

Tracking Automatic Database Maintenance in Cisco ICM

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Introduction

This document describes how to track automatic database maintenance in Cisco Intelligent Contact Management (ICM).

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- ICM

Components Used

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

- ICM version 4.5.x and later

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, make sure that you understand the potential impact of any command.

Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

Track Automatic Database Maintenance

The ICM Database Server and Historical Data Server (HDS) perform daily maintenance on the historical tables in the central and HDS databases. This daily maintenance consists of Purge and Update Statistics functions. When necessary, these servers also perform Auto Purge and Purge Adjustment functions. This section describes the functions:

- The Purge function deletes the oldest day from every historical table. The basis for this purge is the retention days that are set for the table in the registry. Purge runs at the time that is set in the registry.

The default time is 00:30 a.m. (0030).

- Update Statistics in ICM 4.6.2 performs maintenance on every historical table. This function gathers information on the distribution of key values in indices, which improves the performance of queries. The Update Statistics function runs at the time that is set in the registry. The default time is 04:30 a.m. (0430).

Note: ICM versions 5.0 and later do not include the Update Statistics function.

- Auto Purge deletes 1 hour from every historical table. The deletion occurs until the function reduces the percentage of database space utilization to the percent full limit that is set in the registry. Auto Purge runs immediately after space utilization exceeds the percent full limit. The default percent full limit is 95 percent.
- Purge Adjustment deletes 1 hour from every historical table. The deletion occurs until the function reduces the percentage of database space utilization to the purge adjustment limit that is set in the registry. Purge Adjustment runs at the same time as the daily purge, and Purge Adjustment precludes the Purge function. The default purge adjustment limit is 80 percent.

The Logger_Admin table, in conjunction with the Recovery (rcv) process on the Database Server and the Replication (rpl) process on the HDS, schedules and tracks the completion of these functions. By default, the Logger_Admin table retains records for 30 days.

Note: In ICM 4.6.2, the Logger_Admin table has the name Admin table.

All the historical tables in the database contribute to the Logger_Admin table. For every historical table, the rcv and rpl processes create a minimum of two rows each day in the Logger_Admin table. You can use this query to view the rows:

```
select At, TableName, Function, EndTime from Logger_Admin where At >= DATEADD
(dd, -1, GETDATE())
```

Note: This query appears over two lines here due to space limitations.

Note: The -1 represents one day behind the current day. You can change this value to any number, such as 10, 20, 30, and so on.

Here is a sample output of this query:

At	TableName	Function	EndTime
Mar 1 2000 12:30AM	t_Network_Trunk_Group_Half_Hou	Purge	Mar 1 2000 1:04AM
Mar 1 2000 12:30AM	t_Peripheral_Half_Hour	Purge	Mar 1 2000 1:05AM
Mar 1 2000 12:30AM	t_Persistent_Variable	Purge	Mar 1 2000 1:05AM
Mar 1 2000 12:30AM	t_Physical_Controller_Half_Hou	Purge	Mar 1 2000 1:05AM
Mar 1 2000 12:30AM	t_Route_Call_Detail	Purge	Mar 1 2000 1:07AM
Mar 1 2000 12:30AM	t_Route_Call_Variable	Purge	Mar 1 2000 1:07AM
Mar 1 2000 12:30AM	t_Route_Five_Minute	Purge	Mar 1 2000 1:07AM
Mar 1 2000 12:30AM	t_Route_Half_Hour	Purge	Mar 1 2000 1:10AM
Mar 1 2000 12:30AM	t_Routing_Client_Five_Minute	Purge	Mar 1 2000 1:10AM
Mar 1 2000 12:30AM	t_Schedule_Import	Purge	Mar 1 2000 1:10AM
Mar 1 2000 12:30AM	t_Script_Five_Minute	Purge	Mar 1 2000 1:10AM
Mar 1 2000 12:30AM	t_Service_Five_Minute	Purge	Mar 1 2000 1:10AM
Mar 1 2000 12:30AM	t_Service_Half_Hour	Purge	Mar 1 2000 1:15AM

The At field contains the scheduled start date and time for the Purge, Update Statistics, Auto Purge, and Purge Adjustment functions. The EndTime field contains the date and time that the function ended.

You can determine the maintenance that was completed the previous night and the maintenance that is

scheduled for the next night. Use this query in order to display the appropriate fields in the Logger_Admin table:

```
select * from Logger_Admin where At >= DATEADD(dd, -1, GETDATE())
```

You can use the **dumplog processname /last** command in order to view entries in the rcv log on the Database Server and in the rpl log on the HDS. These logs contain information about database maintenance.

Here is sample output from the **dumplog rcv /last** command:

```
Events from November 23, 1998:
00:30:00 Trace: Begin Purge History Cycle
00:30:00 Trace: Purge of table Admin is complete, 0 rows deleted
00:30:01 Trace: Purge of table Recovery is complete, 0 rows deleted
00:30:03 Trace: Purge of table t_Application_Event is complete, 2067 rows
deleted
00:30:10 Trace: Purge of table t_Event is complete, 3970 rows deleted
00:30:12 Trace: Purge of table t_Logger_Meters is complete, 288 rows deleted
00:30:16 Trace: Purge of table t_Network_Trunk_Group_Half_Hou is complete, 2530 rows
deleted
00:31:22 Trace: Purge of table t_Route_Call_Detail is complete, 81302 rows
deleted
00:31:32 Trace: Purge of table t_Route_Half_Hour is complete, 7776 rows deleted
00:31:36 Trace: Purge of table t_Routing_Client_Five_Minute is complete, 2866 rows
deleted
00:31:57 Trace: Purge of table t_Service_Half_Hour is complete, 17654 rows
deleted
00:32:07 Trace: Purge of table t_Skill_Group_Half_Hour is complete, 6503 rows
deleted
00:34:11 Trace: Purge of table t_Termination_Call_Detail is complete, 123382 rows
deleted
00:34:16 Trace: Purge of table t_Trunk_Group_Half_Hour is complete, 2544 rows
deleted
00:34:16 Trace: Purge History Cycle Completed
04:30:00 Trace: Begin Update Statistics Cycle
04:44:39 Trace: Update Statistics Cycle Completed
```

Note: Some of this code appears over two lines here due to space limitations.

Related Information

- [How to Use the Dumplog Utility](#)
- [Identifying and Changing Logger and HDS Log Retention and Purge Settings](#)
- [Technical Support & Documentation – Cisco Systems](#)

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