

Collect debug Information from CPS (QPS) Environment with One Script



Document ID: 119158

Contributed by Vinodkumar Tiwari and Aravindhnan Balasubramanian,
Cisco TAC Engineers.

Jul 29, 2015

Contents

Introduction

Debug Script for CPS Release 5.3.x through 6.x

Capture Logs on the CPS

Script for CPS Release 7.x and Later

Capture Logs on the CPS

Fetch the Collected Information from the CPS System

Troubleshoot for Errors in diagnostics.ini file in diagnostics.sh Output

Problem

Solution

Introduction

This document describes the script you can use in Cisco Policy Suite (CPS) in order to capture several debug logs all at once. From CPS release 5.3.x through release 6.x, you use integrated debug script *zip_debug_info.sh*. In CPS version 7.x you use integrated script *capture_env.sh* in order to collect the logs. This document explains both methods.

Debug Script for CPS Release 5.3.x through 6.x

The *zip_debug_info.sh* script is located at path */opt/broadhop/installer/diag* on *pcrfclient01 VM (Virtual Machine)*.

```
[root@pcrfclient01]#ls -lrth /opt/broadhop/installer/diag/
total 48
-rwxr-xr-x 1 qns qns 2778 May 27 13:30 about.sh
-rw-r--r-- 1 qns qns 888 Jun 25 18:16 diagnostics.ini
-rwxr-xr-x 1 qns qns 16241 May 27 13:30 diagnostics.sh
-rwxr-xr-x 1 qns qns 1449 May 27 13:30 list_installed_features.sh
-rwxr-xr-x 1 qns qns 4370 May 27 13:30 list_staged_features.sh
drwxr-xr-x 6 qns qns 4096 May 27 13:30 performance
-rwxr-xr-x 1 qns qns 334 May 27 13:30 test.sh
-rwxr-xr-x 1 qns qns 1970 May 27 13:30 zip_debug_info.sh
[root@pcrfclient01]#
```

This script collects this set of information:

1. clock_skew.txt
2. consolidated-engine.log
3. consolidated-qns.log
4. diagnostics.txt
5. disk_usage.txt
6. etc/broadhop/

7. features.txt
8. hosts
9. staged-features.txt
10. svn.repos

Capture Logs on the CPS

Run *zip_debug_info.sh* on pcrfclient01 VM. It captures these logs and creates a zipfile stored at */var/tmp/debug_info-<date>.zip*:

```
[root@pcrfclient01]# zip_debug_info.sh

    Creating Zipfile with Debug Info...
    =====
    Capturing /etc/broadhop...
    Capturing Logs...
    Capturing Policy Builder Data...
    Capturing Diagnostics...
    Capturing Installed Software Versions...
    Capturing Staged Software Features...
    Capturing Disk Usage...
    Capturing Clock Skew...
    Creating zip file: /var/tmp/debug_info-2014-06-25.zip...
    =====
    Output debug informativar/tmp/debug_info-2014-06-25.zip
[root@pcrfclient01]#
```

Script for CPS Release 7.x and Later

The *capture_env.sh* script is located at */var/qps/bin/support/env* on pcrfclient01 VM.

```
[root@dcl-pcrfclient01 ~]# cd /var/qps/bin/support/env/

[root@dcl-pcrfclient01 env]# ls -lrt
total 200
-rwxr-xr-x 1 root root 7401 Apr 29 13:04 migrate_qps_6
-rw-r--r-- 1 root root 78798 Apr 29 13:04 env_mongo.sh
-rwxr-xr-x 1 root root 20878 Apr 29 13:04 env_import.sh
-rw-r--r-- 1 root root 62170 Apr 29 13:04 env_functions.sh
-rwxr-xr-x 1 root root 18603 Apr 29 13:04 env_export.sh
-rwxr-xr-x 1 root root 3192 Apr 29 13:04 capture_env.sh
[root@dcl-pcrfclient01 env]#
```

The script collects this set of information:

1. clock_skew.txt
2. consolidated-engine.log
3. consolidated-qns.log
4. diagnostics.txt
5. disk_usage.txt
6. etc/broadhop/
7. features.txt
8. hosts
9. staged-features.txt
10. svn.repos

Capture Logs on the CPS

Run *capture_env.sh* in path `/var/qps/bin/support/env/` on `pcrfclient01` VM. It captures these logs and creates a zipfile stored at location `/var/tmp/capture_env-<YYYY-MM-DD>.tgz`:

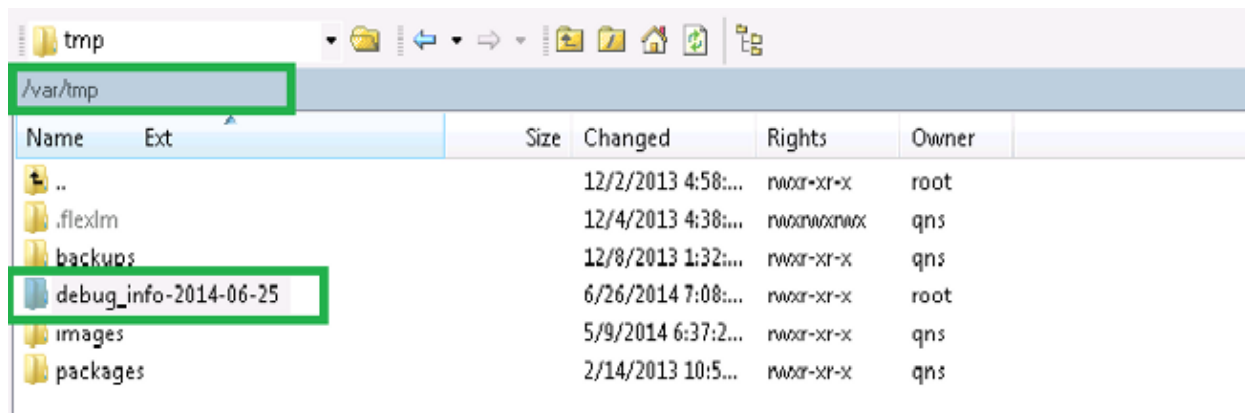
```
[root@dcl-pcrfclient01 env]# capture_env.sh

    Creating archive of QPS environment information...
    -----
    Capturing /etc/broadhop...
    Capturing Logs...
    Capturing Policy Builder Data...
    Capturing Diagnostics...
    Capturing Installed Software Versions...
    Capturing Staged Software Features...
    Capturing Disk Usage...
    Capturing Clock Skew...
Creating the archive /var/tmp/capture_env-2015-06-17.tgz...
    The QPS environment information has been exported
    to /var/tmp/capture_env-2015-06-17.tgz
    [root@dcl-pcrfclient01 env]#
```

Fetch the Collected Information from the CPS System

Use any FTP (File Transfer Protocol) Client in order to login to your `pcrfclient01` VM and fetch the *debug_info-<date>.zip* or *capture_env-<YYYY-DD-MM>.tgz* according to the CPS software release where the logs were generated available at `/var/tmp`.

Example:



Name	Ext	Size	Changed	Rights	Owner
..			12/2/2013 4:58:...	rwxr-xr-x	root
.flexlm			12/4/2013 4:38:...	rwxrwxrwx	qns
backups			12/8/2013 1:32:...	rwxr-xr-x	qns
debug_info-2014-06-25			6/26/2014 7:08:...	rwxr-xr-x	root
images			5/9/2014 6:37:2...	rwxr-xr-x	qns
packages			2/14/2013 10:5...	rwxr-xr-x	qns

Note: On CPS release 7.x, the generated filename is *capture_env-<YYYY-MM-DD>.tgz*.

Troubleshoot for Errors in `diagnosticsh.ini` file in `diagnostics.sh` Output

Problem

If you encounter this error while you run the *zip_debug_info.sh* script (or when you run *diagnostics.sh*) then follow the Solution provided in this section:

Error:

Creating Zipfile with Debug Info...

=====

Capturing /etc/broadhop...

Capturing Logs...

Capturing Policy Builder Data...

Capturing Diagnostics...

/opt/broadhop/installer/diag/diagnostics.ini: line 27: 27718: command not found

Capturing Installed Software Versions...

Solution

Edit the file */opt/broadhop/installer/diag/diagnostics.ini* and separate the *DB_REPL_PORTS* with a comma instead of a space. This resolves the issue.

Correct Format

#Database ports

DB_REPL_PORTS=27717,27718,27719,27720

SH_PORT=27717

Incorrect Format

#Database ports

DB_REPL_PORTS=27717 27718 27719 27720

SH_PORT=27717

Updated: Jul 29, 2015

Document ID: 119158
