

AZURE MYSQL DATABASE START STOP USER GUIDE

<https://capitalrune.com/>

Abstract

Azure Database for MySQL is becoming universal standard database for deployment of all types of applications. Many times customer do not need to run Azure Database for MySQL 24x7 and stop or start on designated time helps to save lot of compute cost; helping to realize true potential of Pay As You Go Azure Benefit.

To simplify Start Stop Automation of Azure MySQL Database you can use "Azure Database for MySQL – Start Stop Automation" tool.

This document provides detailed explanation on below –

1. Pre-requisites
2. Deploying Azure MySQL Database Start Stop - VM from Azure Marketplace
3. Configuration settings for the tool
4. Verification of Azure MySQL Server being started/ stopped
5. Deploying to multiple subscriptions
6. Pricing
7. Support
8. FAQ

Why Start Stop Azure Database for MySQL?

1. Your Azure MySQL Database PaaS workloads may not need to run continuously, for example a development servers that is used only during business hours. Running during non business hours unnecessarily incurs compute cost.
2. Stopping MySQL Database PaaS Server cluster helps you save big Compute cost.
3. By starting on desired time you can then pick up right where you left of after a weekend or to have your database running only while you run your required jobs, processes, applications.

Why use Azure Database for MySQL Start Stop Automation Tool?

1. First ever automation solution for start/ stop of Azure MySQL Database server.
2. Configure separate schedule of your choice per weekday. [Refer screenshot].
3. First ever solution offering configuration of full shutdown on weekend, national holidays. Helping you save more compute cost beyond Reserved Instances cost saving.
4. Supports start stop automation of Azure Database for MySQL single and flexible server deployment.
5. Azure Database for MySQL Start Stop VM can be deployed inside your VNET, enabling you to follow all of your security best practices.
6. Runs with industry standard security best practices.

7. Automated process, no manual intervention required for auto start/ stop of Azure Database for MySQL servers.
8. As we run automation using small sized VMs; extremely cost friendly solution.
9. Specify your preferred start/ stop time from UI web application and relax.
10. Easy deployment of Virtual Machine with examples.
11. Simple configuration steps for automating Start/ Stop of Azure MySQL Database
12. Support is offered free of cost.

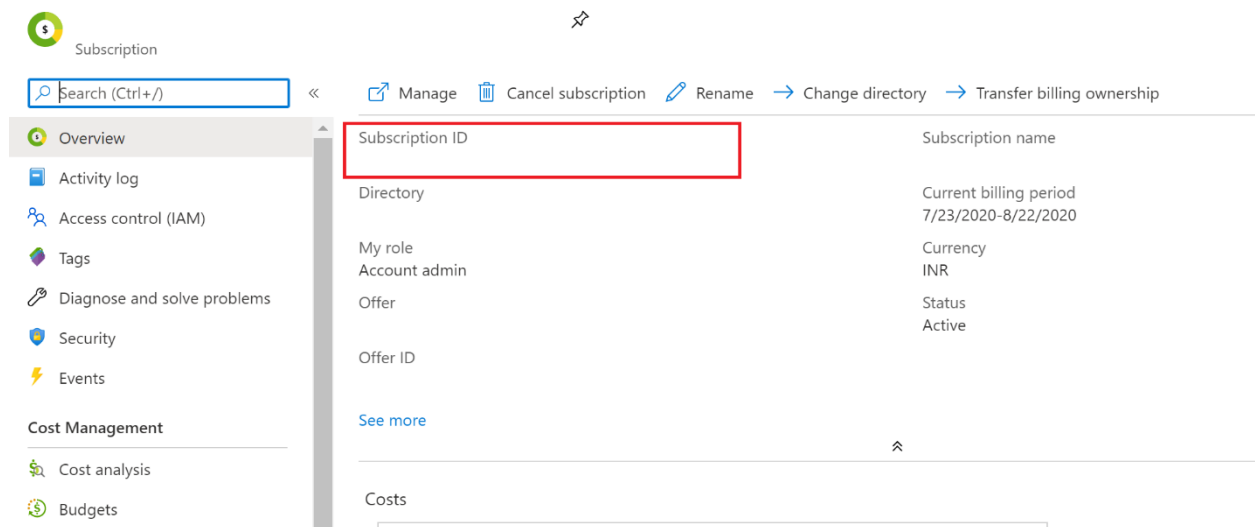
Provisioning

This section talks about prerequisites of running the tool.

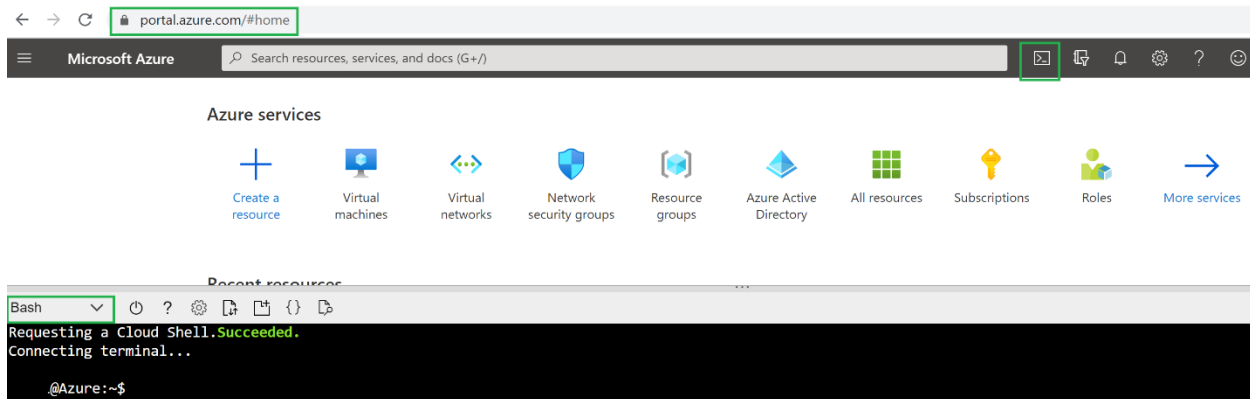
Create Azure Service Principal

For accessing details of Azure MySQL Database, tool requires access over subscription resources and it can be facilitated by Azure Service Principle.

Identify the Azure subscription where you plan to automate start/ stop of Azure Database for MySQL server PaaS in the subscription. Login to the <https://portal.azure.com> and select required subscription. Record subscription ID as shown below and keep it handy.



Open Shell as shown below –



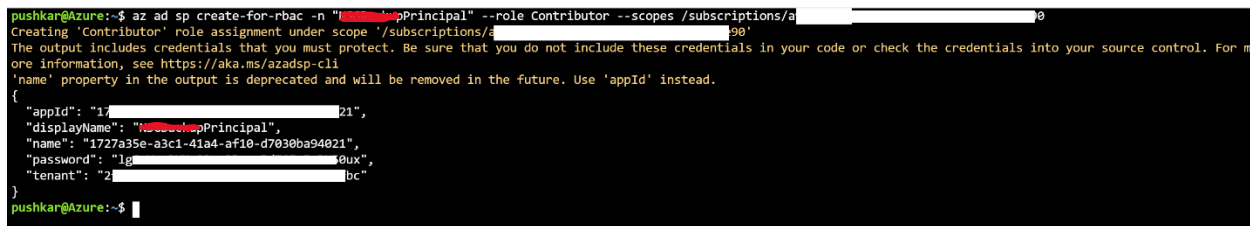
Then run below commands. Make sure you replace the values in below. Make sure that each full line of command is copy pasted in Azure shell on each line.

```
az ad sp create-for-rbac -n "MySQLStartStopPrincipal" --role Contributor --scopes /subscriptions/<YourAzureSubscriptionId>
```

Example Values given below –

```
az ad sp create-for-rbac -n "MySQLStartStopPrincipal" --role Contributor --scopes /subscriptions/a9db1-7fa4-4ed-9408df3e90
```

The output of this command is creation of service principal named as MySQLStartStopPrincipal. This service principal automatically gets contributor access on the required subscription. We will need to copy the Application Id, app secret and Tenant ID on the notepad. We will need to add it in tool settings.



Note – You can change the scope to limit the access only to resource group in which MySQL Database PaaS is deployed.

Provision Azure Database for MySQL Start Stop – VM from Azure Marketplace

Please follow general procedure of provisioning VM on Azure. Make sure you deploy it inside VNET/ Subnet of your choice. **Refer below link to launch Azure Database for MySQL Start Stop solution in your subscription – [Azure Database for MySQL Start Stop automation on Marketplace.](#)**

RDP into VM

RDP is not required. Just access the web application using private IP of the VM as below – <http://privateip/> and configure details mentioned below. Make sure that VM NSG has inbound access for port 80.

For customers with private preview RDP into VM either you can Azure Bastion or you can directly take RDP over private network using Azure Jump VM or any other existing VM on Azure/ on premises. If you are not private preview then RDP should not be required.

Copying Service principle information

appID – Copy app Id value

appSecret – Copy password value

tenantID – Copy tenant value

subscriptionId – We have already copied subscription id when we logged in to the azure portal. Use the same to copy paste.

Copy paste MySQL server name, resource group in which mysql is deployed and your desired start stop timings in 24 hours format on web application.

Example values are shown below –

Home Page - Schedule Creator x +

→ ↻ 🌐 https://localhost

Welcome!

Configure your Azure MySQL DB Cost Saving Tool.

ApplicationId *

AAD ApplicationID

Secret *

.....

TenantId *

AAD Tenant ID

SubscriptionID *

AAD Subscription ID

InstanceName *

MySQL Server Name

ResourceGroupName *

MySQL Resource Group

Select Schedule *

	<input checked="" type="checkbox"/> Mon	<input checked="" type="checkbox"/> Tue	<input checked="" type="checkbox"/> Wed	<input checked="" type="checkbox"/> Thu	<input checked="" type="checkbox"/> Fri	<input type="checkbox"/> Sat	<input type="checkbox"/> Sun
Start Time	9	8	11	15	7	0	0
Stop Time	19	18	21	21	16	0	0

Instructions-

- Please follow 24 Hrs clock for Start and Stop Time.
Ex. To start MySQL DB at 11 AM provide Start Time value as 11, Similarly 22 for Stop Time to stop MySQL DB at 10 PM.
- If checkbox is not selected for specific day then MySQL DB will not start.
- To apply Start / Stop schedule keep checkbox selected. You can deselect it if you don't want to start MySQL DB on that day.
Use Case: Weekend Off

Save Schedule

Save the file and close it.

Note: For security purpose every time you change schedule; you will need fill in secret information.

After this, Tool will automatically start/ stop desired Azure Database for MySQL server.

If you have any difficulty in this configuration, please reach out to us. Refer to contact section below.

Security Best Practices for Azure MySQL Start Stop tool

1. This tool do not require any inbound connection over internet hence assigning of public IP is not required.
2. Use NSGs to control inbound RDP/ web application access.

Pricing

We truly believe in cloud Pay as You Go [PAYG] model as it offers great flexibility to customers. We don't believe locking in customers by asking upfront cost to our solutions. We strongly feel if our solution is good our customers will automatically stick to it. For running this tool, you will be paying below resource costs on Azure –

1. Azure VM
2. OS Disk
3. Nothing else!

FAQ

1. Which region I should choose for deployment of MySQL Start Stop?
It should be same azure region as your Azure MySQL server region.
2. Can I shutdown/ stop multiple MySQL servers using single VM?
We believe in single responsibility principle in today's era of micro services. So we support single MySQL Server PaaS start/ stop operations using single VM.
3. Can I use the single VM across multiple subscription?
No. For start/ stop operation of MySQL server you should deploy those many VM instances, in each subscription.
4. What will be monthly cost for running single Azure Database for MySQL Start Stop – VM?
Refer to Plan +Pricing tab on Marketplace page to know monthly cost for running this tool.

5. What if I don't provide values/ information as shown in provisioning section above?
The start and stop operation of MySQL server may not work.
6. Why we should use your solution?
All reasons are mentioned above.

Feedback, Support and Feature Request

Thanks for using the Azure Database for MySQL Start Stop tool. We are excited to hear back from you. If you like the tool you can simply give 5 stars on Azure Marketplace right away.

If you want to provide more detailed feedback/ feature request drop a note on – support@capitalrune.com

For production support email us at – support@capitalrune.com.