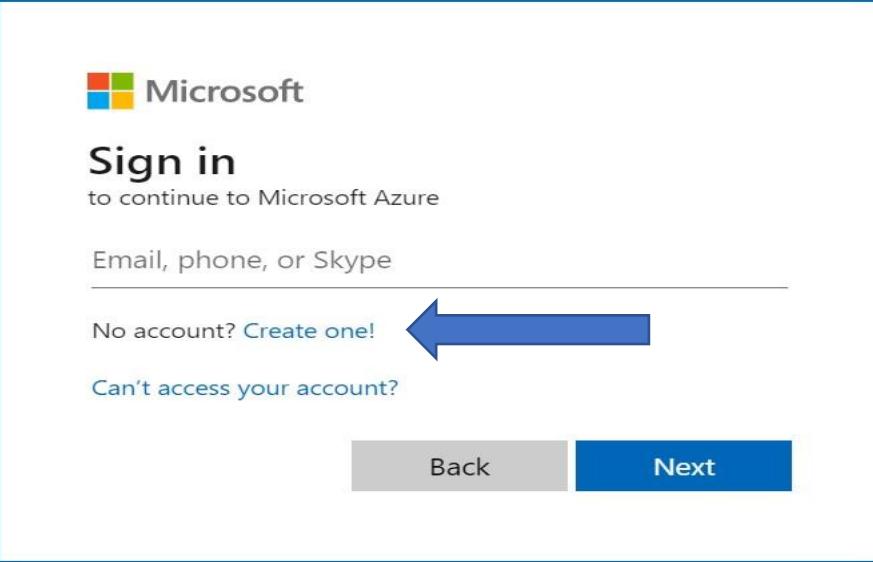


# STAGING CREATION IN MATILLION WITH AZURE



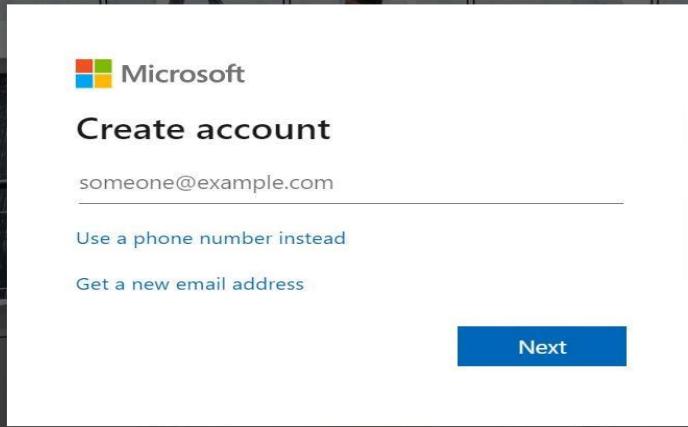
## \*STEPS TO CREATE AZURE ACCOUNT(FREE ACCOUNT)

1. Go to <https://portal.azure.com/>.
2. Click on **CREATE ONE** and create your account.



The image shows the Microsoft Azure sign-in page. At the top, there's a Microsoft logo and the text "Sign in to continue to Microsoft Azure". Below that is a text input field labeled "Email, phone, or Skype". Underneath the input field, there's a link "No account? Create one!" with a blue arrow pointing to it. Further down, there's a link "Can't access your account?". At the bottom, there are "Back" and "Next" buttons. A "Sign in with GitHub" button and a "Sign-in options" link are also visible.

3. Enter your Email Address

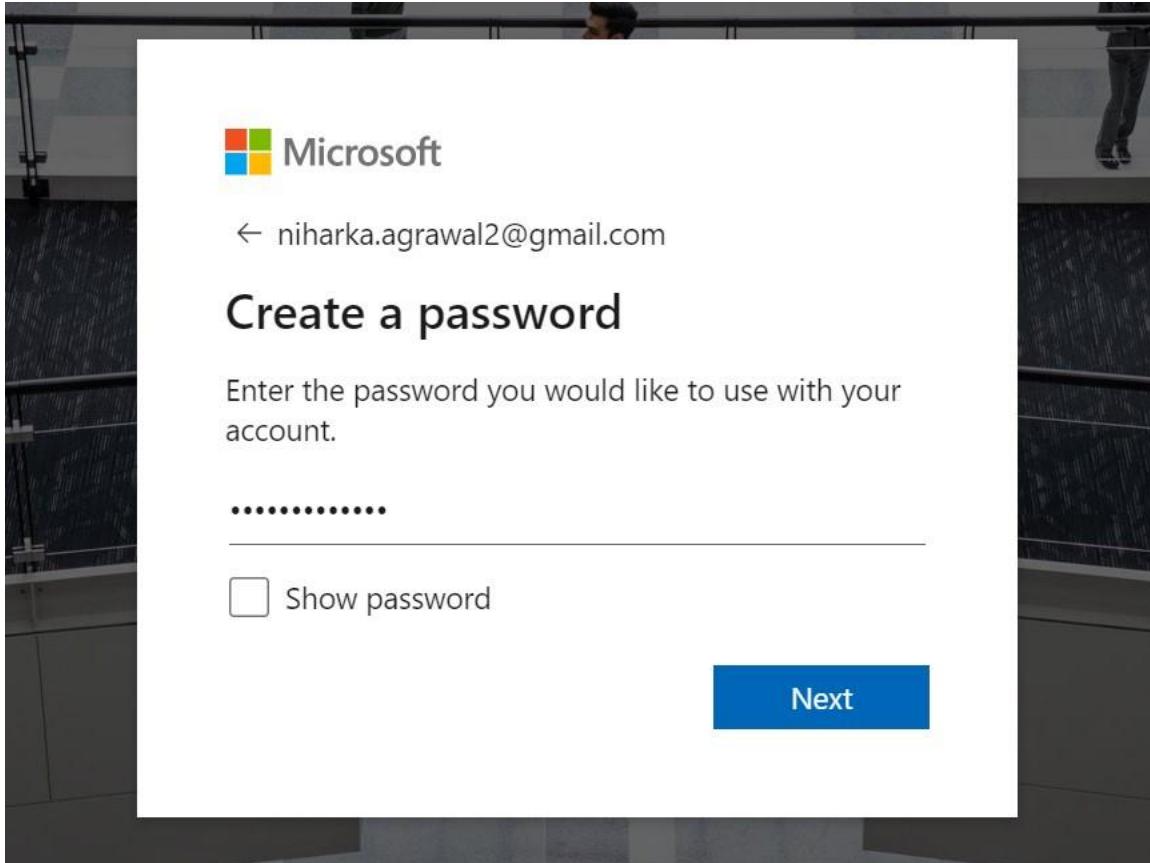


The image shows the Microsoft "Create account" page. It features a Microsoft logo and the title "Create account". There is an input field containing the email address "someone@example.com". Below the input field are links "Use a phone number instead" and "Get a new email address". At the bottom right is a "Next" button.

# STAGING CREATION IN MATILLION WITH AZURE



## 4.Create a password.



## 5.Verify your account.



# STAGING CREATION IN MATILLION WITH AZURE



6. Once all the verification completed successfully, you **will land into Azure GUI.**

A screenshot of the Microsoft Azure portal homepage. At the top, there's a search bar and a navigation bar with icons for notifications, settings, and user profile. The main heading is "Welcome to Azure!". Below it, there are three cards: "Start with an Azure free trial" (blue key icon), "Manage Azure Active Directory" (shield and server icon), and "Access student benefits" (pen and notebook icon). Each card has a "Start", "View", or "Explore" button and a "Learn more" link. Below these cards is a section titled "Azure services" with various service icons: App Service, Functions, Logic Apps, Container Registry, Blob Storage, SQL Database, Cosmos DB, App Configuration, and Application Insights.

**The second option is to create account (pay as u go – once your trail account goes over, switch to this).**

## **\*STEPS TO CREATE AZURE ACCOUNT(PAY AS YOU GO ACCOUNT)**

1. Go to <https://portal.azure.com/> and click on **Free account**.

A screenshot of the Microsoft Azure portal homepage. The top navigation bar includes links for Explore, Products, Solutions, Pricing, Partners, Resources, Search, Learn, Support, Contact Sales, Free account (which is highlighted in green), and Sign in. The main header says "Microsoft Azure portal" and describes it as a place to build, manage, and monitor cloud applications. It features "Sign in" and "New to Azure? Start free &gt;" buttons. A blue banner at the bottom encourages users to check out how-to video series for tips on deploying workloads.

Check out the how-to video series for tips on deploying your cloud workloads from the Azure portal. >

# STAGING CREATION IN MATILLION WITH AZURE



2.Click on **Pay as you go**.

A screenshot of the Azure website. At the top, there's a navigation bar with links for Explore, Products, Solutions, Pricing, Partners, and Resources. On the right side of the header are buttons for Search, Learn, Support, Contact Sales, and Sign in. The main content area has a heading "Build in the cloud with an Azure free account" and a subtext "Create, deploy, and manage applications across multiple clouds, on-premises, and at the edge". Below this are two buttons: "Start free" (in green) and "Pay as you go" (in blue). To the right of the text is a large image of a laptop displaying the Azure portal interface.

3.Enter your **Email Address**

A screenshot of a Microsoft account creation page. The background shows a blurred image of people walking in an office lobby. The main form is white and contains the Microsoft logo, the title "Create account", and an input field with the placeholder "someone@example.com". Below the input field are two links: "Use a phone number instead" and "Get a new email address". At the bottom right of the form is a blue "Next" button.

4.Create a password.

A screenshot of a Microsoft password creation page. The background shows a blurred image of people walking in an office lobby. The main form is white and contains the Microsoft logo, a back arrow with the text "← niharka.agrawal2@gmail.com", the title "Create a password", and a sub-instruction "Enter the password you would like to use with your account.". Below these are two input fields: one for the password itself (containing ".....") and another for "Show password" with a checkbox. At the bottom right of the form is a blue "Next" button.

# STAGING CREATION IN MATILLION WITH AZURE



## 5. Verify your account.

Microsoft Azure

Microsoft  
← niharikaagrawal59@gmail.com

**Verify email**

Enter the code we sent to **niharikaagrawal59@gmail.com**. If you didn't get the email, check your junk folder or [try again](#).

5347

I would like information, tips, and offers about Microsoft products and services.

Choosing **Next** means that you agree to the [Microsoft Services Agreement](#) and [privacy and cookies statement](#).

**Next**

## 4. Fill the signup form .

Your profile

Country/Region India

Choose the location that matches your billing address. You cannot change this selection later. If your country is not listed, the offer is not available in your region. [Learn More](#)

First name

Middle name (Optional)

Last name

Email address for important notifications niharikaagrawal59@gmail.com

Pay as you go with Azure

Only pay for what you use beyond free amounts of services

- As a new customer,<sup>1</sup> you get popular services free for 12 months.
- 55+ services always free.
- Personalized recommendations help you optimize your cloud environment.
- No upfront commitment, cancel anytime.

<sup>1</sup>New customers are those who have not previously had an Azure account and received 12 months of free services.

**Start Chat**

## 5. Now add your card details.

Payment Information

Please provide a credit card or debit card. We don't accept prepaid cards because they do not support monthly payments in your location.

We accept the following cards: **VISA** **MasterCard**

Cardholder Name Niharika Agrawal

Card number

Expires MM YY

CVV

Address line 1

What is a CVV?

Pay as you go with Azure

Only pay for what you use beyond free amounts of services

- As a new customer,<sup>1</sup> you get popular services free for 12 months.
- 55+ services always free.
- Personalized recommendations help you optimize your cloud environment.
- No upfront commitment, cancel anytime.

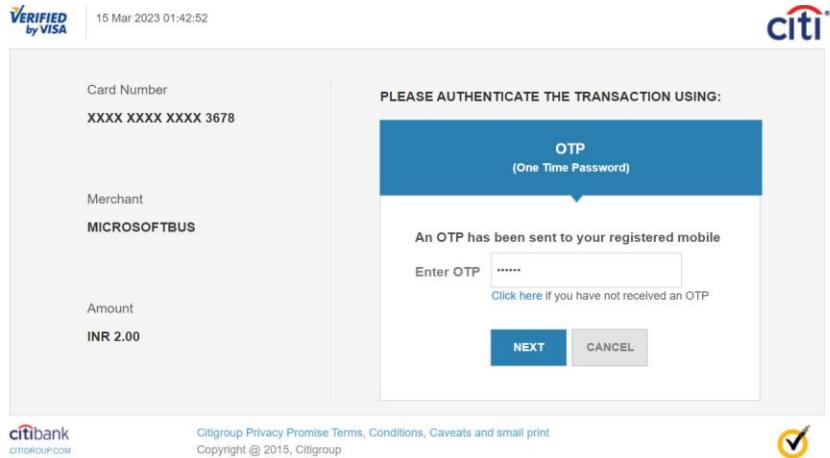
<sup>1</sup>New customers are those who have not previously had an Azure account and received 12 months of free services.

**Start Chat**

# STAGING CREATION IN MATILLION WITH AZURE

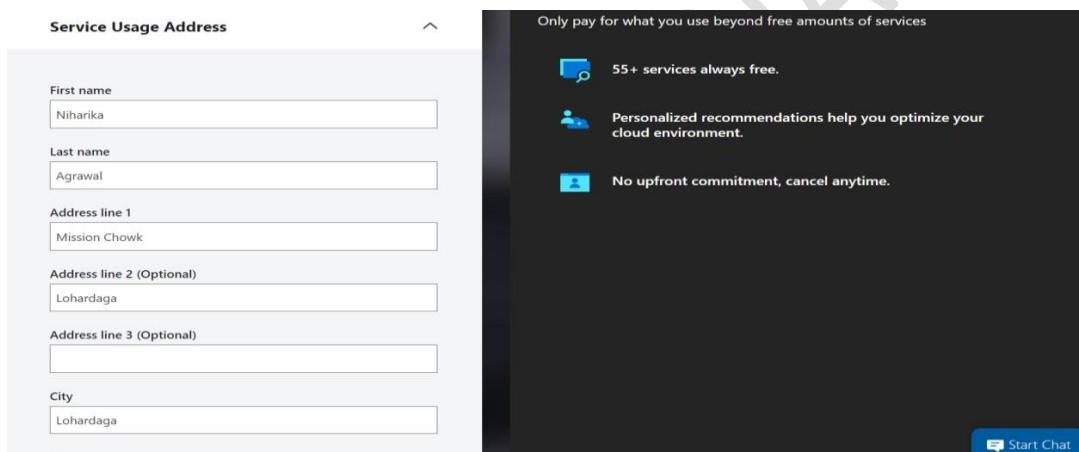


## 6. Verify your card (It will deduct rupees 2)



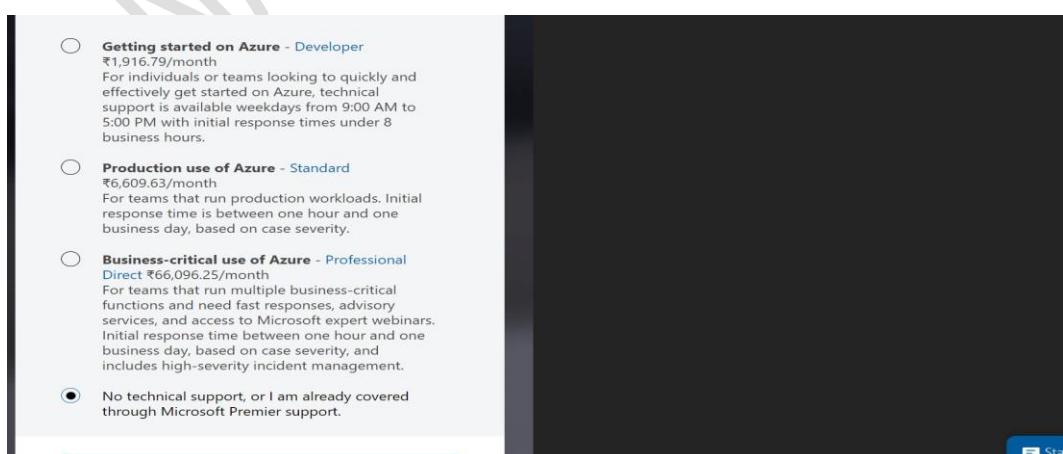
A screenshot of a Citi bank transaction verification page. It shows a card number (XXXX XXXX XXXX 3678), merchant (MICROSOFTBUS), and amount (INR 2.00). A central box prompts for OTP authentication. Below it, a message says "An OTP has been sent to your registered mobile". There is a text input field for "Enter OTP" with a placeholder ".....", a link to "Click here if you have not received an OTP", and two buttons: "NEXT" and "CANCEL". The Citi logo is at the top right, and the Symantec logo is at the bottom right.

## 7. Click on Next.



A screenshot of a "Service Usage Address" form. It includes fields for First name (Niharika), Last name (Agrawal), Address line 1 (Mission Chowk), Address line 2 (Optional) (Lohardaga), Address line 3 (Optional), City (Lohardaga), and a "Start Chat" button. To the right, there is a promotional section for "Only pay for what you use beyond free amounts of services" featuring icons for cloud storage, recommendations, and no upfront commitment.

## 8. Choose No Tech Support option.



A screenshot showing support options for Azure. The "No technical support, or I am already covered through Microsoft Premier support." option is selected with a radio button. Other options listed are "Getting started on Azure - Developer" (₹1,916.79/month), "Production use of Azure - Standard" (₹6,609.63/month), and "Business-critical use of Azure - Professional" (₹66,096.25/month).

# STAGING CREATION IN MATILLION WITH AZURE



9. Then click on **Sign up**.

10. Once all the verification completed, you **will land to Azure GUI**.

A screenshot of the Microsoft Azure home page. At the top, there's a search bar and a user profile. Below the header, there are sections for "Azure services" (Create a resource, Quickstart Center, Virtual machines, App Services, Storage accounts, SQL databases, Azure Cosmos DB, Kubernetes services, Function App, More services) and "Resources" (Recent, Favorite). A message says "No resources have been viewed recently". A large watermark "WITHANAND" is diagonally across the page.

**After that, first we need to create RESOURCE.**

1. Click on **CREATE RESOURCE**.

A screenshot of the Microsoft Azure home page with the "Create a resource" button highlighted by a hand-drawn oval.

2. **SEARCH FOR RESOURCE GROUP** and click on it.

A screenshot of the Azure Marketplace search results for "resource group". The "Resource group" item from Microsoft Azure Service is highlighted with a hand-drawn oval.

# STAGING CREATION IN MATILLION WITH AZURE



3. Click on **CREATE**.

The screenshot shows the Azure Marketplace interface for creating a resource group. The top navigation bar includes "Home", "Create a resource", "Marketplace", and "Resource group". The main title is "Resource group" by Microsoft. Below the title, there's a blue icon of a cube, the text "Resource group", "Microsoft | Azure Service", and a rating of "★ 4.5 (15 ratings)". A "Plan" dropdown menu is open, showing "Resource group" and a "Create" button, which is circled in red. Below the plan section are tabs for "Overview", "Plans", "Usage Information + Support", and "Ratings + Reviews".

4. Give Resource Group name and click on **review + create**.

The screenshot shows the "Create a resource group" wizard on the "Basics" step. The top navigation bar includes "Home", "Create a resource", "Marketplace", and "Resource group". The title is "Create a resource group". The "Basics" tab is selected. The form fields include "Subscription" (Pay-As-You-Go), "Resource group" (snowpipe), and "Region" (East US). At the bottom of the screen, there are buttons for "Review + create", "< Previous", and "Next > Tags". The "Next > Tags" button is circled in red.

5. Next click on **CREATE**.

The screenshot shows the "Create a resource group" wizard on the "Review + create" step. The top navigation bar includes "Home", "Create a resource", "Marketplace", and "Resource group". The title is "Create a resource group". The "Review + create" tab is selected. The summary section shows "Validation passed." and lists the configuration: "Subscription: Pay-As-You-Go", "Resource group: snowpipe", and "Region: East US". The "Tags" section shows "None". At the bottom of the screen, there are buttons for "Create", "< Previous", "Next >", and "Download a template for automation". The "Create" button is circled in red.

# STAGING CREATION IN MATILLION WITH AZURE



After validation completed successfully, resource will get created.

You can see this by typing resource group in home page.

A screenshot of the Microsoft Azure portal's Resource Groups page. The URL in the address bar is "https://portal.azure.com/#blade/HubsBlade/resourceType/resourceGroups/resourceGroup/snowpipe". The page shows a single resource group named "snowpipe". There are two filter buttons: "Unsecure resources" (0) and "Recommendations" (0). The main table lists the resource group with columns for Name, Subscription, and Location. The "Name" column shows "snowpipe", the "Subscription" column shows "Pay-As-You-Go", and the "Location" column shows "East US".

## Next step is to create STORAGE ACCOUNT

6. For that click on the Resource Group you created (Here Snowpipe).

A screenshot of the Microsoft Azure portal's Resource Group overview page for "snowpipe". The URL is "https://portal.azure.com/#resourceGroup/snowpipe". The page shows the "Overview" section with a summary of the resource group. On the left, there is a sidebar with links like "Activity log", "Access control (IAM)", "Tags", "Resource visualizer", and "Events". At the top right, there is a "+ Create" button, which is highlighted with a red oval.

7. Click on + Create.

A screenshot of the Microsoft Azure portal's "+ Create" blade. The title is "Create a new resource". The search bar contains "storage account". The "Category" dropdown is set to "Compute". The "Service" dropdown is set to "Storage accounts". The "Region" dropdown is set to "East US". Below these, there are fields for "Name" (with "snowstorage" entered), "Type" (set to "Standard LRS"), and "SKU" (set to "Standard"). The "Next Step" button at the bottom is highlighted with a red oval.

# STAGING CREATION IN MATILLION WITH AZURE



8. Now search for **Storage Account** and click on it.

Home > Resource groups > snowpipe >

## Marketplace

Get Started

Service Providers

Management

Private Marketplace

Private Offer Management

My Marketplace

Favorites

Recently created

Private products

storage account

Pricing : All >

Publisher name

Showing 1 to 20 of 143 results for 'storage account'. [Clear search](#)

 Storage account	 Storage Account Using ARM Template
Microsoft	FortuneCloud LLC
Azure Service	Azure Application
Use Blobs, Tables, Queues, Files, and Data Lake Gen 2 for reliable, economical cloud storage.	storage account arm template

9. Enter **Storage Account name**(here: **snowpipeautodataload**) and click on **Next:Advanced** (do till **Review tab**).

Home > Resource groups > snowpipe > Marketplace > Storage account >

### Create a storage account

Basics Advanced Networking Data protection Encryption Tags Review

manage your storage account together with other resources.

Subscription \* Pay-As-You-Go

Resource group \* snowpipe

Create new

**Instance details**

If you need to create a legacy storage account type, please click [here](#).

Storage account name ⓘ \*

Review < Previous Next : Advanced >

# STAGING CREATION IN MATILLION WITH AZURE



10. Once it is validated, click on **CREATE**.

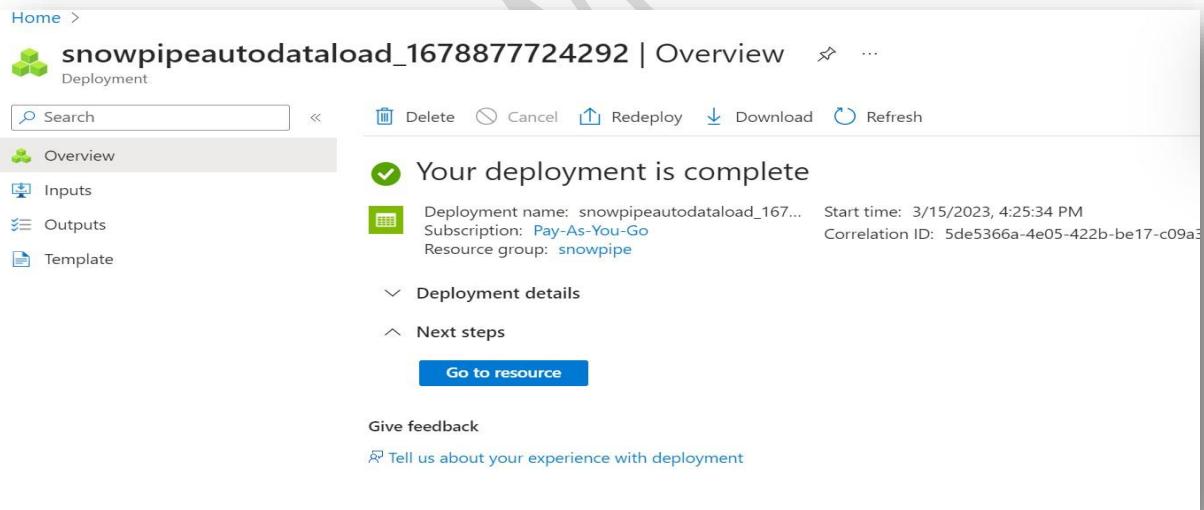


The screenshot shows the 'Create a storage account' review step. It includes tabs for Basics, Advanced, Networking, Data protection, Encryption, Tags, and Review. The Basics section shows the following configuration:

Subscription	Pay-As-You-Go
Resource Group	snowpipe
Location	eastus
Storage account name	snowpipeautodataload
Deployment model	Resource manager
Performance	Standard
Replication	Read-access geo-redundant storage (RA-GRS)

The Advanced section is collapsed. At the bottom, there is a 'Create' button highlighted with a black oval, and navigation links for < Previous, Next >, and Download a template for automation.

11. Once done you will land to deployment page. Successfully created Storage Account.



The screenshot shows the deployment overview page for 'snowpipeautodataload\_1678877724292'. The left sidebar has options for Overview, Inputs, Outputs, and Template. The main area displays the following information:

- Your deployment is complete** (with a green checkmark icon)
- Deployment name: snowpipeautodataload\_167...
- Subscription: Pay-As-You-Go
- Resource group: snowpipe
- Start time: 3/15/2023, 4:25:34 PM
- Correlation ID: 5de5366a-4e05-422b-be17-c09a3...

Below this, there are sections for Deployment details and Next steps, along with 'Go to resource' and feedback links.

Now will proceed further with staging of file. For that we require container. Will do Creation of Container.

12. Go to Storage Account and click on the storage account you created above.

# STAGING CREATION IN MATILLION WITH AZURE



13. Click on Container.

This screenshot shows the Azure Storage Account Overview page for the account "snowpipeautodataload". The left sidebar has sections like Overview, Activity log, Tags, Diagnose and solve problems, Access Control (IAM), Data migration, Events, and Storage browser. Under Data storage, the "Containers" option is selected and highlighted with a red box. The main content area displays "Essentials" information such as Resource group, Location, Primary/Secondary location, Subscription, Disk state, and Tags. Below this are tabs for Properties, Monitoring, Capabilities (7), Recommendations (0), Tutorials, and Tools + SDKs. On the right, there are sections for Blob service (Hierarchical namespace: Disabled, Default access tier: Hot) and Security (Require secure transfer for REST API operations: Enabled, Storage account key access: Enabled).

14. Click on + Container , Enter container name and click on Create.

This screenshot shows the Azure Storage Account Containers page for the same account. The left sidebar shows the "Containers" section selected. The main area lists existing containers, including "Slogit". A "New container" dialog box is open on the right, prompting for a "Name" (with a red box around the input field) and "Public access level" (set to "Private (no anonymous access)"). At the bottom of the dialog, a blue "Create" button is circled with a red oval.

# STAGING CREATION IN MATILLION WITH AZURE



15. Once created successfully, it will display as below:

A screenshot of the Azure Storage Account 'Containers' page. The left sidebar shows options like Overview, Activity log, Tags, etc. The main area lists two containers: '\$logs' and 'nkhealthcaredatablob'. Both are private and available.

Now next thing is we need to create queue.

16. Go back to **storage account** and click on **Queue**.

A screenshot of the Azure Storage Account 'Overview' page. The left sidebar has 'Queues' selected. The main area displays storage details and service configurations.

17. Click on **+ Queue**, enter the name of queue and click **OK**.

A screenshot of the Azure Storage Account 'Queues' page. A modal dialog box titled 'Add queue' is open, showing a 'Queue name' input field with 'nkhealthcaredataqueue'. There are 'OK' and 'Cancel' buttons at the bottom.

# STAGING CREATION IN MATILLION WITH AZURE



**Next will add subscription .**

18. Search **Subscription** and click on the subscription icon. You will get the below page .

**Click Pay-As-You-Go.**

The screenshot shows the Azure portal's "Subscriptions" page. At the top, there are buttons for "Add", "Manage Policies", "View Requests", and "View eligible subscriptions". Below this is a search bar and filter options: "Subscriptions == global filter", "My role == all", "Status == all", and "Add filter". A table lists one subscription entry:

Subscription name	Subscription ID	My role	Current cost	Secure Score	Parent management
Pay-As-You-Go	414887c5-1a59-4698-bbaf-20708a...	Account admin	0.00	-	

19. Search for **Resource Provider** and click on it.

The screenshot shows the "Pay-As-You-Go" subscription settings page. On the left, there's a sidebar with "Settings" and links for "Resource groups", "Resources", "Resource providers", and "Resource locks". The main area has a search bar for "resource provider" and buttons for "Cancel subscription" and "Re". A note says "Tokenization is required to store or allow automatic payments." Below this is a section titled "Essentials" with the following details:

- Subscription ID: 414887c5-1a59-4698-bbaf-20708a...
- Directory: Default Directory (niharikaagrawal)
- My role: Account admin
- Offer: Pay-As-You-Go
- Offer ID: MS-AZR-0003P

# STAGING CREATION IN MATILLION WITH AZURE



20. Inside resource provider, search **Microsoft.event**. Choose **Microsoft.EventGrid** and **Microsoft.EventHub** one by one and then click on **register**.

It will take **4-5 minutes** to get registered.

A screenshot of the Azure portal's "Resource providers" page under the "Pay-As-You-Go" subscription. The left sidebar shows "Resource providers" selected. A search bar at the top right shows "microsoft.event". The main table lists two providers: "Microsoft.EventGrid" and "Microsoft.EventHub", both with a status of "NotRegistered".

Provider	Status
Microsoft.EventGrid	NotRegistered
Microsoft.EventHub	NotRegistered

Next will create an Event.

21. Go back to **storage account** and click on **Event**.

A screenshot of the Azure portal's "Storage account" page for "snowpipe". The left sidebar shows "Events" selected. The main pane displays various account details under the "Essentials" section, including resource group, location, primary/secondary location, subscription, subscription ID, disk state, and tags. The "Events" section is highlighted with a red oval.

Resource group ( <a href="#">move</a> )	: snowpipe
Location	: East US
Primary/Secondary Location	: Primary: East US, Secondary: West US
Subscription ( <a href="#">move</a> )	: Pay-As-You-Go
Subscription ID	: 414887c5-1a59-4698-bbaf-20
Disk state	: Primary: Available, Secondary: Available
Tags ( <a href="#">edit</a> )	: Click here to add tags

# STAGING CREATION IN MATILLION WITH AZURE



22. Click on **Create Event Subscription**, enter event name, system topic name(here: snowflakesnowpipeeventgrid).

Home > snowpipeautodataload\_16/88//24292 | Overview > snowpipeautodataload | Events >

## Create Event Subscription

Event Grid

Basics Filters Additional Features Delivery Properties Advanced Editor

Event Subscriptions listen for events emitted by the topic resource and send them to the endpoint resource. [Learn more](#)

**EVENT SUBSCRIPTION DETAILS**

Name \*  ✓

Event Schema  ▾

**TOPIC DETAILS**

Pick a topic resource for which events should be pushed to your destination. [Learn more](#)

Topic Type  Storage account

Source Resource  snowpipeautodataload

System Topic Name \*

**EVENT TYPES**

**Create**

23. Enter **endpoint type** and click on **select an endpoint**.

### ENDPOINT DETAILS

Pick an event handler to receive your events. [Learn more](#)

Endpoint Type \*  Storage Queues ([change](#))

Endpoint \*  Select an endpoint

**Please select an endpoint**

# STAGING CREATION IN MATILLION WITH AZURE



24. Select the Storage Account and select the Queue. And then click on Create.

## Queues

Subscription	Pay-As-You-Go
Storage account	snowpipeautodataload
Queue	<input checked="" type="radio"/> Select existing queue <input type="radio"/> Create new queue
<input type="text"/> Search queues by prefix	
Queue	Url
nkhealthcaredataqueue	https://snowpipeautodataload.queue.core.windows.net/nkhealthcaredataqueue
<button>Select</button> <button>Cancel</button>	

## ENDPOINT DETAILS

Pick an event handler to receive your events. [Learn more](#)

Endpoint Type \* Storage Queues [\(change\)](#)  
Endpoint \* nkhealthcaredataqueue [\(change\)](#)

## MANAGED IDENTITY FOR DELIVERY

Managed identities are used to authenticate an Event Grid topic to Azure service instances when delivering events. Select either a system assigned or a user assigned managed identity. You should have already configured one or more identities on the topic to which this event subscription is associated. [Learn more about Managed Identities](#)

Managed Identity Type	None	
<button>Create</button>		

# STAGING CREATION IN MATILLION WITH AZURE



25. Once deployed successfully , you will get below page.

A screenshot of the Azure Storage account interface for a resource named "snowpipeautodataload". The left sidebar shows options like Overview, Activity log, Tags, and Events (which is selected). The main area displays the "Event Subscriptions" tab, which includes a message stating "System Topic is not available for this resource." Below this are metrics for General, Errors, and Latency over the last hour.

26. Two Important thing we need while running the code in Snowflake for integration.

1. Tenant ID
2. Storage Notification Queue.

(a) How to get Tenant ID:

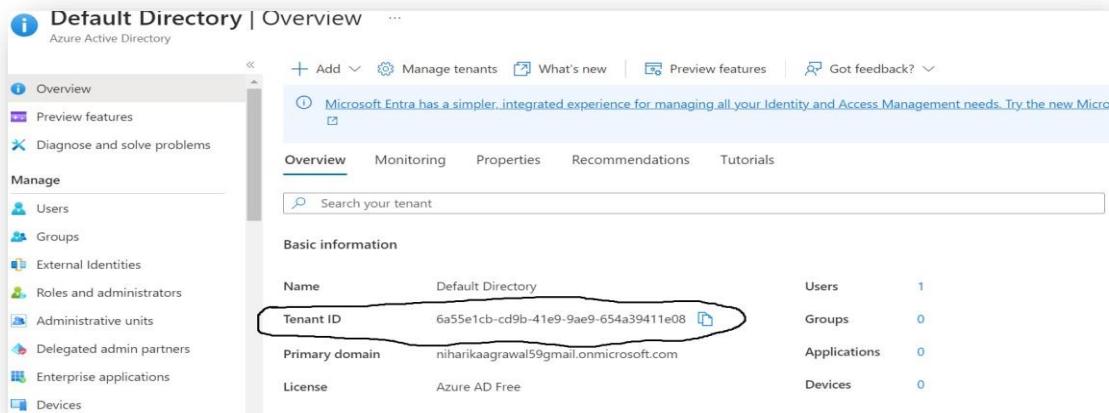
1. In home page, search Azure Active Directory. Click on it.

A screenshot of the Azure search results for "Azure Active Directory". The search bar at the top contains the query. Below the search bar, there are tabs for All, Services (99+), Marketplace (10), Documentation (28), and Azure Active Directory. Under the "Services" heading, "Azure Active Directory" is listed with its icon and name. Other services like "Azure Database for MySQL" and "Azure Arc" are also visible.

# STAGING CREATION IN MATILLION WITH AZURE



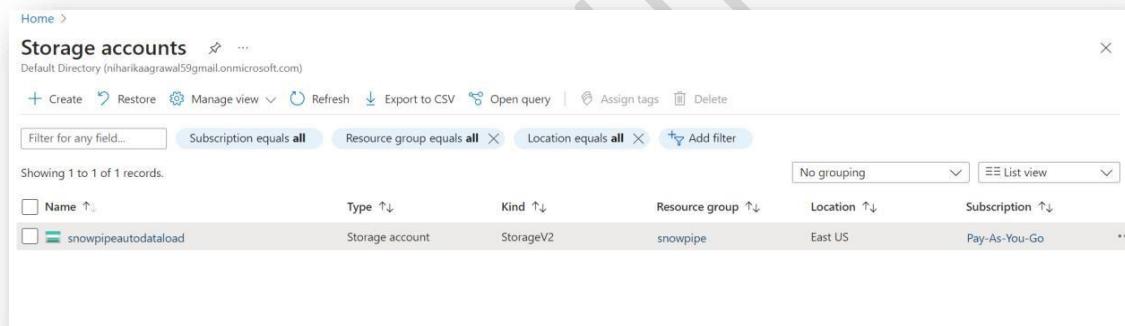
2. You will get a Tenant ID here. **Copy this and keep it handy.**



A screenshot of the Azure Active Directory Overview page. The Tenant ID (6a55e1cb-cd9b-41e9-9ae9-654a39411e08) is highlighted with a red oval. Other visible details include the Primary domain (nihariagrwal59@gmail.onmicrosoft.com), License (Azure AD Free), and User count (1).

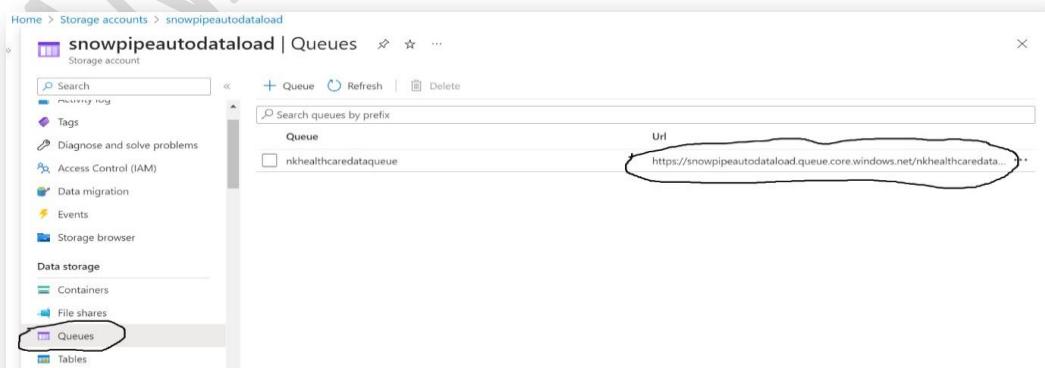
## (b). How you can get Storage Notification Queue:

1. Go to **Storage Account** and click on the account created.



A screenshot of the Azure Storage accounts page. It shows a single storage account named "snowpipeautodataload". The account type is Storage account, resource group is StorageV2, location is East US, and subscription is Pay-As-You-Go.

2. Click on **Queue** and then **copy the ID and keep it handy.**



A screenshot of the Azure Storage account Queues page for the "snowpipeautodataload" account. A queue named "nkhealthcaredataqueue" is selected. The URL for this queue is highlighted with a red oval: <https://snowpipeautodataload.queue.core.windows.net/nkhealthcaredata...>. The "Queues" option in the left navigation bar is also highlighted with a red oval.

# STAGING CREATION IN MATILLION WITH AZURE



**Now you need to run code on Snowflake :**

```
create database azure_pipeline;
```

```
use azure_pipeline;
```

**CREATE OR REPLACE TABLE**

**AZ\_HEALTHCARE**

```
( Patientid VARCHAR(15),
```

```
Gender CHAR(8),
```

```
age VARCHAR(5) ,
```

```
hypertension CHAR(20),
```

```
heart_disease CHAR(20),
```

```
ever_married CHAR(30),
```

```
work_type VARCHAR(60),
```

```
Residence_type CHAR(30) ,
```

```
avg_glucose_level VARCHAR(20),
```

```
BMI VARCHAR(20) ,
```

```
smoking_status
```

```
VARCHAR(20),
```

```
stroke CHAR(20)
```

```
);
```

30.

**--(Enter your Tenant Id and Queue ID):**

**CREATE OR REPLACE NOTIFICATION INTEGRATION AZ\_HEALTHCARE\_EVENT**

**ENABLED=TRUE**

**TYPE = QUEUE**

**NOTIFICATION\_PROVIDER = AZURE\_STORAGE\_QUEUE**

**AZURE\_STORAGE\_QUEUE\_PRIMARY\_URI =**

'<https://snowpipeautodataload.queue.core.windows.net/nkhealthcaredataqueue>' -(Refer step 26.b.2 for Queue ID)

# STAGING CREATION IN MATILLION WITH AZURE



AZURE\_TENANT\_ID = '6a55e1cb-cd9b-41e9-9ae9-654a39411e08'; -- (Refer step 26.a for Tenant ID )

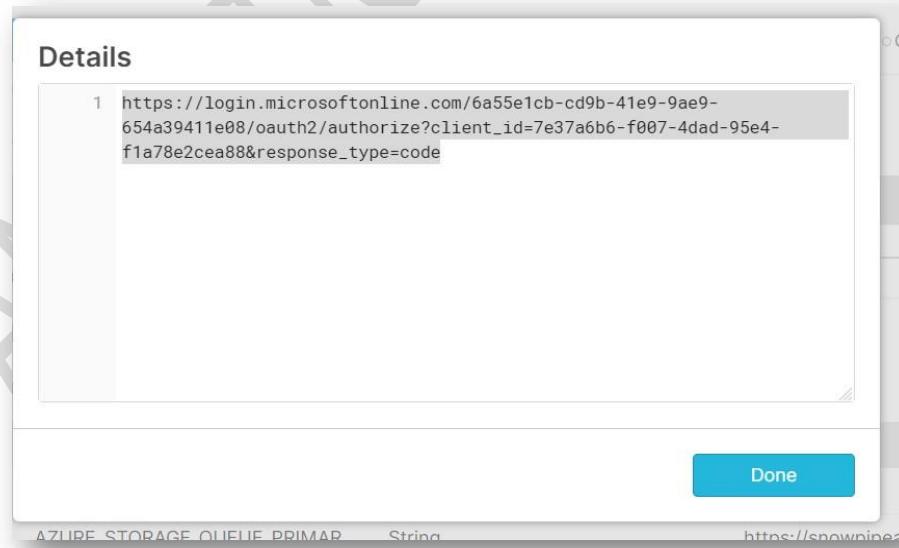
31. SHOW INTEGRATIONS;

32. DESC NOTIFICATION INTEGRATION AZ\_HEALTHCARE\_EVENT;

33. After running DESC NOTIFICATION INTEGRATION AZ\_HEALTHCARE\_EVENT; Go to the output section and click on AZURE\_CONSENT\_URL. Click on the URL, copy it and run it in a new tab as shown below:

The screenshot shows the results of a query to describe a notification integration. The output table has columns: Row, property, property\_type, property\_value, and property\_default. The AZURE\_CONSENT\_URL row is highlighted with a yellow box and circled with a red oval. The URL value is https://login.microsoftonline.com/6a55e1cb-cd9b-41e9-9ae9-654a39411e08/oauth2/authorize?client\_id=7e37a6b6-f007-4dad-95e4-f1a78e2cea88&response\_type=code

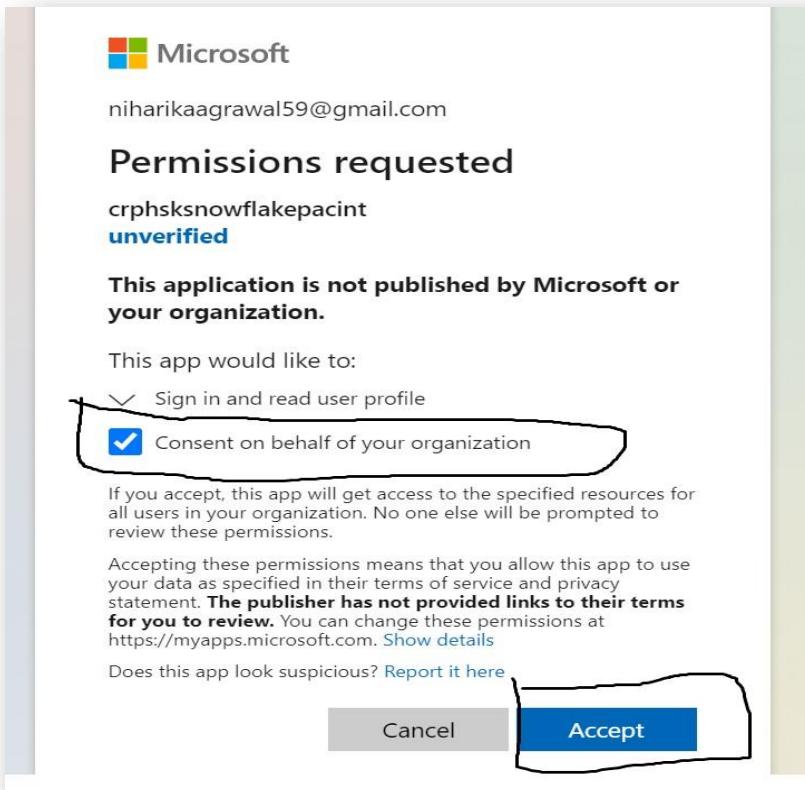
Row	property	property_type	property_value	property_default
1	ENABLED	Boolean	true	false
2	AZURE_STORAGE_QUEUE_PRIMAR...	String	https://snowpipeautodataload.que...	
3	AZURE_CONSENT_URL	String	https://login.microsoftonline.com/6...	
4	AZURE_MULTI_TENANT_APP_NAME	String	crphsksnowlakepacint_16/891349...	
5	COMMENT	String		



# STAGING CREATION IN MATILLION WITH AZURE



34. Once the link open you will get a **provide consent** Mar the checkbox then click on **Accept** as shown below



35. Now go to Azure Dashboard, Search **Enterprise Application** in search bar.

A screenshot of the Azure Enterprise Applications dashboard. The search bar at the top contains the text "enterprise applications". Below the search bar are several navigation buttons: "All" (selected), "Services (13)", "Marketplace (1)", and "Documentation (3)". There is also a button for "Azure Active Directory (0)". A section titled "Services" lists "Enterprise applications" with a blue icon. On the right side, there is a "New" button.

# STAGING CREATION IN MATILLION WITH AZURE



36. You can see application listed there.

A screenshot of the Azure portal's "Enterprise applications | All applications" page. The left sidebar shows "Overview" and "Manage" sections with options like "All applications", "Application proxy", "User settings", "App launchers", and "Custom authentication extensions (Preview)". The main area displays a table with one application entry: "crphsksnowflakepacint" (Name), "035fcbec-5e88-48c4-8b1e..." (Object ID), "7e37a6b6-f007-4dad-95e4..." (Application ID), "https://snowflake.net" (Homepage URL), and "3/16/2023" (Created on). A search bar at the top is set to "Enterprise Applications".

37. Click on Application listed and copy Snowflake/Enterprise Application Name , Application ID and Object Id and keep it handy.

A screenshot of the Azure portal's "crphsksnowflakepacint | Overview" page. The left sidebar shows "Overview", "Deployment Plan", "Diagnose and solve problems", "Manage" (Properties, Owners, Roles and administrators, Users and groups), and "Properties" (selected). The "Properties" section displays the application's details: Name (crphsksnowflakepacint), Application ID (7e37a6b6-f007-4dad-95e4...), and Object ID (035fcbec-5e88-48c4-8b1e...). Below this is a "Getting Started" section.

38. Now go back to home, Go to Storage Account and then click on Access Control (IAM).

A screenshot of the Azure portal's "Storage accounts &gt; snowpipeautodataload | Access Control (IAM)" page. The left sidebar shows "Storage accounts" (Create, Restore, Filter for any field...), "snowpipeautodataload" (selected), and "Access Control (IAM)" (highlighted with a red box). The main area shows the "Check access" tab selected, with "My access" and "View my access" buttons. Other tabs include "Role assignments", "Roles", "Deny assignments", and "Classic administrators".

# STAGING CREATION IN MATILLION WITH AZURE



39. Go to **Role Assignment** and then click on **+ Add** and choose **Add role assignment**.

A screenshot of the Azure Access Control (IAM) interface for a storage account named 'snowpipeautodataload'. The 'Role assignments' tab is selected. A callout box highlights the '+ Add' button, which is used to add a new role assignment.

40. Now search **Storage Queue Data** , From the drop down list choose **Storage Queue Data Contributor** and click on Next

A screenshot of the 'Add role assignment' dialog. The 'Role' dropdown is set to 'Storage Queue Data Contributor'. The table below shows the details of this role.

# STAGING CREATION IN MATILLION WITH AZURE



41. Click on + Select members , paste the snowflake/enterprise application\_name copied in step.37 . You will get the list . click on select.

The screenshot shows the Azure portal interface for adding role assignments. On the left, the 'Members' section has a '+ Select members' button highlighted. A modal window titled 'Select members' is open, showing a search bar with 'crphksnowflakepacint' and a results list with 'No users, groups, or service principals found.' Below the search bar, there's a 'Selected members:' list containing 'crphksnowflakepacint' with a 'Remove' link. At the bottom of the modal are 'Select' and 'Close' buttons, with the 'Select' button circled in red.

42. Now click on Review and assign and then again review and assign on next page , Your role will get generated successfully within few seconds.

The screenshot shows the 'Add role assignment' page in the Azure portal. The 'Members' tab is active. The 'Selected role' is set to 'Storage Queue Data Contributor'. Under 'Assign access to', the radio button for 'User, group, or service principal' is selected. In the 'Members' section, there is a table with one row: 'crphksnowflakepacint' (Object ID: 035fcbec-5e88-48c4-8b1e-98d8ca4c4b1f, Type: App). The 'Description' field is empty. At the bottom, there are 'Review + assign', 'Previous', and 'Next' buttons, with the 'Review + assign' button circled in red.

# STAGING CREATION IN MATILLION WITH AZURE



Role successfully got generated:

The screenshot shows the Azure portal's "Role assignments" section. It displays one role assignment for a service principal named "crphsksnowflake". The role is "Storage Queue Data Contributor" and the scope is "This resource". The search bar at the top shows "Search by name or email". Filter buttons include "Type : All", "Role : All", and "Scope : All scopes".

43. Now go back to storage account , select the account and then click on Endpoints.

The screenshot shows the "Endpoints" tab for the "snowpipeautodataload" storage account. It lists endpoints for Azure CDN and Blob service, along with their respective resource IDs and provisioning states. The primary endpoint for the Blob service is also listed.

44. Now copy Blob Service and Primary Endpoint and keep it handy .

The screenshot shows the "Endpoints" tab under "Settings" for the "snowpipeautodataload" storage account. The "Primary endpoint" and "Secondary endpoint" for the Blob service are displayed, both pointing to "https://snowpipeautodataload.blob.core.windows.net/".

# STAGING CREATION IN MATILLION WITH AZURE



45. Now search shared access signature and click on it.

A screenshot of the Azure Storage account interface. The left sidebar shows "Storage accounts" with one item: "snowpipeautodataload". The main panel is titled "snowpipeautodataload | Shared access signature". It contains a brief description of what a SAS is, a note about account-level SASes, and a link to learn more. Below this is a section for "Allowed services" with checkboxes for Blob, File, Queue, and Table, all of which are checked. A large watermark "ANALYTICS WITH ANAND" is diagonally across the image.

46. Tick mark container and object.

A screenshot of the "Shared access signature" configuration page. It shows sections for "Allowed services" (Blob, File, Queue, Table) and "Allowed resource types" (Service, Container, Object), where Container and Object are checked. A large watermark "ANALYTICS WITH ANAND" is diagonally across the image.

47. Now go down and click on Generate SAS and connection string.

A screenshot of the "Generate SAS and connection string" page. It includes fields for "Allowed IP addresses" (example: 168.1.5.65 or 168.1.5.65-168.1.5.70), "Allowed protocols" (HTTPS only selected), "Preferred routing tier" (Basic (default) selected), and "Signing key" (key1 selected). At the bottom is a blue button labeled "Generate SAS and connection string". A large watermark "ANALYTICS WITH ANAND" is diagonally across the image.

# STAGING CREATION IN MATILLION WITH AZURE



48. Now copy Blob Service SAS URL and SAS token and Keep it handy.

The screenshot shows the "Shared access signature" blade for a storage account named "snowpipeautodataload". The "Shared access signature" tab is selected. It displays several SAS URLs and their corresponding tokens:

- Connection string:** BlobEndpoint=https://snowpipeautodataload.blob.core.windows.net/;QueueEndpoint=https://snowpipe...  
SAS token: ?sv=2021-12-02&ss=bfqt&srt=co&sp=rwdlacupiytfx&se=2023-03-16T19:09:21Z&st=2023-03-16T11:09:...
- Blob service SAS URL:** https://snowpipeautodataload.blob.core.windows.net/?sv=2021-12-02&ss=bfqt&srt=co&sp=rwdlacupiy...
- File service SAS URL:** https://snowpipeautodataload.file.core.windows.net/?sv=2021-12-02&ss=bfqt&srt=co&sp=rwdlacupiy...
- Queue service SAS URL:** https://snowpipeautodataload.queue.core.windows.net/?sv=2021-12-02&ss=bfqt&srt=co&sp=rwdlacup...
- Table service SAS URL:** https://snowpipeautodataload.table.core.windows.net/?sv=2021-12-02&ss=bfqt&srt=co&sp=rwdlacup...

49. Now go to resource group, click on the group you created, and then click on the resource and there search container and click on it. You will get the Blob name. Copy it and keep it handy.

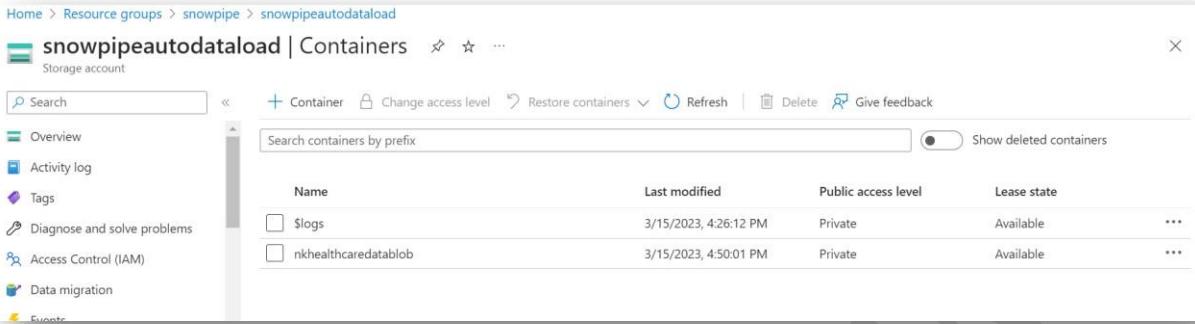
The screenshot shows the "Resource groups" blade for a resource group named "snowpipe". The "Overview" section is selected. The "Resources" table lists two resources:

Name	Type	Location
snowflakessnowpipeeventgrid	Event Grid System Topic	East US
snowpipeautodataload	Storage account	East US

# STAGING CREATION IN MATILLION WITH AZURE



**Blob Name:**



A screenshot of the Azure Storage account interface showing the 'Containers' section for the 'snowpipeautodataload' storage account. The left sidebar includes options like Overview, Activity log, Tags, Diagnose and solve problems, Access Control (IAM), Data migration, and Events. The main area shows a table with two containers: '\$logs' and 'nkhealthcaredatablob'. The '\$logs' container was last modified on 3/15/2023 at 4:26:12 PM, has Private public access level, and is Available. The 'nkhealthcaredatablob' container was last modified on 3/15/2023 at 4:50:01 PM, has Private public access level, and is Available. A search bar at the top allows filtering by prefix, and a toggle switch for 'Show deleted containers' is visible.

**Now again go to snowflake and run the code:**

50.

---Now will create stage.

create or replace STAGE AZ\_HEALTHCARE\_STAGE

/\* Here in url paste your primary endpoint id (refer step: 44) .

replace https:// with azure:// and at the end your blob name/ (refer step :49)

https://snowpipeautodataload.blob.core.windows.net/

replace https:// with azure:// then we have

**azure://snowpipeautodataload.blob.core.windows.net/**

Now at the end add a blob name that is

**azure://snowpipeautodataload.blob.core.windows.net/nkhealthcaredatablob/.**

\*/

**URL = 'azure://snowpipeautodataload.blob.core.windows.net/nkhealthcaredatablob/'**

/\*

In place of credentials we need to paste SAS token id.(Refer step :48)

\*/

```
credentials = (azure_sas_token = '?sv=2021-12-02&ss=bfqt&srt=co&sp=rwdlacupiytfx&se=2023-03-16T19:09:21Z&st=2023-03-16T11:09:21Z&spr=https&sig=N5CX5j3twtZVhvi2%2B5RFNpJY2ZkLL8cklbOM6eWOHe8%3D');
```

# STAGING CREATION IN MATILLION WITH AZURE



51. **show stages;**
52. **LS @AZ\_HEALTHCARE\_STAGE;**
53. **--Now will create pipe.**

**CREATE OR REPLACE PIPLE AZ\_HEALTHCARE\_PIPE AUTO\_INGEST = TRUE**

**INTEGRATION = AZ\_HEALTHCARE\_EVENT AS COPY INTO AZ\_HEALTHCARE from  
@AZ\_HEALTHCARE\_STAGE**

**file\_format = CSV\_HEALTHCARE ;**

54. **SHOW PIPES;**

**Now will upload file on Azure .**

55. **Now go to storage account-> choose account -> go to container . and there click on + upload .**

A screenshot of the Azure Storage Accounts blade. The URL is 'Home &gt; Storage accounts &gt; snowpipeautodataload | Containers &gt; nkhealthcaredatablob'. The container 'nkhealthcaredatablob' is selected. The blade shows various settings like Shared access tokens, Access policy, Properties, and Metadata. On the right, there's a table with columns: Name, Modified, Access tier, Archive status, Blob type, and Size. A search bar at the top right says 'Search blobs by prefix (case-sensitive)'.

56. **Now click on Browse for files and choose the file you want to upload . Tick the checkbox and then click on upload. It will take few minute to upload.**

A screenshot of the 'Upload blob' dialog box. The title is 'Upload blob'. It shows a file named 'healthcare\_stroke.csv' selected for upload. Below the file name, it says 'Drag and drop files here or Browse for files'. There are two checkboxes at the bottom: 'Overwrite if files already exist' (which is checked) and 'Advanced'. At the bottom right is a blue 'Upload' button.

# STAGING CREATION IN MATILLION WITH AZURE



It will reflect once uploaded.

A screenshot of the Azure Storage Blob service interface. At the top, there are navigation links: Upload, Change access level, Refresh, Delete, Change tier, Acquire lease, Break lease, and a search bar. Below these, it shows the authentication method as "Access key" and the location as "nkhealthcaredatablob". A search bar for blobs by prefix is present. A large table lists blobs, with one entry visible: "healthcare\_stroke.csv" was modified on 3/17/2023 at 12:18:07 and is in the "Hot (Inferred)" access tier. There is also a "Search blobs by prefix (case-sensitive)" input field and a "S" toggle switch.

Last step now run below code on snowflake and check the data.

57. `select * from AZ_HEALTHCARE;`
58. `alter pipe AZ_HEALTHCARE_PIPE refresh;`

It will display data in the table. (Row Count: 5110)

Similarly, upload another file, run the same code in Snowflake and see if the row count increases or not. (Row Count: 5114)

# STAGING CREATION IN MATILLION WITH AZURE



Connectivity between Matillion and Blob storage :

## 1. Search for Microsoft Entra ID:

The screenshot shows the Microsoft Azure portal search results for 'microsoft entra'. The search bar at the top contains the query 'microsoft entra'. Below the search bar, the results are categorized into 'Services' (82), 'Marketplace' (31), and 'More (4)'. Under 'Services', the 'Microsoft Entra ID' option is highlighted. Other visible service items include Microsoft Entra Conditional Access, Microsoft Entra Connect, and Microsoft Entra Connect Health. The 'Marketplace' section lists Key Vault, Web App, Resource group, and SQL Database. The 'Documentation' section includes Microsoft Certified Trainer, Microsoft Cloud PKI for Microsoft Intune - Microsoft Intune, and Authorize access to Azure file share data in the Azure portal.

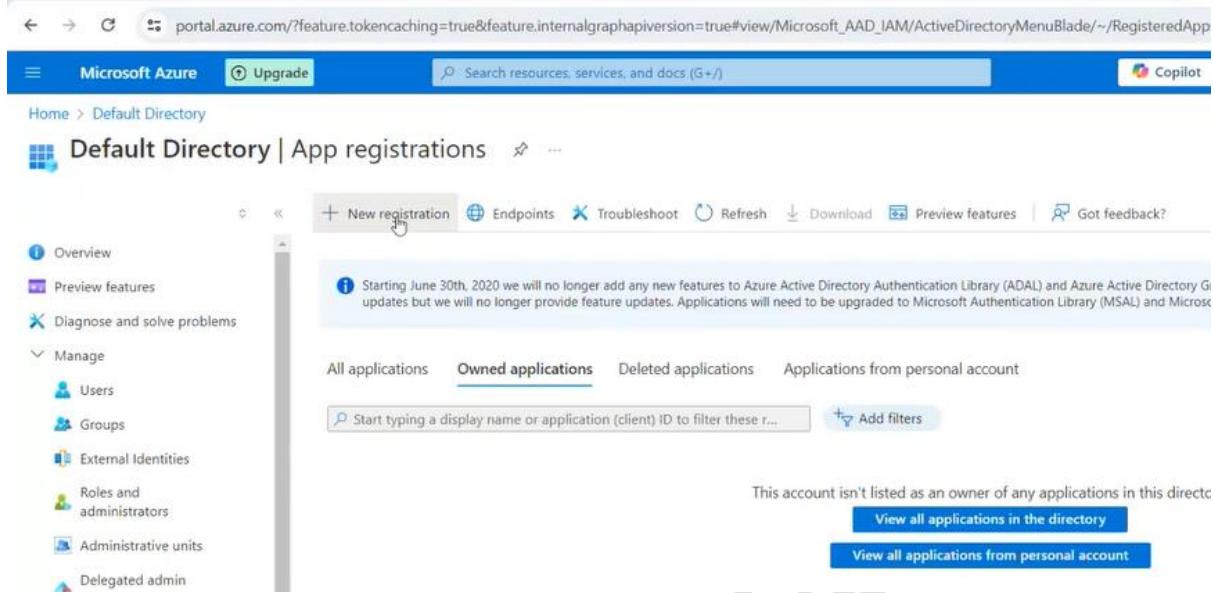
## 2. From left side panel, go to Manage---> App Registrations:

The screenshot shows the Microsoft Azure portal 'Default Directory | Overview' page. The left sidebar is titled 'Manage' and includes options like Users, Groups, External Identities, Roles and administrators, Administrative units, Delegated admin partners, Enterprise applications, Devices, App registrations (which is selected), Identity Governance, Application proxy, Custom security attributes, and Licenses. The main content area has tabs for Overview, Monitoring, Properties, Recommendations, and Tutorials. The 'Overview' tab is active. It displays basic information such as Name (Default Directory), Tenant ID (b3dc1b4e-e061-466d-bde1-9c106672cae8), Primary domain (ardivya85@gmail.onmicrosoft.com), License (Microsoft Entra ID Free), and counts for Users (1), Groups (0), Applications (0), and Devices (0). A note indicates that Azure AD is now Microsoft Entra ID. A warning message about a service change to Microsoft Entra Connect is also present.

# STAGING CREATION IN MATILLION WITH AZURE

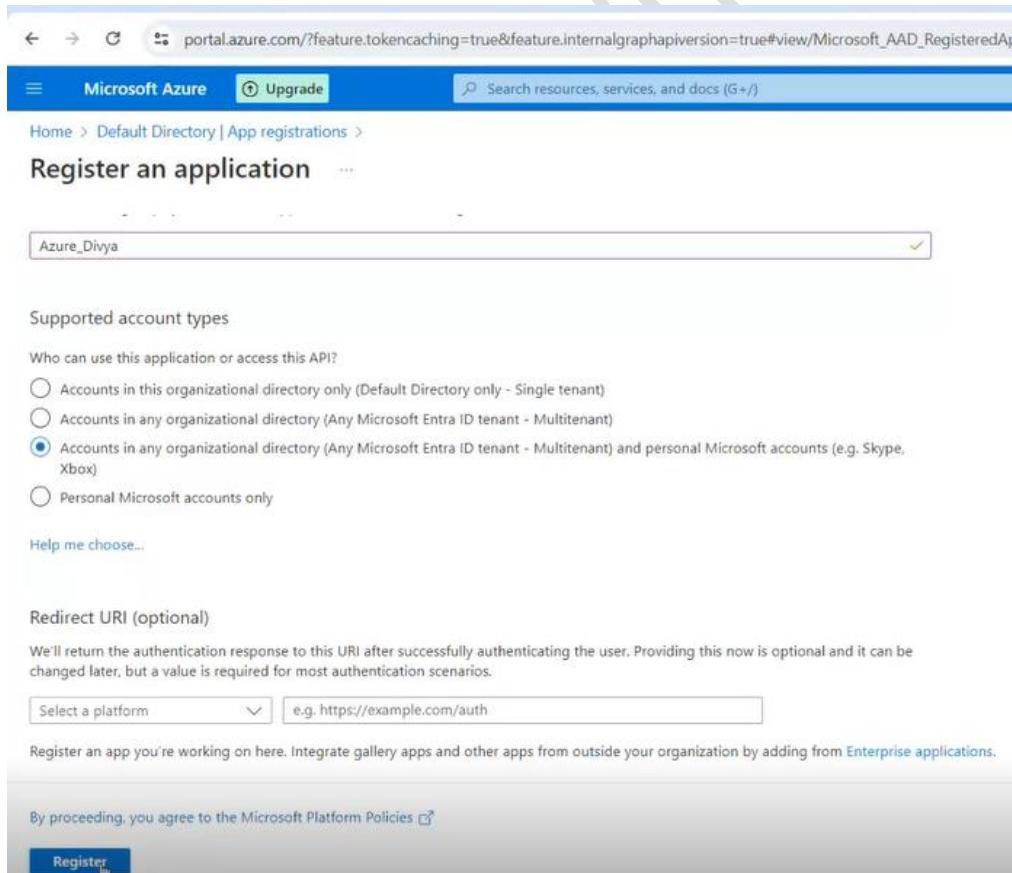


### 3. Then New Registration:



A screenshot of the Microsoft Azure portal showing the "Default Directory | App registrations" page. The left sidebar shows navigation options like Overview, Preview features, Diagnose and solve problems, Manage (with sub-options for Users, Groups, External Identities, Roles and administrators, Administrative units, and Delegated admin), and New registration. The main area displays tabs for All applications, Owned applications (which is selected), Deleted applications, and Applications from personal account. A search bar at the top says "Start typing a display name or application (client) ID to filter these r...". Below the tabs, a message states: "Starting June 30th, 2020 we will no longer add any new features to Azure Active Directory Authentication Library (ADAL) and Azure Active Directory Graph API updates but we will no longer provide feature updates. Applications will need to be upgraded to Microsoft Authentication Library (MSAL) and Microsoft Graph API." Buttons for "View all applications in the directory" and "View all applications from personal account" are visible.

### 4. Give Name and choose 3<sup>rd</sup> Option below:



A screenshot of the Microsoft Azure portal showing the "Register an application" page. The URL is "portal.azure.com/?feature.tokencaching=true&feature.internalgraphapiversion=true#view/Microsoft\_AAD\_RegisteredApps/Create/ConfigureApp". The page has a header with Microsoft Azure, Upgrade, and a search bar. Below the header, it says "Home > Default Directory | App registrations > Register an application". A search bar contains "Azure\_Divya". The main form starts with "Supported account types" and a question "Who can use this application or access this API?". It lists five options with the third one checked: "Accounts in this organizational directory only (Default Directory only - Single tenant)" (radio button), "Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant)" (radio button), "Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)" (radio button, checked), and "Personal Microsoft accounts only" (radio button). Below this is a "Help me choose..." link. The next section is "Redirect URI (optional)" with a note: "We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios." A dropdown menu "Select a platform" is set to "Select a platform" and a text input field shows "e.g. https://example.com/auth". Below this is a note: "Register an app you're working on here. Integrate gallery apps and other apps from outside your organization by adding from Enterprise applications." At the bottom, there's a link "By proceeding, you agree to the Microsoft Platform Policies" and a "Register" button.

# STAGING CREATION IN MATILLION WITH AZURE



5. Before clicking “Register” Button, go back to Matillion, navigate to Project---> Manage OAuth:

The screenshot shows the Matillion ETL Platform interface. On the left, a sidebar menu is open under 'Project: matillion\_ddl2'. The 'Manage OAuth' option is highlighted. The main workspace displays a workflow diagram with a task named 'Azure Blob Storage Load 0'. The task icon is red and features a blue cloud and a white arrow. A tooltip for the task says 'Start'.

6. Copy the CallbackURL:

The screenshot shows the 'Manage OAuth' dialog box. In the 'Callback URL' field, the value 'https://44.222.254.111/oauth\_redirect.html' is entered. The dialog box includes a table with columns 'Name', 'Type', and 'Status'. A note below the table states: 'There are currently no OAuths.' To the right, there is a 'Manage OAuth' section with instructions for adding credentials and a note about unauthorized access. At the bottom right of the dialog box is an 'OK' button.

# STAGING CREATION IN MATILLION WITH AZURE



7. Go back to Azure Portal, select “Web” from Drop-down list and past the copied url here and click “Register”:

The screenshot shows the Azure Portal's "Register an application" interface. In the "Supported account types" section, the third option ("Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)") is selected. Below this, there is a "Help me choose..." link. In the "Redirect URI (optional)" section, a "Web" dropdown is set to "Web" and the URL "https://44.22.254.111/oauth\_redirect.html" is entered. A note states: "We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios." At the bottom, there is a "Register" button and a note: "By proceeding, you agree to the Microsoft Platform Policies".

8. Copy Application (Client) ID from here and save to you notepad (Will be used later):

The screenshot shows the Azure Portal's "Azure\_Divya" app registration details. Under the "Overview" tab, the "Display name" is "Azure\_Divya". The "Application (client) ID" is "3e3599b5-d5a9-447b-9048-c40170ac9e3e". Other details shown include "Object ID": "03d874de-d22e-42aa-aea2-566feaf241bb", "Directory (tenant) ID": "b3dc1b4e-e061-466d-bde1-9c106672cae8", and "Client credentials" and "Redirect URIs" sections. A note at the bottom states: "Starting June 30th, 2020 we will no longer add any new features to Azure Active Directory Authentication Library (ADAL) and Azure Active Directory Graph. We will continue to provide technical support and security updates but we will no longer provide feature updates. Applications will need to be upgraded to Microsoft Authentication Library (MSAL) and Microsoft Graph." At the bottom of the page is a banner: "Build your application with the Microsoft identity platform".

# STAGING CREATION IN MATILLION WITH AZURE



## 9. Next, click "Add a Certificate or Secret":

The screenshot shows the Microsoft Azure portal's App registrations section. The application "Azure\_Divya" is selected. The "Overview" tab is active. Key details shown include:

- Display name: Azure\_Divya
- Application (client) ID: 3e359b5-d5a9-447b-9048-c40170ac9e3e
- Object ID: 03d874de-d22e-42aa-aea2-566efad241bb
- Directory (tenant) ID: b3dc1b4e-e061-466d-bde1-9c106672cae8
- Client credentials: Add a certificate or secret (link)
- Redirect URIs: 1.web.0.spa.0.public client (link)
- Application ID URI: Add an Application ID URI (link)
- Managed application in I...: Azure\_Divya (link)
- Supported account types: All Microsoft account users

Below the main details, there are three informational cards:

- Welcome to the new and improved App registrations. Looking to learn how it's changed from App registrations (Legacy)? [Learn more](#)
- Starting June 30th, 2020 we will no longer add any new features to Azure Active Directory Authentication Library (ADAL) and Azure Active Directory Graph. We will continue to provide security updates but we will no longer provide feature updates. Applications will need to be upgraded to Microsoft Authentication Library (MSAL) and Microsoft Graph. [Learn more](#)
- Starting November 9th, 2020 end users will no longer be able to grant consent to newly registered multitenant apps without verified publishers. [Add MPN ID to verify publisher](#)

At the bottom, there are "Get Started" and "Documentation" links, and a prominent "Build your application with the Microsoft identity platform" button.

## 10. Click "New client secret":

The screenshot shows the "Certificates & secrets" tab of the Azure\_Divya application's settings. The "Client secrets" tab is selected. The interface includes:

- A descriptive text: "Credentials enable confidential applications to identify themselves to the authentication service when receiving token (scheme). For a higher level of assurance, we recommend using a certificate (instead of a client secret) as a credential."
- An informational card: "Application registration certificates, secrets and federated credentials can be found in the tabs below."
- A table header for "Client secrets": "Certificates (0)", "Client secrets (0)" (selected), "Federated credentials (0)".
- A table row for "Client secrets": "Description", "Expires", "Value".
- A note: "No client secrets have been created for this application."
- Left sidebar navigation: Overview, Quickstart, Integration assistant, Diagnose and solve problems, Manage (with sub-options: Branding & properties, Authentication, Certificates & secrets, Token configuration, API permissions, Expose an API, App roles, Owners, Roles and administrators, Manifest).
- Bottom navigation: Support + Troubleshooting.

# STAGING CREATION IN MATILLION WITH AZURE



## 11. Give Description and click Add:

The screenshot shows the Microsoft Azure portal interface. On the left, there's a sidebar with various options like Overview, Quickstart, Integration assistant, Diagnose and solve problems, Manage, Certificates & secrets, Token configuration, API permissions, Expose an API, App roles, Owners, Roles and administrators, and Manifest. The 'Certificates & secrets' option is currently selected. In the main content area, there's a sub-menu for 'Certificates & secrets' with tabs for Certificates (0), Client secrets (0), and Federated credentials (0). A sub-dialog titled 'Add a client secret' is open, prompting for a 'Description' (set to 'Azure\_Divya\_Secret\_key') and an 'Expires' date ('Recommended: 180 days (6 months)'). At the bottom right of the dialog are 'Add' and 'Cancel' buttons.

## 12. Copy Secret ID from here:

This screenshot shows the same Microsoft Azure portal interface as the previous one, but the 'Client secrets' tab is now selected in the sub-menu. It displays a single entry for 'Azure\_Divya\_Secret\_key'. The table includes columns for 'Description' (Azure\_Divya\_Secret\_key), 'Expires' (1/5/2025), 'Value' (redacted), and 'Secret ID' (7932fdb7-3a06-41c8-914f-1db2e44bc0bb). A 'Copy to clipboard' button is visible next to the Secret ID. The rest of the interface is identical to the previous screenshot, including the sidebar and the 'Add a client secret' dialog.

# STAGING CREATION IN MATILLION WITH AZURE



## 13. Copy Value as well:

The screenshot shows the Azure portal interface for managing app registrations. The left sidebar is open, showing options like Overview, Quickstart, Integration assistant, Diagnose and solve problems, Manage, Branding & properties, Authentication, Certificates & secrets, Token configuration, API permissions, Expose an API, App roles, Owners, and Support + Troubleshooting. The Certificates & secrets option is selected. The main content area is titled "Azure\_Divya | Certificates & secrets". It displays a message about credentials enabling confidential applications to identify themselves. Below this, there are tabs for Certificates (0), Client secrets (1), and Federated credentials (0). The Client secrets tab is active, showing a single entry for "Azure\_Divya\_Secret\_key". The table includes columns for Description, Expires, Value (with a copy icon), and Secret ID. The Value column shows a long secret string starting with "YPd8Q~SZXAfUioczlaG3EfEteNDfcqUta...".

## 14. Next, from left side Panel, go to Manage--> App Permissions--> Click on “Add Permission”:

The screenshot shows the Azure portal interface for managing app permissions. The left sidebar is open, showing the same set of options as the previous screenshot. The API permissions option is selected. The main content area is titled "Azure\_Divya | API permissions". It displays a warning about tenant-wide consent revoking existing permissions. Below this, there is a section for "Configured permissions" with a note about authorized APIs. A table lists configured permissions, with one entry for "Microsoft Graph (1)". The table columns are API / Permissions name, Type, Description, Admin consent req..., and Status. The "Microsoft Graph (1)" row shows User.Read as the API name, Delegated as the type, "Sign in and read user profile" as the description, No as the admin consent status, and three asterisks as the status. At the bottom, there is a note about viewing and managing consented permissions for individual apps.

# STAGING CREATION IN MATILLION WITH AZURE



## 15. Select “Azure Storage”:

The screenshot shows the Azure portal interface. The left sidebar is for the app registration 'Azure\_Diva'. The main content area is titled 'Request API permissions' under 'Microsoft APIs'. It lists several Microsoft APIs, with 'Azure Storage' highlighted. A tooltip for 'Azure Storage' indicates it provides 'Secure, massively scalable object and data lake storage for unstructured and semi-structured data'. Other listed APIs include Microsoft Graph, Azure Service Management, Azure Batch, Azure Communication Services, and Azure Cosmos DB.

## 16. Choose your storage and click “Add Permission”:

This screenshot shows the 'Request API permissions' dialog for the Azure Storage API. It has two main sections: 'Delegated permissions' and 'Application permissions'. Under 'Delegated permissions', there's a note about signed-in users. The 'Select permissions' section contains a search bar and a note about admin consent. Below is a table showing a single permission: 'user\_impersonation' with 'Access Azure Storage' checked and 'Admin consent required' set to 'No'. At the bottom are 'Add permissions' and 'Discard' buttons.

# STAGING CREATION IN MATILLION WITH AZURE



## 17. Go to Snowflake, Describe your Storage Integration and copy “Azure\_Multi\_Tenant\_App Name” here:

The screenshot shows the Snowflake interface with the query results for the Azure Storage Integration. The code in the query editor is:

```
DESC STORAGE INTEGRATION azure_int;
```

The results table shows the properties of the storage integration:

property	property_type	property_value	property_default
STORAGE_ALLOWED_LOCATIONS	List	azure://snowpipeautodataload.storage.core.windows.net/divyadatablob/	
STORAGE_BLOCKED_LOCATIONS	List		
AZURE_TENANT_ID	String	b3dc1b4e-e061-466d-bde1-9c106672cae8	
AZURE_CONSENT_URL	String	<a href="https://login.microsoftonline.com/b3dc1b4e-e061-466d-bde1-9c106672cae8">https://login.microsoftonline.com/b3dc1b4e-e061-466d-bde1-9c106672cae8</a>	
AZURE_MULTI_TENANT_APP_NAME	String	c1erdosnowflakepacint_1720503423353	
COMMENT	String		

## 18. Go back to Azure portal, navigate to Manage---> App permissions---> Request API permissions---> “APIs my organization uses”, then paste “Azure\_Multi\_Tenant\_App Name” here that you copied from Snowflake:

The screenshot shows the Azure portal's "Request API permissions" page. The search bar contains the text "c1erdosnowflakepacint".

The "Configured permissions" section lists the following API permissions:

API / Permissions name	Type	Description
user_impersonation	Delegated	Access Azure Storage
User.Read	Delegated	Sign in and read user profile information
user_impersonation	Delegated	Access v2l7w7sn

# STAGING CREATION IN MATILLION WITH AZURE



## 19. Select your Application Client ID and select “user-impersonation” and click “Add permissions”:

The screenshot shows the Azure portal interface for managing API permissions. On the left, the sidebar is open with the 'API permissions' section selected under 'Manage'. The main area displays 'Configured permissions' for the application 'Azure\_Divya'. A modal window titled 'Request API permissions' is open, showing a list of APIs and their permissions. The 'Microsoft Graph' API has a permission entry for 'User.Read' with the 'user\_impersonation' scope selected. The 'Add permissions' button at the bottom of the modal is highlighted.

The screenshot shows the 'Azure\_Divya | API permissions' page in the Azure portal. The sidebar still shows 'API permissions' as the active section. The main content area displays the 'Configured permissions' table. The 'Microsoft Graph' API now has two entries: one for 'User.Read' with 'user\_impersonation' selected, and another for 'User.ReadWrite' with 'user\_impersonation' selected. Both entries have 'Delegated' type and 'Access Microsoft Graph' description. The 'Status' column for both rows shows 'No'.

# STAGING CREATION IN MATILLION WITH AZURE



20. Next, go to your Data Store---> Container---> Access Control (IAM)---> then select “Storage Account Contributor”:

The screenshot shows the Microsoft Azure portal interface. The URL in the address bar is [https://portal.azure.com/?feature.token caching=true&feature.internalgraphapiversion=true#view/Microsoft\\_Azure\\_AD/AddRoleAssignmentsLandingBlade/scope/%2Fsubscriptions%2F080dcf10-df03...](https://portal.azure.com/?feature.token caching=true&feature.internalgraphapiversion=true#view/Microsoft_Azure_AD/AddRoleAssignmentsLandingBlade/scope/%2Fsubscriptions%2F080dcf10-df03...). The page title is "Add role assignment". The top navigation bar includes "Microsoft Azure", "Upgrade", "Search resources, services, and docs (G+)", "Copilot", and user information "ardiva85@gmail.com".  
The main content area is titled "Job function roles" and lists "Privileged administrator roles". Below this, a search bar contains "storage acc". A table lists various Azure roles, with "Storage Account Contributor" highlighted. The table columns are: Name, Description, Type, Category, and Details.

Name	Description	Type	Category	Details
Defender CSPM Storage Scanner Operator	Lets you enable and configure Microsoft Defender CSPM's sensitive data discovery feature on your storage accounts. Inclu...	BuiltinRole	None	View
Defender for Storage Data Scanner	Grants access to read blobs and update index tags. This role is used by the data scanner of Defender for Storage.	BuiltinRole	None	View
Defender for Storage Scanner Operator	Lets you enable and configure Microsoft Defender for Storage's malware scanning and sensitive data discovery features o...	BuiltinRole	None	View
Log Analytics Contributor	Log Analytics Contributor can read all monitoring data and edit monitoring settings. Editing monitoring settings includes a...	BuiltinRole	Analytics	View
Managed Applications Reader	Lets you read resources in a managed app and request JIT access.	BuiltinRole	Management + Gover...	View
Reader and Data Access	Lets you view everything but will not let you delete or create a storage account or contained resource. It will also allow rea...	BuiltinRole	Storage	View
Storage Account Backup Contributor	Lets you perform backup and restore operations using Azure Backup on the storage account.	BuiltinRole	Storage	View
Storage Account Contributor	Lets you manage storage accounts, including accessing storage account keys which provide full access to storage account ...	BuiltinRole	Storage	View
Storage Account Key Operator Service Role	Storage Account Key Operators are allowed to list and regenerate keys on Storage Accounts	BuiltinRole	Storage	View

21. Then click “Select Members”:

The screenshot shows the "Add role assignment" page with the "Members" tab selected. The URL in the address bar is [https://portal.azure.com/?feature.token caching=true&feature.internalgraphapiversion=true#view/Microsoft\\_Azure\\_AD/AddRoleAssignmentsLandingBlade/scope/%2Fsubscriptions%2F080dcf10-df03...](https://portal.azure.com/?feature.token caching=true&feature.internalgraphapiversion=true#view/Microsoft_Azure_AD/AddRoleAssignmentsLandingBlade/scope/%2Fsubscriptions%2F080dcf10-df03...). The top navigation bar includes "Microsoft Azure", "Upgrade", "Search resources, services, and docs (G+)", "Copilot", and user information "ardiva85@gmail.com".  
The main content area shows the "Selected role" as "Storage Account Contributor" and "Assign access to" as "User, group, or service principal". The "Members" section has a button "+ Select members". The "Description" field is empty and labeled "Optional".  
At the bottom, there are navigation buttons: "Review + assign", "Previous", "Next", and "Feedback".

# STAGING CREATION IN MATILLION WITH AZURE



## 22. Paste your Application Client and select it:

The screenshot shows the Microsoft Azure portal interface for adding a role assignment. The main page displays the 'Add role assignment' form with the 'Members' tab selected. Under 'Selected role', 'Storage Account Contributor' is chosen. Under 'Assign access to', the radio button for 'User, group, or service principal' is selected. The 'Members' section contains a search bar and a list of results. A modal window titled 'Select members' is open, showing a single result: 'c1erdosnowflakepacint Application'. The 'Selected members' list also contains this item. At the bottom of the modal are 'Select' and 'Close' buttons.

## 23. Click "Review and Assign":

The screenshot shows the Microsoft Azure portal interface for adding a role assignment. The main page displays the 'Add role assignment' form with the 'Review + assign' tab selected. Under 'Selected role', 'Storage Account Contributor' is chosen. Under 'Assign access to', the radio button for 'User, group, or service principal' is selected. The 'Members' section shows one member selected: 'c1erdosnowflakepacint' (Object ID: b0056fce-3aa1-4e55-a2d5-6c54b01f2ff6). The 'Description' field is empty. At the bottom of the page are 'Review + assign', 'Previous', and 'Next' buttons.

# STAGING CREATION IN MATILLION WITH AZURE



## 24. Copy your Enterprise Application name (Azure\_Divya):

The screenshot shows the Microsoft Azure portal's 'Enterprise applications' section. The left sidebar has 'Overview', 'Manage' (selected), and 'All applications' (selected). Under 'All applications', there are categories like 'Private Network connectors', 'User settings', 'App launchers', and 'Custom authentication extensions'. The main area lists three applications: 'vz17w7snowflakepacint' (pink), 'c1erdosnowflakepacint' (green), and 'Azure\_Divya' (orange, selected). The table columns include Name, Object ID, Application ID, Homepage URL, Created on, Certificate Expir..., Active Certificat..., and Identifier URI (E...). The Identifier URI for 'Azure\_Divya' is https://sfcazapps.sno...

## 25. Repeat the steps 19 to 22 and add "Azure\_Divya" as well here:

The screenshot shows the 'Add role assignment' page in the Microsoft Azure portal. The 'Members' tab is selected. Under 'Selected role', it says 'Storage Account Contributor'. Under 'Assign access to', 'User, group, or service principal' is selected. The 'Members' section has a '+ Select members' button. A modal window titled 'Select members' is open, showing a search bar with 'Azure\_Divya' and a result 'Azure\_Divya Application'. On the right, under 'Selected members:', there are two entries: 'Divya A R(Guest)' and 'Azure\_Divya Application'. At the bottom of the modal are 'Select' and 'Close' buttons.

# STAGING CREATION IN MATILLION WITH AZURE



## 26. Click "Review + Assign":

The screenshot shows the Microsoft Azure 'Add role assignment' interface. The 'Selected role' is set to 'Storage Account Contributor'. The 'Assign access to' section has 'User, group, or service principal' selected. Under 'Members', 'Divya A R(Guest)' and 'Azure\_Divya' are listed. A 'Description' field is optional. At the bottom, there are 'Review + assign', 'Previous', and 'Next' buttons.

## 27. Give above details in Matillion and it will be Successful Connection:

The screenshot shows the Matillion environment editor for project 'matillion\_ddl2'. The left sidebar shows environments like 'BANKDEMO' and 'Divya\_Dev'. The main area displays the 'Edit Environment' dialog for 'ORCH005\_09\_07\_2027\_Multi\_file\_load\_AZ\_Part\_1'. The 'Snowflake Defaults' tab is selected, showing settings for Default Role (ACCOUNTADMIN), Default Warehouse (DEMO\_WAREHOUSE), Default Database (AZUREDATABASE), and Default Schema (AZURE\_SCHEMA). A 'Test' button at the bottom shows a green success message. Buttons for 'Cancel', 'Back', and 'Finish' are at the bottom right.

28. Test Connection – Success - Bingooooo

Happy Learning !