

Julie Turner

Partner/CTO

Working with SharePoint since 2007

Microsoft MVP, Office Apps and Services since 2017

Microsoft 365 PnP Team since 2019

Open-source project co-maintainer: PnPjs & hTWOo



https://julieturner.net/me





Bob German

Cloud Developer Advocate

Working with SharePoint since 2003

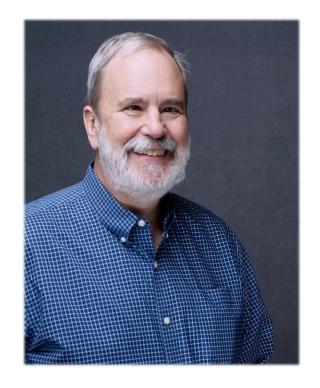
Developer Advocate for Copilot, Teams and Microsoft Graph development

Microsoft 365 PnP Team – Curates community Copilot and Teams app samples



https://aka.ms/BobGerman





Agenda



What are tenants



How they're associated with Azure



What type of users exist (member, guest, external, anon)



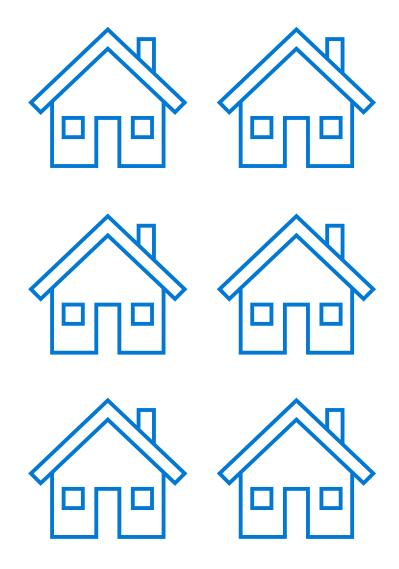
What is the new Multi-tenant feature



What's the experience for each user type - what apps can the various kinds of users use?



Demo: Single vs. Multi-tenant apps, Consents, and Service Principals



Each homeowner is responsible for:

Plumbing

· Roof

· Electrical

· HVAC

· Snow Removal

· etc.

Each homeowner owns what's inside their house

Single family homes

Apartment building

Landlord is responsible for:

Plumbing

· Roof

Electrical

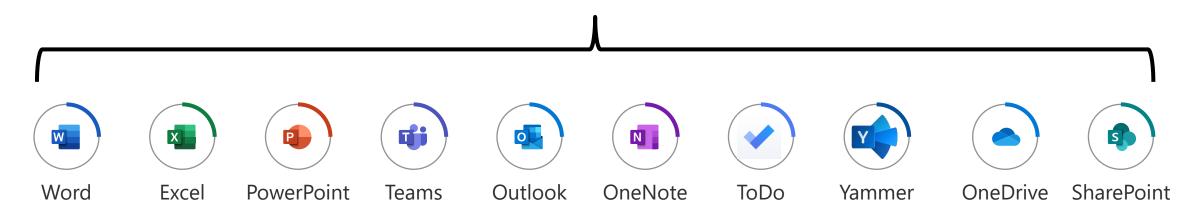
· HVAC

Snow removal

· etc.

Each tenant owns what's inside their apartment

Microsoft 365











SharePoint



OneDrive



Excel

PowerPoint



Microsoft Entra ID



ToDo



Teams



Yammer

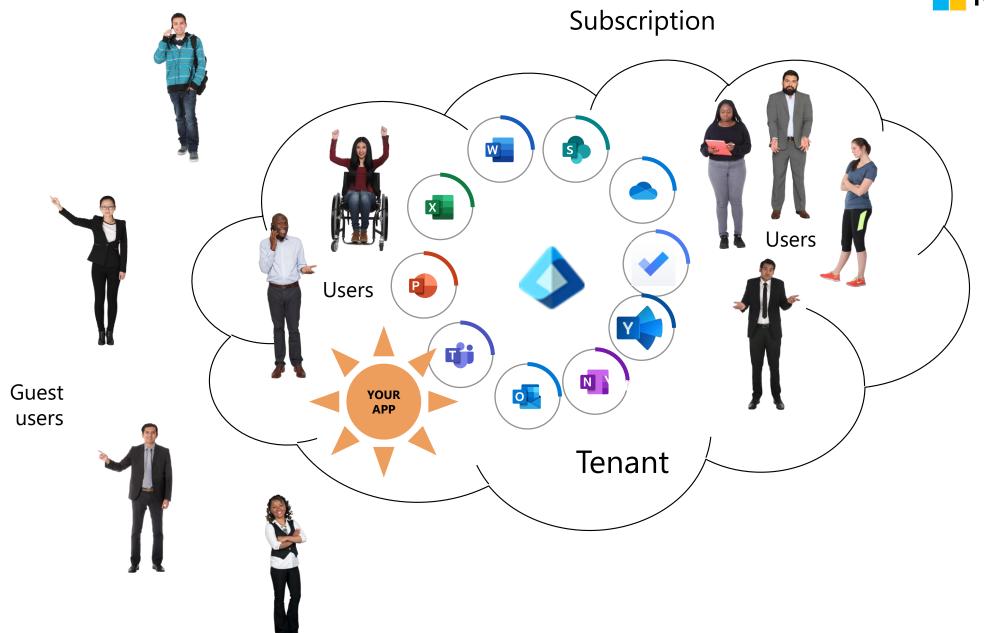


Outlook



OneNote





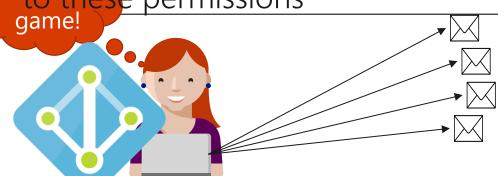
A better permission model

Old School OS

- Applications are just files in the filesystem; users can run any application they want
- Applications have 100% of permission of the user who runs it
- Issue: users have no way to know 100% what the application is doing

Modern OS

- · Applications must be registered
- Applications need *permission* to access *resources*
- Users and/or admins must *consent*

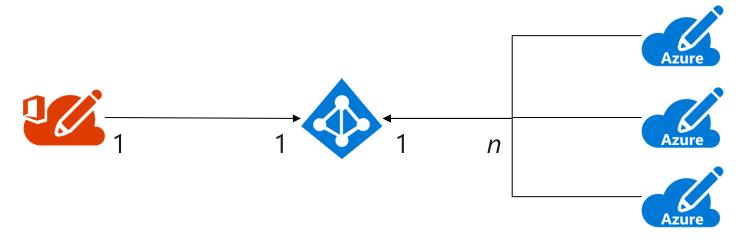


App types and permission types

	User Delegated Permissions (Get access on behalf of users)		App Permissions (Get access as a service)
App type	Mobile, Web and Single page app		Service and Daemon Elevate permissions
Permission type	Delegated permis	sion (user permission)	Application permission
Effective Permissions	Users can consent for their data App permissions	Admin can consent for them or for all users User permissions	Only admin can consent* App permissions

^{*} Resource-specific consent allows Team owner to consent for just that Team

Entra ID and Subscriptions



Microsoft 365 subscriptions have a 1:1 relationship with Entra ID domains Your Entra ID Directory

Many Azure subscriptions can trust an Entra ID domain

Types of Users in Microsoft 365

		Access level	
Ñ		Guest	Member
user authenticates	 External Invited to your tenant User authenticates somewhere else Has a #EXT user in tenant 	Typical use: Collaborate with users not in your organization	Typical use: Multi-tenant organization
How use	InternalRegistered in your tenantUser authenticates directly to your tenant	Typical use: Legacy user from before Entra ID B2B	Typical use: Regular M365 user

Additional cases:

- External *access* Teams user with Skype for Business federation (presence, chat, calls)
- Anonymous access Teams meeting attendee with no authentication

Reference: https://aka.ms/EntraExternalUsers

→ New user	Bulk operations \checkmark \bigcirc Refresh \bigcirc Manage view \checkmark \bigcirc Del	ete Per-user M	IFA ···
Create new user	<u>ID.</u> [2]		
Create a new internal user in your organization	er		
¹ Invite external user			
Invite an external user to collaborate with your organization	principal name ↑↓	User type	Creation type
Adele Vance Adele	V@M365x73137819.OnMicrosoft.com	Member	
Alex Wilber AlexV	V@M365x73137819.OnMicrosoft.com	Member	
Allan Deyoung Allan	D@M365x73137819.OnMicrosoft.com	Member	
BP Bianca Pisani Bianc	raP_M365x56802222.OnMicrosoft.com#EXT#@M365x73137819.onm	Member	Invitation
BG Bob German bob_0	devpoint.live#EXT#@M365x73137819.onmicrosoft.com	Guest	Invitation
BG Bob German 19 bob.g	german@M365x73137819.onmicrosoft.com	Member	
BJ Brian Johnson (TAILSPIN) Brian.	J_M365x56802222.OnMicrosoft.com#EXT#@M365x73137819.onmic	Member	Invitation
CW Cameron White Came	eronW_M365x56802222.OnMicrosoft.com#EXT#@M365x73137819.o	Member	Invitation
CC Christie Cline Chris	tieC_M365x56802222.OnMicrosoft.com#EXT#@M365x73137819.on	Member	Invitation
JT Julie Turner 19 julie.t	curner@M365x73137819.onmicrosoft.com	Member	
MA MOD Administrator admi	n@M365x73137819.onmicrosoft.com	Member	

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	Alex Wilber	AlexW	@M365x73137819.OnMicrosoft.com		Member	
	Allan Deyoung	AllanD	@M365x73137819.OnMicrosoft.com		Member	
	BP Bianca Pisani	Bianca	P_M365x56802222.OnMicrosoft.com#EXT#@M365x73137819.onm		Member	Invitation
	BG Bob German	bob_de	evpoint.live#EXT#@M365x73137819.onmicrosoft.com		Guest	Invitation
	BG Bob German 19	bob.ge	rman@M365x73137819.onmicrosoft.com		Member	
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	JT Julie Turner 19	julie.tu	rner@M365x73137819.onmicrosoft.com		Member	
	MA MOD Administrator	admin	@M365x73137819.onmicrosoft.com		Member	

	→ New user	rs 🖺 I	Bulk operations 🗸 💍 Refresh 🤯 Manage view 🗸 📗 De	lete	MFA ···
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	Allan Deyoung	AllanD	@M365x73137819.OnMicrosoft.com	Member	
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	BG Bob German	bob_d	evpoint.live#EXT#@M365x73137819.onmicrosoft.com	Guest	Invitation
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	BJ Brian Johnson (TAILSPIN) CW Cameron White	BrianJ_ Camer Christi	M365x56802222.OnMicrosoft.com#EXT#@M365x73137819.onmic onW_M365x56802222.OnMicrosoft.com#EXT#@M365x73137819.o	Member Member	Invitation Invitation

+ New user ✓ <u>↓</u> Download users	Bulk operations 🗸 💍 Refresh 🔅 Manage view 🗸 📗 De	lete Per-user N	1FA ···
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Allan Deyoung Alla	anD@M365x73137819.OnMicrosoft.com	Member	
BP Bianca Pisani Bia	ncaP_M365x56802222.OnMicrosoft.com#EXT#@M365x73137819.onm	Member Member	Invitation
BG Bob German bol	o_devpoint.live#EXT#@M365x73137819.onmicrosoft.com	Guest	Invitation
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Cw Cameron White Car	meronW_M365x56802222.OnMicrosoft.com#EXT#@M365x73137819.o	Member Member	Invitation
CC Christie Cline Chi	ristieC_M365x56802222.OnMicrosoft.com#EXT#@M365x73137819.on	Member Member	Invitation
JT Julie Turner 19 juli	e.turner@M365x73137819.onmicrosoft.com	Member	
MA MOD Administrator adm	min@M365x73137819.onmicrosoft.com	Member	

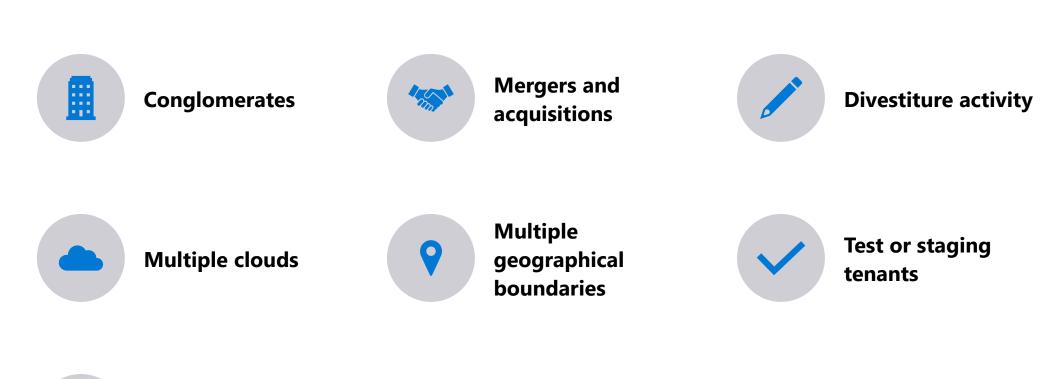
What is the multitenant organization scenario?

When an organization has more than one tenant instance of Microsoft Entra ID.

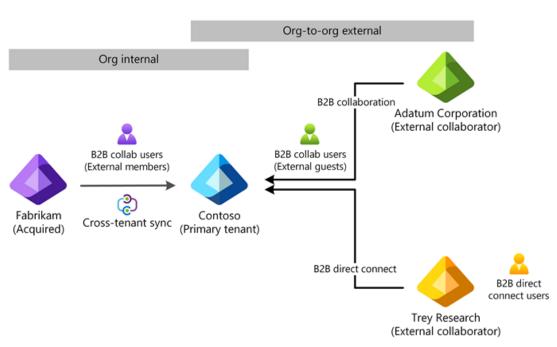
Department or

tenants

employee-created



Multitenant collaboration scenario



B2B Direct Connect

aka "Teams Shared Channels"

B2B Collaboration

This is "Guest Access" that we think about today with relation to M365

Cross tenant synchronization

Same as B2B Collaboration except:

- · no invitation emails
- · no consent prompts
- automatically adds/removes users when the join/leave organization

Can be changed to "External Members"

Multitenant organization

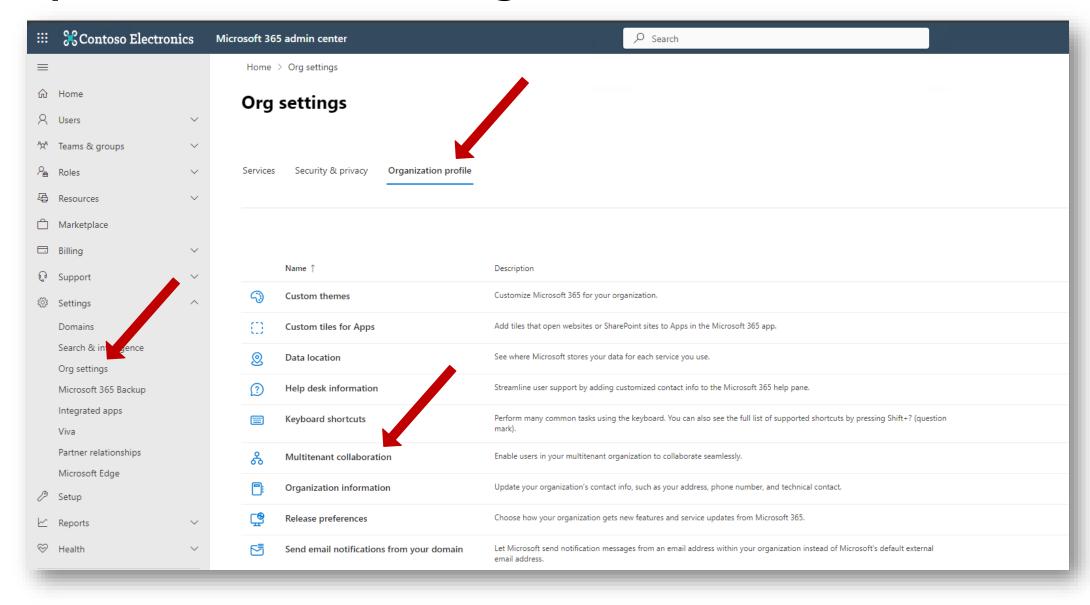
Differentiate in-organization and out-of-organization external users

Improved collaborative experience in new Microsoft Teams and Viva Engage and SharePoint

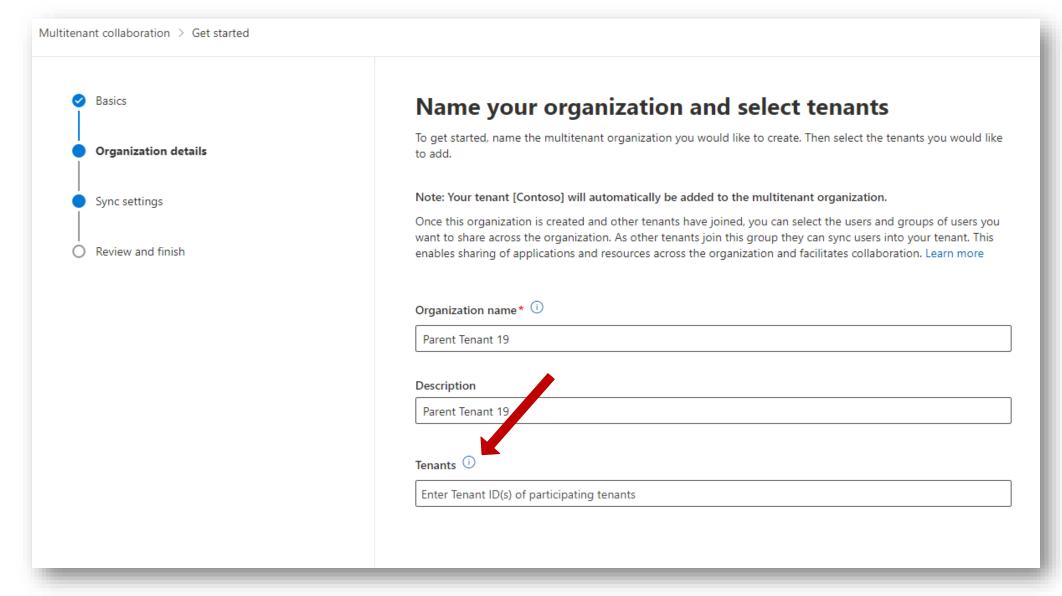
Compare multitenant capabilities reference

	B2B direct connect (Org-to-org external or internal)	B2B collaboration (Org-to-org external or internal)	Cross-tenant synchronization (Org internal)	Multitenant organization (Org internal)
Purpose	Users can access Teams Connect shared channels hosted in external tenants.	Users can access apps/resources hosted in external tenants, usually with limited guest privileges. Depending on automatic redemption settings, users might need to accept a consent prompt in each tenant.	Users can seamlessly access apps/resources across the same organization, even if they're hosted in different tenants.	Users can more seamlessly collaborate across a multitenant organization in new Teams and Viva Engage.
Value	Enables external collaboration within Teams Connect shared channels only. More convenient for administrators because they don't have to manage B2B users.	Enables external collaboration. More control and monitoring for administrators by managing the B2B collaboration users. Administrators can limit the access that these external users have to their apps/resources.	Enables collaboration across organizational tenants. Administrators don't have to manually invite and synchronize users between tenants to ensure continuous access to apps/resources within the organization.	Enables collaboration across organizational tenants. Administrators continue to have full configuration ability using cross-tenant access settings. Optional cross-tenant access templates allow preconfiguration of cross-tenant access settings.
Primary administrator workflow	Configure cross-tenant access to provide external users inbound access to tenant the credentials for their home tenant.	Add external users to resource tenant by using the B2B invitation process or build your own onboarding experience using the B2B collaboration invitation manager.	Configure the cross-tenant synchronization engine to synchronize users between multiple tenants as B2B collaboration users.	Create a multitenant organization, add (invite) tenants, join a multitenant organization. Use existing B2B collaboration users or use cross-tenant synchronization to provision B2B collaboration users.
Trust level	Mid trust. B2B direct connect users are less easy to track, mandating a certain level of trust with the external organization.	Low to mid trust. User objects can be tracked easily and managed with granular controls.	High trust. All tenants are part of the same organization, and users are typically granted member access to all apps/resources.	High trust. All tenants are part of the same organization, and users are typically granted member access to all apps/resources.
Effect on users	Users access the resource tenant using the credentials for their home tenant. User objects aren't created in the resource tenant.	External users are added to a tenant as B2B collaboration users.	Within the same organization, users are synchronized from their home tenant to the resource tenant as B2B collaboration users.	Within the same multitenant organization, B2B collaboration users, particularly member users, benefit from enhanced, seamless collaboration across Microsoft 365.
User type	B2B direct connect user - N/A	B2B collaboration user - External member - External guest (default)	B2B collaboration user - External member (default) - External guest	B2B collaboration user - External member (default) - External guest

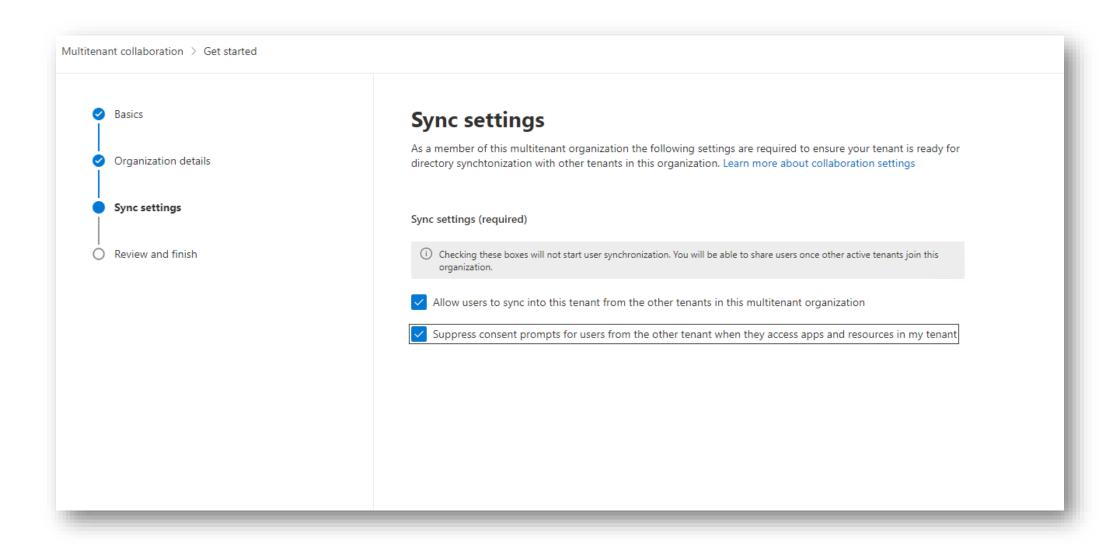
Simple Multitenant configuration



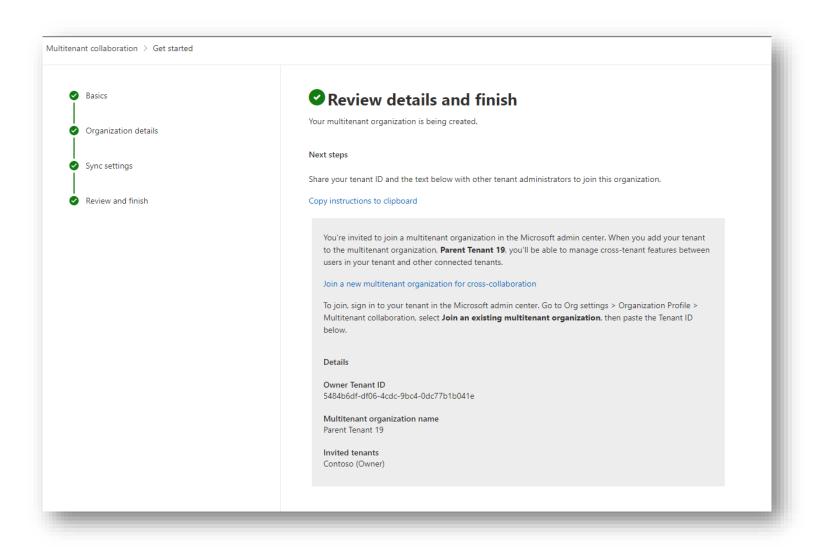
Simple Multitenant configuration - Parent



Simple Multitenant configuration - Parent



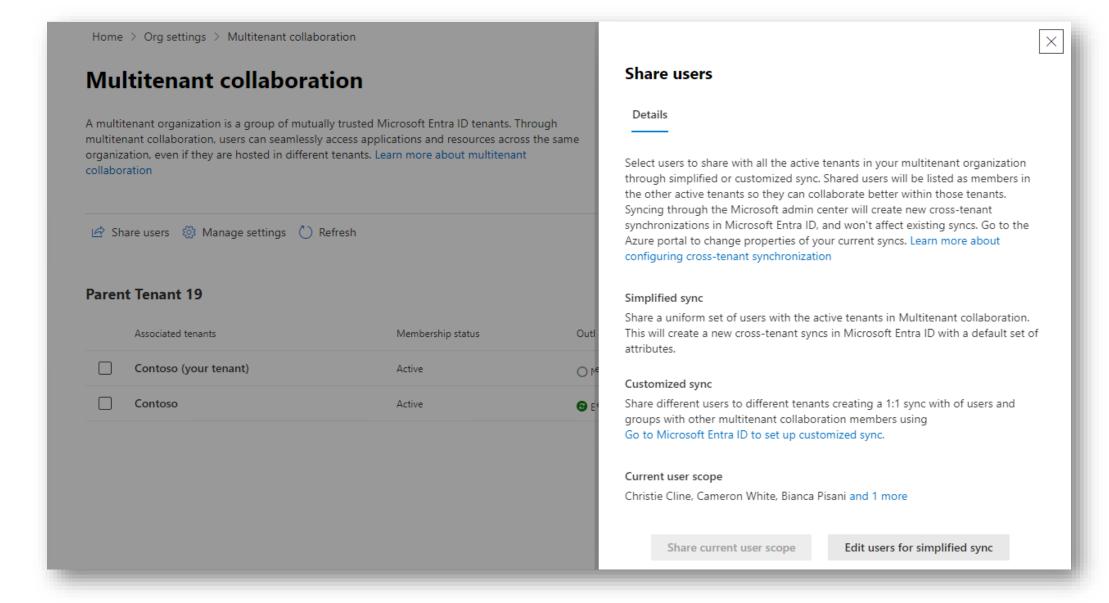
Simple Multitenant configuration - Parent



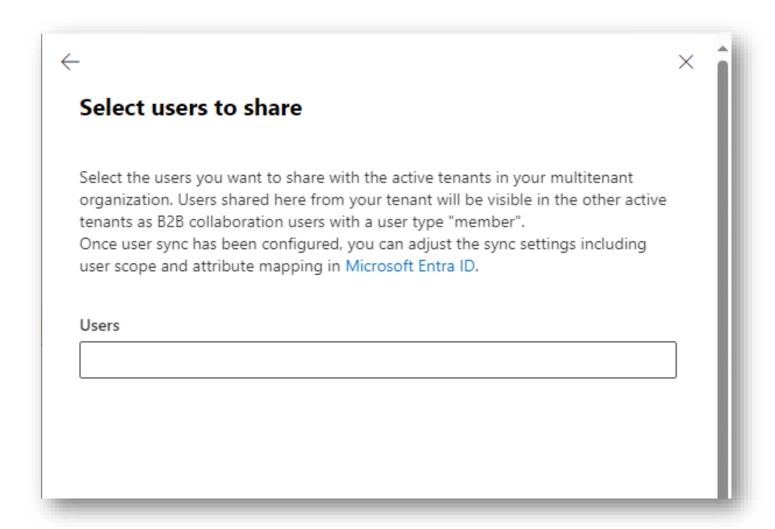
Simple Multitenant configuration - Child

Create or join a multitenant organization A multitenant organization is a group of mutually trusted Microsoft Entra ID tenants. Choose to define a new multitenant organization or join an existing one. Each tenant can only belong to one multitenant organization. Create a new multitenant organization Invite tenants who are part of your organization to collaborate in this new organization. Join an existing multitenant organization You will need to provide the tenant ID shared by organization owner. Enter tenant ID (the organization owner can share it with you) 5484b6df-df06-4cdc-9bc4-0dc77b1b041e Sync settings (required) (i) Checking these boxes will not start user synchronization. You will be able to share users once other active tenants join this organization. Learn more about collaboration settings Allow users to sync into this tenant from the other tenants in this multitenant organization Suppress consent prompts for users from the other tenant when they access apps and resources in my tenant

Simple User Sync Setup

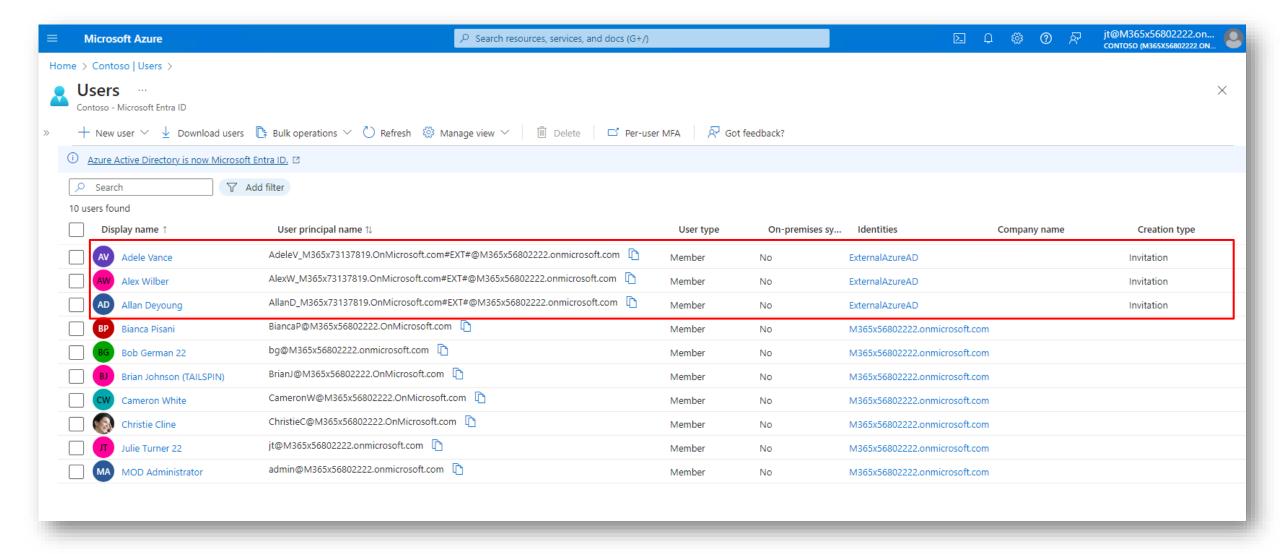


Simple User Sync Setup

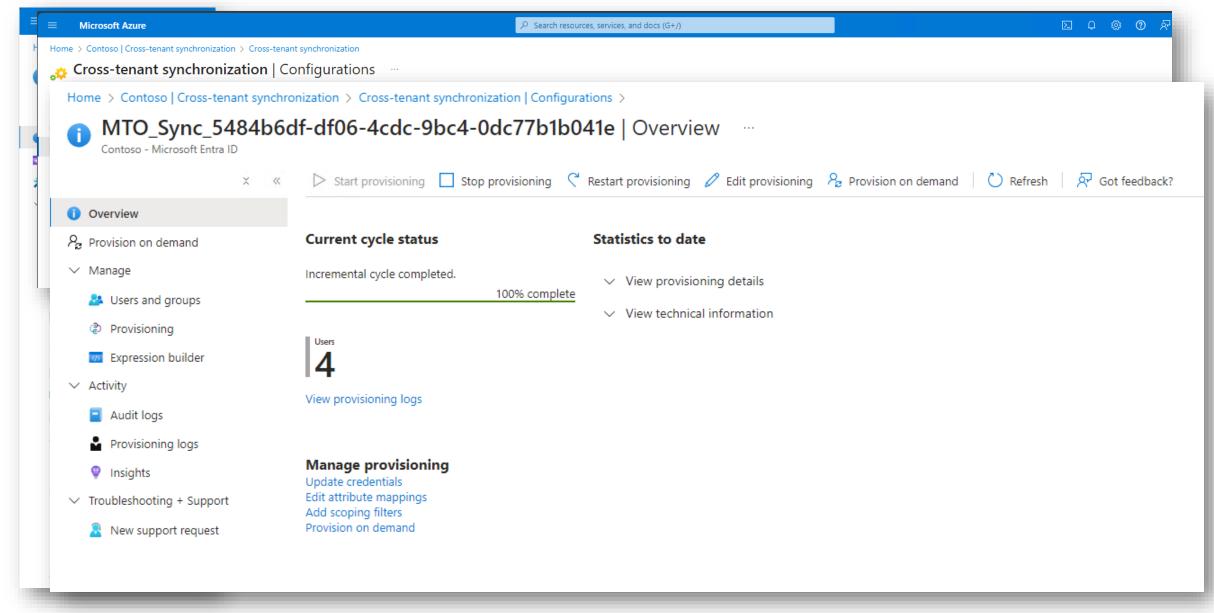


Save user scope for all active tenants? Are you sure you want to apply your outbound directory settings to all active tenants? This change will overwrite any previous configurations settings in Azure Active Directory. Yes Cancel

Simple User Sync Setup

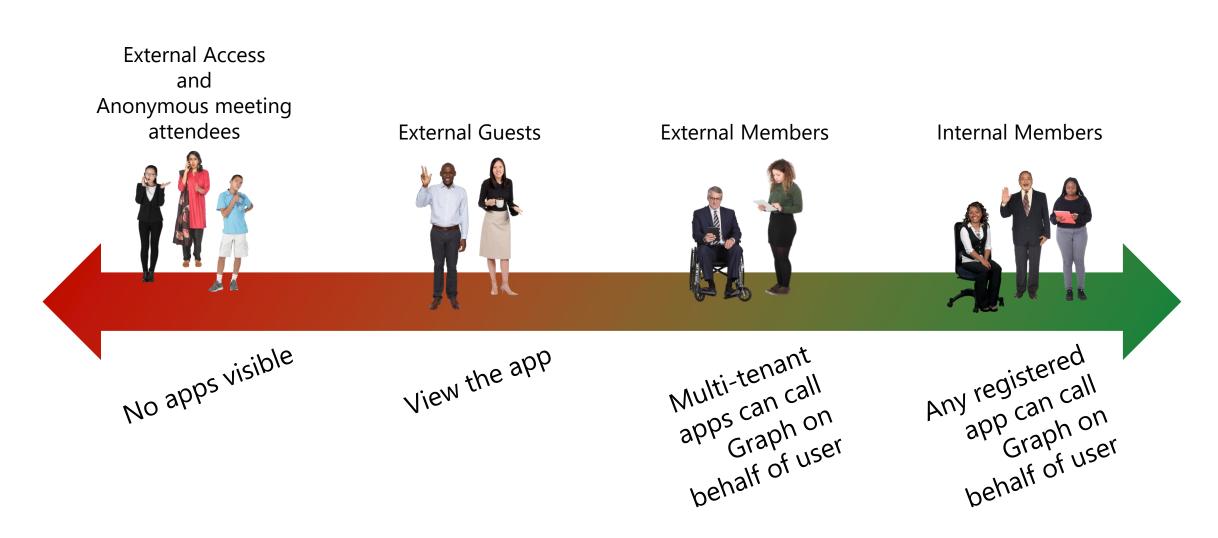


Advanced User Sync use Cross-tenant synchronization



Teams and SharePoint Apps

What works where?



Access to SharePoint Framework Apps

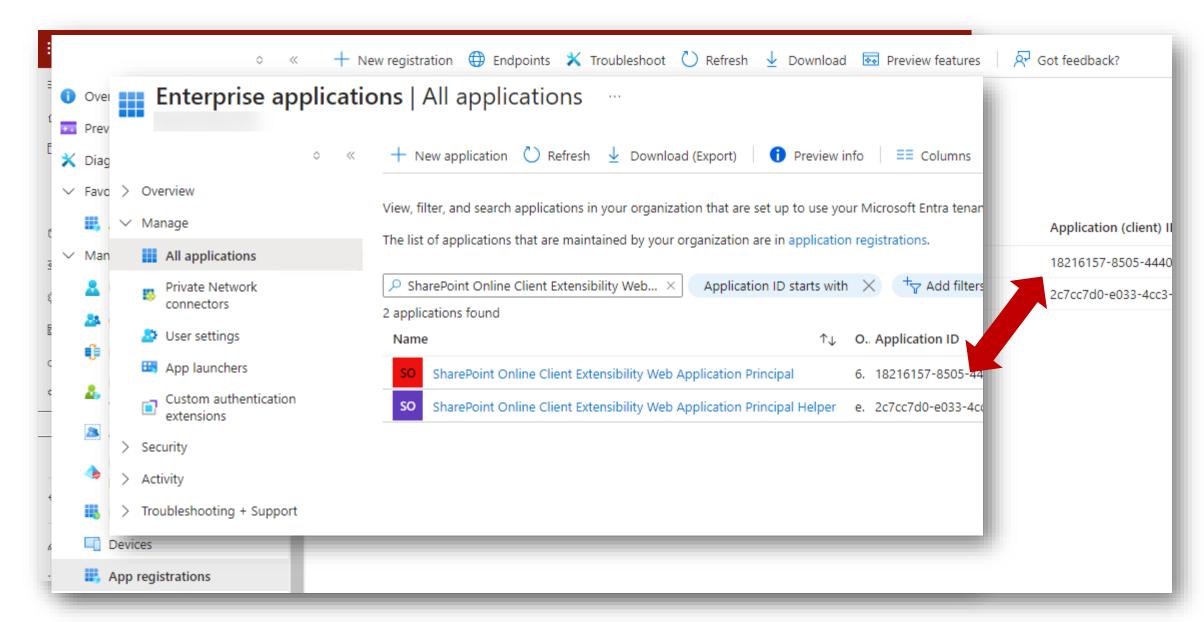
App Type	User Type	App is displayed	App can call SharePoint REST API	App can call Graph API
	Internal Member	Yes	Yes	Yes
	External Member	Yes	Yes	Yes
SharePoint	External Guest	Yes*	Yes*	No*
Framework	External Access	No	No	No
	Anonymous meeting attendee	No	No	No

^{* -} Only works if Tenant CDN is on or you add guest users to group that has read access to the Tenant app catalog.

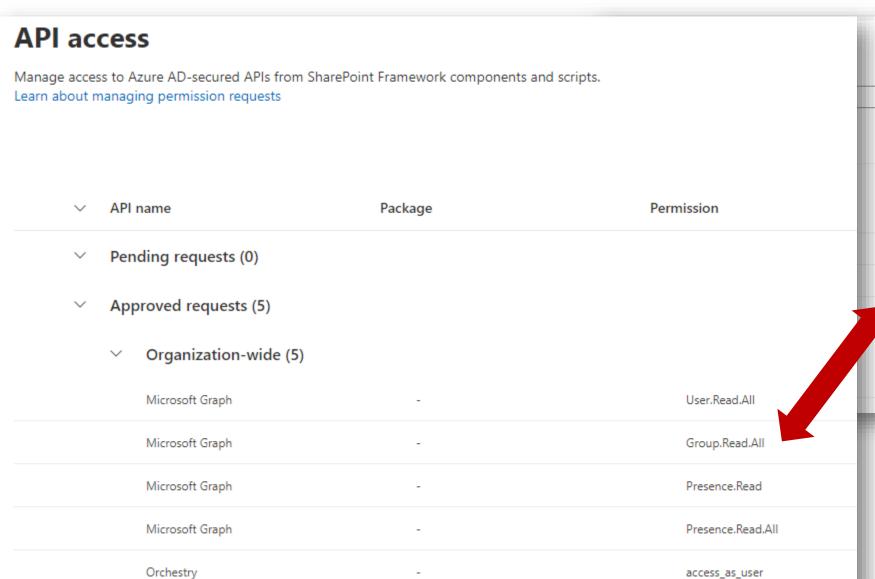
All third-party SPFx solutions share a Multi-Tenant App Registration and service principal. Therefore, any permission granted to one SPFx solution is granted to all in you tenant.**

** - This relates to Microsoft Graph & third-party APIs. SharePoint REST APIs still allow for cookie based auth token

SharePoint Framework Permissions



Permissions Claims Match



Claim value

User.Read.All

Group.Read.All

Presence.Read

access_as_user

Presence.Read.All

Permission

Read all users' ful

Read all groups

Read user's prese

Read presence in

Teams can access

Access to Teams Apps

App Type	User Type	App is displayed	App can call Graph
Teams Single Tenant	Internal Member	Yes	Yes
	External Member	Yes	No
	External Guest	Yes	No
	External Access	No	No
	Anonymous meeting attendee	No	No
Teams Multi Tenant	Internal Member	Yes	Yes
	External Member	Yes	Yes
	External Guest	Yes	No
	External Access	No	No
	Anonymous meeting attendee	No	No

Demo

- Single vs. Multi-tenant apps
- Consents and Service Principals (aka Enterprise Apps)

Resources

Multitenant organization capabilities in Microsoft Entra ID

https://aka.ms/multitenant-org

Collaboration user properties (internal, external, member, guest)

https://aka.ms/collab-user-properties

Entra ID Application Management

https://aka.ms/entra-app-mgmt

Hands-on Graph lab used in the Single/Multitenant demo

https://aka.ms/graph-scenarios