Home Depot
ThousandEyes Script - Functional Specification

Change Control

Title:	ThousandEyes Configuration Script
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Created by:	Daniela Magallan
Confidentiality level:	Confidential

Version History

Date	Version	Created By	Description of Change
Sept 12, 2023	0.1	Daniela Magallan	Initial Draft

Resources

The following parties are involved in the engagement.

Name	Contact	Company	Title
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Description

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

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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 Home Depot.

The goal of the script is as follows:

- List all the enterprise agents that are deployed within specific account(s).

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.

ThousandEyes API

The ThousandEyes API is the mechanism that is used to retrieve all data pertaining to an account group enterprise agents, and to make modifications to such. All data is stored on ThousandEyes' side, and access to the API is required in order to operate the script.

Python Script(s)

The scripts involved in this solution are written in Python, using 3.10 as the target version. The script was developed using Visual Studio Code IDE on MacOS platform. Testing of the scripts was performed on Windows 10 and MacOS Ventura 13.5.

Scripts Overview

List the Thousandeyes enterprise agents

First script that needs to be executed is the **Agents.py**. This script performs the following actions:

- Gets the information of specified account groups about the enterprise agents configured there.
- Then, it concentrates the information on a log file named: "agents_info.log"

Requirements

1. Thousandeyes API Bearer Token with Organization Admin privileges.
2. Linux (recommended based on RHEL distributions), MacOs or Windows with:
   - Python 3.10 (pip3) and following libraries:
   -
     - datetime
     - json

Mode of Operation

The script must be executed via command line or using an IDE such as VisualStudio Code.

Also, it is required to have all the files in the same directory: Agents.py and connector.py

1. Agent.py setup

In order to be able to list the information of the enterprise agents, you will need to have a user with Organization Admin privileges. Once you have the user identified you will need to request its API tokens.

If you are still not sure how to do that, please refer to:
https://docs.thousandeyes.com/product-documentation/user-management/rbac/working-with-account-settings#user-api-tokens.

Now, open the **Agents.py** file and almost at the bottom of the script: Specify, in the form of a list, the accounts from which you would like to get the information of the enterprise agents. Then, replace the value of the *OAuth* variable with the Bearer Token of the user with Org Admin privileges.

This part of the code, should look similar to:

```
78    ####################
79    #        MAIN
80    ####################
81
82    #These are the only values can be modified on the script#
83    accounts = ["Dani's sandbox", "Switching Team"]
84    OAuth = "NMMAS12KO2-123ASDAD-1231-CSDC"
85
```

After these modifications, don't forget to save the changes over the file. As indicated, this is the only thing that can be changed in the script.

2. Agent.py execution

Once script is ready to be executed, open the terminal, navigate to the directory where is located and run it using:

```
$ python3 ./Agents.py
```

A successful script execution will be indicated by an output similar to the below:

```
dmagalla@DMAGALLA-M-39J9 List agents json % python3 ./Agents.py
Status Code https://api.thousandeyes.com/v6/account-groups.json :  200
Status Code https://api.thousandeyes.com/v6/agents.json?aid=1088196&agentTypes=ENTERPRISE_CLUSTER,ENTERPRISE :  200

Your current agents have been listed. Refer to the agents_info.log to see the details.
```

If the agents_info.log file is not created, it will be created automatically after the script finishes the execution. This log file will contain all the information related to the agents in json format. The format will be the following:

```
{
  "service_id":"5d24b10e56d4e549a3942585",
  "log_type":"Instant test run",
  "tag":"ThousandEyes",
  "message":{
      "name":"HD-Test",
      "agentId":1234,
      "enabled":"TRUE",
      "agentState":"Online",
      "location":"CA",
      "utilization":" ",
      "errors":"Agent Version 1.159.1 (latest: 1.161.0), End of Life since 6/30/23",
      "hostname":" ",
      "ipAddresses":"1.1.1.1",
      "targetForTests":"1.1.1.1",
```

```
        "cluster":"First cluster",
        "aid":1088196
    }
}
```

All the information about the agents will be under the "message" field.

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