



Azure Migrate

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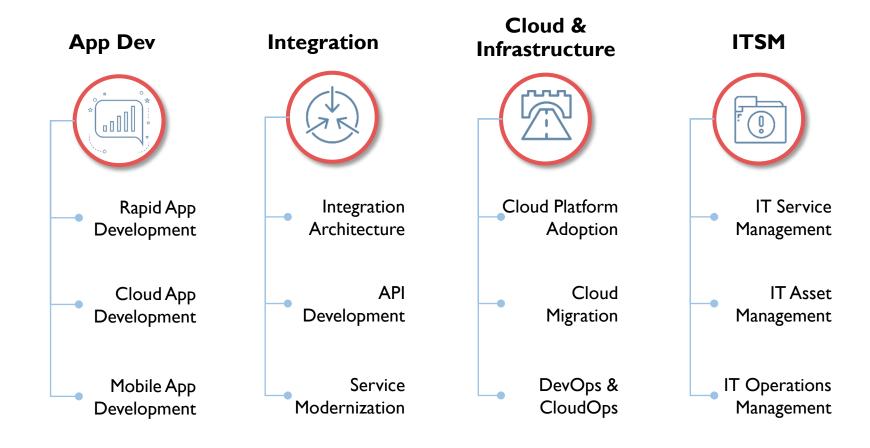
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Overview of Migration





- What is a Migration?
- What are the factors considered during Migration?
 - Goal Reduce cost and increase flexibility
 - Spending model CapEx to OpEx
 - Where to migrate? Public, Private or Hybrid
 - How to migrate? Migration roadmap strategy for enterprise





Migrate to Azure - Benefits





- Highly Available, Reliable and Scalable IT Infrastructure
- Utility Based (Pay-As-You-Go) Billing Model
- Leverage Elasticity to support load bursts
- Azure Hybrid Benefits
 - Save up to 40% on VM licenses
 - Convert or reuse existing licenses
 - 3 Yrs. Security Updates for "Windows 2008 R2" and "SQL 2008 R2"

January 14, 2020
SQL Server 2008 and 2008 R2
July 9, 2019





6R's Approach







(Lift and Shift)
Zero Code and Min Config Changes

REFACTOR

(Lift and Modernize)
Min Code and Conf Changes

REARCHITECT

(Rewrite/Cloud Born)
Code and Technology change

REPLACE

Migrate to SaaS

RETAIN

Can not be Moved
Technology or Business Challenges

RETIRE

Application is not in use No Business Value



Migration – A Simpler Approach



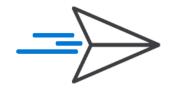


Discover



- Automated Workload and Data Discovery
- TCO and ROI Analysis
- Recommendation and Readiness Report
- Azure Migrate
- Data Migration Assistant (DMA)

Migrate



- Effortless Virtual Machine, App and Data Migration
- Dependency resolutions
- Data Migration Strategy
- Azure Site Recovery (ASR)
- Azure Database Migration Service

Optimize



- Continual health, and Performance Management
- Cost Optimization
- Spend vs Budget
- Operations Management Suite
- Azure Cost Management



Removing Barriers to Migrate





A new set of services and offers enables seamless migrations











Azure Migrate Azure Database Migration Service Azure Cost Management Azure Hybrid Benefit Azure Databox

(Free for All Customers)

(Free for All Customers)

(Free for All Customers)

Windows Server
SQL Server

Large Volume Storage Migration



Rehost - Lift and Shift





- Avoids the burden of owning on-premise servers
- Avoids the cost and risk of maintaining facilities /Data centres
- Lower your Cost by taking advantage of Cloud Infra
- Scale on Demand
- Zero Code and Min Configuration Changes





Azure Migrate



Azure Migrate - Overview



Provides Guidance, insights and mechanisms for Cloud Migration

- Discover and Assess on-premise Virtual Machines and Servers
 - 1500 VM's can be discovered in single discovery
 - Create multiple Migrate projects. (Up to 20 per Subscription)
- Build-in Dependency Mapping
- Intelligent right-sizing for Azure Virtual Machines
- Compatibility reporting with guidelines for remediating potential issues
- Migrate workloads through seamless virtual machine and server replication

Machines Assessments Groups
10 ♀ 3 ≒ 4 ⓓ

Requires conf... 8

Requires conf... 2

ssessments							
NAME		GROUP	GROUP		STATUS		CONFIDENCE RATING
assessment_4_24_2019_18_30_41		gabc-assess1	gabc-assess1		Ready (4/26/2019, 2:46:53 PM)		Not applicable
assessment_4_26_2019_13_34_33		uat3	uat3		Ready (4/26/2019, 1:37:34 PM)		****
assessment_4_26_2019_11_37_38		gabc-3 vm as	gabc-3 vm assessment		Ready (4/26/2019, 11:38:08 AM)		****
							-
NAME	MEMBER OF	DEPENDENCIES	CORES	MEMORY (MB)	DISKS	STORAGE (GB)	NETWORK ADAPTERS
VM 2008R2	gabc-assess1,uat3	Requires conf	4	4096	1	40	1
VM-02	gabc-assess1,ga	● View depend	4	4096	2	60	1
Ubantu Linux	gabc-assess1,ga	♥ View depend	1	2048	2	32	1
hitesh-vm01	gabc-assess1	Requires conf	2	4096	1	40	1
VM-Vcenter	gabc-assess1	Requires conf	2	4096	1	50	1
hitesh-vcenter a	gabc-assess1	Requires conf	2	10240	13	279	1
VMware vCenter	gabc-assess1	Requires conf	2	10240	13	279	1
VM-01	gabc-assess1,ga	♥ View depend	4	4096	1	100	1

2048

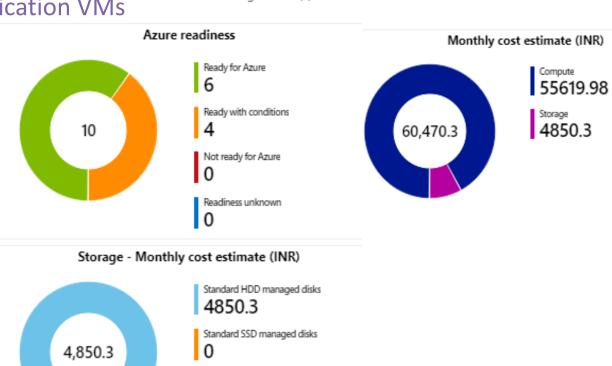


Azure Migrate – Discovery & Assessment





- Agentless Virtual Machine discovery through Virtual Appliance
 - Support for VMWARE vSphere and Hyper-V (In Private Preview)
 - Windows Server and Linux VMs
- Dependency mapping to ensure full visibility off application VMs
 - Understand all server and application connections
 - Discover unknown relationships to ensure through migration
- Intelligent right-sizing
 - Recommendations for Azure VM Sizes based on Utilization or
- Cost Analysis
 - Application Group cost analysis for budgeting
 - Region and Currency Specific
 - Enabled for Azure Hybrid Benefits for Windows Servers
- Azure Readiness
 - Deep Assessments of VMs to determine Azure Compatibility
 - Reporting on VM Readiness and Migration recommendations
 - Migration tool recommendations.



Migration project : GABC2019-Migrator

Confidence rating: Not applicable

Premium managed disks

0

: gabc-assess1

: Ready (Friday, April 26, 2019, 2:46:53 PM)

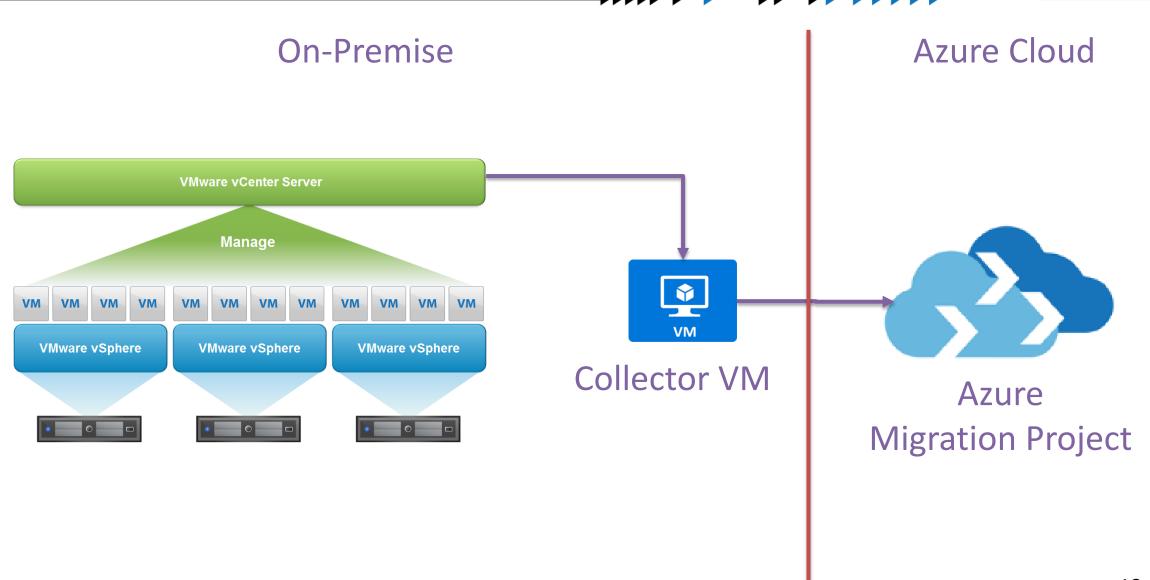
Group

Status



How it Works...



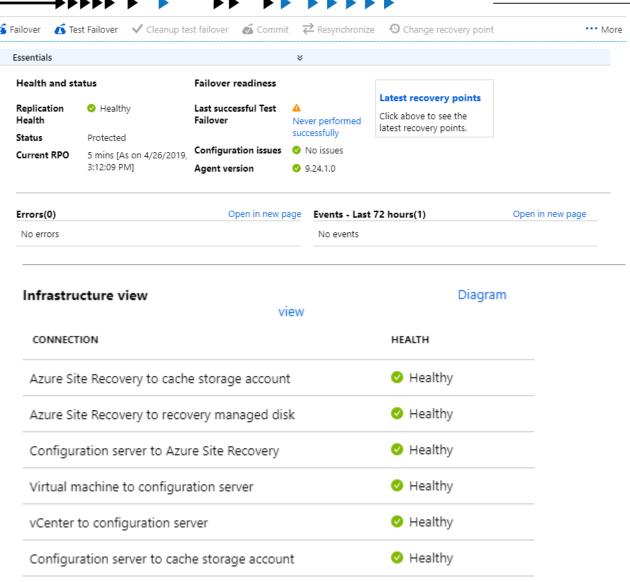




Azure Migrate – Replication (ASR)



- Flexible and powerful tool for Site Recovery (DR)
- Supports Replication to Azure within Azure Regions and from On-Premise (VMWare, Hyper-V, Physical).
- Can be used as Migration tool due to the powerful replication capabilities
- Built-in Migration testing to ensure expected results
- Warm Migrations with no long outages
- Advanced Monitoring and Analytics enables you to manage Performance and Utilization
- Built into Azure Migrate*





Azure Partner Tools









































Demo

Let's see in Action...



Azure Migrate – Demo





- Consider a simple application which is hosted on VMWARE (On-Prem) as follows.
 - VM1 (Application) Windows Server 2012 R2 (IIS 8.x)
 - VM2 (Database) Windows Server 2012 R2 (SQL Server 2012 R2)
- Create Azure Migrate Project and Perform Discovery and Assessment
- Analyze Dependency Mappings
- Migrate Virtual Machines to Azure using ASR







Azure Migrate - Limitations





- Assess only on-premises VMware Virtual Machines managed by V-Center(version 5.5,6.0,6.5 or 6.7)
- Support for Hyper-V is in preview with production support (using VHD's we can create VM's)
- Assessing Physical servers Partner tools





Thank you

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