

# BYOK XTS View

Last updated by | Shawn Xiao | Apr 8, 2021 at 10:33 PM PDT

This page would document how to use BYOK-specific XTS view: Sterling\BYOK Elastic Servers.xts

Currently supports:

1. Search box based BYOK servers or all in a region. BYOK servers will show any server with either byok\_enabled as not-null or MSI being not null (this is to get a sense if customer enabled BYOK and then disabled it back)
2. TotalXXX - shows total number of attempted and currently enabled
3. Tombstoned BYOK

The screenshot displays the BYOK XTS View interface. The top section shows a search box with the text "Step 1: Enter Search String". Below this is a table of BYOK Servers with columns: name, state, elastic\_server\_id, customer\_subscription\_id, byok\_enabled, and identity\_url. The table lists several servers, including byoklocal, byokserver, byok-test-mysql-1, byok-test-pg-1, byoktestpostgre, demopostgresql, demoserverymysql, msqbyoktestpolicy, and orcaboyoktestus2georestore1. The bottom section shows a detailed view of a specific server instance, including its name, elastic\_server\_id, sql\_instance\_id, state, type, service\_level\_objective, target\_service\_level\_objective, worker\_service\_affinity\_tag, tenant\_ring\_name, and fabric.

name	state	elastic_server_id	customer_subscription_id	byok_enabled	identity_url
byoklocal	DroppingGeoRedundantB...	93834b6d-bf66-4bdf-a994-af2d4fe5e45	5c5037e5-d3f1-4e7b-b3a9-f6bf94902b30	true	https://control-eastus.identity.az
byokserver	Inaccessible	0887be7a-c4f1-457c-855f-8145433c7768	5c5037e5-d3f1-4e7b-b3a9-f6bf94902b30	true	https://control-eastus.identity.az
byok-test-mysql-1	Ready	c769e65a-5887-4486-be32-d75ae18a6710	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
byoktestpostgre	Ready	50412ecb-932c-4844-b5da-d895bf3ce99b	d0e465d4-b7e9-47bf-9a20-32939f4b323	true	https://control-eastus.identity.az
demopostgresql	Ready	f98a5ee8-c29e-4b19-8b0c-b3f4eb467144	5c5037e5-d3f1-4e7b-b3a9-f6bf94902b30	true	https://control-eastus.identity.az
demoserverymysql	Inaccessible	7fe5bc37-ed0a-4041-921b-455b65bd1341	5c5037e5-d3f1-4e7b-b3a9-f6bf94902b30	true	https://control-eastus.identity.az
msqbyoktestpolicy	WaitingForElasticServerPr...	909c9723-8f13-48c2-ae9c-c02daa8f42ce	707595a1-1498-4b7d-9771-d0455939d2c	true	https://control-eastus.identity.az
orcaboyoktestus2georestore1	WaitingForCustomSecrets...	0db0b084-49f0-4204-b43b-47e2af514b2ee	8403da61-2731-4c0e-a00c-1ec941e0d247	false	https://control-eastus.identity.az

sterling/Favorites and Links.xts

sterling/BYOK Elastic Servers.xts

orcasql/elastic server and databases.xts

Sterling/Sterling CMS Browser.xts

orcasql/postgres overview.xts

Usage Instructions

BYOK Cheat sheet

Check if BYOK server's system assigned identity has access to customer's key vault for Get/Wrap/Unwrap permissions  
TEST-ELASTICSERVERENCRYPTIONKEY -ResourceGroup <string> -ServerName <string> -ServerType <string> -SubscriptionId <Guid>  
Get BYOK Key URI and Identity metadata from Azure Storage service  
GET-ELASTICSERVERENCRYPTIONINFOFORALLSTORAGEACCOUNTS -ElasticServerId <Guid> -ResourceGroup <string> -ServerName <string> -ServerType <string> -SubscriptionId <Guid>  
Get BYOK Key URI from CMS  
GET-ELASTICSERVERENCRYPTIONKEYS -AzureKeyVaultKeyName <string> -ResourceGroup <string> -ServerName <string> -ServerType <string> -SubscriptionId <Guid>

Impactful BYOK and mgmttest commands are hidden further below

Step 1: Enter Search String

Search String

OK

BYOK-enabled Servers

name	state	elastic_server_id
byoklocal	DroppingGeoRedundantBackupPfs	93834b6d-bf6d-4000-8000-000000000000
byokserver	Inaccessible	0887be7a-c4f4-4000-8000-000000000000
byok-test-mysql-1	Ready	c769e85a-5d8b-4000-8000-000000000000
byok-test-pg-1	Ready	c8f8dacc-b502-42ab-8916-a05e3d0289f3
byok-test-postgres	Ready	c8f8dacc-b502-42ab-8916-a05e3d0289f3

BYOK-enabled Servers

BYOK-Enabled Tombstoned

Total BYOK-Enabled Cores

Total BYOK-Attempted Cores

SqlInstance for byok-test-pg-1

name	elastic_server_id	sql_instance_id	state	type
F71f3eb22eb6	c8f8dacc-b502-42ab-8916-a05e3d0289f3	16125615-ac38-46ef-b646-4d28e56d18e4	Ready	F

CAS Actions

action	command
Select Environment	Select-SqlAzureEnvironment Prod
Select Cluster	Select-SqlAzureCluster Wasd-prod-eastus1-a-CR1
Get JIT Access	Get-JitAccess -WorkitemSource IdM -WorkitemId IdM ID -Justification "Reason for request"
New JIT Request	Get-FabricNode -NodeName DB.36 -NodeClusterName tr281.eastus1-a.worker.database.windows.net   \\\arsing\shared\New-JITReq
AW dumps	https://azureswatson.cloudapp.net/?ClusterName=tr281.eastus1-a.worker.database.windows.net&AppName=F71f3eb22eb6
Dump process	Get-FabricNode -NodeName DB.36 -NodeClusterName tr281.eastus1-a.worker.database.windows.net   Dump-Process -ProcessName
Kill process	Get-FabricNode -NodeName DB.36 -NodeClusterName tr281.eastus1-a.worker.database.windows.net   Kill-Process -ProcessName Dk
Kill instance agent	Get-FabricNode -NodeName DB.36 -NodeClusterName tr281.eastus1-a.worker.database.windows.net   Kill-Process -ProcessName Pc
Restart server	Restart-ElasticServer -SubscriptionId 8403da61-2731-4c0e-a00c-1ecd41e0d247 -ResourceGroup shinim -ServerName byok-test-pg-1
Get Configuration	Get-ElasticServerConfig -SubscriptionId 8403da61-2731-4c0e-a00c-1ecd41e0d247 -ResourceGroup shinim -ServerName byok-test-pg-1
Set Configuration	Set-ElasticServerConfig -SubscriptionId 8403da61-2731-4c0e-a00c-1ecd41e0d247 -ResourceGroup shinim -ServerName byok-test-pg-1
Get SAS key	Get-ElasticServerSasToken -SubscriptionId 8403da61-2731-4c0e-a00c-1ecd41e0d247 -ResourceGroup shinim -ServerName byok-test-pg-1
Take backup	Get-FabricNode -NodeName DB.36 -NodeClusterName tr281.eastus1-a.worker.database.windows.net   Invoke-ElasticServerBackupS
Restore server	Restore-ElasticServer2 -SubscriptionId 8403da61-2731-4c0e-a00c-1ecd41e0d247 -SourceResourceGroup shinim -SourceServerName

Start of BYOK Only

Below commands are for BYOK servers only.

Validate BYOK key is accessible

Test-ElasticServerEncryptionKey -SubscriptionId 8403da61-2731-4c0e-a00c-1ecd41e0d247 -ResourceGroup shinim -ServerName byok-test-pg-1

Get BYOK Key from CMS

Get-ElasticServerEncryptionKeys -SubscriptionId 8403da61-2731-4c0e-a00c-1ecd41e0d247 -ResourceGroup shinim -ServerName byok-test-pg-1

Get BYOK key and identity info from Azure Storage

Get-ElasticServerEncryptionInfoForAllStorageAccounts -SubscriptionId 8403da61-2731-4c0e-a00c-1ecd41e0d247 -ResourceGroup shinim -ServerName byok-test-pg-1

End of MySQL Only

The commands above are for BYOK servers only.

WARNING!

Please consult team orcasbyokeng@microsoft.com before using the commands below