Configure AURA Deployment before vManage Upgrade

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Introduction

This document describes how to configure AURA Deployment before the vManage Upgrade.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco Software-defined Wide Area Network (SD-WAN).

Components Used

The information in this document is based on Cisco vManager Version 20.9.4.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Background Information

Cisco AURA SD-WAN (SURE) Command Line tool performs a total of 30 (non Cluster-Mode) or 36 (Cluster-Mode) checks at different levels of the SD-WAN overlay. The purpose of this tool is to prevent potential failures and recommend corrective actions for a seamless upgrade process. This tool retrieves data using GET API calls and show/shell commands.

Basic Concept

- Simple and straighfroward, uses default python modules that are already available on the vManage server.
- Automatically generates .TXT report.
- Only requires your vManage and password.
- vManage user with admin or RO network operator privileges.
- The vManage user password must not contain the "!" character.
- To execute, simply copy the file to the vManage and run it on the server.
- Not intrusive.
- Runtime is usually less than 60 seconds, depending on your deployment size.
- Root access is not required to perform any check.
- No data is collected or shared to anyone. All information used by the tool remains in the provided report and logs.
- Does not use Real-Time APIs that have scale limitations.

Download the Script on vManage

Identify which Python Version File to Execute Based on the vManage Version

vManage Version	Python Version	Python File to Execute

Before 20.5	Python2	python2/py2_sure.py
20.5 Onwards	Python3	python3/py3_sure.py

Note: The vManage version is 20.9.4, you must use the the py3_sure.py file.

Note: The application can be downloaded under any desired directory, typically it is downloaded under the user home directory.

Option 1. Isolated Environment

1. Obtain the file content from this site, then **copy** via SCP to the server.

```
scp source_file.py {user}@{vManageIP}:/home/{user}
```

MAC OS

<#root>

```
felix:Downloads felix$

 scp -P 28215 py3_sure.py admin@10.124.x.x:/home/admin/


viptela 20.9.4
(admin@10.124.x.x) Password:
py3_sure.py                                                   100%  167KB 340.5KB/s   00:00
```

Windows OS

<#root>

```
C:\Users\felix>

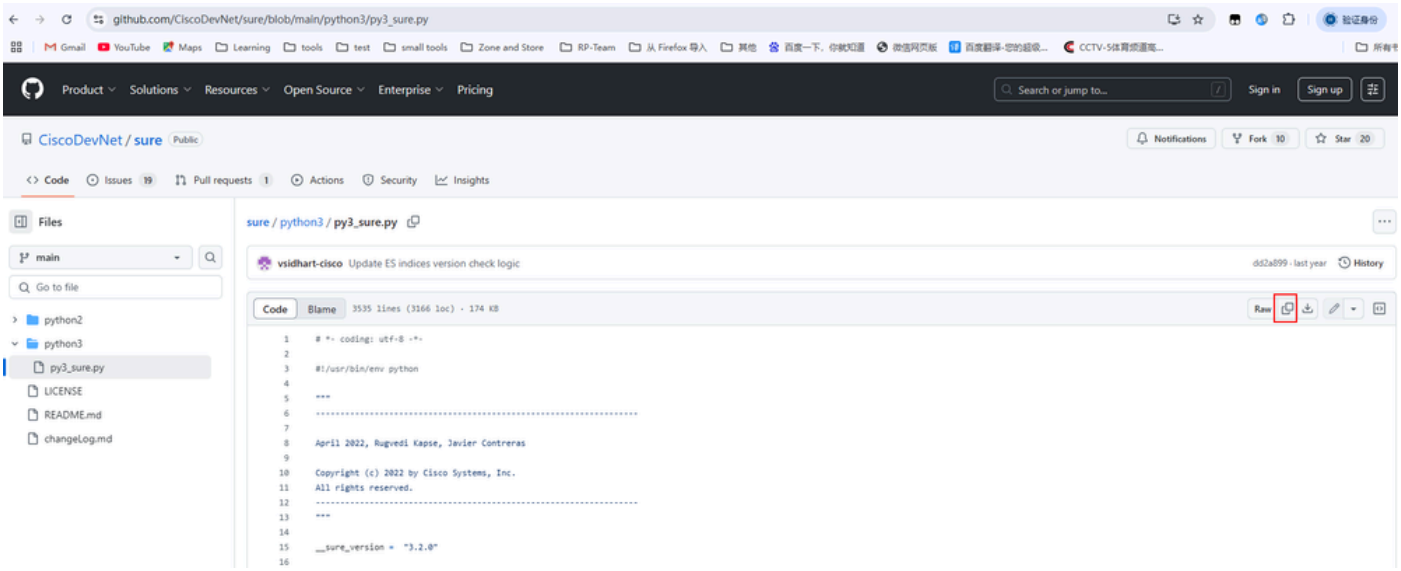
scp C:\Users\felix\py3_sure.py admin@10.124.x.x:/home/admin/
```

```
viptela 20.9.4

(admin@10.124.x.x) Password:
py3_sure.py
```

Option 2. Paste Method

1. Open the py2_sure.py or py3_sure.py file, click **Copy raw file** button.



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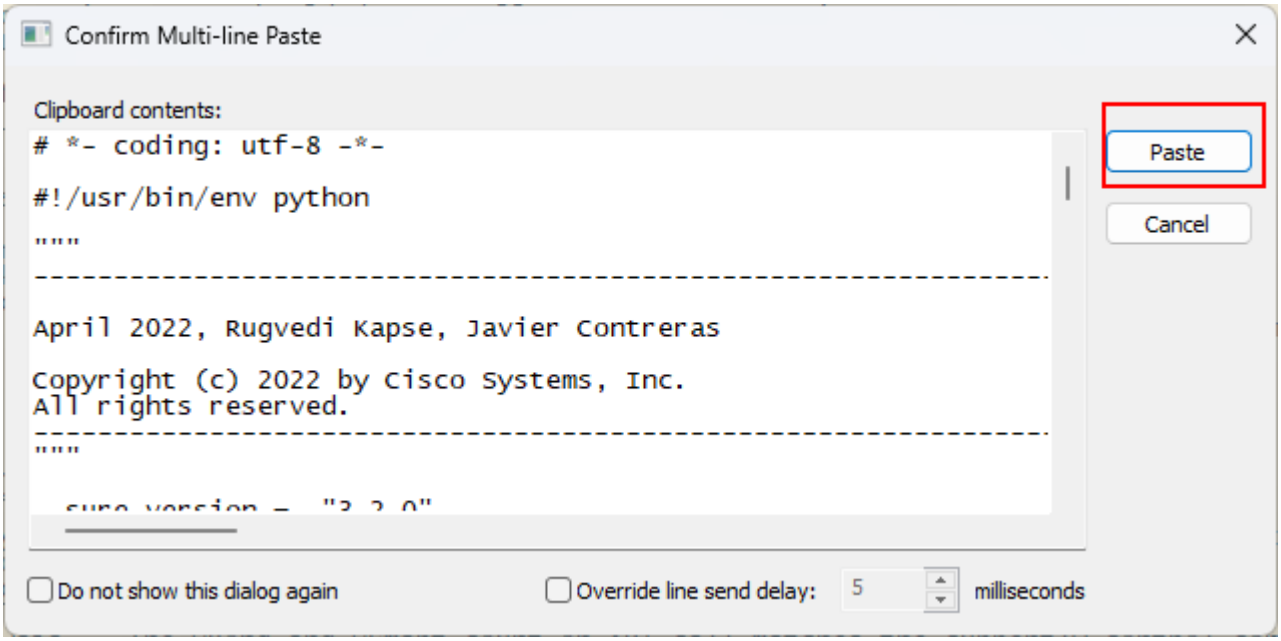
2. SSH to the vManage, and run the **vshell** command.

```
vmanage# vshell
```

---

3. Open **vi**, press **Esc** and then **i** (letter **i**), then **paste** the content.

```
vmanage:~$ vi py3_sure.py
E1187: Failed to source defaults.vim
Press ENTER or type command to continue
```



---

4. After pasting, press **Esc**, **:wq** (symbol **:** and letters **w**,**q**) to save it.

:wq

Note: Save and exit : In command mode, press the **Esc** key to exit insertion mode, then type **:wq** or **:x** and press **enter** to save the **modifications** and exit the **vi editor**.

Do not save exit : In command mode, press the **Esc** key and then type **:q!** ,press the **enter** key to not save the **modifications** and force exit the **vi editor**.

Option 3. WGET

1. Log in vManage CLI session:

```
vmanage# vs
vmanage:~$ wget https://raw.githubusercontent.com/CiscoDevNet/sure/main/python3/py3_sure.py
OR
vmanage:~$ wget https://raw.githubusercontent.com/CiscoDevNet/sure/main/python2/py2_sure.py
```

Warning: If you use WGET, you must ensure your vManage can access GItHub.

How to Run

Command Line Options

usage: sure.py [-h] [-q] [-v] [-d] -u USERNAME

SURE - SDWAN Upgrade Readiness Engine - v3.2.1

optional arguments:
-h, --help show this help message and exit
-q, --quiet Quiet execution of the script
-v, --verbose Verbose execution of the script

-d, --debug Debug execution of the script
-u USERNAME, --username USERNAME
vManage Username
-vp VMANAGE_PORT, --vmanage_port VMANAGE_PORT
vManage Password

Run in Normal Execution Mode

vmanage:~$ python3 py3_sure.py -u admin vManage Password (Note: Tool doesn't support passwords containing "!") : ##########################

Check Report

```
vmanage:~$ cat sdwan_sure/sure_report_08_07_2025_06_15_25.txt
E1187: Failed to source defaults.vim
Press ENTER or type command to continue
```

Cisco SDWAN AURA v3.2.0 Report Cisco SDWAN AURA command line tool performs a total of 26(Non Cluster Mode) or 32(Cluster Mode) checks at

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Upload Report from vManage to Local Computer

Option 1. Viptela CLI

```
vmanage# vs
vmanage:~$ scp sdwan_sure/sure_report_08_07_2025_06_15_25.txt /home/admin
vmanage:~$ ls -l
total 1812
-rw------- 1 admin admin 2 Jul 8 06:21 123
-rw------- 1 admin admin 0 Jul 8 06:21 456
-rw-r--r-- 1 admin admin 566 May 9 17:10 archive_id_rsa.pub
-rwxrwxr-x 1 vmanage admin 1235617 Jul 2 03:07 config_db.tar.gz
-rw------- 1 admin admin 178539 Jul 8 07:42 py2_sure.py
-rw------- 1 admin admin 178540 Jul 8 07:09 py3_sure.py
drwx------ 2 admin admin 4096 Jul 8 08:14 sdwan_sure
-rw------- 1 admin admin 25544 Jul 8 08:18 sure_report_08_07_2025_06_15_25.txt                    <<<<
-rw------- 1 admin admin 15260 Jul 4 05:34 test.pcap
-rw------- 1 admin admin 178540 Jul 8 06:13 test0708
-rw-r--r-- 1 admin admin 1216 Jan 15 2024 vmanage_csr
vmanage:~$ exit

vmanage# request upload vpn 512 scp://admin@10.207.x.x:/test.file sure_report_08_07_2025_06_15_25.txt
Warning: Permanently added '10.207.x.x' (ECDSA) to the list of known hosts.

admin@10.207.x.x's pasword:
sure_report_08_07_2025_06_15_25.txt 100% 25KB 479.5KB/s 00:00
Upload successful
```

Option 2. Linux/Mac Terminal

Command syntax - The command is read as: **copy**
source_file_name from **vManage** into **local_destination_path** with vManage username.

```
scp vManageUsername@PublicIp:<source_file_name> <local_destination_path>
```

Example: Connect to your local **Linux/Mac** terminal and run the **SCP** command to copy the file to your desired directory:

```
adminIT@cisco:~$ scp admin@10.124.X.X:sure_report_08_07_2025_06_15_25.txt  /Users/adminIT/Downloads/
viptela 20.9.4

Password:
sure_report_08_07_2025_06_15_25.txt  100% 25KB 479.5KB/s
```

Option 3. FileZilla or Any Other FTP or SFTP Client

Connect with:

- SFTP as protocol or port 22
- vManage URL, Public IP or Private IP (If vManage is On-Prem)
- Use valid username and password

On the FTP or SFTP Client, the files in the vManage user home directory are listed. Just drag-and-drop to the local destination on the left where you want to transfer your file.

Related Information

- Upgrade SD-WAN Controllers with the Use of vManage GUI or CLI
- AURA-SD-WAN (SURE)
- Transfer Files between a cEdge and vManage