

## 1. Workflow: Access Token & Refresh Token and Username Creation

This workflow generates Access and Refresh token using Authorization code. It also creates Username for accessing Philips Hue resources.

Kindly refer for complete Remote Authentication OAuth2.0 process at <https://developers.meethue.com/develop/hue-api/remote-authentication-oauth/>

### Requirements

- Philips Hue Bridge and Philips Hue smart light
- Register your application i.e. SecureX in Philips Hue developer account - <https://developers.meethue.com/> (create one if doesn't exist). Note down client id and client secret.
- Get authorization code by typing below URL in any web browser:  
[https://api.meethue.com/v2/oauth2/authorize?client\\_id=<client\\_id>&response\\_type=code&state=<any\\_string>](https://api.meethue.com/v2/oauth2/authorize?client_id=<client_id>&response_type=code&state=<any_string>)

This will redirect to the meethue login portal for a user to grant permissions to the resources. Once you allow permission, it will be redirected to URL you mentioned while registering application (SecureX). That redirected link will have authorization "code". Note down authorization code.

### Workflow Steps

1. Take input – “Authorization code”
2. Create Access token and Refresh token
3. Filter access token and refresh token value from JSON output
4. Add these values to Global Variables “Philips Hue – Access Token” and “Philips Hue – Refresh Token” respectively.
5. Enable “link button” on Philips Hue bridge
6. Create Username
7. Extract username from output
8. Set Global Variable “Philips Hue – Userid” with username value.

### Configuration

- Create following Global Variables
  - “Philips Hue – Access Token”
  - “Philips Hue – Refresh Token”
  - “Philips Hue – Client ID”
  - “Philips Hue – Client Secret”
  - “Philips Hue – Userid”
- Set “Philips Hue – Client ID” and “Philips Hue – Client Secret” global variable with values obtained while registering application on Philips Hue developer account as stated in “Requirements” section.

## Targets

Target Group: `Default TargetGroup`

<b>Target Name</b>	<b>Philips Hue - OAuth2 Authentication</b>
No Account keys	True
Protocol	HTTPS
Host	api.meethue.com
Path	/v2/

<b>Target Name</b>	<b>Philips Hue Target for Username &amp; Light control</b>
No Account keys	True
Protocol	HTTPS
Host	api.meethue.com
Path	/route/api/

Note: If you use a self-signed certificate, disable certificate validation on the target

## 2. Refreshing Access token and Refresh Token

This workflow will refresh Philips Hue API access token and refresh token before 7 days. Access token is valid only for 7 days. Hence it needs to be refreshed before 7 days. This workflow is scheduled to run on every Sunday and Wednesday.

This workflow will use already created Refresh Token in "Philips Hue - Access Token & Refresh Token and Username Creation" workflow.

### Requirements

- The following [system atomics] are used by this workflow:
  - Webex - Search for Room
  - Webex - Post Message to Room
- The following workflow must be run before running this workflow:
  - "Philips Hue - Access Token & Refresh Token and Username Creation"
- (Optional) Cisco Webex

### Workflow Steps

1. Refresh Access token and Refresh Token by using previously generated Refresh token and Client ID & Client Secret
2. Extract Access token and Refresh Token value from JSON output
3. Set Global Variables "Philips Hue - Access Token" and "Philips Hue - Refresh Token" with these values.
4. Send Webex team message for successful refresh. (Optional)

## Configuration

- This workflow needs a schedule trigger that helps to run on every Sunday and Wednesday.
  - Create recurring calendar 'Twice a week' that repeats action on every week on Sunday and Wednesday.
  - Create schedule - 'Philips Hue - Refresh Access Token' that runs workflow on 'Twice a week' calendar at 9am.
  - Create a schedule Trigger 'Twice a week' that utilizes 'Philips Hue - Refresh Access Token' schedule.
- Kindly refer below page for information on configuring the workflow for Webex <https://ciscosecurity.github.io/sxo-05-security-workflows/atomics/configuration/webex#configuring-our-workflows>

## Targets

Target Group: `Default TargetGroup`

Target Name	Philips Hue - OAuth2 Authentication
No Account keys	True
Protocol	HTTPS
Host	api.meethue.com
Path	/v2/

Target Name	Webex Teams	Not Necessary if Webex activities are removed
No Account keys	True	
Protocol	HTTPS	
Host	webexapis.com	
Path	None	

## 3. Philips Hue - Light Control

This workflow will change light color to red.

This workflow can be used as notification method for critical events like threat/attack finding in network. It will turn on light with Red color to notify concern team/SOC or IT head about threat detection in network. Visual alert is more effective as compared to email alert.

This workflow can be used in any threat detection workflow or any workflow that requires attention.

## Requirements

- This workflow requires valid access token and username. Hence it is important that below workflows are executed before this workflow.
  1. Philips Hue - Access Token & Refresh Token and Username Creation
  2. Philips Hue - Refreshing Access Token & Refresh Token

- Philips Hue Bridge and smart multi color light
- This workflow requires smart light ID number that needs to be controlled. Kindly refer below URL to get smart light ID: <https://developers.meethue.com/develop/get-started-2/>
- The [targets](#targets) listed at the bottom of the page

## Workflow Steps

1. Get all smart light status
2. Change smart light color to Red.

## Configuration

None

## Targets

Target Group: `Default TargetGroup`

Target Name	Philips Hue Target for Username & Light control
No Account keys	True
Protocol	HTTPS
Host	api.meethue.com
Path	/route/api/