

Create VM in Microsoft Azure:

Step 1: Login into Microsoft Account

Step 2 : navigate to create resource → virtual machine →

There are several Tabs in the Creating VM. in the Basic Tab Set

Subscription Type , Resource Group , and Selecting Region.

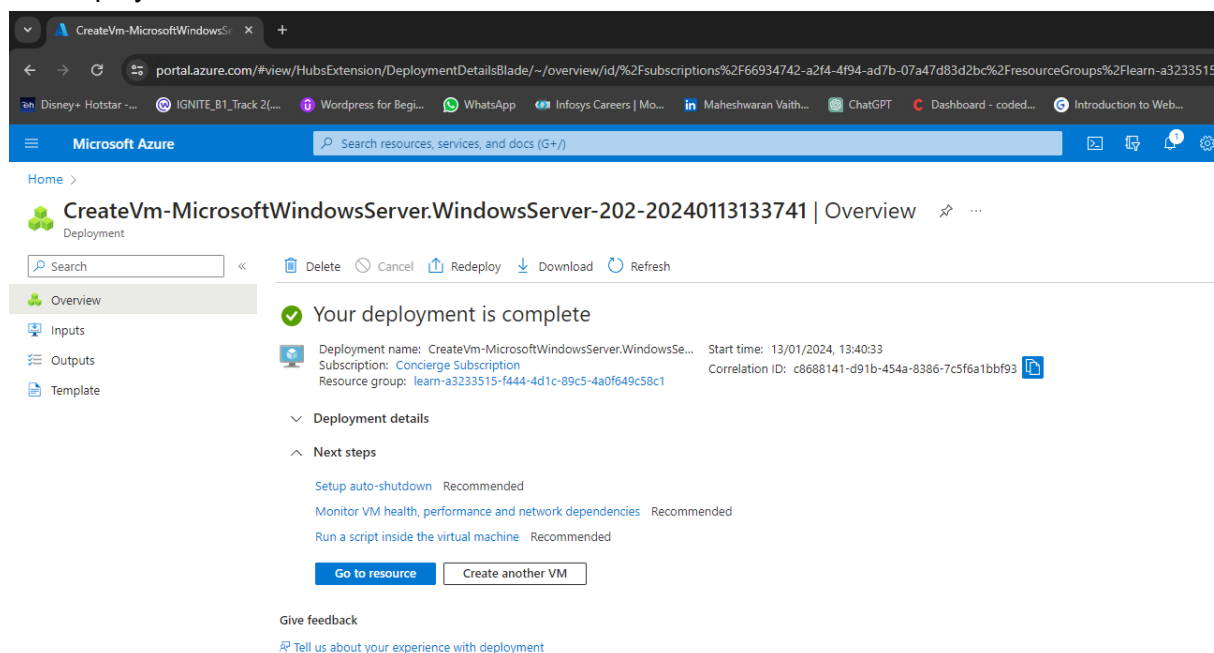
Step 3: Select Which os to be installed on VM. set username and password for the VM.

Step 4 : Set the Ports and navigate to Disk Tab

Step 5: Set the Storage Type and Select other options to set and Review and Create.

Step 6: Connect a VM to the RDP using Public IP Address provided by VM

VM Deployed:



VM Info

Microsoft Azure

Search resources, services, and docs (G+)

Home > CreateVm-MicrosoftWindowsServer.WindowsServer-202-20240113133741 | Overview >

maresh Virtual machine

Search

Connect Start Restart Stop Hibernate (preview) Capture Delete Refresh Open in mobile Feedback CLI / PS

maresh virtual machine agent status is not ready. Troubleshoot the issue →

Essentials

Resource group (move)	: learn-a3233515-f444-4d1c-89c5-4a0f649c58c1	Operating system	: Windows
Status	: Running	Size	: Standard D2s v3 (2 vcpus, 8 GiB memory)
Location	: South India	Public IP address	: 52.140.61.17
Subscription (move)	: Concierge Subscription	Virtual network/subnet	: maresh-vnet/default
Subscription ID	: 66934742-a2f4-4f94-ad7b-07a47d83d2bc	DNS name	: Not configured
Tags (edit)	: Add tags	Health state	: -

VM Properties

maresh virtual machine agent status is not ready. Troubleshoot the issue →

Properties Monitoring Capabilities (8) Recommendations Tutorials

Virtual machine

Computer name	maresh
Operating system	Windows
Image publisher	MicrosoftWindowsServer
Image offer	WindowsServer
Image plan	2022-datacenter-azure-edition
VM generation	V2
VM architecture	x64
Agent status	Not Ready
Agent version	Unknown
Hibernation	Disabled
Host group	-
Host	-
Proximity placement group	-
Colocation status	N/A
Capacity reservation group	-
Disk controller type	SCSI

Networking

Public IP address	52.140.61.17 (Network interface maresh30)
Public IP address (IPv6)	-
Private IP address	10.0.0.4
Private IP address (IPv6)	-
Virtual network/subnet	maresh-vnet/default
DNS name	Configure

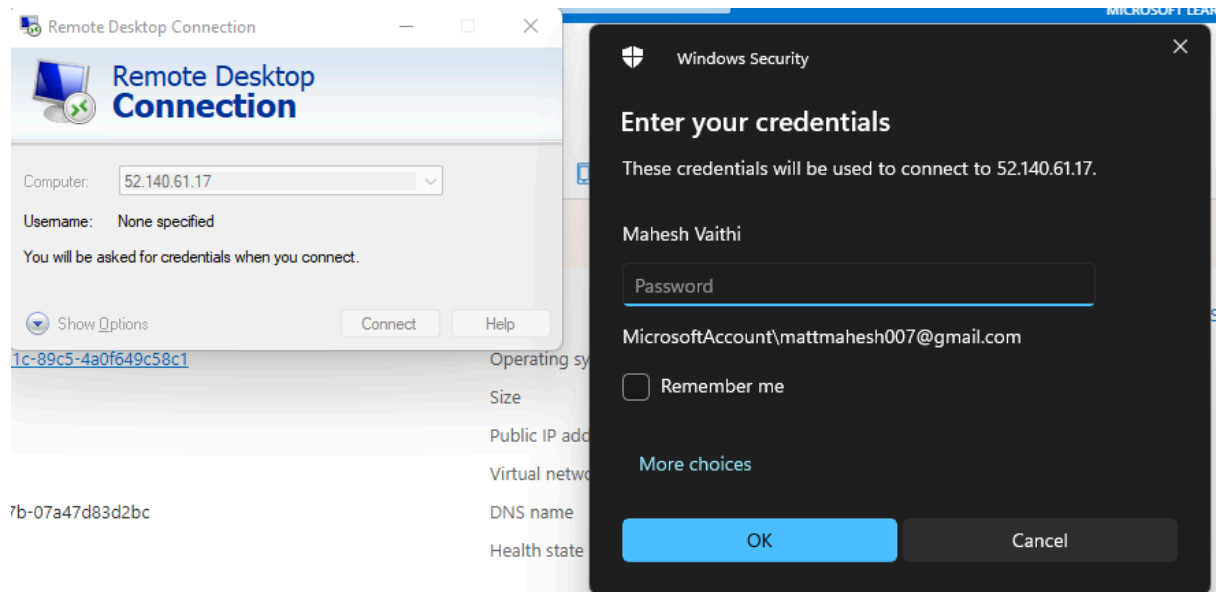
Size

Size	Standard D2s v3
vCPUs	2
RAM	8 GiB

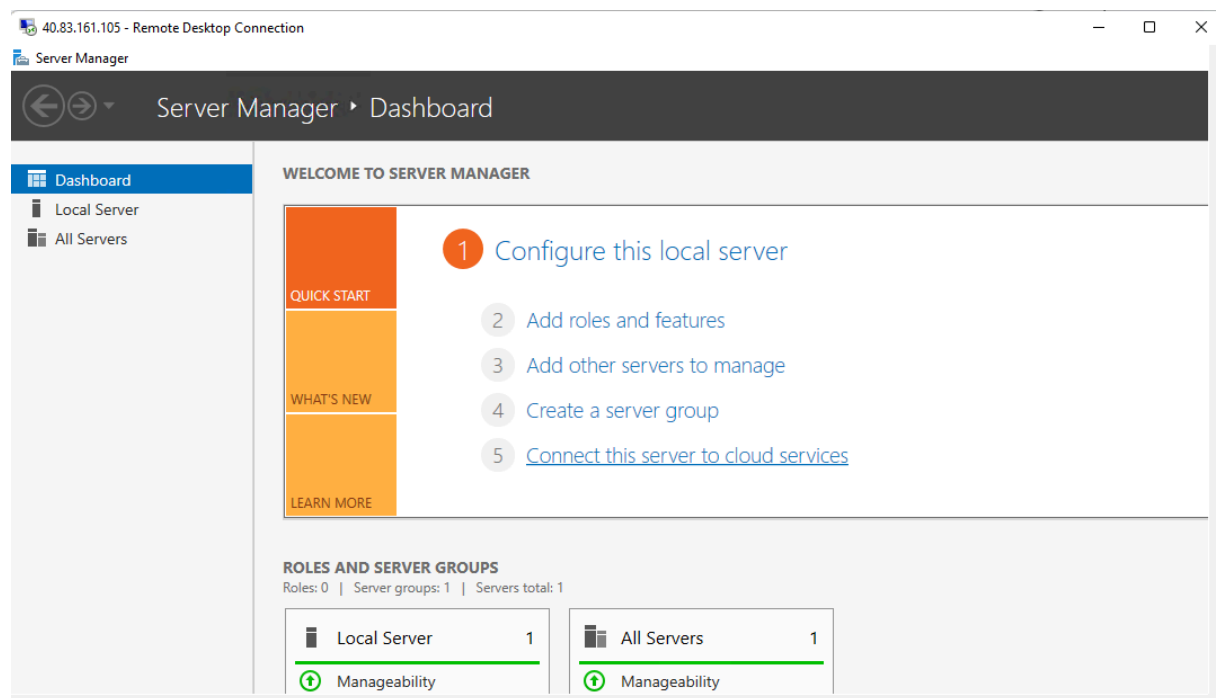
Disk

OS disk	maresh_OsDisk_1_a086509f13c54c83b96b2657e6a6fbc9
Encryption at host	Disabled
Azure disk encryption	Not enabled

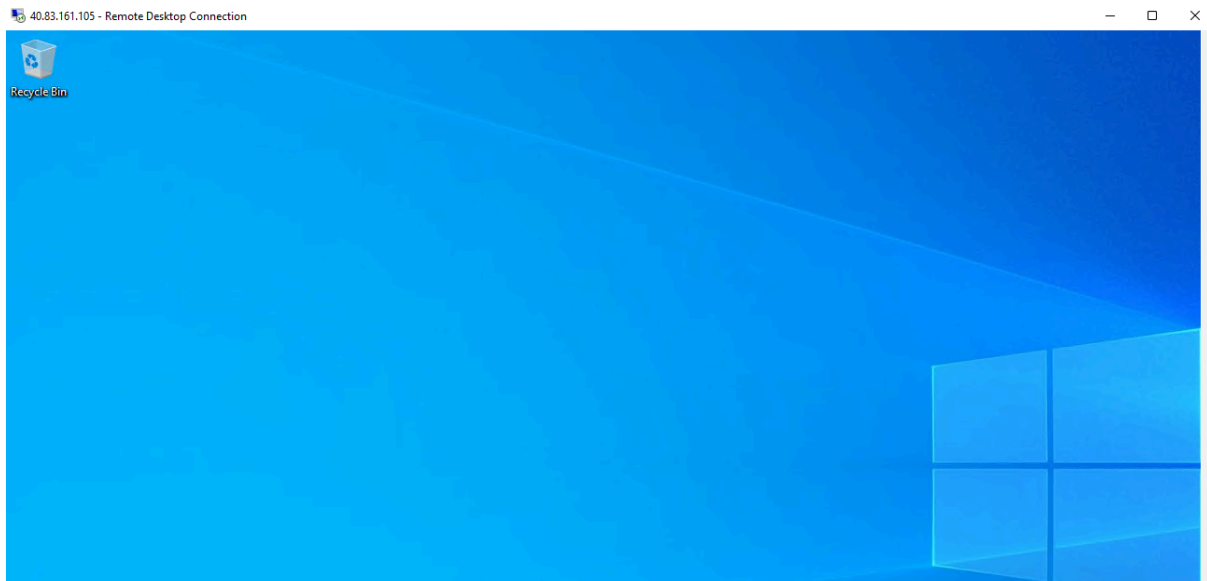
To connect with RDP with Public IP



Local server dashboard



We can use VM on Azure



To create WebApp in Azure

Microsoft Azure portal interface for creating a Web App.

Create Web App

Navigation tabs: Basics, Database, Deployment, Networking, Monitoring, Tags, **Review + create**

Summary

Web App by Microsoft

Standard (S1) sku
Estimated price - 73.00 USD/Month

Details

Subscription	66934742-a2f4-4f94-ad7b-07a47d83d2bc
Resource Group	learn-a3233515-f444-4d1c-89c5-4a0f649c58c1
Name	helloazure15
Publish	Code
Runtime stack	.NET 7 (STS)

App Service Plan (New)

Name	ASP-learn-a3233515-f4444d1c89c54a0f64-a23a
Operating System	Windows
Region	East US
SKU	Standard
Size	Small
ACU	100 total ACU

Deployed Successfully

Microsoft Azure

Search resources, services, and docs (G+)

Home >

Microsoft.Web-WebApp-Portal-e92667a4-bb4e | Overview

Deployment

Overview

Inputs

Outputs

Template

Search

Delete

Cancel

Redeploy

Download

Refresh

✓ Your deployment is complete

Deployment name: Microsoft.Web-WebApp-Portal-e92667a4-bb4e
Subscription: Concierge Subscription
Resource group: learn-a3233515-f444-4d1c-89c5-4a0f649c58c1

Start time: 13/01/2024, 14:10:59
Correlation ID: 2a3aeecc-090a-4e9f-b312-98397884c0d8

Deployment details

Next steps

Manage deployments for your app. Recommended

Protect your app with authentication. Recommended

Go to resource

Give feedback

Tell us about your experience with deployment

Deployment succeeded

Deployment 'Microsoft.Web-WebApp-Portal-e92667a4-bb4e' to resource group 'learn-a3233515-f444-4d1c-89c5-4a0f649c58c1' was successful.

Go to resource

Pin to dashboard

Cost Management

Get notified to stay within your budget and prevent unexpected charges on your bill.

Set up cost alerts >

Microsoft Defender for Cloud

Secure your apps and infrastructure

Go to Microsoft Defender for Cloud >

Free Microsoft tutorials

Start learning today

Webapp portal deployed

Microsoft Azure

Search resources, services, and docs (G+)

Home >

helloazure15

Web App

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Microsoft Defender for Cloud

Events (preview)

Deployment

Deployment slots

Deployment Center

Settings

Configuration

Authentication

Application Insights

Identity

Backups

Custom domains

Search

Browse

Stop

Swap

Restart

Delete

Refresh

Download publish profile

Reset publish profile

Share to mobile

Send us your feedback

Click here to access Application Insights for monitoring and profiling for your app.

JSON View

Essentials

Resource group (move) : learn-a3233515-f444-4d1c-89c5-4a0f649c58c1

Status : Running

Location (move) : South India

Subscription (move) : Concierge Subscription

Subscription ID : 66934742-a2f4-4f94-ad7b-07a47d83d2bc

Tags (edit) : Add tags

Default domain : helloazure15.azurewebsites.net

App Service Plan : ASP-learn-a3233515-f444-4d1c-89c5-4a0f64-9601

Operating System : Windows

Health Check : Cannot fetch health check data. Please try again later.

Properties

Monitoring

Logs

Capabilities

Notifications

Recommendations

Web app

Name : helloazure15

Publishing model : Code

Runtime Stack : Dotnet - v7.0

Domains

Default domain : helloazure15.azurewebsites.net

Custom domain : Add custom domain

Deployment Center

Deployment logs

Last deployment

Deployment provider

View logs

Loading deployments...

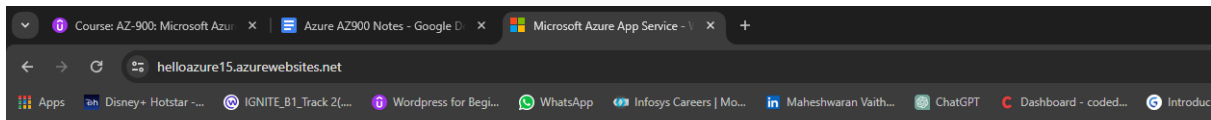
None

Application Insights

Name

Activate Windows


Enable Application Insights



Your web app is running and waiting for your content

Your web app is live, but we don't have your content yet. If you've already deployed, it could take up to 5 minutes for your content to show up, so come back soon.



 Supporting Node.js, Java, .NET and more

Haven't deployed yet?
Use the deployment center to publish code or set up continuous deployment.

[Deployment center](#)

Starting a new web site?
Follow our Quickstart guide to get a web app ready quickly.

[Quickstart](#)

Deployed link: <https://helloazure15.azurewebsites.net/>

Exploring scaleup and scaledown features

Microsoft Azure									
Search resources, services, and docs (G+)									
Home > helloazure15									
helloazure15 Scale up (App Service plan) ☆									
Web App									
Showing 17 App Service pricing plans									
Name	ACU/vCPU	vCPU	Memory (GB)	Remote Storage (GB)	Scale (instance)	SLA	Cost per hour (instance)	Cost per month (instance)	
Dev/Test (For less demanding workloads)									
<input checked="" type="checkbox"/> Free F1	60 minutes/day...	N/A	1	1	N/A	N/A	Free	Free	
Shared D1	240 minutes/day...	N/A	1	1	N/A	N/A	0.014 USD	9.928 USD	
Basic B1	100	1	1.75	10	3	99.95%	0.075 USD	54.75 USD	
Basic B2	100	2	3.5	10	3	99.95%	0.15 USD	109.50 USD	
Basic B3	100	4	7	10	3	99.95%	0.30 USD	219.00 USD	
Production (For most production workloads)									
Standard S1	100	1	1.75	50	10	99.95%	0.10 USD	73.00 USD	
Premium v3 P1V3	195	2	8	250	30	99.95%	0.325 USD	237.19 USD	
Premium v3 P2V3	195	4	16	250	30	99.95%	0.65 USD	474.381 USD	
Premium v3 P3V3	195	8	32	250	30	99.95%	1.30 USD	948.762 USD	
Standard S2	100	2	3.5	50	10	99.95%	0.20 USD	146.00 USD	

Create FunctionApp in Azure:

Setting up for function app

Create Function App - Microsoft

portal.azure.com/#create/Microsoft.FunctionApp

Disney+ Hotstar ~...IGNITE_B1_Track 2(...Wordpress for Begi...WhatsAppInfosys Careers | Mo...Maheshwaran Vaith...ChatGPTDashboard - code

Microsoft AzureSearch resources, services, and docs (G+/)

Home > Create a resource >

Create Function App

Project Details

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription *

Concierge Subscription

Resource Group *

learn-a3233515-f444-4d1c-89c5-4a0f649c58c1

Create new

Instance Details

Function App name *

hellofunction15

.azurewebsites.net

Do you want to deploy code or container image? *

☒ Code ☐ Container Image

Runtime stack *

Python

Version *

3.10

Region *

East US

Operating system

Linux is the only supported Operating System for your selection of runtime stack.

Operating System *

☒ Linux ☐ Windows

Review + create

< Previous

Next : Storage >

Microsoft AzureSearch resources, services, and docs (G+/)

Home > Create a resource >

Create Function App

BasicsStorageNetworkingMonitoringDeploymentTagsReview + create

Summary

Function App

by Microsoft

Details

Subscription

66934742-a2f4-4f94-ad7b-07a47d83d2bc

Resource Group

learn-a3233515-f444-4d1c-89c5-4a0f649c58c1

Name

hellofunction15

Runtime stack

Python 3.10

Hosting

Storage (New)

Storage account

learn-a3233515f4444da995

Plan (New)

Hosting options and plans

Consumption (Serverless)

Name

ASP-learn-a3233515f4444d1c89c54a0f64-b3b4

Operating System

Linux

Validating...

< Previous

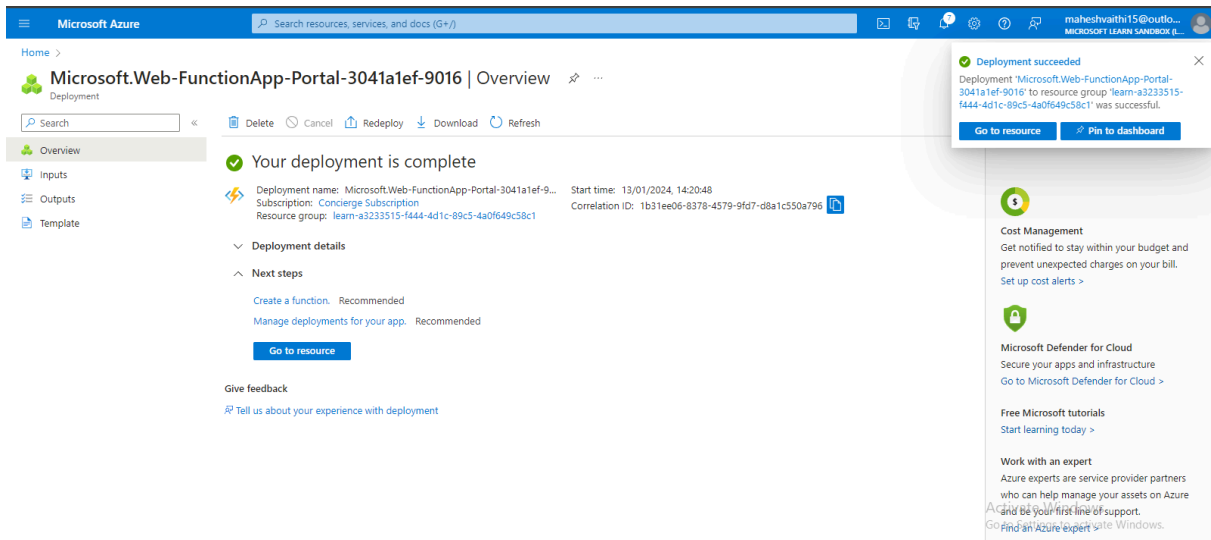
Next >

Download a template for automation

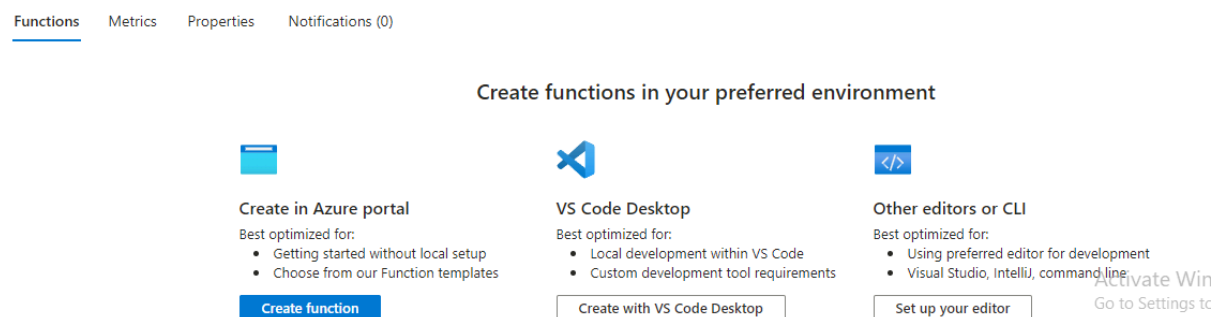
*** Submitting deployment...
Submitting the deployment template for resource group 'learn-a3233515-f444-4d1c-89c5-4a0f649c58c1'.

Activate Windows
Go to Settings to activate Windows.

Function App created



We can create our code setup inside azure portal



Creating code

Create function

Programming Model [?](#)

v2 Programming Model

Select a template

Use a template to create a function. Triggers describe the type of events that invoke your functions. [Learn more](#)

Filter

Blob trigger	A function that will be run whenever a blob is added to a specified container
CosmosDB trigger	A function that will be run whenever documents change in a document collection
EventGrid trigger	A function that will be run whenever an event grid receives a new event
EventHub trigger	A function that will be run whenever an event hub receives a new event
HTTP trigger	A function that will be run whenever it receives an HTTP request, responding based on data in the body or query string
Queue trigger	A function that will be run whenever a message is added to a specified Azure Storage queue
ServiceBus Queue trigger	A function that will be run whenever a message is added to a specified Service Bus queue
ServiceBus Topic trigger	A function that will be run whenever a message is added to the specified Service Bus topic
Timer Trigger	A function that will be run on a specified schedule

Template details

We need more information to create the HTTP trigger function. [Learn more](#)

Create

Cancel

Activate Windows

Go to Settings to activate Windows.

Function code app

Microsoft Azure

Search resources, services, and docs (G+)

Home > Microsoft.Web-FunctionApp-Portal-3041a1ef-9016 | Overview > hellofunction15 > helloazure

helloazure | Code + Test

Function

Search

Save Discard Refresh Test/Run Upload Get function URL

Overview

Adding third party dependencies in the Azure portal is currently not supported for Linux Consumption Function Apps. Click here to setup local environment. [Learn more](#)

Developer

hellofunction15 | function_app.py

```
1 import logging
2
3 app = func.FunctionApp(http_auth_level=func.AuthLevel.FUNCTION)
4
5 @app.route(route="helloazure")
6 def helloazure(req: func.HttpRequest) -> func.HttpResponse:
7     logging.info('Python HTTP trigger function processed a request.')
8
9     name = req.params.get('name')
10     if not name:
11         try:
12             req_body = req.get_json()
13         except ValueError:
14             pass
```

Logs

Log Level Stop Copy Clear Maximize

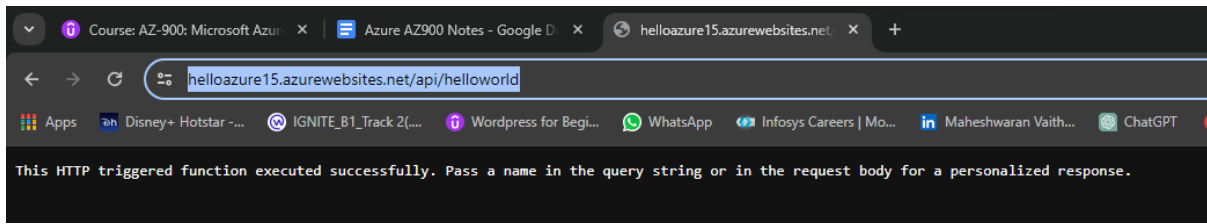
Connecting to Application Insights...

Activate Windows

Go to Settings to activate Windows.

Navigate to get function url to get the URL

<https://helloazure15.azurewebsites.net/api/helloworld>



ContainerApp and Azure Kubernetes are Not Supported in this Free Version.

Creating Storage Account

A screenshot of the Microsoft Azure portal 'Create a storage account' wizard, Basics tab. The page shows the following details:

- Resource group:** learn-223b594a-c997-4743-9408-d5bd6f7d7dbc (with a 'Create new' link)
- Instance details:**
 - Storage account name:** maheshs
 - Region:** (US) West US (with a 'Deploy to an edge zone' link)
 - Performance:** Standard: Recommended for most scenarios (general-purpose v2 account) (selected)
 - Redundancy:** Geo-redundant storage (GRS) (selected)

At the bottom, there are buttons for 'Review', '< Previous', and 'Next: Advanced >'. The 'Review' button is highlighted.

Process in creating

A screenshot of the Microsoft Azure portal 'Create a storage account' wizard, Review tab. The page shows the following details:

- Deploying..** (status indicator)
- Basics** (selected tab)
- Encryption:**
 - Encryption type: Microsoft-managed keys (MMK)
 - Enable support for customer-managed keys: All service types (blobs, files, tables, and queues)
 - Enable infrastructure encryption: Disabled

At the bottom, there are buttons for 'Create', '< Previous', and 'Next >'. The 'Create' button is highlighted. A 'Submitting deployment...' notification is visible in the top right corner.

Deployed

The screenshot shows the Microsoft Azure portal interface. At the top, there's a search bar and navigation icons. The main header indicates the user is logged in as 'maheshv15@outlook.co...'. The left sidebar shows the 'Deployment' section selected. The main content area displays 'Your deployment is complete' for the resource group 'maheshs_1705137776479'. It provides details such as the deployment name, subscription, resource group, start time, and correlation ID. A 'Go to resource' button is visible. On the right, there are several informational cards: 'Deployment succeeded', 'Cost Management', and 'Microsoft Defender for Cloud'.

Details of Storage Account

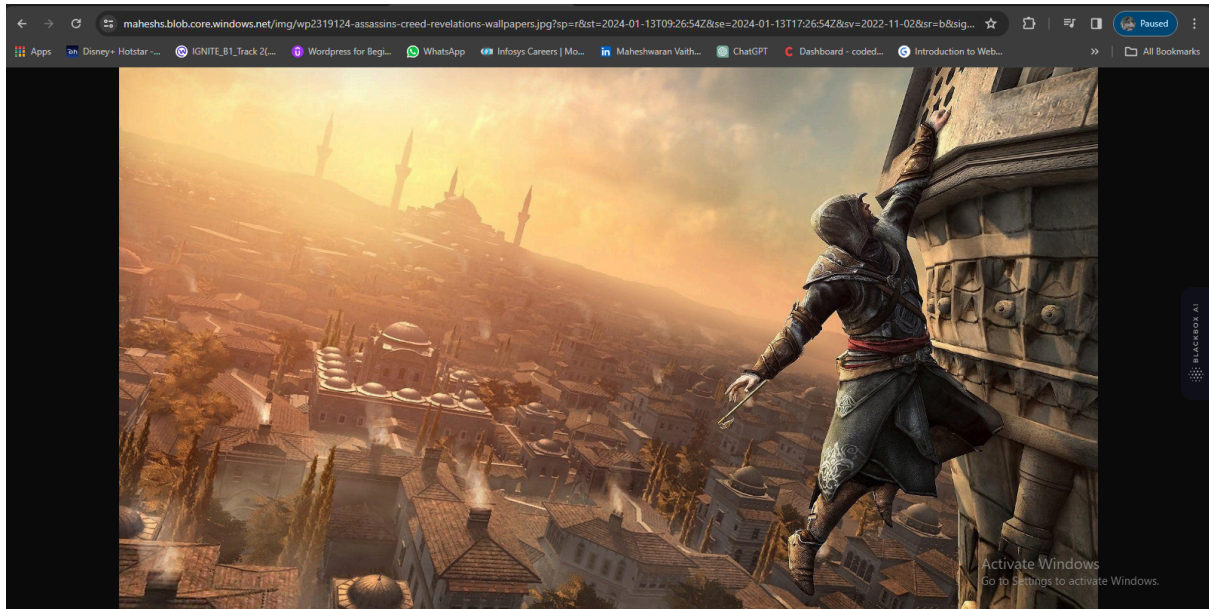
The screenshot shows the Microsoft Azure portal interface for a storage account named 'maheshs'. The left sidebar shows the 'Storage account' section selected. The main content area displays the 'Essentials' tab, showing the resource group, location, subscription, and disk state. Below this, there are tabs for 'Properties', 'Monitoring', 'Capabilities (7)', 'Recommendations (0)', 'Tutorials', and 'Tools + SDKs'. The 'Properties' tab is active, showing details for the 'Blob service' and 'Security' settings. The 'Blob service' section includes settings for hierarchical namespace, default access tier, blob anonymous access, blob soft delete, container soft delete, versioning, change feed, and NFS v3. The 'Security' section includes settings for require secure transfer for REST API operations, storage account key access, minimum TLS version, and infrastructure encryption. A 'Networking' section is also visible, showing 'Allow access from' and 'Number of private endpoint connections'.

The screenshot shows the Microsoft Azure portal interface for a blob named 'wp2319124-assassins-creed-revelations-wallpapers.jpg'. The left sidebar shows the 'img' container selected. The main content area displays the 'Blob' details, including the 'Authentication method' (Access key), 'Location' (img), and 'Search blobs by prefix (case-insensitive)' option. Below this, there are tabs for 'Overview', 'Diagnose and solve problems', 'Access Control (IAM)', 'Settings', 'Shared access tokens', 'Access policy', 'Properties', and 'Metadata'. The 'Settings' tab is active, showing the 'Name' of the blob. The 'Overview' tab is also visible, showing the 'Permissions' (Read) and 'Start and expiry date/time' (01/13/2024, 14:56:54). The 'Generate SAS token and URL' button is visible. Below this, the 'Blob SAS token' and 'Blob SAS URL' are displayed. The URL is: `https://maheshs.blob.core.windows.net/img/wp2319124-assassins-creed-revelations-wallpapers.jpg?sp=r&st=2024-01-13T09:26:54Z&se=2024-01-13T17:26:54Z&sig=2FgJ6c17QNCfZjHqfdFMgKvWcXb1ub5eAisFBkuMs%3D`. A 'Copied' notification is visible next to the URL.

Image uploaded and url as follows

Url:

<https://maheshs.blob.core.windows.net/img/wp2319124-assassins-creed-revelations-wallpapers.jpg?sp=r&st=2024-01-13T09:26:54Z&se=2024-01-13T17:26:54Z&sv=2022-11-02&sr=b&sig=%2Fgj6c17QNCFZZjHqfdFFMgKYeWCxb1ub5eAiSFBkuMs%3D>



Copy container or data in same or different container

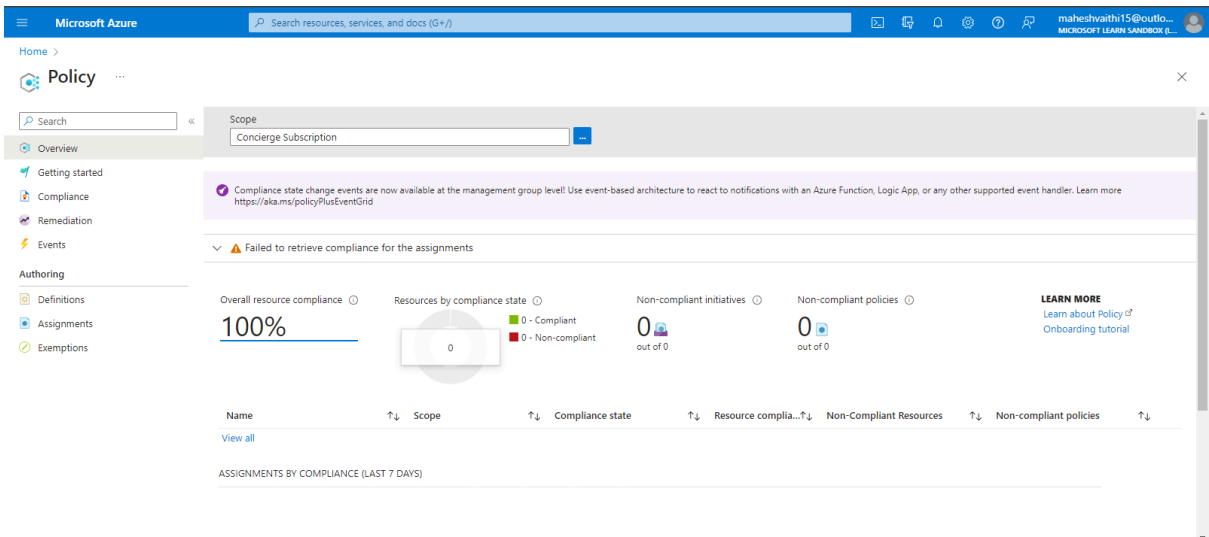
Copy the SAS url from the existing storage.

Create new storage and add permission to write

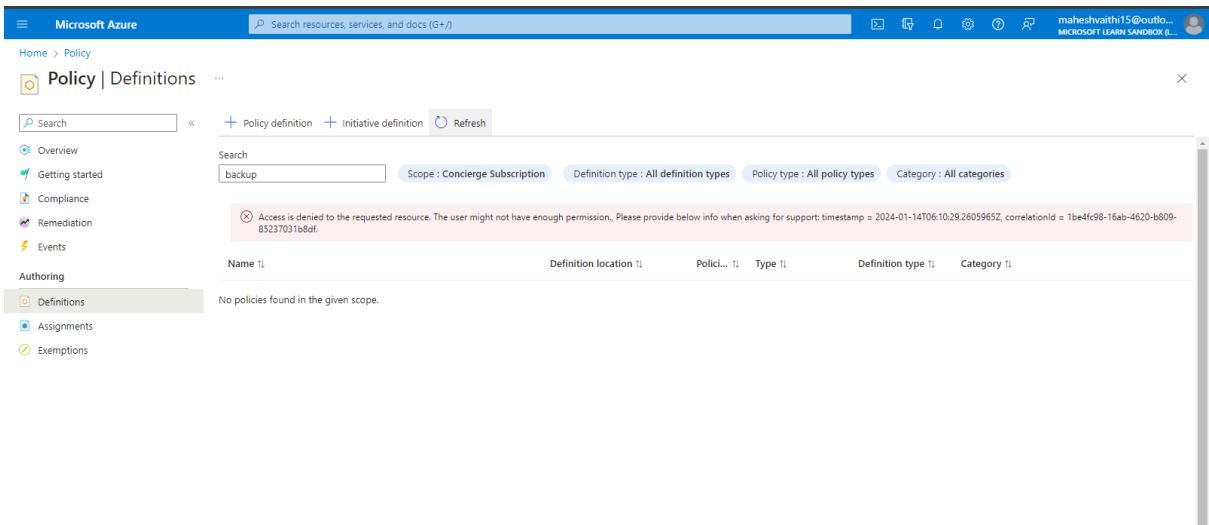
Add the existing container url into the new container

Cmd: azcopy 'url1' 'url2'

AZURE GOVERNANCE POLICY



Click on definition and wait for the policy assigned



Policy Statements are written in JSON format

While Creating App it shows:

Microsoft Azure

Search resources, services, and docs (G+)

Home > Create a resource >

Create Web App

Basics Database Deployment Networking Monitoring Tags **Review + create**

Summary

Web App
by Microsoft

Premium V3 (P1V3) sku
Estimated price - 113.15 USD/Month

Details

Subscription	9d9bf5f6-2cad-4cbb-94e1-11eb71d2236b
Resource Group	learn-532550a1-0617-4668-9ec1-d2ad3fbd0306
Name	helloarm
Publish	Code
Runtime stack	Python 3.10

App Service Plan (New)

Name	ASP-learn532550a1061746689ec1d2ad3f-ab0f
Operating System	Linux
Region	East US
SKU	Premium V3
Size	Small
ACU	195 minimum ACU/vCPU

Create < Previous Next > Download a template for automation

Navigate to download template automation

It is the JSON format used in the azure cloud.

Microsoft Azure

Search resources, services, and docs (G+)

Home > Create a resource >

Template

Download Add to library Deploy

Automate deploying resources with Azure Resource Manager templates in a single, coordinated operation. Define resources and configurable input parameters and deploy with script or code. [Learn more about template deployment.](#)

Template Parameters Scripts

Parameters (15)
Variables (0)
Resources (2)
[parameters('name')] (Microsoft.Web/sites)
[parameters('hostingPlanName')] (Microsoft.Web/serverfarms)

```
1 {
2   "$schema": "http://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#",
3   "contentVersion": "1.0.0.0",
4   "parameters": {
5     "subscriptionId": {
6       "type": "string"
7     },
8     "resourceGroupName": {
9       "type": "string"
10    },
11    "name": {
12      "type": "string"
13    },
14    "location": {
15      "type": "string"
16    },
17    "hostingPlanName": {
18      "type": "string"
19    },
20    "serverFarmResourceGroup": {
21      "type": "string"
```

Microsoft Azure

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

Home > Create a resource > Create Web App > Template >

Importing template

Validation passed!

Basics Edit Template Tags **Review + Create**

Summary

Name	webapptemp
Subscription	Concierge Subscription
Resource Group	learn-532550a1-0617-4668-9ec1-d2ad3fbd0306
Location	East US
Description	GGES
Version	1.0
Change notes	GGES

Create < Previous Next >

We can also importing template from the library

Azure Advisor is used to monitor the health of the system resources

Microsoft Azure

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

Home >

Advisor | Overview

Feedback Download as CSV Download as PDF Workbooks

Subscription equals all Recommendation Status equals Active Resource Group equals All Type equals All Add Filter

Overview

- Getting started
- Advisor score
- Workbooks

Recommendations

- Cost
- Security
- Reliability
- Operational excellence
- Performance
- All recommendations

Monitoring

- Alerts (Preview)
- Recommendation digests

Settings

- Configuration

Cost retail savings/yr*

Security

Reliability

Operational excellence

Performance

Is Advisor helpful?

Microsoft Azure

Search resources, services, and docs (G+)

Home > Monitor

Monitor | Diagnostic settings

Microsoft

Search Refresh Feedback

Subscription * Concurge Subscription Resource group [No filter] Resource type 0 selected Resource

Select any of the resources to view diagnostic settings.

Name	Resource type	Resource group	Diagnostics status
cloudshell1051618772	Storage account	learn-532550a1-0617-4668-9e...	***
blob	Storage account	learn-532550a1-0617-4668-9e...	***
queue	Storage account	learn-532550a1-0617-4668-9e...	***
table	Storage account	learn-532550a1-0617-4668-9e...	***
file	Storage account	learn-532550a1-0617-4668-9e...	***
maheshps	Storage account	learn-532550a1-0617-4668-9e...	***
blob	Storage account	learn-532550a1-0617-4668-9e...	***
queue	Storage account	learn-532550a1-0617-4668-9e...	***
table	Storage account	learn-532550a1-0617-4668-9e...	***
file	Storage account	learn-532550a1-0617-4668-9e...	***
maheshst	Storage account	learn-532550a1-0617-4668-9e...	***
blob	Storage account	learn-532550a1-0617-4668-9e...	***

Used to get the stats of the diagnostics

Microsoft Azure

Search resources, services, and docs (G+)

Home >

Monitor | Overview

Microsoft

Search

Overview Activity log Alerts Metrics Logs Change Analysis Service health Workbooks

Insights Applications Virtual Machines Storage accounts Containers Networks SQL (preview) Azure Cosmos DB Key Vaults

The Log Analytics agents, used by VM Insights, won't be supported as of August 31, 2024. Plan to migrate to VM Insights on Azure Monitor agent prior to this date. →

Overview Tutorials

Insights

Use curated monitoring views for specific Azure resources. [View all insights](#)

Application insights

Monitor your app's availability, performance, errors, and usage.

[View](#) [More](#)

Container Insights

Gain visibility into the performance and health of your controllers, nodes, and containers.

[View](#) [More](#)

VM Insights

Monitor the health, performance, and dependencies of your VMs and VM scale sets.

[View](#) [More](#)

Network Insights

View the health and metrics for all deployed network resources.

[View](#) [More](#)

Detection, triage, and diagnosis

Visualize, analyze, and respond to monitoring data and events. [Learn more about monitoring](#)

Metrics

Create charts to monitor and investigate the usage and performance of your Azure resources.

[View](#) [More](#)

Alerts

Get notified and respond using alerts and actions.

[View](#) [More](#)

Logs

Analyze and diagnose issues with log queries.

[View](#) [More](#)

Workbooks

View, create and share interactive reports.

[View](#) [More](#)

Change Analysis

Diagnostic Settings

Azure Monitor SCOM managed

Managed Prometheus

Used to monitor the overview of the resources