

Міністерство освіти і науки України  
Карпатський національний університет  
імені В.Стефаника

Факультет математики та інформатики  
Кафедра інформаційних технологій

Інформатика і програмування

Лабораторна робота № 9b

Тема: Implement Azure Container Instances

Виконав: Прокутко В.В  
Група ІПЗ-43  
Дата: 13 грудня 2025  
Викладач: Поварчук Д.Д

Івано-Франківськ – 2025

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

In this task, you will create a simple web application using a Docker image. Docker is a platform that provides the ability to package and run applications in isolated environments called containers. Azure Container Instances provides the compute environment for the container image.

The screenshot shows the Microsoft Azure portal interface. The browser title bar reads "az104-c1 - Microsoft Azure". The address bar shows the URL "portal.azure.com/#@vladkeeksgmail.onmicrosoft.com/resource/subscriptions/9889ebc...". The main navigation bar includes "Microsoft Azure", a search bar, and a "Copilot" button. Below the navigation is a breadcrumb trail: "Home > az104-c1".

The main content area displays the "az104-c1" Container Instance details:

- Overview** (selected)
- [Activity log](#)
- [Access control \(IAM\)](#)
- [Tags](#)
- [Resource visualizer](#)
- [Settings](#)
- [Monitoring](#)
- [Automation](#)
- [Help](#)

**Essentials** (JSON View)

Resource group (move)	SKU
<a href="#">az104-rg</a>	Standard
Status	OS type
Running	Linux
Location	IP address (Public)
East US	20.75.180.232
Subscription (move)	FQDN
<a href="#">Azure subscription 1</a>	lab09unique.bxaehqjabcsb5c8.eastus.azurecr...
Subscription ID	Container count
9889ebc0-ca1f-4e0d-8116-0764f6dbd196	1

[Tags \(edit\)](#)  
[Add tags](#)

**CPU (millicores)**

A line chart showing CPU usage over time. The Y-axis ranges from 0 to 100 millicores, and the X-axis shows times from 18:15 to 18:45 UTC+02:00. A single data series is shown: "CPU Usage (Avg), az104-c1 | --".

*Add or remove favorites by pressing Ctrl+Shift+F*

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

In this task, you review the deployment of the container instance. By default, the Azure Container Instance is accessible over port 80. After the instance has been deployed, you can navigate to the container using the DNS name that you provided in the previous task.

1. On the Overview blade of the container instance, verify that Status is reported as Running.

Resource group ([move](#))

[az104-rg9](#)

Status

Running

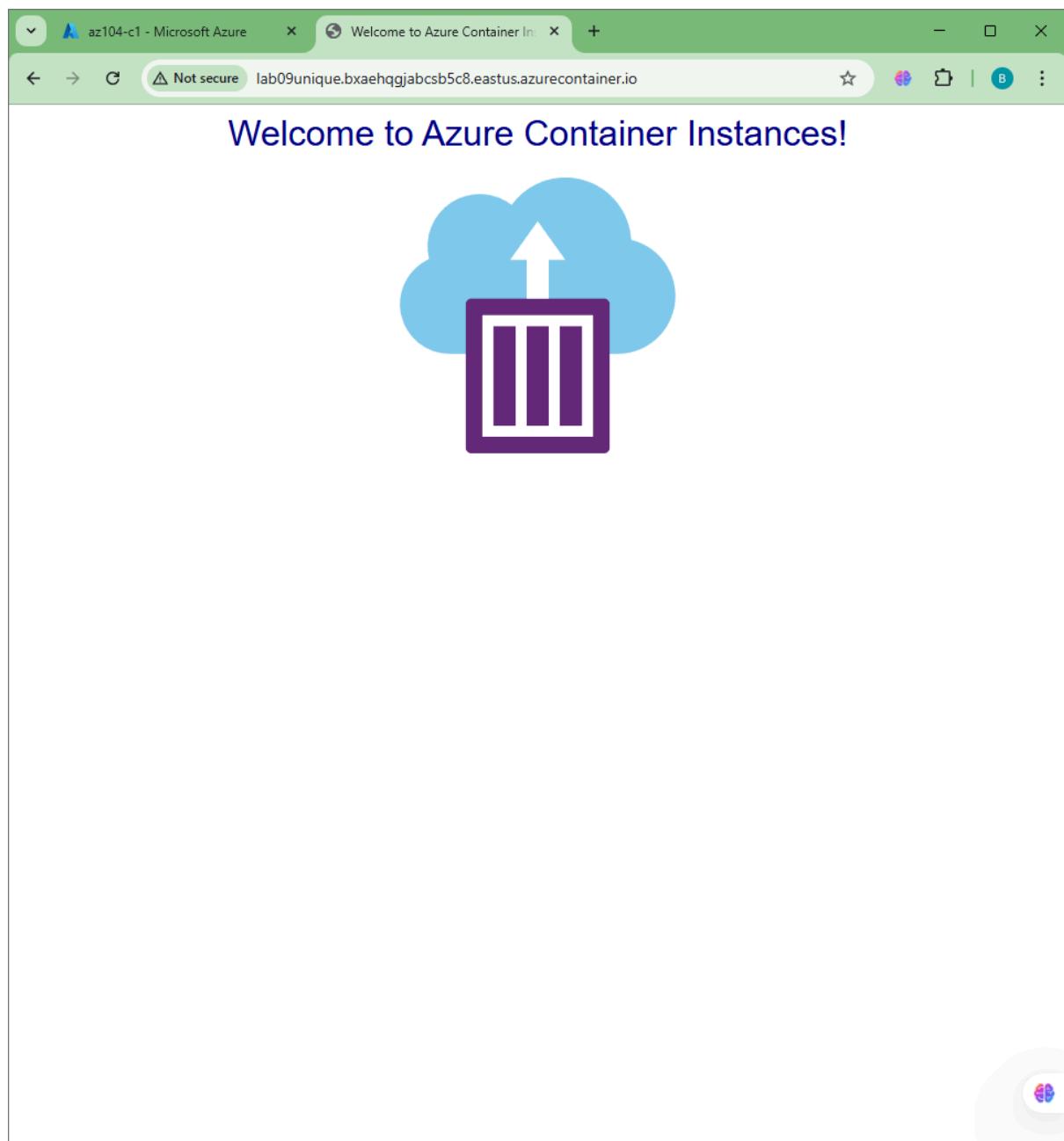
Location

East US

Subscription ([move](#))

[Azure subscription 1](#)

1. Verify that the Welcome to Azure Container Instance page is displayed. Refresh the page several times to create some log entries then close the browser tab.



logs:

The screenshot shows the Microsoft Azure Container Instances dashboard for the 'az104-c1' resource group. The main view displays a single container named 'az104-c1' with the following details:

Name	Image	State	Previous state	Start time	Restart count
az104-c1	mcr.microsoft.com/azuredocs/aci-helloworld:latest	Running	-	2025-12-13T17:07:01.857Z	0

The left sidebar includes navigation links for Home, Overview, Activity log, Access control (IAM), Tags, Resource visualizer, Settings, Containers (selected), Identity, Properties, Locks, Monitoring, Automation, and Help. The Logs section is currently active, showing the following log entries:

```
Listening on port 80
::ffff:10.92.0.6 - [13/Dec/2025:17:09:24 +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:10.92.0.6 - [13/Dec/2025:17:09:25 +0000] "GET /favicon.ico HTTP/1.1" 404 150 "http://lab01unique.baeelogicbsvc5.eastus.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:10.92.0.6 - [13/Dec/2025:17:09:44 +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:10.92.0.6 - [13/Dec/2025:17:09:44 +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:10.92.0.6 - [13/Dec/2025:17:09:45 +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:10.92.0.6 - [13/Dec/2025:17:09:45 +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:10.92.0.6 - [13/Dec/2025:17:09:45 +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:10.92.0.6 - [13/Dec/2025:17:09:46 +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:10.92.0.6 - [13/Dec/2025:17:09:47 +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"
::ffff:10.92.0.6 - [13/Dec/2025:17:09:47 +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"
::ffff:10.92.0.6 - [13/Dec/2025:17:09:47 +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"
::ffff:10.92.0.6 - [13/Dec/2025:17:09:48 +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:10.92.0.6 - [13/Dec/2025:17:09:49 +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:10.92.0.6 - [13/Dec/2025:17:09:49 +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:10.92.0.6 - [13/Dec/2025:17:09:50 +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"
```

overall:

The screenshot shows the Microsoft Azure portal interface. The left sidebar navigation bar includes links for Home, Resource Manager, Resource groups, Tags, Organization, Service groups, Management groups, Subscriptions, Tools, Resource graph explorer, Resource graph queries, Resource visualizer, Resource explorer, ARM API playground, Resource mover, Deployments, Templates, Template specs, Help, Support + troubleshooting, and a Copilot button. The main content area displays the 'az104-rg9' resource group overview. The top navigation bar has tabs for Overview, Activity log, Access control (IAM), Tags, Resource visualizer, Events, Settings, Deployments, Security, Deployment stacks, Policies, Properties, Locks, Cost Management, Monitoring, Automation, and Help. The 'Overview' tab is selected. The 'Essentials' section shows the Subscription (move) as 'Azure subscription 1', Subscription ID as '9898ebc0-ca1f-4e0d-8116-0764f6dbd196', Deployments as '2 Succeeded', and Location as 'East US'. The 'Resources' section lists several resources: 'ASP-az104rg9-a859' (App Service Plan, Canada Central), 'az104-c1t' (Container instances, East US), 'cooline' (App Service, Canada Central), 'staging (cooline/staging)' (App Service (Slot), Canada Central), and 'test-01unique' (Azure Load Testing, East US). A search bar at the top right allows users to search for resources, services, and docs.

costs:

Влад Прокопко - Microsoft Azure

Welcome to Azure Container In... ...

portal.azure.com/#view/Microsoft\_Azure\_GTM/BillingMenuView/~/overview/scopedId/%2Fproviders%2FBilling%2FBillingAccounts%2F6e5385f6-1c67-5c64-cc4a-9a831b7745c7%3A5ff1995-a27d-4191-a219-dd166c0c78fa,2019-05-31/\_/...

Microsoft Azure

Search resources, services, and docs (Q+)

Copilot

vladkeeks@gmail.com  
DEFAULT DIRECTORY (VLADKEEKS)

Home > Vlad Прокопко

Billing account

Get started Summary Tutorials & What's new

Overview

Amount due **US\$0.00** No payment needed

Upcoming invoices Available on 09/01/2024

Billing period 01/12/2025 - 31/12/2025 Pre-tax total so far **US\$0.00**

Invoices over time

Spending rate and forecast

This month's top products by charges

Product	Amount
Virtual Machines Dv3 Series W...	<b>US\$4.48</b>
Application Gateway Standard ...	<b>US\$2.52</b>
Premium SSD Managed Disk ...	<b>US\$0.66</b>
Other purchases	<b>US\$0.10</b>

Billing alerts (0) No billing alerts to display

Shortcuts

- Download usage and prices
- Manage payment methods
- View billing subscriptions
- Share monthly invoice by email
- View your support plan
- Give feedback

Credits remaining **US\$192.24**

US\$7.76 used of US\$200

Used Amount remaining

Add or remove favorites by pressing **Ctrl+Shift+F**

The screenshot shows the Microsoft Azure Billing Summary page. It features a sidebar with navigation links like Overview, Access control (IAM), Billing scopes, Diagnosis and solve problems, Cost management, Cost analysis, Cost alerts, Budgets, Advisor recommendations, Invoices, Payment methods, Payment history, Reservation transactions, Billing profiles, Benefits (preview), Products + services, Settings, and Support + troubleshooting. The main content area has several cards: 'Amount due' (US\$0.00), 'Upcoming invoices' (Available on 09/01/2024), 'Invoices over time' (chart showing spending), 'Spending rate and forecast' (chart showing projected spending), 'This month's top products by charges' (pie chart showing usage distribution), 'Billing alerts (0)', 'Shortcuts' (list of links), and 'Credits remaining' (US\$192.24). A bottom note says 'Add or remove favorites by pressing Ctrl+Shift+F'.