

# Troubleshoot Newly Added QNS VMs Are Not Counted in top\_qps.sh of CPS

## Contents

[Introduction](#)

[Prerequisites](#)

[Requirements](#)

[Components Used](#)

[Background Information](#)

[Problem](#)

[Get Newly Added QNS VMs Counted While the top\\_qps.sh Script is Executed](#)

[Expected Output after the Execution of the Procedure](#)

## Introduction

This document describes the procedure to troubleshoot newly added Quantum Network Suite Virtual Machines (QNS VMs) that are not seen in `top_qps.sh`.

## Prerequisites

### Requirements

Cisco recommends that you have knowledge of these topics:

- Linux
- Cisco Policy Suite (CPS)

**Note:** Cisco recommends that you must have privilege root access to CPS CLI.

### Components Used

The information in this document is based on these software and hardware versions:

- CPS 19.4
- CentOS Linux release 7.6.1810 (Core)
- Unified Computing System (UCS)-B

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

The addition of QNS VMs is the procedure to expand the capacity of the CPS node. Once the

QNS VMs are added to the cluster, it is expected that newly added QNS VMs pick up the traffic immediately if all the internal processes are up.

## Problem

It is observed that once the expansion QNS VMs are added to the cluster, the traffic is taken care of by these VMs, but is not visible in `top_qps.sh` script output. You notice that the `top_qps.sh` output still shows the old count of QNS VMs.

```
[root@installer ~]# top_qps.sh
-----
Host Detail:
qns01,qns02 -----> Shows only QNS01 and QNS02 VMs, QNS03 is not counted.
Measurement timer: 1      QNS Count: 2.
-----
Average      Success      TPS      Error  Time Used      Messages
*** No Statistics During Time Period ***
-----
Average      Success      TPS      Error  Time Used      Actions
*** No Statistics During Time Period ***

Tue Sep 20 04:31:55 UTC 2022
*** End-of-Collection ***
```

```
[root@installer ~]# about.sh
Cisco Policy Suite - Copyright (c) 2015. All rights reserved.
```

CPS Multi-Node Environment

CPS Installer Version - 19.4.0

CPS ISO Version Installed - CPS\_19.4.0.release

CPS Core Versions

```
-----
lb01: qns-1      (iomanager): 19.4.0.release
lb01: qns-2      (diameter_endpoint): 19.4.0.release
lb01: qns-3      (diameter_endpoint): 19.4.0.release
lb01: qns-4      (diameter_endpoint): 19.4.0.release
lb02: qns-1      (iomanager): 19.4.0.release
lb02: qns-2      (diameter_endpoint): 19.4.0.release
lb02: qns-3      (diameter_endpoint): 19.4.0.release
lb02: qns-4      (diameter_endpoint): 19.4.0.release
qns01: qns-1      (pcrf): 19.4.0.release
qns02: qns-1      (pcrf): 19.4.0.release
qns03: qns-1      (pcrf): 19.4.0.release ----->>> Newly Added QNS[QNS03]
pcrfclient01: qns-1      (controlcenter): 19.4.0.release
pcrfclient01: qns-2      (pb): 19.4.0.release
pcrfclient02: qns-1      (controlcenter): 19.4.0.release
pcrfclient02: qns-2      (pb): 19.4.0.release
```

## Get Newly Added QNS VMs Counted While the `top_qps.sh` Script is Executed

Follow the normal procedure from Step 1. to Step 6. to add a new QNS VM. Step 7. is added to ensure the `top_qps.sh` includes the newly added QNS VM in the KPI collection report.

Step 1. Upload the updated CSV deployment files into the Cluster Manager VM.

Step 2. Import the updated CSV deployment files on Cluster Manager.

```
/var/qps/install/current/scripts/import/import_deploy.sh
```

Step 3. Validate the imported data.

```
cd /var/qps/install/current/scripts/deployer/support/; python jvalidate.py
```

Step 4. Build VM images.

```
/var/qps/install/current/scripts/build_all.sh
```

Step 5. Copy `/etc/hosts` file from CLUMAN to all the nodes.

```
SSHUSER_PREFERROOT=true copytoall.sh /etc/hosts /etc/hosts
```

Step 6. Manually deploy additional qns nodes.

```
/var/qps/install/current/scripts/deployer/deploy.sh qns03
```

Step 7. Restart qns-1 process on `pcrfclient01/pcrfclient02`.

```
monit restart qns-1
```

## Expected Output after the Execution of the Procedure

```
[root@installer ~]# top_qps.sh
```

```
-----  
Host Detail:
```

```
qns03,qns01,qns02.      --> QNS03 VM is visible now.
```

```
Measurement timer: 1    QNS Count: 3  
-----
```

Average	Success	TPS	Error	Time Used	Messages
*** No Statistics During Time Period ***					

Average	Success	TPS	Error	Time Used	Actions
*** No Statistics During Time Period ***					

```
Tue Sep 20 05:11:56 UTC 2022
```

```
*** End-of-Collection ***
```