Cisco Enterprise Network Functions Virtualization Tech-Support Generation

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Introduction

This document describes how to collect tech-support files from the Network Functions Virtualization Infrastructure Software (NFVIS) and Enterprise Network Compute System (ENCS) through both GUI and CLI.

Tech-support files contain configuration information, logs and diagnostic data that will help TAC in troubleshooting and resolving a technical issue.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

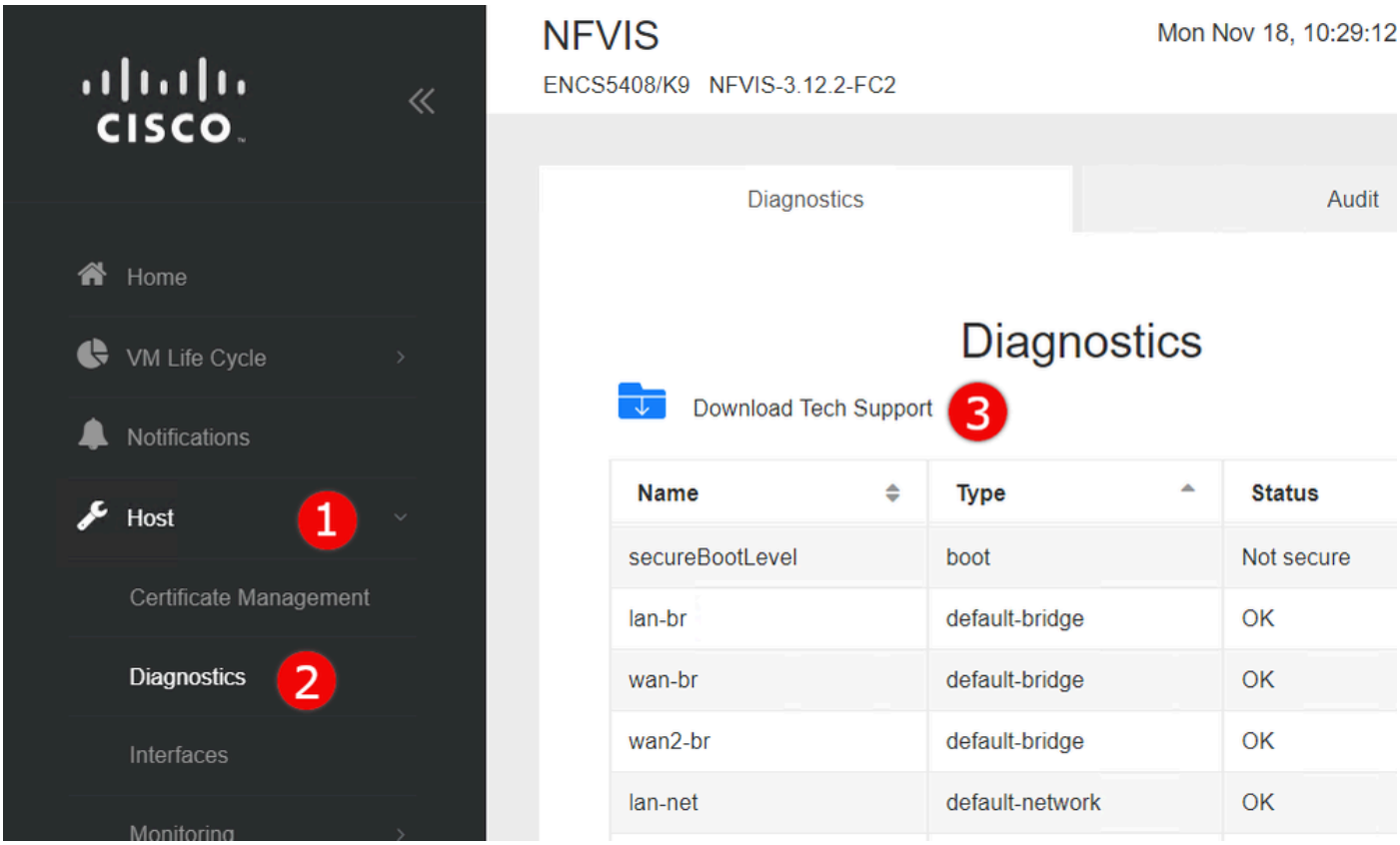
The information in this document is based on Cisco Enterprise NFVIS 3.7.1 and later..

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.

NFVIS Tech-Support Bundle: WebUI Method

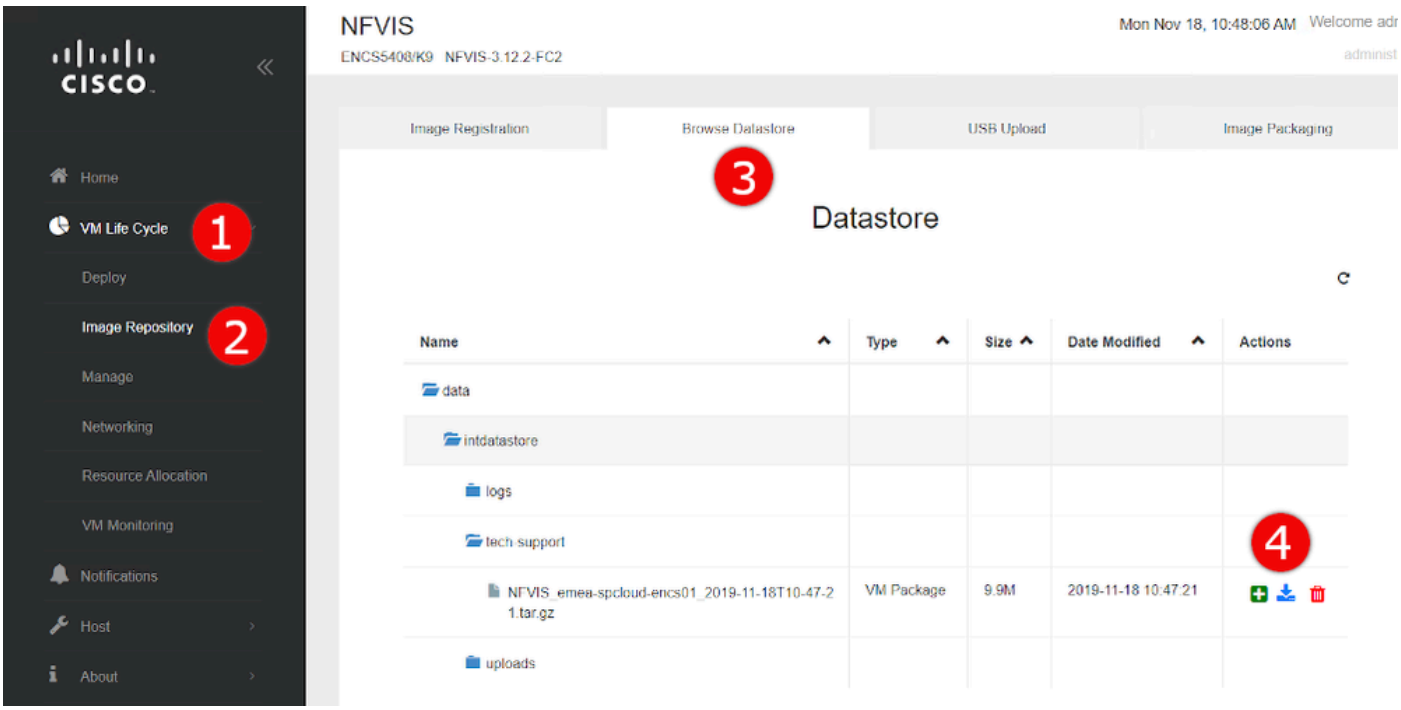
In the the NFVIS web interface, you can download the tech-support bundle log bundle as shown here:

Step 1. Log in to NFVIS and browse to **Diagnostics (2)** under **Host (1)** as shown in the image.



Step 2. Click on **Download Tech Support (3)** . After a few minutes of wait, a pop-up will appear to download the file. If this does not appear, make sure your web browser is set up to allow pop-ups from the NFVIS server you are connected to.

Download Previously Generated Tech-Support files: If you need to re-download a previously generated tech-support file, navigate to the **Image Repository (2)** page, located under the **VM Lifecycle (1)** and select **Browse Datastore (3)**. You can find previously generated tech-supports under the **tech-support** sub-directory of **intdatastore**. Click on the **blue arrow icon (4)** in order to download the file as shown in the image.



NFVIS Tech-Support Bundle: CLI Method

From the NFVIS Command Line Interface (CLI), you can generate a tech-support bundle and transfer it either by uploading to an SCP server or copying to a USB drive. To access the CLI, connect to NFVIS via Secure shell (SSH) or the console.

Upload to SCP server

Use the following steps to generate a tech-support bundle and transfer it via SCP to a remote server:

	Command or Action	Purpose
Step 1	nfvis# **tech-support**	Starts NFVIS tech-support collection
Step 2	nfvis# **show system file-list disk local path /data/intdatastore/tech-support**	This will return a list of all tech-support bundles. **Be sure to identify the filename of the bundle created in the previous step,** as it will be needed in the following steps.
Step 3	nfvis# **system file-copy source** source-path **destination** target-path	(Optional) Move file to another directory **Tip** With NFVIS versions **prior to 3.9.1,** secure copy can be performed only to/from the 'intdatastore:', 'extdatastore1:', 'extdatastore2:', 'usb:' and 'nfs:' path prefixes, none of which include the default path where tech-support bundles are stored, so you must manually copy the file to one of these paths in order to be able to SCP it in the next step. In NFVIS **3.9.1 and later**, a new path-prefix, 'techsupport:', was added for the path where tech-support bundles are stored, allowing secure copy to be peformed directly, so this additional step is **not required**.
Step 4	nfvis# **scp** <path prefix>:<filename> <remote user>@<remote host>:<path>	Transfers the file to the remote SCP server, using the path and filename identified in the previous steps.

Note: You can also download the file from the NFVIS with Secure Copy Protocol (SCP) client. You need to allow incoming SCP connections to NFVIS first. For more details, see Cisco Enterprise Network Function Virtualization Infrastructure Software Configuration Guide.

This is an example of how to generate a tech-support bundle with NFVIS 3.9.1 or later and transfer it to an SCP server:

```
encs01# tech-support

encs01# show system file-list disk local path /data/intdatastore/tech-support
SI NO NAME PATH SIZE TYPE DATE MODIFIED
--------------------------------------------------------------------------------------------------------
388 NFVIS_encs01_2018-12-28T08-32-47.tar.gz /data/intdatastore/tech-support 737K VM Package 2018-12-28 (

encs01# scp techsupport:NFVIS_encs01_2018-12-28T08-42-35.tar.gz root@192.168.0.1:/tmp
root@192.168.0.1's password:
NFVIS_encs01_2018-12-28T08-42-35.tar.gz
encs01#
```

Copy to USB Drive:

Use the steps in the following example to generate a tech-support bundle and copy it to a USB drive.

Note: The USB drive must be formatted with FAT32 of exFAT file system prior to being connected to NFVIS.

<#root>

```
1. Mount the connected USB drive:
     BXB5406-NFVIS(config)#

system usb-mount mount ACTIVE

     BXB5406-NFVIS(config)#

commit

     Commit complete.
     BXB5406-NFVIS(config)#

end


2. Generate the tech-support bundle with the “tech-support” command.
     BXB5406-NFVIS#

tech-support


3. Get the name of the tech-support file:
     BXB5406-NFVIS#

show system file-list disk local path /data/intdatastore/tech-support system file-list disk local 1

      name          NFVIS_BXB5406-NFVIS-401_2020-01-21T15-53-23.tar.gz
      path          /data/intdatastore/tech-support
      size          21K
      type          "VM Package"
      date-modified "2020-01-21 15:53:23"

4. Identify the filepath for your USB drive using "show system file-list disk usb" (note, usb3 will not
     nfvis# show system file-list disk usb
       SI NO NAME PATH SIZE TYPE DATE MODIFIED
       ------------------------------------------------------------------------------------------------
       1 WPSettings.dat /mnt-usb/usb3/System Volume Information 12 Other 2019-12-02 11:15:22
       2 IndexerVolumeGuid /mnt-usb/usb3/System Volume Information 76 Other 2019-12-02 11:15:22
       3 boarding-pass-london.pdf /mnt-usb/usb3 668K Other 2020-02-06 22:26:54
```

5. Use the filename learned above to copy that file to the USB drive using the SCP command (note that h
   for making a simple local file copy by specifying a local source and destination, there is no actual
     BXB5406-NFVIS#

scp techsupport:NFVIS_BXB5406-NFVIS_2020-01-21T15-53-23.tar.gz usb:usb3/BXB5406-NFVIS_2020-01-21T15-53-2

6. Confirm the tech-support file is now on the USB drive:
     BXB5406-NFVIS #

show system file-list disk usb name

```
     SI NO  NAME
     ----------------------------------------------------------
     1      Cisco_NFVIS_BRANCH_Upgrade-3.12.3-RC4.nfvispkg
     2      Logs-for-pahayes.zip
     3      NFVIS_BXB5406-NFVIS_2020-01-21T15-53-23.tar.gz
```

7. Un-mount the USB drive and remove it
     BXB5406-NFVIS (config)#

no system usb-mount mount ACTIVE

```
     BXB5406-NFVIS (config)#
```

commit

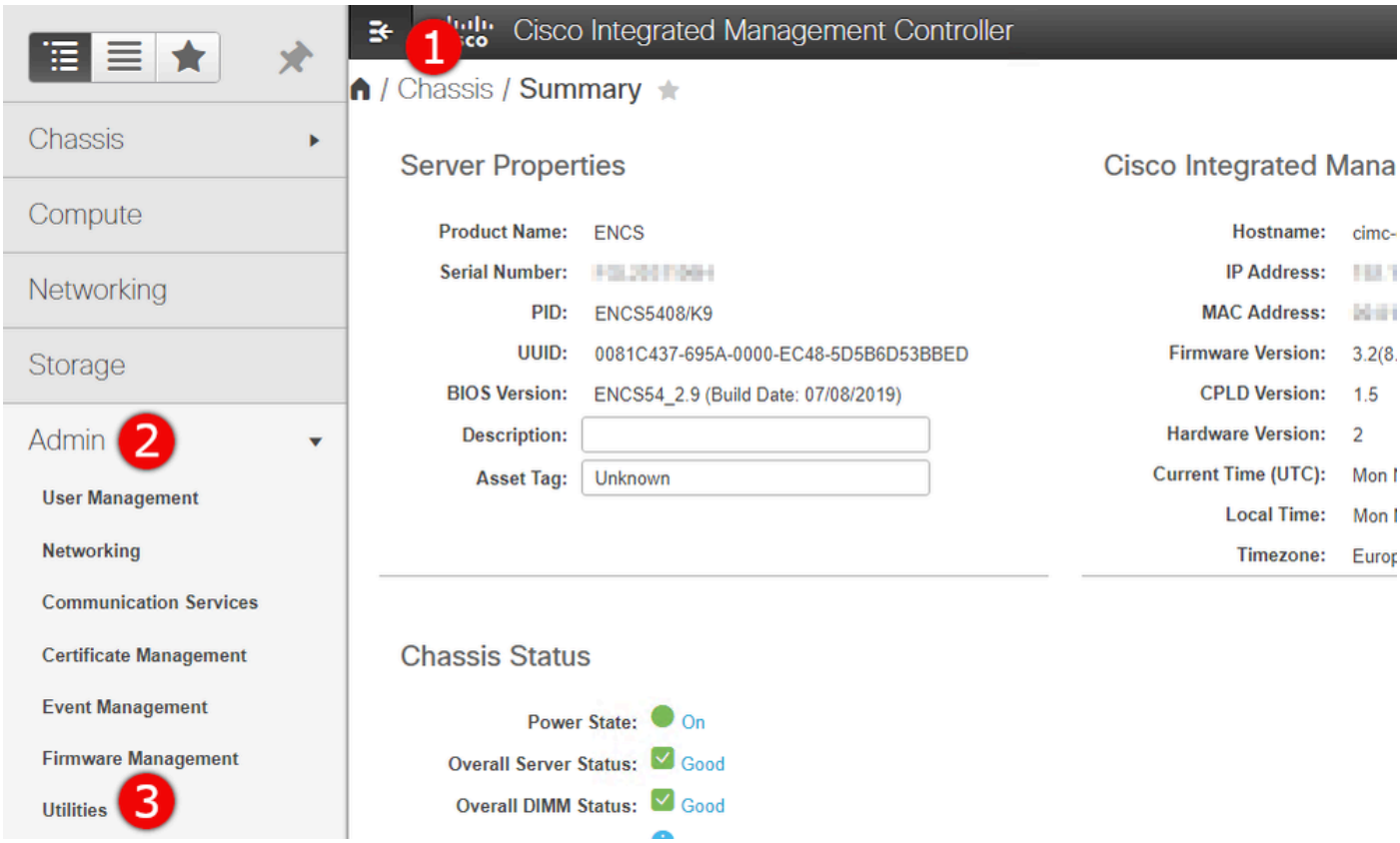
```
     Commit complete.
     BXB5406-NFVIS (config)#
```

end

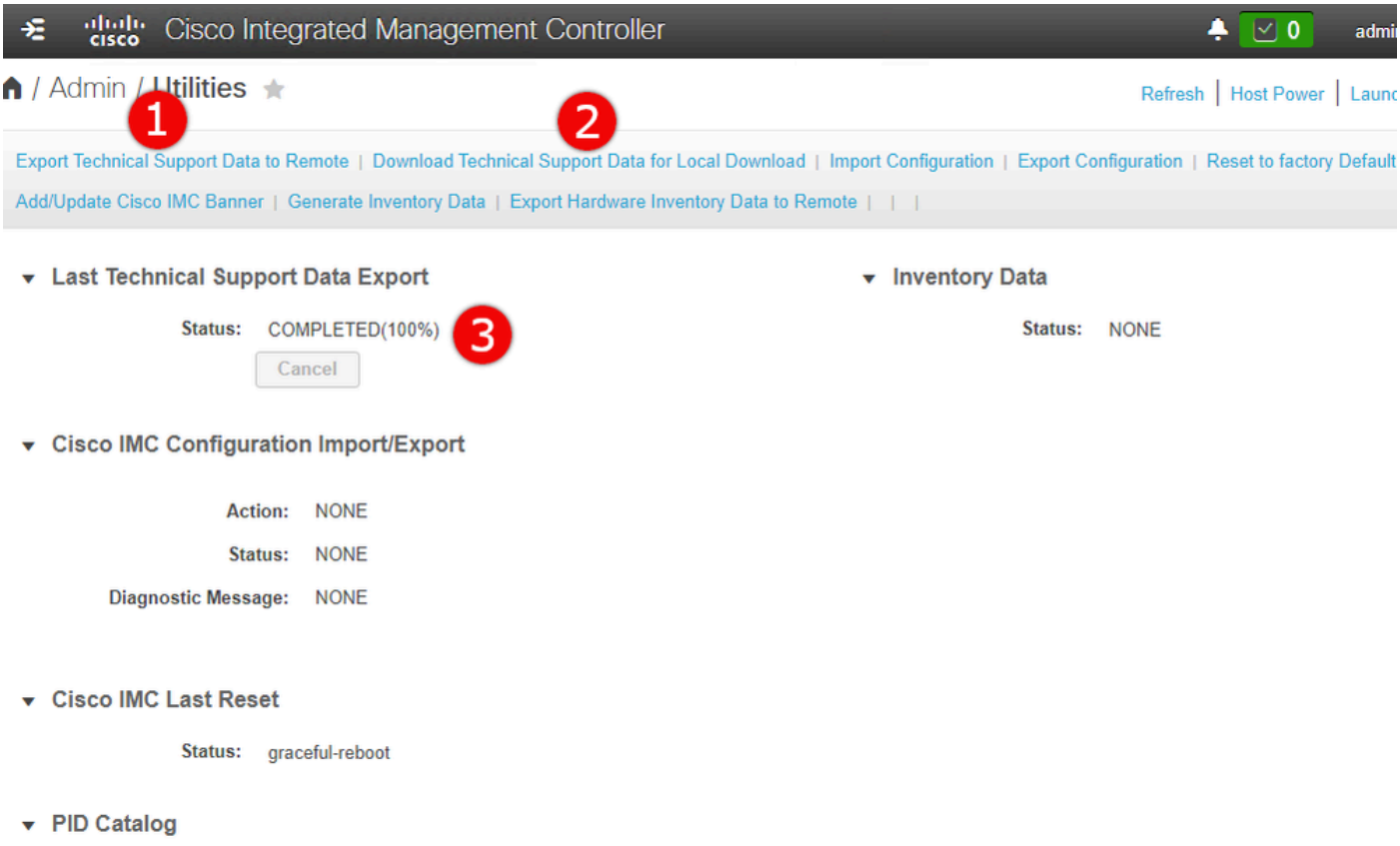
CIMC Tech-Support Bundle: WebUI Method

This method is applicable to Cisco UCS-E Series, UCS-C Series, Cisco Cloud Services Platform (CSP) and ENCS (except ENCS 5104).

Step 1. Log in to CIMC, open **left side menu (1)** and browse to **Utilities (3)** under **Admin (2)**.

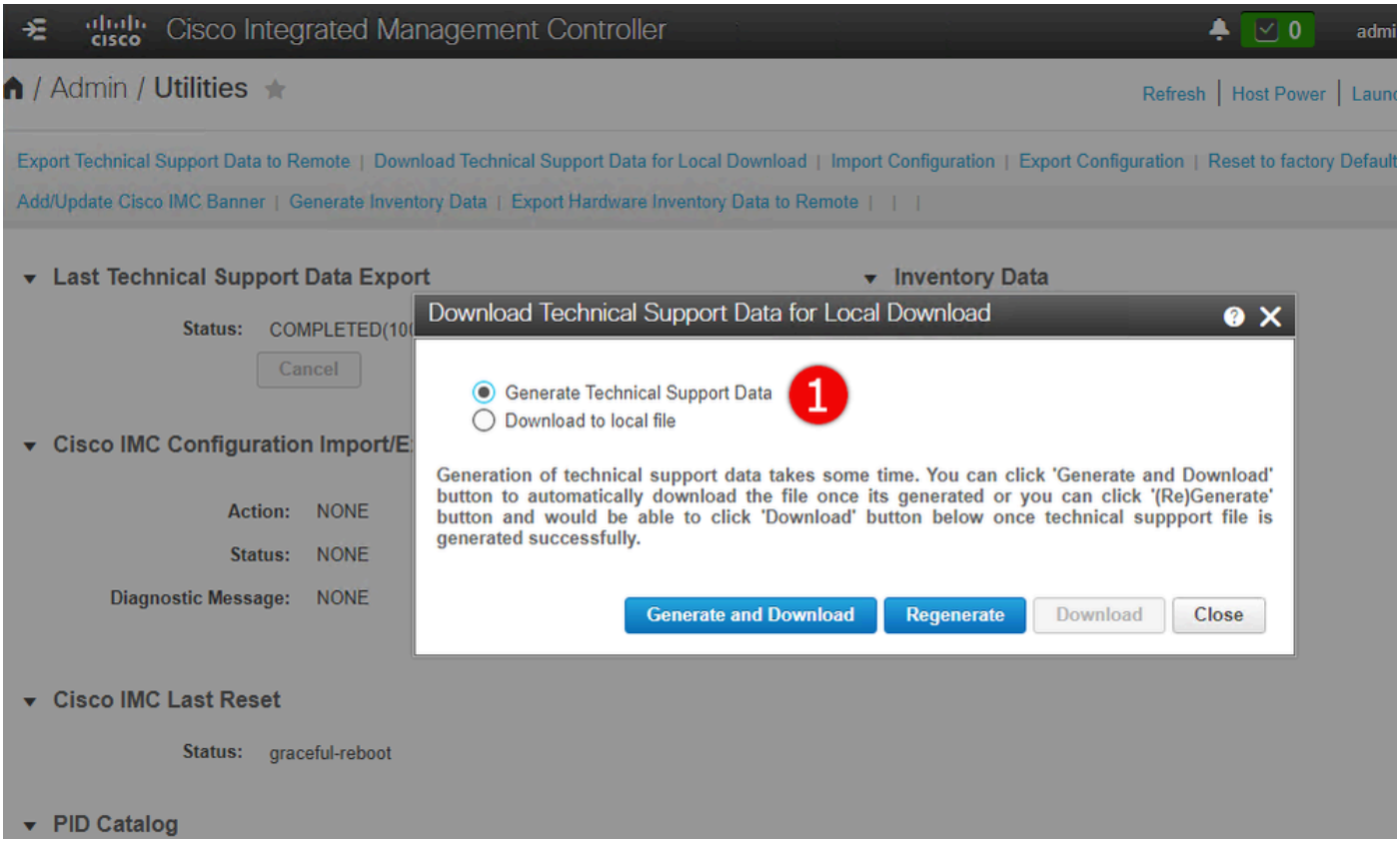


Step 2. Under Utilities, there are two options - **Export Technical Support Data to remote (1)** or **Download Technical Support Data for Local download (2)**. It also shows the status of **Last Technical Support Data Export (3)**. Click on **Download Technical Support Data for Local Download (2)** as shown in the image.



Step 3. In the pop-up message click on **Generate and Download Technical Support Data (1)**. It will take

a few minutes to generate tech-support bundle as shown in the image.



CIMC Tech-Support Bundle: CLI Method

This method is applicable to Cisco UCS-E Series, UCS-C Series, CSP and ENCS (except ENCS 5104).

In order to generate tech-support, connect to Cisco Integrated Management Controller (CIMC) with SSH client of your choice.

Note: To use this method you need to have a host in local network configured as **TFTP/FTP/SFTP/SCP/HTTP** server.

	Command or Action	Purpose
Step 1	Server# **scope cimc**	Enters the CIMC command mode.
Step 2	Server /cimc # **scope tech-support**	Enters the tech-support command mode.
Step 3	Server /cimc/tech-support # **set remote-ip** ip-address	Specifies the IP address of the remote server on which the technical support data file should be stored.
Step 4	Server /cimc/tech-support # **set remote-path** path/filename	Specifies the file name in which the support data should be stored on the remote server. When you enter this name, include the relative path for

		the file from the top of the server tree to the desired location. **Tip** To have the system auto-generate the file name, enter the file name as `default.tar.gz`.
Step 5	Server /cimc/tech-support # **set remote-protocol** protocol	Specifies the protocol to connect to the remote server. It can be of the following types: • tftp • ftp • sftp • scp • http
Step 6	Server /cimc/tech-support # **set remote-username** name	Specifies the user name on the remote server on which the technical support data file should be stored. This field does not apply if the protocol is TFTP or HTTP.
Step 7	Server /cimc/tech-support # **set remote-password** password	Specifies the password on the remote server on which the technical support data file should be stored. This field does not apply if the protocol is TFTP or HTTP.
Step 8	Server /cimc/tech-support # **commit**	Commits the transaction to the system configuration.
Step 9	Server /cimc/tech-support # **start**	Begins the transfer of the data file to the remote server.
Step 10	Server /cimc/tech-support # **show detail**	(Optional) Displays the progress of the transfer of the data file to the remote server.
Step 11	Server /cimc/tech-support # **cancel**	(Optional) Cancels the transfer of the data file to the remote server.

This example creates a technical support data file and transfers the file to an SCP server:

```
encs01 /cimc/tech-support # scope cimc
encs01 /cimc/tech-support # scope tech-support
encs01 /cimc/tech-support # set remote-ip 172.16.0.1
```

```
encs01 /cimc/tech-support *# set remote-path techsupport.tar.gz
encs01 /cimc/tech-support *# set remote-protocol scp
encs01 /cimc/tech-support *# set remote-username root
encs01 /cimc/tech-support *# set remote-password
Please enter remote-password:
Please confirm remote-password:
encs01 /cimc/tech-support *# commit
encs01 /cimc/tech-support #
encs01 /cimc/tech-support # start
Server (RSA) key fingerprint is 4b:b9:a5:14:d0:c3:64:14:54:00:b9:d7:aa:47:1d:6d
Do you wish to continue? [y/N]y
Tech Support upload started.

encs01 /cimc/tech-support # show detail

  Tech Support:
  Server Address: 172.16.0.1
  Path: techsupport.tar.gz
  Protocol: scp
  Username: root
  Password: ******
  Progress(%): 20
  Status: COLLECTING
```