Assessing and Planning Microsoft Azure Migration

PREPARING FOR ASSESSMENT



Michael J. Teske
AUTHOR EVANGELIST, PLURALSIGHT
@teskemj becausesecurity.com

Module Overview



Identify migration strategies
Identify assessment tools
Identify migration tools

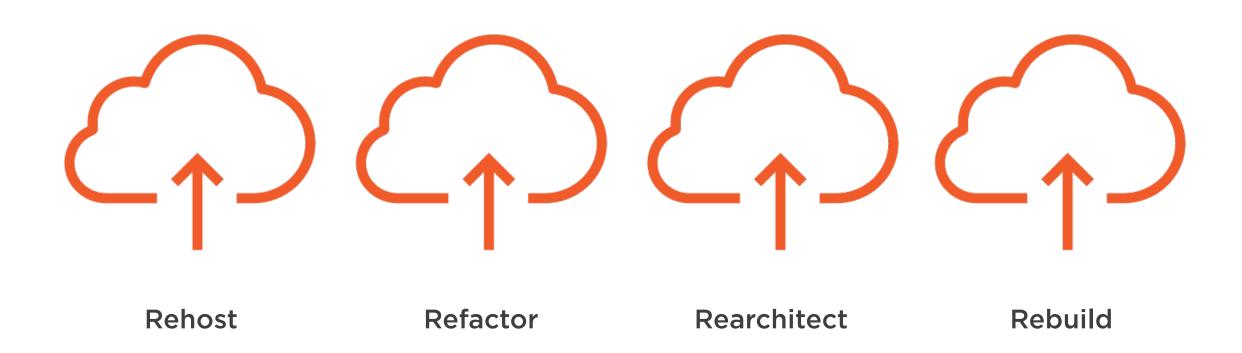


Exercise Files





Identify Migration Strategies



Rehost



Move quickly to the cloud

- a.k.a. "lift and shift"

Want to move an app with minimal changes

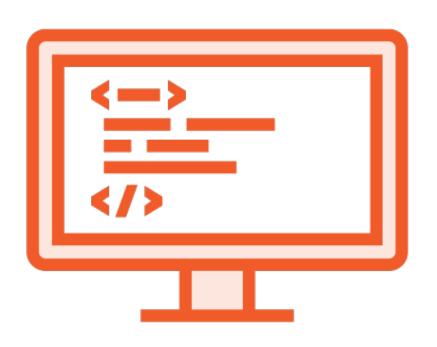
On-prem SQL to Azure SQL Managed instance

Able to leverage laaS scalability

Apps don't need immediate changes



Refactor



Repackaging of apps with minimal changes

Changing of a database vendor

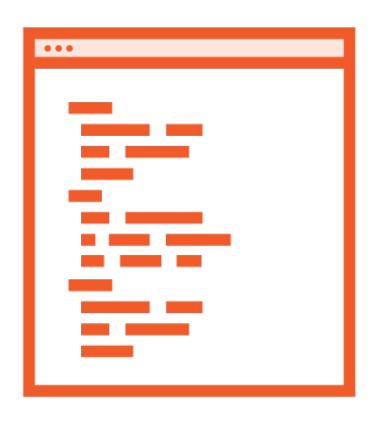
- Switching to MySQL Managed Instance

Moving to platform-as-a-service

- Azure SQL DB



Rearchitect



Migrate existing apps to an Azure solution

- Azure App Service
- Azure Kubernetes Service

Modifying app functionality and code to optimize cloud scalability



Rebuild



Rebuild an app from scratch using Azure technologies



Identify Assessment and Migration Tools









]

Data Migration Assistant/Azure Database Migration Service



Azure Site Recovery



Azure Migrate



Used to assess on-premises VMware workloads

Provides sizing and cost estimates for each workload

Identifies affecting dependencies

Requires the Azure collector appliance



Azure Migrate Limitations



Can only assess on-premises VMware virtual machines

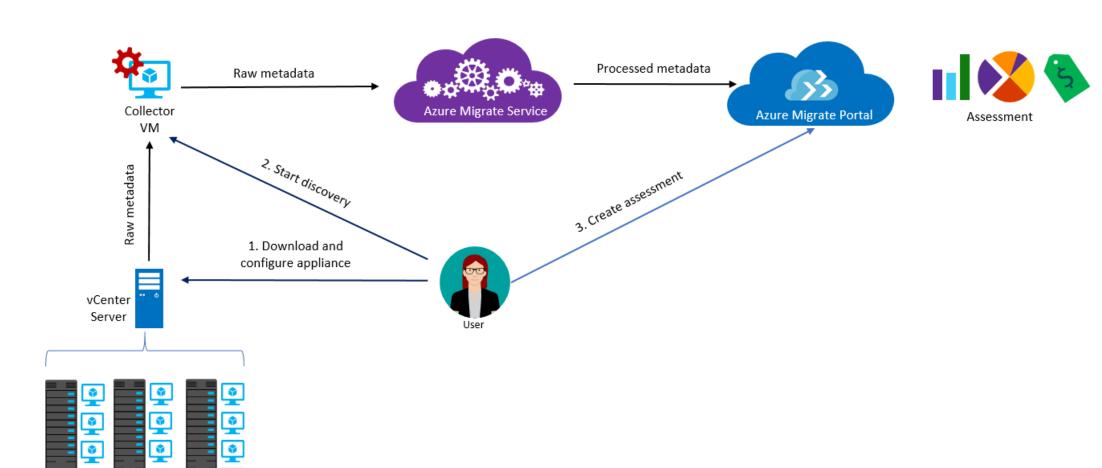
- VMs must be managed by vCenter 5.5 or greater

Support for Hyper-V and Physical Servers is on the roadmap

Can only create an Azure Migrate project in West Central or East US Regions



Azure Migrate







Service Map



Azure Solution

Automatically discover servers and map dependencies in real time

Can plan and accelerate migrations

- Map interdependent systems
- Assess configuration and capacity



Data Migration Assistant and Azure Database Migration Service



Assess on-premises SQL Server instances

Discover compatibility issues of migrating to Azure SQL database

Detect partially supported and unsupported features

Migrate on-premises SQL instances



Azure Site Recovery



Migrate from on-premises to Azure

- VMware
- Hyper-V
- Physical

Migrate from AWS to Azure

- Treats AWS instances no different than physicals



Demo



Explore Azure Docs for compatibility, resources, and road maps

Locate necessary tools for assessment

- Azure Migrate
- Service Map
- Data Migration Assistant
- Database Migration Service
- Azure Site Recovery



Summary



Identified migration strategies

- Rehost
- Refactor
- Rearchitect
- Rebuild

Explored and located resources for migration

- Azure Migrate
- Service Map
- Data Migration Assistant
- Azure Site Recovery

