

# Pohľad na služby Microsoft Azure ako ich isto nepoznáte ...

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A dark-themed world map with numerous small circular markers in light blue and orange scattered across the continents, representing Azure regions. The markers are most densely packed in North America, Europe, and East Asia.

60+

Azure regions

More than  
AWS & Google  
combined

165k+ miles of fiber

# Enterprise-grade cloud infrastructure

## 69 Azure regions

More than AWS  
and GCP combined

## Fast, scalable storage

<1ms latency  
100K IOPS on shared file storage  
Up to 200TB individual Blob size

## High availability

99.996% Azure single-instance  
VM uptime, rolling  
12-month average

## Massive compute capacity

Up to 960 CPU threads  
Up to 24TB RAM  
700+ VM size options

## Best performing network

100Gbps hybrid connectivity  
99.05% Azure inter-region pairs  
100Gbps InfiniBand

## Unmatched security

\$1B+ annual investment  
3,500 security experts  
>8 trillion signals analyzed daily

# What is Azure?



## Edge Devices

Azure Stack Hub

Azure Stack Edge

Azure Sphere

Azure Kinect

HoloLens



## Serverless

Communication Services

Web

Mobile

Mixed Reality

Containers

Events + Integration

Databases

Analytics

AI + Machine Learning

Internet of Things

Media



## Tools

Visual Studio

GitHub

Power Apps

Power BI



## Infrastructure

Compute

Networking

Storage

Security

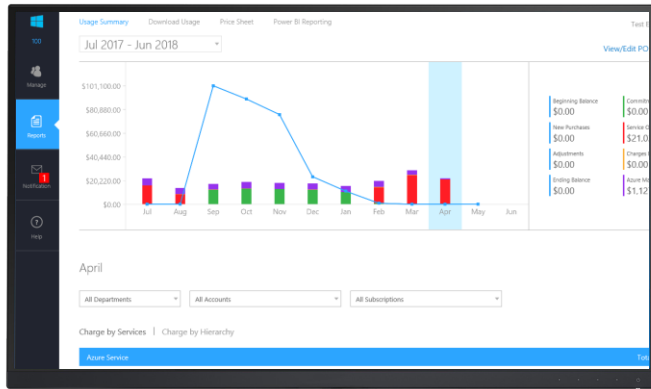
Identity

Optimization

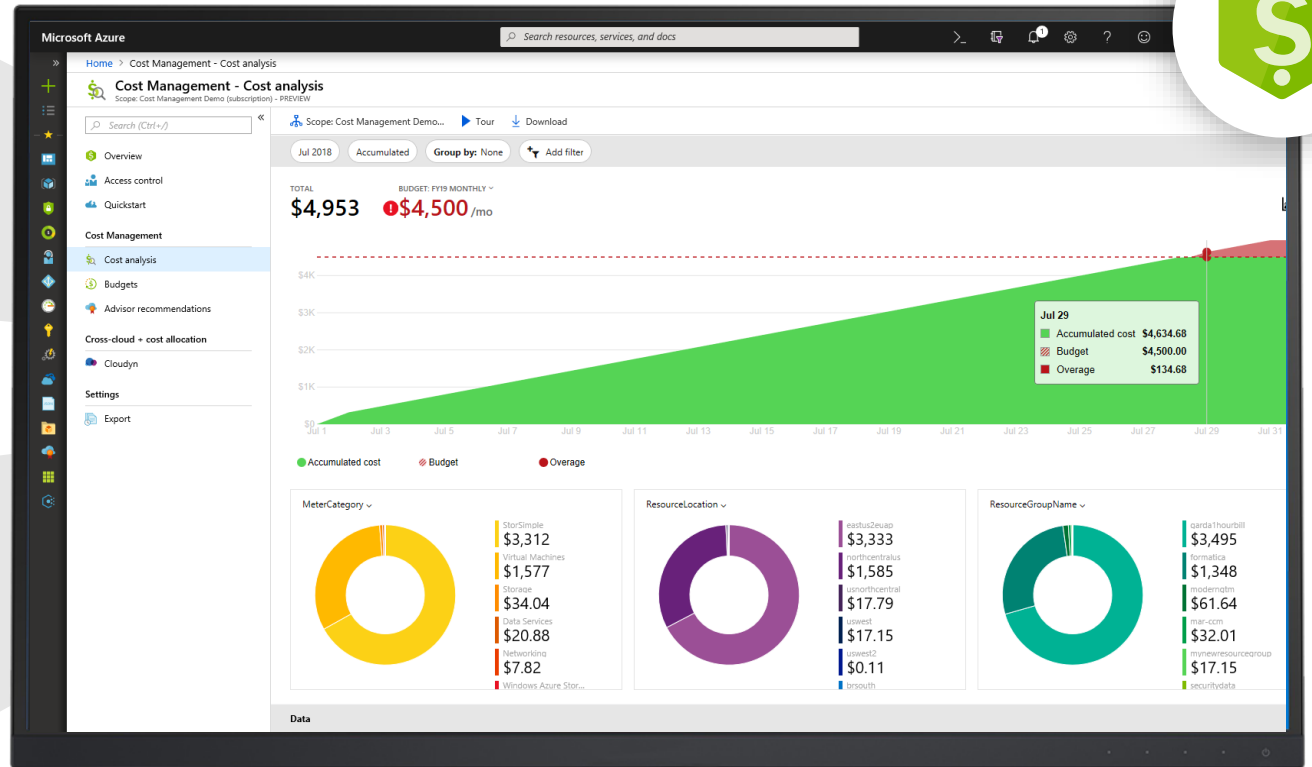


# Bring the best together in Azure Portal

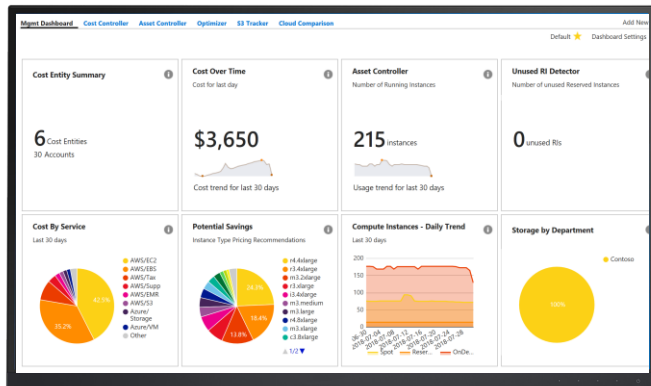
## Enterprise Portal



## Azure Cost Management



## Cost Management By Cloudyn



# Azure Cost Management

Built into Azure



NEW

On by default

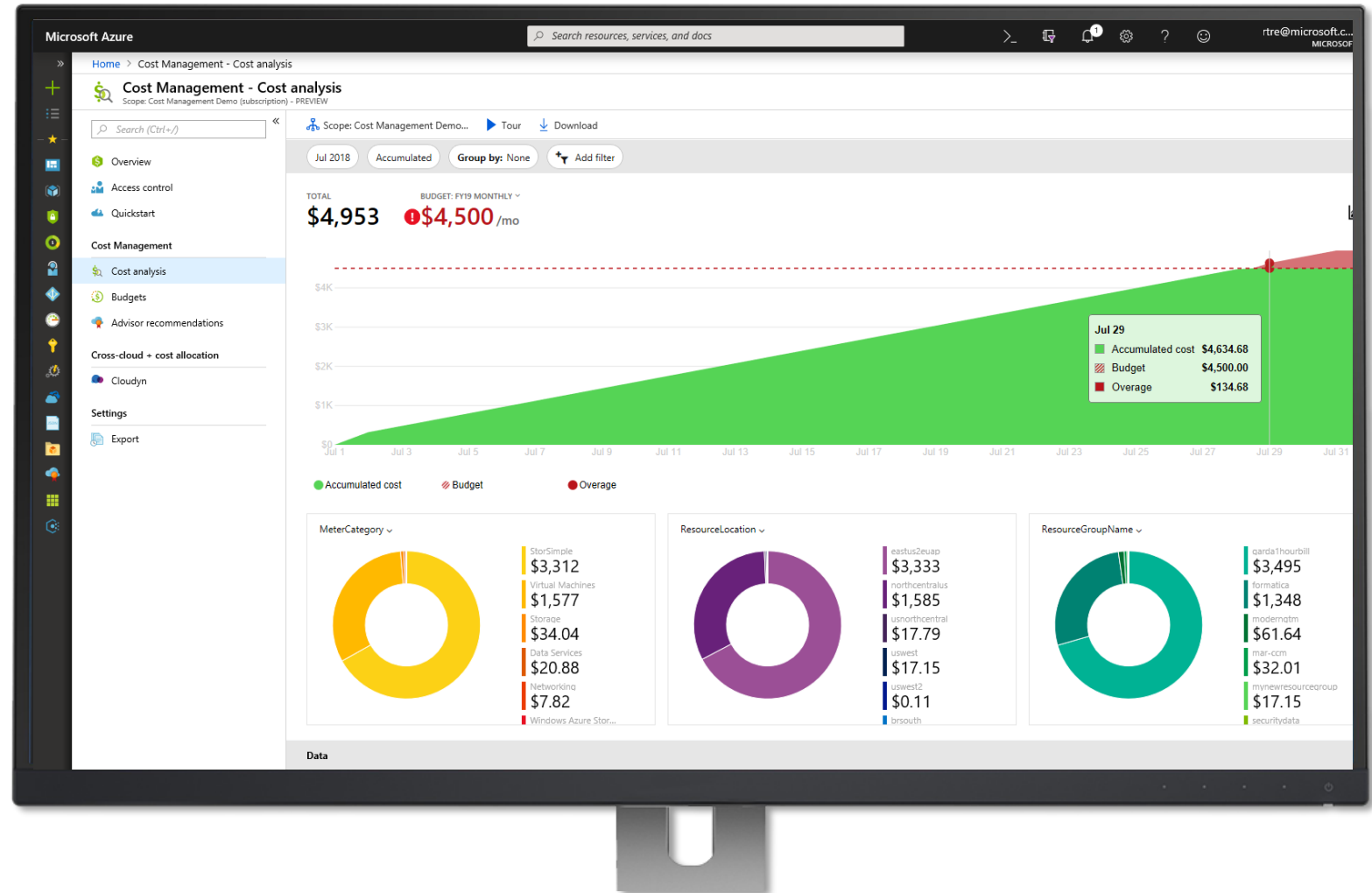
Better experience for more users

Richer analysis and budget alerting

Integrated with Azure Advisor

Reduced data latency by up to 80%

Free to manage Azure costs



# Cost Analysis



Detailed Cost Exploration

Group, filter & view by 14 dimensions + tags

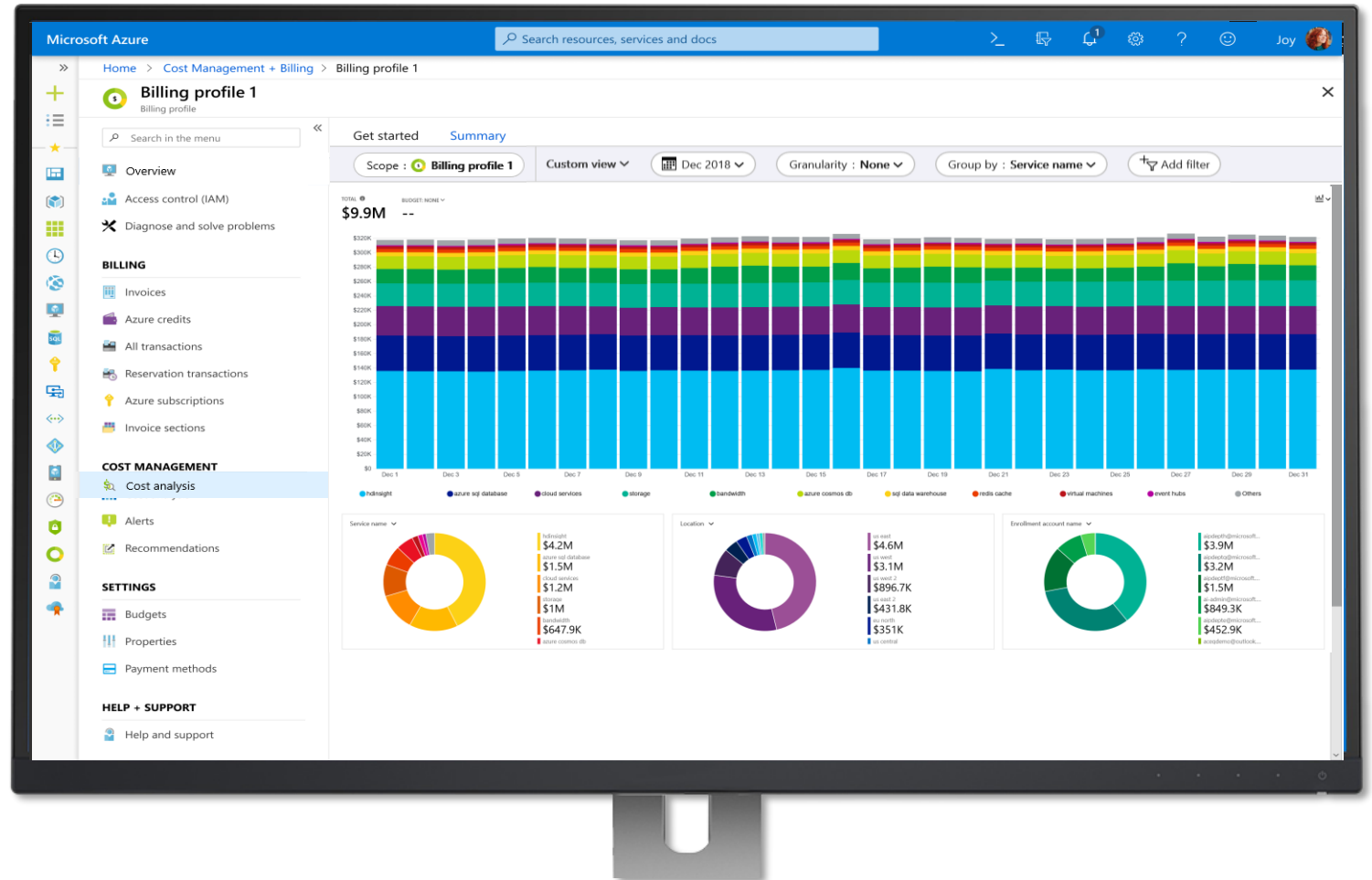
Date Ranges

Daily, accumulated, monthly grain

Saved and scheduled reports

Integrated with Budgets

Enrollment, subscription, management group and resource group scope





# Cost optimization is a key to cloud success

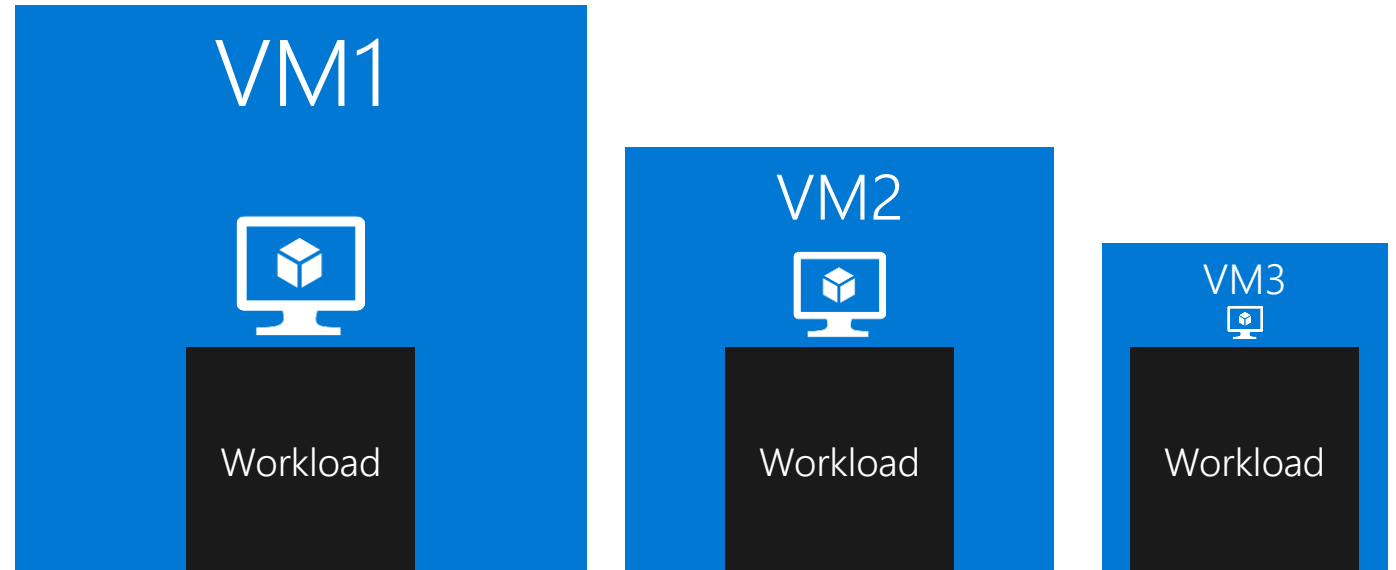


The workload will run fine in all three VM sizes

Which will a developer naturally choose?

Which will deliver more success to the business?

Which one will make managers and finance want more things in the cloud?



How do you know when there are opportunities to optimize?

## 4 Optimization

Do more with less by  
optimizing costs

Always start in **Azure Advisor**



VM right-sizing



Delete unused resources



Use standard snapshots



Save with VM reservations

# Right Sizing & Idle VM Shutdown recommendation

## Shut down or resize your virtual machine

Feedback Download as CSV Download as PDF Create alert Manage alert rules Configure recommendation r...

### Recommendation details

We've analyzed the usage patterns of your virtual machine over the past 7 days and identified virtual machines with low usage. While certain scenarios can result in low utilization by design, you can often save money by managing the size and number of virtual machines. [Learn more](#)




potential yearly savings\*  
**79,698.47 USD**

### Impacted resources

17 selected subscriptions No grouping

Active (22) Postponed & Dismissed (0)

Postpone Dismiss

select	Virtual machine	Recommended actions	Potential savings*	Subscription	Recommendation rule	updated at	Action
<input type="checkbox"/>	 prod-sh01-dbslave-etl-05-a	<b>Resize Standard_DS14_v2 to Standard_DS12-2_v2</b> <a href="#">View Usage Patterns</a>	<b>9,927.94 USD (75%)</b>	Cloudyn Production	CPU utilization < 5%	10/14/2019, 9:45:27 PM	<a href="#">Postpone</a>   <a href="#">Dismiss</a>
<input type="checkbox"/>	 prod-backup1	<b>Resize Standard_DS15_v2 to Standard_DS12-2_v2</b> <a href="#">View Usage Patterns</a>	<b>13,231.30 USD (80%)</b>	Cloudyn Production	CPU utilization < 5%	10/14/2019, 9:51:29 PM	<a href="#">Postpone</a>   <a href="#">Dismiss</a>
<input type="checkbox"/>	 prod-backup2	<b>Resize Standard_DS15_v2 to Standard_DS12-2_v2</b> <a href="#">View Usage Patterns</a>	<b>13,231.30 USD (80%)</b>	Cloudyn Production	CPU utilization < 5%	10/14/2019, 9:51:29 PM	<a href="#">Postpone</a>   <a href="#">Dismiss</a>
<input type="checkbox"/>	 prod-sh01-configdb-slave-0 azure	<b>Resize Standard_DS14_v2 to Standard_B16ms</b> <a href="#">View Usage Patterns</a>	<b>Unavailable</b>	Cloudyn Production	CPU utilization < 5%	10/14/2019, 9:53:08 PM	<a href="#">Postpone</a>   <a href="#">Dismiss</a>
<input type="checkbox"/>	 ContosoClient2	<b>Shut down the virtual machine</b> <a href="#">View Usage Patterns</a>	<b>508.90 USD</b>	Contoso IT - demo	CPU utilization < 5%	10/14/2019, 9:44:42 PM	<a href="#">Postpone</a>   <a href="#">Dismiss</a>
<input type="checkbox"/>	 AA-contoso-01	<b>Shut down the virtual machine</b> <a href="#">View Usage Patterns</a>	<b>146.42 USD</b>	Contoso IT - demo	CPU utilization < 5%	10/14/2019, 9:44:43 PM	<a href="#">Postpone</a>   <a href="#">Dismiss</a>
<input type="checkbox"/>	 ContosoVM21	<b>Shut down the virtual machine</b> <a href="#">View Usage Patterns</a>	<b>219.63 USD</b>	Contoso IT - demo	CPU utilization < 5%	10/14/2019, 9:44:58 PM	<a href="#">Postpone</a>   <a href="#">Dismiss</a>

# Azure Advisor provides optimization recommendations



## Cost

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Maximize the return  
of your IT budget  
investment



## High Availability

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Improve the availability  
of your business-critical  
applications



## Security

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Enhance protection of your  
Azure resources from  
potential security threats



## Performance

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Optimize performance  
to make the most of your  
resources

Resource recommendations (right-sizing, idle, etc.)

Purchasing recommendations (reserved instances, etc.)

# What's new with Azure Reservations



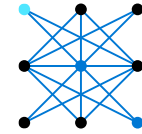
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**Significant cost savings** up to 72% over pay-as-you-go models



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**Budget predictability** and **prioritized** compute capacity



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

- Azure Reservations offer capacity prioritization (for single scope)
- Multiple product families: Available for VMs, SQL Database and Cosmos DB.
- You can also pre-purchase at a discount SUSE Enterprise Linux
- Apply RI to Classic VMs, cloud services and Dev/Test subscriptions – constrained cores (you can constrain cores of RIs you purchased and the rest of the cores can go to another box)

# Instance size flexibility



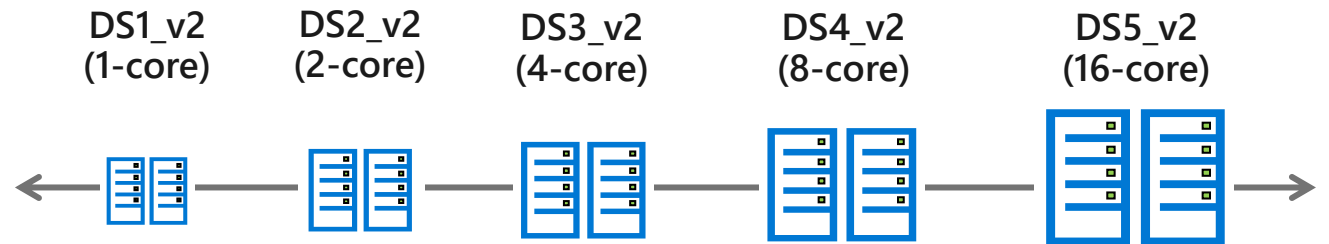
## Feature description

Instance Size Flexibility automatically applies RI benefits across VMs within the same series and region

Customers will have the option to turn this feature on or off depending on their business needs or preferences

Instance Size Flexibility helps maximize the customer's RI purchase by applying the benefit to as many cores as possible

## Example



Customer purchases (10) DS4\_v2 RIs in Australia Southeast, a total of 80 cores  
This can be distributed against other DS series VM in the same region. I.e/ 6 DS4\_v2 and 8 DS3\_v2

## Additionally: OS agnostic

	VM	Cores	Region	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
App 1	D8_v3 - Win HUB	8	USEast	x	x	x	x	x	x	x	x																
App 2	D8_v3 - Linux	8	USEast						x	x	x	x	x	x													
App 3	D8_v3 - RHEL	8	USEast											x	x	x	x	x	x	x							
App 4	D8_v3 - Windows	8	USEast																				x	x	x	x	x

The green highlighted areas show where the RI benefit is applied across the same VM, in the same region, but with different operating systems.

# Exchange vs Cancel



## Exchange

### Feature description

Exchange enables customers to change the VM size, family, region & term

When an exchange is initiated, we determine a pro-rated value for the months remaining in the current RI term

There is no cap on the number or amount of exchanges that can be done

There is **no fee** for an exchange , caveat is exchange should be equal or more

Customers can exchange a single RI for multiple RIs

## Cancel

### Feature Description

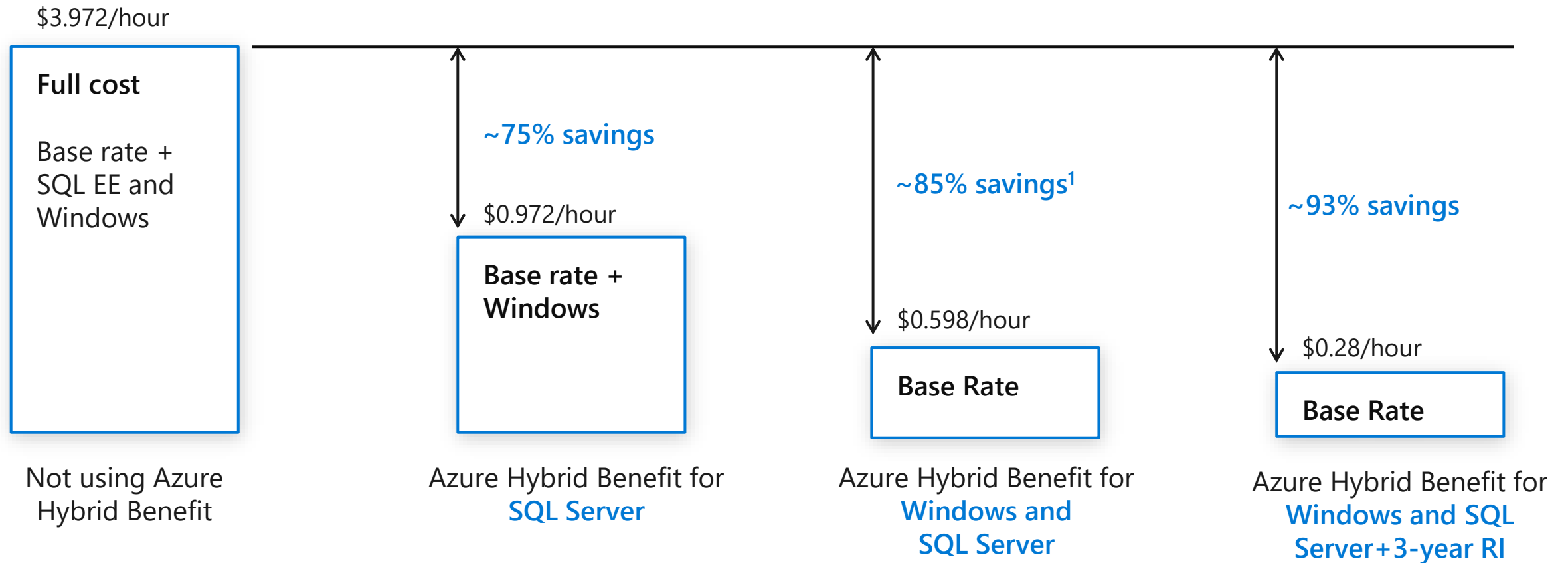
Cancel enables customers to terminate their RI purchase for a pro-rated refund

When a customer initiates a cancellation, we determine a monthly pro-rated value for the time remaining in the current RI term

Microsoft applies a 12% early termination fee; limited to \$50k USD in refunds per calendar year

# Azure Hybrid Benefit

Get [base compute rates](#) if you have active Software Assurance for on-premise Windows Server licenses



<sup>1</sup>Savings based on 8-Core D13 v2 VM in East US 2 region. Savings are calculated from full price (license included) for SQL Server Enterprise edition VM against reduced rate (applying Azure Hybrid Benefit for SQL Server and Windows Server), which excludes Software Assurance costs for SQL Server and Windows Server, which may vary based on EA agreement. Actual savings may vary based on region, instance size and compute family. Prices as of June 5 2018, subject to change.



# Stay on course with a clear path to realize cloud value

## Microsoft Cloud Adoption Framework for Azure

Guidance and tools for implementing business, people and technology strategies for cloud adoption

## Microsoft Azure Well-Architected Framework

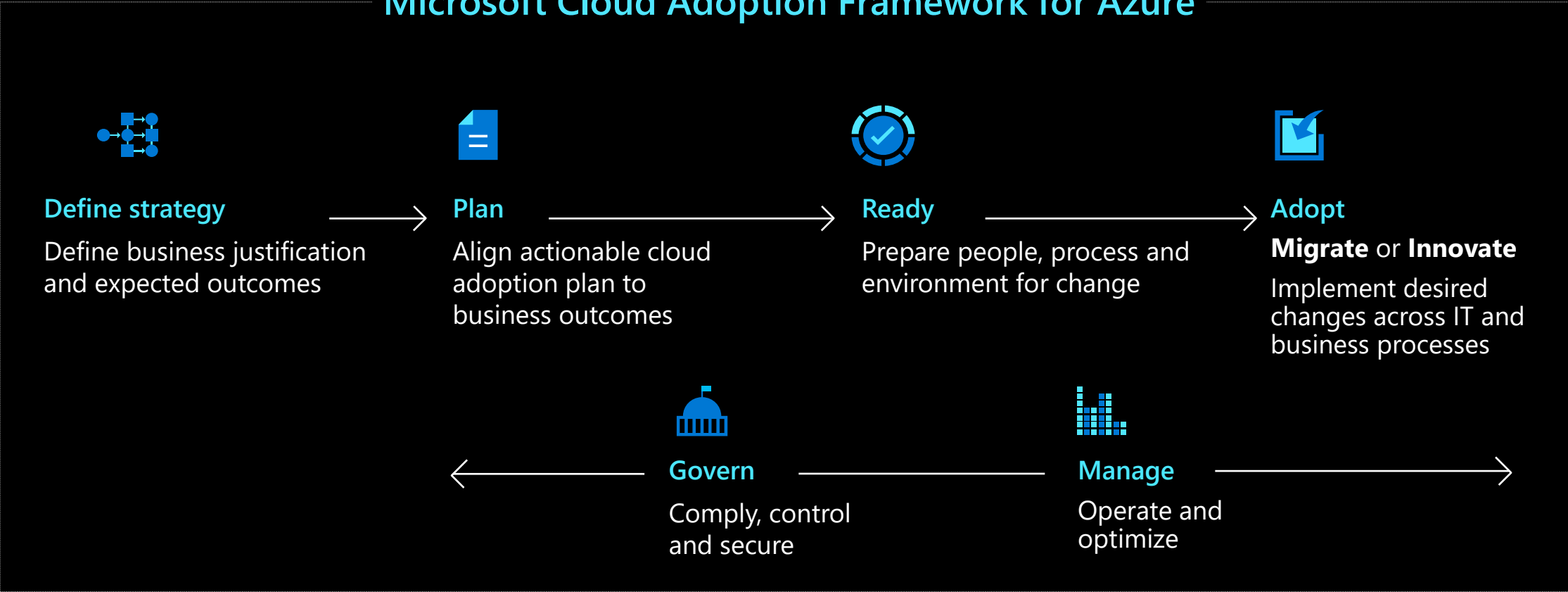
Guidance and tools to improve the quality of workloads based on architectural best practices



Implement DevOps across your organization by using the above frameworks with **GitHub**

# Implement business, people & technology strategies to adopt the cloud with confidence

## Microsoft Cloud Adoption Framework for Azure



# Improve the quality of your workloads based on proven architectural best practices

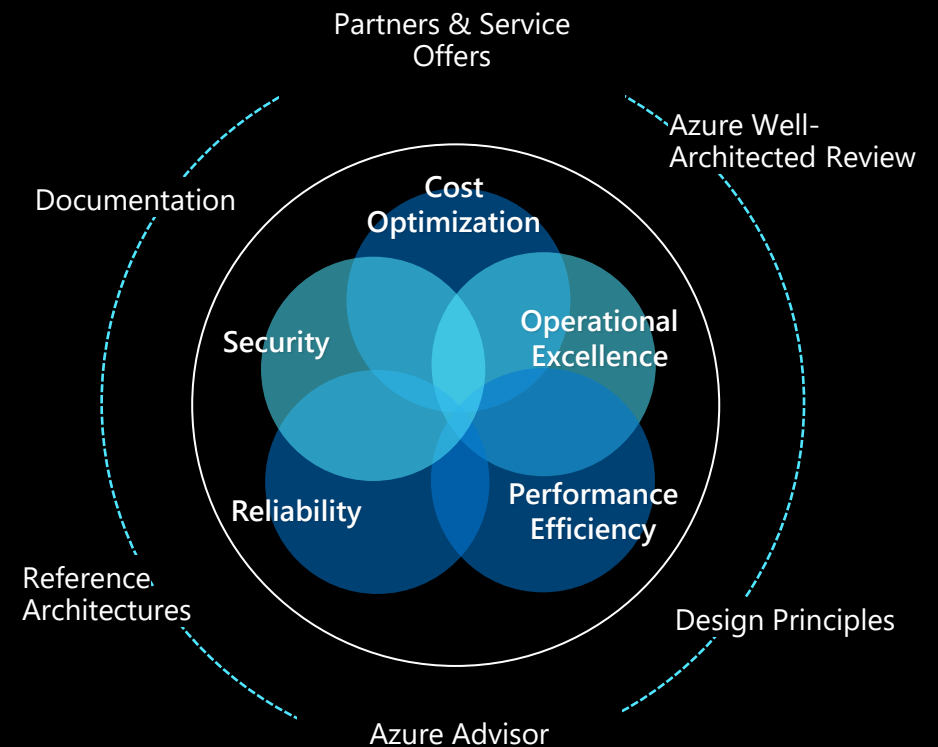
## Well-Architected

**Microsoft Azure Well-Architected Framework** based on five pillars of best practices:

- Cost optimization
- Operational excellence
- Performance efficiency
- Reliability
- Security

### Well-Architected ecosystem

includes resources to make the framework actionable

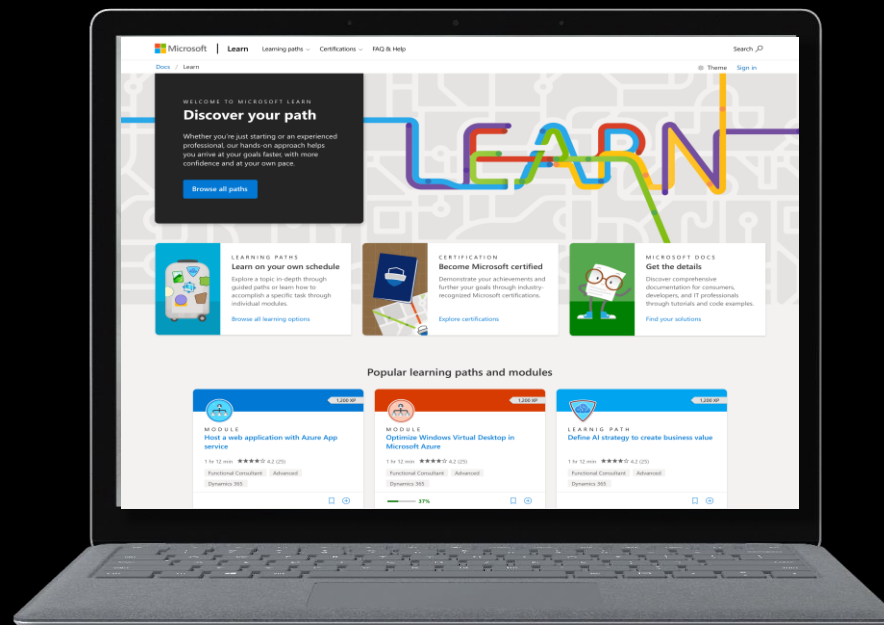


# Build your team's skills to use Azure confidently

## Microsoft Learn

Access to learning options:

- Free interactive self-paced learning paths that offer hands-on experience
- Watch free live and pre-recorded technical content on Learn TV
- Virtual or in-person instructor-led training
- Azure certifications



[microsoft.com/learn](https://microsoft.com/learn)

## Virtual Training Days

Free one-day virtual events combining presentations with demonstrations and hands-on workshops.

## Enterprise Skilling Initiative

Microsoft trainers & partners provide your team's with instructor-led training, self-paced learning, and certifications.

## Learning Partners

Microsoft Learning Partners offer a breadth of training solutions customized to meet your needs.