

VM Scheduled Stop and Start

Last updated by | Paul Kelleher | 17 Jun 2020 at 07:46 GMT

TL/DR;

- ✓ Create 2 New Calanders for Schedule Entries
- ✓ Install Automation & Runbooks
- ✓ Control AutoStart and AutoStopvia Calander

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Preparation

The solution comprises the following Elements



The solution here has been chosen and configured so that the Automation Scripts and Microsoft Flows tasks are simple and should need no updating.

The only maintenance for the solution is the shared Outlook Calanders where we place the start stop entries.

This solution was deemed preferable to tags due to

- Adding, Removing or Amending Schedules can be done with a non-priv account
- The Calanders can be shared enabling all usersto verify schedules
- Admin can be shared by expanding write access to the Calanders and not Azure

Outlook AutoStart/top Calanders

- recommend a shared calander with a service account to access from Flows
- entries only require the time and the vmname,resourcegroup in the Subject
- recurrence and bank holidays etc can be planned in and thus maximise savings

testwin001,RG-AMS-DATA-PRODUCTION-SAS	testwin001,RG-AMS-DATA-PRODUCTION-SAS	testwin001,RG-AMS-DATA-PRODUCTION-SAS
testwin001,RG-AMS-DATA-PRODUCTION-SAS		

Automation and RunAs Accounts


- [MS Docs](#) 
- [Creating and Automation Account](#) 

RunBooks

- Import [AutoStop-NamedVM RunBook](#)
- Import [AutoStart-NamedVM](#)

Scheduled Shutdown

The scheduled actions are triggered by either the Start or Stop Automation Runbooks

 When an upcoming event is starting soon (V2) ...

*Calendar Id

AzureAutomationStop


▼

Look-Ahead Time

5

[Hide advanced options](#) ^

↓

 Create job ...

*Subscription

VBL Data Engineering

▼

*Resource Group

RG-AMS-Data-Management

▼

*Automation Account

aac-vbl-dataprod

▼

Runbook Name

AutoStop-NamedVM


▼

Wait for Job

No


▼

Runbook Parameter

 first(...) ×

[Add dynamic content](#) ➡

Runbook Parameter

 last(...) ×

Runbook Parameter

'AzureRunAsConnection'


[Show advanced options](#) v

+ New step

Save

Dynamic content


Expression

 `first(split(triggerBody())['Subject'])`

Update

String functions


See more

 `concat(text_1, text_2?, ...)`


Combines any number of strings together

Collection

See more

 `contains(collection, value)`


Returns true if a dictionary contains a key, if an...

 `length(collection)`


Returns the number of elements in an array or ...

Logical functions


See more

 `if(expression, valueIfTrue, valueIfFalse)`

Returns a specified value based on whether th...

 `equals(object1, object2)`

Returns true if two values are equal

 `and(expression1, expression2)`

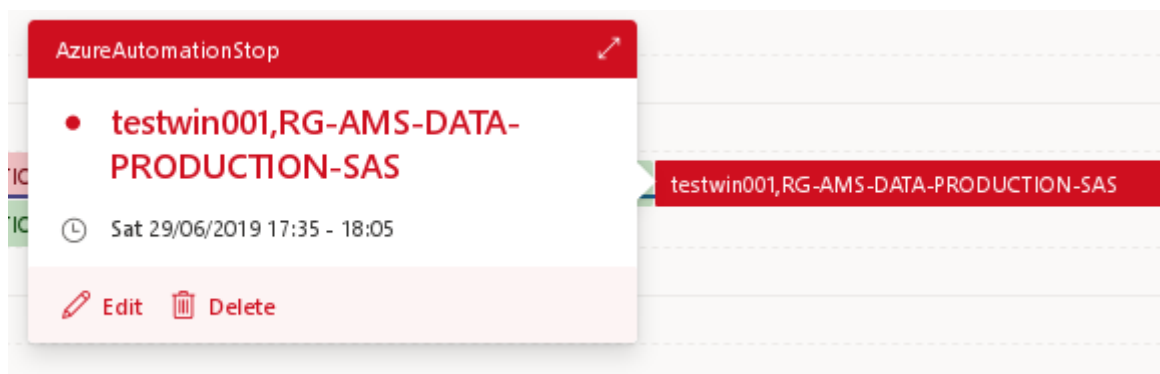
Returns true if both parameters are true

- Check the Calender for Entries happening in next 5 mins
- Read the subject line comprising of VM Name and Resource Group
- Split the Subject line into first part = VMName for AutoStart/Stop Paramater 1
- Split the Subject line into second part = Resource-Group for AutoStart/Stop Paramater 2

Adding a new instance

The screenshot shows the 'AzureAutomationStop' calendar interface. The title bar is red with a dropdown arrow. Below it is a toolbar with icons for Save, Discard, Scheduling Assistant, Busy, and Response options. The main area has a red header with the subject 'vmname,resource-group'. Below this is a section for 'Invite attendees' with an 'Optional' label. The date is set to '29/06/2019' with a calendar icon, and the time is '19:00' to '19:00' with a dropdown arrow. There is an 'All day' toggle switch. The repeat setting is 'Repeat: every day'. There is a search bar for 'Search for a room or location'. The reminder is set to 'Remind me: Never'. At the bottom, there is a text area for 'Add a description or attach documents' with icons for attachments, images, emojis, and links. On the right side, there is a calendar grid for 'Sat, June 29, 2019' with a vertical scrollbar.

Removing an instance



Scheduled Startup

Adding a new instance

- See the notes above for adding a new entry to your AzureAutoStart Calander

Removing and instance

- See the notes above for removing antries from your AzureAutoStart Calander



Manual OOH Startup

Schedules

Action	Schedule	Detail
Shutdown	Daily 19:00/19:30	This should apply to all instances not required 24x7
Shutdown	Weekends 13:00/18:00	To catch any instances that may have been started over the weekend
Startup	Daily 07:00/08:00	Only Production instances should always be started every working day
Startup	OnDemand	Dev and Non-Production instances should be primarily on-demand start and not automatically started unless confirmed they will be used all day when started

Additional Considerations

- ☑ Dev and Non Production Instances should be controleled on-demand by the developers and shutdown each day unless requested otherwise
- ☑ Additional Stop triggers should be identified and validated
- ☑ Notifications Channels or other feeds to inform people
- ☑ Start and Stop Calanders should be shared to read
- ☑ Separate calaners can be used to give more granular control for projects

	
AutoStart-NamedVM AutoStop-NamedVM	FlowsAutoMationStart FlowsVMAutomStopCalanderIntegration