



Azure SQL Analytics (Preview)			
	38 Azure SQL Elastic Pools		1.4k Azure SQL Databases
	10 Managed Instances		0.1k Managed Instance databases

Stored in **Log Analytics** for 10 years

## Easy migration: nearly 100% like SQL Server

### Data migration

- Native backup/restore
- Configurable DB file layout
- DMS (migrations at scale)

### Security

- Integrated Auth (Azure AD)
- Encryption (TDE, AE)
- SQL Audit
- Row-Level Security
- Dynamic Data Masking

### Programmability

- Global temp tables
- Cross-database queries and transactions
- Linked servers
- CLR modules

### Operational

- DMVs & XEvents
- Query Store
- SQL Agent
- DB Mail (external SMTP)

### Scenario enablers

- Service Broker
- Change Data Capture
- Transactional Replication

### MANAGED INSTANCE

## SQL ANALYTICS

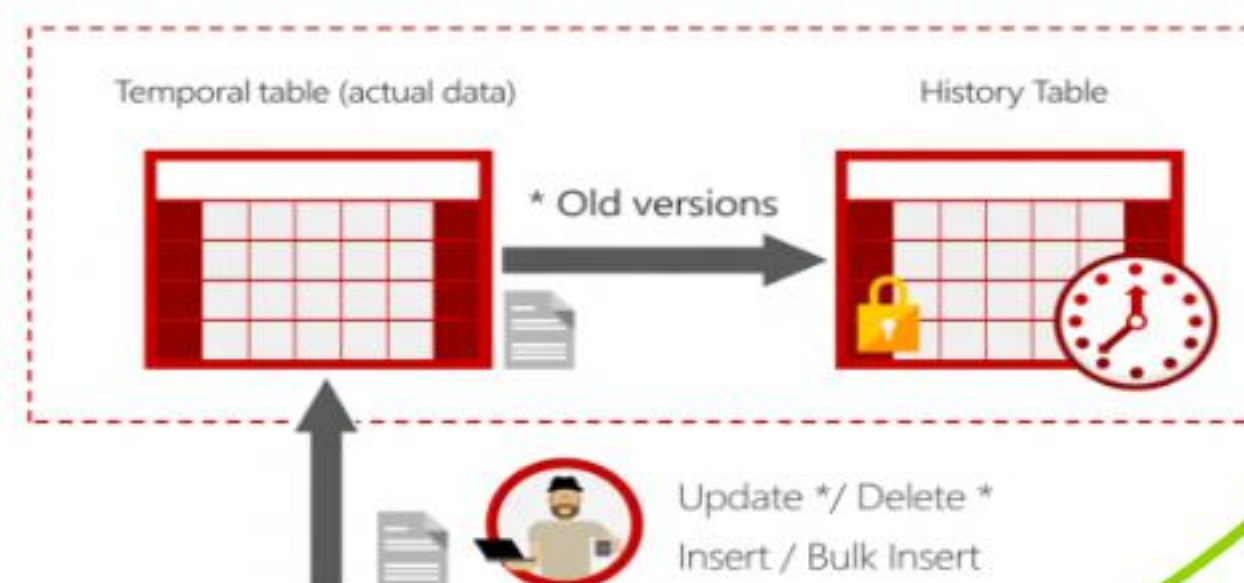
### MISC INFO

Premium support from 250 DTU's

### STRETCH DATABASE

Stretch Database **migrates** your cold data transparently and securely to the **Microsoft Azure cloud**.

Alternative to CDC in Azure



### TEMPORAL TABLE

## FEATURES

### TRANSACTIONAL REPLICATION

Copies changes to data => HISTORY

Applies to SQL on VM

NO caching

Read only

READ WRITE

### CACHING

LOG

DATA

OS Disk

### LOG SHIPPING

Send logs from primary sql server to secondary and restore

Applies to SQL SERVER ON A VM

From something => **Run** =>  
Set the working directory =>  
**Run** the command => **CMD**  
the EXE

Typical Template

ACR URL format is [container image].resource location.azurecontainer.io

URL format

Provides Orchestration

Use **HORIZONTAL POD SCALER** to control replicas



## CONTAINER

### AKS



## SQL SERVER

## DB and WebApps



## Cosmos DB

### Mongo DB API

Made **compatible** with MONGO DB

### Consistency Levels

STRONG

STALENESS

SESSION

CONSISTENT

EVENTUAL

LIKE SQL SERVER

ok! with delay

for that **user session** it is consistent

consistent but **undefined delay**

it will **happen!** eventually

15 mins or less

zero

RPO



## WEB APP

### Scale

scale on cpu

Can only scale upto **50 machines**

scale on **weekends**

scale on **holidays**

scale on **custom metric**



### Tiers

Isolated

Basic

Premier

different CPU/Memory configs determine levels (L1, L2, L3 etc.)

### LOGGING

STATUS CHECK

api/logstream

5 types

web server logging

request tracing

app logging

deployment logging

http file error logging (detailed)

### AZURE FUNCTIONS

Dedicated Plan

PREMIUM : >60 mins

Consumption

1-10 mins

App Service Plan

PREMIUM : >60 mins

STANDARD : 10 mins can be extended to 60 mins