NAVEKSA

Installation and Setup guide

1 — Last update: 25 January 2024

NAVEKSA A/S

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1. Before you begin

Before you begin

You operate this manual by:

- Using the TOC – Table of content
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- When you hoover over a picture and see the + sign or a hand, clicking will enlarge the picture
- Using the Print subject function
- Using the Print manual function
- Using the seach bar
- Click on NAVEKSA A/S on the blue top line to switch to another manual
- Sending your feedback to NAVEKSA if you think something should be improved

Recommended background materials to explore:

- Microsoft Dynamics NAV manufacturing manuals available on Microsoft customer/partner source
- Scott Hamilton: Managing your supply chain using Dynamics NAV
- Peik Bech-Andersen: Manufacturing with Dynamics NAV

NAVEKSA solutions are all Microsoft certified applications (CfMD) working on top of Dynamics NAV version 2016 and newer, and 365 Business Central On-Premise versions; both C/AL and AL/Extension versions.

Our Cloud editions running Dynamics 365 Business Central Cloud are available on Microsoft AppSource.

Throughout this document, the following abbreviation will be used.

BC = Dynamic 365 Business Central
NAV = Dynamic NAV

BC/NAV

BC – Screenshots
BC – Functions, might not be available in NAV

2. Configuring OAUTH in AZURE AD

Configuring OAUTH in AZURE AD and Business Central Cloud

Read the document:

OAUTH konguration document

3. Introducing Installation & setup

Introducing Installation & setup

A NAVEKSA application is easy to install.

Pre-requisite is that your BC / NAV license file permits running NAVEKSA objects.

Import the BC / NAV objects (a .fob file) and compile the imported objects.

And if you also need to install the ShopFloor OPERATOR client, you must run the Windows installer .exe file on each individual PC who should have this client installed.

On Premise AL (BC versions from 15):
A NAVEKSA application is easy to install.

Pre-requisite is that your BC / NAV license file permits running NAVEKSA Apps.

Publish and Install the NAVEKSA ShopFloor App like any other App.

And if you also need to install the ShopFloor OPERATOR client, you must run the Windows installer .exe file on each individual PC who should have this client installed.

Cloud SaaS:
A NAVEKSA application is easy to install.

Install the NAVEKSA ShopFloor App from Microsoft AppSource like any other App.

And if you also need to install the ShopFloor OPERATOR client, you must run the Windows installer .exe file on each individual PC who should have this client installed.

All versions
During initial installation a default setup is created for various functions, so you can run the application right away.

After installation you need to re-tailor the NAVEKSA application(s) to adopt the application to your specific use.

A number of questions need to be answered to configure how the systems shall operate.

4. System requirements for running NAVEKSA solutions

System requirements for running NAVEKSA solutions

NAVEKSA solutions are manufacturing add-on solutions for Microsoft Dynamics NAV and Dynamics 365 Business Central -On-premise C/AL or AL or Cloud via AppSource.

BC / NAV license must be an Extended version running on a perpetual or subscription basis

The solutions consist of objects loaded and compiled into BC / NAV, and a .NET client program if the ShopFloor Operator solution is to be installed.

This client runs against the BC / NAV database via BC / NAV webservices.

System requirements (minimum or higher/newer) for running NAVEKSA solutions together with BC / NAV OnPremise:

All cumulative update packs are supported for each version.

Primary languages supported: Danish, German and English.

Update the customer BC / NAV license file

As a NAVEKSA solution is a Microsoft certified solution (CfMD), running the solutions require that the BC / NAV license file contain the permissions to access and run a NAVEKSA application.

Requirements for the .NET client computer (for running the ShopFloor Operator client)

> The .NET client is a BC / NAV application which is build as an extension, using SOAP services to communicate with our Windows application. Secondly a .NET WPF application runs via BC / NAV web service. The current build is on framework 4.7.2.

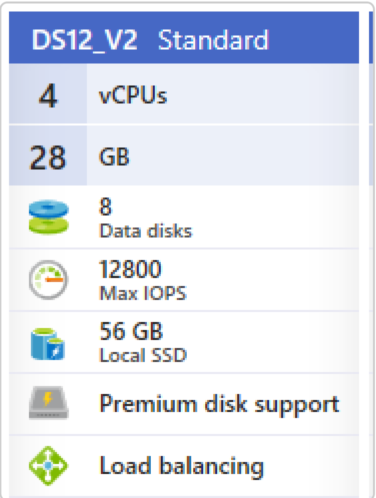
- The client can be run only on a full Windows operating system, Windows 10 or newer.
- Required screen resolution is 1920×1080.
- If you intend to run the client on a tablet we recommend at least a screen size of minimum at least 11” or even bigger.
- Running of the client requires Microsoft .NET Framework 4.6.1 or newer to be installed on the computer.
- Web access is necessary to run the client, as the communication with BC / NAV occurs via webservices.
- The client can only be run via a Windows user, that at the same time is user in BC / NAV, and has the rights to run the objects that have access to BC / NAV from the client (Limited user)
- If it shall be possible to show drawings from a network drive, it is required that the concerned

Windows user that has been set up in the configuration files, has reading access to the file in question that has been specified in the ShopFloor setup.

Requirements on server hardware CPU, RAM and disks, shall correspond to the AZURE requirements. See next item.

Running in a Microsoft AZURE environment

For running on Microsoft Azure with especially the ShopFloor client, we recommend the DSL12_V2 Standard AZURE server specification or higher:



Printing directly from the ShopFloor client

If you want to print directly from the client, it is required that the windows user that has been set up in the configuration file, has got write access to the concerned directory that has been set up in the ShopFloor setup, as well as setup and access to a printer on the concerned computer.

Authentication mode

The authentication mode that is setup in the configuration file, has to correspond to the Authentication mode in the BC / NAV service. A fixed setup can not be specified for this point, as it is administrated by the network administrator. Please read more clicking here.

Operator terminals

The NAVEKSA ShopFloor .NET client can be run on a PC or tablet with a full Windows operating system. The Windows version must be at least Windows 10 or newer.
If you intend to run the client on a tablet we recommend at least a screen size of minimum at least 11” or even bigger.

Server – Users

Naveksa recommends to create a dedicated service tier for the ShopFloor web service, as well as dedicated user which can be used for the ShopFloor configuration.

Warnings – Performance

In most cases the ShopFloor application handles thousands of order lines transactions.

According to customer installation experiences performance wise (display response time) this in itself is no problem.

To get the best performance out of the ShopFloor application, there might be cases where you need to optimize your IT infrastructure:

Please observe if you use the application with advanced drawing/document retrieval, it may decrease performance considerably. This is normally due to the fact that drawing materials often have to be retrieved on different servers apart from the BC / NAV servers, and normally placed in deep folder structures, and normally in extensive drawing catalogues itself. You must observe that thousands of files in the same folder slows Windows down, and thereby impacts performance.

Also be aware that extensive use of customer fields including heavy calculations may impact performance. We recommend you optimize your code and do not have response times higher than 1 ms as customer fields are retrieved per record.

Other factors such as missing SQL server optimization and normal server house cleaning routines in high volume data processing environments can impact performance.

5. Downloading the applications for installation

Downloading the applications

NAVEKSA installation package:

The applications can be downloaded from a Dropbox folder. Please contact NAVEKSA writing a short e-mail to us with a clear description of the NAV /365 BC version you want.

Write to this e-mail address: info@naveksa.com to get the most current set of solutions.

Follow the path for the BC / NAV version you want.

1. The BC / NAV .fob contains a .fob file and a menu .fob file for OnPremise installations.

2. SHOPFLOOR .NET client

The NAVEKSA ShopFloor application includes a .NET Client (.msi or .exe package), which has to be installed running the Windows installer at all terminals from which the client will be run.

The windows components, on which the client is dependent on, are included in the installer.

6. Installation procedure – Cloud (SaaS) user setup

Installation procedure – Cloud (SaaS) Team member user setup

! Microsofts policy is that the application need to run with user impersonation authentication, thus requiring a limited user license per ShopFloor client.

To be able to run the ShopFloor Operator client you must setup define users and permissions properly.

You must create the user(s) as you would normally in Business central.
Then you add the "NAVEKSA SFS PSET" permission set to the user.

You must then run the OAuth setup for the application as described here

7. Installation of applications

Installation of applications

7.1. Installation procedure

Dynamics 365 Business Central / Dynamics NAV On-Premise objects C/AL objects

> ! If you have not already got a download link, then ask us for it now.

Please send a mail to: info@naveksa.com with a clear description of the BC / NAV version you want to download for.

> ! This procedure is not applicable if running Business Central CLOUD setup, or 365 Business Central On-Premise AL/Extension version.

Objects

1. Update the Dynamics NAV / Dynamics 365 Business Central licence file with NAVEKSA apps in order to be able to run the NAVEKSA application.

2. Download the installation files.

3. Unzip the file to a folder.

4. Open the folder with a file explorer.

5. Famliliarize yourself the the content in this installation and ShopFloor Client setup manual”. Read this manual clicking here

6. Import ”NAVEKSA Solution.fob”. Note: You must run this import with administrator privileges.

> ! If you use Lessor TA, import “Lessor CU 6170507.fob” and replace codeunit 6170507.

7. Import” NAVEKSA Menu.fob”. Note: You must run this import with administrator privileges.

> ! Please observe that NAVEKSA is using menu item 1055. If this one is already in use you must rename it.

8. Compile the objects (NAVEKSA*) and after that – compile ALL menu items together.

9. Create a new separate server instance for running the web-services if you are going to use ShopFloor

10. If you are going to install NAVEKSA ShopFloor Please continue at:

11. Open BC / NAV, the menu item NAVEKSA/Setup/First time setup and the run each of the First time menu items included therein. Read about the first time setup clicking here

7.2. Installation procedure – Apps

Installation procedure – Apps

1. Download the apps from the dropbox folder
2. Open Powershell ISE as an administrator
3. Publish, sync and install the app as per standard BC – example script is in the dropbox folder.
4. Open Business Central and run the first time setup if it is an initial installation.

7.3. Installation procedure – client – 365 Business Central Cloud

Installation procedure – client – 365 Business Central Cloud

In order to get the full benefit of NAVEKSA ShopFloor you have to install our ShopFloor MES Client for the operators. This is a stand alone Windows Executable program.

Contact NAVEKSA for download files. Send an e-mail to info@naveksa.com

For installation instructions please visit our online manual, start reading this article and proceed from there: Installation instructions

In order for NAVEKA ShopFloor to work properly valid manufacturing data in Business Central is a prerequisite. The NAVEKSA applications also have a lot of configurable behavior, which should be setup according to your/your customers specific needs. To get started with ShopFloor configuration begin reading our online manual here:Setup instructions

7.4. ShopFloor MES client objects and client configuration

ShopFloor MES client objects and client configuration

> In order for ShopFloor to work in an on-premise installation, web services has to be installed and configured,
> Also a Windows user with web services access must be created.
> Please verify that you can connect to a BC / NAV SOAP web services page using Windows user credentials.
> When this works, you are ready to install the ShopFloor client – the .NET client.

Seperate from the ShopFloor planning system, the system consists of a ShopFloor execution .NET component.

The NAVEKSA BC / NAV part has to be installed as Web Services.

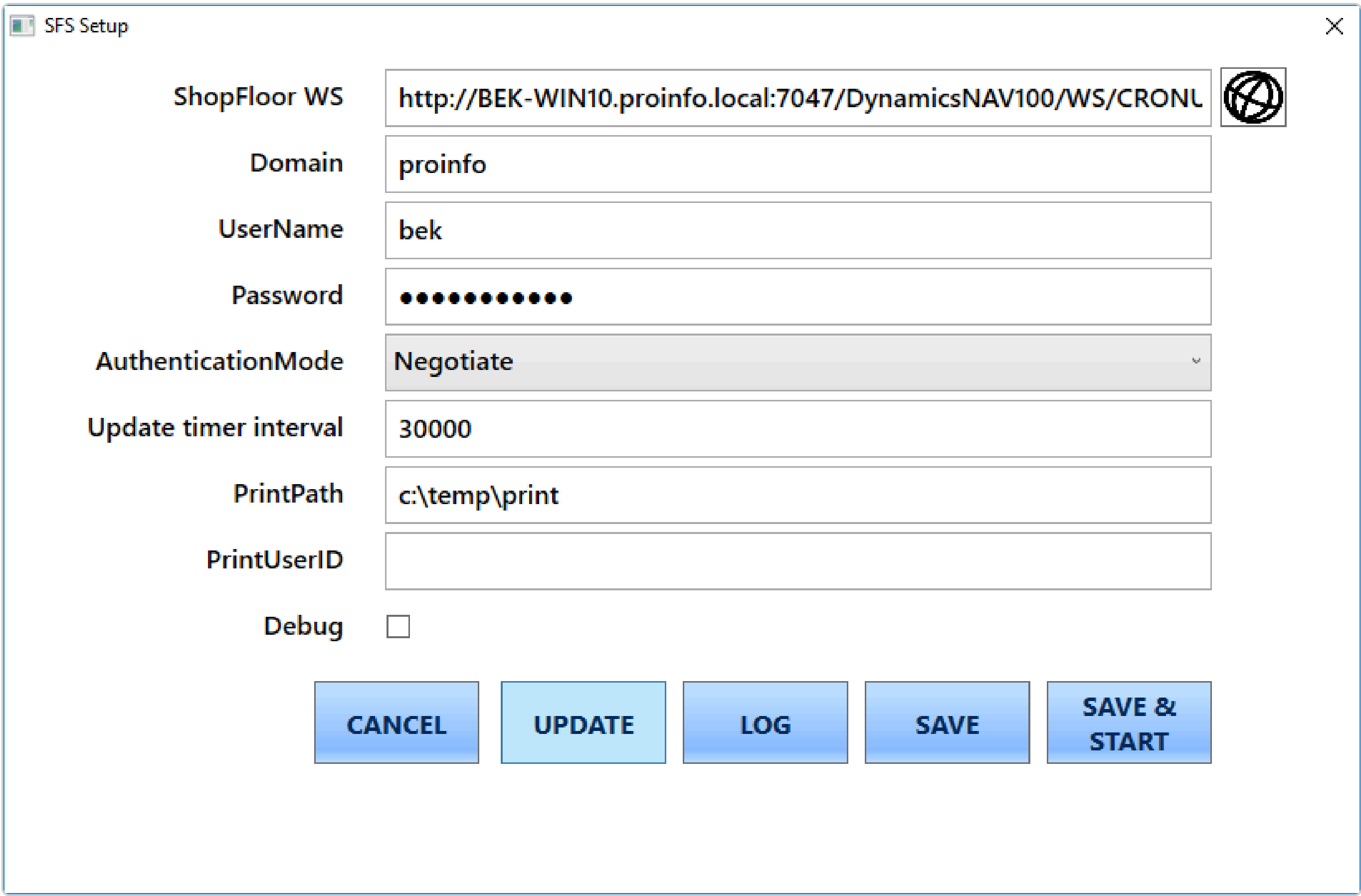
1. Open the folder ”NAVEKSA SFS CLIENT SETUP”.

2. Run the file ”NAVEKSA SFS.msi”. We recommend installing the program on a network location and hereafter to insert the shortcut for this on the respective computers, which have to run the client. Please be aware that “Silent print” is desired, then this setup will only be appropriate if you have one common printer for all print. (Please read the section “Setup”).

3. Click ”Next” multiple times, until the program is installed.

4. After having finished the installation, the program must be configured to connect to the NAV Web Service.

5. Run “SFSSetup.exe” to configure the Client.



6. In the field “Shopfloor WS”, please enter the URL to the BC / NAV web service (you can look this up in NAV on the web service page).

7. In the field “Domain” please enter the domain name if running on a Domain Controller. Otherwise enter the local computer name. In some cases, which of several yet needs to be identified, it is sometimes necessary to leave the field blank. This may be the case if the client is installed on the DC or SQL server.

> If you are configuring for the cloud you must leave this value blank.

8. In the field ”Username” please enter a valid Windows and password user with the necessary Microsoft Dynamics rights (Rights to use the web service). You can test the user rights by opening the URL in a browser and entering the user credentials.

> ! Most optimal the web services user is setup with a “No expiration” password. However if the user password is changed, it must be changed here as well. Otherwise the operator client will not run with an error message 401 – Not authorized…

> If configuring for the cloud you have to generate a “Web Service Access Key” for the desired user in Business Central. Only enter the basic part of the user name. For instance if the username is “user@naveksa.com” only enter “user”.

9. In the field ”Password”, please enter the password of the user account. Note this password will be encrypted using Microsoft standard encryption.

> If configuring for the cloud use the “Web service Access Key” for the user.

10. In the field “AuthenticationMode” please choose the authentication mode according to your Microsoft environment. If you have chosen to use NTLM when setting up your Microsoft Dynamics NAV / Dynamics 365 Business Centralision instance, then choose the “NTLM” value. If you are running the web service as SSL, perhaps you have to choose “Digest”. The default is “Negotiate”

> If configuring for the cloud use “Basic” Authentication.

11. Update Timer Interval is the timer interval value in miliseconds. In regular use the recommended interval is between 3 and 5 minutes, so that is 180000 – 300000 miliseconds. If you want the ShopFloor client to update at a more regular interval, please decrease this value. Be aware that each update uses server resources, so be aware that the interval should not be too low.

> ! If you want to direct print from a shopfloor client to a specific user and printer you must setup this up on each individual work station you have to set the username for each ShopFloor. See the next 2 items.

12. Print Path. Path to local print resource folder when using silent print. The ShopFloor windows user must have write access to this folder.

> ! This is a prerequisite in a cloud setup.

13. Print User ID. Dynamics NAV / Dynamics 365 Business Central user with printer and report configuration this ShopFloor client uses when using silent print.

> ! This is not possible in a cloud setup

14. Press “Save and Start” to test whether the SHOPFLOOR Client is configured properly.

15. Please be aware that it can be necessary to experiment with the different AuthenticationMode settings, if you are not 100% sure of your Microsoft environment security setttings.

7.5. Troubleshooting

Troubleshooting

- Should you have any problems by constructing the name of the web service, you can look it up in the event log after Error messages.
- If you cannot access your web service in a browser with the user credentials used for the ShopFloor Client Setup, please check the web service configuration and availability, before proceeding with the ShopFloor Setup.
- You receive a message “A call to System.IO.DirectoryInfo.GetFile failed” with this message: “The network name cannot be found”. If you get this error, it’s probably because you have configured the system to use a shared folder for drawings, but it is not a valid UNC path for the client computer or client computer the user is unable to access the shared folder. See more in the section “Drawings” in ShopFloor main setup.

You receive a message when trying to end a job “End-time cannot be in the future”. Please check if the NAV server runs local time instead of UTC time. It should be local time.
The error message could also be derived from the answer to the setup question “Block output if end time is in the future”. Please check this setting.

If all else fails, please contact NAVEKSA.

Submit a question to our helpdesk by clicking here

Other FAQ’s answers can be found clicking here “

For example:

Server time zone
The ending time cannot be before the starting time
The setup and use of up to 10 customer specific data fields in SHOPFLOOR
Client cannot connect to the BC / NAV web service – what to do?
BC / NAV web service as SSL

7.6. Upgrade

Upgrade

7.6.1. Upgrade to a newer version

Upgrade to a newer version OnPremise C/AL

As general the NAVEKSA table data are not changed in new versions.

As a consequence no specific upgrade is required. All you need to do is to install the new *.fob objects.

Exceptions in 8.08.02 in table 6170496 2 fields (3,4) are changed from text to code.- Please Force change when compiling.

Upgrade to a newer version OnPremise AL
As general the NAVEKSA table data are not changed in new versions.
As a consequence no specific upgrade is required. All you need to do is to install and upgrade the new App like any other App.

Upgrade to a newer version Clous SaaS
Upgrade is performed automatically from MS AppSource by Microsoft.

7.6.2. Upgrade the ShopFloor .NET client to a newer version

Upgrade the ShopFloor .NET client to a newer version

We have 2 different ways to update the ShopFloor Operator Client.

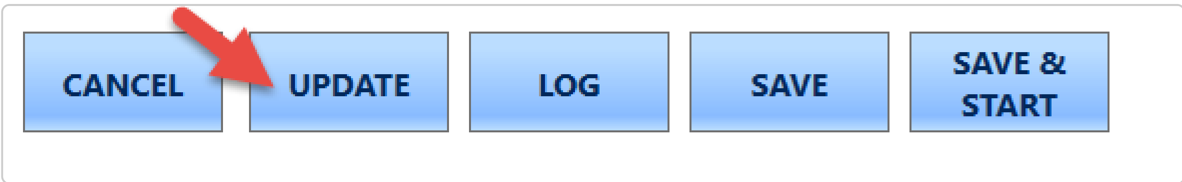
1) Upgrade using ShopFloor Setup.

Create a network folder where you place the latest version of the ShopFloor client files. Remember to either configure the program or remove the .config files, so that you do not overwrite local configurations with the default.

In BC / NAV navigate to Departments -> NAVEKSA -> ShopFloor -> ShopFloor Setup.

In the section “General” field “Path for update directory:” fill in the UNC path to the location of the network folder with the NAVEKSA ShopFloor program files.

Whenever an operator tries to run the NAVEKSA ShopFloor Client and the NAV object version is newer, the operator will receive a message telling that the client is out of date. He will then be asked to run ShopFloor Setup where there is an “Update” button. This will overwrite the local files with the files from the network location. !Be aware that this requires local administrator rights.



2) Upgrade using the installer

Use the Setup.exe to uninstall the local NAVEKSA ShopFloor client and run it again to install the NAVEKSA ShopFloor client. !Be aware that this will remove the local configuration file, so back it up beforehand and restore it manually after the update.

7.6.3. Upgrade tools from NAV with NAVEKSA solutions to BC

NAVEKSA-modules. Data-migration from C/AL to BC-AL

The migration-tool consists of two elements:

1. An export-function to be installed in and executed from the old C/AL-development environment
2. A standard function in the NAVEKSA BC-Apps to import the data into BC.

Make sure, that you execute both elements running the same language on the systems. Otherwise the migration will not work !

First element includes a fob-file (NAVEKSA MigrationTool NAV2BC.fob) with two objects:
A report (6170500) and a codeunit (6170515). You must run the report which then executes the codeunit.
The report is not implemented in the NAV/BC menu-system, but needs to be executed from the development environment.

When you run the report, you must select which App(s) you want to have data exported for.
You can select one or more Apps:

In addition you can select if you want data in your old database deleted after export.
Please observe: This is only relevant, if you do a full data-conversion from NAV to BC and want to remove
the NAVEKSA data before doing the conversion.

Make sure you make a full database backup before deleting any data in case you might need them later.
Deletion of old data is not needed for the migration-tool to work.

Please observe, that after deletion you can of course not run the export again.
Make sure to test everything in full scale before deleting any data.

When you run the export, the system will ask you where to save the data.
Select a place in your file-system for the data-file.

If you have selected to export data for more than one App, the system will prompt you for saving each individual data-file.

Migration .fob file

7.7. Un-install

Un-install

7.7.1. Un-install the application

Un-install application OnPremise C/AL

As the NAVEKSA solution does not modify any standard BC / NAV objects, the un-install process can be made by deleting the NAVEKSA objects (Object range 6170xxx)

Un-install application OnPremise AL / Cloud SaaS
Use the standard Extension uninstall facility.

7.7.2. Un-install the ShopFloor .NET client

Un-install the ShopFloor .NET client

Go to Add/remove programs/functions on the PC and “Remove NAVEKSA SHOPFLOOR”

7.8. Back up and restore procedures

Back up and restore procedures

Standard BC / NAV back up and restore procedures is to be followed.

8. Application setup

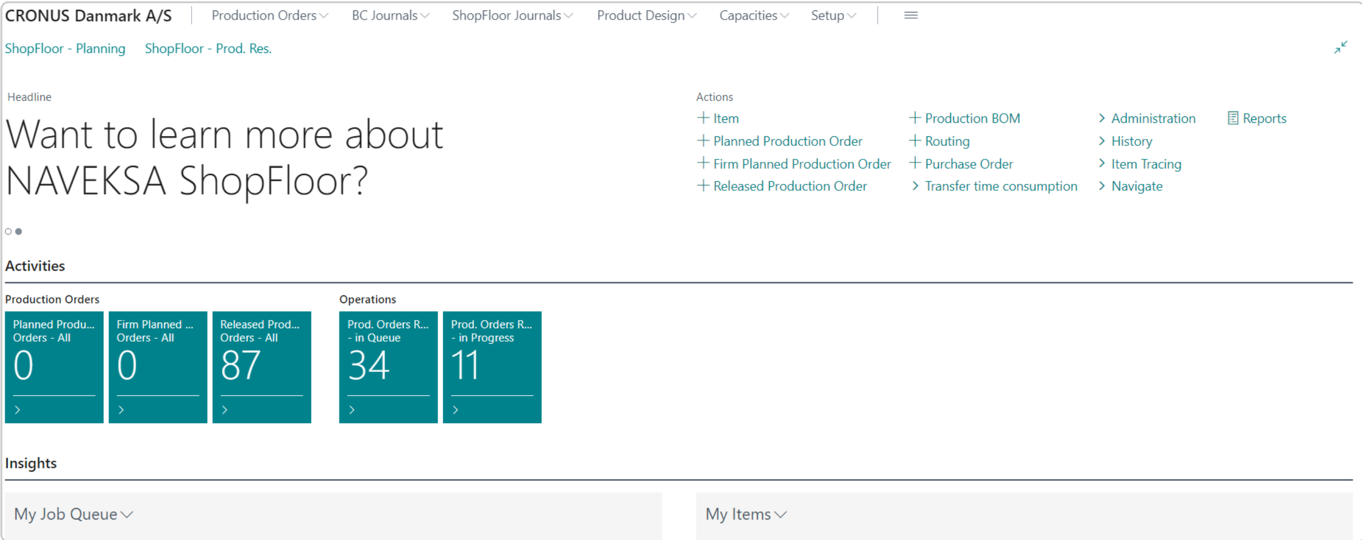
8.1. Setting up ShopFloor

Setting up ShopFloor

Setting up ShopFloor comprises more menu options you will find below.

8.1.1. The NAVEKSA setup menu

The NAVEKSA setup menus



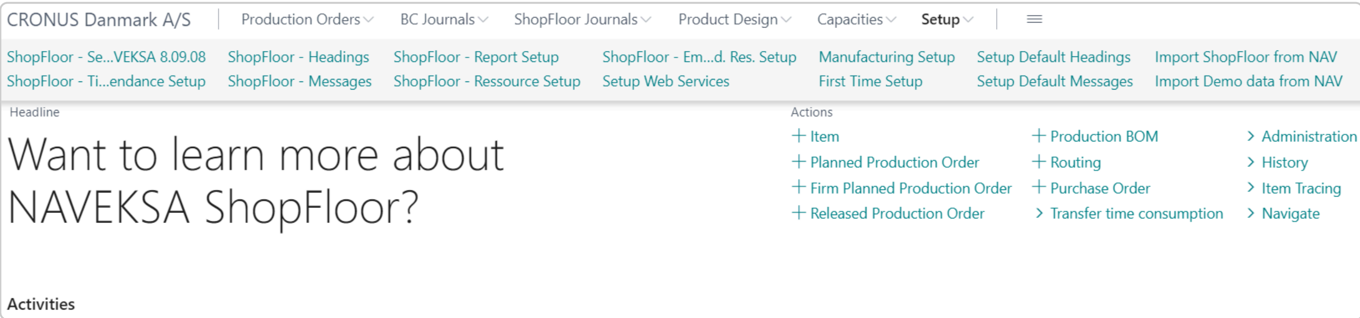
8.1.2. Setting up the first time

Setting up the first time

A NAVEKSA solution is delivered with a default initial setup, so it is ready to run.

But in addition to this, you must run the first time setup menu items to initiate a few things. Navigate to Setup on the main menu, and run initiate below

- First Time Setup
- Setup Web Service
- Setup Default Headings
- Setup Default Messages



8.1.3. Printed documents from the ShopFloor client

Printed documents from the ShopFloor client

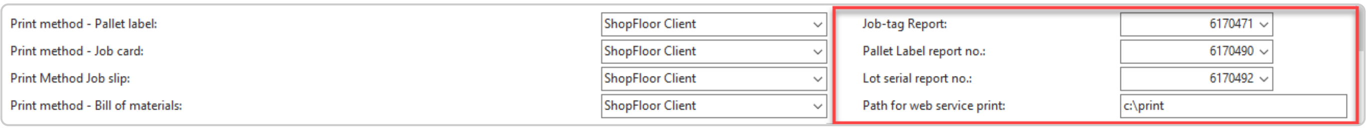
Various reports can be printed when working off the ShopFloor Operator client.

Also printing can be directed from a specific user terminal to a specific user printer. You can read about how to do this here.

! Please notice that the reports delivered as part of the ShopFloor standard solution are just samples. Samples you can modify for your customers specific requirements

To setup reports to be printed you simply choose an existing BC / NAV report to be printed by assigning the report number in the ShopFloor setup.

ShopFloor setup – assigning reports

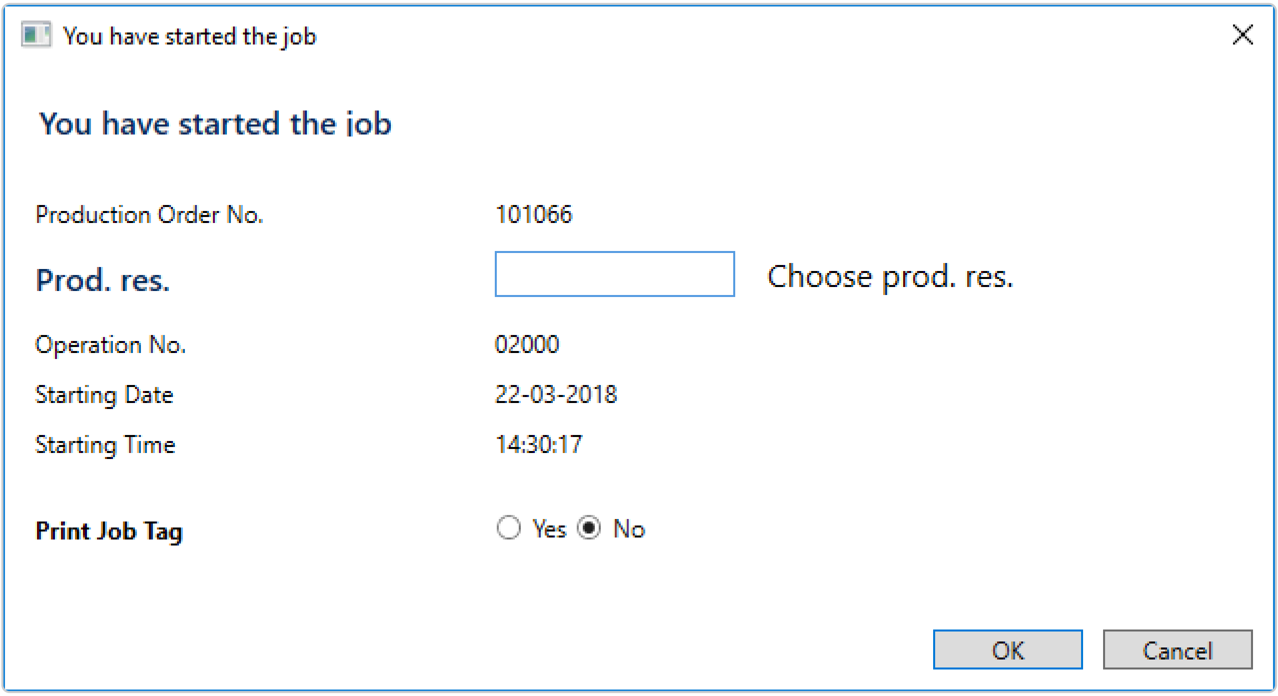


Print method - Pallet label:	ShopFloor Client	Job-tag Report:	6170471
Print method - Job card:	ShopFloor Client	Pallet Label report no.:	6170490
Print Method Job slip:	ShopFloor Client	Lot serial report no.:	6170492
Print method - Bill of materials:	ShopFloor Client	Path for web service print:	c:\print

Reports available:

A job slip can be printed when a job is started to remind the operator on what he is working on. This is report no 6170471

Request screen:



Job ticket printout sample:

CRONUS Danmark A/S Job-tag

Prod. Order No.	101066	
Item No.	FX-49	Færdig vare
Operation No.	02000	Daniel Goldschmidt
Starting Time		

A routing sheet can be printed from the display routing display.

Sample:

CRONUS Danmark A/S

februar 20, 2018
Page 1
LAPTOP-6I4AHTVP\BEK

Status	Firm Planned
No.	1010005
Description	Cykel
Source No.	1000
Quantity	16
Due Date	1/31/2018

Operation No.	Type	No.	Description	Ending Date	Setup Time	Run Time	Quantity
10	Work Center	100	Fælg med dæk	1/24/2018	110	12	________
20	Machine Center	120	Kædesamling	1/25/2018	15	15	________
30	Machine Center	130	Endelig samling	1/30/2018	10	20	________
40	Machine Center	110	Kontrol	1/30/2018	10	8	________

A material picking list can be printed from the show BOM screen. Standard BC / NAV material picking list setup.

Material picking list printout sample:

Prod.ordre - mat.rekvisition

CRONUS Danmark A/S

januar 23, 2018
Side 1
LAPTOP-6I4AHTVP\BEK

Produktionsordre:Status: Frigivet, Nummer: 101005

Frigivet **101005** **NAV demo item**
Kildenr. **FX-42**
Antal **5**

Varenr.	Beskrivelse	Antal pr.	Enhedskode	Restantal	Spildpct.	Forfaldsdato	Lokationskode
TESTING12	Fabricated item	1	STK	5	0	02/12/18	
MV2529	Fabricated item	1	STK	5	0	02/12/18	
3466	Purchased component	1	STK	5	0	02/12/18	

A job card can be printed for each individual routing operations from the Show Route screen. Standard NAV job card list setup.

Job card printout sample:

Prod.ordre - jobkort

CRONUS Danmark A/S

januar 23, 2018
Side 1
LAPTOP-6I4AHTVP\BEK

Produktionsordre:Status: Frigivet, Nummer: 1011003

Prod.ordrenr.	1011003	Cykel	Starttidspunkt	10:11:00 AM
Rutenr.	1000		Startdato	01/25/18
Varenr.	1000		Sluttidspunkt	3:13:00 PM
			Slutdato	01/25/18
Operationsnr.	10			
Type	Arbejdscenter			
Nummer	100			

Forkalkuleret tid

Nødvendig tid	302	MINUTTER

Afgang

Afgang	**Spild**	**Dato**	**Efter**
________	________	________	________

A pallet label can be printed from the ShopFloor buttons whenever it is wanted. Report no: 6170490

Request button at the operator terminal:

Pallet label printout sample:

PO: 101005	Antal:
Varenummer: FX-42	
Dato: 01/23/18	Operation: 01000 Samleafdeling
Medarbejder:	

A pallet label with lot/serial number can be printed in connection with assigning lot/serial numbers. Report no: 6170492

Pallet label with lot/serial info printout sample:

PO: 101008	Antal:
Varenummer: MV2529	
Dato: 01/23/18	Operation: 02000 Kædesamling
Medarbejder:	
Lotnr.	LOT0007
Serienr.	

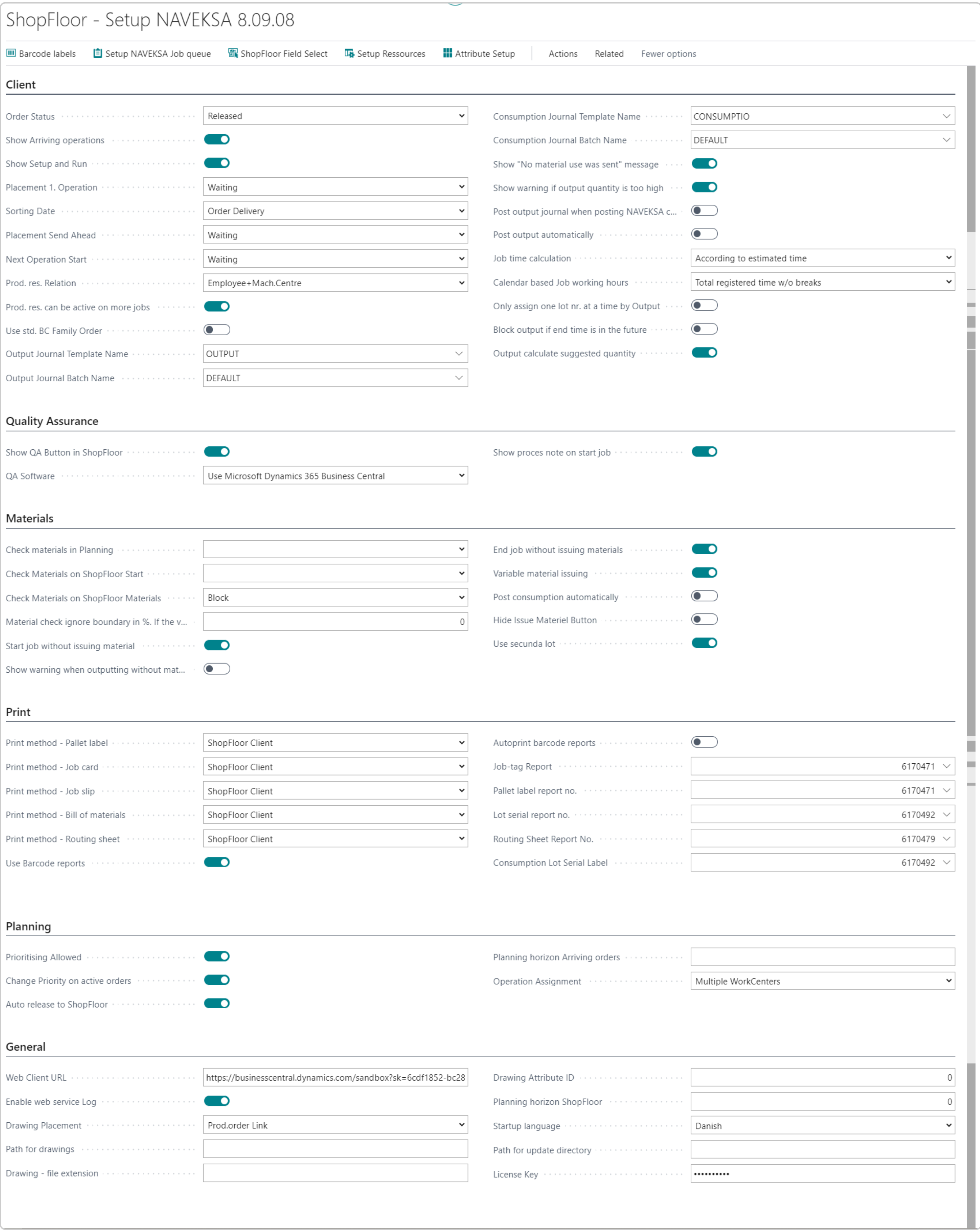
8.1.4. ShopFloor Main setup

ShopFloor main setup

The ShopFloor main setup consists of several run parameters to be adjusted.

> ! Whenever a parameter or setting is changed you must always close the ShopFloor client if running, and start it again to reflect any new settings.

Logically these questions have been put into 6 different sections: The Client, Quality control, Material, Print, Planning and General.



The Client section

Order status

Select what orders you want to work on and see in ShopFloor planning:

- Released,
- Released + Firm planned
- Released + Firm planned + Planned

Show Arriving Operations

If this box has been check marked, the order stack “Arriving” is shown on the operator SHOPFLOOR screen, too.

If the box has not been check marked, only “Processing” and “Queuing” operations are shown as default.

Note: All 3 order stacks are always shown on the planning screen.

Show Setup and Run Times

If this box is check marked, for each order stack – the remaining processing (Queuing and Future orders), the time left, is shown for respectively setup and labor.

The times shown are the accumulated value of the order routings,which can be seen on the screens.

Placement of the First Operation

When a production order is released, this choice determines, whether the first production order routing operation on this route should be placed in the order stack

- Queuing
- Future Orders.

Sorting Date

Sorting date) specifies how the sequence of the order stack will be.

It is possible to choose the sequence based on one of 4 criteria:

- Start date of the production order.
- Start date of the production order routing operation step.
- Due date for production order routing operation step.
- Due date for the production order.

Placement Send-Ahead
The choice in this box determines (if you are using NAV / BC send-ahead) in which order stack send-ahead
operations have to be placed.
Either it will be placed in the “PROCESSING” stack for next subsequent routing operation or in the “QUEUING” stack for the subsequent operation.

Next Operation Start

When reporting an operation as finished, this check mark determines, if the subsequent order routing operation should be moved to

- Processing (Running)
- Waiting (Ready)
- Arriving

You may say that at the completion of an order routing step, considers the following operation to be moved and ready for processing at the next routing step.
Or you may say that completion of a production routing operation does not automatically launch the subsequent order operation status “Queuing”, but that this status changes from “Queuing” to “Processing” must be initiated by the operator.

Production Resource Relation

You must specify which resources can be active on a job:

- User-id
- Employee
- Resource
- Machine center
- Employee + resource
- Emplyoee + machine center

When starting a job and ending a job, the employee/machine or resource must be identified.

Production resource can be active on more jobs

- Yes
- No

Use standard BC / NAV family orders

- Yes
- No

Output Journal Template Name

This field specifies the name of the output journal type to be used for job transactions. Look-up is available to access the BC / NAV defined journal types.

Output Journal Batch Name

This field specifies the name of the output journal name to be used for job transactions. Look-up is available to access the BC / NAV defined journal names.

Consumption Journal Template Name

This field specifies the name of the consumption journal type to be used for job transactions. Look-up is available to access the BC / NAV defined journal types.

Consumption Journal Batch Name

This field specifies the name of the consumption journal name to be used for job transactions. Look-up is available to access the BC / NAV defined journal names.

Show “No material was send” message

If you end a job and materials have not been issued, a warning message is send to the display.

Show warning if Output quantity is too high

If this box is highlighted, a warning will appear, if you try to report a number of items consumed that exceeds the expected number, according to the production order line.

Post output journal when posting when posting NAVEKSA capacity ledger entries

Enabling this function will automatically transfer ShopFloor transactions to the BC / NAV output journal.
Codeunit 6170493, ShopFloor – Automatic Post shall be run via a BC / NAV JobScheduler to make the automation work.
A piece of advice: Normally new installations run the posting procedures manually a month or 2 until people have learned the system, and thus provide error free transactions. And then you automate.

Post output automatically

Enabling this function will automatically post the output journal.
Codeunit 6170493, ShopFloor – Automatic Post shall be run via a BC / NAV JobScheduler to make the automation work.
A piece of advice: Normally new installations run the posting procedures manually a month or 2 until people have learned the system, and thus provide error free transactions. And then you automate.

Job time calculations

- According to estimated time
- According to estimated quantity

[Click here to read more about distribution methods]

Calendar based working hours

In this field you tell the system, if the calculation of actual operation time shall be based on the BC / NAV production calendar.
3 options are available:

- Total work hours
- Total works deducted breaks
- Production calendar work time deducted breaks

Assign just one single Lot Number at a time at Output

If this field is highlighted, just one lot number is assigned per production order line. The number will be assigned in advance.

Block Output, if the end date is in the Future

If this field is highlighted, the operator can report an output later on, than at the time being. To be used when manual ending time is active on the resource.

Output calculate suggested quantity

If active it will give you a suggested output quantity

Quality Assurance

Show QA button in ShopFloor

Turn this on to show a QA function button on the execution client

QA software

Select what QC reporting software you will be using.

- Use Microsoft Dynamics 365 Business Central
- Use Single File instruction

Show proces note on Start job

If active an aprocess note exists for the order operation it will show up be default when starting this order operation.

The Materials section

Check of Material Availability when Planning

If this selection has been activated, a material availability check will be made, when changing the priority upwards for a production order.

Values to choose from:

Blank = No check

Confirm = A message is send if shortages
Block = Priority cannot be changed if shortages exist

Check materials in ShopFloor start

Values to choose from:

Blank = No check
Confirm = A message is send if shortages
Block = An order cannot be started if shortages exist.

Check materials on ShopFloor materials
Values to choose from:
Blank = No check
Confirm = A message is send if shortages
Block = Materials can not be issued if shortages exist.

Material check ignore boundary in %.
When operators start putting small weird percentages as material waste or adding components with eg 0.001 pcs, it is easy for the operator to correct if there are a number of components they often use instead of add and look for them.
But in order for the material issue button not to be dark blue all the time, there is a boundary, so you can write 0.01, and then ignore the logic components with the lower limit value in the remaining amount.

Start job without issuing materials

Shall it be possible to start a job with component shortages?

Show warning when outputting without materials issued

A warning will be shown, when no materials are issued

End job without issuing materials

Shall it be possible to finish an order without having issued the allocated components?

Variable material consumption

Variable material consumption deals with the non-standard BOM component issue (adding components to an order during progress)

Post consumption automatically

Enabling this function will automatically post material consumption in BC / NAV.
Codeunit 6170493, ShopFloor – Automatic Post shall be run via a BC / NAV JobScheduler to make the automation work.
A piece of advice: Normally new installations run the posting procedures manually a month or 2 until people have learned the system, and thus provide error free transactions. And then you automate.

Hide issue material Button
Removes the button from the ShopFloor client, when using pre-defined materials.

Use secunda lot
This is specifically for flow production where you operate with good and secunda items. In the flow process you deliver the total quantity, but you will only charge the customer for the good items.
You can also connect the lot information from the material usage to the end items.
If this is selected serial numbers are not allowed.

The Print section

- Print method – Pallet label
- Print method – Job card
- Print method – Job slip
- Print method – Bill of Materials
- Print method – Routing Sheet

For each of the reports you have 2 choices:

- ShopFloor client
- BC / NAV web client

Use barcode reports

Putting a tick mark in this field, enables the ShopFloor bar code scanning options in various areas. Read more about bar coding here:

Autoprint barcode reports
If you enable this settings barcode reports for the prod. Order operations will print automatically when you release a production order or refresh. If you do not use the automatic feature you can manually print the reports from the Planning screen.

Job tag report

This is the BC / NAV report number for a job tag.You can do a look-up to the BC / NAV reports.

Pallet label report no

This is a BC / NAV report number for a Pallet label. You can do a look-up to the BC / NAV reports.
.
Lot Series Report no

This is a BC / NAV report number for a Lot Series Report. You can do a look-up to the BC / NAV reports.

Routing Sheet Report no.

This is a BC / NAV report number for a routing Sheet Report. You can do a look-up to the BC / NAV reports.

Consumption Lot Serial Label

This is a BC / NAV report number for a Cnsumption Lot Serial Label report. You can do a look-up to the BC / NAV reports.

> ! Please notice that all reports are just delivered as samples. You can modify the existing reports to the specific customer requirements.

The Planning section

Prioritising allowed

Is the planner allowed to manually change the order sequence.

Change Priority on active Orders

In this field you specify whether it is allowed to change priority on orders, which have one or more processing operations. You could have restrictions that this is not allowed, due to order pallet sequence or for other reasons.

Automatic release to ShopFloor

In this field you have to specify whether orders are automatically released to the operator screen, when releasing a production order in BC / NAV.

> IMPORTANT:
> If the box is not check marked, released orders are placed only at the ShopFloor planning screen for further scheduling.
> If the box is check marked, released orders are placed both on the planning screen and on the ShopFloor screen.

You can remove an order from the Operator screen by assigning the priority to status 1.

Planning horizon arriving orders

If you run with many long term orders you can delimit the number of orders to be seen in the Arriving section by inserting a number of days in this field.

Operation Assignment.

Values to choose from:

Single Workcenter

Multiple Workcenters

Function that can be used in the ShopFloor Planning sections.
When Single Workcenter is selected, you can assign operations for the prod.order and the WorkCenter you are currently looking at.
When Multiple WorkCenters is sellected, you can assign all operations for the prod.order you are currently looking at.

> IMPORTANT:
> You can only assign operations from a WorkCenter to one or more MachineCenters.
> Due to BC / NAV rules, you can't assign first and last operations on a prod.order routing, only operations in between.

> **The General section**

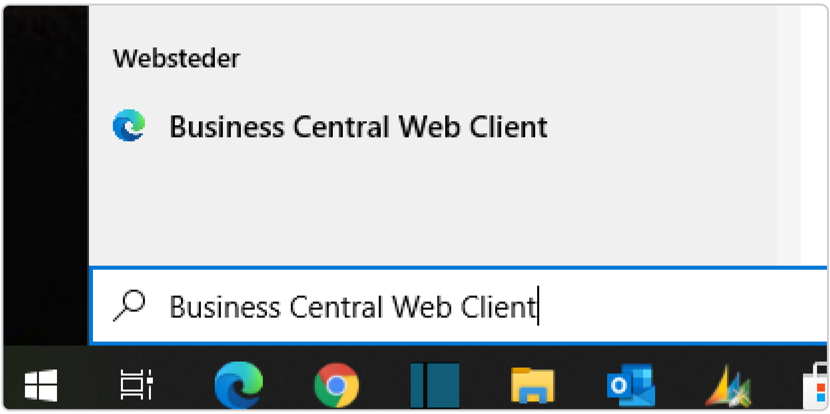
Web client URL

This is the URL to the web-client

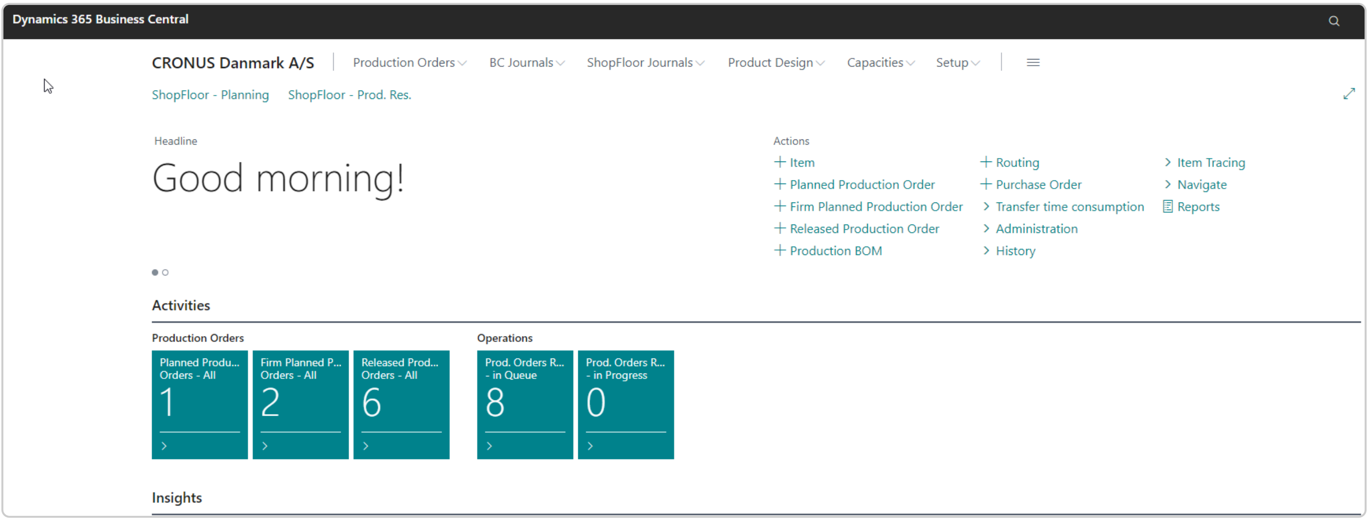
How to find the application url?

Using Windows search write "Dynamics NAV / Business Central Web Client"

You will get a screen like this:



Start the application. This will be shown:



Copy the URL and paste it into the field “web client URL in the general setup:

Enable Web Service Log

If this field is highlighted, all calls are logged to web service in a table in Navision. Please be aware that the amount of data can be even very large. It is recommended primarily to use this function to track errors in the calls and not to turn it on in general.

Drawing placement

There are 3 options in this field:

- Production order link
- Item link
- Shared folder
- Combination

Path for drawings

Write the path to where your drawings are kept.
The path must be a shared UNC path which all the clients and the server can access.
The NAV server instance user and client users must have read access to the shared folder/location,

Drawing – file extension

Here you write the extension for the file type to be shown. F.ex. .pdf

Drawing Attribute ID

You have the possibility to add an Item Link for drawings by using the standard Item Attribute function. You setup which Item Attribute holds the drawing link here.

Then when you add a specific drawing link as the attribute, it is automatically copied to an Item Link and can then be used in the ShopFloor Client.

Planning Horizon ShopFloor

Here the general planning horizon in ShopFloor for queuing and processing orders is specified.

Start-up Language

Here you can select which language the client has to start up with. The language can also be changed temporarily in the ShopFloor client.

Path to the Update Directory

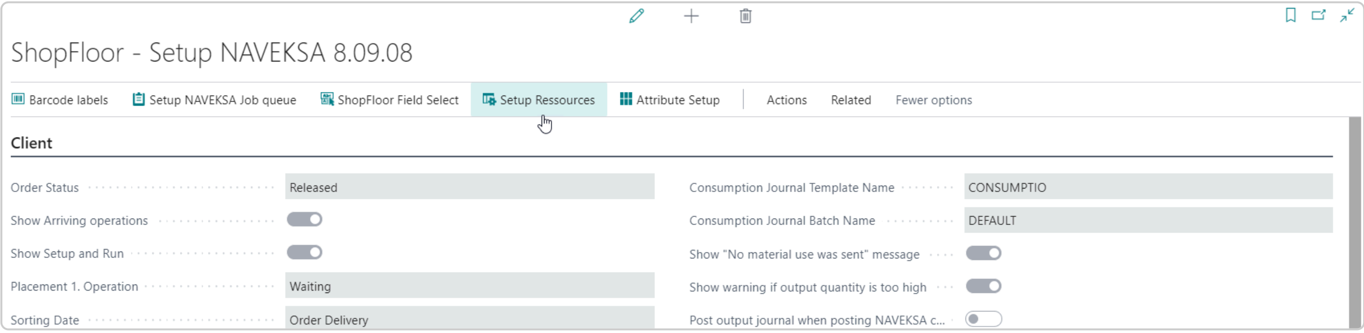
As mentioned under the section running of the set-up file for SHOPFLOOR, an update of the SHOPFLOOR client can be carried out, if a new version of objects in Navision has been loaded, via the set-up window. The path to the updated client has to be specified here.

License key
Using the NAVEKSA ShoipFloor App in a Business Central production environment requires, that you acquire a License Key for the product. This License key needs to be renewed periodically. Please contact NAVEKSA A/S for any questions or requests for License keys.

8.1.5. Synchronize BC / NAV capacities

Synchronize BC / NAV capacities

First time setup: On ShopFloor main setup select the button “Setup resources” to synhcronize the NAV capacity resources (machine and work centers) to ShopFloor resources.



Whenever you change/create/delete a BC / NAV resource, synchronisation can be done either by opening the ShopFloor planning worksheet, or pressing this button again.

8.1.6. ShopFloor – Select fields

ShopFloor – Select fields

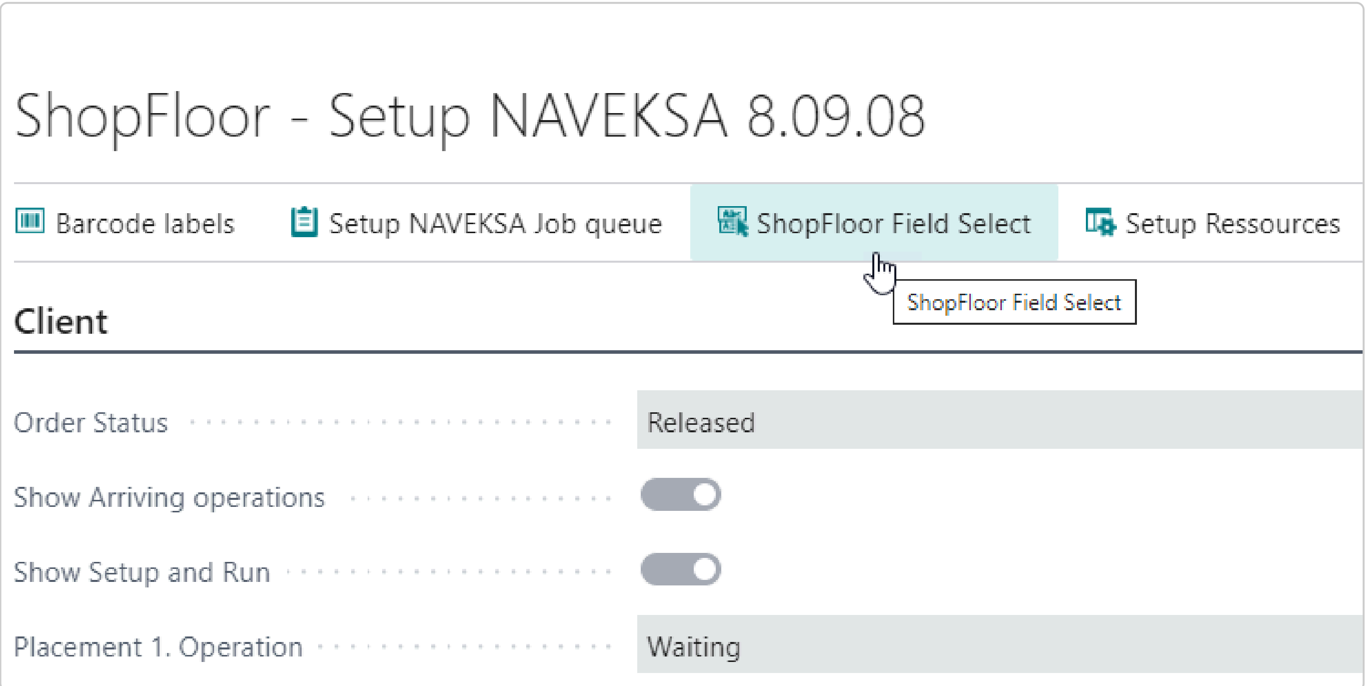
Choosing Fields for the Operator ShopFloor Screen

A number of fields (columns) are available on the operator screen.

Usually it is possible to choose BC / NAV fields on and off on a certain line. This feature is not present on the operator screen.

This ShopFloor field selection determines, which fields you want to see on the operator screen. This is done by putting a checkmark to the fields you want to see.

Click on the ribbon function Field select



ShopFloor Field Selection ✓Saved

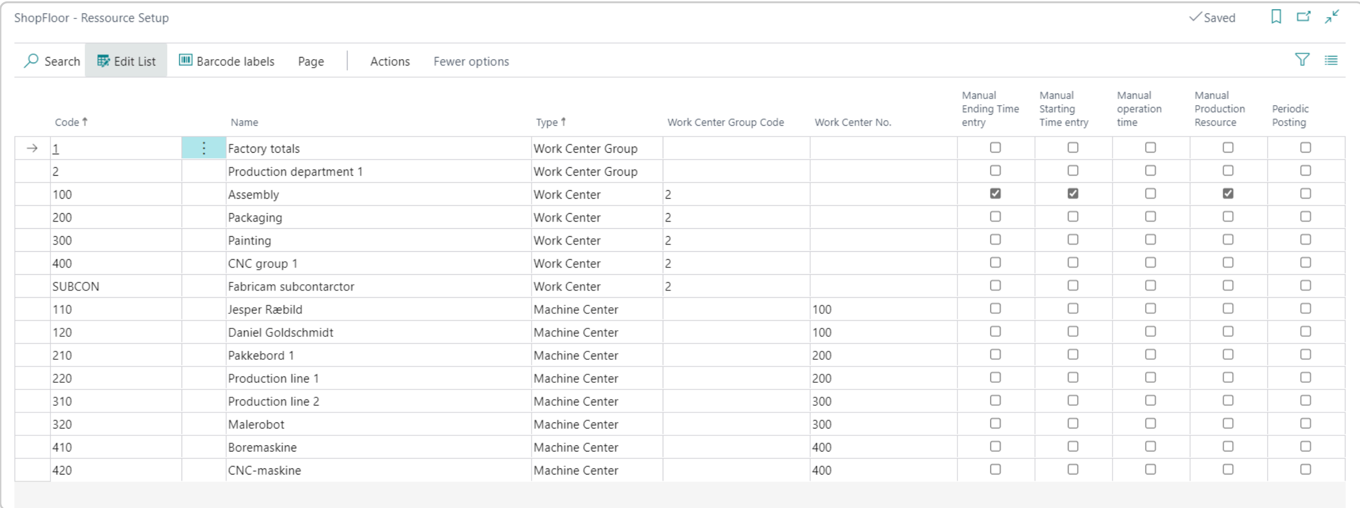
Search | Edit List | Page

Field No. ↑	Field Name	Show	Sort Order
1	Prod. Res. No.	☑	5
2	Status	☑	10
3	Prod. Order No.	☑	15
4	Item No.	☑	20
5	Description	☑	25
6	Routing No.	☑	30
7	Routing Reference No.	☐	35
8	Operation No.	☑	40
9	Op. Description	☑	45
10	Quantity	☑	50
11	Prod. Order Due Date	☑	55
12	Next Operation No.	☐	60
13	Previous Operation No.	☐	65
14	Priority	☐	70
15	Setup Time	☑	75
16	Run Time	☑	80
17	Finished	☐	85
18	Prod. Res. Type	☐	90
19	Setup Time Unit of Meas. Code	☐	95
20	Run Time Unit of Meas. Code	☐	100
21	Unit of Measure Code	☐	105
23	Capacity Date	☐	115
26	Operation Start Date Time	☐	800
27	Customer Order No.	☐	135
28	Prod. Order Start	☐	140

8.1.7. ShopFloor Resource setup

ShopFloor resource setup

Decisions on how to operate the individual work centers and machine centers during execution.


ShopFloor - Ressource Setup ✓Saved

Search | Edit List | Barcode labels | Page | Actions | Fewer options

Code ↑	Name	Type ↑	Work Center Group Code	Work Center No.	Manual Ending Time entry	Manual Starting Time entry	Manual operation time	Manual Production Resource	Periodic Posting
1	Factory totals	Work Center Group			☐	☐	☐	☐	☐
2	Production department 1	Work Center Group			☐	☐	☐	☐	☐
100	Assembly	Work Center	2		☑	☑	☐	☑	☐
200	Packaging	Work Center	2		☐	☐	☐	☐	☐
300	Painting	Work Center	2		☐	☐	☐	☐	☐
400	CNC group 1	Work Center	2		☐	☐	☐	☐	☐
SUBCON	Fabricam subcontarctor	Work Center	2		☐	☐	☐	☐	☐
110	Jesper Ræbild	Machine Center		100	☐	☐	☐	☐	☐
120	Daniel Goldschmidt	Machine Center		100	☐	☐	☐	☐	☐
210	Pakkebord 1	Machine Center		200	☐	☐	☐	☐	☐
220	Production line 1	Machine Center		200	☐	☐	☐	☐	☐
310	Production line 2	Machine Center		300	☐	☐	☐	☐	☐
320	Malerobot	Machine Center		300	☐	☐	☐	☐	☐
410	Boremaskine	Machine Center		400	☐	☐	☐	☐	☐
420	CNC-maskine	Machine Center		400	☐	☐	☐	☐	☐

Chose (Check mark if positive):

- Shall it be possible to override job ending time with a user-entered ending time?
- Shall it be possible to override job starting time with a user-entered ending time?
- Shall it be possible to override a planned resource with a specific job execution resource?

> Example: A job is planned to a work center consisting of 15 individual machines capable of doing more or less the same process.The operator selects an appropriate machine for the job, and select and report the used machine at output reporting.

- Shall it be possible to report (depreciate) long run jobs with daily job time spend without ending the job?

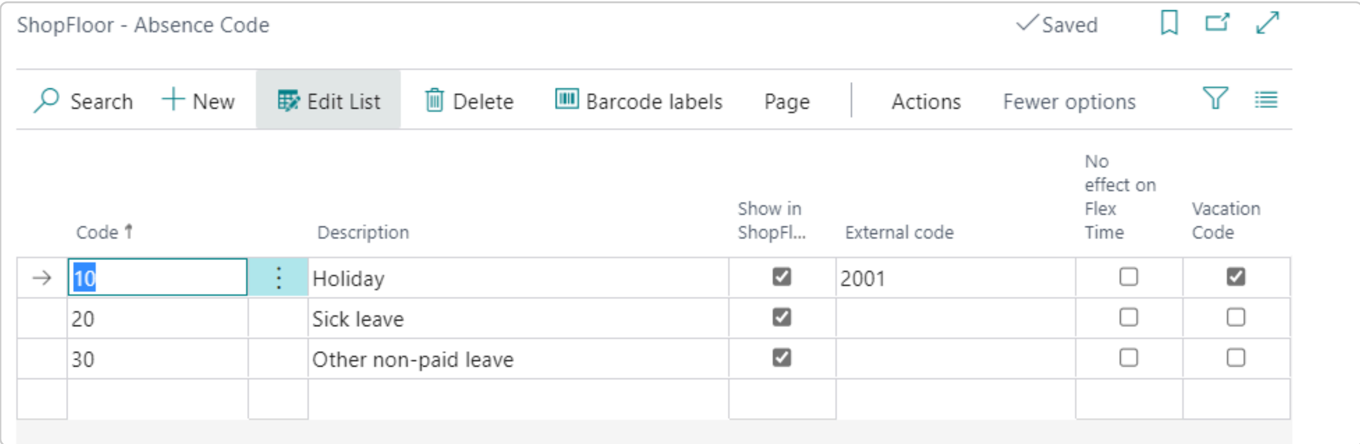
> For logical reasons, please note that overriding the actual stamp times with manual start/stop or total job time does not include deduction af break times in the calculation of job time.

8.1.8. ShopFloor Absence code setup

ShopFloor Absence code setup

Here you setup your company's absence codes.

The external code refer to a payroll code.



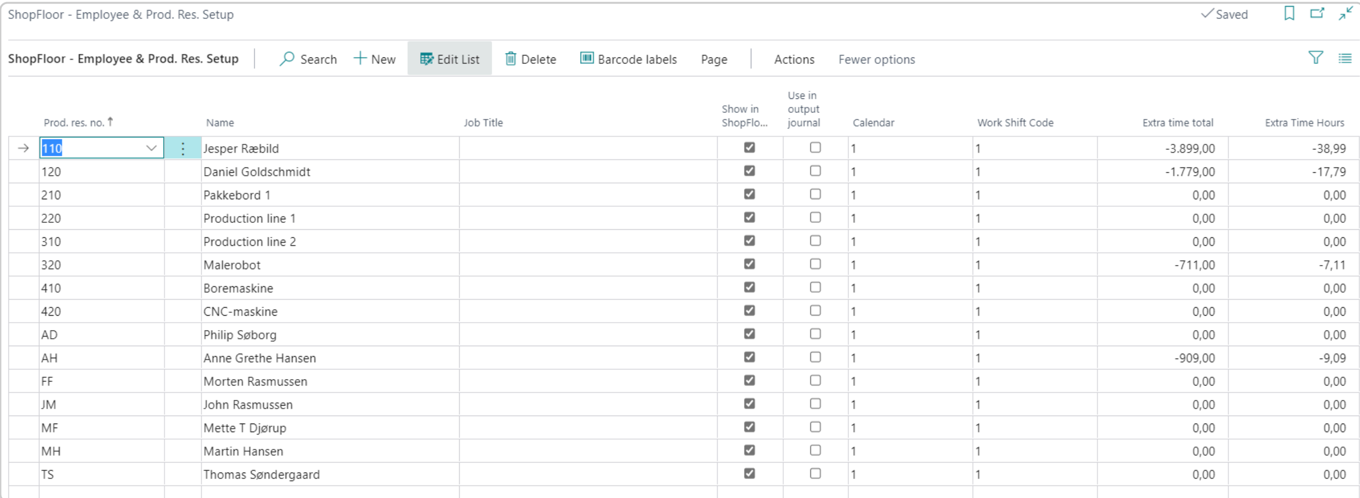
8.1.9. ShopFloor Employee & resource setup

ShopFloor Employee & resource setup

For each production resource you must decide, whether this resource shall show up in the ShopFloor client (Show in ShopFloor).

You must decide, if the machine center or operator cost price shall be used in the output journal instead of work centers rates (Use in output journal)

You must assign a BC / NAV calendar and a BC / NAV shift code to each resource.



Prod. res. no.	Name	Job Title	Show in ShopFlo...	Use in output journal	Calendar	Work Shift Code	Extra time total	Extra Time Hours
110	Jesper Ræbild		☑	☐	1	1	-3.899,00	-38,99
120	Daniel Goldschmidt		☑	☐	1	1	-1.779,00	-17,79
210	Pakkebord 1		☑	☐	1	1	0,00	0,00
220	Production line 1		☑	☐	1	1	0,00	0,00
310	Production line 2		☑	☐	1	1	0,00	0,00
320	Malerobot		☑	☐	1	1	-711,00	-7,11
410	Boremaskine		☑	☐	1	1	0,00	0,00
420	CNC-maskine		☑	☐	1	1	0,00	0,00
AD	Philip Søborg		☑	☐	1	1	0,00	0,00
AH	Anne Grethe Hansen		☑	☐	1	1	-909,00	-9,09
FF	Morten Rasmussen		☑	☐	1	1	0,00	0,00
JM	John Rasmussen		☑	☐	1	1	0,00	0,00
MF	Mette T Djørup		☑	☐	1	1	0,00	0,00
MH	Martin Hansen		☑	☐	1	1	0,00	0,00
TS	Thomas Søndergaard		☑	☐	1	1	0,00	0,00

8.1.10. ShopFloor – Calendar setup

ShopFloor – Calendar setup

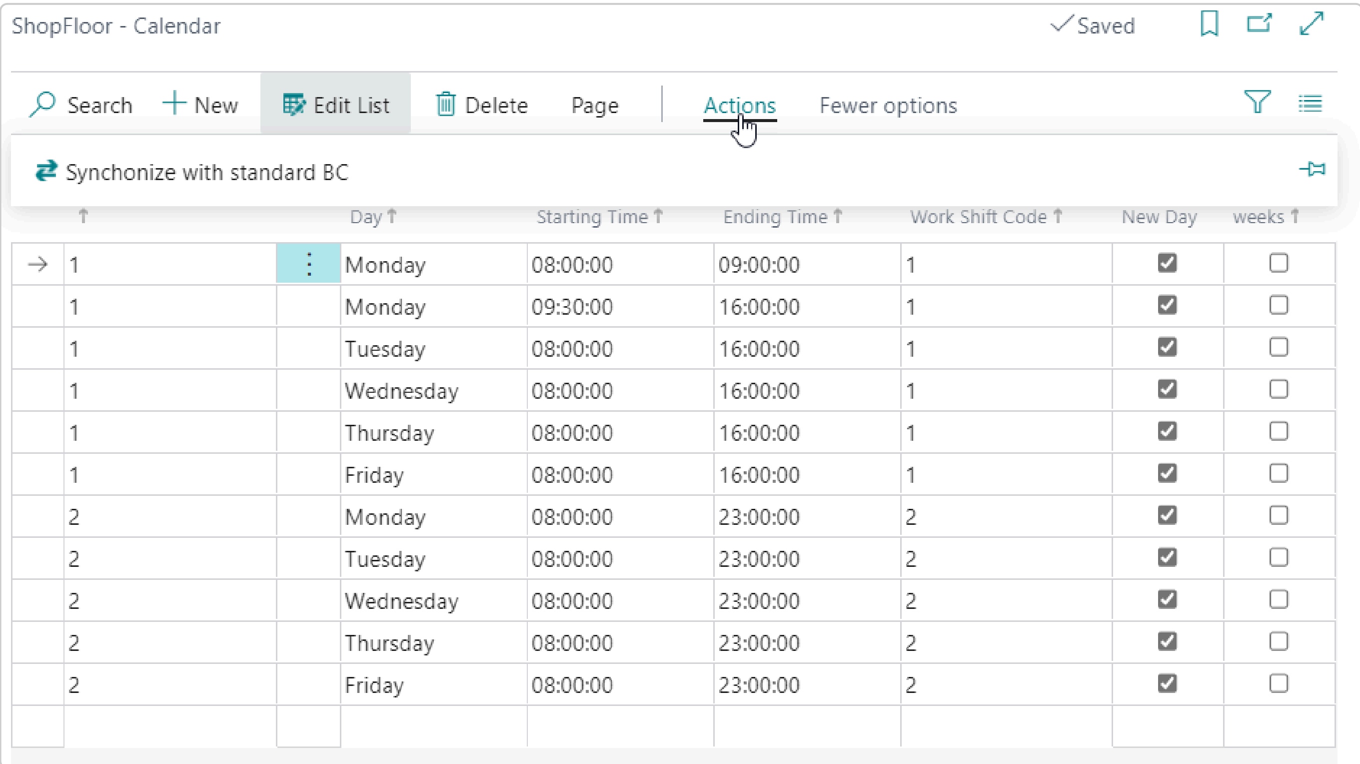
The ShopFloor system is delivered with a TA (Time & Attendance) system for recording attendance transactions.

No matter if you want to use the TA/Payroll functions or not, you must carry out one thing to make the ShopFloor system operate:

Based on your answer to the ShopFloor question “Employee relation”, you MUST run the “Synchronize” function in the Time Attendance setup.

Running “Synchronize” will add the employees/machines/resources to be used in the ShopFloor system for job reporting.

If you want to use the function people clock in/out, you have to indicate at what time a new day starts. This is made with access from the NAVEKSA menu, ShopFloor, LISTS, ShopFloor Calendar:



	Day	Starting Time	Ending Time	Work Shift Code	New Day	weeks
1	Monday	08:00:00	09:00:00	1	☑	☐
1	Monday	09:30:00	16:00:00	1	☑	☐
1	Tuesday	08:00:00	16:00:00	1	☑	☐
1	Wednesday	08:00:00	16:00:00	1	☑	☐
1	Thursday	08:00:00	16:00:00	1	☑	☐
1	Friday	08:00:00	16:00:00	1	☑	☐
2	Monday	08:00:00	23:00:00	2	☑	☐
2	Tuesday	08:00:00	23:00:00	2	☑	☐
2	Wednesday	08:00:00	23:00:00	2	☑	☐
2	Thursday	08:00:00	23:00:00	2	☑	☐
2	Friday	08:00:00	23:00:00	2	☑	☐

8.1.11. ShopFloor – Headings setup

ShopFloor – Headings setup

If you want field text on the display can be changed by editing the texts to suit your needs.

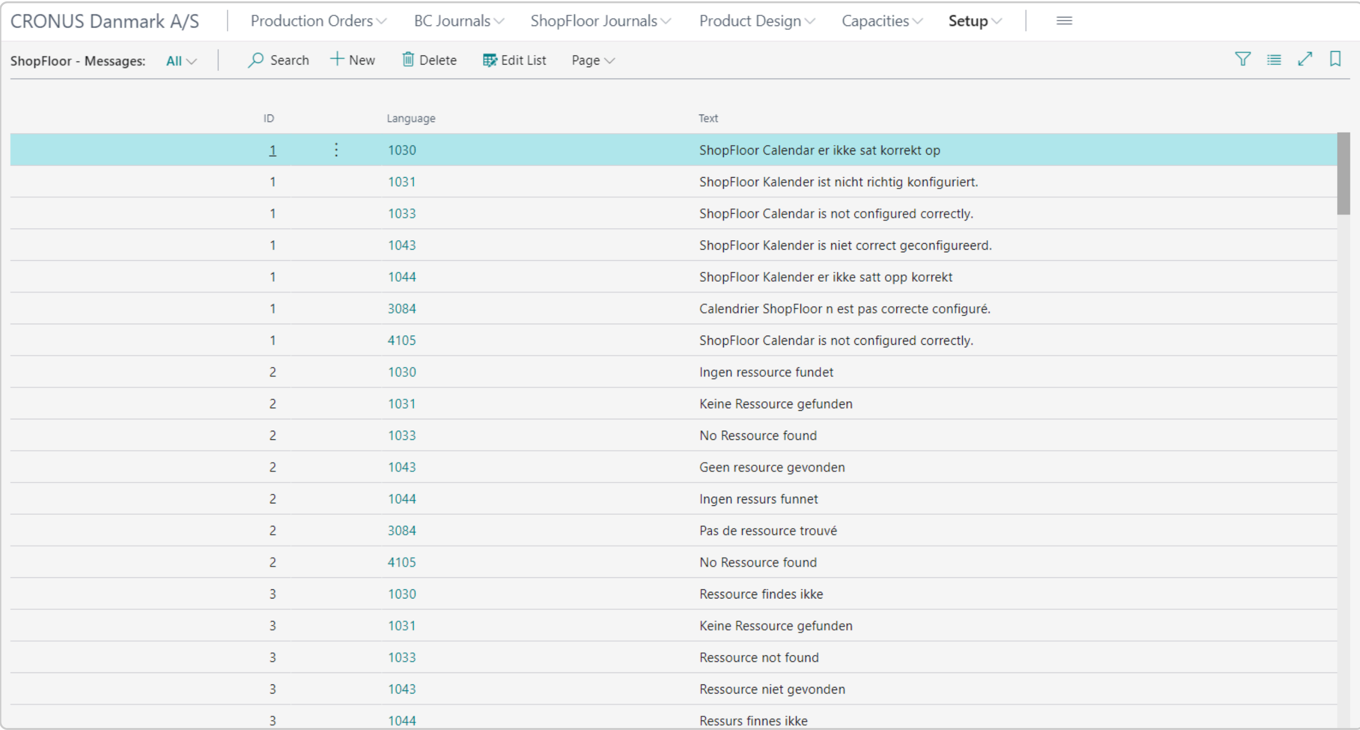
ShopFloor - Headings: All | Search | New | Delete | Edit List | Page

ID ↑	Language	Caption	Captiontext
1	1030	Status1text	IGANGVÆRENDE ORDRER
1	1031	Status1text	IN ARBEIT
1	1033	Status1text	RUNNING ORDERS
1	1043	Status1text	LOPENDE BESTELLINGEN
1	1044	Status1text	PÅGÅENDE ORDRER
1	3084	Status1text	O.F. EN COURS
1	4105	Status1text	ORDERS PROCESSING
2	1030	Status2text	VENTENDE ORDRER
2	1031	Status2text	AUFTRAGSVORRAT
2	1033	Status2text	ORDERS QUEUEING
2	1043	Status2text	WACHTEN BESTELLINGEN
2	1044	Status2text	AVVENTENDE ORDRER
2	3084	Status2text	O.F. ATTENDANT
2	4105	Status2text	ORDERS QUEUEING
3	1030	Status3text	ANKOMMENDE ORDRER
3	1031	Status3text	WARTESCHLANGE
3	1033	Status3text	FUTURE ORDERS
3	1043	Status3text	AANKOMEN BESTELLINGEN
3	1044	Status3text	ANKOMMENDE ORDRER
3	3084	Status3text	O.F. ARRIVANT

8.1.12. ShopFloor Messages setup

ShopFloor Messages setup

The application message texts on the display can be changed by editing the texts.



ID	Language	Text
1	1030	ShopFloor Calendar er ikke sat korrekt op
1	1031	ShopFloor Kalender ist nicht richtig konfiguriert.
1	1033	ShopFloor Calendar is not configured correctly.
1	1043	ShopFloor Kalender is niet correct geconfigureerd.
1	1044	ShopFloor Kalender er ikke satt opp korrekt
1	3084	Calendrier ShopFloor n est pas correcte configuré.
1	4105	ShopFloor Calendar is not configured correctly.
2	1030	Ingen ressource fundet
2	1031	Keine Ressource gefunden
2	1033	No Ressource found
2	1043	Geen resource gevonden
2	1044	Ingen ressurs funnet
2	3084	Pas de ressource trouvé
2	4105	No Ressource found
3	1030	Ressource findes ikke
3	1031	Keine Ressource gefunden
3	1033	Ressource not found
3	1043	Ressource niet gevonden
3	1044	Ressurs finnes ikke

8.1.13. Setting up ShopFloor Quality control

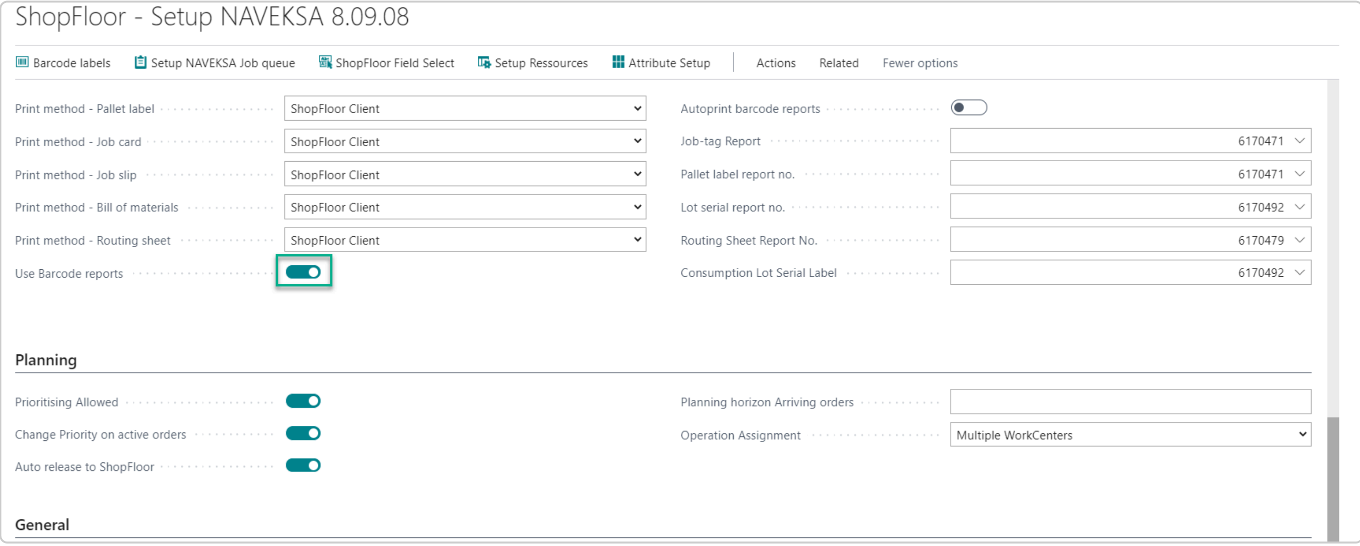
Setting up ShopFloor Quality control

Read about setting up quality control by clicking here

8.1.14. Setting up the use of barcodes

Setting up barcode use

To activate the use of bar coded functions in ShopFloor you must activate the “Use barcode reports” in the ShopFloor setup.
Activating this enables all functions – printing labels and functions.



8.1.15. Enhanced drawing location function

Enhanced drawing location function

Enhanced drawing location functionality:

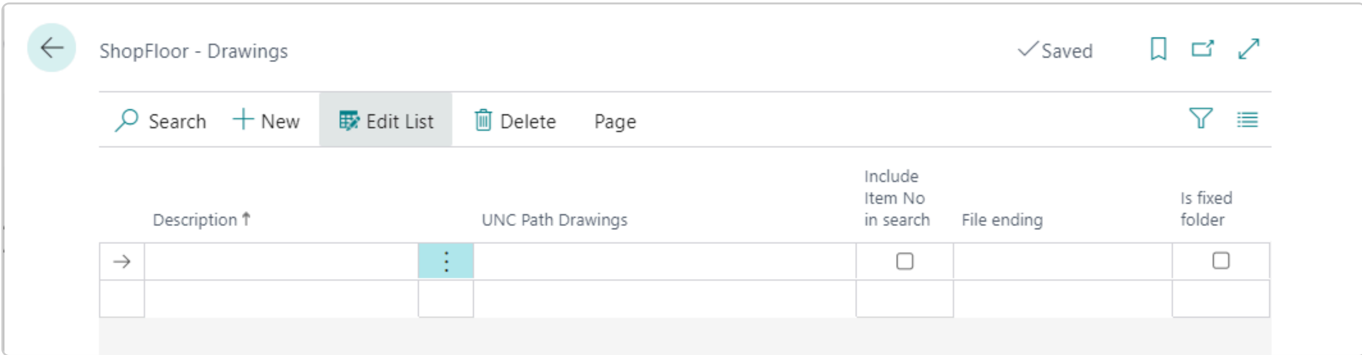
The enhanced drawing location functionality is an improvement of the existing functionality which is working as in previous versions.

The new functionality includes support for drawings in multiple file locations.

It is possible to specify whether it is a Fixed folder. If this I specified then the folder will be added to the drawings as a folder link.

It is possible to specify whether Item no should be included in the file search. If not then all files from a folder will be added as links. This is because the Item No. can now be part of the path using the [itemno] keyword.

Examples



8.1.16. Setting up Shopfloor Attributes

Settting up ShopFloor Attributes

You can use Attributes to supply the operator system with additional information from Business Central. This function can use basic attributes set up on the items and specific attributes set up on the operations in the ShopFloor Planning system.
The link is created in ShopFloor Setup, in the function Attribute Setup, where you link BC Item attributes to ShopFloor attributes which is then automatically linked to the equivalent customer Fields.

You need to make the basic Attribute setup first in standard BC as Item attributes.
Next you need to setup the mapping in ShopFloor Attribute Setup.
Then setting up attribute values for items is a standard BC task.
In addition you can add attribute values to individual operations in the Planning page.

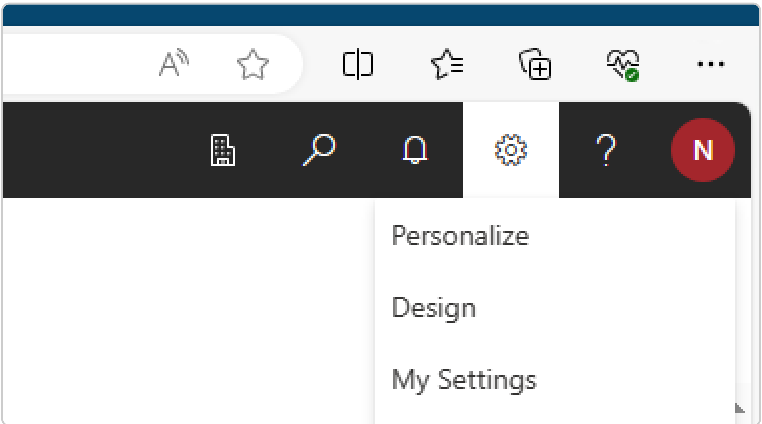
IMPORTANT:
If you setup an attribute value on an operation, this will overwrite the value set up on the Item.

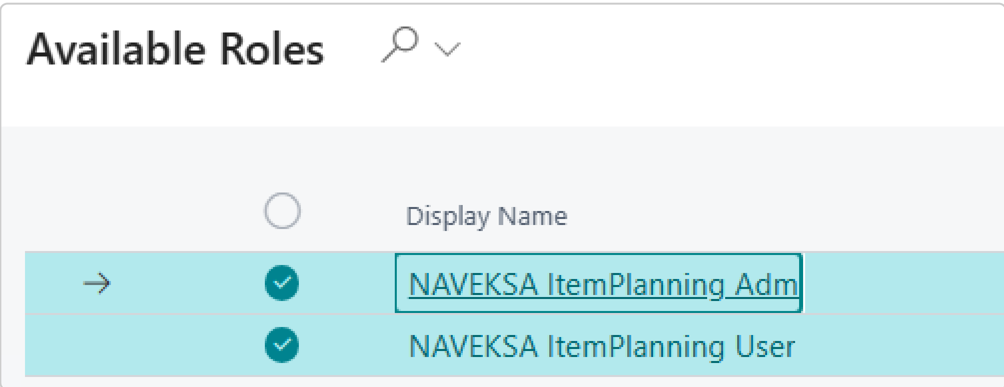
Finally you need to select the Customer Fields to be shown in the ShopFloor client. Please refer to section 9.1.

8.2. Setting up ItemPlanning

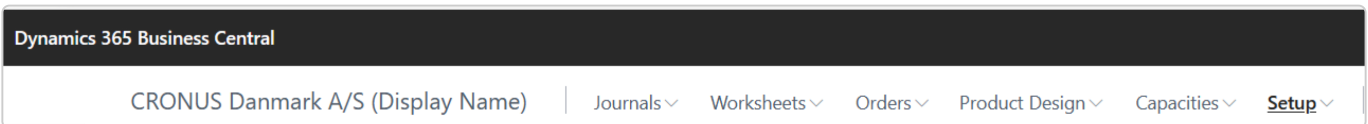
Setting up ItemPlanning

To get access to the ItemPlanning Setup, the easiest way is to select and use the NAVEKSA ItemPlanning Adm Role in “My Settings”





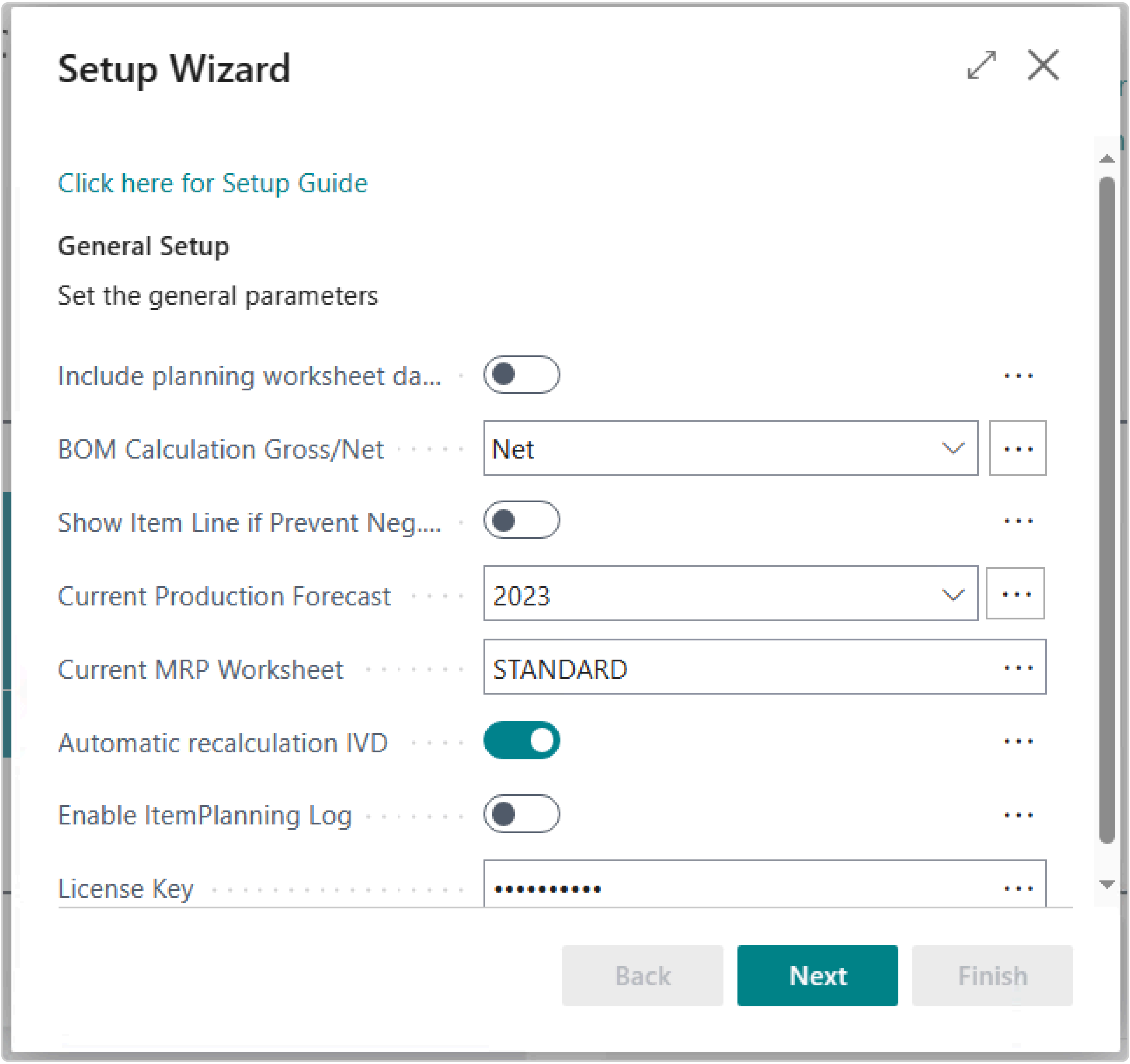
Setting up ItemPlanning is done from the Menu items found in the Main menu of ItemPlanning under Setup.



Setup Wizard

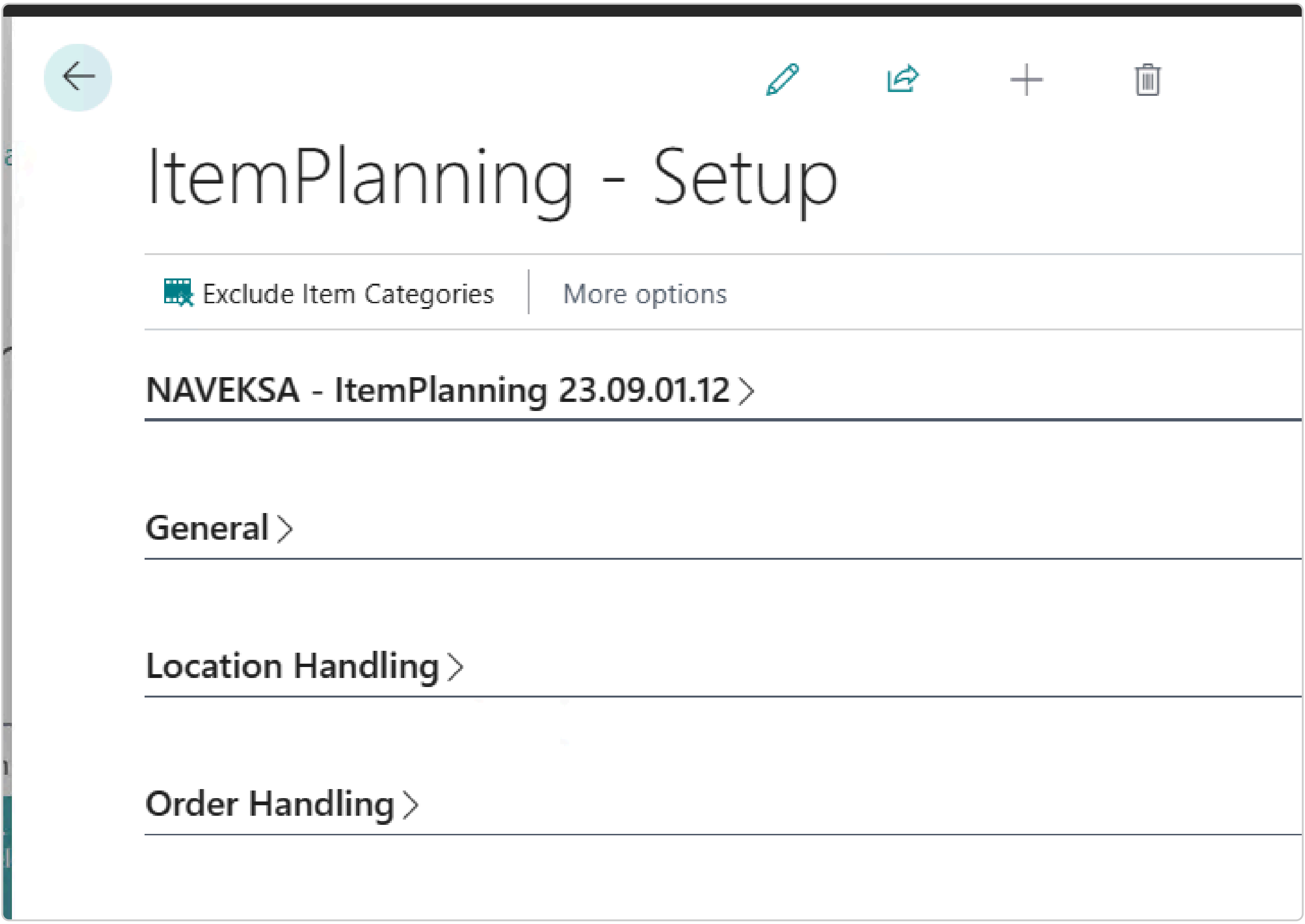
A Setup Wizard has been created to guide you through all the setup paramteres.
This Wizard will be proposed automatically by ItemPlanning. Once you have been through the Wizard, the proposal will disappear.
The idea is, that you get a guided tour through the Setup, and then if you on a later point of time need to modify any Setup parameter, you can go directly to the general ItemPlanning setup function.

> Please note, on each parameter in the Wizard, you can click the 3 dots at the end of the fields to get access to the user guide related to that specific field.

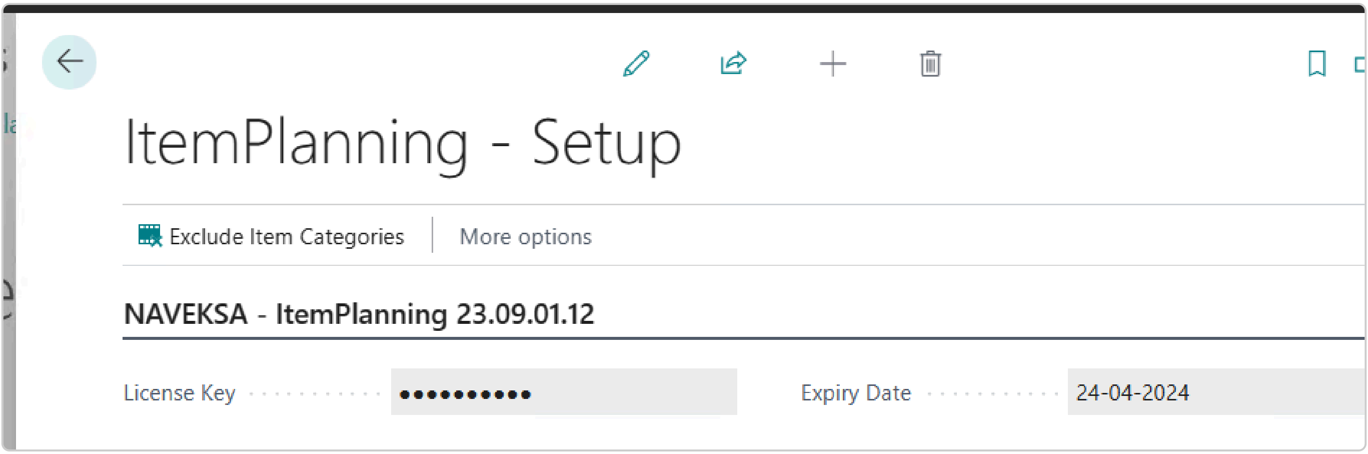


ItemPlanning Setup

The setup screen for ItemPlanning is divided into different sections and looks like this:

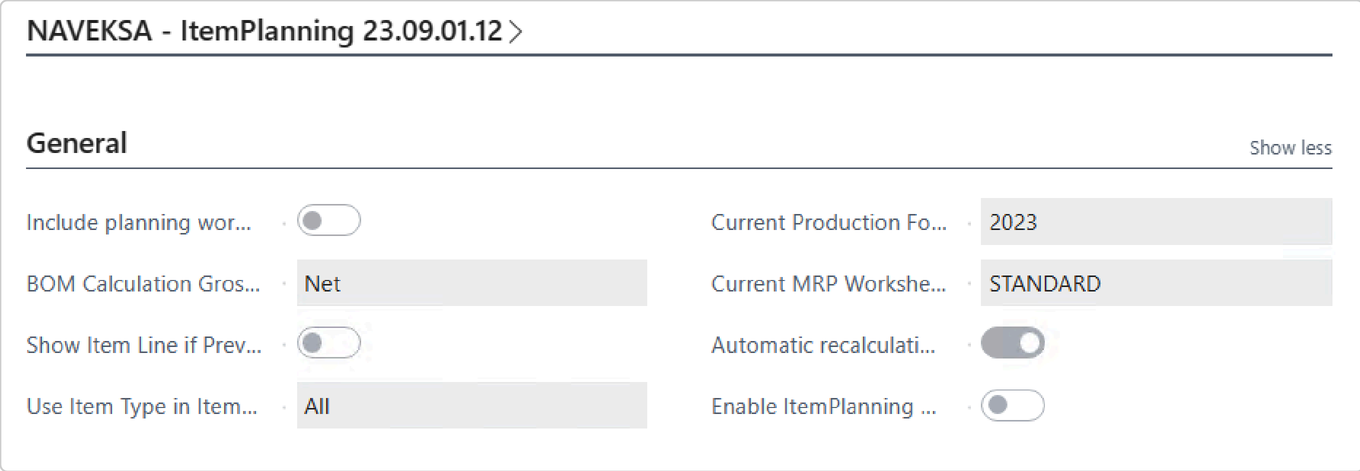


Main parameters



Running ItemPlanning in a production environment requires, that you pay for and get a License Key for the product.
This License Key must be entered here, and shall be renewed each 6 months.
You can see the Expiry Date and will be notified before you reach this date.

General parameters



Include planning worksheet data
As default you can select to include planning sheet order proposals and allocations.
This default Can be overridden on all planning pages at execution time.

BOM calculation Gross/Net
You have the opportunity to make your shortage requirement calculations based on 2 different principles: Gross or net.
Gross calculation is equal to: “ I do not care what I have in stock of the end-item and components. Tell me what I need to deliver a product”
Net calculation is equal to: “Take into consideration whatever I have in stock currently of the end-item and needed components”
If “BOM Calculation Gross / Net” is set to Gross, the BOM calculation of the requirements and calculated future stock requirements on component lines are based on the full required amount quantity, and does not take into account available physical quantity in stock for the end-item and components.

Show Item Line if Prevent Neg. Inv. = No
Parameter to exclude items from ItemPlanning BOM.
If the Item Card field Prevent Negative Inventory has been set to explicit No and this IOtemPlanning parameter is set to No, then the component will not be shown in ItemPlanning BOM.

Use Item Type in ItemPlanning
This parameter allows you to deselect Non-inventory Items from the calculations in ItemPlanning, if you have created such Items in you system.
As a default, all Items are shown and used in ItemPlanning.

Current Production Forecast
Which sales forecast is the current one in the calculations?
You must make sure that this value is the same as in the BC Manufacturing setup.

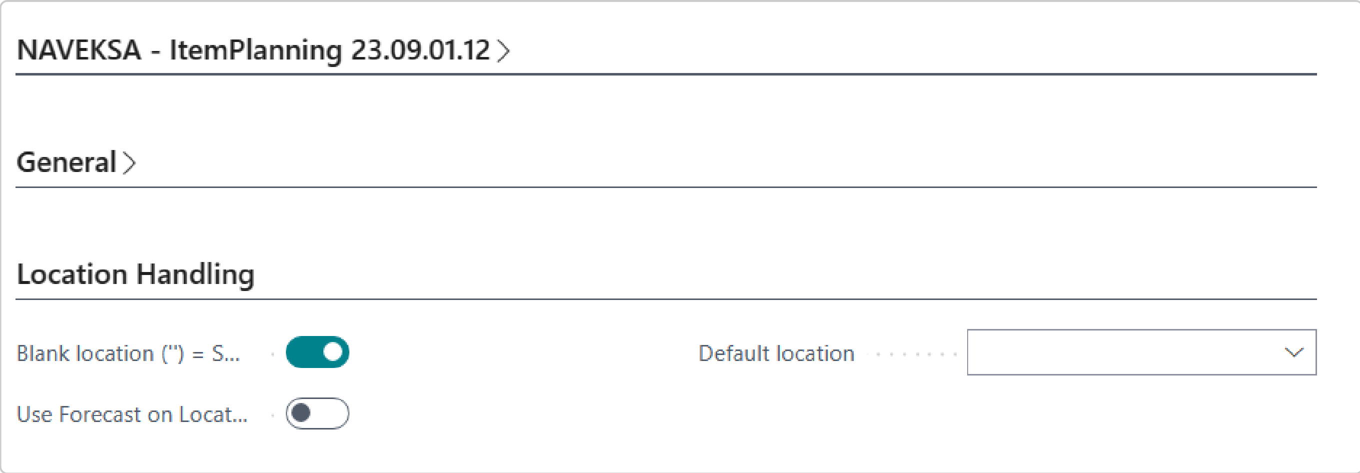
Current MRP Worksheet
The worksheet where Planning data to be used in ItemPlanning are picked up from.

Automatic Recalculation ItemPlanning
If you check mark this field, all calculations are made “on-the fly” or interactively.
If you experience long processing times because of very huge indented bill of materials, you may choose

not to checkmark this field., and instead use the Update Itemplanning button in the application.

Enable ItemPlanning Log
This function is for troubleshooting issues. Normally only to be used by consultants from NAVEKSA as interpretation of the results requires technical knowledge of the construction of ItemPlanning.

Location Handling

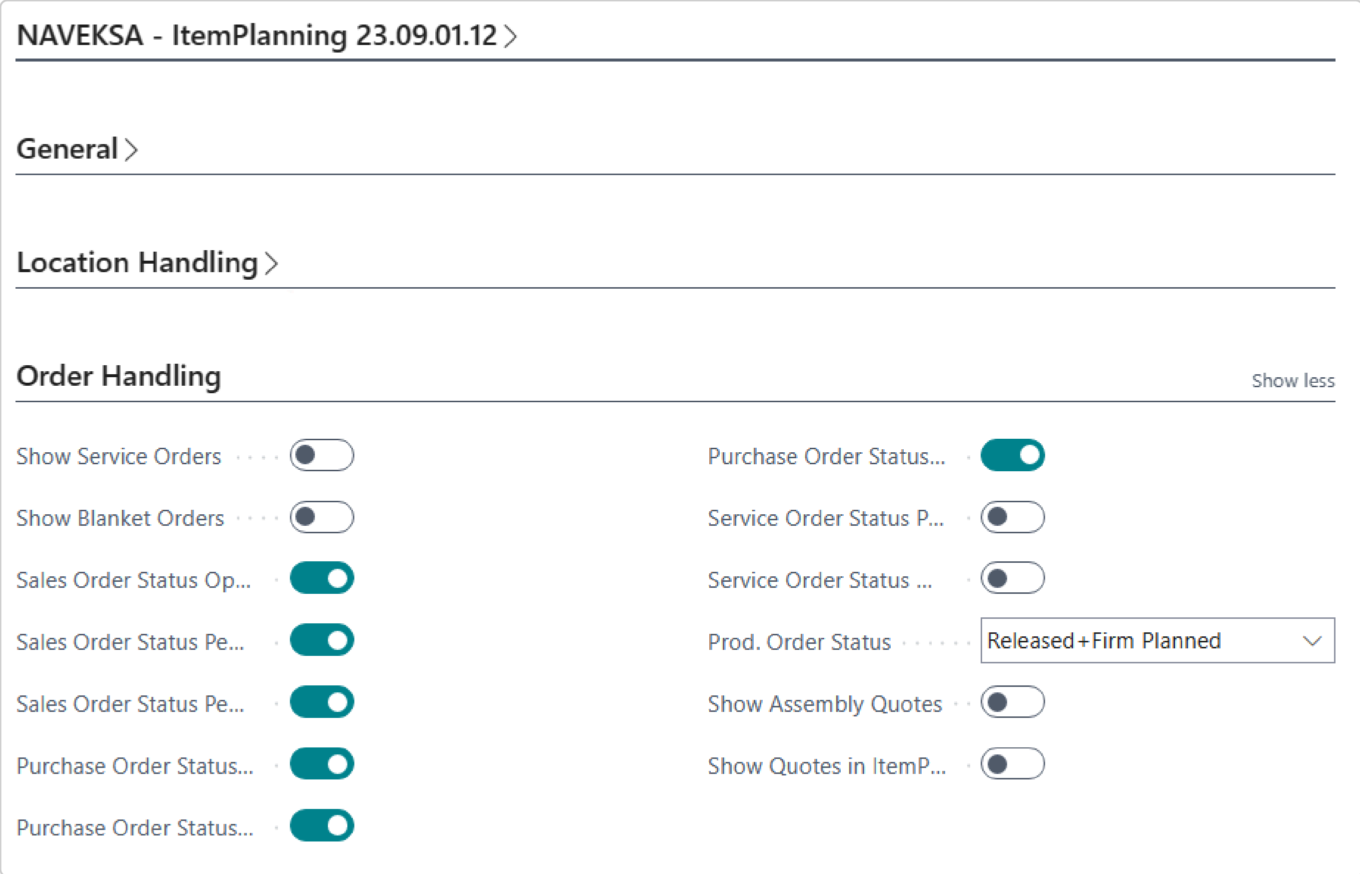


Blank location ('') = Show all
By check marking ”Blank location”(”) = Show all, it means that all stocks, including stock / location = “blank” are shown initially, when the NAVEKSA Itemplanning – Item is generated.

Use forecasts on Locations
Is the forecast used in relation to the location?

Default location
Using a default location means that orders created will be raised against the default location and default bin location if this is present.
Please observe that if you want to display data for a specific location when making an inquiry on Items, the default location is picked up from the Itemplanning setup.
Using the other tools – Itemplanning BOM and Assembly you must select location etc. yourself using the standard BC function “Limit totals” to delimit.

Order Handling



Show Service Orders
Must service orders be included in the calculations?

Show Blanket Ordes
Must blanket orders (sales and purchase) be included in the calculations?

Sales Order staus Open
Must sales orders with the status ”open” be included in the calculations?

Sales Order Status ”Pending Approval
Must sales orders waiting for approval be included in the calculations?

Sales Order Status pending prepayment
Must sales orders waiting for prepayment be included in the calculations?

Purchase Order Status ”Open
Must purchase orders with the status “Open” be included in the calculations?

Purchase Order Status pending Approval
Must purchase orders waiting for approval be included in the calculations?

Purchase Order Status pending prepayment
Must purchase orders waiting for prepayment be included in the calculations?

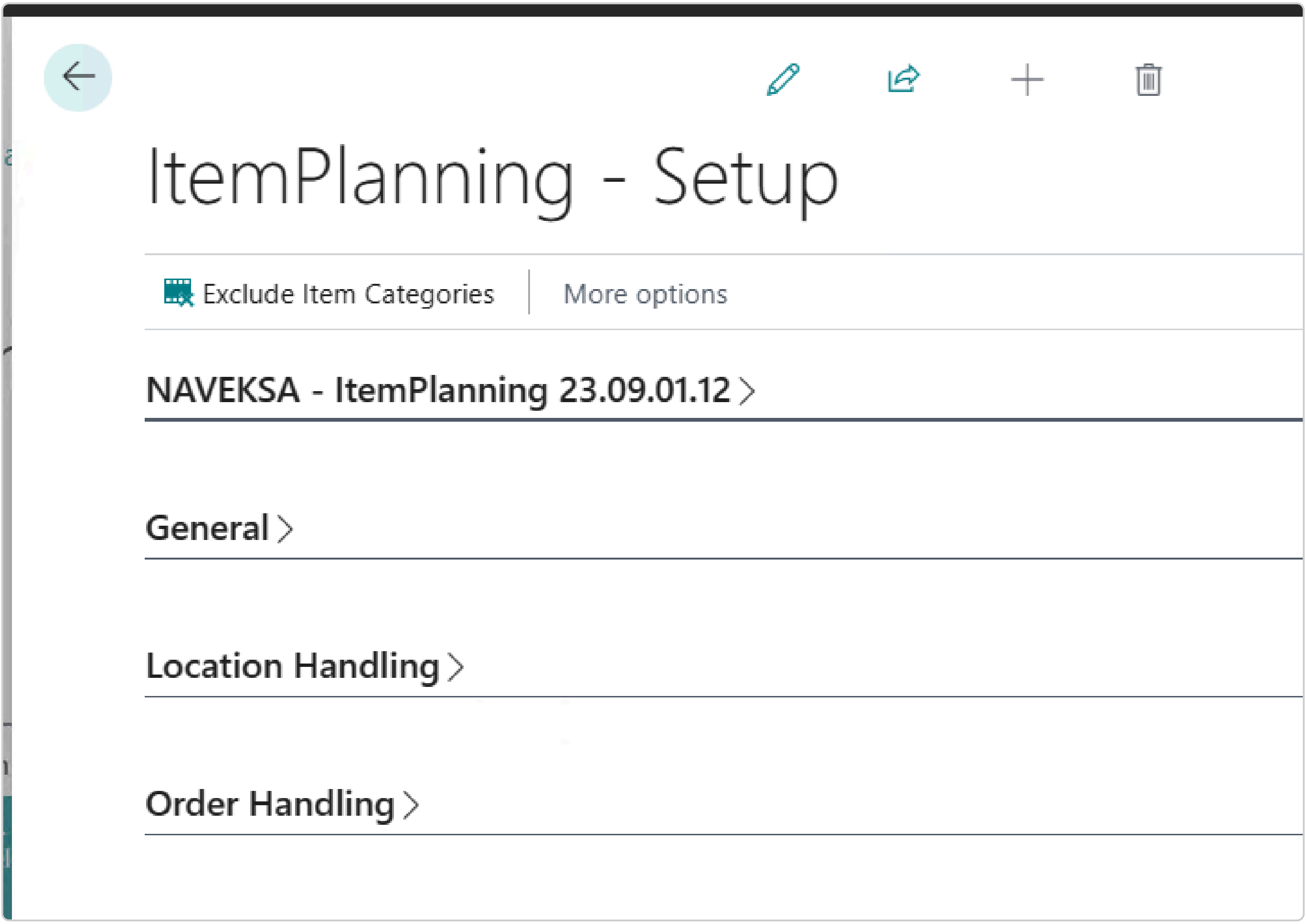
Service Order Status Pending
Must service orders with the status “Pending” be included in the calculations?

Service Order Status "On hold"
Must service orders with the status "On hold" be included in the calculations?

Prod. order status
Here you decide what kind of production orders you want to see in ItemPlanning: Released orders, released + firm planned orders, or released orders + firm planned + planned orders.

Show Assembly Quotes
Must Assembly Quotes be included in the calculations

Show Quotes in ItemPlanning
Must Sales Quotes be included in the calculations



Finally, please note, that you have e menu item setup that allows you to exclude certain Item Categories. That is if you set up any Item Categories here, any Item belonging to this Item Category will not be taken into account in ItemPlanning.

8.2.1. Assigning ItemPlanning Permission Sets

Assigning ItemPlanning Permission Sets

ItemPlanning is delivered with a single Permission Set that gives the necessary access to the different data tables and functions in ItemPlanning.

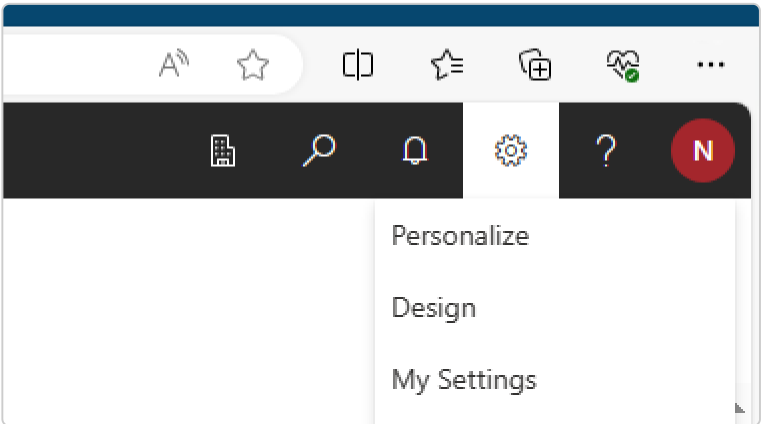
	Permission Set ↑	Name	Type ↑	Extension Name
	NAVEKSA SFS PSET	NAVEKSA SFS PSET	System	NAVEKSA ShopFloor 365
	NAVEKSA_CADCONNECT	NAVEKSA_CADCONNECT	System	NAVEKSA CadConnect 365
→	NAVEKSA_ITEMPLANNING	NAVEKSA_ITEMPLANNING	System	NAVEKSA ItemPlanning 365
	NAVEKSA_MAKETOORDER	NAVEKSA_MAKETOORDER	System	NAVEKSA MakeToOrder 365

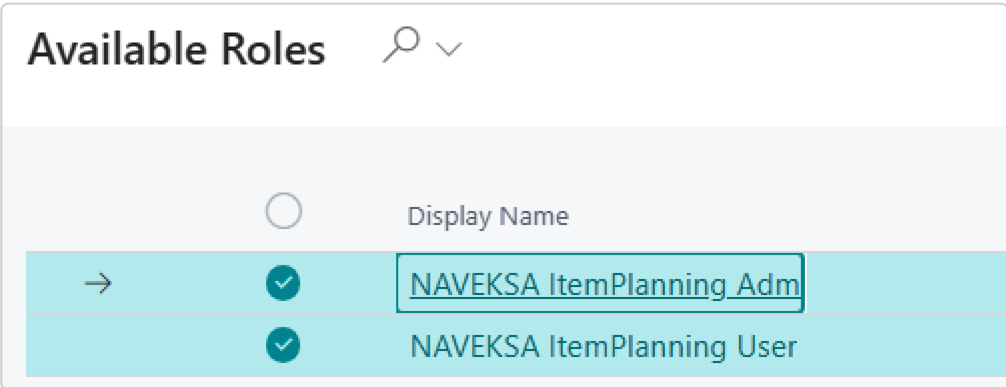
This Permission Set must be added to all BC users, that is going to use ItemPlanning.
In addition you must make sure that the users have sufficient access rights to the necessary BC areas, e.g. Items,. Production BOMs, Sales orders, Purchase orders, Production orders etc.

8.2.2. Using ItemPlanning Roles

Using ItemPlanning Roles

ItemPlanning is delivered with two standard Roles which you can select from standard setup “My Settings”



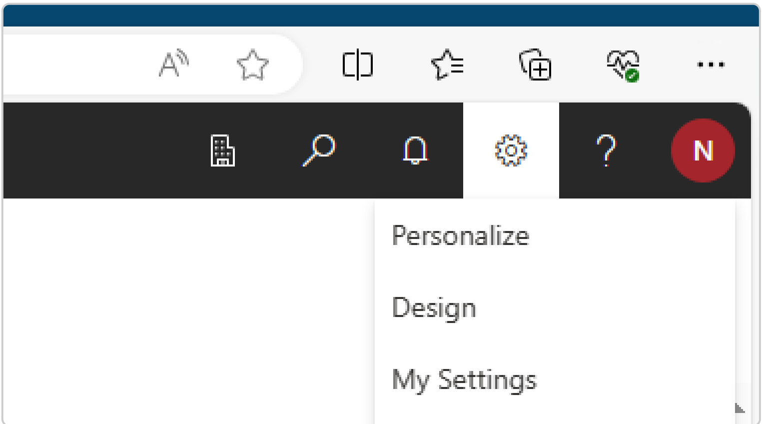


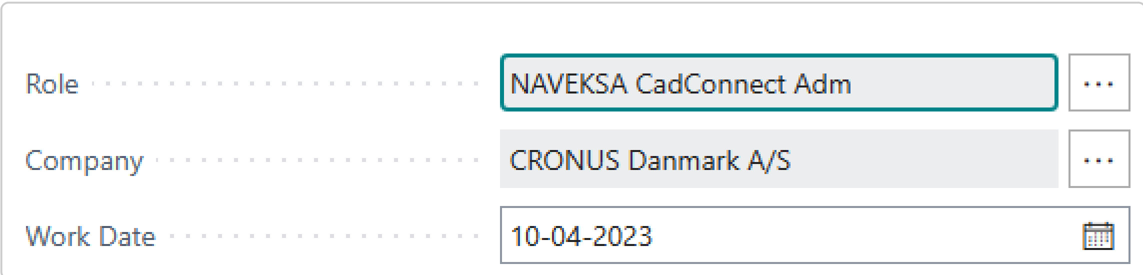
The difference between the two Roles is that the Adm Role has menu items for everything in ItemPlanning
whereas the User Role does not have any menu items for Setup.

8.3. Setting up CadConnect

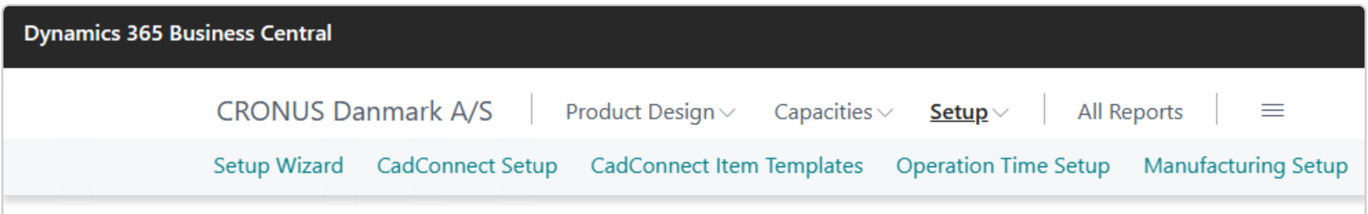
Setting up CadConnect

To get access to the different parts of the CadConnect Setup, the easiest way is to select and use the NAVEKSA CadConnect Adm Role in “My Settings”





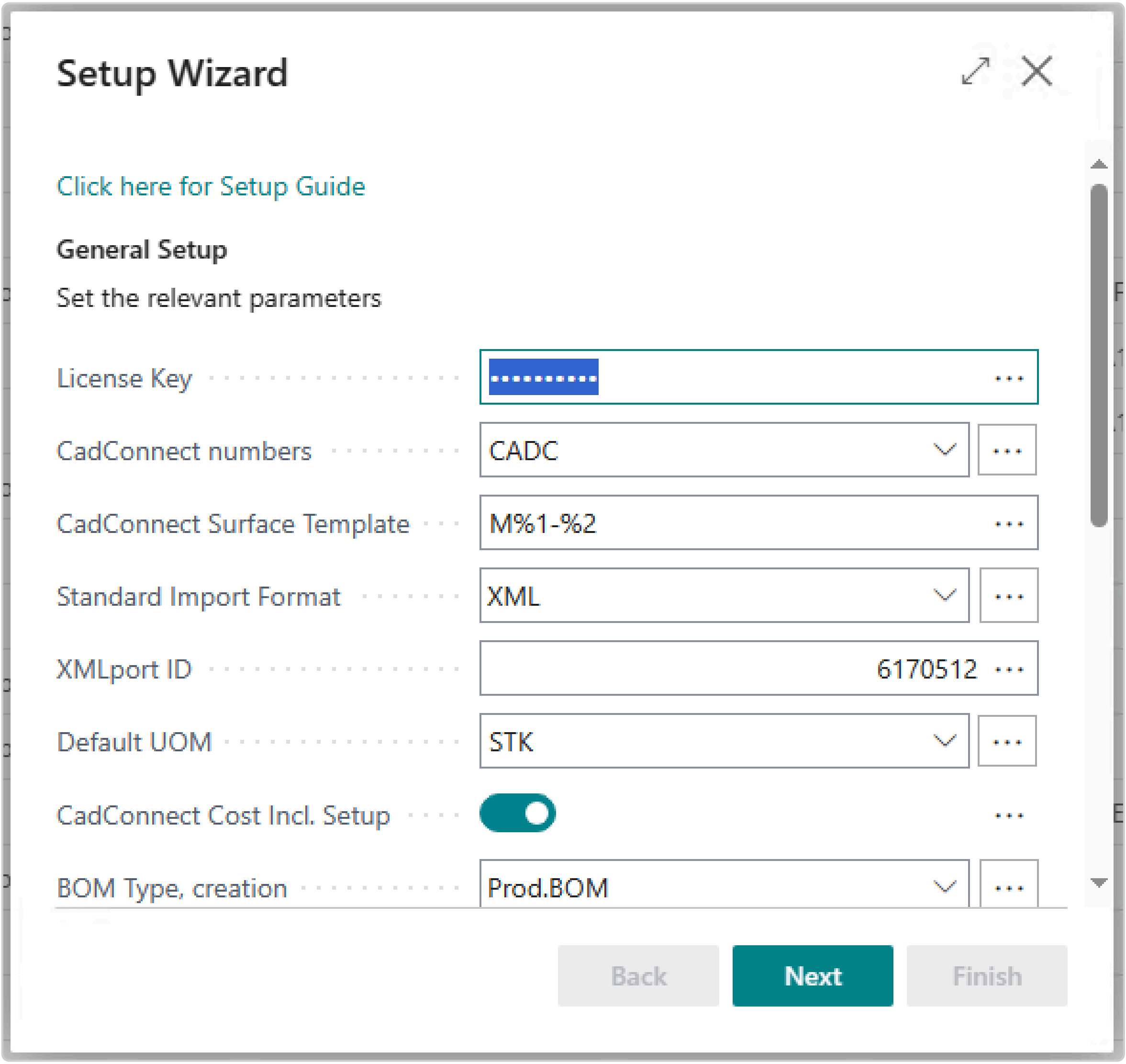
Setting up CadConnect is done from a few different Menu items found in the Main menu of CadConnect under Setup.



Setup Wizard

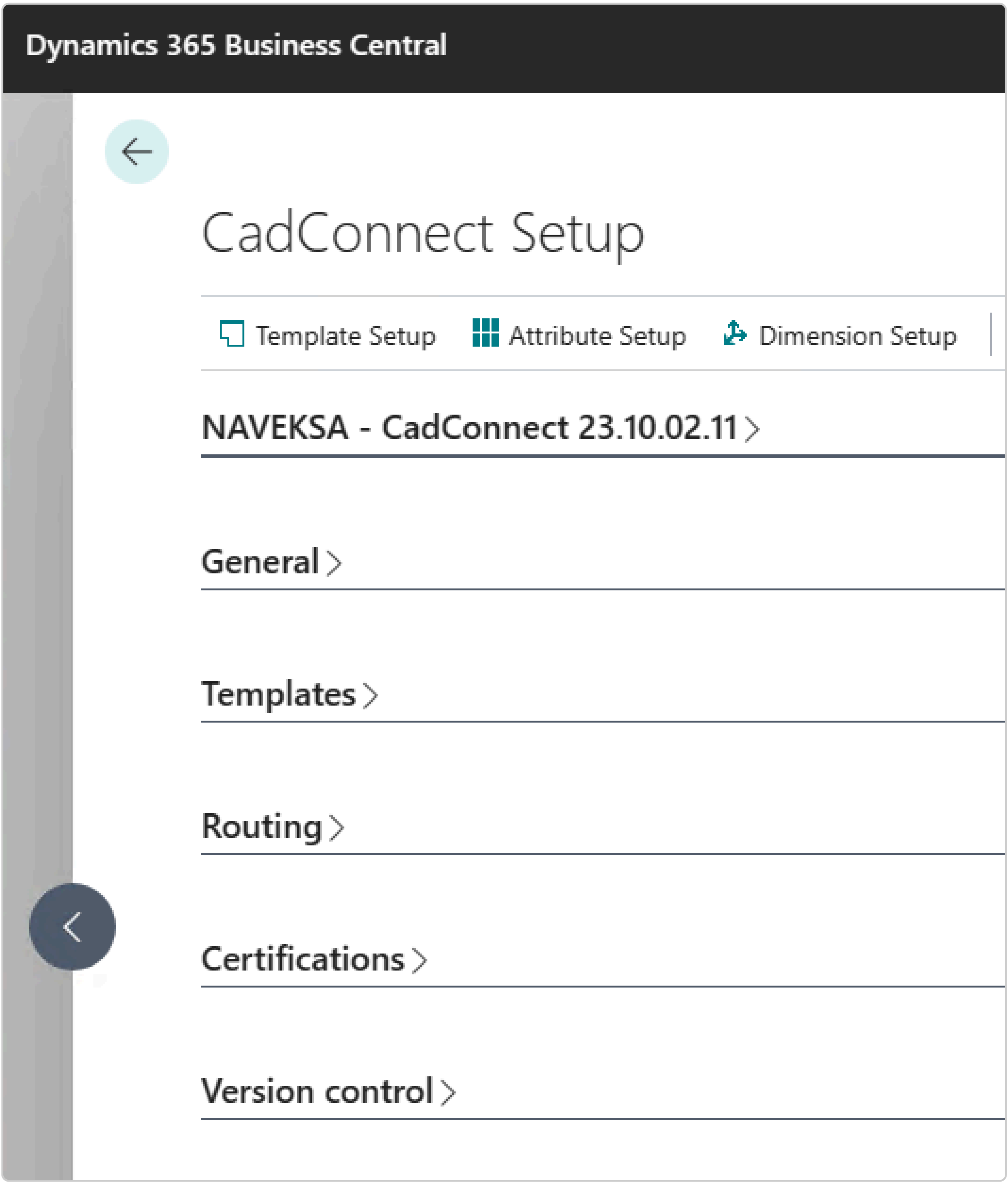
A Setup Wizard has been created to guide you through all the setup paramteres.
This Wizard will be proposed automatically by CadConnect. Once you have been through the Wizard, the proposal will disappear.
The idea is, that you get a guided tour through the Setup, and then if you on a later point of time need to modify any Setup parameter, you can go directly to the general CadConnect setup function.

Please note, on each parameter in the Wizard, you can click the 3 dots at the end of the fields to get access to the user guide related to that specific field.

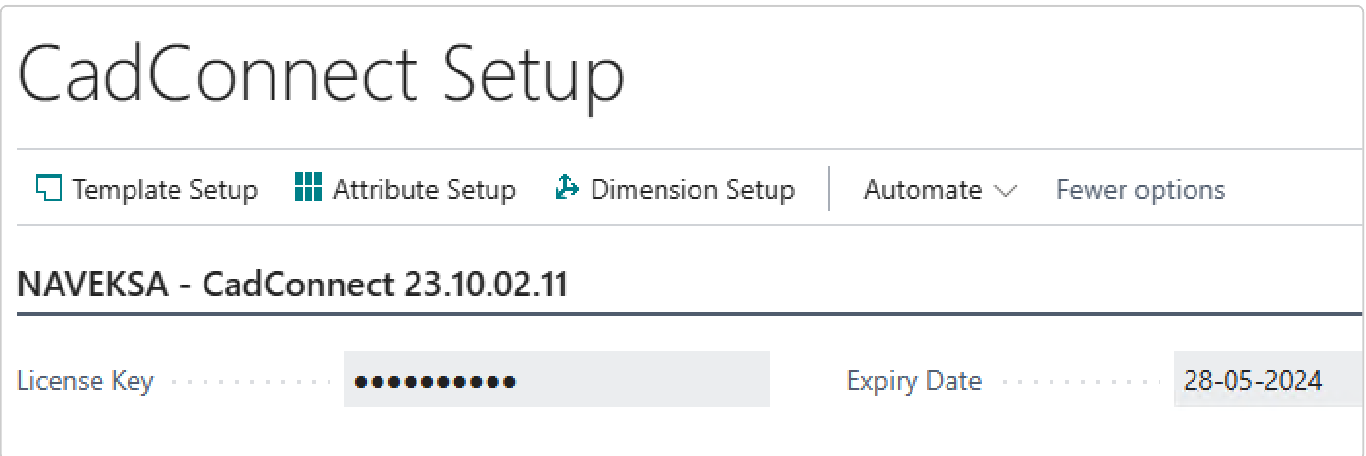


CadConnect Setup

The setup screen for CadConnect is divided into different sections and looks like this:



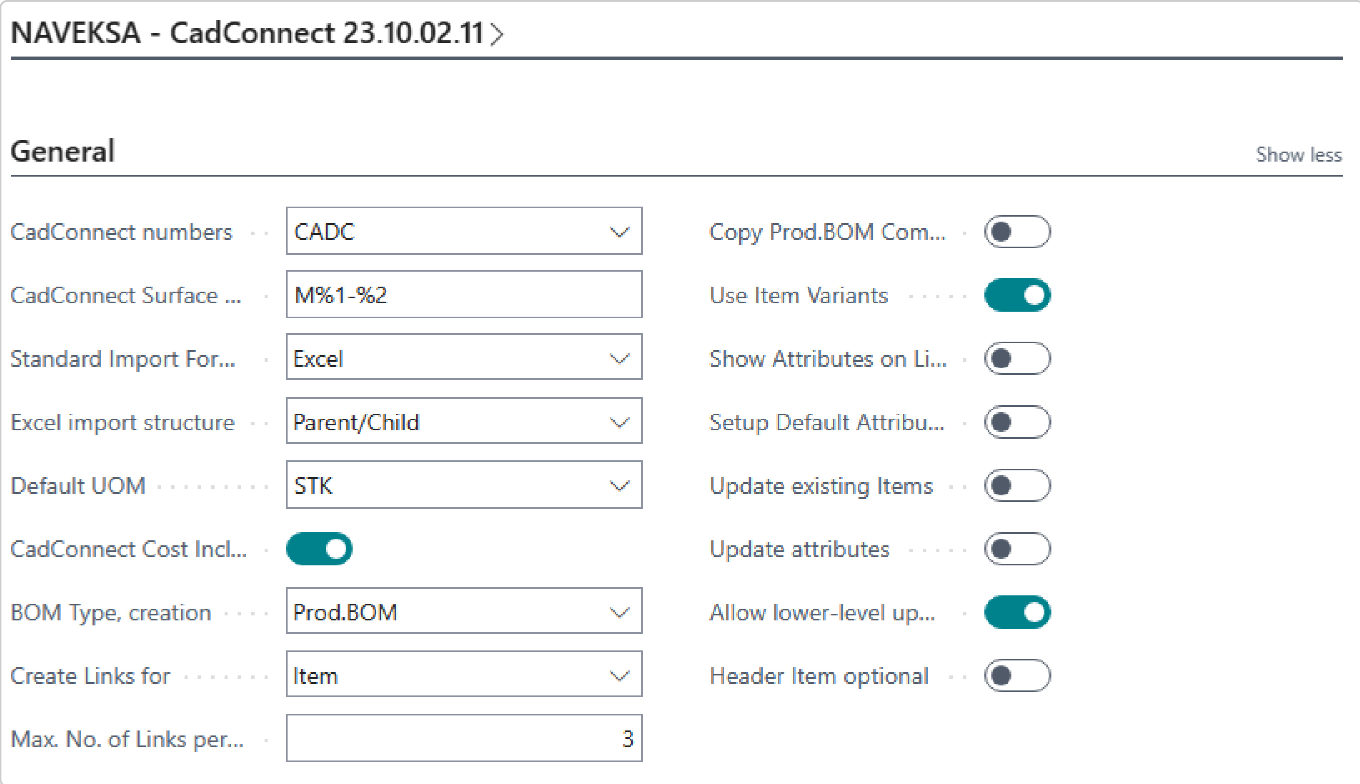
Main parameters



Running CadConnect in a production environment requires, that you pay for and get a License Key for the product.
This License Key must be entered here, and shall be renewed each 6 months.

You can see the Expiry Date and will be notified before you reach this date.

General parameters



CadConnect Numbers
Each CadConnect construction is assigned a unique number, which can be entered either manually or created automatically from a number series definition from BC.
The selected Number series shall be entered here.

CadConnect Surface Template
For any possible variant of a subject designated for a surface treatment, it is coded here. It is possible to retrieve 2 table values, % 1 is item number and % 2 is the surface code. Surface codes (variants) can be created from the CadConnect Task main menu item – CadConnect – Variant.

> Example:
> In the actual example the surface template defines that the creation of a surface treatment item shall be named M + the item number + surface description. That is based on item number F23 and selection of variant RED, the item number of the new product will become MF23-RED.
> When using the option: “Insert surface” in CadConnect, this action creates a new item above the prior item and using this in the BOM. You may hereafter add the necessary routing steps.

Standard import format
2 different options are available: Excel and XML.

Excel import structure

3 different options are available:

- One dimension levelling
- Multi-dimension levelling
- Parent/Child
  For further information on this subject, please refer to CadConnect manual, section Data structure:https://www.manula.com/manuals/naveksa/cadconnect/1/en/topic/exporting-data-to-excel-for-cadconnect-import

Default UOM (Unit of Measure) Code
If the input file does not contain a unit of measure code, the value in this field will be used as the default value.

CadConnect Cost incl. setup
Perfoming cost calculations in CadConnect can be done with or without the setup cost element, that is cost from setup operations added to the CadConnect structure.
This principle is fully equivalent to the costing principle in BC.

BOM type, creation
Specifies which kind of Bill of materials you want to create. You can select from the values:

- Production BOM
- Assembly BOM
- Both

Please notice that Assembly BOM can only be created as end-items with components. That is you cannot start in the middle of a production BOM adding assembly items.
If you select “Both”, you will be propted each time during data creation to select which type to be used.

Create Links for
If you intend to import Links along with your other data, you can here select whether thses Links shall end up as Links on the Item Card or on the BOM.

Max. No. of Links per Item
You can import up to 3 Links per Item.

> Set the value to the max. number of Links, you intend to import.This will reduce/remove the Links section when you work with import making the import screen a bit more simple and you can avoid scrolling through a part, that you do not need. If you do not intend to import Links, set this value to 0.

Copy prod. BOM comments to prod.order
A checkmark in this field enables a function where the bill of material header comments are copied to the production order as order comments. This copy takes place when the production order is being refreshed.

Use item variants

Use Standard BC variants. Selecting this option will open variant-fields in the field-mapping specification when you run the import.

Show Item attributes on lines
If you use CadConnect with Item Attributes you can have these attributes shown on each of the detail lines. In seperate columns. This makes it possible to modify the values imported.

> The attributes will always be shown in Factboxes at the right, unless you choose to hide the Factboxes.

Setup Default Attributes
Setting up Default Attributes will add these Attributes to all new CadConnect constructions and thereby reduce your work to selecting the actual values.

Update existing Items
If you want to be able to change fields on existing items then put a checkmark in this field. The update take place when you execute the update from a CadConnect.
Fields that will be updated are: Description, Description 2, No. 2.

Update Attributes
If you want to be able to change Attributes on existing items the put a checkmark in this field.

You can read more about using Item Attributes here: https://www.manula.com/manuals/naveksa/cadconnect/1/en/topic/using-item-attributes
Please note, that as an item can hold only one value for each BC item attribute, selecting the update will remove the existing attribute values from the item and adding new attributes according to the CadConnect you are updating from.

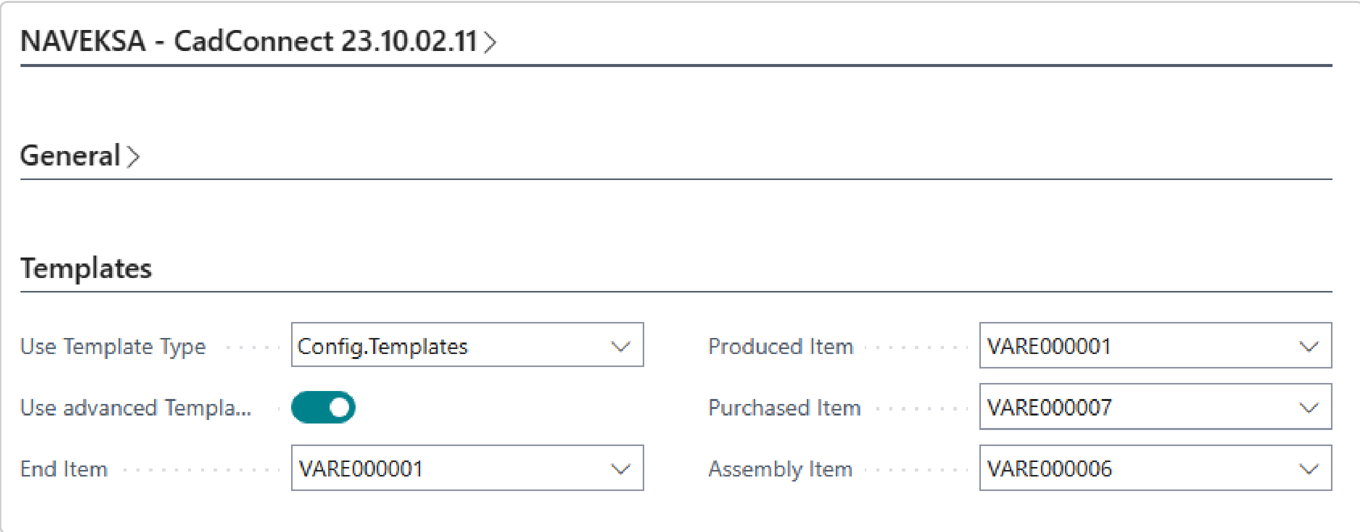
Allow lower-level updates
If you do not allow lower-level updates (default) then CadConnect will not let you change any existing BOMs and routings beneath the top level.
If you allow lower-level updates then CadConnect will let you change all BOMs and routings nomatter the level.

> ! Please be aware of the possible impacts these updates may have. You have the full responsibilty for any changes including possible unexpected updates beneath top-level items.

Header Item optional
Normally you will define the Item in the CadConnect header as your final product, and CadConnect will create BOM and Routing belonging to this Item.
If you select this parameter, CadConnect will allow you to work with constructions based on lines only, that is no information, Item, BOM or Routing will be created based on the Header if the Item field in the Header is left blank.
If you select this parameter, but do fill in the Item No. field in the Header, CadConnect will create

everything from the header as normal.

Templates



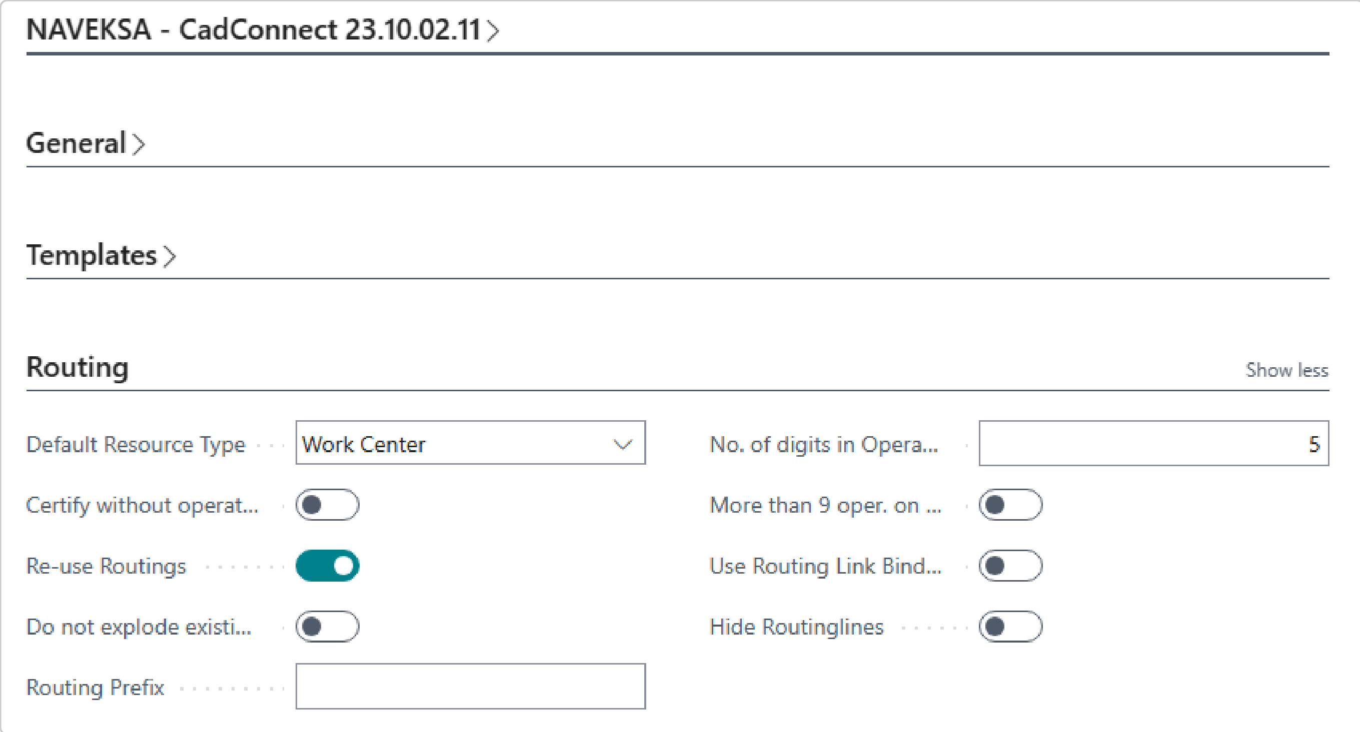
! It is very important that you familiarize yourself with the concept of using standard BC item creation templates / Configuration Templates before you begin using the system.

Use Template Type
New items are created based on the standard BC item creation template / Configuration Template function.
You can here select whether you want CadConnect to use BC Item Templates or BC Configuration Templates.
Depending on this selection the 4 basic Templates (for use on End-items, Produced items, Purchased items or Assembly items) will refer to the created Templates in BC.

Use advanced templates
If you checkmark this field the advanced template use system is initiated.

You can read about the use of Templates in CadConnect here: Using advanced templates

Routing



Default Resource Type
If you intend to import operations with reference to specific capacities, you must here select whether these capacity-numbers are Word Centers or Machine Centers.

Certify without operationtimes
As default CadConnect will require, that you have setup and/or run times defined on all operations lines. If you want to assign these operationtimes at a later point in time and therefore want to be able to create routings without operationtimes, you must select this parameter.

Re-use routings
When you add a routing to an item, through one of the methods available, CadConnect will as default create a new routing with the same number as the item number and add a reference on the item to this new routing.
If you want to re-use existing BC routings and you do not want new “identical” routings created, you can select this option.
In that case selecting an existing routing on a CadConnect line will add a routing to the item, but keep the routing number as is. That is no new routing will be created and the item will be added a reference to the selected existing routing.
Selecting the “Re-use routings” parameter will pen the following parameter.

Do not explode existing routes
When you add a routing to an item, by selecting an existing routing, CadConnect will as default create new lines showing each operation from the routing. When you select this option the routing number will be saved as the Routing Template on the CadConnect item, and no operation lines will be added. When the item is being created the item will be added a reference to this selected existing routing.

Routing Prefix
As mentioned above new routings will as default get the same number as the Item they belong to. You have here the possibility to add a Prefix to the Routing number.

Example: Setting the Routing Prefix to R and create an Item with number 123456, will cause the attached Routing to get the number R123456.

Number of digits in Operation No.

When creating BC Routings and operations from CadConnect, each line will need to have an Operation No. assigned.
You define the layout of this Operation No. here by choosing the lenght.

Examples: Setting the Number of digits to 4 will give you Operation No.s as follows: 1000, 2000, 3000 etc. up to 9000.
Setting the Number of digits to 5 will give you Operation No.s as follows: 10000, 20000, 30000 etc. up to 90000

More than 9 oper. on a Routing

If you have more than 9 operations on any Routing, the above specified Numbering will create a conflict, as you have only 9 values for CadConnect to use.
To solve this issue you will need to mark this parameter and the Operations No.s will change accordingly.

Examples: Setting the Number of digits to 4 ands selecting the “More that 9 oper.…” parameter will give you Operation No.s as follows: 0100, 0200, 0300 etc. up to 1000 and from there 1100, 1200, 1300 etc.

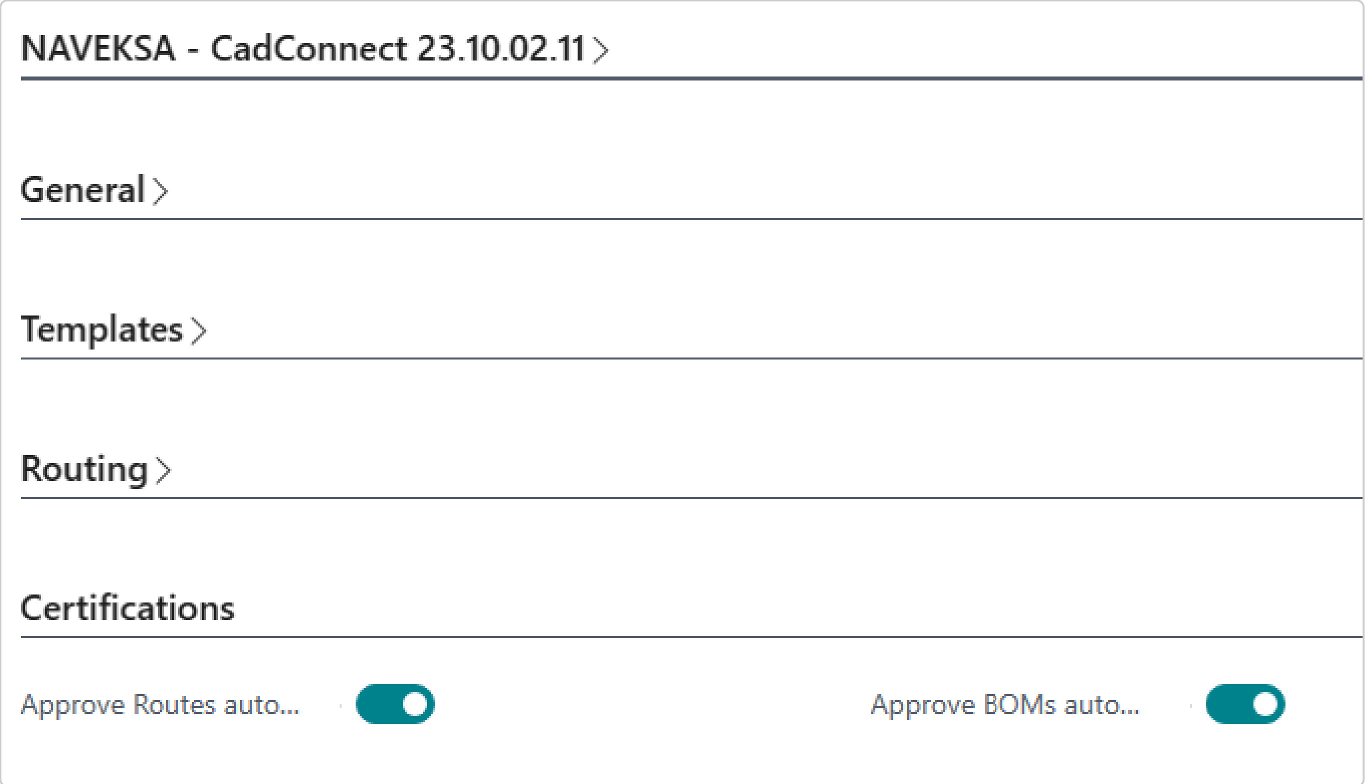
Use Routing Link Bindings

If you want to have Routing Link codes to be copied from an operation to the items/components to be use in that operation, you can have CadConnect to do so automatically by selecting this parameter.

Hide Routinglines

This parameter will hide CadConnect lines of type Routing, that is only showing the specific opeartion lines.
Selecting this parameter will not influence the way CadConnect work during definition and creation of Routings. This is merely a visuel matter to make the overview of a construction more simple by reducing the number of lines shown.

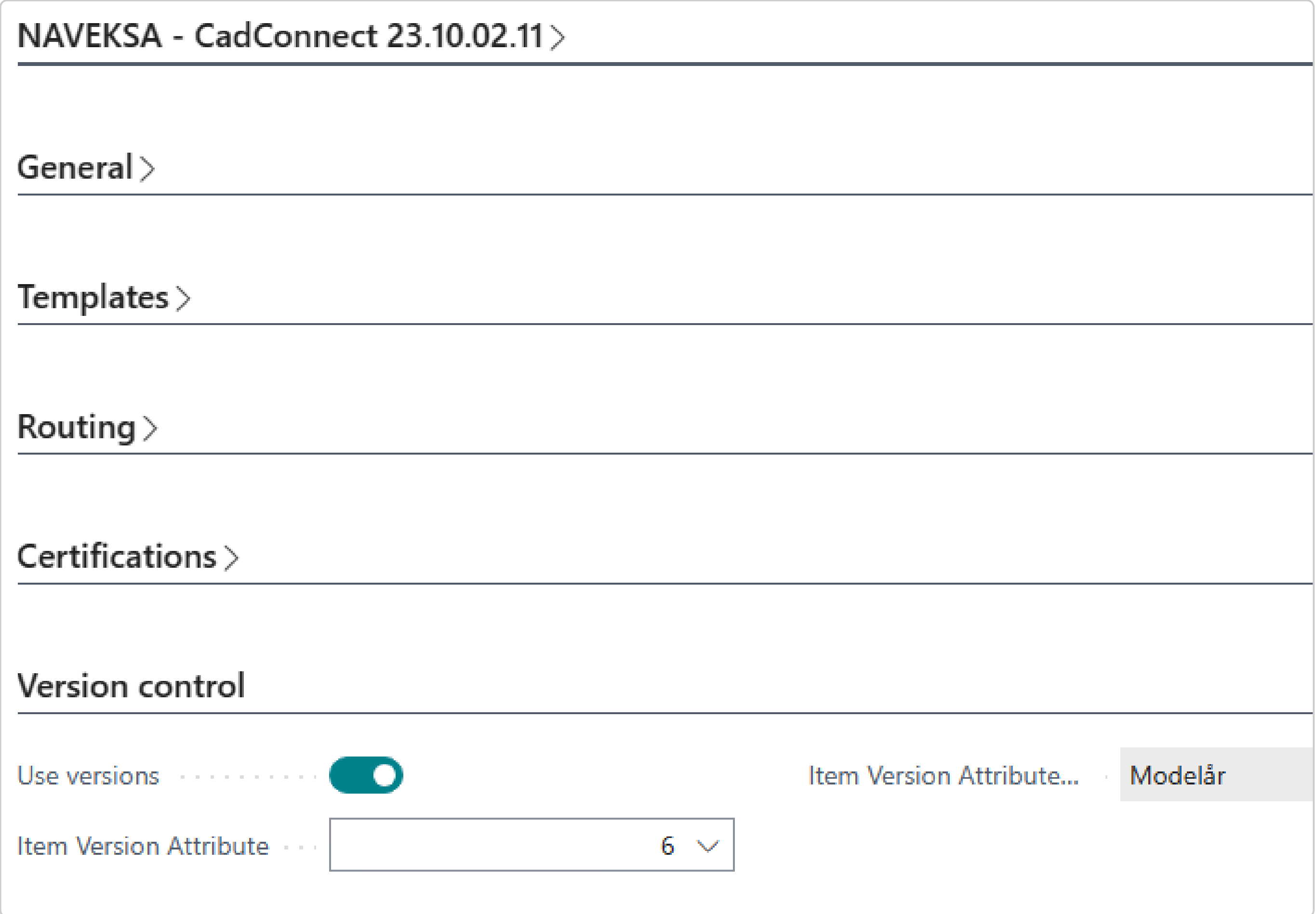
Certifications



Approve Routings / BOMs automatically

You need to decide (select) whether the newly created BC BOM's and/or Routings shall be certified, that is set to Status = Certified, or stay in status New after the creating process.

Version Control



Use Versions
A checkmark in this field allows you to run with version control on items, BOM's and routings.

Item version Attribute
If you want to have imported version codes added to new items as an attribute value, you can assign an item Attribute set for this here.

You can read more about the use of Item Attributes her: [Item Attributes]

CadConnect Item Templates

When you have chosen to use Advance Templates, you have an additional access to the setup here.

Operation Time Setup

In standard BC, you can through Routing setup define standard values for setup, wait and move time on Machine Centers.
We have added the same functionality in CadConnect for Workcenters here.

Manufacturing Setup

We have added direct access to the standard BC Manufacturing Setup in CadConnect, as these setup-parameters are highly related.

8.3.1. Assigning CadConnect Permission Sets

Assigning CadConnect Permission Sets

CadConnect is delivered with a single Permission Set that gives the necessary access to the different data tables and functions in CadConnect.

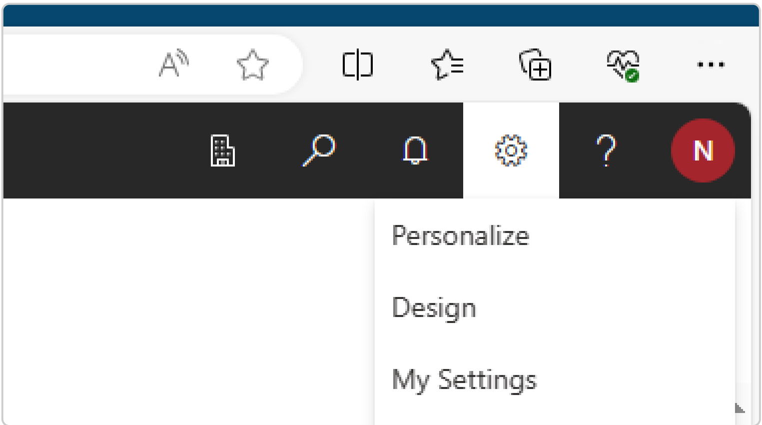
Permission Set ↑	Name	Type ↑	Extension Name
LOGIN	Login access	System	System Application
M365 COLLABORATION	Microsoft 365 Collaboration	System	Base Application
MERGE DUPLICATES	Merge Duplicates	System	Base Application
→ NAVEKSA_CADCONNECT	NAVEKSA_CADCONNECT	System	NAVEKSA CadConnect 365

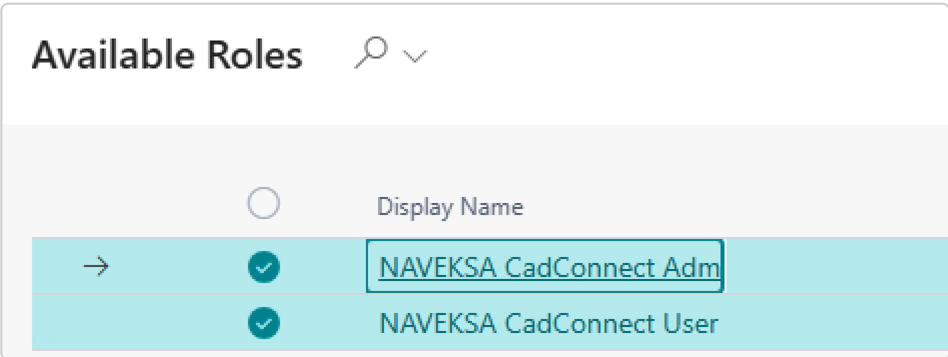
This Permission Set must be added to all BC users, that is going to use CadConnect.
In addition you must make sure that the users have sufficient access rights to the necessary BC areas, e.g. Items,. Production BOMs etc.

8.3.2. Using CadConnect Roles

Using CadConnect Roles

CadConnect is delivered with two standard Roles which you can select from standard setup “My Settings”





The difference between the two Roles is that the Adm Role has menu items for everything in CadConnect
whereas the User Role does not have any menu items for Setup.

8.3.3. How to work with CAD Excel output files

How to work with CAD Excel output files

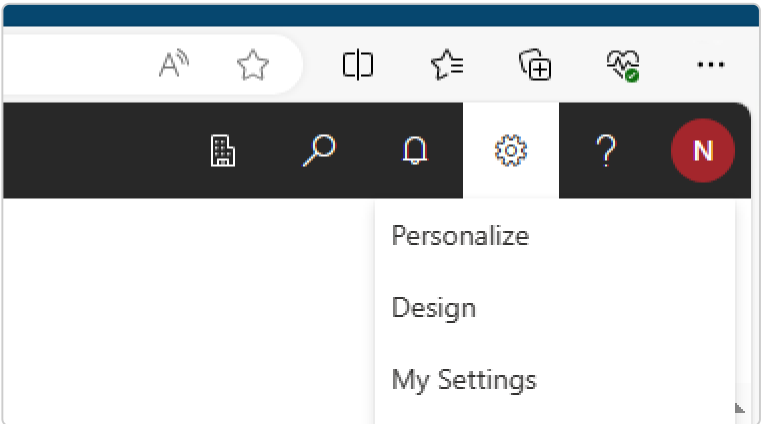
Based on your CAD system you must define how the CAD output shall be interpreted when importing in CadConnect.

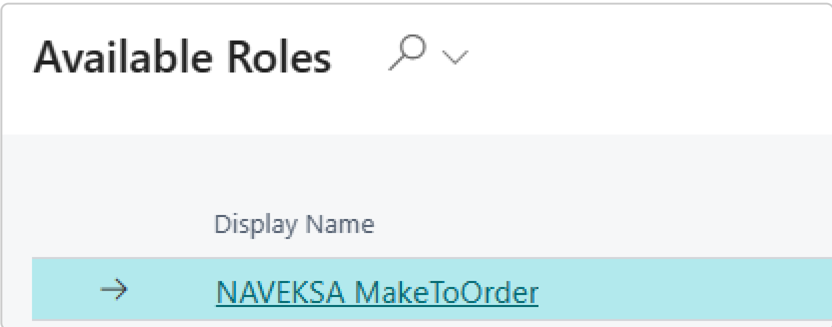
Read more at:
How to work with CAD Excel output files

8.4. Setting up MakeToOrder

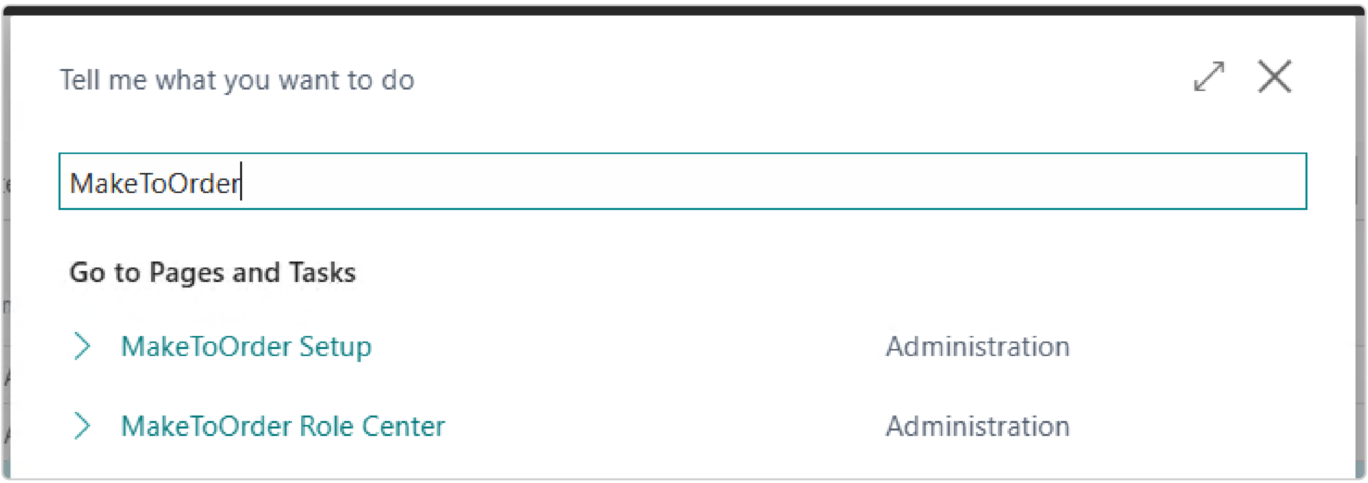
Setting up MakeToOrder

MakeToOrder is delivered with a standard Roles which you can select from standard setup “My Settings”

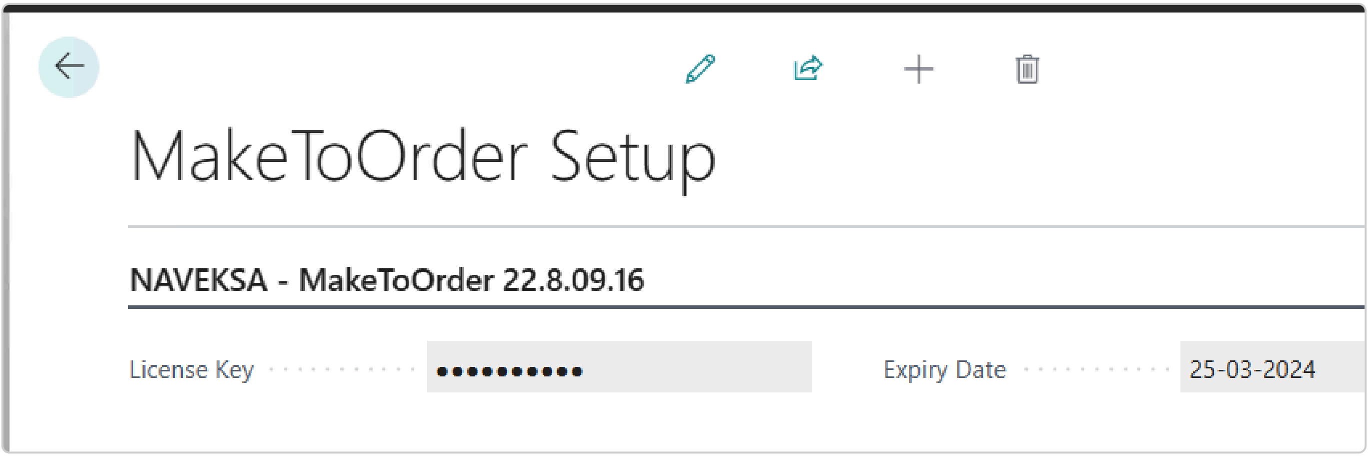




However, the only function in the MakeToOrder Role is the Setup, so you might as well keep you normal role and simply search for MakeToOrder



There is no specific setup involved in running Make to Order. You simply just enter the License Key supplied from NAVEKSA, when you acquire the module.


MakeToOrder Setup
NAVEKSA - MakeToOrder 22.8.09.16
License Key
Expiry Date
25-03-2024

8.4.1. Assigning MakeToOrder Permission Sets

Assigning MakeToOrder Permission Sets

MakeToOrder is delivered with a single Permission Set that gives the necessary access to the different data tables and functions in MakeToOrder.

Permission Set ↑	Name	Type ↑	Extension Name
NAVEKSA SFS PSET	NAVEKSA SFS PSET	System	NAVEKSA ShopFloor 365
NAVEKSA_CADCONNECT	NAVEKSA_CADCONNECT	System	NAVEKSA CadConnect 365
NAVEKSA_ITEMPLANNING	NAVEKSA_ITEMPLANNING	System	NAVEKSA ItemPlanning 365
NAVEKSA_MAKETOORDER	NAVEKSA_MAKETOORDER	System	NAVEKSA MakeToOrder 365

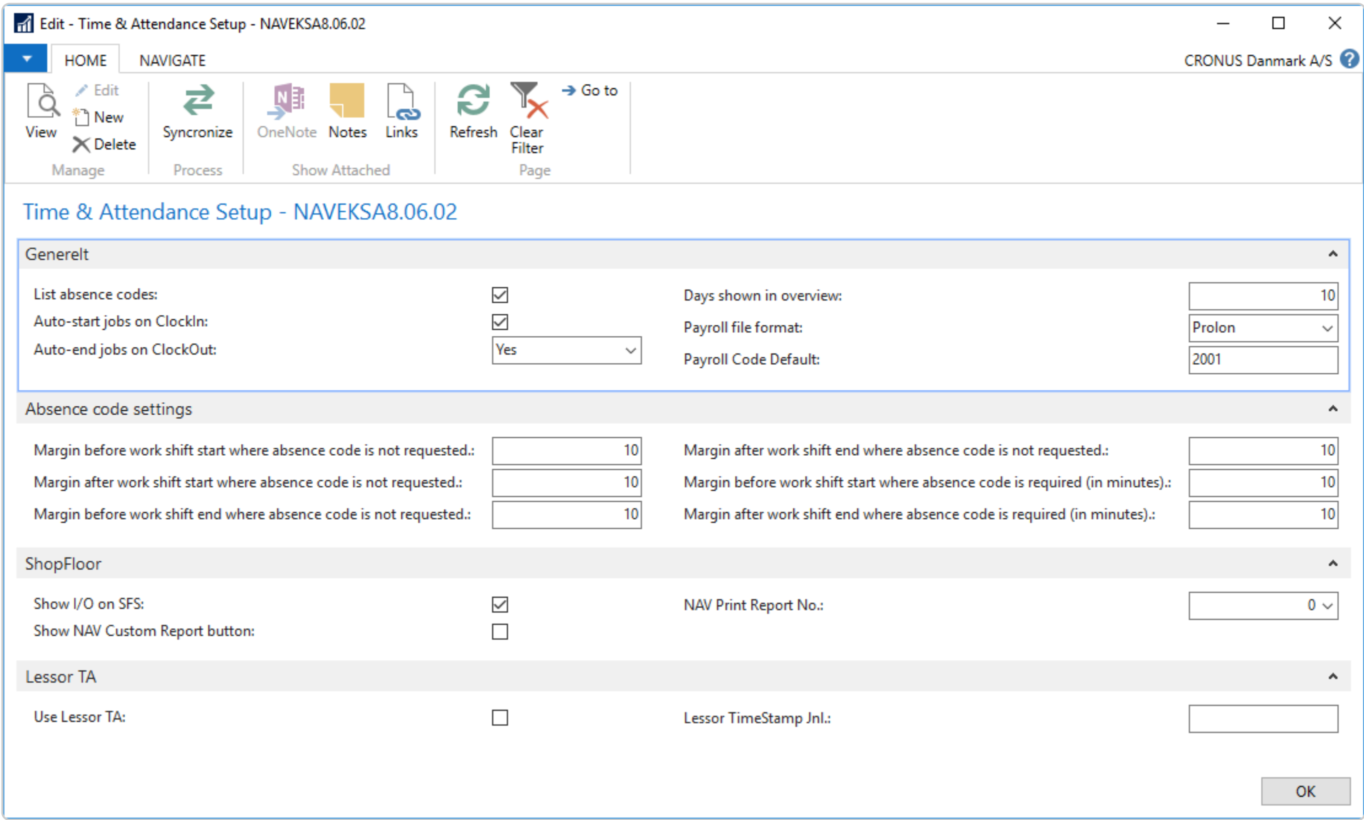
This Permission Set must be added to all BC users, that is going to update production orders when MakeToOrder has been installed.
In addition you must make sure that the users have sufficient access rights to the necessary BC areas, e.g. Items,. Production BOMs, Production orders etc.

8.5. Setting up Time & Attendance

Setting up Time & Attendance

Setting up Time & Attendance requires 3 steps to be taken.

Initially answering the setup display:



The system has got the following setup fields:

List Absence Codes

If this code is active, you have to specify a code when clocking in, in case you do not arrive and leave at normal work start/end. Please see further details regarding conditions for absence codes under "Absence code setting."

Auto-start Job on Clock In

Autostart means that a previous running job was paused when the operator left. Now it automatically turns the job active again by clocking in.

Auto-End Jobs on Clock Out

This field has 3 settings:

- Yes

- No
- Select

If you select Yes, the employee’s active job is ended, when clocking out.
If you select No, the employee’s active job continues to run, when clocking out.
Chosing Select, the employee is asked to decide, whether active jobs must be stopped.

Days shown in overview

When clocking in and out, the employee can see an overview of his clocking in and clocking out hours, for all the number of days specified in the field.

Payroll file Format

According to the options that are possible and have to be transferred to the payroll system as standard.

Payroll code default

Payroll code that specifies normal office hours in the payroll system.

Absence Code Settings

- Margin before work shift start, where the absence code is not requested
- Margin after work shift start, where the absence code is not requested
- Margin before work shift end, where the absence code is not requested
- Margin after work shift end, where the absence code is not requested
- Margin before work shift start, where the absence code is required
- Margin after work shift start, where the absence code is required

Many companies work with flexible working hours, where the employees can decide within a certain time interval, when they come or go adding or subtracting time to their flex account.

If the working hours are usually from 7 am. to 15 p.m., but the employees have the opportunity to flex, between 6 am and 8 am and 14 and 16 p.m., they do not want to be prompted for an absence code within this interval.

Therefore, it is possible, in the time and attendance setup, to select that the employee will not be prompted for an absence code, if he for instance arrives between 6 am and 8 am, and leaves between 14 and 16 pm. In this case, the value in these fields is set to 60 minutes in the setup if the company defined working hours is 7:00 to 15:00.

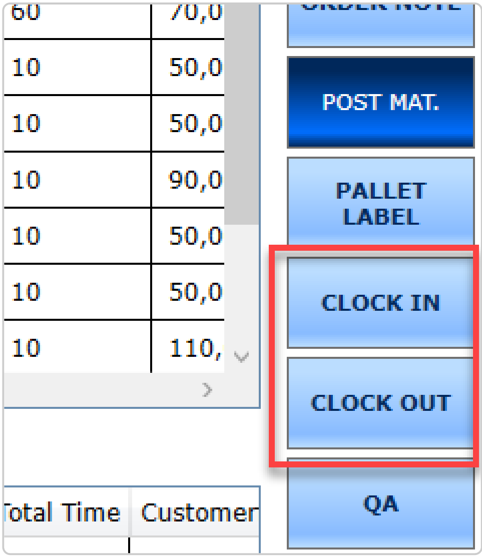
The system needs to get information about, whether an employee arrives too late compared to previous work shift start, or arrives too early in relation to the next work shift start.

Conversely, at the end, whether the employee leaves too early, or too late. It is possible to specify this in these fields, as the content herein determines, whether you consider an employee being late or too early or leave too soon or too early. If you always want an employee to enter an absence code, if he arrives or leaves between a work shift end or a work shift start, you have to enter the number of total minutes, covering the period from end to start.

If the working hours end at 15 pm. and start at 7.pm the next day, you have to allocate 16 hours, corresponding to 960 minutes in these two fields.

However, the content in the previous fields prevail this setup, so that there is no absence code required within an hour before the start and after the end.

Show I/O on ShopFloor

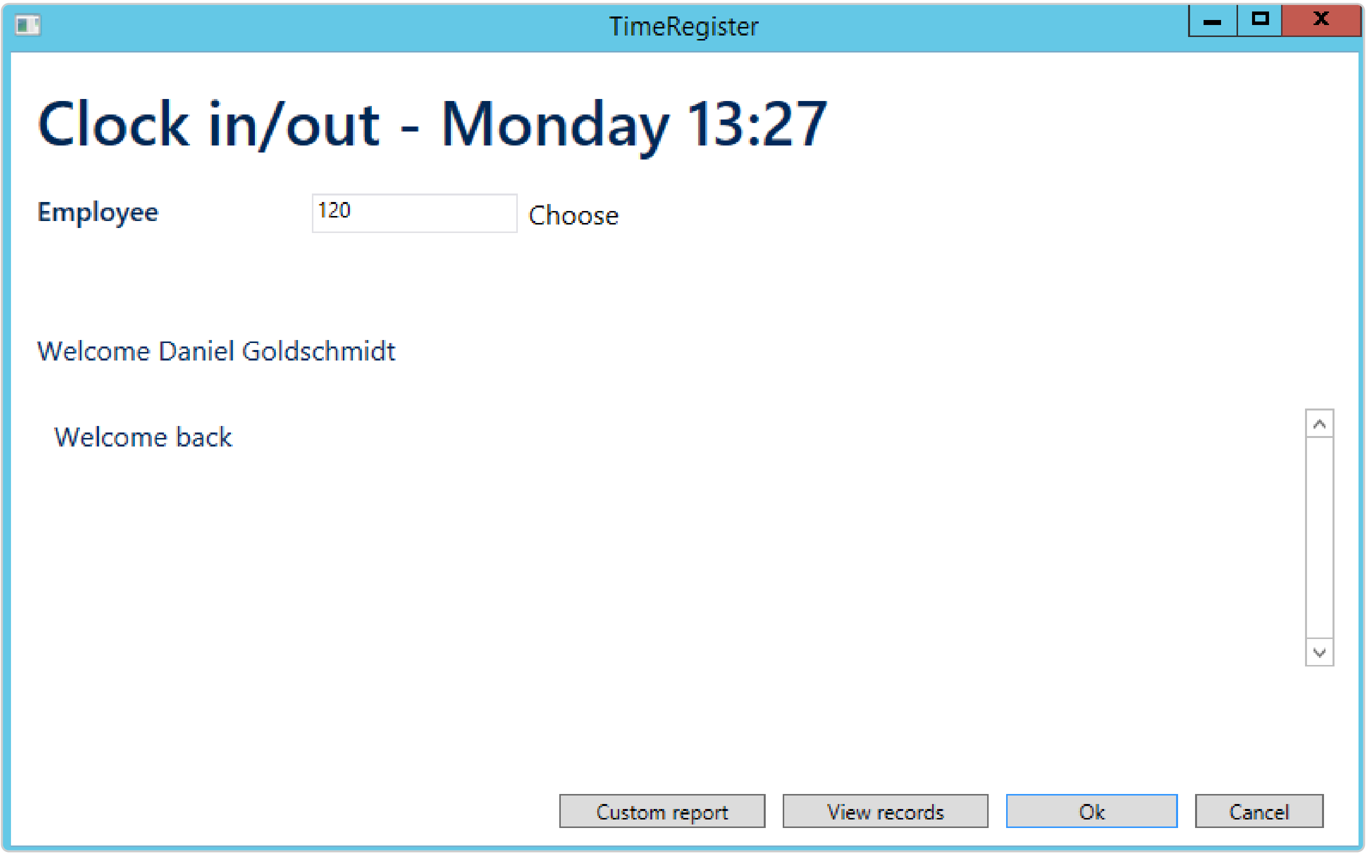


If this field has not been activated it is not possible to perform clock in / clock out stampings in ShopFloor

Show NAV Custom Report button

Nav Print Report no.

It is possible to create a customized report in order to print the time attendance stampings from the time attendance screen in SHOPFLOOR.

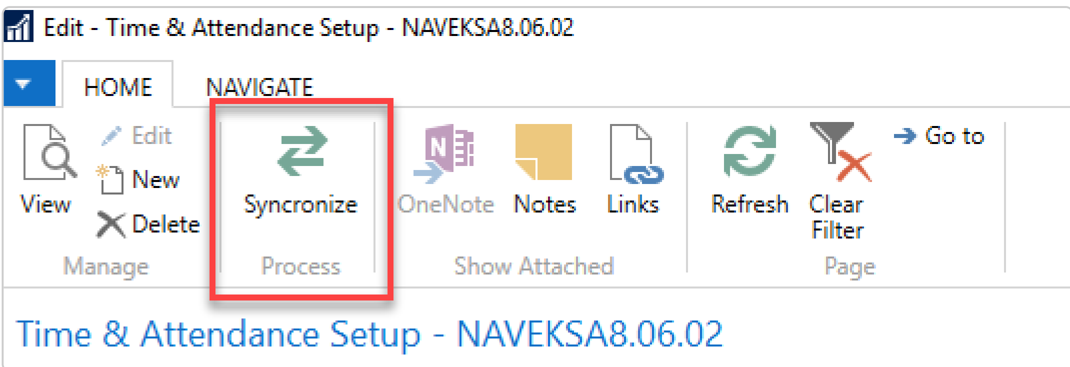


The report is not a part of the standard solution in ShopFloor, but has to be created in a customized version and select it in this field.

Use Lessor / TA Lessor Journal Draft Name

If you use Lessor Payroll, these fields have to be filled in, in order to transfer time attendance stampings for time registration in Lessor. Lessor is only available in certain countries as an add-on for Navision.

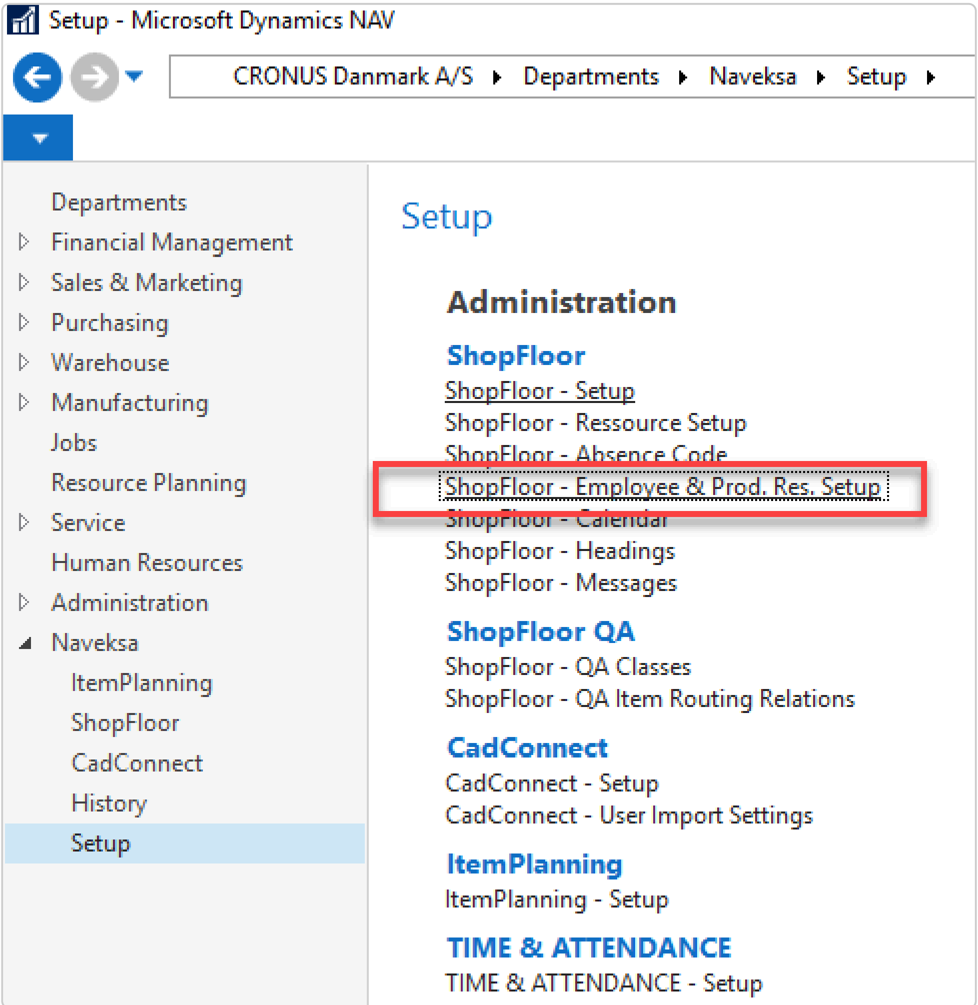
! When job is done and data created or updated, you MUST click the “Syncronize” button.

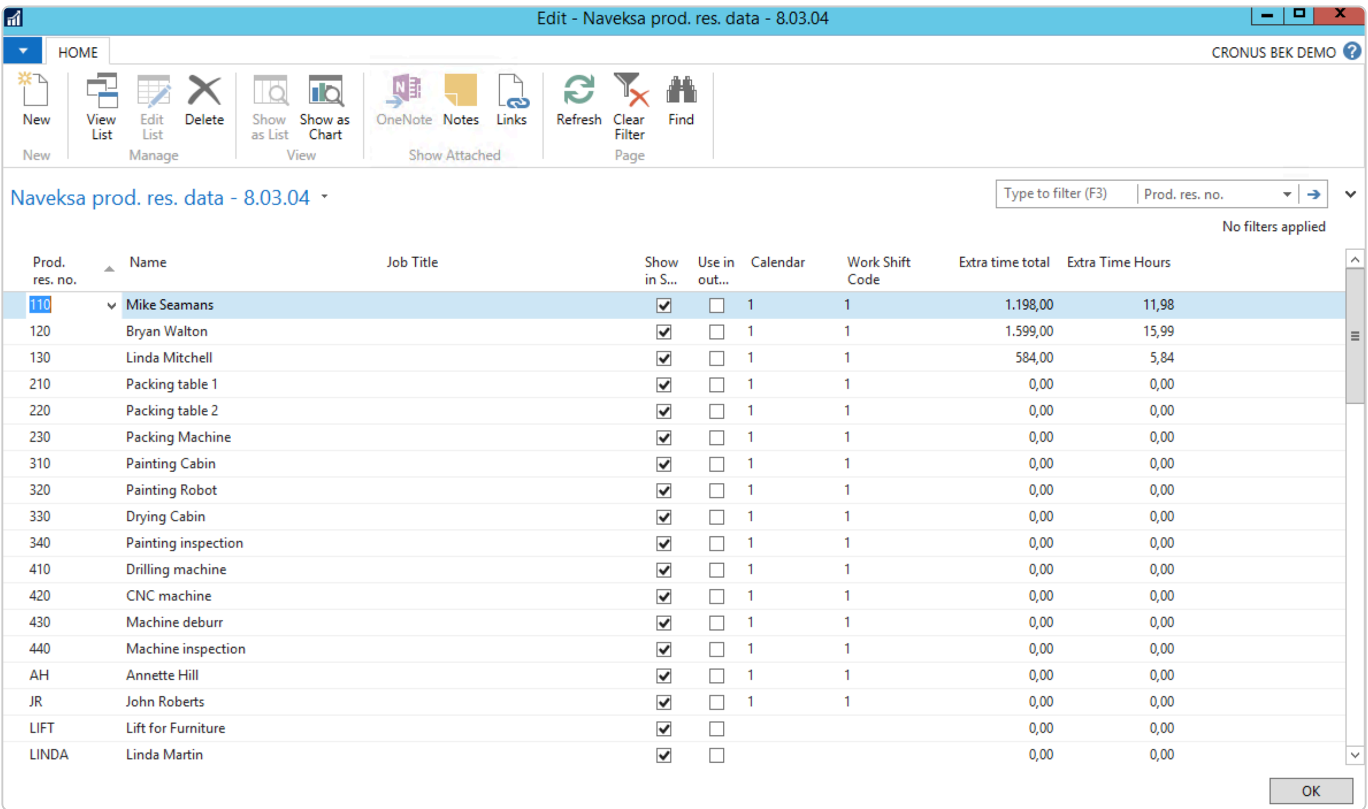


SHOPFLOOR – Employee and Production Resource Setup

You have to select, which production resources /employees will be shown in ShopFloor, and who/which can be clocked in on jobs.

This is done in NAVEKSA setup:





Prod. res. no.	Name	Job Title	Show in S...	Use in out...	Calendar	Work Shift Code	Extra time total	Extra Time Hours
110	Mike Seamans		☑	☐	1	1	1.198,00	11,98
120	Bryan Walton		☑	☐	1	1	1.599,00	15,99
130	Linda Mitchell		☑	☐	1	1	584,00	5,84
210	Packing table 1		☑	☐	1	1	0,00	0,00
220	Packing table 2		☑	☐	1	1	0,00	0,00
230	Packing Machine		☑	☐	1	1	0,00	0,00
310	Painting Cabin		☑	☐	1	1	0,00	0,00
320	Painting Robot		☑	☐	1	1	0,00	0,00
330	Drying Cabin		☑	☐	1	1	0,00	0,00
340	Painting inspection		☑	☐	1	1	0,00	0,00
410	Drilling machine		☑	☐	1	1	0,00	0,00
420	CNC machine		☑	☐	1	1	0,00	0,00
430	Machine deburr		☑	☐	1	1	0,00	0,00
440	Machine inspection		☑	☐	1	1	0,00	0,00
AH	Annette Hill		☑	☐	1	1	0,00	0,00
JR	John Roberts		☑	☐	1	1	0,00	0,00
LIFT	Lift for Furniture		☑	☐			0,00	0,00
LINDA	Linda Martin		☑	☐			0,00	0,00

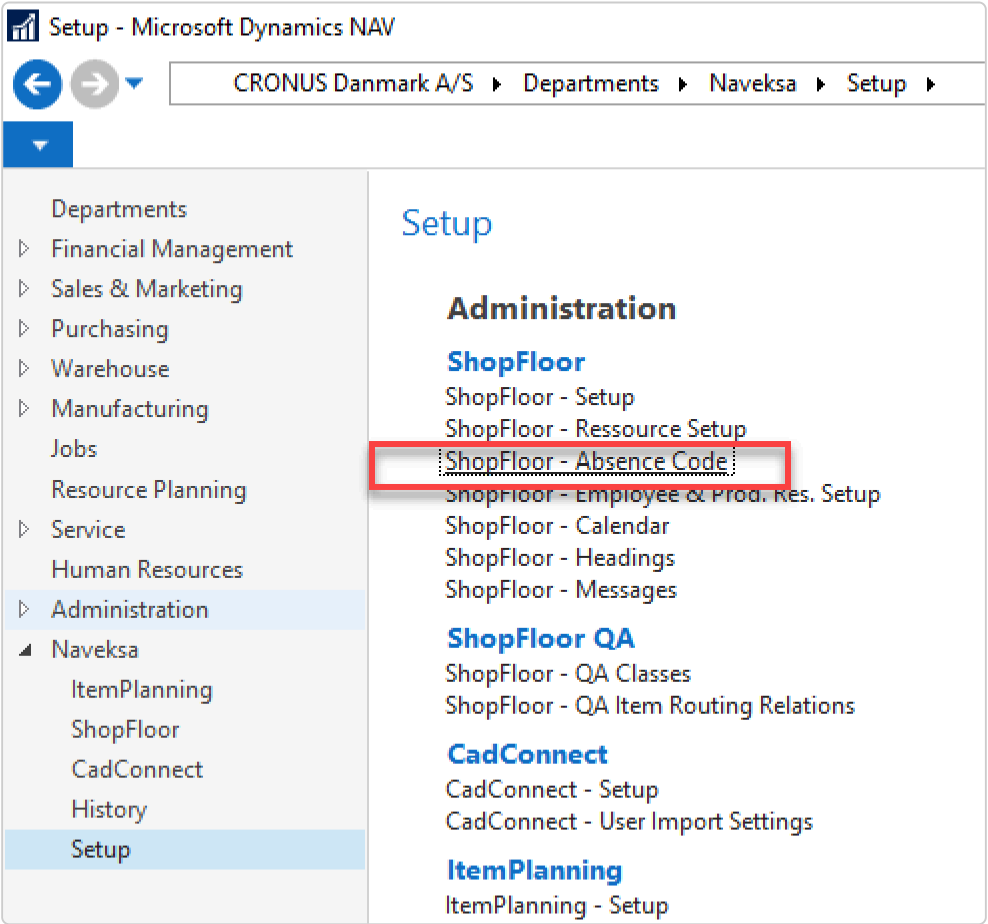
Calendar and Work shift have to be selected and assigned when selecting an operator or resource for ShopFloor.

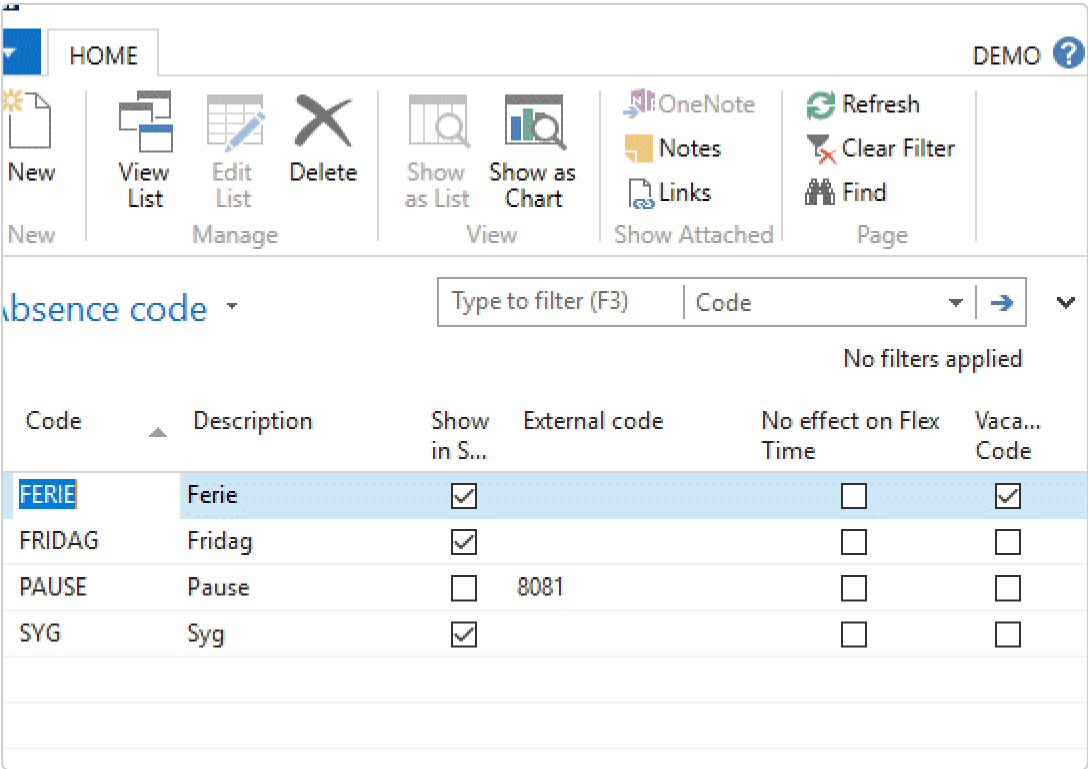
If you want the certain employee and his cost price (rate) to be displayed instead of Work center, the field “Use in output journal”, has to be marked.

Use absence codes

In case absence codes are used, absence codes must be created.

This is done in NAVEKSA setup:





Code = Code for absence – holiday, day off, sick, doctor visit, misc. non-paid etc.
Description = Description of the absence.
Show in ShopFloor = Shall this absence code be shown in the ShopFloor operator client.
No effect on flex time= The transactions with this code will not be a part of an operators flex balance.
Vacancy code = Is this a non-payable/non-flex emplyee absence code?

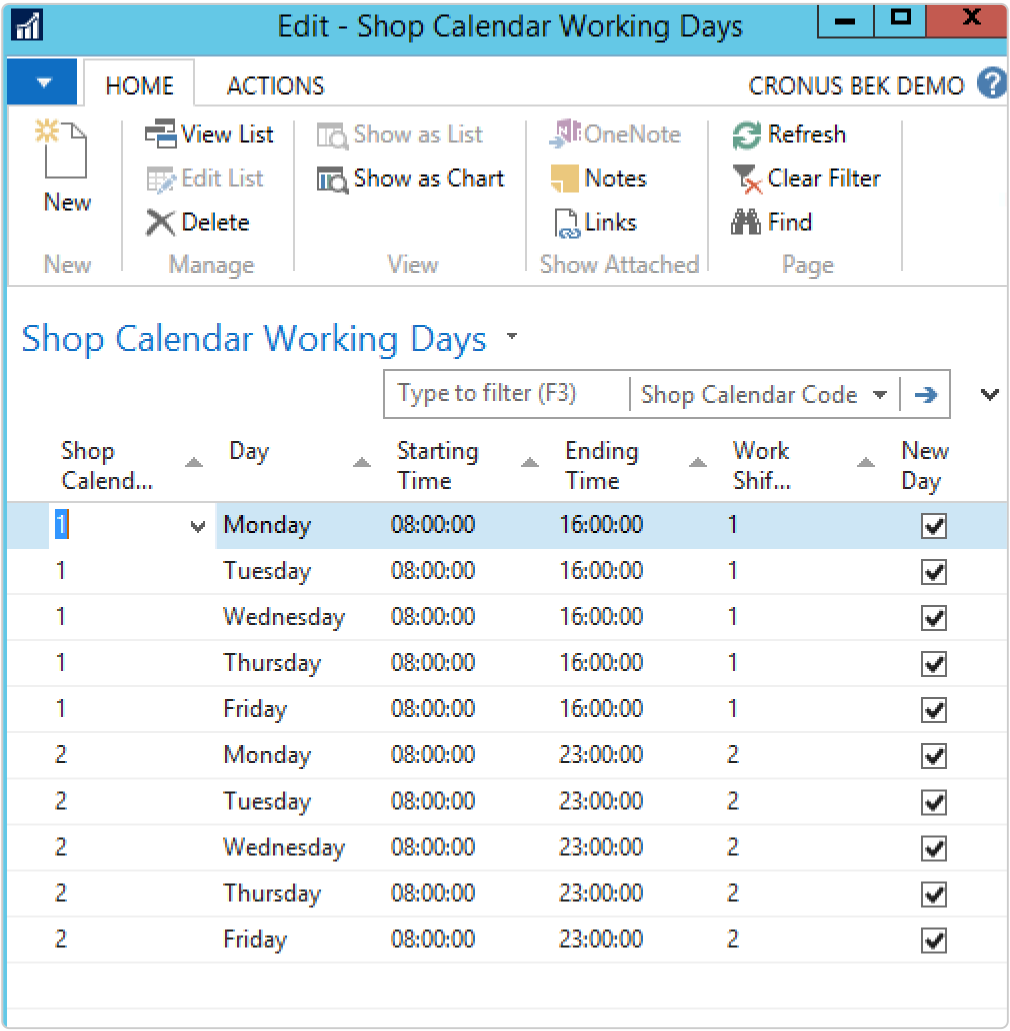
Read more about flex calculations "

Production Calendar / Working day Definitions

The employees and or resources need to be assigned to production calendars, which are the basis for the all time calculations.

The start and end times for breaks, which the employees pay themselves, have to be created.

! Remember to check mark when a new day begins for each day.



Shop Calend...	Day	Starting Time	Ending Time	Work Shif...	New Day
1	Monday	08:00:00	16:00:00	1	☑
1	Tuesday	08:00:00	16:00:00	1	☑
1	Wednesday	08:00:00	16:00:00	1	☑
1	Thursday	08:00:00	16:00:00	1	☑
1	Friday	08:00:00	16:00:00	1	☑
2	Monday	08:00:00	23:00:00	2	☑
2	Tuesday	08:00:00	23:00:00	2	☑
2	Wednesday	08:00:00	23:00:00	2	☑
2	Thursday	08:00:00	23:00:00	2	☑
2	Friday	08:00:00	23:00:00	2	☑

9. Additional features

9.1. Adding your own user fields in ShopFloor

Using your own user fields in ShopFloor

As a customer you may need to add some company specific information to a scheduled production order operation line with the purpose of selecting a proper production family (delimiting all 5 mm raw material plate thickness orders), sorting on color (from white to dark) etc.

An example from a customer where a car position number and outsourced purchase order reference have been added:

Normally this function demands individual programming.

NAVEKSA has made this easy for you.

10 individual customer user fields have been made available for your disposal.

The fields can be named company specific names and filled in with specific (calculated) values. The display and content can then be added to the NAVEKSA SHOPFLOOR planning and execution screens.

The setup and display are controlled in Dynamics NAV / Dynamics 365 Business Central.

How to use Customer Fields

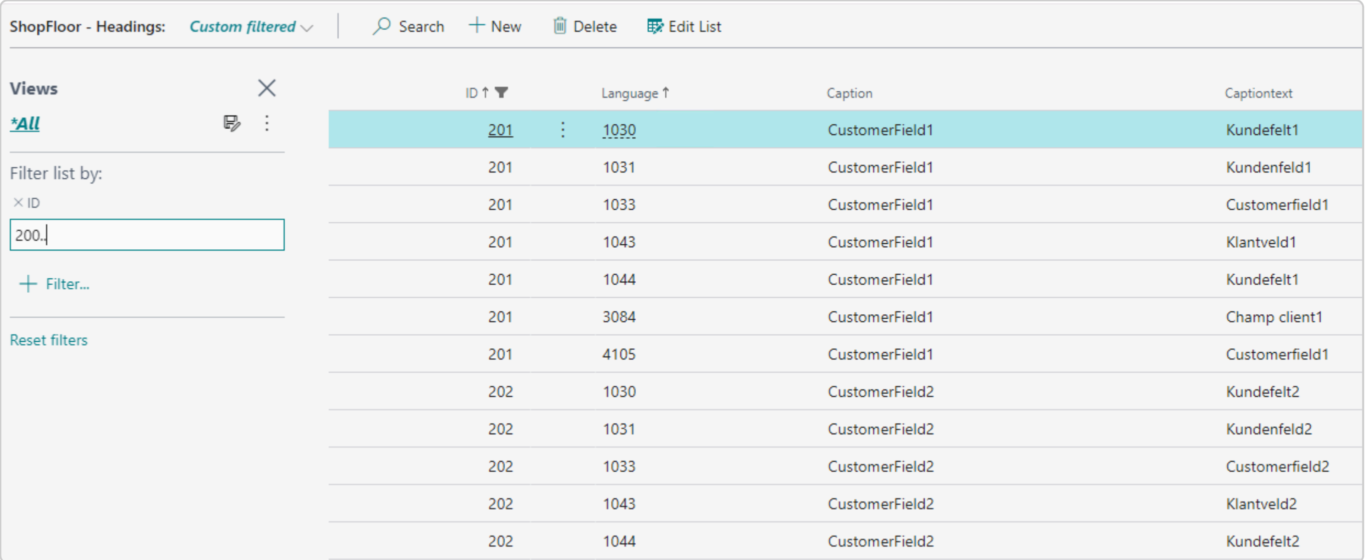
In order to show the customer fields in the ShopFloor client, go to Naveksa ->
Set up->ShopFloor – Set up. Click “ShopFloor field selection” and select the customer fields you want to appear in the ShopFloor client. (They will already be visible as columns, if you run the ShopFloor client, but without data).

In NAV and BC version up to 14 using the C/AL development environment:

In order to put data in the fields, now add a reference to the code unit that has to handle it. Do this by opening the table 6170498 Customer code reference in Dynamics NAV / Dynamics 365 Business Central Development Environment.

Here please enter object ID 6170476, which is the table for the ShopFloor lines, and in the last column, enter the ID of your code unit. The rest has to remain with the standard values.
Let the code unit use table 6170476 SHOPFLOOR Line.

In your code unit, create the desired code that enters values in the required columns.
In order to change the field description line of the customer field, open Naveksa -> Setup->SHOPFLOOR>Naveksa Field selection, find the relevant captions and provide them with new field descriptions lines
Do the same for the planning screen.



ID	Language	Caption	Captiontext
201	1030	CustomerField1	Kundefelt1
201	1031	CustomerField1	Kundenfeld1
201	1033	CustomerField1	Customerfield1
201	1043	CustomerField1	Klantveld1
201	1044	CustomerField1	Kundefelt1
201	3084	CustomerField1	Champ client1
201	4105	CustomerField1	Customerfield1
202	1030	CustomerField2	Kundefelt2
202	1031	CustomerField2	Kundenfeld2
202	1033	CustomerField2	Customerfield2
202	1043	CustomerField2	Klantveld2
202	1044	CustomerField2	Kundefelt2

In BC version from 15 and up using the AL extensions / App:

You have here 2 possibilities for handing the Customer Fields.

1. Adding code like in C/AL by creating a special Extension.
2. Using the function in ShopFloor to integrate Item Attributes to ShopFloor

> Please note, that in order to avoid confusion, you should only use one of the methods.

If you setup both methods, that is installing an Extension as described below and also setup ShopFloor Attributes, both functions will be executed.
his means that values added from the ShopFloor attributes will override values added from your Extension code !

1. Adding code:
As you can't add code directly to the ShopFloor App, you will need to create a customer Extension for holding your code.
a. In your Extension you will need to refer to the ShopFloor App as a dependency in the app.json file.

You code should look something like the following:

```
"dependencies": [
  {
    "id": "bb075128-50ee-40a7-9234-e51a99b45426",
    "name": "NAVEKSA ShopFloor 365",
    "publisher": "NAVEKSA",
    "version": "17.0.1.0"
  }
],
```

b. In your Extension you will need to add a codeunit containing an EventSubscriber function to track insert of records in the ShopFloor Line table.

Your code should look something like the following:

```
    [EventSubscriber(ObjectType::Table, 6170476, 'OnBeforeInsertEvent', '', false,
false)]
    LOCAL procedure OnInsertShopFloorLine(var Rec: Record "NAVEKSA SFS
Line"; RunTrigger: Boolean);
    begin
// Here you add your code to fill the Customer Fields....
    end;
```

Please note the following regarding the ShopFloor Line table (6170476):

i. The table holds the following key-fields, you can use to identify the actual record:

```
    "Prod. Res. Type",
    "Prod. Res. No.",
    "Routing Status",
    "Status",
    "Prod. Order No.",
    "Prod. Order Line No.",
    "Routing No.",
    "Routing Reference No.",
    "Operation No.",
    "Employee No."
```

ii. The Customer fields you can add values to are named:

```
    CustomerField1
    CustomerField2
    CustomerField3
    etc.
```

2. Using Attributes:

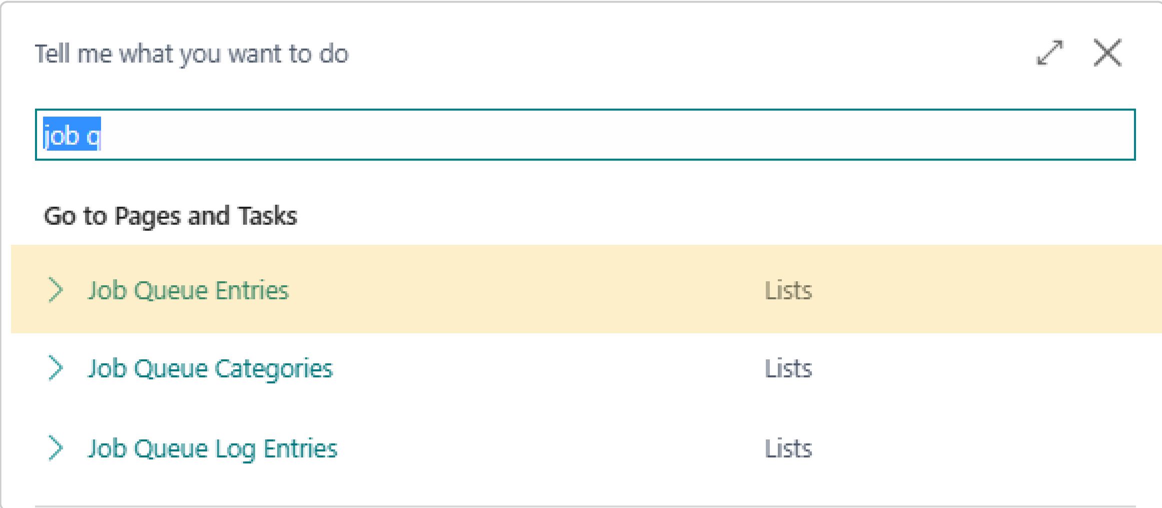
Please refer to section for using the customer fields together with BC attributes: [Setting up ShopFloor attributes]

10. Regular technical operating routines – House-cleaning

Operating routines – technical

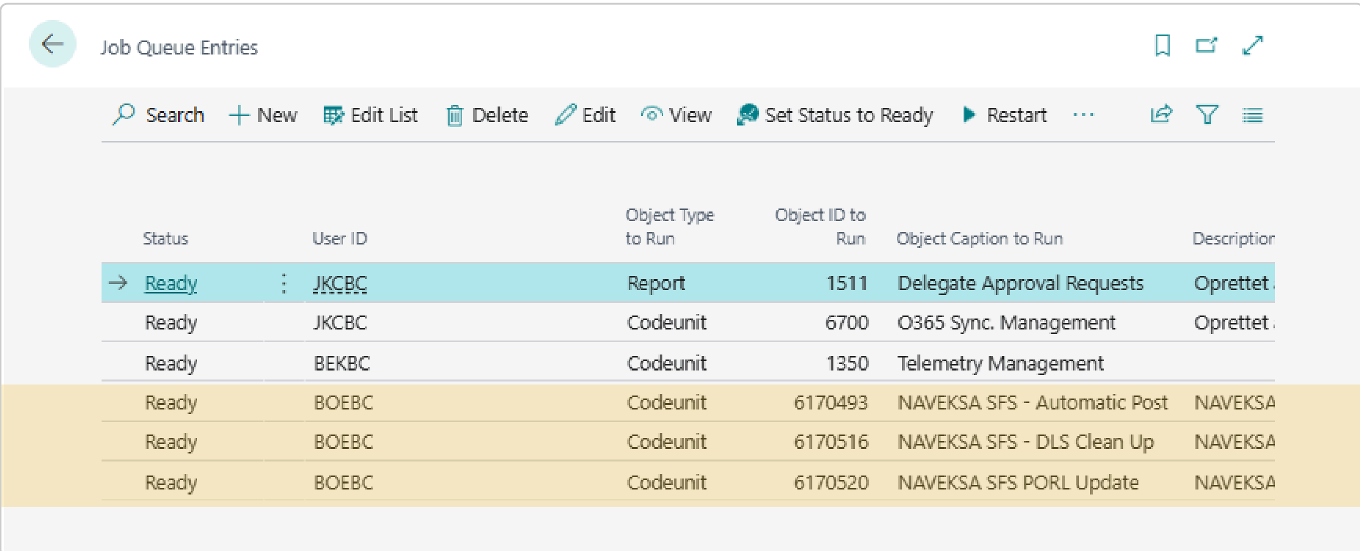
Operating procedures for 365 Business Central: “House-cleaning”

Search for the term “job q” using the search function.

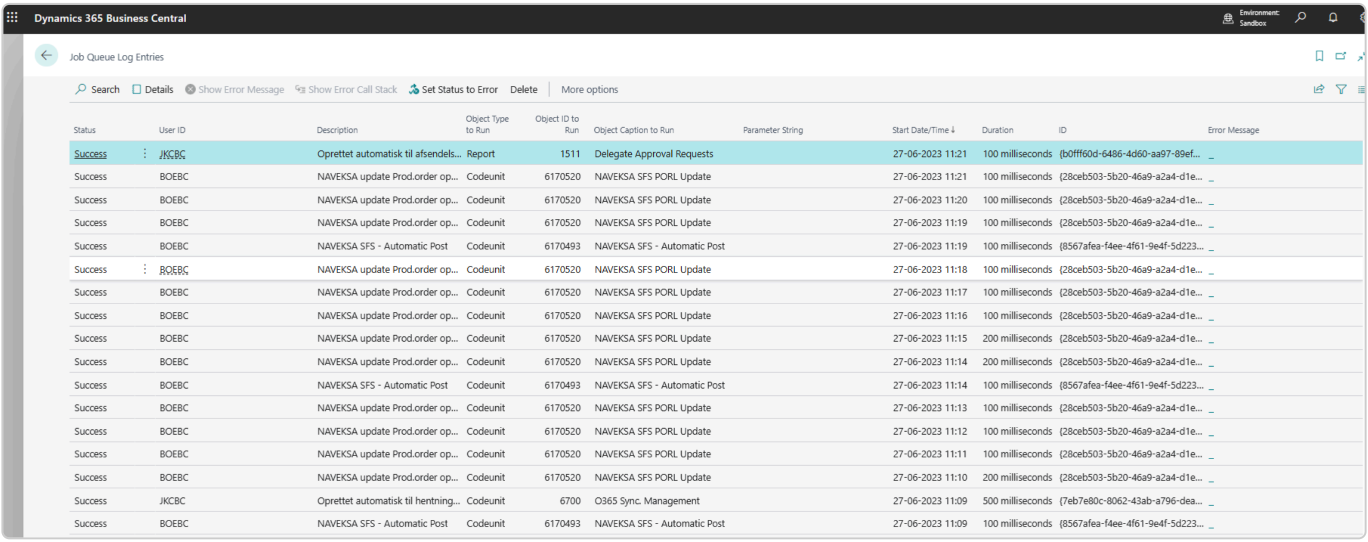


Make sure that the job “NAVEKSA SFS – DLS clean up” is running.

Make sure the job “NAVEKSA SFS – PORL update” is running.



Every time the clean up job runs, a log file record is generated. This file must be cleaned manually at regular intervals.
F.ex. entries older than 7 days.


Dynamics 365 Business Central
Environment: Sandbox
Job Queue Log Entries
Search Details Show Error Message Show Error Call Stack Set Status to Error Delete More options

Status	User ID	Description	Object Type to Run	Object ID to Run	Object Caption to Run	Parameter String	Start Date/Time ↓	Duration	ID	Error Message
Success	JKCBC	Oprettet automatisk til afsendels...	Report	1511	Delegate Approval Requests		27-06-2023 11:21	100 milliseconds	{b0fff60d-6486-4d60-aa97-89ef...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:21	100 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:20	100 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:19	100 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA SFS - Automatic Post	Codeunit	6170493	NAVEKSA SFS - Automatic Post		27-06-2023 11:19	100 milliseconds	{8567afea-f4ee-4f61-9e4f-5d223...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:18	100 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:17	100 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:16	100 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:15	200 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:14	200 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA SFS - Automatic Post	Codeunit	6170493	NAVEKSA SFS - Automatic Post		27-06-2023 11:14	100 milliseconds	{8567afea-f4ee-4f61-9e4f-5d223...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:13	100 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:12	100 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:11	100 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	BOEBC	NAVEKSA update Prod.order op...	Codeunit	6170520	NAVEKSA SFS PORL Update		27-06-2023 11:10	200 milliseconds	{28ceb503-5b20-46a9-a2a4-d1e...	_
Success	JKCBC	Oprettet automatisk til hentning...	Codeunit	6700	O365 Sync. Management		27-06-2023 11:09	500 milliseconds	{7eb7e80c-8062-43ab-a796-dea...	_
Success	BOEBC	NAVEKSA SFS - Automatic Post	Codeunit	6170493	NAVEKSA SFS - Automatic Post		27-06-2023 11:09	100 milliseconds	{8567afea-f4ee-4f61-9e4f-5d223...	_