Archive and Purge Data

Regular use of the new Archive and Purge facilities should be a key part of your CA Unicenter Service Desk maintenance routine. By using these facilities to remove database rows that are no longer required, you can significantly im prove performance—especially when complete table scans are being done at the request of end -user searches. The use of continuous rule -based archive or purge utility can be particularly effective in larger installations.

All the main objects that you archi ve and purge have predefined rules in CA Service Desk. Child objects are also archived and purged. For example, when you archive and purge Call Request object, the associated child objects like Activity Log (alg) objects, Call Request Properties (cr_prp), Attached Events (att_evt) etc. are also archived and purged.

Archive and Purge Rule Definitions

You can define the rules you want to use for running archive and purge jobs on your CA Service Desk database. The product provides a set of predefined Archiv e and Purge rules. You can choose to modify and activate existing rules instead of creating ones.

Important! The default Archive and Purge rules are set to Inactive. You must set the search filter to look for inactive rules. You can run a rule by selectin g it from the Archive and Purge Rules node and clicking Run Now.

Archive and Purge Rule Fields

You can use the fields on the Archive and Purge Rule pages to define and edit rule definitions.

Rule Name : (Required) Specifies a unique identifier for the rule. Can be up to 30 alphanumeric characters.

Status: (Required) Indicates whether this rule is Active or Inactive.

Schedule: Specifies a workshift in which the rule should be in effect. Workshifts are defined by the Administrator. Workshift codes en able the Archive and Purge server process, arcpur_srvr, to perform the archive and purge only during those permitted times in the workshift.

Recurrence Interval : Specifies how often this rule is run, in the format hours:minutes:seconds (HH:MM:SS).

Archive File Name : Specifies the name of the file where you want the out -dated records stored. Its location is controlled by the NX_RULE_ARCHIVE_PATH variable stored in the NX.env file. Archive data files can be restored to the database using the PDM_LOAD utilit y.

Operation Type : Specifies one of the following types of operation that the rule should execute:

Archive/Purge: Purges outdated records from the database that are written to the file specified in the Archive File Name field.

Purge Only: Purges outdated records from the database, but they are not written to the archive file.

Archive Only (Test Run): Writes outdated records to the archive file without purging them from the database. Use this option to test a newly created or edited archive and purge rule.

Config. Object Name: Specifies the name of the database object this rule will archive and purge.

Object Name: (Read-only) Populates your selection in the Config. Object Name field automatically.

Days Inactive: Specifies the number of days a record is inactive to be eligible for archive and purge from the database.

Additional Query: Archives and purges specific inactive records among the existing inactive records. Use this field when you want to create different rules for archiving and purging the subsets of expired records for the same object. Use the same syntax as you use for stored queries. For example, the following query will archive and purge only assigned inactive request records with a priority of 1: priority = 1 AND (assignee IS NOT NULL OR group IS NOT NULL) and active = 0

Running Archive and Purge Rules

You can run both active and inactive archive and purge rules manually at any time.
To run an archive and purge rule from the List page

1. From the Administration tab, select Archive and Purge, Archive and Purge Rules from the left pane. The Archive and Purge Rule List appears.

2. Select the rules you want to run by clicking the box to the left of the rule name, choose the number of hours (1-24) after which you want the rule to stop, and click Run Now. A message appears indicating that the archive and purge process has started.

3. Click OK to close the message box.

Archive and Purge History

You can view a summary of the history information for each archive and purge rule.
To view archive and purge history

1. Select Archive and Purge, Archive and Purge History on the Administration tab. The Archive and Purge History List appears. This list displays an entry for each time the rule has been executed.

2. The following fields are shown:

   Rule Name: Displays the name of the rule used in the history list.

   Start Time: Displays the time that the rule was started.

   End Time: Displays the time that the rule completed.

   Main Objects Purged: Displays the main objects that were purged by the rule. For example, a call request.

   Child Objects Purged: Displays the related child objects that were purged by the rule. For example, the activity logs of a call request.

3. (Optional) Click Show Filter and specify filter criteria to limit the list to the information of interest.

4. Click a rule name if you want to review the rule's configuration. The Archive and Purge Rule Detail page appears.

Attachment Handling

Attachment records are saved in the database and attachment files are saved in the repository directory. When you archive and purge attachment records in the database, they are marked as deleted, but cannot be removed. These records are necessary for the repository daemon to locate the attachments.

Set the Archive Type

You can set the Archive Type for attachments in a repository from the Administration tab.   To set the archive type

1. Navigate to Attachments Library, Repositories. The Repositories page appears.

2. Right-click on a repository (such as Service Desk), select View. The Repository Detail page appears.

3. Click Edit.

   Select one of following from the Archive Type dropdown:

   None: No archive and purge process is performed.

   Archive and Purge: Outdated records are written to the file specified in the Archive File Name field and purged from the database.

Purge Only: Outdated records are purged from the database, but are not written to the archive file.

4. Click Save. The Repository Detail page appears, showing your changes.

Note: You cannot use archive and p urge with CA Service Desk Knowledge Tools. This feature is only supported for CA Service Desk.

Set the Archive Path

You can set the archive path for attachments from the Administration tab.   To set the archive path

1. Navigate to Attachments Library, Repositories. The Repositories page appears.

2. Right-click a repository (such as Service Desk), select View. The Repository Detail page appears.

3. Click Edit. Enter the path in the Archive Path field. The following is the default directory: $NX_ROOT/site/attachments/default/archived_files

4. Click Save. The Repository Detail page appears, showing your changes.

How to Restore Archived Data and Attachments

When restoring archived data, you should start the daemons in dbadmin mode with the pdm_d_mgr utility. Dbadmin mode allows limited access, so you can safely run pdm_load to restore archived data.

Whenever the archived data is restored, the associated attachments are also moved from their backup location to their default repository location.

The following describes how archived data is restored:

1. Shutdown CA Service Desk.

2. Start the daemons in dbadmin mode, using the following command:
pdm_d_mgr -s DBADMIN

3. Locate the archived data file. By default, the file is located under $NX_ROOT/site/data/archive.

4. Run pdm_load against the data file. For example:
pdm_load -a -f 2004611T1726_Call_Request.dat

5. If there is a problem with the load, check the command line and the log for errors. Arcpur.log files can be found in $NX_ROOT/log.

Note: Size limitation of arcpur.log files are defined in $NX_ROOT/NX.env as # The size limit for the Archive and Purge log file and data file. @NX_ARCPUR_FILESIZE=2000000000   It will create arcpur.log.0, arcpur.log.1 though arcpur.log.9 after reaching the file limit for each log files.

6. Run pdm_halt.
This shuts down the daemons.

7. Restart CA Service Desk.

Note: After restoring the record, it will be archived immediately and purged in the next cycle of the archive and purge process.

8. (Optional) To prevent the record to be archived and purged at the next cycle, do the following:
       a. Update the record to make it active again.
       b. Inactivate the archive and purge rule.

Associated Parent & Child Objects

Config. Object Name	Main Object	Child Objects
Call Request	cr	alg,atev,evtdly,attmnt_lrel,attmnt,lrel1,cr_prp, ext_entity_map,attached_sla,cr_tpl
Incident	cr	alg,atev,evtdly,attmnt_lrel,attmnt,lrel1,cr_prp, ext_entity_map,attached_sla,cr_tpl
Problem	cr	alg,atev,evtdly,attmnt_lrel,attmnt,l rel1,cr_prp, ext_entity_map,attached_sla,cr_tpl
Call Request Template	cr_tpl	
Incident Template	cr_tpl	
Problem Template	cr_tpl	
Change Order	chg	chgalg,wf,attached_sla,prp,atev,evtdly, attmnt_lrel,attmnt,ext_entity_map
Change Order Templat e	chg_tpl	
Issue	iss	issalg,iss_wf,attached_sla,iss_prp,atev,evtdly, attmnt_lrel,attmnt,ext_entity_map
Issue Template	iss_tpl	
Audit Log	audlog	
Survey	survey	svy_ques,svy_ans

KD	KD	CI_BOOKMARKS,CI_DOC_LINKS,CI_DOC_LINKS, ES_NODES,INDEX _DOC_LINKS,KD_ATTMNT, LONG_TEXTS,NOTIFICATION,O_COMMENTS, O_EVENTS,BU_TRANS
Retired KD	KD	CI_BOOKMARKS,CI_DOC_LINKS,CI_DOC_LINKS, ES_NODES,INDEX_DOC_LINKS,KD_ATTMNT, LONG_TEXTS,NOTIFICATION,O_COMMENTS, O_EVENTS,BU_TRANS
Session Log	session_log	
Event Log	event_log	
Global_Request_Extension	g_cr_ext	
Global_Request_Queue	g_cr_queue	
Global_Change_Extension	g_chg_ext	
Global_Change_Queue	g_chg_queue	
Global_Issue_Extension	g_iss_ext	
Global_Issue_Queue	g_iss_queue	
EBR_LOG	EBR_LOG	
Notify Log Header	lr	
Document Hits	BU_TRANS	

Important Notes:

1) It is strongly recommended that a backup of your existing MDB Database is taken using the native Database backup utility and also using ServiceDesk's pdm_backup utility before running the archive and purge rules.

2) Schedule the archive/purge rules to run during non -business hours or at a time when the user load is minimal.

3) Requests, Issues and Change Orders will not be archived if they are "parent" to another ticket.

4) Requests, Issues and Change Orders that are stored as Templates will not be archived when you run the default archive and purge rule on the Call Request (cr) Object. However if you run the Cr_Template rule separately, you can also archive the templates

5) Refer to topic "Object to Table and SQL Name " - Appendix C: Table and Object Cross - References in the Modification guide which provides a cross -reference of each object to its corresponding table and SQL name in the database schema .

6) Arcpur.log files in the $NX_ROOT/log directory gives runtime archiving information like the stdlogs.

7) $NX_ROOT refers to the ServiceDesk installation directory path.

Technical Documents:

Refer the below technical documents available on http://support.ca.com for additional information on Archive and Purge.

TEC480780	The Archive and Purge rules have a "Days Inactive" field. When does it star t to count something as inactive?
TEC479414	Can we do Archive and Purge on Assets/CI's?
TEC478017	I ran the "Archive & Purge" activity and want to retrieve the file. What is the default location of this file? Can I change the location of it to avoid space consumption on the default drive?
TEC477678	Can out of the box Change order and Incident templates be archived and purged using an Archive Purge rule?
TEC476204	What field does Archive/Purge use when calculating Days Inactive in Knowledge Document Archive/Purge rule?
TEC474871	How to archive and purge requests based on a particular userid (E.g. ServiceDesk) or request area/category (E.g. Applications)?
TEC471230	How to archive and purge Change orders created by a single contact (e.g. "ake, devonna").