WALKOFF
Beginner Workflow

1. Navigate to *www.virustotal.com*, go to sign in located at the upper right-hand corner. If you already have an account, sign in. If not, click on the bottom left corner labeled *"New? Join the community"* and create an account.

2. Once you have an account and are logged in, click on your account in the top right and then click 🔑 *api key* and generate a new key if you don't already have one.
   Note: Keep this page open as you'll need the api key for the workflow we develop

3. Go back to your Walkoff webpage and click on the applications ■ tab.

4. Find the *"basics"* app and click on *"</> edit application"*

5. On the left pane select app.py and at line 7 insert this line:

   ```
   import requests
   ```

6. Scroll down to line 75 and insert this code snippet:

   ```
   @staticmethod
   def _pretty_print(some_dict):
       pretty = json.dumps(some_dict, sort_keys=False, indent=4)
       return pretty
   async def ip_lookup(self, ip, apikey):
       url = 'https://www.virustotal.com/vtapi/v2/ip-address/report'
       parameters = {'ip': ip, 'apikey': apikey}
       response = requests.get(url, params=parameters)
       response_dict = response.json()
       pretty = self._pretty_print(response_dict)
       await self.console_logger.info(pretty)
   ```

7. Now, save this file by either typing ctrl-S or scrolling to the top of the page and clicking the save icon in the toolbar.

8. Click on *"api.yaml"* also located in the left panel and scroll to the bottom and insert this at line 97 then save this file:

```
- name: ip_lookup
  description: Look up an IP in VT database
  parameters:
    - name: apikey
      schema:
        type: string
      required: true
      description: enter api key
    - name: ip
      schema:
        type: string
      required: true
      description: enter ip address
  returns:
    schema:
      type: object
```

9. Finally, navigate to the *requirements.txt* file and at line 2 add this snippet

```
requests
```

10. *Save* the application and then scroll to the top and click *Rebuild Image*. This will display the umpire build logs for the application and will show a green "toaster message" at the bottom right of the page if the build was successful.

11. Navigate to the Workflows tab and click on *"Create New"* and enter your own Workflow Name (we suggest naming it virus_total and no need to worry about permissions for this one) and click *"Continue."*

18. You're probably wondering why we haven't added anything to the api_key argument, the answer is that we're going to add an encrypted global variable.

19. Click on the bottom tab ☰ and select *"globals",* then click *"Create New."* Name it anything you'd like (we suggest naming it api_key) and under value, delete the brackets "{}" and replace it with the key you created at the very beginning of this guide then click *"save".*

20. We now have a global variable and we're going to replace the missing field in the ip_lookup action. Once you clicked on *ip_lookup,* under Apikey you can select Global and, on the right, add your newly created Global Variable.

21. Now you're finished with your Workflow! Don't forget to click save and then press play in the top toolbar and watch your workflow execute.

12. On the left panel, find the *"basics"* app and place the *"echo_json"* action into the workflow. Navigate to the bottom bar ☰ and click the local tab.

13. Click *"Create New"* and name it anything you'd like but something you'll remember, and in the Default Value box, replace the brackets "{}" with this code snippet.

```
{
    "destination": {
        "ip": "8.8.8.8"
    }
}
```

14. Then, minimize the bottom bar ☰ by clicking the local tab. Replace your *"echo_json"* data argument with your newly created local variable. (From the drop down select local, and on the right select your newly created variable).

15. Next, from the *"Builtin"* app, add a *Transform* to your workflow and connect it to your *"echo_json"* action. In the text box, add this code snippet:

```
result = echo_json.result.get("destination").get("ip")
```

16. Finally, under the *"basics"* app place the *"ip_lookup"* action into your workflow. Connect it to the end of your transform.

17. Click on the *"ip_lookup"* action and on the right panel under the ip argument, click the drop down button and select action_output, directly to the right of this you should now be able to select *"Transform"*.