

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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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.

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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 webshop with delivery to the rest of the world.

amazon.co.uk

<u>Http://b-a.dk</u>

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:

Air -	
Page 🕨	Microsoft Dynamics NAV Help
Print & Send 🔸	Page Notes
Customize 🕨	About This Page
Help 🔸	About Microsoft Dynamics NAV

Which will give you:

About This Page: Edit - Sin	nulated Production Order - 1002 · Produced Item	
Page Information		^
Page:	Simulated Production Order (99000912)	
Page Type:	Document	
Page Mode:	Edit	
SourceTable:	Production Order (5405)	
Rec:	1002 Produced Item	
Table Fields		*
Source Expressions		•
FlowFilter Fields		*
Filters		*

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

About This Page: Edit - Simulat	ed Production Order - 1002 · Produced	Item
Table Fields		^
No. (2) (PK):	1002	
Status (1) (PK):	Simulated	
Actual Time Used (55):	0	
Allocated Capacity Need (56):	0	
Assigned User ID (9000):		
Bin Code (33):		
Blocked (28):	No	
Comment (19):	No	
Completely Picked (7300):	No	
Cost Amount (42):	0	
Creation Date (6):	29-07-2013	
Department Code (30):		
Description (3):	Produced Item	

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**:

Lines	About This Page: Lines		
😽 Functions 🝷 🚞 L	Page Information		<u>^</u> ^
	Page:	Simulated Prod. Order Lines (99000913)	
	Page Type:	ListPart	
	Page Mode:	Edit	
_	SourceTable:	Prod. Order Line (5406)	
	Rec:	1002	
	Table Fields		^
<	Line No. (3) (PK):	10000	
Schedule	Prod. Order No. (2) (PK):	1002	
Starting Time:	Status (1) (PK):	Simulated	
	Bin Code (23):		
Starting Date:	Cost Amount (67):	0	

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:

About This Report: Prod. Order Comp. and Routing

The About This Report feature is now active. Run your report again to view the dataset.

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:

				About This R	eport: Prod. Or	der Comp. and	Routing
ctions							
Email as Attachme	nt 🔣 Export as XN	ML 🛛 👼 Print Pag	je				
Microsoft Word							
Microsoft Excel							
Send	d To	General					
bout This Repo	t: Prod. Order (Comp. and Rou	ting				
bout This Repor	t: Prod. Order C CompanyName	Comp. and Rou Status_Produc	ting No_Productio	CurrReportPa	PrdOdrCmpts	ProductionOr	No1_Prod
		•	5	CurrReportPa	PrdOdrCmpts	ProductionOr	No1_Proc
		Status_Produc	5	CurrReportPa Page	PrdOdrCmpts Prod. Order - C		No1_Prod
TodayFormatt	CompanyName	Status_Produc Released	No_Productio			Description	_
TodayFormatt 4. August 2013	CompanyName CRONUS Intern	Status_Produc Released Released	No_Productio 101010	Page	Prod. Order - C	Description Description	101010

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 *A* 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 *A* 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:

A ii						Items - Microso	oft Dyna	mics NAV			
CRONUS Internat	tional Ltd. 🕨 Home 🕨	ltems 🕨									
HOME ACTIONS NA	NGATE REPORT - IN	VENTORY REPORT	SALES	REPORT -	PURCHASES	REPORT - FINAN	CE & COS	TING REF	ORT - MANUF	ACTURIN	IG
		Sale	s Prices	@ Price		🛅 Orders	5	Entries •	Inventor	y Availab	ility
New Edit View Delete	_	🛛 👘 Ord	ers	🚨 Ven	dors	🖏 Return Ord	ers 🤤	Comments	i Inventor	y - Sales	Back Order
New Edit View Delete	Item Item Availability by • Journ		urns Orde	rs 📄 Requ	uisition Works	heet			🖬 Where-U	lsed (Top	Level)
New Manage	Inventory		Sales		Pure	chases		History			Re
Role Center	Items •								Tv	pe to filt	er (F3)
Released Production Orders	items										
Finished Production Orders											
⊿ ltems	No. Desc	ription	As	Base Unit	Cost	Unit Cost L	nit Price	Vendor No.	Search	Bloc	Product
Produced			BO	of Measure	is				Description		Group
Raw Materials	1000 Bicyc	tle	No	PCS	✓	350,594	4.000,00		BICYCLE		
Stockkeeping Units	1001 Tour	ing Bicycle	No	PCS	✓	350,594	4.000,00		TOURING		
Capacity Ledger Entries	1100 Erent	Miland	Nie	nce		100 671	1 000 00	20000	EDONIT W/		

...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.

General				^
Automatic Cost Posting:			Copy Comments Order to Shpt.:	√
Expected Cost Posting to G/L:			Copy Comments Order to Rcpt.:	✓
Automatic Cost Adjustment:	Never	¥	Outbound Whse. Handling Time:	
Average Cost Calc. Type:	ltem	~	Inbound Whse. Handling Time:	
Average Cost Period:	Day	~	Prevent Negative Inventory:	

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.

General					~
Discount Posting:	All Discounts	¥	Copy Comments Blanket to Order:	•	
Credit Warnings:	Both Warnings	¥	Copy Comments Order to Invoice:	✓	
Stockout Warning:			Copy Comments Order to Shpt.:	✓	
Shipment on Invoice:	 ✓ 		Copy Cmts Ret.Ord. to Cr. Memo:	✓	
Return Receipt on Credit Memo:	 ✓ 		Copy Cmts Ret.Ord. to Ret.Rcpt:	✓	
Invoice Rounding:	 ✓ 		Allow VAT Difference:		
Ext. Doc. No. Mandatory:			Calc. Inv. Discount:		
Appln. between Currencies:	All	~	Calc. Inv. Disc. per VAT ID:		
		~	VAT Bus. Posting Gr. (Price):		~
Logo Position on Documents:	No Logo	¥	Exact Cost Reversing Mandatory:		
Default Posting Date:	Work Date	~	Check Prepmt, when Posting:		
Default Quantity to Ship:	Remainder	~	Archive Quotes and Orders:		

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

1000 · Bicycle

General				** ^
No.:	1000	Qty. on Purch. Order:		0
Description:	Bicycle	Qty. on Prod. Order:		44
Base Unit of Measure:	PCS	Qty. on Component Lines: Qty. on Sales Order:		0 104
Assembly BOM:	No	Qty. on Service Order:		0
Shelf No.:	F4	Qty. on Job Order:		0
Automatic Ext. Texts:		Qty. on Assembly Order:		0
Created From Nonstock Ite		Qty. on Asm. Component:		0
Item Category Code:				
Product Group Code:		Last Date Modified:	13-03-2015	
Service Item Group:		Stockout Warning:	Default (Yes)	*
Search Description:	BICYCLE	Prevent Negative Inventory:	Default (No)	¥
Inventory:	3	2		
			▲ Sho	w fewer fields

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

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

Warehouse			
Special Equipment Code:	~	Last Counting Period Update:	
Put-away Template Code:	~	Next Counting Start Date:	
Put-away Unit of Measure Co	~	Next Counting End Date:	
Phys Invt Counting Period Co	~	Identifier Code:	
Last Phys. Invt. Date:		Use Cross-Docking:	√

Next Counting Start Date:

Prevent Negative Inventory:

Next Counting End Date:

Replaces the previous field **Next Counting Period**

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.

4			New - Sales Order	- 1003				- 🗆 🛛
HOME ACTIONS	NAVIGATE						CRONUS Inte	rnational Ltd. 🔞
View X Delete	e Reopen Post	Depy Document	Statistics	Shipments 🔁 Invoices	E Email Confirmation	Notes	Clear Filte → Go to	Previousr Next
Manage R	elease Posting	Prepare	Order	Documents	Order Confirmation	Show Attached	Pa	ige
1003								
General					*	sell-to	Customer Sal	^ ′
No.: Sell-to Customer No.: Sell-to Customer Name: Sell-to City: Posting Date: Order Date: Lines	1003 26-01-2017 27-01-2017 26-01-2017 27-01-2017	·	Document Date: Requested Delivery Date External Document No.: Salesperson Code: Status:		✓ ✓ ✓ Show more fie	Pstd. Im	Orders: : Drders: lemos: ipments:	
🛄 Line 👻 🦸 Functions	- 🛅 Order - 🏦 Find	Filter 🛛 🛼 Clear Filter				Sales Li	ne Details	^
Type No.	Description	Location Code	Quantity	Qty. to Assemble to Orde			d Quantity:	0
						-		26-01-2017
							/ailability:	0
						 Availab 	le Invent	0

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.

General							 Sell-to Customer Sa 	l
No.:		1003		Document Date:	26-01-2017	~	Customer No.:	1000
Sell-to Custo	-to Customer No.: 10000			Requested Delivery Date:			Quotes: Blanket Orders:	
Sell-to Custo	mer Name:	The Cannon Group PLC		External Document No.:			Blanket Orders: Orders:	
	inci rume.	Birmingham			PS	~	Invoices:	
Sell-to City:		-	v	Salesperson Code:		~	Return Orders:	
Posting Date		26-01-2017 🗸		Status:	Open	`	Credit Memos:	(
Order Date:		26-01-2017 🗸					Pstd. Shipments:	
			-				Pstd. Invoices:	
						 Show more field 	 Pstd. Return Rece 	
						 Snow more field 	,	
ines							Pstd. Credit Mem	
	Functions	🔹 🛅 Order 👻 🁬 Find	Filter 📡 Clear Filter			Show more field	Pstd. Credit Mem	
	Functions No.	▼ B Order × M Find Description	Filter 🕏 Clear Filter	Quantity	Qty. to Assemble		Pstd. Credit Mem	
Line 🔹 🕴				Quantity	Qty. to Assemble to Order	*	Pstd. Credit Mem Sales Line Details Item No.:	
Line 🔹 🕴			Location	Quantity		Reserved Unit of	Pstd. Credit Mem Sales Line Details Item No.:	
Line 👻 対	No.		Location			Reserved Unit of	Pstd. Credit Mem Sales Line Details tem No.: Required Quantity: Availability	
Line 👻 対	No.		Location			Reserved Unit of	Pstd. Credit Mem Sales Line Details tem No.: Required Quantity: Availability	(
Line 👻 対	No.		Location			Reserved Unit of	Pstd. Credit Mem Sales Line Details Item No.: Required Quantity: Availability Shipment Date:	26-01-201

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

Property	Value	
Description	<>	^
OptionCaption	<undefined></undefined>	
OptionCaptionML	<undefined></undefined>	
DecimalPlaces	<undefined></undefined>	
Width	<undefined></undefined>	
ShowMandatory	TRUE	
Title	<no></no>	
MinValue	<>	
MaxValue	<>	
NotBlank	<no></no>	
CharAllowed	<undefined></undefined>	

• Variables that are part of the dataset

Property	Value	
Description	<>	~
OptionCaption	<undefined></undefined>	
OptionCaptionML	<undefined></undefined>	
DecimalPlaces	<undefined></undefined>	
Width	<undefined></undefined>	
ShowMandatory	LocationCodeMandatory	
Title	<no></no>	
MinValue	<>	
MaxValue	<>	
NotBlank	<no></no>	
CharAllowed	<undefined></undefined>	
ValuesAllowed	\diamond	\sim

• Small pieces of code

		_
Property	Value	
ToolTipML	<undefined></undefined>	^
Description	<>	
OptionCaption	<undefined></undefined>	
OptionCaptionML	<undefined></undefined>	
DecimalPlaces	<undefined></undefined>	
Width	<undefined></undefined>	
ShowMandatory	Type = Type::"G/L Account"	
Title	<no></no>	
MinValue	<>	
MaxValue	<>	
NotBlank	<no></no>	
CharAllowed	<undefined></undefined>	~

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

Lines							¥ [*] ^
🛄 Line 🝷 🕴 F	unctions *	<u></u>	Order 🝷 🏦 Find	Filter 🛛 📉 Clear Filter			
Туре	No.		Description	Location Code	Quantity Unit of Measur	Unit Cost (LCY)	Unit Pric 1
ltem	1000		Bicycle	BLUE	PCS	350, 594	4
G/L Account	*	~		*		0,00	k
							•
<							>

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.

Sales Order					
General					** ^
No.: Sell-to Customer No.: Sell-to Customer Name: Sell-to City:	*	· · · · · · · · · · · · · · · · · · ·	Document Date: Requested Delivery Date: External Document No.: Salesperson Code:		
Posting Date: Order Date:	v		Status:	Open 🗸	Show more fields

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

No. Series List 🝷					ype to filter (F3)	Code	-	· → •
						No	filters a	pplied
Code 🔺	Description	Starting No.	Ending No.	Last Da Used	ite Last No. Used	Defa Nos.	Man Nos.	Date Order
S-ORD-1	Sales Order	1001	1999	26-01-2	017 1003	-		
S-ORD-2	Sales Order	2001	2999					

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

Sales Quote

General					*	- ^
Sell-to Customer No.:	*	¥	Requested Delivery Date:		~	
Sell-to Contact No.:		¥	Salesperson Code:		~	
Sell-to Customer Name:			Campaign No.:			¥
Sell-to City:		~	Opportunity No.:			~
Order Date:	¥		Status:	Open		~
Document Date:	¥					
				~	Show more fie	lds

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.

1001 · The Cannon Group PLC

General					* ^
Sell-to Customer No.: Sell-to Contact No.: Sell-to Customer Name:	10000 CT000007 The Cannon Group PLC	* *	Requested Delivery Date: Salesperson Code: Campaign No.:	PS	~ ~
Sell-to City: Order Date:	Birmingham	*	Opportunity No.: Status:	Onon	×
Document Date:		•	Status:	Open	*
				~	Show more fields

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.

Firm Planned Prod. Order

General								^
No.:			Search Description:					
Description:			Quantity:					0
Description 2:			Due Date:		Ý			
Source Type:	ltem	~	Assigned User ID:					¥
Source No.:		~	Last Date Modified:					
M-FIRMP	Description Firm Planned orders	Starting No. 101001	Ty Ending No. Last Dat Used 101999	/pe to filter (F3) te Last No. Used	Code No Defa Nos.	o filters a Man Nos.	-	~
I								

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.

109005 · MEMA Ljubljana d.o.o.

General						
Sell-to Custo		38128456	~	Document Date:	27-09-2017 🗸]
Sell-to Custo	mer Name:	MEMA Ljubljana d.o.o.		Requested Delivery Date:	×	
Sell-to City:		Ljubljana	¥	External Document No.:		
Posting Date	:	27-09-2017 🗸		Salesperson Code:	JR 🗸]
Order Date:		27-09-2017 🗸		Status:	Open	~
					~	Show more fields
Lines						^
🛄 Line 🔹 🕴	Functions	🖷 🛅 Order 🝷 🏙 Find 🛛 Fi	ilter 🛛 🛼 Clear F	ïlter		
Туре	No.	Description	Loc Cod			served Unit of Auantity Measur
ltem	1000	Bicycle		16		PCS
ltem	1001	Touring Bicycle		3		3 PCS
ltem	1100	Front Wheel		5		PCS
ltem	1200	Back Wheel		5		PCS
<						~
	ount Amount:		0,0	00 Total Excl. VAT (EUR):		102.928.39
Invoice Disco	ount %:			0 Total VAT (EUR):		0,00
				Total Incl. VAT (EUR):		102.928,39

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:

	Edit - Send Email	_ □	×
-		CRONUS International.	. 0
From:			
To:	purchase@thecannongroup.com		7
Cc:			
Bcc:			
Subject:	The Cannon Group PLC - Order 1004		
Attachment Name:	Sales Order 1004.pdf		
Message:	thanks		
			\mathbf{v}
Edit in Outlook:	\checkmark		
		OK Cancel	

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

FILER	ち び 1 MEDDELELS	 F The Cannon Group PLC - Order 1004 - Meddelels INDSÆT INDSTILLINGER FORMATÉR TEKST 	CENNEM		×
Sæt ind • Udklipshol	Ē≘ F <i>K</i> ∛ ª⊻ -	New Ror × 12 A A ▲ Image: Constraint of the second	Mærker	Q Zoom Zoom	^
ت الیات Send	Fra 🕶 Til Cc Emne Vedhæftet	peik@b-a.dk purchase@thecannongroup.com The Cannon Group PLC - Order 1004 Sales Order 1004.pdf (151 KB)			
than	ks				

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**:

DynamicsNAV80QM - (Running)						
General						^
General Azure Active Directory App ID URI: Build restriction: Certificate Thumbprint: Close inactive SQL connections in generation: Credential Type: Data Cache Size: Database Instance: Database Instance: Database Server: Debugging Allowed: Default Client Disable SmartSql: Enable Buffered Insert: Enable Euffred Insert:	WamClient Windows Pemo Database NAV (8-0) QM PEIK-PAVILION Windows V	Enable Full C/AL Function Tracing.: Enable SQL Parameters By Ordinal: Enable SQL Parameters By Ordinal: Max Concurrent Calls: Metadata Provider Cache Size: Multitenant: Network Protocol: Report PDF Font Embedding: Send Feedback Services Default Company: Services Default Time Zone: Services Language: Services Option Format: Sesvices Option Format:	✓ 40 150 Default ✓ UTC en-US OptionCaption 3	×		~
Enable Debugging: Enable Encryption on SQL Server connections : Enable file access by C/AL functions:	×	SQL Command Timeout: UI Elements Removal: Use NTLM Authentication:	00:30:00 LicenseFileAndUserPermissions None	~)	
Client Services SOAP Services OData Services			LicenseFile LicenseFileAndUserPermissions		7046 7047 7048	* *

UI Elements Removal

Possible values:

None:	No UI Elements will be removed				
LicenseFile: File will be used.	Only object permissions in the License				
LicenseFileAndUserPermissions:	Both object permissions from the License File and User Permissions system will be used.				
The default setting is LicenceFileAndUserPe	ermissions.				

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.



Role Center - Sales Order Processor

Role Center - Small Business



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:

ue Setu	Jp A	dministrat	or *				T	ype to filter (F3)	User Name	- →
									No f	ilters applied
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	Unfavorabl
		1313	Mini Activities Cue		5 Ongoing Purchase Invoices	None	15,00	Ambiguous	30,00	Unfavorabl
		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	Unfavorabl
		1313	Mini Activities Cue		8 Overdue Purch. Invoice Amount	None	10.000,00	Ambiguous	100.000,00	Unfavorabl
		1313	Mini Activities Cue		9 Overdue Sales Invoice Amount	None	10.000,00	Ambiguous	100.000,00	Unfavorabl
		1313	Mini Activities Cue		10 Average Collection Days	Favorable	10,00	None	30,00	Unfavorabl
		9053	Sales Cue		2 Sales Quotes - Open	None	15,00	Ambiguous	20,00	Unfavorabl
		9053	Sales Cue		3 Sales Orders - Open	None	15,00	Ambiguous	20,00	Unfavorabl
		9053	Sales Cue		4 Ready to Ship	None	15,00	Ambiguous	20,00	Unfavorabl
		9053	Sales Cue		5 Delayed	Favorable	1,00	Ambiguous	20,00	Unfavorabl
		9053	Sales Cue		6 Sales Return Orders - Open	None	15,00	Ambiguous	20,00	Unfavorabl
		9053	Sales Cue		7 Sales Credit Memos - Open	None	15,00	Ambiguous	20,00	Unfavorabl
		9053	Sales Cue		8 Partially Shipped	Favorable	1,00	Ambiguous	20,00	Unfavorabl
		9053	Sales Cue		9 Average Days Delayed	Favorable	3,00	None	7,00	Unfavorabl

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:

411	Prof	iles - Microsoft Dynamics NAV						×
G 🕞 🗸 🔟 > Departments	Administration Application Setup	RoleTailored Client Profiles		6	3 Sei	arch (Ctr	rl+F3)	
HOME ACTIONS							CRONUS International Ltd	d. 🔮
* 1 1	🗟 🗙 🕋 🦽			C	Y,	#		
New Copy Import Edit Profile Profile	View Delete Open Configure profile Profile	Show Show as OneNote Note	es Links	Refresh	Clear Filter	Find		
New	Manage Process	View Show Atta	ached		Page			
Departments	Profiles -		Ту	/pe to filte	er (F3)	Role	e Center ID 🔹 🚽	•
 Financial Management Sales & Marketing 							No filters applied	
Deriver Section Providence United Section 1.1	Profile ID	Description	Role Center	Defa	Disa	Use	Record Notebook	
Warehouse		Description	ID		Pers	Rec	Record Notebook	- 1
Manufacturing	ACCOUNTING MANAGER	Accounting Manager	9001					
Jobs	AP COORDINATOR	Accounts Payable Coordinator	9002					
Resource Planning	AR ADMINISTRATOR	Accounts Receivable Administrator	9003					
Service	BOOKKEEPER	Bookkeeper	9004					
Human Resources	CUSTOMER	Customer Portal	50002					
Administration IT Administration	CUSTOMER - MASTER	Customer Portal	50002		~			
Application Setup	DISPATCHER	Dispatcher - Customer Service	9016					
General	IT MANAGER	IT Manager	9018					
Users	MACHINE OPERATOR	Machine Operator - Manufacturi	9013					
Financial Management	NEWPROFILE	My New Sales Order Processor	9006					

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.

	About This Page: Activities	- 🗆	×
ACTIONS			0
🕒 Email as Attachment 🕞 Export as XML	🖶 Print Page		
Microsoft Word			
Microsoft Excel			
Send To	General		
About This Page: Activities Page Information			^
Page:	Machine Operator Activities (9047)		
Page Type:	CardPart		
Page Mode:	View		
SourceTable:	Manufacturing Cue (9056)		
Rec:			

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.

About This Page: Role Center - Machine Operator - Manufacturing Comprehensive

Page Information	tion	
Page:	Machine Operator Role Center (9013)	
Page Type:	RoleCenter	
Page Mode:	View	
SourceTable:		
Rec:		

▲ 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:

	New - Cue Setup Ad				
HOME				CRONUS Inter	national Ltd.
New View Edit Delete Show Show as a Sits Chart View View Manage View View	Notes Links Show Attached				
ue Setup Administrator 🔹			Type to filter (F3)	User Name	
				No filte	ers applied
User 🔔 Table ID 🔔 Table Name Name	Cue ID 🔔 Cue Name	Low Range Style	Threshold 1 Middle Range Style	Threshold 2 H S	ligh Range tyle
9056 Manufacturing Cue	0 🗸	None	0,00 None	0,00 N	one
1313 Mini Activities Cue		Fields Lookup	_ 🗆 🗙	30,00 U	Infavorable
1313 Mini Activities Cue		Tields Lookup		30,00 U	Infavorable
1313 Mini Activities Cue	HOME		CRONUS Internatio 🕜	100.000,00 Fa	vorable
1313 Mini Activities Cue			3 🏹 🚻 🔡	0,90 U	Infavorable
1313 Mini Activities Cue	Show Show as One	Note Notes Links Re	fresh Clear Find	100.000,00 U	Infavorable
1313 Mini Activities Cue	as List Chart		Filter	100.000,00 U	Infavorable
1313 Mini Activities Cue	1 View	Show Attached	Page	30,00 U	Infavorable
9053 Sales Cue	Fields Lookup	Type to filter (F3)	No. ▼ → ▼	20,00 U	Infavorable
9053 Sales Cue		Fil	ter: 9056 • Decimal,Integer	20,00 U	Infavorable
9053 Sales Cue				20,00 U	Infavorable
9053 Sales Cue	No. 🖉 Field	Name Field Captio	n	20,00 U	Infavorable
9053 Sales Cue	2 Plann	ed Prod. Orde Planned Pro	duction Orders - All	20,00 U	Infavorable
9053 Sales Cue	L	lan, Prod. Or.,, Firm Planner		20,00 U	Infavorable
9053 Sales Cue	4 Releas	ed Prod. Ord Released Pro	duction Orders - All	20,00 U	Infavorable
9053 Sales Cue		BOMs under Prod. BOMs		7,00 U	Infavorable
		igs under De Routings un			
		ase Orders Purchase Or			
	8 Prod.	Orders Routi Prod. Orders	Routings - in Queue		ОК
		Orders Routi Prod. Orders			OK
		icks to Produ Invt. Picks to			
		ut-aways fro Invt. Put-aw			
		ed Prod. Ord Released Pro			

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

Cue Setup	o A	dminist	rato	or •					Ţ	ype to filter (F3)	User Name	• •	~
											No f	ilters applied	
User Name	۸	Table ID	۸	Table Name	Cue ID	\$	Cue Name	Low Range Style	Threshold 1	Middle Range Style	Threshold 2	High Range Style	'
		ç	053	Sales Cue		8	Partially Shipped	Favorable	1,00	Ambiguous	20,00	Unfavorable	
		9	053	Sales Cue		9	Average Days Delayed	Favorable	3,00	None	7,00	Unfavorable	
		9	056	Manufacturing Cue		12	Released Prod. Orders - Today	Favorable	1,00	Ambiguous	5,00	Unfavorable	÷
		ç	056	Manufacturing Cue		4	Released Production Orders - All	Favorable	1,00	Ambiguous	5,00	Unfavorable	÷
		ç	056	Manufacturing Cue		8	Prod. Orders Routings - in Queue	Favorable	1,00	Ambiguous	5,00	Unfavorable	
		ç	056	Manufacturing Cue		9	Prod. Orders Routings - in Progress	Favorable	1,00	Ambiguous	5,00	Unfavorable	

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

)		Pag	ge - Action De	signer		
	E	Туре	SubType	Name	Caption	
		ActionContainer	ActionItems	<action3></action3>	<action3></action3>	1
►		Action	•	Set Up Cues	Set Up Cues	

- 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
| age 9060 SO Proc | essor Activi | ties - C/AL Global | s 💷 🖻 🖻 |
|-------------------|--------------|--------------------|---------|
| es Text Constants | Functions | | |
| ame | DataType | Subtype | Length |
| ueSetup | Codeunit | Cue Setup | ~ |
| | | | |

- 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:



Role Center - Machine Operator - Manufacturing Comprehensive

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.

"	CRONUS EXT International Ltd. Getting Started	New Sales Quote Create a new sales quote Sales Invoice Create a new sales quote Create a new sales avoice.	C DRMO + "
	Image: Welcome Image: Welcome Setting Up Not: Manage Not: Sates 1	Criter a new particular invictor Criter a new particular invictor Payments Payment Registration Moreas your customer's payments by matching anounts received on particular invictors, and then gost and apply dis invictors, and then gost and apply dis invictors, and then gost and apply	EU FOREON
	Orgolog Sales Provolice Amount 81.9% Top 10 Customer Seles Yrip	Setup Setup Getting Started Show/Hide Getting Started	F
	licrosoft Dynamics NAV	Activities Set Up Cues	2014 2015

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.

CRONUS	New Document		
International Ltd.	Sales Invoice	Phone No.	Balance
For Release	Sales Invoice	ion Group PLC	168,364.41
	Sales Order	ian Ltd.	96,049.99
0 20 Sales Quotes - Sales Orders - Open	Sales Return Order	Idock Insurance Co.	349,615.40
Sales Orders Released Not Ship	Sales Credit Memo		
6 0	Price	🔳 Released 📕 Pending Prepayment 🔳 Pending Approval 🔲 Open	
Ready To Ship Partially Shipped	Sales Price Worksheet		
14 7.5	Sales Prices		
Delayed Delayed	Price List		
D 0 1 Sales Return Orders - Open Sales Credit Memos - Open	History Navigate		
	Reports	Jul 2017 Aug 2017 Sep 2017	Oct 2017
	Inventory - Sales Back Orders		
Microsoft Dynamics NAV	Customer - Order Summary	Description	Unit Price

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



Here is an example of sales orders ready to ship:

	es orders eady To	Ship									🕀 net	N		م ر	ະ
No.	Sell-to Customer No.	Sell-to Customer Name	External Document No.	Location Code	Assigned User ID	Status	Salesperson Code	Campaign No.	Currency Code	Document Date	Posting Date	Shipment Date	Requested Delivery Date	Due Date	Ship-to Code
104019	••• 61000	Fairway Sound		WHITE		Released	PS			1/31/2017	1/31/2017	1/31/2017		2/28/2017	
104020	••• 62000	The Device Shop		WHITE		Released	PS			1/31/2017	1/31/2017	1/31/2017		2/14/2017	
6001	+++ 49525252	Beef House		GREEN		Released	JR		EUR	10/12/2017	10/12/2017	10/12/2017		11/12/2017	
6002	+++ 49525252	Beef House		GREEN		Released	JR		EUR	10/16/2017	10/16/2017	10/16/2017		11/16/2017	
6003	+++ 49633663	Autohaus Mielberg KG	i	GREEN		Released	JR		EUR	10/22/2017	10/22/2017	10/22/2017		11/5/2017	
6004	+++ 49633663	Autohaus Mielberg KG	5	GREEN		Released	JR		EUR	1/27/2017	1/27/2017	1/27/2017		2/10/2017	

...and a customer card:

	EDIT - CUSTOMER CARD			Ø 2			
📀 20000 · Selangorian Ltd.	Customer						
	No.	20000	Total Sales	10,007.97			
	Name	Selangorian Ltd.	Costs (\$)	214.00			
	Blocked		Profit (\$)	9,793.97			
Sales History	Last Date Modified	8/26/2014	Profit %	97.9			
0 0 0	Address & Contact						
Ongoing Sales Quotes Ongoing Sales Credit Memos	ADDRESS		CONTACT				
4 2	Address	153 Thomas Drive	Phone No.				
Posted Sales Invoices Credit Memos	Address 2		E-Mail	selangorian.ltd@cronuscorp.net			
Invoices Credit Memos	State / ZIP Code	IL	Home Page				
	ZIP Code	61236	Contact	Mr. Mark McArthur			
	City	Chicago					
	Country/Region Code	US					
	Invoicing						
	Credit Limit (\$)	0.00	PRICES AND DISCOUNTS				
	POSTING DETAILS		Customer Price Group				
			Customer Disc. Group	RETAIL			

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

Page 9171 Profile List - C/AL Globals	
Variables Text Constants Functions	
Name DenClient	Locals

4) Click Locals and create one parameter



5) And one local variable

OpenClient - C/AL Locals								
Return Value	Variables	Text Constar	nts					
		DataType	Subtype	Length				
		DotNet	System.Diagnostics.Proces		\wedge			
			Return Value Variables Text Constan DataType	Return Value Variables Text Constants DataType Subtype	Return Value Variables Text Constants DataType Subtype Length			

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:

	Page 9171 Profile List - C/AL Editor
Ξ	OpenClient(inConfigure : Boolean)
	IF inConfigure THEN
	Process.Start('Microsoft.Dynamics.Nav.Client.exe','-configure -profile:"'+"Profile ID"+'"')
	ELSE
	<pre>Process.Start('Microsoft.Dynamics.Nav.Client.exe','-profile:"'+"Profile ID"+'"');</pre>

- 7) Now it is necessary to create two new actions on the Profile List:
 - a. Go back to the Profile List in design mode:

EType	SubType	SourceExpr	Name	Caption	
Field		"Role Center ID"	<role center="" i<="" td=""><td>Role Center ID</td><td>,</td></role>	Role Center ID	,
Field		"Default Role Cent	<default role<="" td=""><td>Default Role Center</td><td></td></default>	Default Role Center	
Field		"Disable Personaliz	<disable perso<="" td=""><td><disable personalization=""></disable></td><td>1</td></disable>	<disable personalization=""></disable>	1
Field		"Use Record Notes"	<use record<="" td=""><td><use notes="" record=""></use></td><td></td></use>	<use notes="" record=""></use>	
Field		"Record Notebook"	<record note<="" td=""><td><record notebook=""></record></td><td></td></record>	<record notebook=""></record>	
Field		"Use Page Notes"	<use no<="" page="" td=""><td><use notes="" page=""></use></td><td></td></use>	<use notes="" page=""></use>	
Field		"Page Notebook"	<page notebo<="" td=""><td><page notebook=""></page></td><td></td></page>	<page notebook=""></page>	
Container	FactBoxArea		<control190000< td=""><td><control190000007></control190000007></td><td></td></control190000<>	<control190000007></control190000007>	
Part	System		<recordlinks></recordlinks>	<recordlinks></recordlinks>	
Part	System		<notes></notes>	<notes></notes>	

- b. Click View/Page Actions:
- c. Add two new actions:

		Pa			
	E	Туре	SubType	Name	Caption
ActionContainer ActionGroup		ActionContainer	ActionItems	<action1900000< th=""><th><action190000000.< th=""></action190000000.<></th></action1900000<>	<action190000000.< th=""></action190000000.<>
		ActionGroup		<action11026< th=""><th>F&unctions</th></action11026<>	F&unctions
		Action		<action110260< td=""><td>Copy Profile</td></action110260<>	Copy Profile
Action		Action		<action4></action4>	Import Profile
		Action		Open profile	Open profile
Þ		Action		Configure Profile	Configure Profile

- d. On the **Open Profile** action, press F9 and type: OpenClient(FALSE);
- 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
Ē	⊖ Open profile - OnAction() // PBA START OpenClient(FALSE); // PBA END
E	<pre>≥ Configure Profile - OnAction() // PBA START OpenClient(TRUE); // PBA END</pre>
E	<pre>DpenClient(inConfigure : Boolean) // PBA START IF inConfigure THEN Process.Start('Hicrosoft.Dynamics.Nav.Client.exe','-configure -profile:"'+"Profile ID"+'"') ELSE Process.Start('Hicrosoft.Dynamics.Nav.Client.exe','-profile:"'+"Profile ID"+'"'); // PBA END </pre>

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:

<i>1</i> 11	Profil	es - Microsoft Dynamics NAV					- 🗆 💌
🗲 🕞 🔻 🔟 🕨 Department	ts Administration Application	Setup 🕨 RoleTailored Client 🕨 Profiles	ø	Searc	h (Ctrl+F	3)	
HOME ACTIONS					C	RONUS	International Ltd.
New Copy Import Profile Profile	it View Detete Open Config Manage Profile Profile		Links	C Refresh	Clear Filter Page	Find	
Departments Financial Management Sales & Marketing 	Profiles -	Тур	oe to filter	(F3)	Role Ce		▼ →
Purchase Warehouse	Profile ID	_ Description Rol	le Center ID	Defa Role	Disa Pers	Use Rec	Record Notebool
Manufacturing	ACCOUNTING MANAGER	Accounting Manager	9001				
Jobs	AP COORDINATOR	Accounts Payable Coordinator	9002				
Resource Planning	AR ADMINISTRATOR	Accounts Receivable Administrator	9003				
N Convico	BOOKKEEPER	Bookkeeper	9004				
Home	CUSTOMER	Customer Portal	50002				
a Journals	CUSTOMER - MASTER	Customer Portal	50002		-		
Worksheets	DISPATCHER	Dispatcher - Customer Service	9016				
Worksheets	IT MANAGER	IT Manager	9018				
Product Design	MACHINE OPERATOR	Machine Operator - Manufacturi	9013				
	NEWPROFILE	My New Sales Order Processor	9006			_	

... 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:

Inventory Setup

General					^
Automatic Cost Posting: Expected Cost Posting to G/L: Automatic Cost Adjustment: Average Cost Calc. Type: Average Cost Period:	Never Item Day	> >	Copy Comments Order to Shpt.: Copy Comments Order to Rcpt.: Outbound Whse. Handling Time: Inbound Whse. Handling Time: Prevent Negative Inventory:	✓ ✓ 	
Location					^
Location Mandatory:					

The Item has been set up like this:

PBA · PBA Test

General					** ^
No.:	PBA		Qty. on Purch. Order:		0
Description:	PBA Test		Qty. on Prod. Order:		0
Base Unit of Measure:	PCS	~	Qty. on Component Lines:		0
Assembly BOM:	No		Qty. on Sales Order:		0
· · · ·	NO		Qty. on Service Order:		0
Shelf No.:			Qty. on Job Order:		0
Automatic Ext. Texts:			Qty. on Assembly Order:		0
Created From Nonstock Item:			Qty. on Asm. Component:		0
Item Category Code:	FURNITURE	~	Blocked:		
Product Group Code:		~	Last Date Modified:	14-09-2015	
Service Item Group:		~	Stockout Warning:	Default (Yes)	~
Search Description:	PBA TEST		Prevent Negative Inventory:	Default (No)	~
Inventory:		0			
				▲ Show fe	wer fields

...and the Planning:

		_					
Reordering Policy:	Fixed Reorder Qty.	¥	Lot-for-Lot Parameter	s			
Reserve:	Optional	v	Include Inventory:				
Order Tracking Policy:	None	~	Lot Accumulation Per	od:			
Stockkeeping Unit Exists:	No		Rescheduling Period:				
Dampener Period:			Reorder-Point Parame	ters			
		-	Reorder Point	Reord	er Quantity	Maximum Inven	itory
Dampener Quantity:		0	10)	26		0
Critical:			Order Modifiers				
Safety Lead Time:			Minimum Order Quan	t Max	imum Order Qua	nt Order Multi	iple
Safety Stock Quantity:		0		0		0	0

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:

Edit - Calculate Plan - Pl	an. Wksh. 🛛 🗖 🗖	ĸ
 ACTIONS 	CRONUS International L	?
Options	^	
Calculate MPS: MRP: Starting Date: Ending Date: Stop and Show First Error: Use Forecast: Exclude Forecast Before: Respect Planning Parameters for Exception Warnings:	 ✓ ✓ Ø1-01-2017 v 31-12-2017 v □ 2017 v □ ∨ 	
Item Show results: X Where No. ▼ is PBA X And Search Description ▼ is Enter a + Add Filter Limit totals to: X Where Location Filter ▼ is Enter a valu + Add Filter		

...and the result:

40			Edit -	Planning Wo	rksheet -	DEFAULT · Defau	ult Journal Batch	
• H0	OME ACT	IONS						
X Delete	Get Action Messages	Calculate Regenerative Plan	Refresh Planning Li	Get ine Error Log	Order Tracking	Carry Out Action Message	 Item Availability Reserve Dimensions 	by •
Manage		Prepare		Worksheet		Carry Out		Line
Name:	DEFAULT	~						
War	ning No.	Action Message	Acc Acti	Original Due Date	Due Date	Starting Date-1	Time Ending Date-	·Ti ^
								- 11

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:

Manufacturing Setup

Planning			^
Current Production Forec	2017 🗸	Combined MPS/MRP Calculati	√
Use Forecast on Locations:		Components at Location:	WHITE 🗸
Default Safety Lead Time:	1D	Default Dampener Period:	
Blank Overflow Level:	Allow Default C 🖌	Default Dampener Quantity:	0,0

...and the planning worksheet:

					Edit - Planni	ing Worksheet - D	EFAULT · Default Jour	nal Batch	
HOME	ACTIONS								
Vame: DEFAU Warning	No.	Action	Acc	Original Due	Due Date	Description	Location	Quantity	Original Quantity
Attention	PBA	Message New	Acti	Date	02-01-2017	PBA Test	Code WHITE	26	
Attention	PDA	INEW			02-01-2017	PDATES	WHITE	20	

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,

Inventory Setup

General			^
Automatic Cost Posting:		Copy Comments Order to Shpt.:	v
Expected Cost Posting to G/L:		Copy Comments Order to Rcpt.:	√
Automatic Cost Adjustment:	Never 🗸	Outbound Whse. Handling Time:	
Average Cost Calc. Type:	ltem 🗸	Inbound Whse. Handling Time:	
Average Cost Period:	Day 🗸	Prevent Negative Inventory:	

... 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:

General			PBA PCS 0	~
Invoicing				^
Costing Method:	Standard 🗸	Profit %:		0
Cost is Adjusted:	v	Unit Price:		0,00
Cost is Posted to G/L:	Yes	Gen. Prod. Posting Group:	RETAIL V	
Standard Cost:	0,00	VAT Prod. Posting Group:	NO VAT 🗸	
Unit Cost:	0,00	Inventory Posting Group:	FINISHED V	
Overhead Rate:	0,00	Net Invoiced Qty.:		0
Indirect Cost %:	0	Allow Invoice Disc.:	v	
Last Direct Cost:	0,00	Item Disc. Group:		~
Price/Profit Calculation:	Profit=Price-Cost 🗸	Sales Unit of Measure:	PCS v	

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

eneral Po	sting Se	etu	р -						RETAIL		Gen. Prod. P	osting Group	• 5
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.

neral Pos	sting Setu	ib .						RETAIL		Gen. Prod. F	osting 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	
U	RETAIL	7120	7120	7140	7140					7190	7170	7191
XPORT	RETAIL	7130	7130	7140	7140					7190	7170	7191
NTERCOMP	RETAIL	7120	7120	7140	7140					7190	7170	
ATIONAL	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:

106025 · London Postmaster

General						**	^
Buy-from Vendor No.: Buy-from Contact No.:	10000 CT000072	~	Document Date: Vendor Order No.:	26-01-2017		*	
Buy-from Vendor Name:	London Postmaster		Vendor Shipment No.:				
Buy-from City:	London	~	Vendor Invoice No.:	12345			
Posting Date:	26-01-2017 🗸 🗸		Status:	Open			٧
Order Date:	26-01-2017 🗸 🗸						
					∨ \$	how more fiel	ds
Lines							^
🔠 Line 🝷 🦸 Functions	🖷 🛅 Order 👻 🎢 Find 🛛 F	Filter 🛛 🏹 C	lear Filter				
Type No.	Description		Location Qu Code	uantity	Reserved Quantity	Unit of Measur	^
ltem 🗸 PBA	PBA Test		BLUE	10		PCS	
							~
<						3	>
Invoice Discount Amount:		0,00	Total Excl. VAT (GBP):			1.000,	00
Invoice Discount %:		0	Total VAT (GBP):			0,	,00
			Total Incl. VAT (GBP):			1.000,	00

It is amazing what the London Postmaster can deliver S

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

The register will show the following posting:

General	Ledge	er 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:

A 11			Р	rint Preview					×
· •							CRONUS	International L	.td. 🕜
Post Inventory Cost to	o G/L								
I≪	8		• 100%	-	Fin	d Next			
									^
Item Ledger	п	ocument			Inventory		Gen. Bus.	Gen. Prod.	
Entry No. Entry Type Ent Skipped Items			Source No.		Posting Group	Location Code	Posting Group	Posting Group	
PBA 408 Purchase Dire	ect Cost 10	08038	10000	28-01-17	FINISHED	BLUE	RETAIL	RETAIL	
<								3	> ×

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

₩ 4	1	of	1 🕨	N 🐼	🏟 🔲 🛝	100 - 🔍 🔍	•	Find	Next	
Post Inven Posted per En CRONUS Inte	itry		t to G/L - T d.	est						tember 2015 Page 1 /ILION\PEIK
Posting	Éntr	ue Entr y Typ	Document No.	Item No.	Account No.	Name	Description	Amount	Value Entry No.	Item Ledger Entry No.
28-01-17	Purc	Dire	108038	PBA	2120	Finished Goods	Direct Cost 10000 on 28-0	1.000,00	408	335
26-01-17	-	D:	108038	PBA			Direct Cost 10000 on 26-0	-1.000.00	408	335

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

Manufacturing

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