Troubleshoot CPS Control Center Session Limit Issue

Contents

Introduction Prerequisites Requirements Components Used Background Information Problem Procedure to Resolve CPS Control Center Session Limit Issues Approach to Clear Max Session Limit per User Exceed Alert Approach to Customize Session Limit per User

Introduction

This document describes the procedure to troubleshoot Cisco Policy Suit (CPS) Control Center Session Limit issues.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Linux
- 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 and earlier versions.
- 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

CPS Control Center GUI enables you to do these tasks:

- Manage subscriber data, that is, find or create and edit information about your subscribers.
- View subscriber sessions.
- View system sessions.
- Populate custom reference data (CRD) tables.

CPS Control Center supports session limits per user. If the user exceeds the configured session limit, they are

not allowed to log in. CPS also provides notifications to the user when other users are already logged in.

When a user logs in to Control Center, a Welcome message displays at the top of the screen. A session counter is shown next to the username. This represents the number of login sessions for this user. In this example, this user is logged in only once ([1]).

CONTROL CENTER	Welcome, qns [1]	08/30/2014 08:30:36 MDT LO⊙OUT HEL				
		SUBSCRIBERS	CONFIGURATION			
Welcome Message		_				
r						
Login Notification	n loaaed in or					
logged out						
L		ogin Notification for a Second Use	r			

Problem

When the number of sessions the user exceeds the session limit, the user is not allowed to log in and receives the message Max session limit per user exceed! as shown in the image.

admin PASSWORD:	USERNAME:	wax session iii	init per user ex	ceeu.	
PASSWORD:	admin				
•••••	PASSWORD:				
	•••••				

The session limit can be configured by the runtime argument, which can be configured in the qns.conf file. -Dcc.user.session.limit=XX (default value is 5).

Procedure to Resolve CPS Control Center Session Limit Issues

Approach to Clear Max Session Limit per User Exceed Alert

Step 1. Run this command from the installer to login into the OSGi framework of CPS.

```
[root@installer ~]# telnet qns01 9091
Trying 192.168.10.141...
Connected to qns01.
Escape character is '^]'.
```

osgi>

Step 2. Run this command to flush all control center user sessions.

```
osgi> flushCCSessions
Successfully flushed all control center user session.
```

osgi>

Step 3. Try to login into Control Center as a fresh browser session and verify that you are able to log in with the desired username. If you are able to log in to Control Center GUI, then you can ignore the rest of the steps in this approach.

անանո				CONTROL CENTER	Hostname: dc1-qns01	Welcome, qns [1] ADMIN	12/01/2022 10:27:18	UTC LOGOUT HELP
CISCO. CONTRO	L CENTER						SUBSCRIBERS	CONFIGURATION
Subscribers	Subscribers							
Find Subscriber Create Subscriber	Find Subscriber							
Sessions	Criteria			clear				
Find Subscriber Session Find Network Session	Credential or Name:			Search				
	Results			clear				
	Credential	Name	Status					

Control CenControl Center GUI home pageter GUI home page

Else if you are still unable to log in to Control Center due to the Max session limit per user exceed! alert, then proceed with Step 4. onwards.

Step 4. Run this command from the Installer to log in to the active LB of the impacted CPS.

#ssh lbvip01

Step 5. Run this command to restart the Memcached process in active LB to clear the Max session limit per user exceed! alert in Control Center GUI.

#service memcached stop
#service memcached start

Step 6. Try to login into Control Center as a fresh browser session and verify that you are able to log in with the desired username.

ahaha				CONTROL CENTER	Hostname: dc1-qns01	Welcome, qns [1] ADMIN	12/01/2022 10:27:18 UTC LOGOUT HELP		
CISCO. CONTRO	L CENTER						SUBSCRIBERS	CONFIGURATION	
Subscribers	Subscribers								
Find Subscriber Create Subscriber	Find Subscriber								
Sessions	Criteria			clear					
Find Subscriber Session Find Network Session	Credential or Name:			Search					
	Results			clear					
	Credential	Name	Status						

Control CenControl Center GUI home pageter GUI home page

Approach to Customize Session Limit per User

Note: This approach is applicable for recent CPS versions as well.

Step 1. Login into Cluster Manager as a root user.

Step 2. Backup qns conf file.

[root@CM ~]\$ sed -i '\$ i -Dcc.user.session.limit=15' /etc/broadhop/qns.conf

Note: Session limit count 15 is provided as a sample only.

Step 4. Build puppet script.

[root@CM ~]\$ /var/qps/install/current/scripts/build/build_etc.sh Step 5. Distribute the modified file to all VMs.

 $\label{eq:linear} $$ copytoall.sh /etc/broadhop/qns.conf$$ Step 6. Validate qns conf is updated in other VMs. $$$

[root@CM ~]\$ ssh pcrfclient01
[root@cc ~]\$ grep 'Dcc.user.session.limit' /etc/broadhop/qns.conf
Expected output: -Dcc.user.session.limit=15

Step 7. Restart all QNS services. Run this command from Cluster Manager.

[root@CM ~]\$ /var/qps/bin/control/restartall.sh