

Fasten your seatbelts...

This presentation will be heavy on demos, as most of the capabilities we've added are most easily explained by showing them in the product.

IMPORTANT: Some demos are recorded for optimal view on a monitor and hence cannot be adjusted in size. Please come to the front, if you are having difficulties seeing what's on the screen.

And now: **Let's jump into it**

Best of Session!

The screenshot displays the Dynamics 365 Business Central interface. The main pane shows a list of Permission Sets. The 'ScheduledTasks Tool' is selected, and its details are shown in the right-hand pane. The 'Permissions' pane on the right shows a list of objects and their permissions. The 'Included Permission Sets' pane is empty.

Permission Set ↑	Name	Type ↑	Extension Name
SCHEDULEDTASKS TOOL	ScheduledTasks Tool	Extension	ScheduledTasks Tool
CREATE AND SET UP COMPANIES	Create and set up companies	System	System Application
AUDIT EXPORT - EDIT	Audit Export - Edit	System	System Application
AUDIT EXPORT - READ	Audit Export - Read	System	System Application
AUTOMATE - EXEC	Automate - Exec	System	System Application
CONTOSO COFFEE ADMIN	Contoso Coffee Admin	System	Contoso Coffee Demo Dataset
CONTOSO COFFEE - READ	Contoso Coffee Read	System	Contoso Coffee Demo Dataset
D365 ACC. PAYABLE	Dynamics 365 Accounts payable	System	Base Application
D365 ACC. RECEIVABLE	Dyn. 365 Accounts receivable	System	Base Application
D365 ACCOUNTANTS	Dynamics 365 for Accountants	System	Base Application
D365 ADCS, EDIT	Dynamics 365 Create ADCS	System	Base Application
D365 ADCS, VIEW	Dynamics 365 Create ADCS	System	Base Application
D365 ASSEMBLY, EDIT	Dynamics 365 Setup assembly	System	Base Application
D365 ASSEMBLY, SETUP	Dynamics 365 Setup assembly	System	Base Application
D365 ASSEMBLY, VIEW	Dynamics 365 View assembly	System	Base Application
D365 ATTACH DEBUG	Attach Debug	System	System Application
D365 AUTOMATE	Dynamics 365 Automation	System	Base Application
D365 BACKUP	Backup	System	System Application
D365 WORKING	Dynamics 365 Basic access	System	Base Application
D365 BASIC ISV ACC.	Dynamics 365 Basic ISV Acc.	System	Base Application
D365 BUS FULL ACCESS	Dyn. 365 Full Business Acc.	System	Base Application
D365 BUS PREMIUM	Dyn. 365 Prem. Bus. Full Acc.	System	Base Application
D365 CASH FLOW	Dynamics 365 Cash Flow	System	Base Application
D365 COMPANY HUB	D365 COMPANY HUB	System	Company Hub
D365 COSTACC, EDIT	Dyn. 365 Edit Cost Accounting	System	Base Application
D365 COSTACC, SETUP	Dyn. 365 Setup Cost Accounting	System	Base Application
D365 COSTACC, VIEW	Dyn. 365 View Cost Accounting	System	Base Application
D365 CUSTOMER, EDIT	Dynamics 365 Create customers	System	Base Application

Permissions

Object Type ↑	Object ID ↑	Object Name
Table Data	50100	ScheduledTa
Table Data	50101	ScheduledTa
Table	50100	ScheduledTa
Table	50101	ScheduledTa
Codeunit	50100	ScheduledTa

Included Permission Sets

(There is nothing to show in this view)

Users

User Name	Company ↑
YUQPOLEV	

Agenda

1. Composable Permissions
2. Inherent permissions
3. Excluding permissions
4. Security Groups on Business Central environments
5. Nested Security Groups
6. Security Groups in Business Central
7. Deprecation of User Groups
8. Telemetry



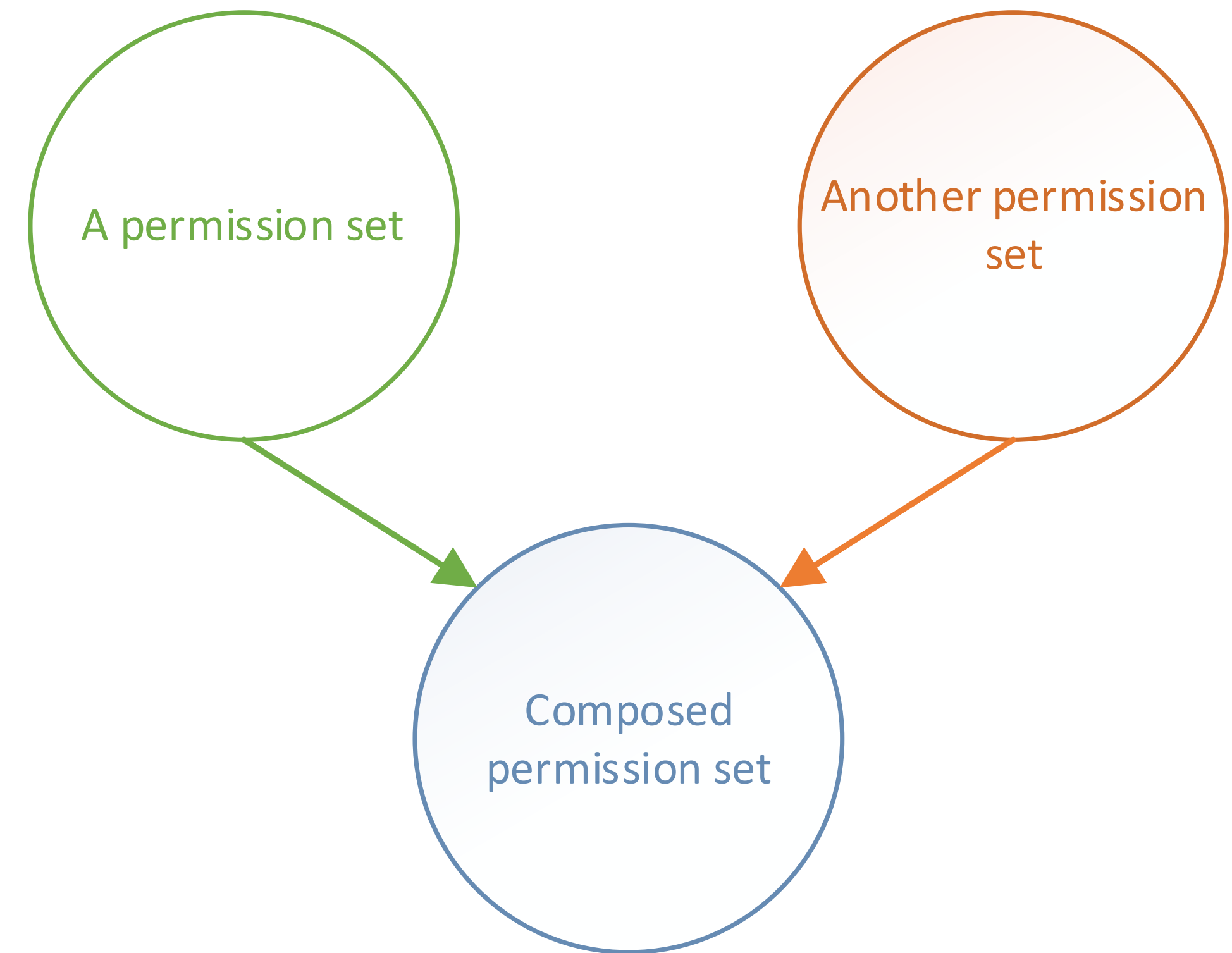
Composable permissions



Composed permission set

A permission set that includes other permission sets' permissions

"Composed permission set" permissions =
"A permission set" permissions +
"Another permission set" permissions +
Permissions



Demo

How to code with composable permissions



Good afternoon, BC Admin!

[+ Sales Quote](#)
 [+ Sales Order](#)
 [+ Sales Credit Memo](#)
 [> Sales](#)
 [> History](#)
[+ Sales Invoice](#)
[+ Sales Return Order](#)
[> Tasks](#)
[> Reports](#)

For Release

Sales Orders Released Not Shipped

A row of eight KPI cards. The first six cards are teal, and the seventh is light gray. Each card displays a title, a large numerical value, and a progress bar. The eighth card is partially cut off on the right.

Metric	Value	Progress Bar Color
Sales Quotes - Open	0	White
Sales Orders - Open	20	Yellow
Ready To Ship	6	White
Partially Shipped	0	Green
Delayed	14	Yellow
Average Days Delayed	7.5	Red
Sales Return O... - Open	0	White
Sales Credit M... - Open	1	White

Incoming Transactions

Outgoing Transactions

My User Tasks

Email Activities

Pending Approvals

Category	Count	Progress Bar
New Intercom... Transactions	0	Green bar
Rejected ...er Companies	0	Green bar
Intercompany ... to Send	0	Green bar
Pending User Tasks	0	Green bar
Failed Emails in Outbox	0	Green bar
Draft Emails in Outbox	0	Green bar
Sent Emails Last 30 Days	0	Green bar
Requests Sent ... Approval	0	Green bar
Requests to Approve	0	Green bar

Current Time Sheet

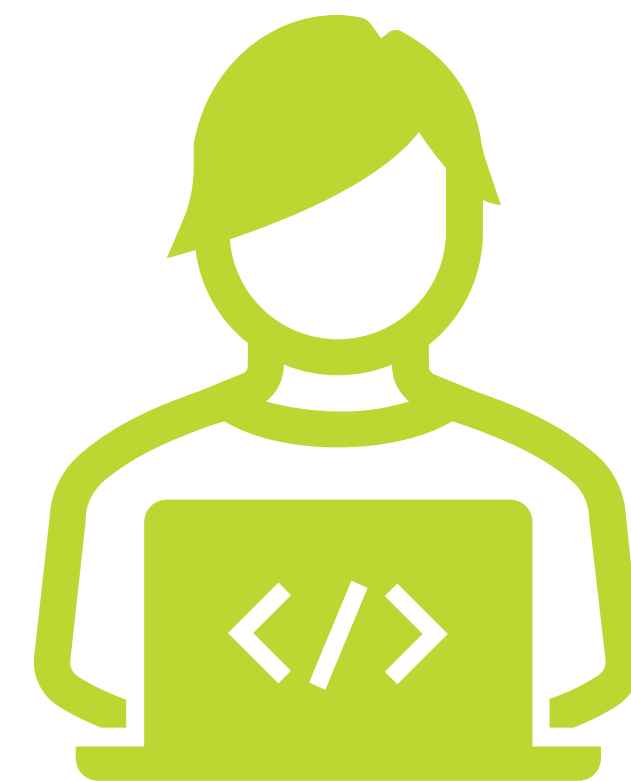
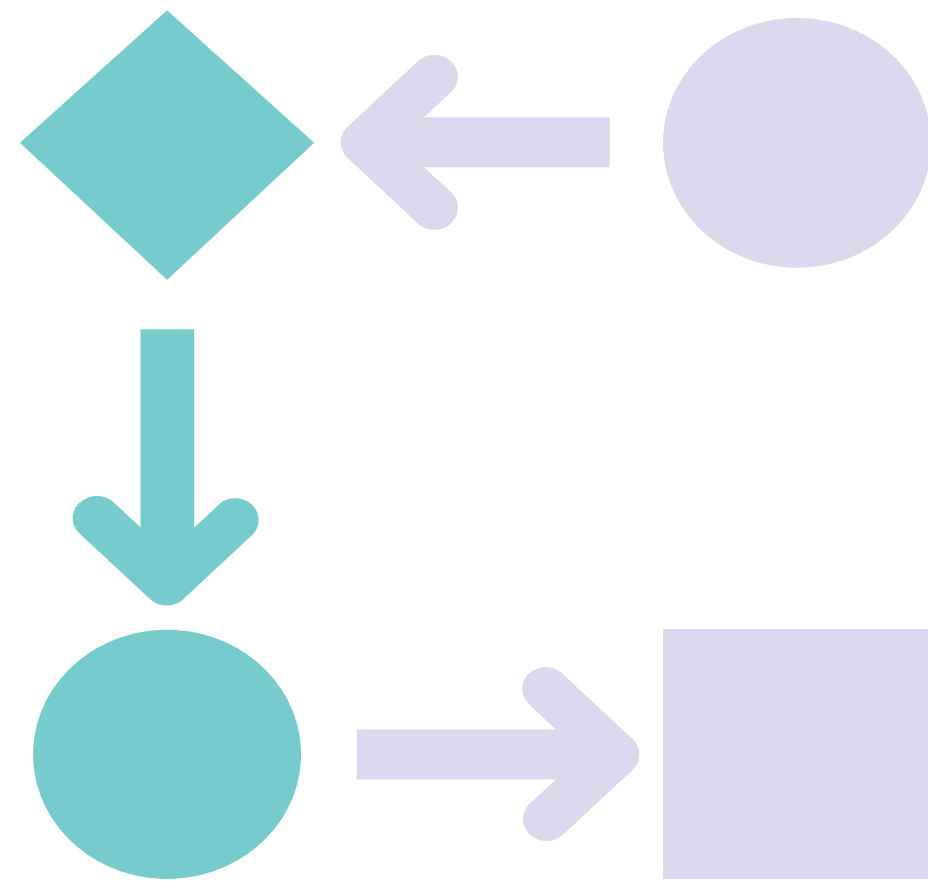
Time Sheets

Inherent permissions



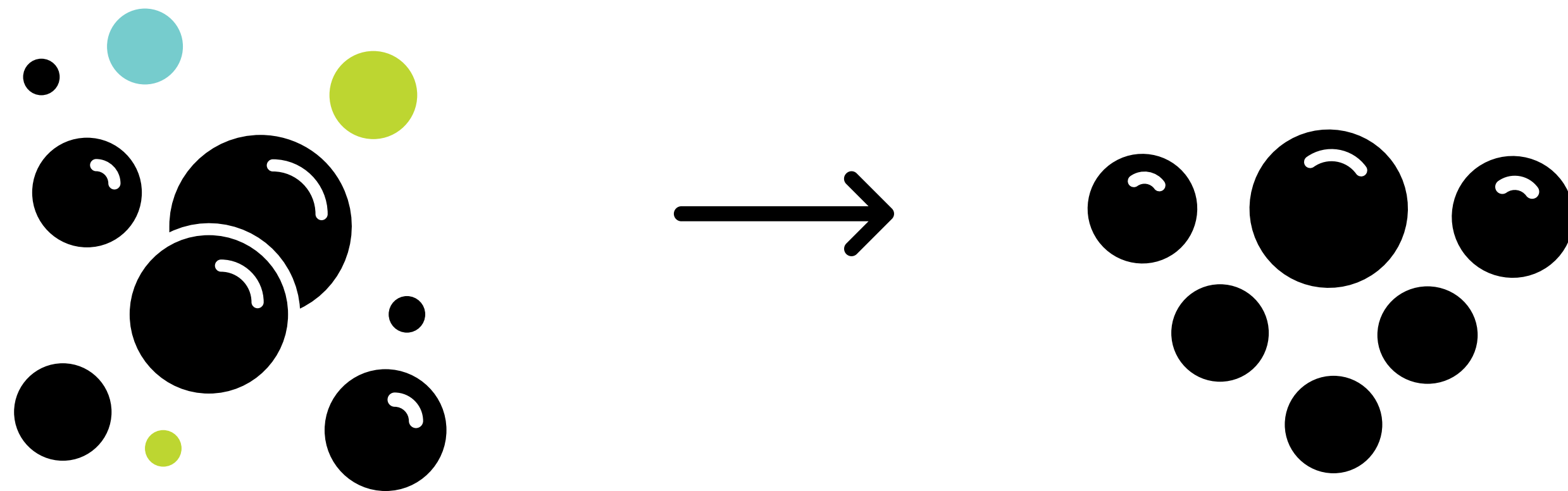
Inherent Permissions

- Ability to elevate user permissions in a given code context
- Either granted during a specific method execution or granted on object level
- Puts power in the hands of the developer



Inherent Permissions

- Should no longer be explicitly added to the permission set
- More clean and comprehensible permission sets
- Improve the stability of the critical code paths
- Can only be used for your own objects



Demo

Improving our demo app with Inherent Permissions



Want to learn more about
Business Central?

[+ Sales Quote](#)
 [+ Sales Order](#)
 [+ Sales Credit Memo](#)
 [> Sales](#)
 [> History](#)
[+ Sales Invoice](#)
[+ Sales Return Order](#)
[> Tasks](#)
[> Reports](#)

For Release

Intercompany

Two KPI cards are displayed side-by-side. The left card is titled 'New Intercom Transactions' and shows a large white number '0' on a teal background. The right card is titled 'Rejected ...er Companies' and also shows a large white number '0' on a teal background. Both cards have a green horizontal bar at the bottom and a white right-pointing arrow.

Intercompany ...
to Send
0

My User Tasks

Email Status

Failed Emails in Outbox

0

Draft Emails in Outbox

0

Sent Emails Last 30 Days

0

Pending Approvals

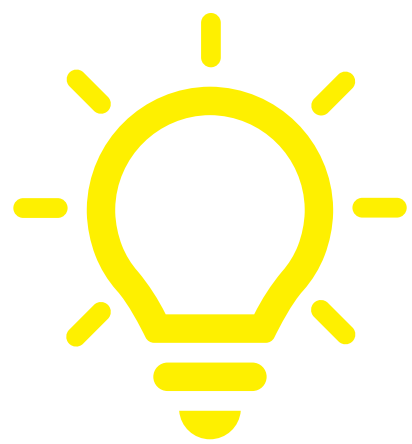
Current Time Sheet



Inherent permissions in action



Putting inherent permissions in metadata to first use in base product.



Reduces the number of permissions the system administrator must relate to. Some objects are simply not worth controlling permissions for...



We converted some permissions and permission sets in the LOGIN set to inherent permissions. These permissions are now no longer configurable.



Demo

Where did the permissions go?



Active users - Microsoft 365 admBusiness Central Admin CenterBusiness Manager - Dynamics 365

https://businesscentral.dynamics-tie.com

Dynamics 365 Business Central

CRONUS UK Ltd. | FinanceCash ManagementSalesPurchasingShopify

CustomersVendorsItemsBank AccountsChart of Accounts

Get started

Hi, meet Business Central!

You're all set to try out our demo company, Cronus. Go explore on your own, or take a quick tour first.

Show demo tours



Some features connect to other Microsoft services

Activities

Sales This Month

£1,237

> See more

Overdue Sales Invoice Amount

£39,754

> See more

Overdue Purch. Invoice Amount

£35,196

> See more

Sales Invoices Predicted Overdue

0

> See more

Ongoing Sales

Sales Quotes

2

>

Sales Orders

8

>

Sales Invoices

7

>

Ongoing Purchases

Purchase Orders

8

>

Ongoing Purch. Invoices

3

>

Purch. Invoices Next Week

0

>

Payments

Unprocessed Payments

1

>

Average Collection Days

5.8

Outstanding V. Invoices

13

>

Scan documents

Create Incoming Invoice from Camera

Search

Microsoft

Exclude from permissions



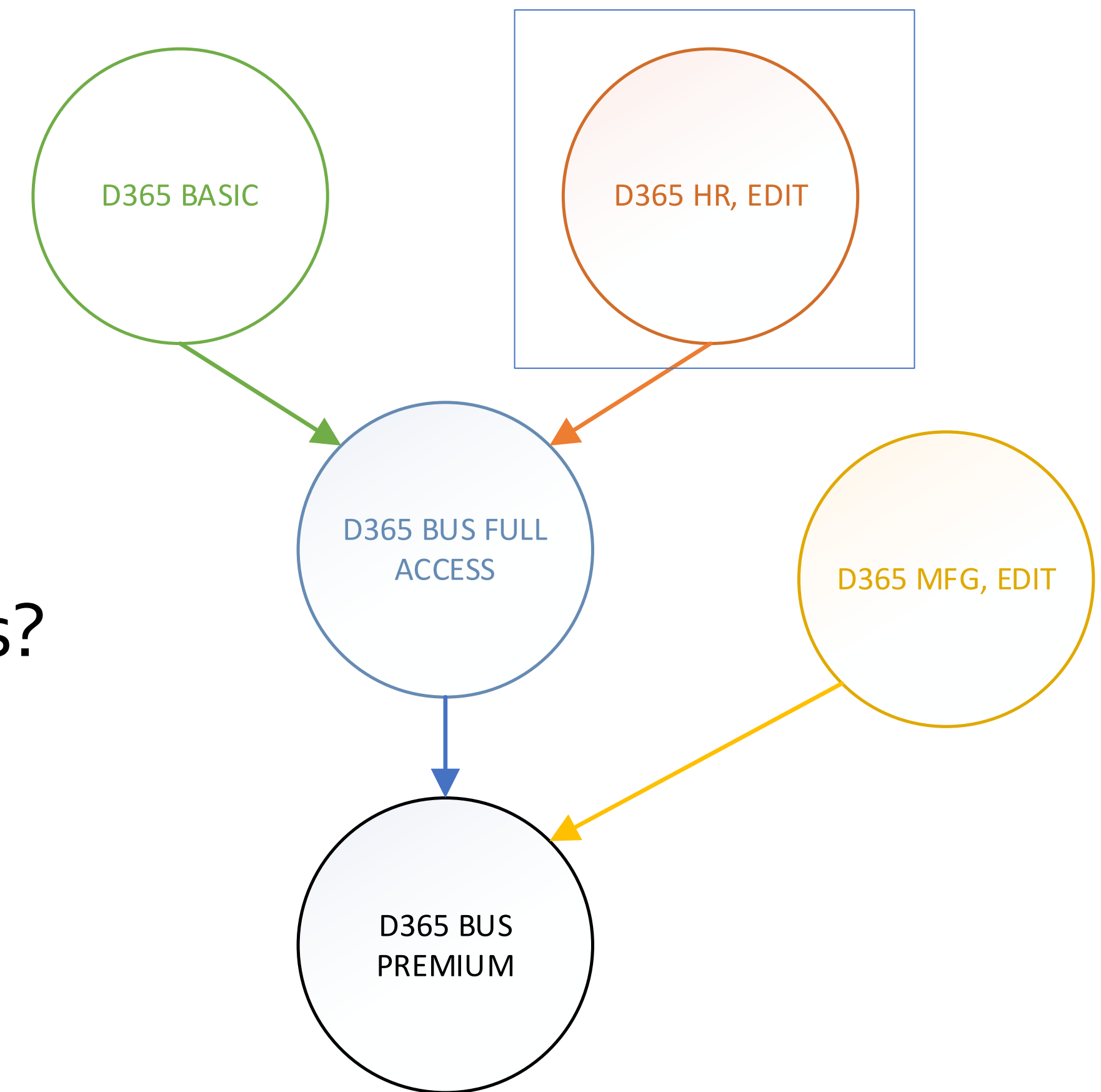
But what if it's not right for you?

What if the hierarchies defined by Microsoft or ISVs are not fine grained enough?

And include too many permissions?

“Copy permission set”?

And end-up synchronizing forever the copied permissions?



How exclusion works

Mental model

Calculate the expanded list of included permissions

Calculate the expanded list of excluded permissions

'Subtract' the excluded permissions from the included

Excluding permission sets

Same as excluding the contained permissions



Demo

Manage our demo app through exclusion of permission sets



Good afternoon, BC Admin!

[+ Sales Quote](#)
 [+ Sales Order](#)
 [+ Sales Credit Memo](#)
 [> Sales](#)
 [> History](#)
[+ Sales Invoice](#)
[+ Sales Return Order](#)
[> Tasks](#)
[> Reports](#)

Sales Quotes - Open
0

Sales Orders - Open
20

The dashboard displays four key performance indicators (KPIs) in a row. Each KPI is represented by a colored square with a title, a large numerical value, a horizontal bar chart, and a right-pointing arrow.

- Ready To Ship:** A blue square containing the number 6, a white bar chart, and a white right arrow.
- Partially Shipped:** A blue square containing the number 0, a green bar chart, and a white right arrow.
- Delayed:** A blue square containing the number 14, an orange bar chart, and a white right arrow.
- Average Days Delayed:** A light gray square containing the number 7.5, a red bar chart, and a white right arrow. A mouse cursor is hovering over the top right corner of this square.

Account Name	Balance
Sales Return O... - Open	0
Sales Credit M... - Open	1

The figure displays three cards representing transaction counts:

- Incoming Transactions**
 - New Intercompany Transactions: 0
- Rejected Transactions**
 - Rejected Intercompany Transactions: 0
- Outgoing Transactions**
 - Intercompany Transactions to Send: 0




My User Tasks

Pending User Tasks

0

>

Email Activities

Failed Emails in Outbox	Draft Emails in Outbox	Sent Emails Last 30 Days
0	0	0
		
>	>	>

Pending Approvals

Requests Sent ... Approval

0

Requests to Approve

0

Current Time Sheet Time Sheets Pending Time Sheets

Exclude from Wildcard Permissions



Improvement of composable permission sets, introduced in Business Central 2022 Wave 2.



Allows you to exclude objects, such as pages, reports and the likes, from permission sets, which include * permissions for those object types (basically all objects except tables).



Gives you more control over which object you would like users to get access to.



Security Groups on Business Central environments



Security Groups on environments



Improvement to the “Update Users from Microsoft 365” action on the Users page, which now respects the security group set on a Business Central environment.



Allows users to be assigned to specific environments only and synced as Business Central users, before they log in.



We now only iterate over users, which belong to the security group defined on the Business Central environment.



Demo

Security Groups on Environments



Active users - Microsoft 365 admBusiness Central Admin CenterView - Users - Dynamics 365 Bus

https://businesscentral.dynamics-tie.com/?company=CRONUS%20UK%20Ltd.&page=9800&dc=0&bookmark=18_eJQ1dwCRbftPbomlkq_l_xvfEptIQ

Dynamics 365 Business Central

Users

Users: AllSearchNewManageHomeNavigateMore options

Effective PermissionsInvite external accountantSend EmailUpdate users from Microsoft 365

User Name ↑	Full Name	Status	Authentication Email
<u>BCESSENTIAL</u>	:	Enabled	bcEssential@GB00004t2.ccsctp.net
BCEXTACCOUNTANT		Enabled	bcExtAccountant@GB00004t2.ccsctp.net
BCTEAMMEMBER		Enabled	bcTeamMember@GB00004t2.ccsctp.net
FULLUSERADMIN		Enabled	fullUserAdmin@GB00004t2.ccsctp.net
USER000	First name	Enabled	User000@GB00004t2.ccsctp.net

Permission Sets

Permission Set ↑	Company ↑
<u>LOGIN</u>	:
MY D365 FULL	

Permission Sets from Security Group...

Permission Set ↑	Company ↑
(There is nothing to show in this view)	

Security Group Memberships

Code ↑	Name
(There is nothing to show in this view)	

Microsoft

Search

Nested Security Groups



Nested Security Groups



Support nested groups inside the security group set on a Business Central environment.



Simplifies set up and maintenance of security groups used in Business Central.



We now always consider both direct and indirect security group memberships in Business Central.



Demo

Nested Security Groups



Active groups - Microsoft 365 adBusiness Central Admin CenterView - Users - Dynamics 365 Bus

https://businesscentral.dynamics-tie.com/?company=CRONUS%20UK%20Ltd.&page=9800&dc=0&bookmark=18_eJQ1dwCRJaTEltXKXUa8UQNflnbkxA

Dynamics 365 Business Central

Users

Users: AllSearchNewManageHomeNavigateMore options

Effective PermissionsInvite external accountantSend EmailUpdate users from Microsoft 365

User Name ↑	Full Name	Status	Authentication Email
BCESSENTIAL		Enabled	bcEssential@GB00004t2.ccsctp.net
BCEXTACCOUNTANT		Enabled	bcExtAccountant@GB00004t2.ccsctp.net
BCTEAMMEMBER		Enabled	bcTeamMember@GB00004t2.ccsctp.net
FULLUSERADMIN		Enabled	fullUserAdmin@GB00004t2.ccsctp.net
USER000	First name	Enabled	User000@GB00004t2.ccsctp.net

Permission Sets

Permission Set ↑	Company ↑
MY D365 FULL	

Permission Sets from Security Group...

Permission Set ↑	Company ↑
(There is nothing to show in this view)	

Security Group Memberships

Code ↑	Name
(There is nothing to show in this view)	

Microsoft

Search

Security Groups in Business Central



Security Groups in Business Central



New functionality – controlling Business Central permissions using security groups.



Allows administrators to manage what Business Central permissions users have via the Azure portal (Saas) or Windows Groups (On Prem)



Add the new functionality that allows matching AAD security groups / Windows Groups to Business Central permissions.



Demo

Security Groups in Business Central



Active groups - Microsoft 365 ad

Business Central Admin Center

View - Users - Dynamics 365 Bus

←

↺

https://businesscentral.dynamics-tie.com/?company=CRONUS%20UK%20Ltd.&page=9800&dc=0&bookmark=18_eJQ1dwCRJaTEltXKXUa8UQNflnbkxA

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Dynamics 365 Business Central

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Users: All

🔍 Search

+ New

Manage

Home

Navigate

More options

📄

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☰

ℹ️

📄 Effective Permissions

👤 Invite external accountant

✉️ Send Email

👥 Update users from Microsoft 365

🔗

User Name ↑	Full Name	Status	Authentication Email
BCESSENTIAL		Enabled	bcEssential@GB00004t2.ccsctp.net
BCEXTACCOUNTANT		Enabled	bcExtAccountant@GB00004t2.ccsctp.net
BCTEAMMEMBER		Enabled	bcTeamMember@GB00004t2.ccsctp.net
FULLUSERADMIN		Enabled	fullUserAdmin@GB00004t2.ccsctp.net
USER000	⋮ First name	Enabled	User000@GB00004t2.ccsctp.net

Permission Sets

Permission Set ↑	Company ↑
MY D365 FULL	⋮

Permission Sets from Security Group...

Permission Set ↑	Company ↑
(There is nothing to show in this view)	

Security Group Memberships

Code ↑	Name
(There is nothing to show in this view)	

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Microsoft

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How does this work on prem?

Exactly as it does in the cloud! Only difference:



No Support for AAD Security Groups



Support for Windows Groups



Deprecation of User Groups



Deprecation of User Groups



Deprecation of user groups functionality in favor of security groups and composable permission sets.



Streamlines and simplifies permission management for administrators.



Mark all application objects related to user groups as obsoleted. Provide the user group migration capabilities.



Demo

Goodbye User Groups

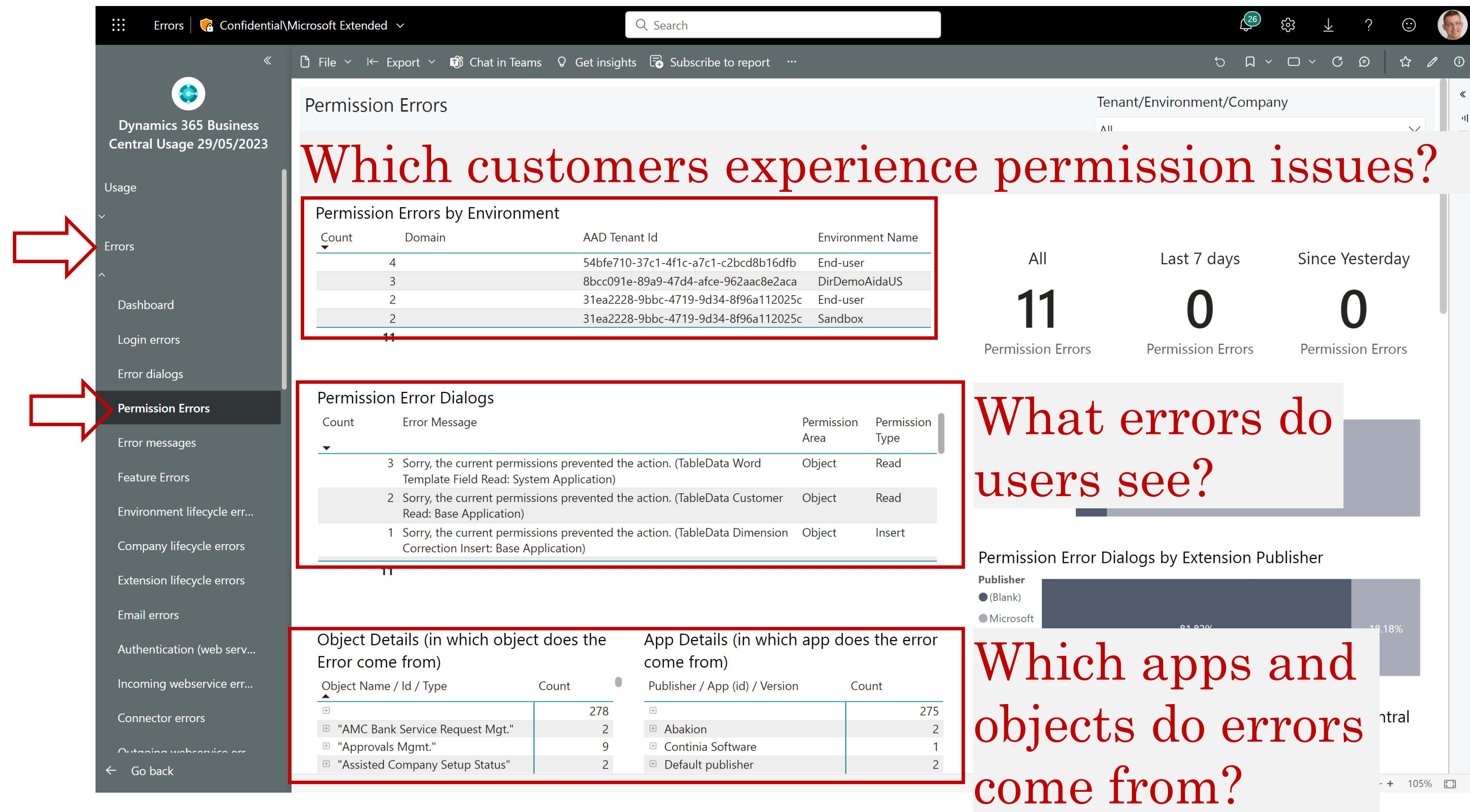


Permission Telemetry

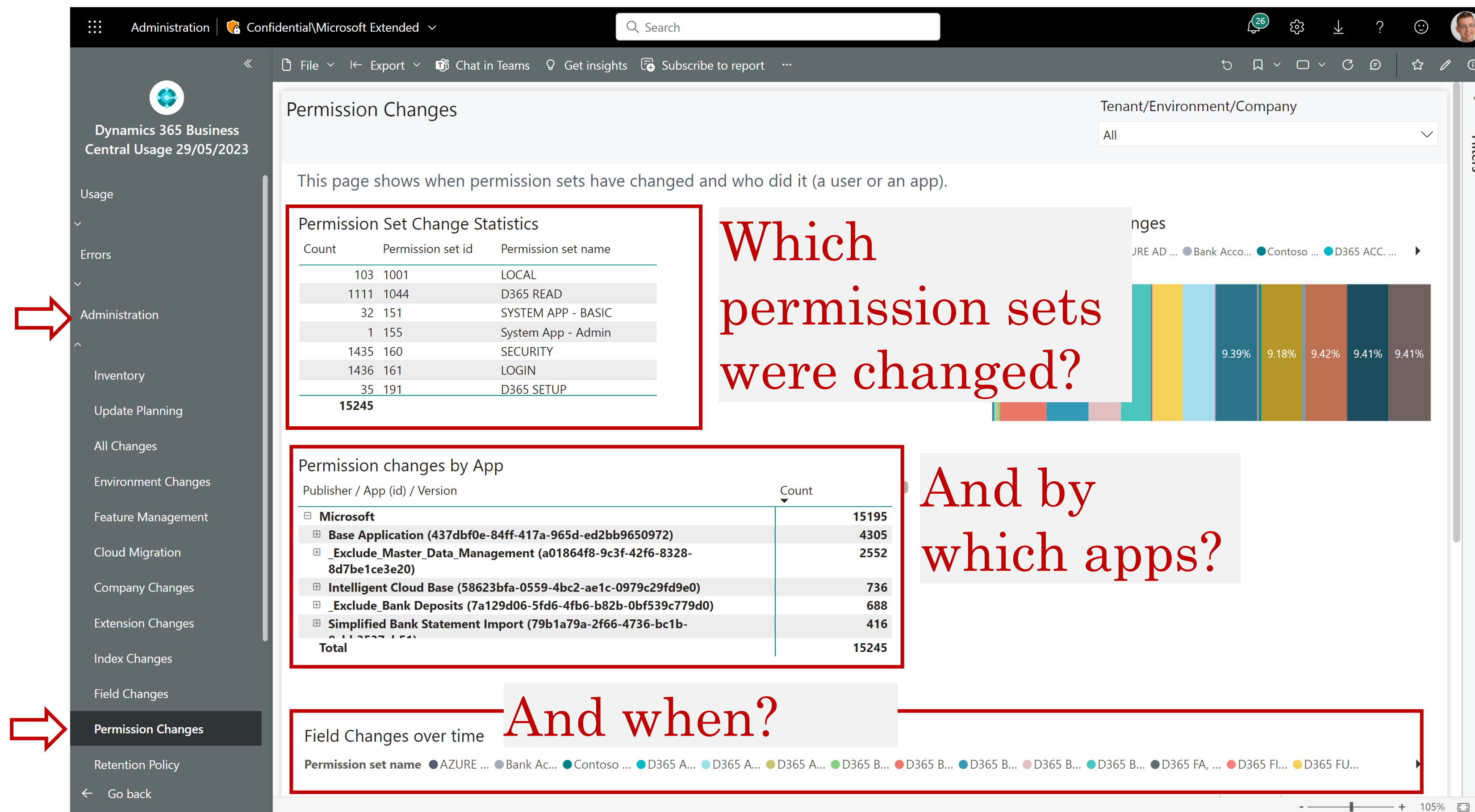
<https://aka.ms/bctelemetry>



Troubleshoot permission issues



Track changes to permissions



Summary: That was it!



Composable
Permissions



Inherent permissions



Exclude from
Permission Sets



Security Groups on Business
Central environments



Nested Security
Groups



Security Groups in
Business Central



Deprecation of User
Groups

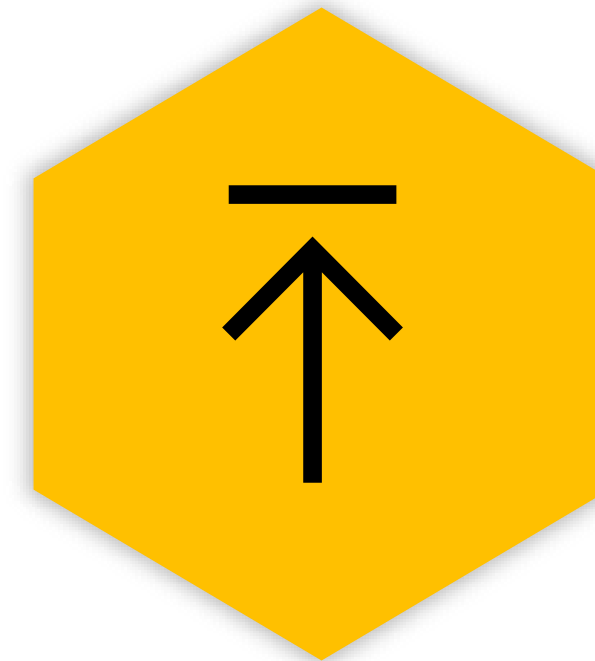


General Business Central resources, learn more!

Join the
conversation
[twitter.com/
MSDyn365BC](https://twitter.com/MSDyn365BC)



Submit
your ideas
aka.ms/BCIdeas



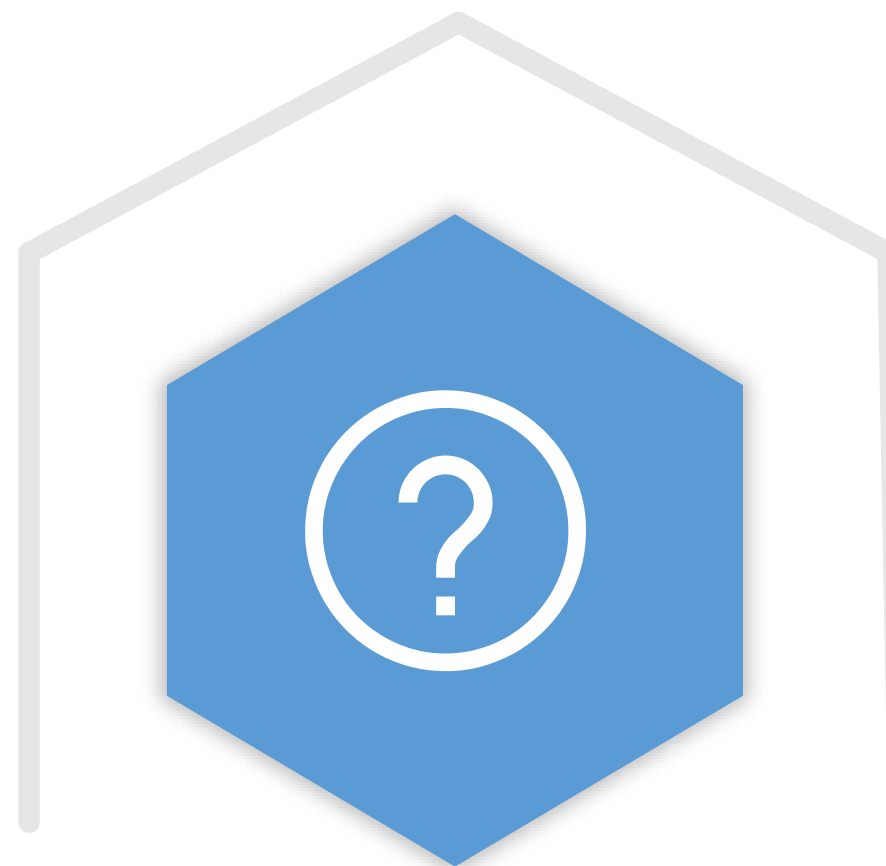
Looking for
resources?
aka.ms/BCAll



Join our office
hours
aka.ms/BCOfficeHours



Have a question?
aka.ms/BCYammer



Thank
You!

