

Clean Prime Collaboration Assurance (PCA) Database

Contents

[Introduction](#)

[Prerequisites](#)

[Requirements](#)

[Components Used](#)

[Symptom\(s\)](#)

[Prior Steps before you start the DB Vacuum](#)

[DB Vacuum Process](#)

[Root Access](#)

Introduction

This document describes how to perform a Database (DB) Vacuum to clean up stale or over-abundant DB entries in the Prime Collaboration Assurance (PCA) Application.

Contributed by Joseph Koglin, Cisco TAC Engineer.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics and perform these recommendations:

- Basic Knowledge of PCA
- When you perform the actions specified in this document you will require a maintenance window if the PCA is in production.
- You will require full root access - instructions can be found at the bottom of this document under Root Access if you do not have it configured

Components Used

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

PCA and PCA PostgreSQL DB

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.

Symptom(s)

A DB Vacuum or DB Cleanup can be utilized

- When disk space repeatedly is increased from the /opt directory
- Server has been online for an extended period of time, ex. 6 months or more and can be utilized for routine maintenance.
- Backups continuously fail

Think of this as a re-organization of the Database, the benefits can be

- System performance is faster
- Data that may have intermittently shown is now consistently displayed.
- Disk Space can decrease drastically to free up more space for larger db growth
- Backups finish faster and have a higher success ratio

Note: Before you perform the DB Vacuum, please note the DB Vacuum Process can take anywhere from 2 hours - 12 hours typically. As the DB Vacuum is dependant on the DB Size, the process time may vary

Prior Steps before you start the DB Vacuum

Prior to this please make a snapshot of the VM via Vsphere or take a PCA Backup, this is a precaution, just to be safe.

Although there have not been any reported incidents of issues with the DB Vacuum in PCA it is best to be safe.

There are two options

Option 1

Take a VM Snapshot:

Step 1. Right click on the VM in Vsphere

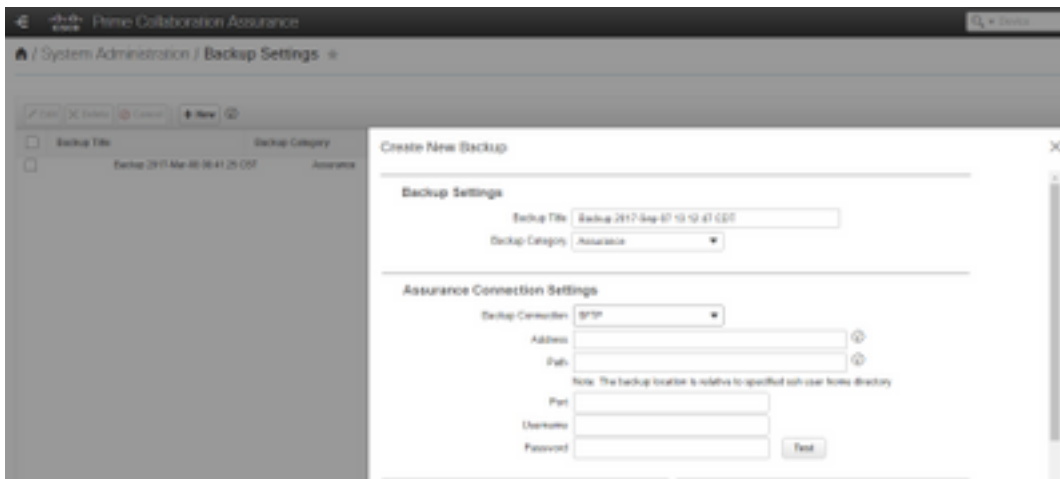
Step 2. Select **Snapshot>>Take Snapshot**. View at the bottom of Vsphere to monitor completion

Or

Option 2

Take a PCA Backup:

1. Navigate to **System Administration>>Backup Settings>> Select New** and fill in the needed information based on if you want just the assurance data or assurance and analytics.



After you have created a VM Snapshot or a successful backup please proceed forward.

To ensure the PCA DB Port is open

Please perform the next steps to ensure the ports needed to run the db vacuum are open to connect

Step 1. Log in to PCA via SSH as root user and port 26

Step 2. Input. **/sbin/iptables -A INPUT -p tcp --dport 5433 -j ACCEPT**

Step 3. Input. **/etc/init.d/iptables save**

DB Vacuum Process

Step 1. Log in to PCA as root user via VM Console, if you use putty or secureCRT for the SSH session it can timeout and is more reliable to run these commands in the VM Console

Step 2. Stop all processes and services. **/opt/emms/emsam/bin/cpcmcontrol.sh stop** (this process can take 10-15 minutes to fully stop all services)

Step 3. Run to ensure all services are stopped. **/opt/emms/emsam/bin/cpcmcontrol.sh status**

Step 4. Start the DB service only. **/opt/emms/emsam/bin/start_db.sh**

Step 5. You will change the directory to navigate to postgres to execute the remaining commands **cd /opt/postgres/9.2/**

Note: The postgres version is subject to change per major version. You can execute `cd /opt/postgres/` followed by `ls -l` to find the version installed if the command with version 9.2 does not work.

Step 6. Input. **su postgres**

Step 7. Input. **vacuumlo -U cmuser -p 5433 -v cpcm**

Note: Steps 7 -10 will take a few hours and each command will complete on it's own. Once it

is complete, proceed to the next step.

```
[root@PCA116 CDT]# cd /opt/postgres/9.2/
[root@PCA116 9.2]# su postgres
[postgres@PCA116 ~]$ vacuumlo -U cmuser -p 5433 -v cpcm
Connected to database "cpcm"
Checking spec in public.cmjob
Checking totalerrordetails in public.cmjobitem
Checking error in public.cmjobresult
Checking result in public.cmjobresult
Checking layoutfile in public.floorlayout
Checking versionsdata in public.inventoryentitycache
Checking blobvalue in public.propertynameandvalue
Checking current_model in public.config_object_tracker
Checking intended_model in public.config_object_tracker
Successfully removed 2273414 large objects from database "cpcm".
```

Step 8. Input. **vacuumlo -U cmuser -p 5433 -v qovr**

Step 9. Input. **/opt/postgres/9.2/bin/psql -p 5433 --username=cmuser cpcm -c "VACUUM FULL ANALYZE;"**

Step 10. Input. **/opt/postgres/9.2/bin/psql -p 5433 --username=qovr qovr -c "VACUUM FULL ANALYZE;"**

Step 11. Input: **su root** and re-enter in the root password

Step 12. Stop DB - **/opt/emms/emsam/bin/shutdown_db.sh**

Step 13. Start all Processes - **/opt/emms/emsam/bin/cpcmcontrol.sh start**

Please allow approximately 15 minutes for all services to come back up and then re-login to the gui.

You now have completed the DB Vacuum Process

Root Access

This section describes how to obtain full Root Access for PCA

Step 1. Log in through SSH to PCA and use port 26 as the Admin User

Step 2. Input **root_enable**

Type in the root password you want

Step 3. Input **root** and type in the root password

Step 4. Once logged in as root Input **/opt/emms/emsam/bin/enableRoot.sh**

Step 5. Input **passwd** and re-enter in your root password

You now should be able to close the SSH session and re-log in directly as root