

Create an automation account for scheduling the Resource in the given date time scenario.

Problem Statement:

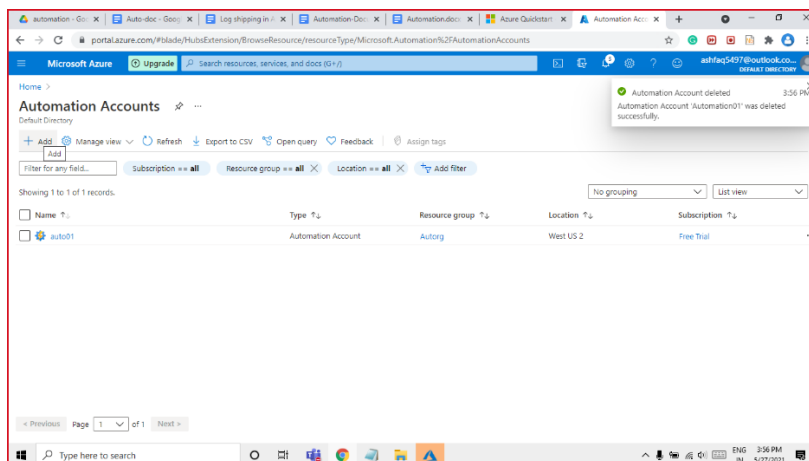
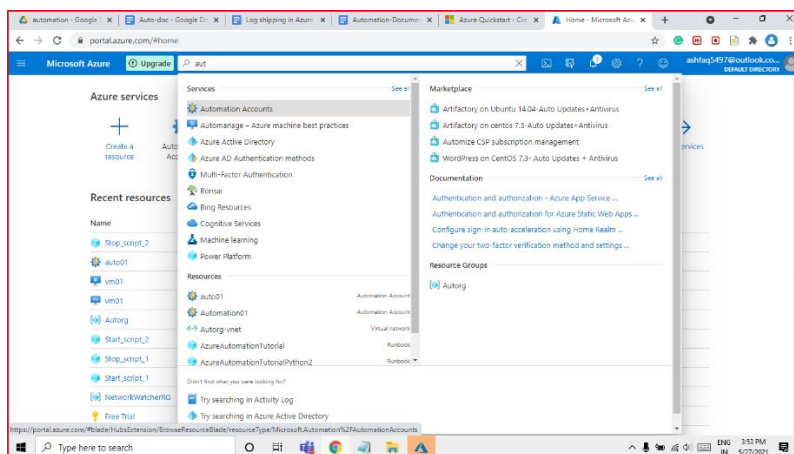
Create an automation account for scheduling the resources for a custom time

QuickStart's

Create Automation account

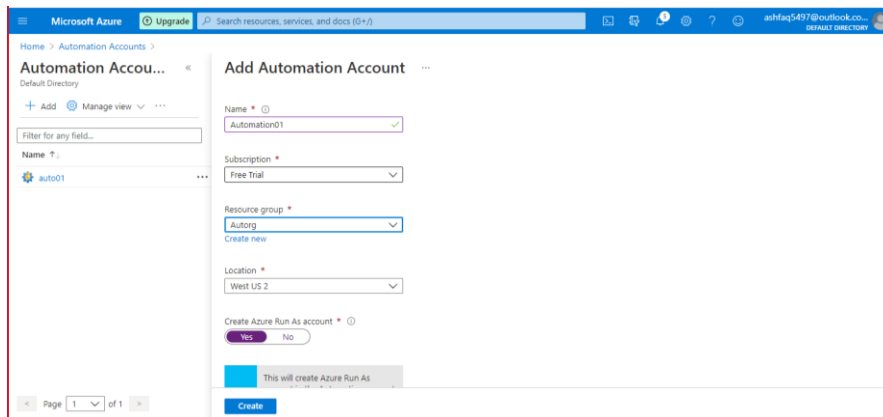
Step1:

You can create an Azure Automation account through Azure, using the Azure portal,

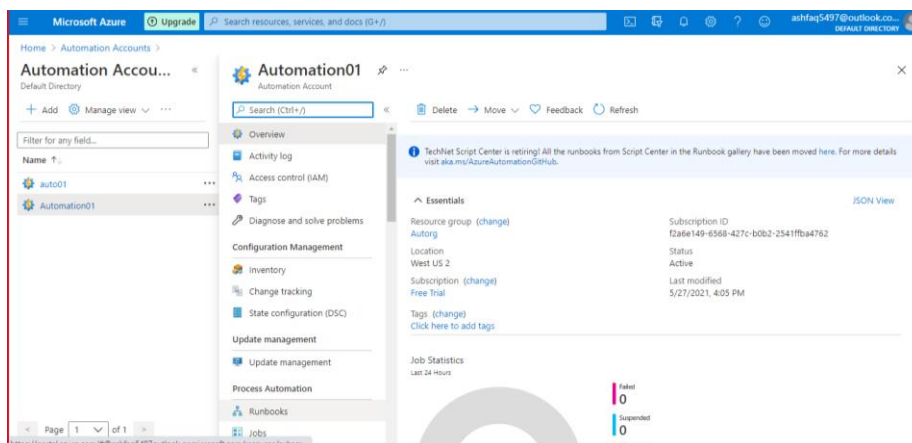
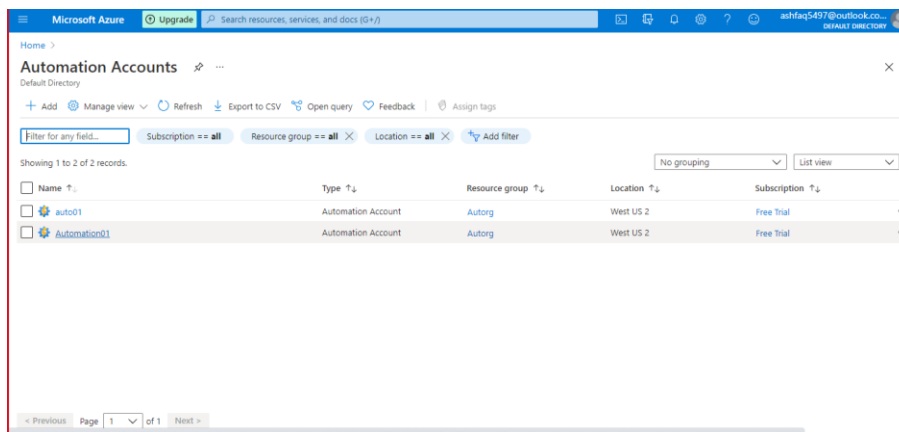


Step2:

Enter the account information, including the selected account name. For **Create Azure Run As account**, choose **Yes** so that the artifacts to simplify authentication to Azure are enabled automatically. When the information is complete, click **Create** to start the Automation account deployment.

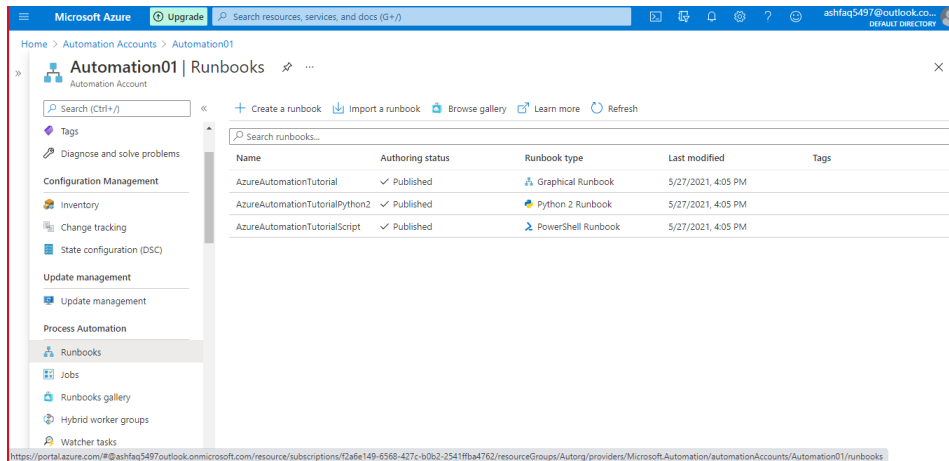


Select **Automation Accounts** and then choose the Automation account you have created.



Step3: Create an Azure Automation runbook

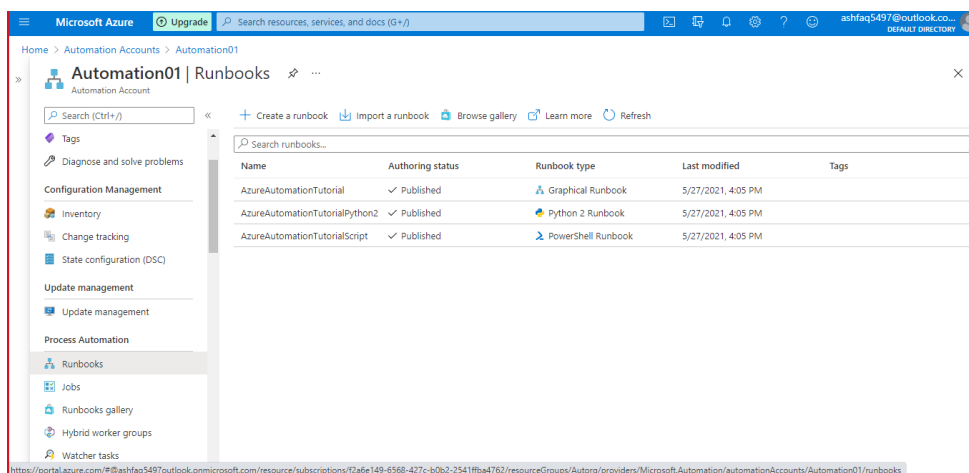
Click **Runbooks** under **Process Automation**. The list of runbooks is displayed. By default, several tutorial runbooks are enabled in the account.



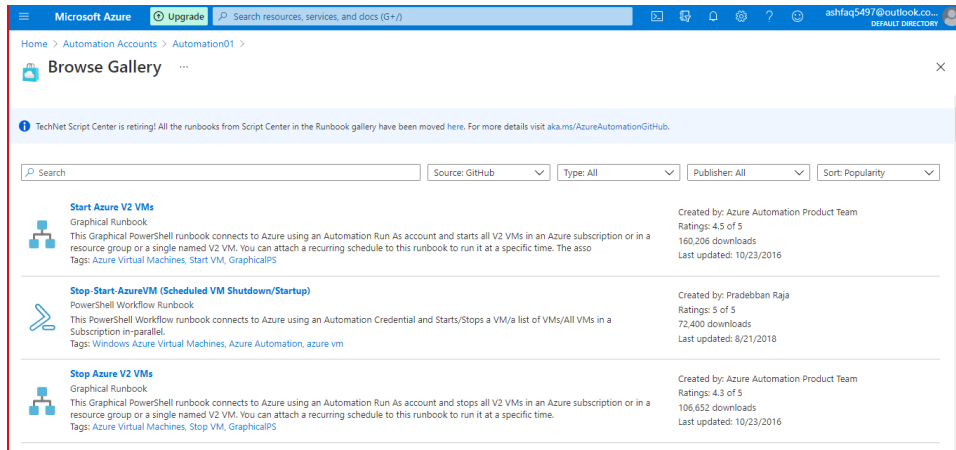
Create the runbook.

We Have 3 Options.

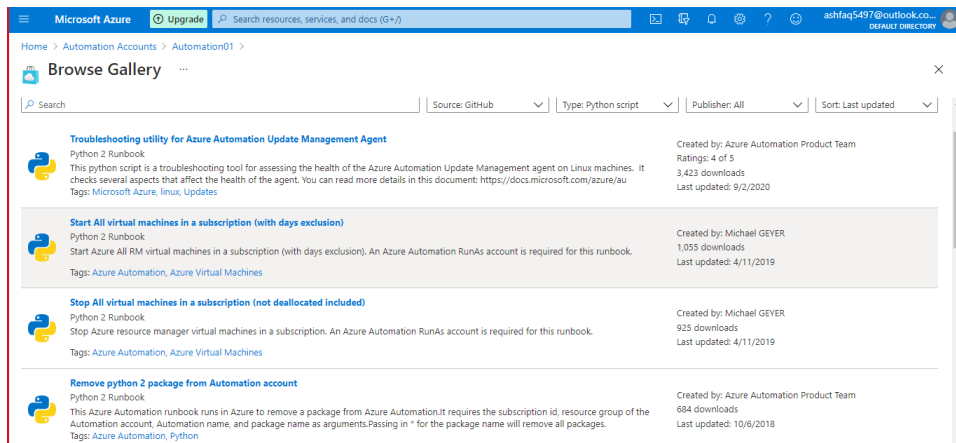
- **Create** a new runbook. Write your own custom code.
- **Import** if we have one already.
- **Browser gallery** and get ready made runbooks.



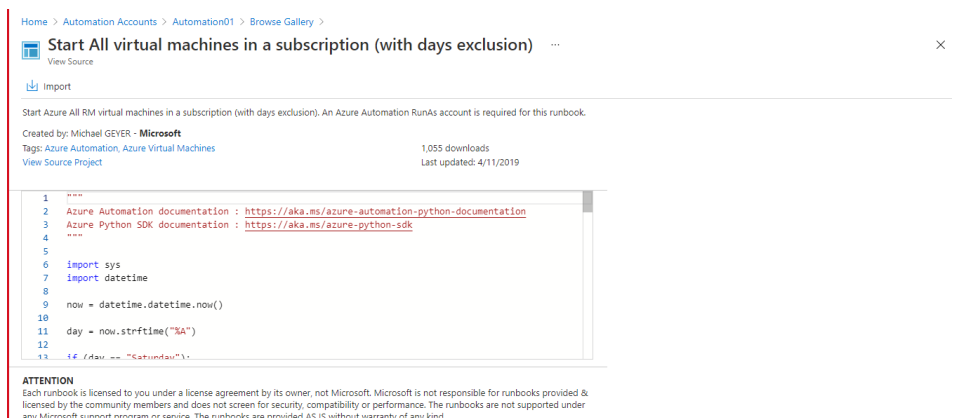
Step4: For this demo will get a runbook from Browser gallery.

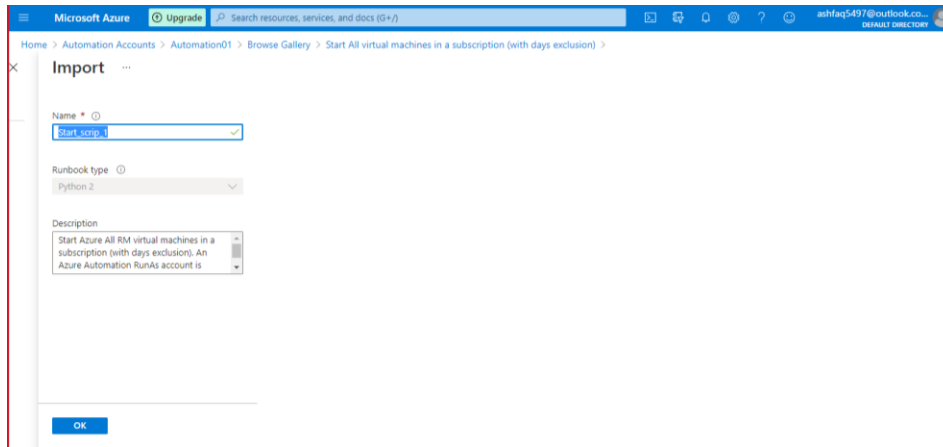


1. In this demo, we will test on VM Resource Start & Stop. We will import the Start VM runbook and stop VM runbook.

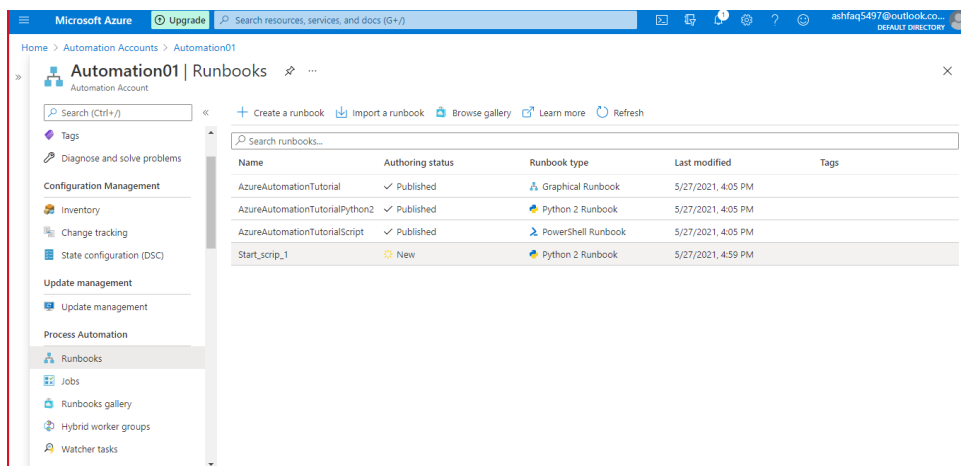


Click on import to give a name Start_scrip_1

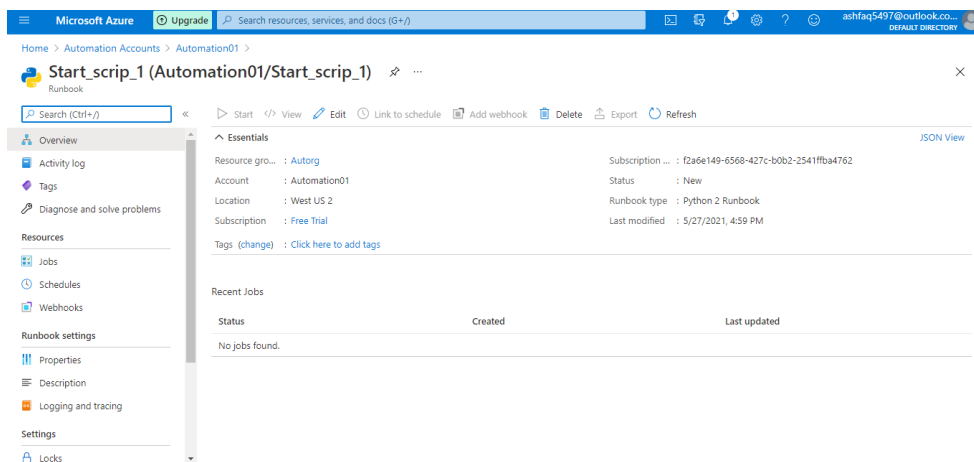




Step5: As we click on ok it will create a runbook Once the runbook is created, you must test the runbook to validate that it works. Open the runbook

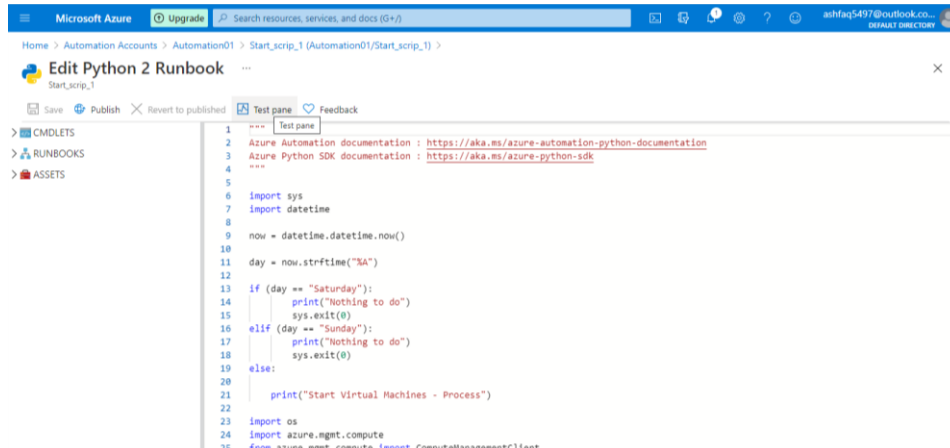


Click on Edit pan in this runbook



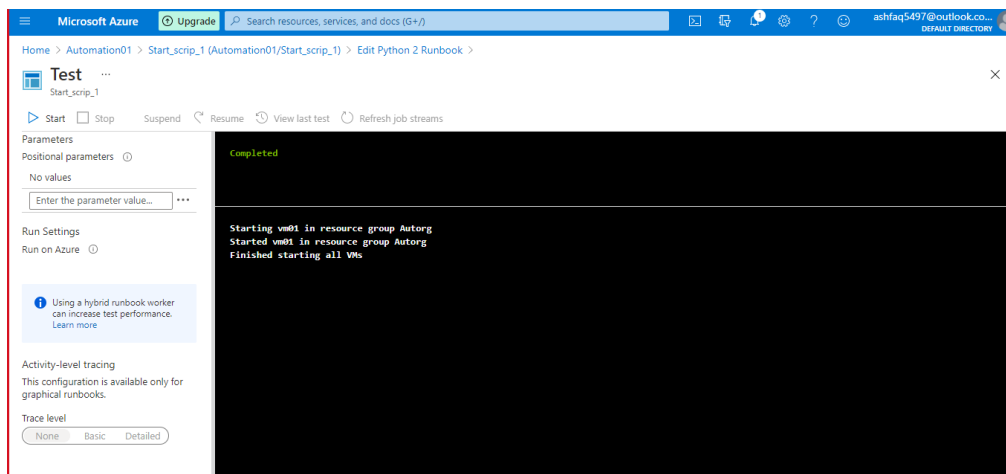
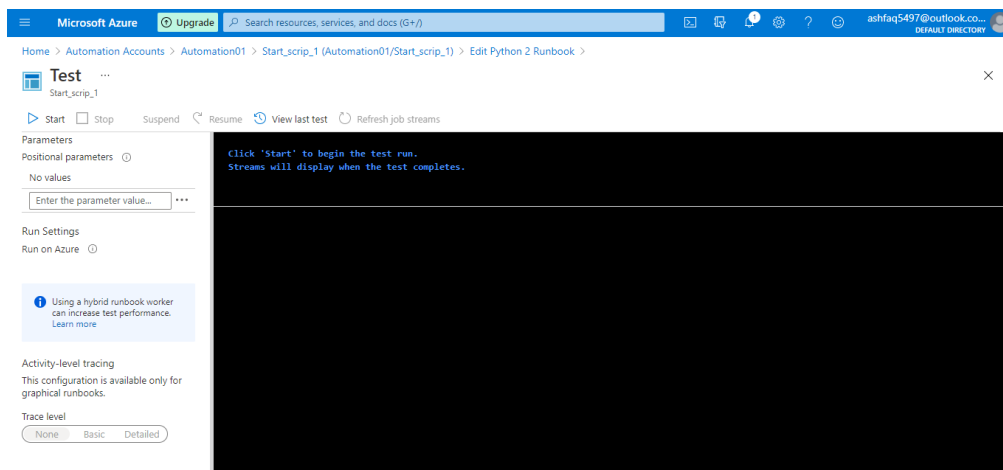
Click **Test pane** to open the Test pane.

. The test job starts and the job status and output display.



```
1 --- test pane
2 Azure Automation documentation : https://aka.ms/azure-automation-python-documentation
3 Azure Python SDK documentation : https://aka.ms/azure-python-sdk
4 ---
5
6 import sys
7 import datetime
8
9 now = datetime.datetime.now()
10
11 day = now.strftime("%A")
12
13 if (day == "Saturday"):
14     print("Nothing to do")
15     sys.exit(0)
16 elif (day == "Sunday"):
17     print("Nothing to do")
18     sys.exit(0)
19 else:
20
21     print("Start Virtual Machines - Process")
22
23 import os
24 import azure.mgmt.compute
25 from azure.mgmt.compute import ComputeManagementClient
```

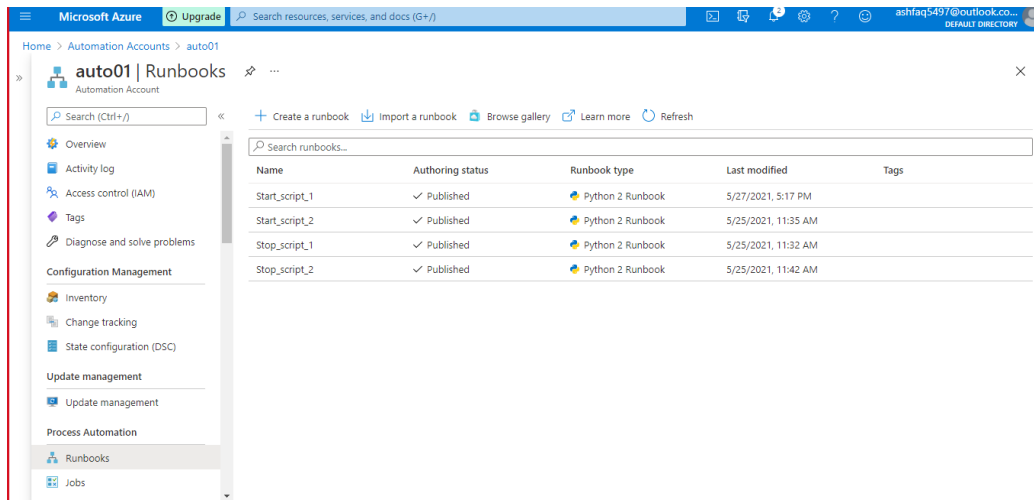
Click on start button.



After the test is completed correctly click on publish button

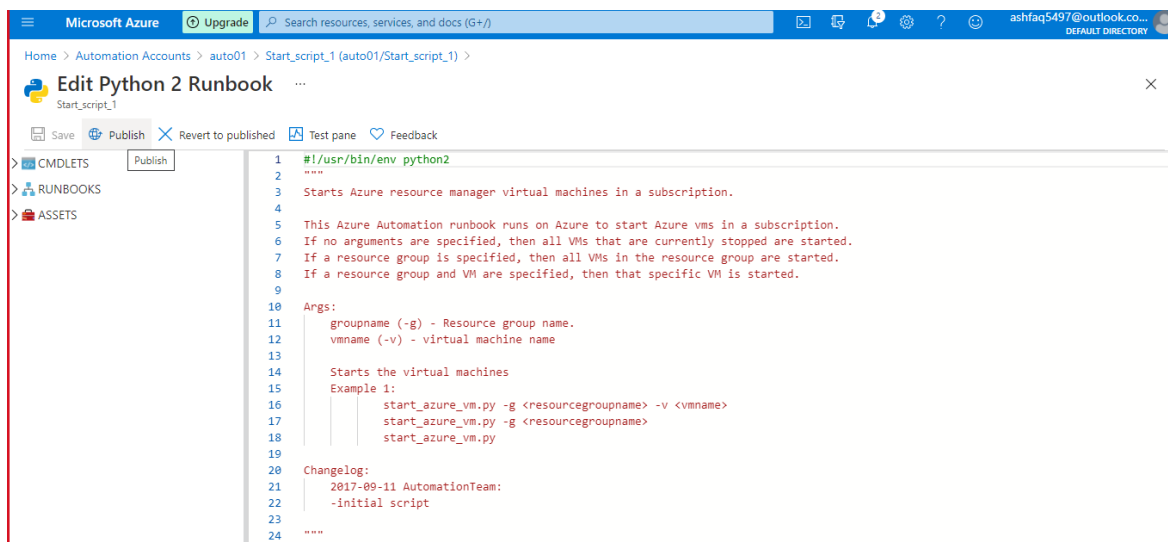
Now we must create four runbooks two runbooks for start and two runbooks for stop.

With this name I have created: Start_scrip_1, Stop_script_1, Start_scrip_2, Stop_script_2



! Test all 4 runbooks before publishing.

Click on publish before scheduling this runbooks



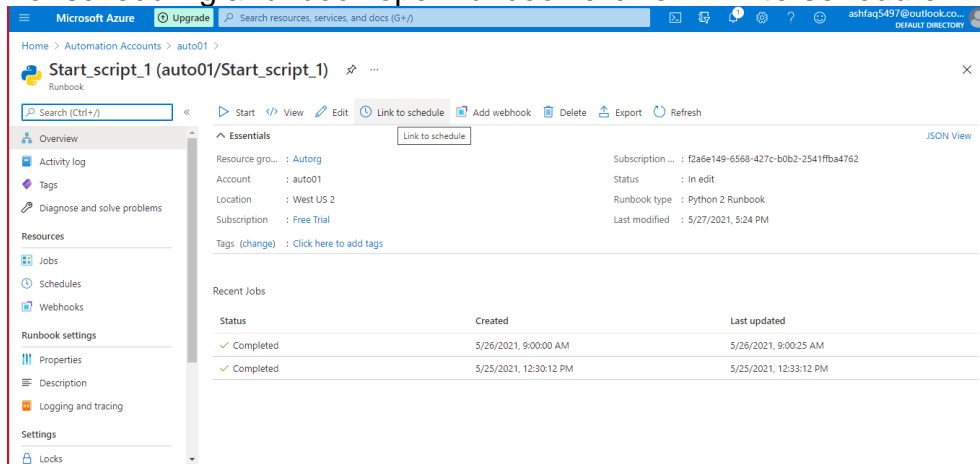
Schedule Pattern

Step:6

Start_script_1. Start Time: - 9:00 AM

This script will run at 9:00 Am everyday excluding Sunday & Saturday.
Execution date is from 3 to 28 of every month.

For scheduling a runbook open runbook click on **link to schedule**



Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01 > Start_script_1 (auto01/Start_script_1)

Runbook

Search (Ctrl+/) | Start | View | Edit | Link to schedule | Add webhook | Delete | Export | Refresh

Overview | Activity log | Tags | Diagnose and solve problems

Resources

Jobs | Schedules | Webhooks

Runbook settings

Properties | Description | Logging and tracing

Settings

Locks

Essentials

Link to schedule

JSON View

Resource group: Autorg | Subscription: f2a6e149-6568-427c-b0b2-2541ffb4762

Account: auto01 | Status: In edit

Location: West US 2 | Runbook type: Python 2 Runbook

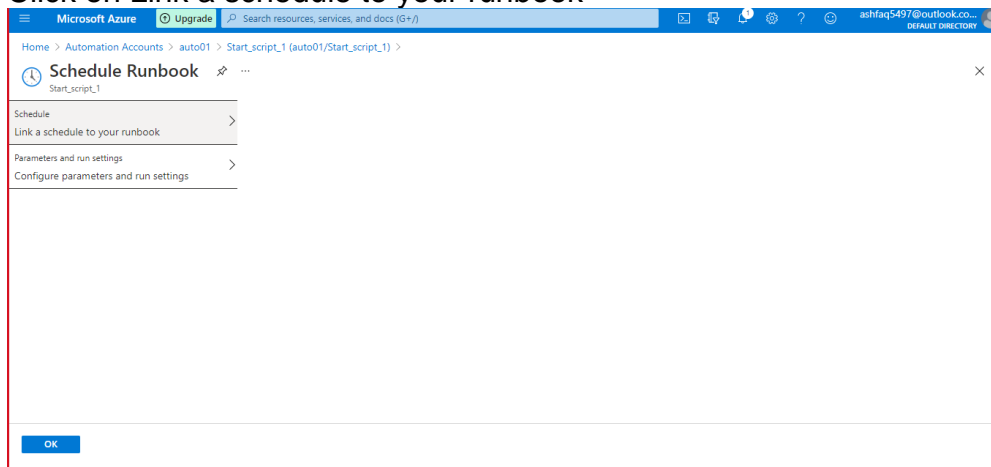
Subscription: Free Trial | Last modified: 5/27/2021, 5:24 PM

Tags (change) | Click here to add tags

Recent Jobs

Status	Created	Last updated
✓ Completed	5/26/2021, 9:00:00 AM	5/26/2021, 9:00:25 AM
✓ Completed	5/25/2021, 12:30:12 PM	5/25/2021, 12:33:12 PM

Click on Link a schedule to your runbook



Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01 > Start_script_1 (auto01/Start_script_1)

Schedule Runbook

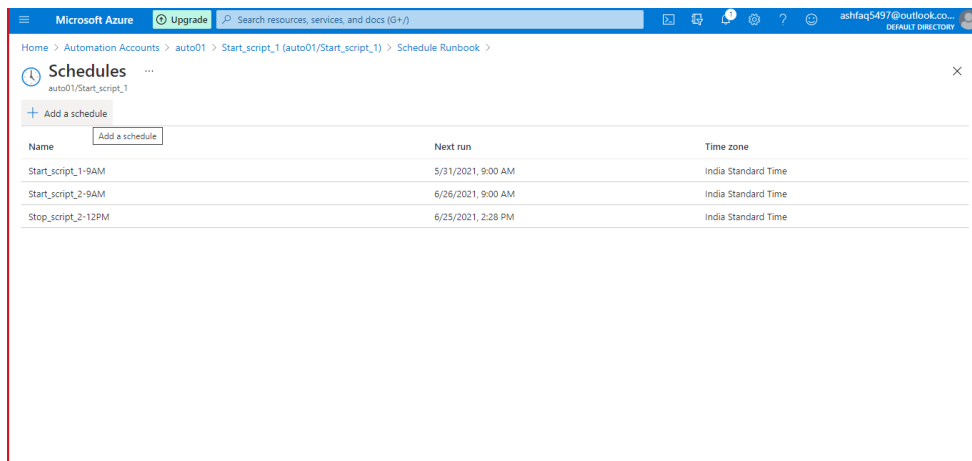
Link a schedule to your runbook

Parameters and run settings

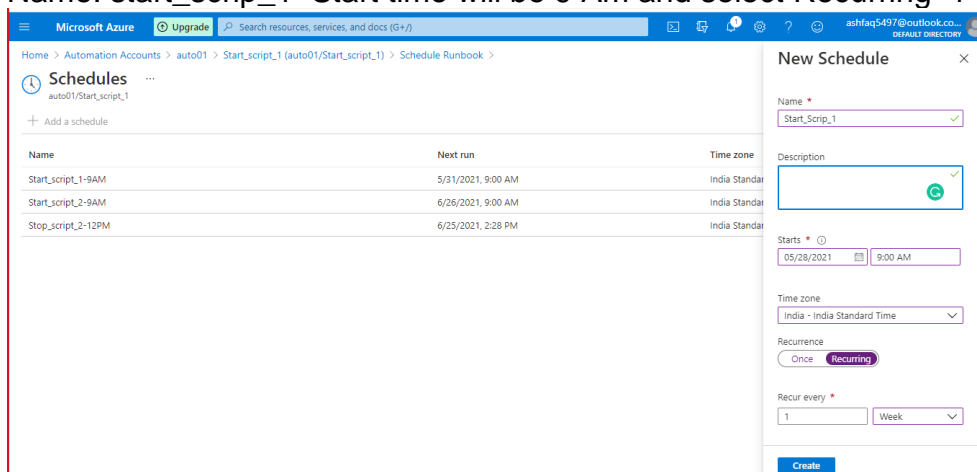
Configure parameters and run settings

OK

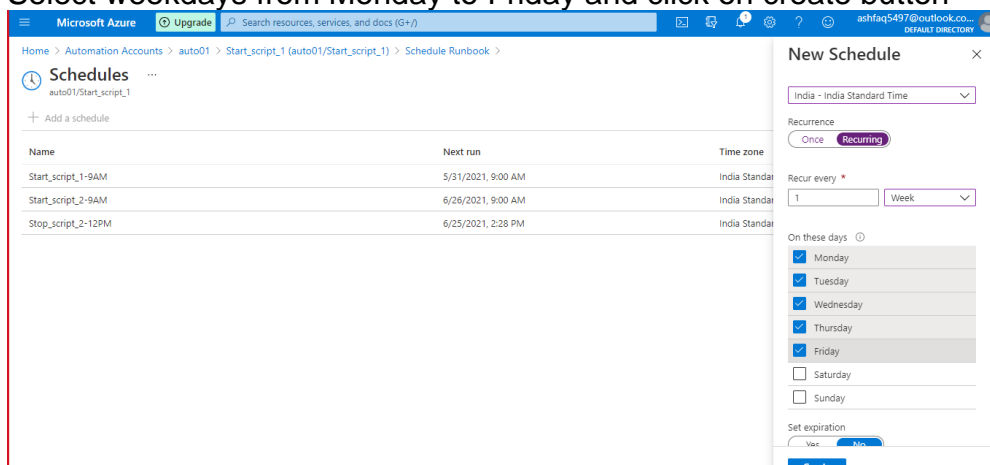
+Add a Schedule



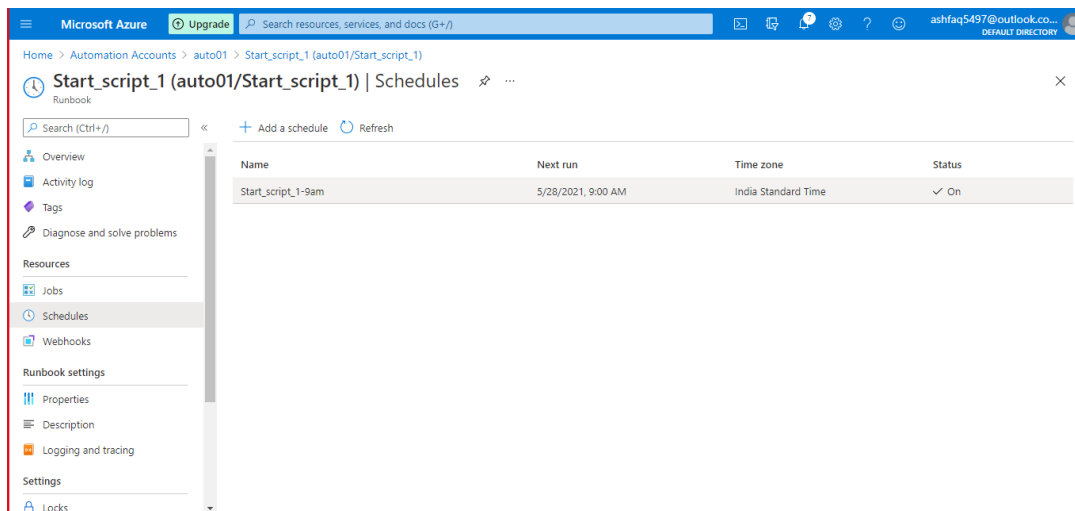
Name: start_scrip_1 Start time will be 9 Am and select Recurring 1 week



Select weekdays from Monday to Friday and click on create button



You can see the above schedule from Resources select Schedules.



Now that we have created Schedule for start_scrip1 will be creating scheduler for rest 3 more script runbook. Scheduler Recurring will be different for each script

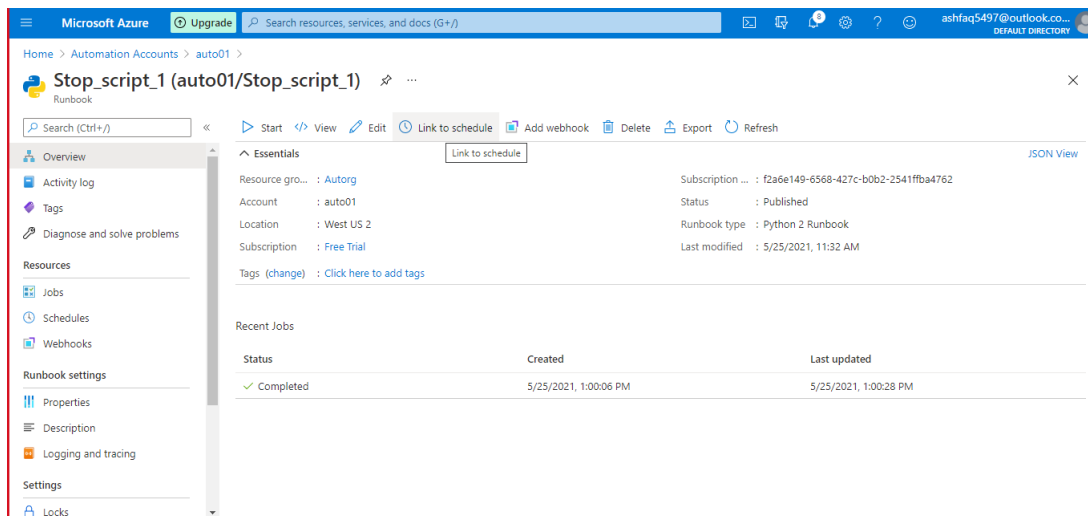
Step7:

Stop_script_1. Stop Time: - 6:00 PM

This script will run at 6:00 Pm everyday excluding Sunday & Saturday.

Execution date is from 3,4, 5.....28 of every month.

Will Schedule Stop_script_1



Microsoft Azure Upgrade Search resources, services, and docs (G+/)

Home > Automation Accounts > auto01 > Start_script_2 (auto01/Start_script_2) > Schedule Runbook >

Schedules

auto01/Start_script_2

+ Add a schedule

Name	Next run	Time zone
Start_script_1-9am	5/28/2021, 9:00 AM	India Standard Time

New Schedule

Name *
Stop_script_1-6pm

Description

Starts *
05/28/2021 6:00 PM

Time zone
India - India Standard Time

Recurrence
Once **Recurring**

Recur every *
1 Month

Create

Select Recurring as months and select the days 3 to 28 same as given in picture and create.

Microsoft Azure Upgrade Search resources, services, and docs (G+/)

Home > Automation Accounts > auto01 > Start_script_2 (auto01/Start_script_2) > Schedule Runbook >

Schedules

auto01/Start_script_2

+ Add a schedule

Name	Next run	Time zone
Start_script_1-9am	5/28/2021, 9:00 AM	India Standard Time

New Schedule

Recurrence
Once **Recurring**

Recur every *
1 Month

Monthly occurrences
Month days Week days

Run on days of month

Month

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Create

Schedule Runbook

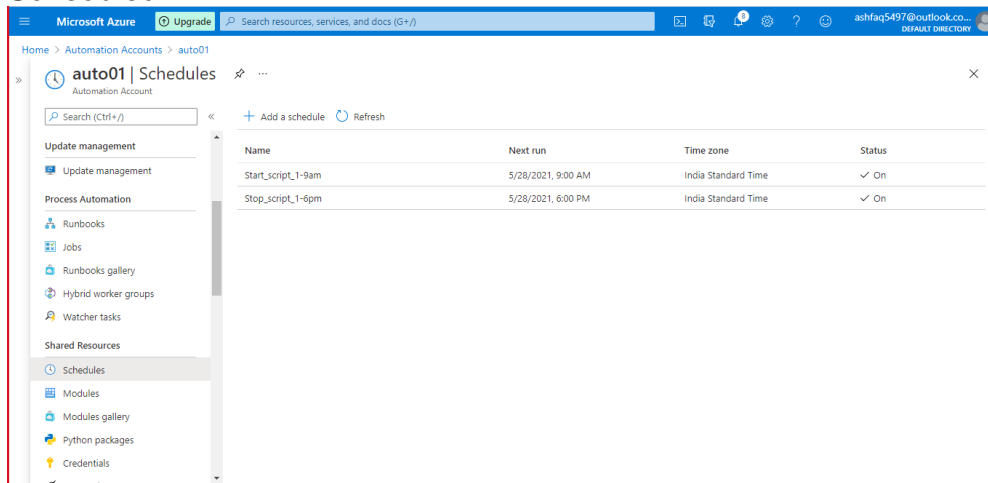
Start_script_2

Schedule
Stop_script_1-6pm

Parameters and run settings
Configure parameters and run settings

OK

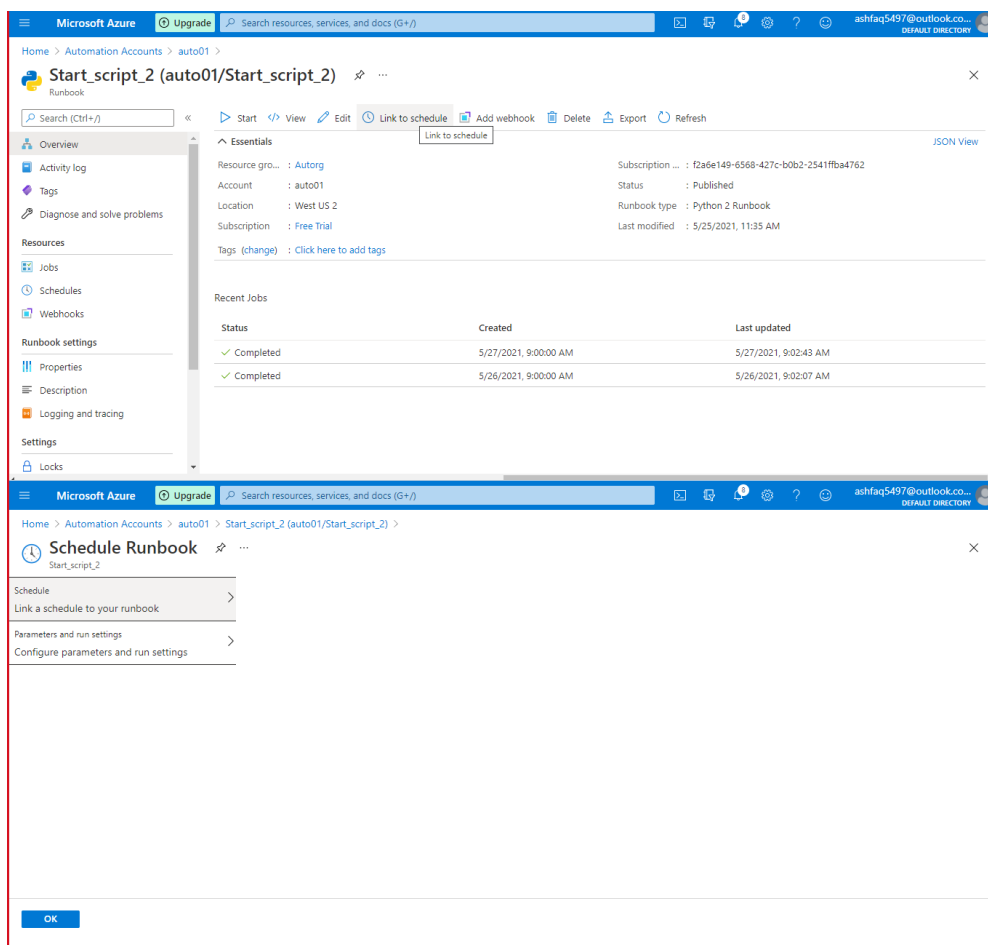
All the Scheduled you can see in the automation account Shared Resources -> Scheduled.



Step8:

Start_script_2. Start Time: - 9:00 AM

This script will run at 9:00 Am on these days (29,30,31,1,2) every month.



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Home > Automation Accounts > auto01 > Start_script_2 (auto01/Start_script_2) > Schedule Runbook >

Schedules

auto01/Start_script_2

+ Add a schedule

Name	Next run	Time zone
Start_script_1-9am	5/28/2021, 9:00 AM	India Standard Time
Stop_script_1-6pm	5/28/2021, 6:00 PM	India Standard Time

New Schedule

Name *
Start_script_2 ✓

Description
✓

Starts *
05/28/2021 9:00 AM

Time zone
India - India Standard Time

Recurrence
Once **Recurring**

Recur every *
1 Month

Create

Select Recurring as months and select the days (29,30,31,1,2) same as given in picture and create.

Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01 > Start_script_2 (auto01/Start_script_2) > Schedule Runbook >

Schedules

auto01/Start_script_2

+ Add a schedule

Name	Next run	Time zone
Start_script_1-9am	5/28/2021, 9:00 AM	India Standard Time
Stop_script_1-6pm	5/28/2021, 6:00 PM	India Standard Time

New Schedule

Recurrence
Once **Recurring**

Recur every *
1 Month

Monthly occurrences
Month days Week days

Run on days of month
Month

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Create

Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01

auto01 | Schedules

Automation Account

Search (Ctrl+F) + Add a schedule Refresh

Update management

- Update management

Process Automation

- Runbooks
- Jobs
- Runbooks gallery
- Hybrid worker groups
- Watcher tasks

Shared Resources

- Schedules**
- Modules
- Modules gallery
- Python packages
- Credentials

Name	Next run	Time zone	Status
Start_script_1-9am	5/28/2021, 9:00 AM	India Standard Time	✓ On
Start_script_1-2	5/29/2021, 9:00 PM	India Standard Time	✓ On
Stop_script_1-6pm	5/28/2021, 6:00 PM	India Standard Time	✓ On

Step9:

Stop_script_2. Stop Time: - 12:00 AM

This script will run at 12:00 Am on these days (29,30,31,1,2) every month.

Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01 > Stop_script_2 (auto01/Stop_script_2)

Stop_script_2 (auto01/Stop_script_2) Runbook

Search (Ctrl+/) << Start <> View Edit Link to schedule Add webhook Delete Export Refresh

JSON View

Overview

Activity log

Tags

Diagnose and solve problems

Resources

Jobs

Schedules

Webhooks

Runbook settings

Properties

Description

Logging and tracing

Settings

Locks

Essentials

Resource group: Autorg

Account: auto01

Location: West US 2

Subscription: Free Trial

Subscription ID: f2a6e149-6568-427c-b0b2-2541ffb4762

Status: Published

Runbook type: Python 2 Runbook

Last modified: 5/25/2021, 11:42 AM

Tags (change): Click here to add tags

Recent Jobs

Status	Created	Last updated
✓ Completed	5/27/2021, 9:00:12 AM	5/27/2021, 9:00:37 AM
✓ Completed	5/26/2021, 9:00:00 AM	5/26/2021, 9:00:19 AM
✓ Completed	5/26/2021, 9:00:00 AM	5/26/2021, 9:00:17 AM
✓ Completed	5/25/2021, 12:30:02 PM	5/25/2021, 12:30:32 PM

Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01 > Stop_script_2 (auto01/Stop_script_2) > Schedule Runbook

Schedule Runbook Stop_script_2

Schedule

Link a schedule to your runbook

Parameters and run settings

Configure parameters and run settings

OK

Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01 > Stop_script_2 (auto01/Stop_script_2) > Schedule Runbook > Schedules

auto01/Stop_script_2

+ Add a schedule

Name	Next run	Time zone
Start_script_1-9am	5/28/2021, 9:00 AM	India Standard Time
Start_script1_2	5/29/2021, 9:00 PM	India Standard Time
Stop_script_1-6pm	5/28/2021, 6:00 PM	India Standard Time

New Schedule

Name * Stop_script_2 ✓

Description ✓

Starts * 05/28/2021 12:00 AM

Time zone India - India Standard Time

Recurrence Once Recurring

Recur every * 1 Month

Create

Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01 > Stop_script_2 (auto01/Stop_script_2) > Schedule Runbook >

Schedules

auto01/Stop_script_2

+ Add a schedule

Name	Next run	Time zone
Start_script_1-9am	5/28/2021, 9:00 AM	India Standard Time
Start_script1_2	5/29/2021, 9:00 PM	India Standard Time
Stop_script_1-6pm	5/28/2021, 6:00 PM	India Standard Time

New Schedule

Once **Recurring**

Recur every *
1 Month

Monthly occurrences ⓘ
Month days Week days

Run on days of month ⓘ

Month

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Create

All four Runbook are now scheduled you can seen from automation account left panel go to Shared Resources > scheduler

Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01

auto01 | Schedules

Automation Account

Search (Ctrl+/) + Add a schedule Refresh

Name	Next run	Time zone	Status
Start_script_1-9am	5/28/2021, 9:00 AM	India Standard Time	✓ On
Start_script_2	5/29/2021, 9:00 AM	India Standard Time	✓ On
Stop_script_1-6pm	5/28/2021, 6:00 PM	India Standard Time	✓ On
Stop_script_2	5/29/2021, 12:00 AM	India Standard Time	✓ On

Update management

- Update management

Process Automation

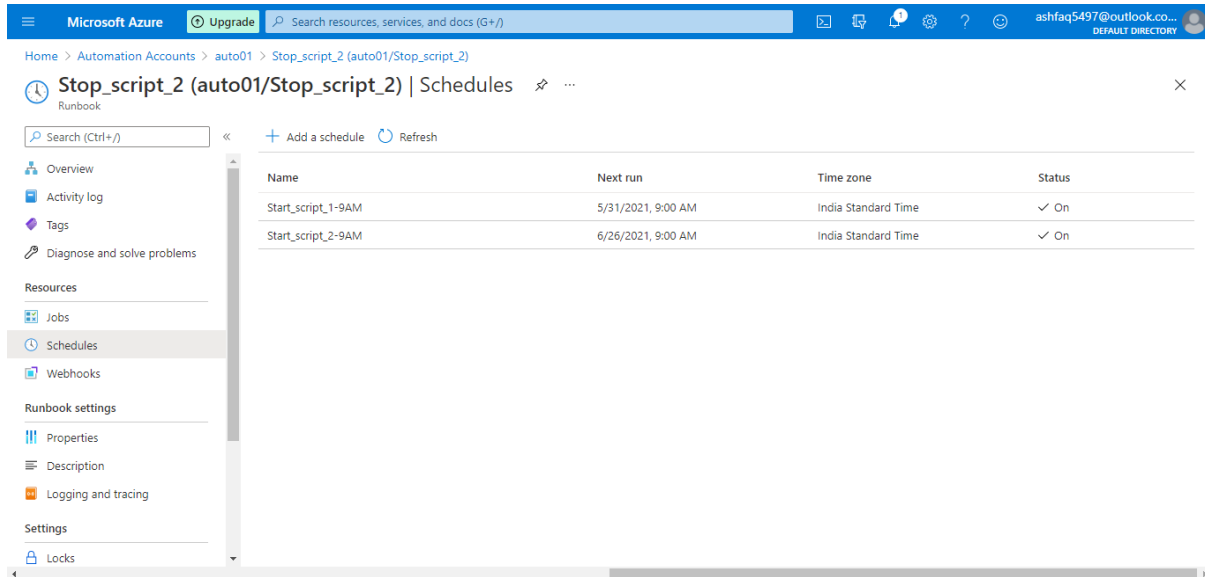
- Runbooks
- Jobs
- Runbooks gallery
- Hybrid worker groups
- Watcher tasks

Shared Resources

- Schedules**
- Modules
- Modules gallery
- Python packages
- Credentials

Testing

1. We have run the **two-start** script simultaneously, first will run on the basis of weekdays while second will run based on month's date, hence there is no chance of clash or failure of script. As shown on below image: -



Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01 > Stop_script_2 (auto01/Stop_script_2)

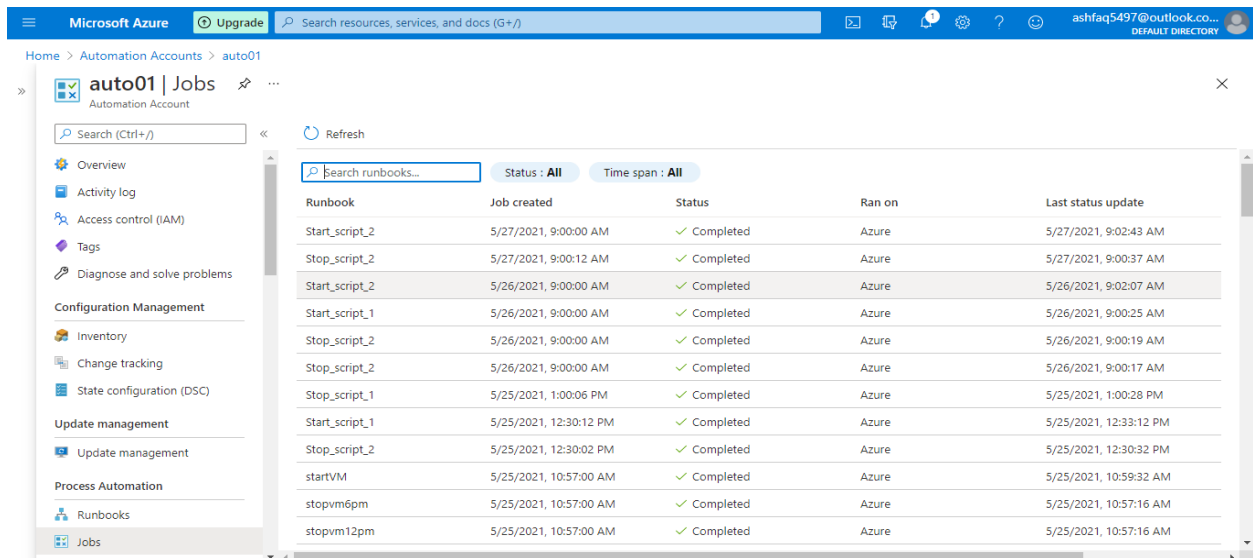
Stop_script_2 (auto01/Stop_script_2) | Schedules

Runbook

Search (Ctrl+/) | Add a schedule | Refresh

Name	Next run	Time zone	Status
Start_script_1-9AM	5/31/2021, 9:00 AM	India Standard Time	✓ On
Start_script_2-9AM	6/26/2021, 9:00 AM	India Standard Time	✓ On

Below image shows the testing result of all the event based on hour as well as based on days.



Microsoft Azure | Upgrade | Search resources, services, and docs (G+)

Home > Automation Accounts > auto01

auto01 | Jobs

Automation Account

Search runbooks... | Status: All | Time span: All

Runbook	Job created	Status	Ran on	Last status update
Start_script_2	5/27/2021, 9:00:00 AM	✓ Completed	Azure	5/27/2021, 9:02:43 AM
Stop_script_2	5/27/2021, 9:00:12 AM	✓ Completed	Azure	5/27/2021, 9:00:37 AM
Start_script_2	5/26/2021, 9:00:00 AM	✓ Completed	Azure	5/26/2021, 9:02:07 AM
Start_script_1	5/26/2021, 9:00:00 AM	✓ Completed	Azure	5/26/2021, 9:00:25 AM
Stop_script_2	5/26/2021, 9:00:00 AM	✓ Completed	Azure	5/26/2021, 9:00:19 AM
Stop_script_2	5/26/2021, 9:00:00 AM	✓ Completed	Azure	5/26/2021, 9:00:17 AM
Stop_script_1	5/25/2021, 1:00:06 PM	✓ Completed	Azure	5/25/2021, 1:00:28 PM
Start_script_1	5/25/2021, 12:30:12 PM	✓ Completed	Azure	5/25/2021, 12:33:12 PM
Stop_script_2	5/25/2021, 12:30:02 PM	✓ Completed	Azure	5/25/2021, 12:30:32 PM
startVM	5/25/2021, 10:57:00 AM	✓ Completed	Azure	5/25/2021, 10:59:32 AM
stopvm6pm	5/25/2021, 10:57:00 AM	✓ Completed	Azure	5/25/2021, 10:57:16 AM
stopvm12pm	5/25/2021, 10:57:00 AM	✓ Completed	Azure	5/25/2021, 10:57:16 AM