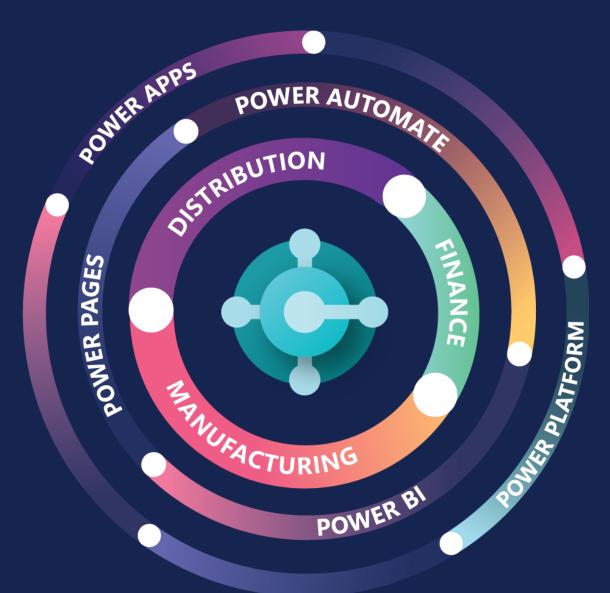
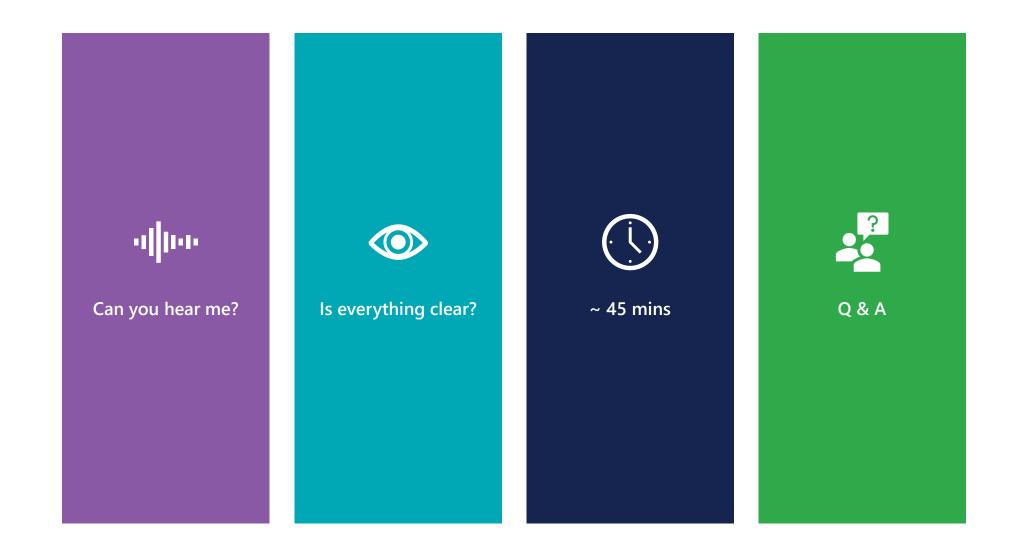


BUSINESS CENTRAL CONNECT

Do you leave your doors unlocked? Well don't do that with your data! (Permissions/Security Strategy)







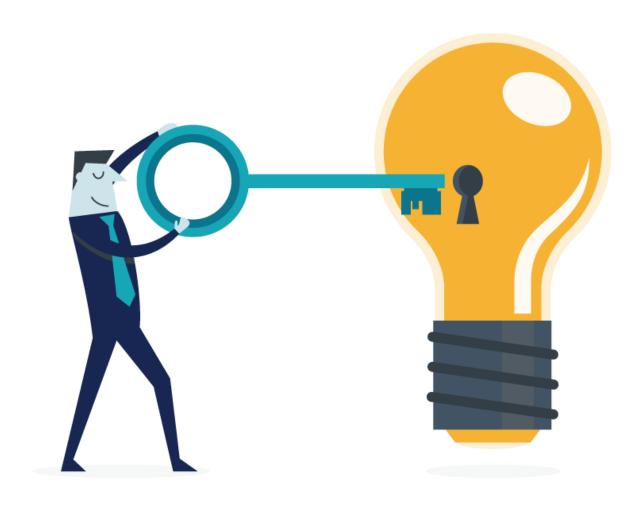
Hi!

Edward Gardiner + George Murcott

What we'll cover

Agenda:

- 1. What you get out of the box & the issues
- 2. Strategies for managing Permissions
- 3. Making sure Apps are accounted for
- 4. Lock down further with Security Filters
- 5. License Configuration to prevent initial issues
- 6. Next steps?
- 7. Resources!





Permissions out of the box



Default Permissions:

Dynamics 365 Business Central Essential				
	Description ▼	Company ▼	Extension Name 💌	Permission Sco
AUTOMATE - EXEC	Automate - Exec	(first company sign-in)	System Application	System
D365 BUS FULL ACCESS	Dyn. 365 Full Business Acc.	(first company sign-in)	Base Application	System
EXCEL EXPORT ACTION	D365 Excel Export Action	(first company sign-in)	System Application	System
LOCAL	Country/region-specific func.	(first company sign-in)	Base Application	System
LOGIN	Login access	(first company sign-in)	System Application	System
Dynamics 365 Business Central Premium				
Permission Set	Description	Company	Extension Name 💌	Permission Sco
AUTOMATE - EXEC	Automate - Exec	(first company sign-in)	System Application	System
D365 BUS PREMIUM	Dyn. 365 Prem. Bus. Full Acc.	(first company sign-in)	Base Application	System
EXCEL EXPORT ACTION	D365 Excel Export Action	(first company sign-in)	System Application	System
LOCAL	Country/region-specific func.	(first company sign-in)	Base Application	System
LOGIN	Login access	(first company sign-in)	System Application	System
Dynamics 365 Business Central Team Mei	mber			
Permission Set	Description ▼	Company	Extension Name 💌	Permission Sco ▼
AUTOMATE - EXEC	Automate - Exec	(first company sign-in)	System Application	System
D365 READ	Dyn. 365 Read access all	(first company sign-in)	Base Application	System
D365 TEAM MEMBER	Dynamics 365 Team Member	(first company sign-in)	Base Application	System
EXCEL EXPORT ACTION	D365 Excel Export Action	(first company sign-in)	System Application	System
LOCAL	Country/region-specific func.	(first company sign-in)	Base Application	System
LOGIN	Login access	(first company sign-in)	System Application	System

What's good/bad about out the box permission?

Good:

- Let users do everything they need to do on the system without errors
- Has a small degree of lock down
 - Users
 - Company Creation
 - Permissions
- Some out the box permission sets are self-explanatory and easy to use

Bad:

- Users can do EVERYTHING, including what they shouldn't do
 - Setup Pages
 - Edit Master data
 - See everything
 - Bank Details, Balance & Entries
 - All GL Balances & Entries
- Can technically delete companies
- No Apps/extensions! So can cause errors
- Even the more 'restrictive' out the box sets tend to give more permissions than wanted



The Historical issues & 'Fixes'

 Users can't access pages because of lack of app/extension permissions?

Give them Super!

Not sure what the user needs to do on the system?

Give them Super!!

Need to completely lock down the system?

Spend hours using Recordings, copied permission sets, testing, getting errors, scaling back, realising you have overlap between permission sets!!

 An upgrade means a permission set you've copied has changed/broken!

A small notification *MIGHT* be present, and you will have to fix the 'missing' permissions!



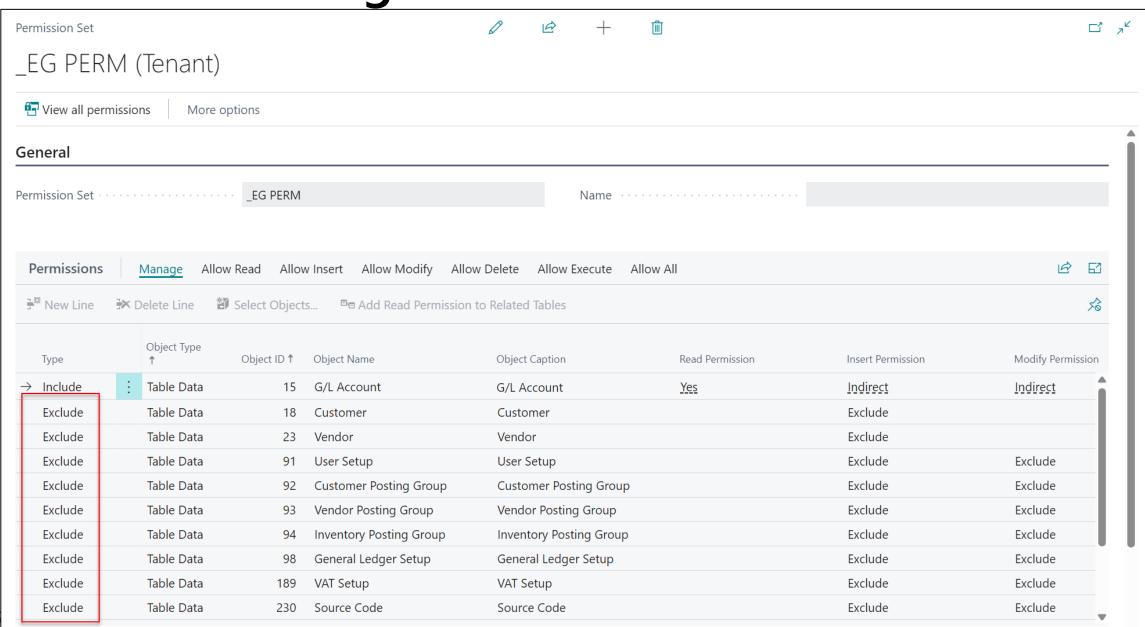
How do we better manage this?

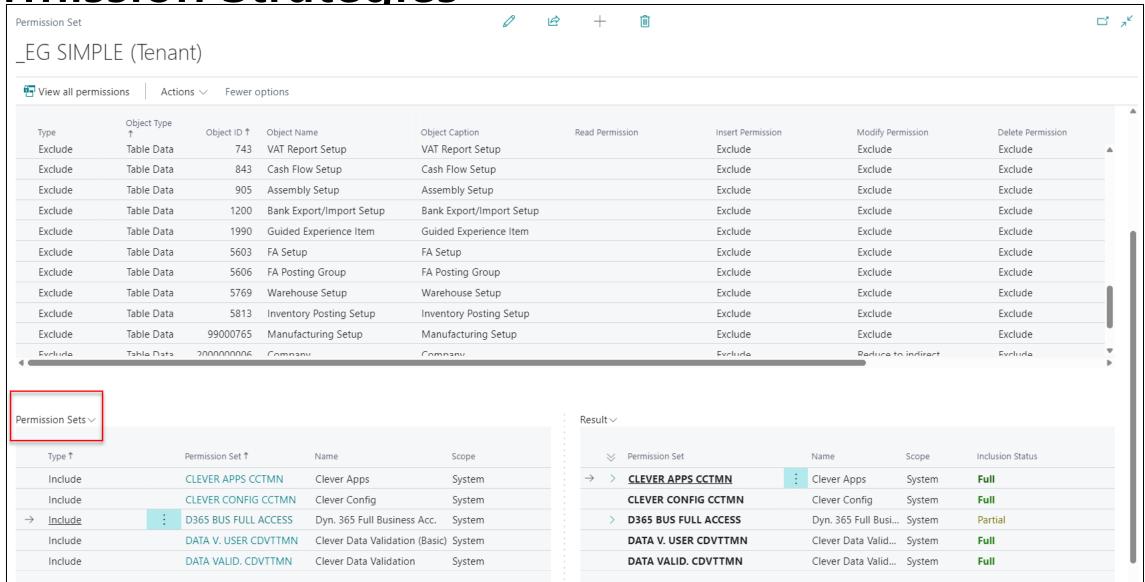


There are sweet spots between time to implement vs the achieved effect, a **Sliding Scale of Involvement**:

- Everyone is SUPER (not great for business security or GDPR compliance)
- (Too) many Super users that aren't really that Super.
- Permission sets applied manually to users.
- Users granted standard Permission Sets
- Users granted company created Permission Sets delivering mostly standard Permissions.
- Users granted company created Role/Scenario focused Permission Sets with bespoke Permission sets using Include/Exclude
- Use of Security Filters to limit access to specific areas of the system that are otherwise available from the standard permission sets
- Additional use of Security Groups if relevant to 'automate' new user enrolment from Active Directory/Entra ID.
- Completely bespoke Permission Sets (manually or using the Recorder)









Permissio	on Sets V				
Ту	/pe ↑		Permission Set ↑	Name	Scope
In	nclude		CLEVER APPS CCTMN	Clever Apps	System
In	nclude		CLEVER CONFIG CCTMN	Clever Config	System
\rightarrow In	nclude	÷	D365 BUS FULL ACCESS	Dyn. 365 Full Business Acc.	System
In	nclude		DATA V. USER CDVTTMN	Clever Data Validation (Basic)	System
In	nclude		DATA VALID. CDVTTMN	Clever Data Validation	System



Three Methods

Simple:

- Base Permission Set
 - D365 Bus Full Access
 - D365 Bus Premium
- Any Required app/extension permission sets
- Excludes used within the main area to prevent access to key setup pages and areas the user should not have access to.

Focused:

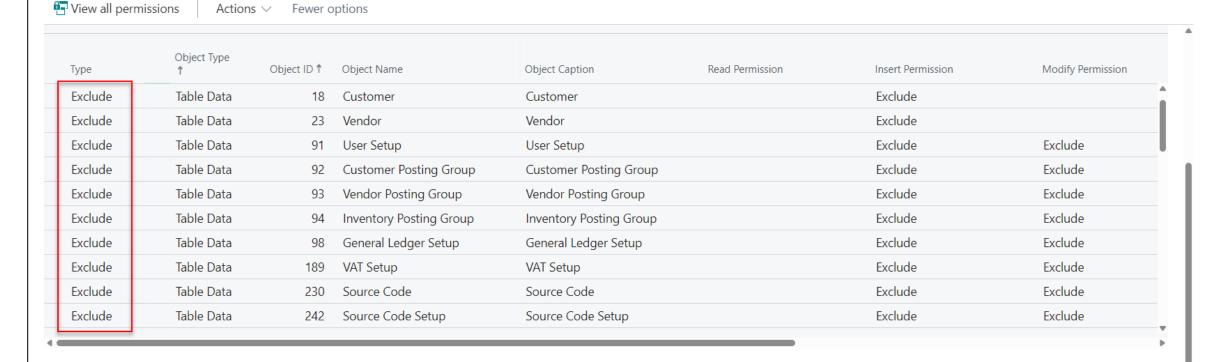
- Multiple 'Base' permission sets relevant to the users job role to better lock down the system compared to the Simple method
- D365 Basic included as a minimum
- App/extension sets
- Excludes to prevent access to key setup pages & undesired areas.

Recorded:

- Uses a secondary
 Permission Set as a recording area
- Record EXACTLY what the user(s) need to do
- Still include relevant appbased permission sets/Excludes as a security measure.
- The most time intensive for both creation and testing.



_EG SIMPLE (Tenant)



Permission Sets∨				
Туре ↑		Permission Set 1	Name	Scope
\rightarrow Include	÷	CLEVER APPS CCTMN	Clever Apps	System
Include		CLEVER CONFIG CCT	Clever Config	System
Include		D365 BUS FULL ACCE	Dyn. 365 Full Business	System
Include		DATA V. USER CDVTT	Clever Data Validation	System
Include		DATA VALID. CDVTT	Clever Data Validation	System

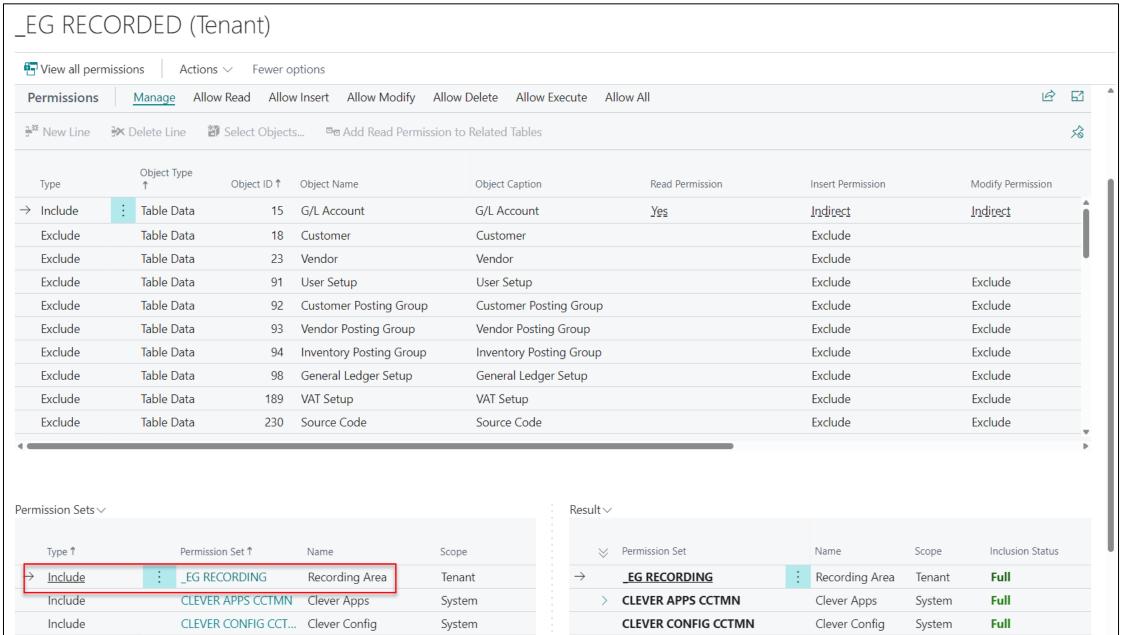
Result \vee					
∀ Peri	mission Set		Name	Scope	Inclusion Status
\rightarrow \rightarrow <u>CL</u>	EVER APPS CCTMN	:	Clever Apps	System	Full
CLI	EVER CONFIG CCTMN		Clever Config	System	Full
> D3	65 BUS FULL ACCESS		Dyn. 365 Full Bu	System	Partial
DA	TA V. USER CDVTTMN		Clever Data Vali	System	Full
DA	TA VALID. CDVTTMN		Clever Data Vali	System	Full

_EG FOCUSED (Tenant)

🚰 View all peri	missions /	Actions \vee Fewer	options				
Туре	Object Ty	oe Object ID ↑	Object Name	Object Caption	Read Permission	Insert Permission	Modify Permission
ightarrow Include	: Table Da	ta 15	G/L Account	G/L Account	<u>Yes</u>	<u>Indirect</u>	<u>Indirect</u>
Exclude	Table Da	ta 18	Customer	Customer		Exclude	
Exclude	Table Da	ta 23	Vendor	Vendor		Exclude	
Exclude	Table Da	ta 91	User Setup	User Setup		Exclude	Exclude
Exclude	Table Da	ta 92	Customer Posting Group	Customer Posting Group		Exclude	Exclude
Exclude	Table Da	ta 93	Vendor Posting Group	Vendor Posting Group		Exclude	Exclude
Exclude	Table Da	ta 94	Inventory Posting Group	Inventory Posting Group		Exclude	Exclude
Exclude	Table Da	ta 98	General Ledger Setup	General Ledger Setup		Exclude	Exclude
Exclude	Table Da	ta 189	VAT Setup	VAT Setup		Exclude	Exclude
Exclude	Table Da	ta 230	Source Code	Source Code		Exclude	Exclude
4							

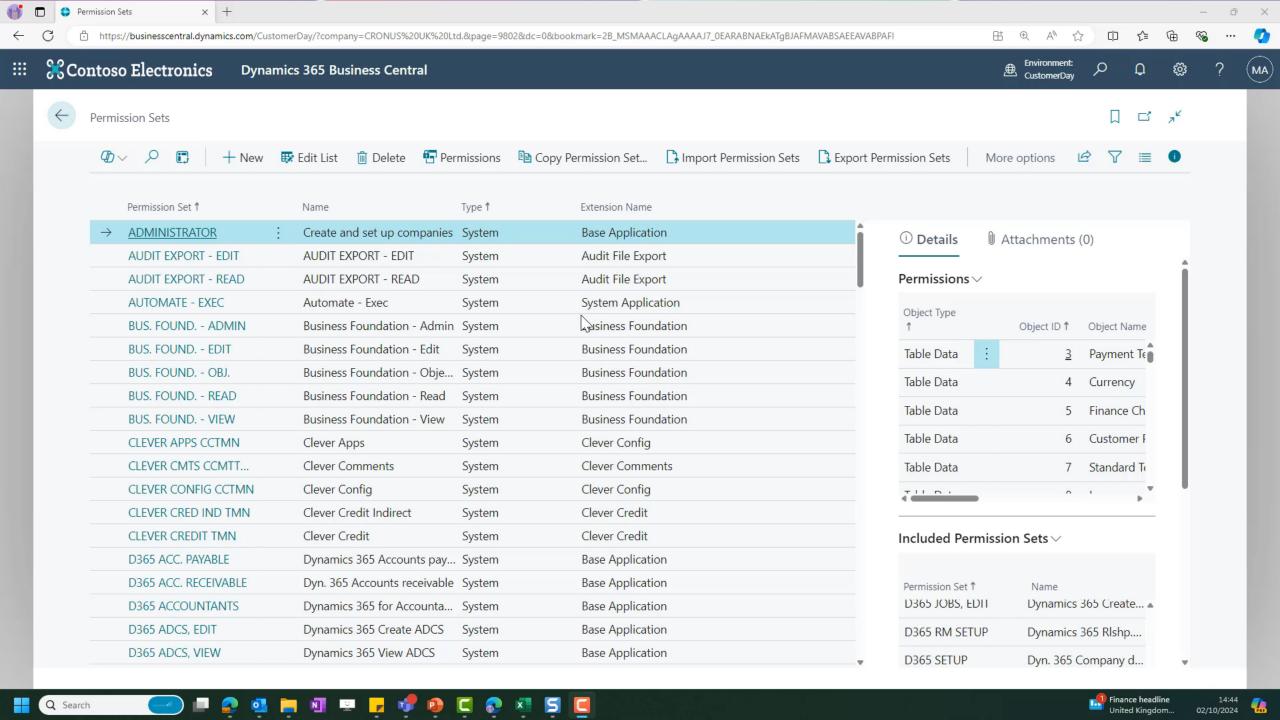
Peri	mission Sets∨			
	Type † Incluae	Permission Set †	Name Dyn. 365 Accounts rec	Scope System
	Include	D365 BASIC	Dynamics 365 Basic ac	System
	Include	D365 CASH FLOW	Dynamics 365 Cash Fl	System
	Include	D365 CUSTOMER, ED	Dynamics 365 Create	System
	Include	D365 DIM CHANGE	D365 Change Global	System
	Include	D365 DIM CORRECTI	D365 Dimension Corr	System
	Include	D365 FA, SETUP	Dyn. 365 Fixed Assets	System
V D J I V I	ESS CENTRAL CONTO	ECT 2024		

Resu	lt∨					
	\otimes	Permission Set		Name	Scope	Inclusion Status
\rightarrow	>	CLEVER APPS CCTMN	÷	Clever Apps	System	Full
		CLEVER CONFIG CCTMN		Clever Config	System	Full
	>	D365 ACC. PAYABLE		Dynamics 365 A	System	Partial
	>	D365 ACC. RECEIVABLE		Dyn. 365 Accou	System	Partial
	>	D365 BASIC		Dynamics 365 B	System	Partial
		D365 CASH FLOW		Dynamics 365 C	System	Partial
		DAGE CHICTOMED EDIT		D . 365.6	<i>~</i> .	B 22.1



Giving it a go!





Tying up loose ends?



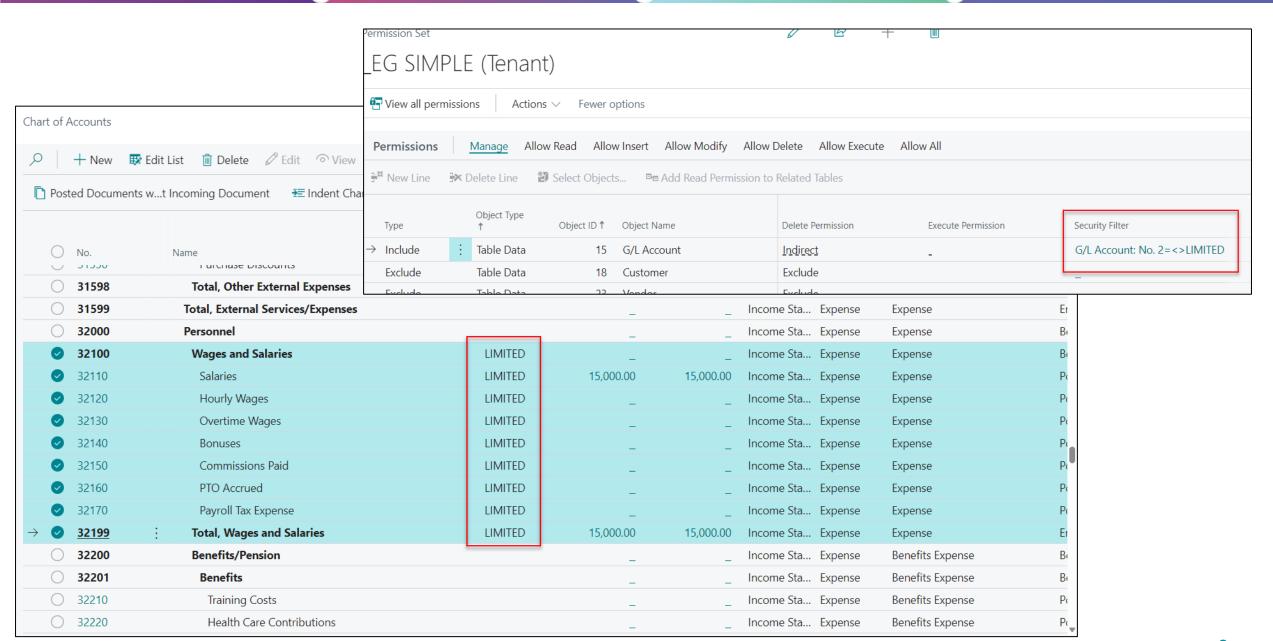
Security Filters:

- Further lock down a page
- Think of it as filtering to 'What data a user can see on a page'
- Requires Testing AND review to ensure no other permissions against the user's name give access to the filtered tables without a filter (this will render it useless!)

Testing:

- Requires you to work with the user who you have applied the permissions to
- Best done on a sandbox so they can try posting/process' without issue
- Test
- Test!
- Test!!







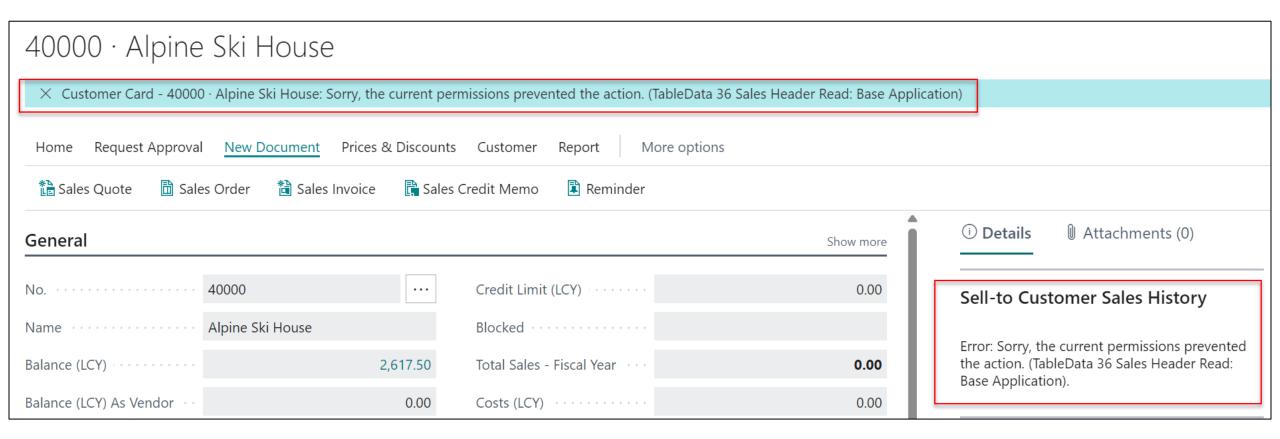
Review User Permissions:

- Ensure no overlap
- Remember, if 50 permissions say a user can't edit something, but the 51st does, they WILL be able to edit that data
- Less is more!

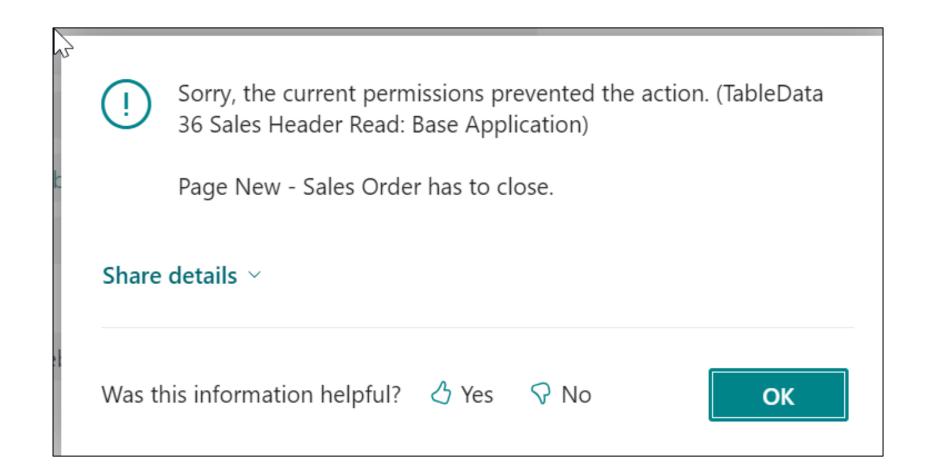
License Configuration:

- What permissions a user gets out of the box
- Perfect way to prevent the high-level access permissions sets (Full access/premium) from ever being added to a user
- Could be used to roll out a collective Apps permission set.

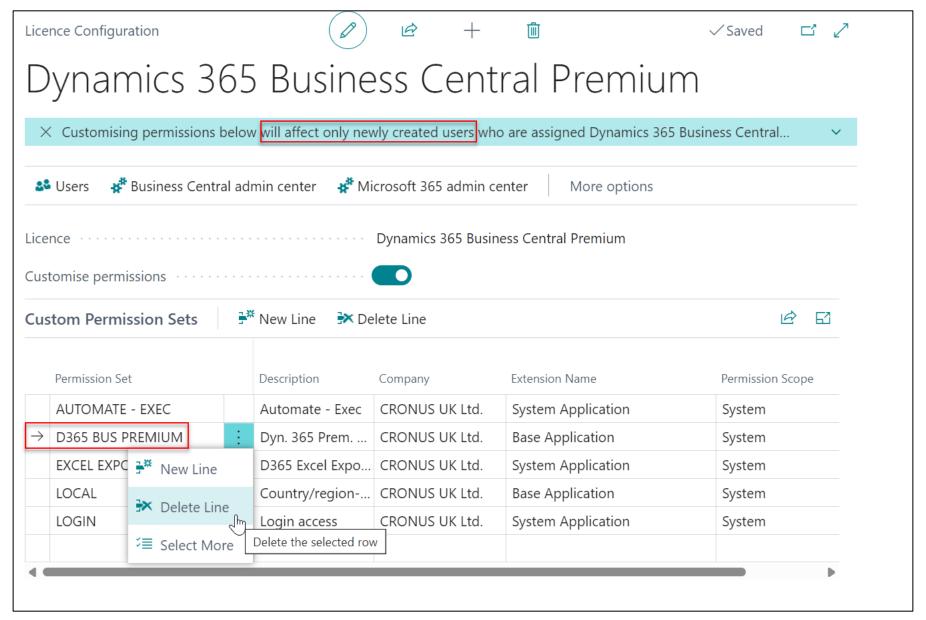














Can this be taken even further?

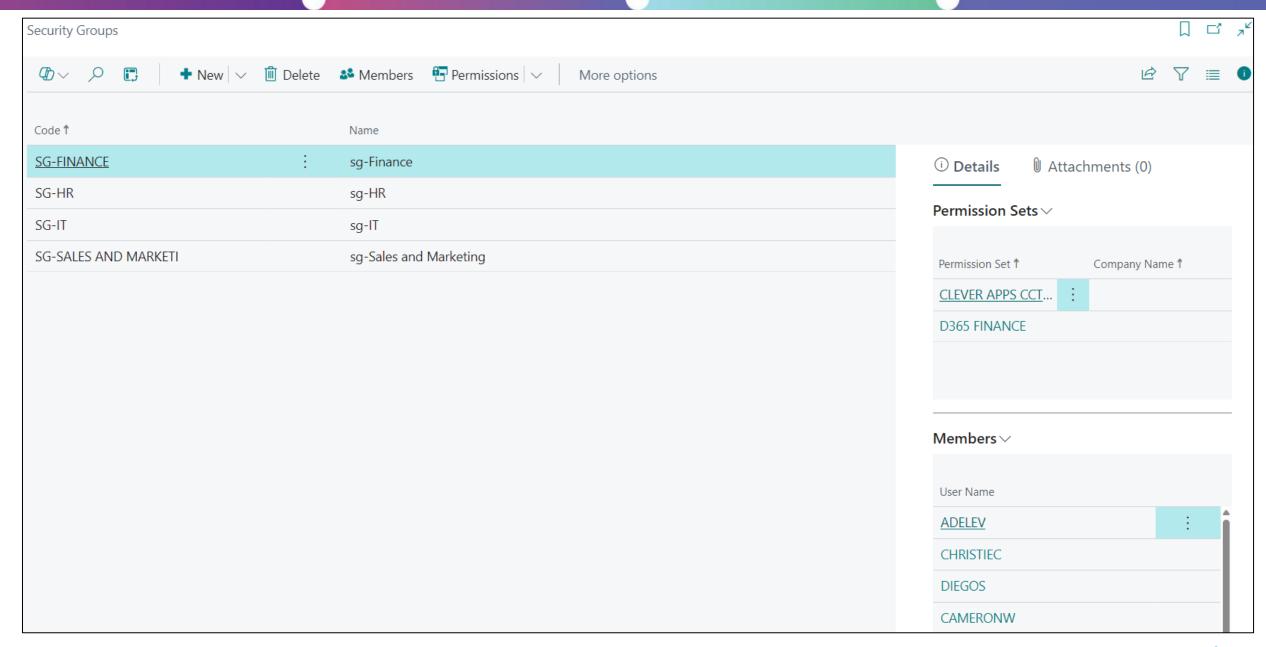
Security Groups:

- Automatic Addition of Permission Set(s) to a user
- For best effect, requires the ability to have access to your Entra/Microsoft 365 Admin areas
- Only way to remove permissions given to a user this way would be to remove the user from the group, or remove the permission from the group itself

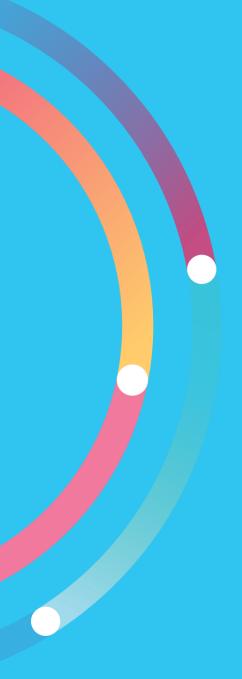
Profiles/Roles:

- Set up the screens for users
- Add in reports/fields/Personalisation for a more standardised experience
- Can now Lock fields on a profile to give a discourage changes at a field level
 - This gets even stronger if you remove users' permissions to change profile/role









Resources



A B	C D	E	F	G	Н	I	J	K	L
	Description: An example of the Include/Exclude		defects linear a manus	ining a to give a goviel	, and affactive lackday.	- of			
	Rationale: Kept broad to allow holiday/abser	•				•	to financo/b	anks and satur	
	Instructions: Copy the required lines in to the r	• •			see other parts of the s	ystem, just mmit access	to mance/b	anks and setup	
	instructions. Copy the required lines in to the r	main/inidule section of your new p	erinissios set, tileiri	eview					
vne V Ohiect Tyne	Object ID V Object Name	▼ Object Caption ▼	Read Permission	Insert Permission	Modify Permission	Delete Permission	Execute Pr	Security Filter	Notes (don't inlcude when copying!)
nclude Table Data	凸 15 G/L Account	G/L Account	Yes	Indirect	Indirect	Indirect	Excedete i	G/L Account: No. 2=<>LIMITED	INCLUDE: Will limit access to just the nomials that do not h
clude Table Data	18 Customer	Customer		Exclude		Exclude			EXCLUDE (if required): Removes the ability to create/inse
clude Table Data	23 Vendor	Vendor		Exclude		Exclude			EXCLUDE (if required): Removes the ability to create/inse
clude Table Data	91 User Setup	User Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	92 Customer Posting Group	Customer Posting Group		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	93 Vendor Posting Group	Vendor Posting Group		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	94 Inventory Posting Group	Inventory Posting Group		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	98 General Ledger Setup	General Ledger Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	189 VAT Setup	VAT Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	230 Source Code	Source Code		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	242 Source Code Setup	Source Code Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	250 Gen. Business Posting Group	Gen. Business Posting Group)	Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	251 Gen. Product Posting Group	Gen. Product Posting Group		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	252 General Posting Setup	General Posting Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	270 Bank Account	Bank Account		Exclude	Exclude	Exclude			Read permission must remain, required by Sales Order fu
clude Table Data	271 Bank Account Ledger Entry	Bank Account Ledger Entry	Reduce to indirect	Reduce to indirect	Reduce to indirect	Exclude			This prevents the user seeing bank balances, as the Balan
clude Table Data	273 Bank Acc. Reconciliation	Bank Acc. Reconciliation	Exclude	Exclude	Exclude	Exclude			EXCLUDE: Hides bank info from non finance users
clude Table Data	274 Bank Acc. Reconciliation Line	Bank Acc. Reconciliation Lin	e Exclude	Exclude	Exclude	Exclude			EXCLUDE: Hides bank info from non finance users
clude Table Data	275 Bank Account Statement	Bank Account Statement	Exclude	Exclude	Exclude	Exclude			EXCLUDE: Hides bank info from non finance users
clude Table Data	276 Bank Account Statement Line	Bank Account Statement Lin	e Exclude	Exclude	Exclude	Exclude			EXCLUDE: Hides bank info from non finance users
clude Table Data	277 Bank Account Posting Group	Bank Account Posting Group		Exclude	Exclude	Exclude			EXCLUDE: Hides bank info from non finance users
clude Table Data	311 Sales & Receivables Setup	Sales & Receivables Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	312 Purchases & Payables Setup	Purchases & Payables Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	313 Inventory Setup	Inventory Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	314 Resources Setup	Resources Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	315 Jobs Setup	Jobs Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	323 VAT Business Posting Group	VAT Business Posting Group		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	324 VAT Product Posting Group	VAT Product Posting Group		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
clude Table Data	325 VAT Posting Setup	VAT Posting Setup		Exclude	Exclude	Exclude			EXCLUDE: Setup pages are required for READ (so remains
roludo Toblo Doto	ssions exclds (Genri User) Licence Permisison	Chango Log Sotup		Evoludo	Evoludo	Evoludo			EVCHIDE: Catus pages are required for DEAD (so remains)



Strategy guide...Controlling user Permissions

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Please Note: There is an Excel file to accompany this booklet, this can be used to import some of the required lines, the file is "Permissions – Exclude and Include for a general user.xlxs"

Moving forward with permissions

Business Central has introduced several changes and new features to the Permissions security process in recent versions and is in the process of removing User Groups. This document introduces these in the context of outlining a potential process for effectively managing your users' permissions in the most practical way.

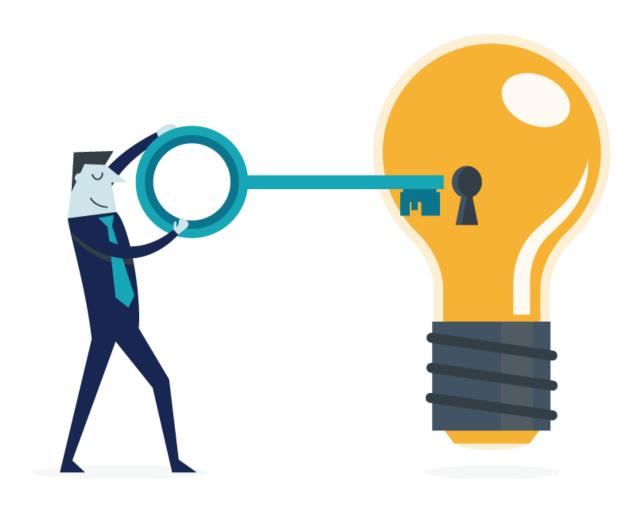
With recent versions of Business Central, many of the features previously found within User Groups have been combined into how Permission Sets now work, as well as new features that both make them easier to manage and give them greater potential than before. New BC environments now are created without User Groups.



In review

What we covered:

- 1. What you get out of the box & the issues
- 2. Strategies for managing Permissions
- 3. Making sure Apps are accounted for
- 4. Lock down further with Security Filters
- 5. License Configuration to prevent initial issues
- 6. Next steps?
- 7. Resources!





Thank you.

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CONNECT

15th & 16th OCTOBER 2024

