

Redefined in the Age of AI: Power Automate Desktop (PPCC24)

Lab 09 – Monitor or troubleshoot your automations

30 mins

September 2024



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Lab Overview

If Contoso Coffee shop keeps growing the business and needs to have more and more automations running on multiple machines. It will become important to be able to monitor all the desktop flow runs and the machines running them. Power Automate provides an easy way to do so with Desktop flow activity. You will complete the following in this lab:

- **Check your current and completed desktop flows runs**

Desktop flow activity provides the perfect entry point to find all your desktop flow runs. We will first trigger some flows and view them from the **Current runs** tab which gives a real-time view of your flows running in the environment. This can be important if you want to understand the current workload and potentially identify a flow that takes too much time to complete. Then we will look at a successful flow run details.

- **Identify an issue**

As you scale the automation in your business, you may need a straightforward way to ensure all your desktop flows are running as expected. Monitor your desktop flow runs, drill down into the issue that just happened.

- **Monitor your machines**

As you scale the automation in your business, you need an overview of your machines to ensure they run as expected, they remain up-to-date and that you can identify and troubleshoot any issue they face.

- **Monitor your automations**

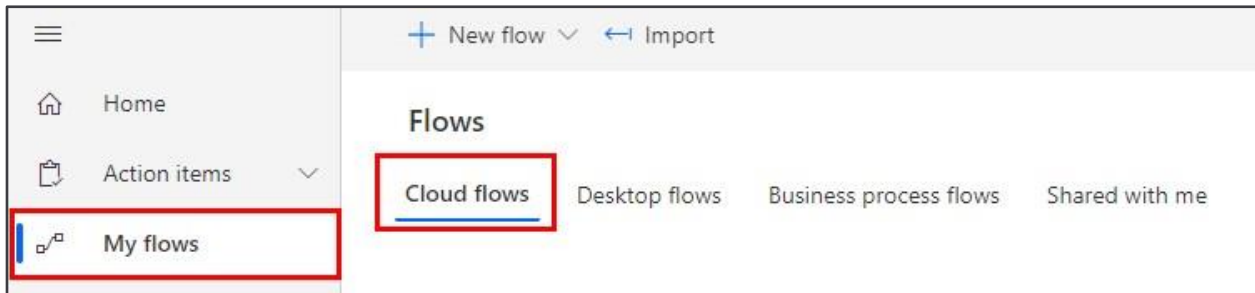
While desktop flow activity helps you to monitor your desktop flows, the new Automation Center (preview) provides comprehensive monitoring and troubleshooting experiences for your automation processes across Power Automate, catering to various personas involved in automation.

Prerequisites

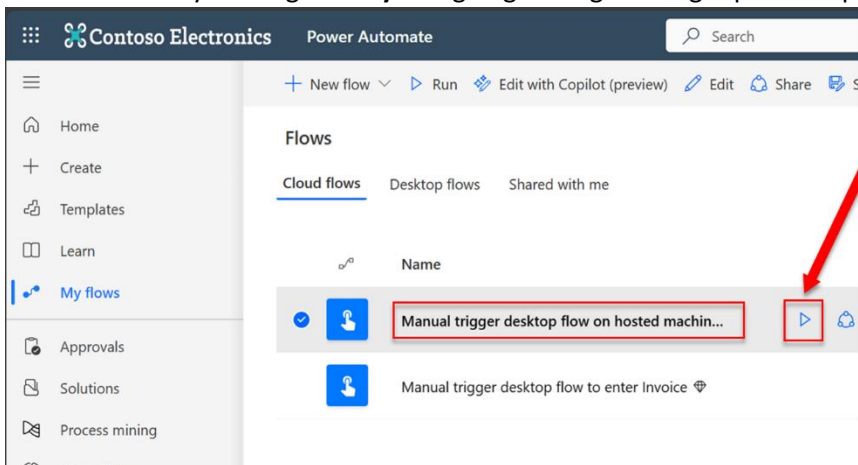
This lab builds on the initial setup lab (lab 1) and labs 2-8 – ensure these labs are complete.

Exercise 1: Check your currently running desktop flows

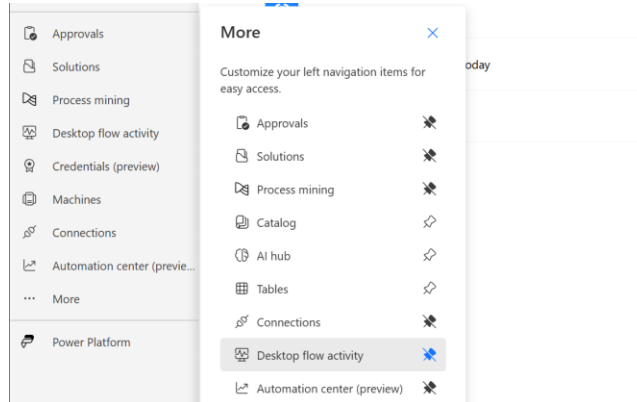
1. Go to <https://powerautomate.microsoft.com>. Then go to **My flows** > **Cloud flows**.



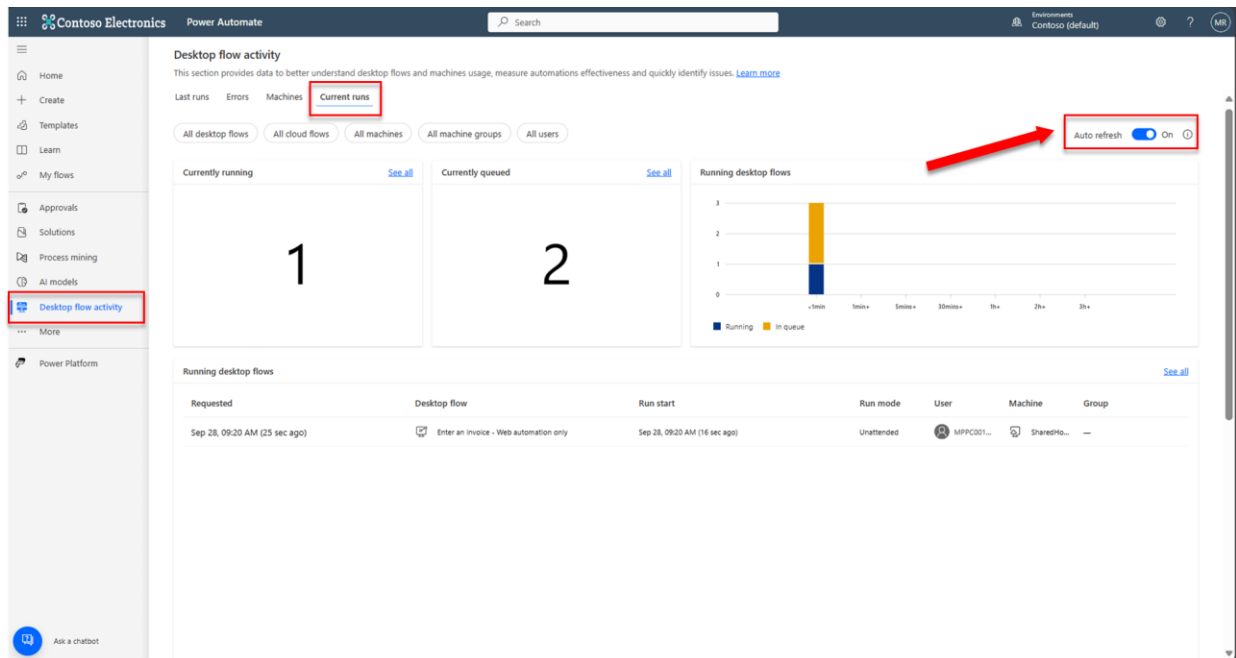
2. Trigger 3 consecutive runs of the flow named “**Manual trigger desktop flow on hosted machine**” by clicking on **Play** and going through the right panel steps (3 times):



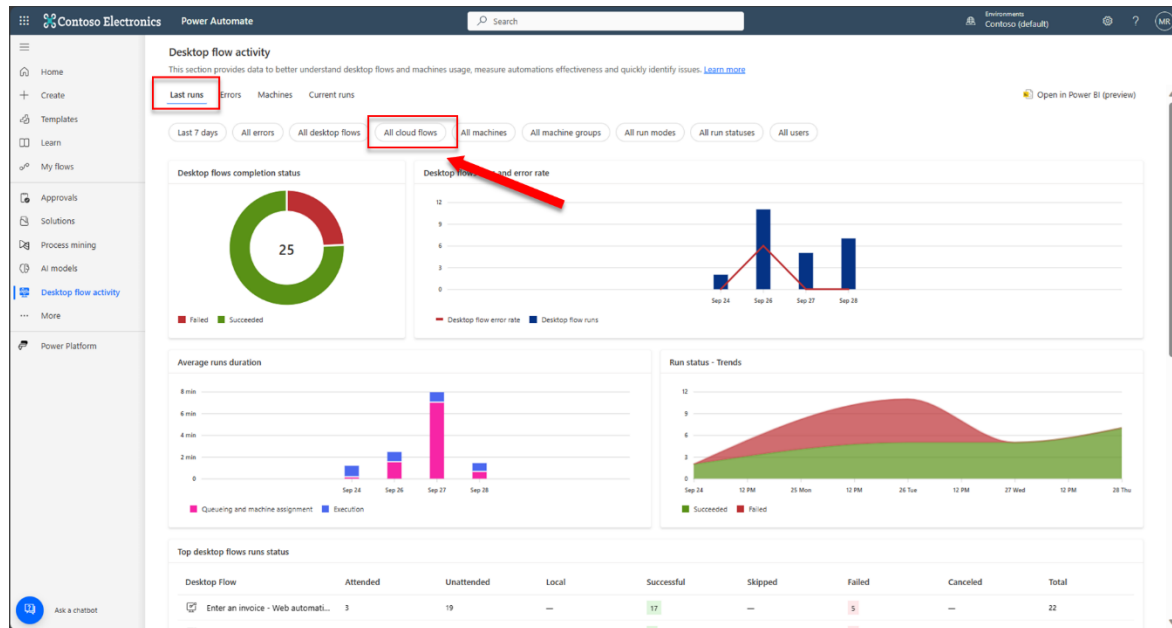
3. From the left navigation pane, Go to **Desktop flow activity**, then select **Current runs** tab and set the **Auto refresh** toggle (at the top right corner of the screen) to **On** so that the page will refresh automatically. Note: if you don't see Desktop flow activity in the left navigation pane, select **More** and make sure **Desktop flow activity** is pinned to the left navigation for easy access.



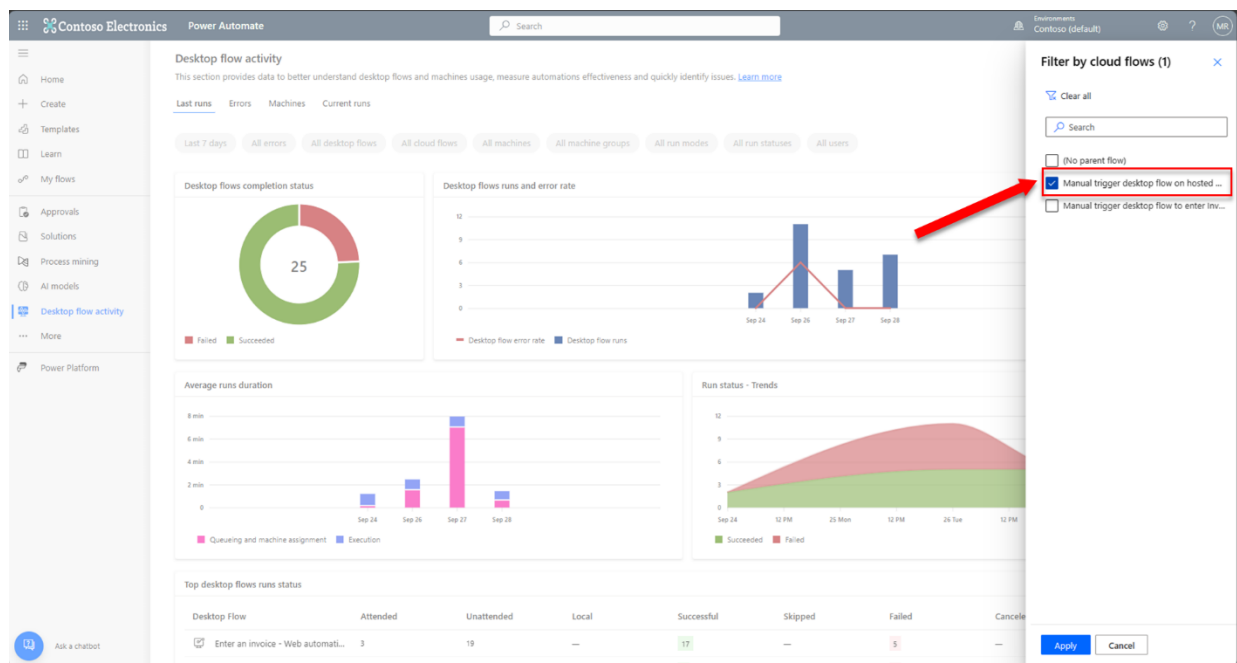
You should be able to see your 3 triggered runs either in currently queued or currently running depending on how fast you came to this page and how fast the machine was able to take on your requested flow runs. Below in the screenshot you can see one has already been picked up by the machine (currently running) and 2 are currently queued.



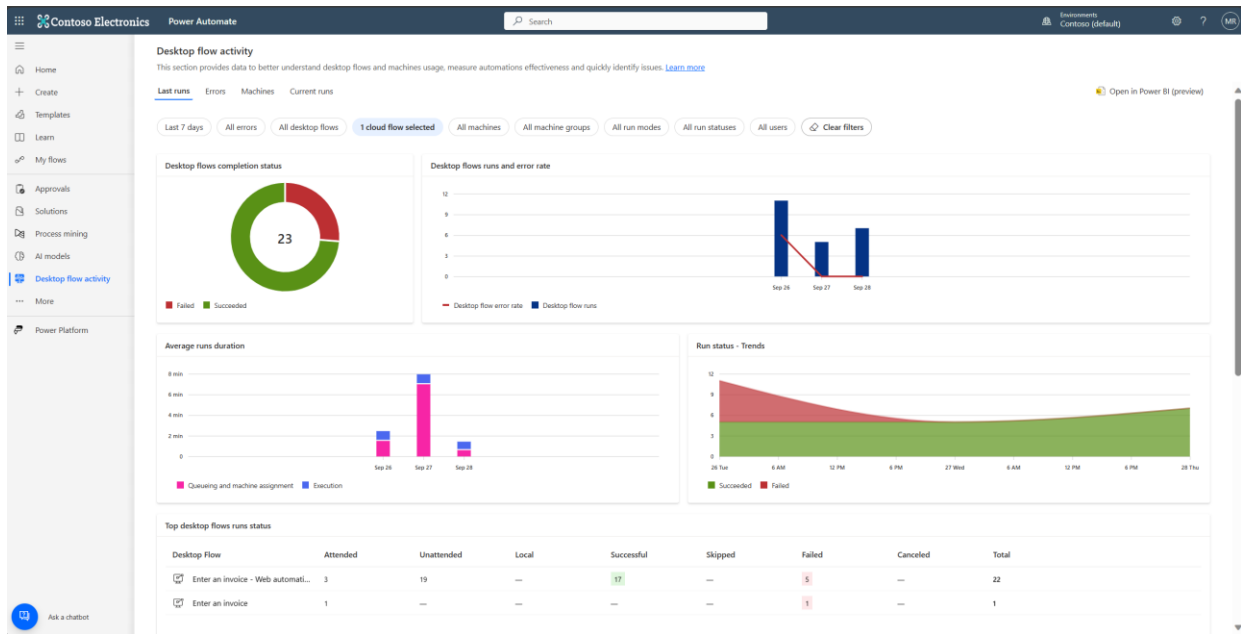
- Once at least one flow has completed, go to **Last runs** tab and from the top level filters, select your **All cloud flows**



5. Then select the cloud flow you just triggered (**Manual trigger desktop flow on hosted machine**) and click on **Apply**:



6. You should only see desktop flow runs that were triggered by that cloud flow, then scroll down to the **"Last desktop flow runs"** section and select the first completed run in the list (which is your most recent flow run):



Desktop flow activity

This section provides data to better understand desktop flows and machines usage, measure automations effectiveness and quickly identify issues. [Learn more](#)

Last desktop flows runs [See all](#)

Requested	Desktop flow	Status	Error	Run start	Run mode	Duration	User	Machine	Group
Sep 28, 09:48 AM (1 min ago)	Enter an invoice - Web automation only	Succeeded	—	Sep 28, 09:48 AM (52 sec ago)	Unattended	00:00:47	MPPC001...	SharedHo...	—
Sep 28, 09:20 AM (29 min ago)	Enter an invoice - Web automation only	Succeeded	—	Sep 28, 09:21 AM (28 min a...	Unattended	00:01:45	MPPC001...	SharedHo...	—
Sep 28, 09:20 AM (29 min ago)	Enter an invoice - Web automation only	Succeeded	—	Sep 28, 09:20 AM (28 min a...	Unattended	00:01:16	MPPC001...	SharedHo...	—
Sep 28, 09:20 AM (29 min ago)	Enter an invoice - Web automation only	Succeeded	—	Sep 28, 09:20 AM (29 min a...	Unattended	00:00:42	MPPC001...	SharedHo...	—
Sep 28, 09:01 AM (48 min ago)	Enter an invoice - Web automation only	Succeeded	—	Sep 28, 09:02 AM (46 min a...	Unattended	00:02:15	MPPC001...	SharedHo...	—

Runs by machines

Machine	Count
SharedHostedVMForMPPC	20

Runs by machine groups

Machine group	Count
Hosted group for invoice processing	4

Runs by desktop flow user

User	Count
MPPC001 R01A	24

7. Verify the different information on that page:

- (1) The **Run details** section, giving you details like the cloud flow which triggered this run, the start time, duration, the target machine on which this flow run happened, the version of PAD and links to the flow inputs/outputs, run mode and more.
- (2) The **Run status** timeline telling you which user triggered it and how much time each step took until completion.
- (3) The **Action details** section, showing each desktop flow step (to be read from the bottom to the top).

Run details

Parent cloud flow run	Parent desktop flow run	Start	Duration	Status
Manual trigger desktop flow on hosted machine	—	Sep 28, 09:48 AM (2 min ago)	00:00:47	Succeeded

Run status

Timeline: 00:00:07 (Requested) → 00:00:02 (Queued) → 156 ms (Machine assignment) → 00:00:32 (Connection and execution) → 00:00:06 (Finalize)

Action details

Start	Subflow	Action index	Action name	Duration	Status
09:49:16 AM	Currency_Converter	4	Close web browser	192 ms	Succeeded
09:49:15 AM	Currency_Converter	3	Get details of element on web page	00:00:02	Succeeded
09:49:12 AM	Currency_Converter	2	Populate text field on web page	00:00:03	Succeeded
09:49:07 AM	Currency_Converter	1	Launch new Microsoft Edge	00:00:05	Succeeded
09:49:07 AM	main	11	Run subflow	31 ms	Succeeded

Exercise 2: Identifying an issue with Desktop flow activity

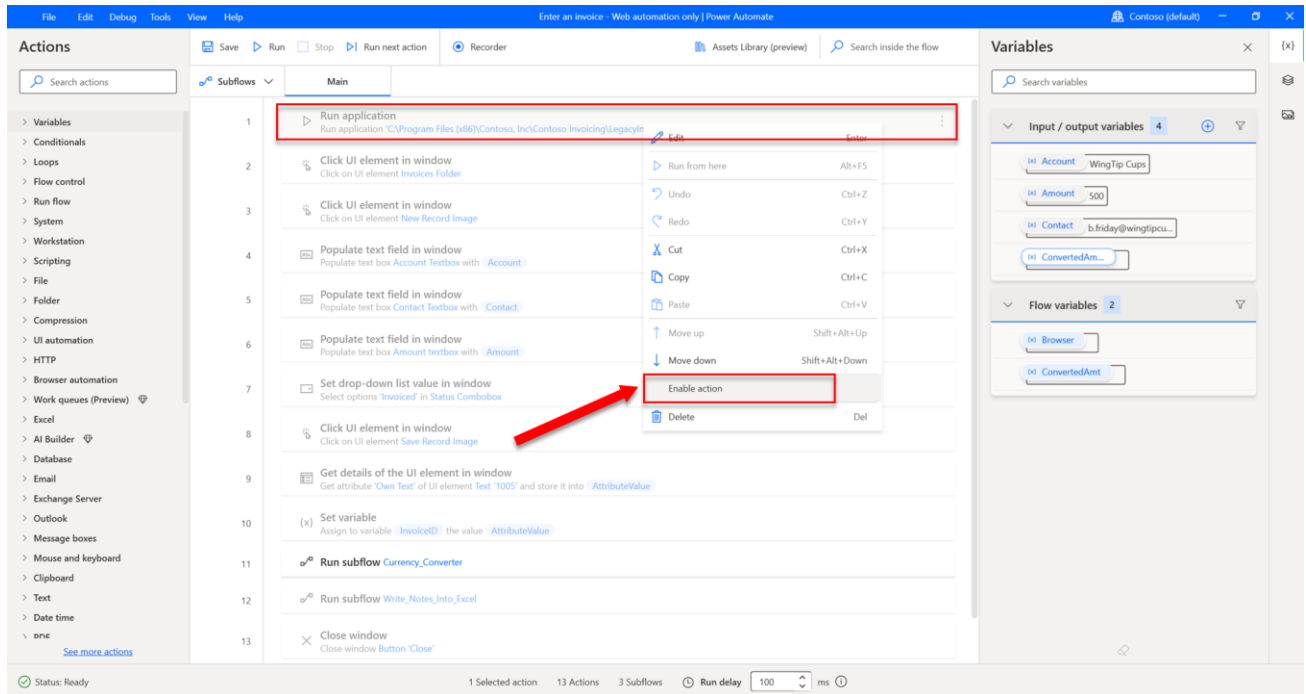
1. Open **Power Automate for Desktop** and edit your flow **Enter an invoice – Web automation only**:

Power Automate | MPPC001 RPA

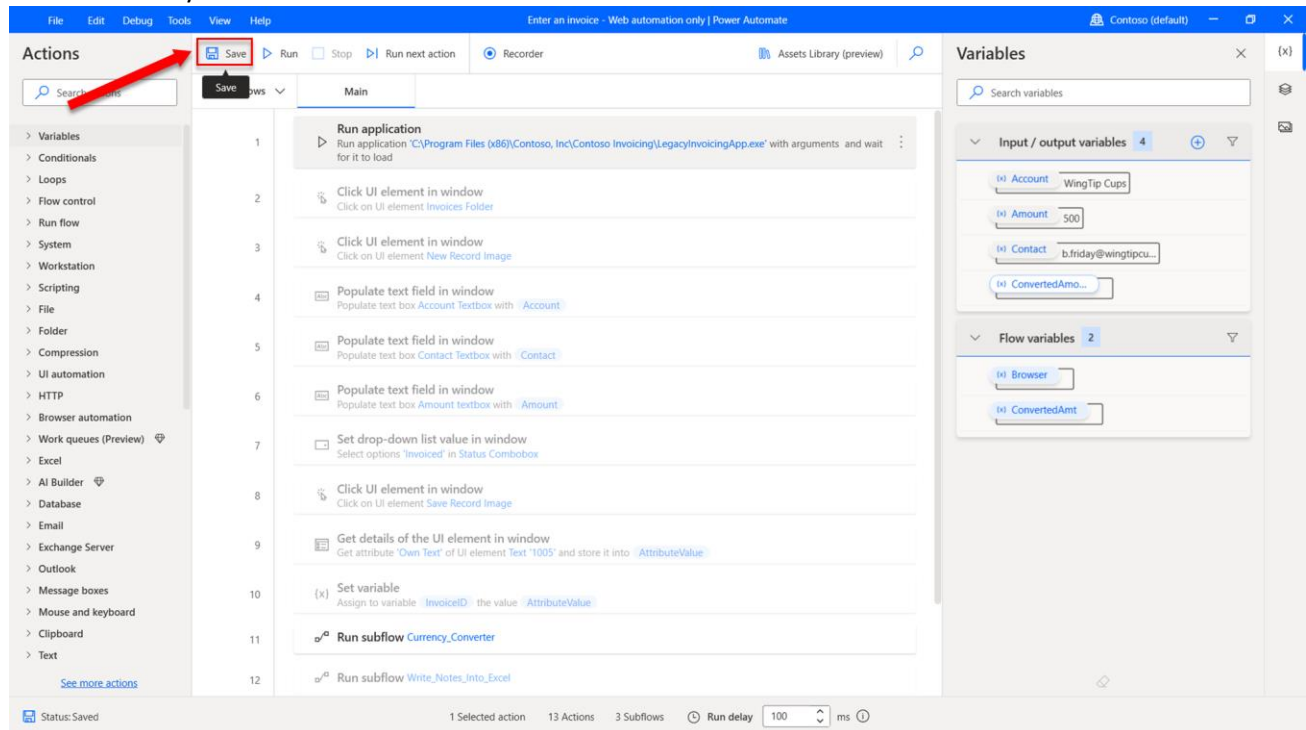
Home | **My flows** | Shared with me | Examples

Name	Modified	Status
Enter an invoice - Web automation only	< 1 minute ago	Not running
Enter an invoice 002	1 day ago	Not running

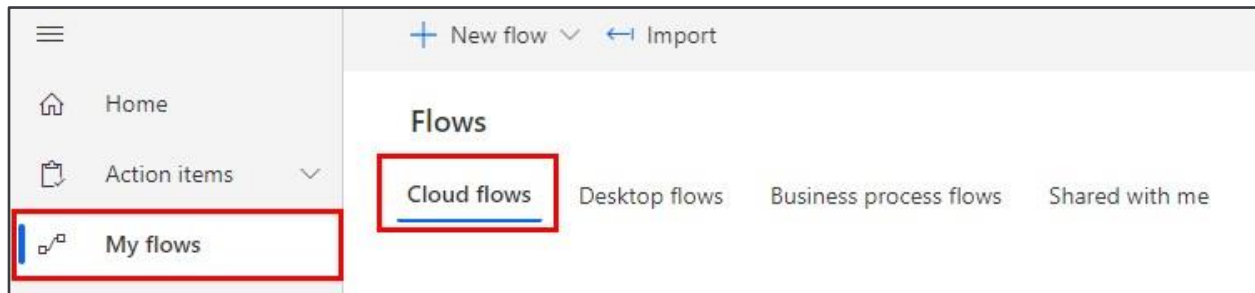
2. We're going to re-enable actions needing the Contoso invoice app, in order to cause an explicit failure. **Right-click** on the first step and select **"Enable action"**



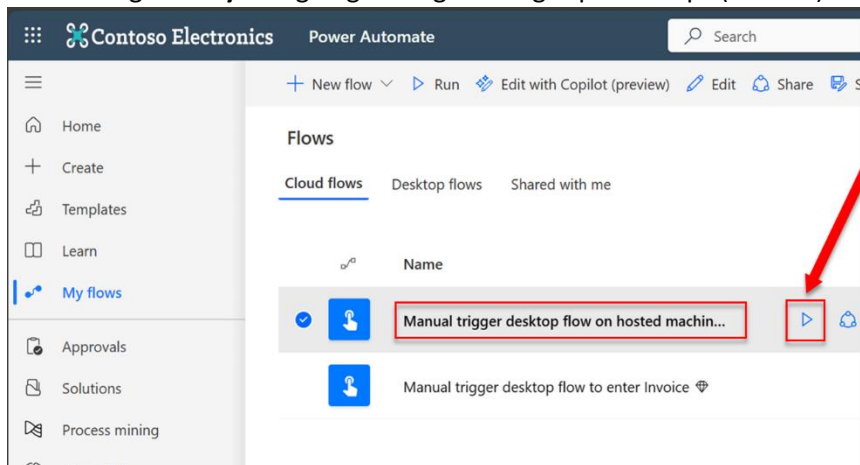
3. Then **Save** your modification:



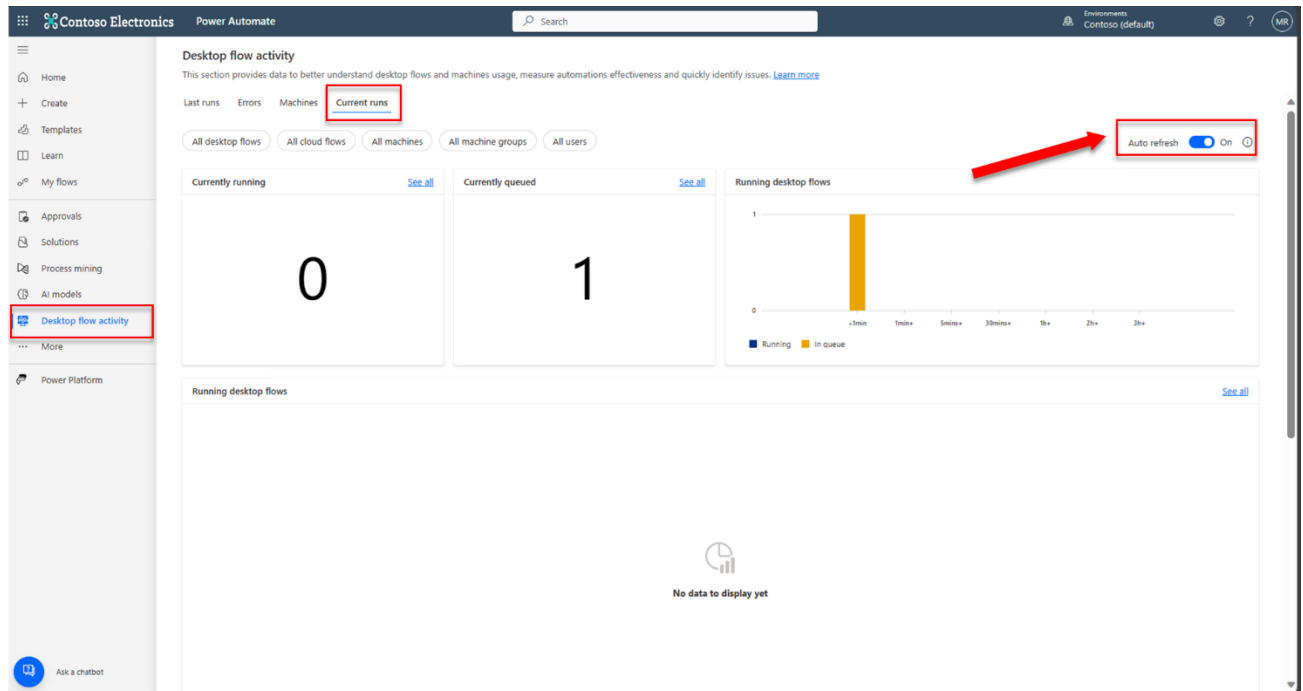
8. Go to <https://powerautomate.microsoft.com>. Then go to **My flows > Cloud flows**.



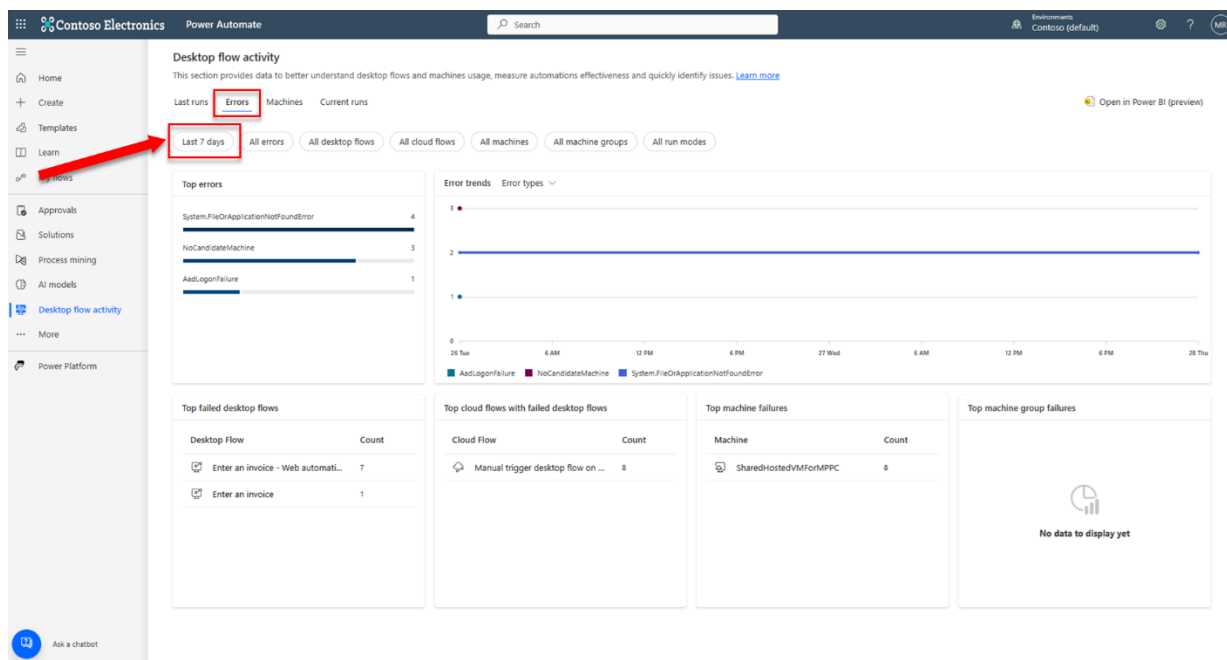
9. Trigger one flow run of your flow “**Manual trigger desktop flow on hosted machine**” by clicking on **Play** and going through the right panel steps (3 times):



10. From the left navigation pane, Go to **Desktop flow activity**, then select **Current runs** tab and set the **Auto refresh** toggle (at the top right corner of the screen) to **On** so that the page will refresh automatically.



11. Wait until your flow runs and disappears from this view, then go to **Errors** tab, select the date filter and change it from “**Last 7 days**” to “**last hour**”:



12. We could further drill down using the different filters but here there is only one error (which is **System.FileOrApplicationNotFoundError**). Let's get more details by selecting the desktop flow that raised this error by clicking on it from the **Top failed desktop flows** section at the bottom.

The screenshot shows the 'Desktop flow activity' dashboard in Power Automate. The left sidebar contains navigation options like Home, Create, Templates, Learn, My flows, Approvals, Solutions, Process mining, AI models, Desktop flow activity, and Power Platform. The main area displays 'Desktop flow activity' with tabs for Last runs, Errors, Machines, and Current runs. The 'Errors' tab is active, showing a 'Top errors' section with 'System.FileOrApplicationNotFoundError' and an 'Error trends' chart. Below this, the 'Top failed desktop flows' section lists one flow: 'Enter an invoice - Web automation only' with a count of 1. A red arrow points to this flow. Other sections include 'Top cloud flows with failed desktop flows', 'Top machine failures', and 'Top machine group failures'.

13. Now, we're in the Desktop flow details page and we can see that the last run failed. Click on Start time (**Requested** column)

The screenshot shows the 'Desktop flows' details page for the flow 'Enter an invoice - Web automation only'. The page includes a 'Details' section with metadata like Owner (MOD Administrator), Created (Sep 26, 02:29 PM), Modified (Sep 28, 01:32 PM), Built with (Power Automate for desktop), and Schema version (V1). The 'Last desktop flows runs' table lists recent runs. The top row is highlighted in red and has a red arrow pointing to its 'Requested' column value: 'Sep 28, 01:33 PM (50 sec ago)'. The table also shows 'Duration' and 'Status' (Failed). On the right, there's a '7-day completed run status' donut chart showing 35 runs, with a legend for Failed (red) and Succeeded (green).

Requested	Duration	Status
Sep 28, 01:33 PM (50 sec ago)	00:00:35	Failed
Sep 28, 01:12 PM (22 min ago)	00:03:53	Succeeded
Sep 28, 01:08 PM (25 min ago)	00:06:24	Succeeded
Sep 28, 01:08 PM (25 min ago)	00:05:44	Succeeded
Sep 28, 01:08 PM (25 min ago)	00:05:05	Succeeded
Sep 28, 01:08 PM (25 min ago)	00:04:22	Succeeded
Sep 28, 01:08 PM (25 min ago)	00:03:39	Succeeded
Sep 28, 01:08 PM (25 min ago)	00:02:55	Succeeded
Sep 28, 01:08 PM (25 min ago)	00:02:18	Succeeded
Sep 28, 01:08 PM (26 min ago)	00:01:36	Succeeded

14. I can see the failure happened at the 4th step (Connection and execution), which means the Power Automate was able to trigger the desktop flow on the target machine but it failed completing successfully. I can see that the first step called **Run application** failed. Click on **View details** to get more information.

Desktop flows > Enter an invoice - Web automation only > Ran at Sep 28, 01:33 PM

Run details

Parent cloud flow run Manual trigger desktop flow on hosted machine	Parent desktop flow run —	Start Sep 28, 01:33 PM (4 min ago)	Duration 00:00:35
Status Failed	Target machine SharedHostedVMForMPPC	Target machine group —	Run mode Unattended
Flow inputs See input details	Flow outputs See output details	Version 2.33.159.23221	

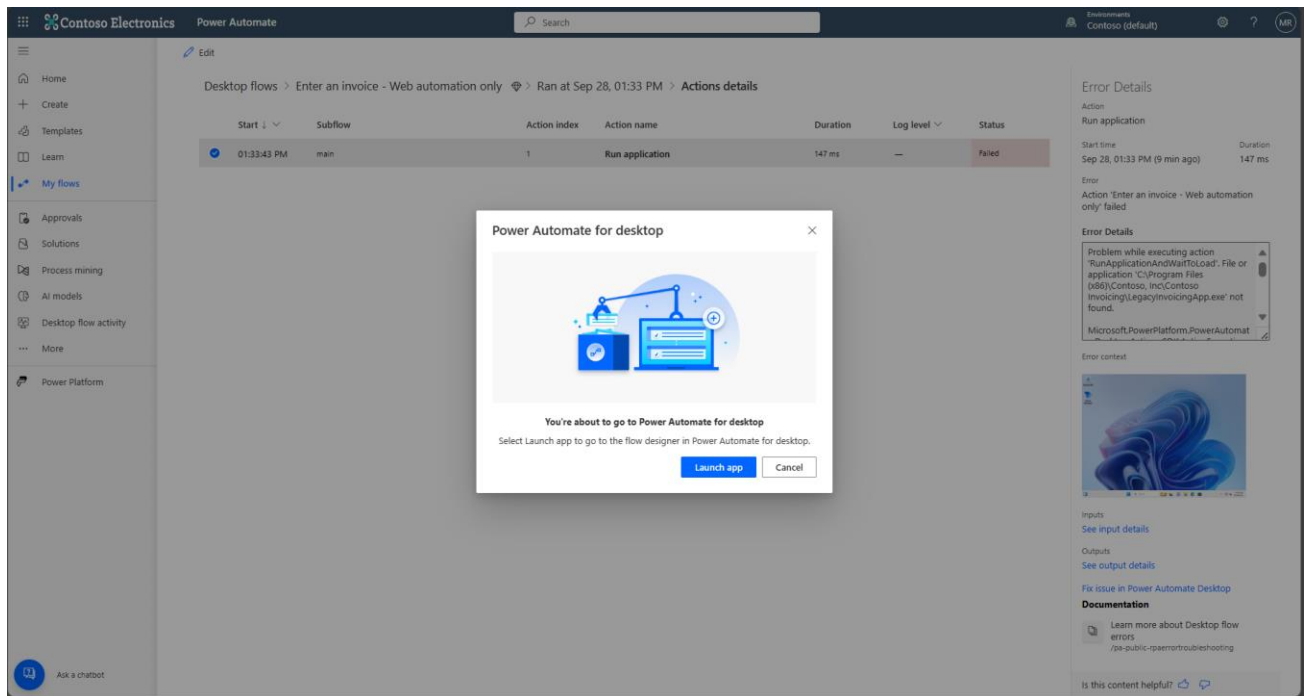
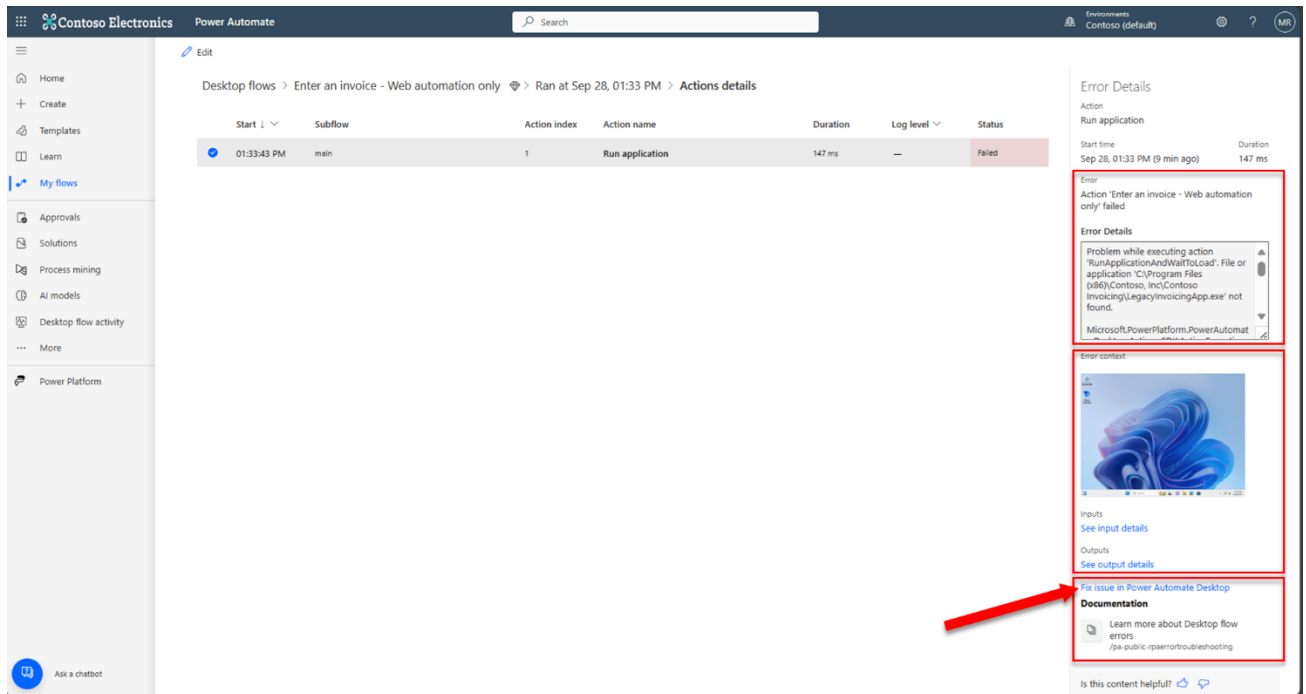
Run status

00:00:04 Requested 00:00:03 Queued 437 ms Machine assignment 00:00:22 Connection and execution 00:00:06 Finalize

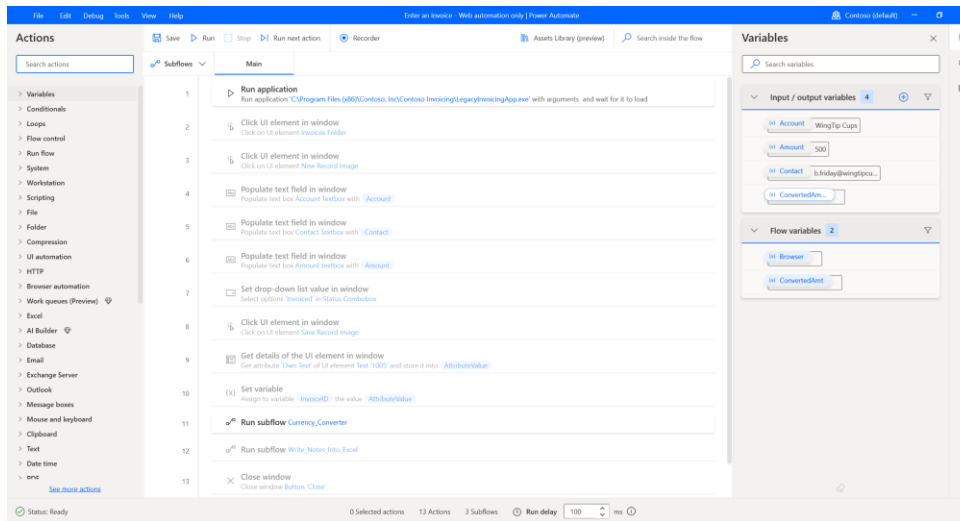
Action details

Start	Subflow	Action index	Action name	Duration	Status
01:33:43 PM	main	1	Run application	147 ms	Failed

15. A more detailed view shows up listing all the performed actions with a right panel opened giving precise information about the failure. Locate **(1)** the error details, **(2)** the machine screenshot taken during the error with links to input & outputs as well as **(3)** a deep link to open Power Automate for Desktop to fix the issue and links to the support documentation. Click on **Fix issue on Power Automate Desktop** link then click on **Launch app** to automatically open the desktop flow.



16. You should have your desktop flow “Enter an invoice – Web automation only” opened in PAD:

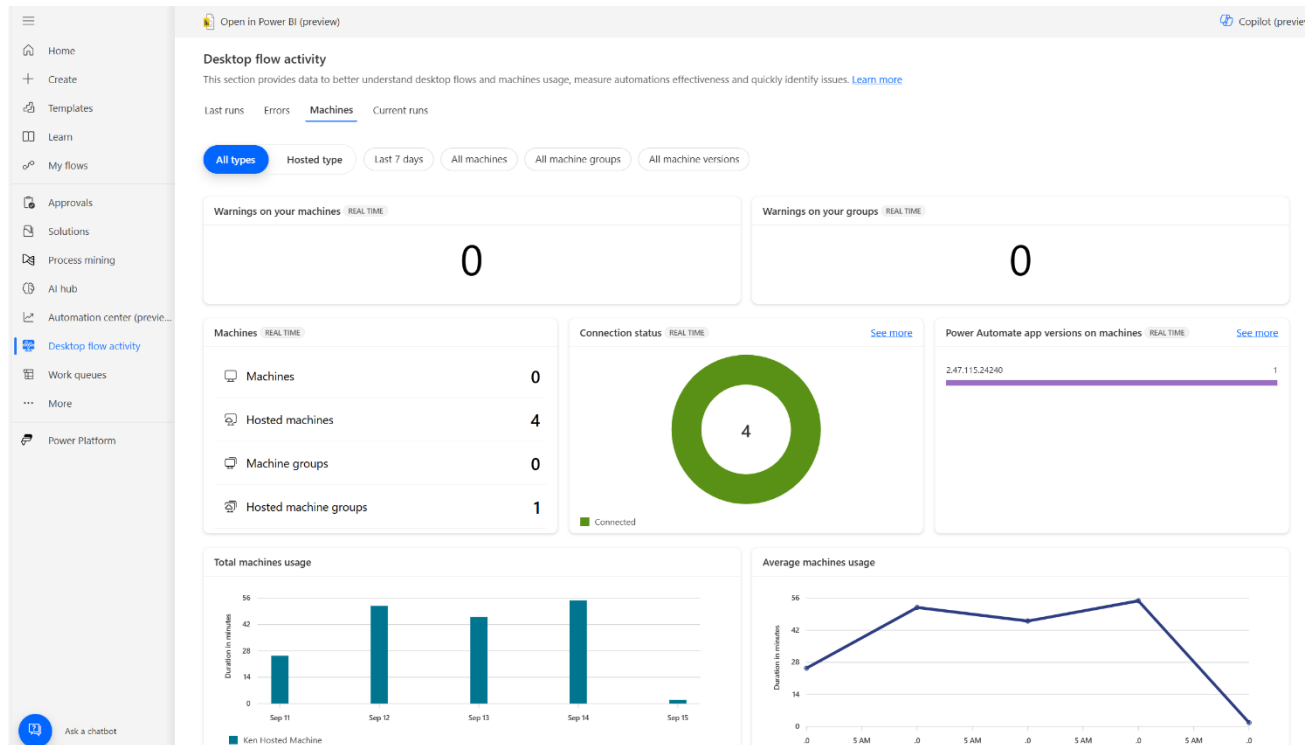


Exercise 3: Monitor your machines

The error we just went through was that the Contoso app wasn't installed, hence the actual fix is to have it installed on that hosted machine. With hosted machines, you can create custom VM images to ensure your necessary software is installed by default when machines are created, we will just go through finding this hosted machine and understand its current configuration.





1. Go to <https://powerautomate.microsoft.com> and then from the left navigation pane select **Desktop flow activity** and click on the **Machines** tab.

You have an overview of all the machines and machine groups you own or that have been shared with you, see if they're connected or not, which version of PAD is installed and insights upon their utilization.



2. Scroll down and click on the hosted machine name.

Note the different icon for hosted machines compared to regular machines.

Machines (real time) See all					Machine groups (real time) See all			
Machine name	Description	Version	Status	Modified on	Machine group name	Description	Machines	Modified on
 SharedHostedVmForMPPC	Machine for MPP...	2.35.159.23221	Connected	Sep 26, 09:55 PM...	 Hosted group for invoice processing	Hosted machine group for...	—	Sep 26, 09:35 PM (1 d ago)
 VmForMPPC23	—	2.35.159.23221	Disconnected	Sep 26, 01:53 PM...				
 LAPTOP-QH76TF6G	—	2.35.159.23221	Connected	Sep 24, 09:48 PM...				

3. From this page, you can get a lot of information about this machine. What were the last runs, its connectivity status, what connections are targeting it and much more. What I'm interested now, is checking with VM image was used to create this machine. Click on the

VM image name (**Desktop Windows Desktop image**).

Machines > SharedHostedVMForMPPC
Machine for MPPC workshop (lab 7)

Machine details

Connectivity status Connected	Flow activity 0 running, 0 queued	VM image Default Windows Desktop image	Network connection Microsoft Hosted Network (Default)	Owner MPPC001 RPA	Version 2.35.159.23221
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Last runs

Requested	Desktop flow	Status	Run mode	Parent flow
Sep 28, 01:33 PM (43 min ago)	Enter an invoice - Web automation only	Failed	Unattended	Manual trigger desktop flow...
Sep 28, 01:12 PM (1 h ago)	Enter an invoice - Web automation only	Succeeded	Unattended	Manual trigger desktop flow...
Sep 28, 01:08 PM (1 h ago)	Enter an invoice - Web automation only	Succeeded	Unattended	Manual trigger desktop flow...
Sep 28, 01:08 PM (1 h ago)	Enter an invoice - Web automation only	Succeeded	Unattended	Manual trigger desktop flow...
Sep 28, 01:08 PM (1 h ago)	Enter an invoice - Web automation only	Succeeded	Unattended	Manual trigger desktop flow...
Sep 28, 01:08 PM (1 h ago)	Enter an invoice - Web automation only	Succeeded	Unattended	Manual trigger desktop flow...
Sep 28, 01:08 PM (1 h ago)	Enter an invoice - Web automation only	Succeeded	Unattended	Manual trigger desktop flow...
Sep 28, 01:08 PM (1 h ago)	Enter an invoice - Web automation only	Succeeded	Unattended	Manual trigger desktop flow...
Sep 28, 01:08 PM (1 h ago)	Enter an invoice - Web automation only	Succeeded	Unattended	Manual trigger desktop flow...
Sep 28, 01:08 PM (1 h ago)	Enter an invoice - Web automation only	Succeeded	Unattended	Manual trigger desktop flow...

7-day completed run status

33

Failed Succeeded

- This is the default vanilla VM image provided by Power Automate, it is not a VM image that includes the Contoso application.

VM images > Default Windows Desktop image
Default Windows Desktop image for use in Microsoft Desktop Flows. Windows 11 Enterprise 22H2 with Microsoft Edge.

VM image details

Used in Both	Version 1	Reference MicrosoftWindowsDes... ent-cpcwin11-22h2-ent-cpc-os	Owner SYSTEM - Deactivat...
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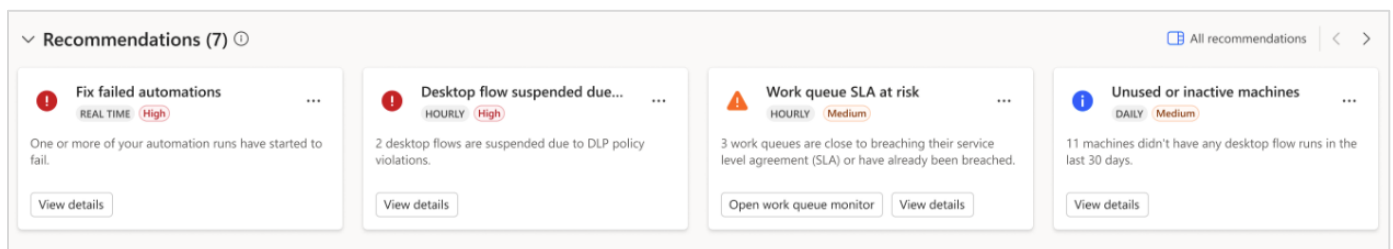
VM image used in

Name	Description	Type	Owner
SharedHostedVMForMPPC	Machine for MPPC workshop (lab 7)	Hosted machine	MPPC001 RPA
Hosted group for invoice processing	Hosted machine group for invoicing	Hosted machine group	MPPC001 RPA

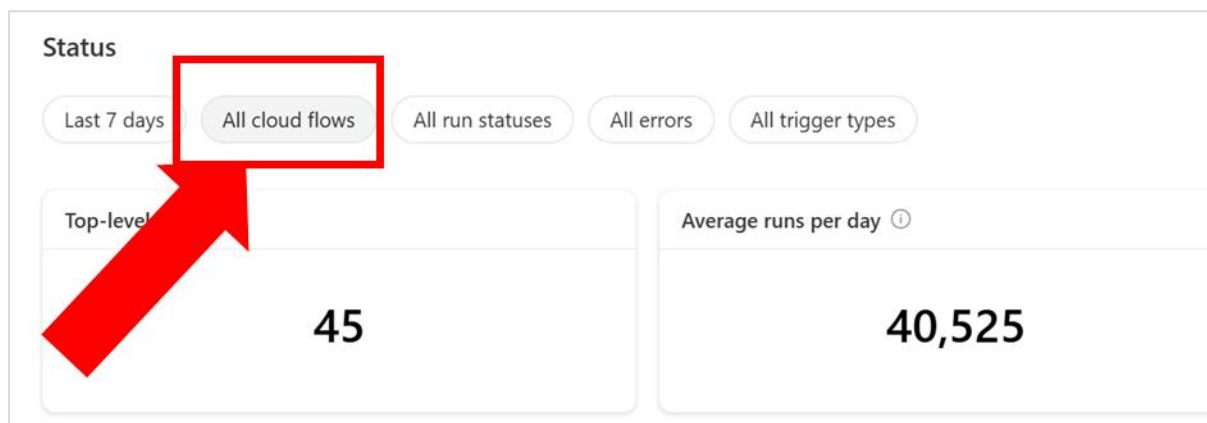
The right fix will be to create a custom VM image that includes the Contoso application and create a hosted machine with it.

Exercise 4: Monitor your automations with the automation center

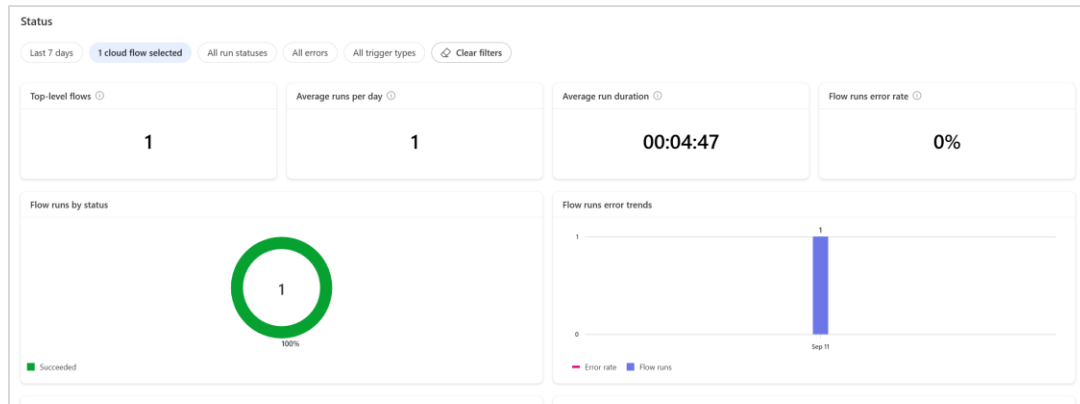
1. Go to <https://powerautomate.microsoft.com>. Then from the left navigation go to Automation Center.
2. In the **Overview** tab, the automation center provides you a top-level view of your flow run activities. In the **recommendations** section, you can retrieve a list of automation health, compliance or actionable recommendations (such as an inactive machine or a lack of capacity).



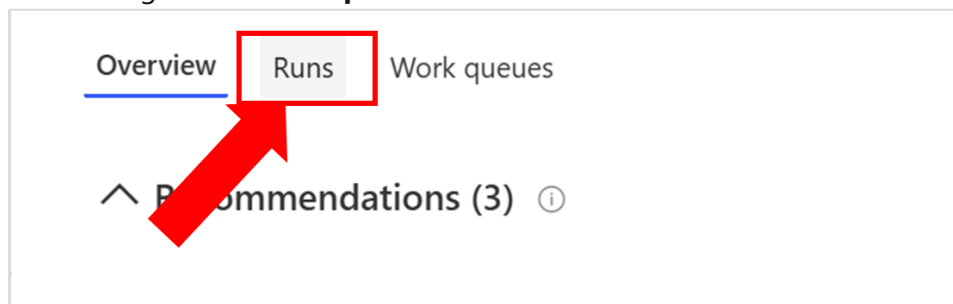
3. In the **status** section, you can monitor and troubleshoot your automation processes across Power Automate. In the list of filters, select **all cloud flows**.



4. In the right pane, you can now select your cloud flow **Manual trigger desktop flow on hosted machine** and click on **Apply**. All the dashboards and data will be updated to show you the activity of your automations (number of runs, average duration, etc..)



- When you see that your flow has failures, you can filter on run status to show only failures and go to the **Runs pivot**.



- From the runs tab, you can view all the runs of your cloud flow that failed. If your cloud flow failed because of a desktop flow, you will also see the child desktop flow and the related error.

Automation center (Preview)

The automation center provides comprehensive visualizations that enable you to monitor the health of your automations, quickly detect issues or trends, and troubleshoot problems more efficiently. [Learn more](#)

Overview Runs Work queues

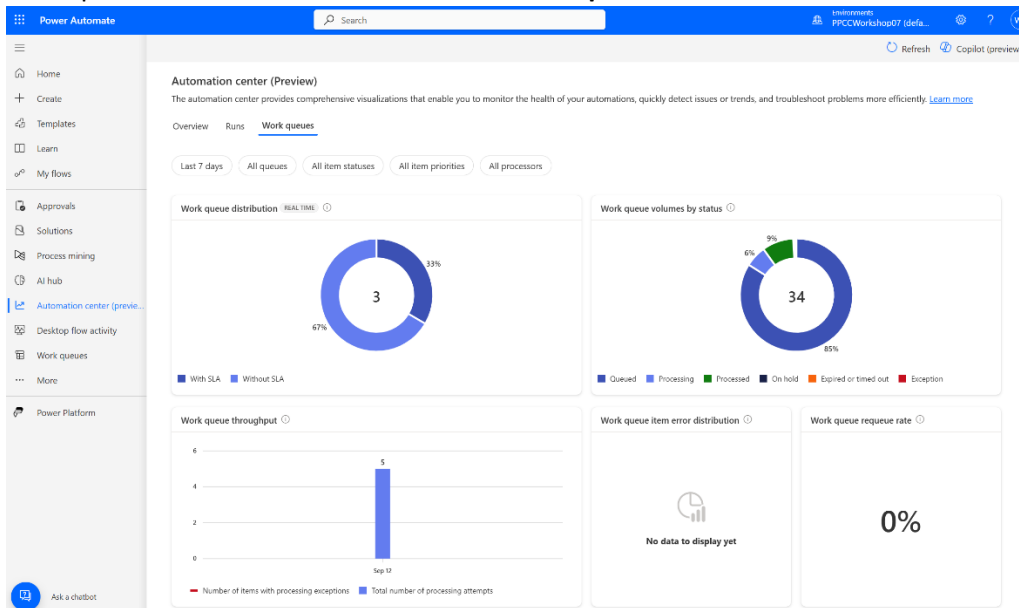
Last 7 days 1 cloud flow selected 1 run status selected All errors All trigger types Clear filters

Flow name	Flow type	Trigger type	Status	Run start	Run mode	Duration
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 10:10:00 PM	—	00:00:11
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 10:10:00 PM	Attended	—
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 10:00:00 PM	—	00:00:12
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 10:00:00 PM	Attended	—
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 9:50:00 PM	—	00:00:12
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 9:50:01 PM	Attended	—
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 9:40:00 PM	—	00:00:12
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 9:40:00 PM	Attended	—
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 9:30:00 PM	—	00:00:12
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 9:30:00 PM	Attended	—
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 9:19:59 PM	—	00:00:12
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 9:20:00 PM	Attended	—

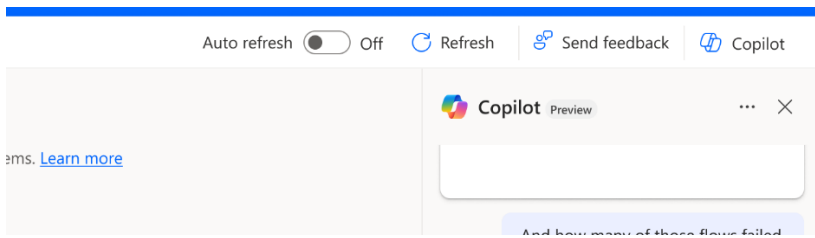
7. You can then select in the **run start** column, the run you want to investigate and you will be redirected to the run details page (that you already saw in the previous exercises).

Flow name	Flow type	Trigger type	Status	Run start ↓	R
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 10:10:00 PM	—
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 10:10:00 PM	A
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 10:00:00 PM	—
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 10:00:00 PM	A
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 9:50:00 PM	—
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 9:50:01 PM	A
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 9:40:00 PM	—
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 9:30:00 PM	A
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 9:30:00 PM	—
> Enter an invoice	Desktop flow	Instant/Manual	Failed	9/12/2024, 9:30:00 PM	A
Manual trigger desktop flow on hosted machine	Cloud flow	Scheduled	Failed	9/12/2024, 9:19:59 PM	—

8. The last tab available is for Work queues and help understand the usage across the different work queues in the environment. Click on **Work queues** tab to discover it.

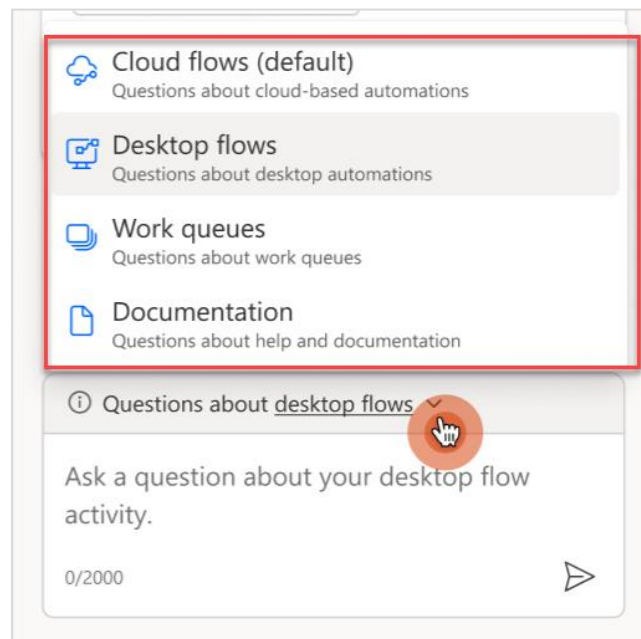


9. Let's now discover how you can monitor your automations with Copilot. In the right corner of the command bar, select **Copilot (preview)**



10. **Copilot (preview)** is designed to assist with the analysis of automation activity, work queue performance, and to provide answers to common questions about Power Automate capabilities (generative answers). Copilot in automation center can answer questions about the following four skills:

- Cloud flow run logs (by default, the "cloud flow" skill is preselected)
- Desktop flow run logs
- Work queue data
- Documentation



11. You can select one of the suggested questions or ask your own questions. For example, start by typing **What are my 2 latest runs that failed today.**

12. Copilot will provide you with a table showing you the latest failed runs.

What are my 2 latest runs that failed today

Here are the 2 latest cloud flow runs that failed today.

Error code	Cloud flow...	Starte...	Run s...
Action failed	Run with It	9/12/202...	Failed
Terminated	Precision engin...	9/12/202...	Failed

Open in new window

Show code

AI-generated content may be incorrect

13. You can select “Open in new window” to go through the results and browse the generated FetchXml code. If you want to [learn more about FetchXML](#).

Congratulations!
You have completed this Lab!

Check your knowledge

Lab 11

5 mins

1. Can you monitor your desktop flow runs in real-time?
 - A. Yes
 - B. No

2. What information do I get in case of a desktop flow failure?
 - A. Error details (error code, error message, input and output)
 - B. Screenshots
 - C. Links to the support documentation and a link to open the desktop flow script
 - D. Detailed timeline of the desktop flow execution
 - E. All the above

3. Can you have an overview of all the machines in the environment?
 - A. Yes
 - B. No

4. What are the different skills supported by Copilot in the automation center ?
 - A. Cloud flows / Desktop flows
 - B. Work queue
 - C. PowerApps
 - D. Documentation
 - E. All the above

Answer Key

1. Can you monitor your desktop flow runs in real-time?

- A. **Yes**
- B. No

Answer: **A.** The current runs tab in Desktop flow activity provides a real-time overview of all queued or running flows.

2. What information do I get in case of a desktop flow failure?

- A. Error details (error code, error message, input and output)
- B. Screenshots
- C. Links to the support documentation and a link to open the desktop flow script
- D. Detailed timeline of the desktop flow execution
- E. **All the above**

Answer: **E.** Desktop flow run details page provides advanced troubleshooting information and recommendation to help you understand the issue and quickly act to fix it.

3. Can you have an overview of all the machines in the environment?

- A. Yes
- B. **No**

Answer: **No.** Desktop flow activity respects the environment RBAC (role based access control), you can only see flow runs and machines you own or that have been shared with you. Note that if an admin uses Desktop flow activity, then yes, they have an overview of all flows and machines running in that environment.

5. What are the different skills supported by Copilot in the automation center ?

- A. **Cloud flows / Desktop flows**
- B. **Work queue**
- C. PowerApps
- D. **Documentation**
- E. All the above

Answer: A, B et D. Apps are not part of the Automation Center.

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