# Assign Role-based Access Control



Dan Lachance
linkedin.com/in/danlachance



#### Introduction



**Understanding Microsoft Azure RBAC** 

Microsoft Azure built-in and custom roles

Assign built-in and custom roles using the CLI tools

Test RBAC role assignments



# Understanding Microsoft Azure RBAC



# Role-based access control (RBAC) facilitates Microsoft Azure delegated resource administration



### Role-based Access Control

Roles organize related resource permissions together

More than 60 built-in roles

Roles vary depending on the specific resource

- E.g. Storage accounts have roles that differ from virtual machine instances

Custom roles can also be created



## Role-based Access Control

#### Roles are applied to a scope

- Management groups
- Subscription
- Resource Group
- Individual resource

#### Roles are assigned to

- Users
- Groups
- Service principal



#### Role Inheritance

A user (uone) is assigned the Virtual Machine Contributor role at the subscription level

Uone inherits the role for Uone inherits the role for Resource Group 1

Resource Group 2



# Microsoft Azure Built-in and Custom Roles



#### Microsoft Azure Built-in Roles

Role Name	Description
Owner	Manage resources and resource access
Contributor	Manage resources but not resource access
Reader	Read-only access
Storage Blob Data Reader	Specific to storage accounts
SQL DB Contributor	Manage, but not access, SQL databases
Virtual Machine Contributor	Manage, but not access, virtual machines



#### Custom Roles

When built-in roles do not satisfy management delegation requirements

#### **Built using**

- PowerShell
- CLI
- REST API

**Custom roles after creation** 

- Same drop-down lists with built-in roles





Assign built-in Microsoft Azure roles





# Create a custom role using Microsoft PowerShell





# Create a custom role using the Microsoft Azure CLI





Assign a custom role using the Microsoft Azure portal and verify that it is working



## Summary



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