CDR Processing

This chapter provides information about how CDRs are processed.

Record Processing

Unified Communications Manager generates two different types of call information records: CDRs and CMRs. The CDR records store information about a call. The CMR records store information about the quality of the streamed audio of the call. The CDR records relate to the CMR records by way of two GlobalCallID columns: Global CallID callManagerId and GlobalCallID Called. Depending upon the call scenario, more than one CMR may exist for each CDR.

When Unified Communications Manager places or receives a call, the system generates a CDR record when the call terminates. The system writes the CDR to a flat file (text file). Inside the Unified Communications Manager, the Call Control process generates CDR records. The system writes records when significant changes occur to a given call, such as ending the call, transferring the call, redirecting the call, splitting the call, joining a call, and so forth.

When CDR records are enabled, Call Control generates one or more CDR records for each call. The system sends these records to EnvProcessCdr, where they are written to the flat files. The number of records that are written varies by type of call and the call scenario. When Diagnostics are enabled, the device generates CMR records for each call. The system writes one CMR record for each IP phone that is involved in the call or for each Media Gateway Control Protocol (MGCP) gateway. The system also sends these records to EnvProcessCdr where they get written to flat files.

The Unified Communications Manager generates CDR and CMR records but does not perform any post processing on the records. The system writes the records to comma-delimited flat files and periodically passes them to the CDR Repository. The CDR and CMR files represent a specific filename format within the flat file.

Filename Format

The following example shows the full format of the filename:
`tag_clusterId_nodeId_datetime_seqNumber`

- `tag`—Identifies the type of file, either CDR or CMR.

- `clusterId`—Identifies the cluster or server where the Unified Communications Manager database resides.

- **nodeId**—Identifies the node

- **datetime**—UTC time in yyyymmddhhmm format

- **seqnumber**—Sequence number

Two examples of the filenames follow:

```
cdr_Cluster1_01_200404021658_1
cmr_Cluster1_02_200404061011_6125
```

Flat File Format

The CDR and CMR flat files have the following format:

- Line 1—List of field names comma separated

- Line 2—List of field type comma separated

- Line 3—Data comma separated

- Line 4—Data comma separated

The following example shows a flat file:

```
Line1-"cdrRecordType","globalCallID_callManagerId","globalCallID_callId","origLegCallIdentifier",...
Line2-INTEGER,INTEGER,INTEGER,INTEGER,...
Line3-1,1,388289,17586046,...
Line4-1,1,388293,17586054,...
```

Note If the value of the CDR Log Calls With Zero Duration Flag parameter is True, the system writes all calls to a flat file. See the "Configuring CDR Service Parameters" section in the *CDR Analysis and Reporting Administration Guide* for additional information about this parameter.

Related Topics

Cisco Call Detail Records
Cisco Call Management Record Field Descriptions
Call Information Record Types
Documentation Related to CDR