always make sure that if you want to apply the pattern to the item you change the ‘Minimum periods’ to ‘Yes’. If you want to first check the details of the pattern click on the name of the’ minimum key’ which acts as a link.





	Change	Unit	Factor	From date	To date	Month
	1	Months	1.00	01/01/2019	31/01/2019	January
	2	Months	1.00	01/02/2019	28/02/2019	February
	3	Months	1.00	01/03/2019	31/03/2019	March
	4	Months	1.00	01/04/2019	30/04/2019	April
	5	Months	1.00	01/05/2019	31/05/2019	May
	6	Months	2.00	01/06/2019	30/06/2019	June
	7	Months	4.00	01/07/2019	31/07/2019	July
	8	Months	4.00	01/08/2019	31/08/2019	August
	9	Months	1.00	01/09/2019	30/09/2019	September
	10	Months	1.00	01/10/2019	31/10/2019	October
	11	Months	1.00	01/11/2019	30/11/2019	November
✓	12	Months	1.00	01/12/2019	31/12/2019	December
	13	Months	3.00	01/01/2020	31/01/2020	January
	14	Months	5.00	01/02/2020	29/02/2020	February
	15	Months	0.00	01/03/2020	31/03/2020	March
	16	Months	1.00	01/04/2020	30/04/2020	April
	17	Months	1.00	01/05/2020	31/05/2020	May
	18	Months	1.00	01/06/2020	30/06/2020	June
	19	Months	1.00	01/07/2020	31/07/2020	July

This table shows you the factor set for each month for a period of 24 months. The system will use these factors along with the minimum safety stock volume set for the item to increase or decrease the safety stock per month.

For example if the minimum safety stock volume is set to 100 and the pattern shown here is selected, the system will assume for the following months you need:

December = 100
January = 300
February = 500
March = 0

The same principle can be set for the ‘maximum key’ which will allow the defined maximum volume to fluctuate as per the chosen monthly pattern.