# Security



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## Overview

# What you need to think about to be successful

#### **RBAC**

- Contributor and Reader roles

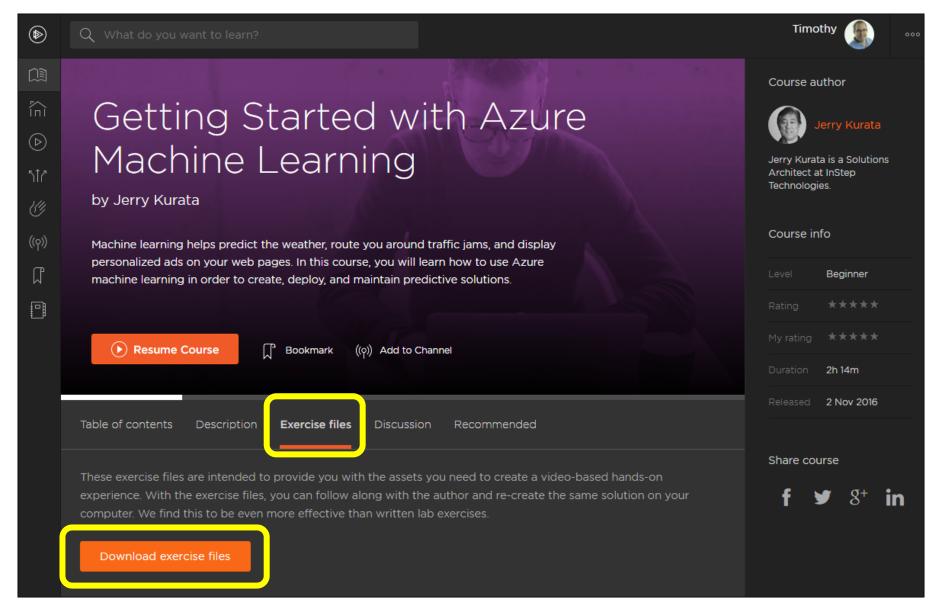
#### **Activity logs**

- Who is doing what in Azure, and when

**Azure Security Center** 



### Exercise Files





# What You Need to Think About to Be Successful



# Things to Keep in Mind Regarding Azure Security

Azure conforms with many compliance certs

You can get
Microsoft's
permission to run
pen tests

Control routing behavior

Leverage defense in depth

Consider virtual network security appliances

**Enable Azure Security Center** 



# Role-Based Access Control (RBAC)



# Access Concepts



**Least Privilege** 

Limiting resource access to what is necessary and no more

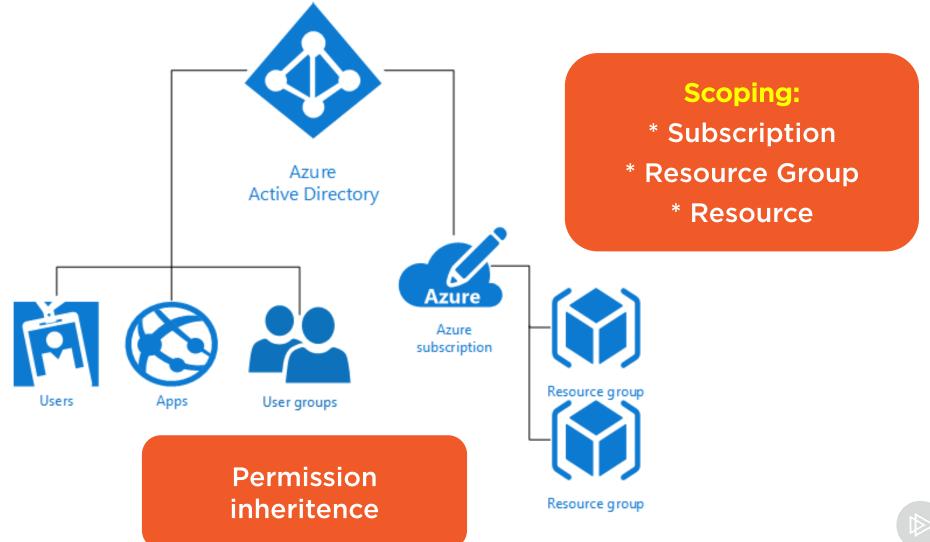


**Role-Based Access Control (RBAC)** 

Regulating resource access based on job role



## Azure RBAC





### Roles

#### Owner

••Full access

#### Contributor

••Full resource access but no grant/revoke privileges

#### Reader

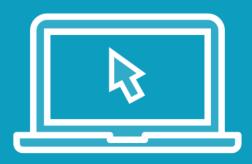
Read-only resource access

#### Custom

••Defined programmatically with PowerShell, CLI, or REST API



## Demo



1

Show Azure compliance page

Make an Azure AD Reader at the resource group level

#### **Show RBAC**

- Azure CLI
- PowerShell



# Activity Logs



# **Azure Activity Logs**

Formerly known as "audit logs" or "operational logs"

Report control-plane events in your subscriptions

Separate and distinct from diagnostic logs

Great flexibility in query, report, and export



## Demo



2

Portal experience
mention Log Analytics
Do PowerShell log access



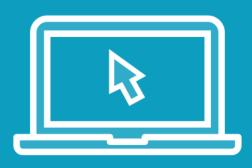
# Azure Security Center



# Dogfooding Respond **Protect** Detect \* BRUCE\*



## Demo



3

Visit Security Center Pricing page

Test the service in the portal

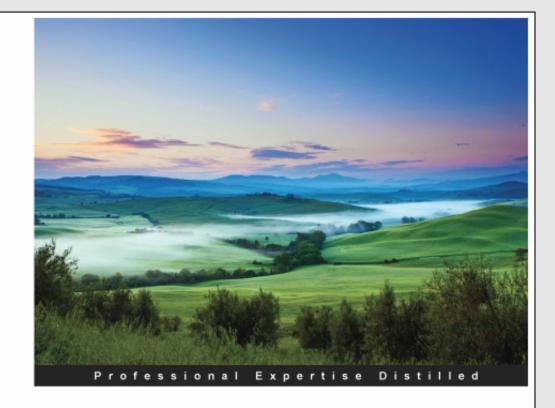


# For Further Learning

Play by Play: Azure Security (Mark Russinovich) Excellent insight into Microsoft's Azure security practices

Creating a DMZ in Azure (Gavin McShera) Nice implementation here





### **Microsoft Azure Security**

Protect your solutions from malicious users using Microsoft Azure Services

**Roberto Freato** 



## Book Reference

Published April 2015

See Chapter 1, "The Fundamentals of Security Standards"



# Summary



# Besides least privilege, encryption is mandatory

 Azure Disk Encryption for Windows and Linux VMs

Redundancy is to high availability, as isolation is to access control

**Next module: Monitoring** 

