

Lab 5 CST8912_011

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Submitted to:

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Lab-5

Title

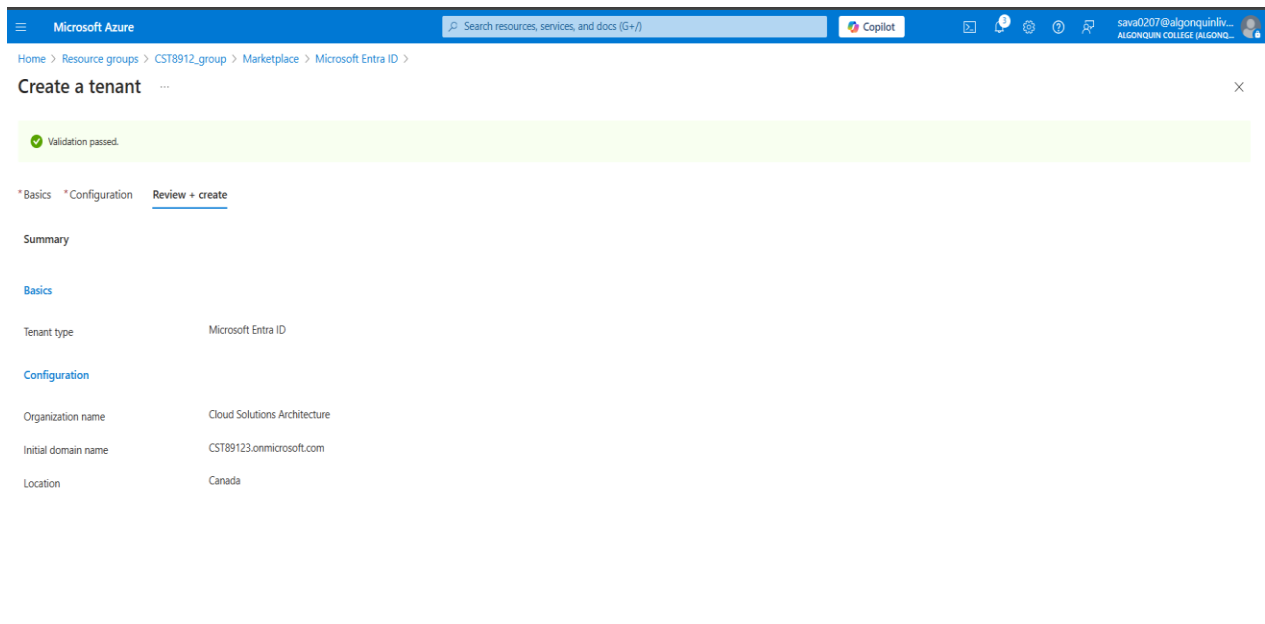
- The implementation of secure and scalable cloud solutions takes place through Microsoft Entra ID.

Introduction

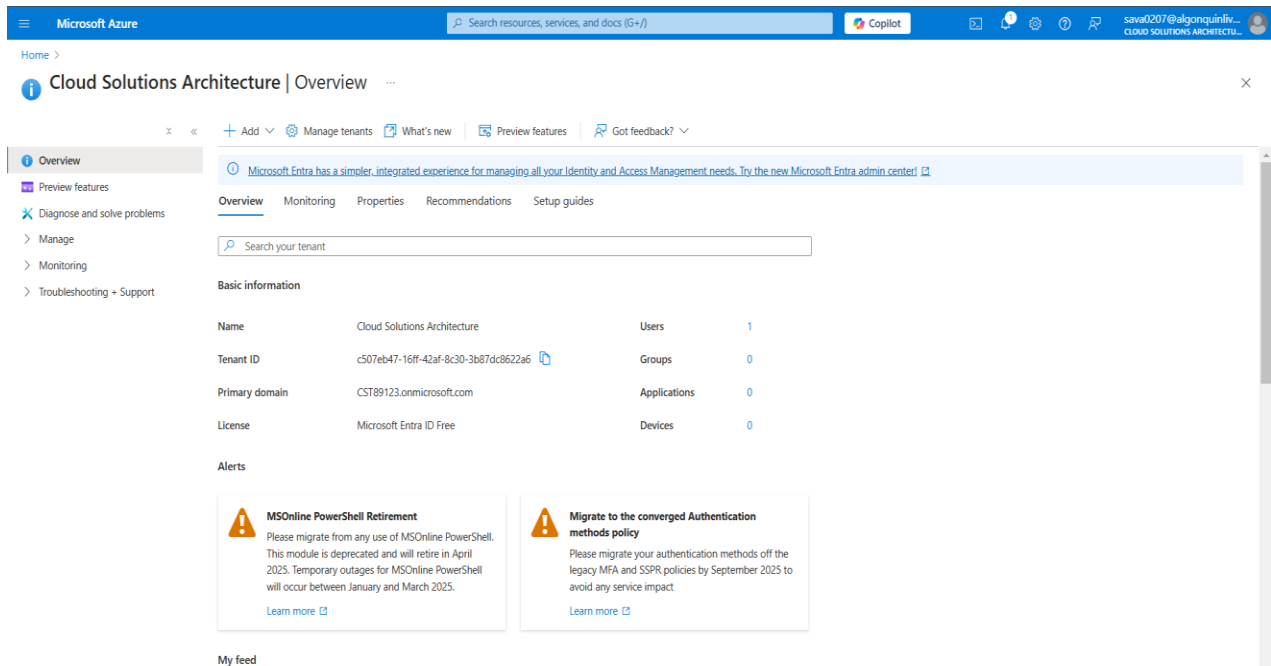
- The Lab allows you to apply Microsoft Entra ID (formerly Azure AD) management skills which entails creating users with roles and groups for building secure scaling cloud solutions. The tasks enable learners to work with vital concepts such as role-based access control (RBAC) and dynamic group memberships and conditional access policies. The assignment also includes duties to work with management groups who organize your resources. The final step will include resource cleanup and documentation of your work process in a detailed report to consolidate your knowledge of cloud security practices and resource management best practices.

Steps

- The assignment consists of tasks that enable deployment of user's groups and roles through Microsoft Entra ID for secure cloud solution development. You should start by making user accounts along with defining roles and adding job titles before setting up static and dynamic groups which require either manual or automatic user attribute-based membership. After implementing role-based access control (RBAC) you will manage permissions for elevated access effectively through the establishment of management groups that organize resources across subscriptions. As the next step you will generate and execute conditional access policies that implement security protocols based on user characteristics alongside access parameters. To conclude you will perform resource cleanup followed by detailed documentation in a comprehensive report that shows your comprehension of cloud security practices and scalability strategies and resource management principles.



1.1 Creating a tenant



1.2 Tenant Overview

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > Users >

8912user1

User

Search

Edit properties Delete Refresh Reset password Revoke sessions Manage view Got feedback?

Overview

Audit logs

Sign-in logs

Diagnose and solve problems

Custom security attributes

Assigned roles

Administrative units

Groups

Applications

Licenses

Devices

Azure role assignments

Authentication methods

New support request

Overview Monitoring Properties

Basic info

8912user1

8912user1yourdomain.onmicrosoft.com@CST89123.onmicrosoft.com

Member

User principal name

8912user1yourdomain.onmicrosoft.com@CST89123.onmicr...

Object ID

ca3b2b64-782e-49d2-a310-5709735c20fb

Created date time

16 Feb 2025, 00:33

User type

Member

Identities

CST89123.onmicrosoft.com

Group memberships

0

Applications

0

Assigned roles

0

Assigned licenses

0

My Feed

Account status

Enabled

Edit

B2B invitation

Convert to external user

Quick actions

1.3 Created User Overview

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > Cloud Solutions Architecture | Overview >

Invite external user

Invite an external user to collaborate with your organization

Basics Properties Assignments Review + invite

Invite a new guest user to collaborate with your organization. The user will be emailed an invitation they can accept in order to begin collaborating. [Learn more](#)

Identity

Email *

tarangpatel667@gmail.com

Display name

Tarang Savaj

Invitation message

Send invite message

☒

Message

Welcome to Azure and our group project.

Cc recipient

Invite redirect URL *

https://myapplications.microsoft.com/?tenantid=c507eb47-16ff-42...

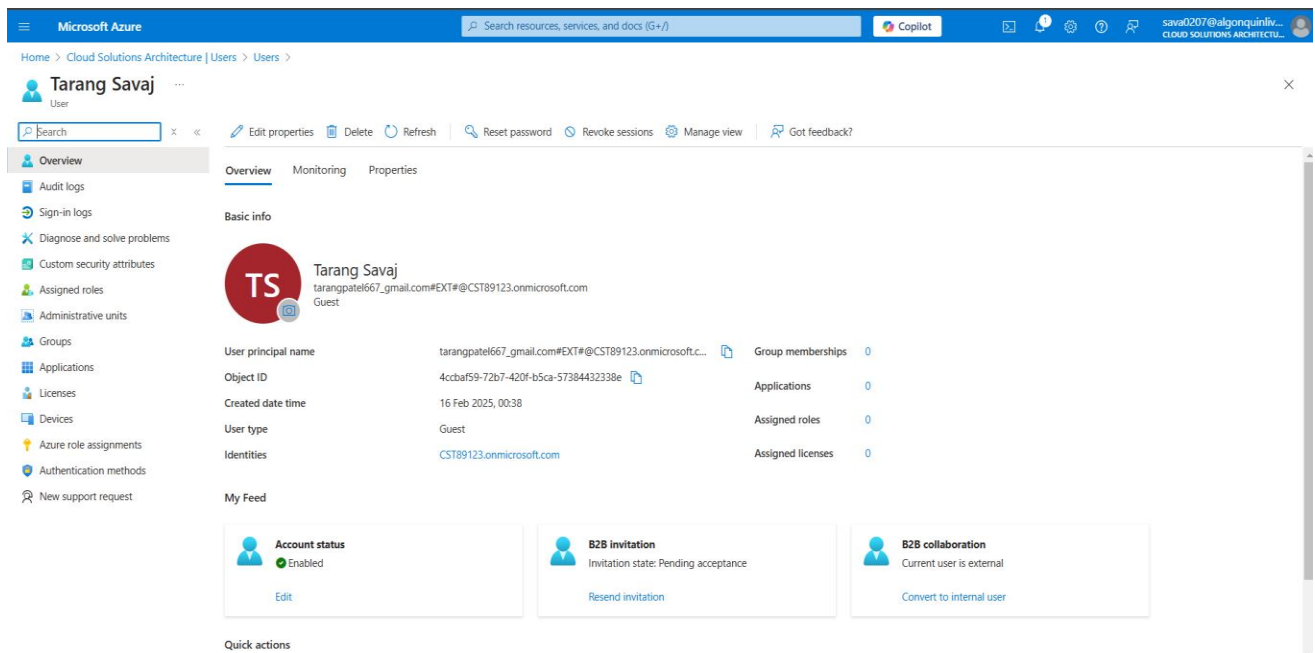
Review + Invite

< Previous

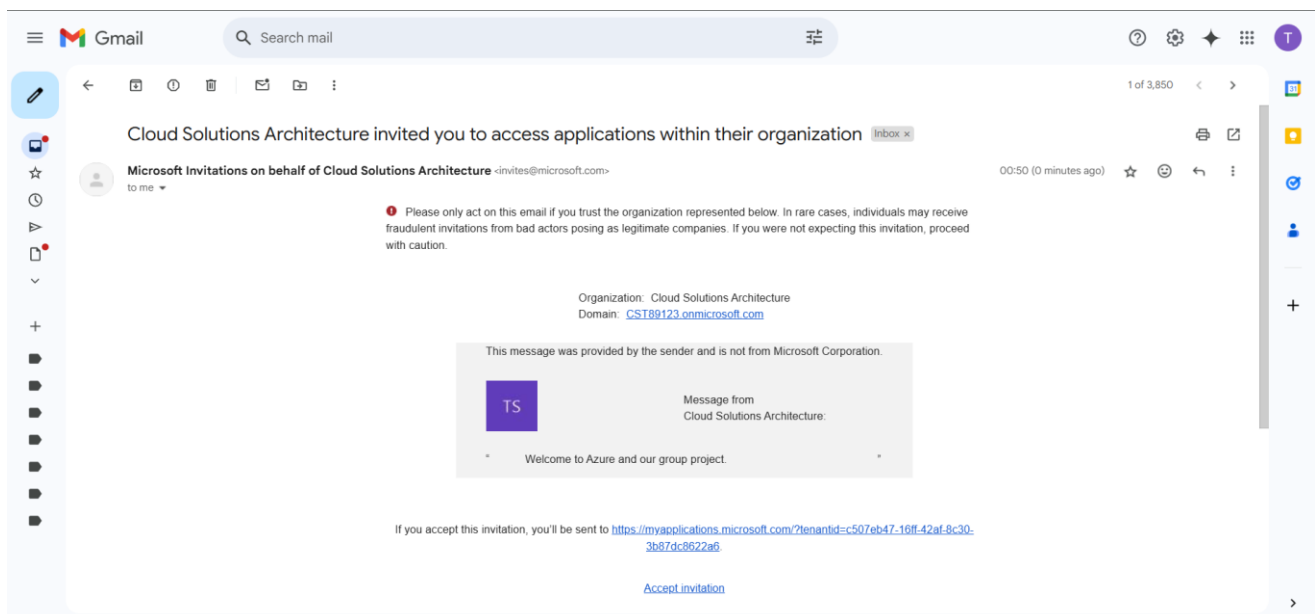
Next: Properties >

Give feedback

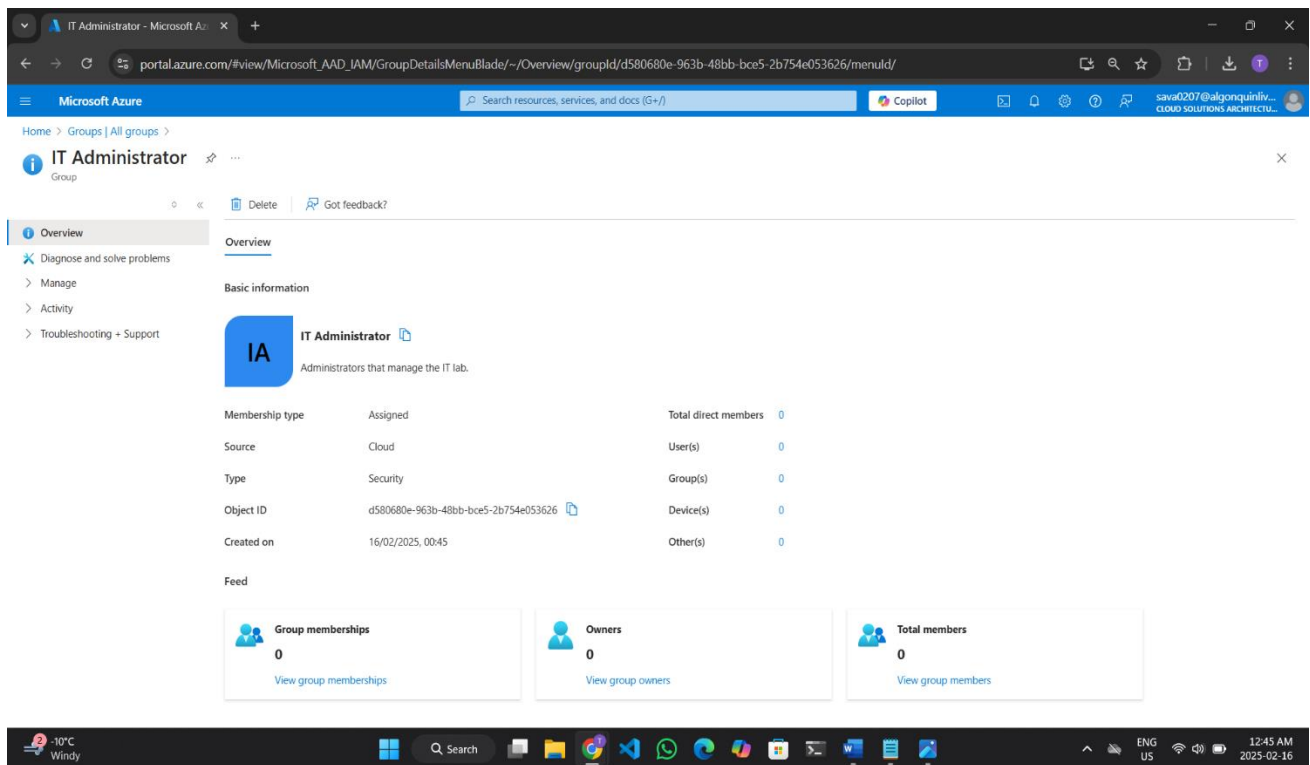
1.4 Inviting external user



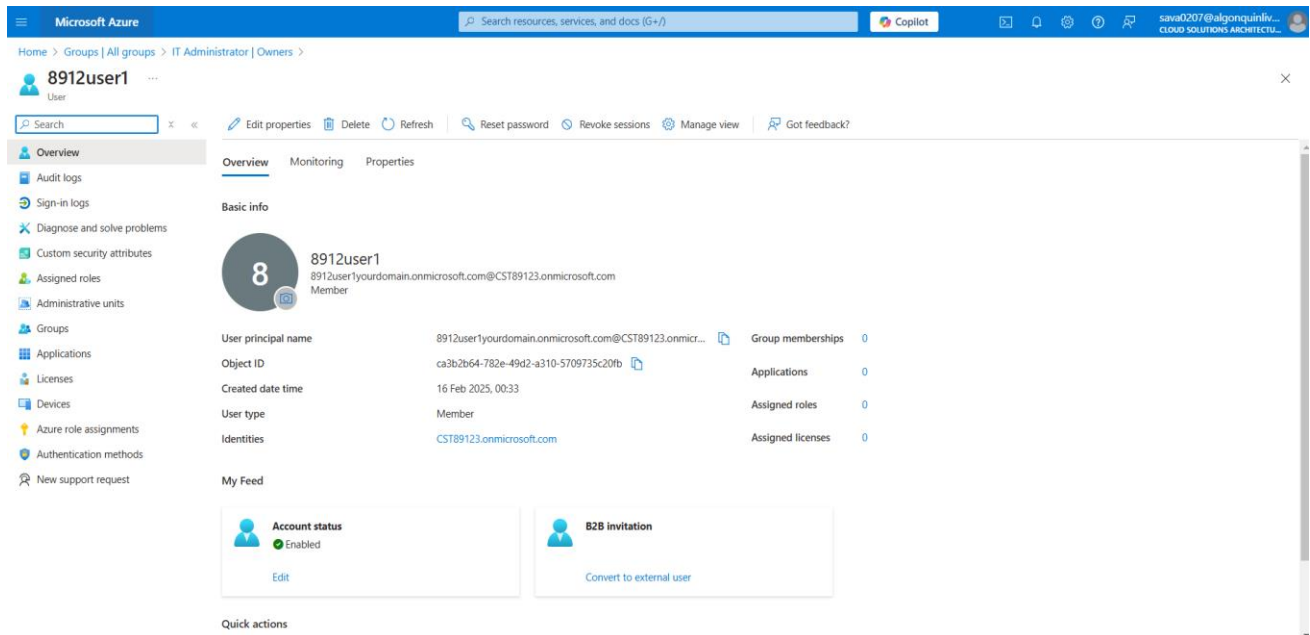
1.5 invited external user's overview



1.6 External user invitation



2.1 Created Group overview



2.2 Owner Added and showing overview

Microsoft Azure

Home > IT Administrator >

Members

IT Administrator

+ Add members Bulk operations Refresh Manage view Remove Got feedback?

Direct members All members

Search Add filter

2 group members found

<input type="checkbox"/>	Name	Type	Email	User type	Object Id	Device Id
<input type="checkbox"/>	8912user1	User		Member	ca3b2b64-782e-49d2-a310-5709735c20fb	
<input type="checkbox"/>	Tarang Savaj	User	tarangpatel667@gmail.com	Guest	4ccba59-72b7-420f-b5ca-57384432338e	

https://portal.azure.com/#

2.3 Added both member (user and guest)

Microsoft Azure

Home > Cloud Solutions Architecture

Cloud Solutions Architecture | Properties

- Enterprise applications
- Devices
- App registrations
- Identity Governance
- Application proxy
- Custom security attributes
- Licenses
- Cross-tenant synchronization
- Microsoft Entra Connect
- Custom domain names
- Mobility (MDM and WIP)
- Password reset
- Company branding
- User settings
- Properties**
- Security
- Monitoring
- Troubleshooting + Support

Name: Cloud Solutions Architecture

Country or region: Canada

Data location: United States datacenters

Notification language: English

Tenant ID: c507eb47-16ff-42af-8c30-3b87dc8622a6

Technical contact: sava0207@algonquinlive.com

Global privacy contact:

Privacy statement URL:

Access management for Azure resources

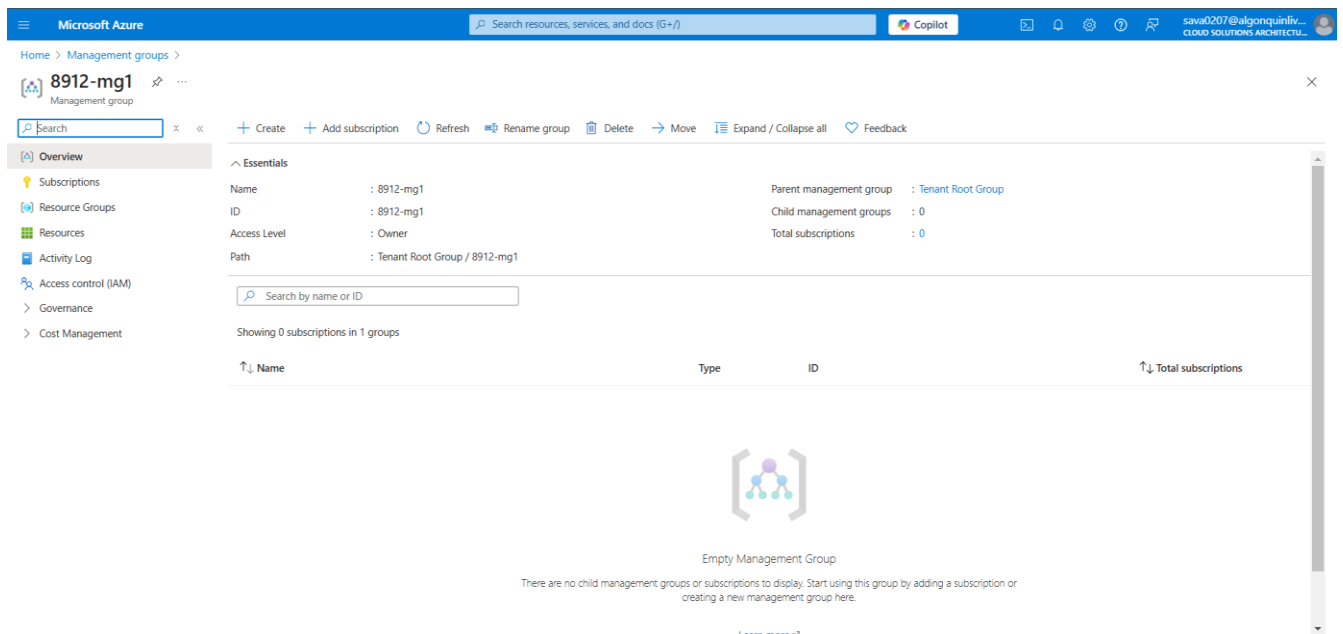
Tarang Savaj (sava0207@algonquinlive.com) can manage access to all Azure subscriptions and management groups in this tenant. [Learn more](#)

☒ Yes

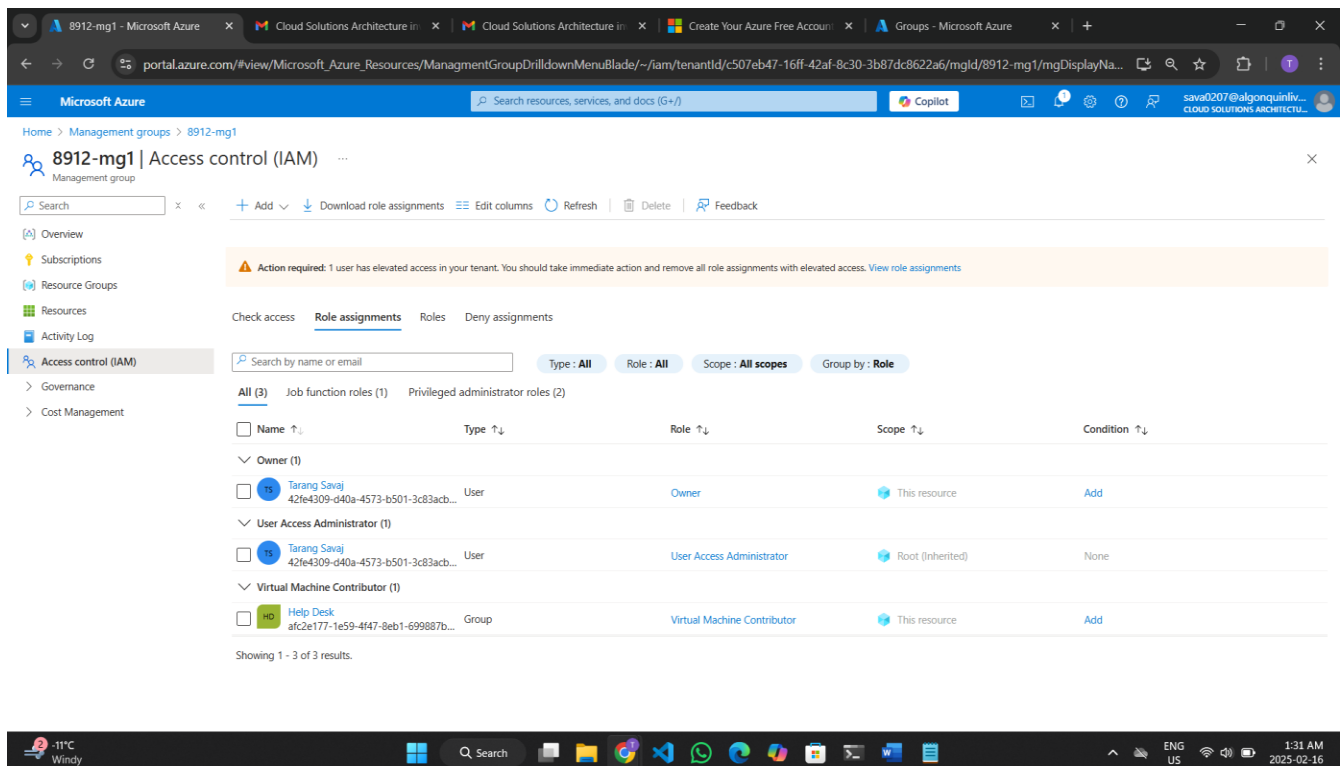
You have 1 users with elevated access. Microsoft Security recommends deleting access for users who have unnecessary elevated access. [Manage elevated access users](#)

Save Discard

3.1 Showing access management for Azure resources is ON



3.2 Created Management Group overview



4.1 showing Role assignments with Help Desk has a virtual machine contributor

Microsoft Azure

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

Copilot

sava0207@algonquiniv...
CST89923.ONMICROSOFT.COM

Home >

Management groups

CST89923.onmicrosoft.com

Search

+

Create

+

Add subscription

↺

Refresh

≡

Expand / Collapse all

↓

Export to CSV

♥

Feedback

Overview

Get started

Settings

Use management groups to group subscriptions. Click on an existing group to drill in, view details and govern resources. Right-click on any subscription or management group to launch quick actions. Click the "Get Started" tab to learn more.

Search by name or ID

Showing 0 subscriptions in 1 groups

↑↓ Name

Type

ID

↑↓ Total subscriptions

Empty Management Group

There are no child management groups or subscriptions to display. Start using this group by adding a subscription or creating a new management group here.

Learn more

Create new group here

Add subscription

Deleting group

Group deletion Succeeded

5.1 Deleting management groups

Microsoft Azure

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

Copilot

sava0207@algonquiniv...
CLOUD SOLUTIONS ARCHITECTU...

Home >

Delete tenant 'Cloud Solutions Architecture?'

Microsoft Entra ID

Troubleshoot

Refresh

Tenant "Cloud Solutions Architecture" was successfully scheduled for deletion. Please click here to sign out. After signing back in you can choose other directories to work with.

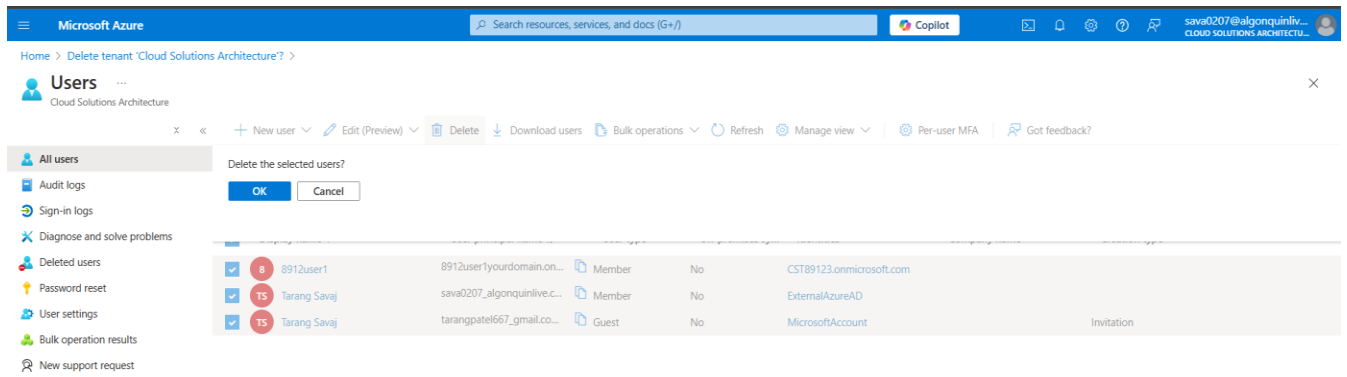
Resource	Status	Required action
Users	✓	--
LinkedIn application ⓘ	✓	--
App registrations ⓘ	✓	--
Enterprise applications ⓘ	✓	--
License-based subscriptions ⓘ	✓	--
Microsoft Azure subscriptions ⓘ	✓	--
Self-service sign up products	✓	--
Microsoft Entra Domain Services	✓	--
Multi-Factor Authentication	✓	--
Identity providers	✓	--
User flows	✓	--

Delete

Successfully deleted tenant

Successfully deleted tenant Cloud Solutions Architecture.

5.2 Deleting Tenant



<https://portal.azure.com/?feature.msals=true#>

5.3 Deleting Users

References

- References for this task are taken from the provided lab file.