Your data platform in the cloud
strategy and options

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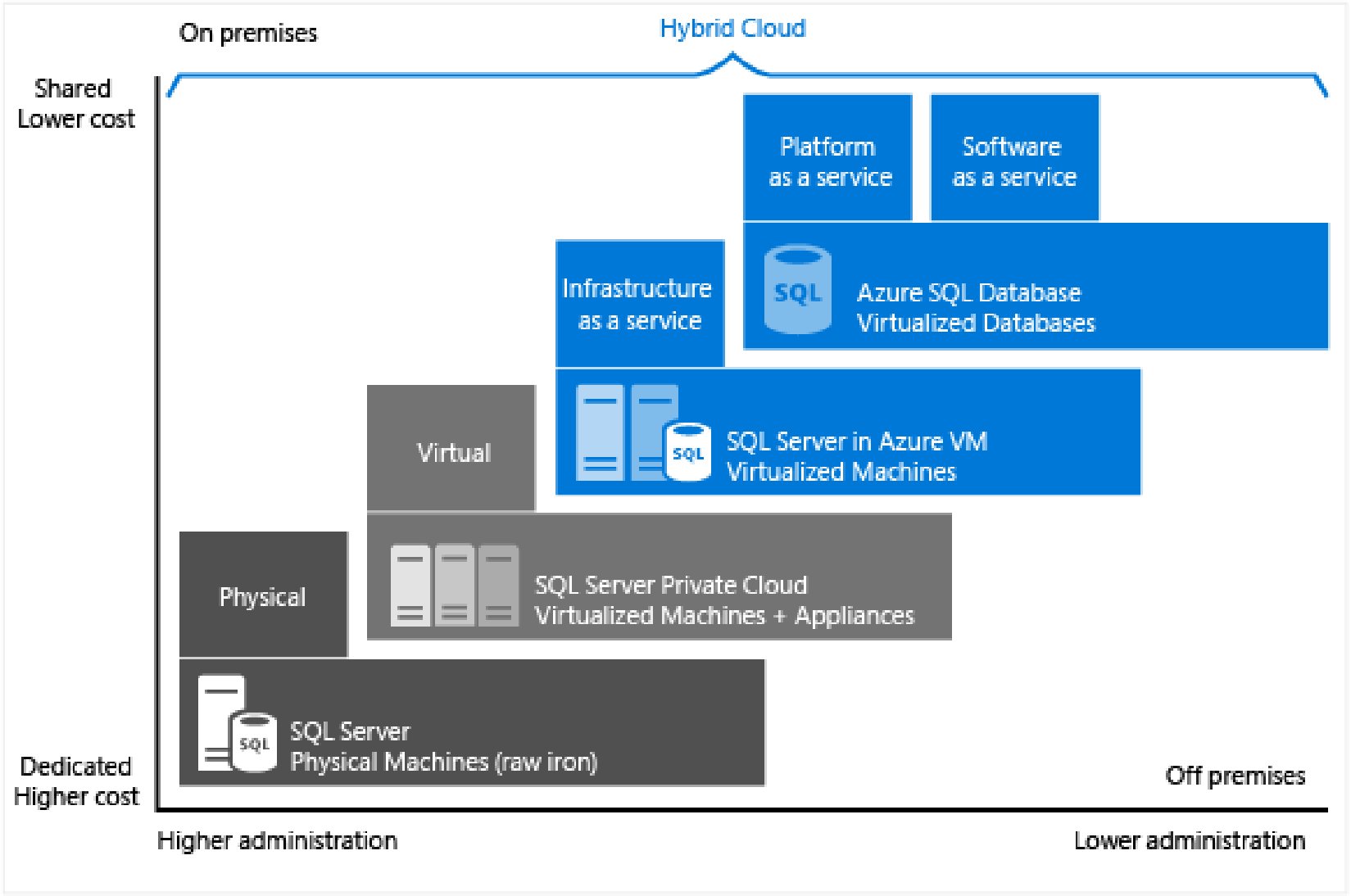
a Gfi Group company

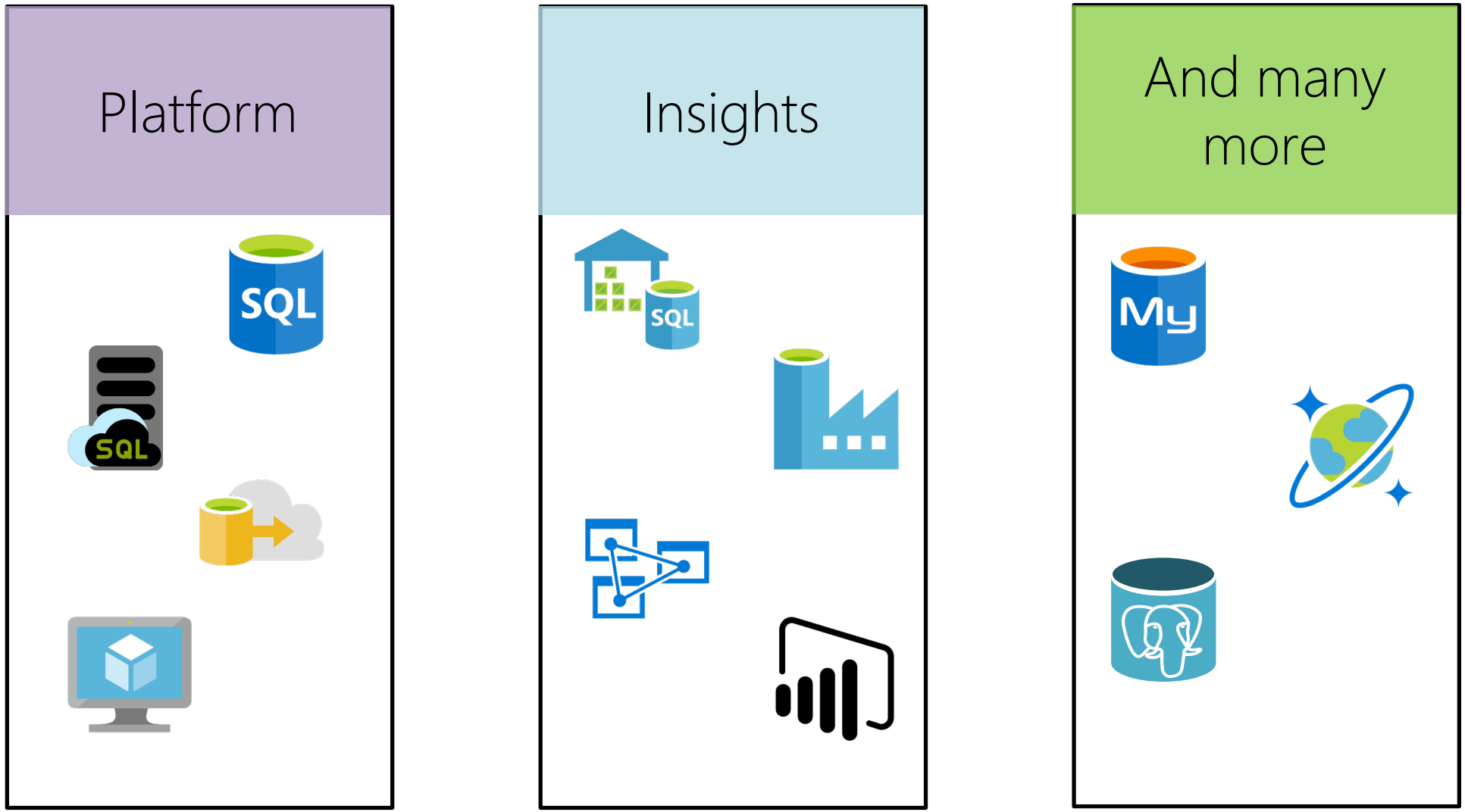
Agenda

- (Azure) Data Platform overview
- How to migrate your database to Azure
- Cost Optimization
- Demo
- Migration options for SQL 2008

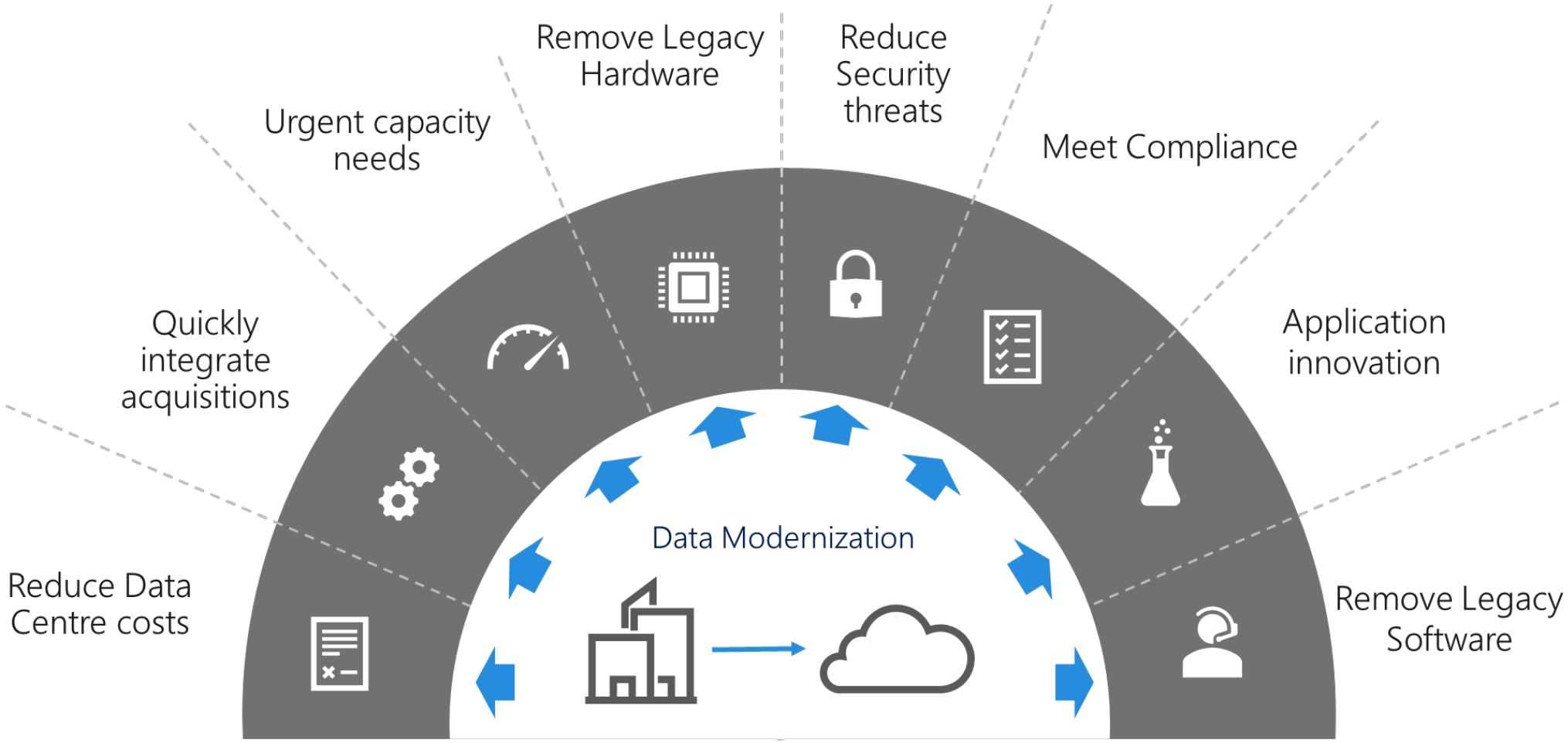
Data Platform Overview



Azure Data Platform Overview

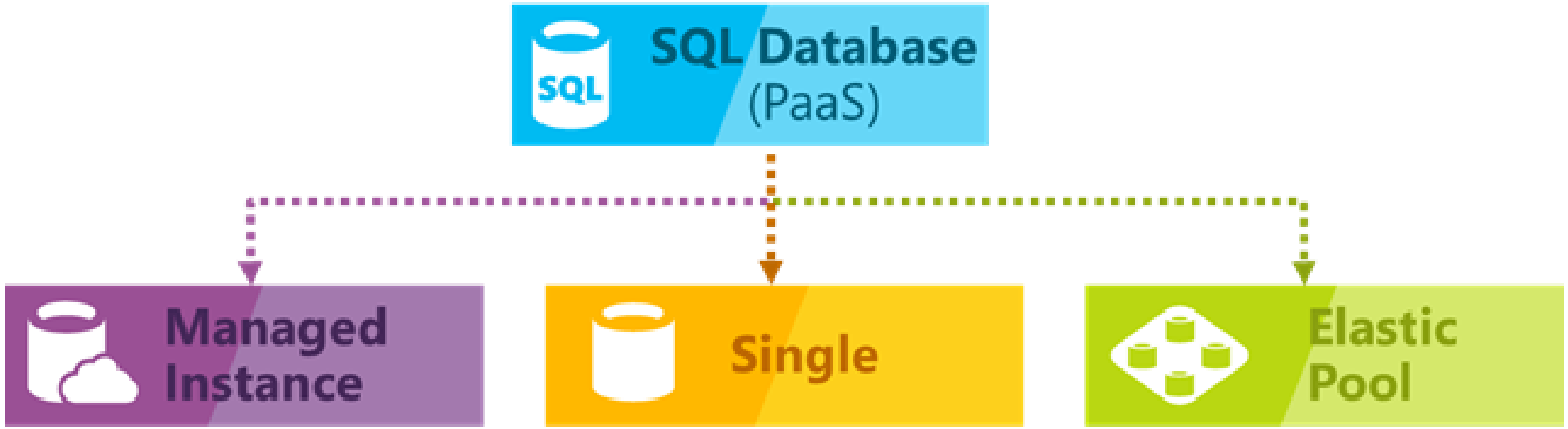


WHY CHANGE YOUR DATA PLAFORM?



SQL Databases on Azure

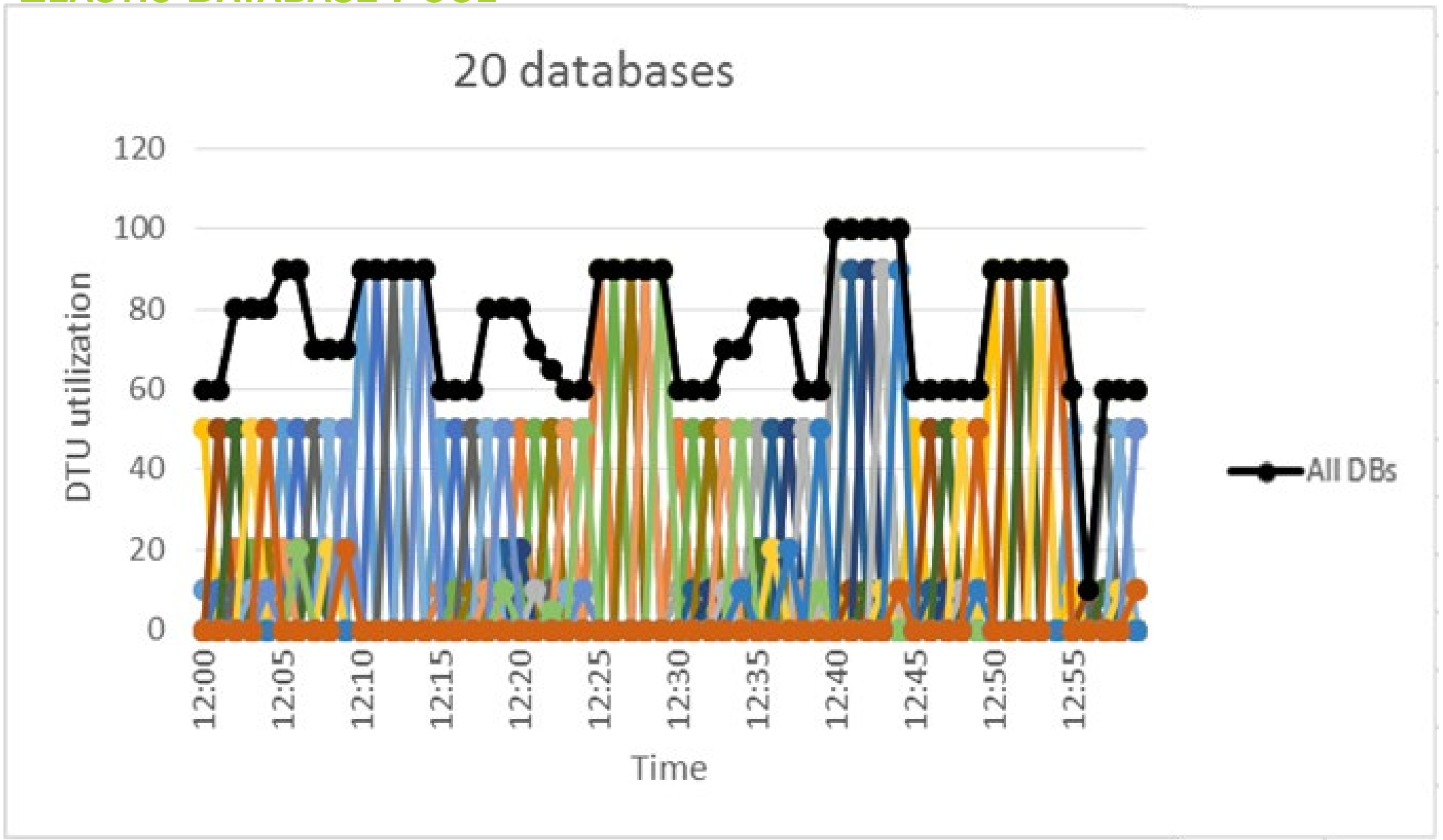
SQL Database Overview



SQL Database

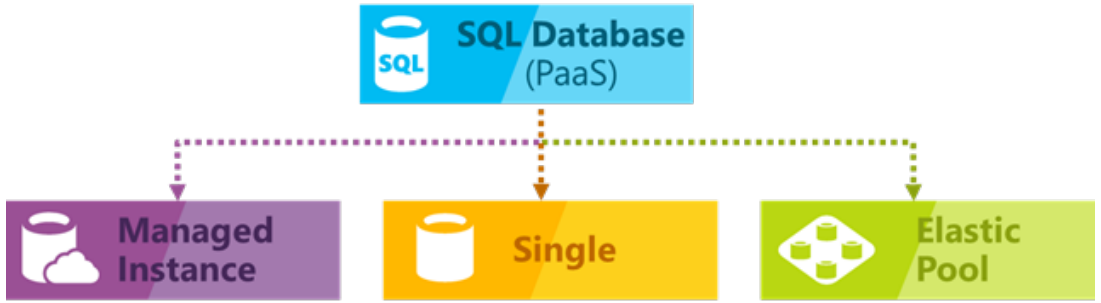
- Ideal for new deployments of PaaS applications
- Great way to start with Azure
- Several available tiers
- DTU vs vCore
  - DTU : unit of computing (CPU, disk IO, Memory)
  - DTU Calculator https://dtucalculator.azurewebsites.net/
- Includes Backup , Management & High Availability
- Not all features are available
- Scale for peak performance

ELASTIC DATABASE POOL



What is SQL Database Managed Instance?

New deployment option enabling friction-free migration of SQL Server workloads to a fully-managed service



Fully-managed service

- Built on the same infrastructure as SQL Database
- Provides the same benefits (PaaS)

SQL Server compatibility

- Fully-fledged SQL instance with nearly 100% compat with on-premise

Full isolation and security

- Contained within your VNet
- Private IP addresses
- Express Route/VPN connectivity

New purchasing options

- Transparent
- Frictionless
- Competitive

Azure SQL Database Managed Instance—GA (General Purpose)

Migrate SQL Server to fully managed SQL in Azure

Fully compatible with SQL Server

Built-in HA, Failover, Geo-DR, Intelligence

NEW: Azure SQL Database Hyperscale—Preview

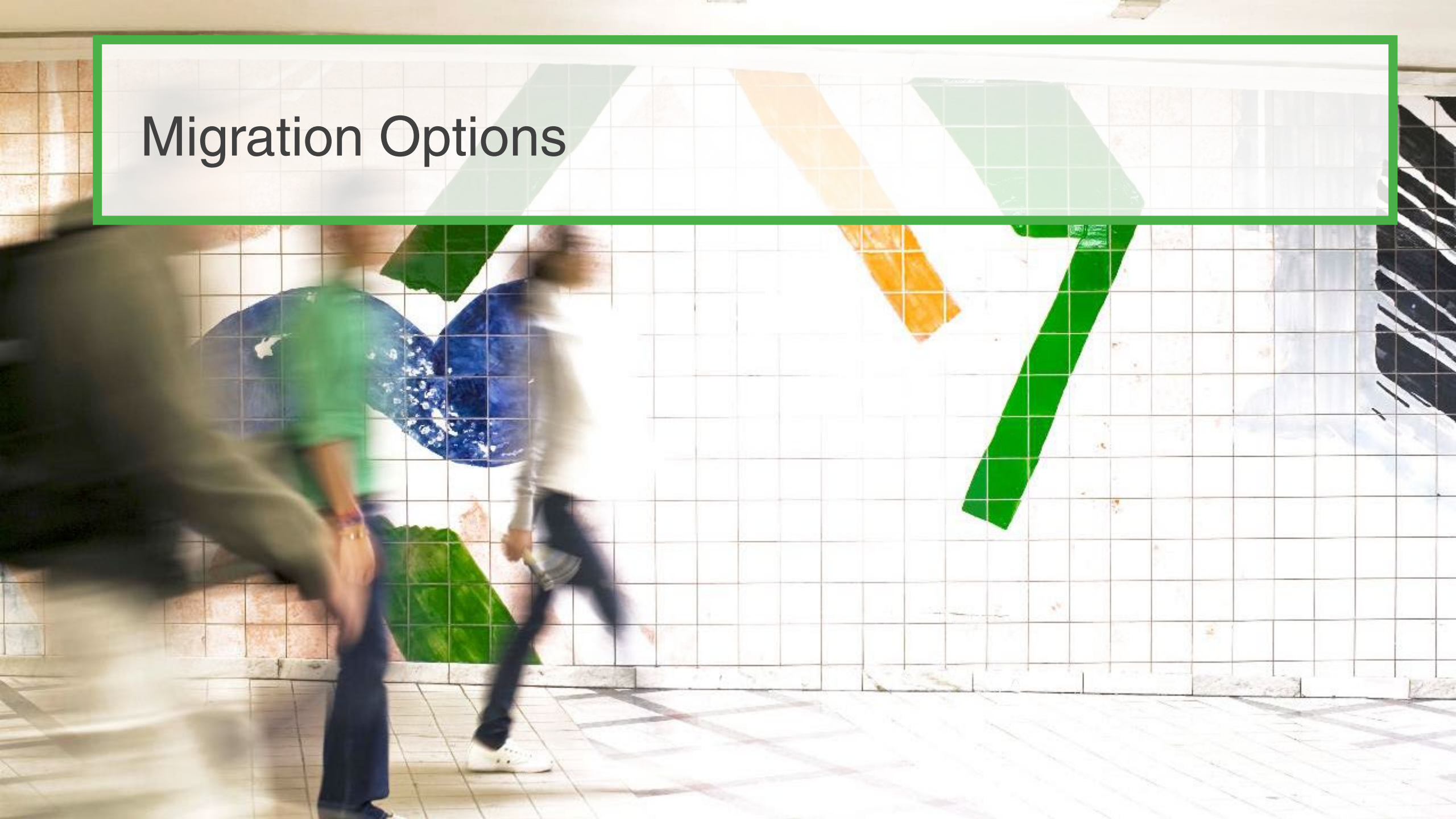
New, highly scalable service tier with built in intelligence

Migrate multi-TB databases to Azure

Auto-scale up to 100 TB per database

Announcing

Migration Options



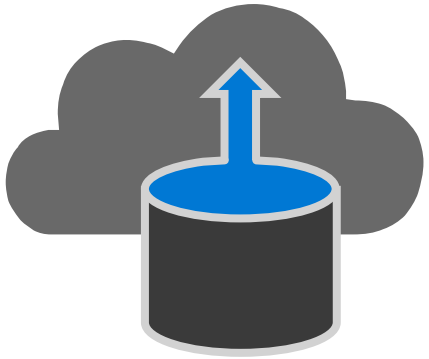
Data Migration Assistant

- Application delivered by Microsoft
- Assess your SQL Server Platform
- Discover migration issues
  - Breaking Changes
  - Behaviour changes
  - Deprecated feature
- Run tool locally to assess remote SQL Servers

Azure Data Migration Service

- Service hosted on Azure
- Used together with Data Migration Assistant
- Eases SQL database migration
- Can perform offline/online migration*

- Some extra effort will be required

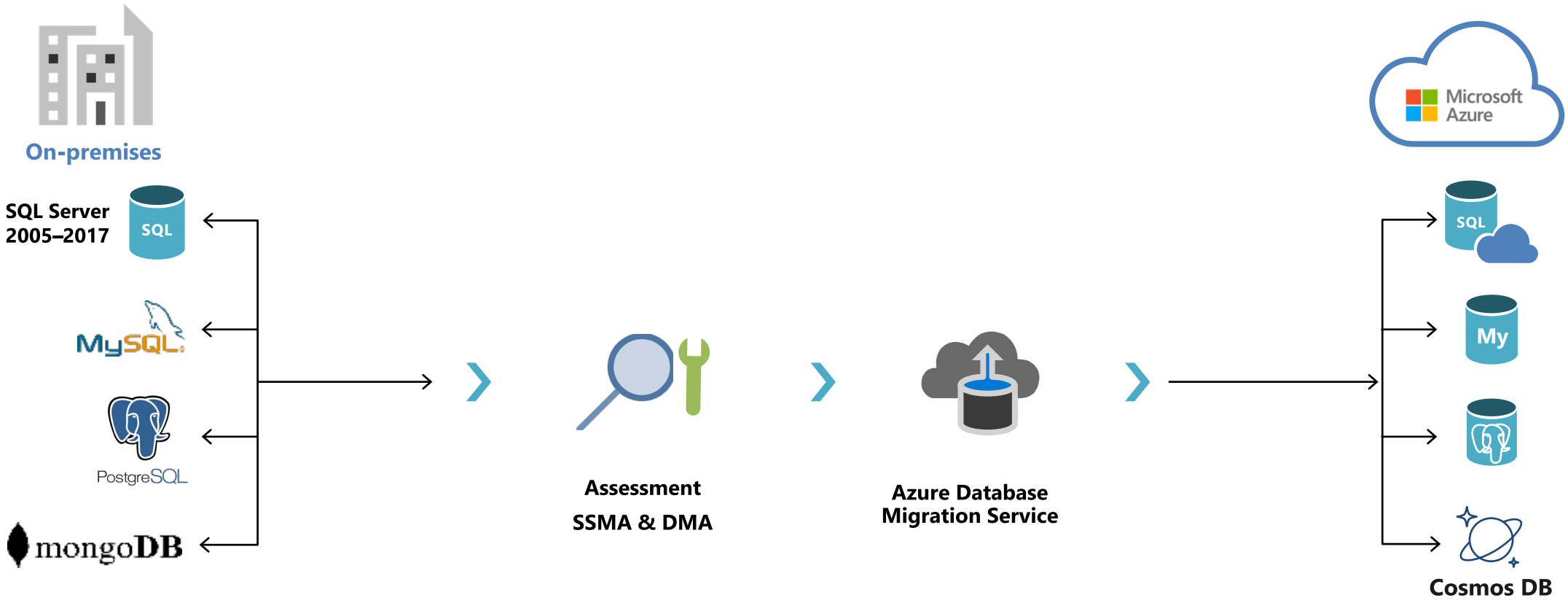


Source	Target	Milestone
SQL Server	Azure SQL Database Managed Instance	Generally Available
MySQL	Azure Database for MySQL	Preview
PostgreSQL	Azure Database for PostgreSQL	Preview
MongoDB	Cosmos DB	Limited preview

Announcing

Azure Database Migration Service: New migration scenarios

Migrate databases using Azure Database Migration Service



Seamless, end to end solution | Near-zero downtime | Migrate at-scale from multiple sources

Gateway

100 TB

Heavy (1 PB)

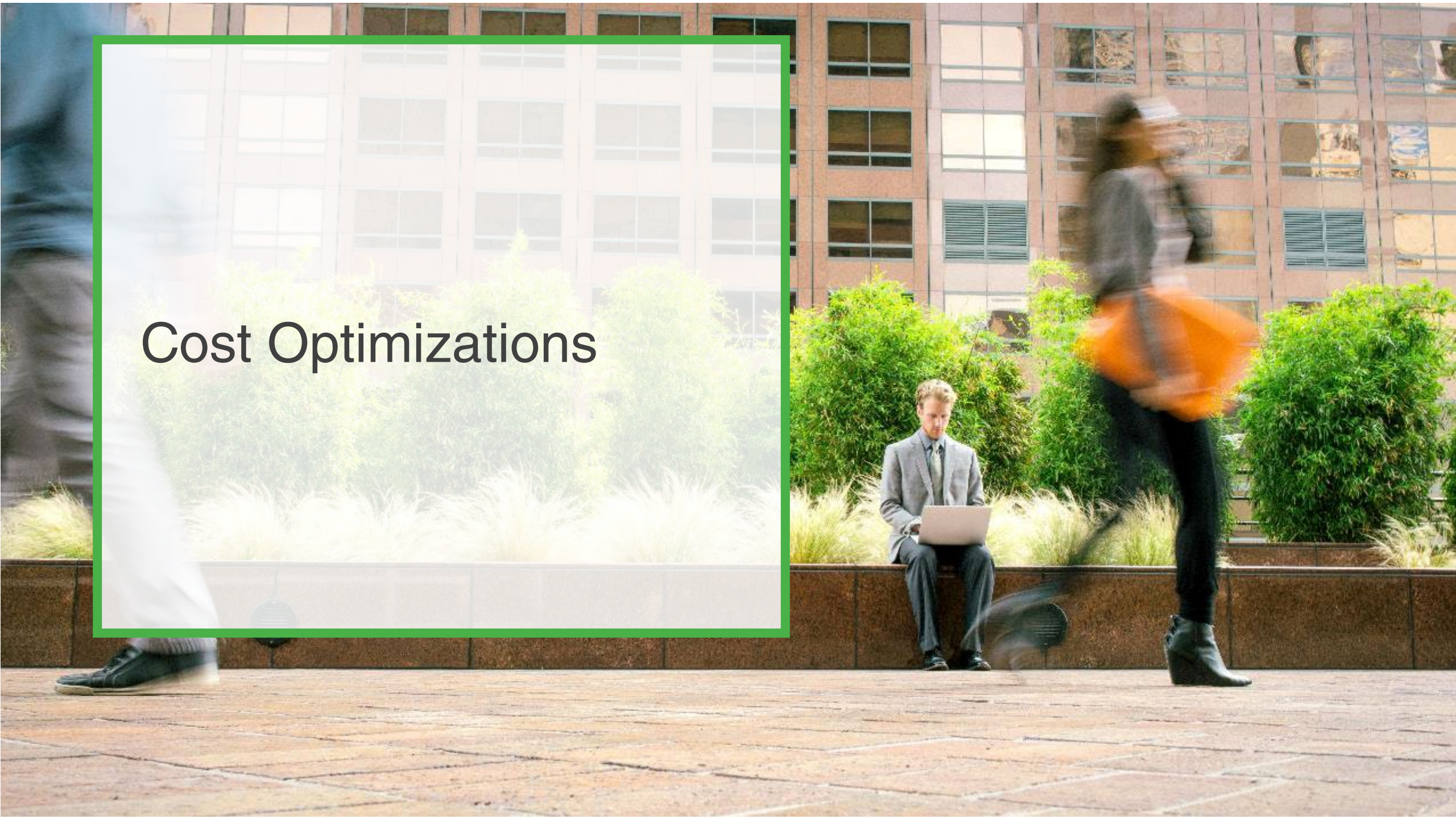
Announcing

Azure Data Box family provides additional data migration options

Migrate large amounts of data quickly and securely

Gateway	Preview
100 TB	General Availability
Heavy (1PB)	Preview

Cost Optimizations



Azure Hybrid Use Benefit

Azure Hybrid Benefits

Azure-only benefit for customers with active software assurance or subscriptions on Windows Server or SQL Server

WINDOWS SERVER AHB

(Standard and Datacenter Editions)

SQL SERVER AHB

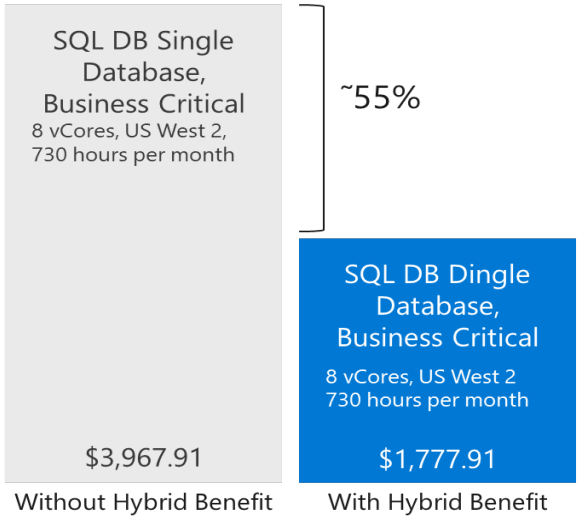
(Standard and Datacenter Editions)

Azure Hybrid Use Benefit (AHUB): Windows Server

- Saving up to 40%
- Convert or re-use your licenses to run Windows Server VM in Azure and pay a lower base compute rate (Linux VM rates)
- For Datacenter Edition Dual use right.
- Retroactive tagging, convert existing VMs on Azure to use Azure Hybrid Benefit for Windows Server

Azure Hybrid Use Benefit (AHUB): SQL Server

- Saving up to 55% on SQL PaaS/IaaS services
- Dual-use Right for 180-days
- Optimize SQL Server Licenses
- Unique Benefit rights for SQL Enterprise Core multiplier (1 SQL EE License Core = 4 Vcore in Azure)



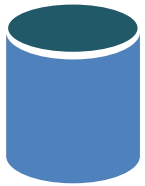
Azure Hybrid Use Benefit (AHUB): SQL Server

Qualified license	Azure Data Service	Ratio of cores : vCores
SQL Server Enterprise (core)	Azure SQL Database (Managed Instance, Elastic Pool and Single Database)- General Purpose	1 Core License : 4 vCores
	Azure SQL Database (Managed Instance, Elastic Pool and Single Database)- Business Critical	1 Core License : 1 vCore
	Azure Data Factory and SQL Server Integration Services (Standard)	1 Core License : 1 vCore
	SQL Server Enterprise Virtual Machines	1 Core License : 1 vCore
SQL Server Standard (core)	Azure SQL Database (Managed Instance, Elastic Pool and Single Database)- General Purpose	1 Core License : 1 vCore
	Azure Data Factory SQL Server Integration Services (Standard)	1 Core License : 1 vCore
	SQL Server Standard Virtual Machines	1 Core License : 1 vCore

DEMO : Azure Hybrid Use Benifit

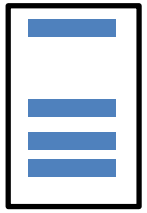
DEMO : Data Migration Assistant

2008 | R2



Windows Server

Ends January 14, 2020



SQL Server

Ends July 9, 2019

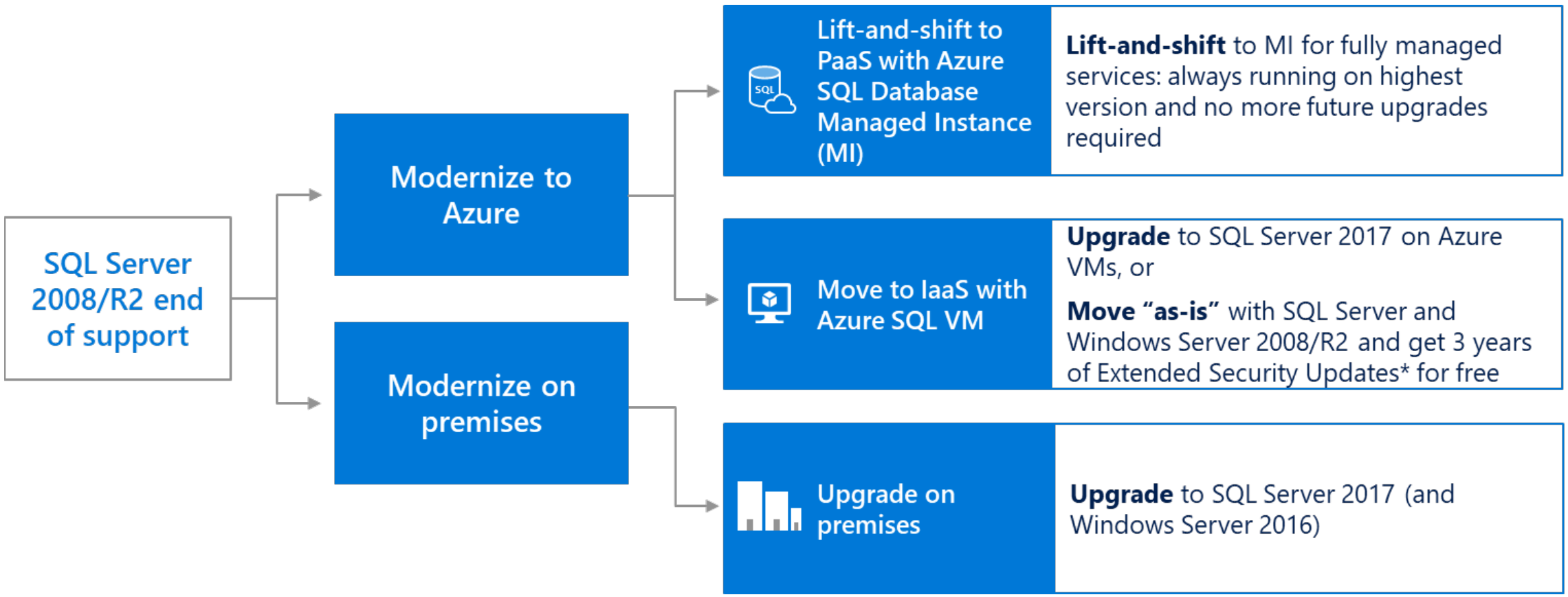
Free **Extended security updates**

Free security updates, only on IaaS Azure

3 years of security updates after support ends

75% of the license cost to buy standalone

MODERNIZE YOUR SQL 2008 (R2) PLATFORM



Questions?

What's Next ?

	Technical Track	Services & Management Track
14:15-15:00	Choosing the right Cloud connectivity model *Nichola Van de Voorde*	IOT, beyond the hype *Johan Kumps*

New challenges
NEW IDEAS

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