

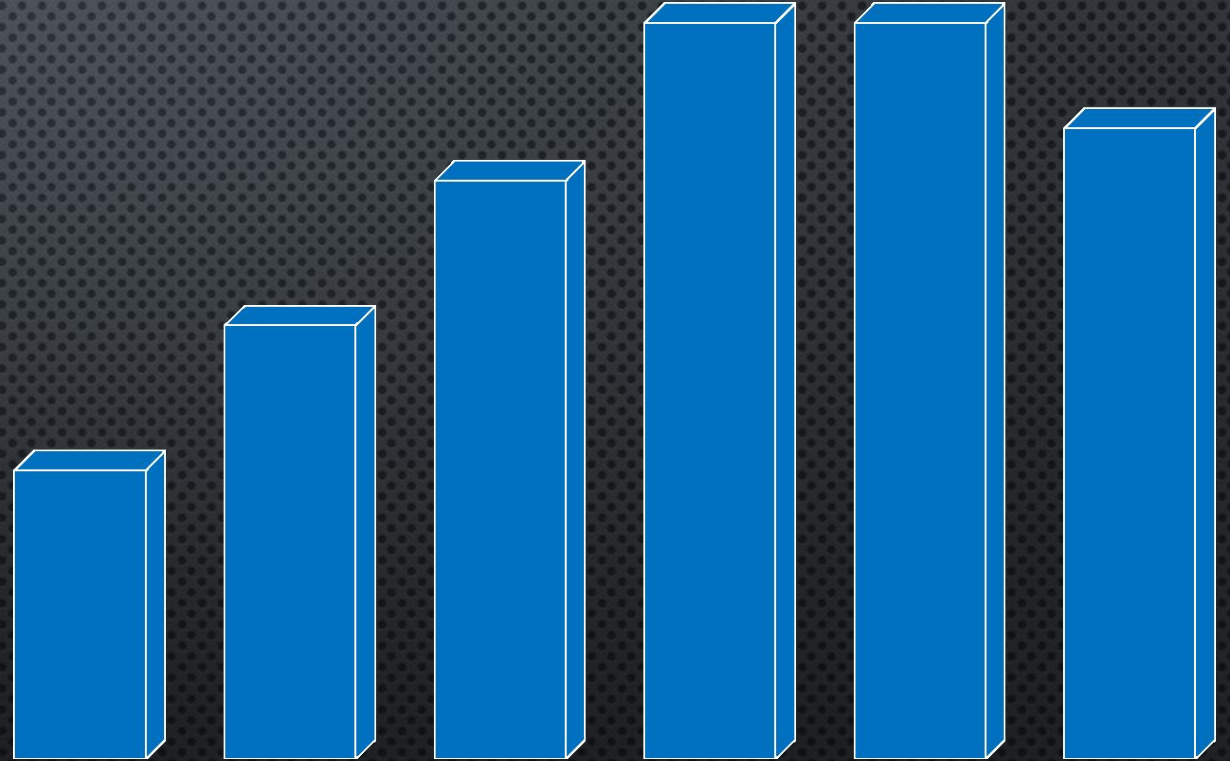
ARCHITECTURE

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

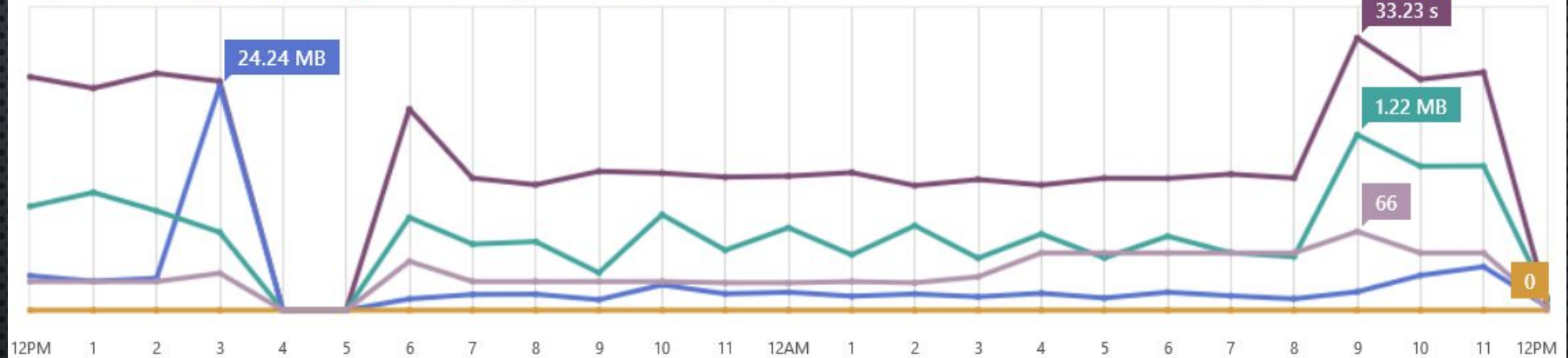
MONITOR EVERYTHING (AZURE PORTAL)

mktsvct101estewatst-secondary

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

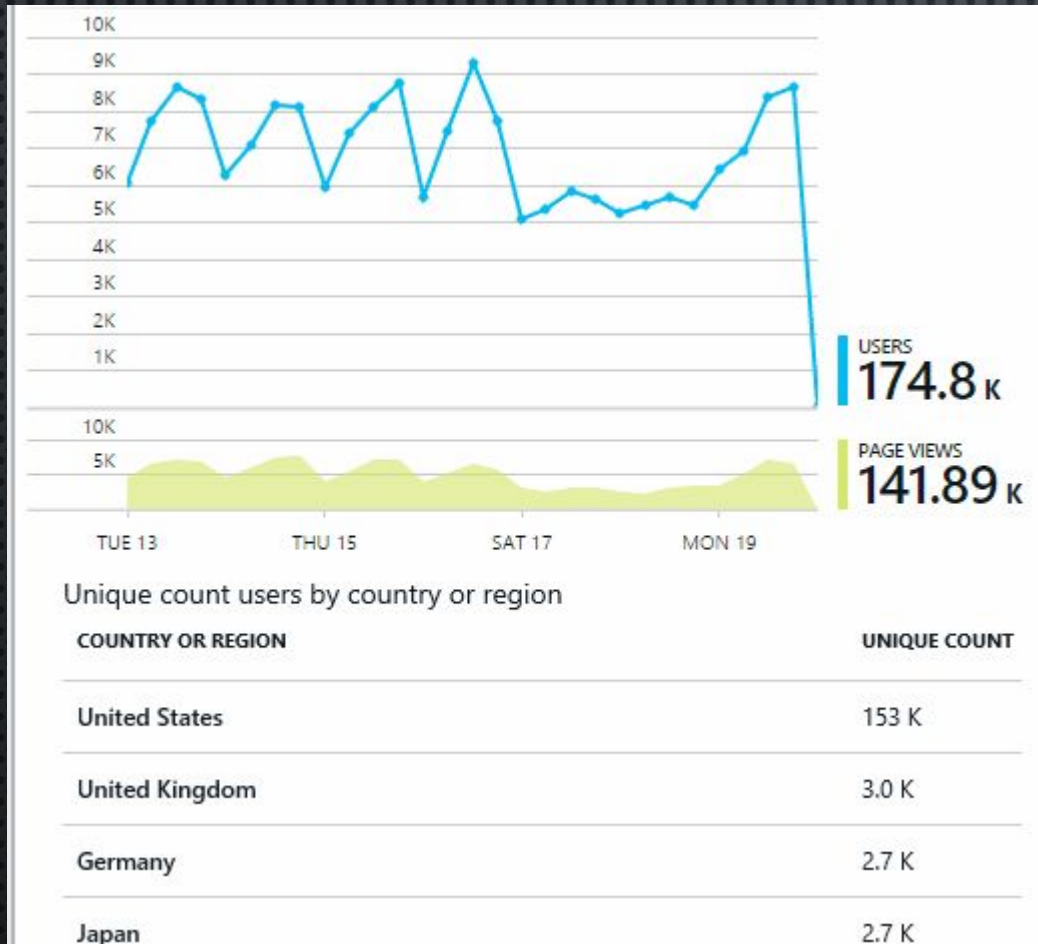
CPU TIME DATA IN DATA OUT HTTP SERVER ERRORS REQUESTS

RELATIVE 24 HOURS

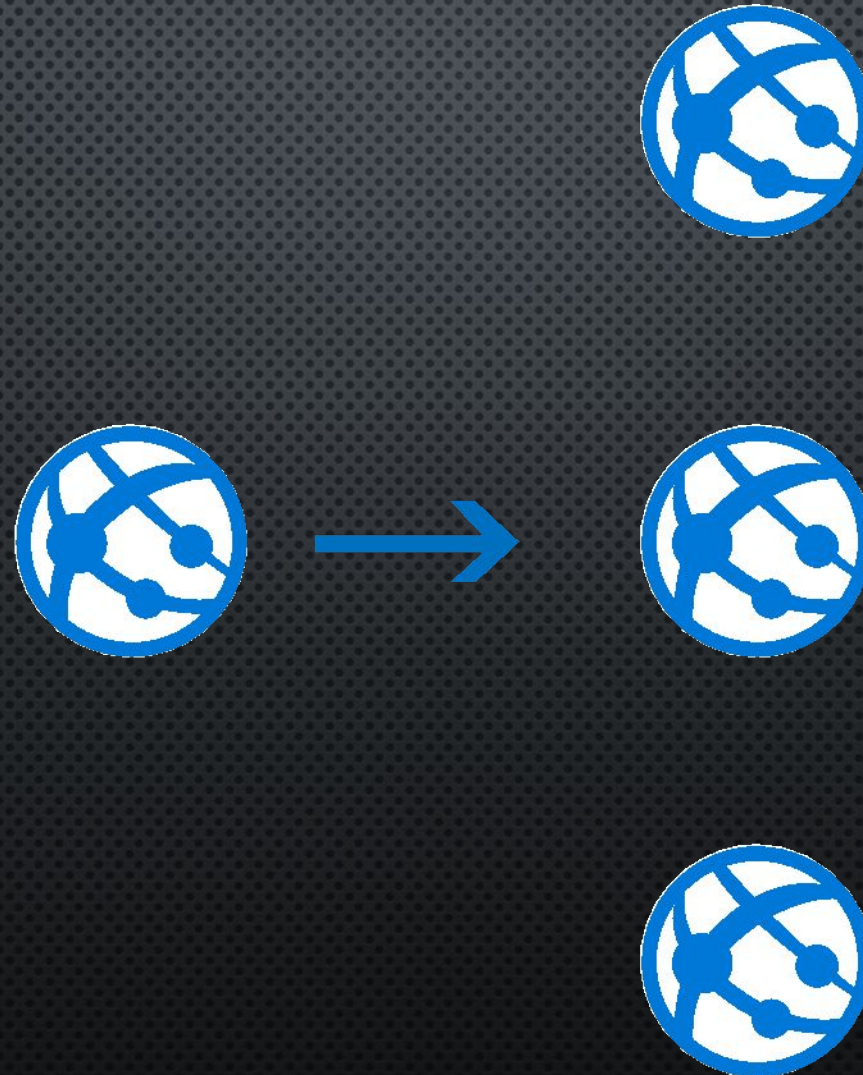


	NAME	SOURCE	MIN	MAX	AVG	TOTAL	ALERT RULES	
<input checked="" type="checkbox"/>	CPU Time	mktsvct101estewatst...	0 ms	33.23 s	19.77 s	454.62 s	Not Configured	
<input checked="" type="checkbox"/>	Data In	mktsvct101estewatst...	0 B	24.24 MB	3.05 MB	70.26 MB	Not Configured	
<input checked="" type="checkbox"/>	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

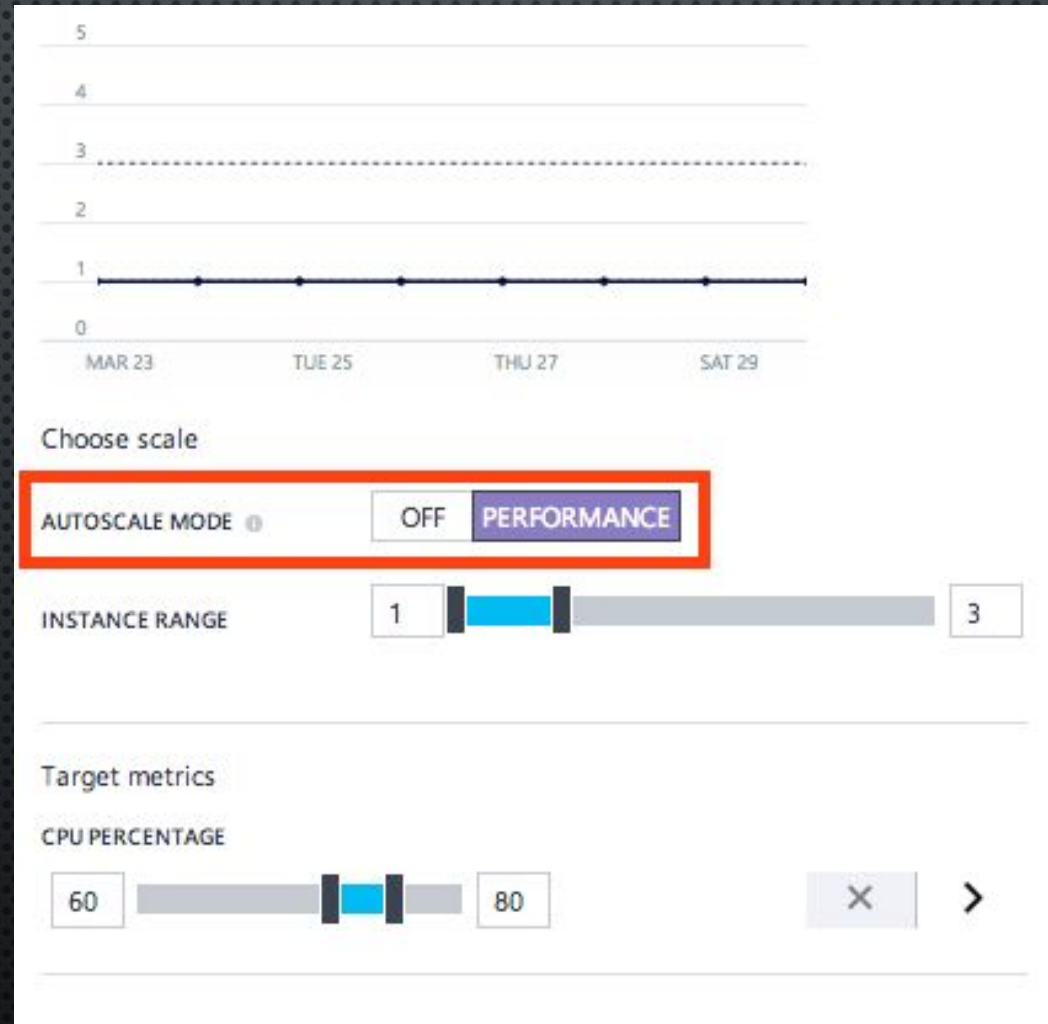
Small (1 core, 1.75 GB Memory)



INSTANCE COUNT

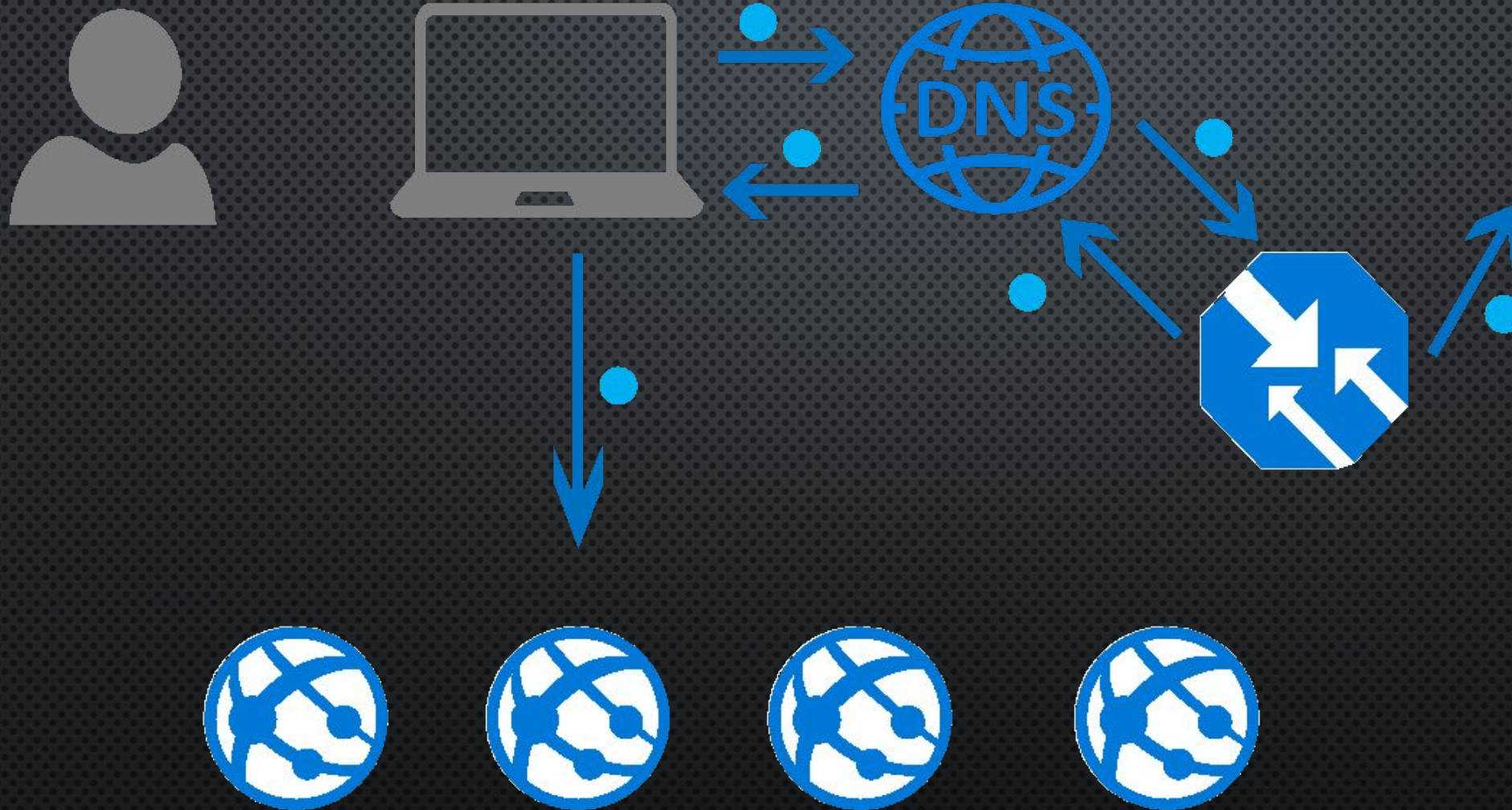


AUTO SCALING ON AZURE PORTAL

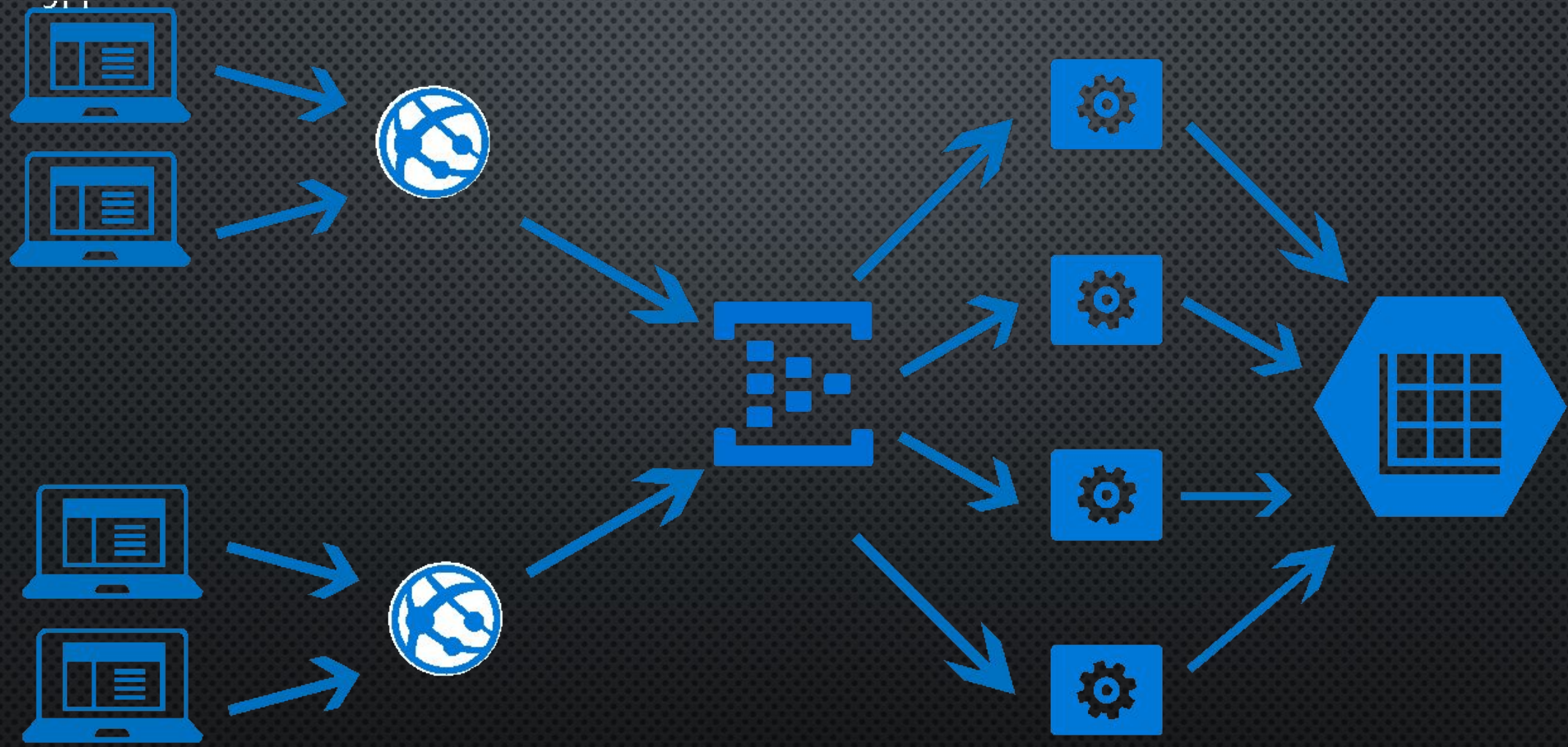


USE TRAFFIC MANAGER TO AUTOMATICALLY DISTRIBUTE USERS ACROSS APPLICATION INSTANCES AND HANDLE FAULT DOMAINS

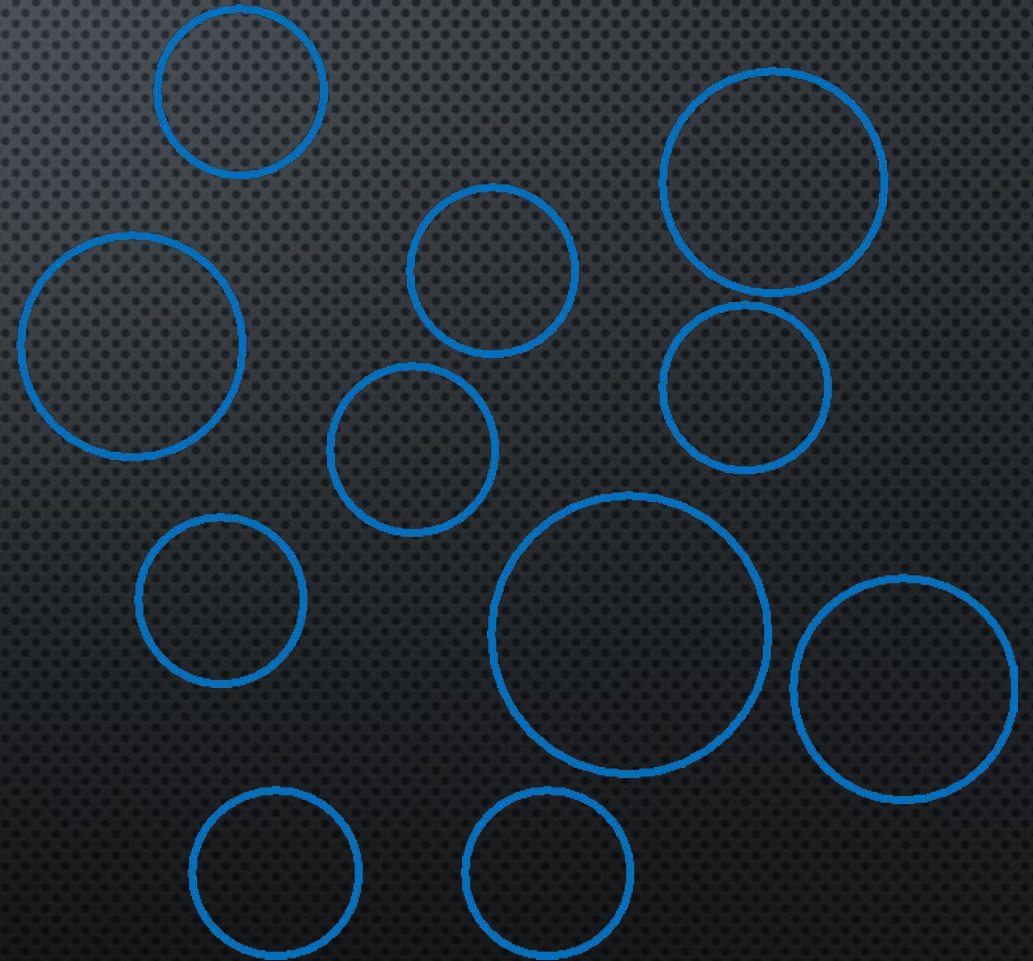
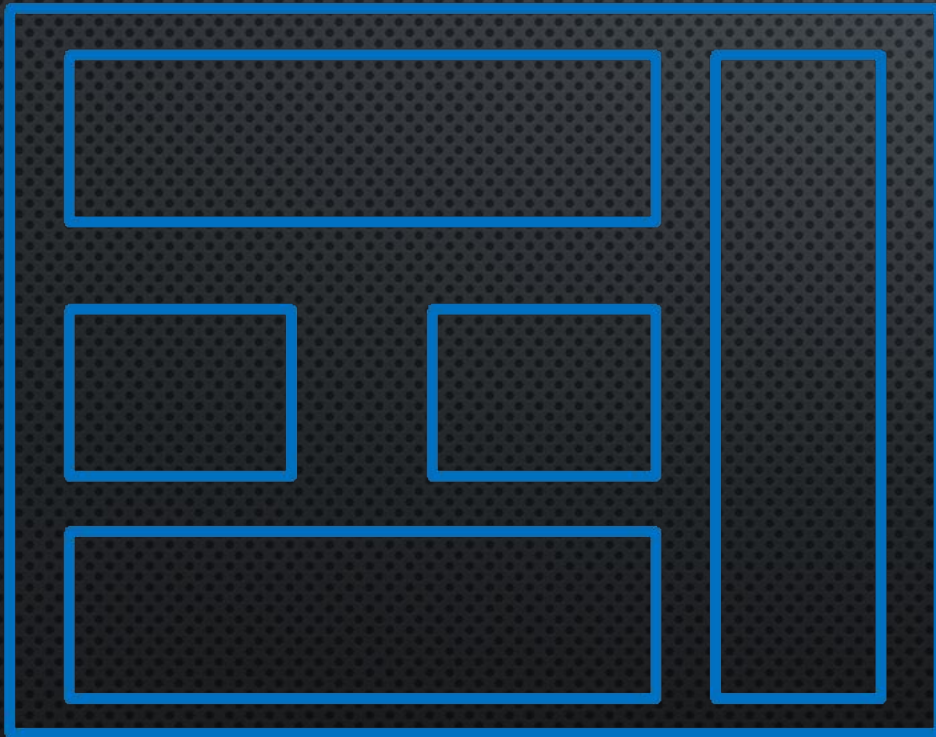
aws.amazon.com



USE ASYNCHRONOUS COMPUTING FOR ALL LONG RUNNING PROCESS



DISTRIBUTE ASYNCHRONOUS COMPUTING USING MICRO SERVICES ARCHITECTURE



SCALE YOUR SQL DATABASES USING HORIZONTAL AND VERTICAL SCALING



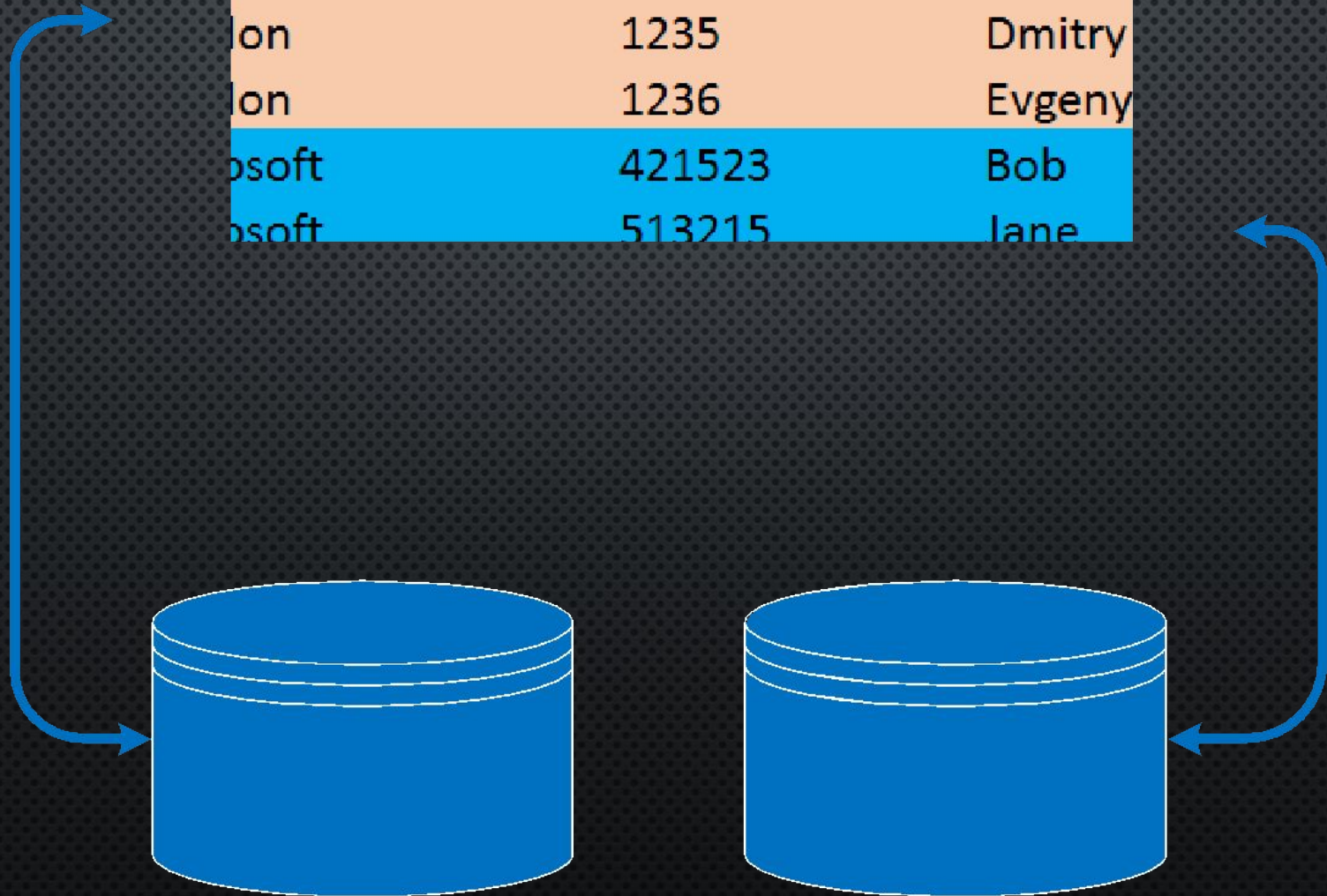
Horizontal Scaling: Add or remove database as needed.

Vertical Scaling:

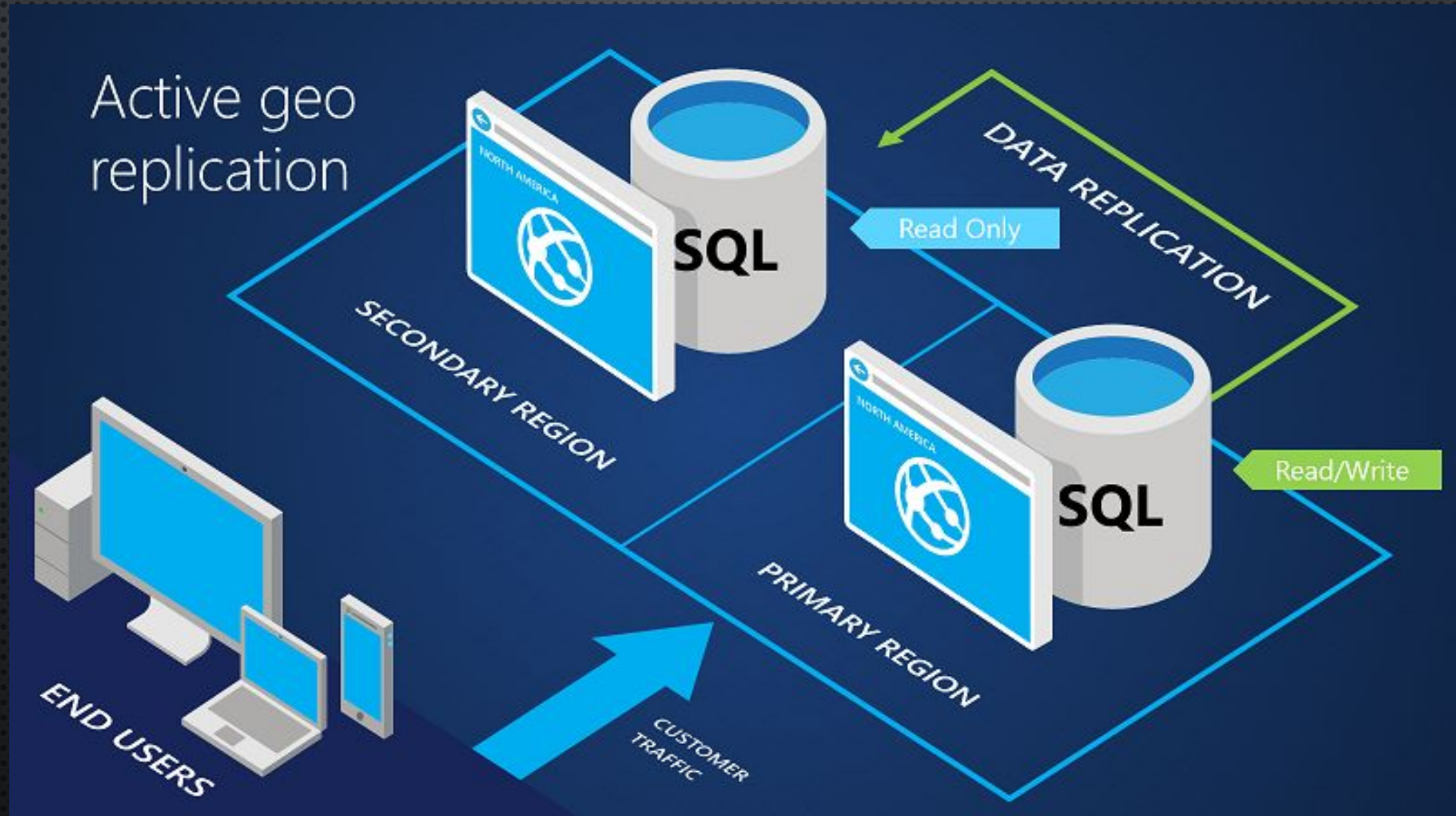
Increase or decrease computing power or databases as needed—either by changing Azure DB performance level or edition, or by using elastic database pools to automatically adjust with workload demand

OR USE AZURE TABLE STORAGE

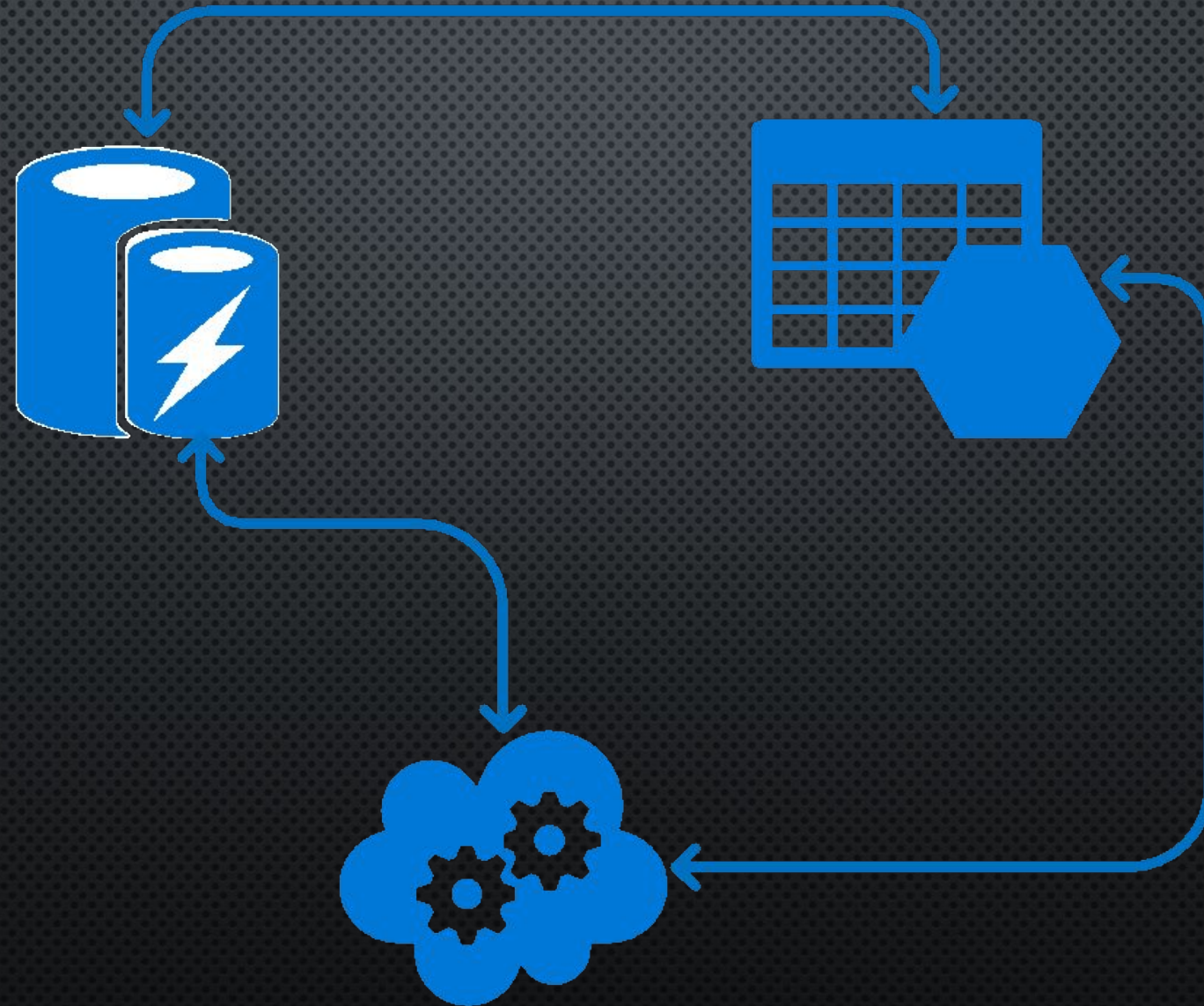
PartitionKey	RowKey	Member
on	1234	Alex
on	1235	Dmitry
on	1236	Evgeny
rosoft	421523	Bob
rosoft	513215	Jane



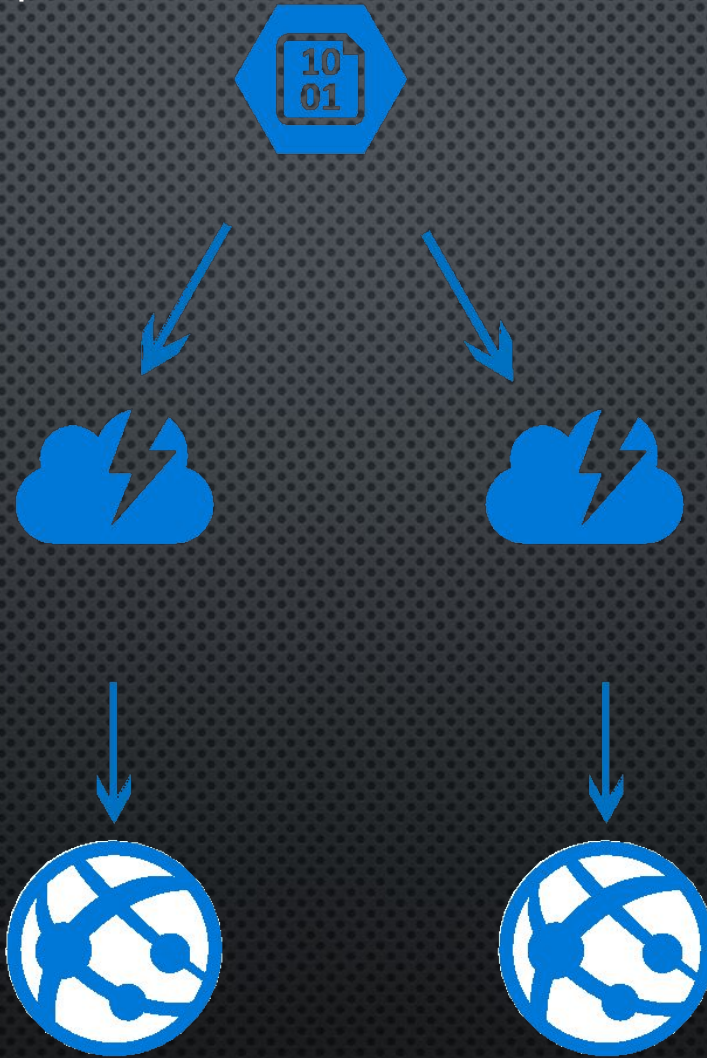
REPLICATE YOUR DATA BETWEEN GEO REGIONS TO PROVIDE GREAT AVAILABILITY AND RESILIENCE



CACHE ALL YOU CAN



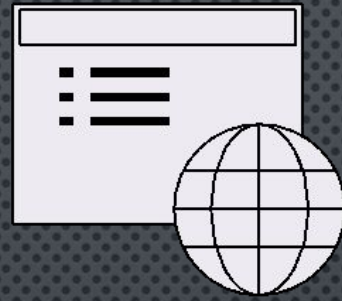
CDN



EXAMPLE

LANDING PAGE A/B TESTING

APPLICATION FUNCTIONALITY



APPLICATION FUNCTIONALITY

