



Troubleshooting

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Collecting Troubleshooting Information

Information collected using the commands listed below can be sent to Cisco Technical Support for troubleshooting purposes.

SUMMARY STEPS

1. `show system sysmgr service name vman`
2. `show mgmt-infra trace message vman_trace`
3. `virtual-service move name virtual-services-name [core | log] to destination-url`
4. `show mgmt-infra trace settings vman_trace`
5. `set trace control vman_trace buffer-size buffer-size`
6. `set trace control vman_trace clear [location active]`
7. `set trace vman_trace level {debug | default | err | info | warning} [location active]`

DETAILED STEPS

	Command or Action	Purpose
Step 1	<code>show system sysmgr service name vman</code> Example: Switch# <code>show system sysmgr service name vman</code> Service "virtManager" ("vman", 40): UUID = 702, PID = 6482, no SAP	This command shows the health of the virtualization manager (VMAN) process.

	Command or Action	Purpose
	<pre>State: SRV_STATE_STARTED (entered at time Thu Nov 19 18:27:01 2015). Restart count: 1 Time of last restart: Thu Nov 19 18:27:01 2015. The service never crashed since the last reboot. Tag = N/A Plugin ID: 0</pre>	
Step 2	show mgmt-infra trace message vman_trace	This command contains information logged by the VMAN process.
Step 3	virtual-service move name <i>virtual-services-name</i> [core log] to <i>destination-url</i> Example: Switch# virtual-service move name openflow_agent core to flash:	Moves application log or core files to a specified destination location. This command can be used when the application running in the container has an issue (but the container is running as expected).
Step 4	show mgmt-infra trace settings vman_trace Example: Switch# show mgmt-infra trace settings vman_trace One shot Trace Settings: Buffer Name: vman_trace Default Size: 262144 Current Size: 262144 Traces Dropped due to internal error: Yes Total Entries Written: 4653 One shot mode: No One shot and full: No Disabled: False	This command displays trace settings of a trace buffer.
Step 5	set trace control vman_trace buffer-size <i>buffer-size</i>	This command sets the trace buffer size.
Step 6	set trace control vman_trace clear [location active]	This command clears the trace buffer.
Step 7	set trace vman_trace level {debug default err info warning} [location active]	This command sets the trace level.

Troubleshooting: Installing Applications in a Virtual Services Container

This topic describes the possible reasons why installation of an application in a virtual services container may not have been successful, and the corresponding solutions.

Problem Installation of an application in a virtual services container is not successful.

Possible Cause Installation of the application may still be ongoing.

Solution Check the installation status, by using the **show virtual-service list** command. The following sample output shows an application that has status `Installed`.

```
Switch# show virtual-service list
Virtual Service List:

Name                               Status           Package Name
-----
openflow_agent                     Installed        ofa-1.1.64142n-cat3000-SSA-k9.ova
```

Possible Cause An application with the same name has already been installed.

Solution Ensure that an application with the same name has not already been installed, by using the **show virtual-service list** command. You can verify this by referencing the Name field.

Possible Cause The target media has not been installed.

Solution Target media for the switch — flash. Ensure that the target media is installed, by using the **show version** command.

```
Switch# show version
Cisco IOS Software, IOS-XE Software, Catalyst L3 Switch Software (CAT3K_CAA-UNIVERSALK9-M),
  Version 03.07.03.E3.369 EARLY DEPLOYMENT PROD BUILD ENGINEERING NOVA_WEEKLY BUILD, synced
  to FLO_DSGS7_BENI_MR2_SYNC
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2015 by Cisco Systems, Inc.
Compiled Thu 12-Nov-15 05:27 by gereddy
```

```
Cisco IOS-XE software, Copyright (c) 2005-2015 by cisco Systems, Inc.
All rights reserved. Certain components of Cisco IOS-XE software are
licensed under the GNU General Public License ("GPL") Version 2.0. The
software code licensed under GPL Version 2.0 is free software that comes
with ABSOLUTELY NO WARRANTY. You can redistribute and/or modify such
GPL code under the terms of GPL Version 2.0.
(http://www.gnu.org/licenses/gpl-2.0.html) For more details, see the
documentation or "License Notice" file accompanying the IOS-XE software,
or the applicable URL provided on the flyer accompanying the IOS-XE
software.
```

```
ROM: IOS-XE ROMMON
BOOTLDR: CAT3K_CAA Boot Loader (CAT3K_CAA-HBOOT-M) Version 1.2, RELEASE SOFTWARE (P)

ott-of-c3k-118 uptime is 36 minutes
Uptime for this control processor is 38 minutes
System returned to ROM by Power Failure
System image file is "flash:cat3k_caa-universalk9.SSA.03.07.03.E3.369.152-3.3.69.E3.bin"
Last reload reason: Power Failure
```

```
This product contains cryptographic features and is subject to United
States and local country laws governing import, export, transfer and
use. Delivery of Cisco cryptographic products does not imply
third-party authority to import, export, distribute or use encryption.
Importers, exporters, distributors and users are responsible for
compliance with U.S. and local country laws. By using this product you
agree to comply with applicable laws and regulations. If you are unable
to comply with U.S. and local laws, return this product immediately.
```

```
A summary of U.S. laws governing Cisco cryptographic products may be found at:
http://www.cisco.com/wwl/export/crypto/tool/stqrg.html
```

If you require further assistance please contact us by sending email to export@cisco.com.

License Level: Ipservices
 License Type: Permanent
 Next reload license Level: Ipservices

cisco WS-C3650-24TS (MIPS) processor with 4194304K bytes of physical memory.
 Processor board ID FDO1909E0XX
 1 Virtual Ethernet interface
 56 Gigabit Ethernet interfaces
 2048K bytes of non-volatile configuration memory.
 4194304K bytes of physical memory.
 257008K bytes of Crash Files at crashinfo:.
 1550272K bytes of Flash at flash:.
 0K bytes of Dummy USB Flash at usbflash0:.
 0K bytes of at webui:.

Base Ethernet MAC Address : 84:b8:02:55:82:00
 Motherboard Assembly Number : 73-15127-05
 Motherboard Serial Number : FDO19091CMW
 Model Revision Number : D0
 Motherboard Revision Number : A0
 Model Number : WS-C3650-24TS
 System Serial Number : FDO1909E0XX

Switch	Ports	Model	SW Version	SW Image	Mode
*	1 28	WS-C3650-24TS	03.07.03.E3.369	cat3k_caa-universalk9	BUNDLE

Configuration register is 0x102

Possible Cause There is insufficient space to install an application.

Solution Check the amount of space that is available, by using the **dir** command.

Switch# **dir flash:**
 Directory of flash:/

```

16168 -rw-      2097152  Nov 17 2015 19:50:45 +00:00  nvram_config
16185 -rw-      88145920 Nov 17 2015 06:33:32 +00:00  ofa-1.1.64144n-cat3000-SSA-k9.ova
16169 -rw-      88145920 Nov 16 2015 20:04:16 +00:00  ofa-1.1.64148n-cat3000-SSA-k9.ova
16190 -rw-        17134  Oct 20 2015 20:21:25 +00:00  eci_config.out
16184 -rw-        58202   Oct 9 2015 01:24:55 +00:00  vman_ofa.log.6568.20151009012455
16201 -rw-        10188  Oct 28 2015 20:28:12 +00:00  iosdMemLeaks.txt
16191 -rw-         345   Oct 20 2015 20:21:25 +00:00  eci_show.out
16199 -rw-         954   Nov 17 2015 20:25:24 +00:00  virtual-instance.conf
24245 -rw-      53754776   Oct 9 2015 14:06:37 +00:00  cat3k_caa-infra.SSA.0.DEV-0.pkg
16167 -rw-         556   Oct 14 2015 02:41:30 +00:00  vlan.dat
16174 drwx         4096  Nov 17 2015 19:49:57 +00:00  dc_profile_dir
16176 drwx         4096  Jul 27 2015 20:03:59 +00:00  wnweb_store
24244 -rw-      5661364   Oct 9 2015 14:06:48 +00:00  cat3k_caa-drivers.SSA.0.DEV-0.pkg
16193 -rw-         356   Oct 20 2015 20:21:25 +00:00  eci_debug.out
16171 drwx         4096  Jul 27 2015 20:43:41 +00:00  onep
16186 drwx         4096  Nov 17 2015 20:00:23 +00:00  temp_amd
80801 drwx         4096  Nov 2 2015 14:22:41 +00:00  tracelogs
16192 -rw-       11792  Oct 20 2015 20:21:25 +00:00  eci_show_content.out
16194 -rw-       9543  Oct 20 2015 20:21:25 +00:00  eci_debug_content.out
16195 -rw-         356   Oct 20 2015 20:21:25 +00:00  eci_clear.out
16196 -rw-         1752  Oct 20 2015 20:21:25 +00:00  eci_clear_content.out
24246 -rw-      46494884   Oct 9 2015 14:06:41 +00:00  cat3k_caa-iosd-universalk9.SSA.0.DEV-0.pkg
24247 -rw-      30839508   Oct 9 2015 14:06:38 +00:00  cat3k_caa-platform.SSA.0.DEV-0.pkg
24248 -rw-     126614208  Oct 9 2015 14:06:48 +00:00  cat3k_caa-wcm.SSA.0.DEV-0.pkg
16212 -rw-       478495  Oct 28 2015 20:36:55 +00:00  iosdProcMemDetail.txt
16175 -rw-     328263356  Nov 16 2015 15:35:23 +00:00  cat3k_caa-universalk9.SSA.03.07.03.E3.369.152-3.3.69.E3.bin
    
```

Possible Cause Disk quota for container is insufficient.

Solution Ensure that sufficient disk quota is allotted to the virtual services container, by using the **show virtual-service global** command.

```
Switch# show virtual-service global
Virtual Service Global State and Virtualization Limits:

Infrastructure version : 1.5
Total virtual services installed : 1
Total virtual services activated : 1

Machine types supported   : LXC
Machine types disabled   : KVM

Maximum VCPUs per virtual service : 1
Resource virtualization limits:
Name                       Quota      Committed  Available
-----
system CPU (%)             6          1          5
memory (MB)                256       256        0
flash (MB)                 256       219        37
```

Possible Cause An invalid OVA package has been used for installation (Invalid package/Parsing error/Invalid machine specification error).

Solution Ensure that the OVA package copied to the device matches in size with the OVA package on the FTP server. Refer to the release for details or Contact Cisco Technical Support to ensure that the OVA file provided is compatible with the device operating system and not corrupted.

Possible Cause The virtual services container does not install properly due to unknown reasons.

Solution Uninstall the virtual services container. If the problem persists, collect general troubleshooting information and contact Cisco Technical Support.

Related Topics

[Collecting Troubleshooting Information, on page 1](#)

Troubleshooting: Activating Applications in a Virtual Services Container

This topic describes the possible reasons why the activation of an application in a virtual services container may not have been successful, and the corresponding solutions.

Problem Activation of an application in a virtual services container is not successful.

Possible Cause Activation of the application may still be ongoing.

Solution Check the activation status of the application, by using the **show virtual-service list** command. The following sample output shows an application that status *Activated*.

```
Switch# show virtual-service list

Virtual Service List:
```

Name	Status	Package Name
openflow_agent	Activated	ofa-1.1.64148n-cat3000-SSA-k9.ova

Possible Cause The virtual services container does not have sufficient resources for activation of the application.

Solution Check if the device has sufficient resources for virtualization, including—memory, disk space, and CPU utilization. You can display the resource requirement for virtualization, by using the **show virtual-service** command.

```
Switch# show virtual-service

Virtual Service Global State and Virtualization Limits:

Infrastructure version : 1.5
Total virtual services installed : 1
Total virtual services activated : 1

Machine types supported   : LXC
Machine types disabled    : KVM

Maximum VCPUs per virtual service : 1
Resource virtualization limits:
Name                       Quota      Committed  Available
-----
system CPU (%)             6          1          5
memory (MB)                256       256        0
```

Possible Cause The application does not activate properly due to unknown reasons.

Solution Deactivate and uninstall the application. If the problem persists, collect general troubleshooting information and contact Cisco Technical Support.

Related Topics

[Collecting Troubleshooting Information, on page 1](#)

Troubleshooting: Uninstalling Applications in a Virtual Services Container

This topic describes the possible reasons why you may not have been successful with the process of uninstalling an application in a virtual services container, and the corresponding solutions.

Problem Uninstallation of an application from the virtual services container is not successful.

Possible Cause The application being uninstalled is not completely deactivated.

Solution Check the activation status of the application, by using the **show virtual-service list** command. The following sample output shows an application in the `Deactivated` status, and can be uninstalled.

```
Switch# show virtual-service list

Virtual Service List:

Name                       Status      Package Name
```

```
-----
openflow_agent           Deactivated           ofa-1.1.64148n-cat3000-SSA-k9.ova
ott-of-c3k-118#delete flash:virtual-instance.conf
ott-of-c3k-118#reload
```

Possible Cause The application does not uninstall due to unknown reasons.

Solution As a last resort, delete the `virtual-instance.conf`, by using the `delete` command, and then reload the device.

```
Switch# delete bootflash:virtual-instance.conf
Switch# reload
```

If the problem persists, collect general troubleshooting information and contact Cisco Technical Support.

Troubleshooting: Deactivating Applications in a Virtual Services Container

This topic describes the possible reasons why you may not have been successful with the process of deactivating an application in a virtual services container, and the corresponding solutions.

Problem Deactivation of an application is not successful.

Possible Cause The application being deactivated is not activated.

Solution Check the activation status of the application, by using the `show virtual-service list` command. The following sample output shows an application that is in the `Activated` state, and can be deactivated.

```
Switch# show virtual-service list

Virtual Service List:

Name                Status             Package Name
-----
openflow_agent      Activated          ofa-1.1.64148n-cat3000-SSA-k9.ova
```

Possible Cause Deactivation takes a long time (5 minutes).

Solution Check if application directories are in use. Ensure that there are no shells open in the application file system directories on the device.

Possible Cause The application does not deactivate gracefully due to unknown reasons.

Solution As a last resort, uninstall the application (if you have not already done this) and delete the `virtual-instance.conf` configuration file, by entering the `delete` command, and then reload the device. This step deletes all applications installed in the virtual services container.

```
Switch# delete flash:virtual-instance.conf
Switch# reload
```

Solution If the problem persists, collect general troubleshooting information and contact Cisco Technical support.

