

# Setup SOP about node-red-contrib-edgetpu-inference 1.0.1

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1. Download the node-red-contrib-edgetpu-inference.zip

2. Open the terminal

3. unzip the node-red-contrib-edgetpu-inference.zip

```
unzip node-red-contrib-edgetpu-inference.zip
```

4. Install the environment for Shenzhou and Node-red

```
cd node-red-contrib-edgetpu-inference
```

```
./install_requirements.sh
```

- If the environment for Shenzhou and Node-red have been installed and want to update the packages of node-red-contrib-edgetpu-inference only, please run the following commands:

```
cd node-red-contrib-edgetpu-inference
```

```
sh ./reinstall_node-red-edgetpu.sh
```

5. Reboot the system

6. Check the Shenzhou work normally

```
ls -l /dev/apex_*
```

If the return value isn't empty, the Shenzhou work normally

7. Open the terminal and Open the node-red by the following command:

```
cd ~/.node-red
```

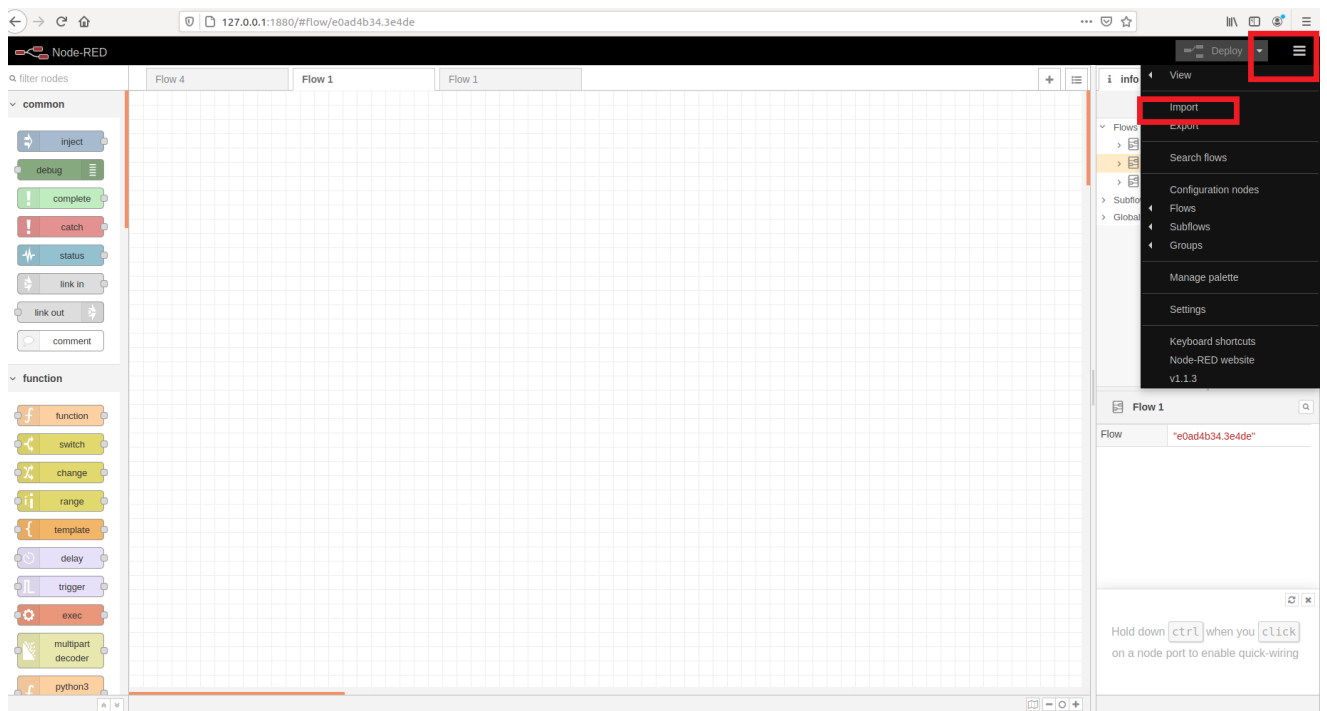
```
node-red
```

8. copy the link "http://127.0.0.1:1880 (<http://127.0.0.1:1880>)" to web browser

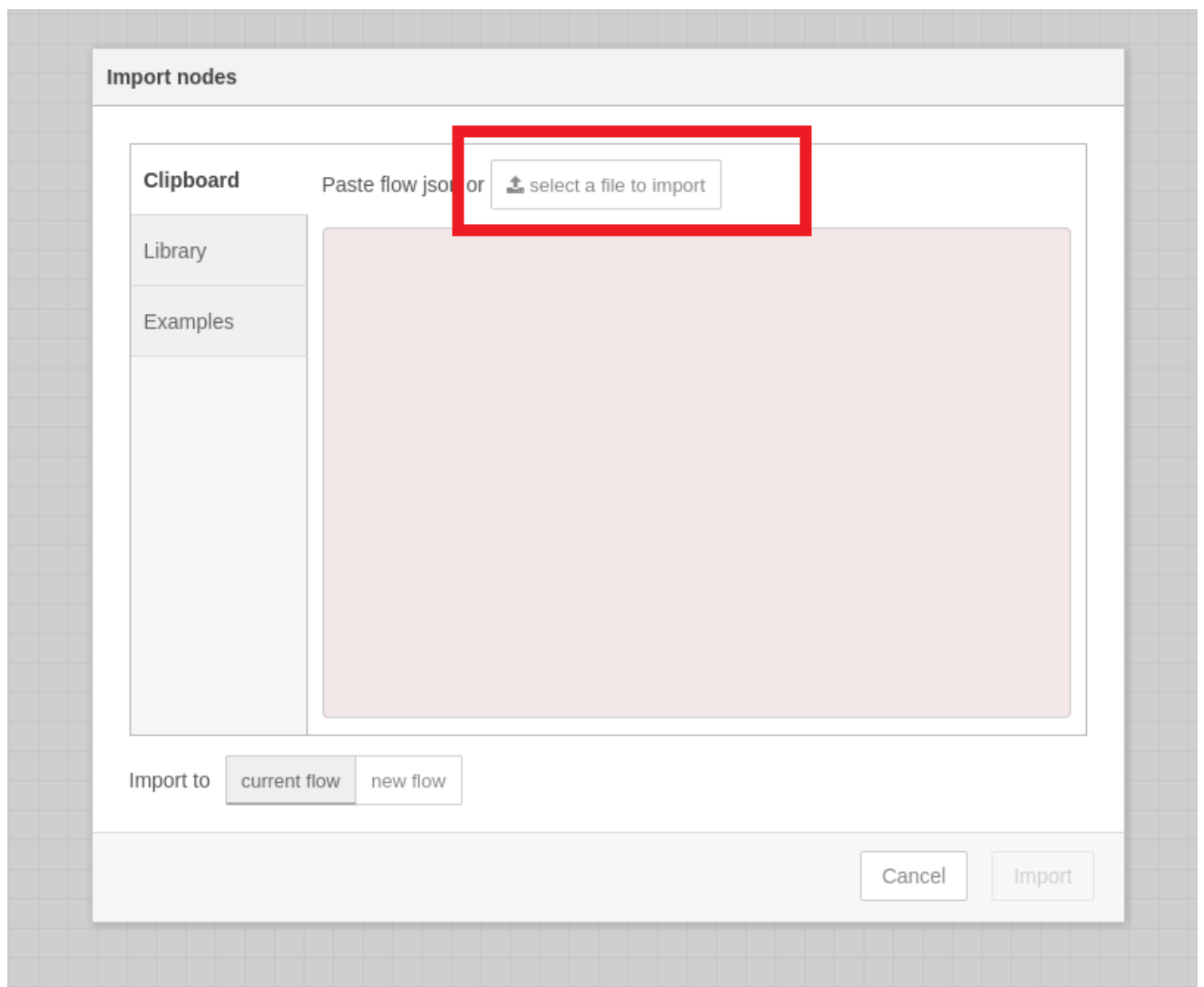
9. You can look the following screen and import the example flow by the following steps:

- Example 1: Object Detection by EdgeTPU

a. Select the menu -> import item



b. Click the button "select a file to import" and select node-red-contrib-edgetpu-inference/exmaples/Inference\_by\_TPU\_example\_flow.json



c. Click the import button

Import nodes

Clipboard

Paste flow json or

Library

Examples

```
[{"id": "ff098c0f.98ad18", "type": "tab", "label": "Flow 4", "disabled": false, "info": ""}, {"id": "b9978474.295c4", "type": "ui_template", "z": "ff098c0f.98ad18", "group": "flac26b3.3872c8", "name": "Display image", "order": 1, "width": "6", "height": "6", "format": "<img width=\\"640\\" height=\\"480\\" alt=\\"stream test\\" src=\\"data:image/jpeg;base64,{msg.payload}\\\" />\n", "storeOutMessages": true, "fwdInMessages": true, "resendOnRefresh": false, "templateScope": "local", "x": 1100, "y": 320, "wires": [[]]}, {"id": "c50eb773.ecf8e8", "type": "python3-function", "z": "ff098c0f.98ad18", "name": "", "cameranode": "0", "modelpath": "/home/asus/Desktop/edgetpu/test_data/mobilenet_ssd_v2_coco_quant_postprocess_edgetpu.tflite", "labelpath": "/home/asus/Desktop/edgetpu/test_data/coco_labels.txt", "func": "counter=0\njson_strings2=\n\\\"{\n    \"objects\": [\n        \\\"{\n            print(\npython3 function=====med)\n        }\n    ]\n}\nfor obj in objs:\n    box = obj.bounding_box.flatten().tolist()\n    json_strings2= json_strings2 + \\\"{\n                    {\n"
```

Import to

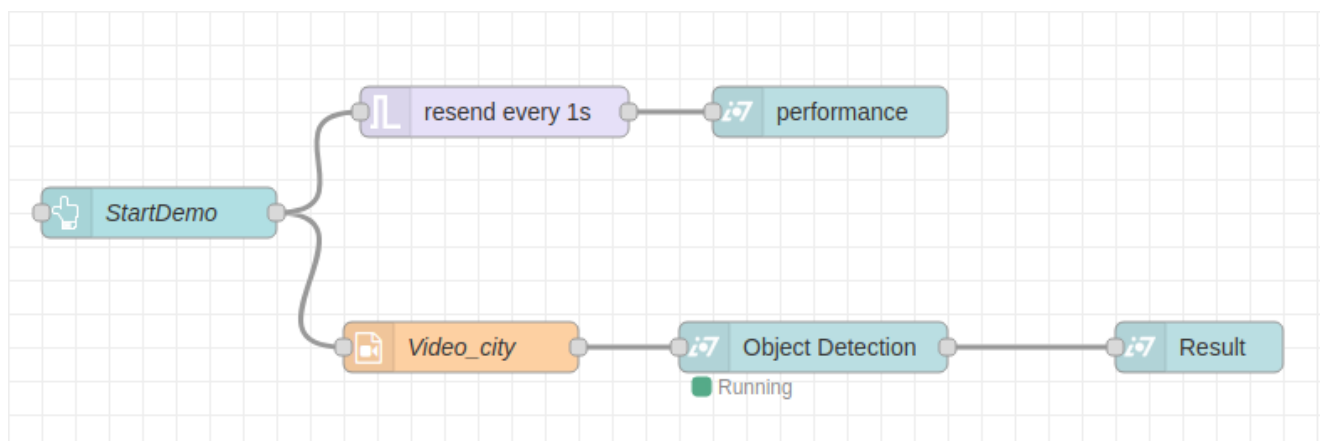
current flow

new flow

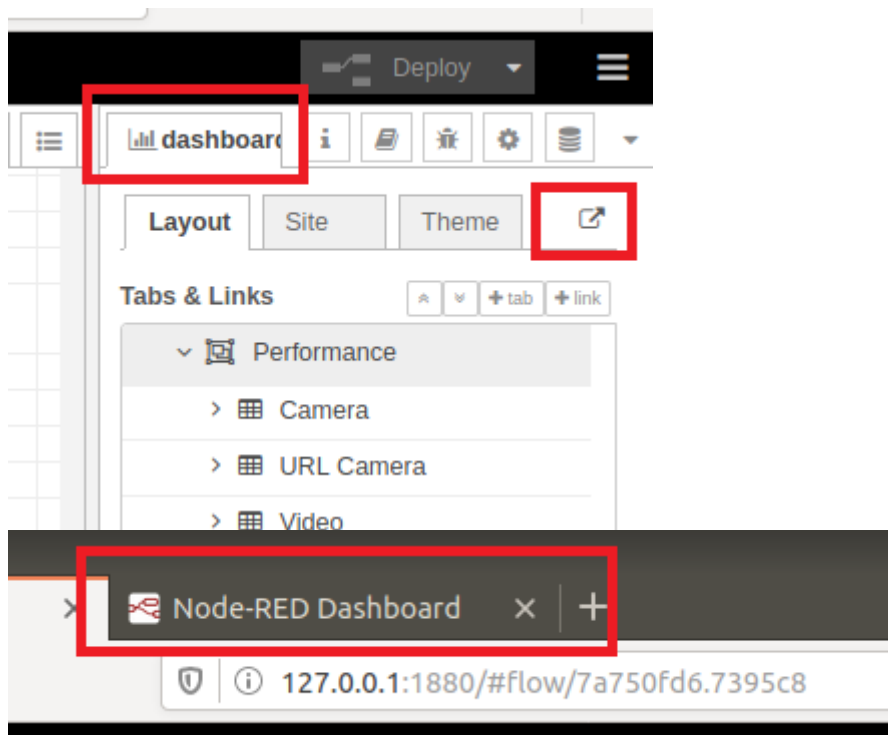
Cancel

Import

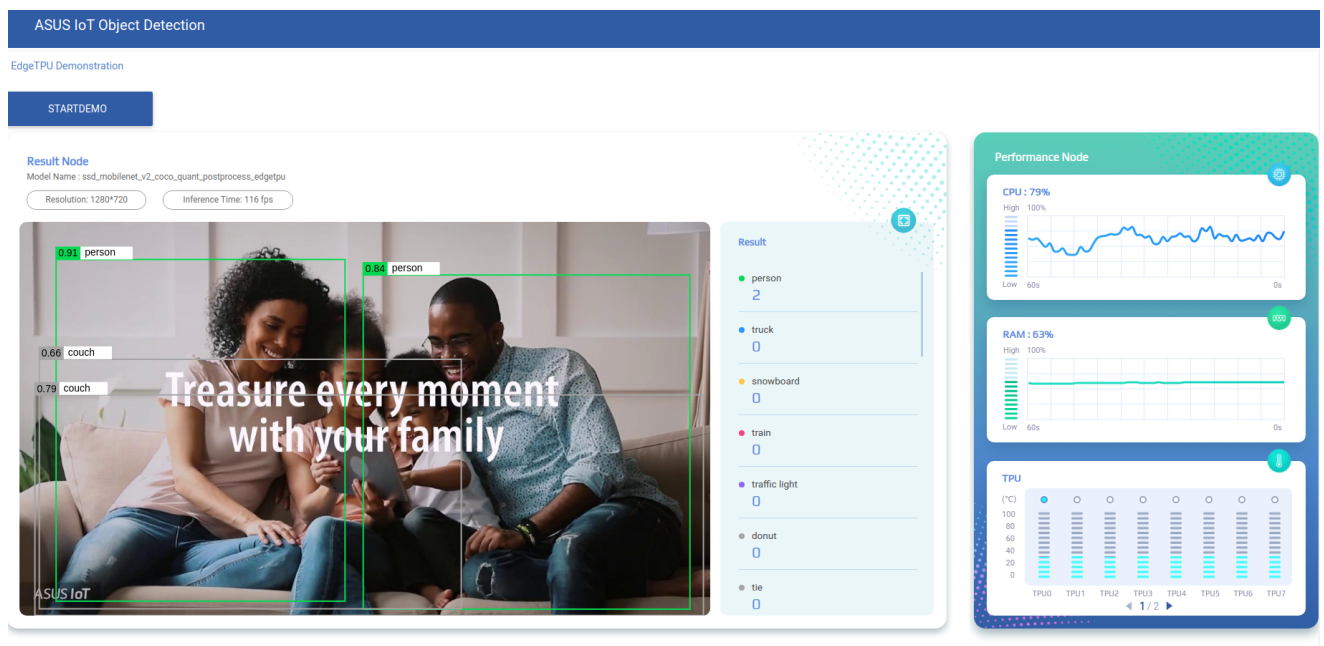
d. Chck the example flow and click the Deploy button



e. Click the dashboard menu and open the web tab of dashboard

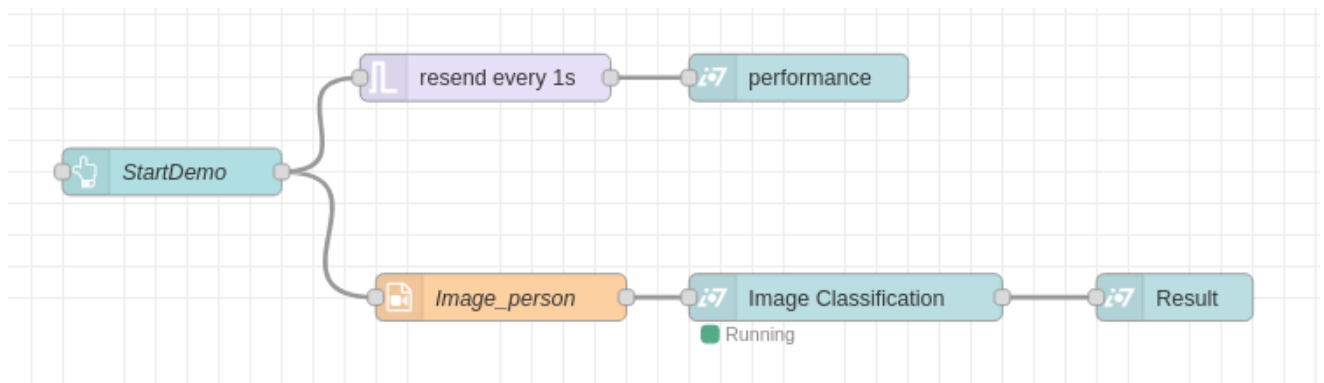


f. Check the following dashboard information and click the “StartDemo” button. You will look at the following results:

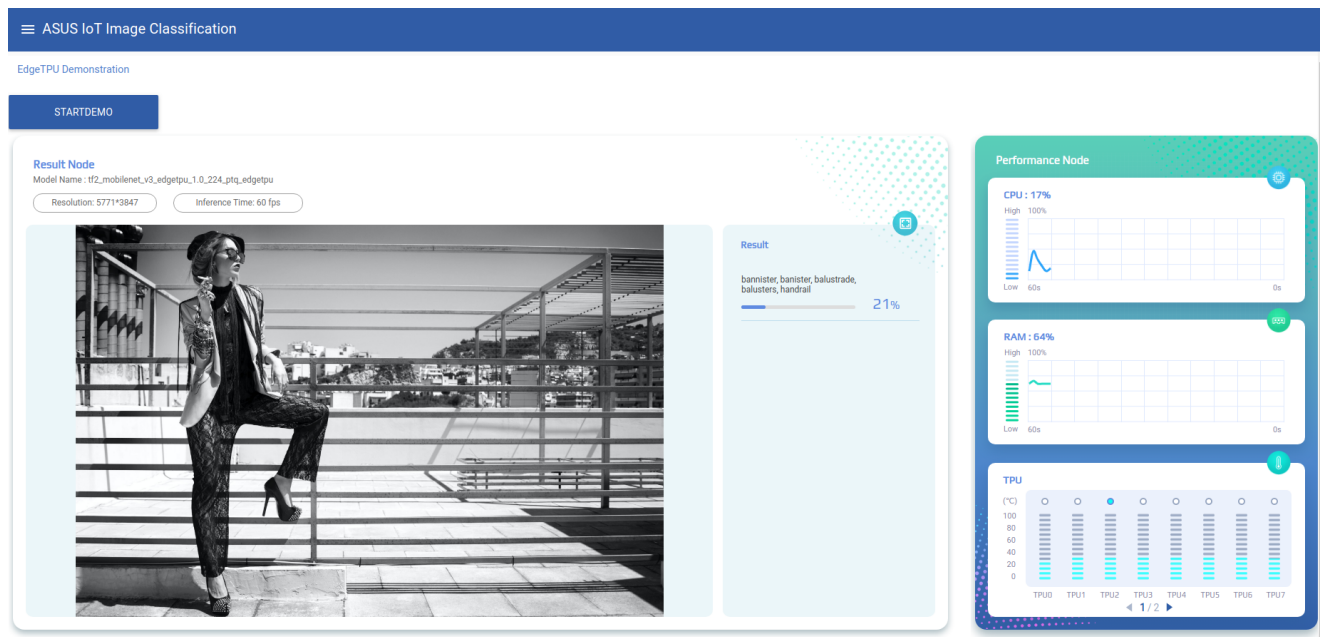


- Exmaple 2: Image Classification by EdgeTPU

a. Click the button “select a file to import” and select node-red-contrib-edgetpu-inference/exmaples/Inference\_by\_TPU\_example\_flow\_for\_image.json



b. Check the following dashboard information and click the “StartDemo” button. You will look at the following results:



- Example 3: Parse “Person” label for multiple sources to multiple EdgeTPU
  - a. Click the button “select a file to import” and select node-red-contrib-edgetpu-inference/exmaples/Inference\_by\_multiple\_source\_to\_multiple\_EdgeTPU.json and click the “Start” button. You will look at the following results

