

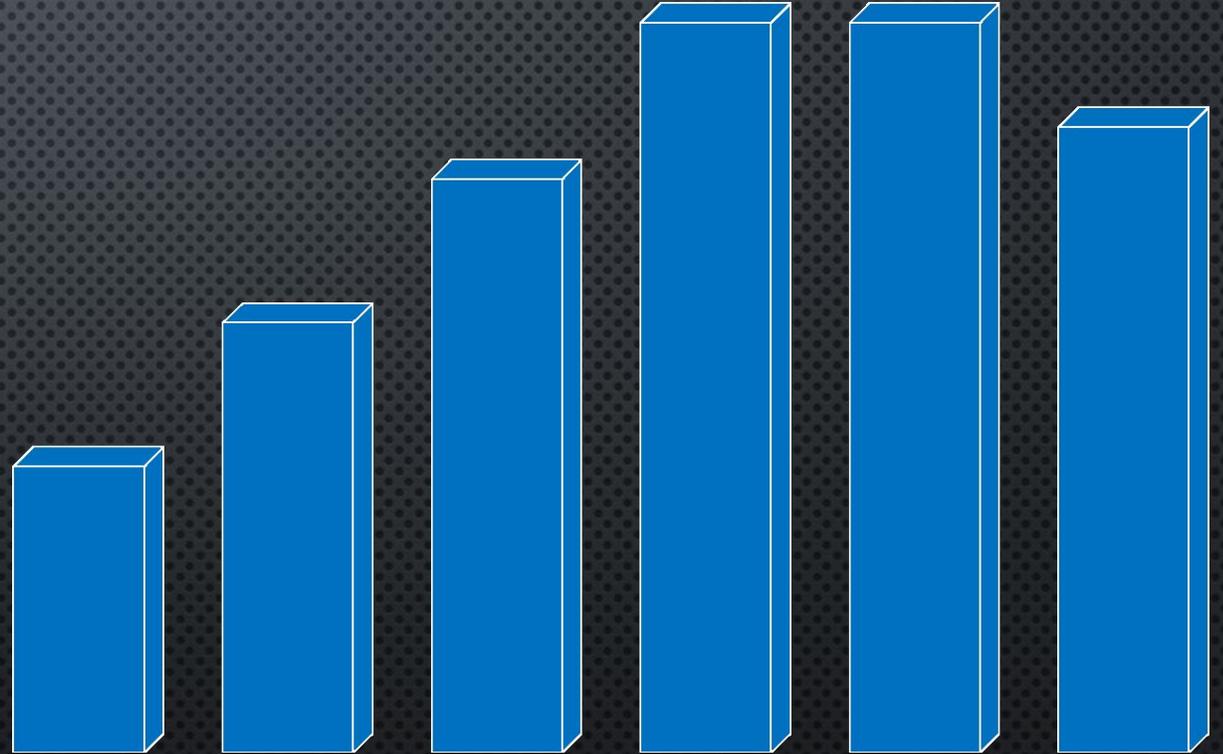
# ARCHITECTURE

OF HIGH LOAD APPLICATIONS

ON AZURE CLOUD

# WHAT IS HIGH LOAD

YOU HAVE CREATED AN AWESOME WEBSITE. YOUR APPLICATION IS QUITE POPULAR AND USERS FROM ALL OVER THE WORLD LOVE IT. LIFE IS GREAT! ... **BUT**, THEN YOU HIT A SPEED BUMP: AS YOUR TRAFFIC HAS BEEN GROWING, SO HAS THE LOAD ON YOUR APPLICATION, AND IT'S CAUSING IT TO RUN SLOWER AND SLOWER AND YOU START TO SEE USER ATTRITION...

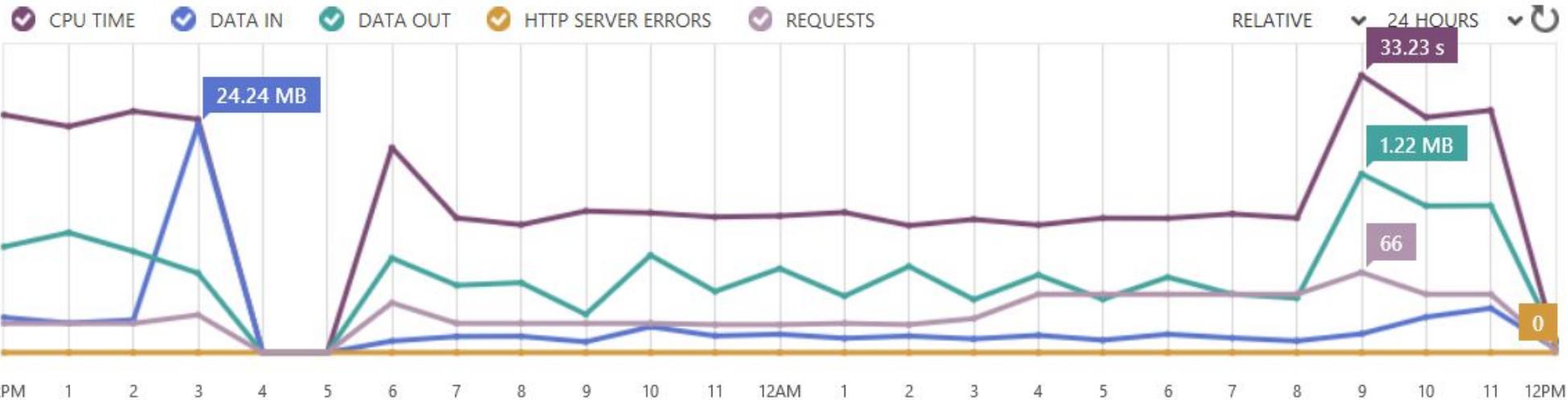


# HOW TO MAKE YOUR APPLICATION READY FOR HIGH LOAD

# MONITOR EVERYTHING (AZURE PORTAL)

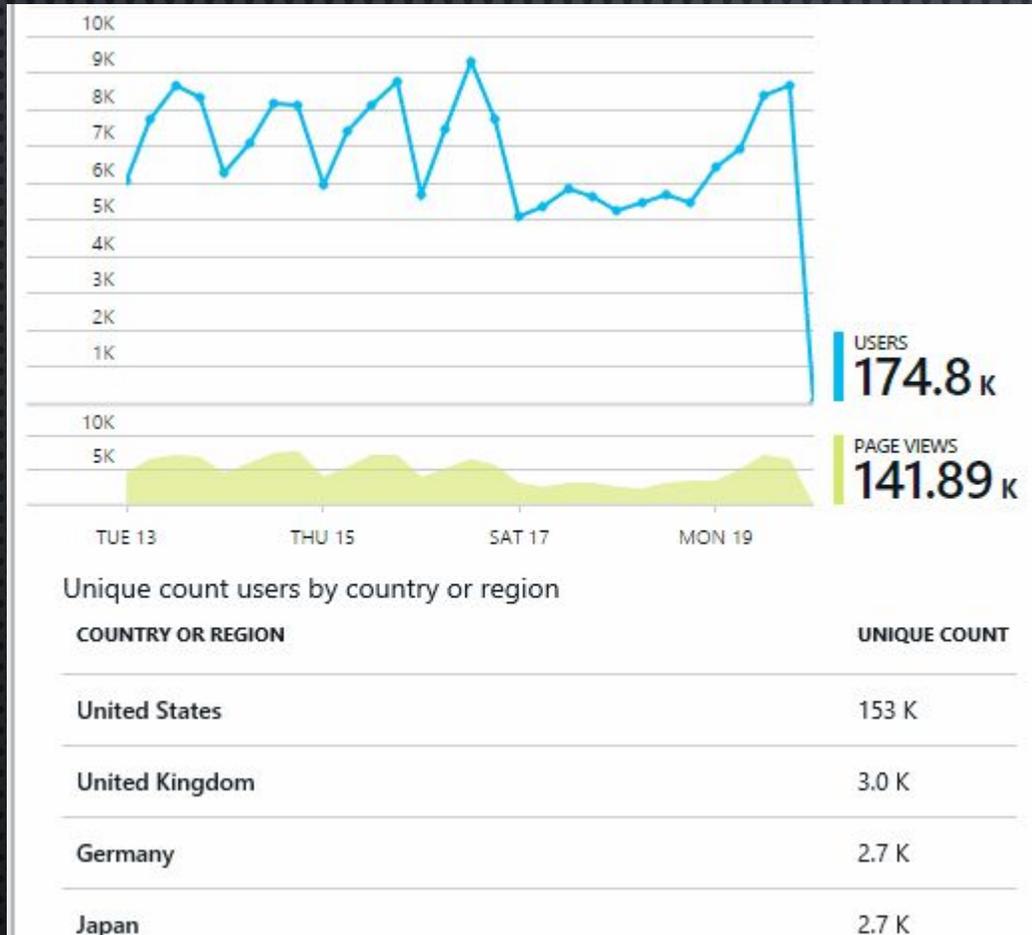
mktsvct101estewatst-secondary

[DASHBOARD](#) [MONITOR](#) [WEBJOBS](#) [CONFIGURE](#) [SCALE](#) [LINKED RESOURCES](#) [BACKUPS](#)

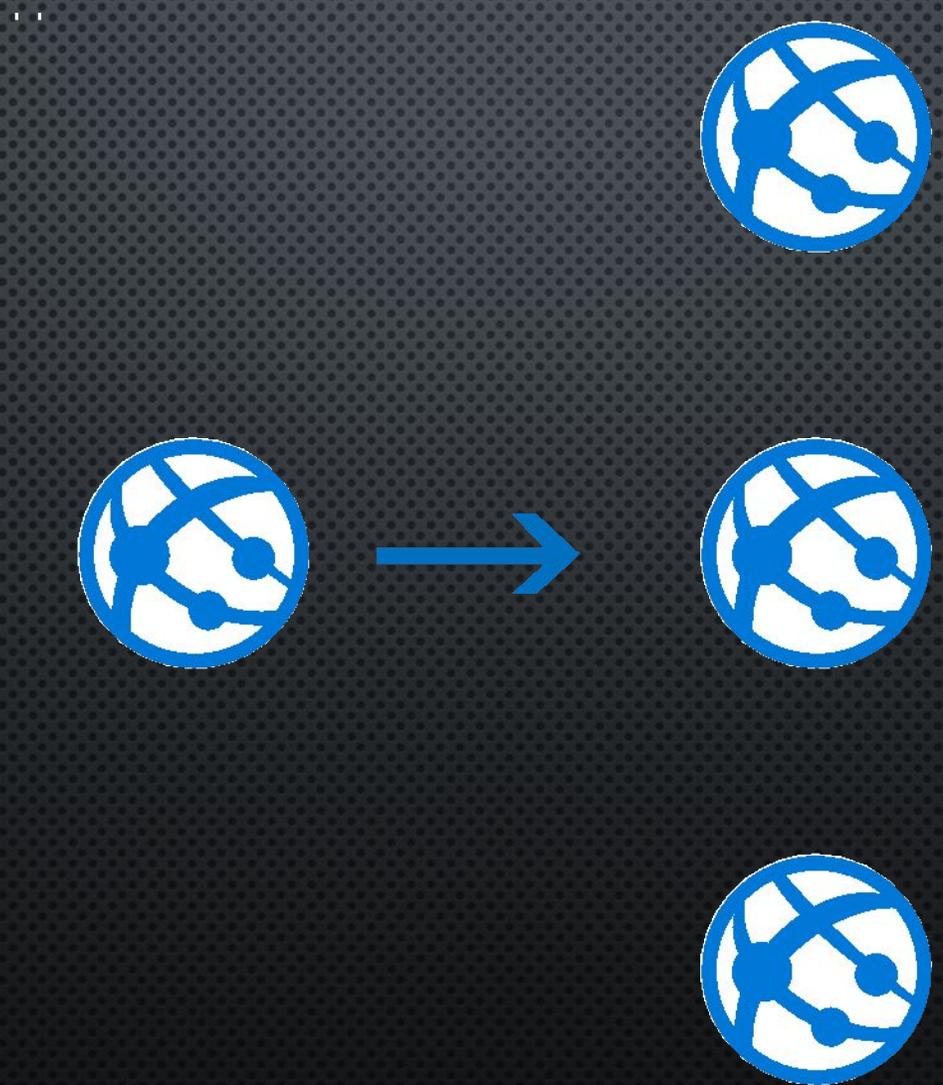


	NAME	SOURCE	MIN	MAX	AVG	TOTAL	ALERT RULES	
<input checked="" type="checkbox"/>	CPU Time	mktsvct101estewatst...	0 ms	33.23 s	19.77 s	454.62 s	Not Configured	
<input checked="" type="checkbox"/>	Data In	mktsvct101estewatst...	0 B	24.24 MB	3.05 MB	70.26 MB	Not Configured	
<input checked="" type="checkbox"/>	Data Out	mktsvct101estewatst...	0 B	1.22 MB	581.72 KB	13.07 MB	Not Configured	
<input checked="" type="checkbox"/>	Http Server Errors	mktsvct101estewatst...	0	0	0	0	Not Configured	
<input checked="" type="checkbox"/>	Requests	mktsvct101estewatst...	0	66	33.26	765	Not Configured	

# MONITOR EVERYTHING (APP INSIGHTS)



# SCALE YOUR APPLICATION TO PROVIDE SERVER RESOURCES FOR EACH OF YOUR USER



# MANUAL SCALING ON AZURE PORTAL

## capacity

With a Standard website, you can configure autoscale and spend only as much as you need for your service.

INSTANCE SIZE

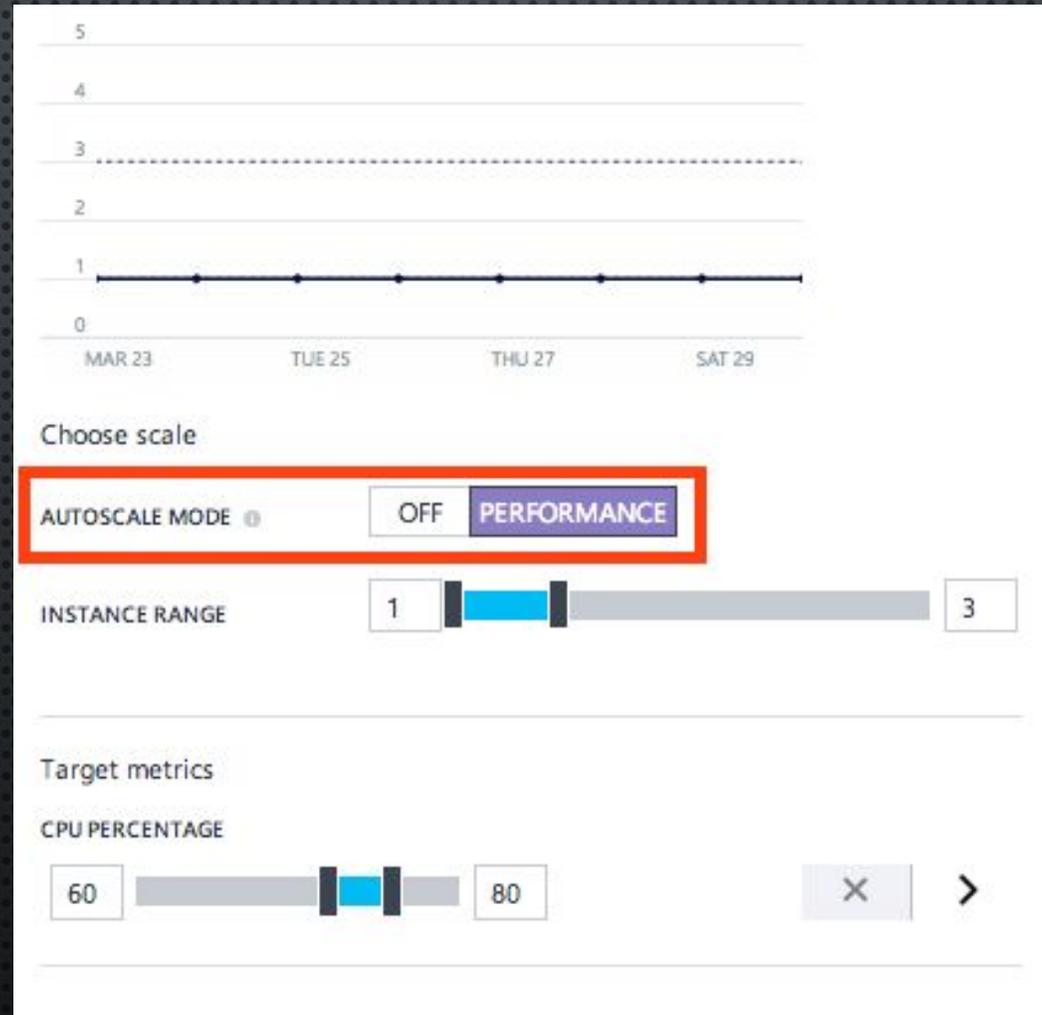
Small (1 core, 1.75 GB Memory )



INSTANCE COUNT

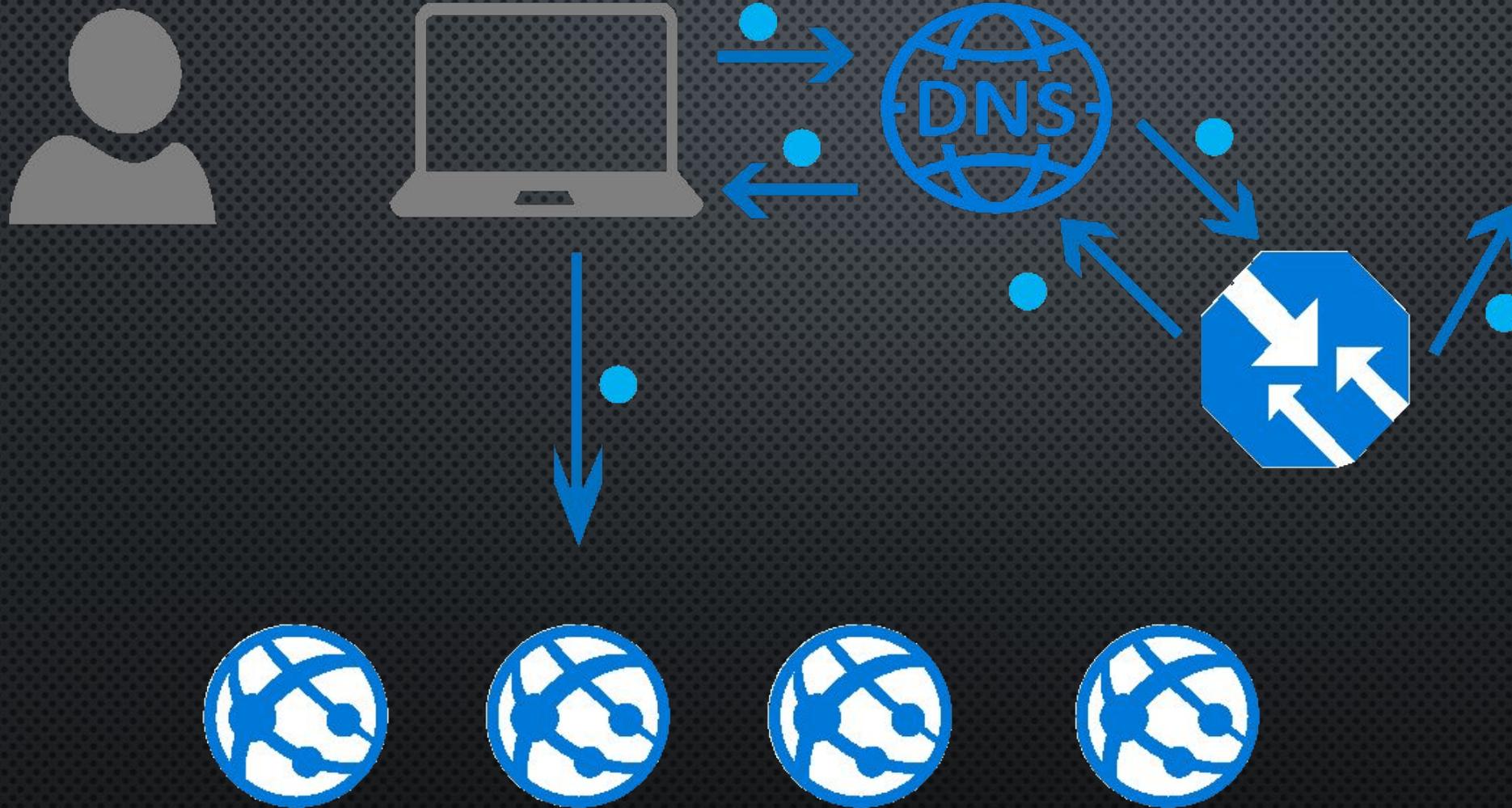


# AUTO SCALING ON AZURE PORTAL

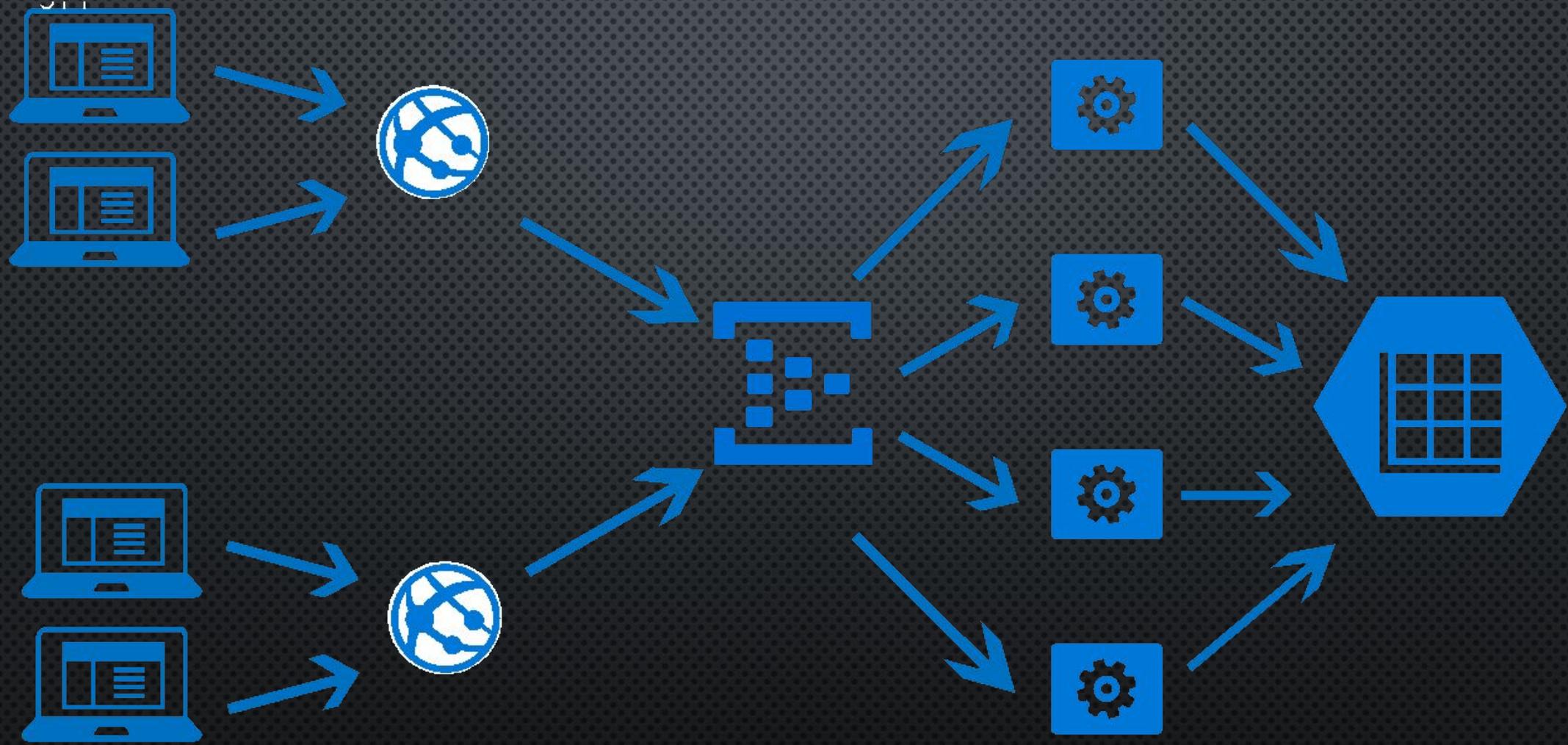


# USE TRAFFIC MANAGER TO AUTOMATICALLY DISTRIBUTE USERS ACROSS APPLICATION INSTANCES AND HANDLE FAULT DOMAINS

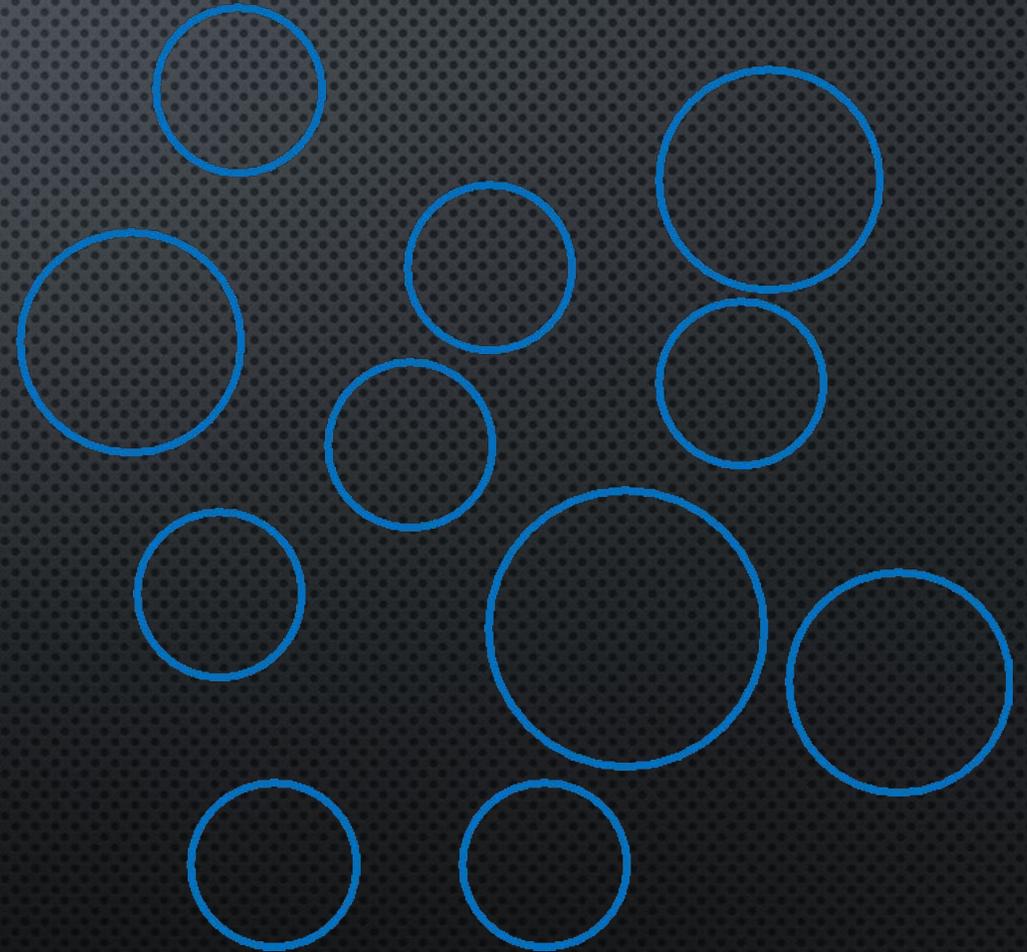
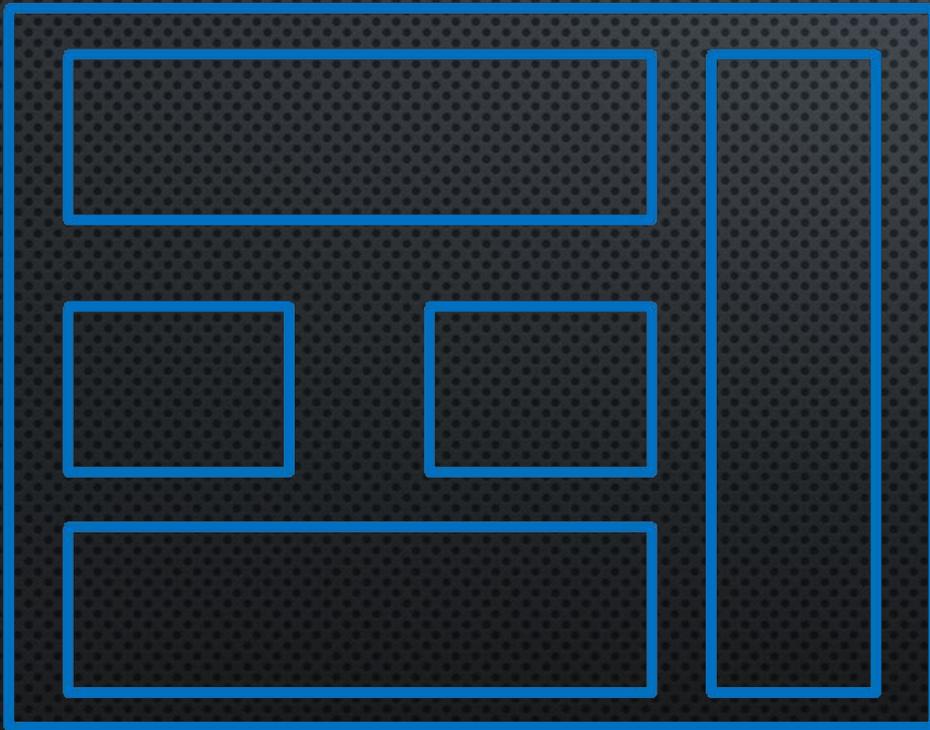
aws/aws-logs



# USE ASYNCHRONOUS COMPUTING FOR ALL LONG RUNNING PROCESS



# DISTRIBUTE ASYNCHRONOUS COMPUTING USING MICRO SERVICES ARCHITECTURE



# SCALE YOUR SQL DATABASES USING HORIZONTAL AND VERTICAL SCALING



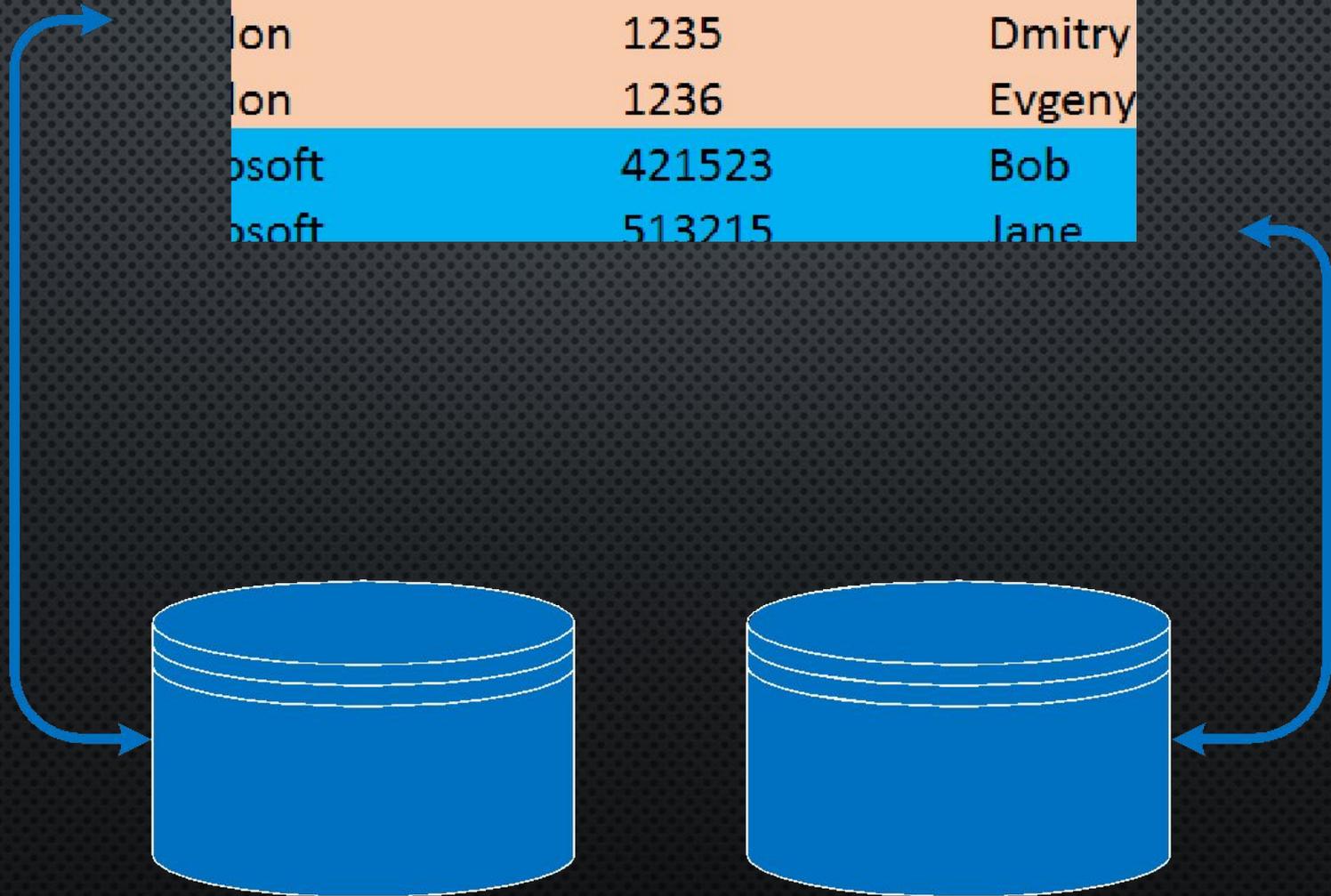
**Horizontal Scaling:** Add or remove database as needed.

## **Vertical Scaling:**

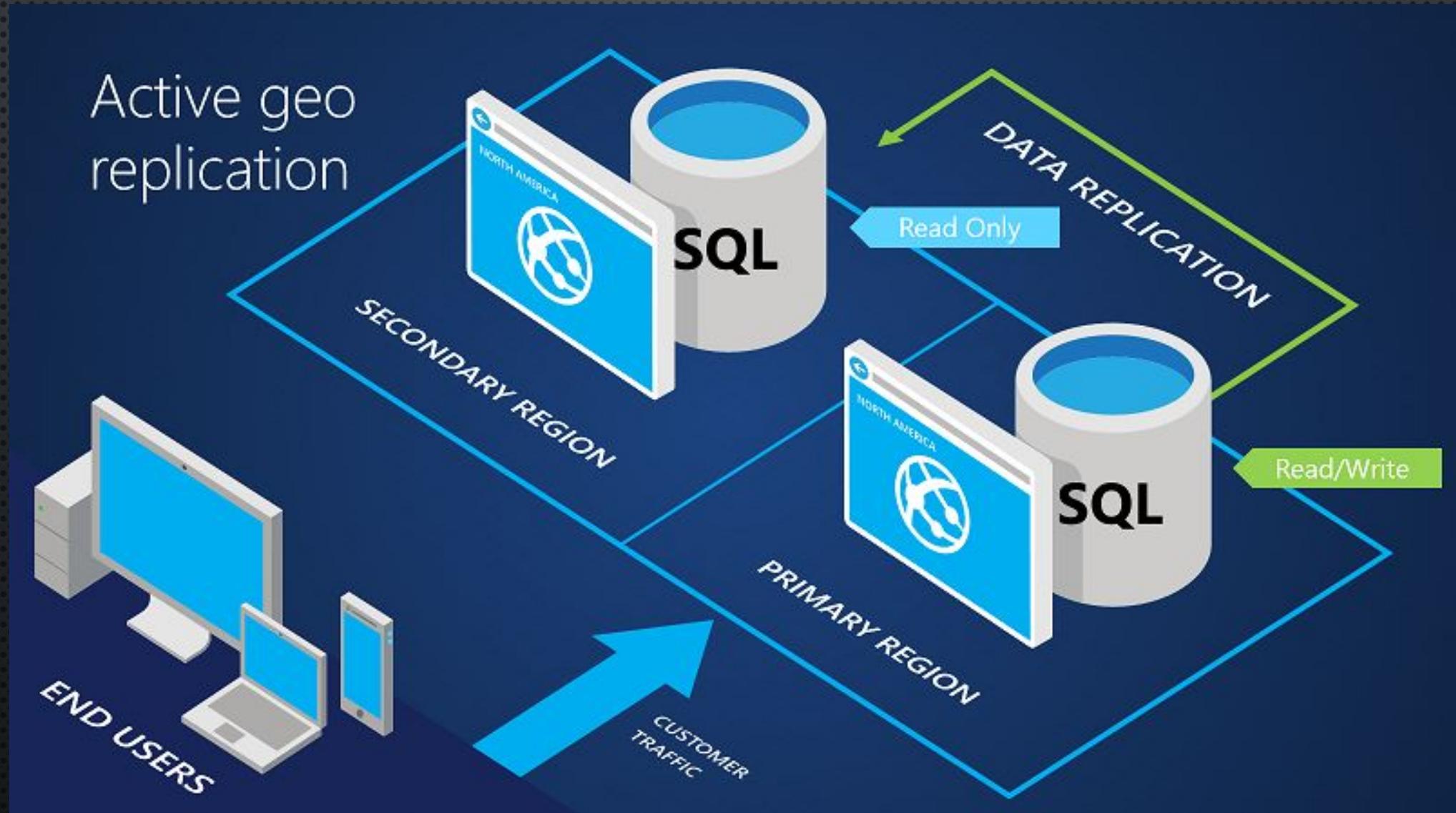
Increase or decrease computing power or databases as needed—either by changing Azure DB performance level or edition, or by using elastic database pools to automatically adjust with workload demand

# OR USE AZURE TABLE STORAGE

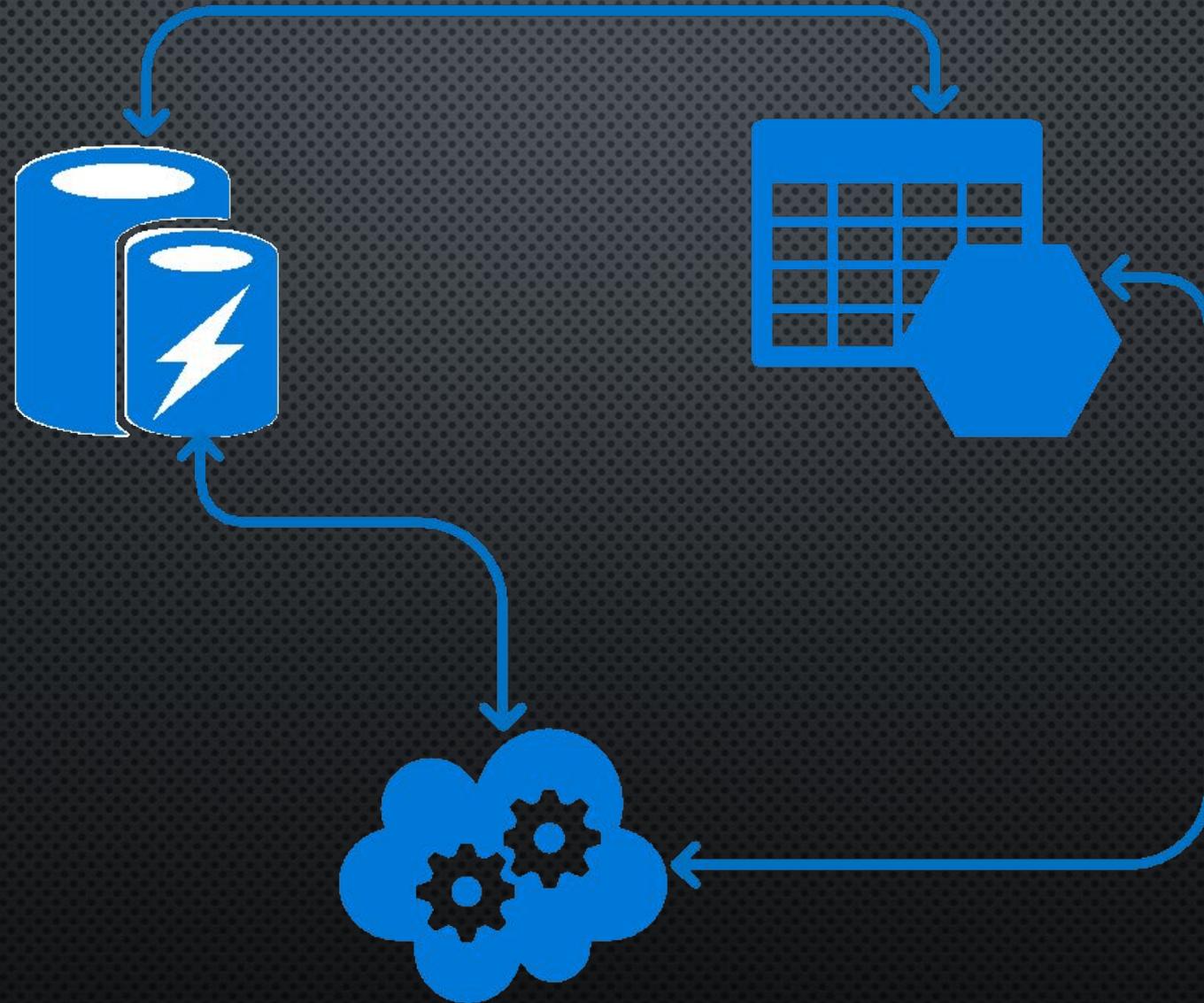
PartitionKey	RowKey	Member
on	1234	Alex
on	1235	Dmitry
on	1236	Evgeny
rosoft	421523	Bob
rosoft	513215	Jane



# REPLICATE YOUR DATA BETWEEN GEO REGIONS TO PROVIDE GREAT AVAILABILITY AND RESILIENCE



# CACHE ALL YOU CAN



# CDN

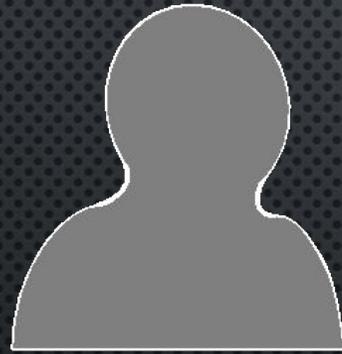
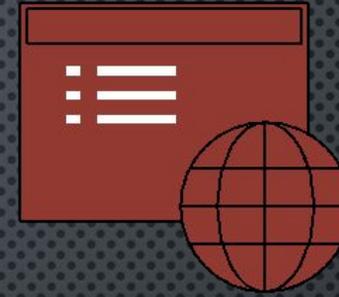
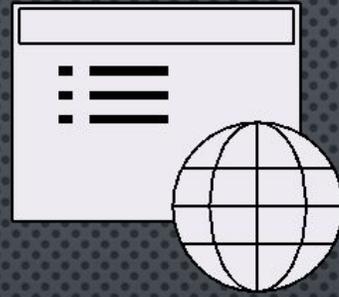
1001



EXAMPLE

LANDING PAGE A/B TESTING

# APPLICATION FUNCTIONALITY



# APPLICATION FUNCTIONALITY

