

INTRODUCTION TO CLOUD COMPUTING

Lab Task 05 (A) (Implement Web Apps)

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Section: SE 7-B

Task 1: Create and configure an Azure web app.

Microsoft Azure

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

Copilot

bsse2280138@szabist.pk
DEFAULT DIRECTORY (BSSE22801...

Home > App Services >

Create Web App

Basics Database Deployment Networking Monitor + secure Tags **Review + create**

Summary

Web App
by Microsoft

Premium V3 (POV3) sku
Estimated price - 79.20 USD/Month

Details

Subscription: 57a8b5a5-89cd-44d7-aaaf-c65ebdf15a43
Resource Group: az104-rg9
Name: ariha
Secure unique default hostname: Enabled
Publish: Code
Runtime stack: PHP 8.2

Validating... < Previous Next > Download a template for automation

Home >

Microsoft.Web-WebApp-Portal-ea751b82-aa5b | Overview

Deployment

Search < Delete Cancel Redeploy Download Refresh

Overview

Inputs
Outputs
Template

Your deployment is complete

Deployment name: Microsoft.Web-WebApp-Portal-ea751b82-a... Start time: 1/9/2026, 12:07:18 PM
Subscription: Azure for Students Correlation ID: 5f73f2c2-c3eb-483f-b1ca-c664a28e98eb
Resource group: az104-rg9

Deployment details
Next steps

Go to resource

Cost management
Get notified to stay within your budget and prevent unexpected charges on your bill.
Set up cost alerts >

Microsoft Azure

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Home > Microsoft.Web-WebApp-Portal-ea751b82-aa5b | Overview >

ariha

Web App

Search < Browse Stop Swap Restart Delete Refresh Download publish profile Reset publish profile Share to mobile ...

Overview

Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Microsoft Defender for Cloud
Events (preview)
Resource visualizer
Deployment
Deployment slots
Deployment Center
Settings
Performance
App Service plan

Essentials

Resource group (move): az104-rg9
Status: Running
Location (move): East Asia
Subscription (move): Azure for Students
Subscription ID: 57a8b5a5-89cd-44d7-aaaf-c65ebdf15a43
Tags (edit): Add tags

Default domain: ariha-b7g0afgbaagdxfa.eastasia-01.azurewebsites.net
App Service Plan: ASP-az104rg9-ba2f (POV3: 1)
Operating System: Linux

Properties

Web app

Name: ariha
Publishing model: Code
Runtime Stack: Php - 8.2

Domains

Default domain: ariha-b7g0afgbaagdxfa.eastasia-01.azurewebsites.net

JSON View

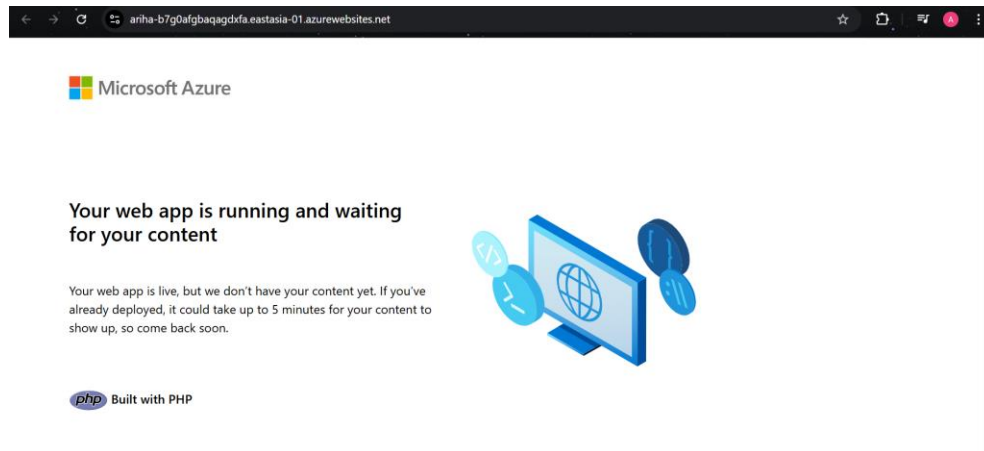
Add or remove favorites by pressing Ctrl+Shift+F

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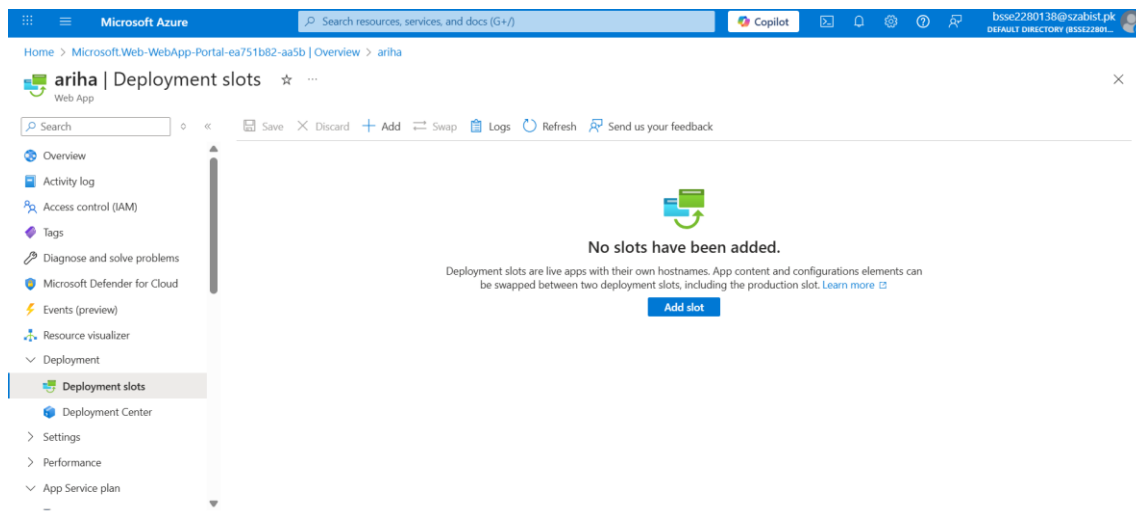
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Task 2: Create and configure a deployment slot.

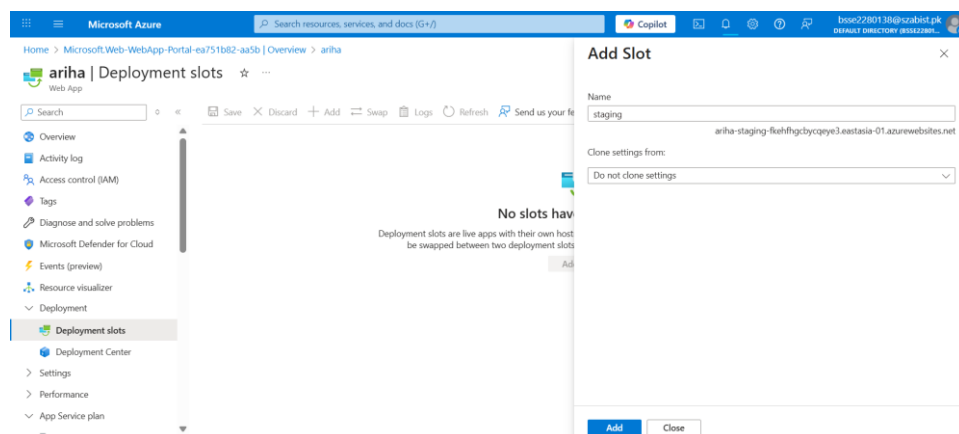
- Access Web App Default Domain (Production Slot)



- Deployment Slots Section



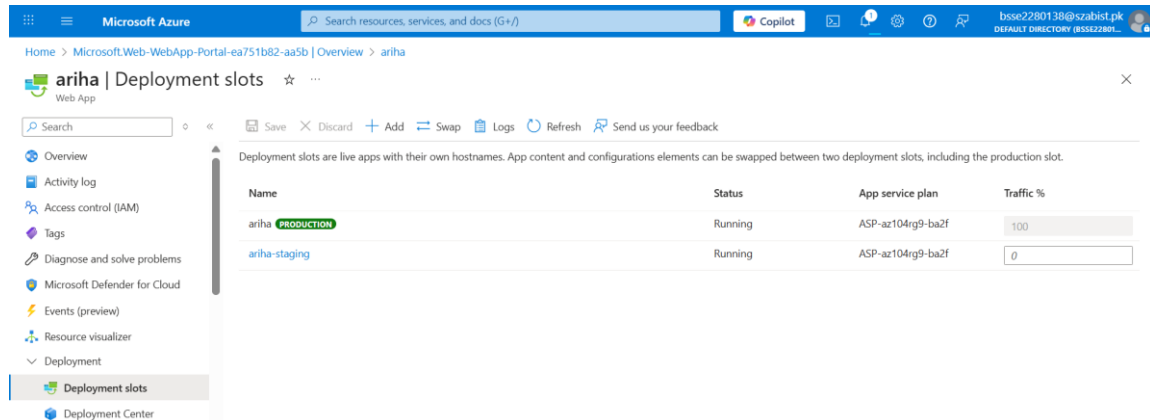
- Add New Deployment Slot (Staging)



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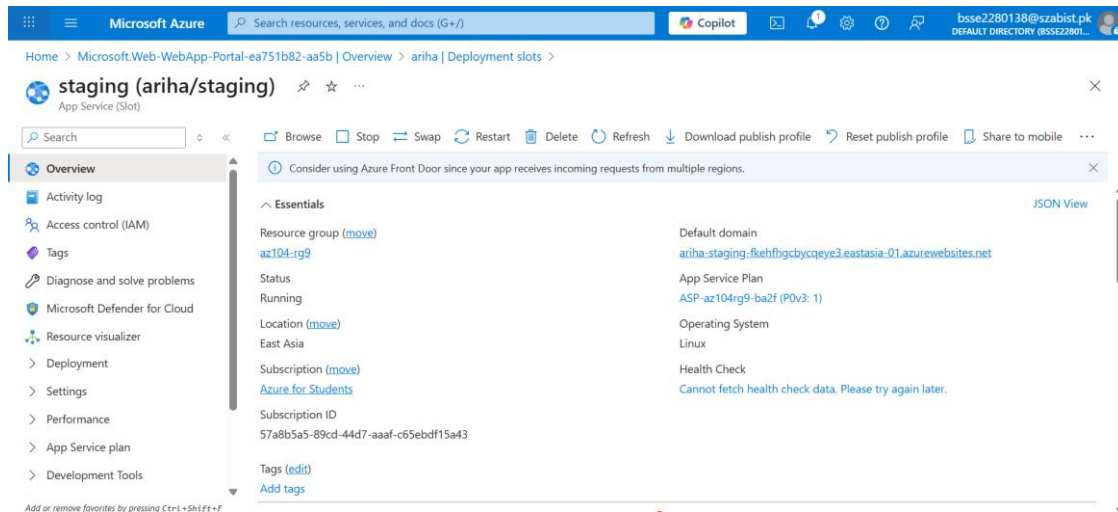
• Deployment Slot Created (Production & Staging)



Deployment slots are live apps with their own hostnames. App content and configurations elements can be swapped between two deployment slots, including the production slot.

Name	Status	App service plan	Traffic %
ariha (PRODUCTION)	Running	ASP-az104rg9-ba2f	100
ariha-staging	Running	ASP-az104rg9-ba2f	0

• Staging Slot Overview



Consider using Azure Front Door since your app receives incoming requests from multiple regions.

Essentials

Property	Value
Resource group (move)	az104rg9
Status	Running
Location (move)	East Asia
Subscription (move)	Azure for Students
Subscription ID	57a8b5a5-89cd-44d7-aaaf-c65ebdf15a43
Tags (edit)	Add tags

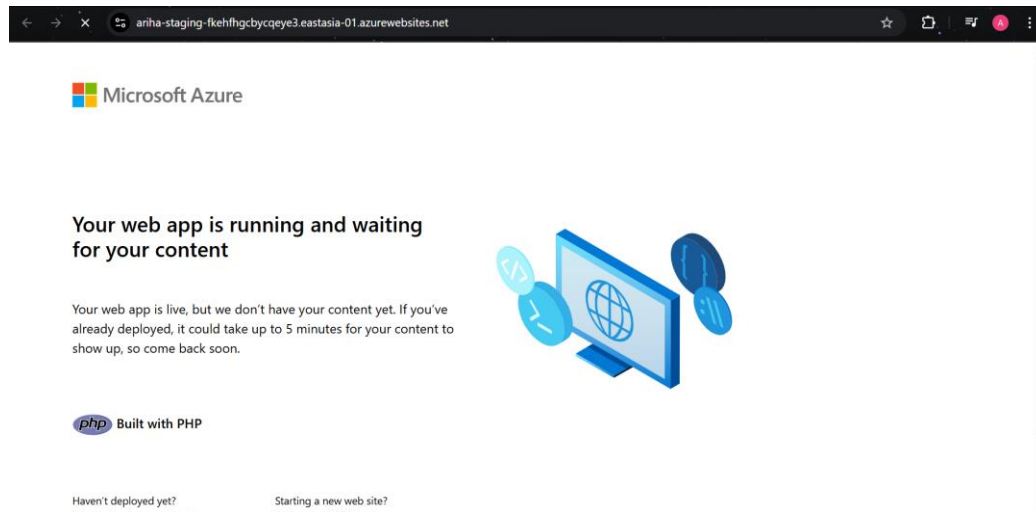
Default domain: ariha-staging-fkehfhgcbqey3.eastasia-01.azurewebsites.net

App Service Plan: ASP-az104rg9-ba2f (P0v3: 1)

Operating System: Linux

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

• Verification of Staging Slot URL



Microsoft Azure

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.

php Built with PHP

Haven't deployed yet? [View the deployment center](#)

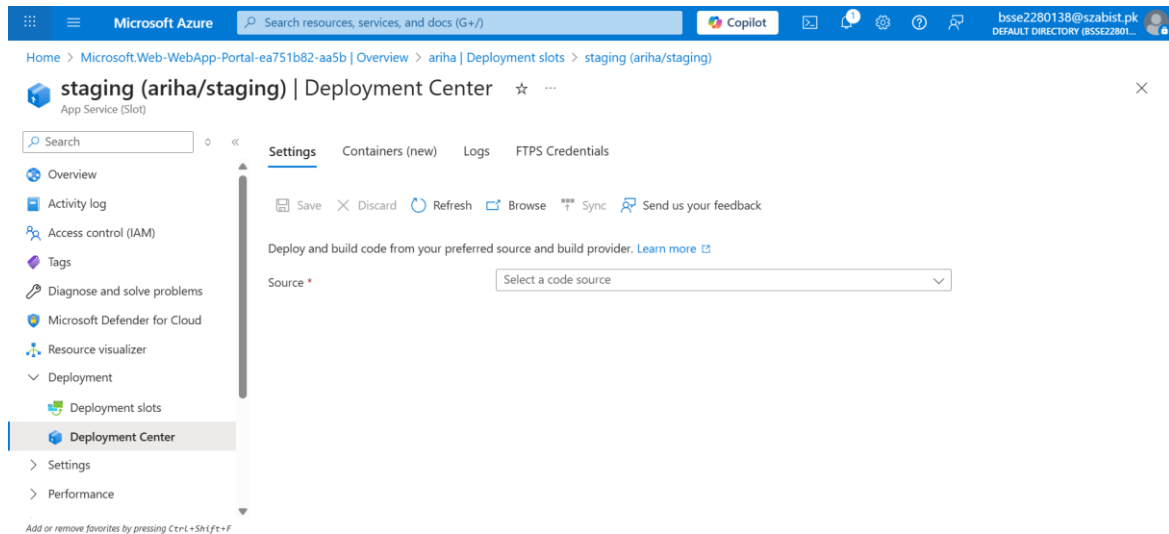
Starting a new web site? [Follow our Quickstart](#)

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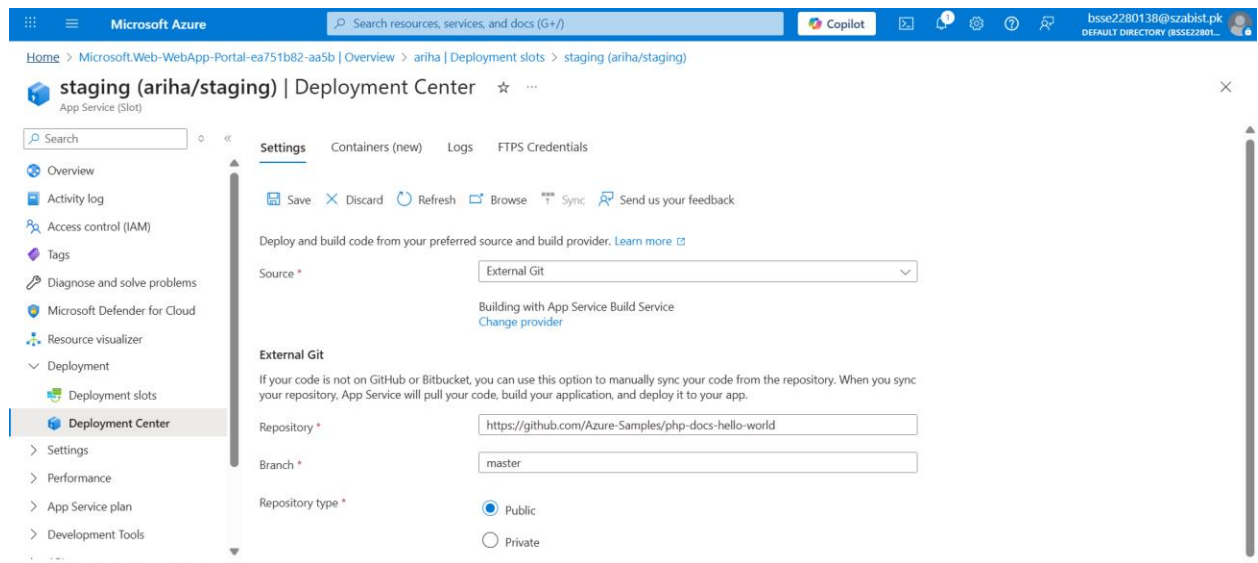
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Task 3: Configure web app deployment settings.

- **Staging Slot Deployment Center:**



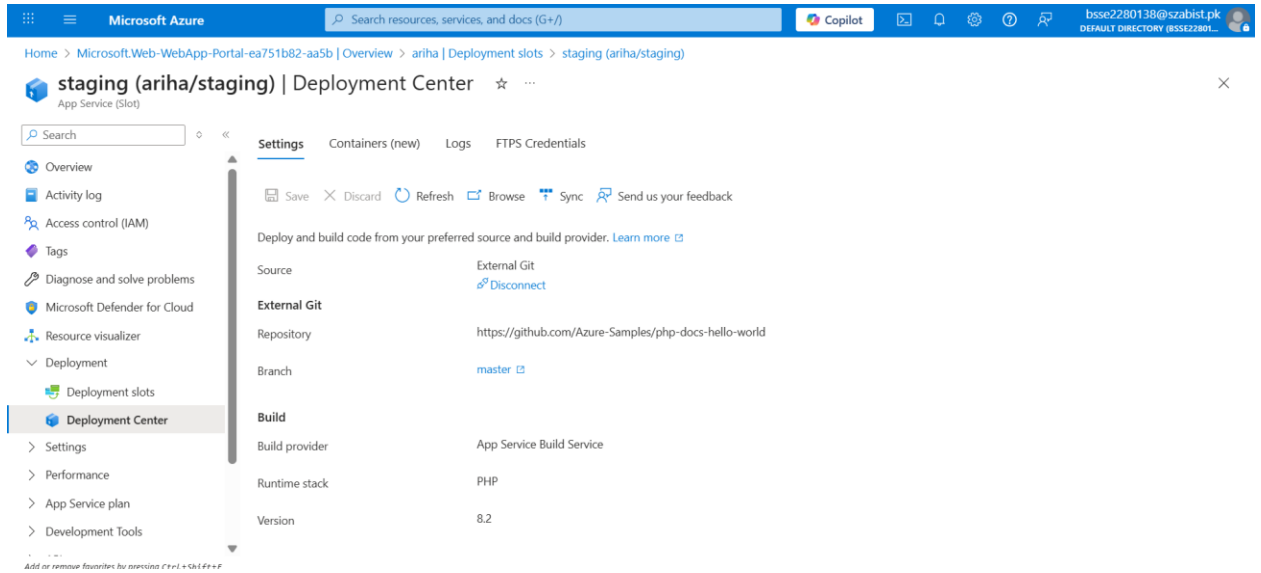
- **Deployment Source Configuration (External Git). Repository and Branch Configuration:**



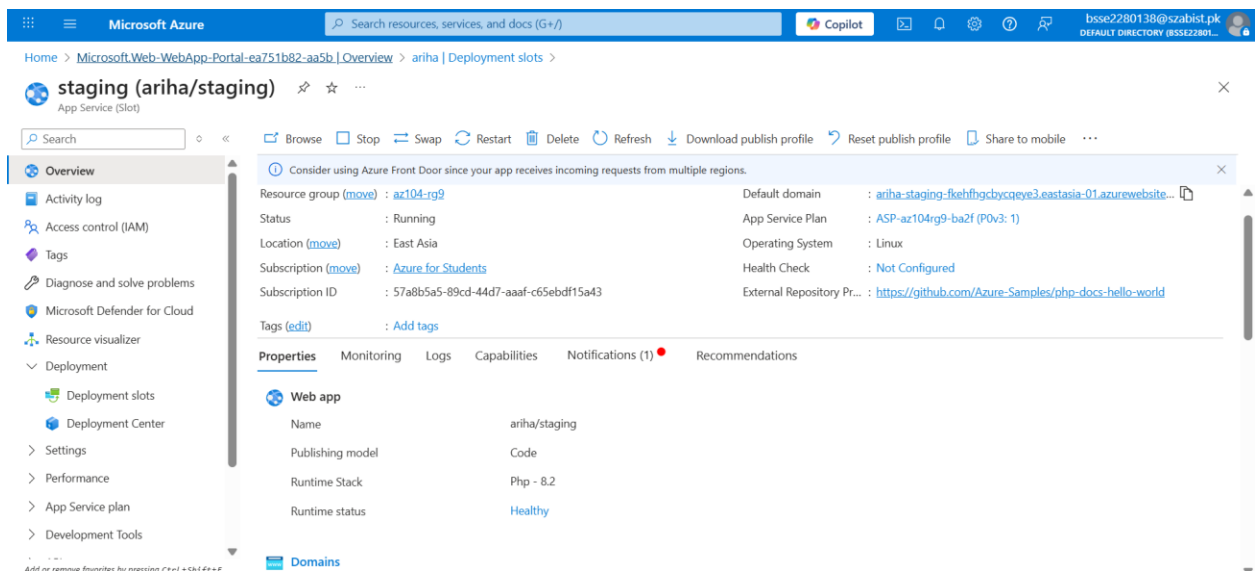
- **Save Deployment Settings:**

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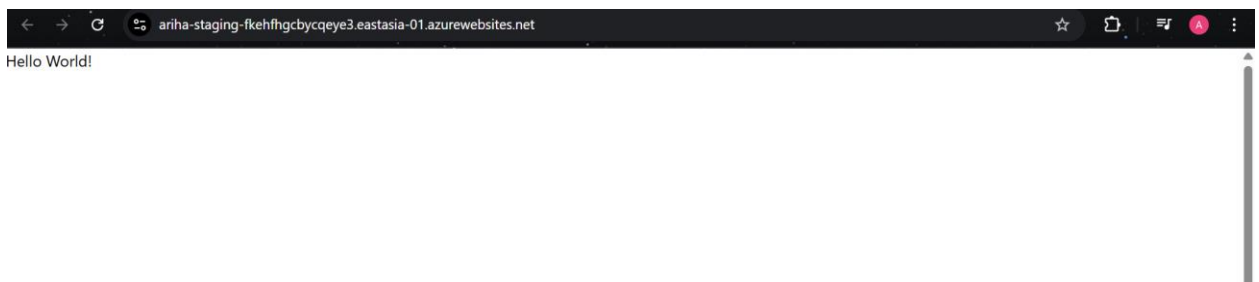
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• Staging Slot Overview Page:



• Staging Slot Default Domain (Hello World Page):

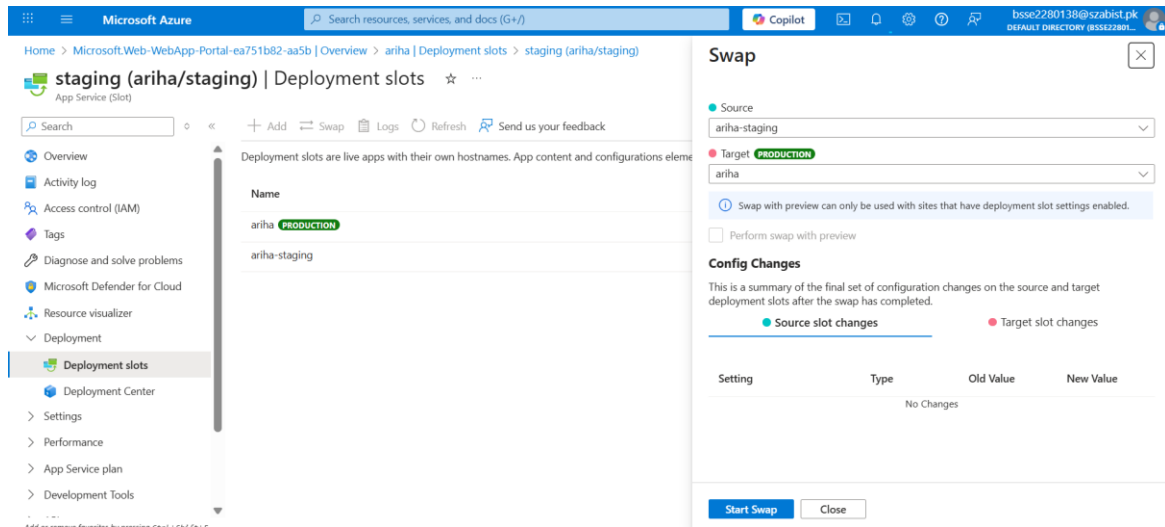


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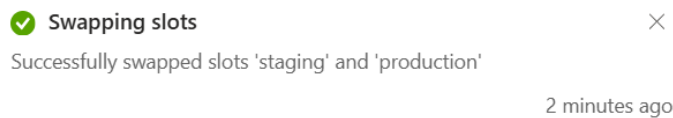
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Task 4: Swap deployment slots.

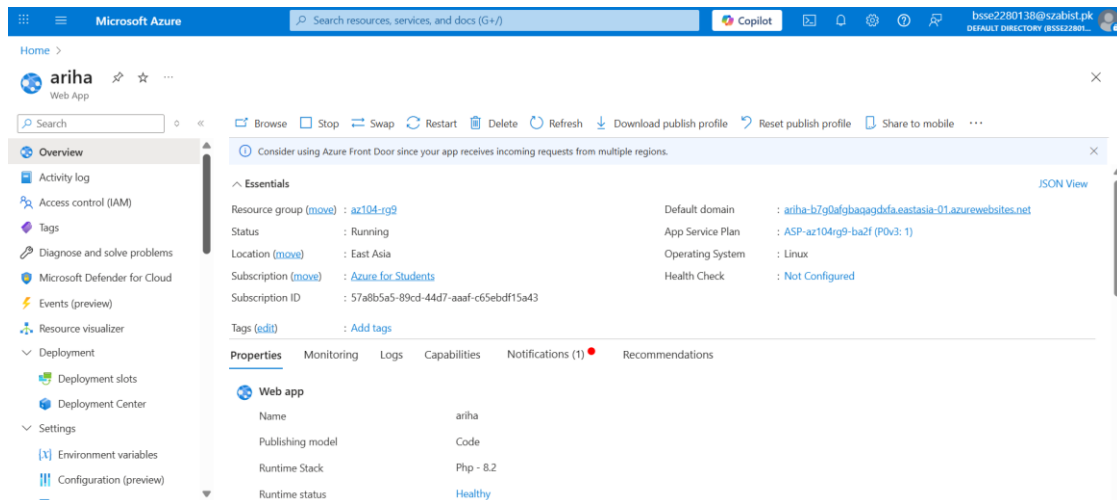
- Go to the Deployment Slots Page & Swap Deployment Slots Configuration



- Swap Operation Completed



- Production Slot Overview After Swap



- Production Web App Default Domain Verification:



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Task 5: Configure and test autoscaling of the Azure web app.

- **App Service Plan – Scale Out Option:**

The screenshot shows the 'Scale out' configuration page for a web app named 'ariha'. The left sidebar contains a navigation menu with options like 'Diagnose and solve problems', 'Microsoft Defender for Cloud', 'Events (preview)', 'Resource visualizer', 'Deployment', 'Settings', 'Performance', 'App Service plan', 'App Service plan', 'Scale up', 'Scale out', 'Development Tools', 'SSH', 'Advanced Tools', and 'Recommended services (preview)'. The main content area is titled 'Scale out' and includes a search bar, a refresh button, and a 'Send us your feedback' link. Below this, there's a 'Pricing plan' section with a table showing the current plan as 'Premium v3 P0V3 (Change)', the price per instance as '0.109 USD/hour (79.205 USD/month)', memory as '4 GB', maximum scale as '30', active instance count as '1', and maximum available zones as 'Not available (Get more info)'. The 'Scaling' section explains that scaling can be manual or automatic. The 'Scale out method' is currently set to 'Manual', with a description: 'Maintain a constant instance count for your application'. There are 'Save' and 'Discard' buttons at the bottom.

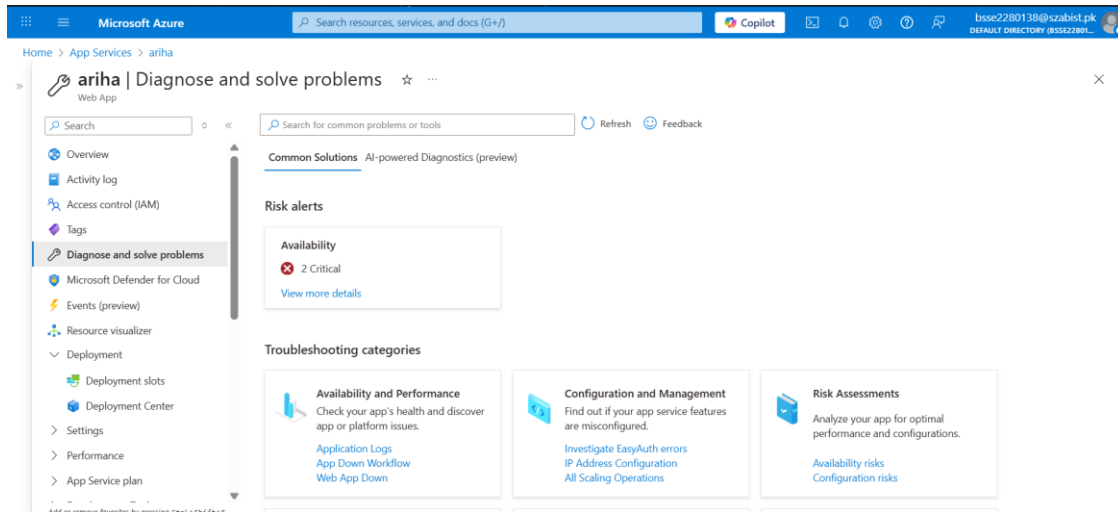
- **Automatic Scaling Configuration & Selecting Maximum Burst 2 Configuration:**

The screenshot shows the 'Automatic' scaling configuration page for a web app named 'ariha'. The left sidebar is similar to the previous screenshot, but the 'Scale out' option is selected. The main content area is titled 'Scale out' and includes a search bar, a refresh button, and a 'Send us your feedback' link. Below this, there's a 'Maximum available zones' section with a table showing 'Not available (Get more info)'. The 'Scaling' section explains that scaling can be manual or automatic. The 'Scale out method' is currently set to 'Automatic', with a description: 'Platform managed scale out and in based on traffic'. There are three configuration options: 'Maximum burst' set to '2', 'Always ready instances' set to '1', and 'Enforce scale out limit' which is a toggle switch. There are 'Save' and 'Discard' buttons at the bottom. On the right side, there's a 'Notifications' panel showing a 'Scale out' notification: 'The scale out operation for the plan 'ASP-az104rg9-ba2f' has been submitted.' with a timestamp of '4 minutes ago'.

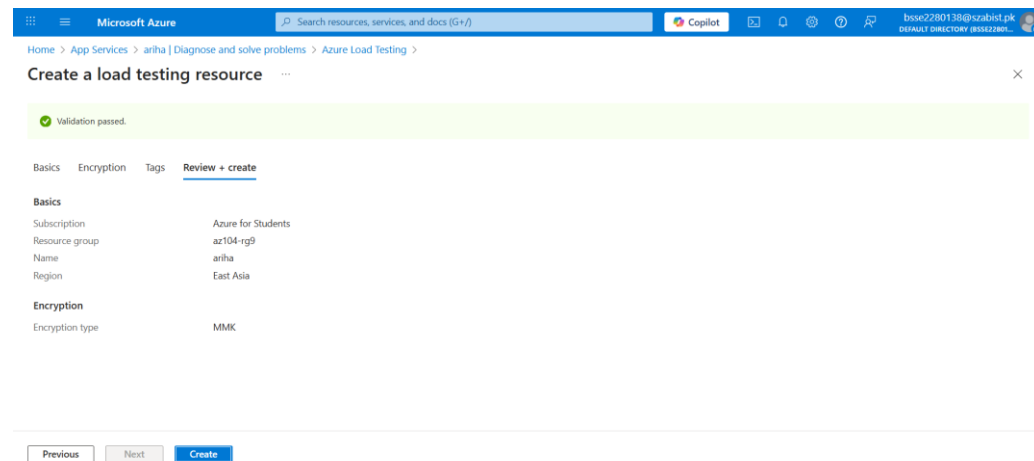
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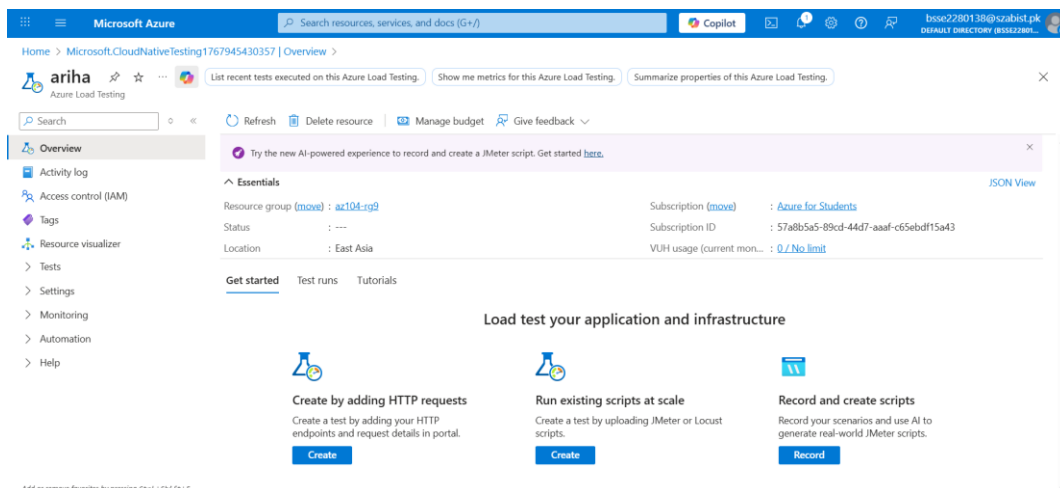
• Diagnose and Solve Problems Section



• Create Load Test Configuration



• Load Test Resource Created



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• Test Plan – Add HTTP Request

The screenshot shows the Microsoft Azure portal interface. On the left, the 'Create a URL-based test' page is visible with tabs for Basics, Test plan, Parameters, Load, Monitoring, Test criteria, and Review. The 'Test plan' tab is active. On the right, the 'Add request' dialog is open. It contains fields for Request format (Add input in UI selected), Request name (Request1), URL (https://ariha-b7g0afgbaqagdxfa.eastasia-01.azurewebsites.net/), and HTTP method (GET). Below these are tabs for Query parameters, Headers, and Response variables. The 'Query parameters' tab is active, showing fields for Name, Value, and URL Encode?.

• Review and Create Load Test

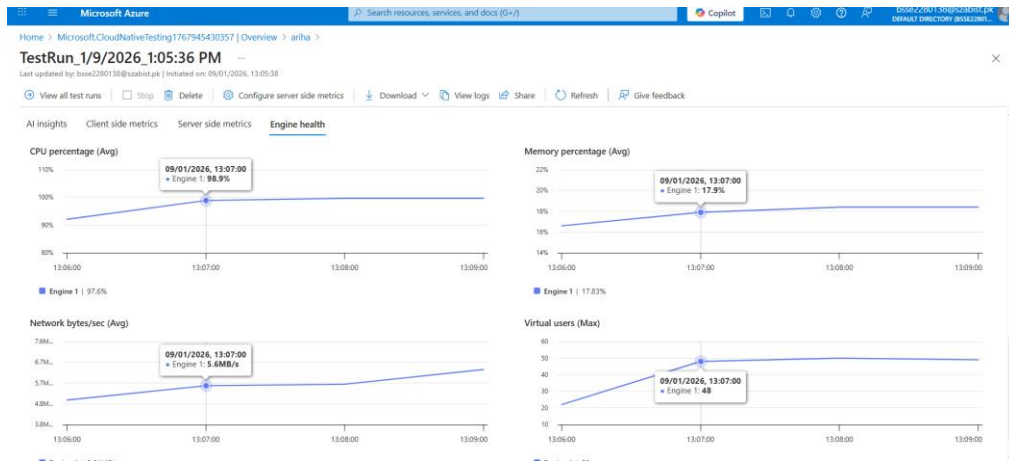
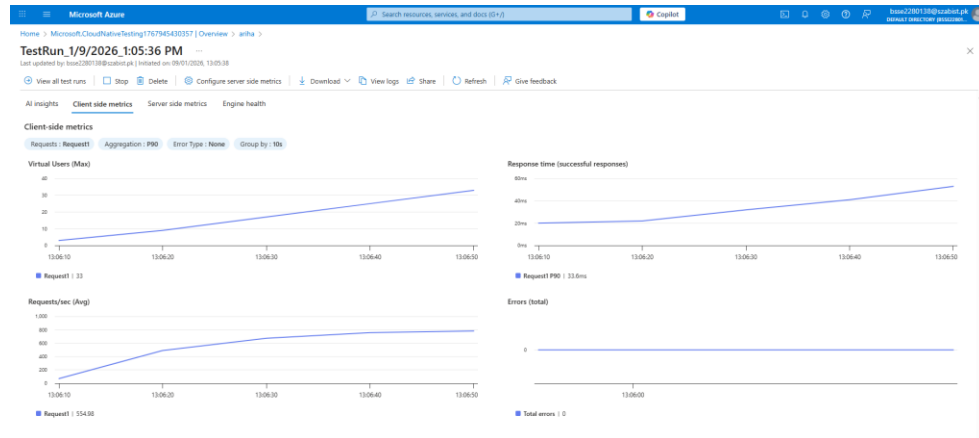
The screenshot shows the Microsoft Azure portal interface. On the left, the 'Create a URL-based test' page is visible with tabs for Basics, Test plan, Parameters, Load, Monitoring, Test criteria, and Review + create. The 'Review + create' tab is active. On the right, the 'Review + create' dialog is open. It contains fields for Test tool (JMeter), Test name (Test_1/9/2026_1:00:36 PM), Test description, Debug mode (Disabled), Test method (URL), Requests (Request1), and Input data files. Below these are tabs for Basics, Test plan, Load, and Next steps. The 'Next steps' tab is active, showing options for Run test after creation, Test run description, and Test run options (As configured selected).

The screenshot shows the Microsoft Azure portal interface. On the left, the 'TestRun_1/9/2026_1:05:36 PM' page is visible. It shows the test run status as 'Executing' and provides details such as Start time, End time, Duration, Engine instances, Virtual users (Max), Virtual user hours, Test run ID, and Baseline. On the right, the 'Notifications' panel is open, showing a list of events including 'Test started', 'JMeter script creation successful', and 'Test successfully created'. Below the test run details, there is a section for 'AI insights' and a message about server-side metrics configuration.

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- **Live Load Test Metrics**



- **Load Test Stopped**

