



The Challenge of Providing Secure Access to External Admins

Myron Helgering

Level: Intermediate

Visual Studio **LIVE!**
EXPERT SOLUTIONS FOR ENTERPRISE DEVELOPERS

Data Platform **LIVE!**
INSIGHTS FOR MANAGING YOUR DATA ECOSYSTEM

TECHMENTOR
IN-DEPTH TRAINING FOR IT PROS

Artificial Intelligence **LIVE!**
AI FOR DEVELOPERS AND DATA SCIENTISTS

Cloud & Containers **LIVE!**
CLOUD-NATIVE, PaaS & SERVERLESS COMPUTING

Cybersecurity & Ransomware **LIVE!**
DEFENDING AGAINST RANSOMWARE AND OTHER ATTACKS

Session Survey

- Your feedback is very important to us
- Please take a moment to complete the session survey found in the mobile app
- Use the QR code or search for “Converge360 Events” in your app store
- Find this session on the Agenda tab
- Click “Session Evaluation”
- Thank you!



About me

- Solution Lead @ Pink Elephant
- Microsoft Security MVP
- Blogger and Speaker
- Fantasy geek



Myron Helgering

 [in/myronhelgering](https://www.linkedin.com/in/myronhelgering)  myronhelgering.com

I Orlando

2007



2016



2018

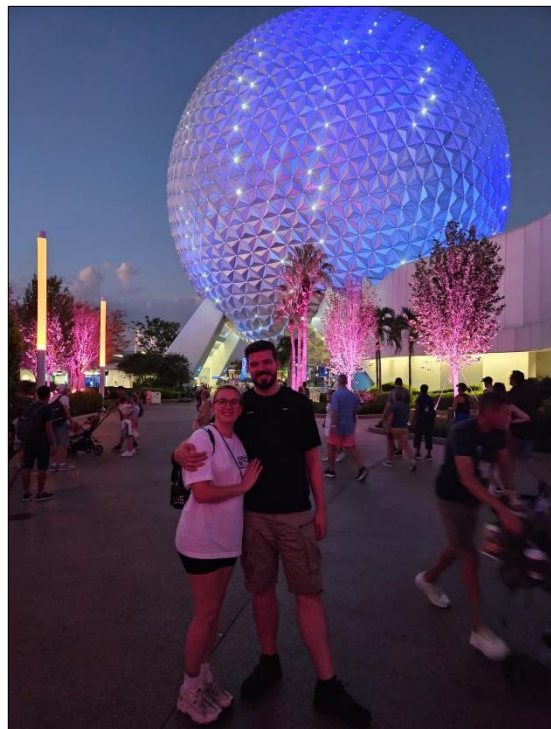


I Orlando

2019



2024



2025



Agenda

01

Introduction

02

Access through
User Account

03

Access through
Guest Account

04

Access through
GDAP

05

Takeaways

06

Q&A

Why this session?



What is the challenge?

- Organizations are not prepared for external admins
- Balancing security risks
- Option may result in bad user experience
- External admins work from their own device

Three options to grant access

1

Access through
User Account

2

Access through
Guest Account

3

Access
through GDAP

Consultant



Types of external admins

MSP



Freelancer



MSSP



Four aspects to take into account

- User Experience
- Device Compliance
- Permissions
- Security

Three options to grant access

1

Access through
User Account

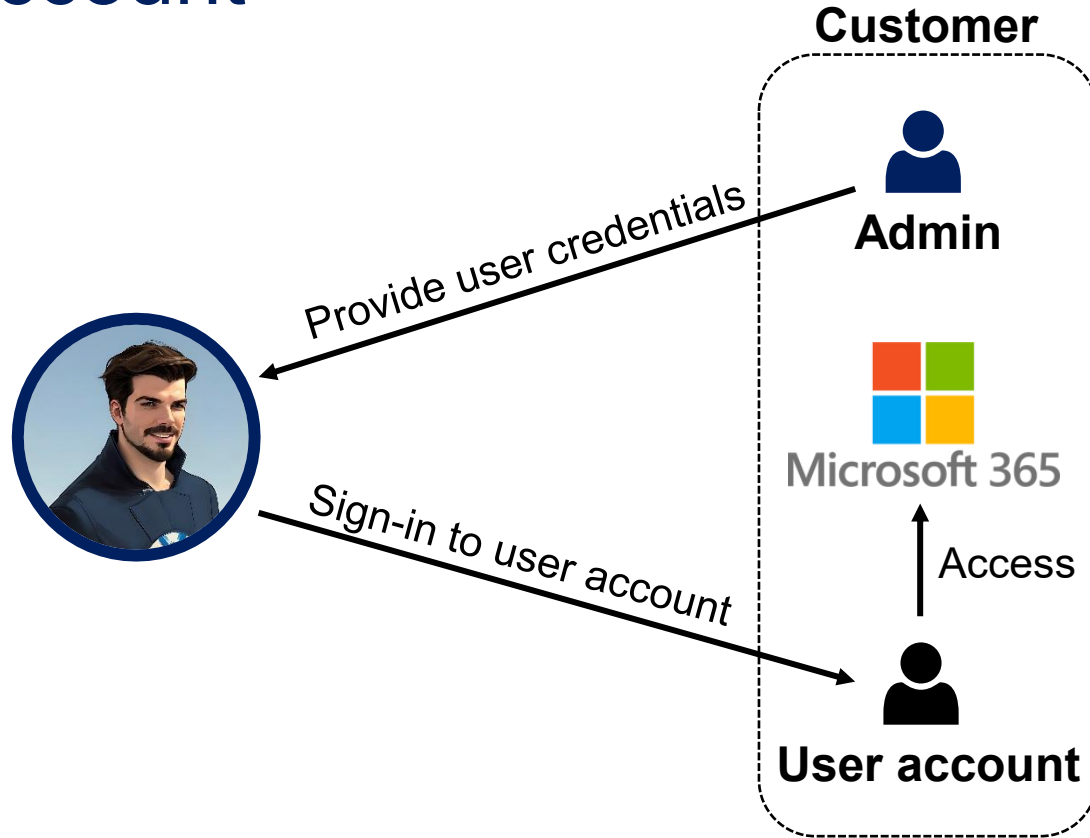
2

Access through
Guest Account

3

Access
through GDAP

User Account

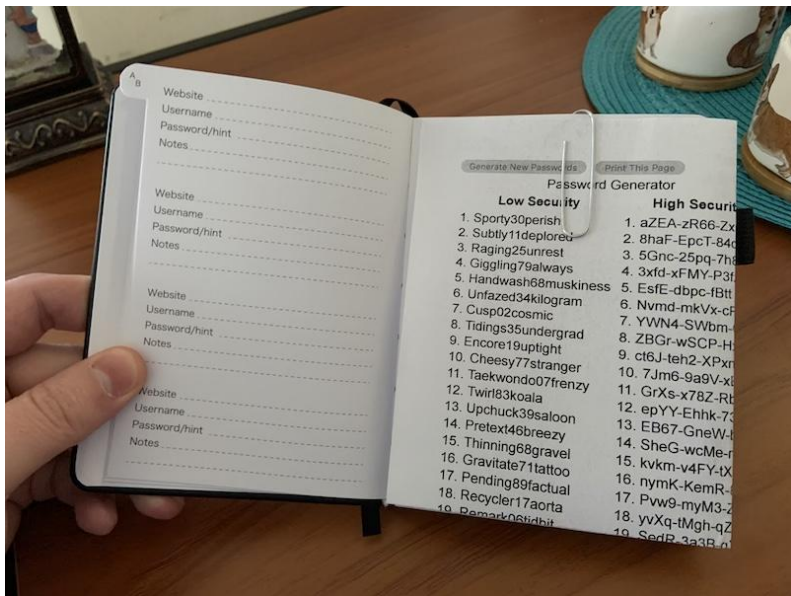


Option 1: Access through User Account

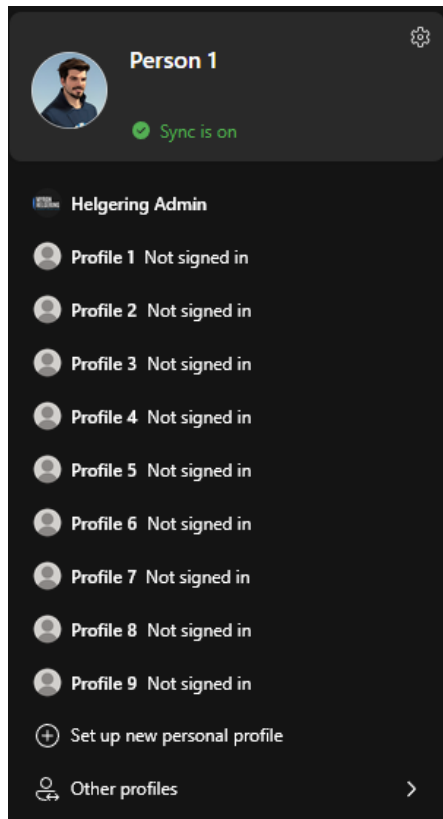
Scenario	User Experience	Device Compliance	Permissions	Security
User Account				

Accounts for multiple customers

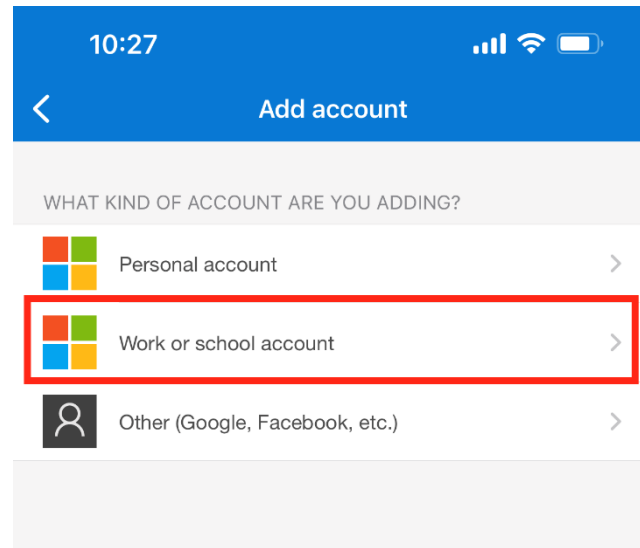
Accounts and passwords



Browser profiles



MFA registrations



User Experience after sign-in



Option 1: Access through User Account

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				

Why managed and compliant device?

- Update OS and software and patch vulnerabilities
- Apply security configurations and policies
- Enable AV/EDR to protect against and detect threats
- Enable secure authentication methods
- Disable local admin rights
- Encrypt or fully wipe data on hard drive
- Restrict access whenever device is not compliant

Require compliant device with Conditional Access

Name *

CA32 - Require compliant device - Admins

Assignments

Users ①

Specific users included and specific users excluded

Target resources ①

All resources (formerly 'All cloud apps')

Network **NEW** ①

Not configured

Conditions ①

1 condition selected

Access controls

Grant ①

1 control selected

Session ①

0 controls selected

Grant ×

Control access enforcement to block or grant access. [Learn more](#) ↗

☐ Block access

☒ Grant access

☐ Require multifactor authentication ①

☐ Require authentication strength ①

☒ Require device to be marked as compliant ①



draco.malfoy@myronhelgering.com

Device must comply with your organization's compliance requirements

This device does not meet your organization's compliance requirements. Go to your organization's device management portal to see why this device is marked noncompliant.

You might be able to browse to other Helgering sites. Otherwise, [sign out to protect your account](#).

[Sign out and sign in with a different account](#)

[More details](#)

Sign in with unmanaged device

Include Exclude

Select the users and groups to exempt from the policy

☐ Guest or external users ⓘ

☐ Directory roles ⓘ

☒ Users and groups

Select excluded users and groups

2 users

EA External Admin User
externaladminuser@myronhe... ⋮

Exclude external
admin user

Include Exclude

Select the locations to exempt from the policy

☐ All trusted networks and locations

☐ All Compliant Network locations

☒ Selected networks and locations

Select

Partner X Office Location

Exclude external
admin location



Is the device compliant?



Probably not



Actual solutions

- **Give external admins managed device**

Give external admins a device



Other solutions

- Give external admins managed device
- **Windows 365 Cloud PC or Azure Virtual Desktop**

Windows 365 Cloud PC

- Easy to setup
- Fixed monthly cost
- Desktop per user

Azure Virtual Desktop

- Complex setup
- Pay-as-you-go
- Supports multi-session

Other solutions

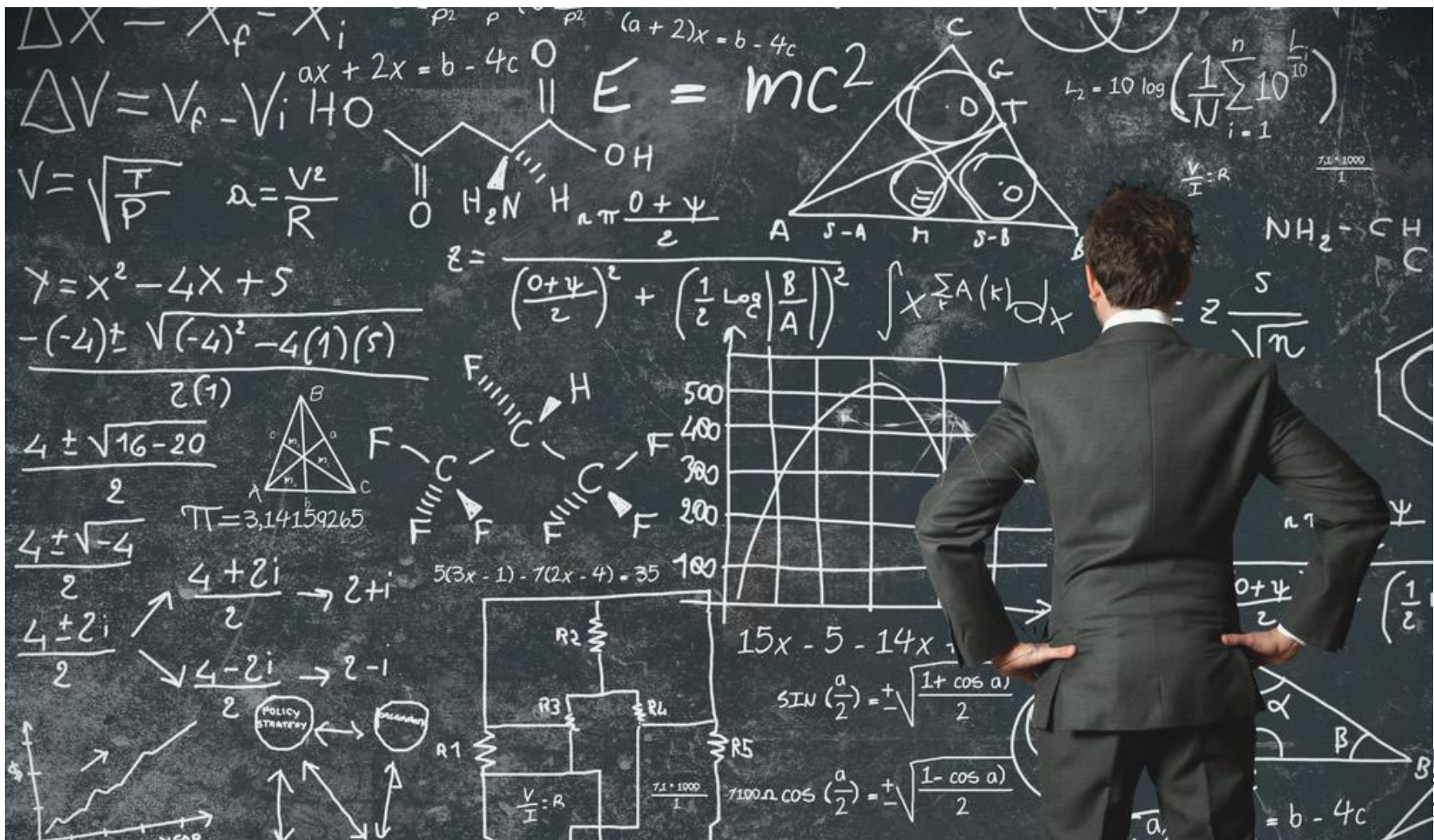
- Give external admins managed device
- Windows 365 Cloud PC or Azure Virtual Desktop
- **Privileged Access Workstation (PAW)**

Privileged Access Workstation (PAW)

- Can be physical or virtual
- Used only for administrative tasks
- Smaller attack surface
- Configuration hardening

PAW Configuration Hardening

- Restrict the use of applications
- Restrict web browsing
- No local admin rights
- Onboard and enable AV/EDR
- Deny BYOD device enrollment
- Strict security policies & configurations
- Only allow admin access from PAW



Option 1: Access through User Account

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				

Permissions

- Privileged Identity Management (PIM) 
- Role Based Access Control (RBAC) 
- Access Packages & Reviews 






Option 1: Access through User Account

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				

MSP perspective



Security

- Upsides
 - Permissions (PIM, Access Packages & Reviews) 
 - Device compliance is possible 
 - Full visibility in sign-in and audit logs 
- Downsides
 - Device compliance can be hard to achieve 
 - MSP managing account security is (almost) impossible 

Option 1: Access through User Account

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				

Three options to grant access

1

Access through
User Account

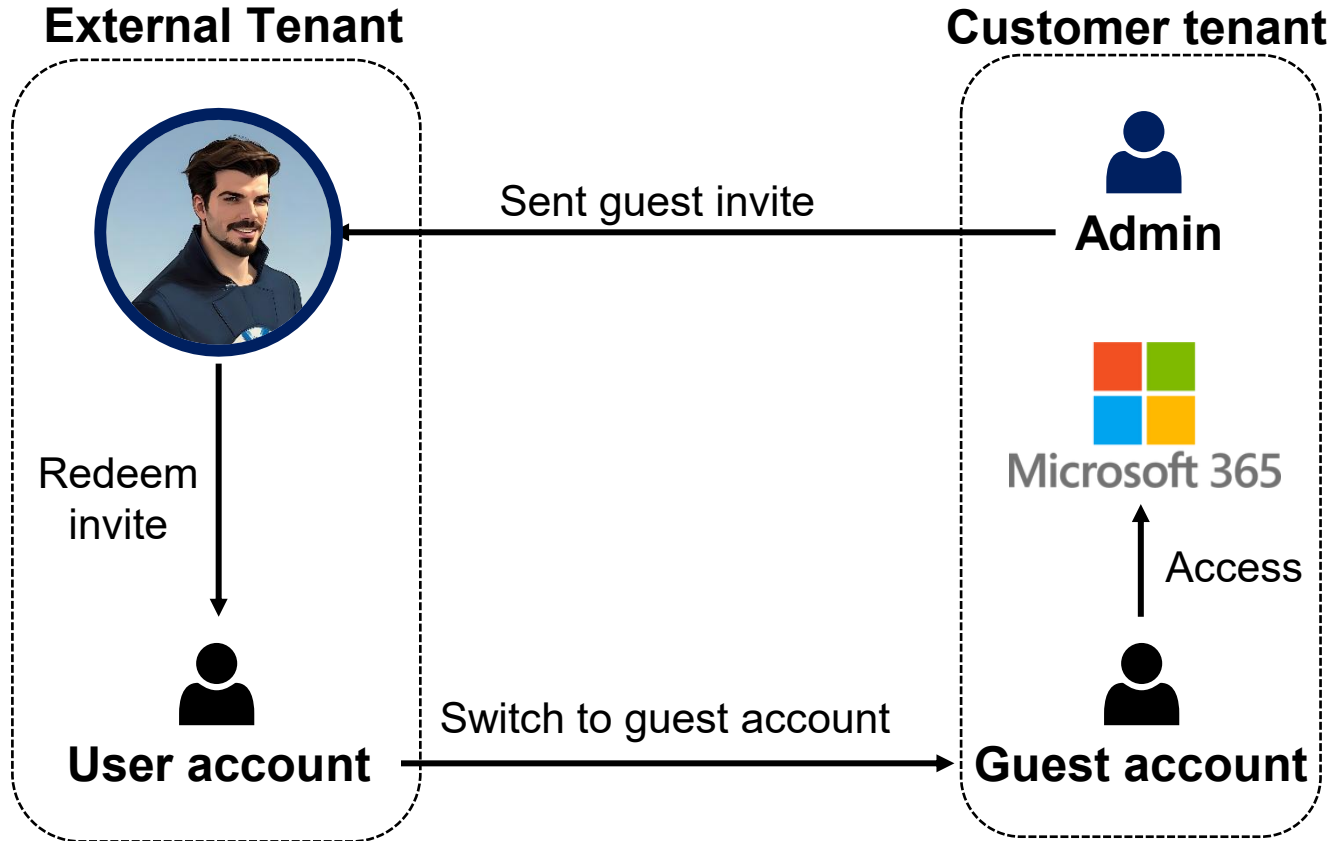
2

Access through
Guest Account





3

Access
through GDAP

Guest account



Option 2: Access through Guest Account

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				
Guest Account				

Four jobs to do

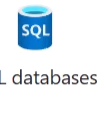
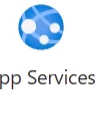
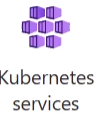
- Start a virtual machine in **Azure management portal**
- View message center in **M365 admin center**
- View onboarded devices in **Defender admin center**
- Close an eDiscovery case in **Purview admin center**

Preparation before demo

- Invite guest user to the Helgering tenant
- Gave access to **Global Administrator** role through PIM
- Gave access to the **Azure Subscription** through PIM
- Redeem the guest user invitation
- Register and authenticate with MFA

Demo: Admin Portals access with Guest Account

Azure services



Resources

Recent Favorite

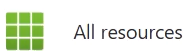
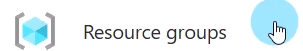
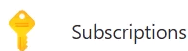
NameTypeLast Viewed



No resources have been viewed recently

View all resources

Navigate



Activate - Contributor - Microsoft

https://portal.azure.com/?feature.msajls=true#view/Microsoft_Azure_PIMCommon/ActivationMenuBlade/~/.azurerbac/provider/aadroles

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

myron.helgering@pinke...
HELGERING (HELGERING.ONMIC...

Home > Privileged Identity Management > My roles

My roles | Azure resources

Privileged Identity Management | My roles

RefreshOpen in mobileGot feedback?

Activate

Microsoft Entra roles

Groups

Azure resources

Troubleshooting + Support

Eligible assignmentsActive assignmentsExpired assignments

Search by role or resource

Resource	Resource type
Microsoft Studio Enterprise Subscription – MPN	Subscription

Activate - Contributor

Privileged Identity Management | Azure resources

RolesActivateScopeStatus

Stage 1

Processing your request and activating your role.

Stage 2

Validating that your activation is successful.

Stage 3

Activation completed successfully.

When the final stage completes your browser will automatically refresh. You do not have to sign-out and back in again.

Refresh in 5 second(s)Cancel

Activate

Cancel

Add or remove favorites by pressing Ctrl+Shift+F

Home - Microsoft AzureMicrosoft 365 admin centerHome - Microsoft DefenderMicrosoft Purview

https://portal.azure.com/?feature.msajs=true#home

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

...

Azure services

Create a resource

Microsoft Entra Privileged...

Resource groups

Resources

Storage accounts

Subscriptions

Quickstart Center

Azure AI Foundry

Kubernetes services

More services




Resources

Recent






Favorite

Name	Type	Last Viewed
<div></div> <div>No resources have been viewed recently</div>		

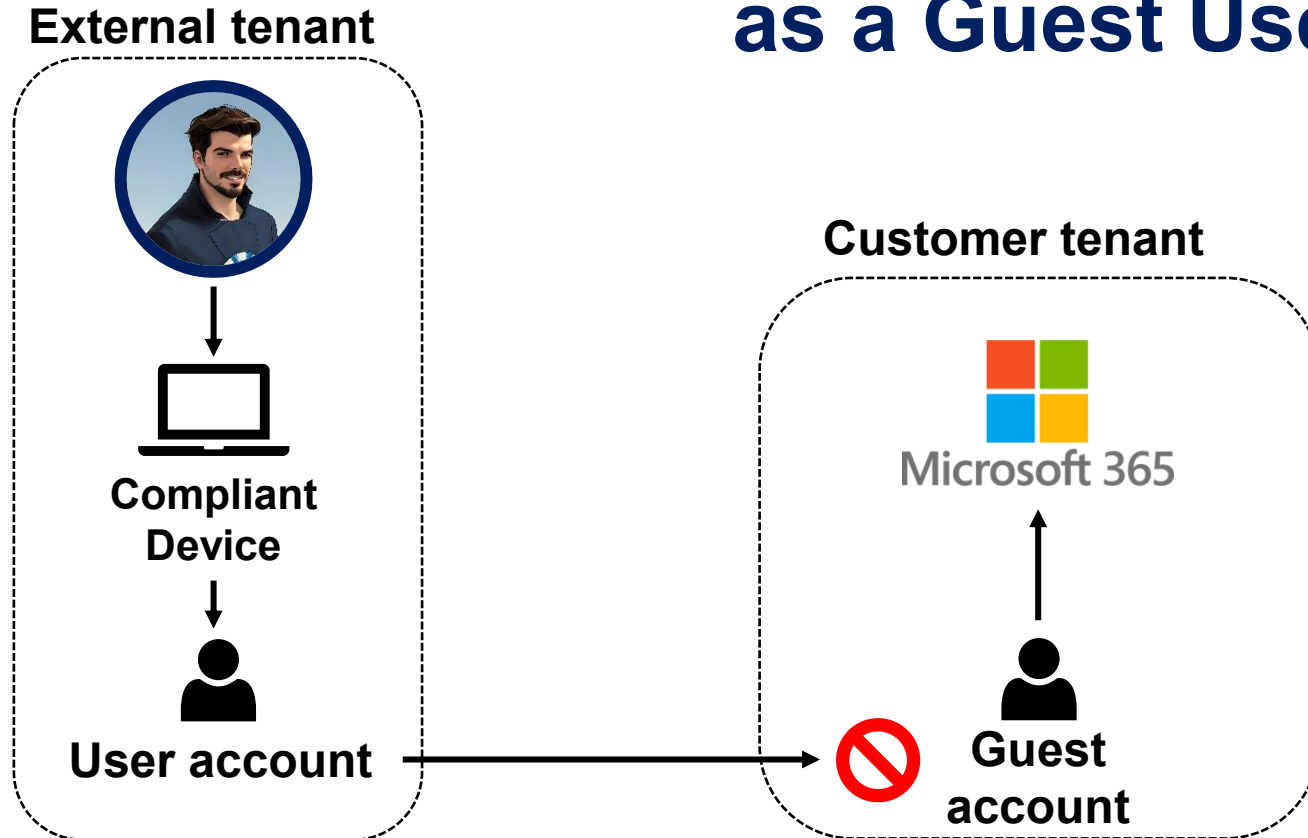
Admin Portal Access

- Access 
 - **Azure Management** portal
 - **Entra** admin center
 - **Intune** admin center
 - **Defender** admin center (through MTO switch button)
- No access 
 - **M365** admin center
 - **Exchange** admin center
 - **SharePoint Online** admin center
 - **Teams** admin center
 - **Power platform** admin center
- Access by pasting tenant ID 
 - **Purview** admin center

Option 2: Access through Guest Account

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				
Guest Account				

Device Compliance as a Guest User



Demo: Configuring cross tenant access settings in Microsoft Entra

Microsoft Entra admin center

Home

Agents

Favorites

Entra ID

ID Protection

ID Governance

Verified ID

Permissions Management

Global Secure Access

What's new

Billing

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

Copilot

3

admin@helgering.onmi...
HELGERING (HELGERING.ONMIC...

Home > Cross-tenant access settings >

Microsoft Entra

Helgering

Tenant ID 97f8ab89-ccf3-4f29-a961-c4e40d453141

Primary domain helgering.onmicrosoft.com

22

View users

36

View groups

33

View devices

10

View apps

Myron Helgering

Global Administrator

8dcd4c7c-133e-4a62-be53-05bc5f77993f

View user profile

My role assignments

1

High privileged role assignments

Other role assignments

Manage my roles

Users at high risk

Tenant status

Identity Secure Score

40.98%

Name *

CA32 - Require compliant device - Admins

Assignments

Users ⓘ

Specific users included and specific users excluded

Target resources ⓘ

All resources (formerly 'All cloud apps')

Network **NEW** ⓘ

Not configured

Conditions ⓘ

1 condition selected

Access controls

Grant ⓘ

1 control selected

Session ⓘ

0 controls selected

Include Exclude

☐ None

☐ All users

☒ Select users and groups

☒ Guest or external users ⓘ

B2B collaboration guest users ▼

☒ B2B collaboration guest users

☐ B2B collaboration member users

☐ B2B direct connect users

☐ Local guest users

☐ Service provider users

☐ Other external users

Include B2B guest
users

Sign-in as a guest user

Date ↓	Request ID	User principal name	Application	Status	Conditional access
2025-09-29T19:36:47Z	1d7d5607-1f5b-45d6-8839-3b1662b93b00	myron.helgering@pinkelephant.nl	Azure Portal	Success	Success
2025-09-29T19:36:14Z	52430241-7398-4d9b-a2bd-f45a51466400	myron.helgering@pinkelephant.nl	Azure Portal	Success	Success
2025-09-29T19:30:10Z	5d06a3de-516a-4e98-b365-8849802d0d00	myron.helgering@pinkelephant.nl	Azure Portal	Success ✓	Success ✓
2025-09-29T19:29:22Z	1b5c0b74-d51e-47e0-88b9-9e1a66265200	myron.helgering@pinkelephant.nl	Azure Portal	Failure	Failure
2025-09-29T19:28:44Z	0aa00ee0-36ee-47dc-9feb-0fd4ef0a6200	myron.helgering@pinkelephant.nl	Azure Portal	Failure	Failure
2025-09-29T19:27:44Z	1b5c0b74-d51e-47e0-88b9-9e1a84205200	myron.helgering@pinkelephant.nl	Azure Portal	Failure ✗	Failure ✗

- Sign-in with **non-compliant** and a **compliant** device

Conditional Access Policy details

↑ Previous ↓ Next

Policy: CA32 - Require compliant device - Admins

Policy state: Enabled

Result: Success

Assignments

User

Myron Helgering (Pink Elephant)

✓ Matched

B2B guest user assignment

Resource

Azure Resource Manager

✓ Matched

Conditions

Sign-in risk

None

● Not configured

Device platform

Windows10

● Not configured

Network (formerly location)

, NL

2001:1c00:6003:3300:249d:406b:8eac:b500 ⓘ

● Not configured

Client app

Browser

✓ Matched

Device

{PII Removed}

● Not configured

User risk

● Not configured

Insider risk ⓘ

● Not configured

Authentication flows

● Not configured

Access controls

Grant Controls

✓ Satisfied

Require compliant device



Matched



B2B guest user assignment


Conditional Access Policy details



Satisfied



Require compliant device



Is the device compliant
with “our” policies?

Probably not

Option 2: Access through Guest Account

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				
Guest Account				

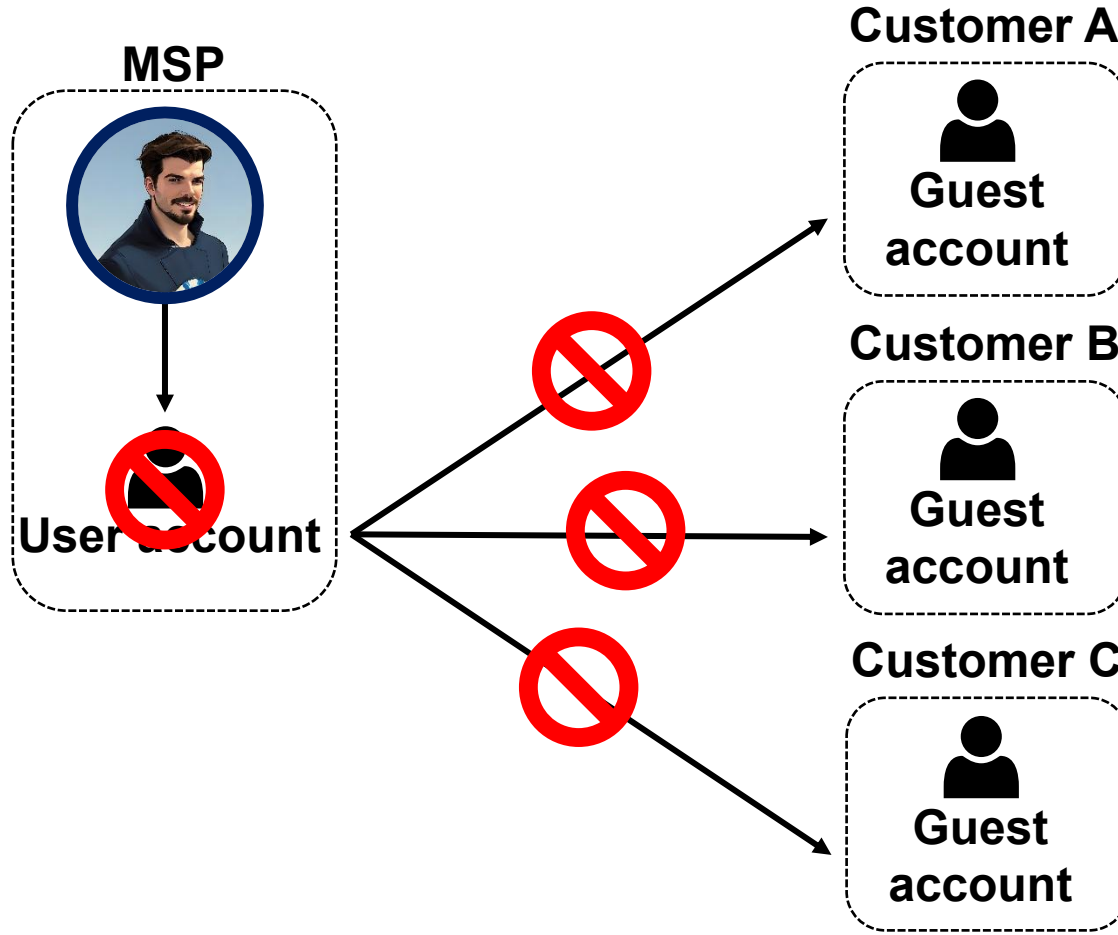
Permissions

- Privileged Identity Management (PIM) 
- Role Based Access Control (RBAC) 
- Access Packages & Reviews 






Option 2: Access through Guest Account

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				
Guest Account				

MSP perspective



Security

- Upsides
 - Permissions (PIM, Access Packages & Reviews) 
 - Device compliance with trust settings for guests works 
 - Guest access is disabled when (MSP) account is disabled 
 - Full visibility in sign-in and audit logs 
- Downsides
 - Real device compliance can't be achieved 

Option 2: Access through Guest Account

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				
Guest Account				

Three options to grant access

1

Access through
User Account

2

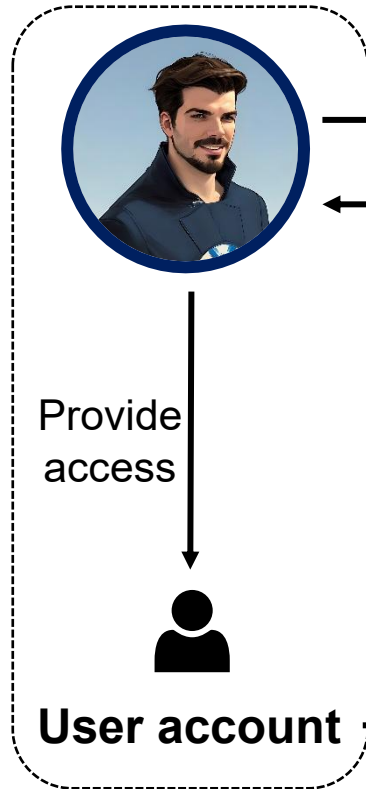
Access through
Guest Account

3

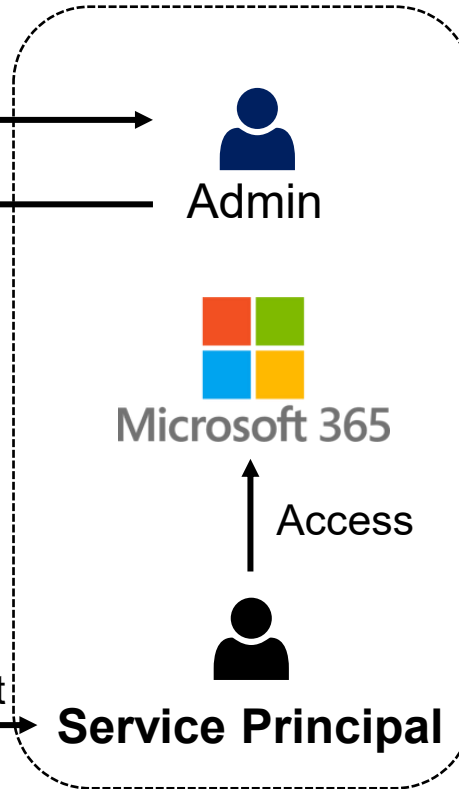
Access
through GDAP

Granular Delegated Admin Permissions (GDAP)

Microsoft Partner



Customer



Request permissions

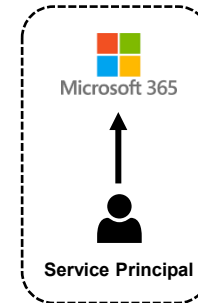
Accept permissions

Provide access

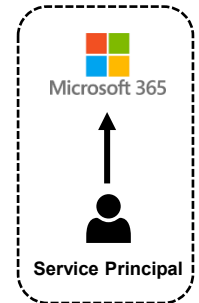
Switch to customer tenant

Access

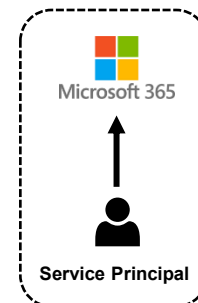
Customer 2



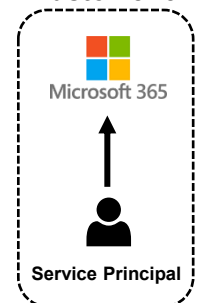
Customer 3











Customer 4



Customer 5



Option 3: Access through GDAP

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				
Guest Account				
GDAP Access				

Three jobs to do

- Troubleshoot enrollment failures
- Assign authentication method policies
- Change SharePoint library settings

Demo: Using GDAP access

partner.microsoft.com/dashboard/v2/customers/list

Microsoft Partner Center

Search

Home > Customers

Customer List

Administer

Indirect providers

Expiring granular relationships

Customer List | Customers

Connect, manage or support your existing customers, connect with new customers or invite a customer to establish a new relationship. [Learn more](#)

Important: Indirect resellers cannot view or purchase customer subscriptions.[Learn more about indirect reseller capabilities](#)

Customers

New relationship

Manage tags

Assign tags

Export

Service Management

helgering

Name	Microsoft ID	Primary domain name	Relationship	Tags
<div><div></div>Helgering</div>	97f8ab89-ccf3-4f29-a961-c4e40d453141	helgering.onmicrosoft.com	Cloud Reseller	

<< First

< Previous

Next >

Last >>

Access through GDAP

- Admin features are not working
- Limited SPO & Teams access
- Tenant switching
 - Button only available in M365
 - Arrive in the wrong tenant
- Bugs, bugs & more bugs



M365 Lighthouse

- Central Management for all your customers
- Account Management
- Device Security
- Audit Logs
- Role Management
- Baseline Deployment
- Message Quarantine Management

Demo: M365 Lighthouse

Helgering | Customer list | Custom

https://partner.microsoft.com/dashboard/v2/customers/97f8ab89-ccf3-4f29-a961-c4e40d453141/servicemanagementpage

Microsoft Partner Center

Search

Home > > Customer list > Helgering

Devices

Users and licenses

Admin relationships

Service management

Service requests

Account

Please enable Auto Extend using [Partner Center UI](#) or [API](#) for needed MLT GDAPs nearing their expiration to ensure uninterrupted business continuity.

Helgering | Service Management

Lists AOBO (Admin On Behalf Of) links to different workloads and links to Service Health.

Administer Services










If you don't see a link to administer the desired service, click [here](#) to find out why.

- [Microsoft Entra ID](#)
- [Dynamics 365 Business Central](#)
- [Microsoft Intune](#)
- [Exchange](#)
- [Lifecycle Services](#)
- [Microsoft 365](#)
- [Microsoft 365 Compliance](#)
- [Microsoft 365 Defender \(Use for GDAP relationships only\)](#)
- [Microsoft 365 Lighthouse](#)
- [Microsoft Azure Management Portal](#)
- [Power BI](#)
- [Power Platform](#)


Service Health

- [Dynamics CRM Online](#)
- [Exchange Online](#)
- [Identity Service](#)
- [Microsoft Dynamics Marketing](#)
- [Mobile Device Management](#)
- [Office 365 Portal](#)
- [Office Subscription](#)
- [Microsoft Intune](#)
- [OneDrive](#)
- [Planner](#)
- [Power BI](#)
- [Rights Management Service](#)
- [SharePoint](#)

Option 3: Access through GDAP

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				
Guest Account				
GDAP Access				

Device Compliance

- Cross-tenant access settings work the same as “Option 2: Guest Account.” 

Name *

CA32 - Require compliant device - Admins

Assignments

Users ⓘ

Specific users included and specific users excluded

Target resources ⓘ

All resources (formerly 'All cloud apps')

Network **NEW** ⓘ

Not configured

Conditions ⓘ

1 condition selected

Access controls

Grant ⓘ

1 control selected

Session ⓘ

0 controls selected

Include Exclude

☐ None

☐ All users

☒ Select users and groups

☒ Guest or external users ⓘ

Service provider users ▼

☐ B2B collaboration guest users

☐ B2B collaboration member users

☐ B2B direct connect users






☐ Local guest users

☒ Service provider users

☐ Other external users

Include service
provider users

Option 3: Access through GDAP

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				
Guest Account				
GDAP Access				

Delegated Admin Permissions (DAP)

- Overprivileged access
- Indefinite access
- Limited audit logging
- Vulnerable to threat actors

Granular Delegated Admin Permissions (GDAP)

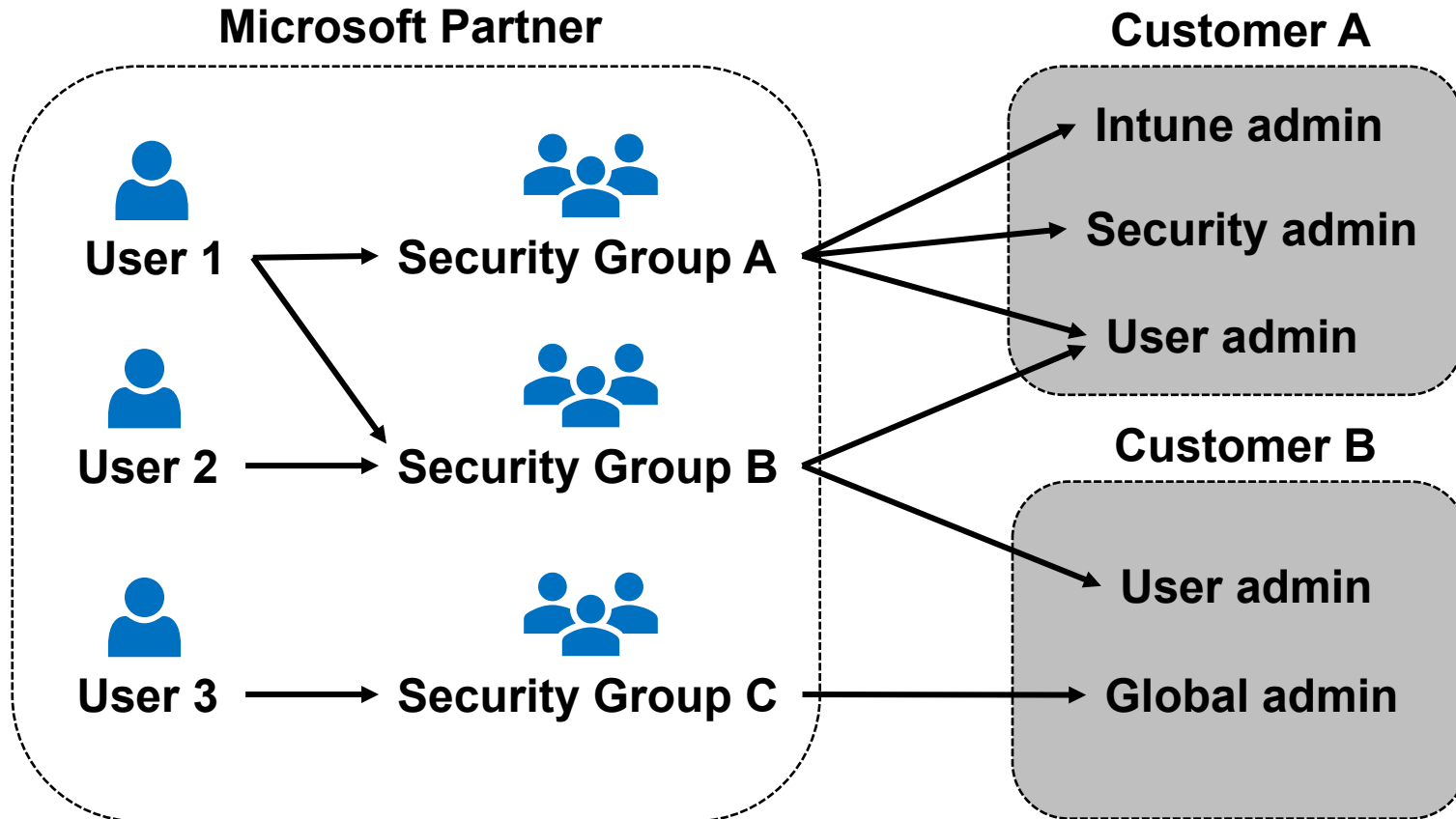
- Granular access
- Timebound access
- Full audit logging
- Less vulnerable to threat actors

A photograph of Steve Harvey, a bald man with a mustache, wearing a dark suit and a patterned tie. He has a wide-eyed, open-mouthed expression of shock or surprise. The background is a warm, orange-red gradient with a blue vertical stripe on the left. The word "Customer" is written in white text above him, and a longer sentence is written in white text below him.

Customer

You realize you're
not in control anymore

Granting Permissions through GDAP



GDAP + PIM (role-based)

Customer	Sec Group	Roles	PIM
Customer A Customer B Customer C	Service desk	Global reader Helpdesk admin	Permanent
Customer A Customer B Customer C	Engineers	Intune administrator Exchange administrator	Eligible
Customer A Customer B Customer C	Global admins	Global administrator	Approval

Don't do this please!

GDAP + PIM (customer-based)

Customer	Sec Group	Roles	PIM
Customer A	CustomerA_T1	Global reader Helpdesk admin	Permanent
Customer A	CustomerA_T2	Intune administrator Exchange administrator	Eligible
Customer A	CustomerA_T3	Global administrator	Approval
Customer B	CustomerB_T1	Global reader Helpdesk admin	Permanent
Customer B	CustomerB_T2	Intune administrator Exchange administrator	Eligible












GDAP + PIM (customer + role based)

Customer	Sec Group	Roles	PIM
Customer A Customer B Customer C	Service desk	Global reader Helpdesk admin	Permanent
Customer A	CustomerA_T2	Intune administrator Exchange administrator	Eligible
Customer A	CustomerA_T3	Global administrator	Approval
Customer B	CustomerB_T2	Intune administrator Exchange administrator	Eligible
Customer B	CustomerB_T3	Global administrator	Approval

Permissions available through GDAP

- 20 out of 118 Entra roles are missing
- Custom roles are not supported
- Admin portal specific RBAC roles are not supported
 - Defender
 - Purview
 - Intune

Option 3: Access through GDAP

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				
Guest Account				
GDAP Access				

Audit Log Details

Activity Target(s) Modified Properties

Activity

Date 10/5/2025, 2:07 PM

Activity Type Update group

Correlation ID 1d7e4c57-af36-45eb-b29f-e8d38deb8bfb

Category GroupManagement

Status success

Status reason

User Agent

Initiated by (actor)

Type User

Display Name [redacted] Technician

Object ID d556a198-2533-4944-a1f9-a566d57ff41d

IP address XX.XXX.XXX.XX

User Principal Name user_d556a19825334944a1f9a566d57ff41d@[redacted]

Audit logs from Customer Perspective

- UPN = user_XX@partner.com
- DN = “Partner” Technician

Audit logs from MSP Perspective

Update group.

Directory

Overview

Related logs

User



Myron Helgering

mhel.pink@

Activity

Update group.

Activity time

05/10/2025, 14:07:53

Category

Group management

Tenant name

Helgering

Service

Directory

Result



Success




Result reason

--





- UPN visible
- Display Name visible

Overall Security












- Upsides

- Microsoft Partner can combine GDAP with PIM 
- Device compliance with trust settings for guests works 
- Guest access is disabled when (MSP) account is disabled 

- Downsides

- GDAP supports only a limited amount of roles 
- Customer has little control over permission governance 
- Real device compliance can't be achieved 
- Customer has limited insights in sign-in and audit logs 

Option 3: Access through GDAP

Scenario	User Experience	Device Compliance	Permissions	Security
User Account				
Guest Account				
GDAP Access				

When to choose which option

- Option 1: User account
 - If you want to be in control of your own environment and want to maintain a high security level.
- Option 2: Guest account
 - If external admins only need access to specific accessible admin portals.
- Option 3: GDAP
 - If you delegate most of your IT business to an MSP partner.

Takeaways

- Prepare your organization for external admins.
- Don't simply exclude external admins from your Conditional Access policies.
- If possible, give your external admins access through a (virtual) managed device, such as a PAW.
- Configure cross-tenant access settings for external GDAP and B2B guest admins.
- Always combine PIM with GDAP permissions and create security groups for each customer.

Time for questions!

Other sessions @ Live! 360

- Wednesday, November 19, 2025
 - Automated Data Security: Identifying Sensitive Data with Microsoft Purview **(9:30am – 10:45am)**
- Thursday, November 20, 2025
 - Six Methods to Protect your Business from the Threat of Unmanaged Devices **(1:00pm – 2:15pm)**
 - The Challenge of Providing Secure Access to External Admins **(2:30pm – 3:45pm)**

Session Survey

- Your feedback is very important to us
- Please take a moment to complete the session survey found in the mobile app
- Use the QR code or search for “Converge360 Events” in your app store
- Find this session on the Agenda tab
- Click “Session Evaluation”
- Thank you!



Thank you!