

# Collect an Admin-Tech in SD-WAN Environment and Upload to TAC Case

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## Introduction

This document describes how to initiate an **admin-tech** in an Software Defined Wide Area Network (SD-WAN) environment.

## Prerequisites

### Requirements

Cisco recommends that you have knowledge of Cisco SD-WAN.

### Components Used

The information in this document is based on Cisco vManage.

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

When you initiate an **admin-tech** in an Software Defined Wide Area Network (SD-WAN) environment, this is intended to help capture information for the Technical Assistance Center (TAC) in order to assist it to troubleshoot an issue. It helps to capture the **admin-tech** in the problem state. It covers the usage of the vManage GUI and CLI, Edge device CLI, and the upload of the **admin-tech** directly into the Cisco TAC case with the use of the token mechanism.


## Generate Admin-Tech

### Scenario 1. From vManage for Device Online

Step 1. Log in to vManage.

Step 2. Navigate to **Tools > Operational Commands**.

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 **Note: Admin-Tech** is generated by a user that has **netadmin** rights or with a custom usergroup user that has write access to **Tools**.

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Cisco vManage



Dashboard



Monitor



Configuration



Tools



SSH Terminal

Rediscover Network

Click Here

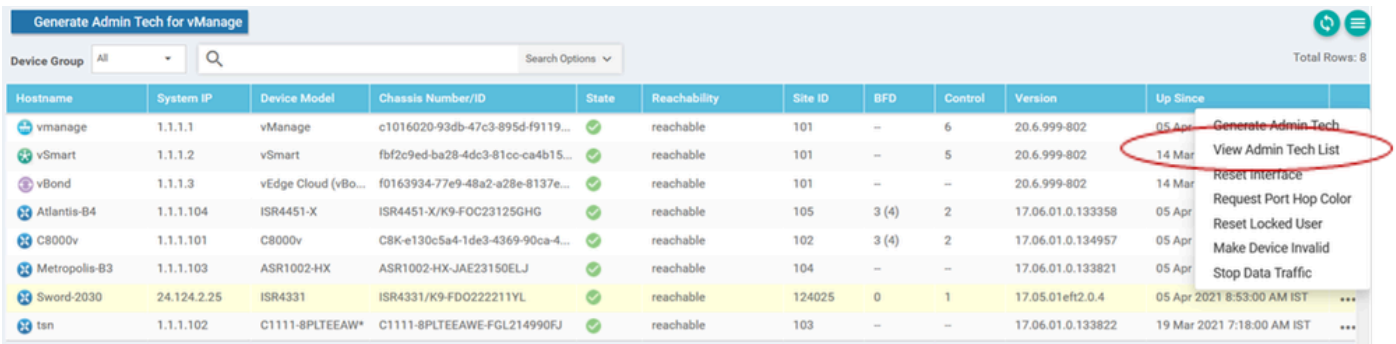


Operational Commands

in more recent releases). This shows a list of admin-techs available on the Edge Router which can be uploaded to the vManage so same steps mentioned later in this document can be used to upload the admin-tech to a Service Request (SR).

Following are the steps to do this.

**Step#1:** Go to Tools -> Operational Commands and select a specific device by clicking on "...". You see a new option 'View Admin Tech List'

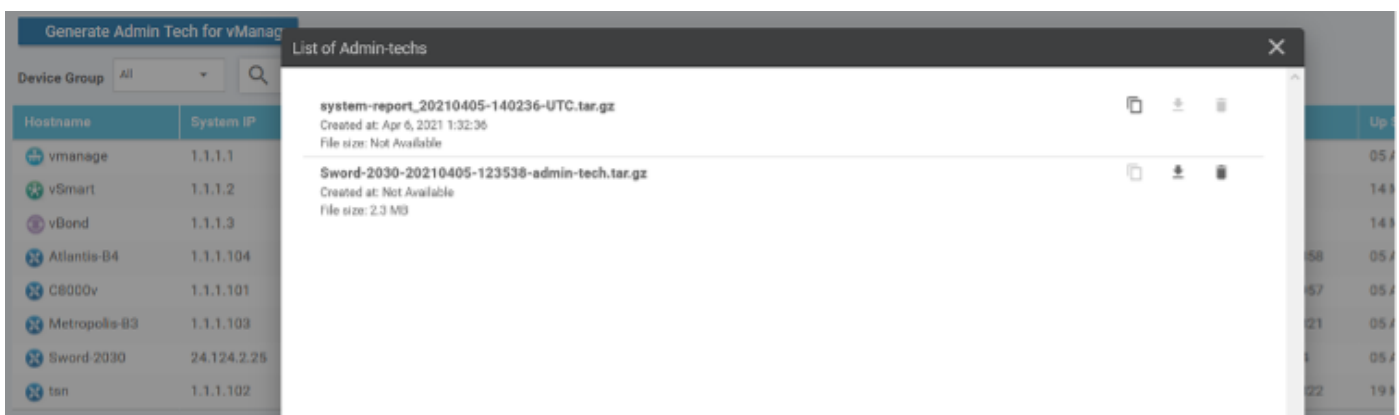


The screenshot shows the 'Generate Admin Tech for vManage' interface. It features a table with columns: Hostname, System IP, Device Model, Chassis Number/ID, State, Reachability, Site ID, BFD, Control, Version, and Up Since. A context menu is open over the 'Sword-2030' device, with 'View Admin Tech List' highlighted. Other menu items include 'Generate Admin Tech', 'Reset Interface', 'Request Port Hop Color', 'Reset Locked User', 'Make Device Invalid', and 'Stop Data Traffic'.

Hostname	System IP	Device Model	Chassis Number/ID	State	Reachability	Site ID	BFD	Control	Version	Up Since
vmanage	1.1.1.1	vManage	c1016020-93db-47c3-895d-f9119...	✓	reachable	101	--	6	20.6.999-802	05 Apr
vSmart	1.1.1.2	vSmart	fbf2c9ed-ba28-4dc3-81cc-ca4b15...	✓	reachable	101	--	5	20.6.999-802	14 Mar
vBond	1.1.1.3	vEdge Cloud (vBo...	f0163934-77e9-48a2-a28e-8137e...	✓	reachable	101	--	--	20.6.999-802	14 Mar
Atlantis-B4	1.1.1.104	ISR4451-X	ISR4451-X/K9-FOC23125GHG	✓	reachable	105	3 (4)	2	17.06.01.0.133358	05 Apr
C8000v	1.1.1.101	C8000v	C8K-e130c5a4-1de3-4369-90ca-4...	✓	reachable	102	3 (4)	2	17.06.01.0.134957	05 Apr
Metropolis-B3	1.1.1.103	ASR1002-HX	ASR1002-HX-JAE23150ELJ	✓	reachable	104	--	--	17.06.01.0.133821	05 Apr
Sword-2030	24.124.2.25	ISR4331	ISR4331/K9-FDO222211YL	✓	reachable	124025	0	1	17.05.01eft2.0.4	05 Apr 2021 8:53:00 AM IST
tsn	1.1.1.102	C1111-8PLTEAW*	C1111-8PLTEAW-E-FGL214990FJ	✓	reachable	103	--	--	17.06.01.0.133822	19 Mar 2021 7:18:00 AM IST

View Admin Tech List

**Step#2:** Click on it and now you see list of admin-tech available for uploading to vManage.

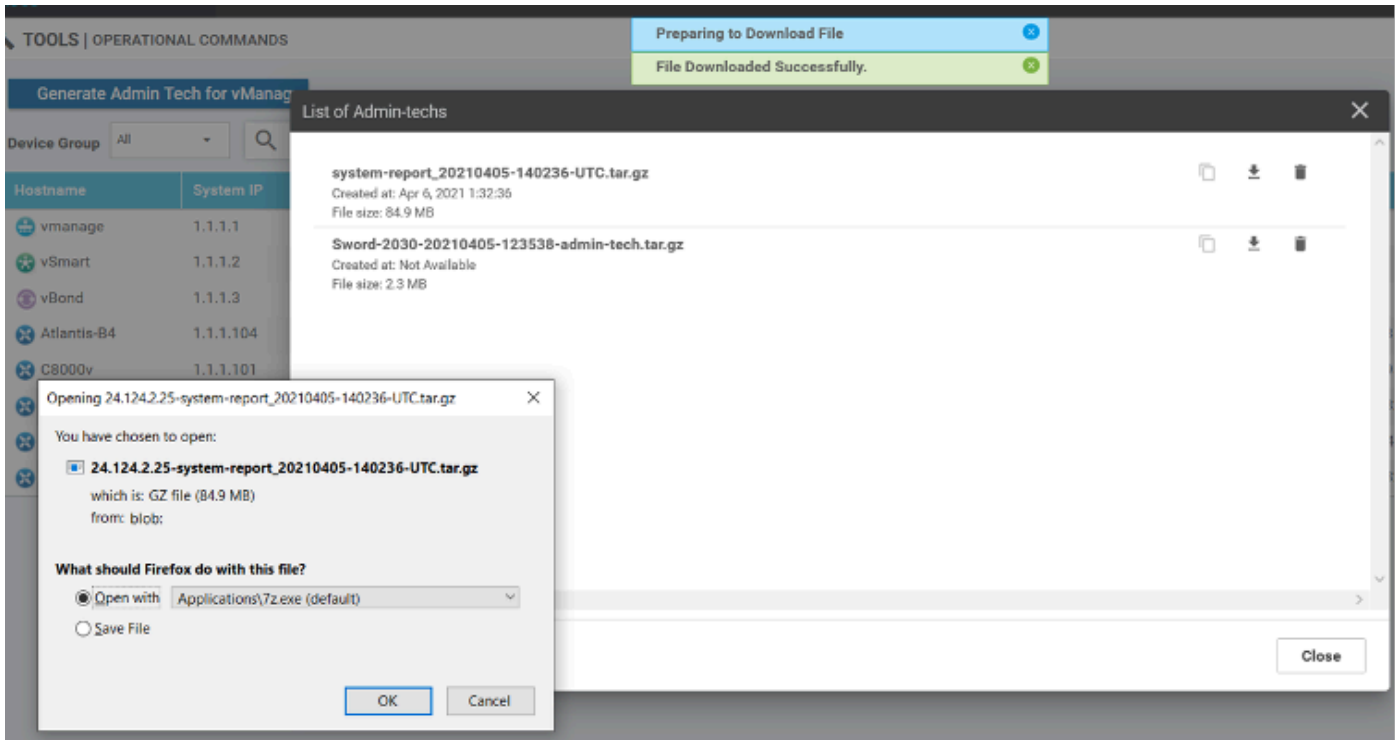


Files on Edge Router which can be uploaded to vManage

You see a 'Copy' icon. Click on it

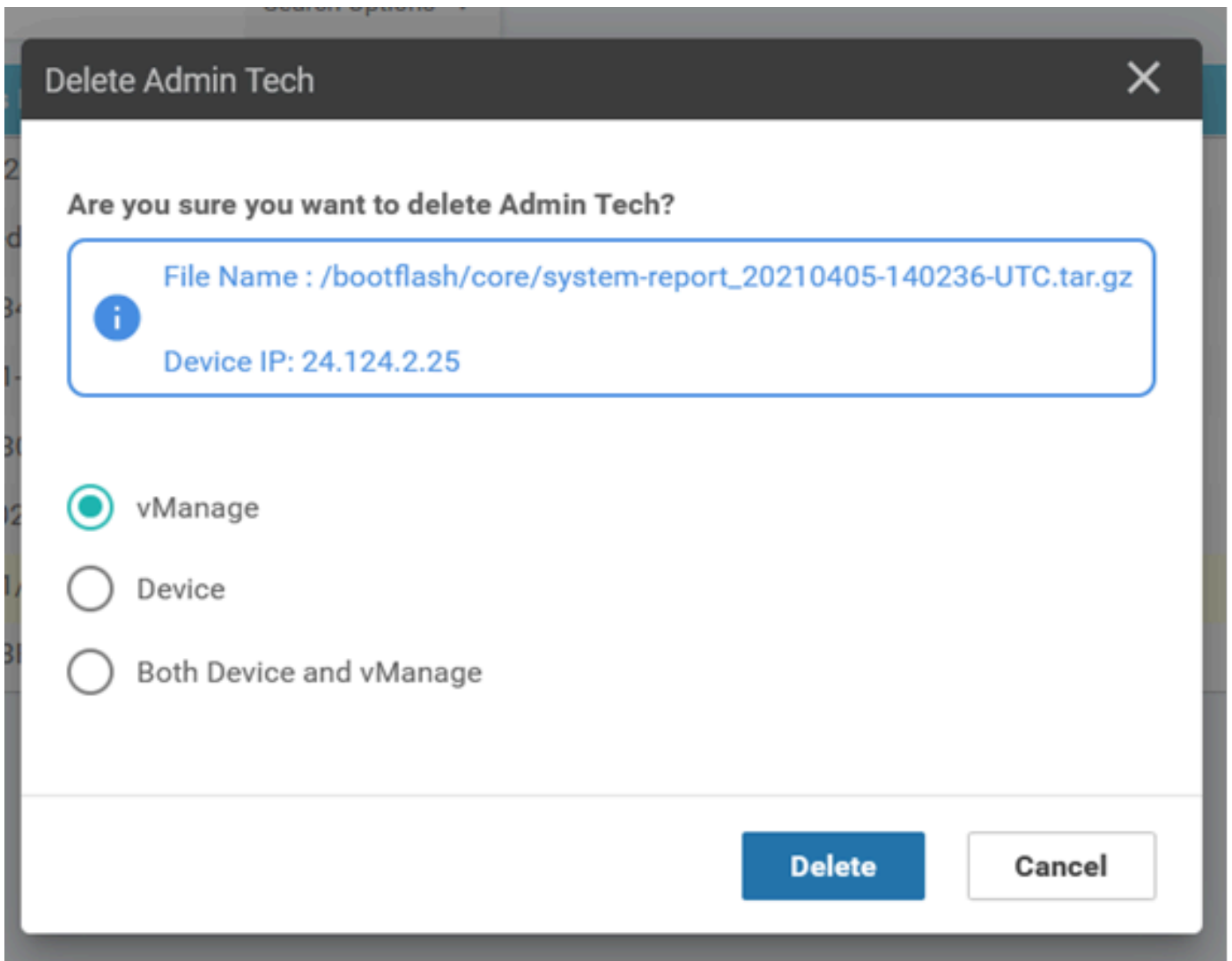
**Step#3:** Wait for the file to get copied to vManage storage.

**Step#4:** Now you can download the file like any other admin-tech




*Upload and opening file now stored on vManage*

**Step#5:** When you select delete, you see additional options as below. This allows you to free up space on bootflash: from UI itself.



User can delete files from vManage, Device or both

## Additional Notes

 **Note:** In Release 20.1.x and later, the option to exclude specific files from the **admin-tech** from the CLI is available.

vEdge:

```
vEdge# request admin-tech ?
Possible completions:
delete-file-name  Delete admin-tech file
exclude-cores    Include only /var/crash/info.core* and exclude the /var/crash/core* files
exclude-logs     Collect only vdebug logs
exclude-tech     Ignore /var/tech files
|               Output modifiers
<cr>
vEdge#
```

```
cEdge#request platform software sdwan admin-tech ?
delete-file-name request sdwan admin-tech delete-file-name
exclude-cores request sdwan admin-tech exclude-cores
exclude-logs request sdwan admin-tech exclude-logs
exclude-tech request sdwan admin-tech exclude-tech
install request sdwan admin-tech install
<cr> <cr>
```

cEdge#

## Transfer Admin-Tech Directly into a Cisco SR

In order to troubleshoot SD-WAN related issues, upload the **admin-tech** directly from vManage to a Cisco SR. You can find it hard to download the rather bulky file to your own workstation when you are remote from the controller. After the slow download, you then need to upload the file to the SR, which is again a slow process. This procedure describes how to achieve it via the GUI and CLI on vManage.

### Prerequisites

For the upload to work, the vManage requires connectivity to the public Internet. Cisco cloud-hosted vManage controllers have such capability. The user needs to have **netadmin** privileges to be able to request an **admin-tech**. You can only transfer one **admin-tech** into the SR at a time. For the upload to the SR, you need the SR number and an upload token. More information on different ways to upload is explained in [Customer File Uploads to Cisco Technical Assistance Center](#). The Customer eXperience Drive (CXD) procedure is used in the example.

### Retrieve the Upload Token for an SR

#### Use SCM to Get the Token

When an SR is opened, CXD automatically generates an upload token and inserts a note in the SR which contains the token and some details on how to use the service.

In order to retrieve the upload token, complete these steps:

Step 1. Log in to [SCM](#).

Step 2. Open the desired case to get the upload token for.

Step 3. Click the **Attachments** tab.

Step 4. Click **Generate Token**. Once the token is generated, it is displayed to the right of the **Generate Token** button.



#### Notes:

- The Username is always the SR number. The term **password** and **token** refer to the upload token, which is used as a password when prompted by CXD.
  - The note is attached automatically within a few minutes to the SR. If the user cannot find the note, they can contact the SR Owner and the token can be generated manually.
-



Click the "Generate Token" button to create a [Customer eXperience Drive \(CXD\)](#) upload token.

**GENERATE TOKEN**

Generated Token: 4p[REDACTED]7FSIJJ

## Upload Admin-Tech to an SR

### vManage GUI

For vManage 20.7.x and later, perform steps 1-7 in **Scenario 1. From vManage for Device Online**.

Once step 7 is complete, and the **admin-tech** has been generated, click the **cloud** icon, fill in the information (SR Number, Token, and VPN 0 or 512) and click **Upload**.

## List of Admin-techs

[REDACTED]-admin-tech.tar.gz  
Created at: May 19, 2022 15:06:52  
File size: 77.0 MB



Upload admin-tech file to CXD (cxd.cisco.com) for 10.0.0.12.  
This process may take several minutes. After upload, you cannot interrupt the process even if you close this window.  
For each device, you can upload only one admin-tech file at a time.

SR Number	<input type="text" value="Enter SRNumber"/>
Token	<input type="text" value="Enter Token"/>
VPN	<input type="text" value="VPN 0"/>

Generate one per Admin-Tech

**Upload** **Cancel**

**Close**

After you click **Upload**, the **Upload successful** message is displayed to let you know that the **admin-tech** was successfully uploaded to the SR.

## List of Admin-techs

[REDACTED]-admin-tech.tar.gz  
Upload successful



Also, now we have the ability on the vManage to fetch the **admin-tech** from the Edge device, if the **admin-tech** is already there on the device. It could be that the **admin-tech** has been generated via the CLI on the device. On vManage, now you can use the copy option to copy the image into vManage and subsequently



use it to upload directly into the Cisco SR case, as mentioned previously.

Additional information is provided here.

You can see the **admin-techs** on the device via:

Hostname	System IP	Device Model	Chassis Number/ID	State	Reachability	Site ID	BFD	Control ...	Version	Up Since
⊕ vedge1_20_6_3	4.4.4.1	vEdge Cloud	688841a2-ce0d-d0e0-7406-3...	●	reachable	101	4	5	20.6.3	02 Jun 2022 11:18:00 PM ---

[Generate Admin Tech](#)  
[View Admin Tech List](#)

## List of Admin-techs

vedge1\_20\_6\_3-20220520-110231-admin-tech.tar.gz  
Created at: Not Available  
File size: Not Available

Copy from device to vManage  
02 Jun 2022

Once the download is initiated / completed:

Started copying Admin Tech from Device to vManage. After successful copy, the download button will be enabled.

## List of Admin-techs

vedge1\_20\_6\_3-20220520-110231-admin-tech.tar.gz  
Created at: Not Available  
File size: 1.2 MB

The list of **admin-techs** shows the downloaded one. You can use the **cloud** icon to upload it into the Cisco SR.

## List of Admin-techs

4.4.4.1-vedge1\_20\_6\_3-20220520-110231-admin-tech.tar.gz  
Created at: Jun 7, 2022 18:42:30  
File size: 1.2 MB

⬇️ ☁️ ⬆️

In Release 20.6.x and later, if the vManage is in a Cluster mode, you can generate **admin-tech** across all the vManage nodes with the **Generate Admin Tech for vManage** option under **Tools > Operational Commands**.

# Generate Admin Tech for vManage

Once generated, you can use the previous steps to upload the **admin-techs** directly to the TAC Case.

## vManage CLI

Specific to vManage only, once **request admin-tech** is used via the CLI to generate the **admin-tech** and it is completed, you can enter the **request upload** command. Use this syntax in this example. Once prompted for the password, enter the token you retrieved earlier.

```
vManage# request upload ypn 512 scp://69094XXXX@cxd.cisco.com:/test.file test.file
69094XXXX@cxd.cisco.com's password:
test.file          100%  21    0.3KB/s   00:00
vManage#
```

## Verify the Case Attachment

Verify the **admin-tech** has been uploaded to the case with the use of SCM.

[Expand All](#) | [Preview All](#)

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	From	Title	Date ▾
▾	TACHIGHWAY	CXD Attached a File	03/19/2021 at 18:08:31