



Microsoft Learn  
Spark possibility



# AZ-500

## Secure cloud resources with Microsoft security technologies



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Lead Trainer Cloud Infrastructure

Microsoft Certified Trainer since 1999

<https://github.com/www42/az-500>

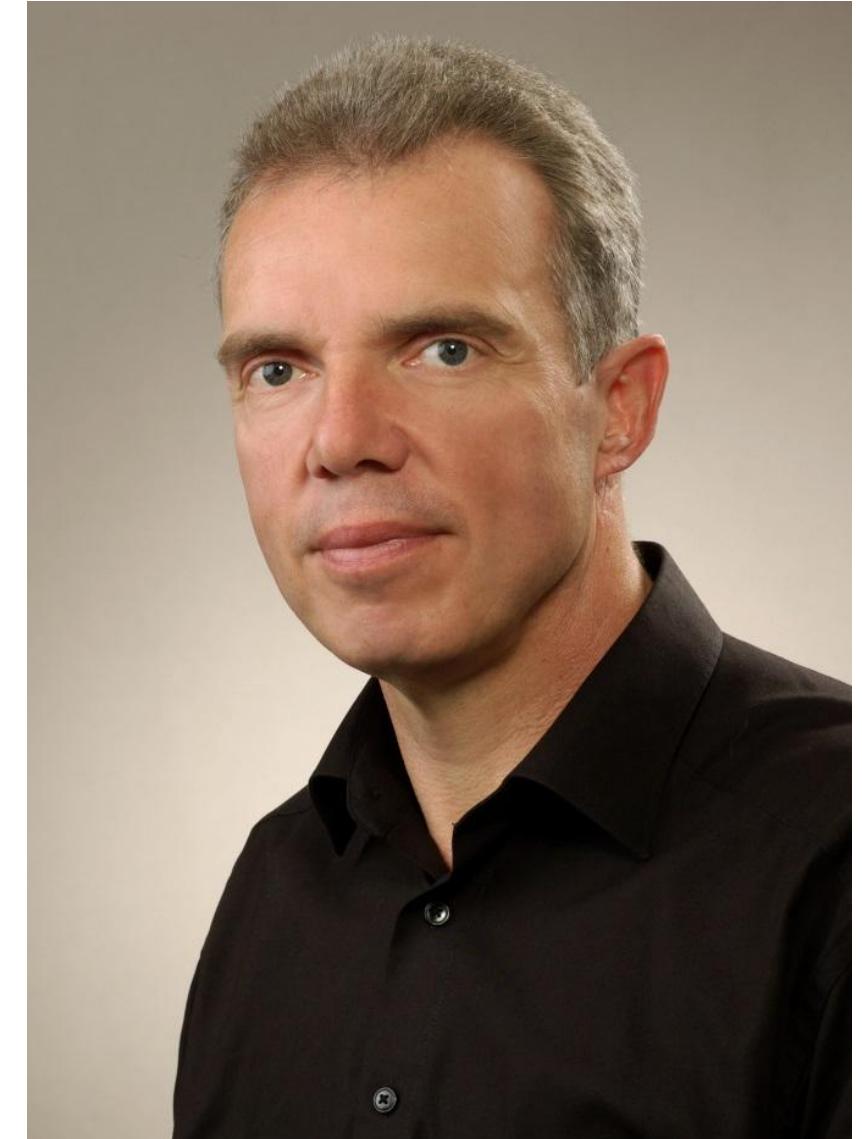
Physik

AI  
Security Copilot

NT 4.0

2011 Windows Azure  
2013 Azure ARM

Heidelberg



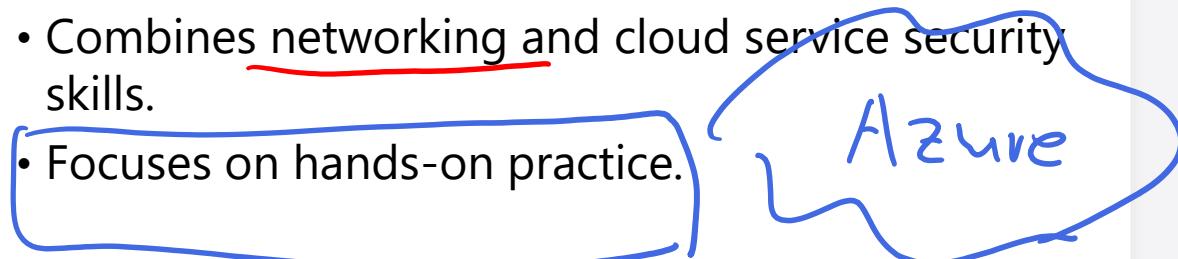
# About this course

## Purpose

- Helps students prepare for the new credential or day to day job tasks
- Bridges fundamental and associate level tasks

- Combines networking and cloud service security skills.

- Focuses on hands-on practice.



Azure

## Prerequisites

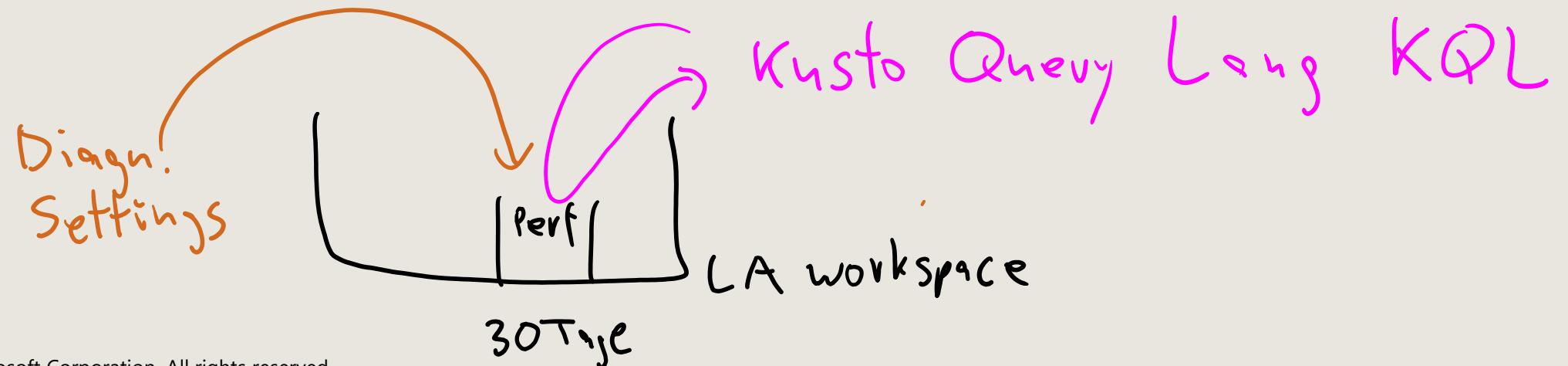
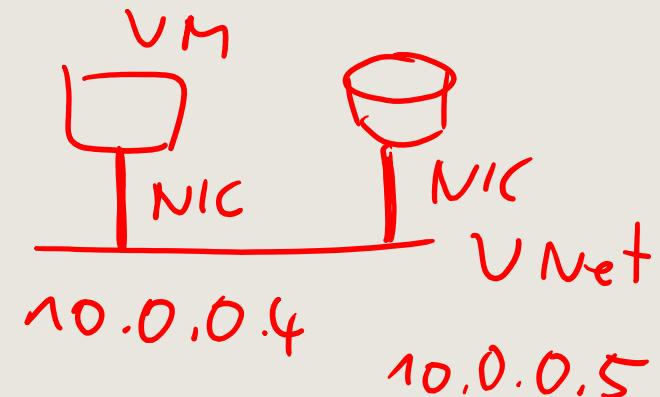
- Practical experience in administration of Microsoft Azure and hybrid environments.
- Strong familiarity with compute, network, and storage in Azure, as well as Microsoft Entra ID.

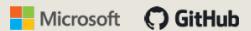
- Familiarity with security management and vulnerability remediation techniques.
- Knowledge of threat modeling and implementation of threat protection measures.

# Agenda

## Learning Path

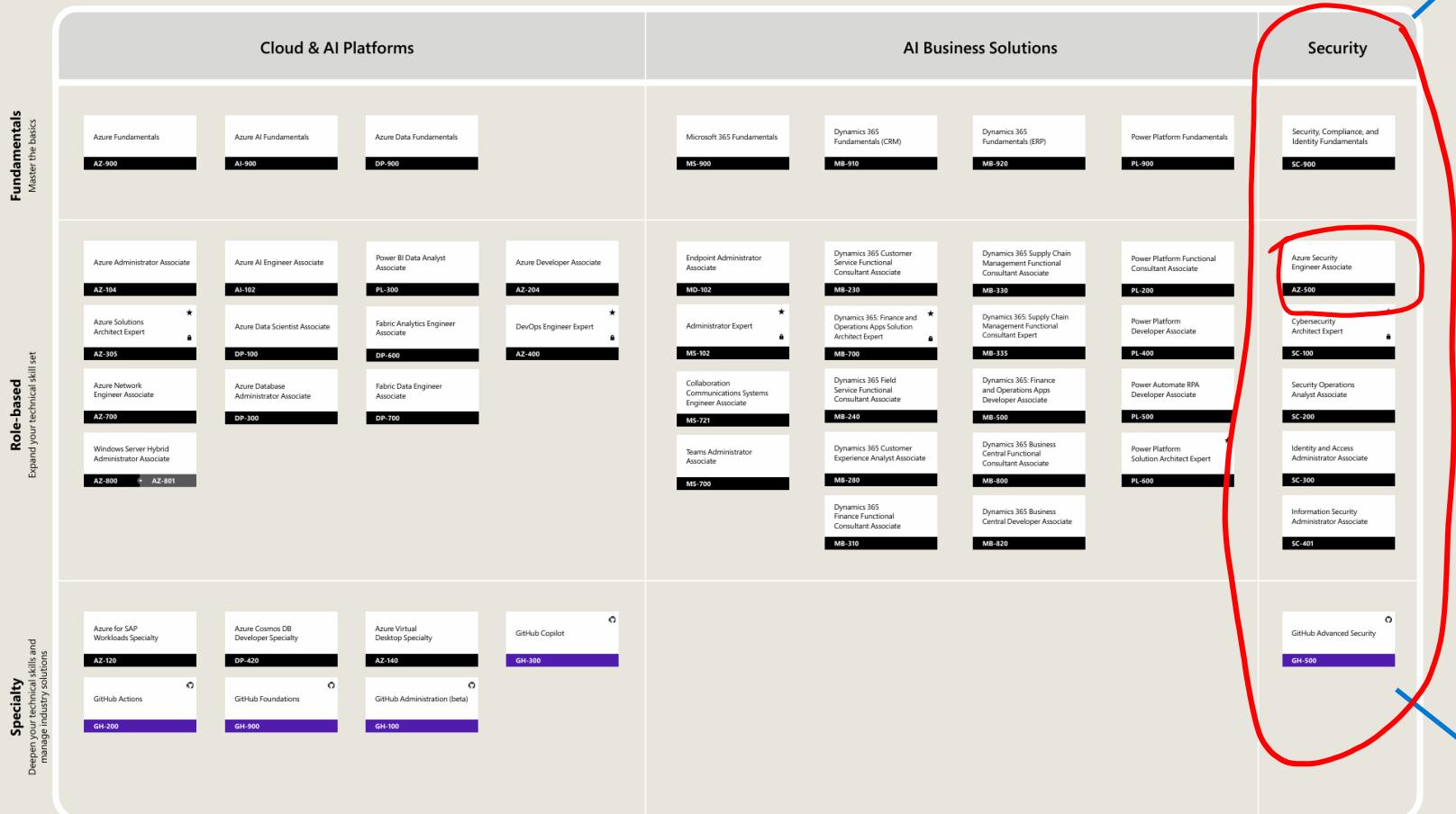
- 1 Secure identity and access      Extra ID
- 2 Secure networking      NSG      FW
- 3 Secure compute, storage, and databases
- 4 Secure Azure using Microsoft Defender for Cloud and Microsoft Sentinel





# Certify with Microsoft and GitHub

Learn more at: <https://aka.ms/ExploreCredentials>



Security, Compliance, and Identity Fundamentals

**SC-900**

Azure Security Engineer Associate

**AZ-500**

Cybersecurity Architect Expert

**SC-100**

Security Operations Analyst Associate

**SC-200**

Identity and Access Administrator Associate

**SC-300**

Information Security Administrator Associate

**SC-401**

GitHub Advanced Security

**GH-500**

# Let's get to know each other

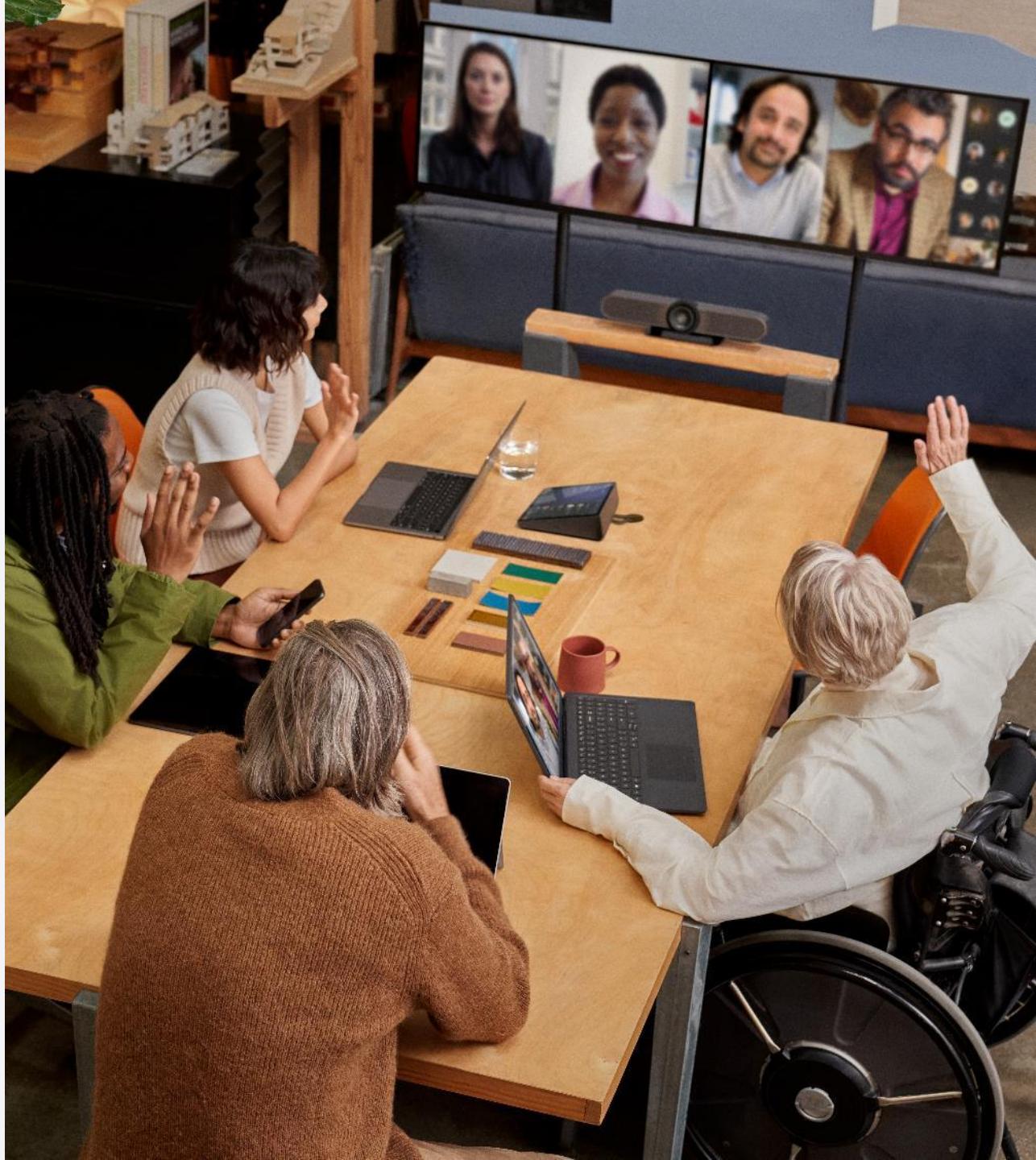
Your name

Company affiliation

Title/function

Your experience

Your expectations  
for the course



# Let's have a great time together

## We all contribute to a great class

- Be on time (class hours)
- Be present (avoid mail, calls, side meetings)

9<sup>00</sup> - 17<sup>00</sup>

12<sup>30</sup> - 13<sup>30</sup>

15 min



## What you should know about our facilities

- Internet access
- Parking
- Restrooms
- Emergency



# Get the most out of your Microsoft Learn profile

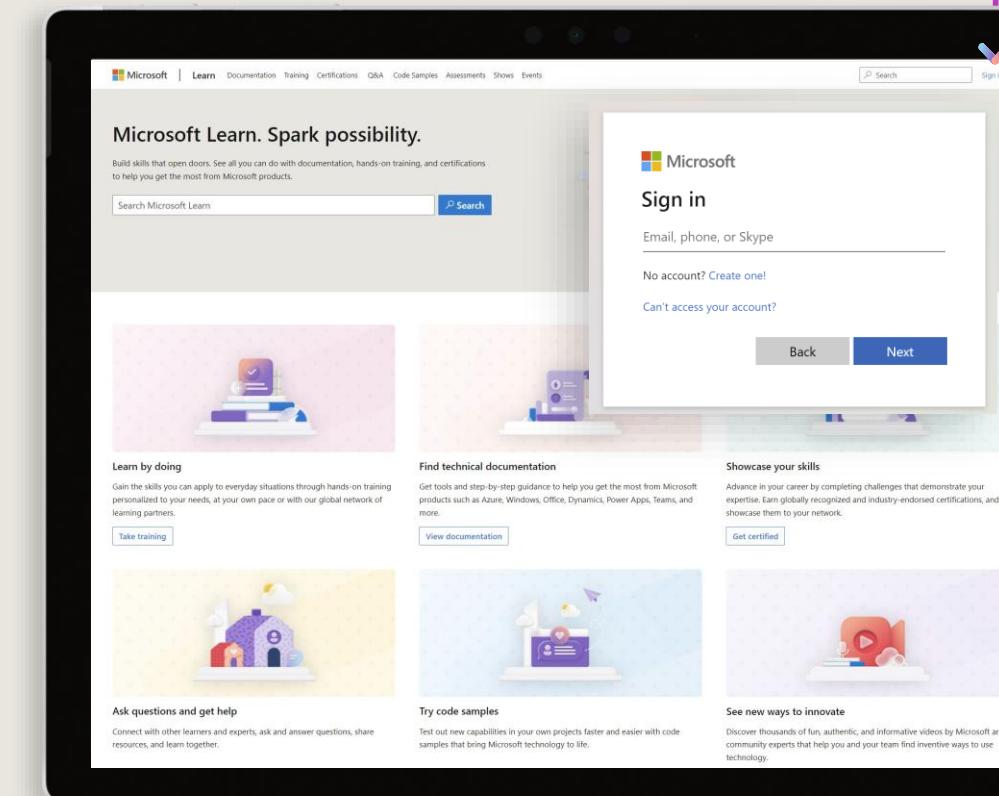
Verify, track, and share your training and certification progress and accomplishments—*all on one platform*

- Claim your achievement code for this course and share you have completed it.
- Access your course material and track progress on your learning activities.
- Share and verify your Microsoft Certifications via email, on social networking platforms, and on your résumé.
- Download and print transcripts and certificates.
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[www.aka.ms/MyMicrosoftLearnProfile](http://www.aka.ms/MyMicrosoftLearnProfile)

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- Select *Sign in* at the top, right corner of any Microsoft Learn page.
- Follow the Microsoft account authentication process.
- If the account that you have chosen to sign-in with doesn't already have a Microsoft Learn profile, you'll be guided to create one.



# AZ-500 Labs



## AZ-500T00-A Microsoft Azure Security Technologies: Hands-on Labs

- 1 **Role-Based Access Control** (Expected Duration 1 hours, 30 minutes)  
AZ-500T00-A Microsoft Azure Security Technologies [Cloud Slice Provided], Lab 01 (CSS)  
  
 10 of 10 launch attempts remaining  
  
↓
- 2 **Network Security Groups and Application Security Groups** (Expected Duration 1 hours, 30 minutes)  
AZ-500T00-A Microsoft Azure Security Technologies [Cloud Slice Provided], Lab 02 (CSS)  
  
 10 of 10 launch attempts remaining  
  
↓
- 3 **Azure Firewall** (Expected Duration 3 hours)  
AZ-500T00-A Microsoft Azure Security Technologies [Cloud Slice Provided], Lab 03 (CSS)  
  
 10 of 10 launch attempts remaining  
  
↓
- 4 **Configuring and Securing ACR and AKS** (Expected Duration 1 hours, 30 minutes)  
AZ-500T00-A Microsoft Azure Security Technologies [Cloud Slice Provided], Lab 04 (CSS)  
  
 10 of 10 launch attempts remaining  
  
↓

A screenshot of a Microsoft Edge browser window titled "Azure Monitor, Microsoft Defender for cloud, Microsoft Sentinel - Personal - Microsoft Edge". The URL is "https://labclient.labondemand.com/LabClient/8fb62af8-6c16-4020-8b90-2fc06aa335d8". The main content area shows a dark-themed desktop environment with icons for "Recycle Bin" and "Visual Studio Code". To the right, a sidebar displays "Instructions" for "Exercise 1: Deploy an Azure virtual machine" with a 10-minute duration and a list of tasks. A large blue arrow points from the "Launch" button in the third lab item on the left towards the "Instructions" section on the right.

Azure Monitor, Microsoft Defender for cloud, Microsoft Sentinel - Personal - Microsoft Edge

https://labclient.labondemand.com/LabClient/8fb62af8-6c16-4020-8b90-2fc06aa335d8

5 Hr 38 Min Remaining

Instructions Resources Help  100%

Instructions

Exercise 1: Deploy an Azure virtual machine

Exercise timing: 10 minutes

In this exercise, you will complete the following tasks:

- Task 1: Deploy an Azure virtual machine.

Task 1: Deploy an Azure virtual machine

1. Sign-in to the Azure portal  
.

2. Sign in to the Azure portal using an account that has the Owner or Contributor role in the Azure subscription you are using for this lab. In this Cloudslice lab, this account is  with password .

3. Open the Cloud Shell by clicking the first icon in the top right of the Azure Portal. If prompted, select **PowerShell** and **Create storage**.

4. Ensure **PowerShell** is selected in the drop-down menu in the upper-left corner of the Cloud Shell pane.

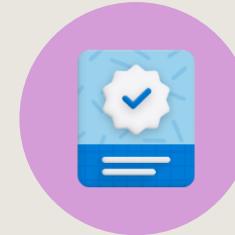
5. In the PowerShell session within the Cloud Shell pane, run the following to create a resource group that will be used in this lab:

```
az group create --name myResourceGroup --location WestEurope
```

7:28 PM 5/31/2024

DEU DE  0% Tasks Complete

# Become Microsoft Certified



92%

of certified IT professionals feel more confident in their abilities after earning certifications<sup>1</sup>

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Microsoft role-based and specialty certifications require annual renewal.<sup>2</sup>

Learn about certification renewal at  
[aka.ms/RenewYourCert](https://aka.ms/RenewYourCert)

<sup>1</sup> "2023 Value of IT Certification | Candidate Report," Pearson VUE, 2023   <sup>2</sup> Microsoft fundamentals certifications don't expire