

Readme for ACS 5.3 patch 6 for CDETS

CSCtz24314 and CSCtz49470

1.1 Introduction

This document describes the details of the solution provided for Disk space issue (CDETS:CSCtz24314) and rebuilding or restoring Monitoring and Reporting data from support bundle without root patch (CDETS :CSCtz49470) in ACS 5.3 patch 6.

1.2 Disk Space Issue (CDETS: CSCtz24314)

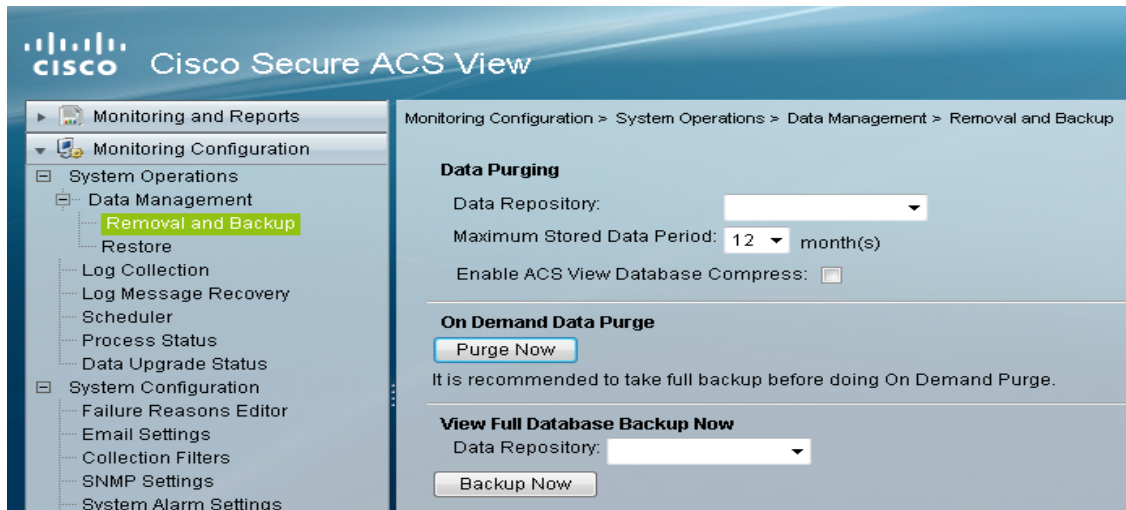
The Monitoring and Reporting database can increase when as records are collected. There are two mechanisms to reduce this size and prevent it from exceeding the maximum limit.

1. Purge: In this mechanism the data will be purged based on the configured data retention period or upon reaching the upper limit of the database.
2. Compress: This mechanism frees up unused space in the database without deleting any records.

Previously the compress option could only be run manually. In ACS 5.3 Patch 6 there are enhancements so it will run daily at a predefined time, automatically when specific criteria are met. Similarly by default purge job runs every day at 4 AM. In Patch 6 new option provided to do on demand purge as well.

1. The new solution is to perform the Monitoring and Reporting database compress automatically.
2. New GUI option is provided to enable the Monitoring and Reporting database compress to run on every day at 5 AM. This can be configured under GUI Monitoring And Configuration -> System Operations -> Data Management -> Removal and Backup
3. Changed the upper and lower limit of purging of Monitoring and Reporting data. This is to make sure at lower limit itself ACS has enough space to take the backup. The maximum size allocated for monitoring and reporting database is 42% of /opt(139 GB). The lower Limit at which ACS purges the data by taking the backup is 60% of maximum size Monitoring and Reporting database (83.42 GB). The upper limit at which ACS purges the data without taking backup is 80% of maximum size Monitoring and Reporting database (111.22 GB).
4. The acsview-database compress operation stops all services till 5.3 patch 5 , now only Monitoring and Reporting related services are stopped during this operation.

5. Provided “On demand purge” option in Monitoring and Reporting GUI. This option will not try to take any backup, it will purge the data based on window size configured.



6. Even if the “Enable ACS View Database compress” option is not enabled in GUI then also automatic view database compress will be triggered if the physical size of Monitoring and Reporting database reached to the upper limit of its size.
7. This automatic database compress takes place only when the “LogRecovery” feature is enabled, this is to make sure that the logging which happens during this operation will be recovered once this operation is completed. ACS generates alert when there is a need to do automatic database compress and also to enable this feature.
8. Before enabling “LogRecovery” feature configure the Logging Categories in such way that only mandatory data to log into Local Log Target and Remote Log Target as Log collector under System Administration > ... > Configuration > Log Configuration

This “LogRecovery” feature can recover the logs only if the logs are present under local log target.

9. This automatic database compress operation also performed only when the difference between actual and physical size of Monitoring and Reporting database size is > 50GB.
10. The new CLI “**acsview**” with option “**show-dbsize**” is provided to show the actual and physical size of the Monitoring and Reporting database. This is available in “acs-config” mode.

acsview show-dbsize Show the actual and physical size of View DB and transaction log file

List of new alerts added in 5.3 patch 6

1. The alert with severity “Warning” is generated when logging rate is > 2 GB per

Alert : The number of incoming log messages is reaching the threshold value : <Value>

Details : The number of incoming log messages is reaching threshold value: Value. Make sure that you configured ACS to send only the important category of messages to Log collector.

2. The alert with “Warning” severity is generated when there is a need to do automatic database compress and ”LogRecovery” feature is not enabled.

Alert: Automatic database rebuild operation would be triggered as size of the database exceeds the limit. To continue, Enable log recovery feature.

Details: Automatic database rebuild operation would be triggered as the size of the database exceeds the limit to avoid disk space issue. Enable log recovery feature to recover missed log messages during database rebuild operation. Database re-build operation will not continue till log recovery feature enabled.

3. The alert with “Warning” severity is generated about automatic database compress in advance (one or two days before starting the automatic compress). This is generated when the difference between actual and physical size of the database is > 10 GB and <50 GB.

Alert: Automatic View Database compress will be started (Sev: warning)

Details: System detects a need to compress the database. Run the view database compress operation manually during maintenance window, otherwise, automatic database rebuild would be triggered to avoid disk space issue.

4. The alert with “Critical” severity is generated before starting automatic database compress operation.

Alert: Automatic rebuild of view database has started (Sev: Critical)

Details: Automatic database rebuild operation has started. The Log collector services would be shut down during this operation and they would be made up after rebuild operation is completed. If log recovery option is enabled already, any log messages that may be received during the rebuild operation would be recovered after log collector services are up.

5. The alert with information severity is generated once the view database compress operation is completed

Alert: Database reload operation completed. (Sev: Info)

Details: The database reload operation completed.

1.3 Creating and restoring data from support bundle (CDETS: CSCtz49470)

The new CLI “**acsview**” with below options are introduced in 5.3 patch 6 . This CLI is available in acs-config mode. This new CLI allows creation of a new Monitoring and Reporting database that optionally includes data for a selected number of days that is retrieved from the support bundle.

1. **replace-cleandb** Replaces acsview cleandb (ACS View and Management services will be restarted)
2. **rebuild-database** Rebuild the db with logging data for given number of days from old database(ACS View and Management services will be restarted)

Example: `cd-acs5-13-160/acsadmin(config-acs)# acsview rebuild-data-to-cleandb 10`

This operation will take more time if the number of records are more in the database. During this operation, ACSview unloads the data for given number of days to localdisk, Stops view services ,replaces with clean db, restart view services and reload the data. Do you want to continue (y/n)?

Please wait till database reload operation is completed. Refer ADE.log for more details.

Note: The database can be rebuild based on the available size of “localdisk” the size allocated for local disk is “63 GB”. Use CLI “sh disk” to check the usage of local disk and make sure to clean up the files and have enough space in disk before using this option.

3. **merge-from-supportbundle** Merge or rebuilds view db from the given support bundle (ACS View and Management services will be restarted)

Example :`cd-acs5-13-160/acsadmin(config-acs)# acsview merge-from-supportbundle clisupport.tar.gz`

Do you want to clean the data first? [yes/no]

Note: The decrypted support bundle of same version including patch level has to be copied to localdisk using the CLI “copy” to use above option. Refer CLI reference guide for more details to use CLI “copy”.

4. **replace-clean-activesessionsdb** Replaces the Active Sessions Clean Database. (ACS View services will be restarted)
5. **truncate-log** Truncates the Monitoring and Reporting database transaction log