

## Purpose

The purpose of this document is to highlight the significant changes to the AZ-104T00: Azure Administrator course from the previous release. This document is for Microsoft Certified Trainers and Instructors to prepare for teaching the class. This is not an error log or a supplement to the course materials. This document just provides additional context so that you can understand the major changes.

Most of the course materials in the MCT Download Center have been updated to fix typos, broken links, and formatting. So, **we recommend you always download the latest course materials**. Please read the Instructor Preparation Guide which provides the overall strategy for teaching this course.

## Update – 10 May 2024

### Lab Changes.

A section has been added to each GitHub lab page called **Extend your learning with Copilot for Edge**. Several prompts have been suggested for the lab content. For example,

- What is the difference between Azure Network Security Groups and Azure Application Security Groups? Share examples of when to use each of these groups.
- How do I use Azure PowerShell or Azure CLI commands to add a virtual network peering between vnet1 and vnet2?

**Course Content Changes.** This update is primarily about retiring older Learn modules and instead using newer Learn modules. Where possible we have tried to align the slides with the Learn module. But keep in mind the slide decks have been curated to focus on the exam content and topics where an instructor's explanation is most helpful.

PowerPoint	New Learn module(s)	Comments
01 – Administer Identity, Configure Microsoft Entra ID	Change to: <a href="#">Understand Microsoft Entra ID</a>	Change slide titles to match the new module (not possible in all cases). Updated the Examine Microsoft Entra ID feature list.
03 – Administer Azure Resources, Configure Azure resources with tools	Change the references to: <a href="#">Introduction to Azure Cloud Shell</a> <a href="#">Introduction to Bash</a> <a href="#">Introduction to PowerShell</a>	No content changes. Just change the references on the Summary page. These modules provide more information for users just starting with the tools.

## AZ-104: Azure Administrator Change Log

04 – Administer Virtual Networks, Configure Azure DNS	Change to: <a href="#">Host your domain on Azure DNS</a>	Changed the slide titles to align with this module (not possible in all cases). This module provides more information and includes practice sandboxes.
07 – Administer Azure Storage, Configure Azure Files and File Sync	Rework: <a href="#">Configure Azure Files and Azure File Sync</a>	Remove slides on File Sync. Add soft delete and Azure Storage Explorer.
09 – Administer PaaS Computer Options, Configure Azure Container Instances	Rework: <a href="#">Configure Azure Container Instances</a>	Add information on ACA and compare it to other container management solutions.
10- Administer Data Protection, Configure File and Folder Backups	Change to: <a href="#">Introduction to Azure Backup</a>	Instead of covering File and Folder backups, instead cover the Azure Backup Service. Keep the demonstration using File and Folder backups. Retire the older module.
10 – Administer Data Protection, Configure Virtual Machine Backups	Rework: <a href="#">Configure virtual machine backups</a>	Streamlined this set of slides. Remove on-premises backups. Reworked the ASR slide.
11 – Configure Azure Alerts	Change to: <a href="#">Improve incident response with alerting on Azure</a>	This newer module covers more than is needed. Did not rework the slides. We are only highlighting exam related things.

## Update – 23 February 2024

This update is primarily about the labs. Every lab has changed in some way, so be sure to review all the labs before class. If you have other feedback, please use the new MCT Tech Community to submit your comments. Remember the best feedback is actionable and specific.

**Commentary:** By far, course labs have the most negative sentiment. Here are the three most frequent complaints we get about the labs.

## AZ-104: Azure Administrator Change Log

1. **There is not enough lab time.** Our goal is to provide a 50/50 mix of instructor-led and student-led activities. Examples of instructor-led activities are demonstrations, lectures using slides, group discussion, whiteboards, and Q&A. Examples of student-led activities are lab time, reviewing Learn materials, watching reference videos, and using the interactive lab simulations. The labs have been redesigned to cover exam-related topics in the most efficient manner possible. Please try to give students more time to use the product and provide less lecture with more demonstrations.
2. **The labs do not work.** The new labs have been tested on a variety of subscriptions and hosting environments. Screenshots and explanatory notes have been added to clarify what needs to be done. If you notice something that needs to be changed, please take time to submit an Issue or Pull Request on the GitHub. Also, every Lab Host has a help desk that may be able to give support. Please use your best judgment to determine if the issue is due to Lab Host environment or is a problem across multiple lab environments. Determining this difference helps us respond and fix the issue more quickly.
3. **The labs do not pertain to my job.** We have reworked the labs to provide more common day-to-day administrator tasks. We have renamed “Tasks” to “Job Skills” and reworded the tasks. For example, “Configure the lab environment” is now “Use a template to create a network infrastructure”. This is more than just semantics. It is trying to relate our course content to the Azure Administrator’s job.

Here are just a few of the changes.

- Changed to a new lab format and updated the job skills to appeal to a larger audience with different subscriptions. Reminder that these labs are used not only in the classroom, but by self-paced Learn users and other partners like LinkedIn.
- Provided new lab slides (overview and architecture diagram). Where possible we kept the previous lab architecture slide. The slide is hidden so if you liked the previous lab, you could use that to review and walk through the interactive lab simulation.
- Interactive lab simulations have not been updated. We have added other simulations from other courses that might be of interest. Also, we added key takeaways and links to additional self-paced Learn modules.
- Lab 03 (Tooling) – There is now only one lab in this module. It covers templates, Cloud Shell, PowerShell, and the CLI.
- Lab 05 (Intersite connectivity) – Includes Network Watcher and different ways of troubleshooting connections. Network Watcher is formally covered in Module 06.
- Lab 06 (Network traffic) – Focused just on the load balancer and application gateway.
- Lab 08 (Virtual machines) – Focused just on virtual machines and virtual machine scale sets.
- Lab 10 (Data protection) – Focused just on Azure virtual machines.

There is also a content change of interest.

- Module 11 (Monitoring). The [Configure Azure Alerts](#) module is being retired and replaced by [Improve incident response with alerting on Azure](#). Note that the course slides are not changing. Our slides continue to focus on the certification topics. The Learn content is reference for both classroom and self-paced users.

## Update – 17 Nov 2023

This will be our last update of the calendar year.

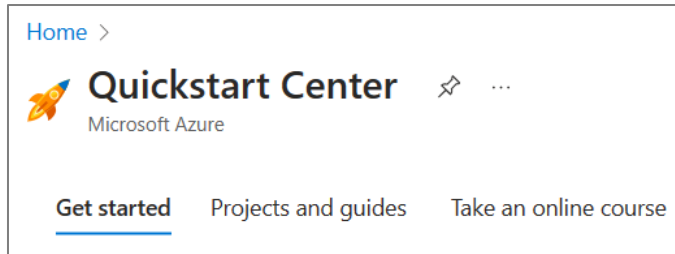
- **Entra ID branding.** Scrubbed the slides and images for the new Entra ID branding.
- **Screenshot updates.** Reviewed and updated numerous screenshots in the slide decks.
- **PowerPoint 11, Configure Azure Alerts.** Refreshed the graphics in this section.
- **Learn feedback.** Have you noticed the Learn modules have a new feedback link (#azure training) at the bottom of the page? This is replacing the traditional *reporting feedback* link. The tag takes you to the [Q&A forum for Azure Training](#). The forum is monitor and provides a quick response to questions, comments, and concerns.

### Need help?

- For issues related to this module, post on Microsoft Q&A and use the [#azure training tag](#).

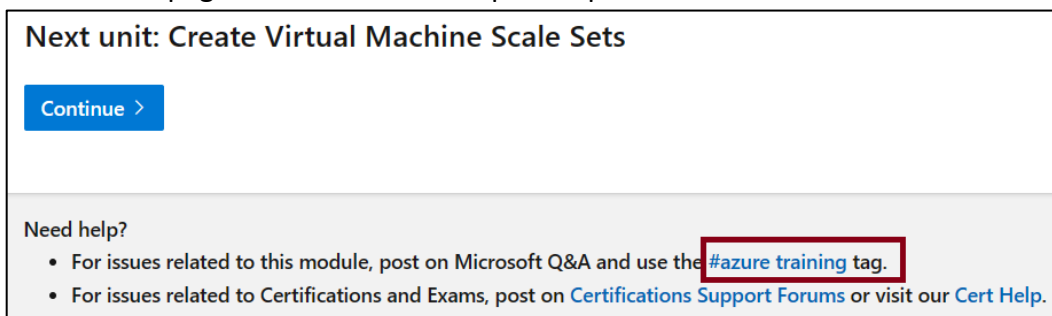
- **AI enhancements.** Have you noticed some Learn content displays a note about AI ? For AZ-104 this means improvements in Learning Objectives, Prerequisites, Introduction, and Summary pages. These updates will continue through the end of the calendar year.

- **Azure Quickstart Center.** Have you noticed the [Azure Quickstart Center in the Azure portal](#)? Azure Quickstart Center is a guided experience in the Azure portal available to anyone who wants to improve their knowledge of Azure. For organizations new to Azure, it's a fast way to start a project or view the setup guides.



## Update – 29 Sept 2023

- **Awareness - New WWL PowerPoint template.** To standardize the look and feel of the courses, a new PowerPoint template has been applied. You will see a difference in the *Title, Section, Demonstration, and Lab* slides. There is also renaming to ensure there are *Learning Objectives* and *Learning Recap* slides. The *Introduction* PowerPoint deck has been updated. There is a new *Conclusion* PowerPoint deck.
- **Awareness - [Microsoft Entra ID branding](#).** Began the process of updating the course content for the new branding. The slides and labs (01 and 02a) have been updated. The Learn content is being updated separately. It will take some time for everything to be corrected, please be patient.
- **Awareness – New Learn content feedback process.** The AZ-104 Learn content is now using the [Microsoft Q&A](#) forum for feedback. You will see a feedback tag at the bottom of the Learn pages. Follow the link to post a question.



- **Awareness – Join the new [MCT Lounge](#).** The MCT Program has launched a new online community to bring you more events, updates, and connections to Microsoft. Be sure to request access and be verified as an active MCT or MCT Alumni to join the new MCT Lounge. This gated space on the Tech Community platform will now be the centralized resource for all MCT Program information. The old MCT Central site is retiring. Mass emails from the MCT Program will be discontinued. You will now be able to set up filtered subscriptions on MCT Lounge and receive notifications for the events, news, and updates most important to you.
- **Course Datasheet.** This is no longer delivered for the FSI community. The file was removed from the MCT Download Center. The General and Detailed course outlines in this file were moved to an Appendix in the Trainer Preparation Guide.

- **PowerPoint 01, Configure Microsoft Entra ID.** Reworked the content for the new branding. The biggest change is the *Select Microsoft Entra Plans & Pricing* topic, slide 9. The Learn content changes will follow in early October.
- **PowerPoint 07, Administer Azure Storage.** Consolidated the *Implement Azure Storage* topic with the *Explore Azure Storage Services* topic (slide 8).
- **PowerPoint 07, Administer Azure Storage.** Added the new **Cold tier** to the *Create Blob Access Tier* topic (slide 20).

## Update – 28 July 2023

The certification exam was updated 28 July. The [Study guide for Exam AZ-104: Microsoft Azure Administrator | Microsoft Learn](#) shows the new emphasis. This course update reflects those changes.

### Awareness: Upcoming Course Updates

- **New PowerPoint templates.** To standardize the look and feel of the courses, a new PowerPoint template has been approved. Courses will begin implementing the new template starting in September.
- [Azure Active Directory is becoming Microsoft Entra ID](#). This change will require all course materials to be technically reviewed and rebranded. This will mostly affect Module 01 and Module 02. Also, any associated lab instructions and screenshots.

### Awareness: Learn Improvements

- New: [Microsoft Learning Room Directory - Microsoft Community Hub](#)). Learning Rooms provide a way for learners to connect with experts and peers. These are several rooms for Azure specific learning.
- New: [Welcome to the Azure Community \(microsoft.com\)](#). Your community for best practices and the latest news on Azure.

### Awareness: GitHub Improvements

- Added the [Instructor Demonstrations](#) to the GitHub (scroll down after the Lab instructions). The separate Word handout has been removed from the MCT DLC.
- Lab 01 (tenant creation) does not work well in cloud slice lab hoster environments. In those environments the lab should be *Instructor Demonstration* or *Walk-through the Interactive Lab Simulation*. When using Azure passes or in small audiences, the lab works just fine.
- Posted on GitHub - [Lab 05 and Lab 06 - Difficulty and overlap · Issue #726](#). This has suggested options on how to use these labs in the classroom. In the future, we would like to simplify Lab 06.
- Lab 09c, Azure Kubernetes Service, has been changed to Azure Container Apps.

## PowerPoints (All decks)

- Demonstration slides. Added a Quickstart or Tutorial link in the Notes area.
- Introduction slides. Updated the certification information in the Notes area.

## PowerPoint 00, Introduction

- The **AZ-104 Certification Areas** slide has been updated to reflect the new functional group percentages.
- The **Course Schedule** slide has been updated. AKS is no longer on the exam, so Day 4 just shows Containers and ACA.

## PowerPoint 01, Administer Identity

- Marked the **Configure Azure AD Device Identities**, **Create Bulk Accounts**, and **Create Administrative Units** topics as optional and hid the slides. These topics are no longer on the certification. The content is still included in the Learn module.

## PowerPoint 02, Administer Governance and Compliance

- Updated the graphics on the **Metrics and Logs** slide. Made the graphics more readable.

## PowerPoint 03, Administer Azure Resources

- Removed two demonstrations: *Working with PowerShell (locally)* and *Azure CLI*.
- Marked the *Demonstration – Run Templates with PowerShell* slide as optional.

## PowerPoint 04, Administer Virtual Networks

- Reminder that **Configure Azure Firewall** was removed in the last update. Azure Firewall is not on the exam. A few slides are left at the end. The module is being retired and removed from the Learning Path.

## PowerPoint 05, Administer Intersite Connectivity

- During the last update, **Configure VPN Gateway** and **Configure ExpressRoute and Virtual WAN**, were marked optional. These sections have now been removed from the agenda and the slides hidden at the end. The modules are being retired and removed from the Learning Path.
- Moved the **Configure network routing and endpoints** module from Module 06. This gives this Module 05 two sections to cover. Adjusted the whiteboard slide.

### PowerPoint 06, Administer Network Traffic

- Moved the **Configure network routing and endpoints** module to Module 05. Module 06 now focuses on Load Balancer, Azure Application Gateway, and Network Watcher.
- Added a demonstration for the Load Balancer.
- Added a demonstration for the Azure Application Gateway.

### PowerPoint 07, Administer Azure Storage

- Reminder **Azure File Sync** was removed. There are a few slides left at the end. The Learn content still covers this for our self-paced users.

### PowerPoint 08, Administer Virtual Machines

- Removed the **Configure Virtual Machine Extensions** section. This is no longer on the exam. Slides relocated to the end.
- Removed the **Demonstration: Connect to Linux VMs**. This should be part of the creation of a virtual machine demonstration. That is a good time show either RDP, SSH, or Bastion.

### PowerPoint 09, Administer PaaS Compute Options

- The **Administer PaaS Compute Options whiteboard** slide graphic was changed. Added ACA.
- Removed Azure Kubernetes Service from the agenda. The slides are at the end if you still wish to cover them.
- Azure Container Apps is new to the certification. In the **Configure Azure Container Instances** section, added an **Implement Azure Container Apps** slide. Also, added a demonstration. Didn't change the Learn content. There is an entire Learn module on this topic, [Implement Azure Container Apps - Training | Microsoft Learn](#).

### PowerPoint 10, Administer Data Protection

- Reworked the demonstration slides.

### PowerPoint 11, Administer Monitoring

- Reworked the demonstration slides.



## Update – 5 May 2023

### GitHub Labs

- The Administrator password has been removed from the JSON parameter template files. This is because of continuing security escalations for compromised virtual machines. Students will now be prompted to provide a password. This affects Lab 4-7, 10, and 11.

### All PowerPoint presentations

- Reviewed the Summary and Resources slide to ensure the latest Learn modules are referenced.
- On the whiteboard slides, put the questions in the Notes area. This gives more room for the whiteboard diagram.
- Changed screenshots and made minor bullet changes. Some of the more important changes are listed below.
- For each Agenda slide reviewed and updated the appropriate certification objectives in the Notes area.

### PowerPoint 00, Introduction

- Changed the *Student Exercises* placeholder slide (slide 13) to be more generic without a reference to Azure passes. You will want to adjust this slide to your lab hoster's environment.
- Updated the *Additional resources* slide, slide 14.

### PowerPoint 01, Administer Identity

- Moved the *Compare AD DS to Azure Active Directory* up one slide to follow the *Describe Azure Active Directory Benefits and Features* slide. This seems more logical. Did not change the Learn content order.
- Swapped the *Create User Accounts* graphic with the *Manage User Accounts* graphic.

### PowerPoint 02, Administer Governance and Compliance

- Changed slide 6, *Identity regions*, to 60+ regions.
- Changed the title on slide 11 to *Determine Service Limits and Quotas*. Adjusted the bullet to point out this is a subscription quota. Did not change the Learn content title.
- Moved the "Resource locks can be applied at any level." bullet to *Create an Azure Resource Hierarchy*, slide 12.
- Reworked the *Create Azure Policies* graphic, slide 19.
- Moved the four slides showing the Azure Policy demonstration steps to the end of the deck. These are now slides 40-43.
- Moved some Azure Resource Manager extra slides from PPT 03 to this module, slides 44-46.

### PowerPoint 03, Administer Azure Resources

- Added a code example to the *Consider Azure Bicep Files* slide. In the title, changed *Templates* to *Files*.

### PowerPoint 04, Administer Virtual Networks

- Marked **Configure Azure Firewall as optional**. This is not covered in the certification and is included in the AZ-700 exam, Designing and Implementing Microsoft Azure Networking Solutions. The slides are left in place in case your audience wants to discuss.
- Moved the *Create virtual networks* slide up one slide ahead of the *Create subnets* slide. This seems more logical, slides 7 and 8. Did not change the Learn content order.
- Updated the screenshot on *Create Public IP Addresses*, slide 10.
- Updated the screenshot on *Create NSG rules*, slide 20.

### PowerPoint 05, Administer Intersite Connectivity

- Marked **Configure VPN Gateway as optional**. This is not covered in the certification and is included in the AZ-700 exam, Designing and Implementing Microsoft Azure Networking Solutions. The slides are left in place in case your audience wants to discuss.
- Marked **Configure ExpressRoute and Virtual WAN optional**. This is not covered in the certification and is included in the AZ-700 exam, Designing and Implementing Microsoft Azure Networking Solutions. The slides are left in place in case your audience wants to discuss.
- Since this module now only has Virtual Network Peering, which has a lab, you may want to combine it with either the previous or following module.

### PowerPoint 06, Administer Network Traffic

- Updated the *Create Load Balancer Rules* slide. Removed the screenshot and added a conceptual diagram instead.
- Deleted the *Create Backend Pools* slide.
- Removed extra PPT slides at the end of the presentation showing a custom routing example.

### PowerPoint 07, Administer Azure Storage

- Updated the *Secure Storage Endpoints* screenshot, slide 14.
- Updated the *Create Scale Sets*, slide 23, screenshot.
- Moved the detailed *File Sync* slides (2 each) to the end of the presentation. File Sync is not covered in the certification.
- Moved the *Create virtual machines in the portal* slide to the end of the presentation. This is covered in the demonstration.

### PowerPoint 08, Administer Virtual Machines

- Updated the graphic on the *Review Cloud Services Responsibility*, slide 6.

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- Change to 70+ regions on the *Plan Virtual Machines* slide, slide 7.
- Updated the screenshot on *Create Scale Sets*, slide 23.

### PowerPoint 09, Administer PaaS Compute Options

- Updated the *Create an App Service* screenshot, slide 15.
- Updated the *Compare Containers to Virtual Machines* graphic to include the Docker Engine, slide 25.
- Marked the *Configure AKS Scaling to ACI* slide as optional, slide 38. The slide is hidden.

### PowerPoint 10, Administer Data Protection

- Updated the *Manage Soft Delete* slide. The soft delete number of days can be extended beyond 14 days, although it will have a fee.

### PowerPoint 11, Administer Monitoring

- Nothing of significance