70-534 Architecting Azure Solutions Exam Preparation

Key Information

Q: Do I need to do all the labs?
A: No, however, as you do more labs, you strongly increase your likelihood of passing the exam! Target minimum of 2-3 per session, maybe a couple more for the big target areas (20-25% topics)

- **Videos of the NYC event on 6/2017 will be made available online soon; a link will be posted here.**
- **Mark Grimes @ MSFT Certification Exam Overview 70-534** https://mva.microsoft.com/en-US/training-courses/certification-exam-overview-70534-architecting-microsoft-azure-solutions-17406
- **Some Lab links you may have to click on "How To" in the left Navigation pane to get to the step-by-step**

#1 Design Azure Resource Manager (ARM) networking (5–10%)

- **Create a virtual network using PowerShell** https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-create-vnet-arm-ps
- **Create a virtual network using the Azure CLI** https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-create-vnet-arm-cli
- **Design Azure virtual networks - Extend on-premises**
- **Create network security groups using the Azure portal** https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-create-nsg-arm-pportal
- **Create network security groups using PowerShell** https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-create-nsg-arm-ps
- **Describe Azure VPN and Express Route architecture and design**

#2 Secure resources (20–25%)

- **Lab Azure AD** https://github.com/dstolts/70-534/blob/master/Labs/AzureADLab.pdf
- **Lab Creating an Azure AD B2C and Connect an Application** https://github.com/dstolts/70-534/blob/master/Labs/AzureADB2CLab.pdf

#3 Design an application storage and data access strategy (5–10%)

- **Azure Storage Samples** https://azure.microsoft.com/en-us/resources/samples/?service=storage
- **Table Labs for .NET** https://github.com/Azure-Samples/storage-table-dotnet-getting-started
- **Blob Labs for .NET**
  https://azure.microsoft.com/en-us/resources/samples/storage-blob-dotnet-getting-started/
  https://github.com/Azure-Samples/storage-blob-dotnet-getting-started
- **SAS Labs** https://azure.microsoft.com/en-us/resources/samples/storage-dotnet-sas-getting-started/
- **Azure Storage Scalability and Performance Targets (READ/UNDERSTAND)**
  https://docs.microsoft.com/en-us/azure/storage/storage-scalability-targets

- **SQL Database Videos** https://azure.microsoft.com/en-us/resources/videos/index/?services=sql-database

#4 Design advanced applications (20–25%)

- **Design Advanced Applications** https://github.com/dstolts/70-534/blob/master/Labs/AdvancedAppsLab.pdf

#5 Design Azure Web and Mobile Apps (5–10%)

- **Creating and Managing a Web App & Services** https://github.com/dstolts/70-534/blob/master/Labs/WebAppsLab.pdf
- **Creating and Managing a Mobile App** https://github.com/dstolts/70-534/blob/master/Labs/MobileAppsLab.pdf

Azure AD

- **Creating and Managing a Mobile App** https://github.com/dstolts/70-534/blob/master/Labs/MobileAppsLab.pdf
- **.Net Calling a web API in a web app using Azure AD and OpenID Connect** https://azure.microsoft.com/en-us/resources/samples/active-directory-dotnet-webapp-webapi-openidconnect/
- **.NET Integrating a web app with Azure AD using WS-Federation** https://azure.microsoft.com/en-us/resources/samples/active-directory-dotnet-webapp-wsfederation/
- **Java Integrating Azure AD into a Java web application** https://azure.microsoft.com/en-us/resources/samples/active-directory-java-webapp-openidconnect/
- **Java Calling the Azure AD Graph API in a web application** https://azure.microsoft.com/en-us/resources/samples/active-directory-java-graphapi-web/
- **Node.js Integrating Azure AD into a NodeJS web application** https://azure.microsoft.com/en-us/resources/samples/active-directory-node-webapp-openidconnect/
- **Node.js Securing a web API with Azure AD** https://azure.microsoft.com/en-us/resources/samples/active-directory-node-webapi/

Lab Creating an Azure AD B2C and Connect an Application

This lab provides the links to create an Azure AD B2C directory, a sample application and connect that application to the directory for authentication. There are several choices for the application so you can choose the one that makes the most sense to you.

- **Create an Azure AD B2C directory**
  Below is a link to tutorial on how to create an Azure AD B2C directory from the azure documentation site:
  https://docs.microsoft.com/en-us/azure/active-directory-b2c/active-directory-b2c-get-started
  - **Note: Don't skip Step 4 about how to link the Azure AD B2C tenant or you won't be able to see all the settings.**
  - Once you have the directory, tenant and linking done, you can now choose a tutorial to create an application to use that directory.

- Don't worry - all tutorials use samples from github – so you won't have to type all the application code.

- **iOS Application Tutorial:** Azure AD B2C: Sign-in using an iOS application https://docs.microsoft.com/en-us/azure/active-directory-b2c/active-directory-b2c-devquickstarts-ios
- **Android Application Tutorial:** Azure AD B2C: Sign-in using an Android application https://docs.microsoft.com/en-us/azure/active-directory-b2c/active-directory-b2c-devquickstarts-android
- **Node.js Web API Tutorial:** Azure AD B2C: Secure a web API by using Node.js https://docs.microsoft.com/en-us/azure/active-directory-b2c/active-directory-b2c-devquickstarts-api-node
- **.NET Web App Tutorial: Azure AD B2C: Sign-Up & Sign-In in a ASP.NET Web App** https://docs.microsoft.com/en-us/azure/active-directory-b2c/active-directory-b2c-devquickstarts-web-dotnet-susi
- **.NET Web API Tutorial:** Azure Active Directory B2C: Build a .NET web API https://docs.microsoft.com/en-us/azure/active-directory-b2c/active-directory-b2c-devquickstarts-api-dotnet
- **Windows Desktop Tutorial:** Azure AD B2C: Build a Windows desktop app https://docs.microsoft.com/en-us/azure/active-directory-b2c/active-directory-b2c-devquickstarts-native-dotnet

#6 Design a management, monitoring, and business continuity strategy (20–25%)

- **Azure IaaS monitoring with OMS** https://github.com/dstolts/70-534/blob/master/Labs/06-Monitoring-Azure-Automation.pdf
- **Create an alert rule on a metric with the Azure portal** https://github.com/dstolts/70-534/blob/master/Labs/06-Monitoring-Create-Alerts.pdf
- **Azure Automation Account** https://github.com/dstolts/70-534/blob/master/Labs/06-Monitoring-Azure-Automation.pdf
- **Replicate Hyper-V virtual machines (without VMM) to Azure using Azure Site Recovery with the Azure portal** https://docs.microsoft.com/en-us/azure/site-recovery/site-recovery-hyper-v-site-to-azure
- **Replicate physical machines to Azure by using Site Recovery** https://docs.microsoft.com/en-us/azure/site-recovery/site-recovery-physical-servers-to-azure
- **My first graphical runbook** https://docs.microsoft.com/en-us/azure/automation/automation-first-runbook-graphical
- **My first PowerShell runbook** https://docs.microsoft.com/en-us/azure/automation/automation-first-runbook-textual-powershell
- **My first PowerShell Workflow runbook** https://docs.microsoft.com/en-us/azure/automation/automation-first-runbook-textual
- **Getting Started with Azure Automation DSC**
  Desired State Configuration (DSC) https://docs.microsoft.com/en-us/azure/automation/automation-dsc-getting-started

- **How Azure Backup Works in 10 mins** https://docs.microsoft.com/en-us/azure/backup/backup-try-azure-backup-in-10-mins
- **Microsoft Azure Backup Server v2** *Docs:* https://azure.microsoft.com/en-us/blog/announcing-microsoft-azure-backup-server/ *Download:* https://www.microsoft.com/en-us/download/details.aspx?id=55269
- **AzureRM.RecoveryServices.Backup (PowerShell)** https://docs.microsoft.com/en-us/azure/backup/backup-azure-vms-automation

#7 Architect an Azure Compute infrastructure (10–15%)

- **Deploy Templates – Portal** https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-template-deploy-portal
- **Resize a Windows VM** https://docs.microsoft.com/en-us/azure/virtual-machines/windows/resize-vm
- **Creating and Updating Resources in one ARM Template based deployment:** https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-manager-update
- **Share state between linked templates:** https://docs.microsoft.com/en-us/azure/azure-resource-manager/best-practices-resource-manager-state
- **Patterns for deploying resources:** https://docs.microsoft.com/en-us/azure/azure-resource-manager/best-practices-resource-manager-design-templates
- **Deploy resources with Resource Manager templates and Azure PowerShell** https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-template-deploy