

# Introduction to Cloud Computing

## LAB 09b

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BS-SE 7B

### Task 1: Deploy an Azure Container Instance using a Docker image

The screenshot shows the Microsoft Azure portal homepage. At the top, there's a search bar and a Copilot button. On the right, a user profile is shown with the email 'bsse2280155@szabist.pk' and a sign-out link. Below the header, the 'Azure services' navigation bar includes links for 'Create a resource', 'App Services', 'Resource groups', 'Subscriptions', 'Virtual machine scale sets', 'Disks', 'Virtual machines', 'Private DNS zones', and 'DNS zones'. The main content area displays a list of 'Recent' resources, including 'zabdesk' (App Service), 'staging (zabdesk/staging)' (App Service Slot), 'ASP-az104rg9-8468' (App Service plan), 'az104-rg9' (Resource group), 'Azure for Students' (Subscription), and 'NetworkWatcherRG' (Resource group). At the bottom, there are links for 'See all', 'Subscriptions', 'Resource groups', 'All resources', and 'Dashboard'.

- search for and select **Container instances** and then, on the **Container instances** blade, click **Create**.

The screenshot shows the 'Create container instance' blade in the Microsoft Azure portal. At the top, there's a breadcrumb trail 'Home > Create container instance ...' and a search bar. The blade is divided into several sections: 'Project details', 'Container details', and 'SKU'. The 'Project details' section includes fields for 'Subscription' (set to 'Azure for Students') and 'Resource group' (set to '(New) az104-rg9'). The 'Container details' section includes fields for 'Container name' (set to 'az104-c1'), 'Region' (set to '(Asia Pacific) Central India'), 'Availability zones (Preview)' (set to 'None'), and 'SKU' (set to 'Standard'). A note below the SKU field states: 'Standard SKU is available for all regions. Confidential SKU is only available for specific regions. Learn more'. The 'Container name' field has validation messages: 'The value is in between 1 and 63 characters long.', 'Match found.', and 'Container instance name must be unique in the current resource group.' At the bottom, there are buttons for 'Review + create' and 'Next : Networking >'.

**Create container instance**

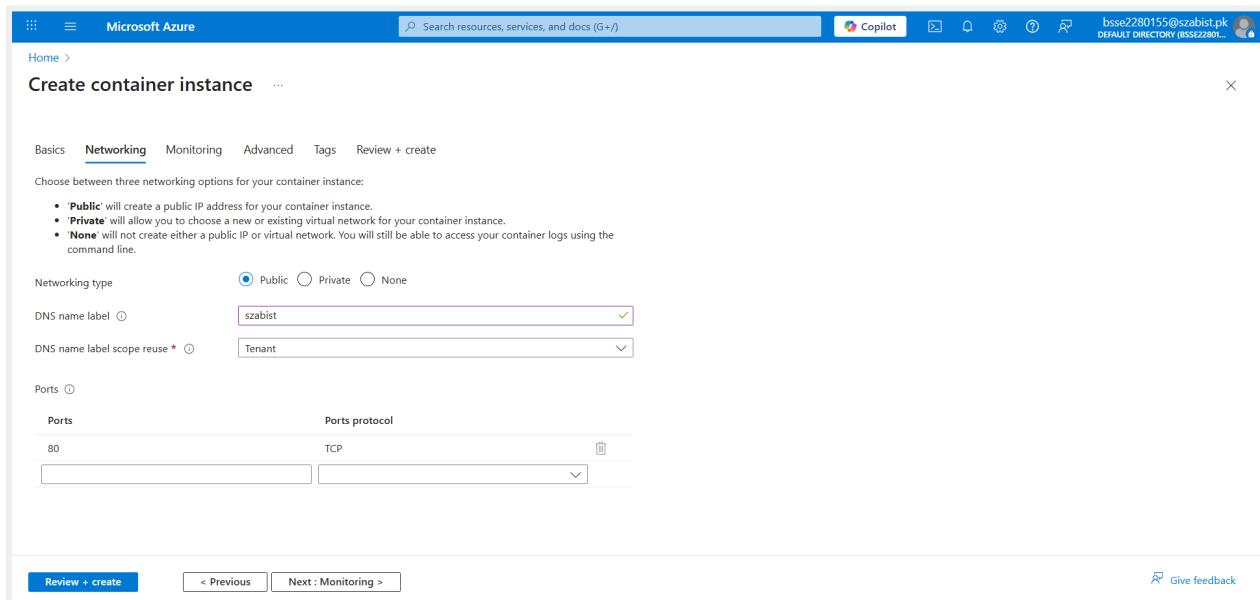
Networking type:  Public  Private  None

DNS name label: szabist

DNS name label scope reuse: Tenant

Ports: Port 80, Protocol TCP

[Review + create](#) [Next : Monitoring >](#) [Give feedback](#)

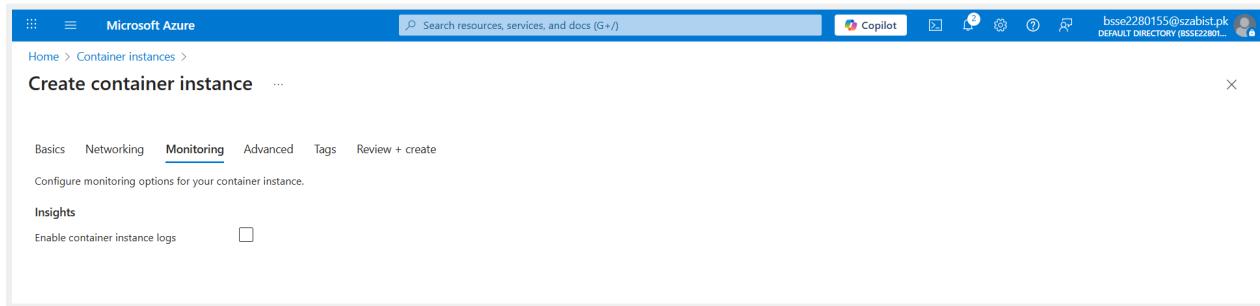


**Create container instance**

Monitoring

Configure monitoring options for your container instance.

Insights: Enable container instance logs



**NoMarketplace-20260109114002 | Overview**

Deployment

Deployment succeeded: Deployment 'NoMarketplace-20260109114002' to resource group 'az104-rg9' was successful.

Overview: Your deployment is complete

Deployment details: Deployment name: NoMarketplace-20260109114002, Subscription: Azure for Students, Resource group: az104-rg9

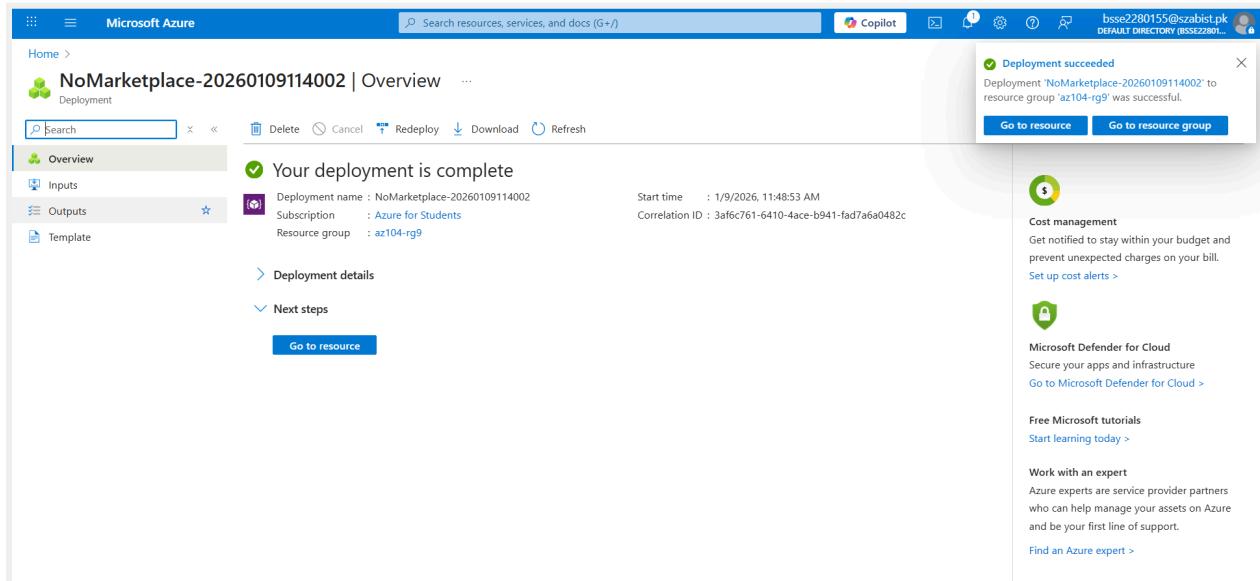
Next steps: Go to resource

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## Task 2: Test and verify deployment of an Azure Container Instance

- When the deployment completes, select **Go to resource** link.
- On the **Overview** blade of the container instance, verify that **Status** is reported as **Running**.

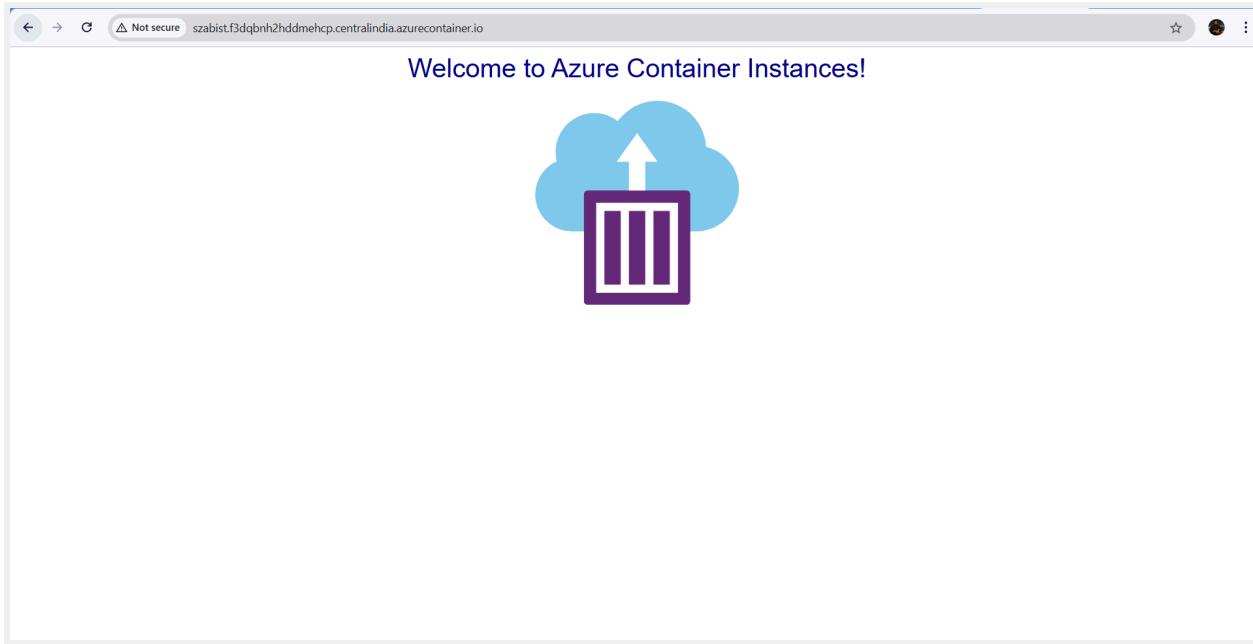
The screenshot shows the Microsoft Azure portal interface for a container instance named "az104-c1". The "Overview" tab is selected. Key details shown include:

- Resource group: az104-rg9
- Status: Running
- Location: Central India
- Subscription: Azure for Students
- Subscription ID: db0878fcc-8781-42d0-a61d-55de3d976446
- SKU: Standard
- OS type: Linux
- IP address (Public): 98.70.246.223
- FQDN: szabist.f3dqbnh2hddmehcp.centralindia.azurecontainer.io
- Container count: 1

Below the details are two performance charts:

- CPU (millicores)**: Shows usage starting at 0.8 and peaking sharply near 1.0 around 11:45 AM UTC+05:00.
- Memory**: Shows usage starting at 20MB and dropping to 0B around 11:45 AM UTC+05:00.

- Copy the value of the container instance **FQDN**, open a new browser tab, and navigate to the corresponding URL.



- In the **Settings** section of the container instance blade, click **Containers**, and then click **Logs**.

Name	Image	State	Previous state	Start time	Restart count
az104-c1	mcr.microsoft.com/azuredocs/aci-hell...	Running	-	2026-01-09T06:55:49.592Z	0

```
listening on port 80
:ffff:10.92.0.11 - - [09/Jan/2026:07:00:26 +0000] "GET / HTTP/1.1" 200 1696 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/143.0.0.0 Safari/537.36"
:ffff:10.92.0.11 - - [09/Jan/2026:07:00:26 +0000] "GET /favicon.ico HTTP/1.1" 404 150 "http://szabist.f3dqbhn2hddmehcp.centralindia.azurecontainer.io/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/143.0.0.0 Safari/537.36"
:ffff:10.92.0.11 - - [09/Jan/2026:07:01:37 +0000] "GET / HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/143.0.0.0 Safari/537.36"
:ffff:10.92.0.11 - - [09/Jan/2026:07:01:39 +0000] "GET / HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/143.0.0.0 Safari/537.36"
:ffff:10.92.0.11 - - [09/Jan/2026:07:01:44 +0000] "GET / HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/143.0.0.0 Safari/537.36"
:ffff:10.92.0.11 - - [09/Jan/2026:07:01:47 +0000] "GET / HTTP/1.1" 304 - "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/143.0.0.0 Safari/537.36"
```