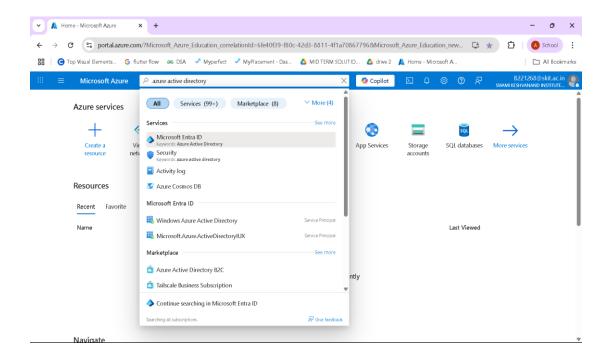
### 1: Create an Azure AD User & Invite a Guest User

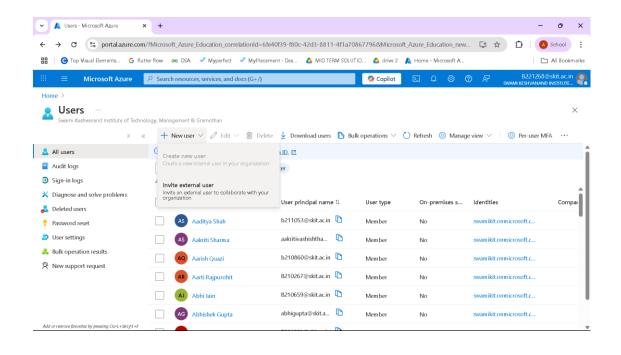
#### 1.1 Create a New Azure AD User

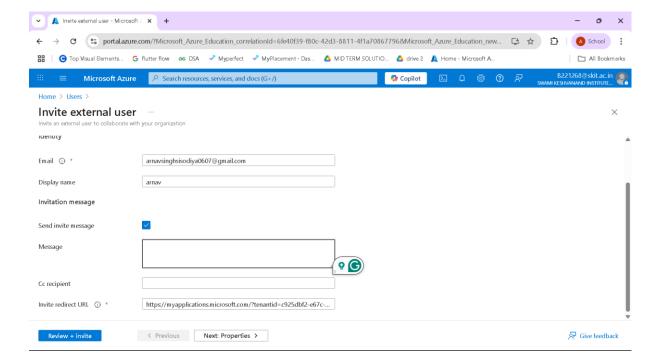
- 1. Open Azure Portal.
- 2. In the search bar, type **Azure Active Directory**  $\rightarrow$  Click it.
- 3. On the left menu, click on **Users** followed by New Users.
- 4. Choose **Create user**.
- 5. Fill the details: fill in Username, Name, and Password for the same.
- 6. Click Create.

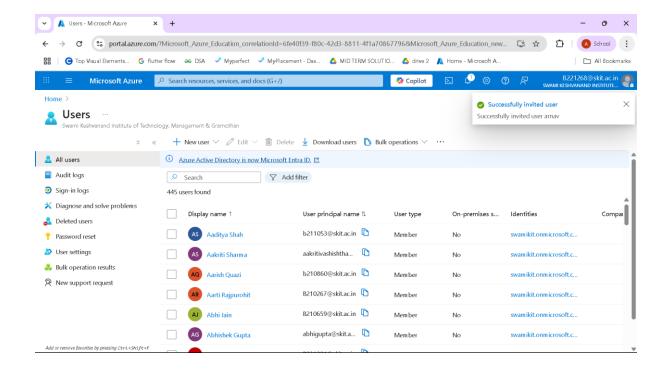
### 1.2 Invite a Guest User (External User)

- 1. Go to Azure AD -> Users -> + New guest user.
- 2. Enter:
  - o **Name:** Guest user's name.
  - o **Email address:** Their personal or official email.
- 3. Add a welcome message (optional).
- 4. Click Invite.
- 5. The user will get an invitation email to join your tenant.









## 2. Create Groups (Security & Microsoft 365) with their differences

### 2.1 Navigate to Groups

- 1. Login to azure portal.
- 2. In the left-hand menu or search bar, type **Azure Active Directory** and select it.
- 3. In the **Azure AD blade**, select **Groups** from the left menu.
- 4. Click on + **New group** to start creating a group.

### 2.2 Create a Security Group

A **Security group** is used to control access to apps, files, or resources.

#### Steps:

- 1. **Group type:** Select **Security**.
- 2. **Group name:** Enter a name like security group.
- 3. **Group description:** Enter a meaningful description like "*Provides access to developer resources.*"
- 4. **Membership type:** Select one of the following:

- Assigned: You manually add users.
- o **Dynamic User:** Users are added automatically based on rules.
- Dynamic Device: Devices are added automatically based on rules.

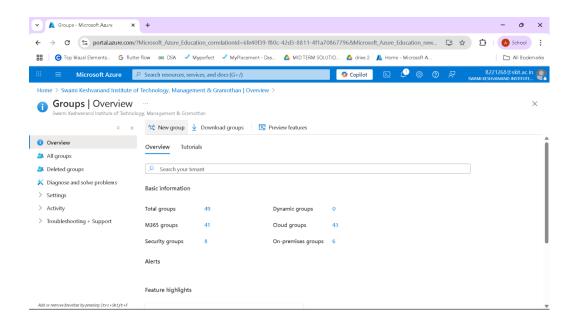
(For this project, select **Assigned**.)

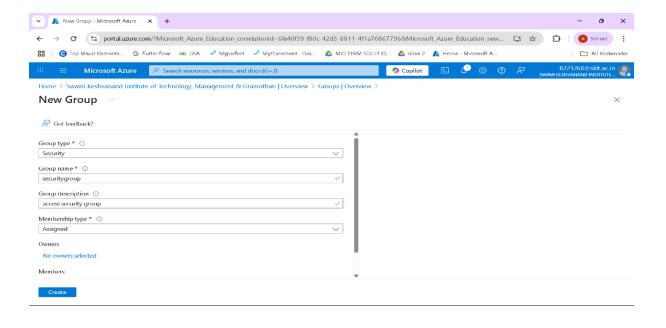
## 5. Owners:

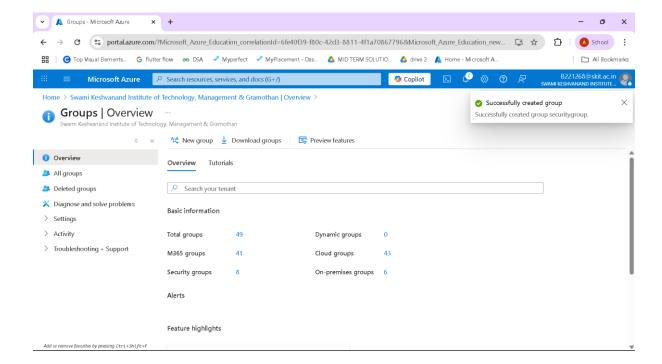
- $\circ$  Click on No owners selected  $\rightarrow$  + Add owners.
- Select the users (like the one you created in Step 1).

### 6. Members:

- Click + Add members to add the users who should belong to this group.
- 7. **Create:** Click **Create** at the bottom.







## 2.3 Create a Microsoft 365 Group

A **Microsoft 365 Group** is designed for collaboration.

It creates: A shared mailbox, Calendar, Integration with Teams, Planner, and SharePoint.

## Steps:

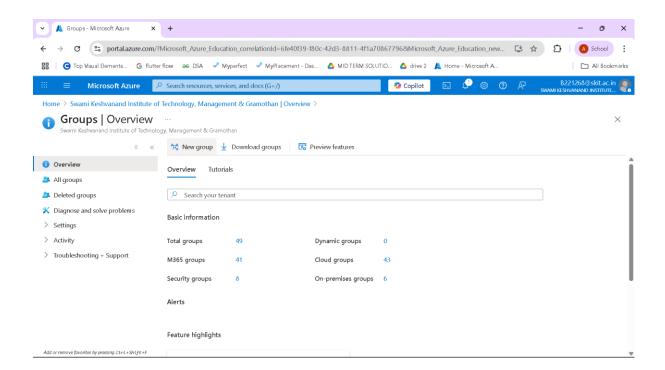
- 1. Group type: Select Microsoft 365.
- 2. **Group name:** Enter a name like m365group.
- 3. **Group description:** Example "Team for DevOps collaboration and communication."
- 4. **Email address:** A unique email alias will be generated, e.g., m365group@domain.com.

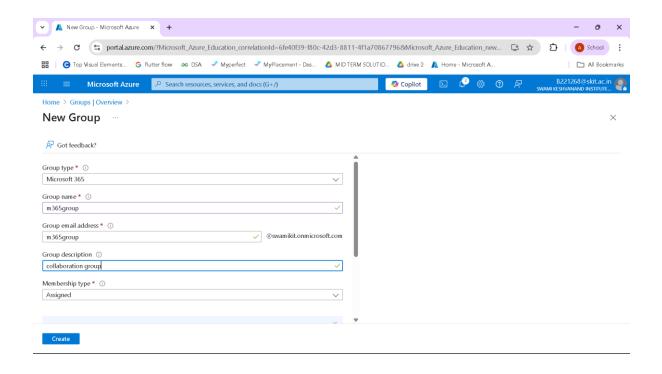
### 5. Privacy:

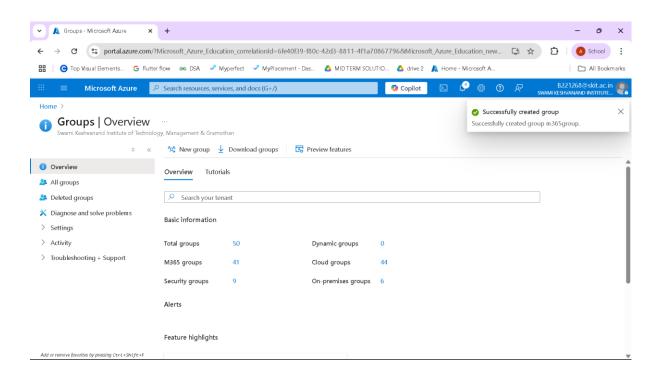
- o **Private:** Only approved members can join.
- Public: Anyone in the organization can join.
  (Choose Private for most cases.)
- 6. **Membership type:** Usually **Assigned** (manually add members).

#### 7. Owners:

- Click No owners selected  $\rightarrow$  + Add owners.
- 8.**Members:** Click + **Add members** to add required users and click on **CLICK**.







# 2.4 Key Differences Between Security and Microsoft 365 Groups

Feature	Security Group	Microsoft 365 Group
Purpose	Access control for resources.	Team collaboration & communication.
Email mailbox	No mailbox	Has a mailbox & calendar.
Integration	No direct Teams/SharePoint link	Integrated with Teams, Planner, etc.
Privacy settings	Not applicable	Public or Private option.
Licensing required	No	Yes (Microsoft 365 license needed).
Dynamic Membership	Supported	Supported.

## 3. Demonstrate Groups in Azure Active Directory (AAD).

## 3.1 Add Owners to a Group

**Owners** are the people who can manage the group (add/remove members, edit group properties, etc.).

# 1. Navigate to Groups:

 $\circ$  Go to Azure Portal  $\rightarrow$  Azure Active Directory  $\rightarrow$  Groups.

## 2. Select the Group:

o Click on the group where you want to add an owner.

### 3. Add Owner:

o Go to **Owners** (in the left menu).

- Click + Add owners.
- Select a user (e.g., test user you created).
- $\circ$  Click **Select** → Done.

## 3.2 Assign Members to a Group

**Members** are the users who are part of the group.

## 1. Go to the same Group:

 $\circ$  Azure AD  $\rightarrow$  Groups  $\rightarrow$  Select the group.

#### 2. Add Member:

- o Click on **Members** (left menu).
- Click + Add members.
- o Search for a user (e.g., your test user).
- Click Select.

### 3.3 Roles & Administrators

You can assign **Azure AD roles** (like User Administrator, Security Reader, etc.) to **users or groups**.

#### 1. Go to Azure AD Roles:

 $\circ$  Azure Portal → Azure Active Directory → Roles and administrators.

#### 2. Choose a Role:

• Select any role (e.g., **User Administrator**).

### 3. Assign Role to Group:

- Click + Add assignments.
- In the Select members window, search for the group you created.
- $\circ$  Click **Select** → **Add**.

# 3.4 Licenses Assignment

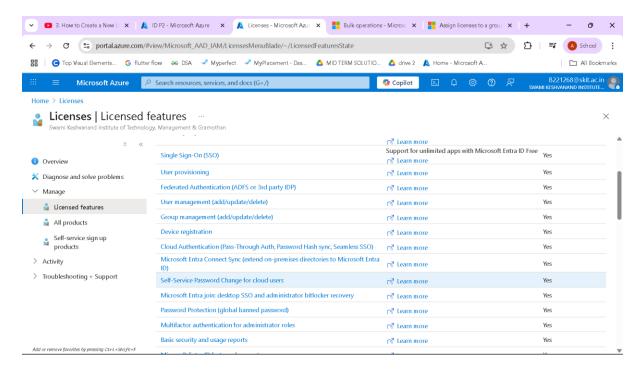
Licenses (like Microsoft 365 E3) can be assigned to groups.

### 1. Go to the Group:

 $\circ$  Azure AD → Groups → Select the group.

#### 2. Assign License:

- o Click on **Licenses** (left menu).
- Click + Assignments.
- o Select the **license** (e.g., Microsoft 365 E3 or any available).
- Click Save.



### 3.5 Azure Role Assignment

This is **Role-Based Access Control (RBAC)** at the resource level (e.g., giving the group permission to manage a virtual machine or resource group).

#### 1. Go to an Azure Resource:

 $\circ$  E.g., navigate to a **Resource Group** (Home  $\to$  Resource Groups  $\to$  Select a group).

### 2. Open IAM (Access Control):

Click Access control (IAM) in the left panel.

#### 3. Add Role Assignment:

 $\circ$  Click + Add → Add role assignment.

- In Role, choose something like Reader or Contributor.
- o In Members, select User, Group, or Service Principal.
- Search for your group and add it.
- Click Review + Assign.

### 3.6 Group Membership

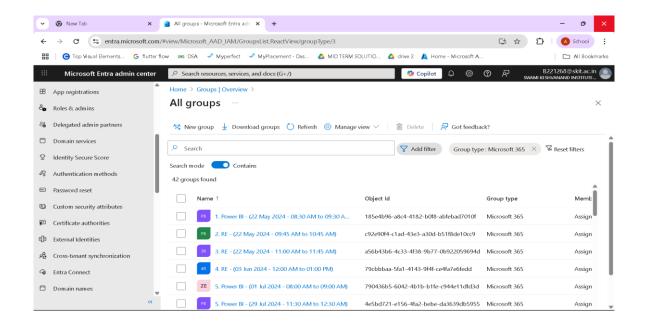
**Group membership** means understanding **Assigned vs. Dynamic Membership**.

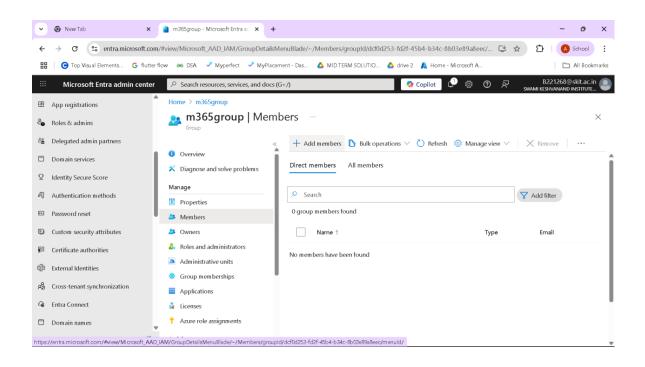
### 1. Go to the Group:

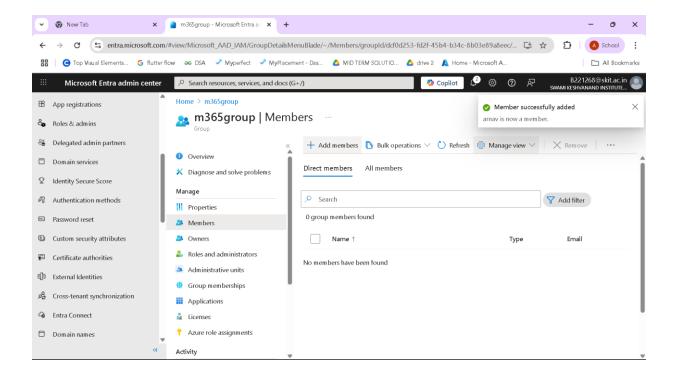
 $\circ$  Azure AD → Groups → Select your group.

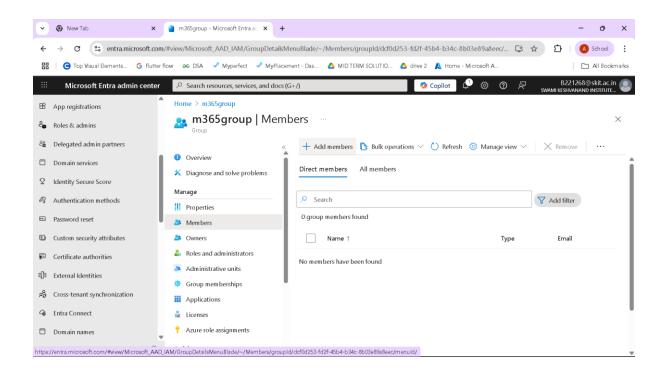
### 2. Membership Type:

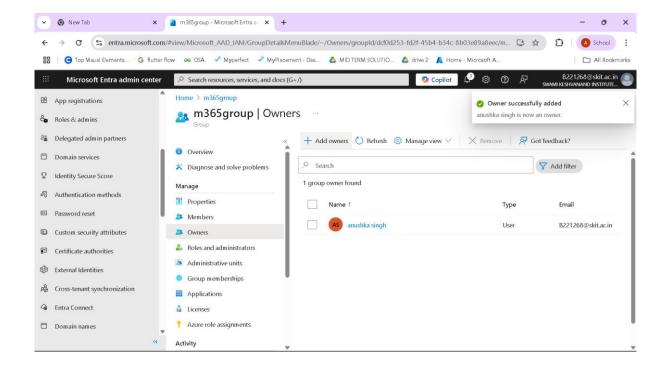
- Under Properties, check Membership type:
  - Assigned You manually add members.
  - Dynamic User/Device Users are auto-added based on rules (e.g., all users from a certain department).











# **4.Properties of Security & Microsoft 365 Groups**

## 4.1 How to Access Group Properties

- 1. Go to Azure Portal  $\rightarrow$  Azure Active Directory.
- 2. From the left-hand panel, click **Groups**.
- 3. Click on the name of the **group** (either Security or Microsoft 365 group).
- 4. In the group menu, select "Properties".
- 5. A page opens where you can **view and modify details** like:
  - o Group name
  - Description
  - Group type
  - Membership type
  - Email alias (for M365 group)
  - Privacy settings (for M365 group)

# 4.2 Properties of a Security Group

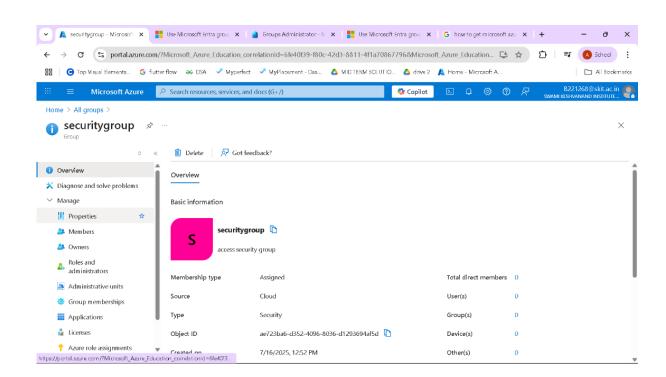
When you select **Properties** of a Security Group, you will see:

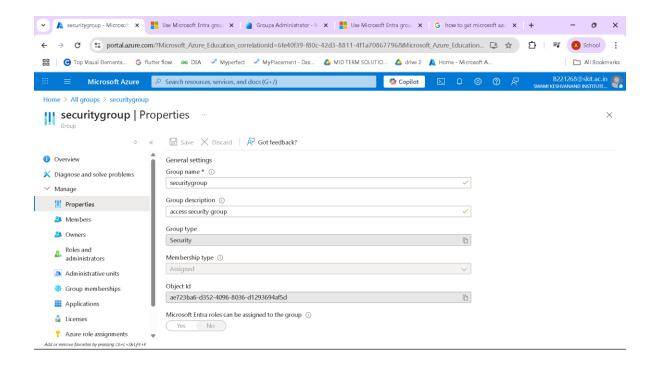
- 1. **Group Name:** Editable name of the group.
- 2. **Group Description:** Description of what the group is used for.
- 3. **Group Type:** Security (fixed, cannot be changed once created).
- 4. Membership Type:
  - Assigned: Users are manually added.
  - Dynamic User: Users are automatically added based on user attributes (requires Azure AD Premium).
  - Dynamic Device: Devices are automatically added (also requires Premium).

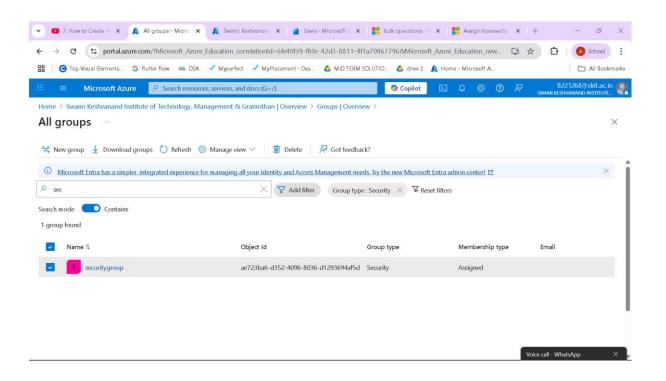
- 5. **Object ID:** Unique ID of the group.
- 6. **Source:** Whether the group was created in Azure AD or synced from on-premises.

### **Steps to Modify Security Group Properties**

- 1. Open the Security Group.
- 2. Click **Properties**.
- 3. Edit **Name** or **Description** if needed.
- 4. (Optional) Change **Membership Type** (if you have premium license).
- 5. Click Save.







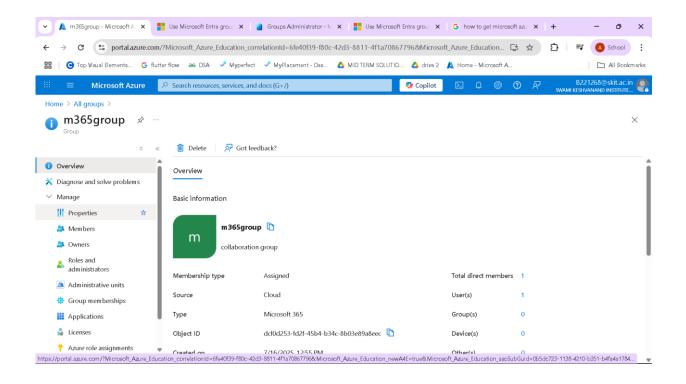
## 4.3 Properties of a Microsoft 365 Group

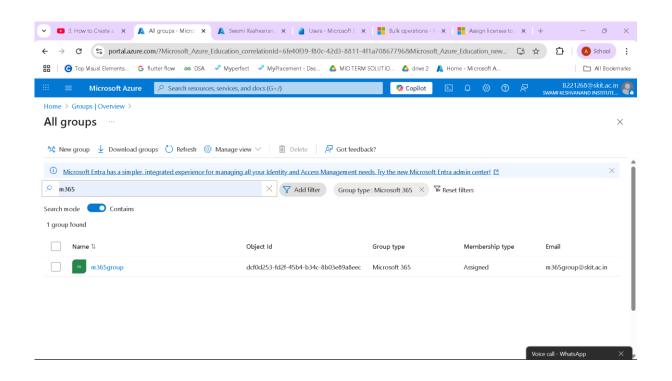
When you check **Properties** of an M365 Group, you will see extra fields compared to a Security Group:

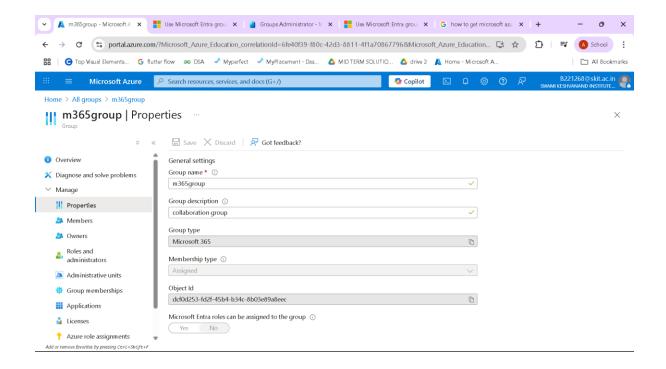
- 1. **Group Name:** Editable name.
- 2. **Description:** Explains the group's purpose.
- 3. **Group Type:** Microsoft 365.
- 4. **Membership Type:** Assigned or Dynamic.
- 5. **Privacy:** 
  - o **Private:** Only group members can see content.
  - o **Public:** Anyone in the organization can see content.
- 6. **Email Address:** M365 groups automatically have an email alias (e.g., devops@domain.com).
- 7. **Owners:** Who manages the group.
- 8. **Associated Apps:** Microsoft Teams, SharePoint, and Planner (if enabled).

## **Steps to Modify Microsoft 365 Group Properties**

- 1. Open the Microsoft 365 group.
- 2. Click **Properties**.
- 3. Edit: **Name** and **Description**. **Along with Privacy** setting (Public or Private).
- 4. Add/modify **Email Alias** (via "General" settings of the group).
- 5. Save the changes.







# 4.4 Key Differences in Properties

Property	Security Group	Microsoft 365 Group
Email Address	Not applicable	Automatically assigned
Privacy Setting	Not applicable	Public or Private
App Integration	No integration	Teams, SharePoint, Planner
Purpose	Access control for resources	Collaboration and communication

### 5: Assign Roles, Add to Group, License, and Administrative Unit

### 5.1 Assign Roles

**Roles** define what a user or group can do in Azure AD (e.g., reset passwords, create users).

### Steps to Assign a Role to a User:

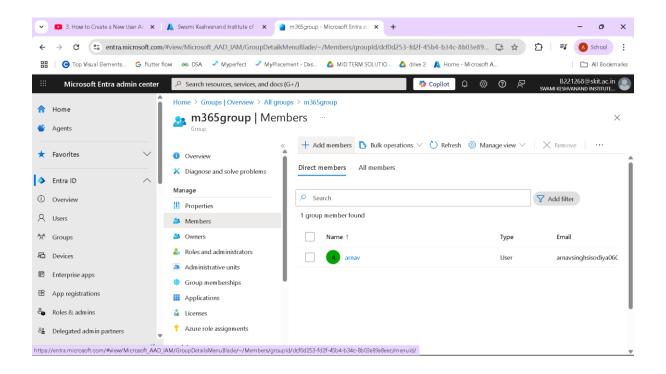
- 1. Go to Azure Active Directory > Roles and administrators.
- 2. Select a role (e.g., **User Administrator**).
- 3. Click + Add assignments.
- 4. Select the user and click **Add**.

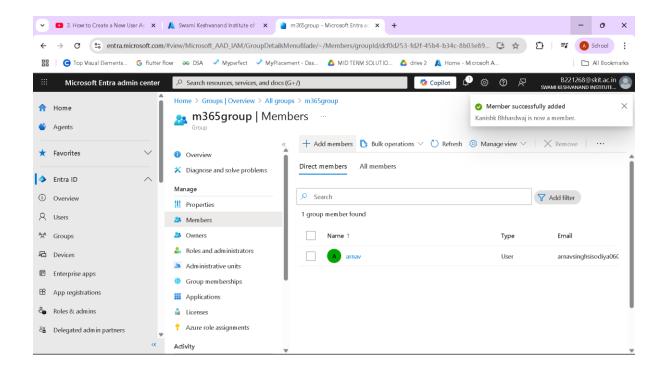
## Steps to Assign a Role to a Group

- 1. Go to Azure Active Directory > Roles and administrators.
- 2. Select a role (e.g., Global Reader).
- 3. Click + Add assignments.
- 4. Choose the group and click **Add**.

#### 5.2 Add Users to a Group

- 1. Go to **Azure AD > Groups**.
- 2. Select the group where you want to add a member
- 3. Click **Members** > + **Add members**.
- 4. Select the user you want to add and click **Select**.



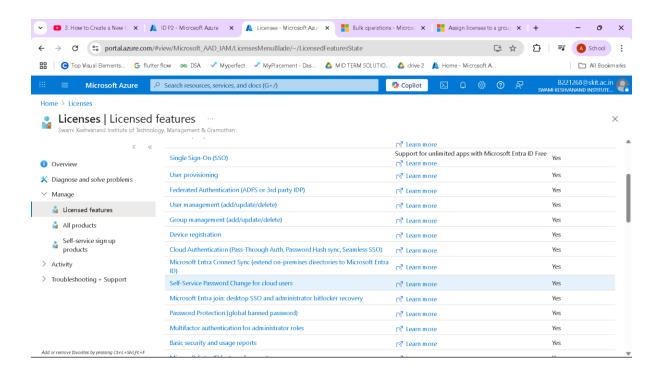


## 5.3 Assign Licenses

Licenses give users access to Microsoft services (e.g., Office 365).

### Steps:

- 1. Go to Azure AD- > Users.
- 2. Select the user.
- 3. In the left menu, click **Licenses -> + Assignments**.
- 4. Select the license (e.g., Microsoft 365 E3 or E5).
- 5. Click Save.

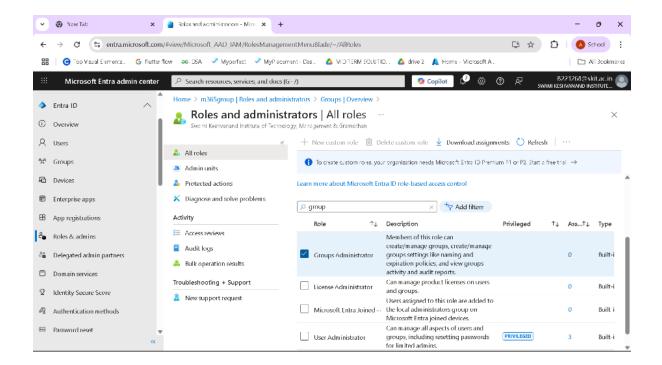


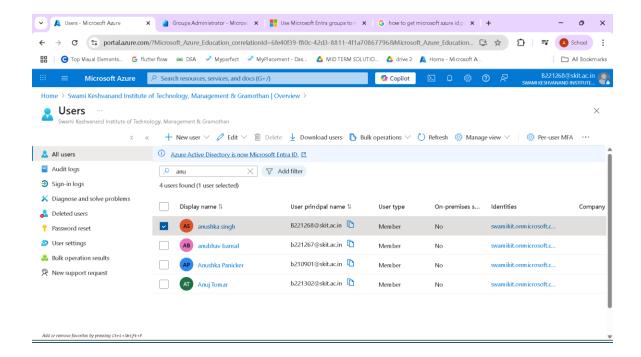
## 5.4 Create and Assign an Administrative Unit

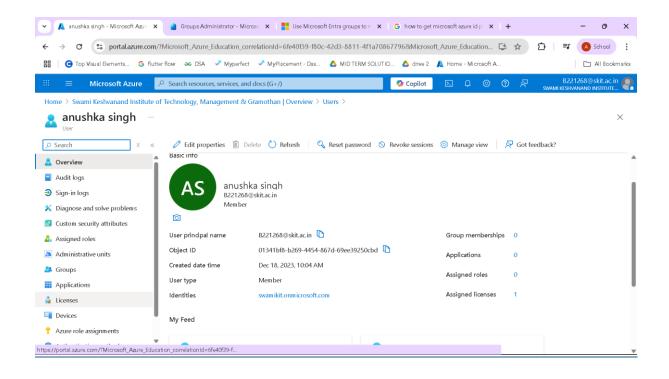
Administrative units allow you to delegate management to specific users for a subset of your organization.

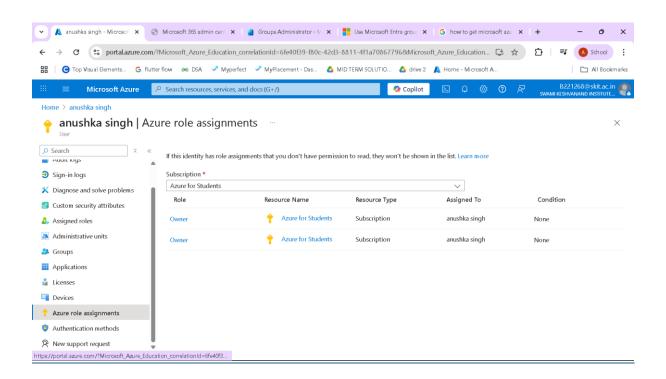
### Steps:

- 1. Go to Azure AD > Administrative units.
- 2. Click + **Add**.
- 3. Name the unit.
- 4. Add users/groups under this unit.
- 5. Assign roles to users **inside the unit**.









**Step 6: Configure Bulk Operations** 

### 6.1 Bulk Create Groups

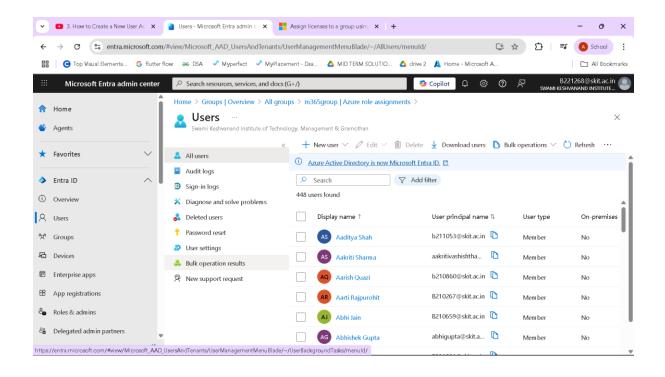
- 1. Go to Groups:
  - $\circ$  Azure Portal → Azure Active Directory → Groups.
- 2. Open Bulk Operations:
  - $\circ$  Click Bulk operations  $\rightarrow$  Bulk create.
- 3. Download CSV Template:
  - Click Download to get the sample CSV file.
  - Open it in Excel and fill the required columns:
    - DisplayName Name of the group.
    - Description Description of the group.
    - MailNickname Short name for the group.
    - SecurityEnabled True for Security group, False for Microsoft 365 group.
    - MailEnabled True for M365 group, False for Security group.
    - GroupTypes Leave blank for Security group, use Unified for Microsoft 365 group.

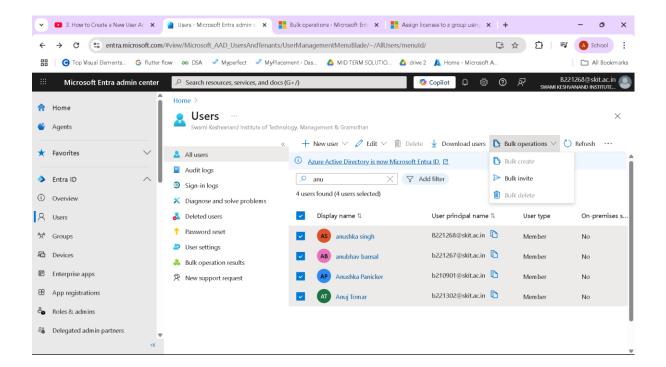
#### 6.2 Bulk Invite Users to Groups

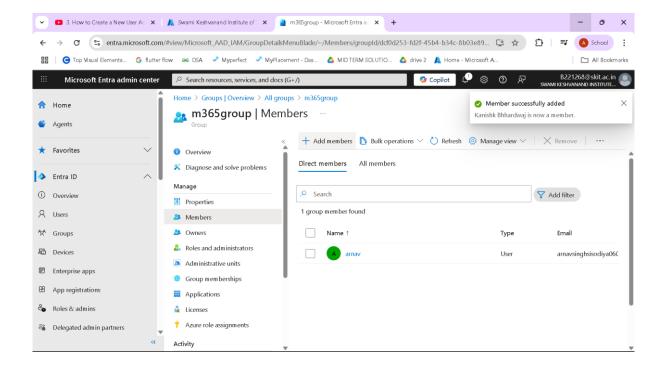
- 1. Go to Users:
  - o Azure AD → Users.
- 2. Open Bulk Operations:
  - $\circ$  Click Bulk operations  $\rightarrow$  Bulk invite.
- 3. Download CSV Template:
  - o Fill details:
    - EmailAddress Email of the external user.
    - DisplayName Name of the user.
    - InviteRedirectURL A URL where they are redirected after accepting the invite.

### 6.3 Bulk Delete Groups

- 1. Go to Groups:
  - $\circ$  Azure AD  $\rightarrow$  Groups.
- 2. Open Bulk Delete:
  - $\circ$  Click Bulk operations  $\rightarrow$  Bulk delete.
- 3. Download CSV Template:
  - Add ObjectId of each group you want to delete.
    - Find ObjectId: Azure AD → Groups → Select group → Copy Object ID from Overview.
- 4. Upload CSV:
  - $\circ$  Upload the CSV  $\rightarrow$  Click Submit.
- 6.4 Download Groups (Export List of Groups)
  - 1. Go to Groups:
    - $\circ$  Azure AD  $\rightarrow$  Groups.
  - 2. Export All Groups:
    - Click Download groups at the top.
    - It will generate a CSV containing details like:
      - Group Name, ObjectId, Type (Security/M365), Description.



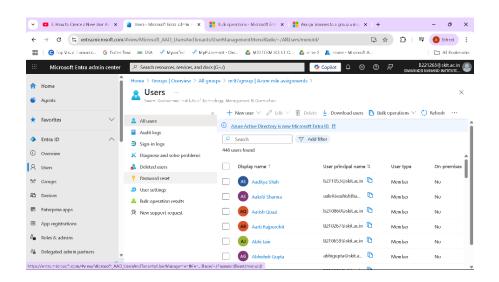




### Step 7: Manage Users

#### 7.1 Password Reset

- 1. Go to Azure AD > Users.
- 2. Select the user whose password you want to reset.
- 3. Click **Reset Password** on the top.
- 4. A new password is auto-generated (or set manually).



### 7.2 Manage Deleted Users

- 1. Go to Azure AD > Users > Deleted users.
- 2. From here, you can
  - o **Restore** a user.
  - o **Permanently delete** a user.

### 7.3 User Settings

- 1. Go to Azure AD > User settings.
- 2. Here you can configure:
  - Self-service password reset.
  - Guest user permissions.
  - External collaboration settings.

### Step 8: Monitor Azure AD (Audit Logs & Sign-In Logs)

Azure AD provides built-in monitoring capabilities to track user activities, admin actions, and sign-in events. These logs are critical for security auditing, troubleshooting, and compliance.

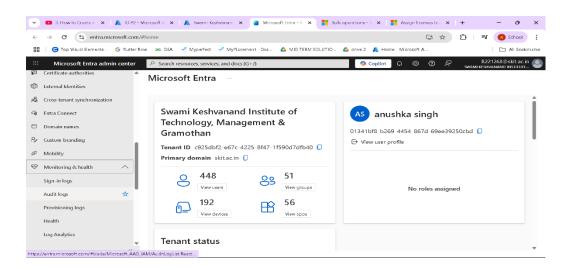
#### 8.1 Audit Logs

Audit logs show changes or actions performed in Azure AD, such as:

- User creation, deletion, or updates.
- Group creation and membership changes.
- Role assignments.
- Password resets.

### **Steps to View Audit Logs**

- 1. Go to Azure Active Directory > Monitoring > Audit logs.
- 2. You'll see a list of events such as user/group modifications.
- 3. Use the filters (top bar) to filter logs
- 4. Click on any event to see details (who performed the action, when, and what changed).



#### 8.2 Sign-In Logs

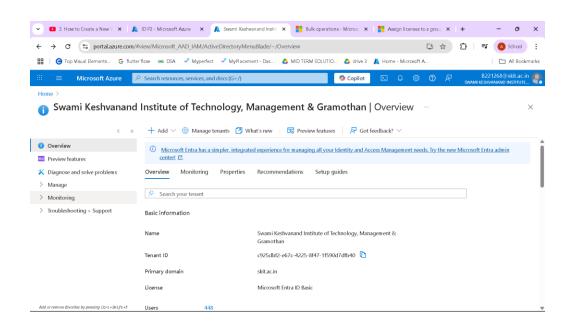
Sign-in logs provide details about user login activities, including:

- Success and failed logins.
- User location (IP address).
- · Application accessed.
- Conditional access policies applied.

### Steps to View Sign-In Logs

- 1. Go to Azure Active Directory > Monitoring > Sign-in logs.
- 2. You'll see sign-in attempts with columns like:
  - User (who signed in).

- Application (resource accessed).
- Status (Success/Failure).
- Location/IP address.
- 3. Click on any sign-in event to see details like device information, authentication method, and token details.



#### 8.3 Why Monitoring is Important?

Monitoring in Azure Active Directory is essential for ensuring security, compliance, and operational efficiency. Audit logs help track all critical changes, such as user creation, role assignment, group modifications, and license updates. By regularly reviewing these logs, administrators can identify unauthorized changes, track administrative actions, and maintain a transparent record of all activities. This is especially important for compliance with regulatory standards like GDPR, ISO, and HIPAA, where organizations must demonstrate accountability and proper identity management practices.

Sign-in logs play a crucial role in detecting and preventing security breaches. They provide detailed information about login attempts,

including the user's location, IP address, and the status of each signin. This data is vital for identifying unusual login patterns, failed attempts, or suspicious activities like brute-force attacks. With proactive monitoring, administrators can quickly respond to security threats, enforce conditional access policies, and ensure that only authorized users are accessing organizational resources.