



CVS Health

ThousandEyes Script - Functional Specification



Change Control

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Created by:	Helmut Heise
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Version History

Date	Version	Created By	Description of Change
January 24, 2024	0.1	Helmut Heise	Initial Draft
January 26, 2024	0.1	Amy Arana	Review

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 CVS Health



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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 CVS Health

The goal of the script is as follows:

- Have the capability to change the target of the tests to mitigate the F5 issues that have been arising
- Have the agent pull a local agent file. The script is created to live outside a docker container but in the same server(s) the agent container lives.
 - File will be read every day (5 am local time per server)
- Single file per store (Agent) Recommend to have the same naming convention.
- Capability so assign more than 1 test within the .json

ThousandEyes Solution

Overview

The following sections describe all deliverables involved for the solution.

Solution Components

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

Python Script(s)

The script involved in this solution is 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 MacOS and Windows and Python 3.7.15

JSON Files

Stores the data structure used for the script as configuration files in order to assign the agents to the appropriate test(s).



Solution Overview

The script must be executed by a cron job and performs the following functions:

- Read the configuration from any .json file(s) listed on a directory (default is cvs_folder/), modify the directory path to point a different source in the main.py:
- Performs the following actions for each test:
 - Match the test(s) target with the target test(s) configured on the .json file(s) .
 - Setup each test assigning the proper agents when configuration requires.
 - Enable / Disable the test depending on configuration.

Requirements

Any Operating System:

- Python 3.7.x or above
- Ram 4GB
- Disk space 3GB

Mode of Operation

The script must be executed via cron job or manually via command line:

```
$ python3 Main.py
```

Step 1

Place the files or clone the repository on the desired destination

```
$ git clone https://github.com/amarana-te/PS-E-109171-Dynamic-Test.git
```

Step 2

install the required libraries:

```
$ pip3 install httpx
```



Step 3

Edit the Main.py to setup the OAuth token and the file(s) source directory:

```
def main(directory_path):  
  
    te_agents, te_tests = get_info(OAUTH="X X X X X X")  
  
    cvs_agents = read_files(directory_path)  
  
    te_tests = agents2Tests(te_tests, te_agents, cvs_agents)  
  
    provisioning = provision_agents(te_tests, OAUTH="X X X X X X")  
  
    return provisioning
```

Configuration

This JSON details the agent and the tests where will be assigned ensure that at least one target is added to the list.

```
{  
  "name": "s00044app.stores.cvs.com",  
  "urls": ["https://10.100.10.1:8888", "https://11.100.10.1:80"]  
}
```

Note: Ensure that <https://api.thousandeyes.com/v6/status.json> is reachable



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