

Configure AURA Deployment before vManage Upgrade

Contents

[Introduction](#)

[Prerequisites](#)

[Requirements](#)

[Components Used](#)

[Background Information](#)

[Basic Concept](#)

[Download the Script on vManage](#)

[Identify which Python Version File to Execute Based on the vManage Version](#)

[Option 1. Isolated Environment](#)

[MAC OS](#)

[Windows OS](#)

[Option 2. Paste Method](#)

[Option 3. WGET](#)

[How to Run](#)

[Command Line Options](#)

[Run in Normal Execution Mode](#)

[Check Report](#)

[Upload Report from vManage to Local Computer](#)

[Option 1. Viptela CLI](#)

[Option 2. Linux/Mac Terminal](#)

[Option 3. FileZilla or Any Other FTP or SFTP Client](#)

[Related Information](#)

Introduction

This document describes how to configure AURA Deployment before 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-SDWAN (SURE) Command Line tool performs a total of 30 (Non Cluster Mode) or 36 (Cluster Mode) checks at different levels of the SDWAN overlay. The purpose of the tool is to prevent potential failures and recommend corrective actions for a seamless upgrade process. The tool retrieves data using GET API Calls and show/shell commands.

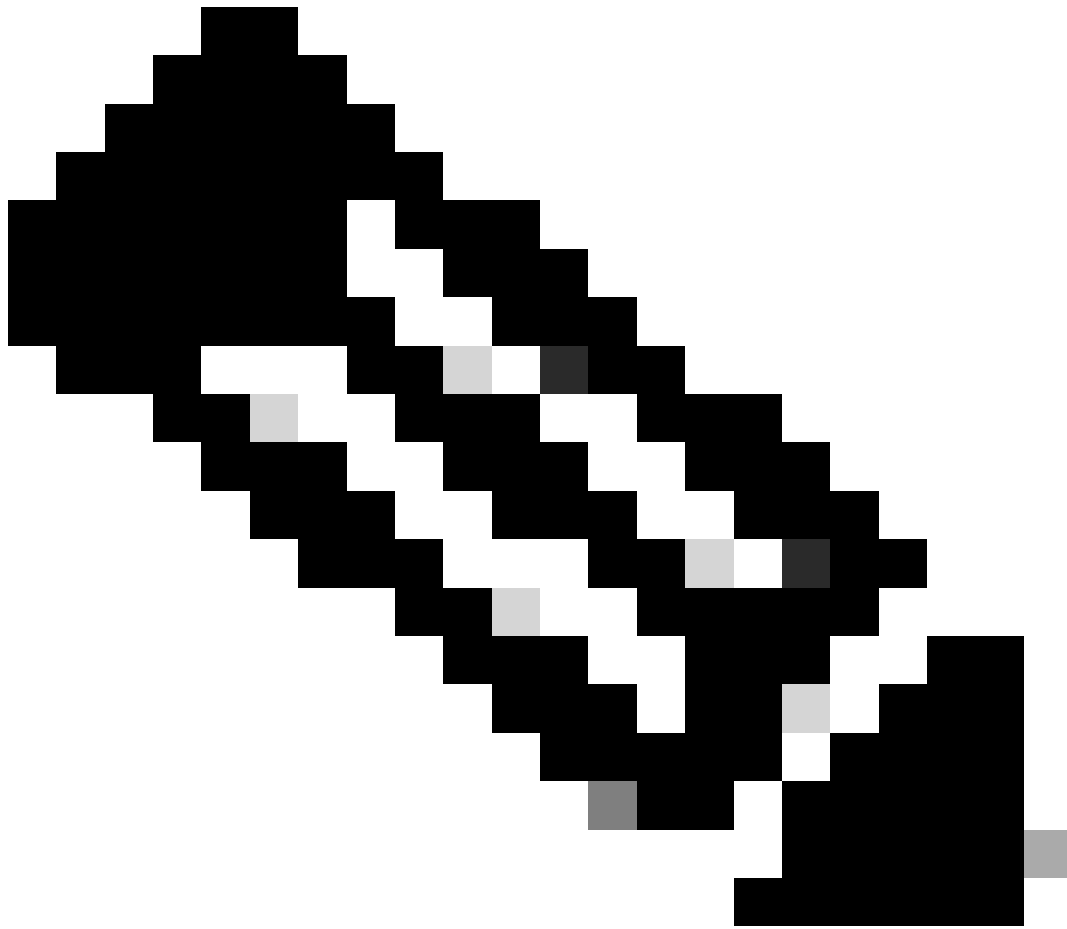
Basic Concept

- Simple and straightforward, uses default python modules that are already available on the vManage server
- Automatically generates TXT report.
- Only requires – 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
- Run Time - 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
- Do 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, so the py3_sure.py file needs to be used.



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

Option 1. Isolated Environment

Obtain **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>
```

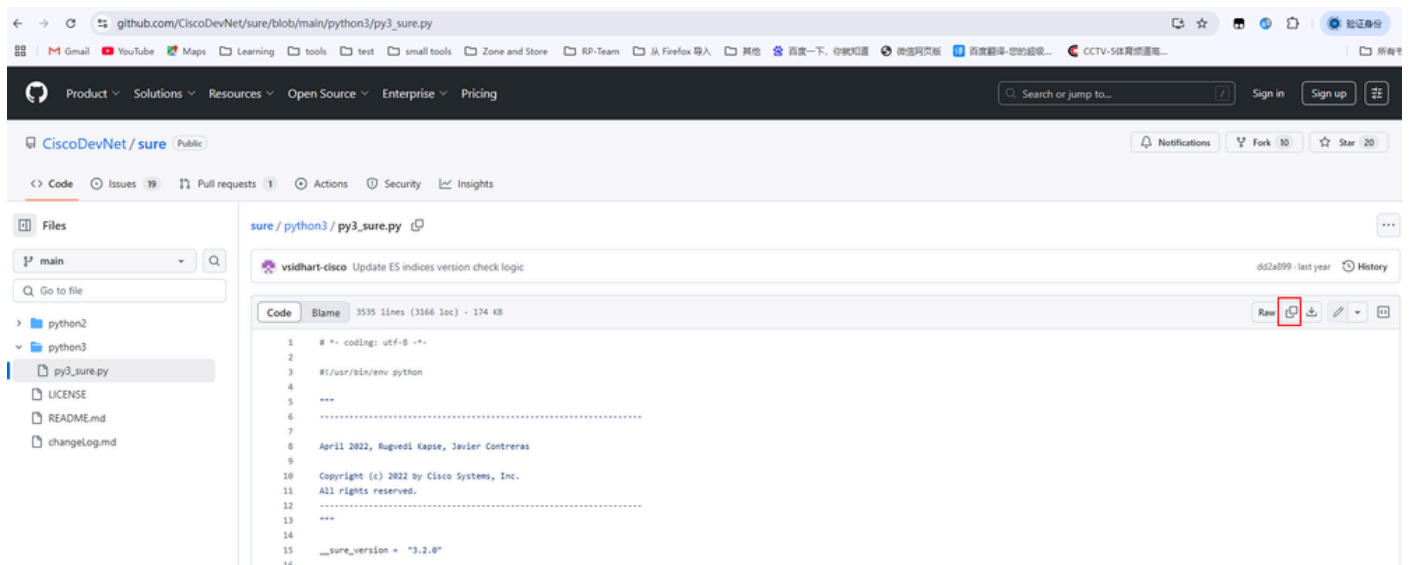
```
scp C:\Users\felix\py3_sure.py admin@10.124.x.x:/home/admin/
```

```
viptela 20.9.4
```

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

Option 2. Paste Method

- Open [py2_sure.py](#) or [py3_sure.py](#) file, click **Copy raw file** button.



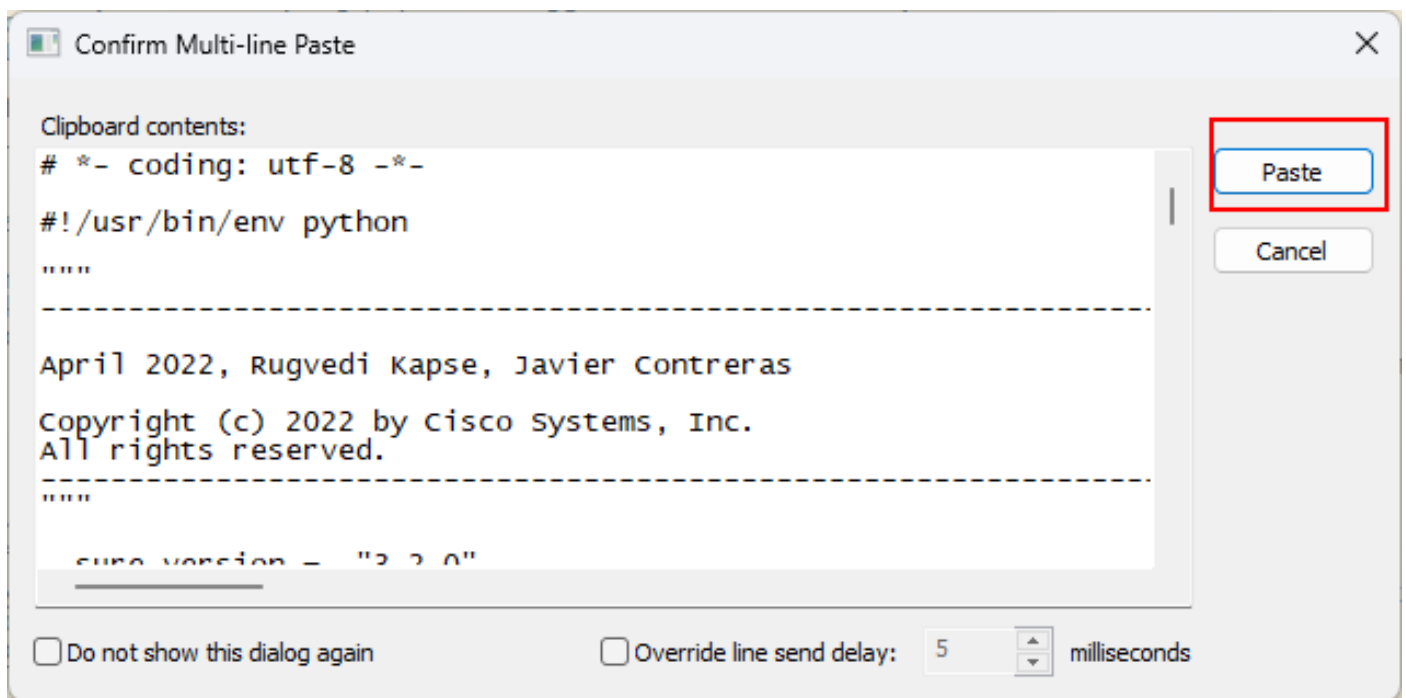
- SSH to the vManage, and use **vshell** command.

```
vmanage# vshell
```

- 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



- 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

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 make it so that your vmanage can access the [GItHub.com](https://github.com).

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 "!") :

```
#####  
###  AURA SDWAN (SURE) - Version 3.2.0  ###  
#####  
###  Performing SD-WAN Audit & Upgrade Readiness  ###  
#####
```

****Collecting Preliminary Data

*Starting Checks, this may take several minutes

**** Performing Critical checks

Critical Check:#01
Critical Check:#02
Critical Check:#03
Critical Check:#04
Critical Check:#05
Critical Check:#06
Critical Check:#07
Critical Check:#08
Critical Check:#09
Critical Check:#10
Critical Check:#11
Critical Check:#12
Critical Check:#13
Critical Check:#14
Critical Check:#15
Critical Check:#16
Critical Check:#17

**** Performing Warning checks

Warning Check:#18
Warning Check:#19
Warning Check:#20
Warning Check:#21
Warning Check:#22
Warning Check:#23
Warning Check:#24
Warning Check:#25

**** Performing Informational checks

Informational Check:#26
Informational Check:#27
Informational Check:#28

Cisco AURA SDWAN tool execution completed.

Total Checks Performed: 28
Overall Assessment: 4 Critical errors, 2 Warnings, please check report for details.
-- Full Results Report: sdwan_sure/sure_report_08_07_2025_06_15_25.txt
-- Logs: sdwan_sure/sure_logs_08_07_2025_06_15_25.log
-- Json Summary: sdwan_sure/sure_json_summary_08_07_2025_06_16_22.json

Reach out to sure-tool@cisco.com if you have any questions or feedback

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 different levels of the SDWAN overlay

Reach out to sure-tool@cisco.com if you have any questions or feedback

Summary of the Results:

AURA SDWAN Version: 3.2.0

vManage Details:

Software Version: 20.9.4 System IP Address: 1.1.1.1

Script Execution Time:

Start Time: 08-07-2025 06:15:20

End Time: 08-07-2025 06:16:22

Overall upgrade evaluation: Critical issues found that need to be resolved before an upgrade

Check Results:

Total Checks Performed: 28
Total Checks Passed: 24 out of 28
Total Checks Failed: 4 out of 28
Total Checks with Errors: 4
Total Checks with Warnings: 2

Detailed list of failed checks, and actions recommended

Check no	Check Name	Check Result	Check Actions
----------	------------	--------------	---------------

#03	Memory size	Memory size is 67 GB, it is below the hardware size. Correct the memory available to the server
		Recommendations when DPI is enabled. Memory size should be 128 GB. For more information please check: https://www.cisco.com/c/en/us/td/docs/routers/sdwan/release/notes/compatibility-and-server-recommendations/ch-server-recs-20-3.html
#04	CPU Count	No. of Processors is below minimum supported size. Allocate more processors when DPI is in use. CPU Count is 16, it should be 32 or higher.
#10	NTP status across network	Devices with invalid ntp association found. Please validate the NTP time synchronization across the network.
#17	Verify if stale entry of vManage+vSmart UUID present on any one cEdge	The vManage+vSmart UUIDs are not consistent in cEdges in the vManage+vSmart UUIDs in cEdges.

Preliminary Tabulated data:

Parameters	Value
vManage System IP address	1.1.1.1
vManage CPU Speed	2.198
vManage CPU Count	16
xEdge Count	10
vManage Cluster Size	1
vManage Server Mode	Single Server
vManage Disk Controller Type	/dev/sdb

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
vmange:~$ exit

vmange# 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 password:
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 the file.

Related Information

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