



User Manual of RPI Automated Heat Stress at Work Warning System

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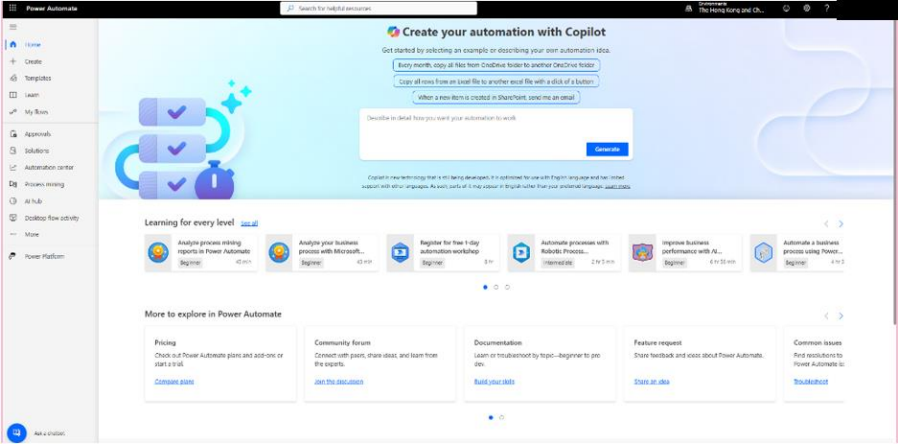
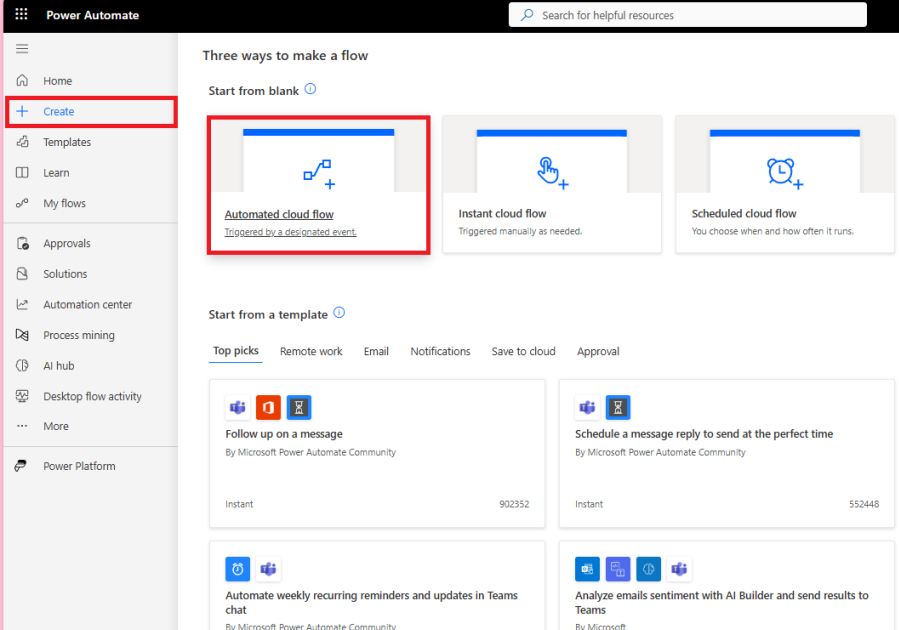
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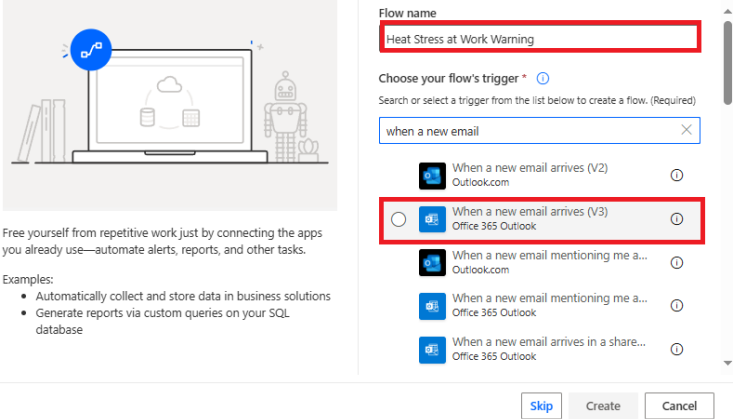
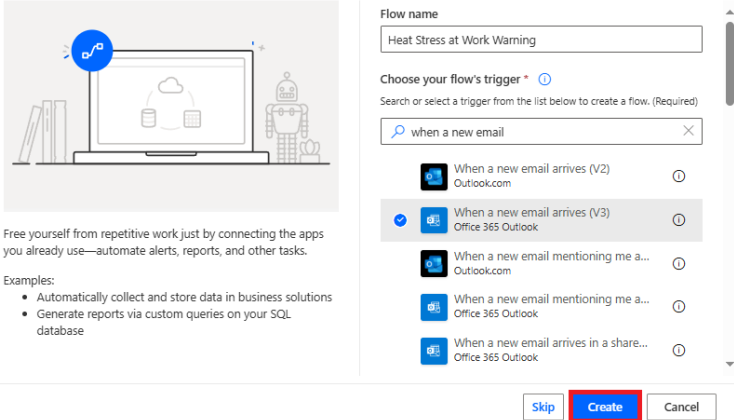
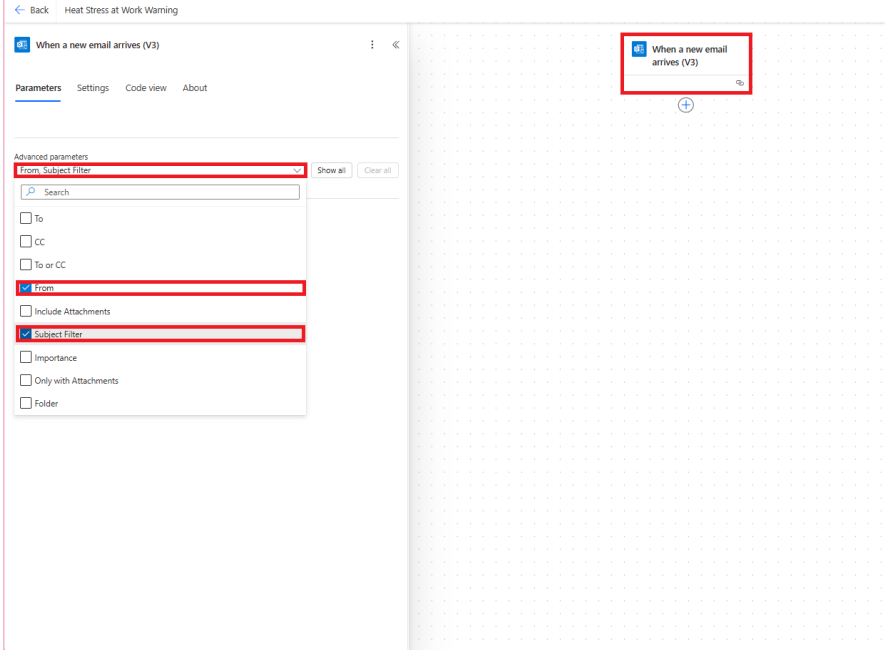
Objective

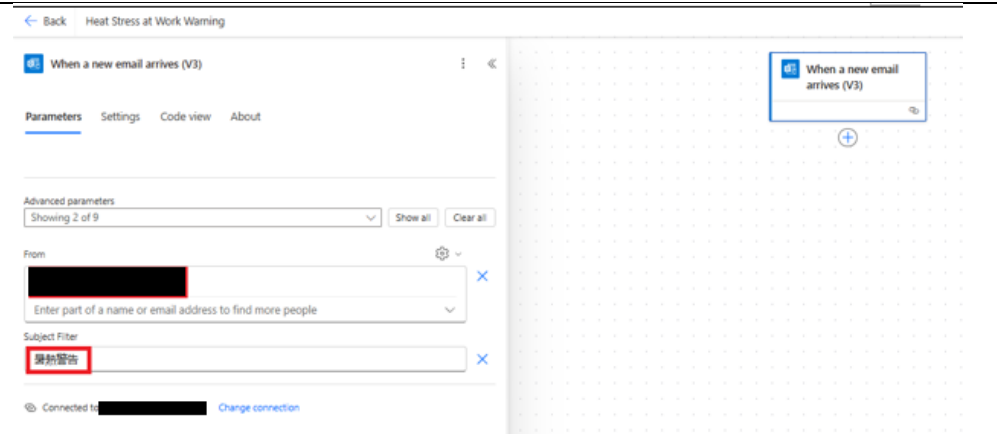
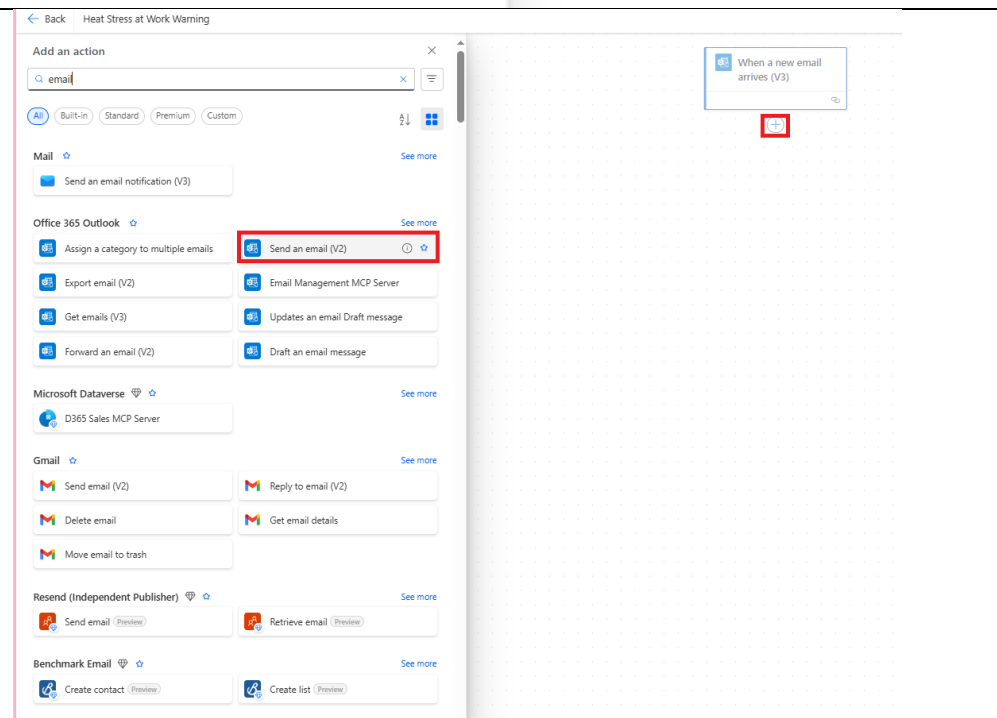
The Automated Heat Stress at Work Warning System aims to enhance the workplace safety by providing timely alerts to relevant stakeholders. When Hong Kong Labour Department issues a Heat Stress at Work Warning, the system will automatically:

- Notify contractors and engineers via email to ensure immediate awareness.
- Send WhatsApp notifications for rapid communication and accessibility.

Setup Instructions

Step	Action	Example
1.	Open the Power Automate (Web)	
2.	<p>Create a workflow</p> <p>I. Select “Create” on the left-hand side panel</p> <p>II. Select “Scheduled cloud flow” under “Start from blank”</p>	

<p>3.</p>	<p>Build the starting automated flow</p> <ol style="list-style-type: none"> I. Fill in “Flow name” II. Select “When a new email arrives(V3)” under “Choose your flow’s trigger” III. Click on “Create” 	<div>  </div> <div>  </div>
<p>4.</p>	<p>Setting up detection of email sent from HSE</p> <ol style="list-style-type: none"> I. Click on the “When a new email arrives(V3)” widget II. Select “From” and “Subject Filter” under “Advanced parameters” in the left-hand side panel III. Input XXX@towngas.com under “From” and “暑熱警告” under “Subject Filter” 	

		
5.	<p>Create the second action</p> <ol style="list-style-type: none"> Click on the add button below the previous action Find “Send an email(V2)” under “Add an action” <p><i>*Note it’s “Send an email(V2)” instead of “Forward an email(V2)” which could be classified as spam by system</i></p>	

6.

Set up the Content of Automated Sent Warning Emails

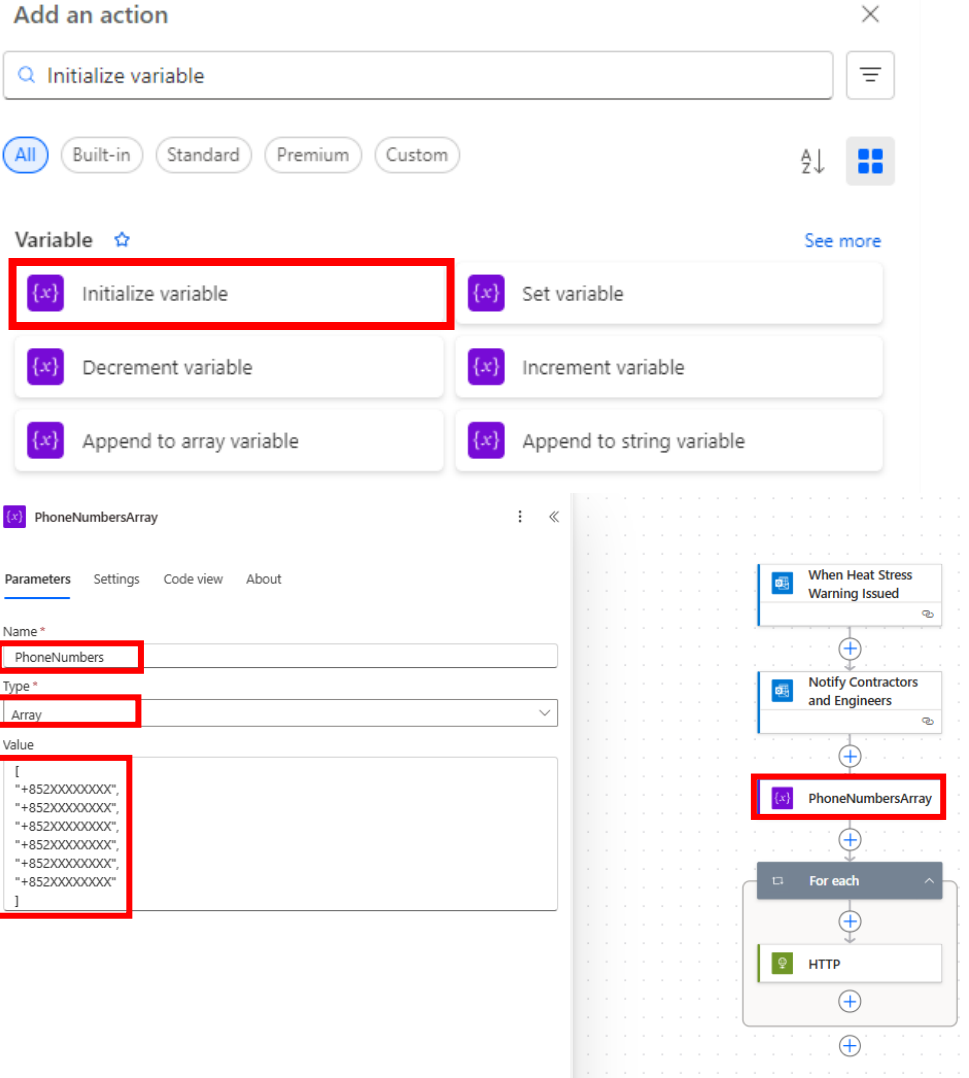
- I. Add the desired recipients under “To” in the action panel
- II. Input “/” under “Subject” and “Body” then select “Insert dynamic content” in the pop-up panel
- III. Select the respective dynamic content for email’s “Subject” and “Body”

The image displays three sequential screenshots of a workflow configuration interface for sending an automated email.

Top Screenshot: The 'Send an email (V2)' action is configured. The 'To' field is populated with a redacted email address. The 'Subject' and 'Body' fields contain a forward slash (/). A red box highlights the 'Subject' field, and another red box highlights the 'Body' field. The 'Insert dynamic content' pop-up menu is visible, showing options for 'Insert dynamic content' and 'Insert expression'.

Middle Screenshot: The 'Insert dynamic content' pop-up menu is shown. The 'Subject' and 'Body' fields are selected, and the 'Subject' field is highlighted with a red box. The 'Subject' field is labeled 'Subject' and the 'Body' field is labeled 'Body'.

Bottom Screenshot: The 'Send an email (V2)' action is configured. The 'To' field is populated with a redacted email address. The 'Subject' and 'Body' fields are populated with dynamic content, indicated by the red boxes around the 'Subject' and 'Body' fields.

7.	<p>Set up the content of phone number list</p> <p>I . Add “Initialize variable” action next to “Notify Contractors and Engineers” aka Send an Email (V2).</p> <p>II . Set the name to “Phone Numbers”, Type be Array, Value be phone numbers of all contractor and engineers e.g. [“+85212345678”].</p>	 <p>Add an action</p> <p>Initialize variable</p> <p>All Built-in Standard Premium Custom</p> <p>Variable ☆ See more</p> <ul style="list-style-type: none"> Initialize variable Set variable Decrement variable Increment variable Append to array variable Append to string variable <p>PhoneNumbersArray</p> <p>Parameters Settings Code view About</p> <p>Name * PhoneNumbers</p> <p>Type * Array</p> <p>Value</p> <pre>["+852XXXXXXXX", "+852XXXXXXXX", "+852XXXXXXXX", "+852XXXXXXXX", "+852XXXXXXXX", "+852XXXXXXXX"]</pre> <p>Workflow diagram:</p> <pre> graph TD A[When Heat Stress Warning Issued] --> B[Notify Contractors and Engineers] B --> C[PhoneNumbersArray] C --> D[For each] D --> E[HTTP] </pre>
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8.

Set up the WhatsApp Notification

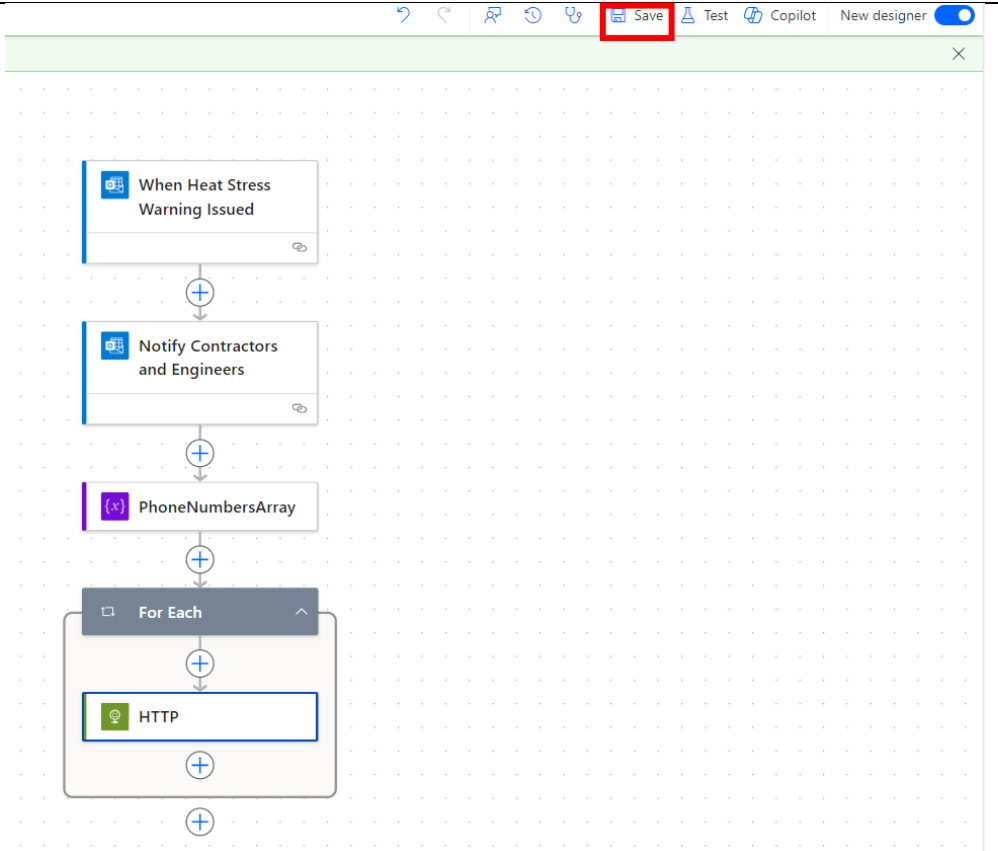
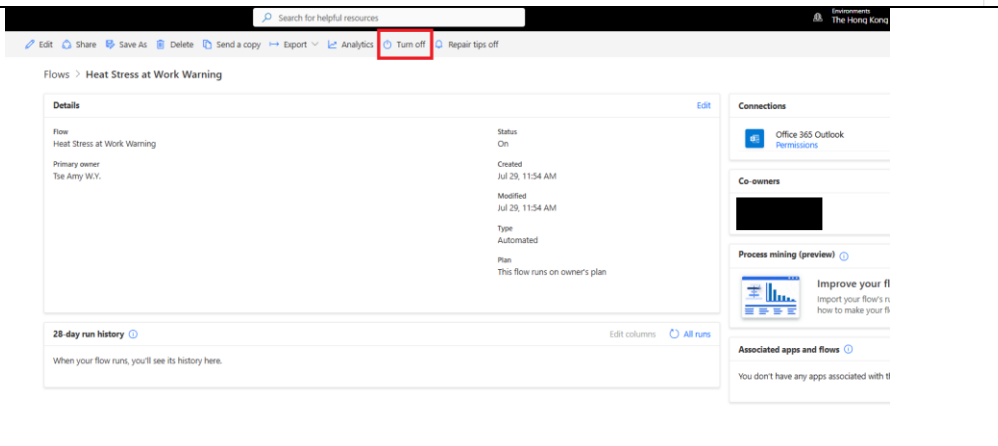
I . Add “Apply to each” and “HTTP” actions next to PhoneNumbersArray action.

II . Configure HTTP action as shown in the image

The screenshot displays a workflow configuration in a visual editor. At the top, a 'PhoneNumbersArray' variable is connected to a 'For Each' loop. Inside the loop, an 'HTTP' action is configured with the following details:

- URI:** `https://graph.facebook.com/v22.0/801932832993701/messages`
- Method:** POST
- Headers:**
 - Authorization:** Bearer `EAAVZB01cPJN4BPHrNLzB7pQ4NQzlFgjabGcnwz6xBnLt1dSgfk8XOoneBcUJJC6vkolHoNz8wzgMnGEUEuKsEBPEnUkGvDyILIQHpE51aLmHQbRcAFsNluptlgAxFtGld7J4jSpmqa9h6A88Kfmlr0nBxZA3VSaV0TDT88t8dQZB4g1PIEkuuZBX9QufAZDZD`
 - Content-Type:** application/json
- Queries:** (Empty)
- Body:**

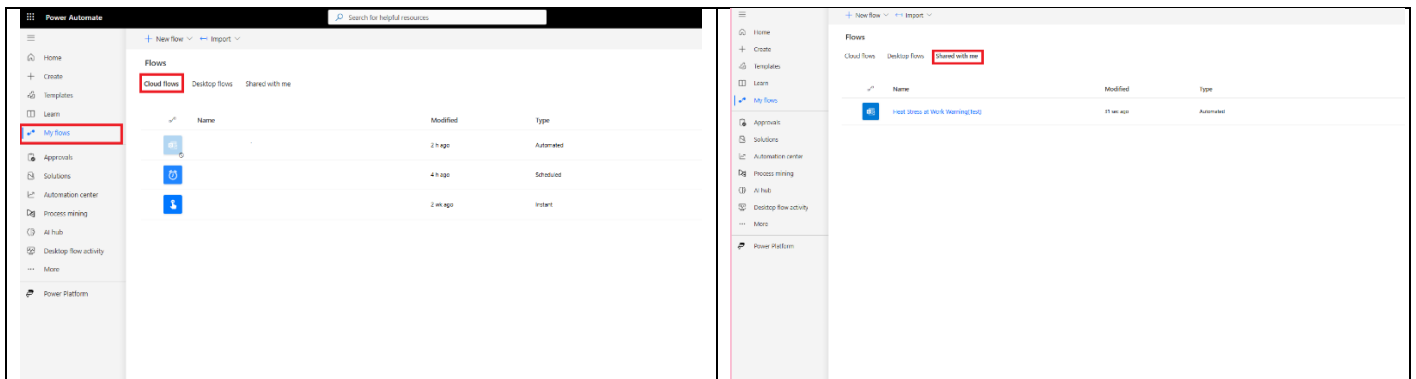
```
{
  "messaging_product": "whatsapp",
  "to": "Current item X",
  "type": "template",
  "template": {
    "name": "heat_warning",
    "language": {
      "code": "zh_HK"
    }
  }
}
```

9.	Click “Save” after finishing the previous steps	
8.	The workflow would be automatically turned on after being saved	

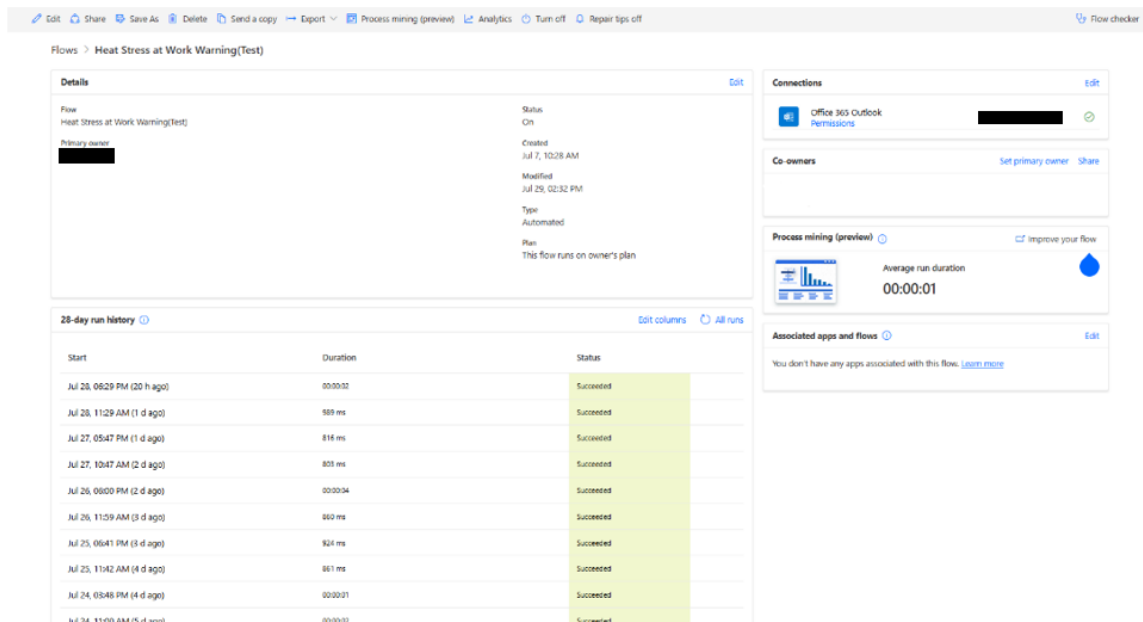
Maintenance

Monitoring

To check your flow's status, navigate to 'My flows' in the left panel. Your created flow will appear either in 'Cloud flows' (for personal web-created flows) or 'Shared with me' (for collaborative flows with multiple owners).



After selecting the flow, the Flow Overview is shown, you'll see its current status including when alerts were last sent, average delivery time, and activation status (on/off), etc.



Co-owner

You can add co-owner in the Flow Overview by clicking the “Share” button in the Flow Overview.

[Analytics](#) [Turn off](#) [Repair tips off](#) [Flow checker](#)

Edit

Status

On

Created

Jul 7, 10:28 AM

Modified

Jul 29, 02:32 PM

Type

Automated

Plan

This flow runs on owner's plan

Edit columns

All runs

Status

Succeeded




Succeeded

Succeeded

Succeeded

Connections



Edit

 Office 365 Outlook Permissions  

Co-owners

[Set primary owner](#) [Share](#)

Process mining (preview)

 Average run duration 00:00:01 

[Improve your flow](#)

Associated apps and flows

Edit

You don't have any apps associated with this flow. [Learn more](#)

←

Heat Stress at Work Warning(Test)

Edit

Co-owners

Adding an owner gives them full control of this flow, so make sure you only share with people you trust. They'll be able to add or remove other users as owners, access the run history, and can update, edit or delete this flow.
 [Learn more](#)

Add a user or group as owner

Embedded connections

Everyone listed as an owner will have access to all these connections and will only be able to use them in this flow.
 [Learn more](#)

Connections in use

Connections listed are actively being used in this flow. [Manage connections](#)

Office 365 Outlook

×

Office 365 Outlook

×

Update Connection

To alter the sender of the warning email. You may click “Edit” on the Flow Overview Page.

Edit

Share

Save As

Delete

Send a copy

Export

Process mining (preview)

Analytics

Turn off

Repair tips off

Flows > Heat Stress at Work Warning(Test)

Details

Flow

Heat Stress at Work Warning(Test)

Status

On

Primary owner

Created

Jul 7, 10:28 AM

Modified

Jul 29, 02:32 PM

Type

Automated

Plan

This flow runs on owner's plan

28-day run history

Edit co

Start	Duration	Status
Jul 29, 06:20 PM (20 h 20 m)	00:00:00	Succeeded

After opening the editing panel of the flow, click the “Send an email(V2)” widget. Then click the “Change connection” button at the bottom of the action panel.

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Power Automate

Search for helpful resources

BackHeat Stress at Work Warning(Test)

Send an email (V2)

ParametersSettingsCode viewTestingAbout

Enter part of a name or email address to find more people

Subject *

Subject X

Body *

Normal Arial 15px B I U A E C

Body X

Advanced parameters

Showing 0 of 7

Show allClear all

Connected to

Change connection

When a new email arrives (V3)

Send an email (V2)





Select the desired sender or add a new connection by signing in that person's account.

← Back Heat Stress at Work Warning(Test)

Change connection

Send an email (V2)

Select an existing connection or create a new one

Status	Display name	Details
		...
		...

[Add new](#) [Cancel](#)

When a new email arrives (V3)

Send an email (V2)

Create connection

Send an email (V2)

Create a new connection

Sign in to create a connection to Office 365 Outlook.

[Sign in](#) [Cancel](#)

When a new email arrives (V3)

Send an email (V2)