

Introduction to Cloud Computing

LAB 09a

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BS-SE 7B

Task 1: Create and configure an Azure web app

- Search for and select App Services. Select Create, from drop-down menu, Web App.

The screenshot shows the 'Create Web App' wizard in the Microsoft Azure portal. The user is on the 'Basics' tab. In the 'Project Details' section, the 'Subscription' dropdown is set to 'Azure for Students' and the 'Resource Group' dropdown is set to '(New) az104-rg9'. In the 'Instance Details' section, the 'Name' field is filled with 'zabdesk' and the 'Default hostname' dropdown shows 'dcaheeb8e7cjdjhj.eastus-01.azurewebsites.net'. A note at the bottom says 'Secure unique default hostname on. More about this update'. At the bottom of the screen, there are 'Review + create', '< Previous', and 'Next : Database >' buttons.

The screenshot shows the 'Overview' page for a deployed web app named 'Microsoft.Web-WebApp-Portal-e07a9267-86c0'. The deployment status is shown as 'Deployment is in progress'. Deployment details include:

- Deployment name: Microsoft.Web-WebApp-Portal-e07a9267-86c0
- Subscription: Azure for Students
- Resource group: az104-rg9
- Start time: 1/8/2026, 10:16:31 PM
- Correlation ID: 5d50040c-097d-499e-92ab-2a872fa4522d

A table titled 'Operation details' shows one entry:

Resource	Type	Status	Operation details
ASP-az104rg9-8468	Microsoft.Web/serverfarms	OK	Operation details

On the right side of the page, there are promotional banners for Microsoft Defender for Cloud, Microsoft tutorials, and Azure experts.

- After the deployment, select **Go to resource**.

zabdesk Web App

Overview

Essentials

Resource group (move)	: az104-rg9	Default domain	: zabdesk-dcaheeb8e7cjdjhj.centralindia-01.azurewebsites.net
Status	: Running	App Service Plan	: ASP-az104rg9-8468 (B1: 1)
Location (move)	: Central India	Operating System	: Linux
Subscription (move)	: Azure for Students	Health Check	: Cannot fetch health check data. Please try again later.
Subscription ID	: db878fcc-8781-42d0-a61d-55de3d976446		
Tags (edit)	: Add tags		

Properties **Monitoring** **Logs** **Capabilities** **Notifications (0)** **Recommendations**

Web app

Name	zabdesk	Deployment logs	View logs
Publishing model	Code	Last deployment	Loading deployments...
Runtime Stack	PHP - 8.2	Deployment provider	None

Domains

Default domain	zabdesk-dcaheeb8e7cjdjhj.centralindia-01.azurewebsites.net	Name	Not supported. Learn more
Custom domain	Add custom domain		

Deployment Center

Application Insights

Networking

Task 2: Create and configure a deployment slot

- On the blade of the newly deployed Web App, click the **Default domain** link to display the default web page in a new browser tab.

zabdesk-dcaheeb8e7cjdjhj.centralindia-01.azurewebsites.net

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.

Quickstart

Deployment center

PHP Built with PHP

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

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

- In the **Deployment** section of the Web App blade, click **Deployment slots**. Click **Add slot**.

The screenshot shows the Microsoft Azure portal interface for a Web App named 'zabdesk'. On the left, the navigation menu is expanded to show the 'Deployment slots' option under 'Deployment'. On the right, a modal window titled 'Add Slot' is open. It has a 'Name' input field containing 'staging', a dropdown for 'Clone settings from' set to 'Do not clone settings', and a note below stating 'No slots have been added yet.' At the bottom of the modal are 'Add' and 'Close' buttons.

- Refresh the page to view the Production and Staging slots.

The screenshot shows the Microsoft Azure portal interface for the 'zabdesk' Web App. The 'Deployment slots' section is selected in the navigation menu. The main area displays a table of deployment slots:

Name	Status	App service plan	Traffic %
zabdesk PRODUCTION	Running	ASP-az104rg9-8468	100
zabdesk-staging	Running	ASP-az104rg9-8468	0

- Select the entry representing the newly created staging slot.

Microsoft Azure

Home > Microsoft.Web-WebApp-Portal-e07a9267-86c0 | Overview > zabdesk | Deployment slots > staging (zabdesk/staging)

App Service (Slot)

Search

Browse Stop Swap Restart Delete Refresh Download publish profile Reset publish profile Share to mobile Send us your feedback

Overview

Essentials

Resource group (move) : az104-rg9 Status : Running Location (move) : Central India Subscription (move) : Azure for Students Subscription ID : db878fcc-8781-42d0-a61d-55de3d976446 Default domain : zabdesk-staging-gkedcegfdcdxbngs.centralindia-01.azurewebsites.. App Service Plan : ASP-az104rg9-8468 (S1: 1) Operating System : Linux Health Check : Cannot fetch health check data. Please try again later.

Tags (edit) : Add tags

Properties Monitoring Logs Capabilities Notifications (0) Recommendations

Web app

Name : zabdesk/staging Publishing model : Code Runtime Stack : PHP - 8.2 Deployment Center

Domains

Default domain : zabdesk-staging-gkedcegfdcdxbngs.centralindia-01.azurewebsites.net Application Insights

Custom domain : Add custom domain

Networking

View logs Last deployment Loading deployments... Deployment provider None

Name Not supported. Learn more

Task 3: Configure Web App deployment settings

- In the staging slot, select **Deployment Center** and then select **Settings**.
- In the **Source** drop-down list, select **External Git**.

Microsoft Azure

Home > Microsoft.Web-WebApp-Portal-e07a9267-86c0 | Overview > zabdesk | Deployment slots > staging (zabdesk/staging)

App Service (Slot)

Search

Save Discard Refresh Browse Sync Send us your feedback

Deployment Center

Settings Containers (new) Logs FTPS Credentials

Deploy and build code from your preferred source and build provider. Learn more

Source * : External Git

Building with App Service Build Service Change provider

External Git

If your code is not on GitHub or Bitbucket, you can use this option to manually sync your code from the repository. When you sync your repository, App Service will pull your code, build your application, and deploy it to your app.

Repository * : https://github.com/Azure-Samples/php-docs-hello-world

Branch * : master

Repository type * : Public

Microsoft Azure

Search resources, services, and docs (G+)

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staging (zabdesk/staging) App Service (Slot)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Microsoft Defender for Cloud

Resource visualizer

Deployment

Deployment slots

Deployment Center

Search

Browse Stop Swap Restart Delete Refresh Download publish profile Reset publish profile Share to mobile Send us your feedback

Essentials

Resource group (move) : az104-rg9

Status : Running

Location (move) : Central India

Subscription (move) : Azure for Students

Subscription ID : db878fcc-8781-42d0-a61d-55de3d976446

Tags (edit) : Add tags

Default domain : zabdesk-staging-gkedcegfdcdxbngs.centralindia-01.azurewebsites.net

App Service Plan : ASP-az104rg9-8468 (S1: 1)

Operating System : Linux

Health Check : Not Configured

External Repository Proj... : <https://github.com/Azure-Samples/php-docs-hello-world>

Properties Monitoring Logs Capabilities Notifications (0) Recommendations

Web app

Deployment Center

- Verify that the staging slot displays **Hello World**.

zabdesk-staging-gkedcegfdcdxbngs.centralindia-01.azurewebsites.net

Hello World!

Task 4: Swap deployment slots

- Navigate back to the **Deployment slots** blade, and then select **Swap**.

Microsoft Azure

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staging (zabdesk/staging) App Service (Slot)

Overview

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Search

Browse Stop Swap Restart Delete Refresh Download publish profile Reset publish profile Share to mobile Send us your feedback

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

Essentials

Resource group (move) : az104-rg9

Status : Running

Location (move) : Central India

Subscription (move) : Azure for Students

Subscription ID : db878fcc-8781-42d0-a61d-55de3d976446

Tags (edit) : Add tags

Default domain : zabdesk-staging-gkedcegfdcdxbngs.centralindia-01.azurewebsites.net

App Service Plan : ASP-az104rg9-8468 (S1: 1)

Operating System : Linux

Health Check : Not Configured

External Repository Proj... : <https://github.com/Azure-Samples/php-docs-hello-world>

- Review the default settings and click **Start Swap**.

The screenshot shows the Microsoft Azure portal interface. On the left, there's a sidebar with navigation links like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Microsoft Defender for Cloud, Resource visualizer, Deployment (with sub-options for Deployment slots and Deployment Center), Settings (with sub-options for Environment variables, Configuration (preview), Instances, Authentication, Identity, and Backups), and a note about favorite keys. The main content area shows the 'staging (zabdesk/staging)' blade for an App Service Slot. It displays details such as Resource group (az104-rg9), Status (Running), Location (Central India), Subscription (Azure for Students), Subscription ID (db878fcc-8781-42d0-a61d-55de3d976446), and Tags (edit). Below this is a 'Properties' tab with sections for Web app (Name: zabdesk/staging, Publishing model: Code, Runtime Stack: PHP - 8.2, Runtime status: Healthy) and Domains (Default domain: zabdesk-staging-dotnetframework-centralindia). On the right, a 'Swap' dialog is open, showing the Source slot as 'zabdesk-staging' and the Target slot as 'PRODUCTION'. It includes a note about preview swap being available only for sites with deployment slot settings enabled, a checkbox for 'Perform swap with preview', and a 'Config Changes' section. The 'Source slot changes' tab is selected, showing a table with one row: 'Setting' (No Changes), 'Type' (None), 'Old Value' (None), and 'New Value' (None). At the bottom of the dialog are 'Start Swap' and 'Close' buttons.

- Return to the portal home page. Search for **App Services** and select your App Service web app.

The screenshot shows the Microsoft Azure portal interface, specifically the 'App Services' section. On the left, there's a sidebar with 'Create' and a search bar. The main content area shows the 'zabdesk' blade under the 'App Services' category. It displays the same details as the previous screenshot: Resource group (az104-rg9), Status (Running), Location (Central India), Subscription (Azure for Students), Subscription ID (db878fcc-8781-42d0-a61d-55de3d976446), and Tags (edit). Below this is a 'Properties' tab with sections for Web app (Name: zabdesk, Publishing model: Code, Runtime Stack: PHP - 8.2). On the right, there's a 'Default domain' link under the 'Properties' tab, which is highlighted in the screenshot. Other tabs include Monitoring, Logs, Capabilities, Notifications, and Recommendations. The 'Web app' section also includes a 'DNS' sub-section with the URL 'zabdesk-dcaheeb8e7cjdjh1.centralindia-01.azurewebsites.net'.

- On the **Overview** blade of the Web App select the **Default domain** link to display the website home page.

- Verify the production web page now displays the **Hello World!** page.



Task 5: Configure and test autoscaling of the Azure Web App

- The Automatic Scale out method is disabled due to **Azure Student Subscription**.

The screenshot shows the Microsoft Azure portal interface for a 'Web App' named 'zabdesk'. The left sidebar shows navigation options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Microsoft Defender for Cloud, Events (preview), Resource visualizer, Deployment, Settings, Performance, App Service plan, Scale up, and Scale out. The 'Scale out' option is currently selected. The main content area is titled 'zabdesk | Scale out' and contains sections for Scaling, Scale out method (set to Manual), Instance count (set to 1), and Async scaling. A note indicates that automatic scaling requires a Premium v2 or Premium v3 App Service Plan.

Microsoft Azure

Search resources, services, and docs (G+)

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Home > zabdesk

zabdesk | Diagnose and solve problems

Web App

Search Search for common problems or tools Refresh Feedback

Common Solutions AI-powered Diagnostics (preview)

Risk alerts

Availability 1 Critical 1 Warning View more details

Troubleshooting categories

- Availability and Performance Check your app's health and discover app or platform issues.
 - Application Logs
 - App Down Workflow
 - Web App Down
- Configuration and Management Find out if your app service features are misconfigured.
 - Investigate EasyAuth errors
 - IP Address Configuration
 - All Scaling Operations
- Risk Assessments Analyze your app for optimal performance and configurations.
 - Availability risks
 - Configuration risks
- Deployment Discover and resolve issues with your application code deployments.
- Networking Discover and resolve any networking related issues with your resources.
- Diagnostic Tools Run proactive tools to automatically mitigate the app.

Add or remove favorites by pressing Ctrl+Shift+F