

# Azure Fundamentals, Skill Labs

## Course Specifications

Course Number: ACI76-023SL\_rev1.0

Lab Length: Approximately 5 hours

## Cloud Essential Concepts (PLAB-AZ1)

### Introduction

#### Objective

Welcome to the Cloud essential concepts lab. In this lab, you will be provided with the instructions and devices needed to develop your hands-on skills.

Cloud computing is the concept of provisioning and accessing computing resources in a data center remotely through the Internet.

In this lab, different cloud concepts will be covered to better understand what cloud computing entails.

### Overview

#### Learning Outcomes

In this module, you will complete the following exercises:

- Cloud Service Providers (CSPs)
- Cloud Models
- Different Cloud Services
- Benefits of a Cloud Infrastructure

After completing this module, you should be able to:

- Explain the different CSPs.
- Explain the different cloud computing models.
- Explain the different cloud services.
- Explain the benefits of cloud infrastructure.

## The Azure Platform (PLAB-AZ1)

### Introduction

#### Objective

Welcome to The Azure platform lab. In this lab, you will be provided with the instructions and devices needed to develop your hands-on skills.

The Azure platform is Microsoft's cloud solution. The platform can be used to create and manage several different cloud resources and infrastructures, including the following:

- Infrastructure as a Service (IaaS)

## Course Outline

- Platform as a Service (PaaS)
- Software as a Service (SaaS)

In this module, the Azure portal will be explored to better understand how these resources are created and managed.

### Overview

#### Learning Outcomes

After completing this module, you will be able to:

- Identify an Azure subscription.
- Perform cost management in Azure.
- Explore the Azure portal.

## Azure Resource Groups (PLAB-AZ1)

### Introduction

#### Objective

Welcome to Azure Resource Groups lab. In this lab, you will be provided with the instructions and devices needed to develop your hands-on skills.

In this lab, the functionality of Resource Groups in Azure will be explored.

Depending on the permissions assigned to Azure users, not all will be able to access the different resource groups in the Azure Subscription. For this exercise, a resource group for the user has been pre-populated.

### Overview

#### Learning Outcomes

In this module, you will complete the following exercises:

- Explore Resource Groups in the Azure Portal
- Create an Azure Resource in a Resource Group
- Delete an Azure Resource in a Resource Group

After completing this module, you should be able to:

- Navigate the Azure portal and identify resource groups.
- Create a resource and a resource groups.
- Delete a resource in a resource groups.

## Azure Networking Concepts (PLAB-AZ1)

### Introduction

#### Objective

Welcome to Azure Networking Concepts lab. In this lab, you will be provided with the instructions and devices needed to develop your hands-on skills.

## Course Outline

Resources that are created in a cloud infrastructure needs to be able to connect to other created resources. Azure networking ensures the communication of these resources. Azure networking consists of several components. In this module, the different components will be explored.

### Overview

#### Learning Outcomes

In this module, you will complete the following exercises:

- Different Virtual Networking Components
- Creating an Azure Virtual Network
- Connecting Different Azure Networks

After completing this module, you should be able to:

- Explain different networking components in Azure.
- Create an Azure virtual network.
- Connect different Azure networks.

## Azure Virtual Machines (PLAB-AZ1)

### Introduction

#### Objective

Welcome to the Azure Virtual Machines labs. In this lab, you will be provided with instructions and devices needed to develop your hands-on skills.

Infrastructure as a Service (IaaS) is a cloud service that provides the functionality to create virtual machines (VMs) and other virtual devices on a cloud service provider's platform. A company can utilize this service to move its current on-premise infrastructure to the cloud by creating VMs and moving their data to the service provider. This can also be referred to as lift and shift as the on-premise infrastructure is replicated on the cloud platform.

The benefits of creating VMs on a cloud platform are that the company does not need to maintain any physical hardware for their servers or procure new hardware when the infrastructure needs to be scaled out. The costs associated with VMs running in the cloud can be closely controlled and maintained as consumed resources will incur costs.

In this lab, we will create a VM in Azure.

### Overview

#### Learning Outcomes

After completing this lab, you will be able to:

- Create an Azure VM using the Azure portal.
- Scale a virtual machine.