

Scaling_with_BYOK

Last updated by | Lisa Liu | Nov 6, 2020 at 10:36 AM PST

Issue

Scaling Orcas with BYOK

Investigation and Analysis

A customer can scale either the compute or the storage or both. The scenario below describes each of these.

Compute Scaling

Contoso is experiencing significant business growth and as part of that growth, John needs to scale PG Service to higher pricing tier. John knows that Azure will provision the PG Service on a new container that can meet the compute capacity requested but he is concerned if this change will require him to re-establish BYOK?

John is happy to know that Azure OSS database service maintains BYOK property when scaling compute up/down requiring no user action.

Storage Scaling

Contoso is experiencing significant data growth in their MySQL database service. To accommodate that, John needs to increase the size of the storage to 10 TB and to avail the increased IOPS required to sustain the workload.

John knows that Azure MySQL can scale storage online without any downtime to the application, but he is concerned if BYOK would change anything. John is happy to know that he can continue to scale the storage online with BYOK intact

Mitigation

You can check the XTS view to see the state of the database. The customer will not have a downtime

File Edit Recent Views View Favorites Tools Utilities Window Profiles Help Versions

Views

byok

byoklocal

byokserver

byok-test-mysql-1

byok-test-pg-1

byok-test-postgre

demopostgresql1

demosevermysql

mysqbyoktestpolicy

orcasbyokeastus2georestore1

Usage Instructions

Step 1: Enter Search String

Search String

OK

BYOK Servers

name	state	elastic_server_id	customer_subscription_id	byok_enabled	identity_url
byoklocal	DroppingGeoRedundantB...	93034b8d-bf66-4bdf-a804-af2cfaf5e545	5c5037e5-d3f1-4e7b-b3a9-f6bf94902b30	true	https://control-eastus.identity.az
byokserver	Inaccessible	0807be7a-c44f-457c-855f-8145433c7768	5c5037e5-d3f1-4e7b-b3a9-f6bf94902b30	true	https://control-eastus.identity.az
byok-test-mysql-1	Ready	c769e85a-5d87-4496-be32-d75ae18a8710	8403da61-2731-4c0e-a00c-1ec941e0d247	true	https://control-eastus.identity.az
byok-test-pg-1	Ready	c8f8dacc-b502-42ab-8916-a05e3d0289f3	8403da61-2731-4c0e-a00c-1ec941e0d247	true	https://control-eastus.identity.az
byok-test-postgre	Ready	50412ecb-932c-4844-b5da-d895bf3ce99b	d0e465d4-b7e9-47bf-9a20-329393f4b323	true	https://control-eastus.identity.az
demopostgresql1	Ready	f98a5ee8-c29e-4b19-8b0c-b3f4eb467144	5c5037e5-d3f1-4e7b-b3a9-f6bf94902b30	true	https://control-eastus.identity.az
demosevermysql	Inaccessible	7fe5bc37-ed3a-4041-921b-455865bd1341	5c5037e5-d3f1-4e7b-b3a9-f6bf94902b30	true	https://control-eastus.identity.az
mysqbyoktestpolicy	WaitingForElasticServerPr...	909c9723-9f13-48c2-ae9c-c03daa8f42ce	707595a1-1498-4b7d-9771-cf0455939d2c	true	https://control-eastus.identity.az
orcasbyokeastus2georestore1	WaitingForCustomSecrets...	0db0d084-49f0-4204-b43b-47e2a514b2ee	8403da61-2731-4c0e-a00c-1ec941e0d247	false	https://control-eastus.identity.az

BYOK Servers Total BYOK Enabled Servers | Total BYOK Attempted | BYOK Tombstoned Servers |

sqlinstance for demosevermysql

name	elastic_server_id	sql_instance_id	state	type	service_level_objective	target_service_level_objective	worker_service_affinity_tag	tenant_ring_name	Fabric
Instance Name	partition_id								
d68f589987e9	8500278D-05E9-4235-8796-C9F154988C04								

Partition ID for Instance

Instance Name	partition_id
d68f589987e9	8500278D-05E9-4235-8796-C9F154988C04

CAS Actions

action

command

Select Environment

Select-SqlAzureEnvironment Prod

Select Cluster

Select-SqlAzureCluster Wazd-prod-eastus1-a-CR1

Get Jit Access

Get-JitAccess -WorkitemSource IdM -WorkitemId IdM ID -Justifica

New JIT Request

Get-FabricNode -NodeName DB.19 -NodeClusterName tr7336.ea

AW dumps

https://azureswatson.cloudapp.net/7/ClusterName-tr7336.eastus

Dump process

Get-FabricNode -NodeName DB.19 -NodeClusterName tr7336.ea

Kill process

Get-FabricNode -NodeName DB.19 -NodeClusterName tr7336.ea

Kill instance agent

Get-FabricNode -NodeName DB.19 -NodeClusterName tr7336.ea

Kill SAT runner

Get-FabricNode -NodeName DB.19 -NodeClusterName tr7336.ea

Kill MDS agent

Get-FabricNode -NodeName DB.19 -NodeClusterName tr7336.ea

Restart server

Restart-ElasticServer -SubscriptionId 5c5037e5-d3f1-4e7b-b3a9

Add Firewall Rule

New-ElasticServerFirewallRule -StartIpAddress "0.0.0.0" -EndIp

Remove Firewall ...

Remove-ElasticServerFirewallRule -SubscriptionId 5c5037e5-d3f

Get Configuration

Get-ElasticServerConfig -SubscriptionId 5c5037e5-d3f1-4e7b-b3

Set Configuration

Set-ElasticServerConfig -SubscriptionId 5c5037e5-d3f1-4e7b-b3

Get SAS key

Get-ElasticServerSasToken -SubscriptionId 5c5037e5-d3f1-4e7b

PG Basic Backup

Get-CreateElasticServerBackup -ServerName demosevermysql -

Take backup

Get-FabricNode -NodeName DB.19 -NodeClusterName tr7336.ea

Restore server

Restore-ElasticServer2 -SubscriptionId 5c5037e5-d3f1-4e7b-b3a

Create read replica

New-ElasticServerReplica2 -SubscriptionId 5c5037e5-d3f1-4e7b

Start of MySQL ...

The following commands are for MySQL only.

Invoke Command

Invoke-ElasticServerDbCommand -SubscriptionId 5c5037e5-d3f1

Show binary logs

Invoke-ElasticServerDbCommand -SubscriptionId 5c5037e5-d3f1

Show master sta...

Invoke-ElasticServerDbCommand -SubscriptionId 5c5037e5-d3f1

Show slave status

Invoke-ElasticServerDbCommand -SubscriptionId 5c5037e5-d3f1

Show processlist

Invoke-ElasticServerDbCommand -SubscriptionId 5c5037e5-d3f1

Start Slave

Invoke-ElasticServerDbCommand -SubscriptionId 5c5037e5-d3f1

Stop Slave

Invoke-ElasticServerDbCommand -SubscriptionId 5c5037e5-d3f1

Turn on bin log

Set-ElasticServerConfig -SubscriptionId 5c5037e5-d3f1-4e7b-b3

Turn on audit log

Set-ElasticServerConfig -SubscriptionId 5c5037e5-d3f1-4e7b-b3

Set audit events

Set-ElasticServerConfig -SubscriptionId 5c5037e5-d3f1-4e7b-b3

Set audit exd user

Set-ElasticServerConfig -SubscriptionId 5c5037e5-d3f1-4e7b-b3

Turn off parallel ...

Set-ElasticServerConfig -SubscriptionId 5c5037e5-d3f1-4e7b-b3

End of MySQL Only

The commands above are for MySQL only.

WARNING!

Please consult team orcasql@service.microsoft.com before using

Remove replica

Get-FabricNode -NodeName DB.19 -NodeClusterName tr7336.ea

Move Replica

Get-FabricNode -NodeName DB.19 -NodeClusterName tr7336.ea

Delete database...

Check the state -

```
MonAnalyticsElasticServersSnapshot
| where name == "{REPLACE_HERE}"
| summarize min(TIMESTAMP), max(TIMESTAMP) by ['state'], bin(TIMESTAMP, 1h)
```

Internal Reference (optional)

[Internal Functional Specs](#)

Root Cause Classification

Cases resolved by this TSG should be coded to the following root cause: Azure Open Source DB V2\Security\User Request\Data Encryption\How-to questions

How good have you found this content?

