### **Purpose**

This document is for Microsoft Certified Trainers (MCTs) teaching the *AZ-900T01: Microsoft Azure Fundamentals* course. This document contains general information for preparation and awareness. Information about specific topics is included in the student content and the instructor Microsoft PowerPoint Notes.

#### **Certification exam**

This course maps directly to and is intended to prepare students for the AZ-900: Microsoft Azure Fundamentals exam.

Each study area has a percentage indicating the relative weight of the area on the exam. The higher the percentage, the more questions students are likely to see in that area.

Study Areas	Weights
Understand Cloud Concepts	15-20%
Understand Core Azure Services	30-35%
Understand Security, Privacy, Compliance, and Trust	25-30%
Understand Azure Pricing and Support	25-30%

This exam is not a prerequisite for any other exam, nor is it a part of any credential offering. It is a standalone exam offering.

# **Course Design**

This course will provide foundational level knowledge of cloud services and how those services are provided with Microsoft Azure. The course can be taken as an optional first step in learning

about cloud services and Microsoft Azure, before taking further Microsoft Azure or Microsoft cloud services courses.

The course will cover general cloud computing concepts as well as general cloud computing models and services such as Public, Private and Hybrid cloud and Infrastructure-as-a-Service (IaaS), Platform-as-a-Service(PaaS) and Software-as-a-Service (SaaS).

It will also cover some core Azure services and solutions, as well as key Azure pillar services concerning security, privacy, compliance and trust. It will finally cover pricing and support services available with Azure.

## **Learning Objectives**

In this course students will learn how to:

- Understand general cloud computing concepts
- Understand core services available with Microsoft Azure
- Understand security, privacy, compliance and trust with Microsoft Azure
- Understand pricing and support models available with Microsoft Azure.

#### Audience

The course is intended for a broad range of candidate backgrounds. It's suitable for candidates with non-technical backgrounds such as those involved in selling or purchasing cloud-based solutions and services, and those who have or will have some involvement with cloud-based solutions and services.

It's also suitable for candidates with a technical background who might be looking to take a first look at cloud services and Azure.

## **Prerequisites**

There are no prerequisites for taking this course. Technical IT experience is not required; however, some general IT knowledge or experience would be beneficial.

#### Hands-on

There are no labs present in the course however there are two aspects to hands on in the course

- Following of topics in Azure We would recommend that you encourage students to sign up for a free Azure account at the start of the course at <u>Create your free account</u> <u>today</u>. This way they can try out some of the areas as you come across them in the course. There is a Demo available in Module 0 which provides a walkthrough of how to set up an Azure free account, which may be of use to students.
  - You could choose to ask students to create an Azure Free Account at this point at the start of the course, and encourage them to use that free account then, during the course.
- Walkthroughs The course contains several "walkthrough" topics. These are step-bystep guides for completing a particular task in Azure. Students can just read through the
  tasks and get a feel for how they work, or actually step through them like a lab task.

  Another option could be to complete the walkthroughs at the end of the module, and
  complete all, or some, of the walkthroughs in the module together, at that stage, like an
  end of module, or even end of course, lab. Alternatively, the MCT may choose to deliver
  them in real time during the class as demonstrations, following the steps in the student
  book. How you approach this may depend on your available time.

The following is a list of walkthrough's present in the course.

- Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products\04-Walkthrough-Create a Virtual machine using Azure Portal
- Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products\07-Walkthrough-Create a virtual network via the Azure Portal
- Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products\08-Walkthrough-Deploy Azure Container Instances (ACI) in Azure Portal
- Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products\12-Walkthrough-Create Blob storage
- Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products\15-Walkthrough-Create a SQL database

- Mod 2 >M02-Core Azure Services\L04-Azure Solutions\03-Walkthrough-Add IoT device to Azure IoT Hub
- Mod 2 >M02-Core Azure Services\L04-Azure Solutions\10-Walkthrough-Run serverless code with Azure Functions in Azure portal
- Mod 2 >M02-Core Azure Services\L05-Azure Management Tools\04-Walkthrough-Working with the Azure CLI
- o 05-Walkthrough-Create VMs from a script with Azure PowerShell
- Mod 2 >M02-Core Azure Services\L05-Azure Management Tools\06-Walkthrough-Install IIS webserver on a VM with Azure Cloud Shell
- Mod 2 >M02-Core Azure Services\L05-Azure Management Tools\09-Walkthrough-Save a recommendations report with Azure Advisor
- Mod 3-Security, Privacy, Compliance and Trust\L02-Securing network connectivity in Azure\03-Walkthrough-Implement an Azure Firewall using Azure Portal
- Mod 4-Azure Pricing and Support\L03-Planning and Managing costs\09-Walkthrough-Download an Azure Pricing Calculator estimate
- Mod 4-Azure Pricing and Support\L03-Planning and Managing costs\11 Walkthrough-Download an Azure TCO Calculator cost comparison report

We would also recommend you can take the time to demonstrate some topics as you go, and as discussion comes up and evolve around subjects.

# **Azure subscriptions**

No Azure subscriptions are provided or specifically required to teach this course, or for students to attend the course. However, as mentioned earlier in the Hands-on section, we would recommend that you encourage students to sign up for a free Azure account at the start of the course.

## Preparing to teach the course

In the next sections we will cover the main course components and how you can use them in class. This includes the Microsoft PowerPoint slides, videos, module review questions, reference links, and practice exercises. There is a lot of flexibility in how you use this content to create a great learning experience for your students.

#### **PowerPoint slides**

PowerPoint slides are provided to help you teach the course:

- There is a Module 00 PowerPoint file. with the filename AZ-900T01 Microsoft Azure
   Fundamentals-00.pptx. The slide deck includes an agenda with modules and lessons for
   the course. It also includes a mapping from the certification study areas to the modules
   in the course. We recommend that you customize this file for your specific situation. For
   example, you can add an introduction, and explain the facilities for your specific building.
- Additionally, each module within the course has its own separate PowerPoint file. For example, AZ-900T01 Microsoft Azure Fundamentals-01.pptx is the slide deck for Module 01. Slides are designed to supplement the student materials. You should review how the topics are presented to the student versus how the slides are organized. By doing this, you can customize the slides to make your presentation more interesting.
- Each slide contains a mixture of text-based content, graphics, references, and notes. Use the topic and reference links to fully cover each concept.

#### **Videos and Demonstrations**

Your PPT deck includes some links to videos and demonstrations, labelled *Video* and *Demo* in the slides, that provide conceptual information about a topic area. There are many ways to use this media in your course:

 Play the videos and demonstrations during the course if you wish and you feel they add value, or use them for homework, or for revision later in the day. If you wish, and have

time, you could view them and follow it up with a short discussion about the topics covered in the video or demo.

- The videos and demos are inserted on standalone slides in between the content topic slides. You may wish to rearrange the videos and demos. For example, you could play the videos first to introduce the content. Or, you could play the videos last as a review.
- You can create your own demonstrations based on certain topics as you go and do those
  if you prefer.
- There are many other videos which you use as part of the course if you wish to supplement certain areas. Channel 9 is a great source for videos.
- We also recommend <u>Azure Friday</u> with Scott Hanselman, and the <u>Tuesdays with Corey</u>
   Sanders series.
- The following is a list of recorded *Demos* present in the course
  - Mod 0 > L01-Course overview\03-Demo-Create Free Azure Account
  - Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products \03-Demo-Create Azure Virtual machine.
  - Mod 2 >M02-Core Azure Services \ L03-Core Azure Services and Products\08-Demo-Create Blob Storage
  - Mod 2 >M02-Core Azure Services \ L05-Azure Management Tools \03-Demo-Customize the Azure Portal

# **Module review questions**

Module review questions are provided at the end of each module. You might wish to supplement with questions of your own.

You can use these review questions in several ways:

- Have the student's pre-test before the course starts, and then at the end to show them what they have learned.
- As a group, go through the questions before moving on to another section.
- Interspace the questions into the content as you cover the applicable material.

#### **Reference links**

The course content includes many reference links. This is because the Azure documentation is constantly being updated, and also for the MCT to use as reference, or an opportunity to link into a high-level overview of a certain feature:

- Before you teach the course, use the reference links to validate that the content is still current. Pay attention to capabilities and limits: for example, preview features and virtual machine (VM) sizes.
- Reference links have been added to your PowerPoint slides and instructor notes to make
  it easy for you to access more detailed information. Use these links to walk through
  details that are not covered in the content, and lengthy steps that have only been
  summarized in the content.

### **Group discussions**

Consider initiating group discussion around certain topics. You can use the end-of module questions as conversation starters at any stage during the course delivery.

# **Course timing**

While the content should not be particularly challenging, delivering the course on time in a one-day window will most likely be the biggest challenge you have. Remember you have discretion and flexibility to show a feature or area of Azure as you go, and this freedom should allow you to quicken or slow the course pace as you need. Also, based on the students' experience, you might be able to skip over or quickly go through certain topics or areas. The course content is designed to take a day to complete.

#### Resources

There are a lot of resources to help you and the student learn about Azure. We recommend you bookmark these pages and offer the list to your students:

- <u>Azure forums</u>. The Azure forums are very active. You can search the threads for a specific area of interest. You can also browse categories such as Azure storage, pricing and billing, Azure VMs, and Azure Migrate.
- Microsoft Learning Blog. Get the latest information on the certification tests and exam study groups.
- Channel 9. Channel 9 provides a wealth of informational videos, shows, and events.
- Tuesdays with Corey. Corey Sanders answers your questions about topics such as Azure VMs, websites, mobile services, and Dev/Test.
- <u>Azure Friday</u>. Join Scott Hanselman as he engages one-on-one with the engineers who build the services that power Azure as they demo capabilities, answer Scott's questions, and share their insights.
- <u>Microsoft Azure Blog</u>. Keep current on what's happening in Azure, including what's in preview, what's generally available, and news and updates.
- <u>Azure Newsletter</u>. Stay informed on the latest Azure features, events, and community activities. Browse through past newsletters or subscribe and get the latest Azure news delivered to your inbox.

#### Connect with others

You also have the ability to connect directly with others preparing ot teach the course or to get assistance if need be:

- MCT Central Your one stop for all things MCT. Stay up to date with the latest MCT news, learn about upcoming events, find job opportunities, or connect with other MCTs around the world. You can also ask questions and discuss a variety of topics including courseware and certification with Microsoft through the MCT central forums.
- MOC Courseware Support If there are problems with a course or you need to log a support ticket, contact the Official Support channel for MOC courses. This channel is monitored by support agents and is the quickest way to log your course support issue. It is the official support channel for courseware.

**Feedback** 

These courses differ from the traditional MOC courses that Microsoft has provided in the past.

This course has a framework for you to work within. Take time to prepare and think about the

value that only an instructor can bring to training. We hope to partner with you to provide an

exceptional student experience and we welcome your feedback.

Happy learning!

Courseware Development Team