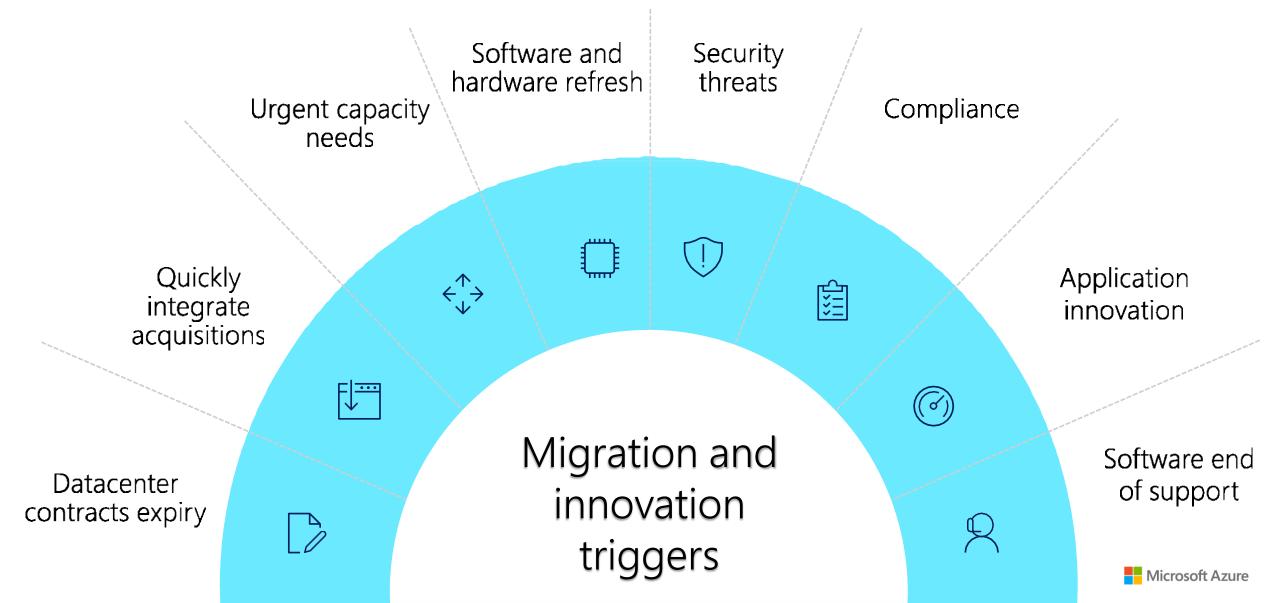
Azure Migrate A deep journey to the Cloud



Introduction

What's driving migrations to Azure?



Migration Journey









Create Cloud Migration Plan Involve Stakeholders Calculate your TCO Discover and Evaluate Apps

Define Strategy:

- Rehost
- Refactor
- Rearchitect
- Rebuild

Choose and deploy appropriate tools for migration:

- Azure Migrate (as central preferred tool)
- Azure Site Recovery
- .

- Manage and monitor cloud costs with Azure Cost Management
- Save with Azure Offers
 (Azure Hybrid Benefit and Azure Reservations)
- Re-invest to do more (take advantage of the capacity and capabilities of the cloud and all new services and features)
- Get industry leading security (Security Center, Threat Protection...)
- Protect your data in the cloud (Azure Backup, Azure Site Recovery, Geo-redundancy...)
- Monitor your cloud health (Azure Monitor, Log Analytics, Application Insights...)

What is Azure Migrate?



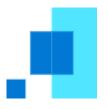
Extensible approach across Azure and popular ISV assessment and migration tools.



Integrated experience across all phases of your migration, with end-to-end progress tracking for server and database migrations.



Assessment and migration of largescale VMware, Hyper-V, and physical servers and multiple database targets, including Azure SQL Database and managed instances.



Multiple options for migrating web applications and offline data from onpremises to Azure.

Unified migration platform

Range of tools

Assessment and migration

Key Migration Scenarios



Windows and Linux

VMware, Hyper-V,
Physical, Other Clouds



Virtual Desktop



SQL and other databases



Web apps



Data

Integrated Tools

Integrated discovery, assessment, and migration capabilities

Tool	Assess/Migrate	Details
Azure Migrate: Server Assessment	Assess servers	Discover and assess on-prem VMware VMs, Hyper-V VMs,and physical servers
Azure Migrate: Server Migration	Migrate servers	Migrate VMware VMs, Hyper-V VMs, physical servers, as well as other virtualized machines, and public cloud VMs, to Azure.
Database Migration Assistant (DMA)		
Database Migration Service (DMS)		

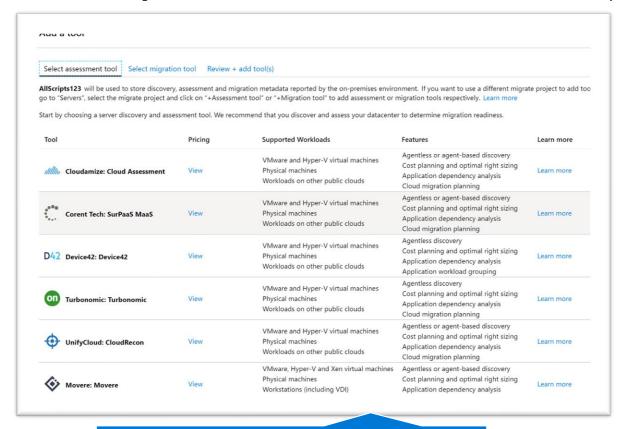
Integrated Tools

Integrated discovery, assessment, and migration capabilities

Tool	Assess/Migrate	Details
Movere		
Web App Migration Assistant		Use the Azure App Service Migration Assistant to assess on- premises websites for migration to Azure App Service. Migrate .NET and PHP web apps to Azure, using Azure App Service Migration Assistant.
Azure Data Box		Use Azure Data Box products to move large amounts of data offline to Azure.

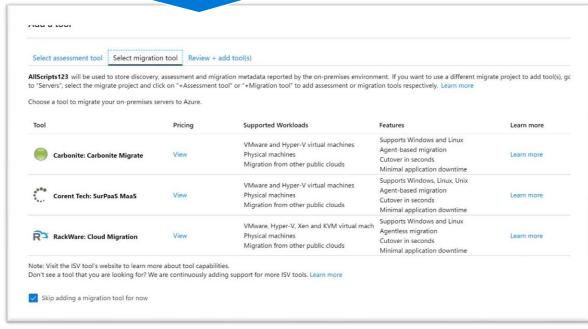
ISV Integration

Powered by Microsoft and extensible with ISV partner tools



Assessment Tools





Assessment & Migration

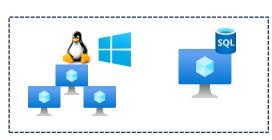
Migrate servers, databases, web apps, and

more



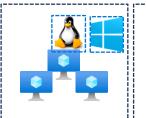


VMware tools



Azure VMware Solutions









Server Migration Database Migration











SQL

App Service Azure SQL MI





Microsoft Hyper-V

Assess and Migrate Servers











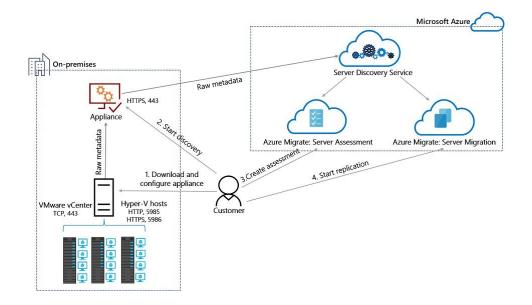


- 1. Deploy the Azure Migrate appliance
- 2. Appliance starts discovery and analyzing performance of the on premises Windows or Linux servers
- 3. Group servers and perform assessments to determine Azure suitability, right-sizing information, dependency mapping, and cost planning
- 4. Start migrating servers to Azure with the combined appliance Test migration and perform zero data loss cut over to Azure

Assessment for Hyper-V VMs

Hyper-V

- Set up an Azure Migrate project.
- Set up and register an Azure Migrate appliance (VHD).
- Start continuous discovery of on premises VMs.
- Group discovered VMs and assess the group.
- Review the assessment.



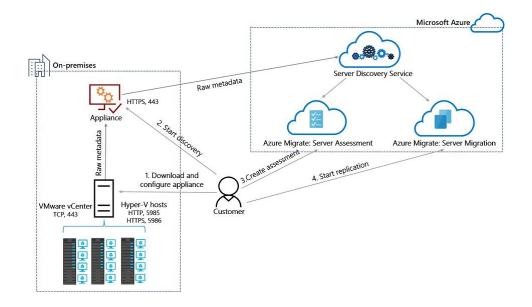
Assessment for VMware VMs

VMware – AGENTLESS

- Prepare VMs for migration.
- Deploy the Azure Migrate appliance as a VMware VM using an OVA file.
- Add the Azure Migration Server Migration tool.
- Discover VMs you want to migrate.
- Start replicating VMs.
- Run a test migration to make sure everything's working as expected.
- Run a full VM migration.

VMware – AGENT

- Set up the source environment, and deploy an Azure Migrate replication appliance for agent based migration.
- Set up the target environment for migration.
- Set up a replication policy.
- Enable replication.
- Run a test migration to make sure everything's working as expected.
- Run a full migration to Azure.



Assessment for Physical Servers

Physical

Can be used for assessing:

On premises physical servers
VMs virtualized by platforms such as Xen, KVM
Hyper V or VMware VMs
VMs running in private clouds
VMs running in public clouds such as AWS or GCP

Steps:

- Prepare Azure for migration with the Azure Migrate Server Migration tool.
- Check requirements for machines you want to migrate, and prepare a machine for the Azure Migrate replication appliance that's used to discover and migrate machines to Azure.
- Add the Azure Migrate Server Migration tool in the Azure Migrate hub.
- Set up the replication appliance.
- Install the Mobility service on machines you want to migrate.
- Enable replication.
- Run a test migration to make sure everything's working as expected.
- Run a full migration to Azure.

Azure Migrate – Assess and migrate databases

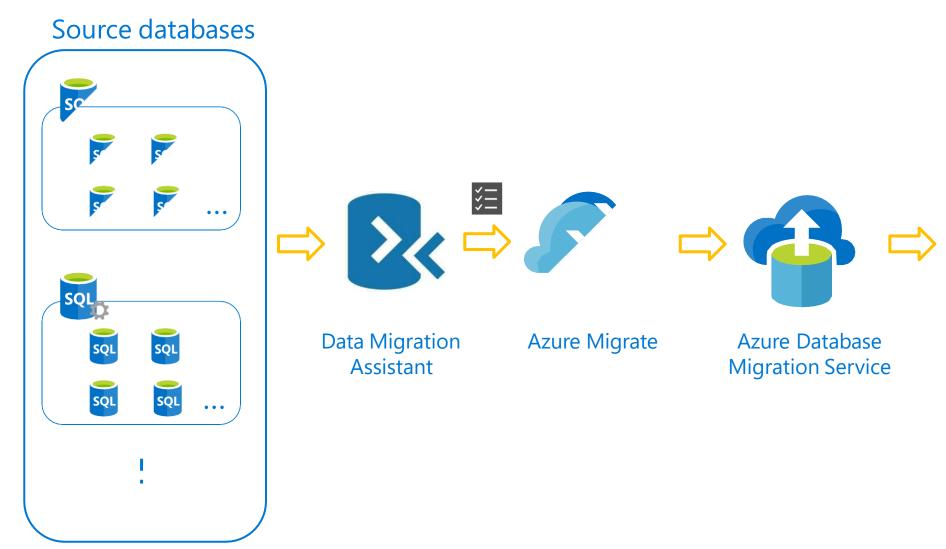




- Seamless, end-to-end solution for moving databases to the cloud from on premises and AWS RDS
- 2. Assessments across various database targets including Azure SQL Database and Managed Instance
- Achieve near-zero downtime as you migrate your business critical applications
- Migrate at scale from multiple sources to your target database

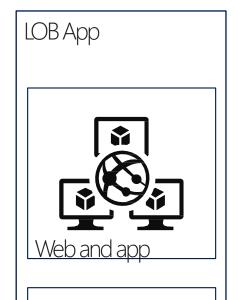


Migration Demo flow





Application migration – App Service and SQL MI

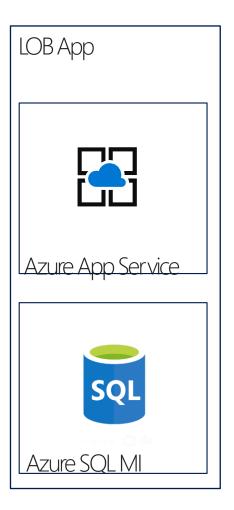




App Service Migration Assistant



Azure Migrate – Database Migration











Google Cloud





Multiple migration options

Move to App Service by redeploying code via your CI/CD pipeline, deploying a container, or using the migration tool.





Storage migration – Data Box

On prem storage data



Online: Data Box Edge and Data Box Gateway



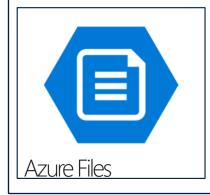
Offline:

Data Box Disk, Data Box, Data Box Heavy















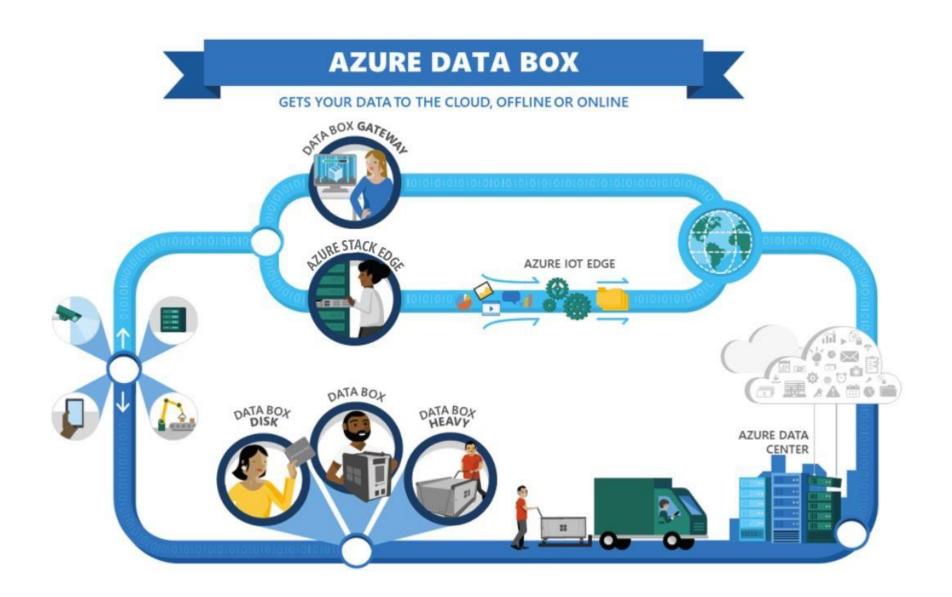


Google Cloud





Storage migration – Data Box



Best Practices for creating assessments

Assessment types

- Performance Based
- As-is-on-premises

Recalculate assessments

- Assessments are point in time snapshots
- Recalculate assessments before migration

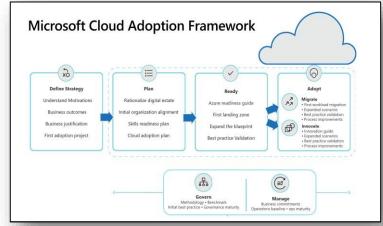
Confidence Ratings

- Confidence Rating depends on percentage of data points (for Performance Based)
- The more data points available, higher the confidence rating

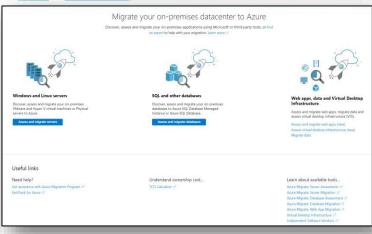
Optimization

Azure Migration—process, product, and program

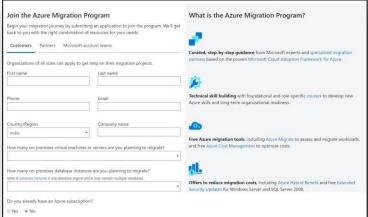










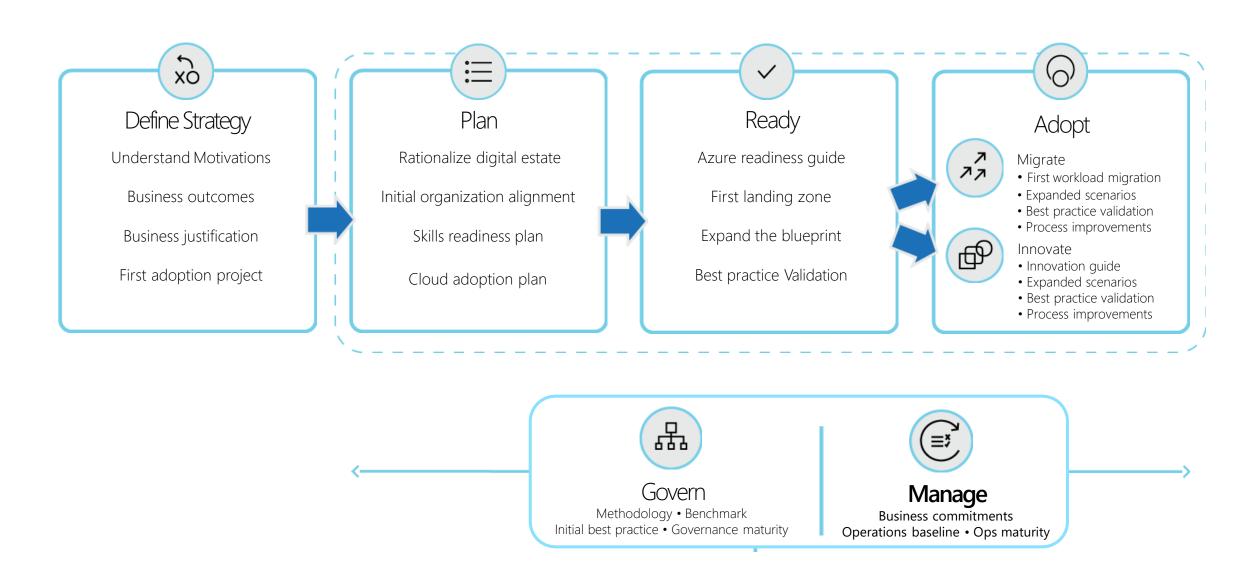


Microsoft Cloud Adoption Framework Azure Migrate

Azure Migration Program



Microsoft Cloud Adoption Framework for Azure



Demo

Server Tools

	Assessment		Migration
First Party	Azure Migrate: Server AssessmentMovere	First Party	 Azure Migrate: Server Migration
ISV Tools	CloudamizeCorent TechnologyDevice42TurbonomicUnifycloud	ISV Tools	Corent TechnologyCarboniteRackware