



NIC Cloud
Connect

Oslo Spektrum
November 7 - 9



Beyond the Thunderdome: Microsoft 365 Guest & External Access Inside & Out!

Andy Malone MVP

Visit my YouTube Channel @AndyMaloneMVP



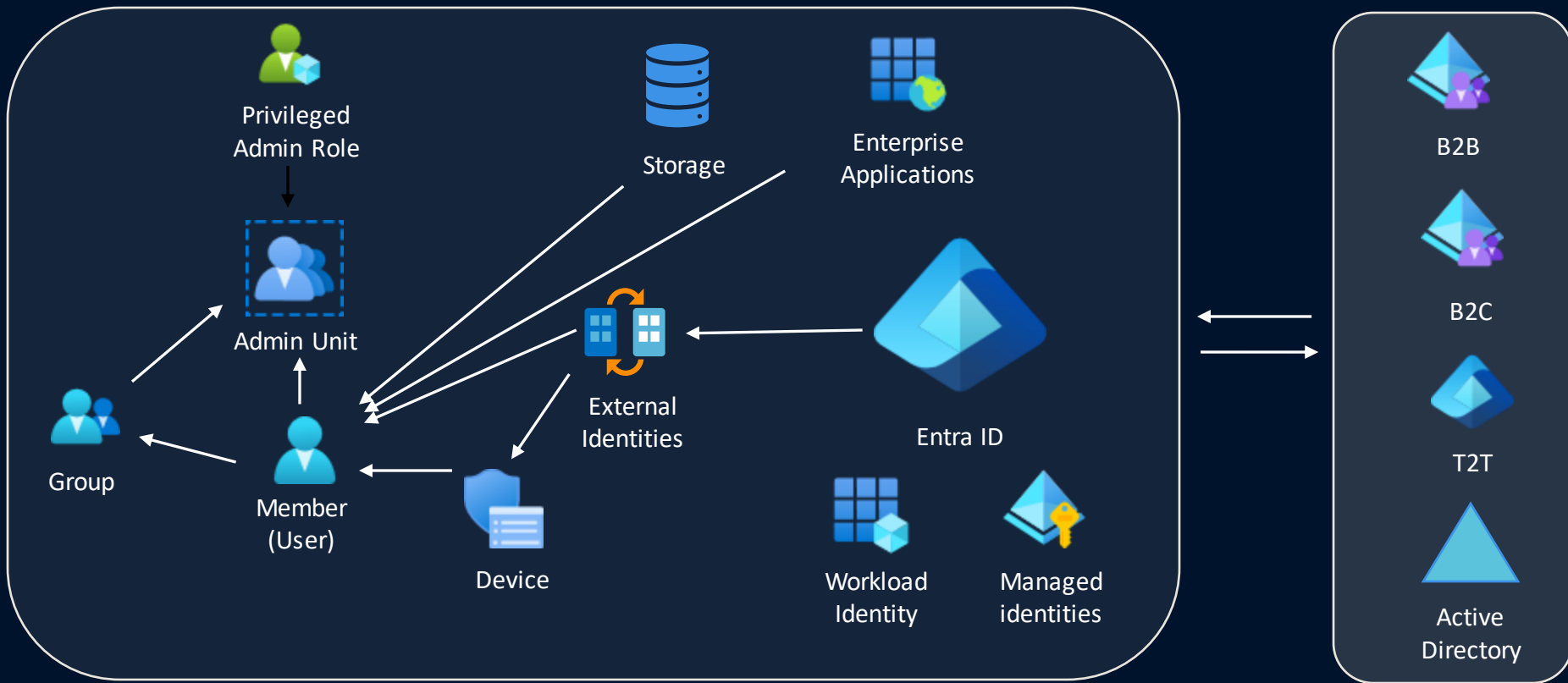
This Session we'll Discuss ...

- Identity Types – B2B Vs T2T Vs B2C
- Understand Members Vs Users
- External Collaboration Settings explained
- Microsoft 365 Multi Tenant Collaboration
- Cross Tenant Synchronization (T2T)
- Demos Demos!
- Conclusions





Microsoft Entra ID Identity Types



Identity Types -B2B (Business to Business)

- B2B Allows Federation between two directories.
- Used to prevent the creation of duplicate accounts for the same users across directories.
- Enables and simplified organization collaboration.
- Creates identities (called external identities) to easily assign resources to.



Identity Types - Entra B2C (Business to Consumer)

Customers

Social IDs, email, local accounts



Business and Government IDs



Securely authenticate your customers using their preferred identity provider

Capture login, preference, and conversion data for customers

Provide branded (white label) registration and login experiences

Business

Apps and APIs



Analytics



Integration with other systems





External Vs Member Users



User_domain.com#EXT#Tenant.onmicrosoft.com



user@Tenant.onmicrosoft.com

Type	External Guest	External Member
External 	collaboration user has an account in an external Microsoft Entra organization or an external identity provider	Uses an external account to authenticate. But has member level permissions within your organization
	Most users who are commonly considered external users or guests fall into this category	A common Scenarios in Multi Tenant Scenarios (T2T)
	Internal Guest	Internal Member
Internal 	Has an Internal account in Entra ID but only has guest level access to organizational resources	Has a member level account in your Entra ID Directory and member level access in your organization
	This is often a legacy guest user created before the availability of Entra ID B2B	Generally considered employees of your organization

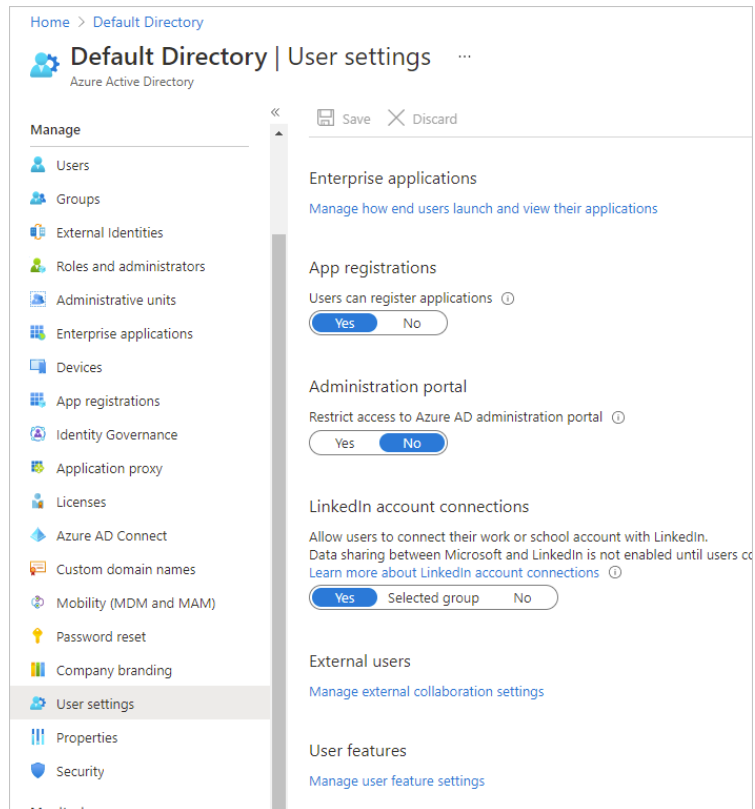
Identity Types & Sign In Methods

Identities property value	Sign-in state
ExternalAzureAD	This user is homed in an external organization and authenticates by using a Microsoft Entra account that belongs to the other organization.
Microsoft account {host's domain}	This user is homed in a Microsoft account and authenticates by using a Microsoft account. This user authenticates by using a Microsoft Entra account that belongs to this organization.
google.com	This user has a Gmail account and has signed up by using self-service to the other organization.
facebook.com	This user has a Facebook account and has signed up by using self-service to the other organization.
mail	This user has signed up by using Microsoft Entra External ID email one-time passcode (OTP).
{issuer URI}	This user is homed in an external organization that doesn't use Microsoft Entra ID as their identity provider, but instead uses a SAML/WS-Fed-based identity provider. The issuer URI is shown when the Identities field is clicked.

Note* Phone sign-in is not supported for external users. B2B accounts cannot use phonevalue as an identity provider.

Before you Start! Understand External Permissions

- Guest users have default restricted directory permission
- They can manage their own profile, change their own password, and retrieve limited information about other users, groups, and apps.
- B2B guest users are not supported in Microsoft Teams shared channels.
- For access to shared channels see B2B direct connect.



Permission & Roles



Users | User settings

Default Directory - Azure Active Directory

Enterprise applications

[Manage how end users launch and view their applications](#)

App registrations

Users can register applications ⓘ

Yes

No

Administration portal

Restrict access to Azure AD administration portal ⓘ

Yes

No

LinkedIn account connections

Allow users to connect their work or school account with LinkedIn.
Data sharing between Microsoft and LinkedIn is not enabled until users consent to connect their Microsoft work or school account with their LinkedIn account.

[Learn more about LinkedIn account connections](#) ⓘ

Yes

Selected group

No

External users

[Manage external collaboration settings](#)

User features

[Manage user feature settings](#)



Roles and administrators | All roles













Default Directory - Azure Active Directory

Administrative roles

Administrative roles are used for granting access for privilege application configuration. [Learn more](#).

[Learn more about Azure AD role-based access control](#)

Role

<input type="checkbox"/>	 Application administrator
<input type="checkbox"/>	 Application developer
<input type="checkbox"/>	 Attack payload author
<input type="checkbox"/>	 Attack simulation administrator
<input type="checkbox"/>	 Attribute assignment administrator 
<input type="checkbox"/>	 Attribute assignment reader 
<input type="checkbox"/>	 Attribute definition administrator 
<input type="checkbox"/>	 Attribute definition reader 

Creating / Inviting a Guest (External)

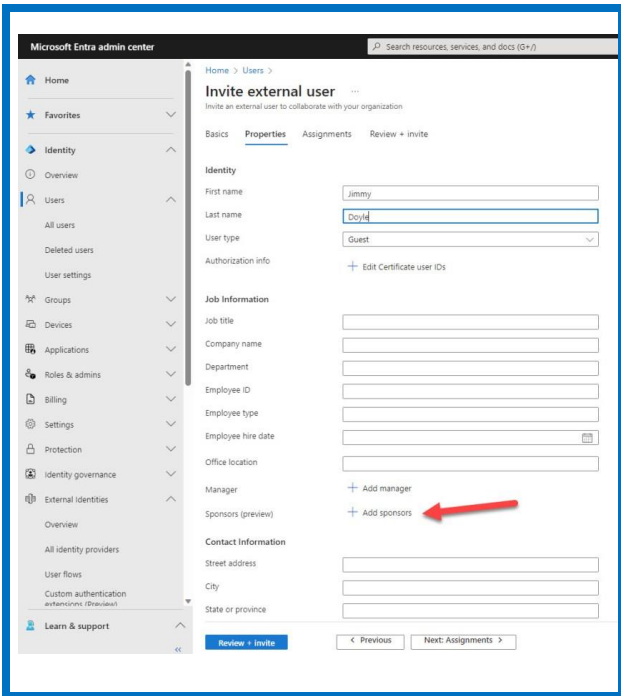


External Users can either be invited directly by an Administrator

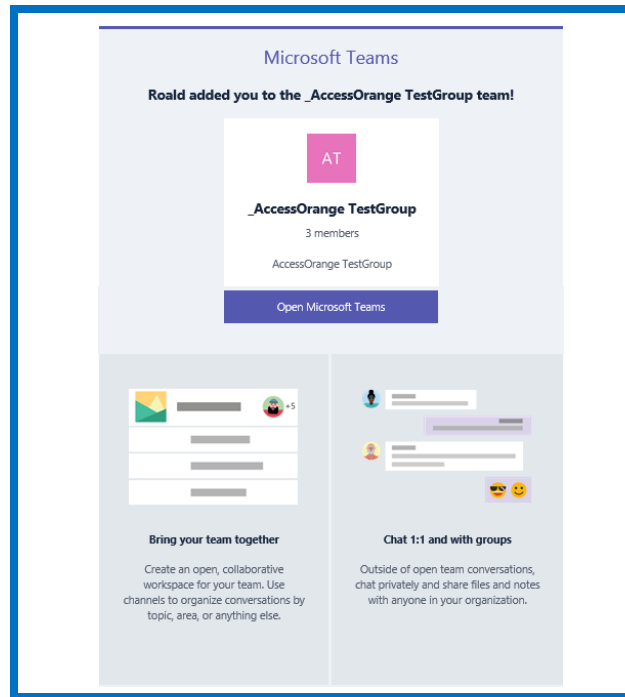
Or

Invite via a Microsoft Teams Guest invitation.

You can Add a Sponsor to the Guest Account



Creating a Guest User in Entra ID



Invite Via Teams

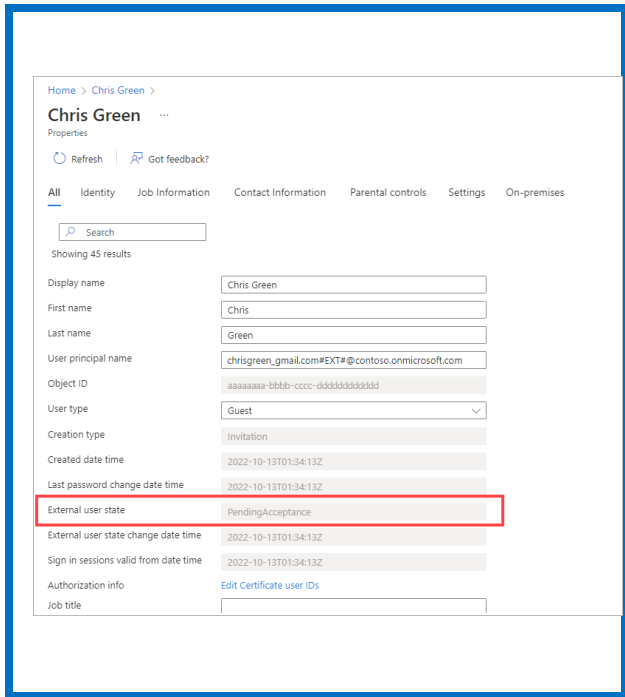
Before & After the External Invite is Accepted



Prior to acceptance, the External Users account is set to pending acceptance status.

Once accepted, The users native account or credentials from the external identity provider, Identities reflects the identity provider, For example google.com

Provide branded (white label) registration and login experiences



Home > Chris Green >

Chris Green

Properties

Refresh Got feedback?

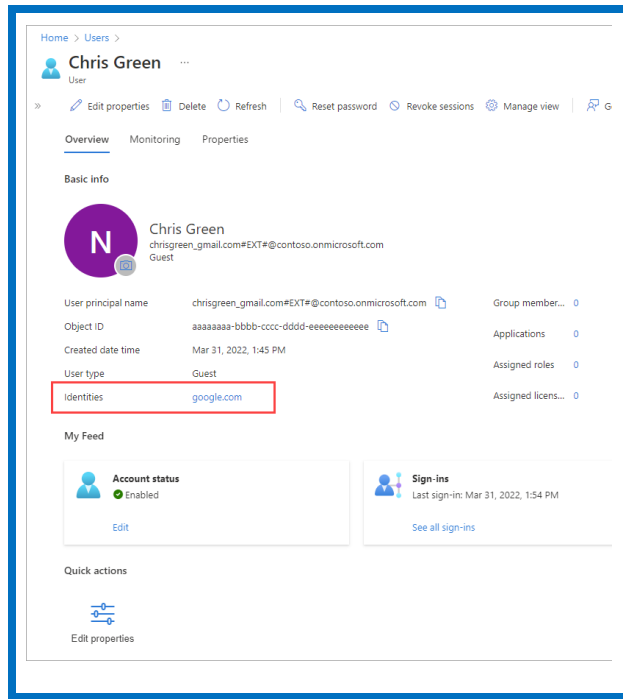
All Identity Job Information Contact Information Parental controls Settings On-premises

Search

Showing 45 results

Display name	Chris Green
First name	Chris
Last name	Green
User principal name	chrisgreen_gmail.com#EXT#@contoso.onmicrosoft.com
Object ID	aaaaaaaa-bbbb-cccc-dddd-dddd
User type	Guest
Creation type	Invitation
Created date time	2022-10-13T01:34:13Z
Last password change date time	2022-10-13T01:34:13Z
External user state	PendingAcceptance
External user state change date time	2022-10-13T01:34:13Z
Sign in sessions valid from date time	2022-10-13T01:34:13Z
Authorization info	Edit Certificate user IDs
Job title	

Before invitation redemption



Home > Users >

Chris Green

User

Edit properties Delete Refresh Reset password Revoke sessions Manage view

Overview Monitoring Properties

Basic info

Chris Green
chrisgreen_gmail.com#EXT#@contoso.onmicrosoft.com
Guest

User principal name	chrisgreen_gmail.com#EXT#@contoso.onmicrosoft.com	Group member...
Object ID	aaaaaaaa-bbbb-cccc-dddd-eeeeeeee	Applications
Created date time	Mar 31, 2022, 1:45 PM	Assigned roles
User type	Guest	Assigned licenses...
Identities	google.com	

My Feed

Account status
Enabled
Edit

Sign-ins
Last sign-in: Mar 31, 2022, 1:54 PM
See all sign-ins

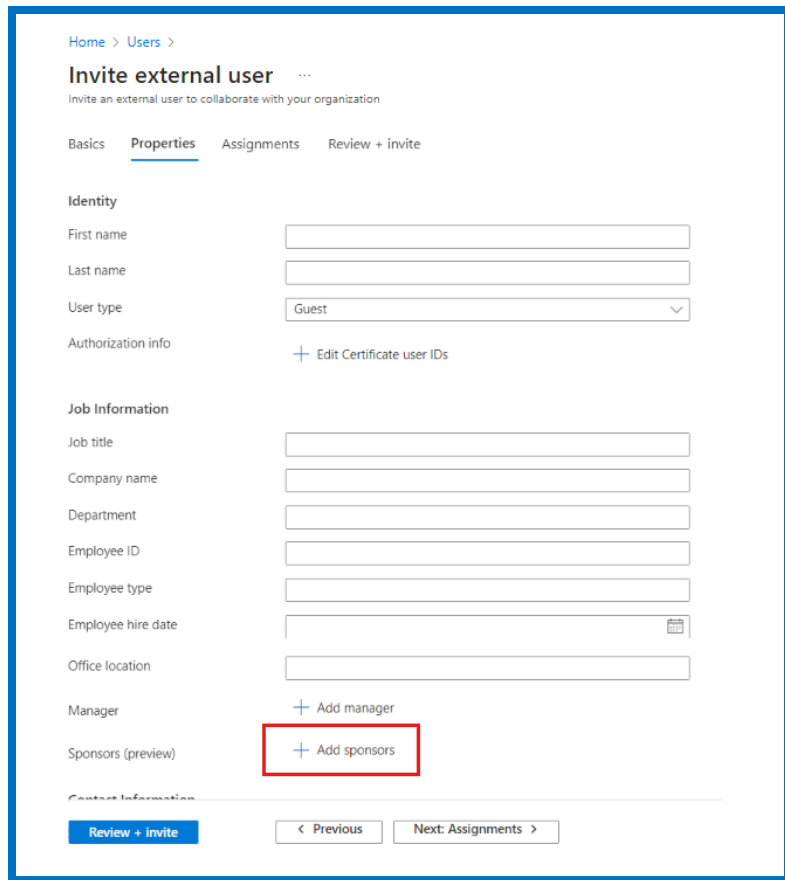
Quick actions

Edit properties

After invitation redemption

Guest Sponsor (Public Preview)

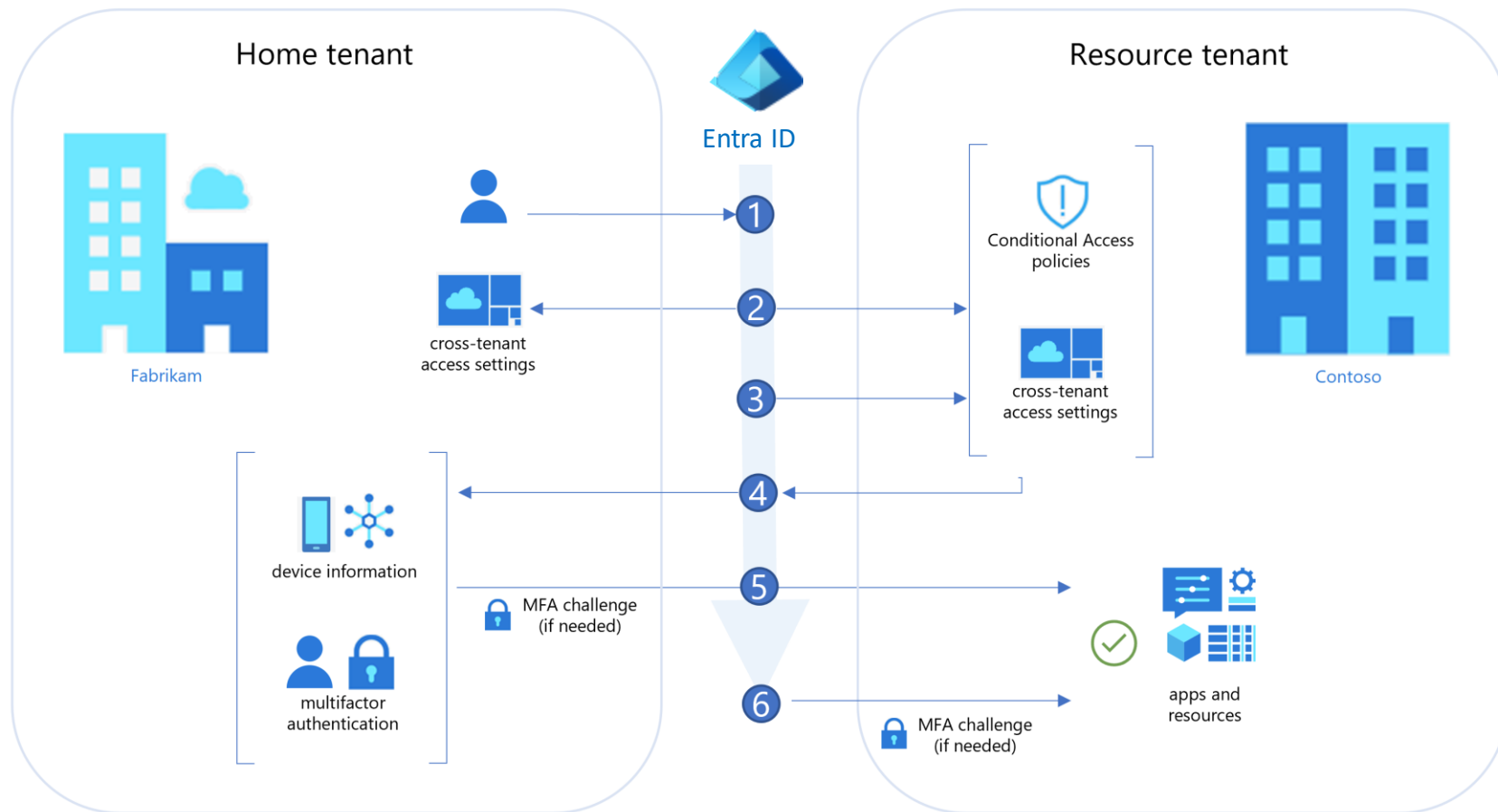
- Sponsors are the person or a group who invited the guest to the organization
- By implementing the sponsor feature, you can identify a responsible individual or group for each guest.
- This allows you to track who invited the guest and to help with accountability.
- If you send an invite to a guest, you'll automatically become the sponsor of that guest, unless you specify another user in the invite process
- You can have a max of five sponsors per single guest user

A screenshot of the 'Invite external user' form in the NIC Cloud Connect interface. The form is titled 'Invite external user' with a three-dot menu icon to its right. Below the title is a subtitle: 'Invite an external user to collaborate with your organization'. The form has four tabs: 'Basics', 'Properties' (which is selected and underlined), 'Assignments', and 'Review + invite'. The 'Properties' tab contains several sections: 'Identity' with fields for 'First name', 'Last name', and 'User type' (a dropdown menu currently showing 'Guest'); 'Authorization info' with a link '+ Edit Certificate user IDs'; 'Job Information' with fields for 'Job title', 'Company name', 'Department', 'Employee ID', 'Employee type', 'Employee hire date' (with a calendar icon), and 'Office location'; 'Manager' with a link '+ Add manager'; and 'Sponsors (preview)' with a link '+ Add sponsors' that is highlighted by a red rectangular box. At the bottom of the form, there is a 'Review + invite' button and two navigation links: '< Previous' and 'Next: Assignments >'. The breadcrumb 'Home > Users >' is visible at the top left of the form area.

Demo

Understanding External Guest Permissions
& Inviting External Users

Authentication and Conditional Access Flow for External ID



Converting a Guest User to a Member (UI)

- You can convert UserType from Member to Guest and vice-versa by editing the user's profile in the Azure portal or by using PowerShell
- Authentication for B2B members is performed by the external user's home tenant
- Should the user continue to have access to the same resources? Should a mailbox be assigned?
- Guest users have default restricted directory permissions.
- Guests can manage their own profile, change their own password, and retrieve some information about other users, groups, and apps. However, they can't read all directory information.

This view only contains properties that can be updated. [Learn more](#)

Showing 6 results under "Identity"

Display name	<input type="text" value="Andy Malone"/>
First name	<input type="text" value="Andy"/>
Last name	<input type="text" value="Malone"/>
User principal name	<input type="text" value="andrew.malone_qual..."/> @ <input type="text" value="M365x73105249.on..."/> Domain not listed
User type	<div><div>Guest</div><div>Member</div><div>Guest</div></div>
Authorization info	

Converting a Guest User to a Member (PowerShell)

1 - Update the UPN

```
Set-MsolUserPrincipalName -UserPrincipalName  
"JaneDoe_contoso.com#EXT#@contoso.onmicrosoft.com" -NewUserPrincipalName  
"janedoe@contoso.com"
```

2 – Set the Usage Location

```
Set-MsolUser -UserPrincipalName janedoe@contoso.com -UsageLocation "US"
```

3 –Set a Default Password

```
Set-MsolUserPassword -UserPrincipalName "janedoe@contoso.com" -  
ForceChangePassword $true
```

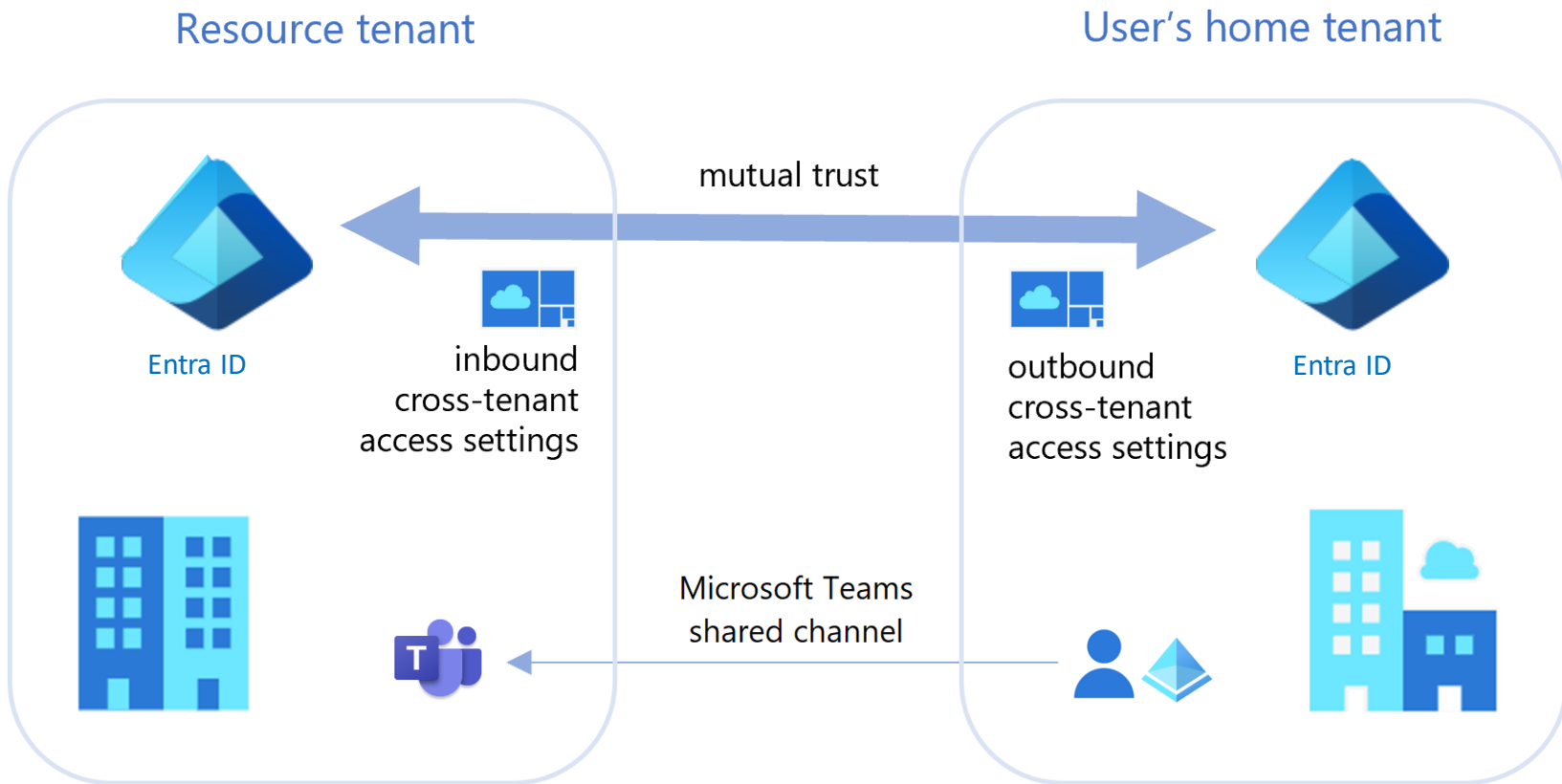
4 –Assign a License

```
Set-MsolUserLicense -UserPrincipalName "janedoe@contoso.com" -AddLicenses  
"contoso:ENTERPRISEPACK"
```

B2B Direct Connect

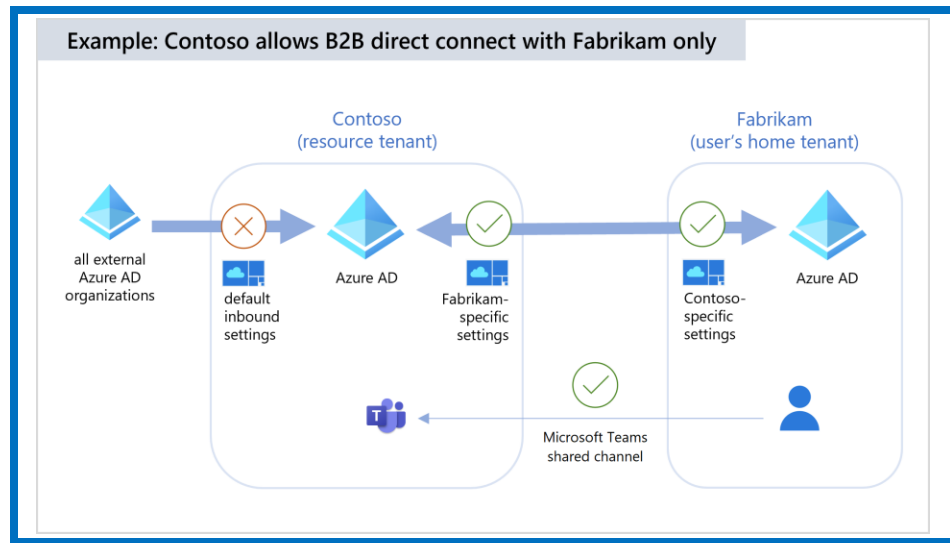
Cross-tenant access settings

B2B – Direct Connect



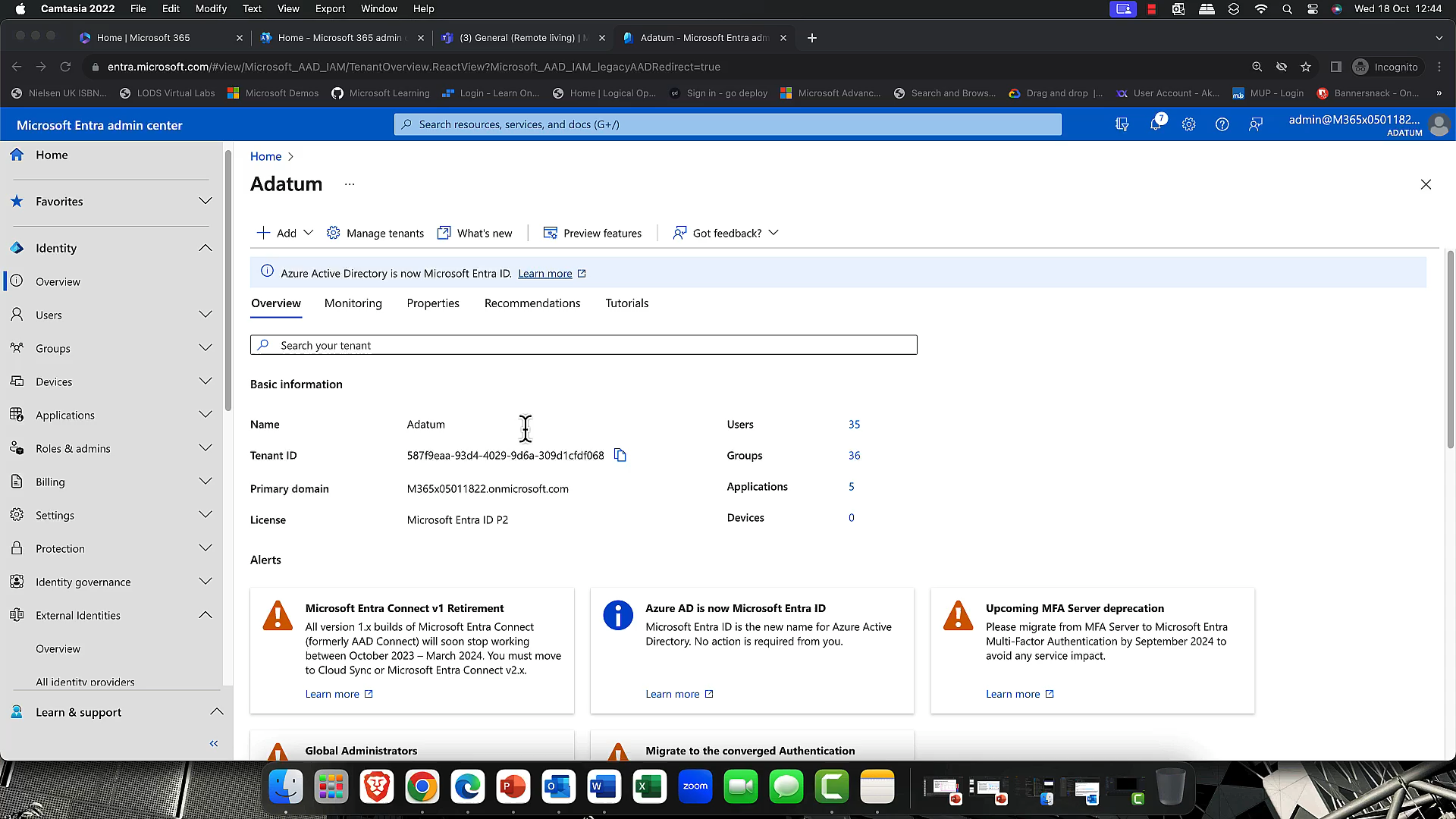
B2B Direct Connect

- A mutual trust relationship with another Entra org for seamless collaboration
- This feature currently works with Microsoft Teams shared channels
- Users from both orgs can work together using their home credentials and a shared channel in Teams, without having to be added to each other's organizations as guests
- B2B Direct connect is part of External Identities, so no additional license is required, other than P1



Demo

B2B Direct Connect & Teams Shared Channels



Home | Microsoft 365

Home - Microsoft 365 admin

(3) General (Remote living)

Adatum - Microsoft Entra admin

entra.microsoft.com/#view/Microsoft_AAD_IAM/TenantOverview.ReactView?Microsoft_AAD_IAM_legacyAADRedirect=true

Nielsens UK ISBN... LODS Virtual Labs Microsoft Demos Microsoft Learning Login - Learn On... Home | Logical Op... Sign in - go deploy Microsoft Advanc... Search and Brows... Drag and drop |... User Account - Ak... MUP - Login Bannersnack - On...

Microsoft Entra admin center

Search resources, services, and docs (G+)

admin@M365x0501182... ADATUM

Home

Favorites

Identity

Overview

Users

Groups

Devices

Applications

Roles & admins

Billing

Settings

Protection

Identity governance

External Identities

Learn & support

Home >

Adatum

+ Add Manage tenants What's new Preview features Got feedback?

Azure Active Directory is now Microsoft Entra ID. [Learn more](#)

Overview Monitoring Properties Recommendations Tutorials

Search your tenant

Basic information

Name	Adatum	Users	35
Tenant ID	587f9eaa-93d4-4029-9d6a-309d1cfd068	Groups	36
Primary domain	M365x05011822.onmicrosoft.com	Applications	5
License	Microsoft Entra ID P2	Devices	0

Alerts

Microsoft Entra Connect v1 Retirement

All version 1.x builds of Microsoft Entra Connect (formerly AAD Connect) will soon stop working between October 2023 – March 2024. You must move to Cloud Sync or Microsoft Entra Connect v2.x.

[Learn more](#)

Azure AD is now Microsoft Entra ID

Microsoft Entra ID is the new name for Azure Active Directory. No action is required from you.

[Learn more](#)

Upcoming MFA Server deprecation

Please migrate from MFA Server to Microsoft Entra Multi-Factor Authentication by September 2024 to avoid any service impact.

[Learn more](#)

Global Administrators

Migrate to the converged Authentication

B2B – Direct Connect Sign in Logs

Home > Contoso

Contoso | Audit logs

Azure Active Directory

Download
Export Data Settings
Refresh
Columns
Got feedback?

Date: Last 24 hours
Show dates as: Local
Service: All
Category: All
Activity: All
Add filters

Date	Service	Category	Status
12/2/2021, 9:21:01 AM	Core Directory	CrossTen	Success
12/2/2021, 9:21:01 AM	Core Directory	Policy	Success
12/2/2021, 9:21:01 AM	Core Directory	Policy	Success
12/2/2021, 12:14:14 AM	Core Directory	Applicati	Success
12/2/2021, 12:13:38 AM	Invited Users	UserMan	Success
12/2/2021, 12:13:38 AM	Invited Users	UserMan	Success
12/2/2021, 12:13:38 AM	Core Directory	UserMan	Success
12/1/2021, 5:50:00 PM	Entitlement Management	Entitleme	Success
12/1/2021, 5:41:51 PM	Entitlement Management	Entitleme	Success
12/1/2021, 5:41:50 PM	Entitlement Management	Entitleme	Success
12/1/2021, 5:34:39 PM	Core Directory	UserMan	Success
12/1/2021, 5:32:23 PM	Entitlement Management	Entitleme	Success
12/1/2021, 5:28:58 PM	Core Directory	RoleMan	Success
12/1/2021, 5:28:56 PM	Invited Users	UserManagement	Success
12/1/2021, 5:28:56 PM	Core Directory	UserManagement	Success
12/1/2021, 12:35:49 PM	B2C	ResourceManagement	Success

Category

Search

- ☐ ApplicationManagement
- ☐ AssociationInvitation
- ☐ AttributeManagement
- ☐ Authentication
- ☐ Authorization
- ☐ AuthorizationPolicy
- ☐ CertificateBasedAuthConfiguration
- ☐ CompanyAssociation
- ☐ Contact
- ☒ CrossTenantAccessSettings
- ☐ Device
- ☐ ...

Apply

Enterprise applications

Devices

App registrations

Identity Governance

Application proxy

Custom security attributes (Preview)

Licenses

Azure AD Connect

Custom domain names

Mobility (MDM and MAM)

Password reset

Company branding

User settings

Properties

Security

Monitoring

Sign-in logs

Audit logs

Provisioning logs

6/29/2021, 3:23:52 PM

b5b5bba1-a936-429d-8753...

Abbe Blank

Microsoft Teams Web Client

Success

6/29/2021, 3:23:27 PM

b99accfb-a553-464a-b891-...

Abbe Blank

Microsoft invitation Accept...

Success

6/29/2021, 3:22:19 PM

e1d554ea-11ad-46cc-afb9-...

Abbe Blank

Office365 Shell WCSS-Client

Success

6/29/2021, 3:22:17 PM

9fcbbe5b-ebes-4c80-b74a-...

Abbe Blank

Office365 Shell WCSS-Client

Success

6/29/2021, 3:22:16 PM

f2adb87b-165b-4770-9365-...

Abbe Blank

Office365 Shell WCSS-Client

Success

6/29/2021, 3:22:09 PM

f2adb87b-165b-4770-9365-...

Abbe Blank

Office 365 Exchange Online

Success

6/29/2021, 3:22:08 PM

2116480d-4c1a-43ed-9a71-...

Abbe Blank

Office 365 Exchange Online

Success

6/29/2021, 3:21:50 PM

bbd5ba98-9b57-4871-b801-...

Abbe Blank

Azure Portal

Success

6/29/2021, 3:21:48 PM

bb71127d-c10e-4f5d-ba39-...

Abbe Blank

Azure Portal

Interrupt

Basic info

Location

Device info

Authentication Details

Conditional Access

Report-only

Additional Details

Date

6/29/2021, 3:27:48 PM

User

Abbe Blank

Request ID

89f7f09c-184a-4c14-8697-81397a15a501

Username

abblank@m365e64337.onmicrosoft.co

Correlation ID

cb116150-ac88-4905-ae14-e720ef1062ae

User ID

7f1994b4-1615-4d05-81ba-21489d23ab93

Authentication requirement

Single-factor authentication

Sign-in identifier

Status

Success

User type

Guest

Continuous access evaluation

No

Cross tenant access type

B2B direct connect

Application

Microsoft Teams Web Client

Application ID

5e3ce6cd-2b1f-4285-bd4b-75ee78787346

Resource

Microsoft Graph

Resource ID

00000003-0000-0000-c000-000000000000

Resource tenant ID

8f025aab-d8bc-4300-9fa3-af07298e4ed8

Home tenant ID

02fe7e24-be52-47d2-8806-b4da26d9db9a

Client app

Token issuer type

Azure AD

Token issuer name

Latency

137ms

Flagged for review

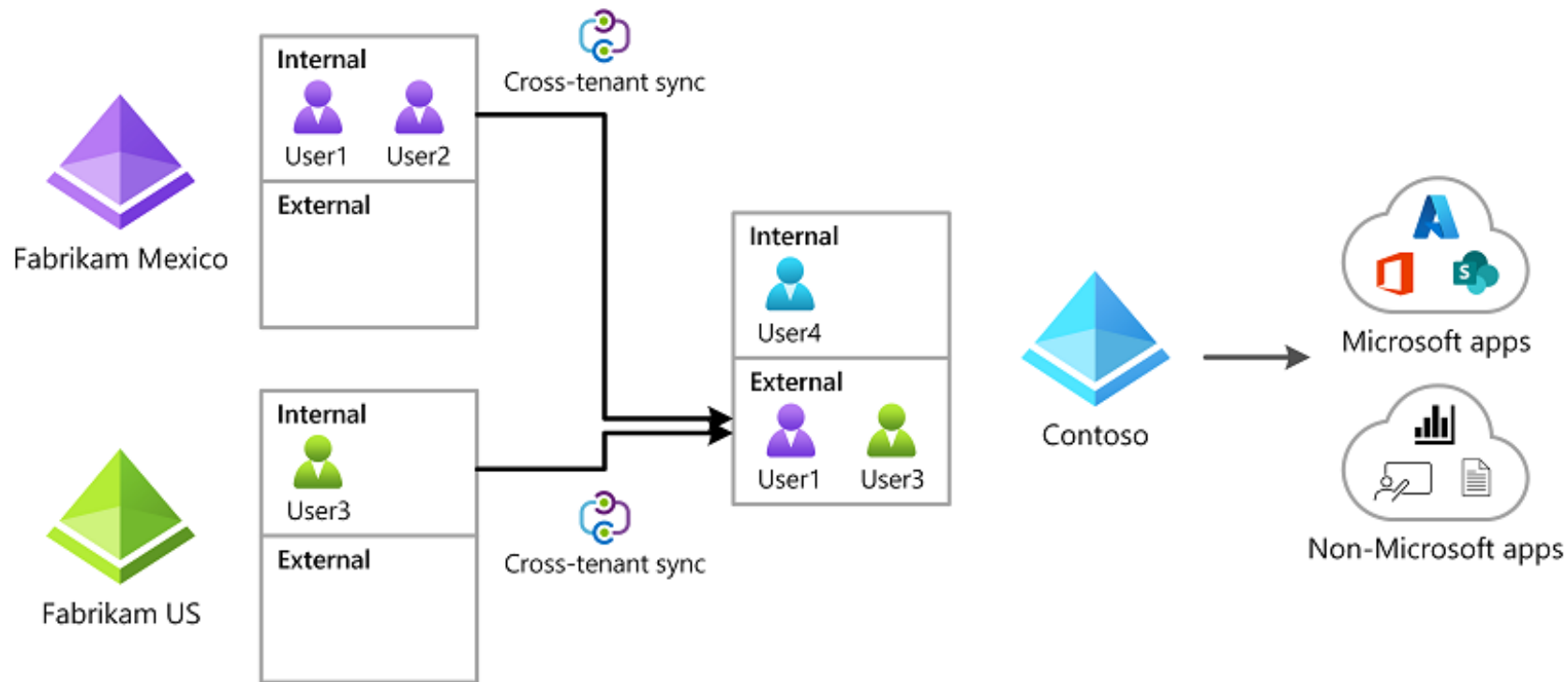
No

User agent

Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.114 Safari/537.36 Edg/91.0.864.59

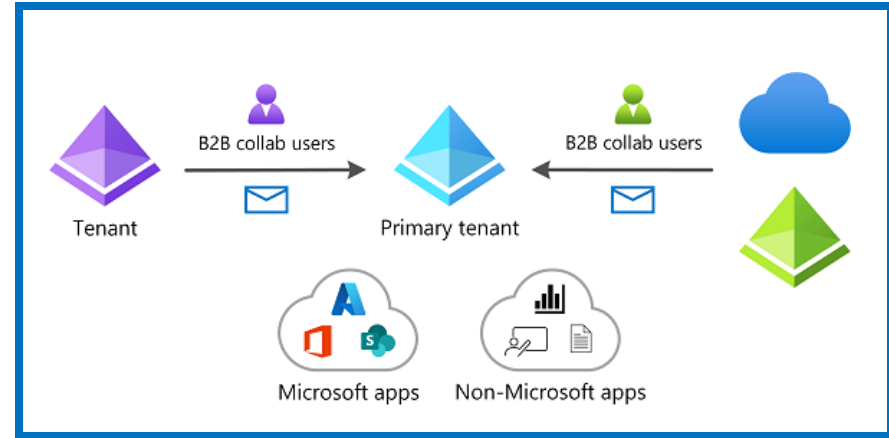
Multi Tenant Collaboration & Cross Tenant Synchronization

Cross Tenant Synchronization (T2T)



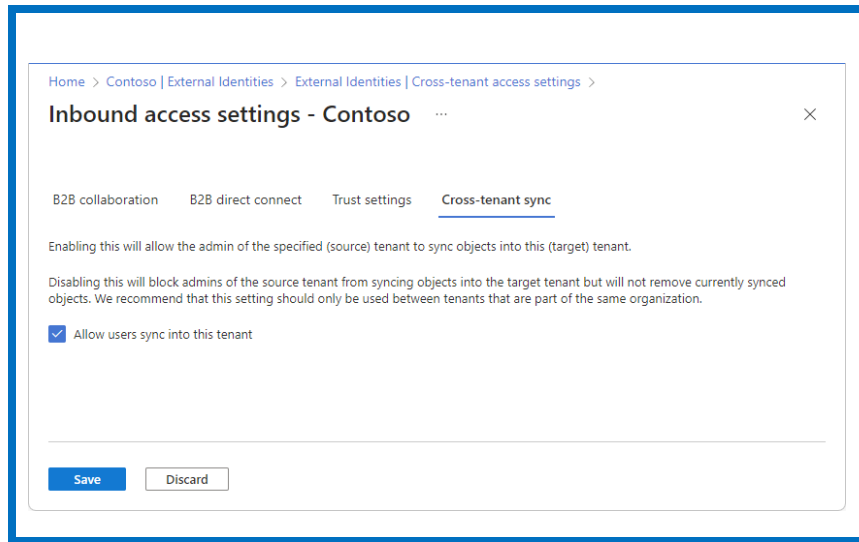
Cross Tenant Synchronization

- Automatically create B2B users within your org and provide access to the applications they need, without creating and maintaining custom scripts.
- Improves the user experience and ensures that users can access resources, without receiving an invitation email and having to accept a consent prompt in each tenant.
- Automatically update users and remove them when they leave the organization.



Cross Tenant Synchronization Limitations

- Synchronized users will have the same cross-tenant Teams and Microsoft 365 experiences available to any other B2B collaboration user.
- Doesn't synchronize groups, devices, or contacts.
- Cross-tenant synchronization isn't supported within the Microsoft Azure operated by 21Vianet cloud
- Synchronization is only supported between two tenants in the same cloud
- Cross-cloud isn't currently supported



Cross Tenant Synchronization Properties

When you configure cross-tenant sync, you define a trust relationship between a source tenant and a target tenant. Cross-tenant synchronization has the following properties

- It's a push process from the source tenant, not a pull process from the target tenant.
- Syncing external users from the source tenant is not supported
- Users in scope for synchronization are configured in the source tenant
- Attribute mapping is configured in the source tenant
- Extension attributes are supported
- Target tenant admins can stop a synchronization at any time

Cross Tenant Synchronization Properties

How does cross-tenant sync manage existing B2B users?

- Cross-tenant sync uses an internal attribute called the **alternativeSecurityIdentifier** to uniquely match an internal user in the source tenant with an external / B2B user in the target tenant.
- Cross-tenant synchronization updates existing B2B users, ensuring that each user has only one account.
- Cross-tenant synchronization cannot match an internal user in the source tenant with an internal user in the target tenant (both type member and type guest).

Attribute Mapping

Save X Discard

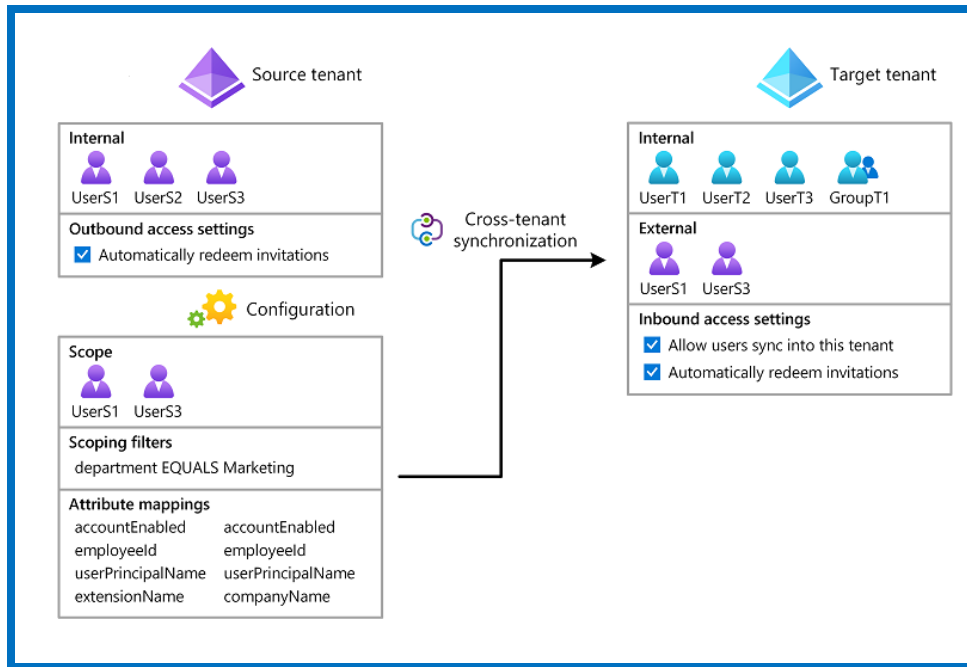
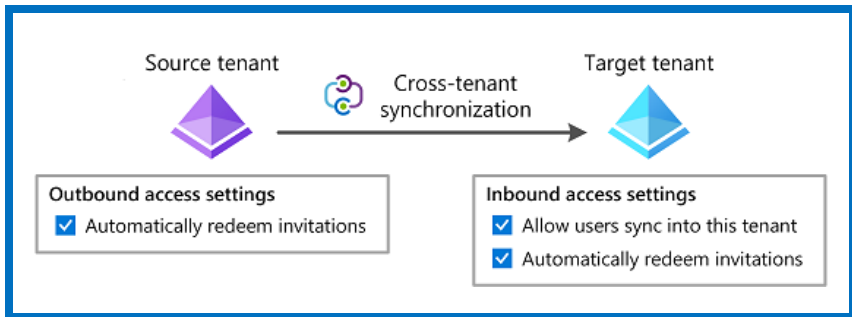
Attribute Mappings

Attribute mappings define how attributes are synchronized between Azure Active Directory and Azure Active Directory (target tenant)

Azure Active Directory Attribute	Azure Active Directory (target tenant) ...	Matching precedence	Remove
AltSecIdFromNetId@netId	alternativeSecurityIds	1	Delete
IsSoftDeleted	IsSoftDeleted		Delete
accountEnabled	accountEnabled		Delete
streetAddress	streetAddress		Delete
city	city		Delete
state	state		Delete
postalCode	postalCode		Delete
country	country		Delete
department	department		Delete
employeId	employeId		Delete
displayName	displayName		Delete
givenName	givenName		Delete
jobTitle	jobTitle		Delete
mailNickname	mailNickname		Delete
physicalDeliveryOfficeName	physicalDeliveryOfficeName		Delete
preferredLanguage	preferredLanguage		Delete

Cross Tenant Synchronization Questions

- Each synced user must have a P1 license in their home/source tenant
- Sync cycle is fixed to every 40mins, Sync duration varies.
- Initial sync cycle is longer than the following incremental cycles.
- Config via UI or PowerShell



<https://learn.microsoft.com/en-us/azure/active-directory/multi-tenant-organizations/cross-tenant-synchronization-configure-graph?tabs=ms-powershell>

Microsoft 365 Multi Tenant Collaboration (Preview)

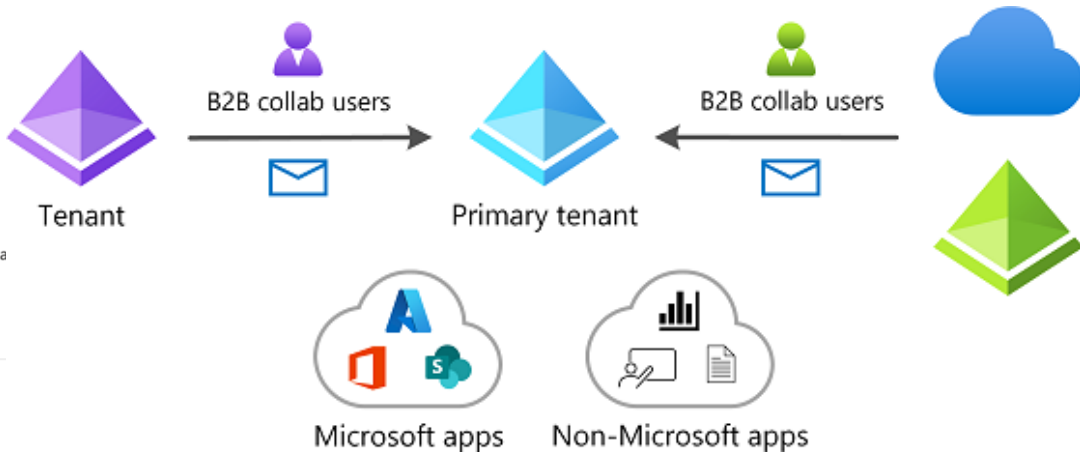
Multitenant collaboration Preview

A multitenant organization is a group of mutually trusted Microsoft Entra ID tenants. Through multitenant collaboration, users can seamlessly access applications and resources across the sa organization, even if they are hosted in different tenants. [Learn more about multitenant collaboration](#)

[Share users](#) [Refresh](#)

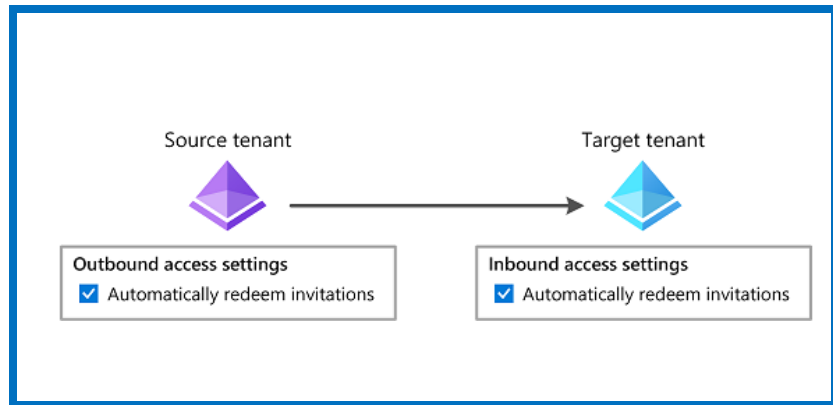
Contoso

Associated tenants	Membership status	Outbound sync status	Role
<input type="checkbox"/> Contoso (your tenant)	Active	<input type="radio"/> Not applicable	Member
<input type="checkbox"/> Adatum	Active	<input checked="" type="radio"/> Enabled	Owner



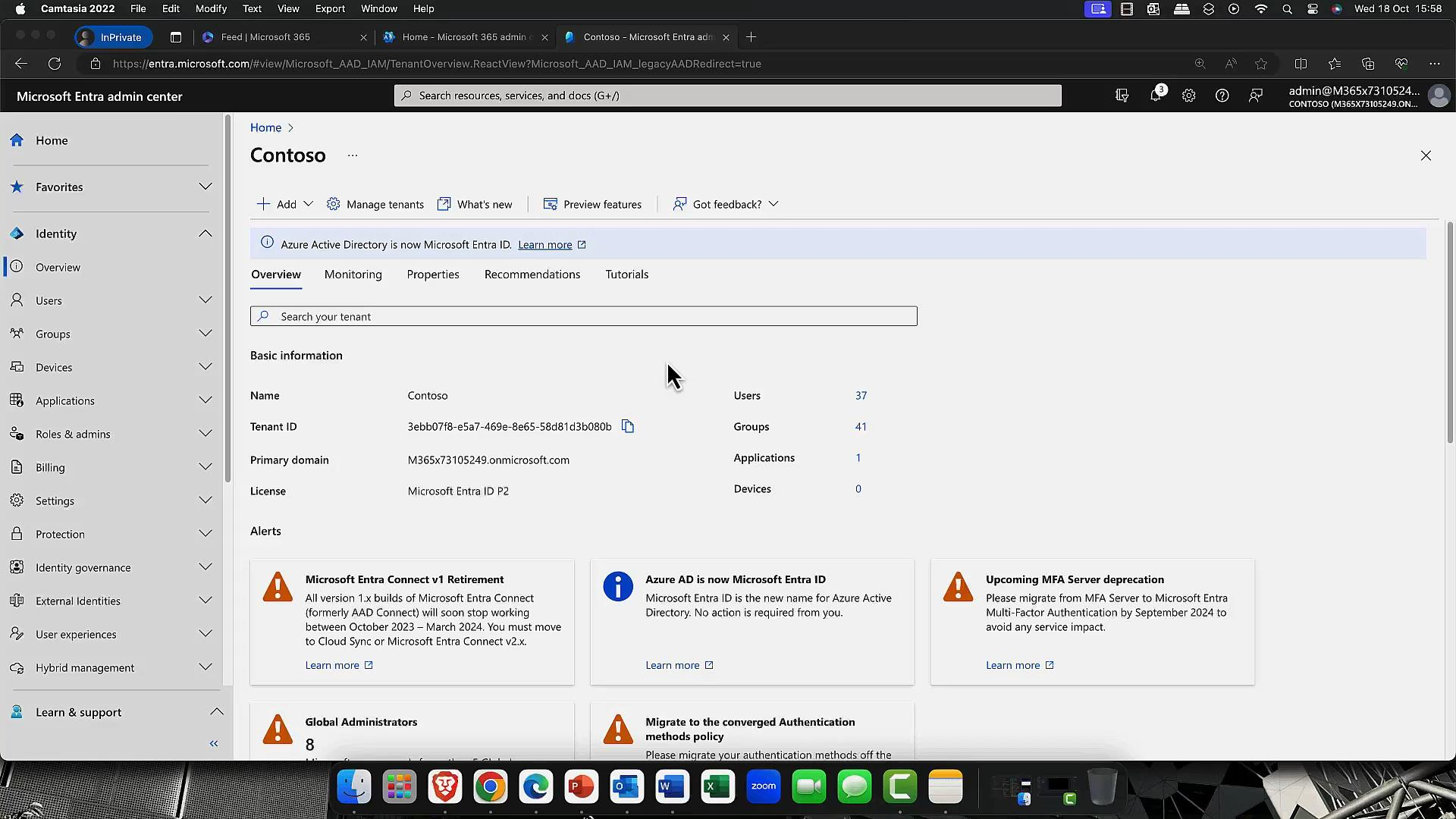
Microsoft 365 Multi Tenant Collaboration

- You can set up a multitenant org in Microsoft 365 to facilitate collaboration and resource access between tenants
- Provides a more seamless collaboration experience between the users in different tenants when searching, using Teams and, and collaborating on files
- Tenant that creates the multitenant org is known as the owner while others that join are known as members
- During Setup Configures Directory Sync in Entra ID



Demo

Multi-Tenant Collaboration &
Cross Tenant Synchronization



Camtasia 2022

File

Edit

Text

View

Export

Window

Help

InPrivate

Feed | Microsoft 365

Home - Microsoft 365 admin

Contoso - Microsoft Entra admin

https://entra.microsoft.com/#view/Microsoft_AAD_IAM/TenantOverview.ReactView?Microsoft_AAD_IAM_legacyAADRedirect=true

Search resources, services, and docs (G+)

admin@M365x7310524...
CONTOSO (M365X73105249.ON...)

Home

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Identity

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Roles & admins

Billing

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Protection

Identity governance

External Identities

User experiences

Hybrid management

Learn & support

Home >

Contoso

+ Add

Manage tenants

What's new

Preview features

Got feedback?

Azure Active Directory is now Microsoft Entra ID. [Learn more](#)

OverviewMonitoringPropertiesRecommendationsTutorials

Search your tenant

Basic information

Name	Contoso	Users	37
Tenant ID	3ebb07f8-e5a7-469e-8e65-58d81d3b080b	Groups	41
Primary domain	M365x73105249.onmicrosoft.com	Applications	1
License	Microsoft Entra ID P2	Devices	0

Alerts

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Global Administrators

8

Migrate to the converged Authentication methods policy

Please migrate your authentication methods off the

Multi Tenant Collaboration Current Limitations

- Max of 5 tenants in the multitenant organization is supported.
- Max of 100,000 users per tenant is supported.* (MIM Option)
- Teams on the web, macOS, Teams Rooms, and VDI/AVD Aren't supported.
- Ability to grant or revoke permission to receive notifications from other tenants and to switch between tenants isn't supported on mobile.
- People in your organization links may not work for users from another tenant if their account had originally been a guest and they had previously accessed SharePoint resources.
- It might take up to 7 days for a user to appear in search once Synced
- Support for a guest UserType of member in Power BI is currently in preview

Session Conclusions

- Identity Types – B2B Vs T2T Vs B2C
- Understand Members Vs Users
- External Collaboration Settings explained
- Cross Tenant Collaboration
- Cross Tenant Synchronization (T2T
- Microsoft 365 Multi Tennant Collaboration
- Demos Demos!
- Conclusions





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