



# Azure Migrate

Project title

Author name

Date

# Agenda

1

Assessment  
Overview

2

Business  
Case

3

Transformation  
Considerations

4

Additional Azure  
opportunities

# Assessment Overview - Key Metrics

## Business objectives

### Sample:

Data collection was performed at a secondary site where Contoso sought more information on scope, scale, and cost estimation for a possible migration of servers to Azure due to the lease expiration of the secondary site.

## Key findings

### Sample:

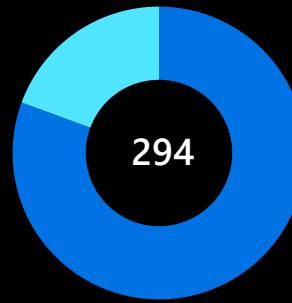
- Contoso is also considering other cloud providers
- Lease expiration of secondary site is Q4 2022
- Interested in PaaS for cost estimation but will likely migrate into IaaS and then consolidate after migration is completed

\*SQL Server discovery and assessment are available only for Windows Server

\*\*ASP.NET discovery and assessment is only available for Windows Server running in VMware environment

\*\*\*Includes servers with SSRS, SSIS, and SSAS

## Servers



**237** Windows Servers

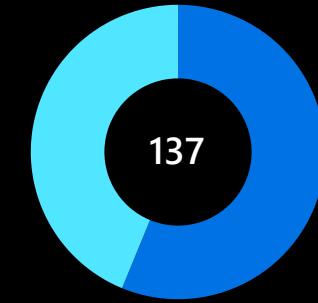
**57** Linux Servers

**60** Servers with ASP.NET Application on IIS Webserver

**79** Servers with SQL Server and other SQL Services\*\*\*

**110** Other workloads and Windows VMs

## Workloads



**77** Servers with SQL Server\*

**133** SQL Server Instances

**10K** SQL Server Databases

**0.34** Total Storage (TB)

**60** Servers with ASP.NET Applications\*\*

**60** Number of IIS Web Servers

**115** Number of Applications

Average CPU utilization at P95(%)

**29.46**

Average RAM utilization at P95(%)

**23.30**

Azure Region

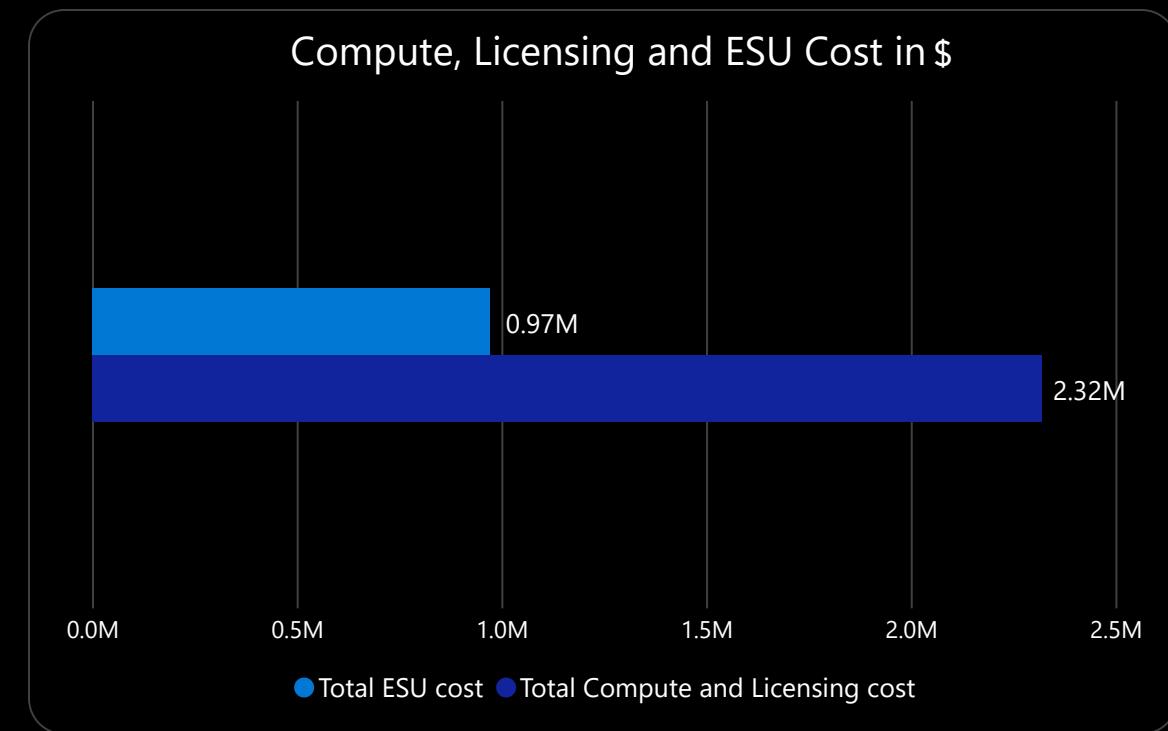
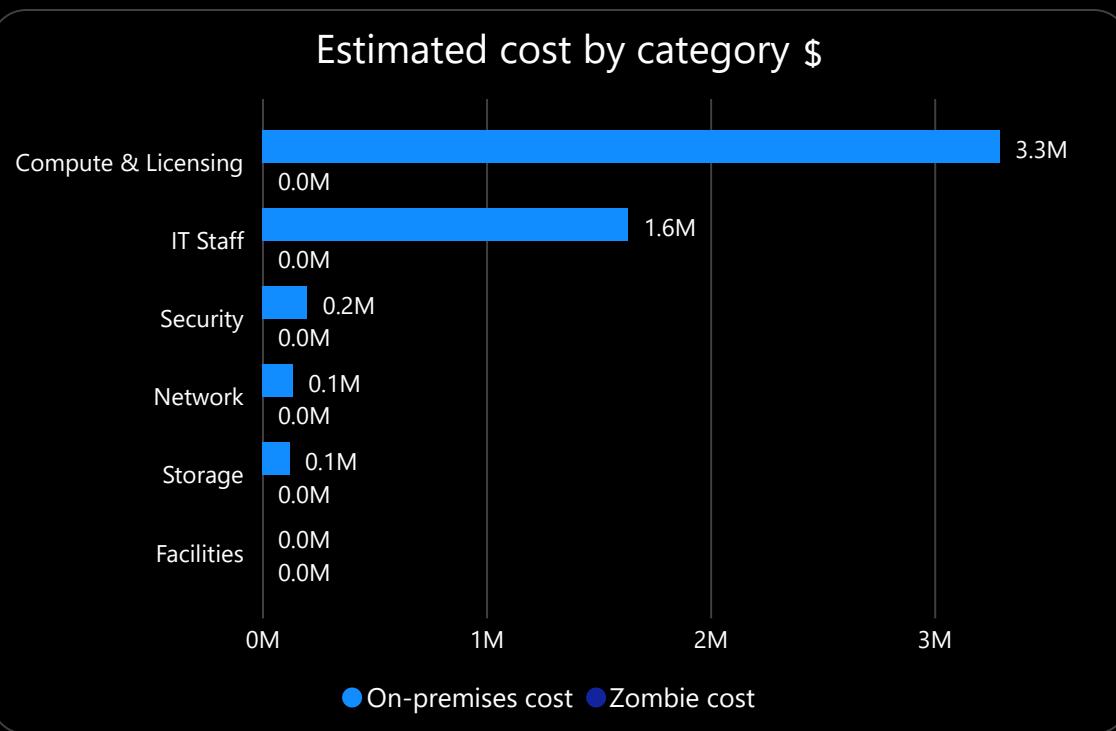
**Central US**

# Assessment Overview - On-premises cost estimates

Servers  
**294**

CPU Utilization (%)  
**29.46**

Memory Utilization(%)  
**23.30**



# Assessment Overview- Server Analysis

Servers

**294**

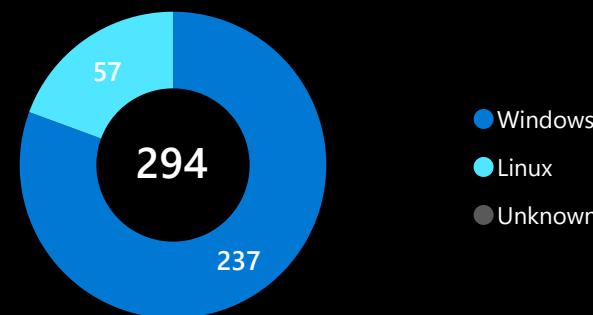
CPU Utilization (%)

**29.46**

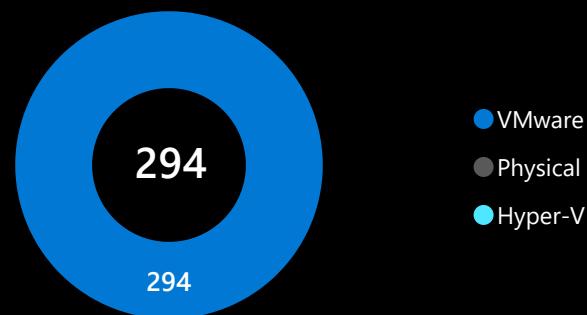
Memory Utilization(%)

**23.30**

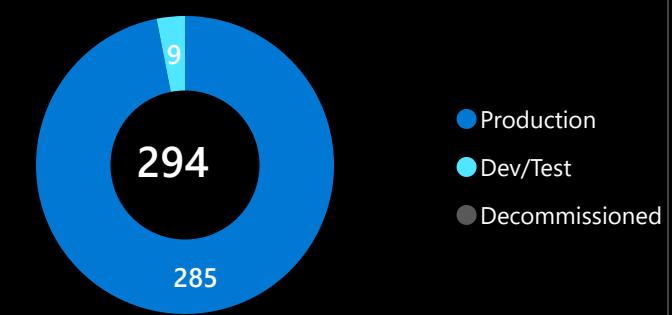
Distribution by Operating System



Distribution by Appliance



Distribution by Environment



Windows  
80.61%

Linux  
19.39%

Virtualized  
100.00%      Non-virtualized  
0.00%

Production  
96.94%  
Dev/Test  
3.06%  
Decommissioned  
0.00%

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# Business Case

## Total cost of ownership (TCO)

### Potential Cost Savings

Estimated on-premises cost      \$ 5,380,309.62

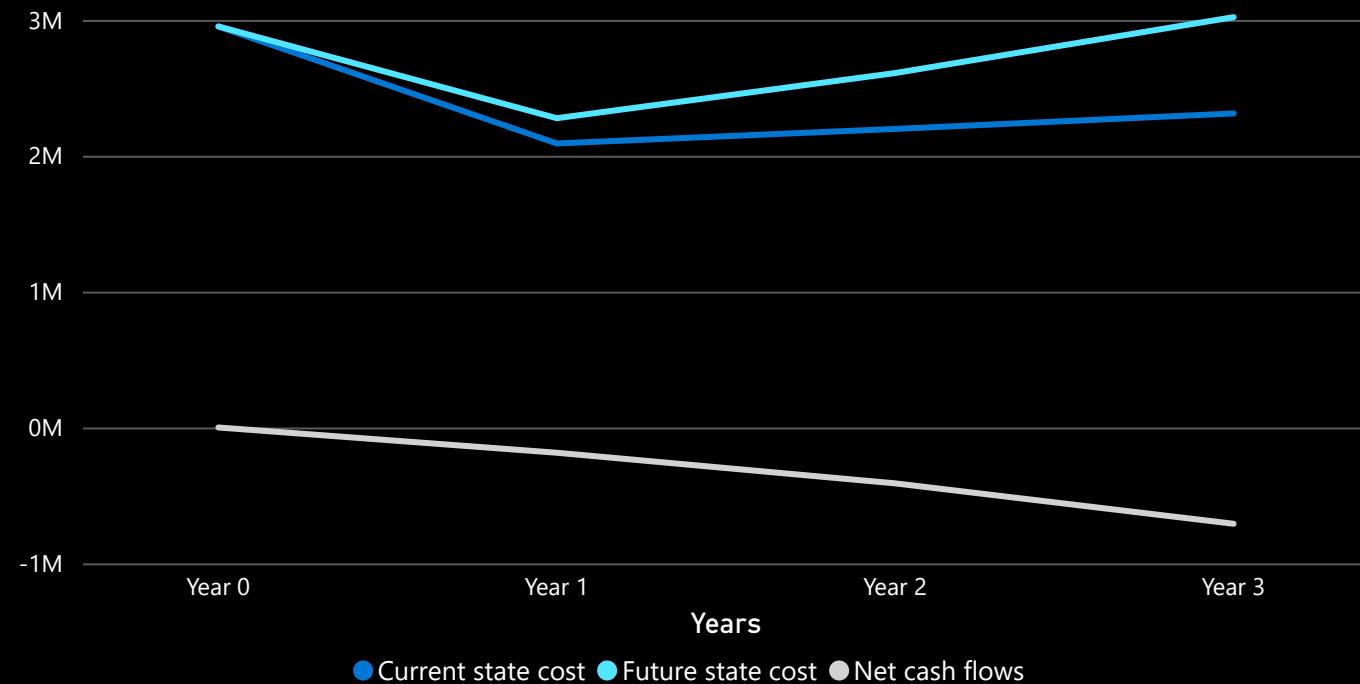
Estimated Azure cost  
for servers and workloads ready  
for migration      \$ 1,751,383.44

IaaS cost      \$ 1,060,970.51

PaaS cost      \$ 690,412.93

Savings      \$ 3,628,926.18  
Save up to 67.45%

YoY estimated current vs future state cost (Payback period 3 years)



Savings with Azure Hybrid benefit

Bring your existing Windows  
Server licenses to Azure  
\$ 140,902.04

Bring your existing SQL Server  
licenses to Azure  
\$ 1,014,084.91

# Business Case - Details

## Total cost of ownership (TCO)

Contoso can save up to 87.65% on License cost with Azure Hybrid benefit. Azure also provides free extended security updates for servers that reach end of life. You can run out of support servers for 3 additional years on Azure.

	On-premises(\$)	Azure(\$)	Savings(\$)	Insights	Savings with Azure Hybrid Benefit
Compute & Licensing	3,291.79K	465.31K	2,826.49K	\$ 2,826,487.74 saved by applying AHB and using optimized savings options in Azure	Windows Server Licenses \$ 140,902.04
IT Staff	1,631.99K	1,145.72K	486.27K	\$ 486,265.81 saved by improving IT productivity	SQL Server Licenses \$ 1,014,084.91
Security	200.26K	53.39K	146.88K		
Network	135.57K	26.30K	109.27K	\$ 109,268.46 saved by network optimizations in Azure	Savings with Extended Supportability Updates
Storage	120.70K	60.67K	60.03K		\$ 972,157.71
Facilities	0.00K	0.00K	0.00K		
<b>Total</b>	<b>\$ 5,380,309.62</b>	<b>\$ 1,751,383.44</b>	<b>\$ 3,628,926.18</b>		

\*Production and Dev-test combined \*\*Includes servers with SSRS, SSIS, and SSAS

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opportunities

# Key Transformation Considerations

Contoso has a business goal to migrate servers from an on-premises secondary data center to Azure

## 01 Modernize/Re-platform(PaaS)

Estimated annual  
storage cost  
**\$ 0.00**

Estimated annual  
compute cost  
**\$341,588.09**

Total annual cost  
**\$ 341,588.09**

## 02 Migrate/Re-host to Azure (IaaS)

Estimated annual  
storage cost  
**\$ 60,669.91**

Estimated annual  
compute cost  
**\$ 123,716.94**

Total annual cost  
**\$ 184,386.85**

## 03 Management

Estimated annual  
storage cost  
**\$ 0.00**

Estimated annual  
compute cost  
**\$ 173,813.14**

Total annual cost  
**\$ 173,813.14**

## 04 Security

Total annual cost  
**\$ 53,387.57**

Estimated annual Azure consumption cost  
**\$ 753,175.65**

# Transformation to PaaS

Contoso has a business goal to migrate servers from an on-premises secondary data center to Azure

**01** Modernize/Re-platform(PaaS)

**02**

**03**

**04**

## Workload

4 ASP.NET WebApps on IIS\*\* in dev/test environment

48 ASP.NET WebApps on IIS\*\* in production environment

4 SQL Server Database Engine in dev/test environment

38 SQL Server Database Engine in production environment

## Azure Recommendation

Modernize to 1 Azure App Service plan with dev/test discount pricing

Modernize to 6 Azure App Service with Azure Savings Plan

Modernize to 9 Azure SQL Managed Instance with dev/test discount pricing

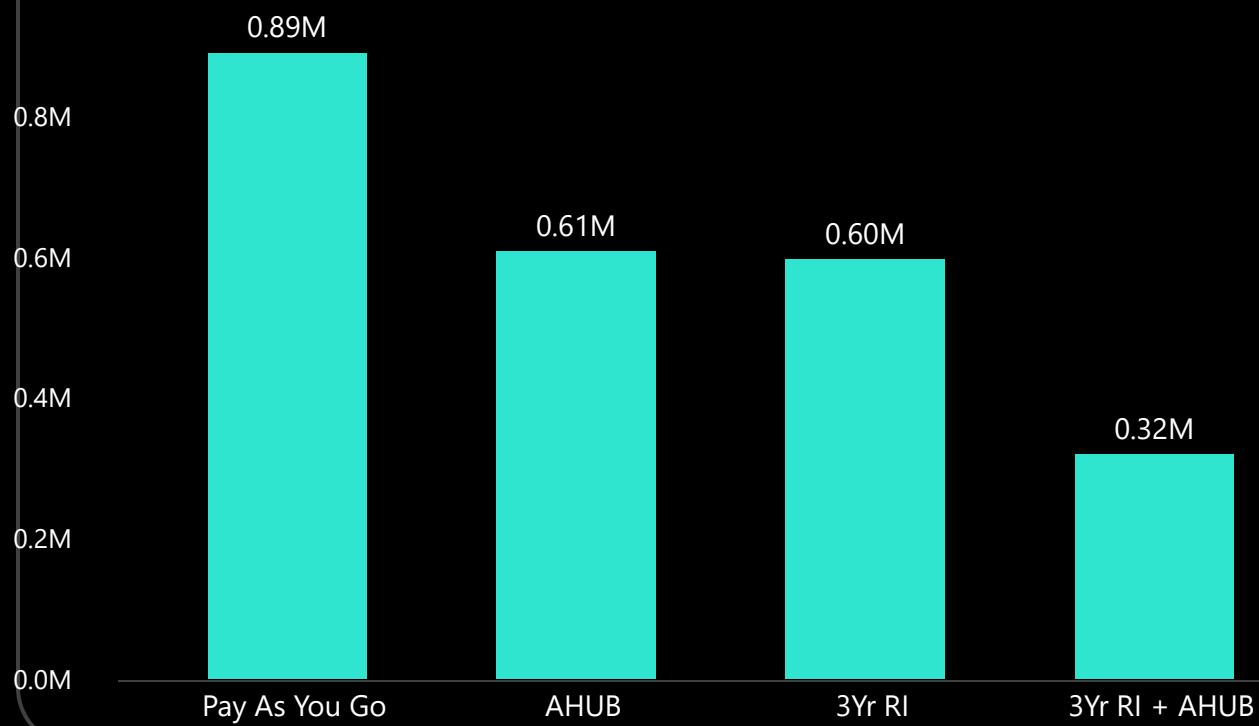
Modernize to 51 Azure SQL Managed Instance with (AHB + 3YR RI) discount pricing

# Transformation to PaaS\*

## SQL Server MI

We recommend modernizing 60 SQL Server instances running on 42 servers to 60 Azure SQL MI deployments. This assessment provides readiness, pricing estimates and sizing.

Estimated Annual Azure consumption cost (3Yr RI +AHUB)\* in \$



Estimated annual Azure consumption cost (3Yr RI + AHUB)\*  
**\$319,162.33**

Active SQL Instances	Avg. SQL CPU Utilization (%)	Total Storage (TB)
60	3.79	0.08

\*\*Includes (3Yr RI + AHUB) cost for Production and (AHUB) cost for Dev-test

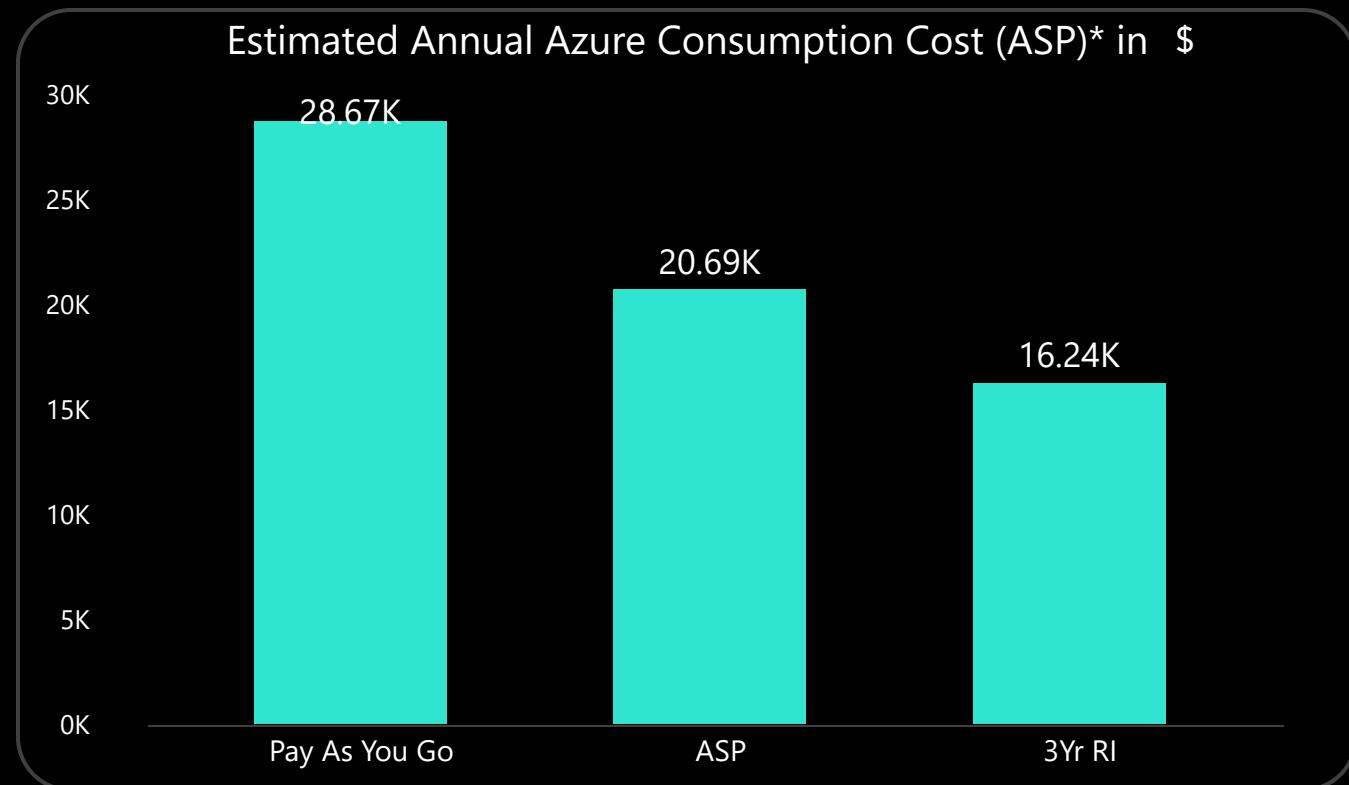
# Transformation to PaaS\*

## App Service

We recommend modernizing 52 SQL ASP.NET App to 7 Azure App Service plan instances. This assessment provides pricing estimates and sizing.

Estimated annual Azure consumption cost (ASP)\*  
\$16,235.31

ASP.NET Apps\*\*  
115



\*\* ASP.NET discovery and assessment are only available for Windows Server running in VMware environment.

\*Includes (3Yr RI) cost for Production and (PAYG) cost for Dev-test

# Transformation to IaaS

Contoso has a business goal to migrate servers from an on-premises secondary data center to Azure

01

02 Migrate/Re-host to Azure (IaaS)

03

04

## Workload

4 ASP.NET WebApps on IIS\*\* – Prod

0 ASP.NET WebApps on IIS\*\* - Dev/Test

174 Servers\* – Prod

0 Servers\* – Dev/Test

41 SQL Server Database Engine – Prod

3 SQL Server Database Engine – Dev/Test

## Azure Recommendation

Modernize to 4 Azure VM with IaaS Production (AHB + 3YR RI)

Modernize to 0 Azure VM with IaaS Production (AHB)

Modernize to 174 Azure VM with IaaS Azure Production (AHB + 3YR RI)

Modernize to 0 Azure VM with IaaS Azure Dev/Test (AHB)

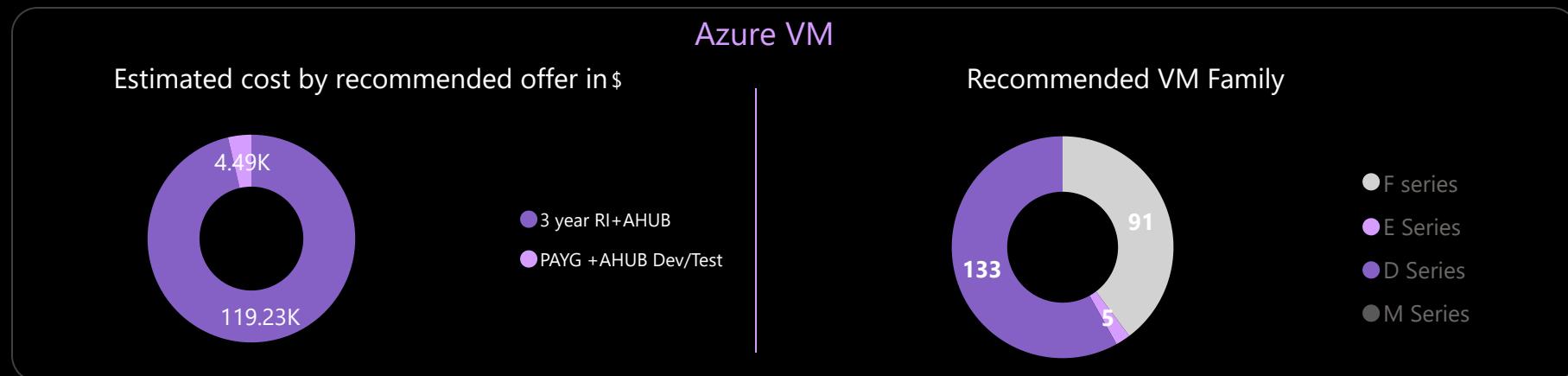
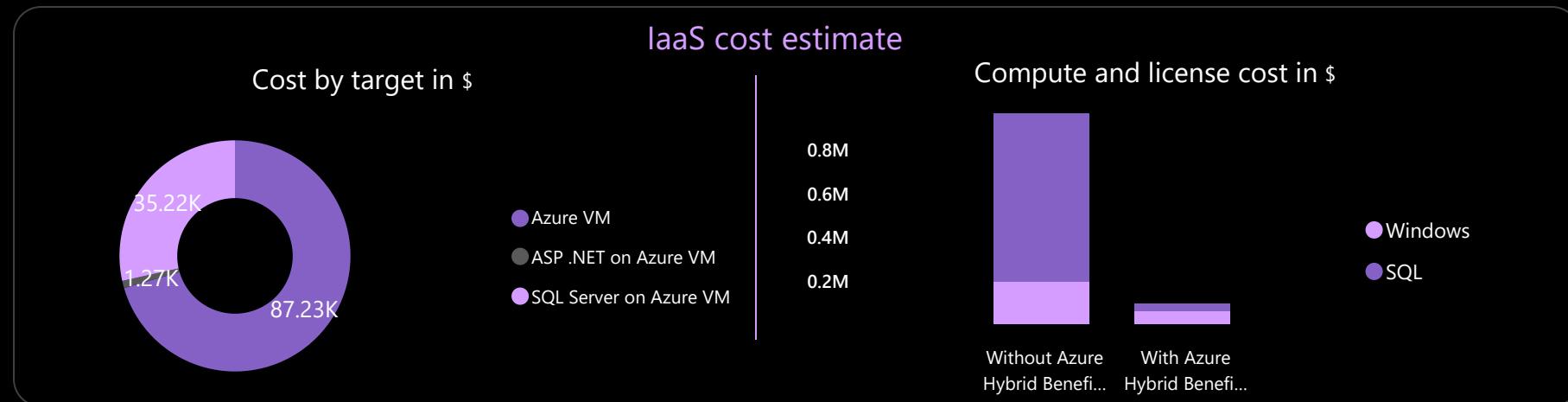
Modernize to 48 SQL Server on Azure VM with IaaS Production(AHB + 3YR RI)

Modernize to 3 SQL Server on Azure VM with IaaS Dev/Test(AHB)

# Transformation to IaaS

## Servers - Ready for Migration

Ready For Migration			
Servers	Compute	Memory	Storage
186 out of 229	747 cores	1,453 GB	25,902 GB



Savings with Azure Hybrid benefit

\$ 875,104.94

Bring your existing Windows and SQL Licenses to Azure.

Savings With extended security updates

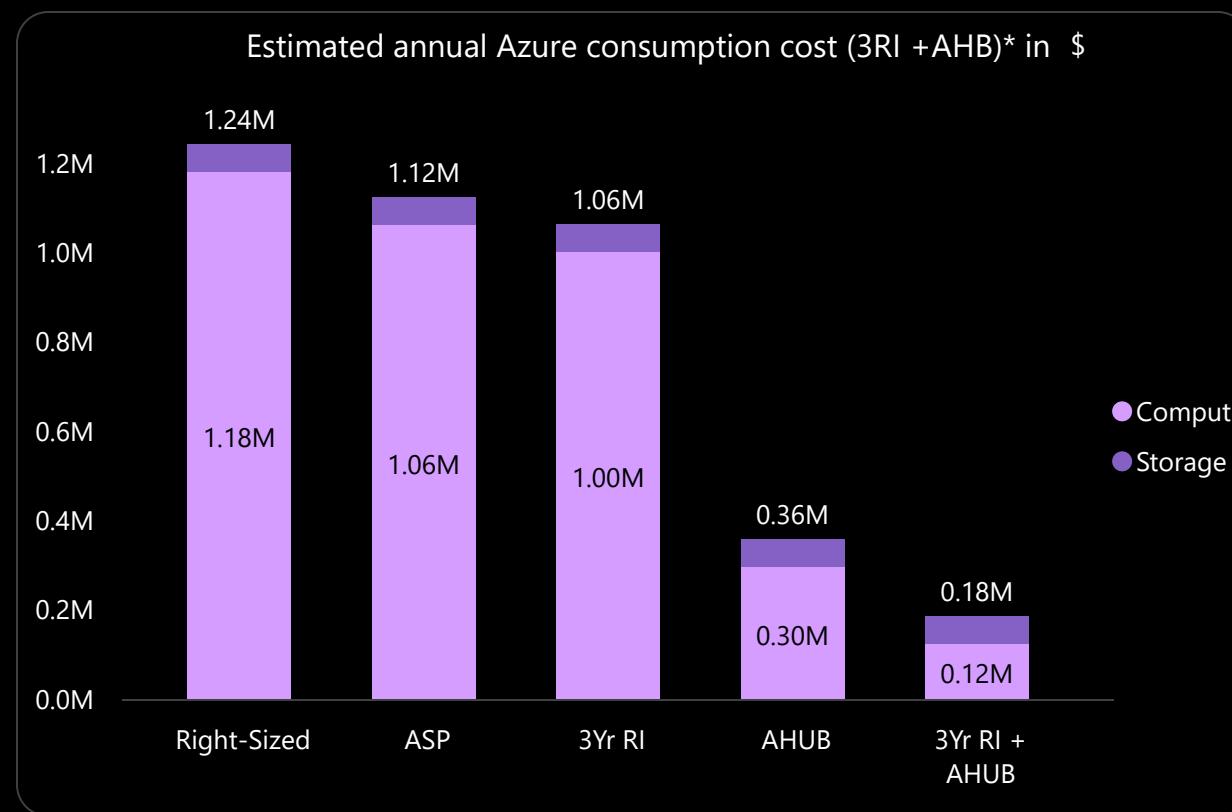
\$ 106,384.38

Bring your end of Support Windows OS and SQL versions to Azure.



# Migrate servers to Azure VM (IaaS)

Contoso's secondary site is run on corporate-owned hardware in a remote location. The lease for colocation space is approaching renewal in Q4 of 2022 and the hardware is several years old. Migrating this secondary site to Azure would eliminate site costs as well as remove the need for additional hardware purchases.



Estimated annual Azure consumption cost (3Yr RI + AHUB)\*  
**\$184,386.85**

Tech	Server	Avg. CPU Utilization (in %)	Avg. RAM Utilization (in %)	Storage (in TB)
General Windows workloads	117	22.86	17.28	13.80
General Linux workloads	57	11.85	16.55	7.11
Servers with SQL Server instances	51	19.56	12.42	3.79
Servers with ASP.NET Apps	4	15.73	17.99	0.59

\*Includes (3Yr RI + AHUB) cost for Production and (AHUB) cost for Dev-test

\*\*Includes servers with SSRS, SSIS, and SSAS

# Transformation of Management Services

01

02

03 Management

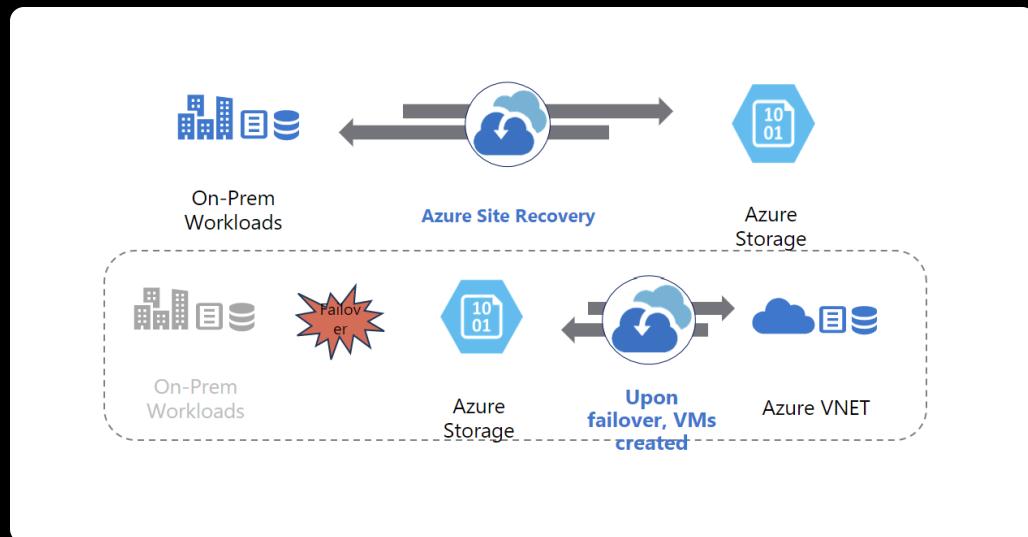
04

## Azure Site Recovery\*

Annual estimated cost of 223 Production Servers

**\$99,440.16**

Azure Site Recovery monitors servers and stores replicas in Azure's low-cost storage. When failover occurs, ASR is used to spin up the recovery VMs from the replicas.



## Azure Backup Service\*

Annual estimated cost of 223 Production Servers

**\$72,094.98**

Azure Backup service provides simple, secure, and cost-effective solutions to back up your data and recover it from the Microsoft Azure cloud.



### Cost assumptions:

Configurable retention needs at steady state:

- Local Redundant Storage (LRS)
- Moderate Churn
- Daily Recovery Point retention for 30 days
- Weekly Recovery Point retention for 4 weeks
- Monthly Recovery Point retention for 12 months
- Yearly Recovery Point retention for 1 year

# Windows Server and SQL End of Support

Reviewing and planning around the OS lifecycle is key to securing on-prem infrastructure and prioritizing Azure migration.

Microsoft is invested in supporting customers moving to the cloud as part of infrastructure modernization and provides resources to help keep your environment secure.

## Windows Server

41%

### **Extended Support**

Plan for upgrade of systems in Extended Support.  
2012/R2 support ends 10th October 2023.

## Windows Server

10%

### **Out of Support**

To mitigate active security risks, prioritize review of OSEs for decommission, upgrade, or migration.

## SQL Server

71%

### **Extended Support**

Plan for upgrade of systems in Extended Support.  
2012 support ends 12th July 2022.

## SQL Server

35%

### **Out of Support**

To mitigate active security risks, prioritize review of SQL Servers for decommission, upgrade, or migration.

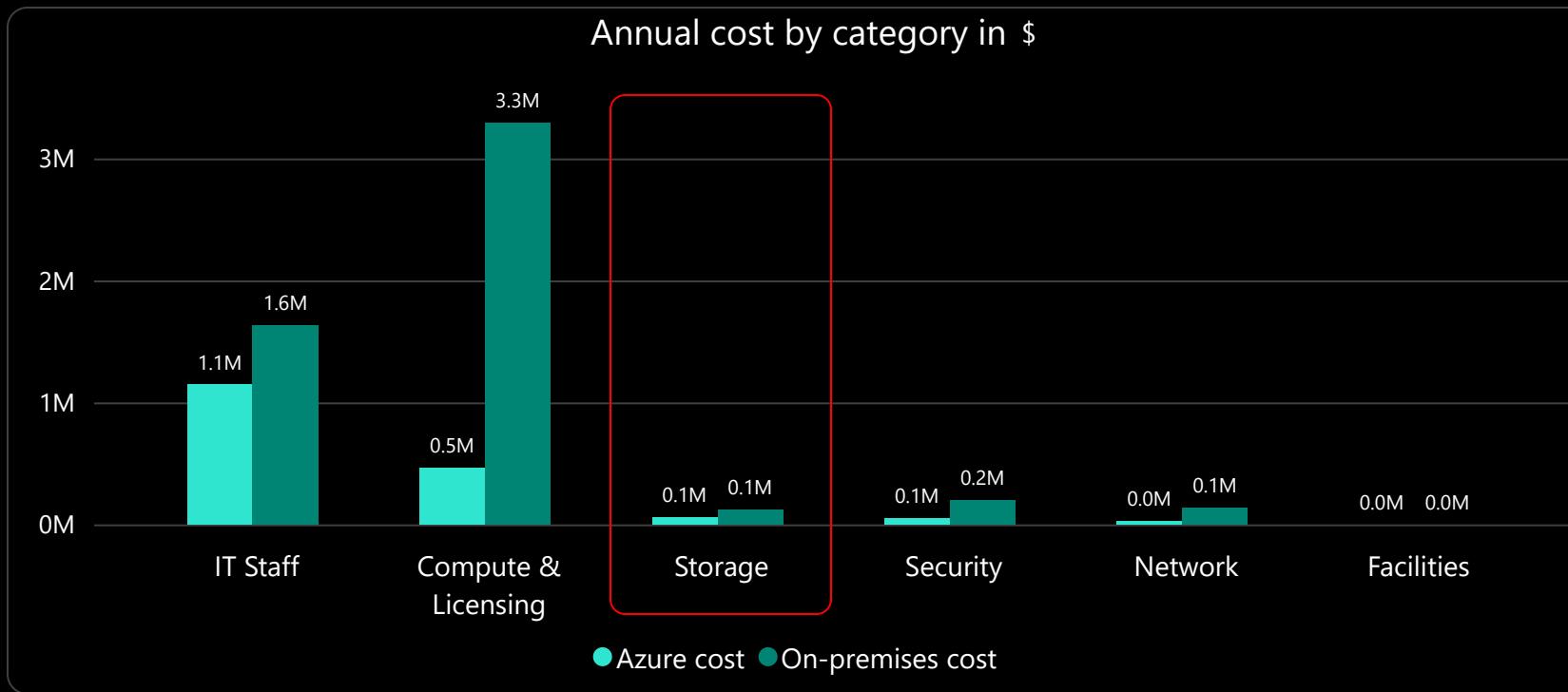
# Defender Business Case

01

02

03

04 Security



## Insights

- **\$ 146,876.45** saved by unifying security management with Microsoft Defender for Cloud

- **Mitigate threats 50% faster** and improve your security posture with Microsoft Defender for Cloud

## Total on-premises costs vs Azure cost

Potential Savings  
\$ 3,628,926.18

Total on-premises cost  
\$ 5,380,309.62

Total Azure cost  
\$ 1,751,383.44

Savings: 67.45%

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# **Cost savings on Dev/ Test workloads**

Deep-dive

# Azure Dev/Test

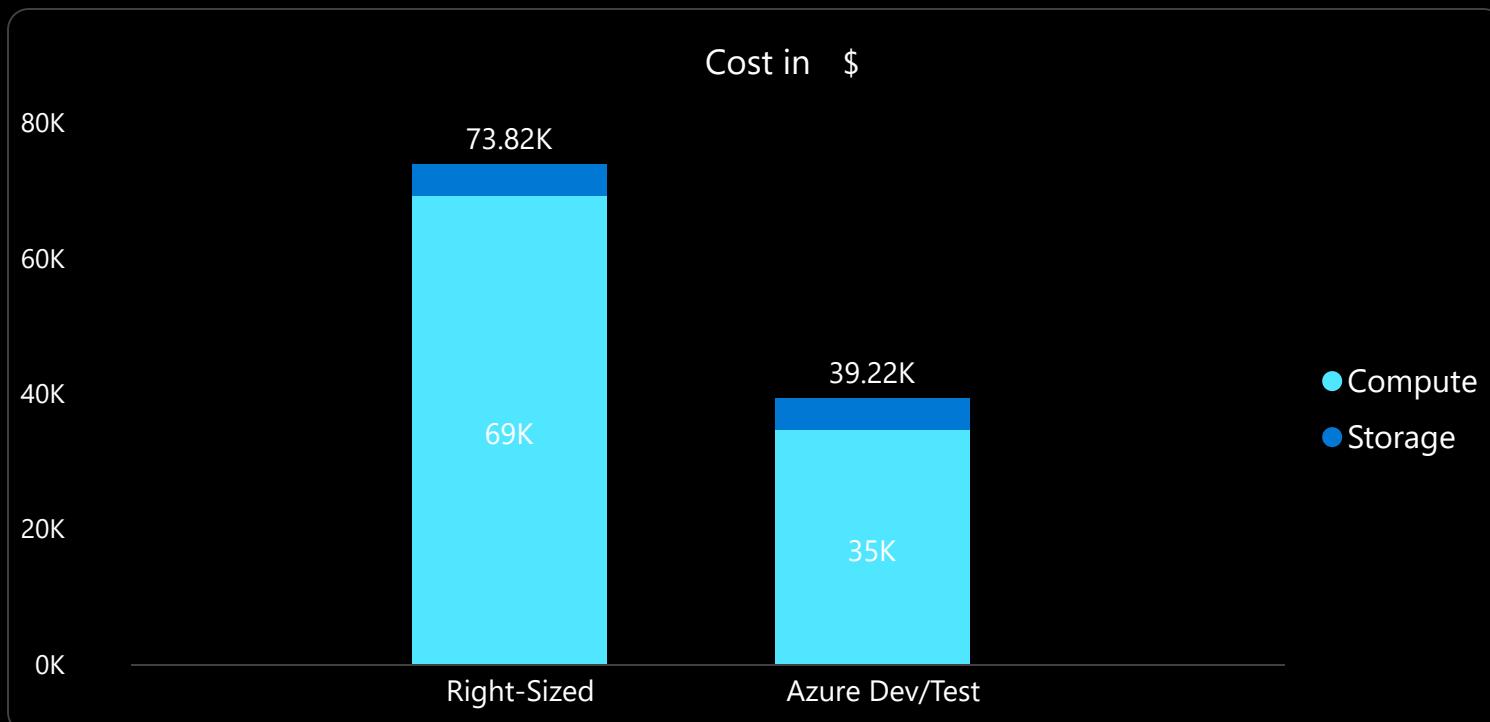
Azure provides numerous advantages for groups with dynamic Dev/Test needs – special Dev/Test pricing, the ability to spin VMs up and down rapidly, and fine control available around uptime and downtime to control costs.

## Current non-prod environment considerations:

- ▲ 0 General Linux workloads
- 4 Servers with ASP.NET Apps
- 4 Servers with other SQL Services\*\*
- 6 Servers with SQL Server instances
- 9 General Windows workloads

## Azure Dev/Test Benefits for EA customers

- Use Visual Studio & MSDN Platforms subscriptions to pay no Microsoft software charges on Azure VMs
- Subscribers receive up to \$150 in monthly Azure credits
- Access Windows 11 VMs & Windows Virtual Desktop service
- Save up to 55% off Azure SQL Managed Instance (PaaS)
- Use auto-shutdown to reduce VM costs – up to 78% savings at 40 hrs/wk uptime\*



\*Estimates excludes machines eligible for migration to managed servers

\*\*Includes servers with SSRS, SSIS, and SSAS

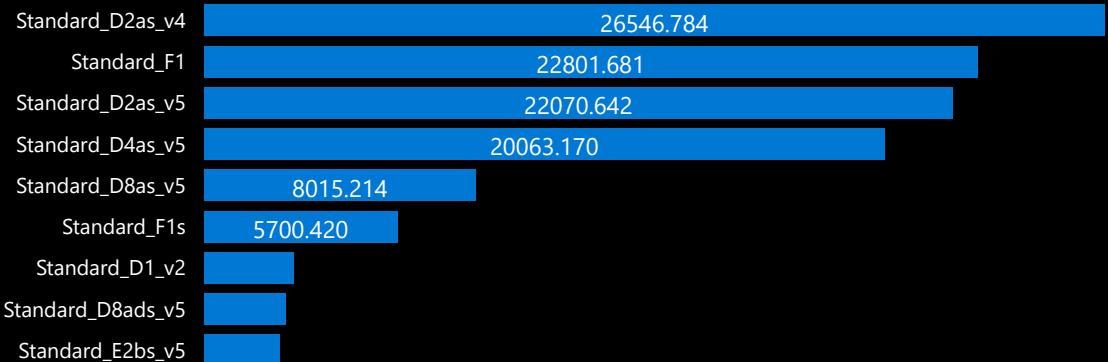
# Migrate servers to Azure VM (IaaS)

Deep-dive

**Refer to Core Report for details.**

# Migrate servers to Azure VM (IaaS)\*

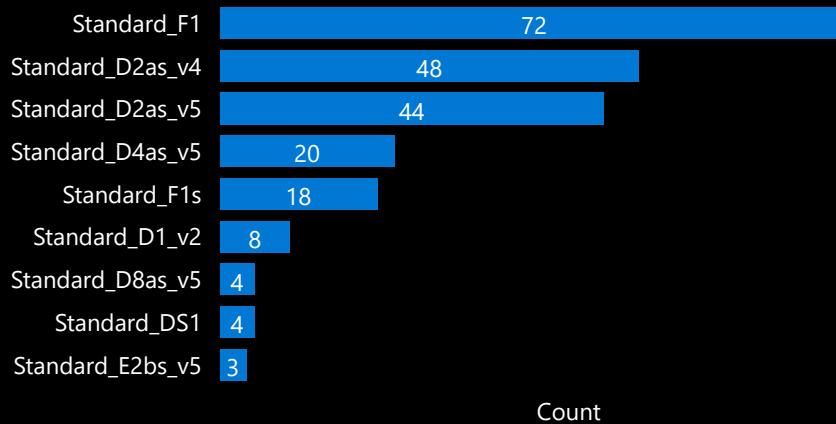
Top Recommended VM SKUs by cost\*\*\* (Prod) (AHUB) in \$



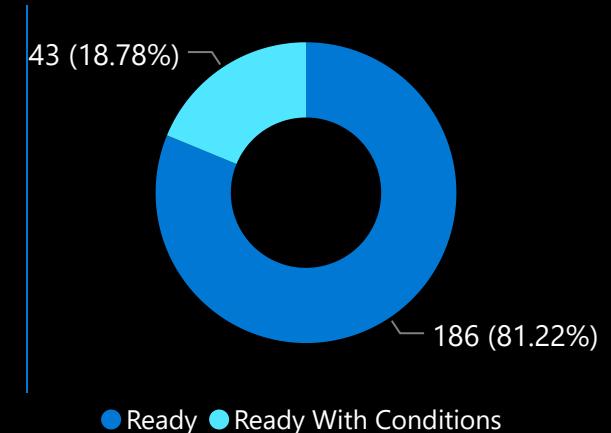
Top Recommended VM SKUs by cost\*\*\* (Dev) (AHUB) in \$

Standard_D2as_v4	4490.681
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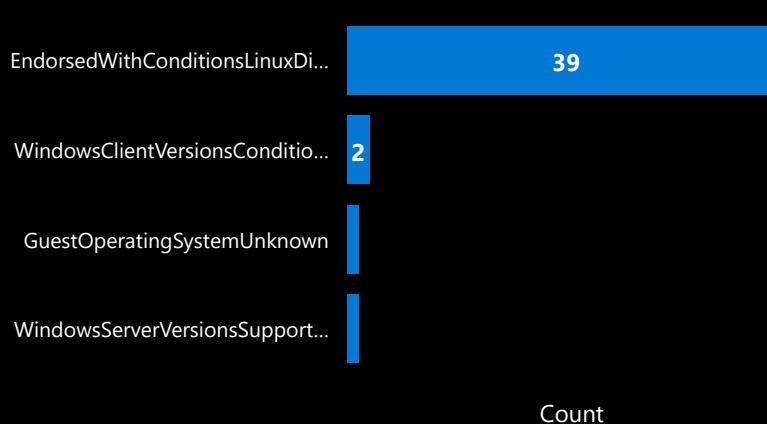
Top Recommended VM SKUs by count



Azure VM Readiness



Top readiness warnings\*\*



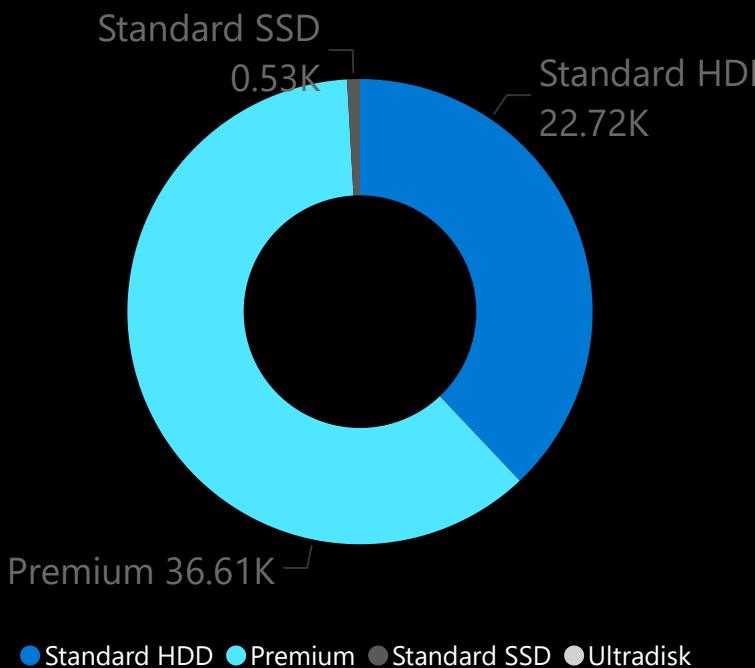
\*Includes (3Yr RI + AHUB) cost for Production and (AHUB) cost for Dev-test

\*\*Issue definitions can be found here: <https://docs.microsoft.com/azure/migrate/troubleshoot-assessment#azure-vm-assessment-readiness-issues>

**Refer to Core Report for details.**

# Migrate disks to Azure Storage

Aligning disk sizing to performance requirements further reduces costs. Automatic disk allocation ensures that there are no bottlenecks with the server and applications. Specific workloads and applications may also run on a lower specification disk when the peaks occur.



## Standard HDD Drives

**190**

\$ 22,717.49 accounts for 37.44% of total storage cost

## Standard SSD Drives

**13**

\$ 532.17 accounts for 0.88% of total storage cost

## Premium Disks

**94**

\$ 36,614.29 accounts for 60.35% of total storage cost

## Ultra Drives

**0**

\$ 0.00 accounts for 0.00% of total storage cost

# Modernize to PaaS

Deep-dive

**Refer to Core Report for details.**

# Modernize SQL to Azure SQL Managed Instance (PaaS)

Top Recommended MI Configs by Cost\*\*\* (Prod) (3Yr RI + AHUB) in \$

GeneralPurpose,Provisio... 0.23M

Top Recommended MI Configs by Cost\*\*\* (Dev) (AHUB) in \$

GeneralPurpose,Provi... 91K

Top Recommended MI Configs by Count

GeneralPurpose,Provisio... 60

Top Readiness Warnings\*\*

TraceFlags 8

\*Includes (3Yr RI + AHUB) cost for Production and (AHUB) cost for Dev-test

\*\*Issue definitions can be found here: <https://aka.ms/AzureSQLMI/AssessmentRules>

**Refer to Core Report for details.**

# Modernize ASP.NET Apps

## Azure App Service (PaaS)

Top App Service Plan instances by cost\* (Prod) (3Yr RI) in \$

Premium\_V3      16K

Top App Service Plan instances by cost\* (Dev) (PAYG) in \$

Premium\_V3

Top App Service Plan instances by count

Premium\_V3      6

Top Readiness Warnings\*\*

\*Includes (3Yr RI) cost for Production and (PAYG) cost for Dev-test

\*\*Issue definitions can be found here: <https://aka.ms/AzureSQLMI/AssessmentRules>

# Additional Azure Opportunities

# Modernize SQL completely

# Azure SQL Platforms Overview

Azure provides flexible offerings to enable organizations to tailor SQL to their business needs, priorities, and timelines.

Consideration	SQL on Azure VMs	Azure SQL Database Managed Instance	Azure SQL Database
Cloud service type	IaaS	PaaS	PaaS
Pricing model	Compute & Storage	vCores & Storage	vCores & Storage
Migration effort	Fast Lift/Shift	Fast Lift/Shift	Refactor
SQL Server compatibility	Full	Full	Limited
Customization/Admin capability	High	High	Moderate
Storage max	64TB	8TB*	4TB
Azure Hybrid benefits	Yes	Yes	Yes
Reserved Instance/capacity pricing	Yes	Yes	Yes
Hardware admin	Microsoft	Microsoft	Microsoft
OS admin	Customer	Microsoft	Microsoft
SQL Server admin	Customer	Microsoft	Microsoft
Built-in Azure security features	No	Yes	Yes
Built-in Azure HA/DR/BC features	No	Yes	Yes
Built-in intelligence	No	Yes	Yes

Azure SQL Database Managed Instances streamline PaaS adoption with extremely high feature parity with the latest on-premises SQL Server database technologies, while reducing management overhead versus the IaaS model.

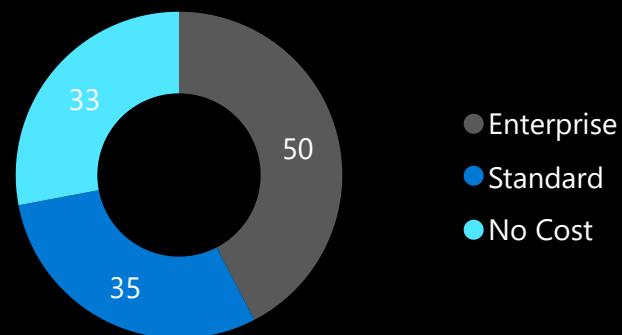
For detailed guidance on database migration paths and strategies, see Microsoft's whitepaper at:  
<https://azure.microsoft.com/en-us/resources/choosing-your-database-migration-path-to-azure/en-us/>

\* General Purpose Tier

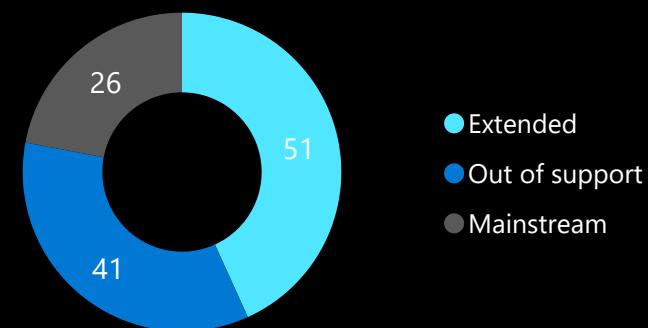
# SQL Supportability\*

85 SQL instances of Standard or Enterprise Edition were identified, with an additional 33 varied no-cost editions (such as Express or Developer). Review security & maintenance across all installed SQL instances to best manage risk.

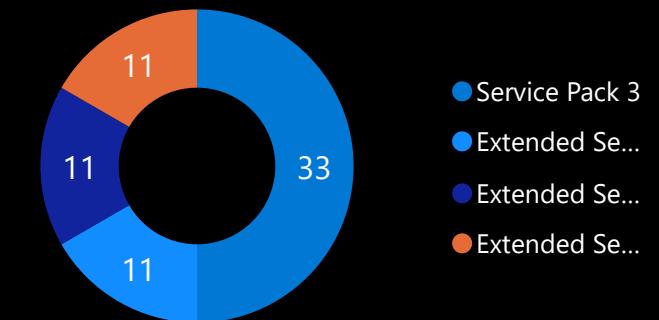
SQL Instance by Edition



SQL Instances by Support Status



SQL Instances by SP Offset



## Extended Support

Plan for upgrade  
2012: Support ends Jul 12, 2022  
2014: Support ends Jul 9, 2024

## Unsupported/Unpatched

Prioritize review & action to mitigate security risks.  
Migration to Azure provides three years Extended Security Updates beyond end of support for 2012.

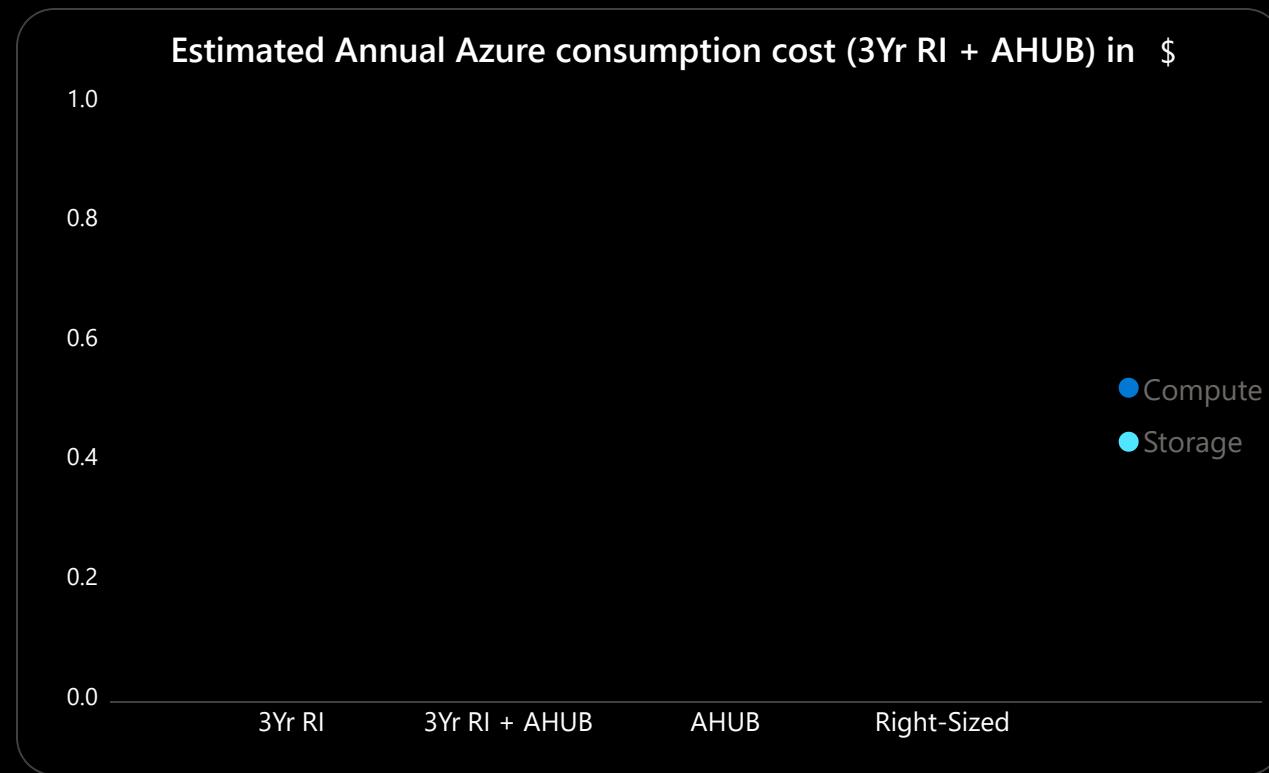
## Not Recently Patched

Catch up on Service Pack installation on these instances to mitigate security risk.

Refer to Core Report for details.

# Modernize remaining production SQL deployments to Azure SQL MI

We recommend modernizing 60 SQL Server instances running on 42 servers to 60 Azure SQL MI deployments. This assessment provides readiness, pricing estimates and sizing.



Estimated annual Azure consumption cost  
(3Yr RI + AHUB)\*  
\$0.00

SQL Instances**	Avg. CPU Utilization (in %)	Sum of Storage(TB)
58	3.41	0.26

\*Includes (3Yr RI + AHUB) cost for Production and (AHUB) cost for Dev-test

\*Please ensure that discovery has completed for all SQL Server deployments

\*\*SQL Server discovery and assessment are available only for Windows Server

**Refer to Core Report for details.**

# Modernize remaining production SQL deployments to Azure SQL MI

Top Recommended MI Configs by Cost (Prod) (3Yr RI + AHUB) in \$

„0vCore,0 GB Storage

Top Recommended MI Configs by Cost (Dev) (AHUB) in \$

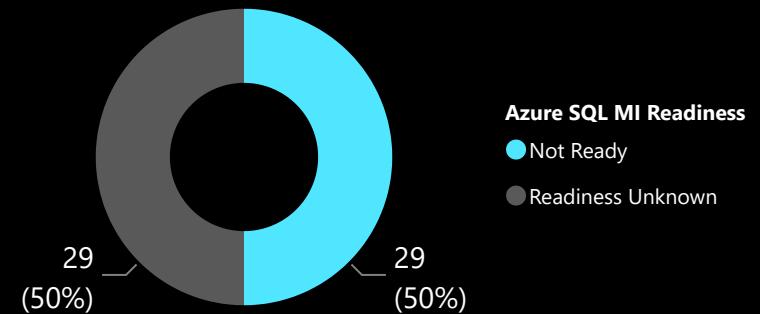
„0vCore,0 GB Storage

Top Recommended MI Configs by Count

„0vCore,0 GB S...

58

SQL Server Readiness



Top Readiness Issues & Warnings\*\*

NumDbExceed...

29

SkuNotFound

29

TraceFlags

13

\*Includes (3Yr RI + AHUB) cost for Production and (AHUB) cost for Dev-test

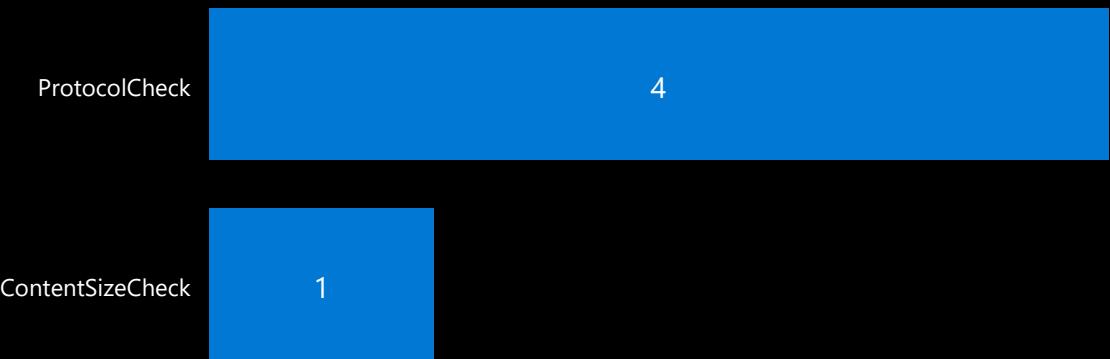
\*\*Issue definitions can be found here: <https://aka.ms/AzureSQLMI/AssessmentRules>

# Modernize ASP.NET WebApps completely

**Refer to Opportunity Report  
for details.**

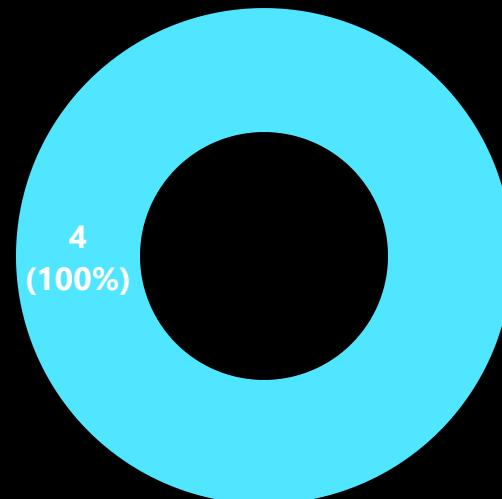
# Modernize/ Replatform ASP.NET Apps to Azure App Service (PaaS)

Top Readiness Issues & Warnings



Sum of count

ASP.NET WebApp Readiness



**Azure App Service Readiness**  
● Not Ready

\*Production and Dev-test combined

\*\*Issue definitions can be found here: <https://aka.ms/AzureSQLMI/AssessmentRules>

# Rehost VMware Servers on Azure VMware Solution

Seamlessly move VMware-based workloads from your datacenter to Azure and integrate your VMware Environment with Azure.

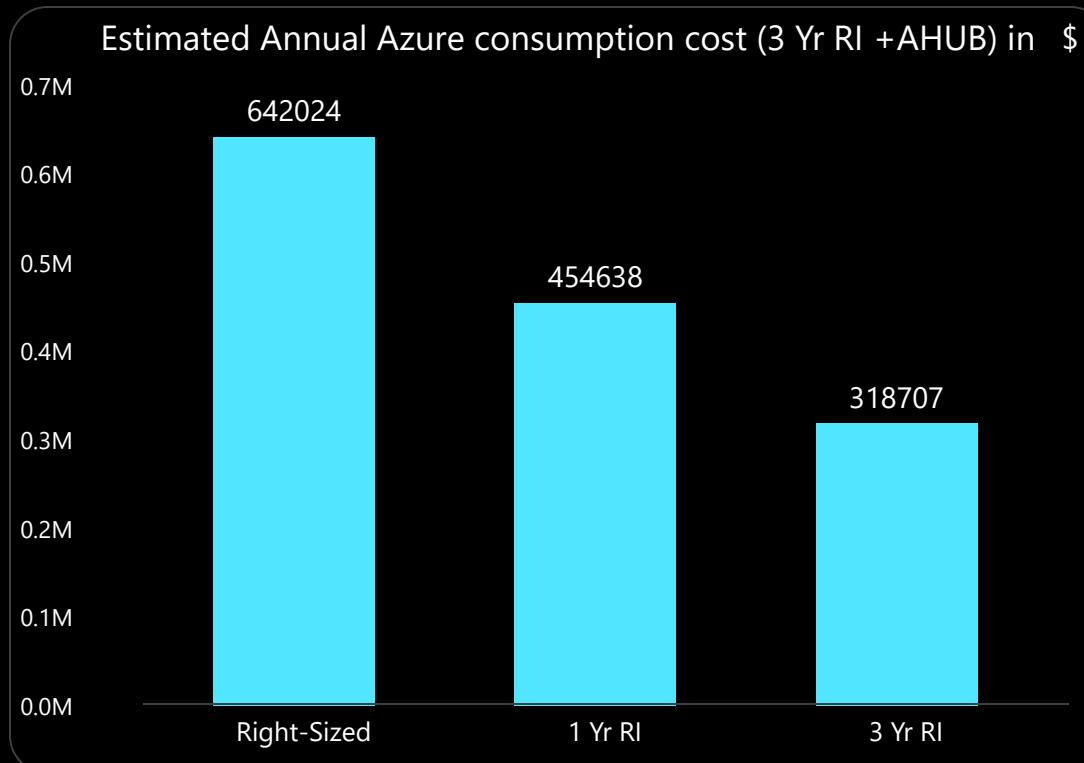
## Cost Assumptions:

- ▲
  - 180 vCPU deployed with 78.89 % avg. utilization
  - 2880 GB RAM provisioned | 874.08 GB RAM in use ( 30.35% Over-Provisioned)
  - 294 VMs running on VMware
  - 5 nodes needed
  - 75 TB storage provisioned | 61.3275 TB storage in use ( 81.77% Over-Provisioned)
  - Each AV36 node includes 15.36 TB Flash Storage
  - Inclusive of all VMware licensing

**Refer to Opportunity Report for details.**

## 5 AV36 Nodes needed to support 294 VMs

- Get scale, automation, and fast provisioning for your VMware workloads on global Azure infrastructure
- Modernize your VMware workloads with native Azure management, security, and services
- Keep using your existing VMware investments, skills, and tools, including VMware vSphere, vCenter
- Take advantage of Azure as the best cloud for your Microsoft Windows and SQL Server workloads



**Estimated annual Azure consumption cost (3Yr RI + AHUB)\***  
**\$318,706.89**

**Refer to Opportunity Report  
for details.**

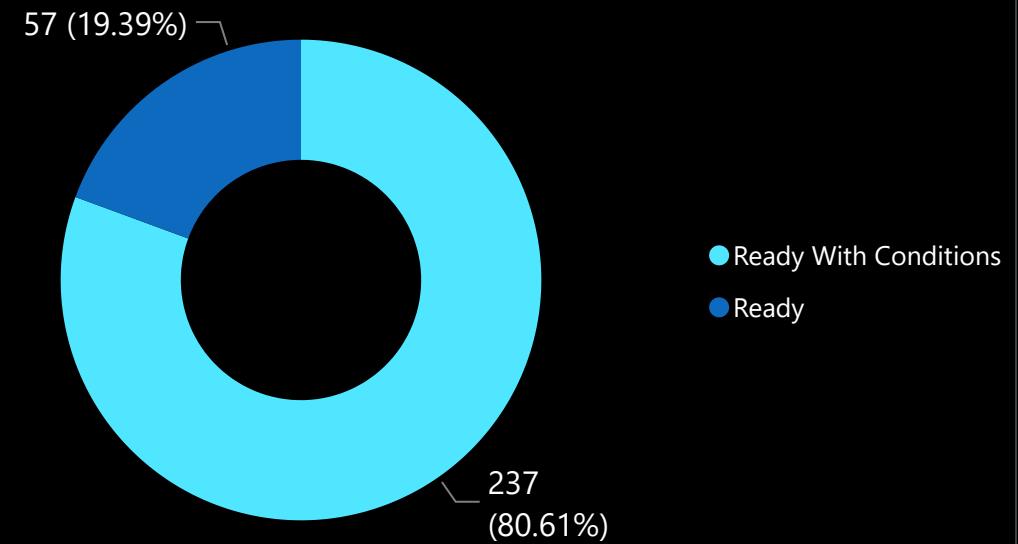
# Azure VMware Solution\*

## Top Readiness Issues & Warnings

IPv6NotSupported

237

## Server Readiness for AVS



# Azure Benefits and Offers



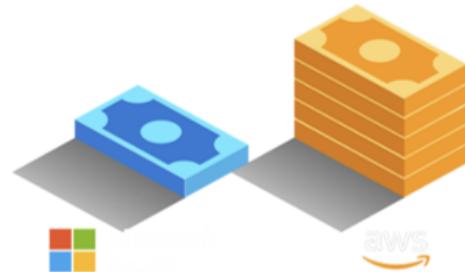
## Azure Hybrid Benefit for Windows Server and SQL Server

Save 50% versus other cloud providers

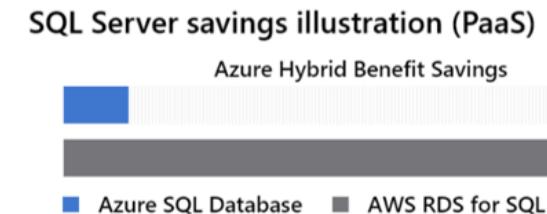
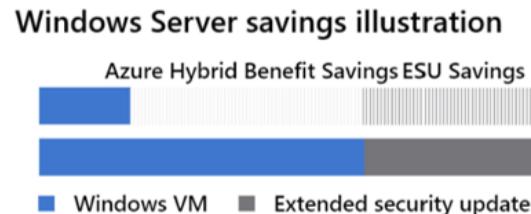


## Extended Security Updates (ESU), free only on Azure

Three years of security after support on-premises ends  
75% of the license cost to buy standalone



### Pay less with Azure. AWS is 5x more expensive



Learn more: [aka.ms/why5xmore](http://aka.ms/why5xmore)

# Azure Hybrid Benefits

Save up to 55% in Azure for Windows Server and SQL Server workloads\*

## Azure Hybrid Benefit for Windows Server

Convert, or re-use Windows licensing with active software assurance in Azure for IaaS

Significantly reduce costs, paying the 'base rate' in Azure

## Azure Hybrid Benefit for SQL Server

Convert SQL licensing with active software assurance to save up in Azure for IaaS and PaaS

Use licenses on-premises and under the Hybrid Benefit simultaneously for 180 days

\*Savings may be higher when that Azure Hybrid Benefit for Windows Server and SQL Server are used together or 'stacked' in IaaS

# Azure Hybrid Benefit for Windows Server

Convert or re-use Windows Server to pay reduced rates in Azure

## License edition

Windows Server Datacenter  
16 cores (with SA or subs)

Windows Server Standard  
16 cores (with SA or subs)

## Use right via the Azure Hybrid Benefit for Windows

Re-use Windows Server on up to  
2 VMs and up to 16 cores in Azure  
  
Run virtual machines on-premises  
and in Azure

Convert Windows Server on up to  
2 VMs and up to 16 cores in Azure  
  
Run virtual machines either  
on-premises or in Azure

# Azure Hybrid Benefit for SQL Server

Azure only benefit for customers with active SA or subscriptions on SQL cores



Significantly reduce the costs of running SQL IaaS and PaaS in Azure



Pay only the 'base rate' in Azure on SQL IaaS, and SQL PaaS



Available for SQL Server core licenses only



Customers can use their cores on-premises, OR as vCores in Azure

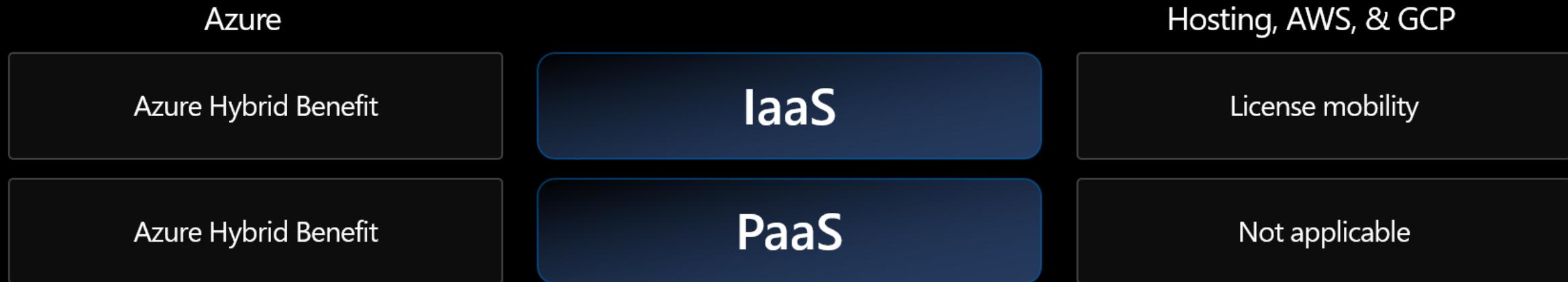


However, cores can be used on-premises and in Azure simultaneously for up to 180 days, to allow for migration



# Moving SQL Server to the Cloud

SQL Server goes further in Azure than other clouds



## What are the advantages of the hybrid benefit over license mobility when adopting IaaS?

Use the SQL cores on-premises and in Azure simultaneously for up to 180 days while migrating

No need to complete and submit license verification forms!

AND the Hybrid Benefit for Windows and SQL can be used together for IaaS (PaaS abstracts the OS)

# Save money when you reserve resources in advance

Select 1- or 3-year terms, monthly payment options at no extra cost

Capacity prioritization

Virtual Machines, Azure SQL, Azure Cosmos DB, Synapse, Storage and more



**Significant cost savings up to 80% versus PAYG models**



**Budget predictability pay upfront or monthly**



**Flexibility to modify reservations and simplicity of purchase**

# Azure Reservations

Select 1- or 3-year terms

- Capacity prioritization and not guaranteed

- Virtual Machines, Storage, SQL & Cosmos DB, SQL DW, and more

- Prepaid software plans for SUSE Linux Enterprise Server and Red Hat Enterprise Linux



**Significant cost savings up to 80% versus PAYG rates**

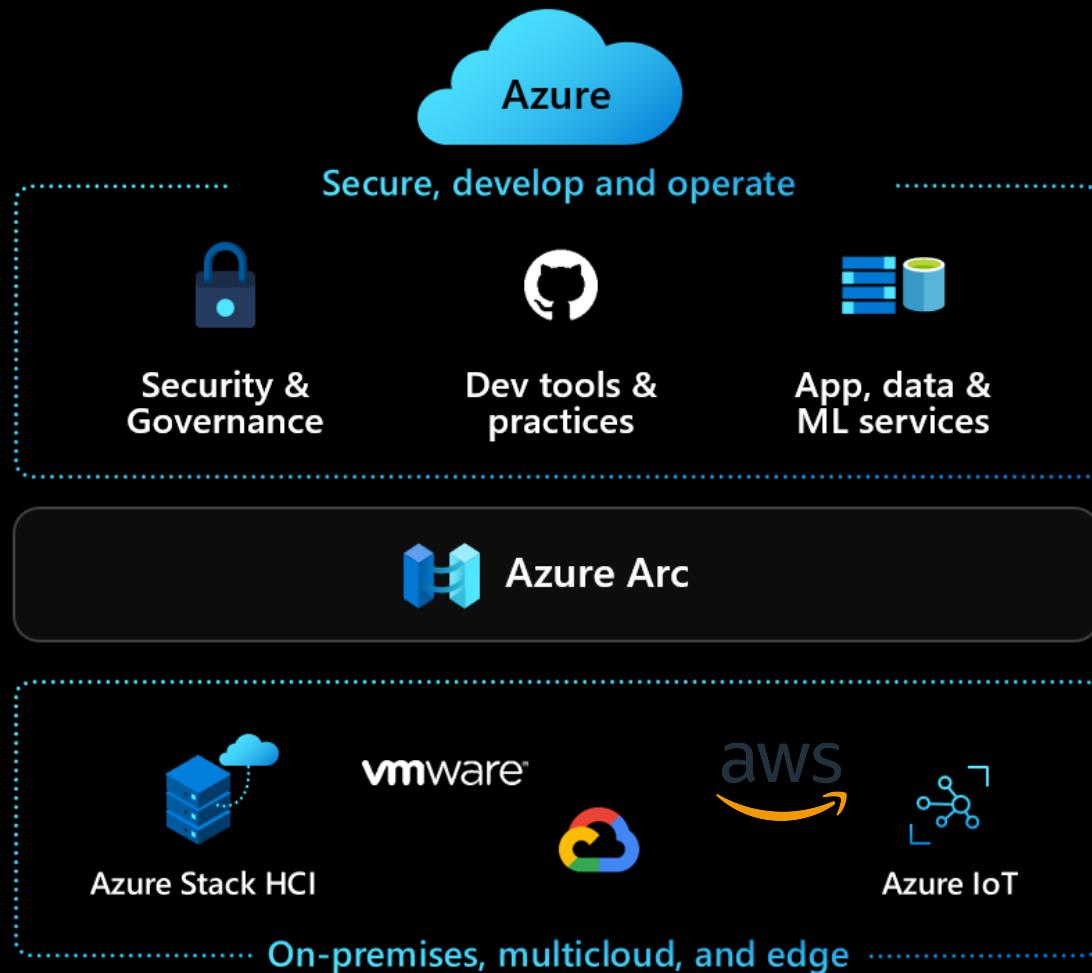


**Budget predictability pay upfront or monthly**



**Flexibility to modify reservations and simplicity of purchase**

# Innovate anywhere with Azure Arc



# Use cases for Hybrid and Multi-Cloud Security



**Azure AD**

Identity and access management



**Azure Monitor**

Cloud to edge observability



**Microsoft Defender for Cloud**

Cloud security posture management and protection



**Microsoft Sentinel**

Intelligent security analytics across the organization  
with a cloud-native SIEM



**Azure Arc**



**Multi-cloud**



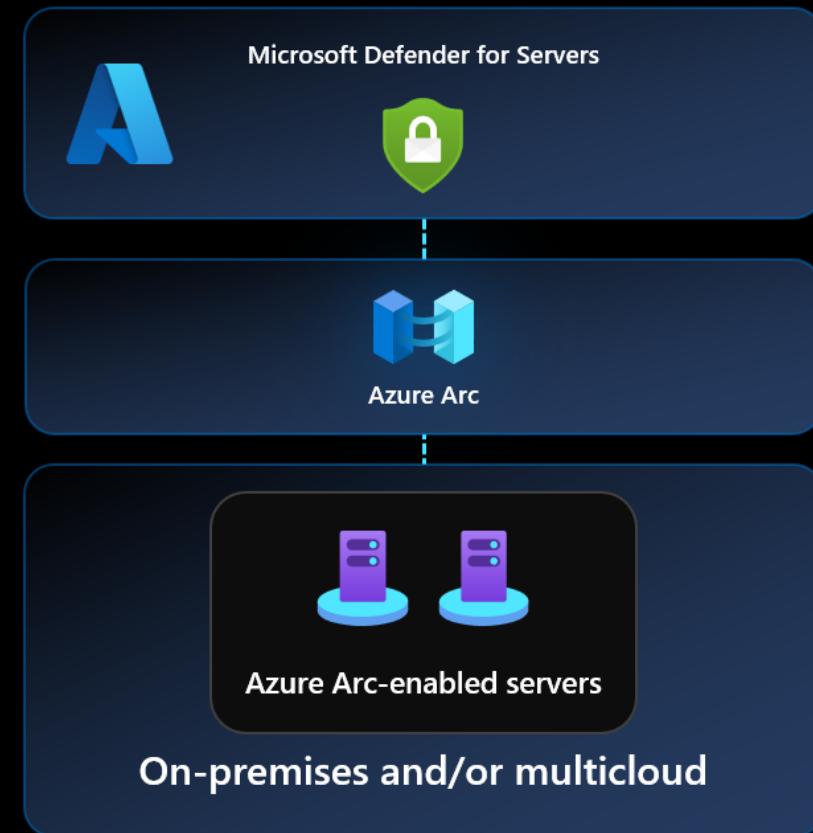
**Datacenter**



**Edge**

# Deploy Defender for Servers anywhere

- Easily deploy as extensions in Azure without re-installing agents
- Vulnerability assessment built-in with flexibility to use tools like Qualys offering integrated vulnerability scanning for your connected machines
- Use Just-in-Time VM access to control access to commonly attacked management ports
- Block malware with adaptive application controls
- Set guardrails with Azure Policy integration, server owners can view and remediate to meet their compliance



# Anticipate, detect and withstand security threats with complete visibility and resiliency

> Collect, analyze and act on telemetry data to gain end-to-end visibility across the stack

> Detect & diagnose issues through centralized insights, smart alerts and automated actions

> Single pane-of-glass visualization solution for hybrid and multi-cloud environments



**63%**

faster to resolve configuration errors thus preventing security vulnerabilities<sup>1</sup>

> Run a second instance when applications have a catastrophic failure

> Protect applications in Azure or a secondary datacenter

> Restore your data if it is corrupted, deleted or lost



**80%**

reduction in average data recovery time<sup>2</sup>

1. IDC Business Value White Paper, sponsored by Microsoft Azure, The Business Value of Microsoft Azure Monitor, April 2023. The study compares Azure Monitor with an on-premises observability solution.

2. IDC Business Value White Paper, sponsored by Microsoft Azure, The Business Value of Microsoft Azure Site Recovery and Backup, doc #US48616721, February 2022

# Financial Summary Modelling

This report highlights several options for reducing the overall cost of your estate on Azure

## Pay As You Go

Accounts for the actual usage of your servers over the scan period as measured by the assessment tool. Azure target VMs are selected based on collected usage statistics.

## Azure Reserved VM Instances (RIs)

An option to reserve capacity for 1 year or 3 years which in turn can lead to significant discounts.

<https://azure.microsoft.com/en-us/pricing/reserved-vm-instances/>

## Azure Hybrid Benefit (AHB)

A pricing benefit for customers who have licences with Software Assurance. Eligible customers can save up to 40% on Azure Virtual Machines and up to 55% on Azure SQL Database and SQL Server on Azure Virtual Machines.

<https://azure.microsoft.com/en-us/pricing/hybrid-benefit/>

Cost savings vs. pay as-you-go

