Whitepaper: Upgrading Microsoft Dynamics® NAV Manufacturing to 2015

Improvements in the manufacturing module

Microsoft Dynamics® NAV

from version 2013 to 2015

Peik Bech-Andersen

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About the Author

Peik Bech-Andersen is a solution architect and senior developer at Columbus NSC in Denmark, implementing solutions all-over the world, specializing in advanced manufacturing combined with master data replication and Intercompany solutions.

He first saw Navision in 1984 at the beta testing program of PcPlus. He started implementing manufacturing solutions in 1983 on IBM S/36 systems. Since the Dynamics NAV manufacturing module was released, he has implemented at least 50 Manufacturing solutions in all kinds of different businesses. Starting as an accountant in a production company and moving on to implementing systems, he has both the accounting, the development and the implementation background.

As a Microsoft Certified Trainer, he has conducted courses for the last 10 years in topics such as Dynamics NAV programming, installation, finance, trade, warehouse management and manufacturing. During the 10 years, he has lead around 150 courses with at least 800 participants in 14 countries. He maintains a blog in Mibuso.com where he writes about both programming, installation and application topics. Usually topics discussed during courses or customer implementations.

He is the author of:

- "Manufacturing with Microsoft Dynamics NAV": The book about the Manufacturing module in Microsoft Dynamics NAV, launched in 2014.
- "RoleTailoring Microsoft Dynamics NAV": The book about how to implement the RoleTailored client in an organization with success, which will be launched in October 2015.
- Twenty-six "How-to-videos" released by Microsoft for Microsoft Dynamics NAV 2013 R2 about the MiniApp, published in 2013 and 2014.

He has been appointed:

- Lead MCT for the Dynamics NAV 2013 version, reviewing course material for Microsoft and educating all other MCT's in the new version
- Beta tester as part of the 'Sicily' Beta testing team evaluating the next version of Dynamics NAV.

Content

Introduction

After the release of my book “Manufacturing with Microsoft Dynamics NAV”, many have been requesting an updated version of the book to include all the new stuff in Dynamics NAV 2013 R2 and Dynamics NAV 2015.

However, the amount of changes in the new versions, that affect the manufacturing module, are so few that it is hardly worth while going through the full process with proofreading, printing, marketing and all the other stuff that is necessary to publish a book.

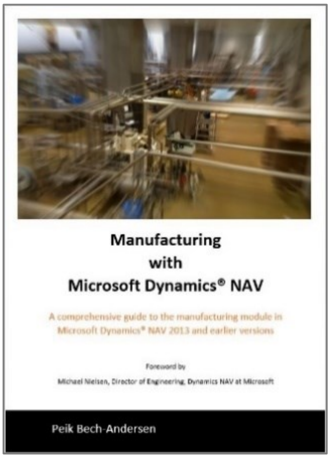
Therefore, I have decided to make do with this whitepaper. Here I will emphasize the changes in Dynamics NAV 2013 R2 and Dynamics NAV 2015 that have a direct or indirect connection with the manufacturing module.

Many of us had hoped that the development team would give the manufacturing module a makeover like the one some of the other modules have been given, but no such luck. Most of the changes in Dynamics NAV 2015 revolve around user interface and accessibility but there are a few functional changes too.

Naturally, the tablet client has taken much of the focus and as I see it, there might even be possibilities for the manufacturing company to develop RoleCenters/profiles to be used in the warehouse or the shop floor.

This whitepaper is an amendment to my previous book **“Manufacturing with Microsoft Dynamics NAV”** and it fills the gap between the manufacturing module of Dynamics NAV 2013, which the book was based on and the newest Dynamics NAV 2015. The whitepaper is a mix between hardcore functional changes in the Dynamics NAV 2015 application, inspirational uses of the new user experience enhancements and a couple of “aha-experiences” I have had working with the manufacturing module in real life.

Manufacturing with Microsoft Dynamics NAV



My previous book is still available as a paperback and of course as eBook.

If you have doubts if the book is interesting for you, you can download the free preview.

Otherwise, purchase the paperback to get a hard copy or purchase the eBook and save the freight and you can start reading already today.
The book can be purchased either in Amazon with free delivery in all UK or in my own web-shop with delivery to the rest of the world.

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Useful tools when navigating Dynamics NAV

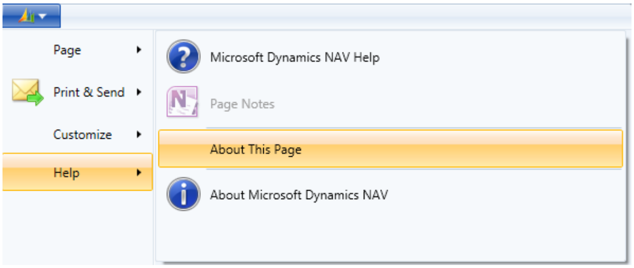
Sometimes a shortcut or a little trick can make life a lot easier when browsing through Dynamics NAV. Here are a few of mine:

About This Page

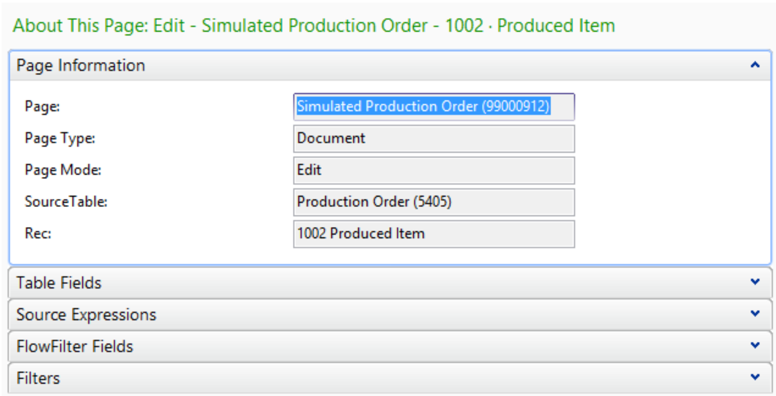
In older versions, we had the “Zoom function” to show us the content of all the fields in a table. This was used when we were too lazy to retrieve the field to the form, or if we did not have access or permission to do it. In the RoleTailored client, we have **About This Page** or **Crtl+Alt+F1** as the shortcut.

This shortcut might not work for everyone. This is because some graphic cards use **Ctrl+Alt+F1** for their screen handling. It is usually possible to remove the graphics card use of the shortcut allowing Dynamics NAV to use the combination. In other machines the combination **Ctrl+Alt+Windows+F1** will work.

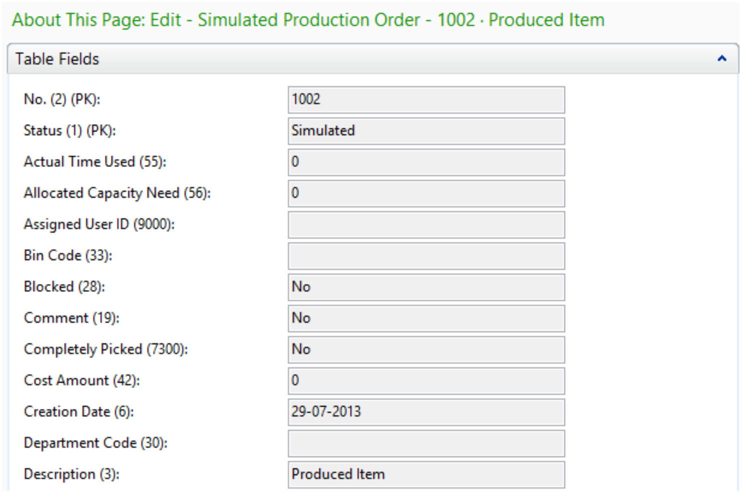
On any page go to the top left corner and click the application menu:



Which will give you:

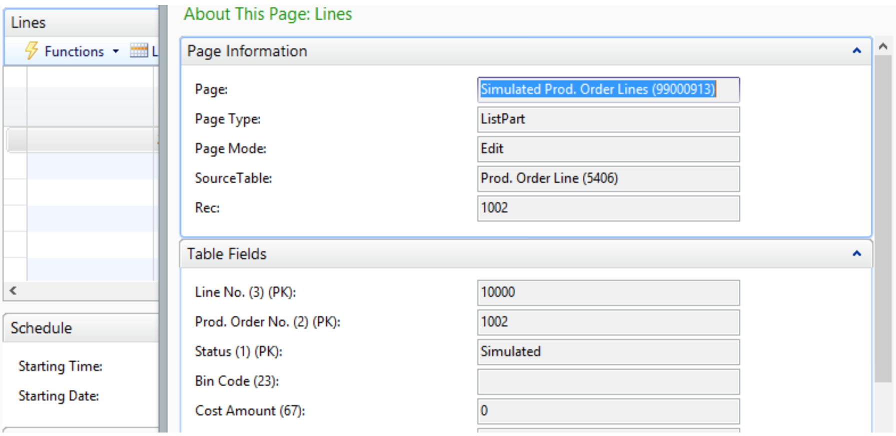


In the table fields section, all the fields in the table are in alphabetical order (as opposed to field number order in previous versions).



Using this method will only allow you to see the fields on the header. If the **About This Page** function is needed for the lines or for a FactBox, you need to use the shortcut **Crtl+Alt+F1**.

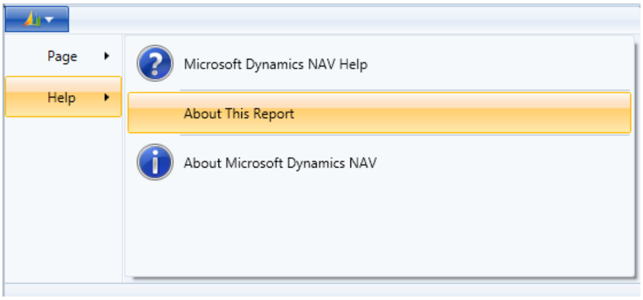
Position the cursor in the lines with the mouse or press **F6** to jump to the next section and press **Ctrl+Alt+F1**:



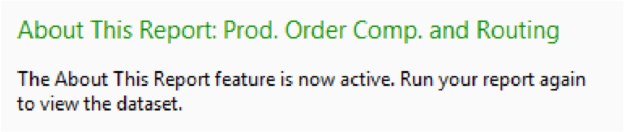
About This Report

Just as it is possible to get a list of all fields in a table, it is also possible to see the dataset behind a report. To do that you need to “execute” the function once for this session. After this, the client will save the dataset from all reports. To turn it off again, close the client and start it again.

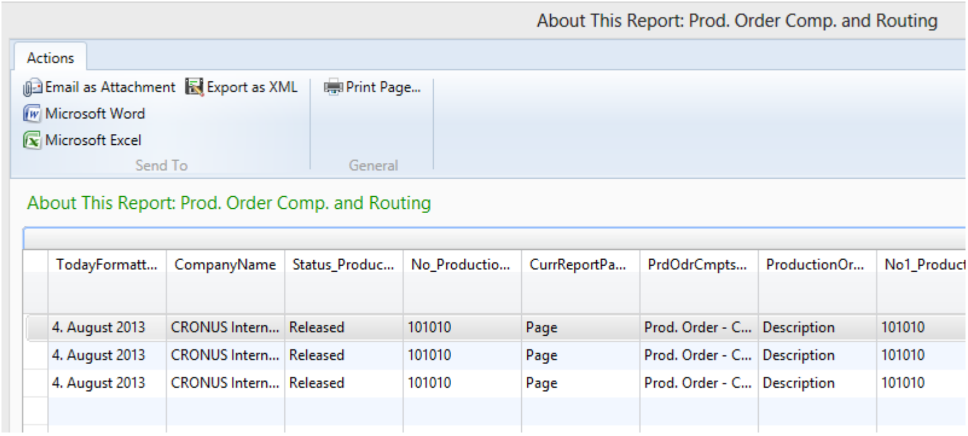
Turning the function on can be done by previewing a report and clicking **Ctrl+Alt+F1** or accessing the function through the application menu:



Now this message will appear:



The function is now turned on for the remainder of this session. Now close the preview and run the preview again. Activate **About This Report** and the following page shows up:



This is the complete dataset created for the report. Here it is possible to see if the information intended for the report actually exists in the dataset.

The dataset can be sent to the developers this way, so that they can see the problem.

In Dynamics NAV 2009, it can be sent to Excel and sent from there. Using the **Email as attachment** function can be used but the data are sent as an html page, which limits its later use.

In Dynamics NAV 2015, the data can be sent as an Excel file as in Dynamics NAV 2009, but it can now also be sent as an XML file. This allows the developer to run the report directly on the dataset that gave the error.

Drilldown and drill across

In previous versions, **F6** was the answer for everything, meaning that it would give you a list of choices (drilldown). In the RoleTailored client, the equivalent shortcut is **F4**. Now working in a mixed environment (classic client and RoleTailored client) this can prove fatal, since the **F4** shortcut in the classic client means delete.

Instead, it is possible to use the shortcut **Alt+Down Arrow**. This will work the same in both clients. By the way, it fits how the hands rest on the keyboard much better than **F6**.

Likewise, in the classic client, it was much faster to “drill across” by using **F6** and **Shift+F5** to jump from the number field on the order line to the item card.

This also has an equivalent function in the RoleTailored client. The combination seems complicated but it is amazing how quickly you get used to it. The combination is **Ctrl+F4** and **Ctrl+Shift+E**. **Ctrl+F4** will show the list page for the subsidiary table, making it possible to edit the records. **Ctrl+Shift+E** will take you to the card page from the list page.

Get back to the RoleCenter

Use **Shift+F12** to go all the way back to the RoleCenter no matter where you are.

Find the menu with the keyboard

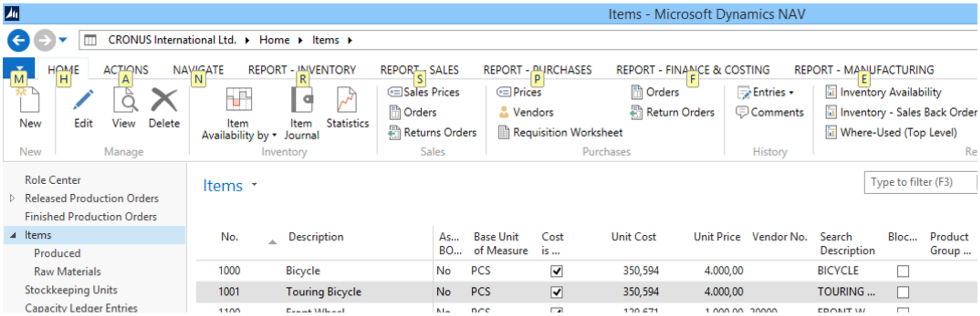
In Dynamics NAV 2013, a new shortcut was introduced. **F12** will take you to the menu from a list. In Dynamics NAV 2009, you can achieve the same by clicking **Shift+F6** a number of times.

Navigate the pages

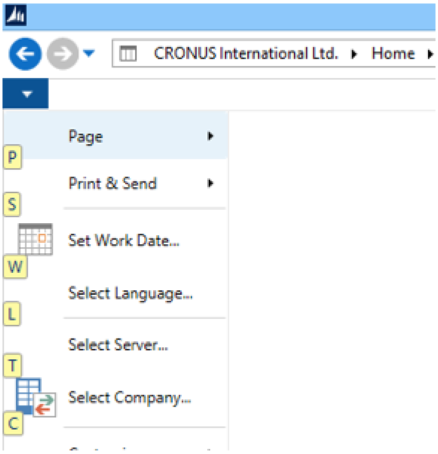
If you are wondering how to get from the menu pane to the list and back again, **F6** and **Shift+F6** will take you from the active page part or menu to the next page part and back.

Highlight the shortcuts

It is possible to operate the RoleTailored client only with the keyboard. If the **Alt**-key is pressed once, the shortcuts are highlighted:



...and pressing the shortcut, e.g. **M** will give the next menu:

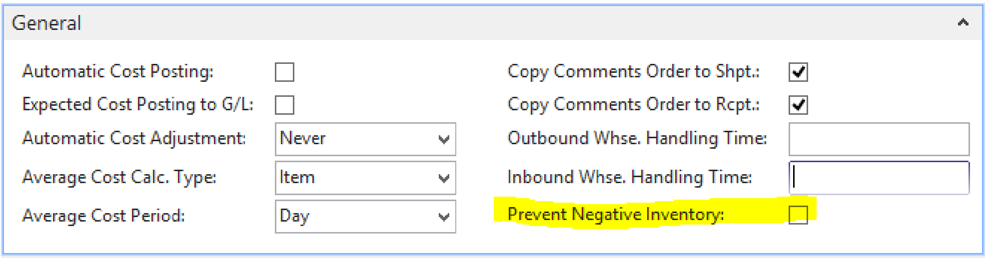


Setup

As previously mentioned there are only a few functional changes but nevertheless worthwhile mentioning.

Inventory Setup

In the **Inventory Setup**, there are only changes to one new field that could influence the manufacturing module.



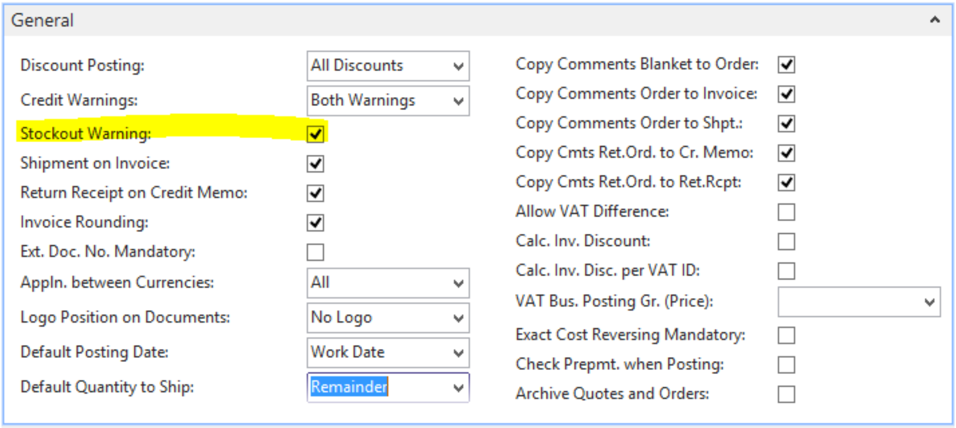
Prevent Negative Inventory:

Specifies if the Default value in the equivalent field on the item card should be set by default. Even if the field is set, the setting can be changed on the individual item card.

This also means that changing the field will not have any influence on existing items. These must be changed manually.

Sales & Receivable Setup

In the Sales & Receivable Setup, there are no new fields, but the functionality of one of the existing fields has changed.



Stockout Warning:

The **Stockout Warning** field was always in the **Sales & Receivable Setup**. The field functioned as a global on/off button for the Stockout Warning. If it was on, a warning was given if the item was not on inventory.

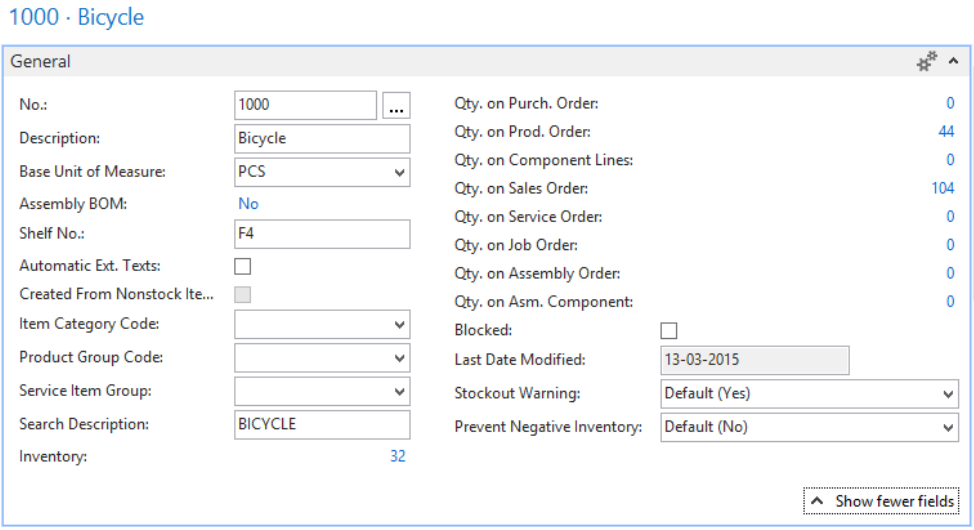
Now the field functions as the default for new items that are created.

This also means that changing the field will not have any influence on existing items. These must be changed manually.

Item Card

There are a couple of new fields on the item card. None of these has a direct influence on the manufacturing module, but since they might have an indirect influence, I have included them here.

General



Stockout Warning:

The **Stockout Warning** field specifies if a warning should be shown when entering a quantity on a sales order, which will bring the total available inventory below zero. The setting can be useful on items that are always produced to order. In this case, the inventory will always be zero. The values can be:

Default: Showing the value selected as the default value in the Sales & Receivable setup.

Yes: Manually changed to yes for this item

No: Manually changed to no for this item

Prevent Negative Inventory:

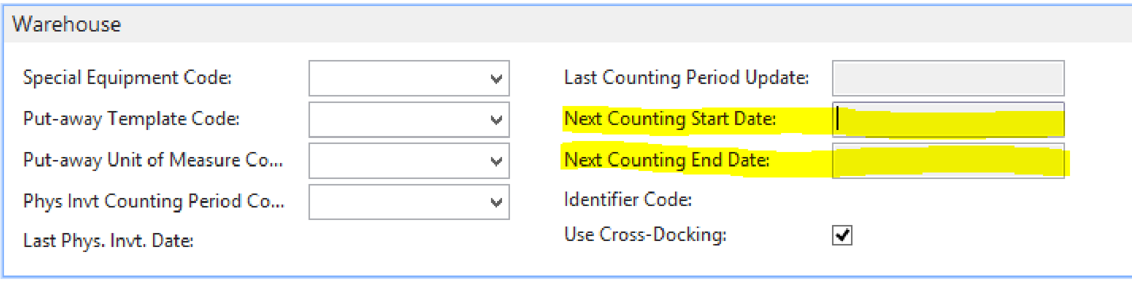
The **Prevent Negative Inventory** field specifies if it should be possible to post any transaction that will bring the inventory below zero. The values can be:

Default: Showing the value selected as the default value in the Inventory setup.

Yes: Manually changed to yes for this item

No: Manually changed to no for this item

Warehouse



Next Counting Start Date:

Replaces the previous field **Next Counting Period**

Next Counting End Date:

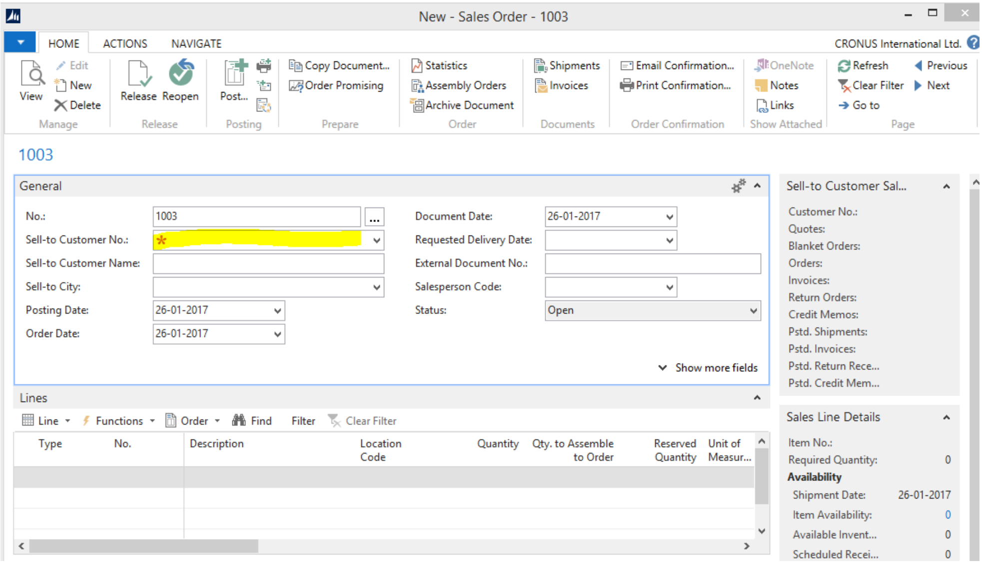
Replaces the previous field **Next Counting Period**

User experience enhancements

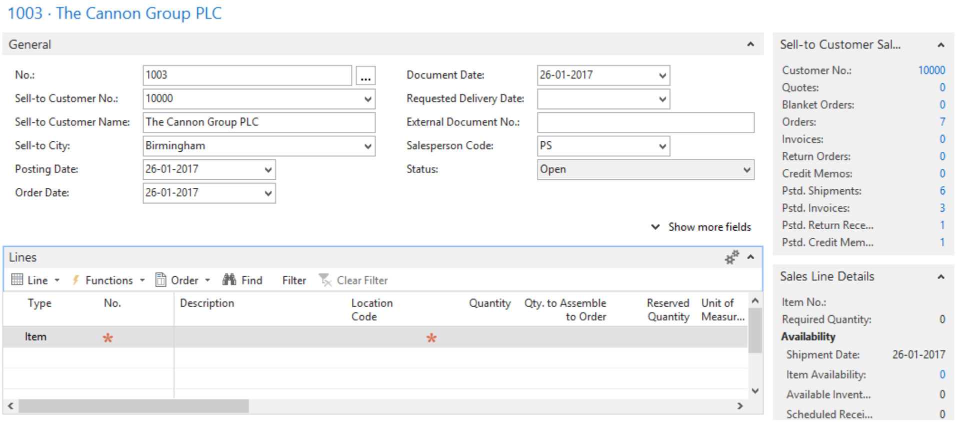
Dynamics NAV 2015 introduced the user experience enhancements, which includes:

Mandatory Field Input

The **Mandatory Field Input** has been implemented by showing a red (*) indicating that the field must be filled in.

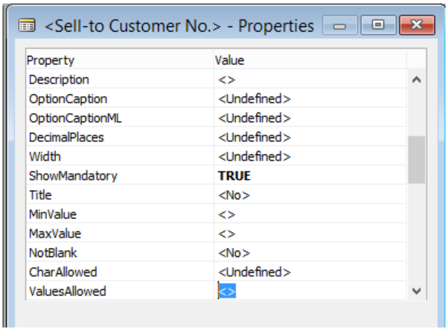


The **Mandatory Field Input indicator** changes dynamically, so when the customer and the line type has been selected, the new Mandatory Field Input fields are calculated.

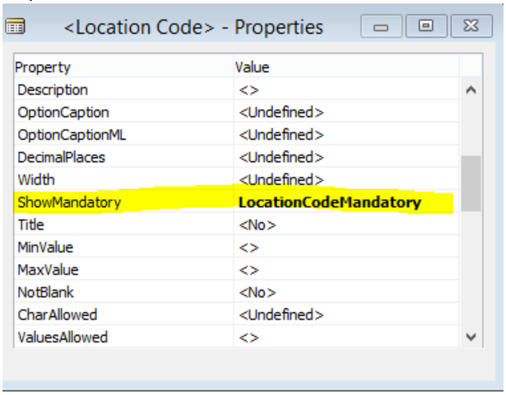


For the developers this is controlled in the properties of the fields. Because of the type of the **ShowMandatory** property, it can contain multiple types of values:

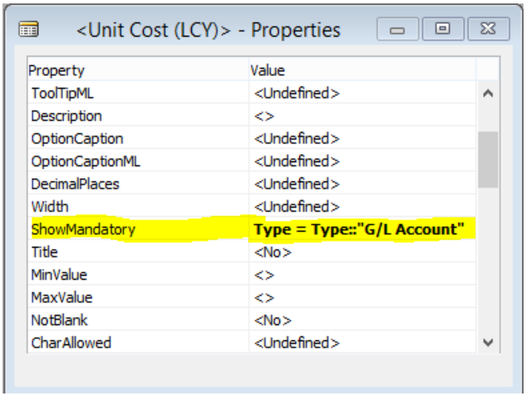
- TRUE/FALSE



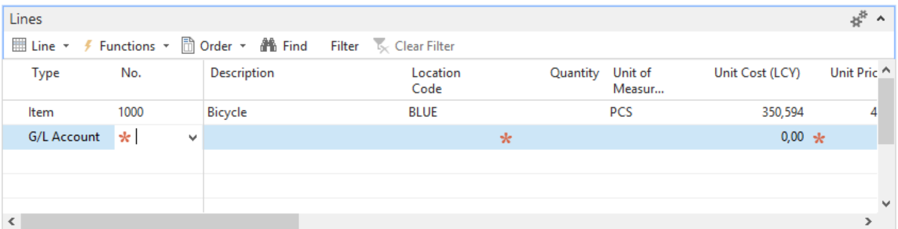
- Variables that are part of the dataset



- Small pieces of code



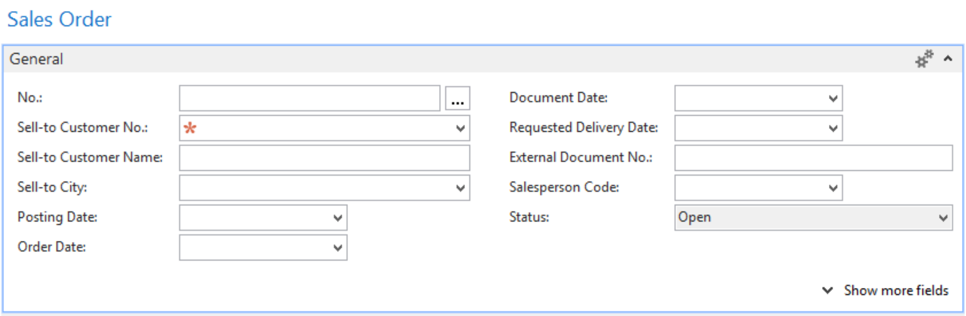
Giving a red * in the Unit Cost (LCY) field:



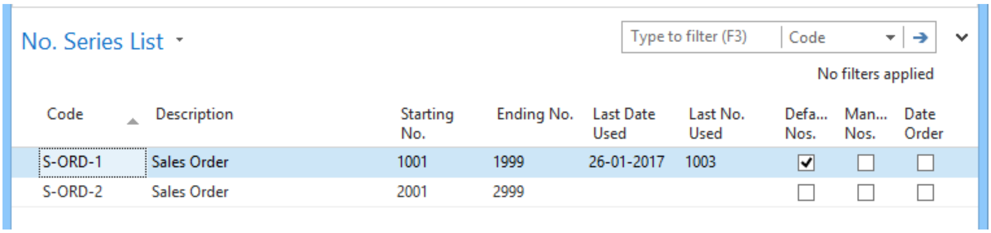
Auto filling of document numbers

The **Auto filling of document numbers** has been implemented by hiding the document number field. This is only done if there are only one number series registered for this document.

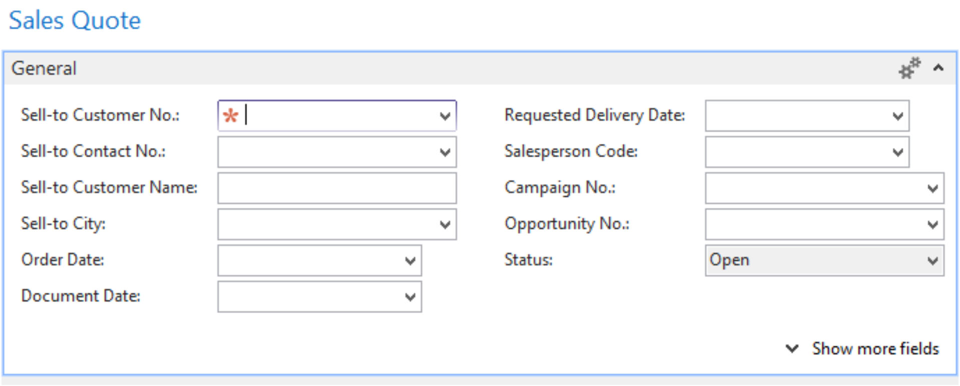
So when creating a new Sales Order the **Document No** field *is* shown.



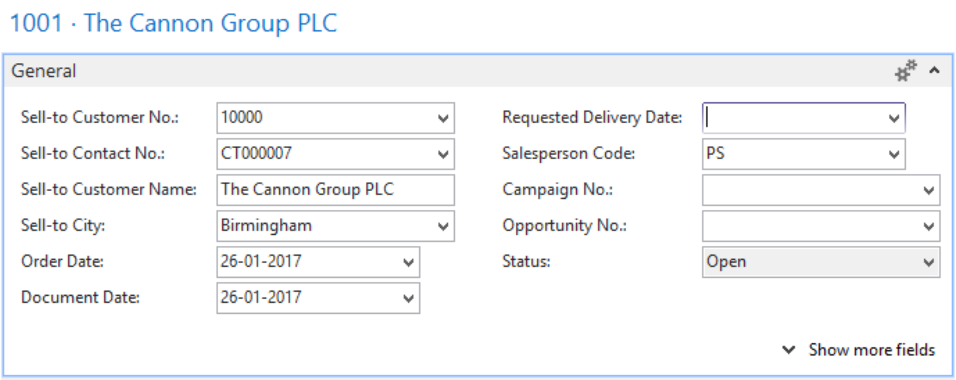
Clicking the **Assist Edit** button for the document number shows that there are two registered number series for the sales orders.



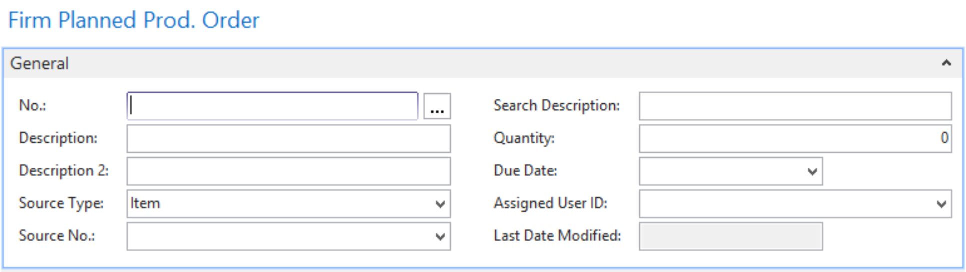
Whereas creating a new sales quote the **Document No.** field is not shown at all:

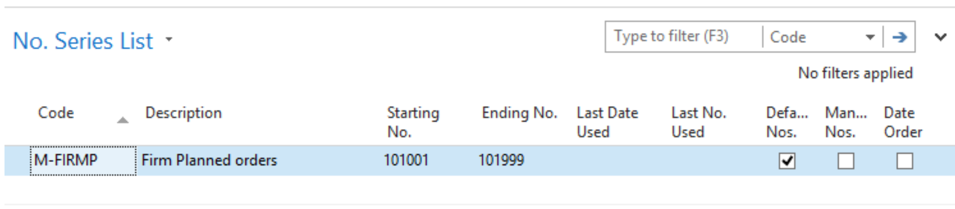


Entering the customer number will create the sales quote, and the document number is shown with the customer name in the title of the page.



This functionality has not reached the manufacturing module yet, and the document number on the production orders are still shown regardless of the amount of assigned number series.

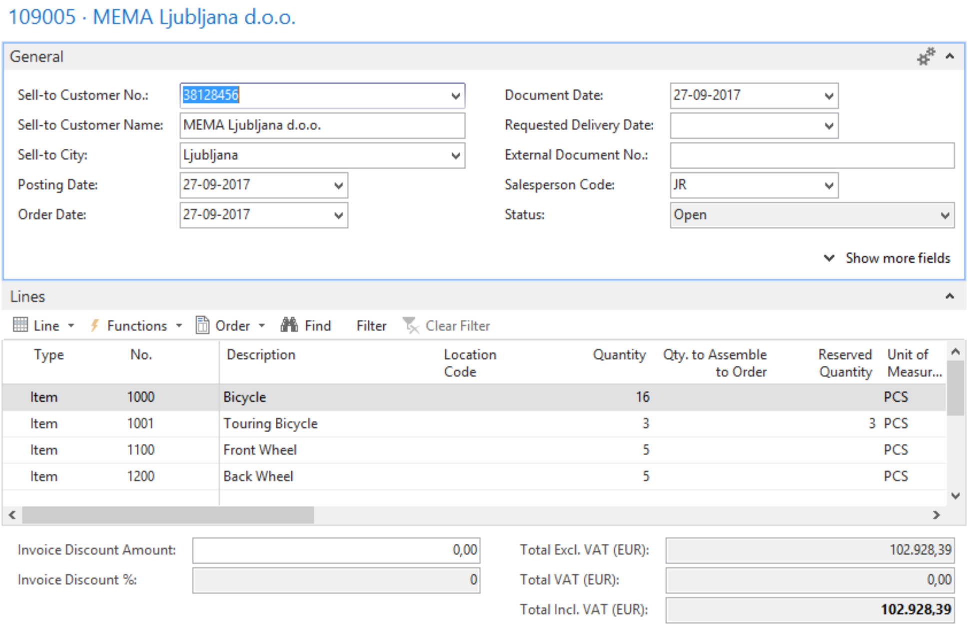




However, with a Developers License and a little poking around, this can be solved easily.

Integrated total fields on document pages

It has been a wish from the users for a long time, to be able to see the total on the sales and purchase documents directly on the page, instead of having to press the F7 button.



The functionality focuses on the sales and purchase documents. Therefore, it has not reached the manufacturing documents yet, and the question is, if it will bring any value to the production planner to see the totals at all.

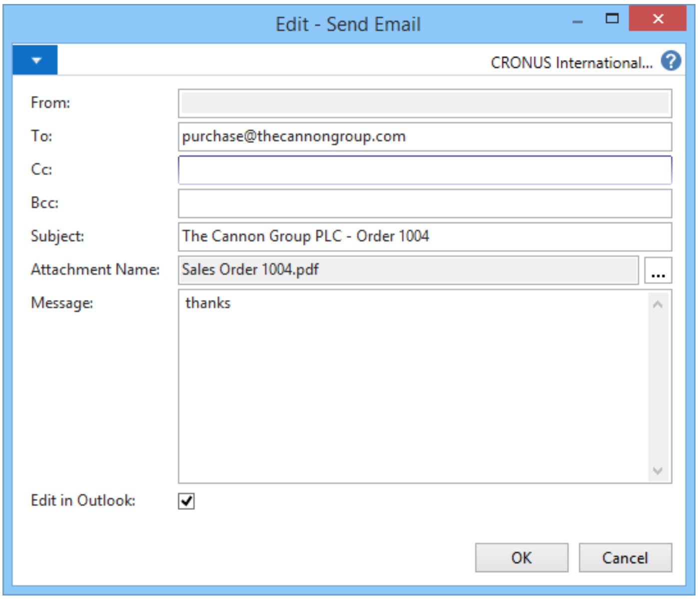
Emailing directly from the sales documents

As something new, it is possible to send some documents as mail directly from NAV:

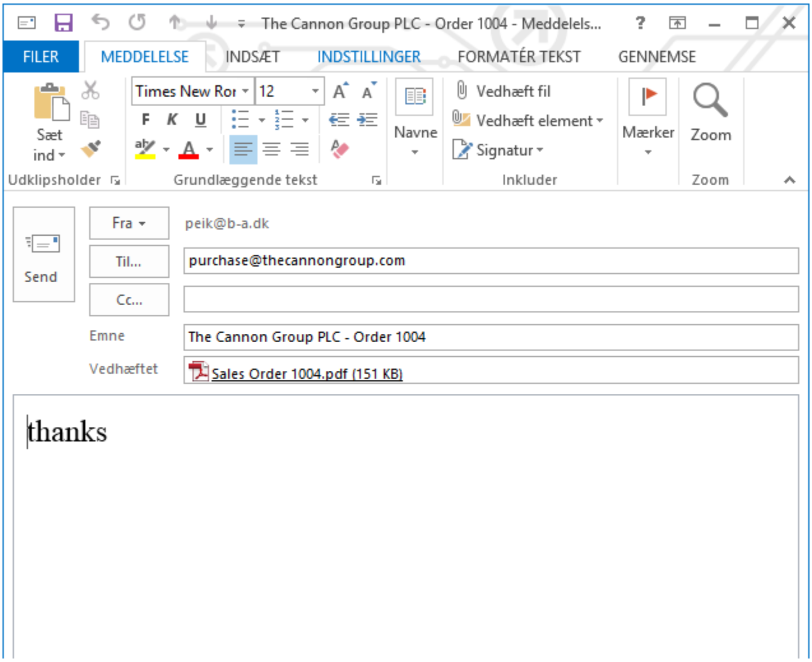
- Send Order Confirmation from order
- Send Invoice with posting
- Send Invoice from posted invoice
- Send Credit Memo with Posting
- Send Credit Memo from posted Credit memos
- Send Reminder from Issued Reminder
- Send Finance Charge from Issued Finance Charge

In all cases, the email address is taken directly from the customer email address and it is possible to edit the text both in Dynamics NAV and in Outlook before sending the email.

The **NAV Send Email** page:



The mail can be further edited in Outlook, if the **Edit in Outlook** is marked.

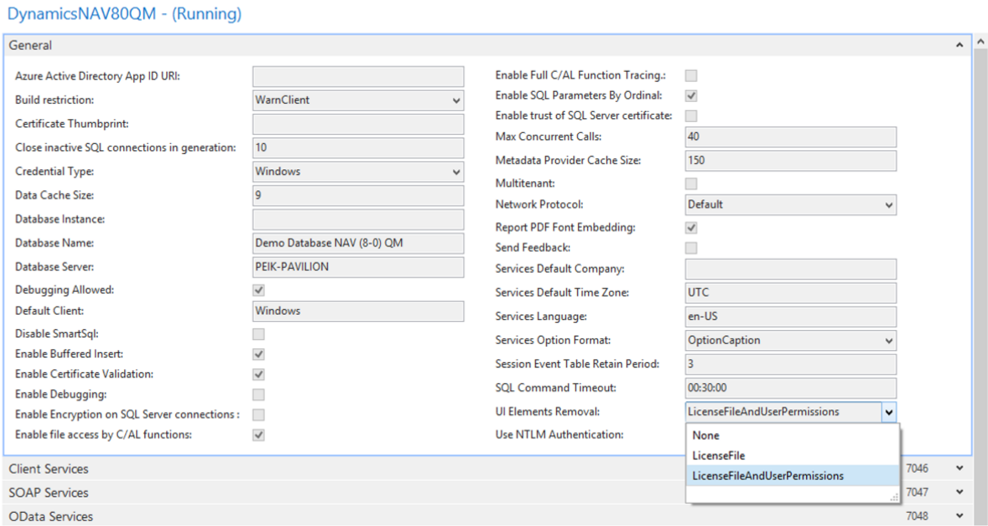


This is not the most advanced solution I have seen, but it is a start. Looking into the code it is revealed that the functions have been made generically, so that it will be possible to reuse part of it in e.g. a function to send bill-of materials or recipes by mail for approval.

Hide functionality depending on permissions and license

Dynamics NAV 2015 introduced a new setting that allows removal of all functionality that is not within the permissions or the purchased license. This way the users will not be confused by menu items or fields they will not be able to use anyway.

The setting can be changed in the **Dynamics NAV Administration tool**:



UI Elements Removal

Possible values:

None: No UI Elements will be removed

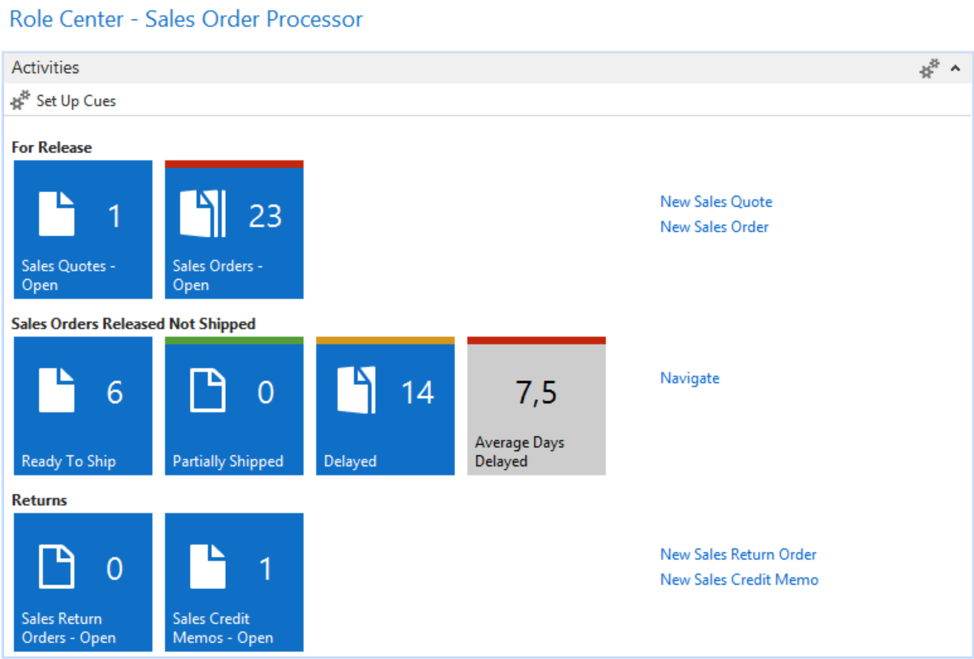
LicenseFile: Only object permissions in the License File will be used.

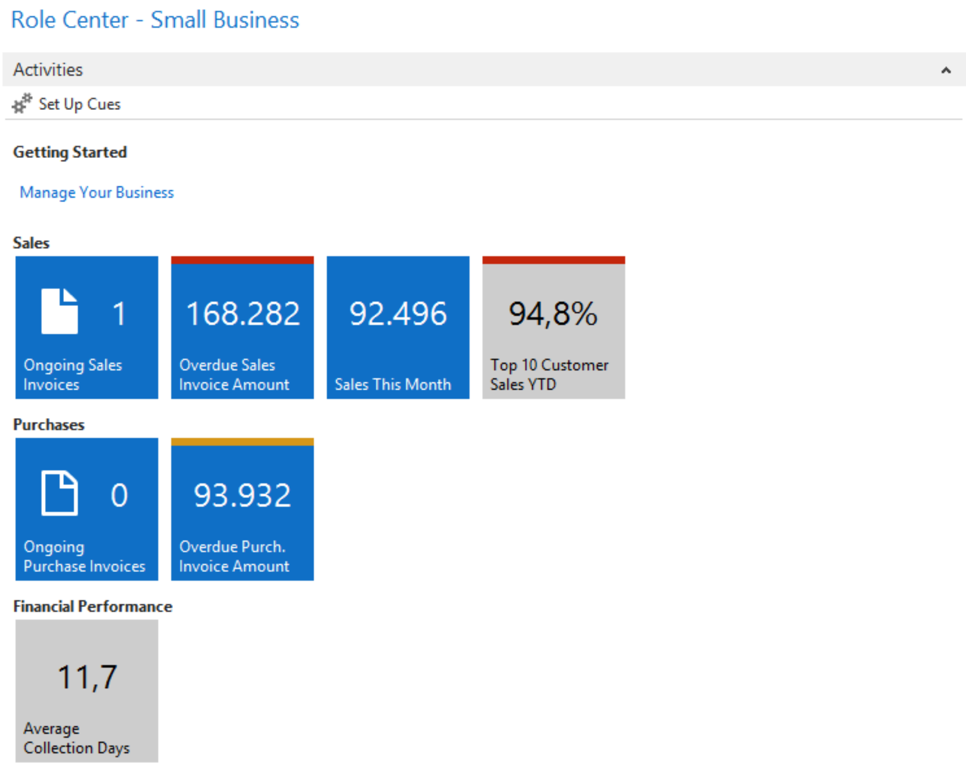
LicenseFileAndUserPermissions: Both object permissions from the License File and User Permissions system will be used.

The default setting is **LicenceFileAndUserPermissions**.

Expressive tiles

In order to help increase readability on the RoleCenter, the tiles have been enhanced with a color bar along its upper border. The expressive tiles can be seen on the Order Processor RoleCenter or the Small Business RoleCenter and it displays red, yellow or green depending on the value of the cue. However, the functionality is available for all RoleCenters.

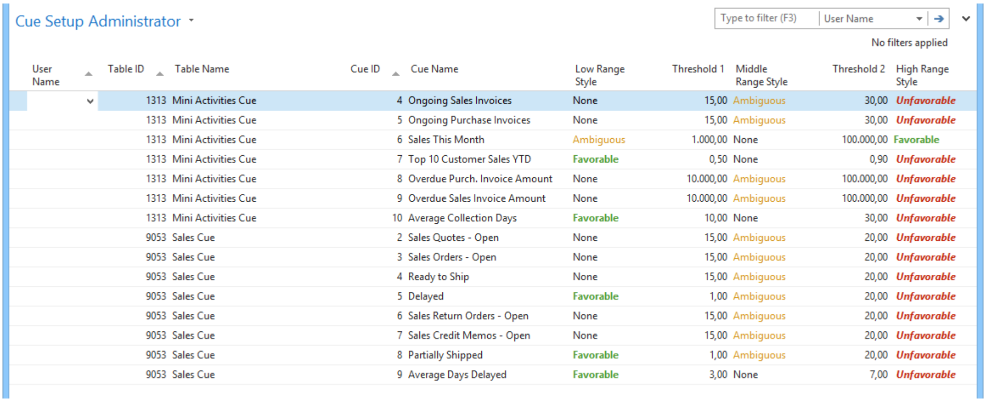




Since the cues calculate different types of values - some are amount of documents, some amounts and again some are days - it is difficult to set up standard rules for when a cue should show the red, the yellow or the green bar. The values can even be different depending which user is looking at them. It is therefore possible to setup the values on different levels.

Setting up expressive tiles

The Cue setup page has been hidden in the **Departments/Application Setup/General** menu instead of the more logical **Departments/Application Setup/RoleTailored Client** menu:

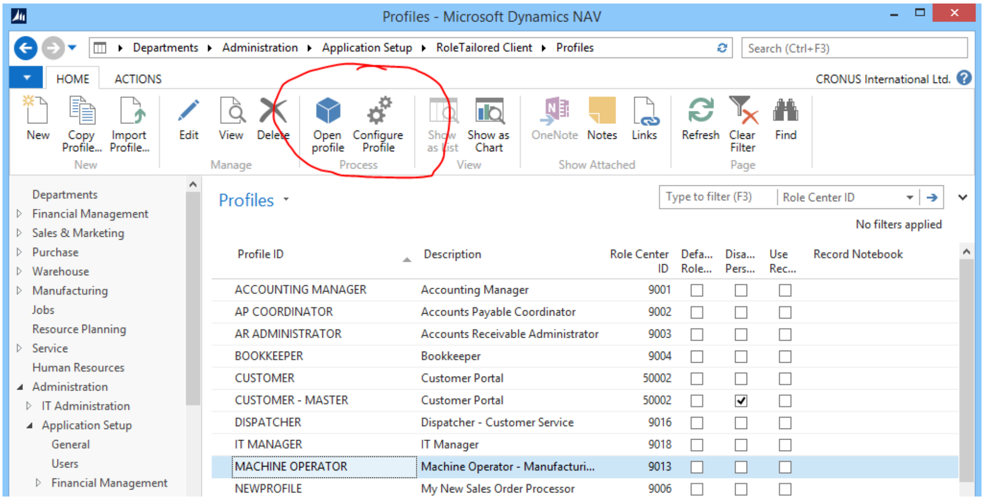


User Name	Table ID	Table Name	Cue ID	Cue Name	Low Range Style	Threshold 1	Middle Range Style	Threshold 2	High Range Style
	1313	Mini Activities Cue	4	Ongoing Sales Invoices	None	15,00	Ambiguous	30,00	Unfavorable
	1313	Mini Activities Cue	5	Ongoing Purchase Invoices	None	15,00	Ambiguous	30,00	Unfavorable
	1313	Mini Activities Cue	6	Sales This Month	Ambiguous	1.000,00	None	100.000,00	Favorable
	1313	Mini Activities Cue	7	Top 10 Customer Sales YTD	Favorable	0,50	None	0,90	Unfavorable
	1313	Mini Activities Cue	8	Overdue Purch. Invoice Amount	None	10.000,00	Ambiguous	100.000,00	Unfavorable
	1313	Mini Activities Cue	9	Overdue Sales Invoice Amount	None	10.000,00	Ambiguous	100.000,00	Unfavorable
	1313	Mini Activities Cue	10	Average Collection Days	Favorable	10,00	None	30,00	Unfavorable
	9053	Sales Cue	2	Sales Quotes - Open	None	15,00	Ambiguous	20,00	Unfavorable
	9053	Sales Cue	3	Sales Orders - Open	None	15,00	Ambiguous	20,00	Unfavorable
	9053	Sales Cue	4	Ready to Ship	None	15,00	Ambiguous	20,00	Unfavorable
	9053	Sales Cue	5	Delayed	Favorable	1,00	Ambiguous	20,00	Unfavorable
	9053	Sales Cue	6	Sales Return Orders - Open	None	15,00	Ambiguous	20,00	Unfavorable
	9053	Sales Cue	7	Sales Credit Memos - Open	None	15,00	Ambiguous	20,00	Unfavorable
	9053	Sales Cue	8	Partially Shipped	Favorable	1,00	Ambiguous	20,00	Unfavorable
	9053	Sales Cue	9	Average Days Delayed	Favorable	3,00	None	7,00	Unfavorable

Here it is obvious that only two RoleCenters use the new Expressive Tiles functionality, but it is possible to add new ones here. If the user id is left blank, the Expressive Tiles will apply to all users. With the user id, it will only be available for the individual user.

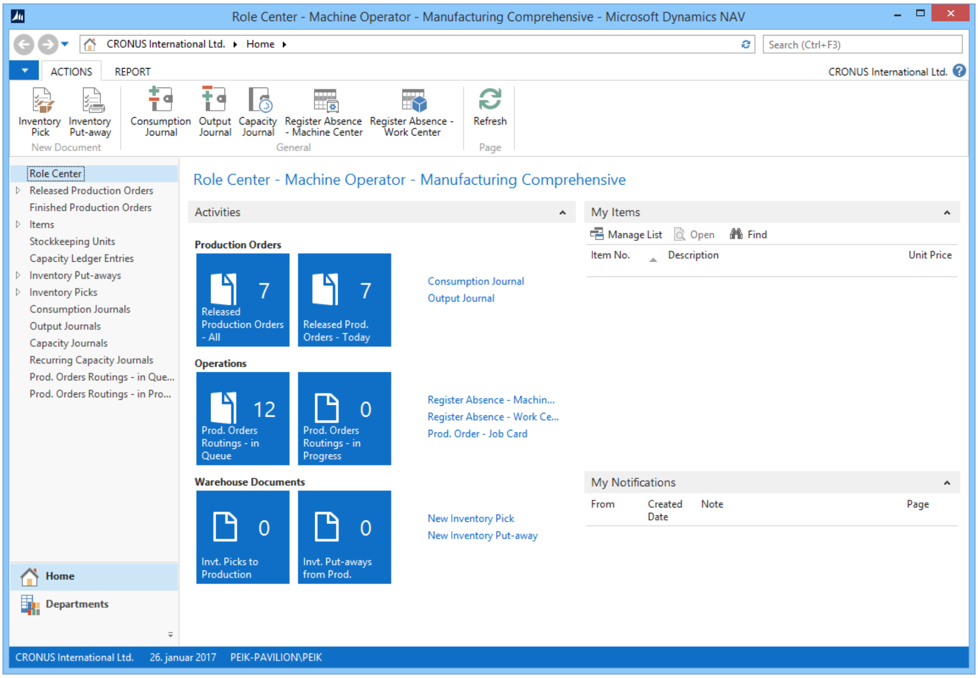
So how do I add Expressive Tiles functionality to the MACHINE OPERATOR RoleCenter?

First, we need the Table ID used on the RoleCenter and to do that, go to the profile list and open the profile:

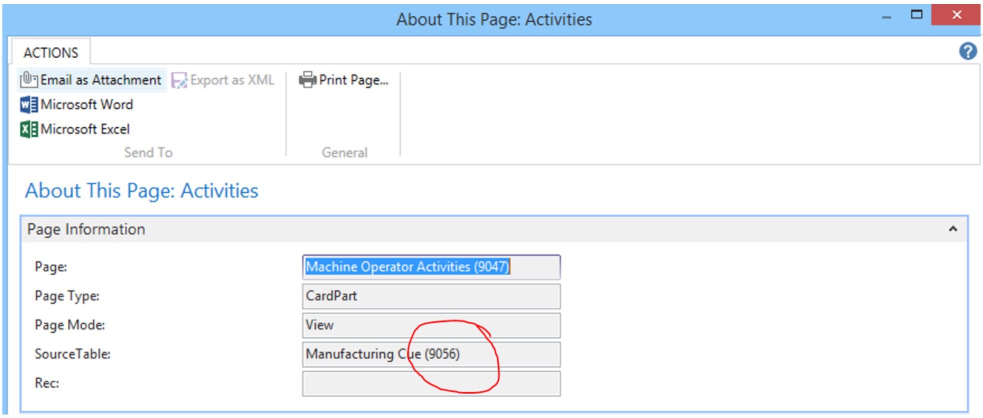


If you do not have the **Open Profile** and **Configure Profile** actions on your profile list, it is because you haven't read my blog. Here it is described how to implement these simple but essential changes in page 9171. Please refer to **Appendix A** where the change is also described.

Opening the MACHINE OPERATOR RoleCenter the activities page looks like this:

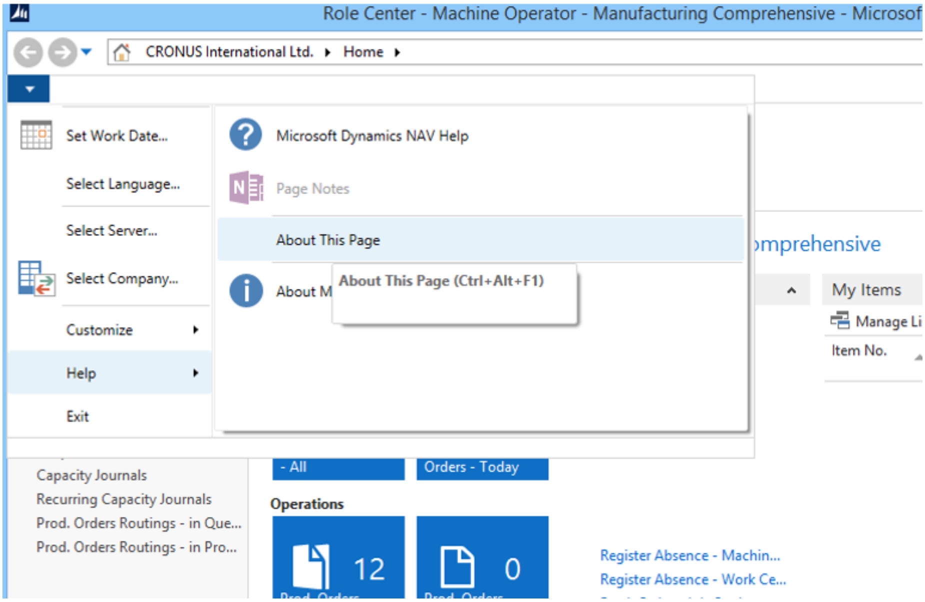


Press **F6** until the focus changed to one of the tiles and then press **Ctrl+Alt+F1** to get the **About This Page** for this page part.

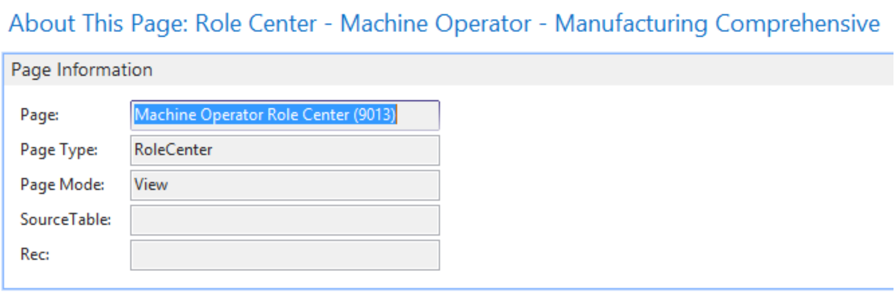


Note the table number for the source table, in this case 9056.

There are no menu item for **About This Page** on a subpage and you cannot activate the function with the mouse alone. If the menu on the RoleCenter is used…

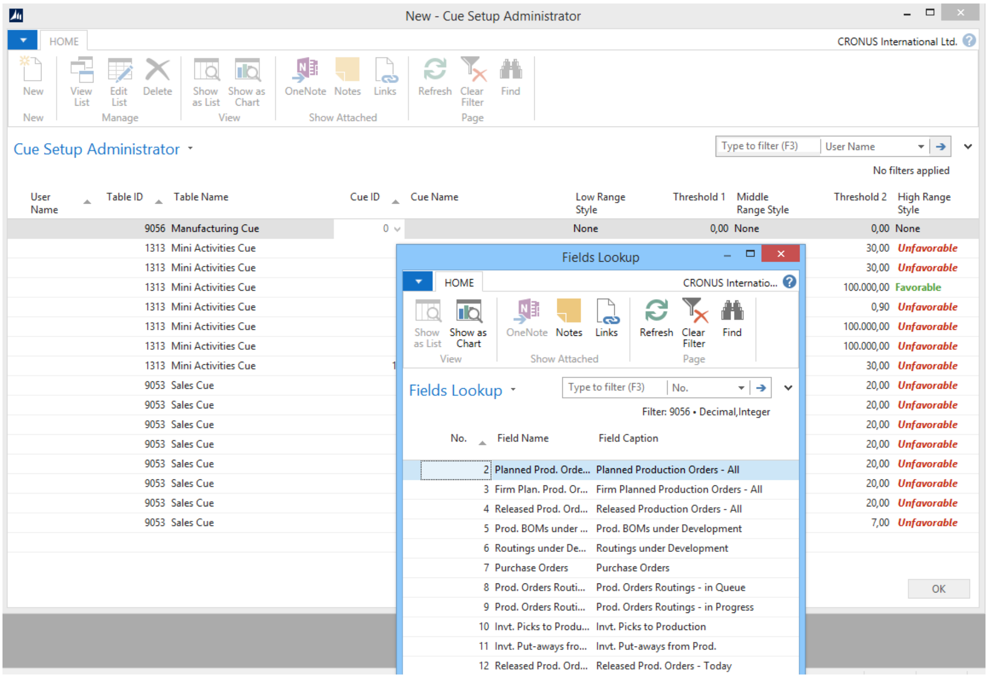


…it will always show the RoleCenter page.

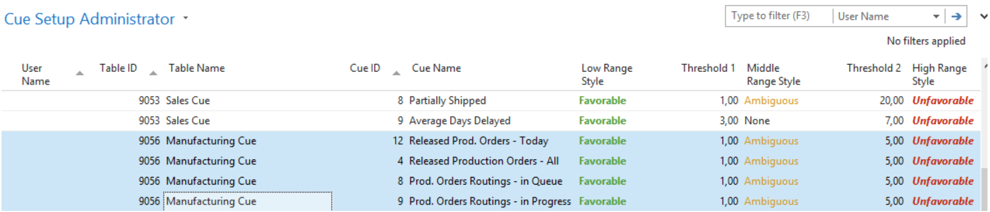


Some machines already use the **Ctrl+Alt+F1** for other purposes, in that case the combination **Ctrl+Windows+Alt+F1** will do the same trick.

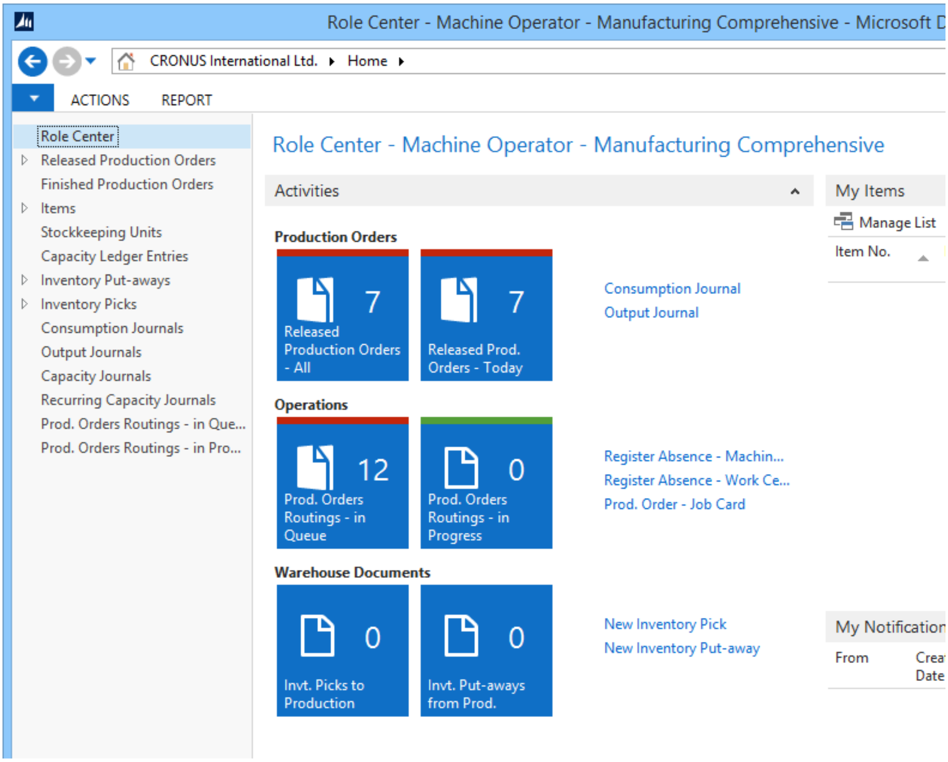
Now it is possible to add lines to the **Cue Setup** for page 9056:



Entering the **Table ID**, the drill-down in the **Cue ID** will show all the cues on the activity page.



Entering values for the four tiles, the tiles on the RoleCenter looks like this:



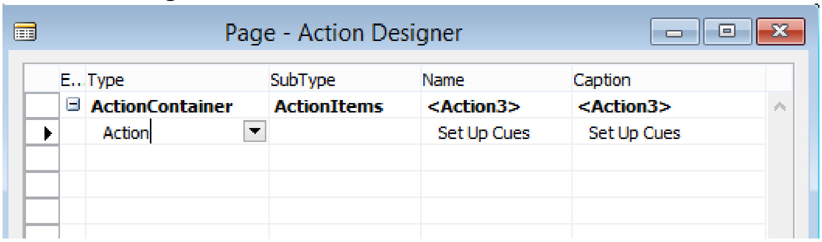
Adding the **Set Up Cues** action on the activity page

Looking at the ORDER PROCESSOR RoleCenter, there is an action for the user to change the values on the Expressive Tiles themselves, but the MACHINE OPERATOR does not have this action. This is because the action must be manually added to each activity page.

This sounds complicated, but it is not:

1) Find the activity page name on the ORDER PROCESSOR activities page using the **About this Page** function as described above (Page 9060)
2) Find the activity page name on the MACHINE OPERATOR activities page using the **About this Page** function as described above (Page 9047)

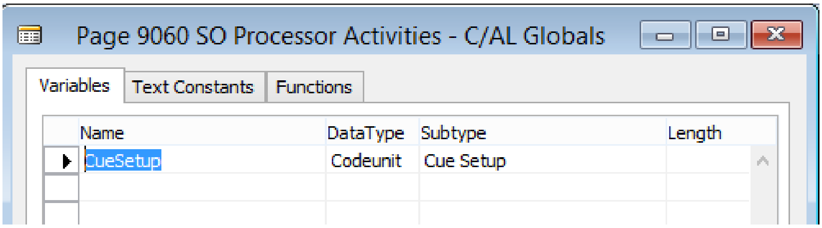
3) Go to Page 9060 **SO Processor Activities** and perform following
    a. Click Design
    b. Click View/Page Actions



    c. Mark All (**Ctrl+A**) and Copy (**Ctrl+C**)
    d. Keep it open while doing the next

4) Go to Page 9047 **Machine Operator Activities** and perform following:
    a. Click Design
    b. Click View/Page Actions
    c. Click Paste (**Ctrl+V**)

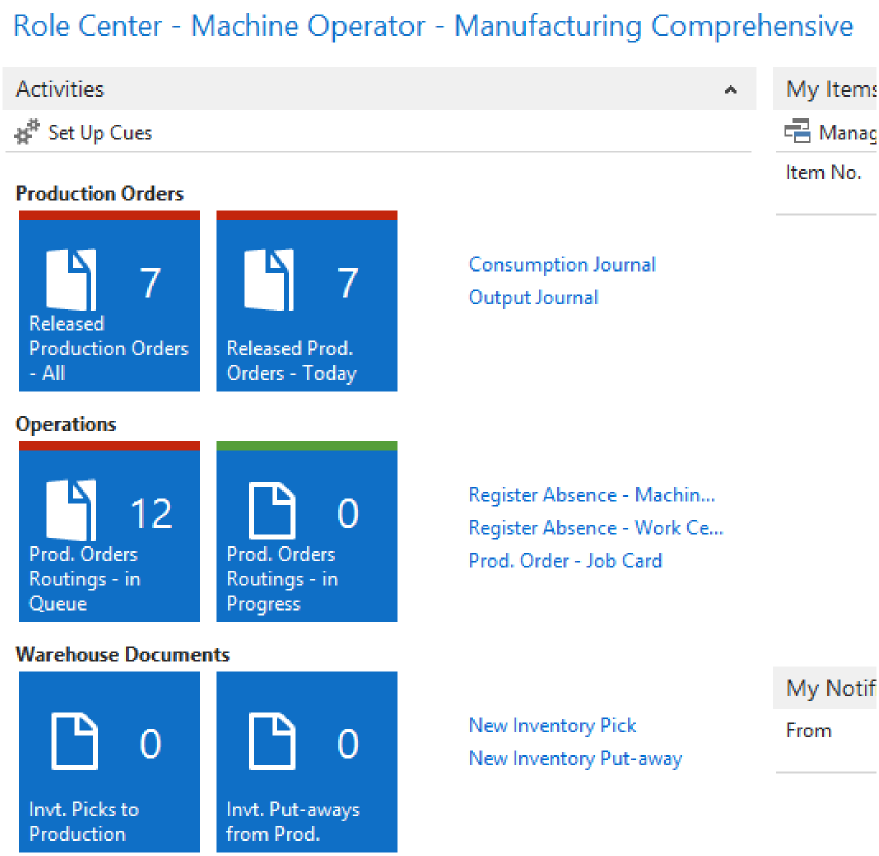
5) Go Back to the Open Page 9060 and perform the following:
    a. Click View/C/AL Globals



b. Mark the line and copy
c. Esc - Esc – Esc, and answer **NO** if it asks if you want to save

6) Go Back to the Open Page 9047 and perform the following:
   a. Click View/C/AL Globals
   b. Paste the line
   c. Esc - Esc – Esc, and answer YES when it asks if you want to save

This will make the Activities page on the MACHINE OPERATOR RoleCenter look like this:



Now the user can change the values for their own profiles without changing the values for all other users.

Tablet interface for Shop Floor

The tablet interface is the new client in Dynamics NAV 2015 made for tablet users only. The tablet interface is based on the web client and users using it can therefore be licensed as a limited user, which is perfect for a shop floor solution, where users only need to report consumption, output and waste quantity and time consumption on each production order.

Apps are available for multiple platforms:

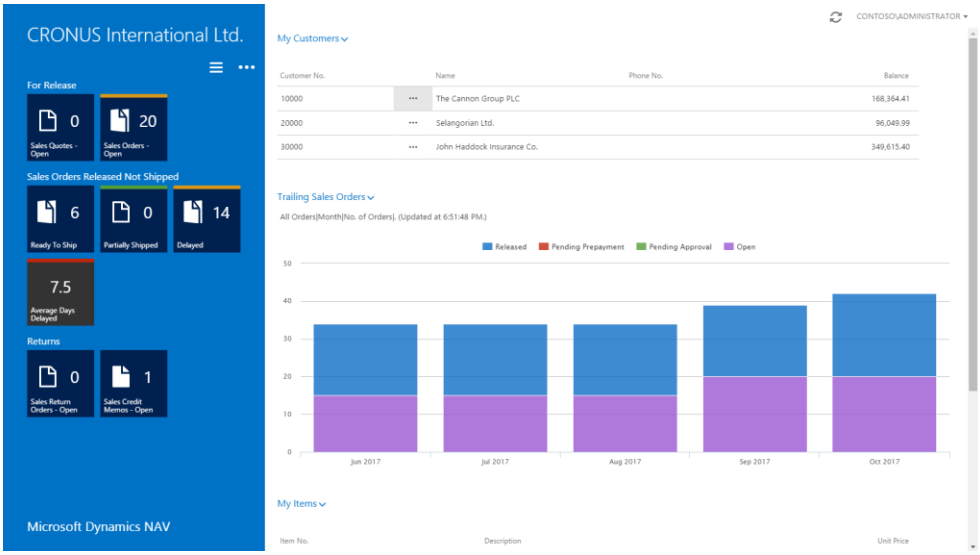
- Android
- Windows
- Apple IOS

The authors own iPad with the IOS app. Notice the alternative design of the glass.

There are only two out-of-the-box tablet profiles but since the technology are there, it is not a big task to create additional profiles for tasks like:

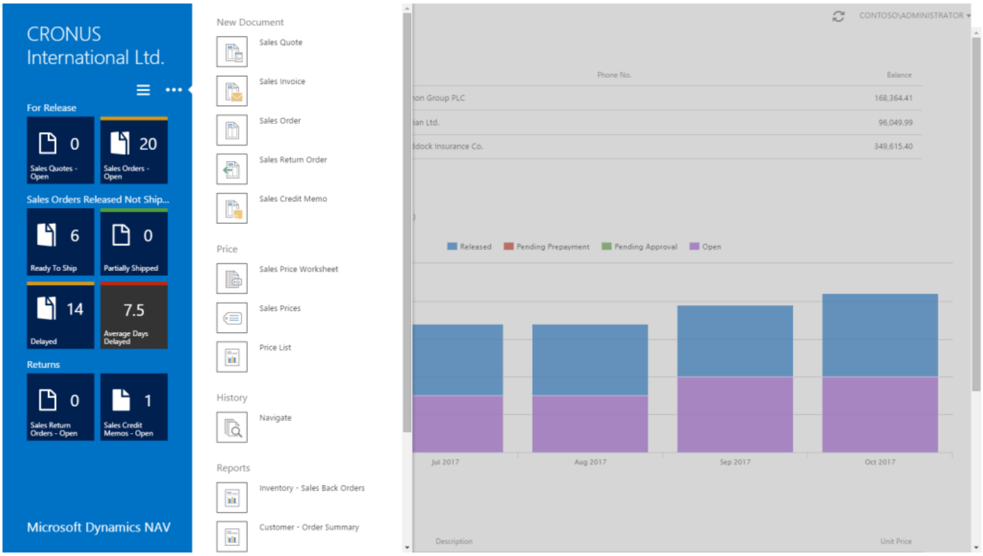
- Shop Floor reporting
- Inventory
- Delivery

This example is the ORDER PROCESSOR – tablet profile:

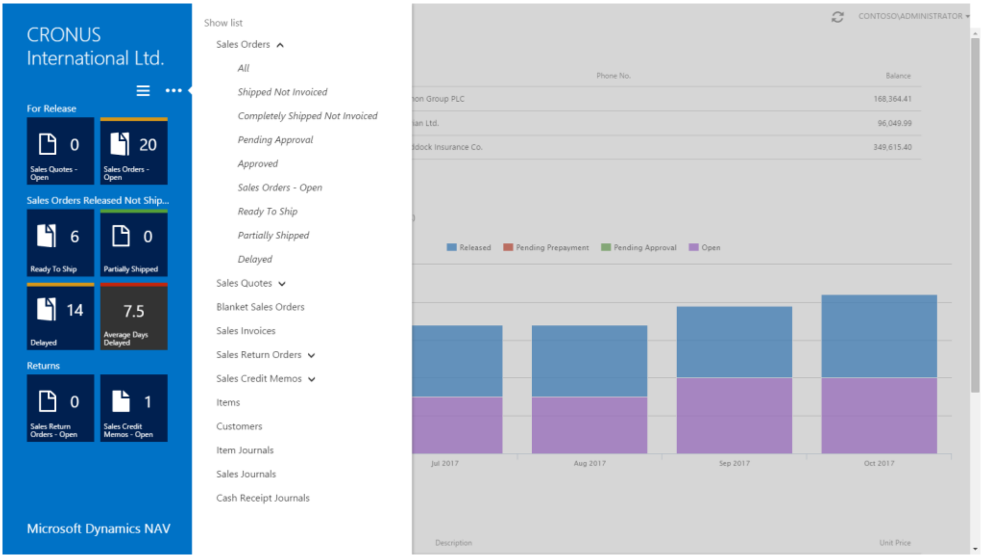


All pages are designed to so they are easy to handle with the touch screen only and views have been simplified to fit the needs on a tablet.

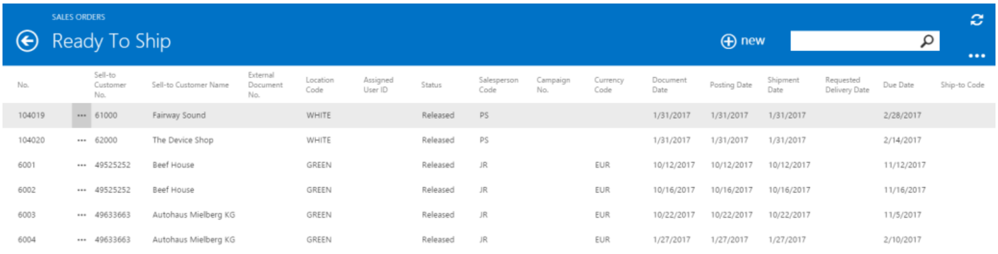
By touching the three dots the **New Document** menu is shown and it is possible to operate with finger touch only.



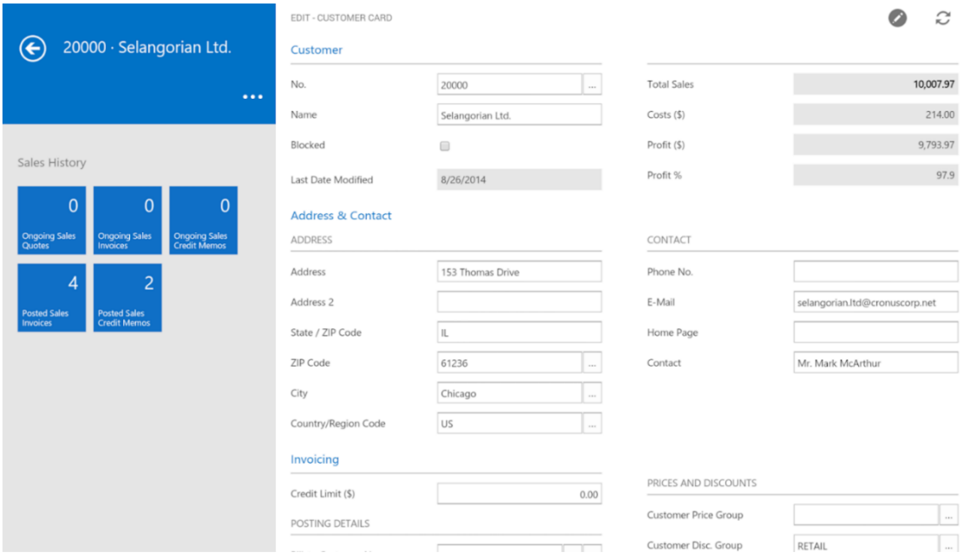
The three lines will provide lists corresponding to the **Home** section of the RoleCenter.



Here is an example of sales orders ready to ship:

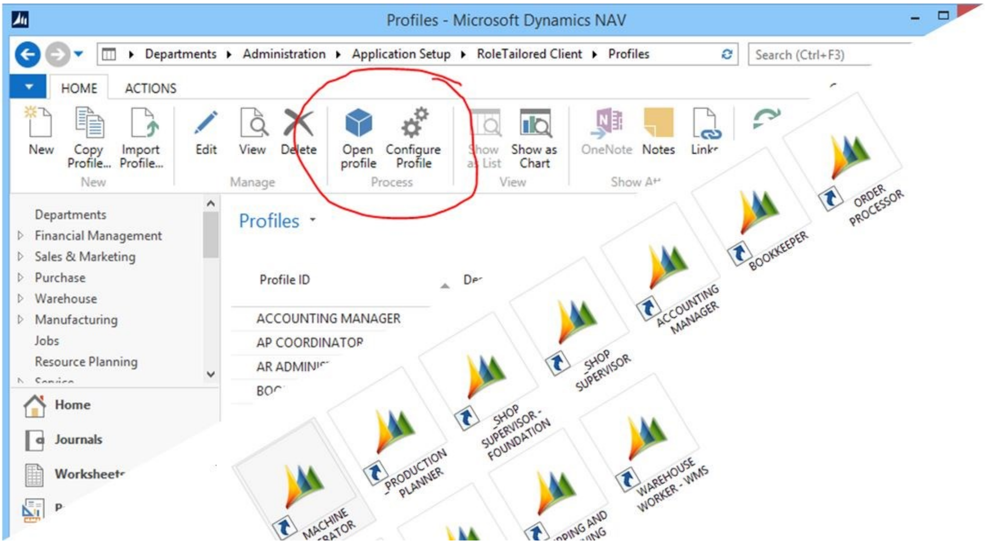


…and a customer card:

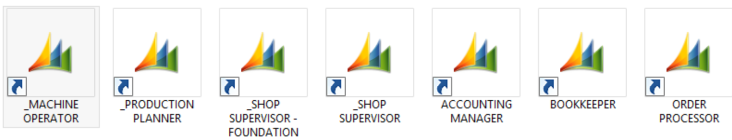


Appendix A

Managing Dynamics NAV profiles from the profile list page



One of the topics I address on nearly all my courses is RoleTailoring. How to set up profiles and how to assign them to users. The process of configuring and personalizing the profiles is also a hot topic and during the implementation process, it is recommended to create special shortcuts for each active profile in the company in order to maintain each profile.



Each of these shortcuts points to a specific profile and it can also point to a configuration file containing information on:

- Server name
- Instance name
- Port number
- Credentials type.

An example of the destination of the shortcut could look like this:

```
"C:\Program Files (x86)\Microsoft Dynamics NAV\70\RoleTailored
Client\Microsoft.Dynamics.Nav.Client.exe" -profile:"MACHINE OPERATOR" -
settings:"C:\Users\Administrator\Desktop\Manufacturing\ClientUserSettings.co
nfig"
```

The **–profile** parameter refers to the desired profile name and adding the **–configure** parameter will start the client in configuration mode.

When starting up the client with the **–profile** parameter, it is the permissions of the user running the shortcut that count. It is possible to run the shortcut as another user, by right clicking the shortcut with the shift key pressed and selecting “run as a different user”.

In Dynamics NAV 2013, the user running the shortcut must be owner of the profile in order to start a profile in configuration mode.

This has also been the usual way for me to open profiles, but it becomes a bit tedious to have to create shortcuts every time it is necessary to configure a new profile.

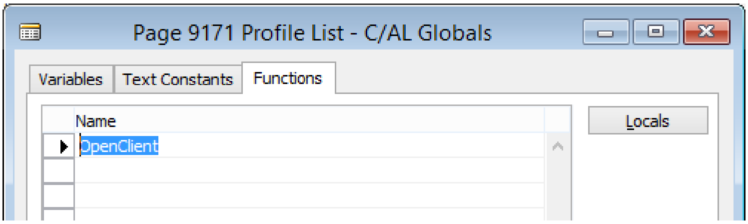
On one of my courses in Jutland, a creative student (I’m sorry I don’t remember your name) provided a simple solution for this:

Why not open the profile directly from the profile list?

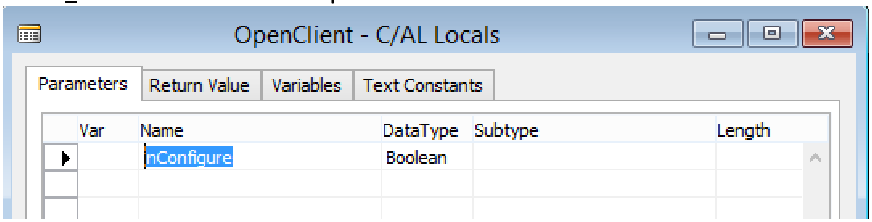
Therefore, he designed this simple solution:

In the Development Environment go to the Profile List page (9171) and perform the following

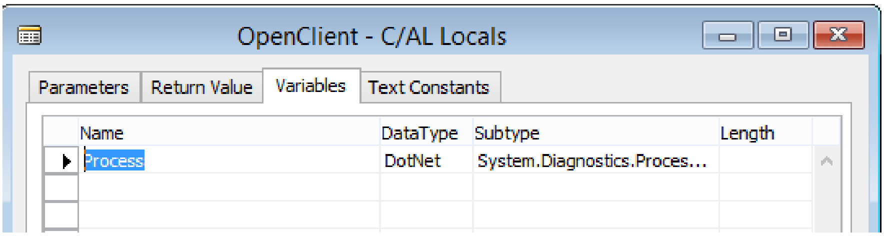
1) Design the page
2) Click View/C/AL Globals
3) Add a new function called OpenClient



4) Click Locals and create one parameter



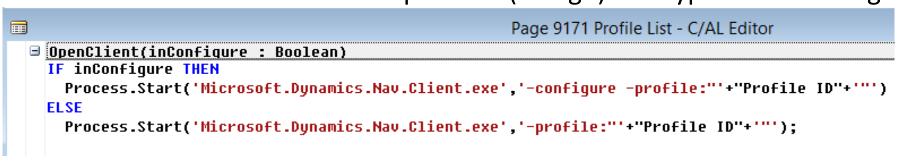
5) And one local variable



The full Subtype must be (can be copy/pasted):

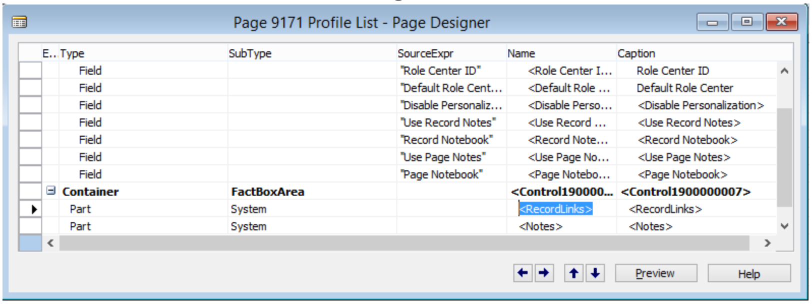
```
System.Diagnostics.Process.'System,
Version=4.0.0.0, Culture=neutral,
PublicKeyToken=b77a5c561934e089'
```

6) Now Go back to the function and press F9 (Design) and type the following:



7) Now it is necessary to create two new actions on the Profile List:

a. Go back to the Profile List in design mode:



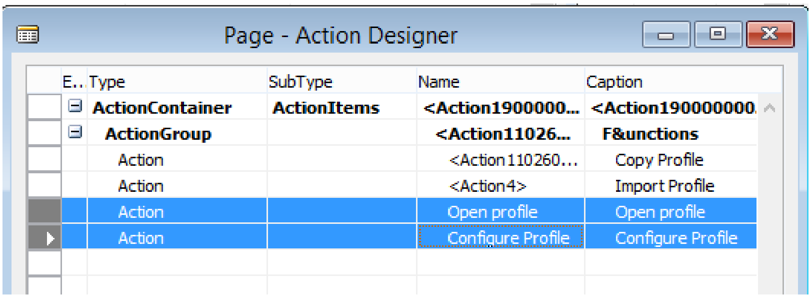
Page 9171 Profile List - Page Designer

E..	Type	SubType	SourceExpr	Name	Caption
	Field		"Role Center ID"	<Role Center I…	Role Center ID
	Field		"Default Role Cent…	<Default Role …	Default Role Center
	Field		"Disable Personaliz…	<Disable Perso…	<Disable Personalization>
	Field		"Use Record Notes"	<Use Record …	<Use Record Notes>
	Field		"Record Notebook"	<Record Note…	<Record Notebook>
	Field		"Use Page Notes"	<Use Page No…	<Use Page Notes>
	Field		"Page Notebook"	<Page Notebo…	<Page Notebook>
⊟	**Container**	**FactBoxArea**		**<Control190000…**	**<Control1900000007>**
	Part	System		<RecordLinks>	<RecordLinks>
	Part	System		<Notes>	<Notes>

Preview Help

b. Click View/Page Actions:

c. Add two new actions:



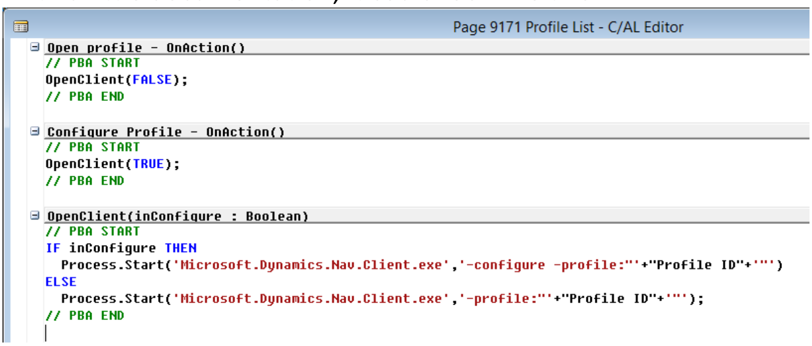
Page - Action Designer

E..	Type	SubType	Name	Caption
⊟	**ActionContainer**	**ActionItems**	**<Action1900000…**	**<Action190000000…**
⊟	**ActionGroup**		**<Action11026…**	**F&unctions**
	Action		<Action110260…	Copy Profile
	Action		<Action4>	Import Profile
	Action		Open profile	Open profile
	Action		Configure Profile	Configure Profile

d. On the **Open Profile** action, press F9 and type:
OpenClient(FALSE);

e. Go back to the actions and switch to the **Configure Profile** action press F9 and type:
OpenClient(TRUE);

With a little documentation, it could look like this:

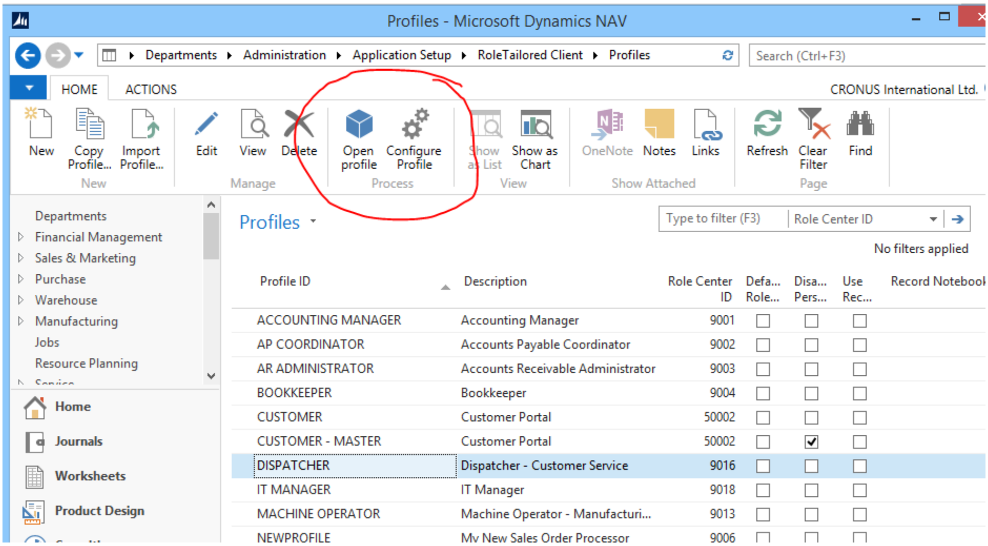


Page 9171 Profile List - C/AL Editor

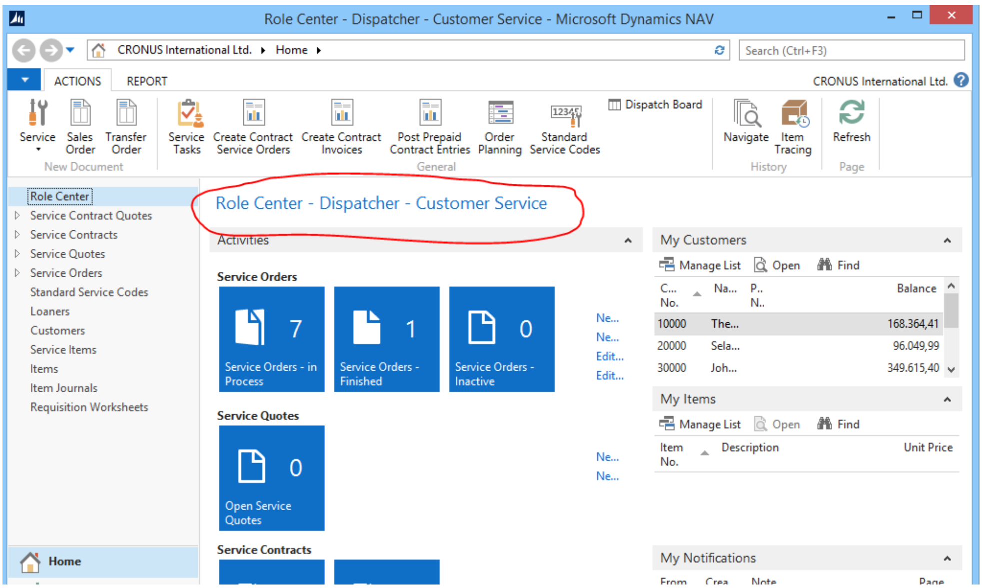
```
Open profile - OnAction()
// PBA START
OpenClient(FALSE);
// PBA END

Configure Profile - OnAction()
// PBA START
OpenClient(TRUE);
// PBA END

OpenClient(inConfigure : Boolean)
// PBA START
IF inConfigure THEN
  Process.Start('Microsoft.Dynamics.Nav.Client.exe','-configure -profile:"'+"Profile ID"+'"')
ELSE
  Process.Start('Microsoft.Dynamics.Nav.Client.exe','-profile:"'+"Profile ID"+'"');
// PBA END
```

8) Press Esc until prompted to save the object

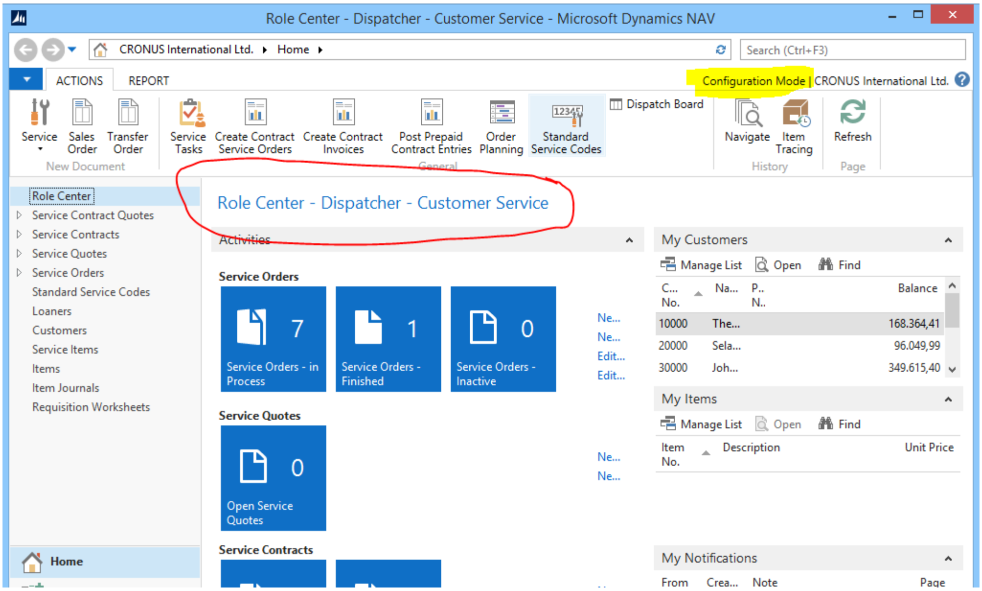
From now on, all you need to do to open or configure a profile is to open the Profile List, find the DISPATCHER profile and click Open Profile:



…and the DISPATCHER profile opens:



…or to open it in configuration mode:

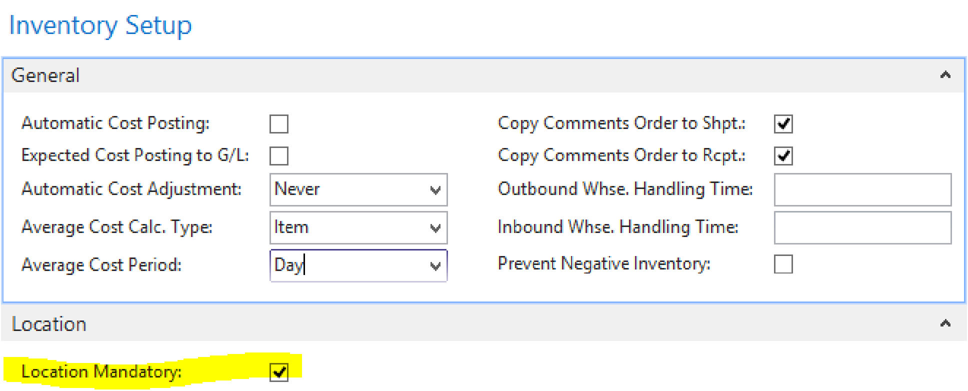


I used the property Image **WorkCenter** for the Open Profile action and the property Image **Setup** for the Configure Profile action.

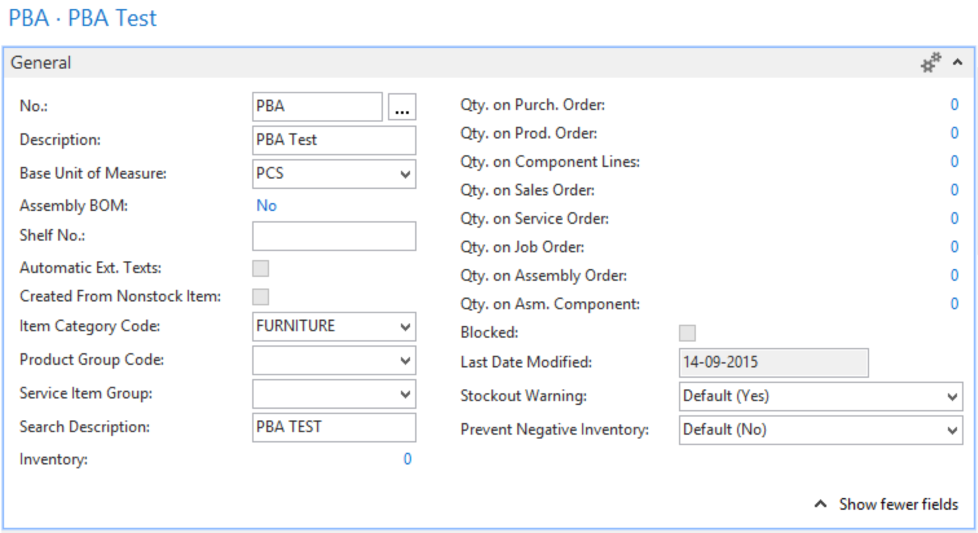
Why does the item planning ignore the planning parameters on the item card?

Have you experienced that the Item planning does not consider the planning parameters on the Item Card if the **Location Mandatory** field in the Inventory setup has been set.

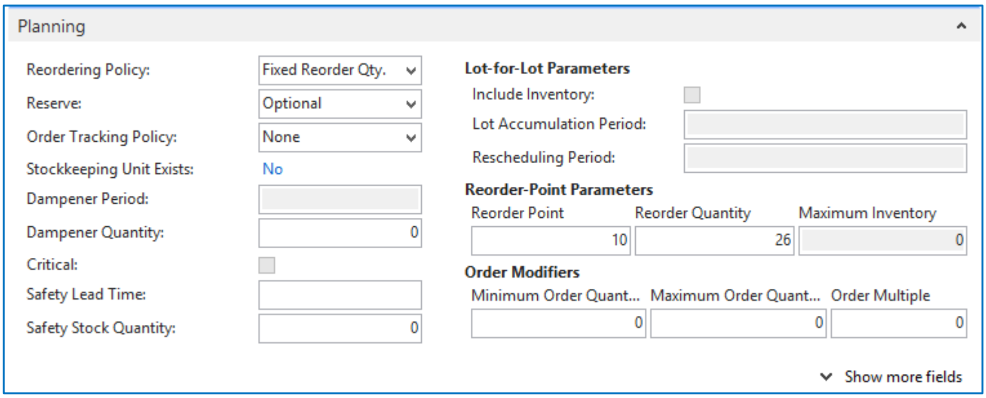
It sure looks like it:



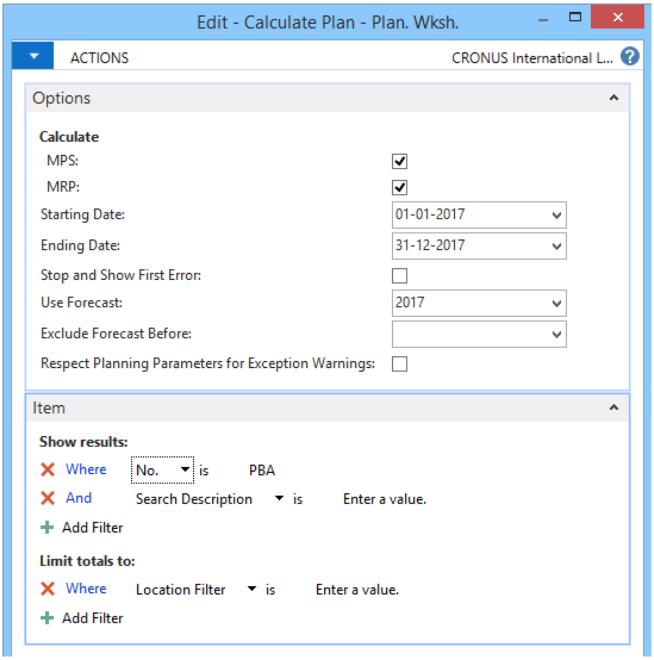
The Item has been set up like this:



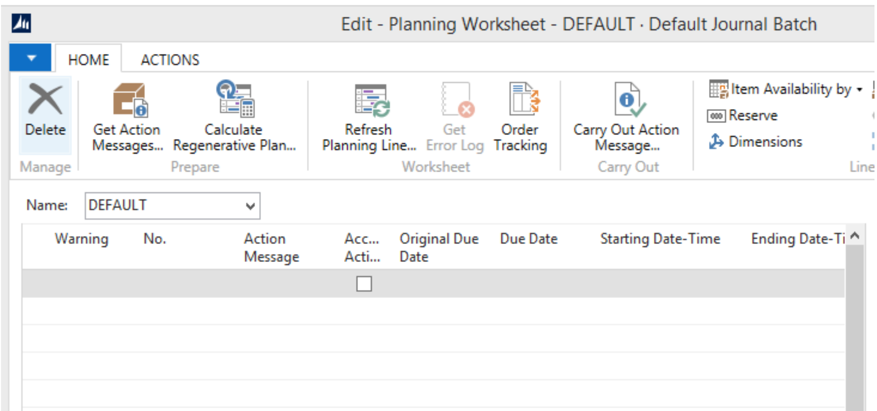
...and the Planning:



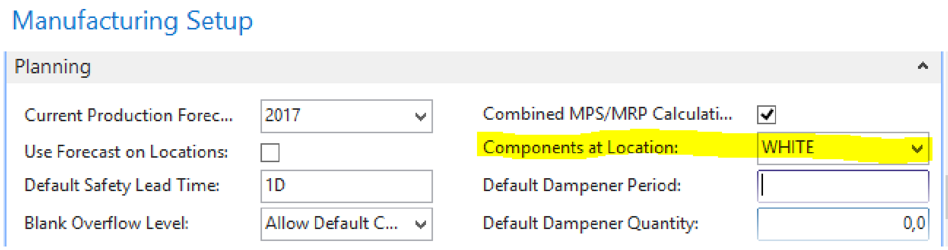
In my book, I should get a planning suggestion to buy 26 pcs of my item, but the **Planning Journal** remains empty. No errors - no warning what so ever when running the Calculate Plan:



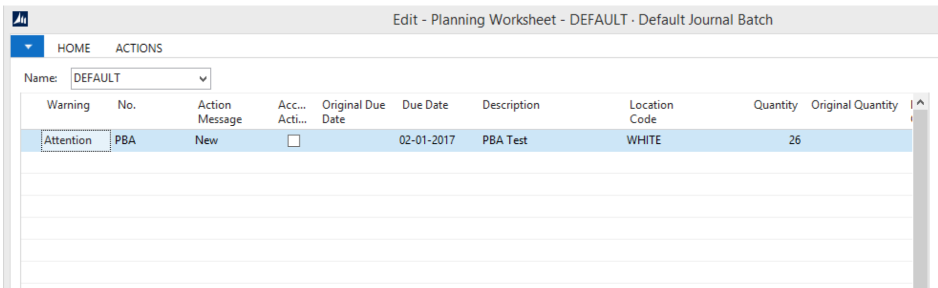
...and the result:



However if I add a default **Components At Location** in the Manufacturing Setup – Regardless if manufacturing is used with this customer or not – then everything works fine:

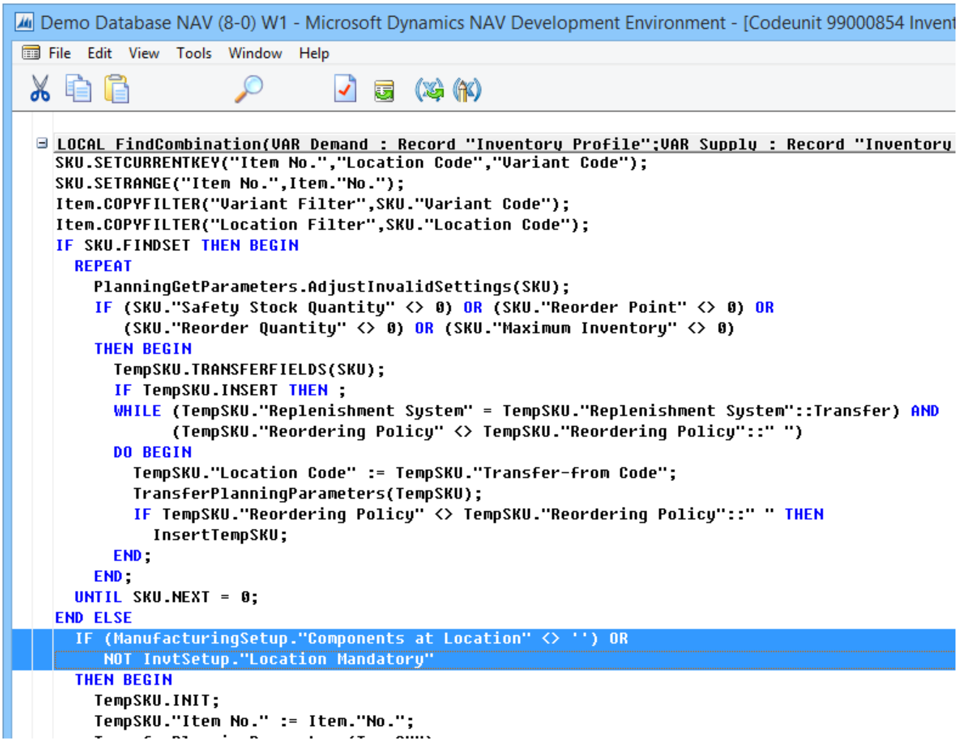


...and the planning worksheet:



Fantastic – now it works.

This is due to this small piece of code in Codeunit 99000854:

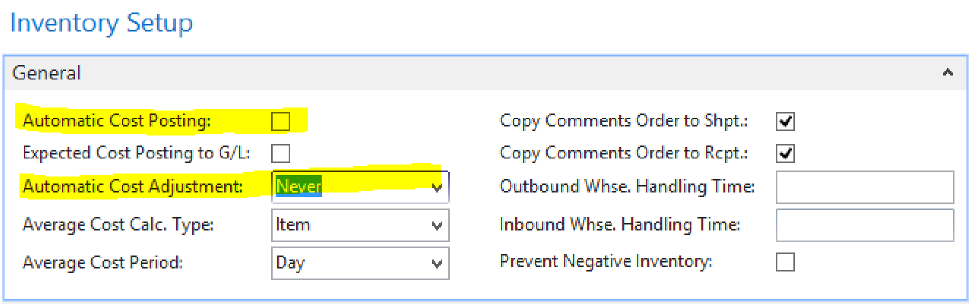


Don’t ask me why ☺

Why do the inventory batch ignore some value entries?

Often the **Automatic Cost Posting** and the **Automatic Cost Adjustment** are disabled to improve performance. This is a very common setup if it has proven too much to post both sales and purchase transactions along with the inventory postings in the daily routines. The trick is then to run the **Adjust Cost Item Entries** batch, which will determine the actual cost to be posted and the earliest acceptable posting date, at night or during the weekend. Then the **Post Inventory to G/L** batch is run. This will actually post the value entries to the G/L.

If the **Automatic Cost Posting to G/L** has been deactivated,



…and the inventory batch has been setup to run in a Job Queue Entry,

The job WILL NOT fail if there are missing G/L accounts in the General Posting Setup.

It is necessary to set up a procedure running the **Post Inventory to GL – TEST** report on a regular basis because that all errors are only visible on running this report. The report will warn you if any accounts are missing in the General Posting Setup.

Other errors such as invalid posting dates WILL fail the job as usual

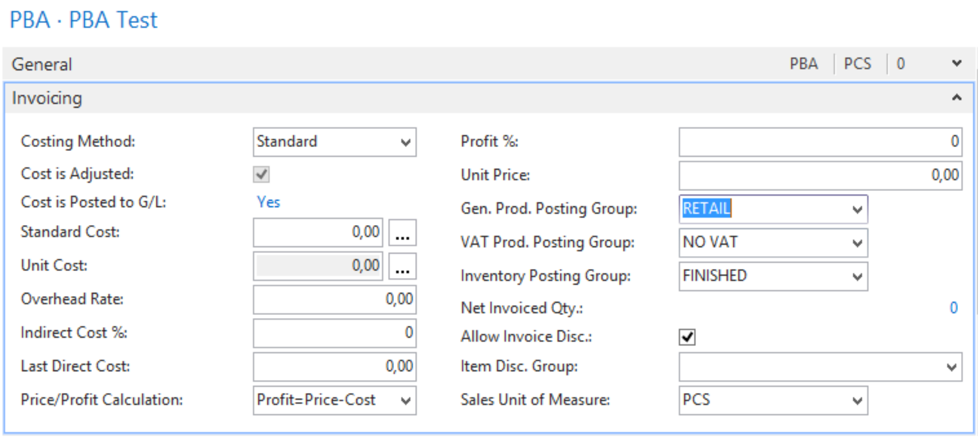
The value entries that fails will remain unadjusted.

This can also be checked by running the inventory adjustment report manually more than once.

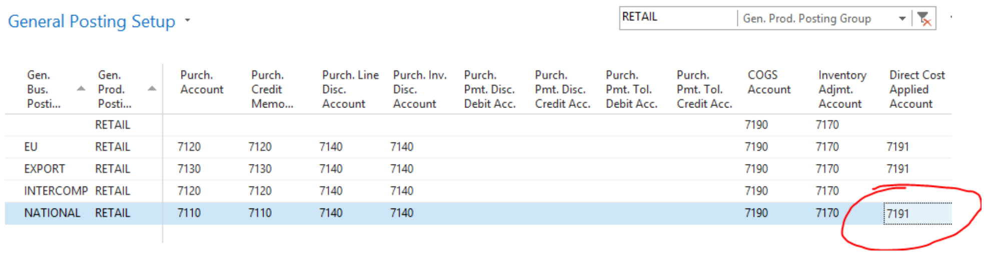
If all the value entries remains after running the report, it is probably because they are marked as “Skipped”.

A quick test:

Item PBA Test has the following setup:



The **Gen. Posting Setup** for the **Gen. Prod. Posting Group**: RETAIL and the **Gen. Bus. Posting Group**: NATIONAL looks like this:



Gen. Bus. Posti...	Gen. Prod. Posti...	Purch. Account	Purch. Credit Memo...	Purch. Line Disc. Account	Purch. Inv. Disc. Account	Purch. Pmt. Disc. Debit Acc.	Purch. Pmt. Disc. Credit Acc.	Purch. Pmt. Tol. Debit Acc.	Purch. Pmt. Tol. Credit Acc.	COGS Account	Inventory Adjmt. Account	Direct Cost Applied Account
	RETAIL									7190	7170	
EU	RETAIL	7120	7120	7140	7140					7190	7170	7191
EXPORT	RETAIL	7130	7130	7140	7140					7190	7170	7191
INTERCOMP	RETAIL	7120	7120	7140	7140					7190	7170	
NATIONAL	RETAIL	7110	7110	7140	7140					7190	7170	7191

Notice the **Direct Cost Account** field is filled with G/L Account 7191. This setup will be tested when the purchase order is posted. However if the setup is change after the posting but before the **Adjust Cost Item Entries** and **Post Inventory Cost to G/L** then the problem occurs.

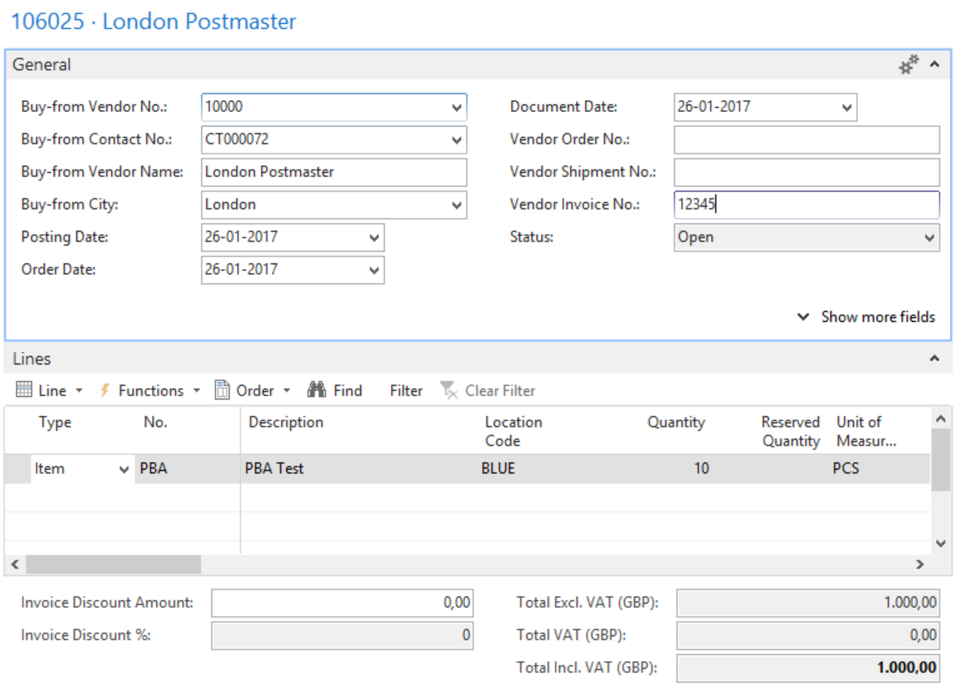
General Posting Setup

RETAIL | Gen. Prod. Posting Group

Gen. Bus. Posti...	Gen. Prod. Posti...	Purch. Account	Purch. Credit Memo...	Purch. Line Disc. Account	Purch. Inv. Disc. Account	Purch. Pmt. Disc. Debit Acc.	Purch. Pmt. Disc. Credit Acc.	Purch. Pmt. Tol. Debit Acc.	Purch. Pmt. Tol. Credit Acc.	COGS Account	Inventory Adjmt. Account	Direct Cost Applied Account
	RETAIL									7190	7170	
EU	RETAIL	7120	7120	7140	7140					7190	7170	7191
EXPORT	RETAIL	7130	7130	7140	7140					7190	7170	7191
INTERCOMP	RETAIL	7120	7120	7140	7140					7190	7170	
NATIONAL	RETAIL	7110	7110	7140	7140					7190	7170	

For a deep-dive into the wonderful world of the Inventory Batch, please check the Costing chapter of my book “Manufacturing with Microsoft Dynamics NAV”. This will give you the guided tour through the costing of purchase, sales and manufacturing process.

Testing with a quick purchase order:



It is amazing what the London Postmaster can deliver ☺

The Purchase order is posted as “Received” and “Invoiced” with no errors.

The register will show the following posting:

General Ledger Entries

Posting Date	Document Type	Document No.	G/L Accou...	Description	Gen. Postin...	Gen. Bus. Posting ...	Gen. Prod. Posting ...	Amount	Bal. Accou...	Bal. Accou...	Entry No.
26-01-2017	Invoice	108037	7110	Order 106025	Purchase	NATIONAL	RETAIL	1.000,00	G/L Account		2825
26-01-2017	Invoice	108037	5410	Order 106025				-1.000,00	G/L Account		2826

If the setup has been changed as described above then the inventory batch will react like this: Run the **Adjust Cost – Item Entries** and the **Post Inventory to G/L** and it does not return an error. It will just fail silently:

Print Preview

CRONUS International Ltd.

Post Inventory Cost to G/L

1 of 1 100% Find | Next

Entry No. Skipped Items PBA	Item Ledger Entry Type	Entry Type	Document No.	Source No.		Inventory Posting Group	Location Code	Gen. Bus. Posting Group	Gen. Prod. Posting Group
408	Purchase	Direct Cost	108038	10000	26-01-17	FINISHED	BLUE	RETAIL	RETAIL

No matter how many times the **Post Inventory Cost to G/L** is run this line never disappears. The explanation does not appear until the **Post Inventory Cost to G/L – Test** report is run:

Post Invt. Cost to G/L - Test

1 of 1 100% Find | Next

Post Inventory Cost to G/L - Test 14. September 2015

Posted per Entry Page 1

CRONUS International Ltd. PEIK-PAVILION\PEIK

Posting Date	Item Ledger Entry Type	Value Entry Type	Document No.	Item No.	Account No.	Name	Description	Amount	Value Entry No.	Item Ledger Entry No.
26-01-17	Purc	Dire	108038	PBA	2120	Finished Goods	Direct Cost 10000 on 26-0	1.000,00	408	335
26-01-17	Purc	Dire	108038	PBA			Direct Cost 10000 on 26-0	-1.000,00	408	335
Warning!			Direct Cost Applied Account is missing in Inventory Posting Setup, BLUE FINISHED.							

You might say that this is a very theoretical situation, but I have actually seen the issue in real life.

Manufacturing

Project and Production Handling
A Unique Solution for Manufacturers

THOROUGH BUSINESS SOLUTIONS FOR MANUFACTURING COMPANIES

The Columbus NSC manufacturing solution is a business solution, tailored for companies dealing with project and discrete manufacturing.

The Columbus NSC manufacturing solution for Microsoft Dynamics NAV makes it possible for companies to combine their ERP system with an industry specific solution, which combines financial management, project management and production management. The solution offers effective tools for handling the business processes, guiding you from the offer, through production planning, resource handling, billing, and service and maintenance, to the actual order.

Our unique and certified solution for project and manufacturing handling ensures effective business processes and improves companies' ability to adapt to future possibilities and conditions. The solution is a tool that enables companies to increase and optimize the value of their business processes.

Through many years of specific industry experience, Columbus NSC has amassed a great amount of knowledge around solutions for project and production companies.

THE MANUFACTURING SOLUTION MAKES IT POSSIBLE TO:

- *Optimize your project finances*
- *Provide realistic delivery deadlines*
- *Reduce waste*
- *Reduce amount of working hours in connection with offers*
- *Improve service level and customer satisfaction*
- Visualize your project plan

WANT TO KNOW MORE?

For more information,
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kontakt.nsc@columbusglobal.com

Columbus Manufacturing®
Once you *know* how...
www.columbus.dk