Solution Assessments as a Service
Top Unmanaged for Partner

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Curated Assessments

Powerful
1st or 3rd party tools

Customized visualizations
and recommendations

Using data to drive better decisions

Microsoft Solution Assessments use the power of <u>data-driven recommendations</u> and <u>actionable steps</u> to help customers improve productivity, reduce costs, and optimize their investments

Valuable insights

Get expert recommendations for your technology journey so you can make the best decisions for your business

Trusted partnership

We'll help you find the right Microsoft partner to drive your digital transformation

Peace of mind

Rest easy knowing you are staying ahead of your organization's security needs

Solution Assessment – the Value

Provides customers with an in depth understanding of the **opportunities** available in their environments to improve productivity, reduce cost and optimize investments.

- A Solution Assessment is a set of proven processes that delivers a comprehensive view of a tangible data insights, inventory, usage, and risks, ultimately enabling organizations to **regulate costs and resources, manage business, and align IT investments with business needs.**
- Solution Assessment provide data based **real data** on existing infrastructure, **security** threats and **migration** options including **TCO** views
- From a **security** standpoint, a Solution Assessment helps organizations identify and counter potential threats by ensuring that end-of-life products get decommissioned and that product updates and security patches are applied in a timely way.
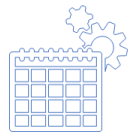
Planning

Prepare environment for tool deployment

Identify key points of contact and process owners

Identify scope of workloads & applications

Data collection

Deploy toolset/s:

Azure Migrate, Movere, Cloud Pilot, DMA, SQL script

Data Collection for 5-30 days

Data analysis

Review and validate all collected data, complete analysis and prepare **Business Case**

TCO

Final recommendations

Present our results, recommendations, and next steps through an overview presentation and detailed set of outputs

Microsoft | Solution Assessments

HOW: Solution Assessment – as a Service model

What do I have?

What should I do?

How shall I do it?

How can I optimize?

Assessment

Plan & decide

Migrate

Optimize
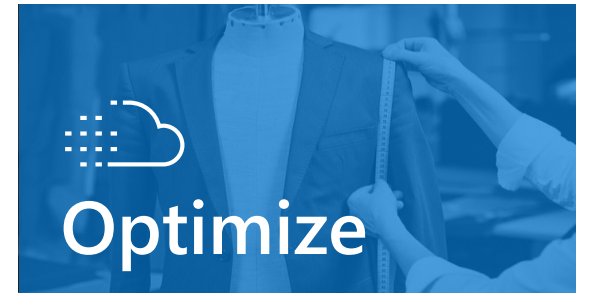
Partner

Microsoft as a service

Discovery Tool
Migration Tool – Data Collection
Data analysis

Final Assessment Report
Recommendations &
Action Plan
Workshop
Migration Action Plan and **sign off**

Migration in Execution

"Tailored" Cloud Project
Consumption monitoring
Cost Control & Governance
Managed Service

UnifyCloud   CSAT   MOVERE

CAST
Software Intelligence for Digital Leaders

Solution Assessment | as a Microsoft service - Goals

Accelerate top unmanaged customers' Microsoft cloud adoption by delivering cloud assessments and migration support at scale

4 solution assessments offered to help customers:

1. **Data & Infrastructure Migration**: Helps customers modernize their server & data storage and provide recommendations for migration to Azure

2. **CyberSecurity**: Helps customers understand security risks in their IT Infrastructure and how to solve issues

3. **Application Modernization**: Assists customers identify and prioritize applications for cloud modernization

4. **Workplace Modernization**: Provides the customer with a detailed prioritized set of recommendations of their overall cloud-ready capabilities in relation to their desktop cloud migration strategy

Partner Value

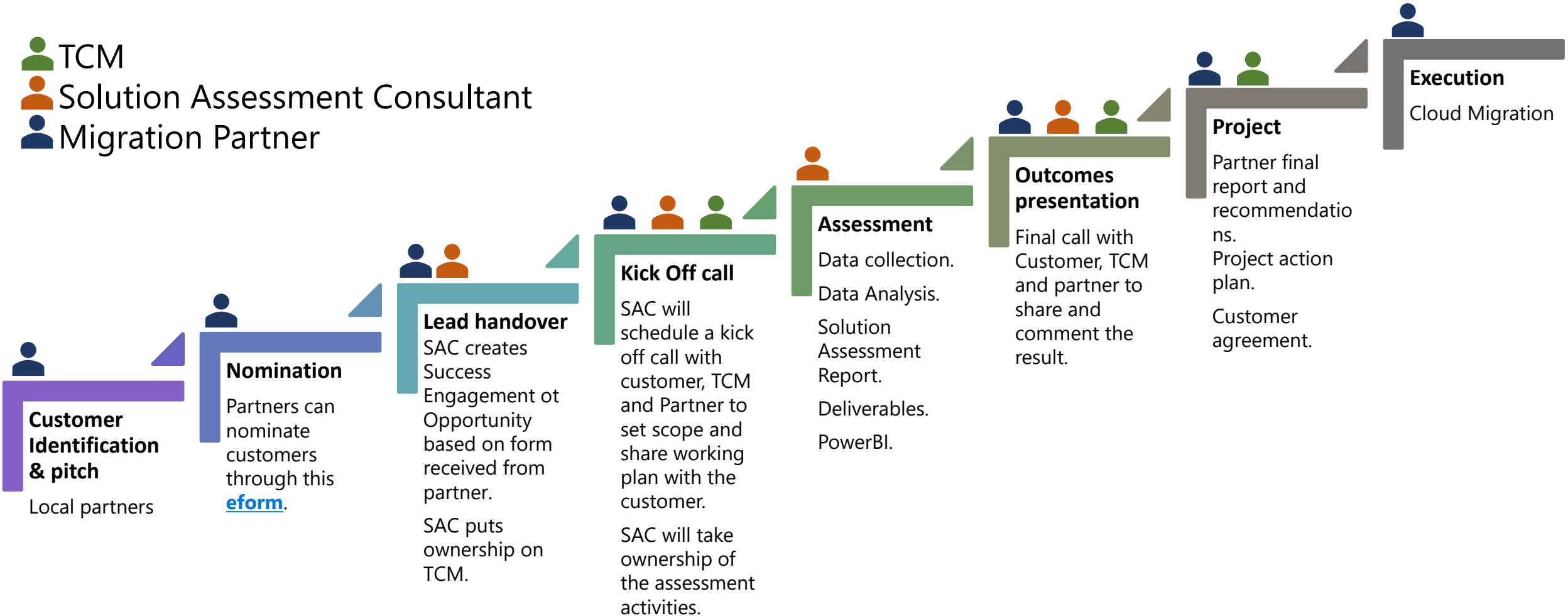|	
⏱	Reduce time to market ready to present final project proposal
✕↗	Focus on Partner core business
👥	Demonstrates deep partnership with Microsoft
✎	Assessment data gathering developed by a 3rd party
📋	Partner involved in every step and leads the final project

Solution Assessment process

Microsoft

- TCM
- Solution Assessment Consultant
- Migration Partner

Customer Identification & pitch

Local partners

Nomination

Partners can nominate customers through this **eform**.

Lead handover

SAC creates Success Engagement ot Opportunity based on form received from partner.

SAC puts ownership on TCM.

Kick Off call

SAC will schedule a kick off call with customer, TCM and Partner to set scope and share working plan with the customer.

SAC will take ownership of the assessment activities.

Assessment

Data collection.

Data Analysis.

Solution Assessment Report.

Deliverables.

PowerBI.

Outcomes presentation

Final call with Customer, TCM and partner to share and comment the result.

Project

Partner final report and recommendations.

Project action plan.

Customer agreement.

Execution

Cloud Migration

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Solution Assessments & Partners deliverables

Microsoft

Assessment Deliverables (Microsoft Provided)

Infrastructure Optimization

- End of Support Systems
- Right-Sizing for IaaS
- IaaS Projections (Windows & Basic Linux)
- Dependency Mapping
- Performance Metrics

Application Modernization

- Recommendations for Azure VM, SQL DB, Web app, Containers
- IaaS/PaaS TCO

Cybersecurity & Threat Assessment

- OS and SQL End of Support
- SQL Service Pack Deviations
- Software Vulnerabilities
- Missing Antivirus
- Exposure to Ransomware, and other threats

Workplace Modernization

- End of Support Systems
- Security Profile & Threat Advisor
- Competitive product mapping to M365 & TCO
- Aging Hardware

Partner Deliverables

Migration Plan

A customized migration plan should address scope, time and cost:

- Provide recommendations on the data gathered and analysis completed during the assessment
- Provide a prioritized roadmap detailing the cloud migration recommendations
- Provide a detailed timeline and milestones

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Partner - Final Assessment Report, must include

1. **Executive Summary:** A high-level summary of project background and scope, data discovery.

2. **Summary of Current Environment**
   - Data Collection info
   - PowerBI
   - "Solution Assessment as a service" Final Outcome
   - Partner Comments

3. **Business case:** Deliver a compelling business case aligned to the customer's initial objective, evaluating the benefit, cost, and risks of the proposed solution

4. **Recommended Next Steps**
   - Provide a customized **Migration Plan** that addresses scope, time, and cost, including
   - **recommendations** for a base architecture and landing zone foundation.

CSP Partner requirements

Partner
- needs to complete this training
- needs to use Partner Center
- needs to maintain an active MPN membership
- has a published offering in place to execute after the assessment
- has already 5 customers using the offering
- has employed certified people:
    - For all assessments: Azure Administrator Associate (AZ-104)
    - For specific assessments:

Infrastructure & Data Migration	Cybersecurity	Application Modernization	Workplace Modernization
• Azure Solution Architect Expert (AZ-303+AZ-304)	• Azure Security Engineer Associate (AZ-500)	• Azure Developer Associate (AZ-204)	• MS – 900 Microsoft 365 Fundamentals or MS-500 Microsoft 365 Security Administration

Solution Assessments

	Data & Infrastructure — Helps customers modernize their server, data centers and provide recommendations for migration to Azure	Cybersecurity — Takes a comprehensive look at customers' cybersecurity infrastructure	Application Modernization — Assess specific applications for PaaS in Azure	Workplace Modernization — Focuses on migrating to or implementing a software as a service (SaaS) strategy
Ideal Candidate	Customers with aging HW & SW Customers defining their cloud strategy Customers with Low or No cloud presence	Customers that want to evaluate their security risk	Established Azure customers considering PAAS solutions Customers considering modernizing on premise applications	Dark on cloud On-premise to Office365/M365 Aging hardware with Surface opportunity
Criteria	See details next slide	See details next slide	See details next slide	See details next slide
Timing	4-6 weeks	2-3 weeks	4-6 weeks	2 - 3 weeks
Tools	Movere	CSAT/Block64	CloudPilot	MAP, Movere, Block64
Inputs	Server hardware and software inventory with performance metrics	Hardware and software inventory Completed questionnaire to gather additional required information	Initial scan of all customer applications Agreed scope for analysis of 3-5 applications' source code	Hardware and software inventory, including refresh cycles, versions, operating systems and patching
Deliverable	A report detailing Azure readiness, including a TCO analysis and migration plan	A foundational analysis of the customer cybersecurity state and areas of potential risk, including a roadmap based on a maturity model using the CIS Controls A TCO analysis and migration plan	A report highlighting applications' readiness to move to Azure, including cost consumption estimates, reference architecture design, and a modernization plan	A detailed prioritized set of recommendations of the customer's cloud-ready capabilities in relation to their desktop cloud migration strategy with consideration to the Surface portfolio of devices A TCO analysis and migration plan

Customer Criteria

- Customer has a cloud strategy and the intention to move to the cloud
- Customer agrees to an appointment with the Solution Assessment Consultant

Infrastructure & Data Migration	Cybersecurity	Application Modernization	Workplace Modernization
• No Azure consumption, or less than 1K • More than 10 Windows/Linux/SQL/ OSS DB servers on premise • Domain Controller implemented	• More than 100 employees or PCs	• In house developed application • Application that serves customers (ISV) or at least 3 internal applications • Access to source code	• Customer is OnPrem or has high potential for upsell from basic cloud SKU's (EXO, E1, Business Basic, Proplus) • More than 100 employees • Compete solutions

Triggers
- End of Support Servers/Databases
- Usage of any virtualization console - Vmware or HyperV, minimum of 10 VMs
- Usage of Remote Desktop

Triggers
- No M365 usage or deployment
- Remote teamwork needed
- No security policy in place

Triggers
- Strong dependency on Hardware
- OS/Database EoS
- Legacy applications with databases on SQL, MySQL, Oracle, Postgress

Triggers
- EOS
- Hardware refresh
- No Teams, shadow IT, compete solutions

Actions

Review Material and technical training
Cloud Champion
http://Microsoft.com/solutionassessments

Identify and select your customer based on criteria

Submit your Customer nominations thru **eform**
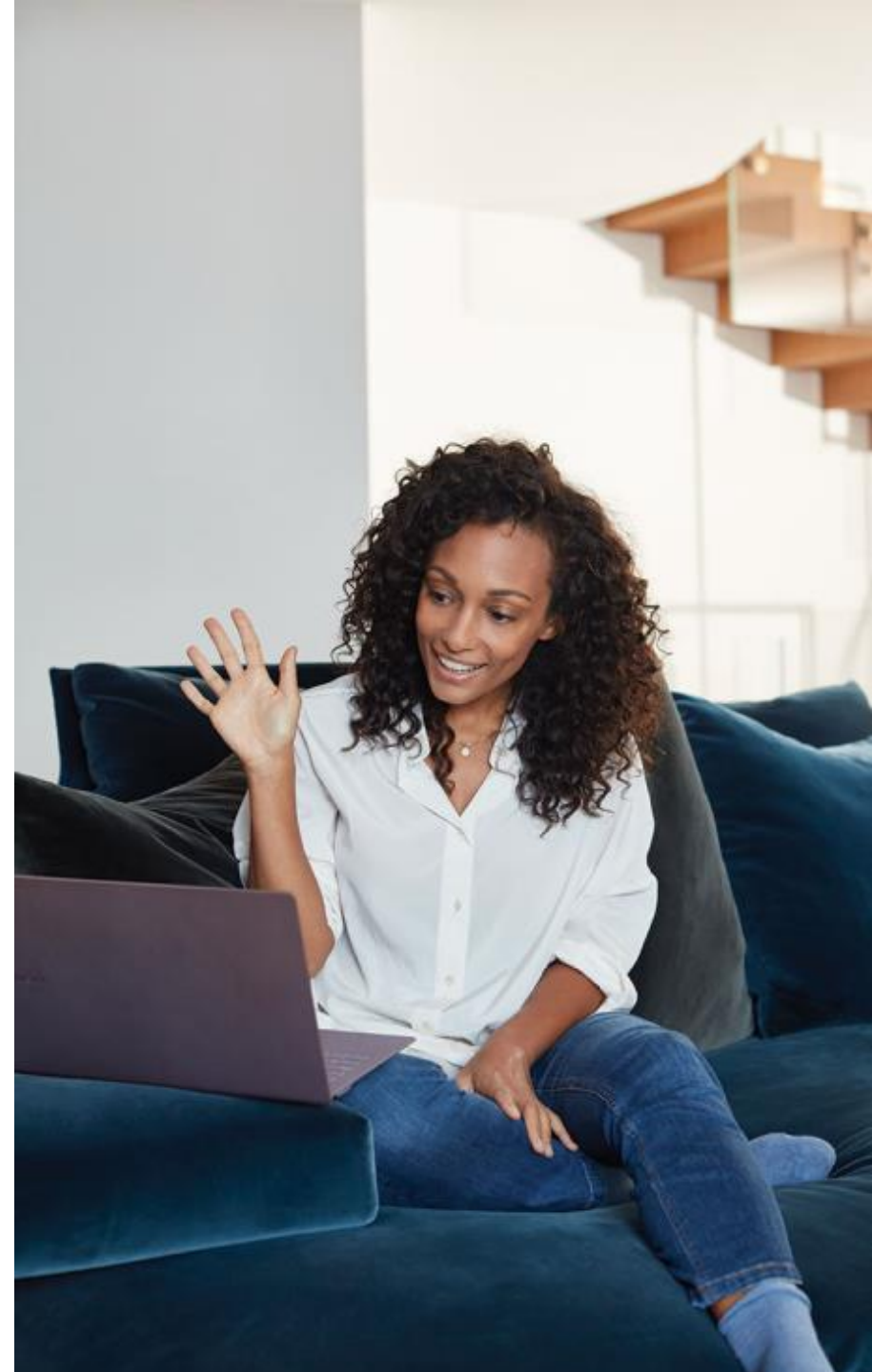Local Solution Assessment Consultant (SAC) will contact you

Organize kick off call with Customer and local SAC

Questions

solutionassessments@microsoft.com

Thank You

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Appendix
Assessment Report

Sample Outputs

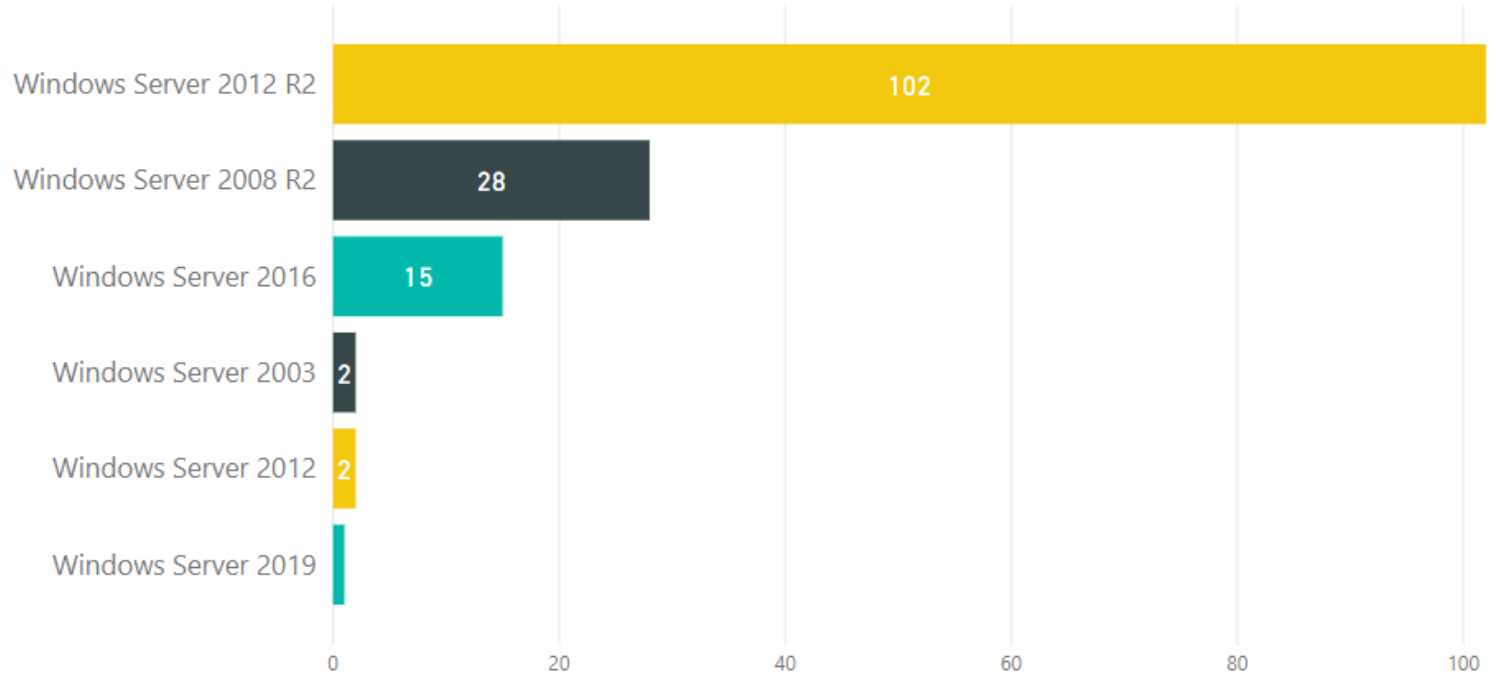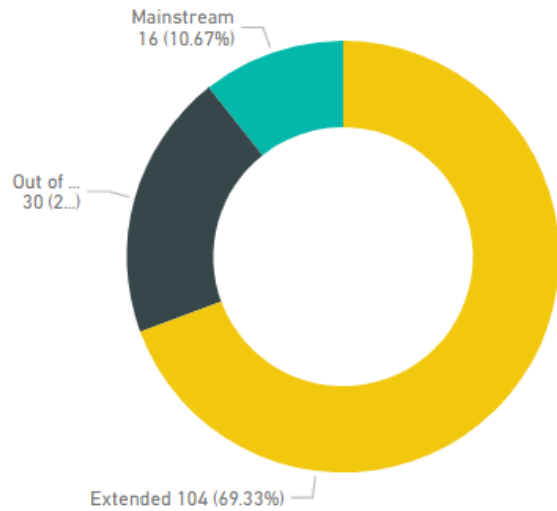# Operating Systems Lifecycle

150
Devices

OS Type
Server ⌄

Lifecycle Analysis - Operating Systems

Mainstream
16 (10.67%)

Out of ...
30 (2...)

Extended 104 (69.33%)

Device Distribution: Operating System Lifecycle

OS Status ● Extended ● Mainstream ● Out of Support

OS	Value
Windows Server 2012 R2	102
Windows Server 2008 R2	28
Windows Server 2016	15
Windows Server 2003	2
Windows Server 2012	2
Windows Server 2019	

0   20   40   60   80   100

Microsoft
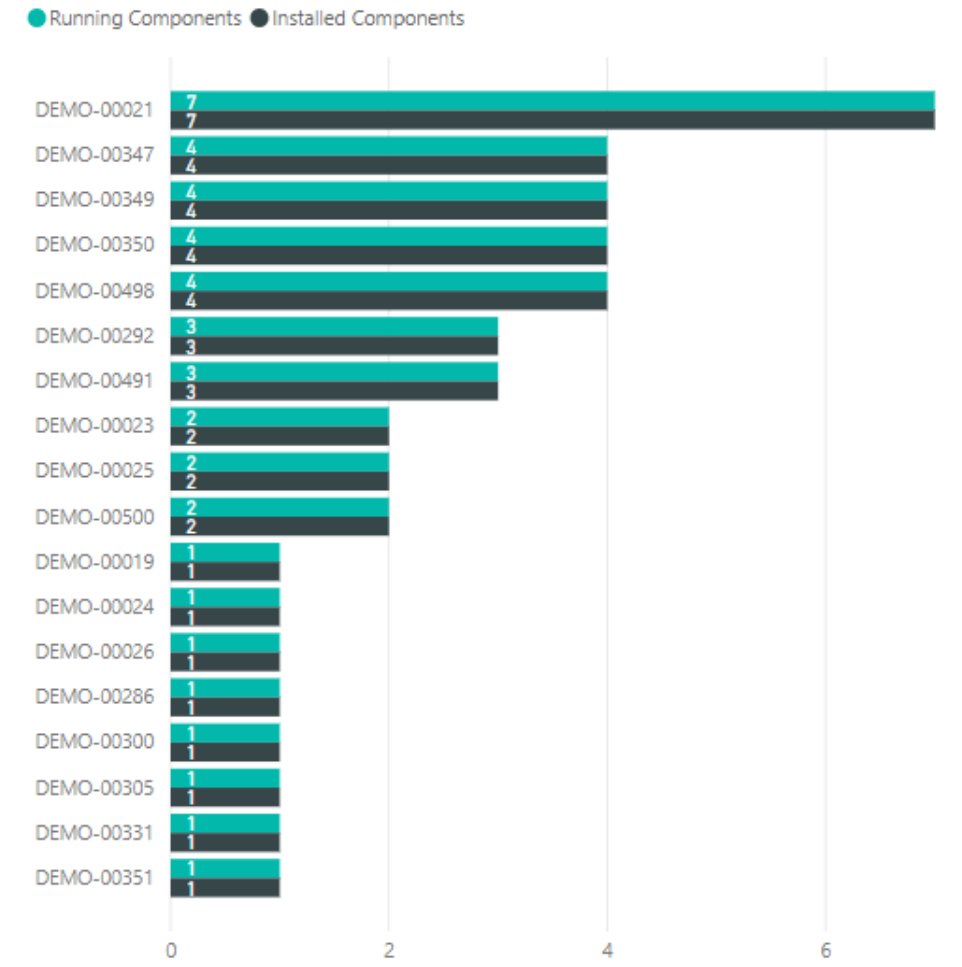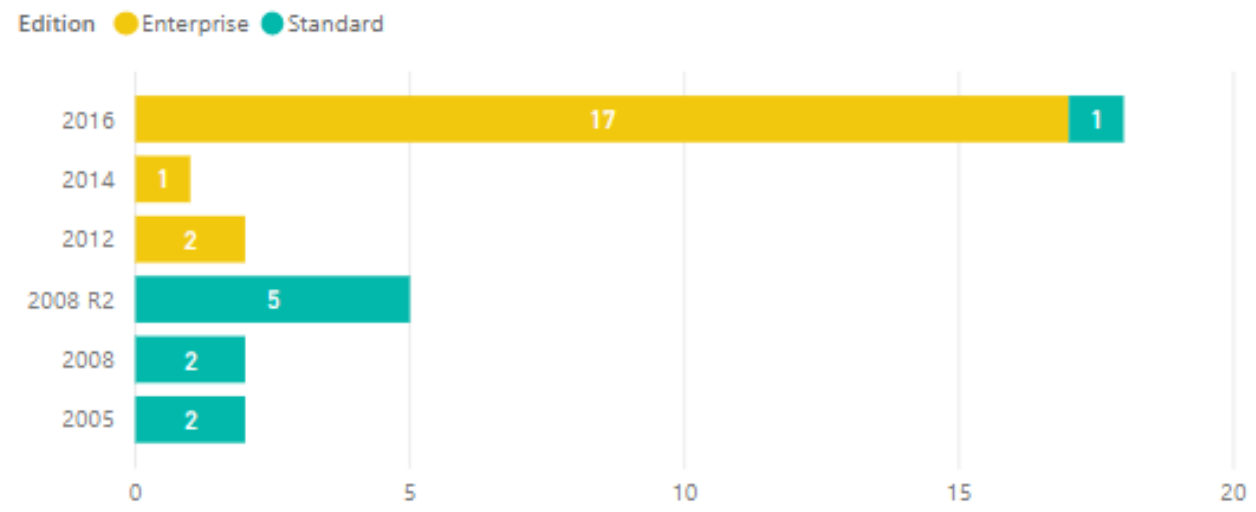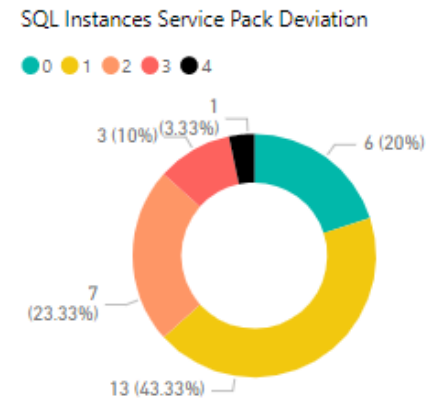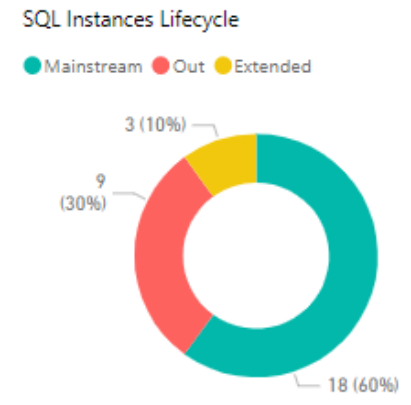
Azure Projections

130 Devices

53.53% Estimated Savings with Right-Sizing

26,072.51 Monthly VM+Storage

| 312,870.11 Over 1 year Cost VM+Storage

23,583.30 Azure VM per Month

2,489.21 Storage per Month

Azure VM Cost Breakdown (per Month)

23,583.30 Compute Cost

0.00 Windows Server License

0.00 SQL License

Region
Canada Central ▽

Currency
CAD ▽

VM Sizing
○ As-Is
● Cost Optimized
○ Right-Sized

Storage Scenario
○ As-Is
● Cost Optimized
○ Right-Sized

Commitment
○ 1 year RI
○ 3 year RI
● Pay as you Go

Dev/Test Scenario
○ 24h/7d
● 8h/5d

AHUB Scenario
● Full AHUB
○ No AHUB

AHUB Estimations
696 SQL Server Cores
1136 WIndows Server Cores
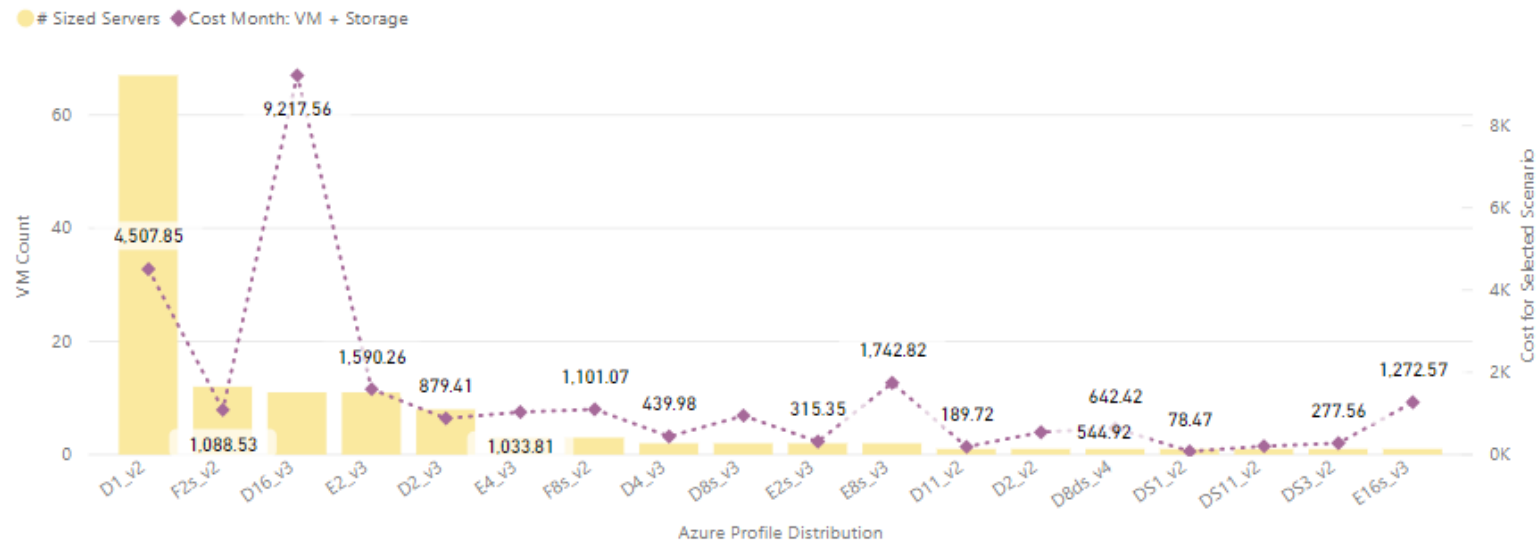
● # Sized Servers ◆ Cost Month: VM + Storage

Azure Profile Distribution

Device Name
Search 🔍 ✎

Device Name
All ▽

Migration Groups
All ▽

Environment
All ▽

OS Support
All ▽

SQL Edition
All ▽

Device Name	OS Version	SQL Edition	On-Prem Cores	On-Prem RAM (GB)	Azure Profile	Azure vCores	Azure RAM (GB)	AHUB WS	AHUB SQL	Hours Month	Azure VM Cost	Storage Cost	Total Cost	Description
DEMO-00504	2016		8	16	D1_v2	1	4	8	4	730	65.40	18.11	83.51	
DEMO-00503	2012		4	16	D1_v2	1	4	8	4	730	65.40	2.16	67.56	
DEMO-00500	2012	Enterprise	4	32	D1_v2	1	4	8	4	730	65.40	4.24	69.64	
DEMO-00499	2016		2	4	D1_v2	1	4	8	4	730	65.40	4.24	69.64	
DEMO-00498	2016	Enterprise	4	8	F8s_v2	8	16	8	8	730	346.63	61.18	407.81	
DEMO-00497	2016		2	16	D1_v2	1	4	8	4	730	65.40	8.47	73.87	
DEMO-00496	2016		2	16	D1_v2	1	4	8	4	730	65.40	8.47	73.87	
Total			**551**			**420**	**1873**	**1136**	**696**		**23,583.30**	**2,489.21**	**26,072.51**	

Storage & IOPS Analysis

130
Devices

2,489.21
Storage Cost

Region
Canada Central ⌄

Currency
CAD ⌄

VM Sizing
- ⦿ As-Is
- ○ Cost Optimized
- ○ Right-Sized

Storage Scenario
- ○ As-Is
- ⦿ Cost Optimized
- ○ Right-Sized

Commitment
- ○ 1 year RI
- ⦿ 3 year RI
- ○ Pay as you Go

Dev/Test Scenario
- ○ 24h/7d
- ⦿ 8h/5d

23,445.66
Azure VM

AHUB Scenario
- ⦿ Full AHUB
- ○ No AHUB

25,934.86
Monthly VM+Storage

Disk Usage per Server

● Used (GB) ● Available (GB)

Device	Used	Available
DEMO-00291	4,854	3,871
DEMO-00300	2,196	1,929
DEMO-00021	1,454	
DEMO-00490	881	
DEMO-00295	848	
DEMO-00024	731	

(axis: 0K, 2K, 4K, 6K, 8K, 10K)
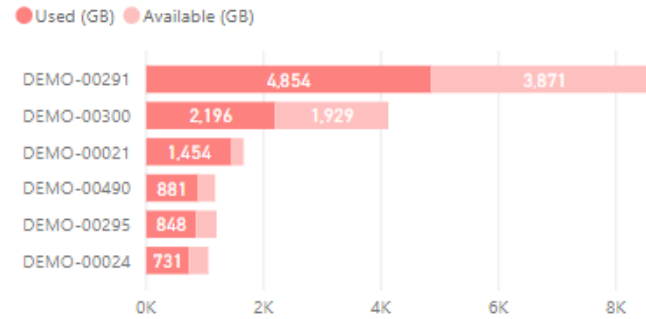
Drive Mix (Based on Right-Sizing)

Storage Type ● Premium ● Standard

Devices	Premium	Standard
DEMO-00285		7
DEMO-00292	2	5
DEMO-00291		6
DEMO-00300	3	2
DEMO-00347	2	2

Drive Count (by Storage Type) (axis: 0, 2, 4, 6, 8)
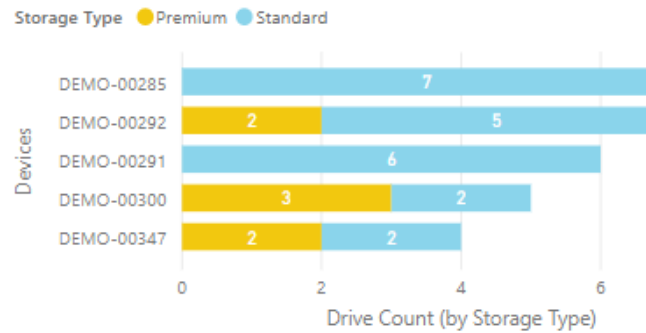
IOPS, Throughput and Storage Type Recommendations
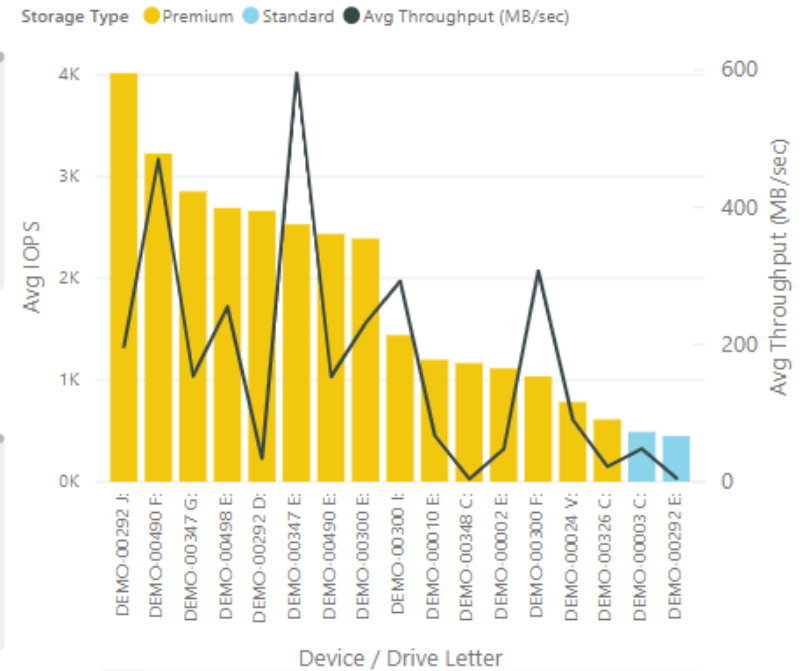
Storage Type ● Premium ● Standard ● Avg Throughput (MB/sec)

Device / Drive Letter

Device Name
Search 🔍 |

Device Name
All ⌄

Migration Groups
All ⌄

Environment
All ⌄

OS Support
All ⌄

SQL Edition
All ⌄

On-Prem Profiling: Disk Usage, IOPS & Throughput (MB/sec)

Device	Drive Letter	Total (GB)	Used (GB)	IOPS	Thgpt	Description
DEMO-00001	C:	75	59	44	1	
DEMO-00001	D:	60	48	32	1	
DEMO-00002	C:	125	43	430	19	
DEMO-00002	E:	100	92	1115	48	
DEMO-00003	C:	120	106	490	48	
Total		**40,108**	**20,018**	**50898**	**3859**	

Azure Managed Disks Sizing Scenarios

Storage Sizing	1. As-Is			2. Right-Sized			3. Cost Optimized		
Device/Drive	Disk Profile	Size (GB)	Monthly Cost	Disk Profile	Size (GB)	Monthly Cost	Disk Profile	Size (GB)	Monthly Cost
DEMO-00001/C:	S10	128	8.29	S10	128	8.29	S6	64	4.24
DEMO-00001/D:	S6	64	4.24	S6	64	4.24	S6	64	4.24
DEMO-00002/C:	S10	128	8.29	S10	128	8.29	S6	64	4.24
DEMO-00002/E:	S10	128	8.29	P20	512	93.71	P10	128	25.23
Total	**P10**	**54784**	**5,612.33**	**P15**	**103296**	**11,477.39**	**P10**	**30296**	**2,489.21**

Azure storage profiles are available as "Standard" and "Premium". And this is where IOPS becomes a key factor. If a disk's IOPS exceeds 500 or has a throughput greater than 60MB per second during an ARC scan, then Movere will recommend Premium storage SKUs. *More information at:* [Movere: Cloud Storage Sizing & Pricing](#)

Network Throughput
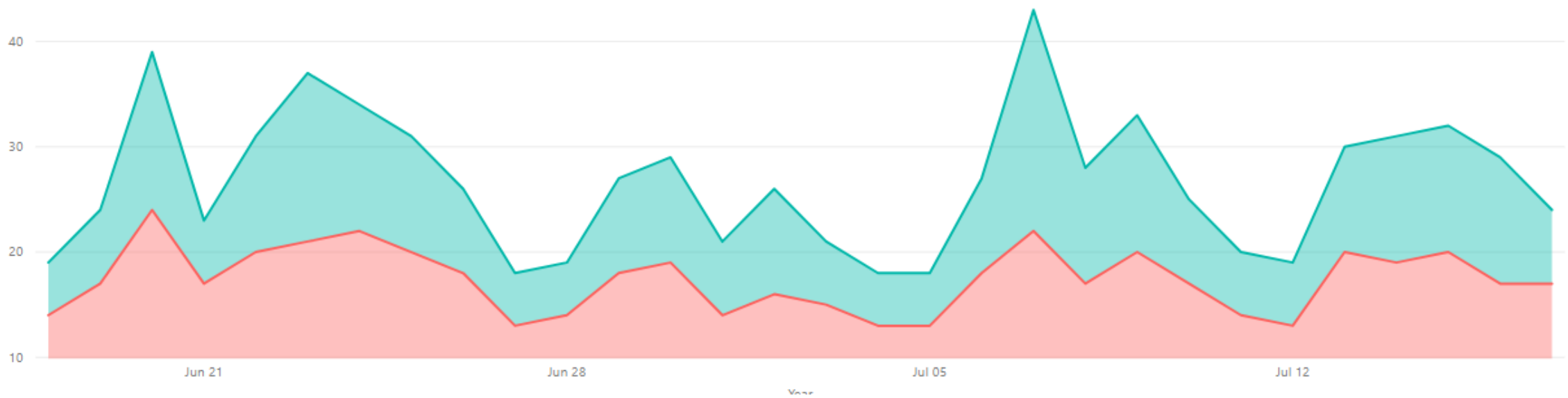
Infrastructure Optimization - Dependency Mapping

■■ Microsoft

Device Name
Search 🔍

Environment
All ⌄

Process Name
All ⌄

State
All ⌄

Environment (Foreign)
All ⌄

Foreign Devices
Search 🔍

Device Name
DEMO-00283 ⌄

Migration Groups
End of Support ⌄

1

Servers Selected

Servers
DEMO-00283

Foreign Device
All ⌄

Migration Groups (Foreign)
End of Support ⌄
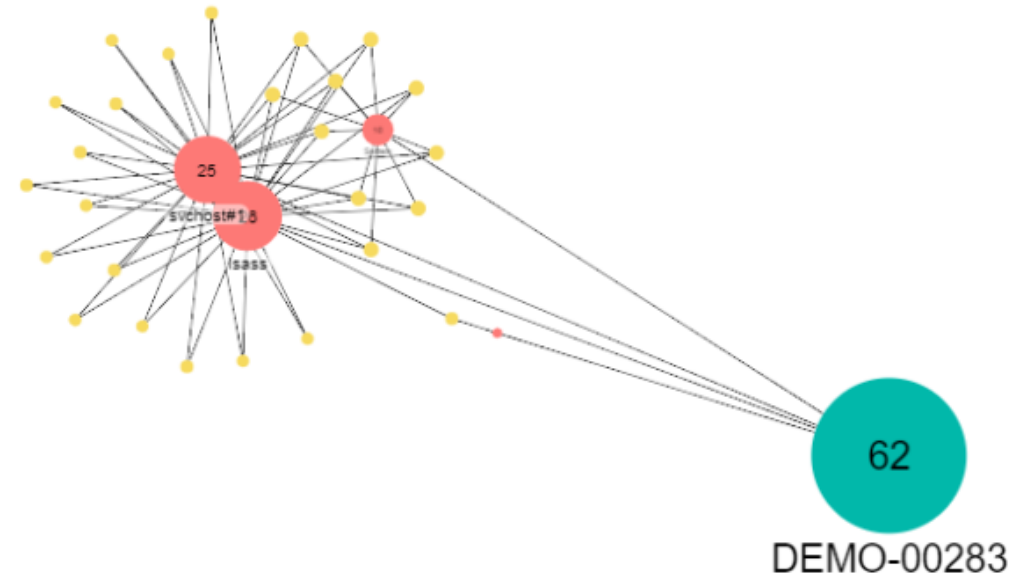
26

Foreign Devices

Foreign Devices
DEMO-00001
DEMO-00003
DEMO-00004
DEMO-00005
DEMO-00006
DEMO-00007
DEMO-00008
DEMO-00009
DEMO-00011
DEMO-00012
DEMO-00014
DEMO-00015
DEMO-00016
DEMO-00017
DEMO-00018
DEMO-00019
DEMO-00020
DEMO-00024
DEMO-00025
DEMO-00026
DEMO-00027
DEMO-00028
DEMO-00245

25
svchost#18
lsass
62
DEMO-00283

zoomcharts

● Shortname   ● Process Name   ● Foreign Device

Server	Process Name	Process Path	Local Port	State	Foreign Port	Foreign Device
DEMO-00283	lsass	C:\Windows\system32\lsass.exe	389	Established	228754	DEMO-00003
DEMO-00283	lsass	C:\Windows\system32\lsass.exe	389	Established	114267	DEMO-00012
DEMO-00283	lsass	C:\Windows\system32\lsass.exe	389	Established	435302	DEMO-00015
DEMO-00283	lsass	C:\Windows\system32\lsass.exe	389	Established	247035	DEMO-00016
DEMO-00283	lsass	C:\Windows\system32\lsass.exe	389	Established	536812	DEMO-00019
DEMO-00283	lsass	C:\Windows\system32\lsass.exe	389	Established	164985	DEMO-00026
DEMO-00283	lsass	C:\Windows\system32\lsass.exe	389	Established	227601	DEMO-00028
Total					**30058708**	

SQL Performance – Average Reads & Writes
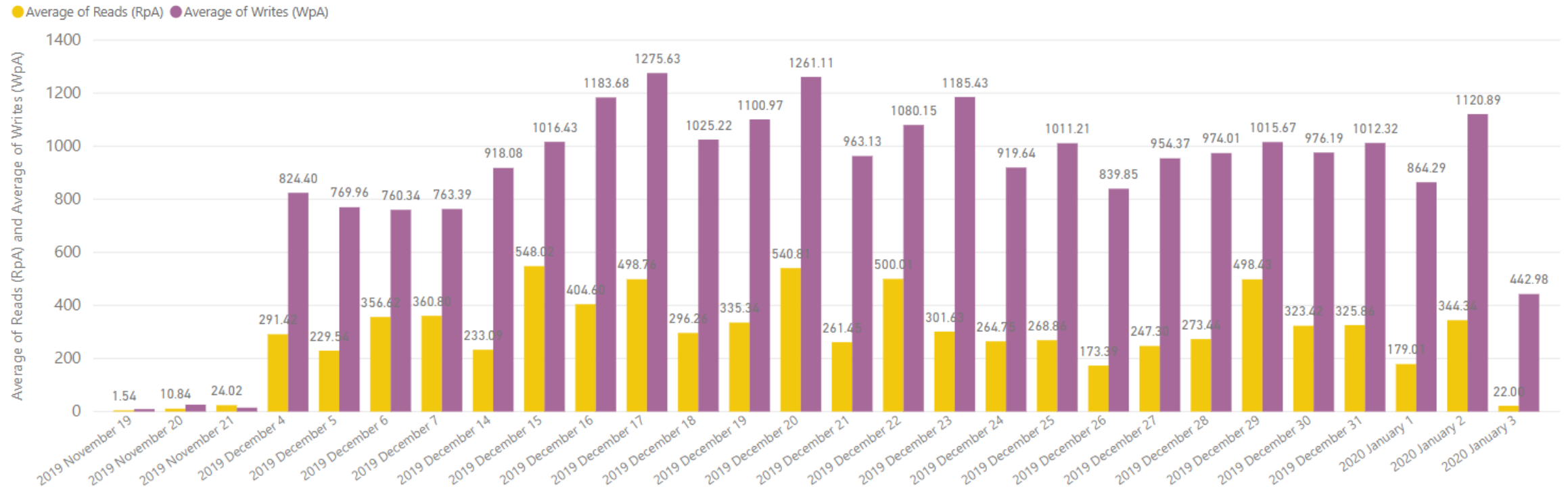
App Modernization: Assessment Overview

Microsoft

Assessed Apps **2**

Assessed DBs **2**

Application Name	Application Platform	Scan Date	Container Readiness	App Service Readiness	Virtual Machine Readiness
Demo App1	.Net	05-18-2020	75%	79%	79%
Demo App2	.Net	05-18-2020	74%	75%	79%

Database Name	Database Type	Source Platform
Demo Database1	SQL Server	On-Premise
Demo Database2	SQL Server	On-Premise

App Profile and Recommendations:

Demo App1: Web Application; 1 Component; 24296 Code Lines; .Net Platform

- **Azure App Service** is recommended
- **12** changes needed
- **66** hours of migration effort
- **S2** instance CAD **$ 206.13** (monthly)

Demo App2: Web Application; 4 Components; 11454 Code Lines; .Net Platform

- **Azure App Service** is recommended
- **25** changes needed
- **161** hours of migration effort
- **S2** instance CAD **$ 206.13** (monthly)

Database Profile and Recommendations:

Demo Database1: MSSQL; Express Edition; v15.0.2070.41

- **SQL Database (vCore)** is recommended.
- **7** changes needed.
- **22** hours of migration effort.
- **Gen 5 – 2 vCore** database CAD **$ 529.62** (monthly)

Demo Database2: MSSQL; Express Edition; v15.0.2070.41

- **SQL Database (vCore)** is recommended.
- **8** changes needed.
- **26** hours of migration effort.
- **Gen 5 – 2 vCore** database CAD **$ 529.62** (monthly)

App Modernization: Overview (Demo App)

Microsoft

Recommendations Result

Azure App Service	12
Azure Container(AKS)	14
Virtual Machine	12

Azure Infrastructure Cost

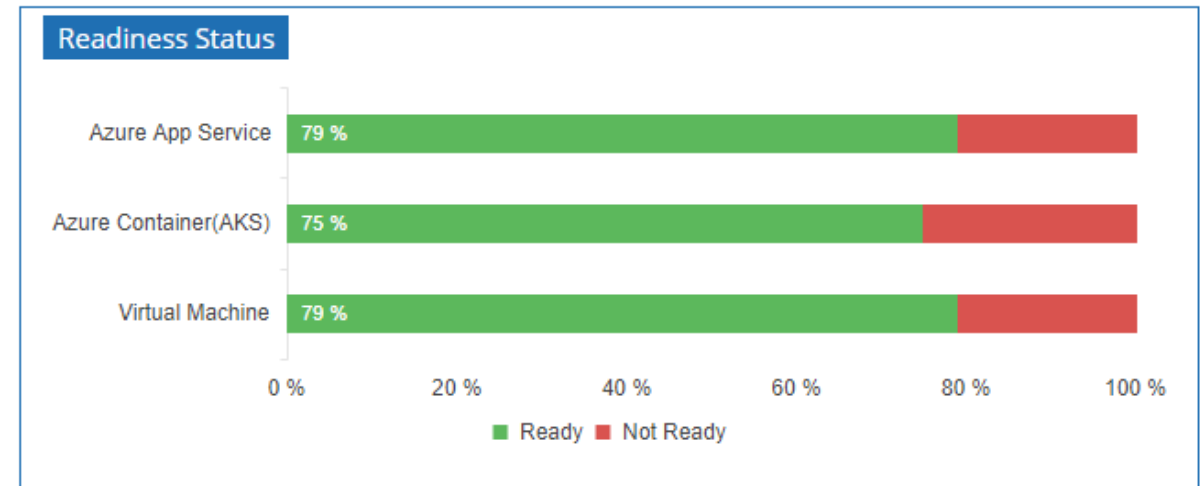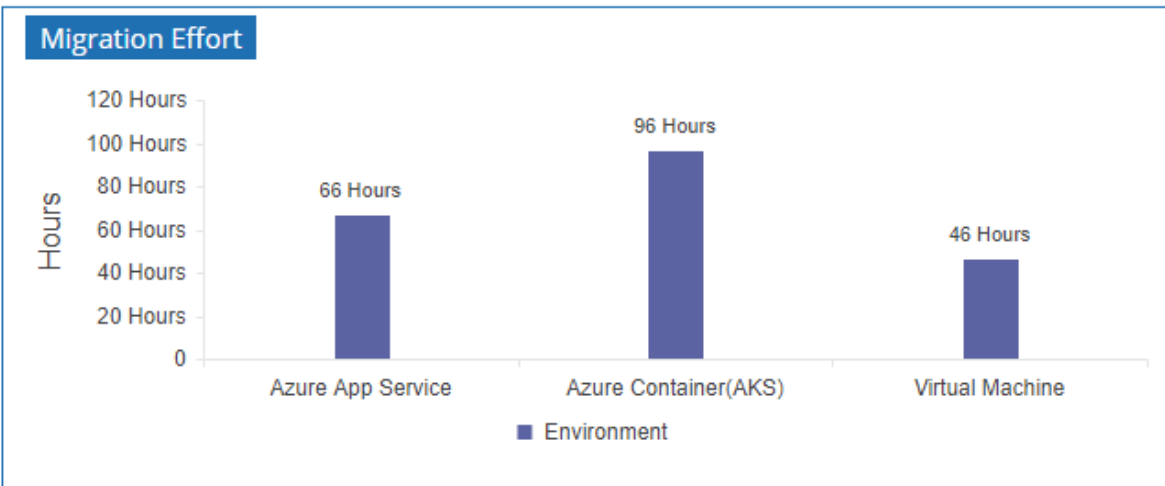|	
Azure App Service	S2 (CAD $ 206.13)
Azure Container(AKS)	DS2 v2 (2 Nodes) (CAD $ 262.34)
Virtual Machine	DS2 v2 (CAD $ 240.80)

Recommended Application Platform: Azure App Service enables you to build and host web applications in the programming language of your choice without managing infrastructure. It offers auto-scaling and high availability, supports both Windows and Linux, and enables automated deployments from GitHub, Visual Studio Team Services, or any Git repo.
More Info...

Why: This application is a good choice to move to Azure App Services, as it has no blockers & has additional features without any cost.
Other Option: Azure Container Instance, Azure Kubernetes Service, Service Fabric and Virtual Machine.

Migration Effort

Azure App Service: 66 Hours
Azure Container(AKS): 96 Hours
Virtual Machine: 46 Hours

Hours — 120 Hours, 100 Hours, 80 Hours, 60 Hours, 40 Hours, 20 Hours, 0

■ Environment

Readiness Status

Azure App Service	79 %
Azure Container(AKS)	75 %
Virtual Machine	79 %

0 % 20 % 40 % 60 % 80 % 100 %

■ Ready ■ Not Ready

App Modernization: App Service Assessment (Demo App)

Azure Web Apps enables you to build and host web applications in the programming language of your choice without managing infrastructure. It offers auto-scaling and high availability, supports both Windows and Linux, and enables automated deployments from GitHub, Visual Studio Team Services, or any Git repo. More Info...

Why: This application is a good choice to move to Azure app services, as it has no blockers & has additional features without any cost.
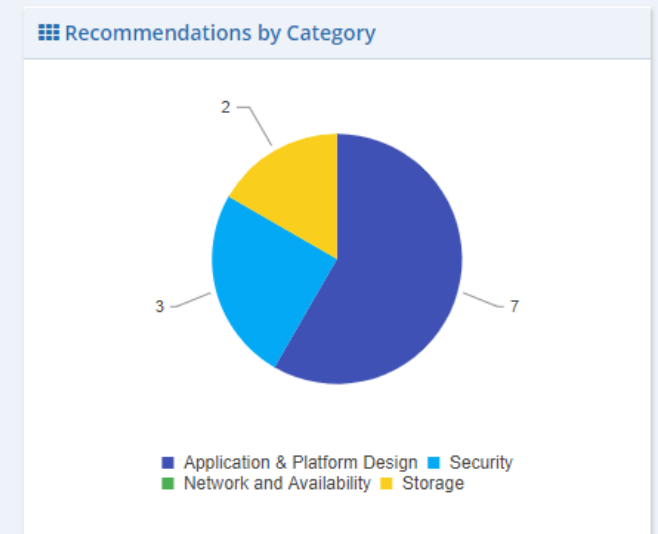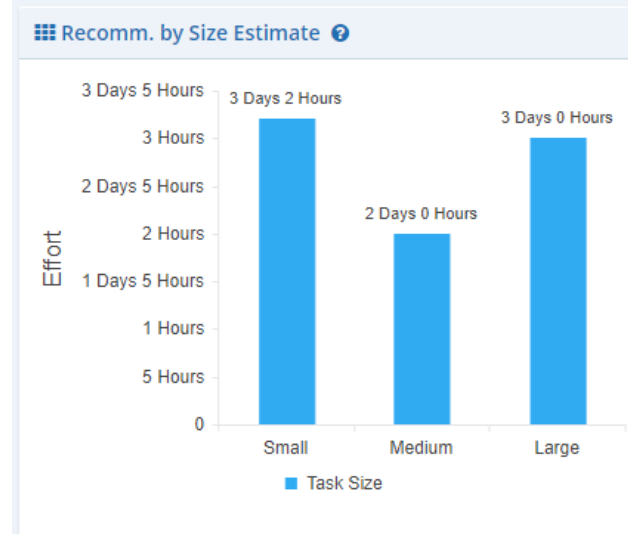**Cost:** S2 (CAD $ 206.13)

AppService Readiness

21 %

79 %

■ Not Ready ■ Ready
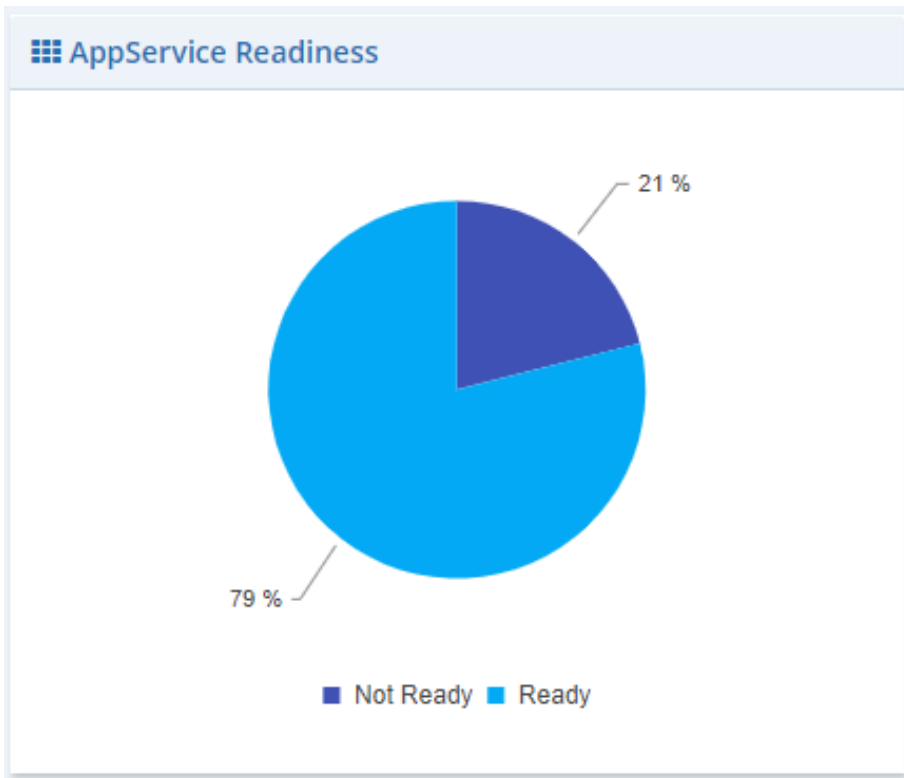
Recommendations will help increase readiness.

Recommendations Result

			Estimated Effort
Application & Platform Design	:	7	34 Hours
Security	:	3	27 Hours
Network & Availability	:	0	0
Storage	:	2	5 Hours

Total Estimated Effort

Small	Medium	Large
10	1	1

Recomm. by Size Estimate ❓

3 Days 2 Hours

2 Days 0 Hours

3 Days 0 Hours

Small Medium Large

■ Task Size

Recommendations by Category

2

3

7

■ Application & Platform Design ■ Security
■ Network and Availability ■ Storage

App Modernization: Recommendation Summary (Demo App)

Microsoft

⠿ Application & Platform Design

Category	Count
AppSettingsSection	1
SessionStateSection	1
Hard Coded IP Address	1
Hard Coded URL	1
Hard Coded Drive Path	1 ●
GAC Dependency	1
Com Import	1

⠿ Security

Category	Count
Windows Authentication	1
Connection Strings Section	1
PII Information	1

⠿ Storage

Category	Count
DB Connections	1
Automatic Backup	1

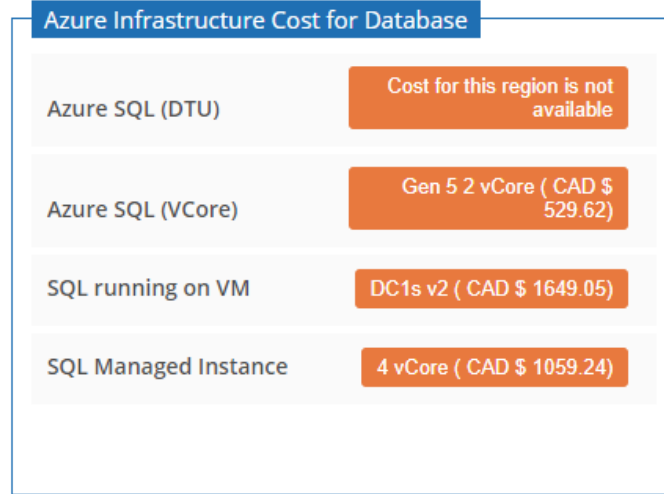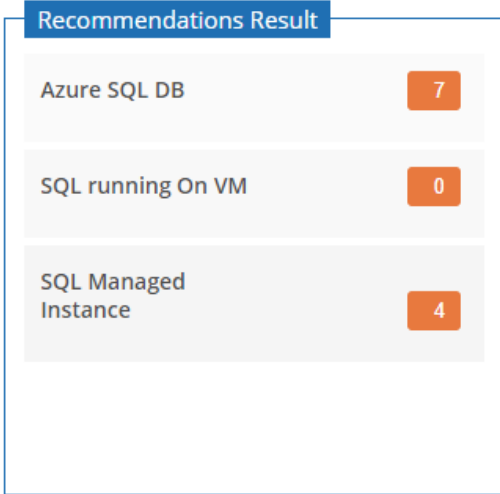**_12 changes recommended to optimize app migration_**

● Mandatory Changes

App Modernization: Recommendation Summary (Demo App)

Sample summary table for Key Recommendations

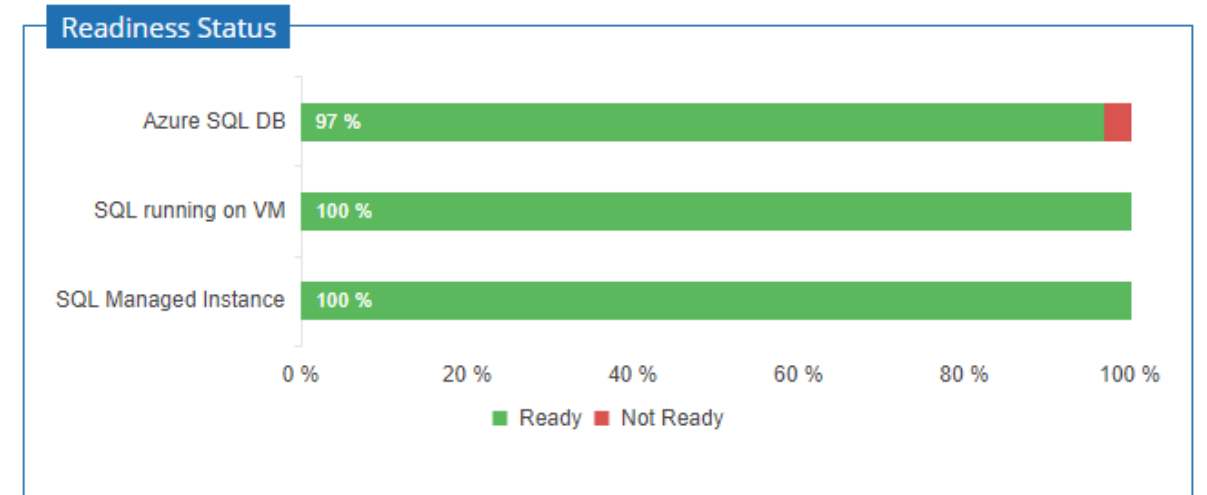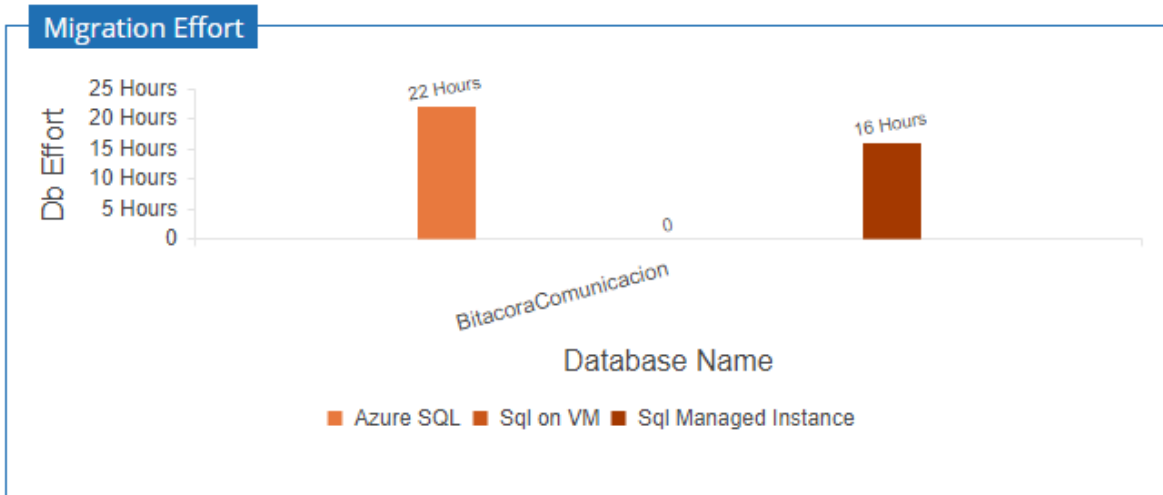| Code Block	Line	Hours	Impact	Reason for change
<authentication mode="Windows" />	74	24	Optional	Application using Windows Authentication for Identity. Windows Authentication is not supported on the cloud, use other recommended authentication scheme for identity
N/A	N/A	1	Optional	AppSettingsSection is used for storing sensitive information of application.
<sessionState mode="InProc" timeout="40" />	60	4	Optional	In Proc, Session mode will not support when you scale up your Application.
Dim path2 As String = "D:\ABC\Apps\DemoApp1\Demo\tmp\Sample.pdf"	22	16	**Mandatory**	The Application uses Hard Coded Drive Path. These drive paths may not be accessible after deployment in Azure App Service.

Microsoft

App Modernization: Overview (Demo Database)

Microsoft

Recommendations Result

Azure SQL DB	7
SQL running On VM	0
SQL Managed Instance	4

Azure Infrastructure Cost for Database

Azure SQL (DTU)	Cost for this region is not available
Azure SQL (VCore)	Gen 5 2 vCore (CAD $ 529.62)
SQL running on VM	DC1s v2 (CAD $ 1649.05)
SQL Managed Instance	4 vCore (CAD $ 1059.24)

Recommended Database Platform : SQL Database is a general-purpose relational database service that supports structures such as relational data, JSON, spatial, and XML. It delivers dynamically scalable performance and provides options such as column store indexes for extreme analytic analysis and reporting, and in-memory OLTP for extreme transactional processing. Microsoft handles all patching and updating of the SQL code base seamlessly and abstracts away all management of the underlying infrastructure.

Why: Highly Scalable without downtime. Enable Failover clustering in minutes. Supports in built auditing , logging , query performance optimization and elastic query in a single connection.
Other Options: SQL Service running on IaaS Virtual Machine and Azure SQL Database managed instance.

Migration Effort

Bar chart titled "Migration Effort" with Db Effort (Hours) on Y axis (0 to 25 Hours) and Database Name on X axis. Bars: 22 Hours, 0, 16 Hours for BitacoraComunicacion. Legend: Azure SQL, Sql on VM, Sql Managed Instance.

Readiness Status

|	
Azure SQL DB	97 %
SQL running on VM	100 %
SQL Managed Instance	100 %

Legend: Ready, Not Ready

App Modernization: Azure SQL Assessment (Demo Database)

Azure Web Apps enables you to build and host web applications in the programming language of your choice without managing infrastructure. It offers auto-scaling and high availability, supports both Windows and Linux, and enables automated deployments from GitHub, Visual Studio Team Services, or any Git repo. More Info...
Why: This application is a good choice to move to Azure app services, as it has no blockers & has additional features without any cost.
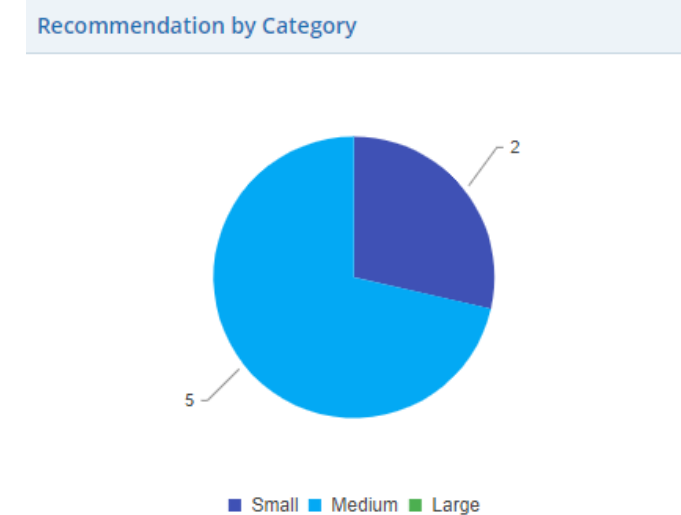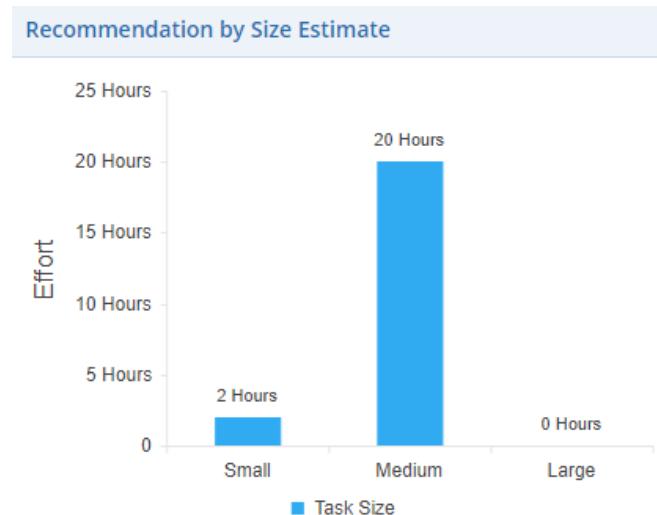**Cost:** S2 (CAD $ 206.13)

Azure SQL DB Readiness

- 3 %
- 97 %
- ■ Not Ready ■ Ready
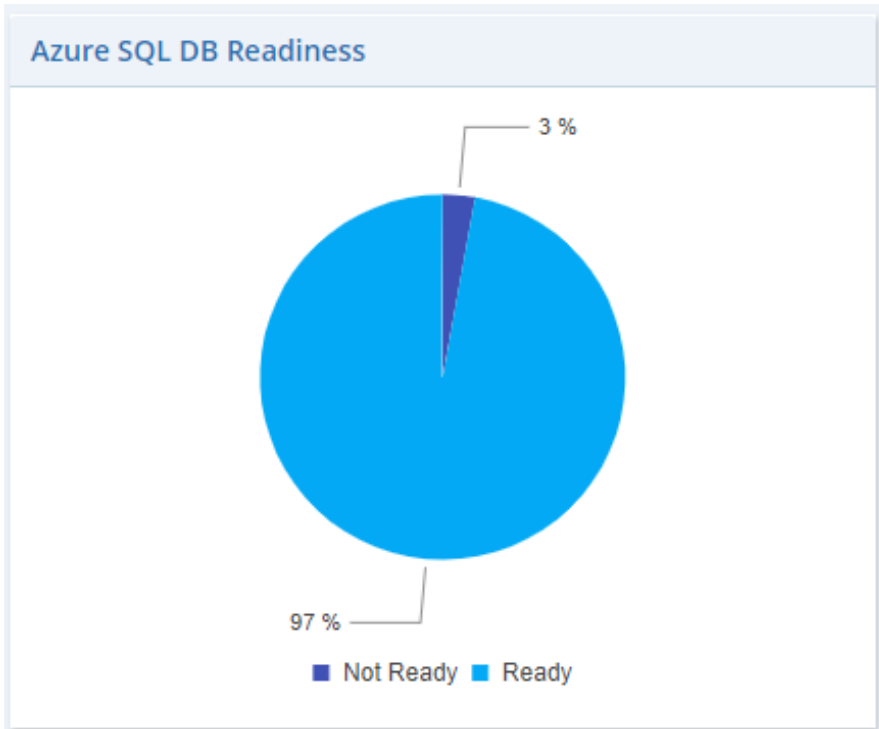
Recommendations Result

Total Recommendations	Impacted Objects
7	11

Total Efforts
22 Hours

Total Estimated Effort

Small	Medium	Large
2	5	0

Recommendation by Size Estimate

Recommendation by Category

- 2
- 5
- ■ Small ■ Medium ■ Large

Recommendations will help increase readiness.

App Modernization: Recommendations (Demo Database)

⚠ Migration Blockers

Issue Details:	Action
Cross database queries using three- or four-part names not supported in Azure SQL Database	**Mandatory**

Impact: Queries or references using three- or four-part names not supported in Azure SQL Database. Three-part name format, [database_name].[schema_name].[object_name], is supported only when the database_name is the current database or the database_name is tempdb and the object_name starts with #.

Recommendation: Move the dependent datasets from other databases into the database that is being migrated. Migrate the dependent database(s) to Azure and use 'Elastic Database Query' functionality to query across Azure SQL databases. (more info)

Issue Details:	Action
BAK file (import/export) is not supported in Azure SQL Database	**Mandatory**

Impact: You can not restore database in Azure SQL Database using BAK file.

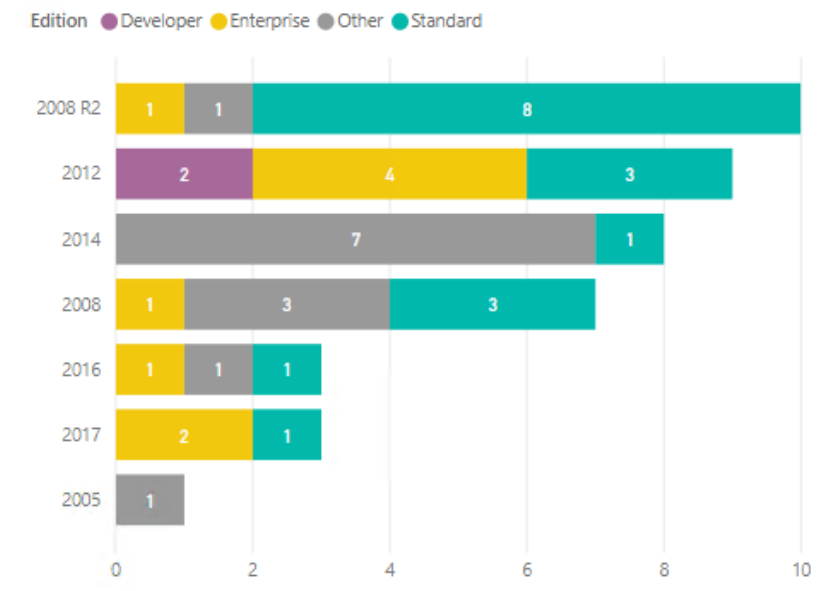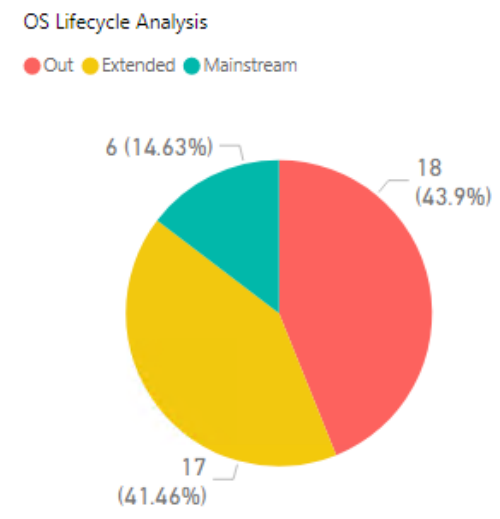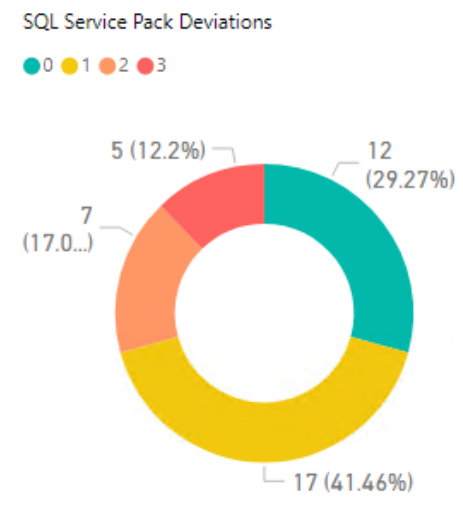**Recommendation**: Convert BAK file into a BACPAC file and restore it manually (more info).

SQL Overview

36 Devices

41 Instances

263 Services

SQL Service Pack Deviations

● 0 ● 1 ● 2 ● 3

5 (12.2%)
7 (17.0…)
12 (29.27%)
17 (41.46%)

OS Lifecycle Analysis

● Out ● Extended ● Mainstream

6 (14.63%)
18 (43.9%)
17 (41.46%)

Edition ● Developer ● Enterprise ● Other ● Standard

Year				
2008 R2	1	1	8	
2012	2	4	3	
2014	7	1		
2008	1	3	3	
2016	1	1	1	
2017	2	1		
2005	1			

0   2   4   6   8   10

Device Name

[Search 🔍] 🗑

Environment

Dev/Test	Productive

Service Running?

No	Yes

Computer Name	Instance Name	Machine Type	Service Pack	Max SP	SP Deviation	Total Cores	Host Name
DEV-DES-04	SQLDEVDES04	Virtual	Service Pack 1	3	2	2	SRV-PRD-ESX1
NB-IAE-1140	MSSQLSERVER	Physical	RTM	0	0	2	
SRV-DE-SQL08-P	MSSQLSERVER	Virtual	Service Pack 4	4	0	2	SRV-PRD-ESX1
SRV-DE-SQL17	MSSQLSERVER	Virtual	RTM	0	0	4	SRV-PRD-ESX1
SRV-MS-DPM1	MSDPM2012	Physical	Service Pack 3	3	0	4	
SRV-MS-ENC	MSSQLSERVER	Virtual	Service Pack 3	4	1	2	SRV-PRD-ESX1
SRV-MS-SYM1	MSSQLSERVER	Virtual	Service Pack 3	4	1	2	SRV-PRD-ESX7
SRV-PP-SQL001-P	MSSQLSERVER	Virtual	Service Pack 3	4	1	2	SRV-PRD-ESX8
SRV-PR-ABS1	MSDPMINSTANCE	Virtual	Service Pack 1	2	1	4	
SRV-PR-AUD1-P	MSSQLSERVER	Virtual	RTM	3	3	2	SRV-PRD-ESX1
SRV-PR-DPM12-R	MSSQLSERVER	Physical	Service Pack 4	4	0	8	
Total				**128**	**46**	**165**	

Computer Name	Running	Service Name	Service Description	Start
DEV-DES-02	No	MSSQLServerADHelper100	SQL Active Directory Helper Service	Disal
DEV-DES-02	No	SQLAgent$SQLDEVDES02	SQL Server Agent (SQLDEVDES02)	Man
DEV-DES-02	Yes	MsDtsServer100	SQL Server Integration Services 10.0	Auto
DEV-DES-02	Yes	MSOLAP$SQLDEVDES02	SQL Server Analysis Services (SQLDEVDES02)	Auto
DEV-DES-02	Yes	MSSQL$SQLDEVDES02	SQL Server (SQLDEVDES02)	Auto
DEV-DES-02	Yes	MSSQLFDLauncher$SQLDEVDES02	SQL Full-text Filter Daemon Launcher (SQLDEVDES02)	Man
DEV-DES-02	Yes	ReportServer$SQLDEVDES02	SQL Server Reporting Services (SQLDEVDES02)	Auto
DEV-DES-02	Yes	SQLBrowser	SQL Server Browser	Auto
DEV-DES-02	Yes	SQLWriter	SQL Server VSS Writer	Auto
DEV-DES-04	No	MSOLAP$SQLDEVDES04	SQL Server Analysis Services (SQLDEVDES04)	Man
DEV-DES-04	No	MSSQLFDLauncher$SQLDEVDES04	SQL Full-text Filter Daemon Launcher (SQLDEVDES04)	Disal
DEV-DES-04	No	MSSQLServerADHelper100	SQL Active Directory Helper Service	Disal

IaaS & PaaS Projections
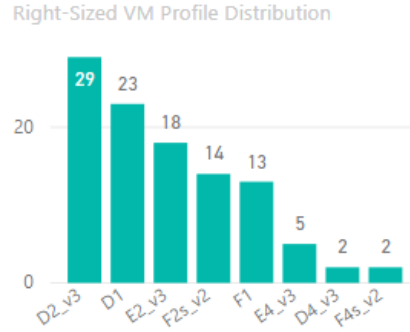
Microsoft

Canada Central — Region
CAD — Currency

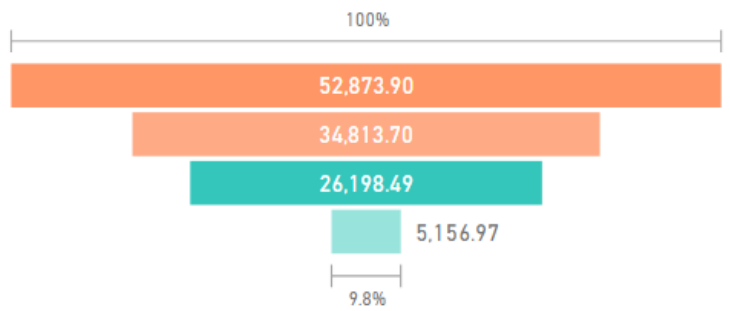**SQL Edition**
All

OS Support Status
All

SQL Support Status
All

Environment
All

Device Name
Search

As-Is VM Profile Distribution

Right-Sized VM Profile Distribution
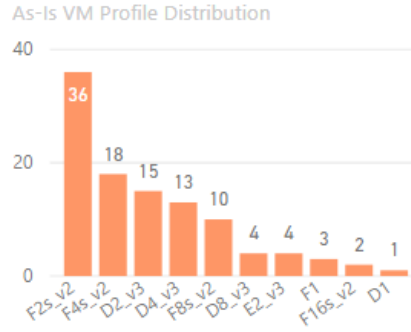
VM Scenario Cost Comparison

As-Is PayG no AHUB	52,873.90
Right-Sized PayG no AHUB	34,813.70
Right-Sized 3yRI no AHUB	26,198.49
Right-Sized 3yRI full AHUB	5,156.97 (9.8%)

Right-Sized SQL Managed Instance Size Distribution

general-purpose-4	34
general-purpose-8	1
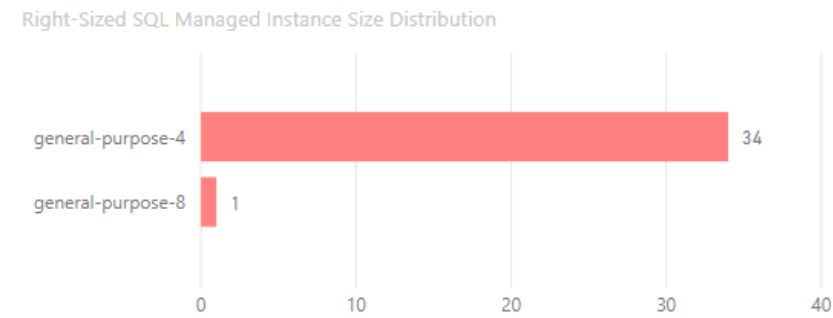
Managed Instance Scenario Cost Comparison

As-Is PayG no AHUB	52,274.59
Right-Sized 3yRI no AHUB	24,188.74
Right-Sized 3yRI full AHUB	13,680.32 (26.2%)
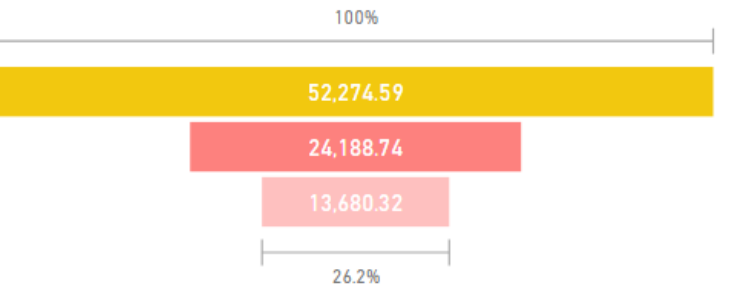
Server Migration Scenarios: Azure VMs & SQL Managed Instances

Machine Name	OS Version	SQL Edition	SQL Version	AI VM Profile	RS VM Profile	AI-PayG-COS	RS-3yRI-COS	RS-3yRI-C	RS SQL MI Size	SQL M
SRV-DE-DSPACE-P	2012 R2			F2s_v2	F1	162.79	59.03	25.45		
SRV-DE-IIS01-P	2012 R2			F2s_v2	D1	162.79	59.83	26.25		
SRV-DES-06	2012 R2			D2_v3	F2s_v2	183.23	101.66	34.50		
SRV-DE-SQL08-P	2012 R2	Standard	2008	F2s_v2	D1	454.79	351.83	26.25	general-purpose-4	
SRV-DE-SQL17	2016	Enterprise	2017	D4_v3	D2_v3	1,461.46	1,206.08	43.92	general-purpose-4	
SRV-DEV-DES3	2008 R2			D2_v3	F2s_v2	183.23	101.66	34.50		
SRV-DE-WEBPLA-P	2012 R2			F4s_v2	D2_v3	325.58	111.08	43.92		
SRV-MS-APP	2003			F2s_v2	F1	162.79	59.03	25.45		
SRV-MS-APP2	2003			F1	F1	81.03	59.03	25.45		
SRV-MS-APP4	2012 R2			F2s_v2	D2_v3	162.79	111.08	43.92		
SRV-MS-BPM01	2003			F2s_v2	F1	162.79	59.03	25.45		
SRV-MS-CGN2	2008 R2			D4_v3	F4_v3	366.46	288.04	153.72		
Total						**52,873.90**	**26,198.49**	**5,156.97**		**5**

Storage Profiling (Managed Disks)

Machine Name	Disk Name	Azure Profile	Price Per Month	Used Space
SRV-DE-DSPACE-P	0 C:	premiumssd-p6	17.63	1
SRV-DE-DSPACE-P	1 D:	premiumssd-p6	17.63	3
SRV-DE-IIS01-P	0 C:	premiumssd-p6	17.63	3
SRV-DES-06	0 C:	premiumssd-p10	34.05	7
SRV-DE-SQL08-P	0 C:	premiumssd-p6	17.63	2
SRV-DE-SQL08-P	1 D:	premiumssd-p6	17.63	5
SRV-DE-SQL17	0 C:	premiumssd-p10	34.05	6
SRV-DE-SQL17	1 D:	premiumssd-p10	34.05	9
SRV-DEV-DES3	0 C:	premiumssd-p6	17.63	3
SRV-DE-WEBPLA-P	0 C:	premiumssd-p10	34.05	1
SRV-DE-WEBPLA-P	1 D:	premiumssd-p20	126.46	34
SRV-MS-APP	0 C: N:	premiumssd-p6	17.63	2
Total			**7,356.91**	**13,48**

7,356.91
Storage price Per Month (add to Azure VM Cost)

Cost Acronyms: AI = As-Is; RS = Right-Sized | PayG = Pay as you go; 1yRI = 1 year Reserved Instances; 3yRI = 3 year Reserved Instances; C = Compute Cost; O = Operating System Cost; S = SQL Cost. (*AHUB removes O and S cost*) | SQL MI = SQL Managed Instance
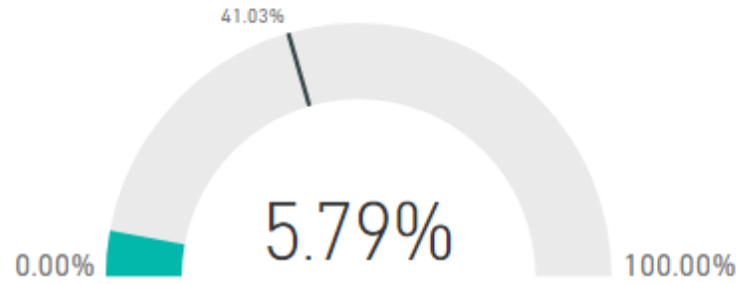
Azure Express: Performance Metrics
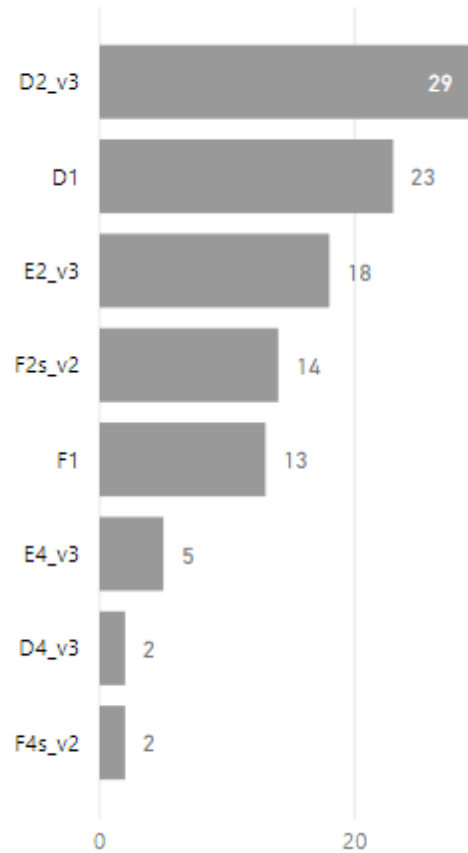
Movere Overview

Tenant

(Port 443)

Console

Bots (Port 139)

Payloads (Port 443)

Target Devices
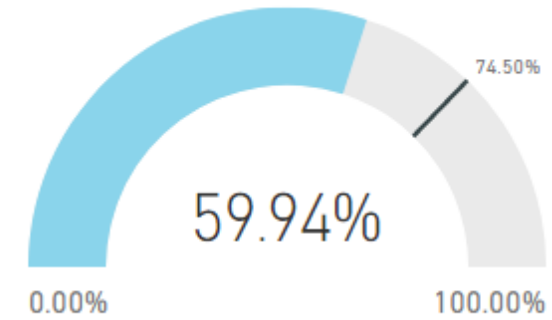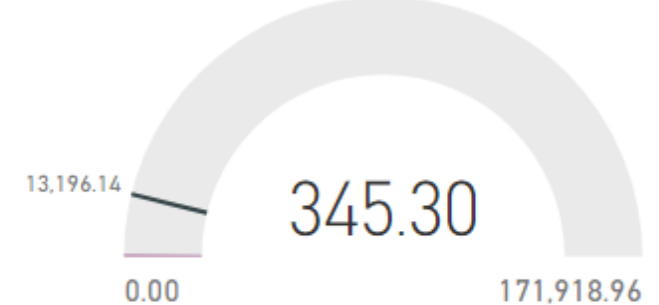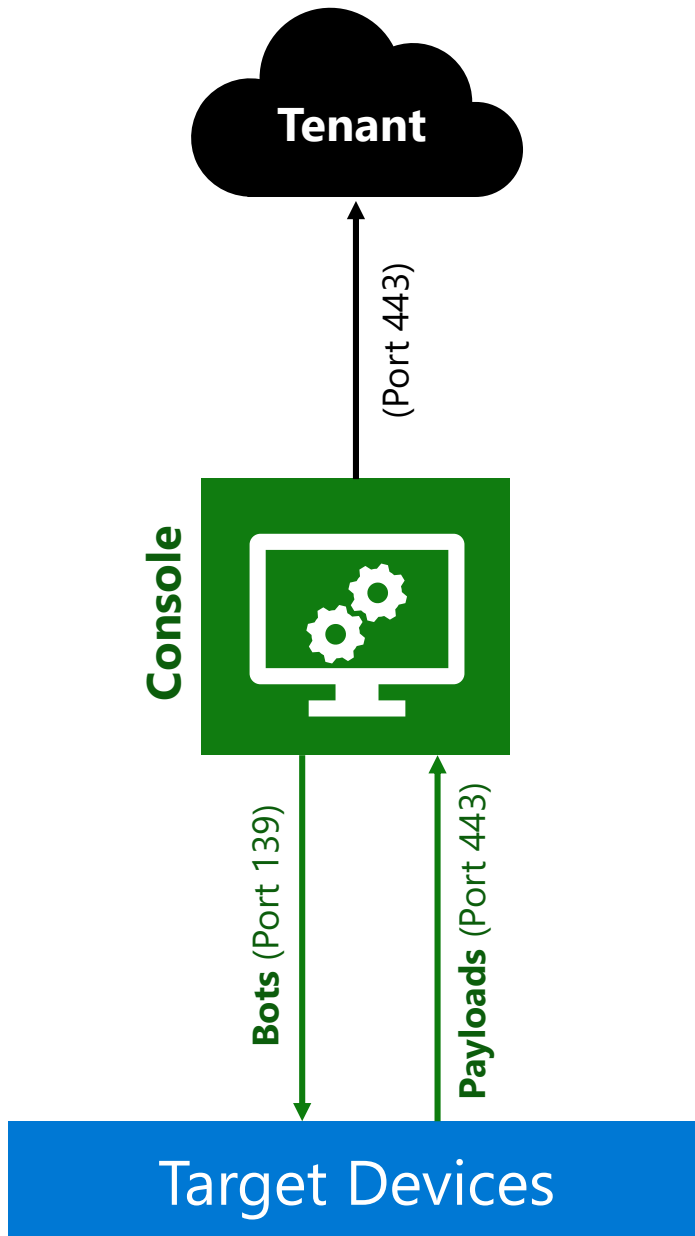
VM for Movere Console (one for each separate datacenter/network):
- Operating System: Windows Server **2012 and above** (recommended).
- .NET Framework **4.7.2**. (minimum).
- Joined to domain and connected to AD + Resolves in DNS.
- Port 443 to the internet for upload and download *(connecting to 40.86.208.139 (Canada East))*
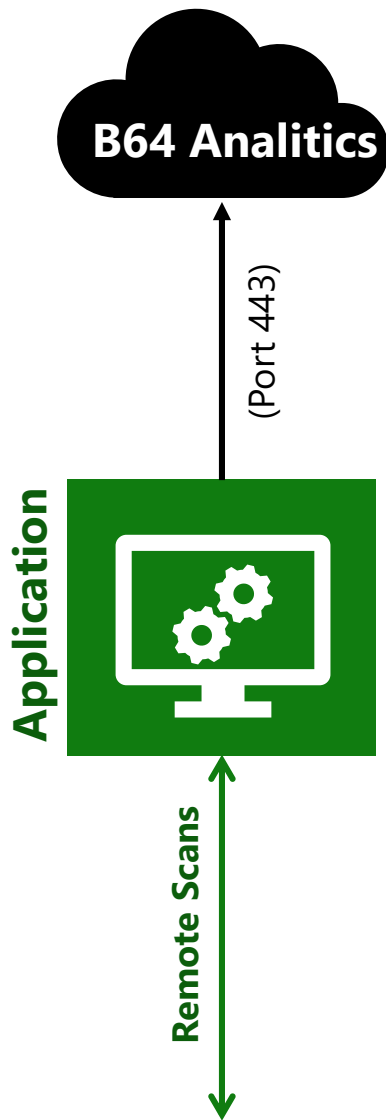
Credentials:
- Windows Service Account: *Local Admin on the Windows device(s) to be scanned.*
Note: depending on scope, SQL Service Account and Linux Service Account might be needed.

Main Ports:
- 443: *Download Movere (EXE), upload token used to transmit payloads to cloud.*
- 139: *Deliver bots (Inventory + ARC), Framework verifier, tokens*
- 135: *Remote scanning (WMI needs to be enabled on targets)*

https://docs.microsoft.com/en-us/movere/console-deployment-requirements

Block 64 (Windows Native Application)

B64 Analitics

(Port 443)

Application

Remote Scans

Windows Devices

Operating System and Hardware Requirements:
- **Recommended:** Windows 10 (or Windows Server 2016), 8GB of RAM, CPU w/ 4 cores
- **Minimum:** Windows 7 (or Windows Server 2008R2), 4GB of RAM, CPU w/ 2 cores

You'll want to have on hand:
- **Network:** All internal networks in scope; CIDR notation or single IP addresses are accepted
- **Active Directory:** A domain controller per domain in scope; IP address or FQDN formats are accepted
- **Windows Inventory:** An account that has any two of the following 3 levels of access will accomplish inventory:
    - *Access to C$*
    - *The ability to run NET RPC / Remote Registry*
    - *Remote (read-only) WMI*
- **Virtual Infrastructure:** Read-only administrator credentials for each vCenter Server in scope.
- **Office 365:** Global administrator credentials; used to grant read-only access to Office 365 usage reports, security events, and directory data.

Note: only scans Windows OS, for Linux other options are available (BlockBox).

Cloud Pilot
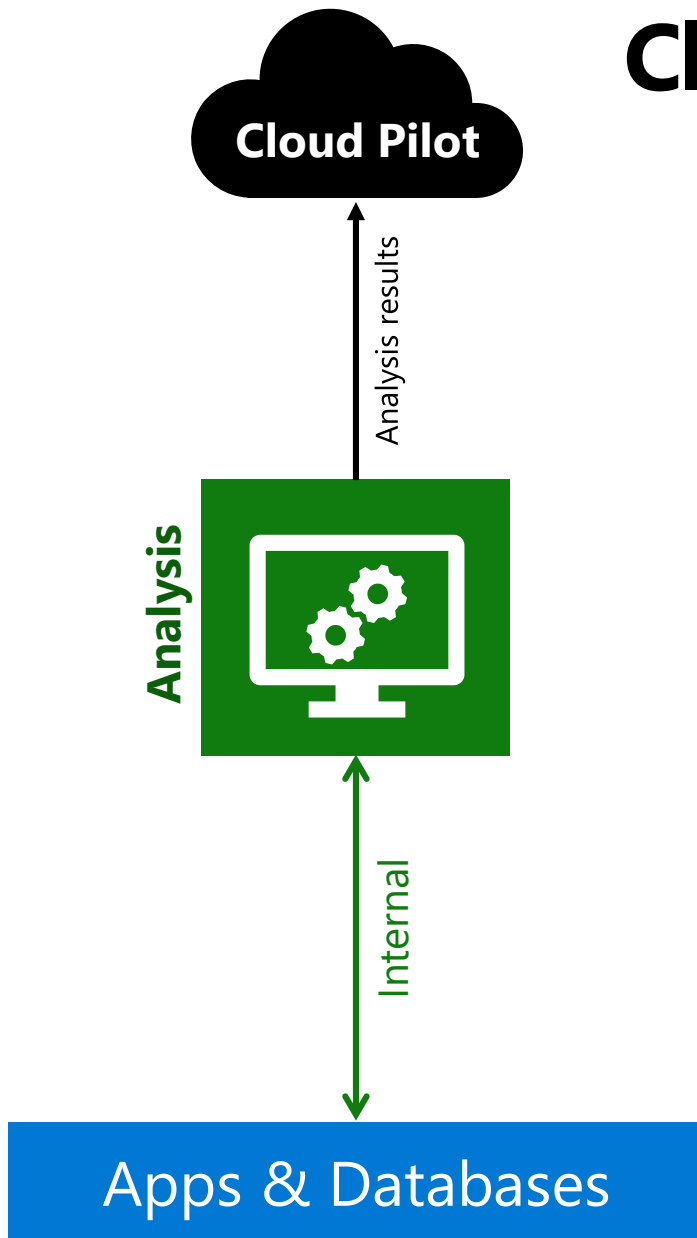
Deployment Requirements:
- Windows 10 (recommended)
- Data Migration Assistant v4.1
- PowerShell v5 or later
- .NET Framework v4.5

Application Analysis:
- **Main Requirement:** a folder with the source code of the applications in scope.
- **Platforms:** .NET, Java and PHP apps can be analyzed.

Database Analysis:
- **Main Requirement:** *sysadmin* permissions and connection to the databases in scope.
- **Additional Requirements:**
  - If Oracle Database is in scope:
    - *Strawberry Perl*
    - *Ora2Pg Tool*