

PWC

ThousandEyes Script - Functional Specification



## Change Control

<b>Title:</b>	ThousandEyes Configuration Script
<b>Version:</b>	1.0
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<b>Created by:</b>	Helmut Heise
<b>Confidentiality level:</b>	Confidential

## Version History

Date	Version	Created By	Description of Change
September 22, 2023	0.1	Daniela Magallan	Initial Draft
September 22, 2023	0.1	Amy Arana	Review
September 25, 2023	0.2	Helmut Heise	
September 26, 2023	0.3	Daniela Magallan	

## Resources

The following parties are involved in the engagement.

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## Description

This document serves as the functional specification for the script delivered by ThousandEyes to Home Depot



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## Introduction

### Purpose

The purpose of this document is to provide a functional specification on the script created by ThousandEyes Professional Services for PWC.

The goal of the script is as follows:

- Script will read the labels of configured and shared tests from all account groups and then will configure the same labels in the account groups where the tests are being shared. This will ensure that the labels in the recipient account groups match the labels in the original account group.

## ThousandEyes Solution

### Overview

The following sections describe all deliverables involved for the solution.

### Solution Components

The three main components involved in this solution are described in the sections below

#### Python Script(s)

The script involved in this solution has been written in Python, using 3.11.5 as the target version. The script was developed using Visual Studio Code IDE on Windows 10 and MacOS platforms. Testing of the scripts was performed on Python 3.7.11, 3.9.13 and 3.11.5.

```
>pip3 install requests  
>pip3 install openpyxl
```

#### Openpyxl

##### *Purpose*

Openpyxl is a Python library to read/write Excel 2010 xlsx/xlsm/xltx/xltn files.

#### Requests



### Purpose

Requests allows you to send HTTP/1.1 requests extremely easily. Which in this case will allow us to interact with the Thousandeyes API.

## Script Configuration Flow.

### Initial Configuration

#### 1. On the Main.py file:

**In order to start any operation please issue an organizational admin user OAuth Token.**

If you are still not sure how to do that, please refer to:

<https://docs.thousandeyes.com/product-documentation/user-management/rbac/working-with-a-ccount-settings#user-api-tokens>.

Once you have a valid OAuth Bearer token, please open the Main.py file and change the value of the OAUTH variable. It should look something like:

```
#Variables & Constants####  
OAUTH = "XXXXXXXXXXXXXXXXXXXXX"  
FILE_PATH = ""  
HEADERS = {'Content-Type': 'application/json', 'Authorization': 'Bearer ' + OAUTH}  
#####
```

#### 2. Execution

Execute the script with the following command (Python's environment variable must be configured):

```
Unset  
python3 Main.py
```

The script will prompt you to choose one of the following options:

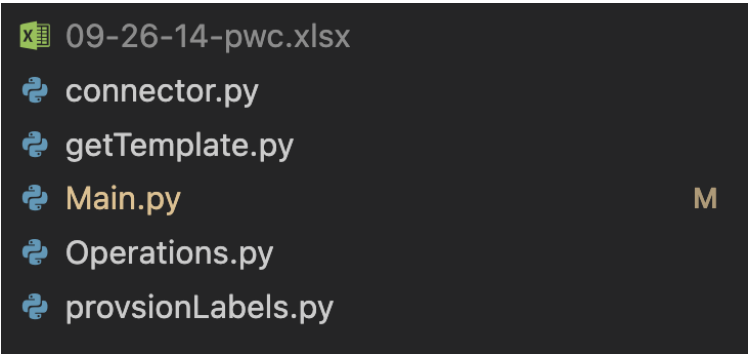


```
Hi, select the action you want to perform:
1. Get template
2. Bulk labels
7. Quit
Enter the function number (1, 2 or 7):
```

Select option 1

3. After execution

The script pulls the shared tests and the parent account group mapped labels and will create an excel file in the base directory.



4. Option 2 (Provisioning Labels)

Once you generate the template with option 1, open the generated file and please copy and paste the row's you would like to configure from the Report's Tab to the Deploy's Tab.

Organization	Account group	Type	Name	TestID	Enabled	Shared with	Labels
PWC	Dani's sandbox	ftp-server	FTP test	3368535	FALSE	Testing	
PWC	Dani's sandbox	http-server	Getting Started	3015887	FALSE	Switching team, Testing	Testing, PWC

Then, go back to the script on the Main.py file and replace the value of the FILE\_PATH variable with the name of the latest generated excel file. This is a must to start the provisioning option. The script should look something like:



```
#Variables & Constants####  
OAUTH = "XXXXXXXXXXXXXXXXXXXXX"  
FILE_PATH = "09-21-15-pwc.xlsx"  
HEADERS = {'Content-Type': 'application/json', 'Authorization': 'Bearer ' + OAUTH}  
#####
```

Save the last modifications and run the script again with the same command:

```
Unset  
python3 Main.py
```

When the menu appears select option 2 and the labels provisioning will begin. As soon as the script finishes you will recover control on the console. Go back to the ThousandEyes platform and refresh the page to see the changes made.

## Errata

### When doing a request

This script automatically generates a log file on the same path where the script is running. These logs are intended to show if the Label and the Test is created or if the script couldn't create the label or retrieve the tests and labels for the template.

Where the log file format is made up of the ThousandEyes API call status codes:

200 - information retrieved successfully  
201 - Label created and Test mapped  
400 - Label and / or Test could not be created / mapped

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Name	Version	License
openpyxl	3.0.10	MIT License

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Name	Version	License
requests	2.31	Apache License

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