

## 20533 Implementing Microsoft Azure Infrastructure Solutions

### Overview

Students will learn how to implement infrastructure components such as virtual networks, virtual machines, containers, web and mobile apps, and storage in Azure.

### Prerequisite Comments

Before attending this course, students must have the following technical knowledge:

- Completed the Microsoft Certified Systems Administrator (MCSA) certification in Windows Server 2012.
- Understanding of on-premises virtualization technologies, including: virtual machines, virtual networking, and virtual hard disks (VHDs).
- Understanding of network configuration, including: TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.
- Understanding of websites, including: how to create, configure, monitor and deploy a website on Internet Information Services (IIS).
- Understanding of Active Directory concepts, including: domains, forests, domain controllers, replication, Kerberos protocol, and Lightweight Directory Access Protocol (LDAP).
- Understanding of database concepts, including: tables, queries, Structured Query Language (SQL), and database schemas.
- Understanding of resilience and disaster recovery, including backup and restore operations.

### Target Audience

This course is intended for IT professionals who have some knowledge of cloud technologies and want to learn more about Azure.

- IT professionals who want to deploy, configure, and administer services and virtual machines (VMs) in Azure.
- IT professional who use Microsoft System Center to manage and orchestrate server infrastructure.
- Windows Server administrators who are looking to evaluate and migrate on-premises Active Directory roles and services to the cloud.
- IT professionals who want to use Windows Azure to host websites and mobile app backend services.
- IT professionals who are experienced in other non-Microsoft cloud technologies, meet the course prerequisites, and want to cross-train on Azure.
- IT professionals who want to take the Microsoft Certification exam 70-533, Implementing Azure Infrastructure Solutions.

### Course Objectives

After completing this course, students will be able to:

- Describe Azure architecture components including infrastructure, tools, and portals.

[Register Online](#)

### Schedule

Class Length: 5 Days

G2R = "Guaranteed to Run"   OLL = "Online LIVE" ILT = "Instructor-Led-Training"					
05/11/18	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
12/11/18	G2R	4:00PM - 12:00AM	Lisbon, Portugal	OLL	EUR 2975
12/11/18	G2R	4:00PM - 12:00AM	Lisbon, Portugal	OLL	EUR 2750
26/11/18	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
26/11/18	G2R	3:00PM - 11:00PM	Lisbon, Portugal	OLL	EUR 2750
03/12/18	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
10/12/18	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
10/12/18	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2750
07/01/19	G2R	3:00PM - 11:00PM	Lisbon, Portugal	OLL	EUR 2750
07/01/19	G2R	4:00PM - 12:00AM	Lisbon, Portugal	OLL	EUR 2975
14/01/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
21/01/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
28/01/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
04/02/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
11/02/19	G2R	4:00PM - 12:00AM	Lisbon, Portugal	OLL	EUR 2975
18/02/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
25/02/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
04/03/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
11/03/19	G2R	1:00PM - 9:00PM	Lisbon, Portugal	OLL	EUR 2975

- Implement and manage virtual networking within Azure and to connect to on-premises environments.
- Plan and create Azure virtual machines.
- Configure, manage, and monitor Azure virtual machines to optimize availability and reliability.
- Implement, manage, backup and monitor storage solutions.
- Plan and implement data services based on SQL Database to support applications.
- Deploy and configure websites.
- Deploy, configure, monitor, and diagnose cloud services.
- Publish content through CDNs and publish videos by using Media Services.
- Create and manage Azure AD directories, and configure application integration with Azure AD.
- Integrate on-premises Windows AD with Azure AD.
- Automate operations in Azure management by using PowerShell runbooks.

## Course Outline

### Introduction to Azure

Cloud technology overview  
 Overview of Azure  
 Managing Azure with the Azure portal  
 Managing Azure with Windows PowerShell  
 Overview of Azure Resource Manager  
 Azure management services  
 Lab : Managing Microsoft Azure

### Implementing and managing Azure networking

Overview of Azure networking  
 Implementing and managing Azure virtual networks  
 Configuring Azure virtual networks  
 Configuring Azure virtual network connectivity  
 Overview of Azure networking in an infrastructure as a service (IaaS) version 1 (v1)  
 Lab : Using a deployment template to implement Azure virtual networks  
 Lab : Configuring connectivity between the IaaS v1 and IaaS version 2 (v2)

### Implement Virtual Machines

Overview of IaaS v2 virtual machines  
 Planning for Azure virtual machines  
 Deploying Azure IaaS v2 virtual machines  
 Authoring Azure Resource Manager templates  
 Overview of IaaS v1 virtual machines  
 Lab : Creating IaaS v2 virtual machines in Azure  
 Lab : Deploying IaaS v2 virtual machines by using Azure Resource Manager templates

### Managing Azure VMs

Configuring Azure VMs  
 Managing disks of Azure VMs  
 Managing and monitoring Azure VMs  
 Managing classic Azure VMs  
 Lab : Managing Azure VMs

18/03/19	G2R	3:00PM - 11:00PM	Lisbon, Portugal	OLL	EUR 2975
25/03/19	G2R	1:00PM - 9:00PM	Lisbon, Portugal	OLL	EUR 2975
01/04/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
08/04/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
15/04/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
22/04/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
29/04/19	G2R	4:00PM - 12:00AM	Lisbon, Portugal	OLL	EUR 2975
06/05/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
13/05/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
20/05/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
03/06/19	G2R	4:00PM - 12:00AM	Lisbon, Portugal	OLL	EUR 2975
10/06/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
17/06/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
24/06/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
08/07/19	G2R	4:00PM - 12:00AM	Lisbon, Portugal	OLL	EUR 2975
15/07/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975
22/07/19	G2R	2:00PM - 10:00PM	Lisbon, Portugal	OLL	EUR 2975

## Managing Virtual Machines

Configuring virtual machines  
Configuring virtual machine disks  
Managing and monitoring Azure virtual machines  
Managing IaaS v1 virtual machines  
Lab : Managing Azure virtual machines

## Implementing Azure App services

Introduction to App Service  
Planning app deployment in App Service  
Implementing and maintaining web apps  
Configuring web apps  
Monitoring web apps and WebJobs  
Implementing mobile apps  
Implementing Traffic Manager  
Lab : Implementing web apps

## Implementing Azure App services

Introduction to App Service  
Planning app deployment in App Service  
Implementing and maintaining web apps  
Configuring web apps  
Monitoring web apps and WebJobs  
Implementing mobile apps  
Traffic Manager  
Lab : Implementing websites

## Planning and implementing storage, backup, and recovery services

Planning storage  
Implementing and managing Azure Storage  
Implementing Azure CDNs  
Implementing Azure Backup  
Planning and implementing Azure Site Recovery  
Lab : Planning and implementing Azure Storage

## Planning and implementing storage, backup, and recovery services

Planning storage  
Implementing and managing storage  
Implementing Azure Content Delivery Networks  
Implementing Azure Backup  
Planning for and implementing Azure Site Recovery  
Lab : Planning and implementing storage

## Implementing containers in Azure

Implementing Windows and Linux containers in Azure  
Implementing Azure Container Service  
Lab : Implementing containers on Azure VMs  
Lab : Implementing Azure Container Service

## Planning and implementing Azure SQL Database

Planning and deploying Azure SQL Database  
Implementing and managing Azure SQL Database  
Managing Azure SQL Database security  
Monitoring Azure SQL Database  
Managing Azure SQL Database business continuity  
Lab : Planning and implementing Azure SQL Database

## Implementing Azure Cloud Services

Planning and deploying Azure Cloud Services  
Managing and maintaining Azure Cloud Services  
Lab : Implementing Azure Cloud Services

## Implementing PaaS cloud services

Planning and deploying PaaS cloud services  
Managing and maintaining cloud services  
Lab : Implementing PaaS cloud services

## Implementing Azure Active Directory

Creating and managing Azure AD tenants  
Configuring application and resource access with Azure AD  
Overview of Azure AD Premium  
Lab : Implementing Azure AD

## Managing Active Directory in a hybrid environment

Extending on-premises Active Directory domain to Azure  
Implementing directory synchronization by using Azure AD Connect  
Implementing federation  
Lab : Implementing and managing Azure AD synchronization

## Implementing Azure-based management and automation

Implementing Microsoft Operations Management Suite (OMS)  
Implementing Azure Automation  
Implementing Automation runbooks  
Managing Azure Automation  
Lab : Implementing Automation