

File Transfer Power Automate Flow: AWS S3 to One Drive

Overview: This development work aims to automate the processing of files from the AWS-S3 bucket into OneDrive.

Things before going to the walkthrough:

1. Make sure you have a Microsoft Account that allows you to access Power Automate and OneDrive on your browser.
2. Make sure you have access to the AWS School Fuel workplace and have access to the step functions, S3, and AWS Transfer Family.

Walkthrough Video:

Instant Cloud Flow:

<https://drive.google.com/file/d/1PZxBG7ge65L3cEh3ly3jf11kVoiPLJSJ/view?usp=sharing>


- For SFTP - SSH connection, make sure there is no whitespace in the root folder path.

Creating the Power Automate Flow

Creating an Instant Cloud Flow:

1. Go to Power Automate
2. On the left panel, click Create. Click on **Instant Cloud Flow**
3. In Build an automated cloud flow, Under Choose your flow's trigger, select Manually trigger flow, select when a file is created in a folder, and click Create.

Build an instant cloud flow



Triggered manually from any device, easy-to-share instant flows automate tasks so you don't have to repeat yourself.

Examples:

- Get an automatic mobile alert whenever a VIP client emails you
- Save all your email attachments to a folder automatically

Flow name

Add a name or we'll generate one

Choose how to trigger this flow *

- ☒ Manually trigger a flow
Flow button for mobile
- PowerApps
- When Power Virtual Agents calls a flow
Power Virtual Agents
- When a flow step is run from a business process flow
Microsoft Dataverse
- For a selected message (V2)
Microsoft Teams
- From the compose box (V2)
Microsoft Teams
- When someone responds to an adaptive card

[Skip](#) [Create](#) [Cancel](#)

4. Create a new step and search for “Sftp” and select “SFTP - SSH” icon.

Manually trigger a flow

Choose an operation

Sftp

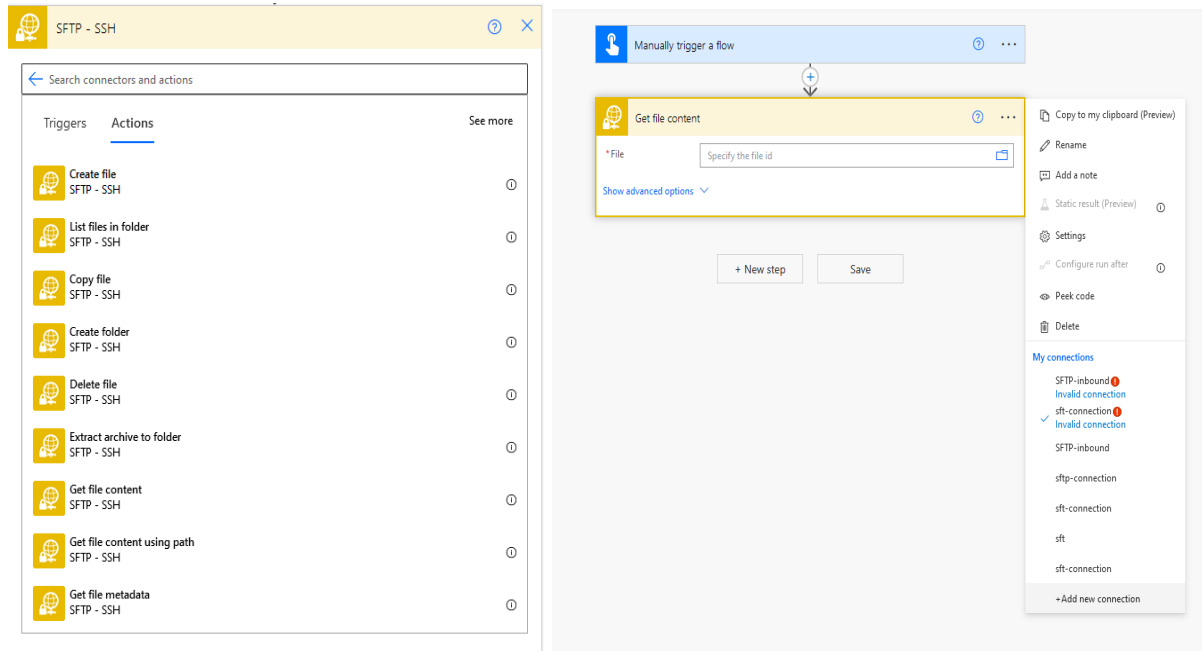
All Built-in Standard Premium Custom My clipboard

SFTP - SSH FTP SFTP IA-Connect JML SFTP

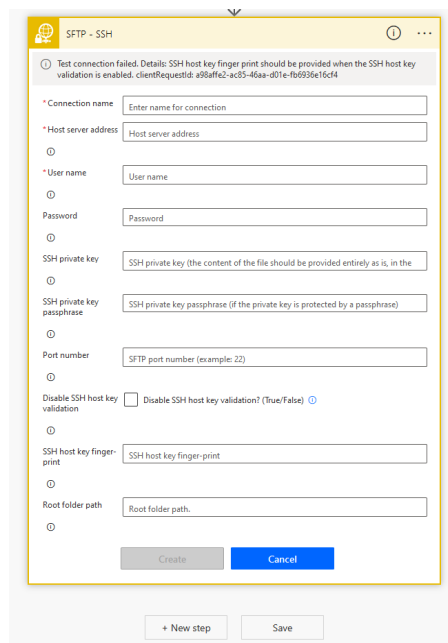
Triggers Actions See more

- List files in folder
SFTP - SSH
- Create file
SFTP - SSH
- Create file
FTP
- Send Email (V3)
SFTP
- List files in folder
FTP
- Get file content using path
SFTP - SSH

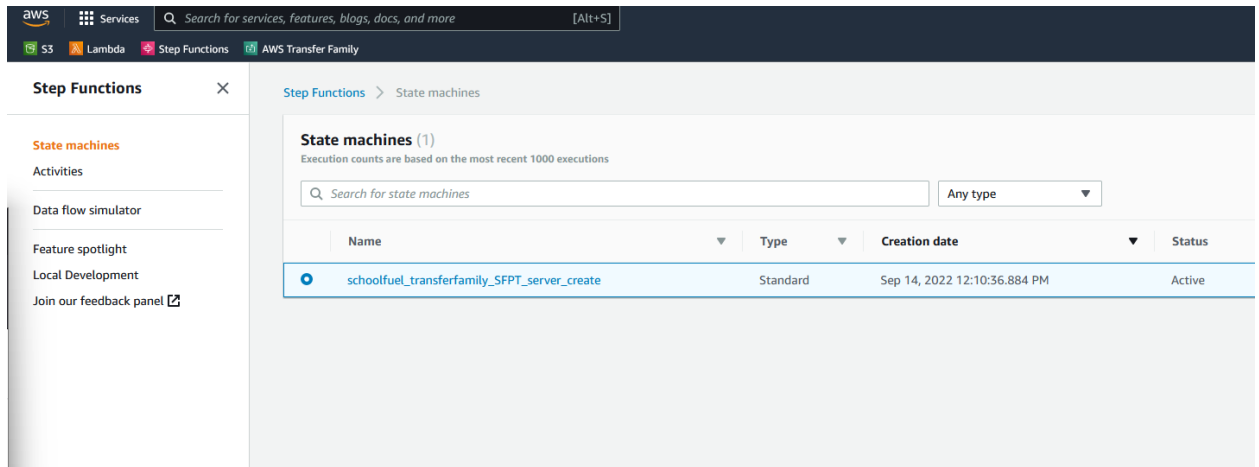
- For the list of actions click on “Get file content”, then click on the top right ellipse and add a new connection.



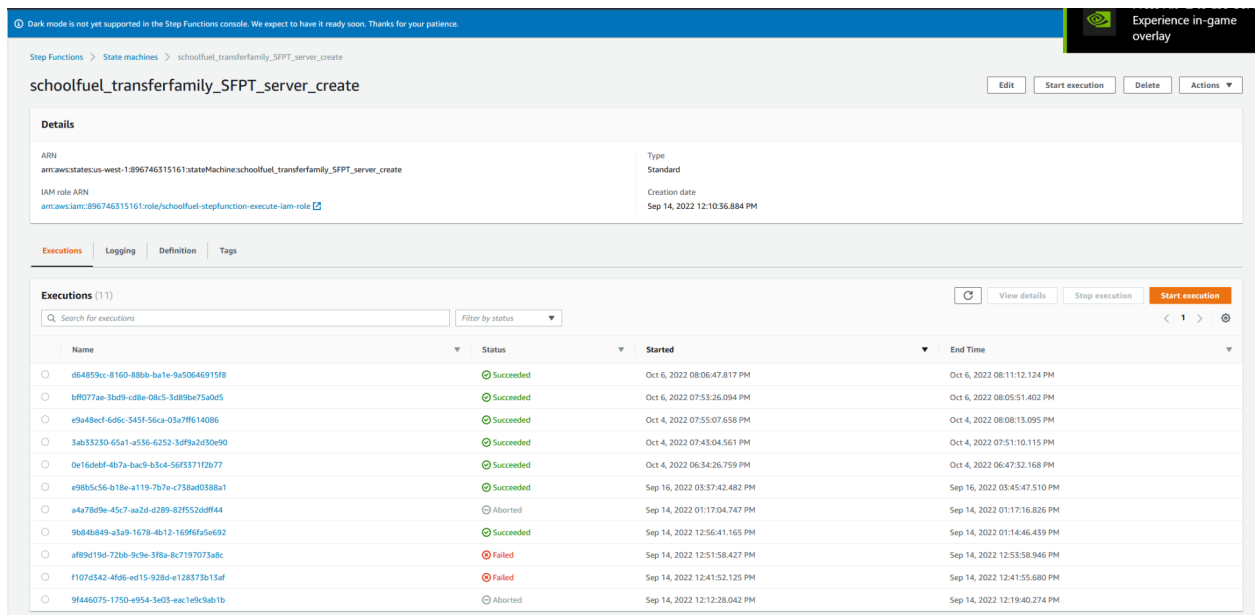
- Once the step looks like the one below we must create a server using the already created AWS Step Function.



- Log in to AWS using the school fuel that is provided. Make sure you are in the northern California region. Then search for the Step Function and there should be a state machine that will create an SFTP server.



- Click on the “schoolfuel_transferfamily_SFPT_server_create” step function. You should see the below page.



- Click on the orange “Start Execution” button, then you could input an comment and the number of seconds you want the server to run. 600 second = 10 minutes. Then click on “Start execution”.

Start execution

Start an execution using the latest definition of the state machine. [Learn more](#)

Name - optional

38708941-4c4f-d682-a65c-62a70c5b1c11

Input - optional

Enter input values for this execution in JSON format

```
1 {
2   "Comment": "Power Automate Documentation Testing",
3   "seconds": 600
4 }
```

☐ Open in a new browser tab

CancelStart execution

10. Then go to the AWS Transfer Family section, then you see the newly created server. It will take some time to start up so wait a couple of seconds.

AWS Transfer Family

Servers

Connectors

AS2 Trading Partners

Workflows

Servers (1)

	Hostname	Server ID
<input type="checkbox"/>	sftp.schoolfuel.org	s-84f5ee5f82cd4ed78

11. Click on the Server ID link which is above “s-84f5ee5f82cd4ed78”, then you will see the info needed for the SFTP - SSH connection.

Transfer Family > Servers > s-84f5ee5f82cd4ed78

s-84f5ee5f82cd4ed78

View logs

Actions

Protocols

Edit

Protocols over which clients can connect to your server's endpoint

- SFTP

Identity provider

Edit

Identity provider type
Service managed

Endpoint details

Edit

Status
Online

Endpoint type
Public

FIPS Enabled
No

Custom hostname
sftp.schoolfuel.org

Endpoint
s-84f5ee5f82cd4ed78.server.transfer-us-west-1.amazonaws.com

Users (1)

Actions

Add user

Q

	User name	Home directory	Role	Public keys
<input type="checkbox"/>	schoolfuel-sftp-70465000	/schoolfuel-70465000/inbound-files	schoolfuel-transfer-family-user-iam-role	1

Agreements (0)

Actions

Add agreement

Agreement id

Description

Status

Profile

Partner profile

To add/update Agreements, enable AS2 on your server by editing the protocols

Edit protocols

Server host keys (0)

Actions

Add host key

Q

12. Now input the information for the connection from above.

12.1 Connection Name: any name that makes sense.

12.2 Host Server Address: Endpoint

12.3 User name: Users

12.4 SSH private key: copy and paste the SSH private key

12.5 Disable SSH host key validation: checked

12.6 Root folder path: Home directory

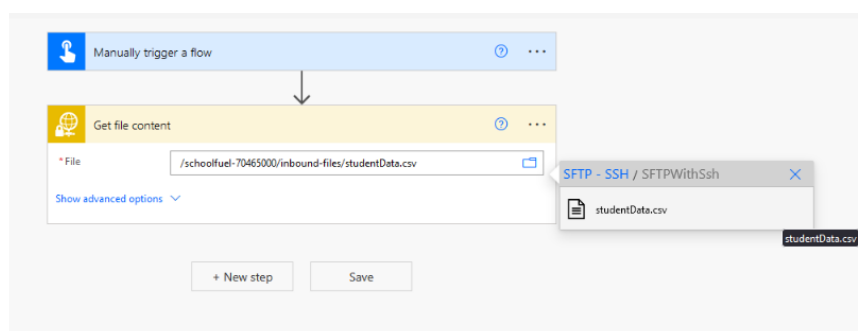
(Make sure to get rid of white spaces)

The screenshot shows a workflow editor with a blue header bar labeled "Manually trigger a flow". Below it is a yellow dialog box titled "SFTP - SSH". The dialog contains the following fields and values:

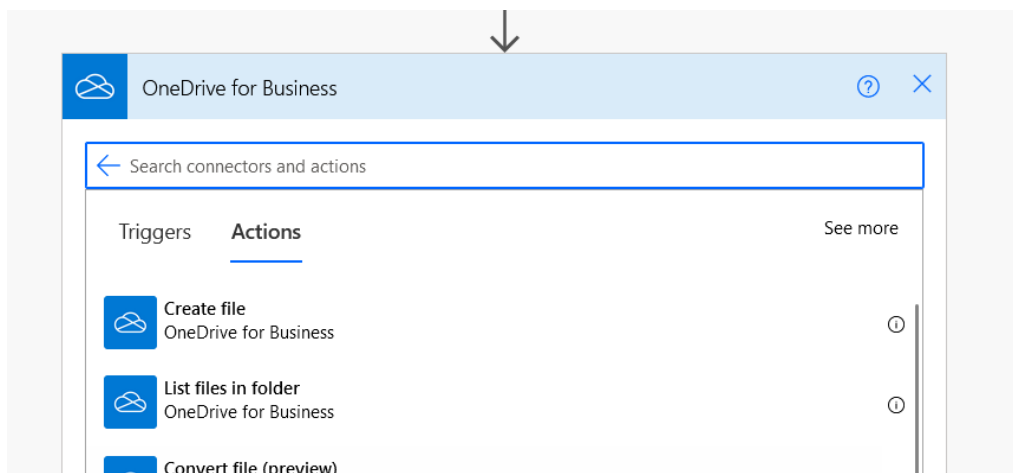
- Connection name: sft-connection2
- Host server address: s-fd4e1fa0caf47b59.server.transfer.us-west-1.amazonaws.com
- User name: schoolfuel-sftp-70465000
- Password: Password
- SSH private key: [Redacted]
- SSH private key passphrase: SSH private key passphrase (if the private key is protected by a passphrase)
- Port number: 22
- Disable SSH host key validation: ☒ Disable SSH host key validation? (True/False)
- SSH host key fingerprint: SSH host key finger-print
- Root folder path: /schoolfuel-70465000/inbound-files

At the bottom of the dialog are "Updating..." and "Cancel" buttons. Below the dialog, in the workflow editor, are "+ New step" and "Save" buttons.

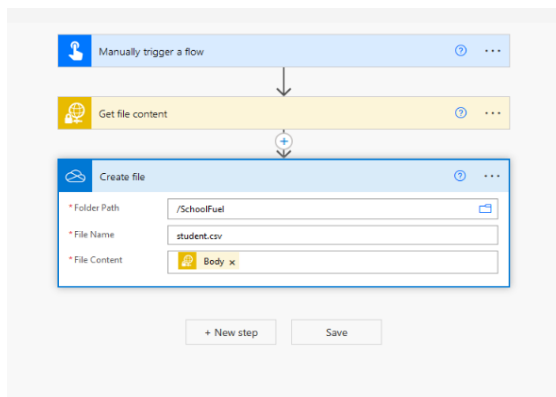
13. Then click on create, then you should be able to find the files.



14. Then create a new step, search for OneDrive, click on the OneDrive for the Business icon, then click on the “Create file” action.



15. Connect your OneDrive account and have a folder to add the file to your OneDrive space. Add the file name with the extension. File content from sftp connection.



16. On the top right, test the flow. If there are no errors, then it should be in your OneDrive folder.

