



Azure Maintenance Mode Scheduler

User Guide

Azure Maintenance Mode Scheduler is a tool for scheduling maintenance mode for Alert Rules in Azure. This guide will go through how to schedule maintenance mode in Azure.

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Scheduling Maintenance Mode

In this scenario a SQL Admin will be performing maintenance on their SQL servers at 2:00am on Sunday. During maintenance, the servers may be rebooted. The admin opens the Azure Maintenance Mode Scheduler and schedules a maintenance window for this time frame so that heartbeat alerts for the SQL servers don't get sent to the admin or anyone else.

- 1.) Open the **Maintenance Mode Scheduler Website** in your web browser. <http://yourMSserver/AzMM>
- 2.) Select the Azure Alert Rule in my case its **SQL Team Heartbeat Alerts**.
- 3.) Under **Start Time**; Pick the **time** and **date** for Maintenance Mode on that rule to Start.
- 4.) Under **End Time**; Pick the **time** and **date** for Maintenance Mode on that rule to finish.
- 5.) Under **Frequency** choose how often Maintenance Mode should run.
 - a. **Once** – Run just once.
 - b. **Daily** – Run **every day** at the Start Time selected.
 - c. **Weekly** – Run **every week** on the day/time selected for Start Time.
 - d. **Monthly** – Run **every month** on specific days of the Month.
- 6.) Under **Category** choose the category (Planned or Unplanned) to specify the maintenance mode.
 - a. Under **Comment**: Type in an Optional Comment.

The screenshot shows the Azure Maintenance Mode Scheduler interface in a web browser. The browser tab is titled "Azure Maintenance Mode Sched" and the address bar shows "vm19/azmm". The page has a navigation bar with "Rules", "Instant MM", and "Manage" tabs. The main heading is "Azure Alerts Rules" with a green exclamation mark icon. Below this, there are several form fields: "Rules:" with a dropdown menu showing "SQL Team Heartbeat Alerts"; "Start Time:" with a date and time picker set to "04/24/2022 02:00 AM"; "End Time:" with a date and time picker set to "04/24/2022 06:00 AM"; "Category:" with a dropdown menu showing "Planned - Other"; and "Recurrence:" with four buttons: "Once" (selected), "Daily", "Weekly", and "Monthly". Below these fields is an "Advanced" link with a dropdown arrow. At the bottom of the form, there is a green notification box that says "SQL Team Heartbeat Alerts - 240 minutes Maintenance Mode Scheduled Successfully". A large orange "Schedule" button is located at the bottom right of the page.

7.) **Verify the job has been created** on the Azure server by going to the **Manage Page**.

Azure Maintenance Mode Scheduler

Rules Instant MM Manage

Manage Maintenance Mode Schedules

Schedules: SQL Team Heartbeat Alerts - 240 minutes Maintena... ▾

Enabled:

Next Runtime: 04/24/2022 02:00 AM

Last Runtime: 11/30/1999 12:00 AM

Schedule: At 2:00 AM on 4/24/2022-Trigger expires at 4/25/202...

Duration: 240

Objects: (SQL Team Heartbeat Alerts)

Comments: 78817986

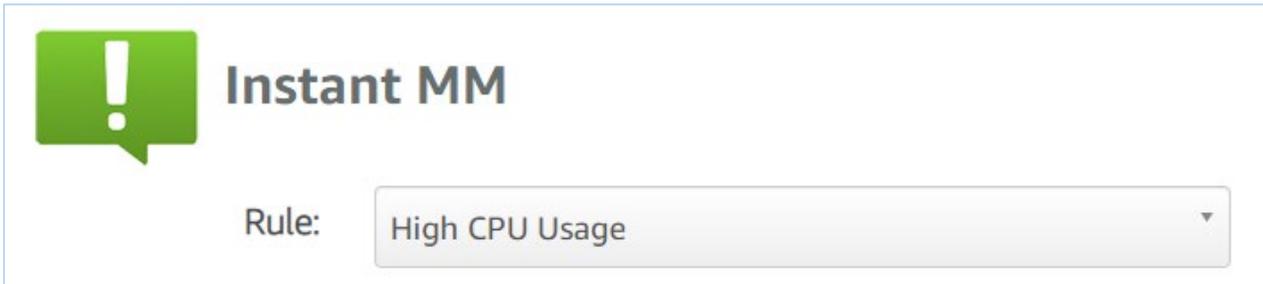
Status: Ready

Disable Enable Stop Delete

Instant Maintenance Mode

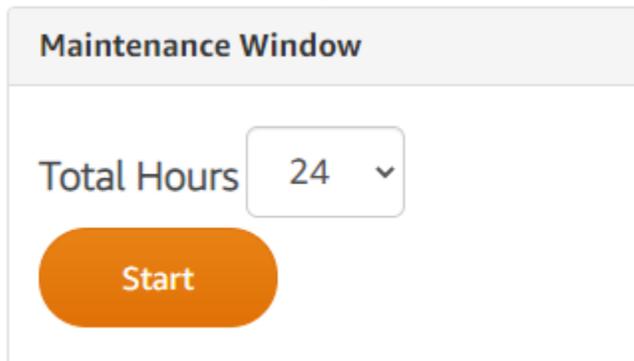
The Azure Maintenance Mode Scheduler application makes it easy for IT staff to quickly put a rule into maintenance mode without having to go into the Azure console.

- 1.) Open the **Instant MM** Website from the server to put it into maintenance mode using Internet **Explorer**.
<http://YourMMServer/AzMM/Home/InstantMM>
- 2.) Select the Rule you want to put into Maintenance Mode.



The screenshot shows the 'Instant MM' website interface. It features a green speech bubble icon with a white exclamation mark on the left. To its right, the text 'Instant MM' is displayed in a large, bold, dark grey font. Below this, there is a label 'Rule:' followed by a dropdown menu. The dropdown menu is currently open, showing the selected option 'High CPU Usage' in a light grey font. A small downward-pointing triangle is visible at the end of the dropdown box.

- 3.) Select the **amount of time you want the Rule to be in Maintenance Mode for** and click **Start**.



The screenshot shows the 'Maintenance Window' configuration form. The form has a light grey header with the text 'Maintenance Window' in a bold, dark grey font. Below the header, there is a label 'Total Hours' followed by a dropdown menu. The dropdown menu is currently open, showing the selected option '24' in a dark grey font. A small downward-pointing triangle is visible at the end of the dropdown box. Below the dropdown menu, there is a large, rounded orange button with the text 'Start' in a white font.

- 4.) The rule will immediately be put into maintenance for the selected amount of time.

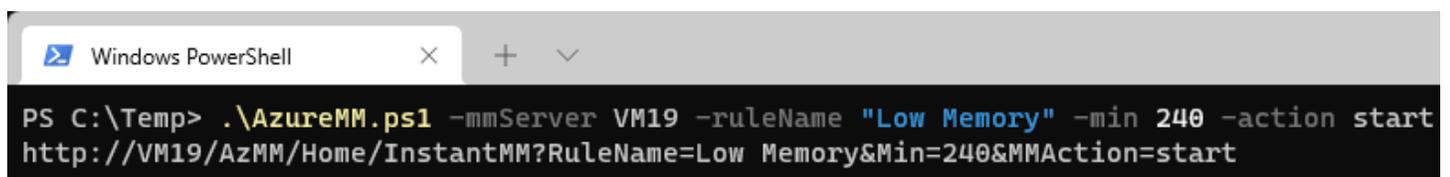
Instant Maintenance Mode using PowerShell

Using URL Parameters, you can put Azure Alert rules into Maintenance Mode from any computer using a script. Typical use case would be using SCCM when updates or software is installed. SCCM would execute the PowerShell script before the install process to start maintenance mode. After the updates or software is installed SCCM would call the script to stop maintenance mode.

PowerShell Example Download: <https://www.scom2k7.com/downloads/AzureMM.ps1.txt>

```
param (  
    [Parameter(Mandatory=$true)][string]$mmServer,  
    [Parameter(Mandatory=$true)][string]$ruleName,  
    [Parameter(Mandatory=$true)][string]$min,  
    [Parameter(Mandatory=$true)][string]$action  
)  
  
$FullURL = "http://" + $mmServer + "/AzMM/Home/InstantMM?RuleName=" + $ruleName + "&Min=" +  
$min + "&MMAction=" + $action  
  
$FullURL
```

Invoke-RestMethod \$FullURL -Method 'POST'



```
Windows PowerShell  
PS C:\Temp> .\AzureMM.ps1 -mmServer VM19 -ruleName "Low Memory" -min 240 -action start  
http://VM19/AzMM/Home/InstantMM?RuleName=Low Memory&Min=240&MMAction=start
```

Instant Maintenance Mode using Shell Scripting in Linux/Unix

To put an Azure Alert Rule into Maintenance Mode you can use the following Shell Script.

Shell Script Example Download: <https://www.scom2k7.com/downloads/AzMM.sh>

```
#Fix RuleName with spaces
RuleName=$2
RuleName=$( printf "%s\n" "$RuleName" | sed 's/ /%20/g' )

url="http://$1/AzMM/Home/InstantMM?RuleName=$RuleName&Min=$3&MMAction=$4"

echo $url

wget $url --method POST
```

```
tmac@docker:~/temp$ sh AzMM.sh vm19 "High CPU Usage" 120 start
http://vm19/AzMM/Home/InstantMM?RuleName=High%20CPU%20Usage&Min=120&MMAction=start
--2022-04-19 00:22:45-- http://vm19/AzMM/Home/InstantMM?RuleName=High%20CPU%20Usage&Min=120&MMAction=start
Resolving vm19 (vm19)... 10.0.0.9
Connecting to vm19 (vm19)|10.0.0.9|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 435 [text/html]
Saving to: 'InstantMM?RuleName=High CPU Usage&Min=120&MMAction=start.2'

InstantMM?RuleName=High CPU U 100%[=====>] 435 --.-KB/s in 0s
2022-04-19 00:22:49 (39.5 MB/s) - 'InstantMM?RuleName=High CPU Usage&Min=120&MMAction=start.2' saved [435/435]

tmac@docker:~/temp$
```

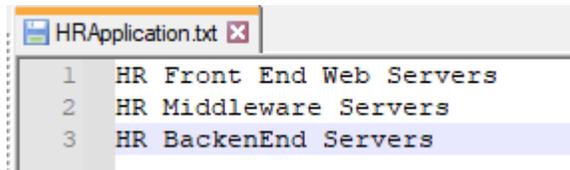
Add Azure Alert Rules using a Text File or CSV File

In this scenario the HR Application team has provided a list of Azure Alert Rules in a CSV (Comma Separated Values) file named HRAzRules.csv

They would like the Azure Alert Rules listed in the csv file to be put into maintenance mode Every Sunday at 3:00AM for Application Maintenance

Here are the contents of the HRAzRules.csv file

****NOTE: Make sure there are no spaces between comma and the rule names****

A screenshot of a text editor window titled 'HRApplication.txt'. The window contains three lines of text, each representing an Azure Alert Rule. The first line is '1 HR Front End Web Servers', the second is '2 HR Middleware Servers', and the third is '3 HR BackenEnd Servers'. The third line is highlighted in blue.

```
1 HR Front End Web Servers
2 HR Middleware Servers
3 HR BackenEnd Servers
```

- 1.) Open the **Maintenance Mode Scheduler Website** your web browser. <http://yourMMserver/MM>
- 2.) Click the **Advanced..** Link at the bottom left of the Page to expand out the CSV option.
- 3.) Under **Rules, Import CSV or Text File**; Click the **Choose File** button.
- 4.) Browse to the **location of the CSV file or text file**; Click **Open**.
- 5.) Under **Start Time**; Pick the **time** and **date** for Maintenance Mode on the rules to Start.
- 6.) Under **End Time**; Pick the **time** and **date** for Maintenance Mode on the rules to finish.
- 7.) Under **Frequency** choose how often Maintenance Mode should run.
 - a. **Once** – Run just once.
 - b. **Daily** – Run **every day** at the Start Time selected.
 - c. **Weekly** – Run **every week** on the day/time selected for Start Time.
 - d. **Monthly** – Run **every month** on specific days of the Month.
- 8.) Under **Category** choose the category (Planned or Unplanned) to specify the maintenance mode.

Under **Comment**: Type in an Optional Comment.

Azure Maintenance Mode Scheduler

Rules Instant MM Manage

Azure Alerts Rules

Rules: HR BackenEnd Servers x HR Front End Web Servers x
HR Middleware Servers x

Import: Text File or CSV

Select a text file with a list of jobs on each line or CSV file to import rules from:

Choose file

Start Time: 04/24/2022 03:00 AM

End Time: 04/24/2022 06:00 AM

Category: Planned - Other

Recurrence: Once Daily Weekly Monthly

Every 1 Weeks

Day: Sunday

End Recurrence Date: (Optional) Select End Date

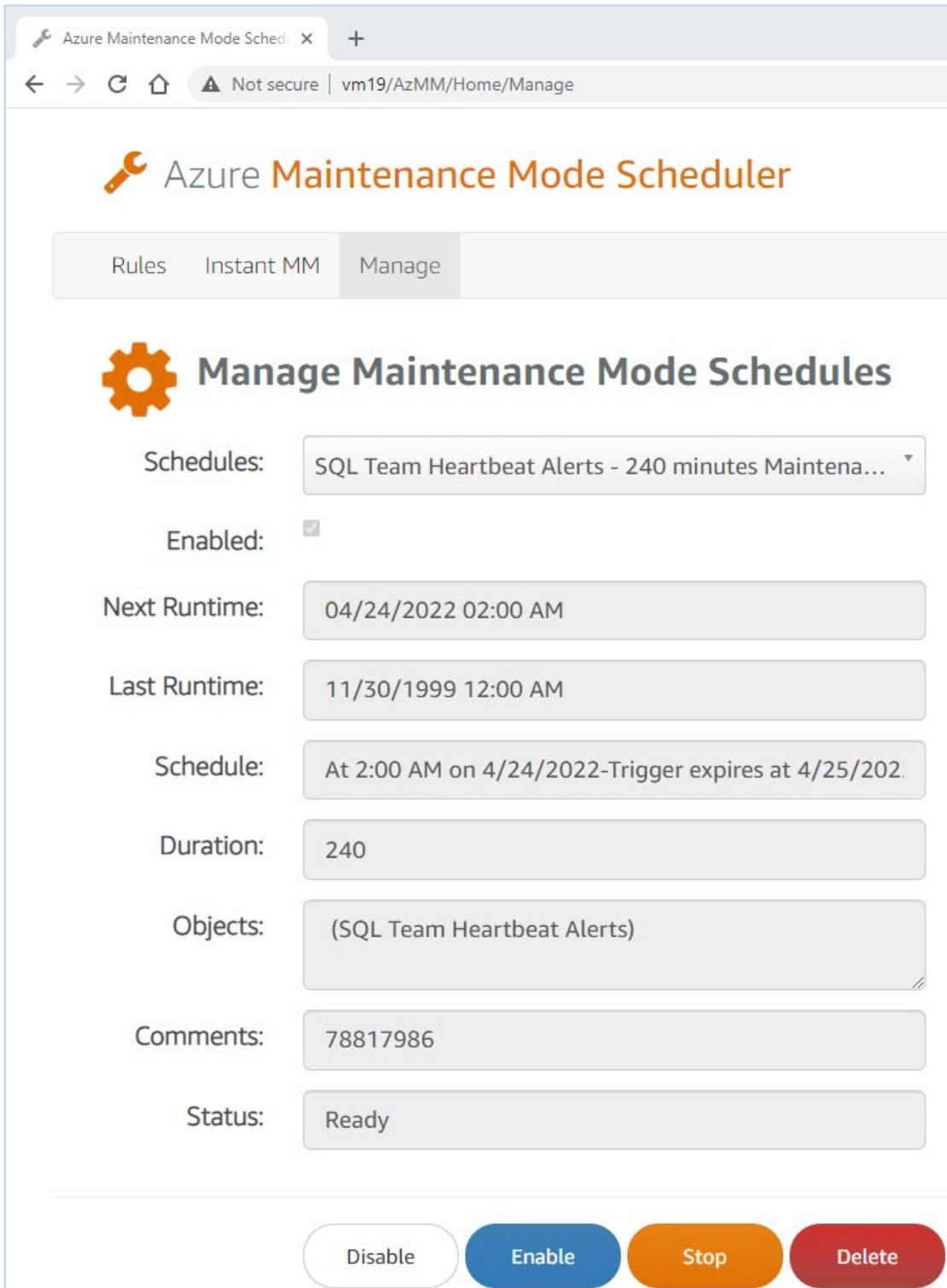
Comment: HR Application

Job Name: 3AM HR Application Weekly Maintenance

Manage Maintenance Mode Schedules

In this example an Admin has created a maintenance mode schedule that they no longer want to run. The job they want to delete is a re-occurring Sunday 2AM Maintenance Mode on all their SQL servers.

- 1.) Open the **Maintenance Mode Scheduler Website** in your web browser. <http://yourMSserver/AzMMWeb>
- 2.) Pick **Manage** on the main page.
- 3.) Pick the **Schedule**. "SQL Team Heartbeat Alerts – 240 Minutes"
- 4.) Click the Delete Button



The screenshot shows a web browser window with the URL `vm19/AzMM/Home/Manage`. The page title is "Azure Maintenance Mode Scheduler". A navigation bar contains "Rules", "Instant MM", and "Manage" (which is selected). The main heading is "Manage Maintenance Mode Schedules" with a gear icon. Below this, a list of schedule details is shown in a form-like layout:

- Schedules:** SQL Team Heartbeat Alerts - 240 minutes Maintena... (dropdown menu)
- Enabled:**
- Next Runtime:** 04/24/2022 02:00 AM
- Last Runtime:** 11/30/1999 12:00 AM
- Schedule:** At 2:00 AM on 4/24/2022-Trigger expires at 4/25/202...
- Duration:** 240
- Objects:** (SQL Team Heartbeat Alerts)
- Comments:** 78817986
- Status:** Ready

At the bottom of the page, there are four buttons: "Disable" (white), "Enable" (blue), "Stop" (orange), and "Delete" (red).