

# Mastering Secure External Sharing in Microsoft 365: A Comprehensive Guide for Structured and Unstructured Sharing

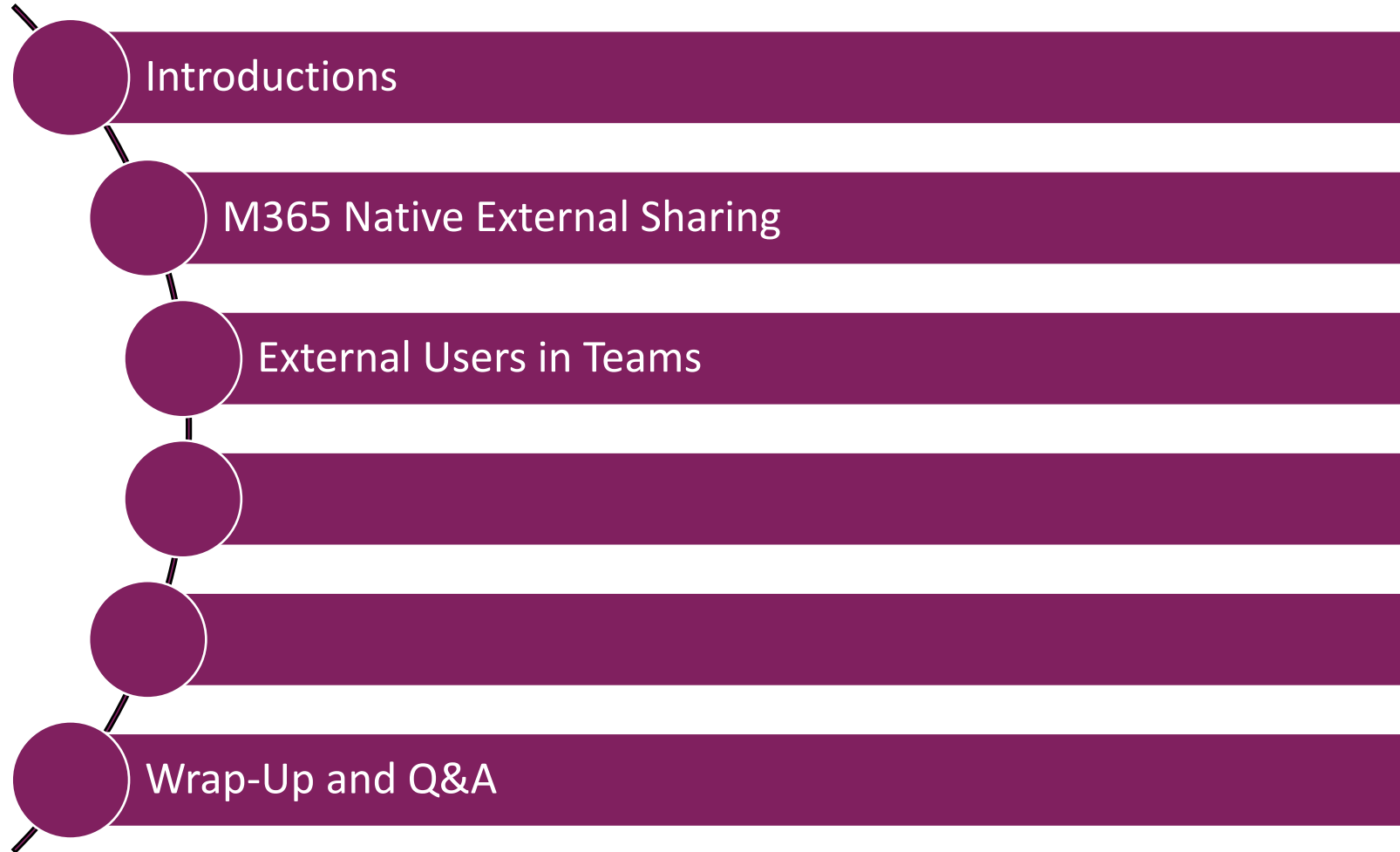
Saturday November 25<sup>th</sup>, 2023

# Peter Carson

- President, Extranet User Manager and Envision IT
- 13-time Office Apps and Services Microsoft MVP
- [peter@envisionit.com](mailto:peter@envisionit.com)
- [blog.petercarson.ca](http://blog.petercarson.ca)
- [www.extranetusermanager.com](http://www.extranetusermanager.com)
- President, Toronto SharePoint User Group

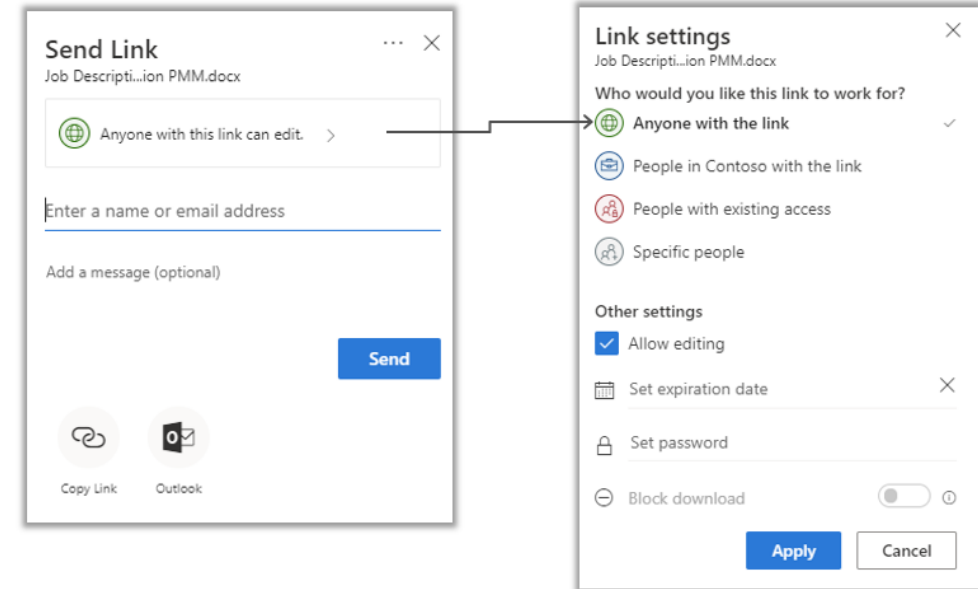


# Agenda



# What is Unstructured Sharing in Microsoft365?

- External Sharing in Microsoft 365 strongly supports ad-hoc collaboration
- **Unstructured sharing involves** sharing documents with a few to a few dozen external people
- Secure Link sharing to sites, libraries, and documents



# Microsoft 365 Native External Sharing

1. Who will you be sharing with? Is there a member database to interface with? → Any type of external user
2. Self-registration option or invitation only? Who approves new registrations? → Invitation only
3. How will your external users authenticate? → Microsoft 365 / Azure AD, Microsoft Account, One Time Passcode, Gmail, Facebook
4. What interactions are your external users going to have? → Any interactions
5. What applications will be accessible? → Microsoft 365 only

# Managing External Sharing

## Control WHO can share to external users

- Everyone
- Only specific people
- No one

## Control WHICH external users can be shared with

- Anyone
- Only authenticated users
- Only authenticated users except specific domains
- Only authenticated users in specific domains
- No one

## Control WHAT can be shared externally

- Anything
- Only specific sites
- Only files without sensitive content

## Control HOW externally shareable links can be used

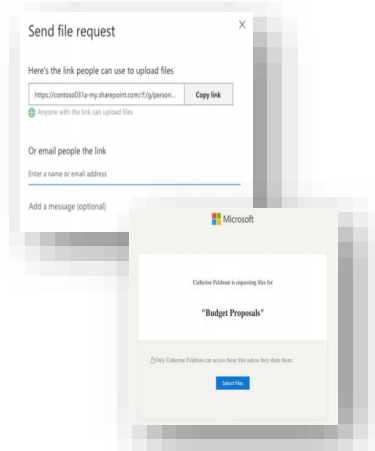
- Default
- Enabled, but not default
- Mandatory expiration date
- Block externally-shareable edit links
- Disabled

# Microsoft 365 Tools for Unstructured Sharing



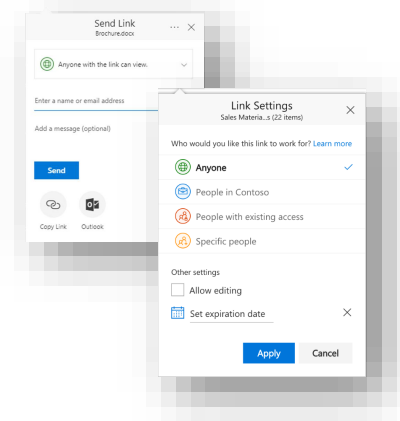
## Request Files with OneDrive for Business

- Ask colleagues and external users to upload files to a folder
- Uploaders can only see their own content



## Shareable Links in SharePoint Online

- Enable edit and/or read access to colleagues or external users
- Can modify granularity of access



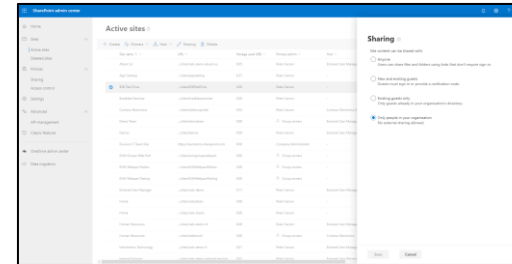
## Teams Shared Channels

- Invite anyone allowed in the host organization's tenant, including external

# Multiple Places to Configure External Sharing



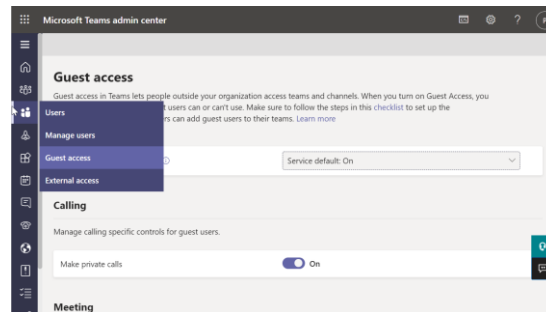
SharePoint Admin



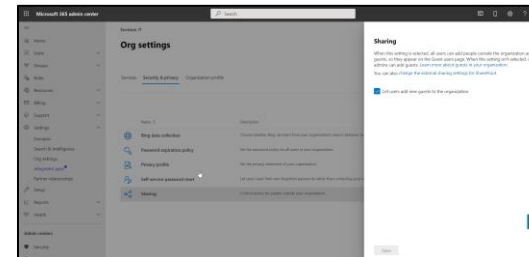
Site Collection Admin



PowerShell



Teams Admin

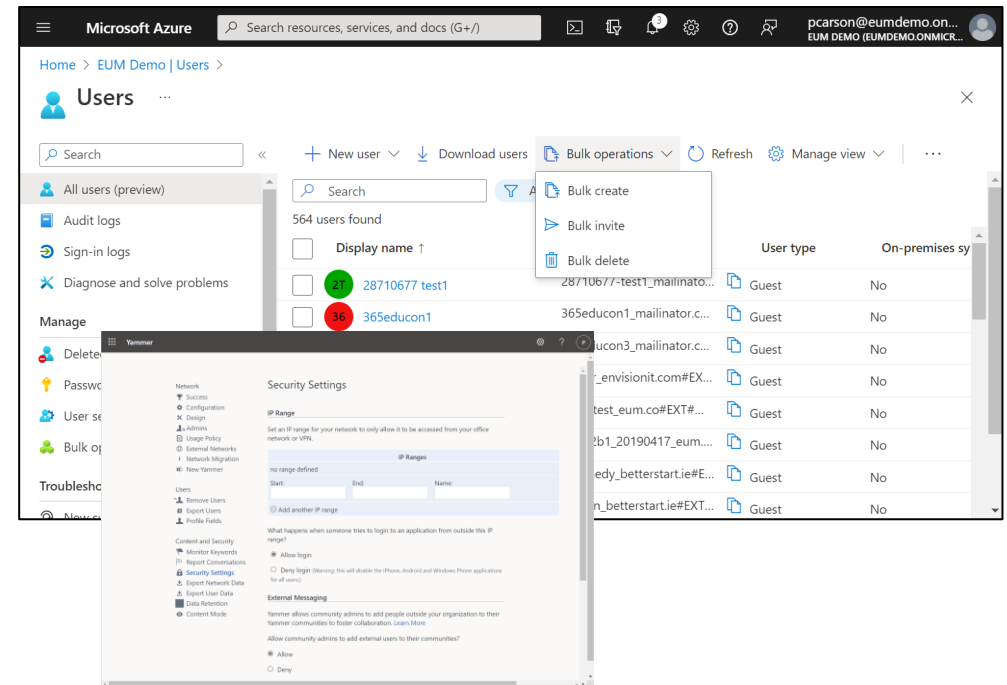


Microsoft 365 Admin



# Invite External Users into your Microsoft 365 with Azure AD/Entra

- Restricted to IT personnel with Azure privileges
- Highly manual: users invited one at a time, or bulk import
- User Guest Inviters have limited capabilities
- Azure AD B2B allows guests to login and access apps and resources in Microsoft 365
- Supported onboarding experiences:
  - Microsoft account via SSO
  - Non-Microsoft account via One-Time Passcode authentication
  - Social users via SSO (with federation)



# Shareable Links

**Send Link**  
Brochure.docx

Anyone with the link can view.

Enter a name or email address

Add a message (optional)

**Send**

Copy Link Outlook

**Link Settings**  
Sales Materia...s (22 items)

Who would you like this link to work for? [Learn more](#)

- Anyone ✓
- People in Contoso
- People with existing access
- Specific people

Other settings

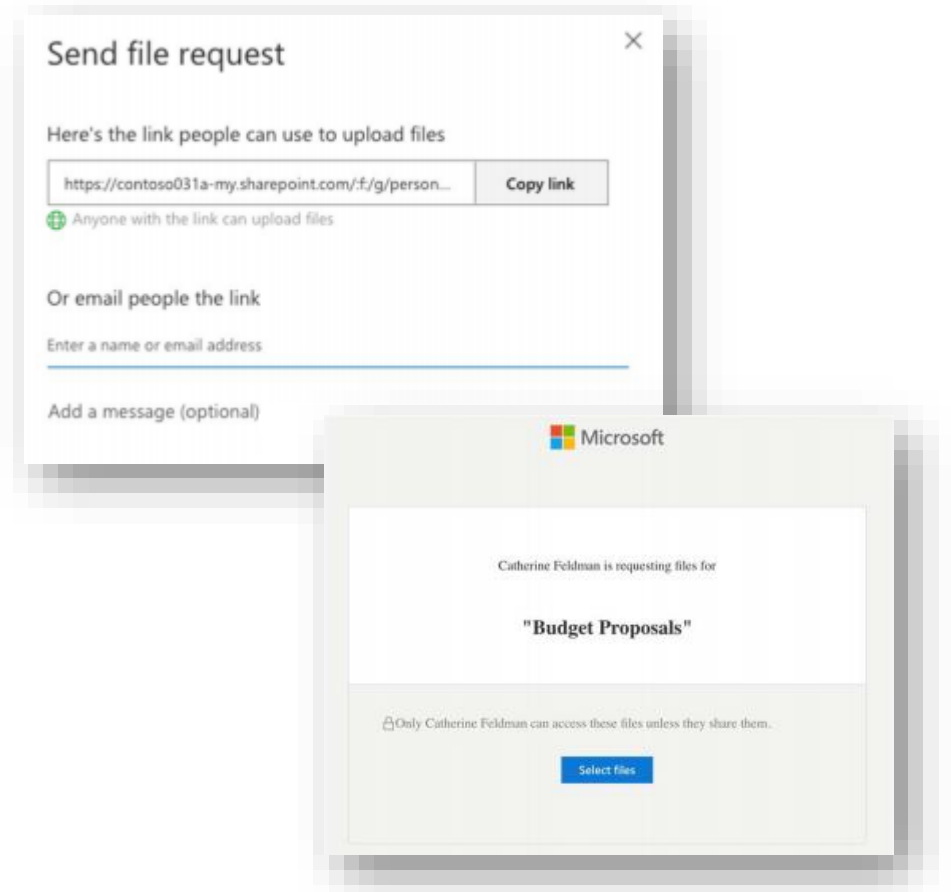
- Allow editing
- Set expiration date

**Apply** Cancel

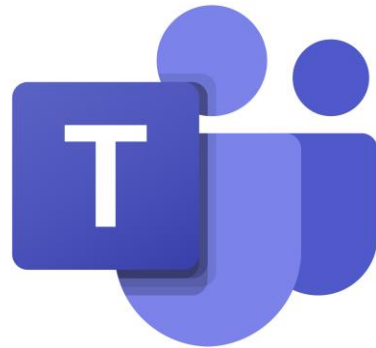


# Request Files

- Ask colleagues and external guest users to upload files to a folder
- Uploaders can only see their own content
- Single link can be used for many uploaders



# External Users in Teams



# External Users in Teams

## B2B Guests

- User exists in the external Team's Azure AD
- All the B2B controls apply
- Guests need to switch their Teams to the external tenant
  - Lose their home tenant's Teams, notifications, feeds
- Can use different browser profiles for different tenants

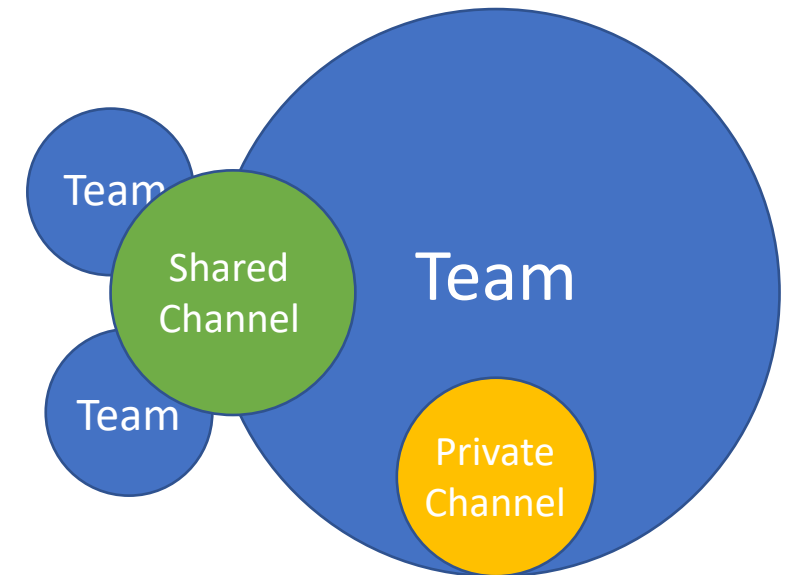
## Teams Connect

- Needs to be enabled on both tenants
  - More for organization to organization sharing
- No tenant switching
- Shared channels appear with all the home Teams and channels
- Also appear in home activity feed

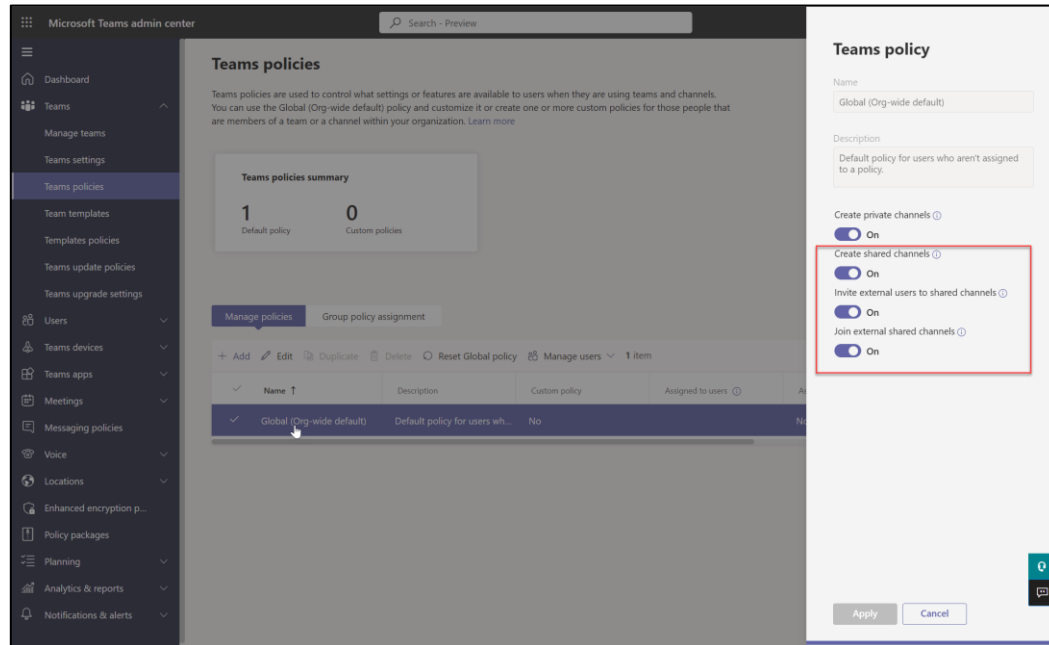
[How We Use Teams Shared Channels | Extranet User Manager](#)

# Shared Channels vs. Private Channels

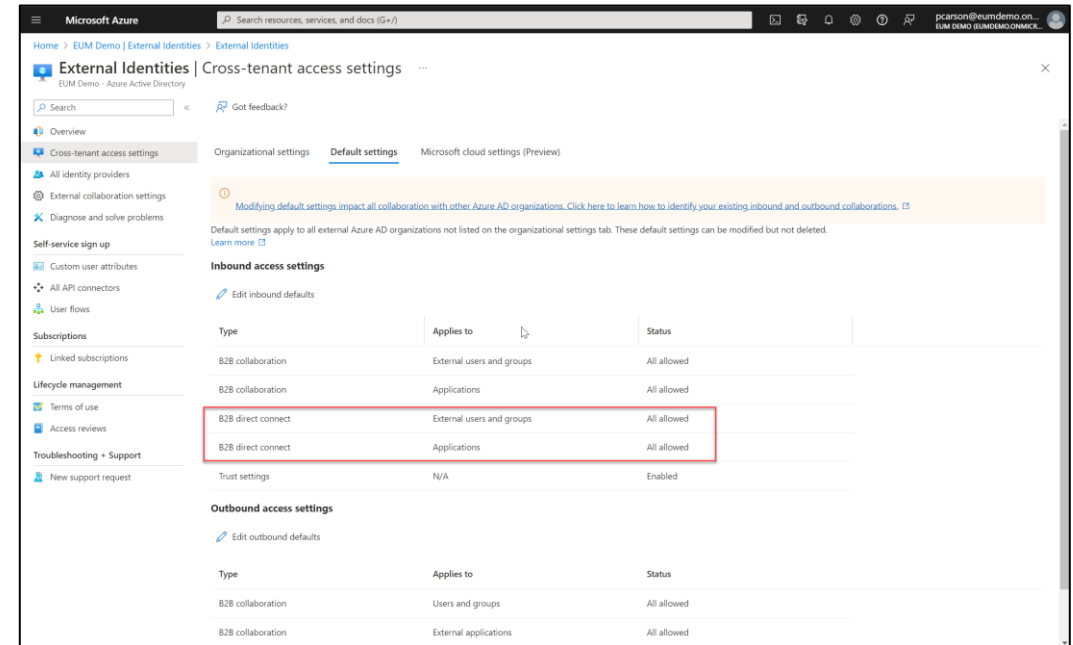
- Both channel styles create a channel site collection for documents
- Both have Teams restrictions on Apps and features
- Private channels let you invite a subset of the parent Team's members
- Shared channels let you invite anyone allowed in the tenant
  - Can also include other Teams
- Department team that is private to that department
  - All company channel for two way communication with the organization
- Outbound connections don't need to be setup
  - Just add members of the tenant



# Configuring Shared Channels



Teams Admin



Azure Portal

Search

EUM Demo PC

**Teams**

Your teams

- Marketing @Envision IT
- EUM Demo - Market... (Ex...**
- EUM - Microsoft Team
  - General
  - EUM Admin
  - Project Updates
- Private Group with Appr...
- Teams Provisioning
  - General
  - Project One

Join or create a team

**EUM Dem...** Posts Files

+ New Upload

All Documents

**Documents**

Name	Modified	Modified By



# Discover the Microsoft Entra product family



## Azure Active Directory

Safeguard your organization with the identity and access management solution that connects people to their apps, devices, and data.



## Microsoft Entra Permissions Management

Discover, remediate, and monitor permission risks across your multicloud infrastructure with a cloud infrastructure entitlement management (CIEM) solution.



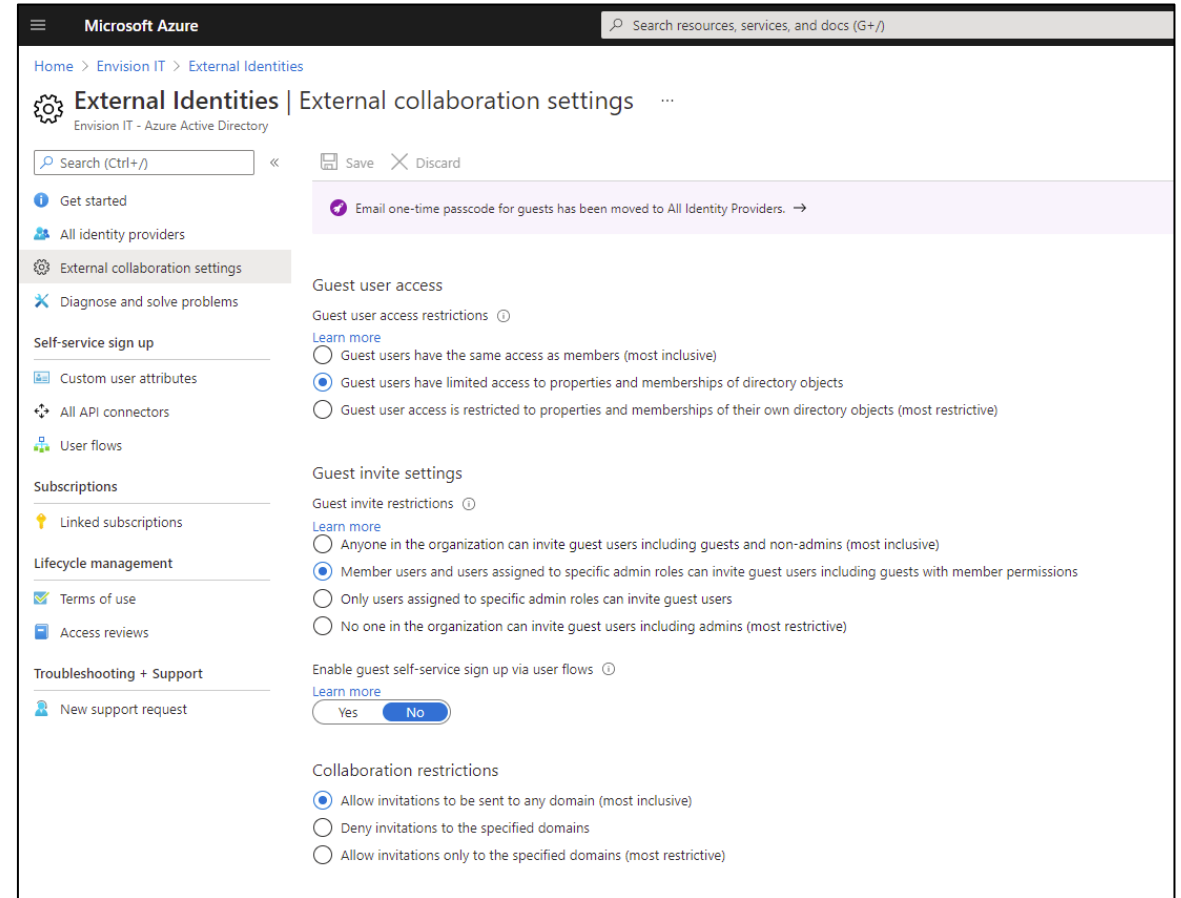
## Microsoft Entra Verified ID

Create, issue, and verify privacy-respecting decentralized identity credentials with an identity verification solution that helps you enable more secure interactions with anyone or anything.

[Microsoft Entra - Secure Identities and Access | Microsoft Security](#)

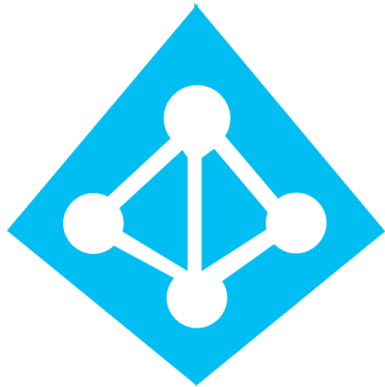
# Entra ID External Identities (B2B)

- Allow outside users access to apps and resources
- “Bring their own identities” to sign in
- External user’s identity provider manages their identity
- You manage access to apps within Azure AD protecting your resources



[External Identities documentation | Microsoft Docs](#)

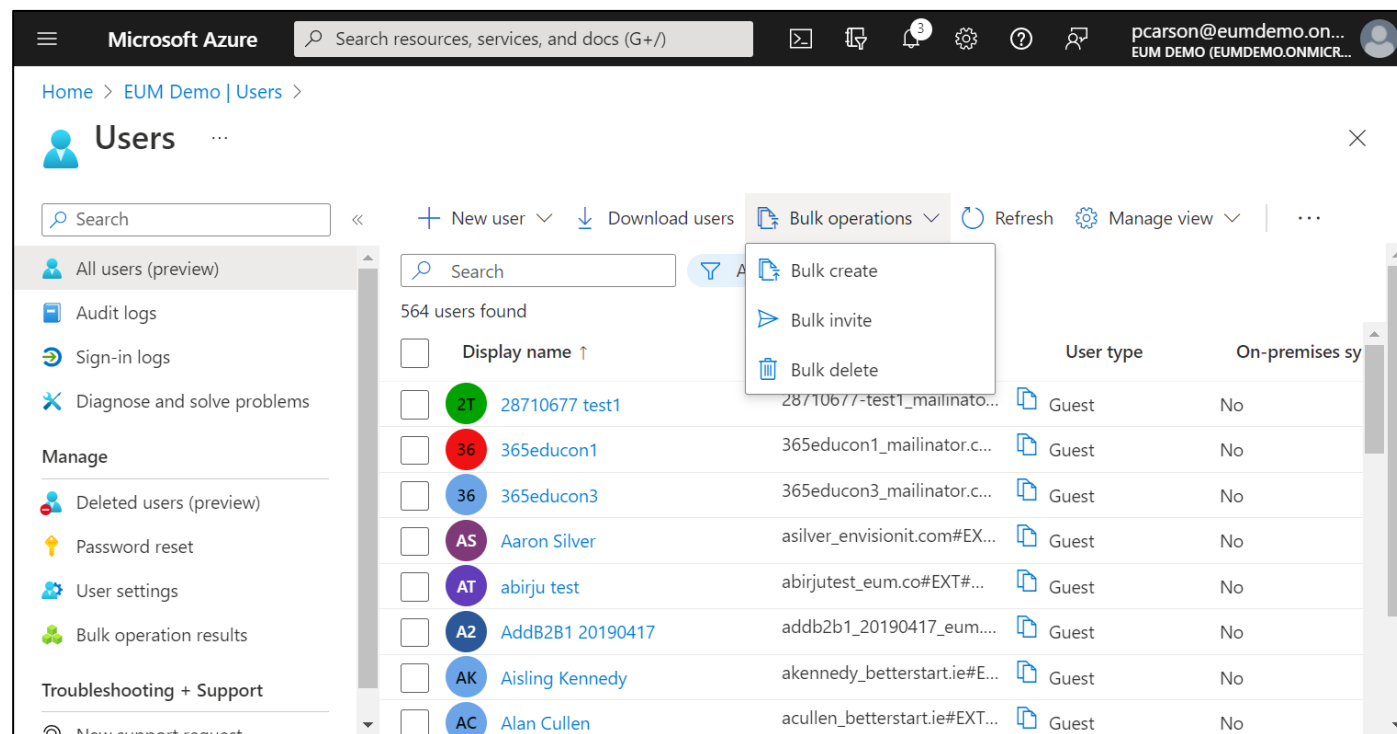
# Entra ID and Microsoft 365



- Entra ID Business to Business
- External users can access Microsoft 365 and any other system exposed through AAD
- Completely free for certain Microsoft 365 workloads for external users
  - SharePoint
  - Yammer
  - Teams
  - Planner
  - Office Online
- MAU billing model only applies to Entra ID Premium features
- First 50,000 MAU are free for Premium features
- Invite as many external users as you'd like

# Azure AD Invitation Process

- Invitations are done through the Entra portals
- Not a business friendly interface
- Can be one at a time, or bulk import by CSV
- Need to have Global Admin, User Administrator, or Guest Inviter role
- Guest Inviters can only set the email and display name
  - Cannot edit or delete after creation
  - Could build a Power App, Power Automate, or Logic App to help with this



# Entra ID B2B Onboarding Experiences

## Existing Microsoft 365

- Logs in with their Entra credentials
- Seamless experience
- Single sign-on if already signed into Microsoft 365
- Also works for Microsoft accounts

## No Azure AD Account

- One time passcode
- Emailed at sign-in
- Valid for 30 minutes
- Low friction, no new account to setup or password to remember
- Validates at each sign in that they still own the email address

## Social User

- Federation with Google and Facebook accounts now also supported
- Same seamless login experience as Microsoft 365
- Need to be an @gmail.com address for Google Federation

# Email One-Time Passcode Authentication

- New way to authenticate Guest users without:
  - Entra ID account
  - Microsoft account
  - Social provider - Google or Facebook
- Temporary passcode is sent to email address
- Passcode is entered to sign in
- One-time passcode is valid for 30 minutes
- Next user session will send a new passcode to the user

# EUM Test Ride

ExtranetUserManager Login / Register

Congratulations on taking the first step toward building a collaborative community

Customize your test drive by choosing the kind of collaboration that fits your business needs

We understand that each business interacts and collaborates with external customers and stakeholders differently. Learn about the different groups within each collaboration tile by clicking below

- Document Sharing and Collaboration**  
Publish, collect and collaborate on documents.
- Dashboards & Analytics**  
Business intelligence that helps create data-driven impact.
- Messaging**  
Group conversations through external Teams and Yammer groups.
- Web Publishing**  
Communicate with public or secure private audiences, in the portal or through SharePoint.
- Learning Management**  
Provide online training and learning management through partner product LMS365.

[portal.eumdemo.com/testride](http://portal.eumdemo.com/testride)

# Microsoft at RSA 2020

> 1.2M	Compromised accounts in January 2020
99.9%	Compromised accounts did not have MFA
99%	Password spray attacks used legacy authentication
> 97%	Replay attacks used legacy authentication

[Entra ID and Microsoft 365 Security Fundamentals | Extranet User Manager](#)



# MFA Scenarios

## Admins

- Require MFA on every authentication

## Members

- Rules can be more flexible
- Don't need MFA on every authentication
- Every x days on the same device
- Additional rules
  - Joined device
  - Geography
  - Identity Protection score
  - Incorrect password

## Guests

- Decide if MFA is required
- User experience and support cost to requiring it
- Doesn't need to be all or nothing
- Sensitivity labels are a good way to control this

# Entra Portal B2B Links

## [Cross Tenant Settings](#)

- B2B Collaboration
- B2B Direct Connect
- Trust Settings

## [Identity Providers](#)

- Microsoft
- One-Time Passcode
- Google
- Facebook
- Custom SAML / WS-Federation

## [External Collaboration Settings](#)

- Access, invite, and collaboration restrictions

## [Self-Service Sign Up](#)

- [User Attributes](#)
- [API Connectors](#)
- [User Flows](#)

## [Lifecycle Management](#)

- [Terms of Use](#)
- [Access Reviews](#)

## [Company Branding](#)

### Security

- [Conditional Access](#)
- [Terms of Use](#)

### Monitoring

- [Sign-In Logs](#)
- [Audit Logs](#)
- [Diagnostic Logs](#)

# Entra ID P1 vs. P2

## Entra ID Premium P1

- Multi-factor authentication with Conditional Access
- Hybrid Identities
- Password protection (custom banned passwords)
- Advanced Security and Usage Reports
- Conditional Access based on group, location, and device status
- Azure Information Protection integration
- And [Much More](#)

## Entra ID Premium P2

- Everything offered in P1
- Identity Protection
- Privileged Identity Management
- Access reviews
- Entitlement Management (Preview)

# Updates to Entra ID External Identity Licensing

- External identities now count as unique Monthly Active Users (MAU)
- Billing model affects Entra ID B2B and B2C
- Replaces 1:5 billing ratio
- First 50,000 MAUs are free for both Premium P1 and Premium P2 features
- Entra ID Free will remain free unless you need premium Entra ID features for guests

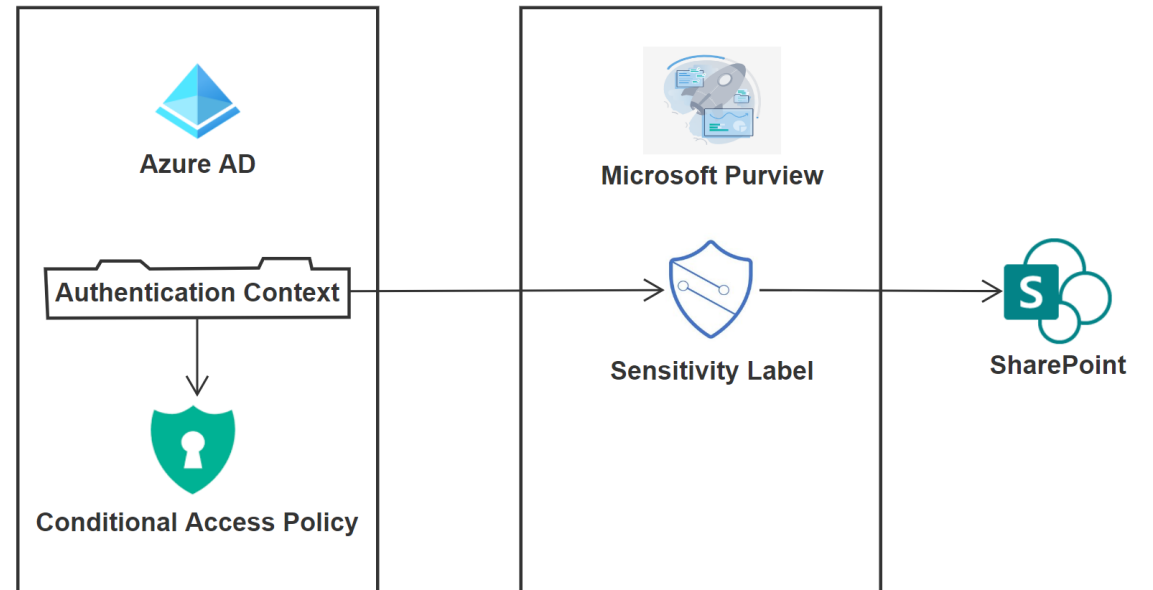
	PREMIUM P1	PREMIUM P2
First 50,000 MAU	\$0/Monthly Active Users	\$0/Monthly Active Users
More than 50,000 MAU	\$0.00416/Monthly Active Users	\$0.020736/Monthly Active Users

\*Features in public preview are subject to future pricing changes.

<https://docs.microsoft.com/en-us/azure/active-directory/external-identities/external-identities-pricing>  
<https://azure.microsoft.com/en-us/pricing/details/active-directory/external-identities/>

# Sensitivity Labels

- Labels can be applied to content in Microsoft 365
  - Emails
  - SharePoint sites and content
- Can be manually or automatically applied
- Can be leveraged in conditional access policies
- Can also enforce rights management and encryption
- Travels with the content regardless of location
- Can be applied to sharing rules
- Requires Office 365 E5 Compliance

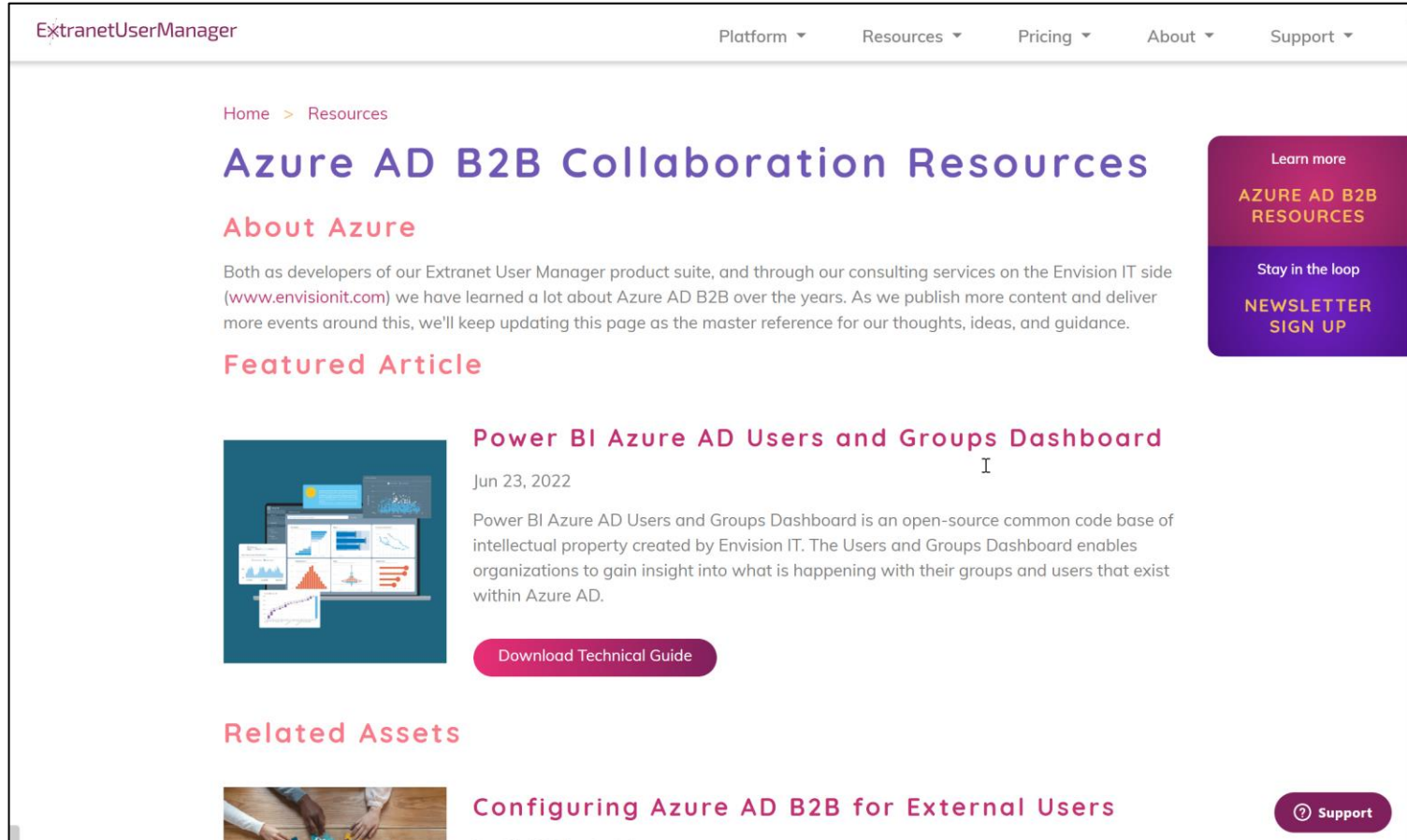


# Sensitivity Labels Walkthrough

# Entra ID B2B Health

- **User Type Not Populated**
  - Users created before Aug 2014 when B2B first launched
- **Mismatch Between Email and UPN**
  - Can cause confusion when signing in
- **Missing Email**
  - Email is required for direct sign in without accepting the Microsoft invitation
- **Unaccepted Invitations**
  - Invitations are no longer needed
  - Users that were invited when it was required and didn't accept can't sign in
  - Resending the invitation still requires them to use the invitation
  - Deleting and re-inviting them allows them to sign in without the invitation
- **Conflicting Microsoft Account**
  - Brings up work/school or personal account dialog
  - Doesn't always prompt
  - Causes confusion

# Entra ID B2B Resources



The screenshot shows the 'Azure AD B2B Collaboration Resources' page on the ExtranetUserManager website. The page features a navigation bar with 'Platform', 'Resources', 'Pricing', 'About', and 'Support' menus. A breadcrumb trail indicates 'Home > Resources'. The main heading is 'Azure AD B2B Collaboration Resources'. Below this, there is a section titled 'About Azure' with a paragraph of text. A 'Featured Article' section highlights 'Power BI Azure AD Users and Groups Dashboard' with a date of 'Jun 23, 2022' and a 'Download Technical Guide' button. A 'Related Assets' section shows 'Configuring Azure AD B2B for External Users'. On the right side, there are two call-to-action buttons: 'Learn more AZURE AD B2B RESOURCES' and 'Stay in the loop NEWSLETTER SIGN UP'. A 'Support' button is located at the bottom right of the page content.

ExtranetUserManager Platform Resources Pricing About Support


Home > Resources

## Azure AD B2B Collaboration Resources

### About Azure

Both as developers of our Extranet User Manager product suite, and through our consulting services on the Envision IT side ([www.envisionit.com](http://www.envisionit.com)) we have learned a lot about Azure AD B2B over the years. As we publish more content and deliver more events around this, we'll keep updating this page as the master reference for our thoughts, ideas, and guidance.

### Featured Article




#### Power BI Azure AD Users and Groups Dashboard

Jun 23, 2022

Power BI Azure AD Users and Groups Dashboard is an open-source common code base of intellectual property created by Envision IT. The Users and Groups Dashboard enables organizations to gain insight into what is happening with their groups and users that exist within Azure AD.

[Download Technical Guide](#)

### Related Assets



#### Configuring Azure AD B2B for External Users

[Support](#)

[Learn more AZURE AD B2B RESOURCES](#)

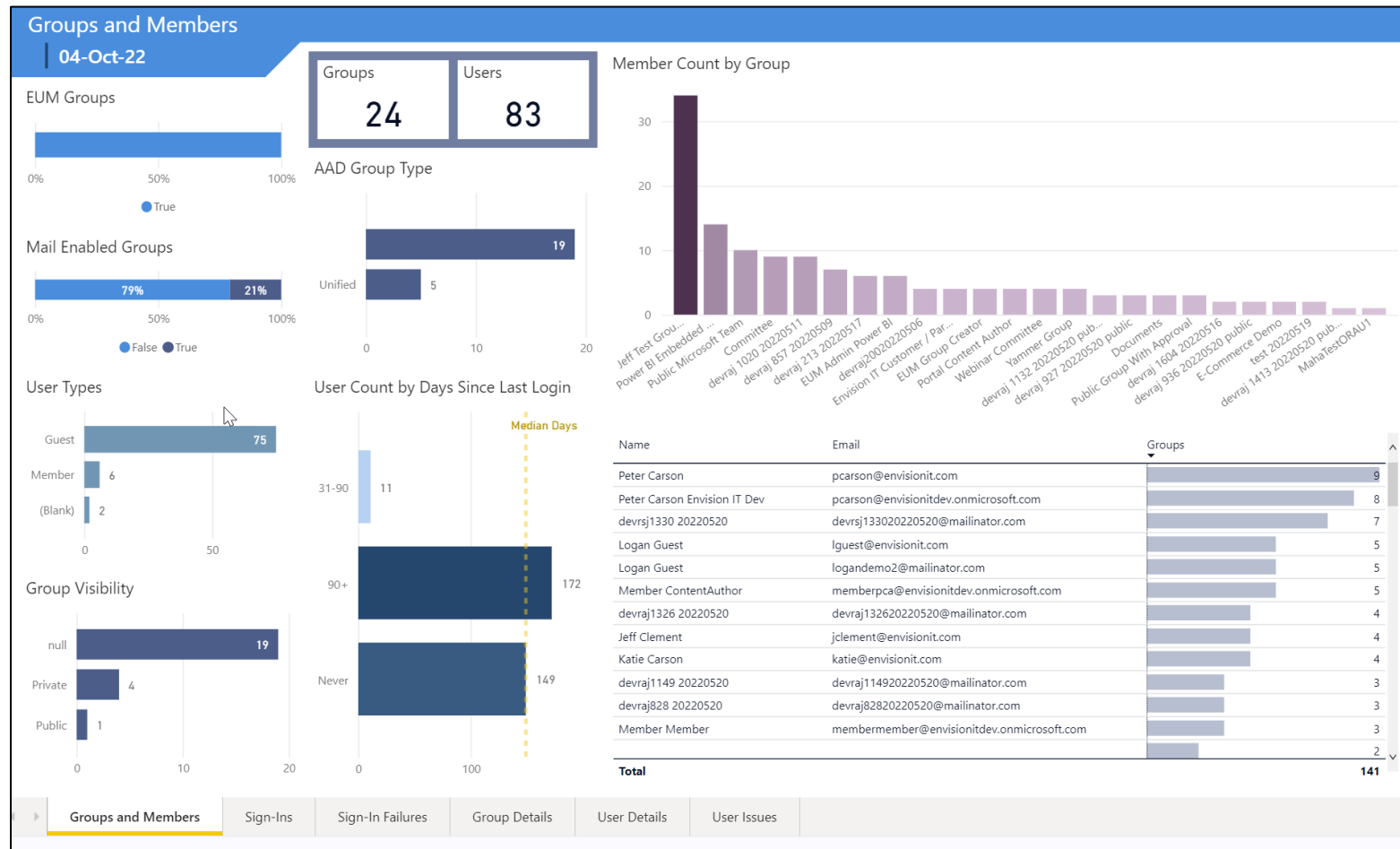
[Stay in the loop NEWSLETTER SIGN UP](#)

<https://www.extranetusermanager.com/resources/Azure-AD-B2B-Collaboration-Resources>

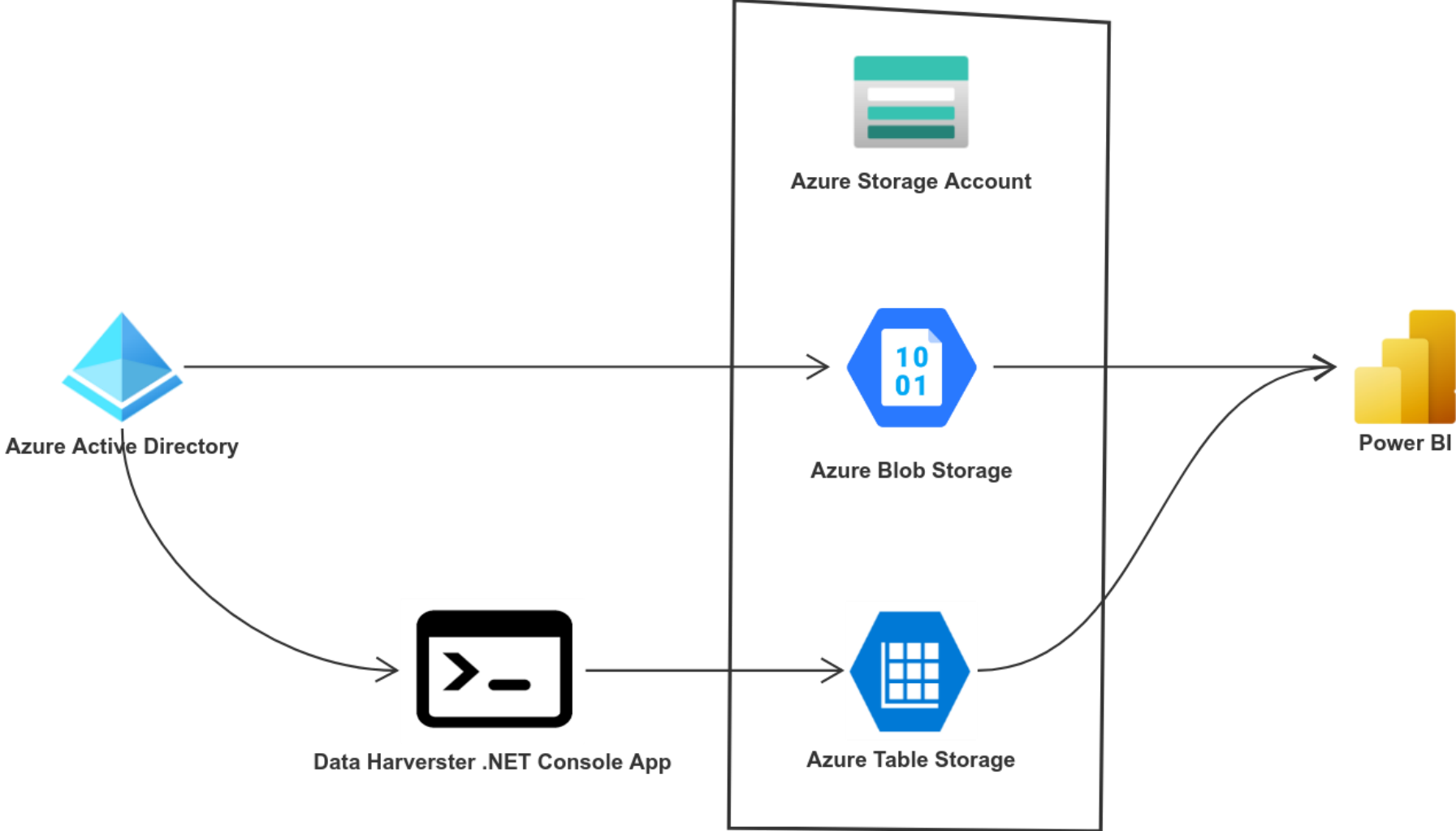
[https://github.com/extranet-user-manager/EUM\\_AzureADPowerBI](https://github.com/extranet-user-manager/EUM_AzureADPowerBI)



# Entra ID Power BI Dashboard



# Power BI Data Harvester



# Microsoft 365 Portals

# Why Build a Microsoft 365 Focused Portal?

- Microsoft 365 is already the spot you're working and collaborating in
- You can build a robust portal that relies on a strong Microsoft 365 foundation
  - SharePoint Online
    - Documents
  - Teams
    - Meetings
    - Recordings
    - Channel conversations
- Stop sharing through email and third party solutions
- Leverage the Microsoft 365 Security and Compliance features while hiding the complexity
- It's time to integrate how you're working with how you're sharing

# Portal Considerations

- **How are users invited to the Portal?**
  - Invitation Only – Manual or Automated
  - Public Registration
  - Private Registration
- **What Portal functionality is required?**
  - Secured web content
  - Viewing / Downloading / Uploading documents
  - Co-authoring documents
  - SharePoint Online sites, Teams, or Yammer
  - Third-Party or Internal Applications
- **Who is responsible for Portal content and administration?**

# Types of Portals

Member Portals

Board/Committee  
Sites

Data Portals

Document Sharing

Training Portals

# Structured Sharing with Microsoft 365

- Typically hundreds to hundreds of thousands of external users
- Represent many different groups of external users
  - Projects
  - Committees
  - Customers/Partners/Vendors
- May **have** many different business owners
  - Owners can be internal or external

# Microsoft 365 Structured Sharing Options

## Roll Your Own

- Build in the tool of your choice
- Integrate through the Graph API

## Entra ID

- Self-registration and workflows define onboarding process
- Some branding and customization
- Dynamic groups

## Extranet User Manager

- Fully brandable and customizable
- EUM Admin portal for creating and managing users and groups
- Licensed by the pool size of external users



# Extranet User Manager

The screenshot displays the 'Search Users' page in the Extranet User Manager. The left sidebar contains navigation options: Home, Reports, Users, Search Users (highlighted), Add New User, Groups, Search Groups, Add New Group, Admin, License, Azure AD, Quick Links, EUM Configuration Site, and EUM Portal. The main content area is divided into two sections: 'Search Users' and 'Search Results'. The 'Search Users' section has input fields for 'First Name' (with 'pete' entered), 'Last name', and 'Email', along with 'Search' and 'Reset' buttons. The 'Search Results' section shows a table of users with checkboxes, names, and email addresses.

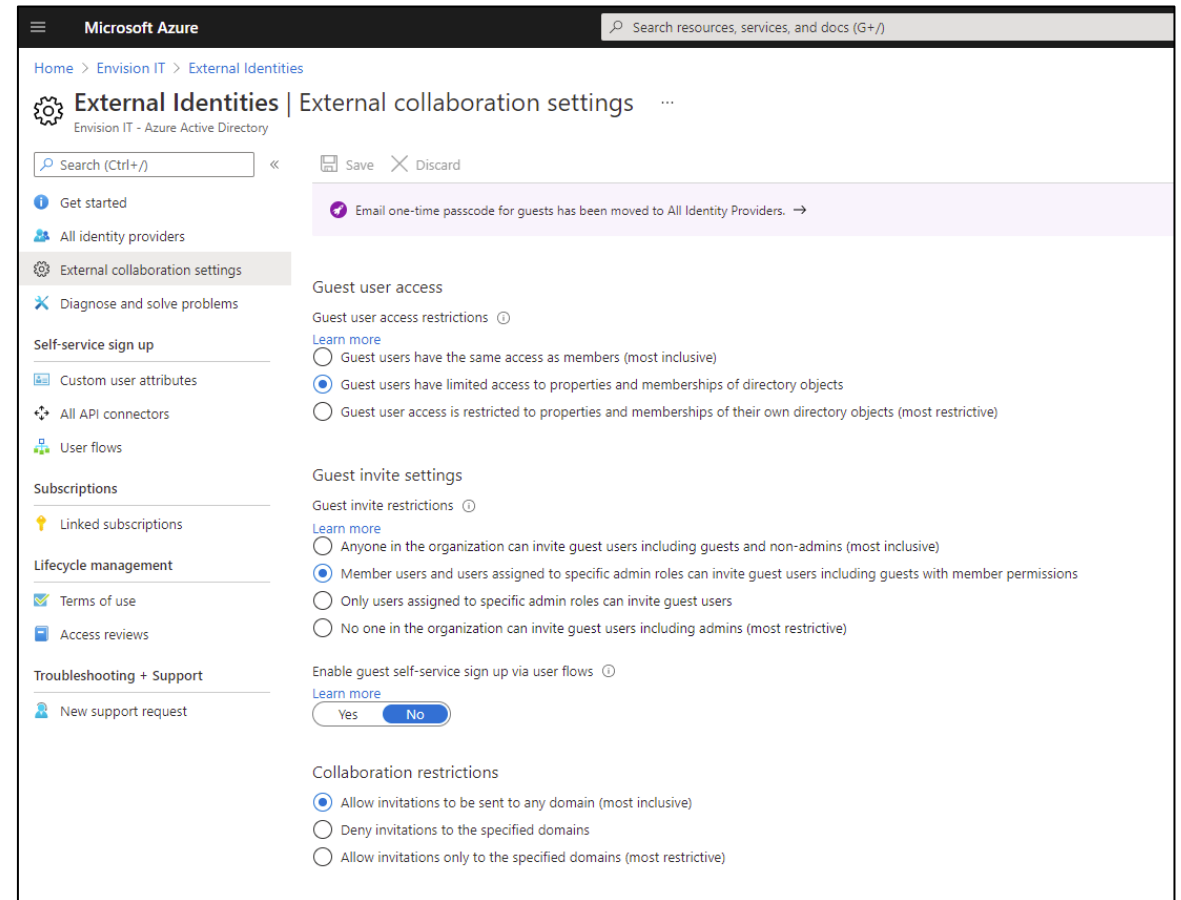
<input type="checkbox"/>	Display Name	Email
<input type="checkbox"/>	<a href="#">Peter Carson</a>	4165614885@sms.eum.co
<input type="checkbox"/>	<a href="#">Peter Carson</a>	pcarson@envisionit.com
<input type="checkbox"/>	<a href="#">Peter Carson</a>	peter.a.carson@outlook.com
<input type="checkbox"/>	<a href="#">Peter Carson Envision IT Dev</a>	pcarson@envisionitdev.onmicrosoft.com
<input type="checkbox"/>	<a href="#">Peter Carson Gmail</a>	pcarson337@gmail.com
<input type="checkbox"/>	<a href="#">Peter Demo</a>	pdemo1@mailinator.com
<input type="checkbox"/>	<a href="#">Peter Demo 1</a>	peterdemo1@mailinator.com
<input type="checkbox"/>	<a href="#">Peter Demo 5</a>	pdemo5@mailinator.com
<input type="checkbox"/>	<a href="#">Peter Demo 6</a>	pdemo6@mailinator.com
<input type="checkbox"/>	<a href="#">Peter Test 1</a>	ptest1@mailinator.com

Support User Guide      License valid until 2022-12-31      © 2022 Extranet User Manager - v6.0.8357.3

- Simple delegation to the business or external users
- Invitation, self-registration, and bulk import
- Approval workflows and auto-approvals
- Group management and discovery
- Mobile friendly

# Azure AD External Identities (B2B)

- Self-service sign up
  - Custom attributes
  - API connectors
- Lifecycle management
  - Terms of use
  - Entitlement packages
  - Access reviews



[External Identities documentation | Microsoft Docs](#)

ExtranetUserManager

### Sign in

someone@example.com

No account? [Create one!](#)

[Can't access your account?](#)

Next

Welcome to the Extranet User Manager demo site.

ExtranetUserManager

### Create account

Sign up with email

Sign up with Microsoft

Sign up with Google

Back

ExtranetUserManager

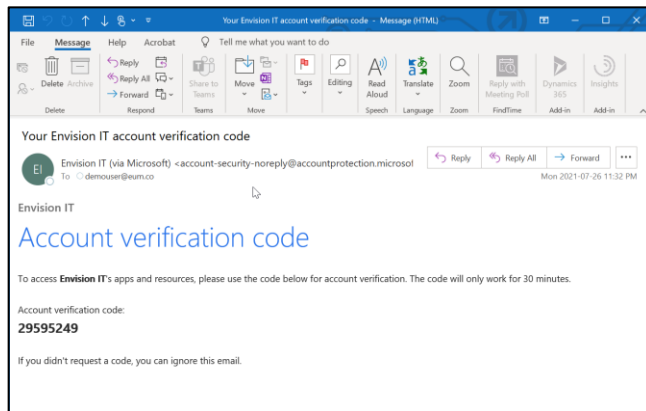
← demouser@eum.co

### Enter code

We just sent a code to demouser@eum.co

Enter code

Sign in



Microsoft

demouser@eum.co

### Review permissions

Envision IT  
eumdemo.onmicrosoft.com

**This resource is not shared by Microsoft.**

The organization Envision IT would like to:

- Sign you in
- Read your name, email address, and photo

You should only accept if you trust Envision IT. By accepting, you allow this organization to access and process your data to create, control, and administer an account according to their policies. **Envision IT has not provided links to their terms for you to review.** Envision IT may log information about your access. You can remove these permissions at <https://myapps.microsoft.com>.

Cancel Accept

ExtranetUserManager

### Add more details

You can use this email to sign in next time.

demouser@eum.co

First Name

Last Name

Job Title

Street Address

City

State/Province

Postal Code

Country

Cancel Continue

Microsoft

demouser@eum.co

### Permissions requested

Azure Registrations App  
[Unverified](#)

**This application is not published by Microsoft.**

This app would like to:

- View your basic profile
- Maintain access to data you have given it access to

Accepting these permissions means that you allow this app to use your data as specified in their terms of service and privacy statement. **The publisher has not provided links to their terms for you to review.** You can change these permissions at <https://myapps.microsoft.com>. [Show details](#)

Does this app look suspicious? [Report it here](#)

Cancel Accept

# Self-Service User Sign-Up – Attributes

- Choose what user information you require to provide access to Application
- Both built-in and custom attributes
- Steps to configure:
  - Define any custom attributes
  - Assign the attributes to a user flow
  - Define the page layout
  - Define any additional languages

# Define the Attributes

Microsoft Azure | Search resources, services, and docs (G+)

Home > External Identities

External Identities | Custom user attributes

Envision IT - Azure Active Directory

Search (Ctrl+)

+ Add | Got feedback?

Name	Data Type	Description	Attribute type
City	String	The city in which the user is located.	Built-in
Country/Region	String	The country/region in which the user is l...	Built-in
Display Name	String	Display Name of the User.	Built-in
Given Name	String	The user's given name (also known as fir...	Built-in
Job Title	String	The user's job title.	Built-in
Postal Code	String	The postal code of the user's address.	Built-in
State/Province	String	The state or province in user's address.	Built-in
Street Address	String	The street address where the user is loca...	Built-in
Supplier Number	String	Custom Supplier code	Custom
Surname	String	The user's surname (also known as famil...	Built-in

Add an attribute

Name <sup>ⓘ</sup>  
Shoesize ✓

Data Type <sup>ⓘ</sup>  
String ✓

Description <sup>ⓘ</sup>  
The user's shoe size ✓

Create

# Assign the Attributes to a User Flow

Microsoft Azure Search resources, services, and docs (G+/)

Home > Envision IT > External Identities > B2X\_1\_eumdemo-sign-up

## B2X\_1\_eumdemo-sign-up | User attributes

Sign up and sign in

Search (Ctrl+/) Save Discard Manage user attributes Got feedback?

Overview

Settings

- Identity providers
- User attributes**
- API connectors

Customize

- Page layouts
- Languages

Use

- Applications

User attributes are values collected on sign up. You can create custom attributes for use in your directory. [Learn more about user attributes.](#)

Name	Data Type	Description	Attribute type
<input checked="" type="checkbox"/> City	String	The city in which the user is located.	Built-in
<input checked="" type="checkbox"/> Country/Region	String	The country/region in which the user is loc...	Built-in
<input type="checkbox"/> Display Name	String	Display Name of the User.	Built-in
<input checked="" type="checkbox"/> Email Address	String	Email address of the user.	Built-in
<input checked="" type="checkbox"/> Given Name	String	The user's given name (also known as first ...	Built-in
<input checked="" type="checkbox"/> Job Title	String	The user's job title.	Built-in
<input checked="" type="checkbox"/> Postal Code	String	The postal code of the user's address.	Built-in
<input checked="" type="checkbox"/> State/Province	String	The state or province in user's address.	Built-in
<input checked="" type="checkbox"/> Street Address	String	The street address where the user is located.	Built-in
<input type="checkbox"/> Supplier Number	String	Custom Supplier code	Custom
<input checked="" type="checkbox"/> Surname	String	The user's surname (also known as family n...	Built-in

# Define the Page Layout

Microsoft Azure Search resources, services, and docs (G+)

Home > Envision IT > External Identities > B2X\_1\_eumdemo-sign-up

## B2X\_1\_eumdemo-sign-up | Page layouts

Sign up and sign in

Search (Ctrl+/) Save Discard

Overview

Settings

- Identity providers
- User attributes
- API connectors

Customize

- Page layouts**
- Languages

Use

- Applications

Got a second? We would love your feedback on customizing user flows →

Select the layout of the form users who are signing up are shown. This form consists of the attributes you choose to collect in this user flow, and you can choose the order of how they are displayed and how users provide input. [Learn more about customizing your page.](#)

Attribute collection page

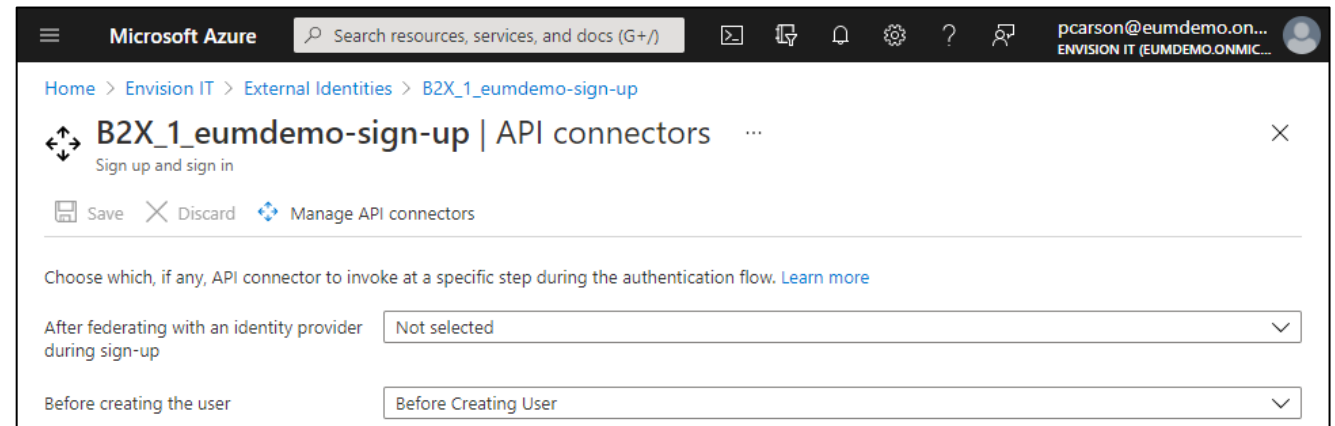
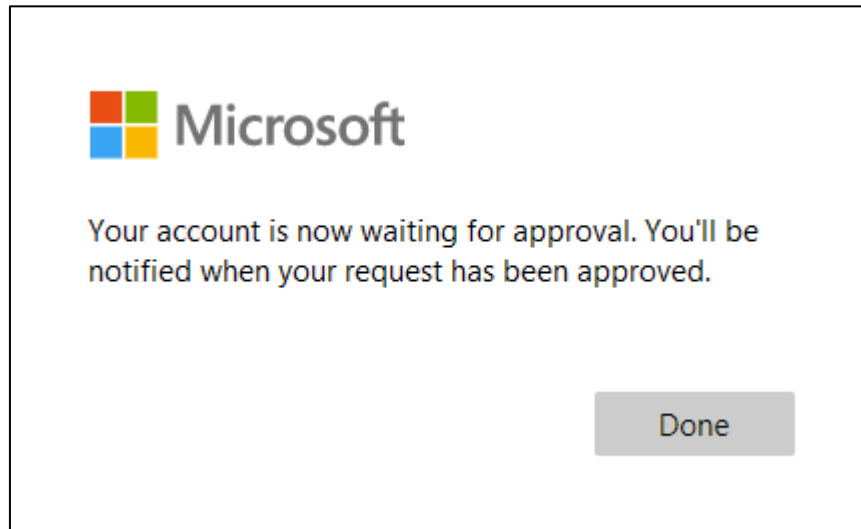
↑ Move up ↓ Move down ↕ Move to top ↓ Move to bottom

Name	Optional	User input type	Label
Email Address	Yes		Email Address
Given Name	No	TextBox	First Name
Surname	No	TextBox	Last Name
Job Title	Yes	TextBox	Job Title
Street Address	Yes	TextBox	Street Address
City	Yes	TextBox	City
State/Province	Yes	TextBox	State/Province
Postal Code	Yes	TextBox	Postal Code
Country/Region	Yes	DropDownSingleSelect	Country

https://portal.azure.com/#

# Custom Approval Workflows

- API connectors allow you to integrate custom approval workflows into the self-service sign up

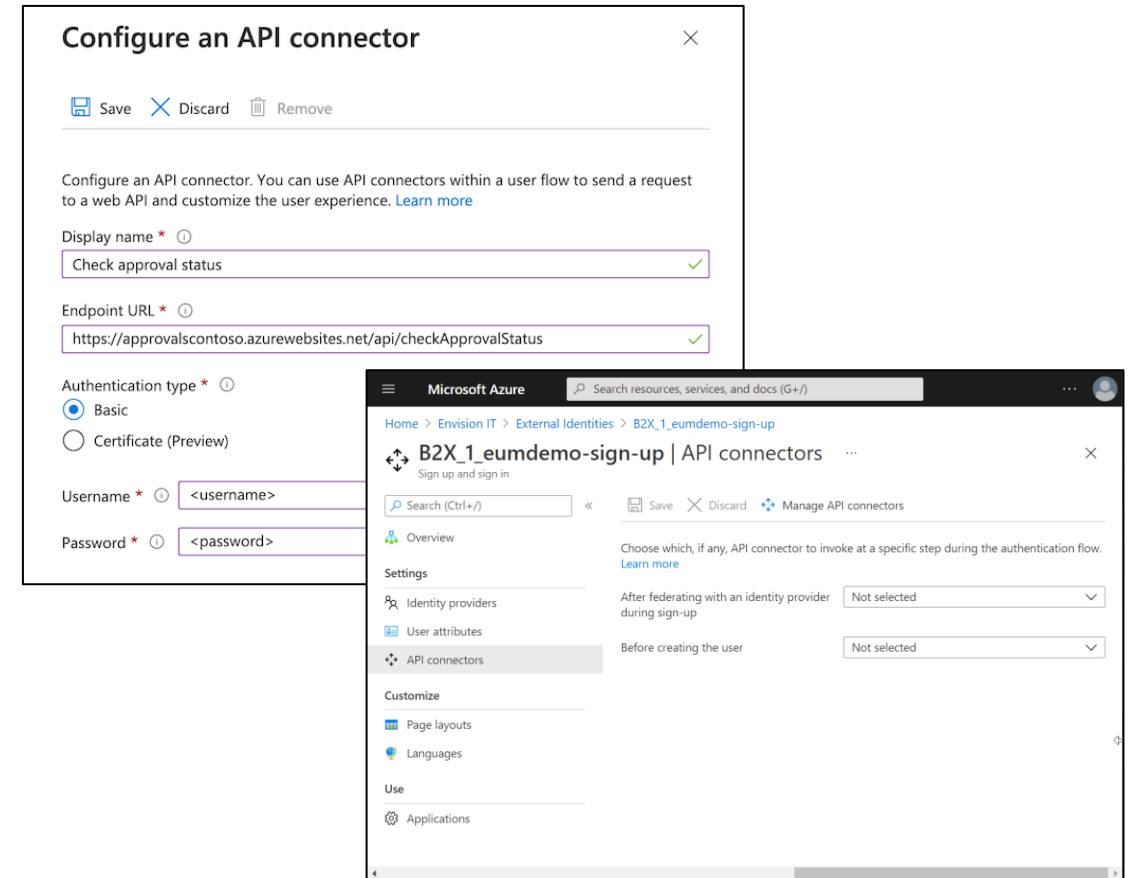


[Add custom approvals to self-service sign-up flows - Azure AD | Microsoft Docs](#)



# Custom Approval Workflows

- Preferred approach to building a full custom API is to use Logic Apps
- Use Azure API Management in front of Logic App to handle the security
  - Basic auth or certificate
- Can have rules to assign group memberships
- Can also be done with dynamic groups



[Add custom approvals to self-service sign-up flows - Azure AD | Microsoft Docs](#)

# Let's stay connected



## Subscribe to our newsletter

- Microsoft 365 tips and tricks
- Product news and updates
- Exclusive Microsoft event recaps
- And more!
- <https://eum.co>