

Azure Subscription

A subscription is like a container for your Azure resources. It defines:

- Billing boundary: All costs for resources are tied to a subscription.
- Access control boundary: You can assign roles and permissions at the subscription level.

You can have multiple subscriptions under one Azure account (e.g., for dev, test, and production environments).

Resource Group

A resource group is a logical container for related Azure resources. For example:

- A web app, its database, and storage account can all be in one resource group.
- It helps with organization, access control, and lifecycle management.

You can:

- Deploy, update, and delete resources together.
- Apply tags and policies at the group level.

Resources

A resource is any manageable item in Azure. Examples include:

- Virtual Machines (VMs)
- Storage Accounts
- SQL Databases
- Web Apps
- Virtual Networks

Each resource belongs to one resource group and one subscription.

Azure Region

A region is a geographic location where Azure data centers are located (e.g., East US, West Europe, Southeast Asia).

- You choose a region when creating resources.
- Some services are region-specific for performance and compliance reasons.

Azure Active Directory (Azure AD)

Azure AD is Microsoft's identity and access management service.

- It controls who can access what in your Azure environment.
- Supports Single Sign-On (SSO), Multi-Factor Authentication (MFA), and role-based access control (RBAC).

Role-Based Access Control (RBAC)

RBAC lets you assign permissions to users, groups, or applications.

- Roles like Owner, Contributor, and Reader define what actions they can perform.
- You can assign roles at the subscription, resource group, or resource level.

Tags

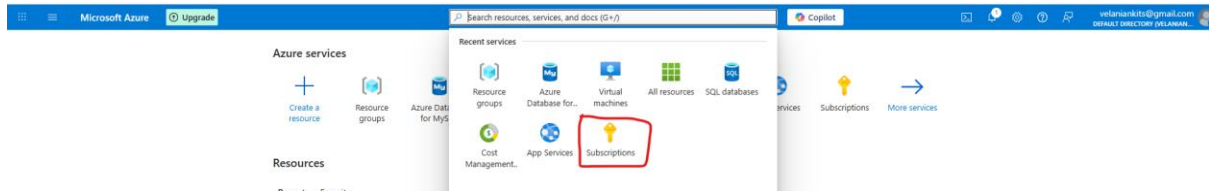
Tags are key-value pairs that help you organize and manage resources.

- Useful for cost tracking, automation, and governance.
- Example: Environment = Production, Department = Finance

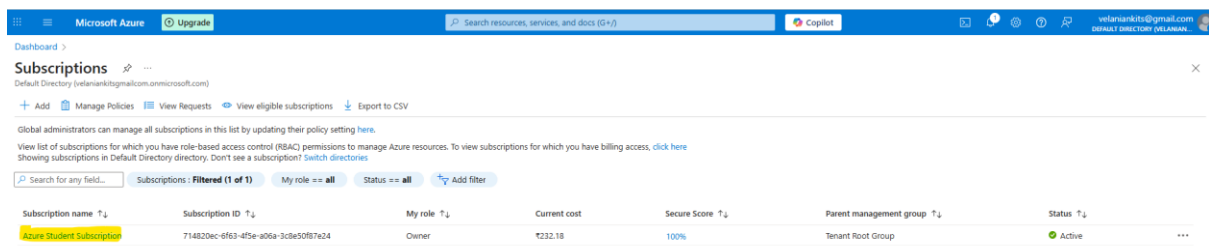
Azure Concept	College Analogy
Subscription	Entire university's IT budget
Resource Group	Each department
Resources	Course portals, databases, VMs
Region	Data center near the university
Azure AD	Student and staff directory
RBAC	Access permissions for users
Tags	Labels like department, course, owner

Step-by-Step Azure Subscriptions Setup for Azure Bootcamp

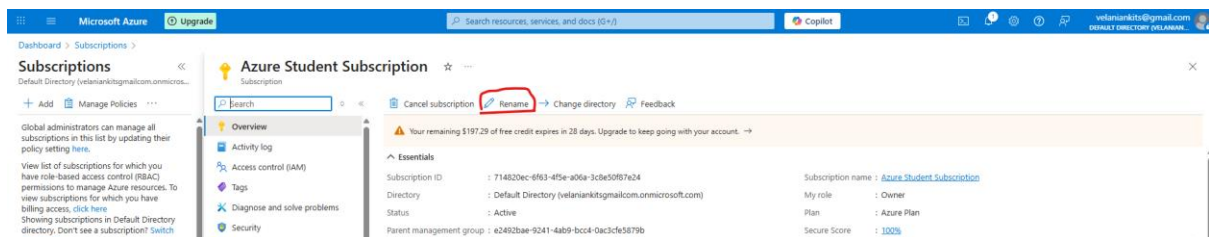
- Go to <https://portal.azure.com/#home>
- Sign in with your Azure account
- Search **Subscription** in search bar



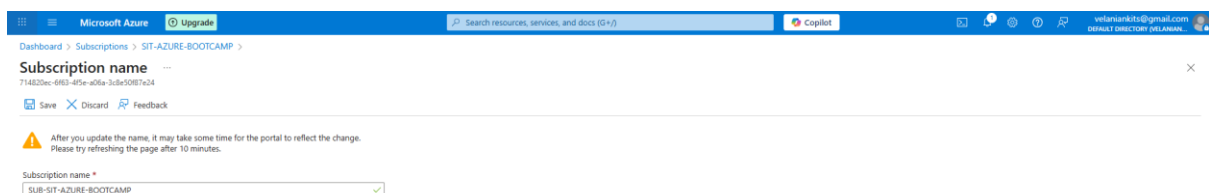
Click on Subscription



Click on Rename

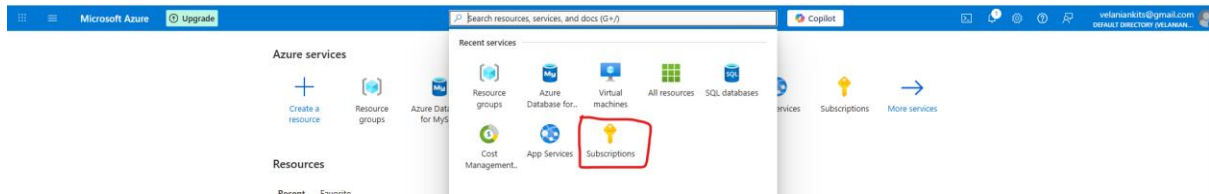


Provide a meaningful subscription name: You can choose any name, but for better clarity, I'm naming the resource group as **SUB-SIT-AZURE-BOOTCAMP**

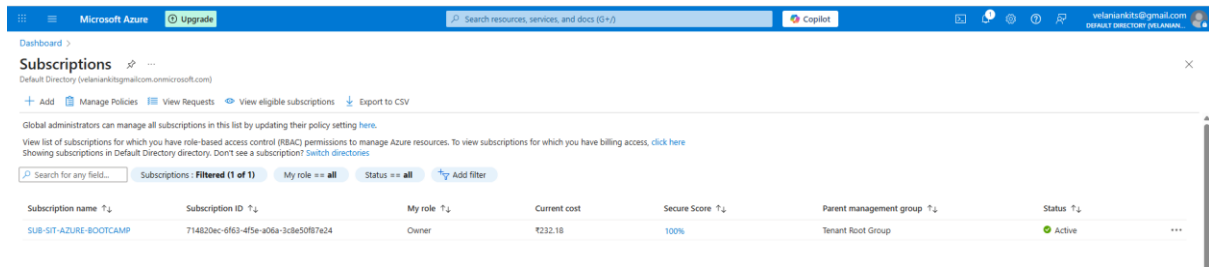


Click on Save

Search **Subscription** in search bar



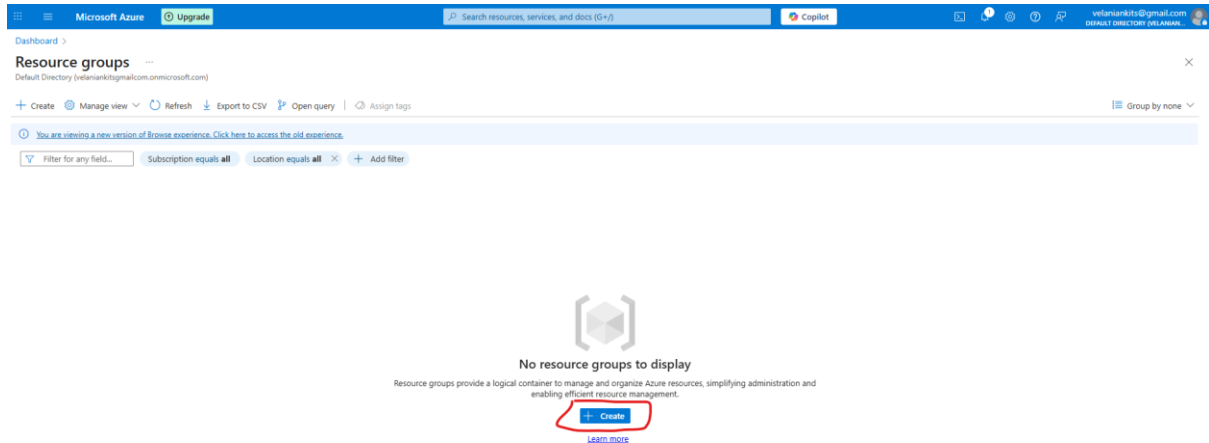
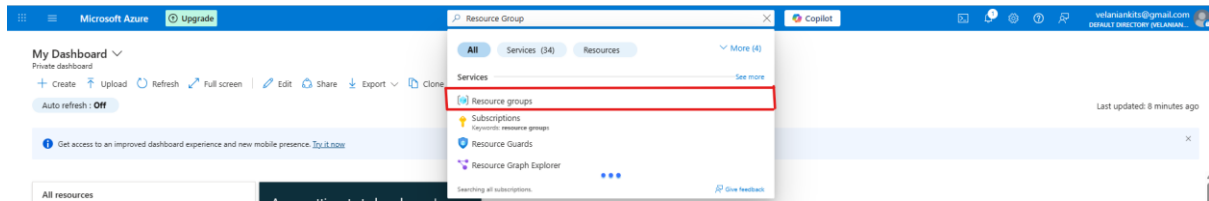
Update Subscription details available in Azure Portal



Congratulations! Your Azure subscription details have been successfully updated.

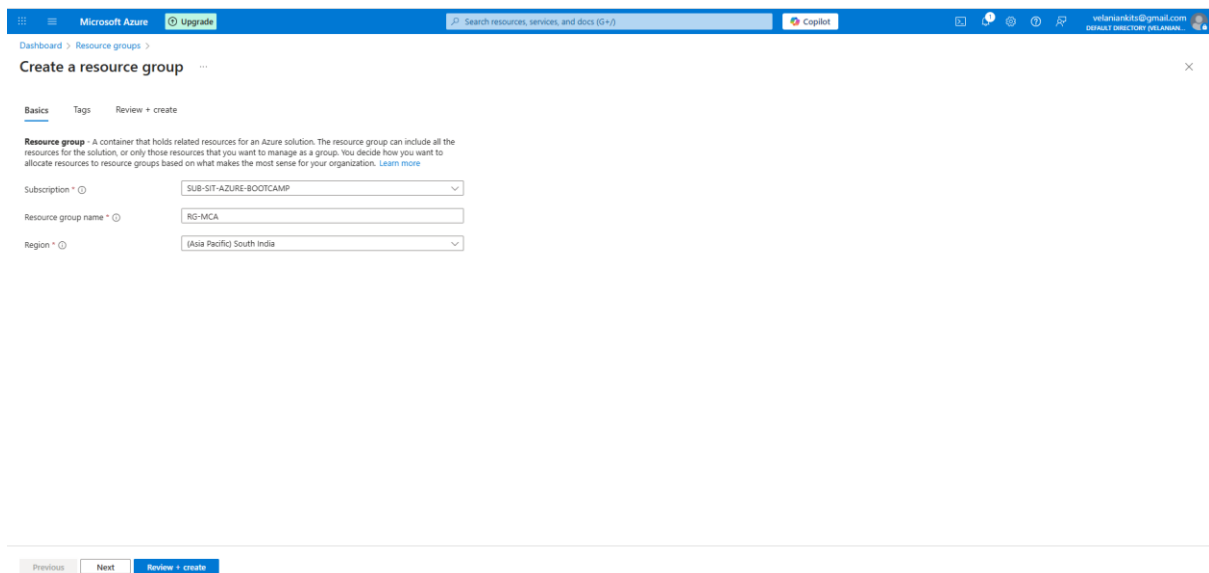
Resource Groups

Search Resource Groups in Search bar



Click on **Create**, to create new Resource Group for bootcamp

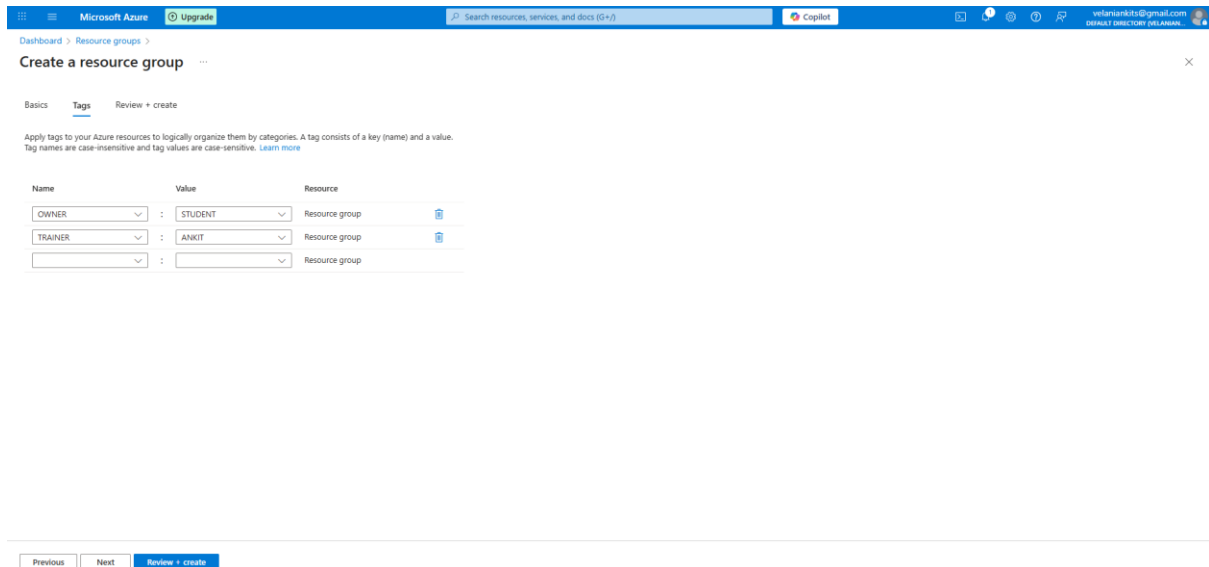
Provide a meaningful Resource Group name: You can choose any name, but for better clarity, I'm naming the resource group as **RG-MCA**



Click on **Next**, add provide Tag for the Resource Group

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AZURE STUDENT BOOTCAMP – SIT, TUMKUR



Dashboard > Resource groups > Create a resource group

Basics Tags Review + create

Apply tags to your Azure resources to logically organize them by categories. A tag consists of a key (name) and a value. Tag names are case-insensitive and tag values are case-sensitive. [Learn more](#)

Name	Value	Resource
OWNER	STUDENT	Resource group
TRAINER	ANKIT	Resource group
		Resource group

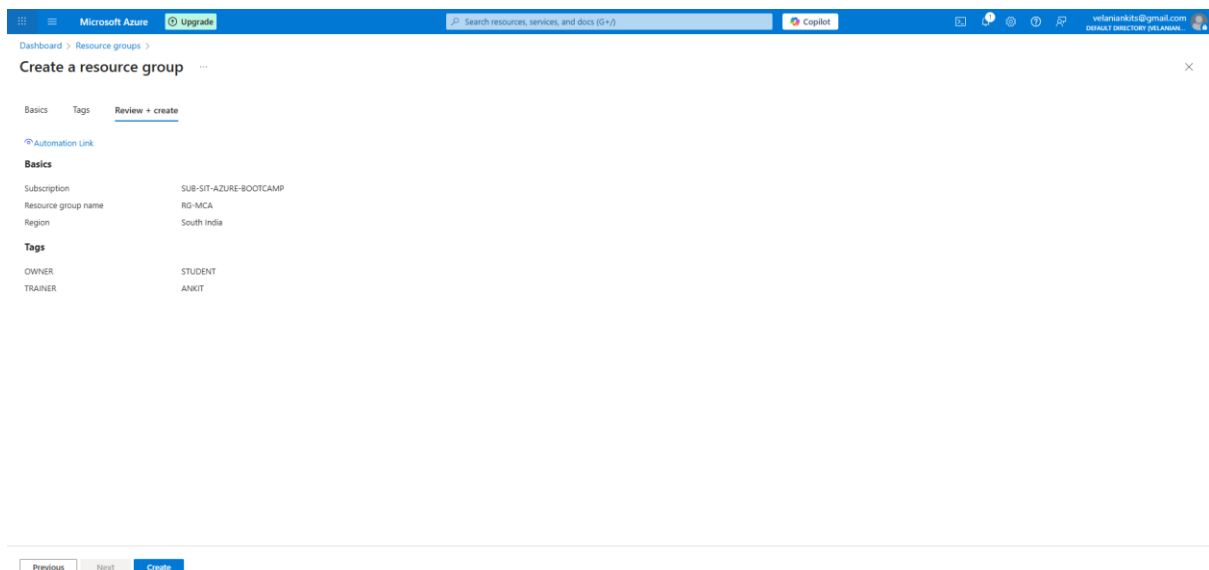
Previous Next Review + create

Here are some of the tags created for the Resource Group (RG-MCA)

OWNER: STUDENT

TRAINER: ANKIT

Click on Next



Dashboard > Resource groups > Create a resource group

Basics Tags Review + create

[Automation Link](#)

Basics

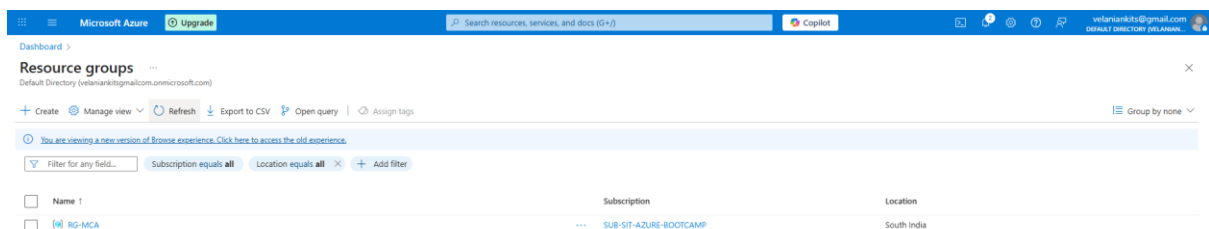
Subscription	SUB-SIT-AZURE-BOOTCAMP
Resource group name	RG-MCA
Region	South India

Tags

OWNER	STUDENT
TRAINER	ANKIT

Previous Next Create

Click on **Create** and complete the resource group creation process



Dashboard > Resource groups

Default Directory (velianankits@gmail.com on microsoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags

[You are viewing a new version of Browse experience. Click here to access the old experience.](#)

Filter for any field... Subscription equals all Location equals all + Add filter

Name	Subscription	Location
RG-MCA	SUB-SIT-AZURE-BOOTCAMP	South India

Congratulations! Your Resource group details have been successfully updated.

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