

Installation and Operation Manual

Ascom Report Manager

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1 Introduction

Ascom Report Manager is a software application that provides system administrators, department managers, and executive management the ability to easily generate reports to effectively monitor performance and efficiency of their staff and integrated systems.

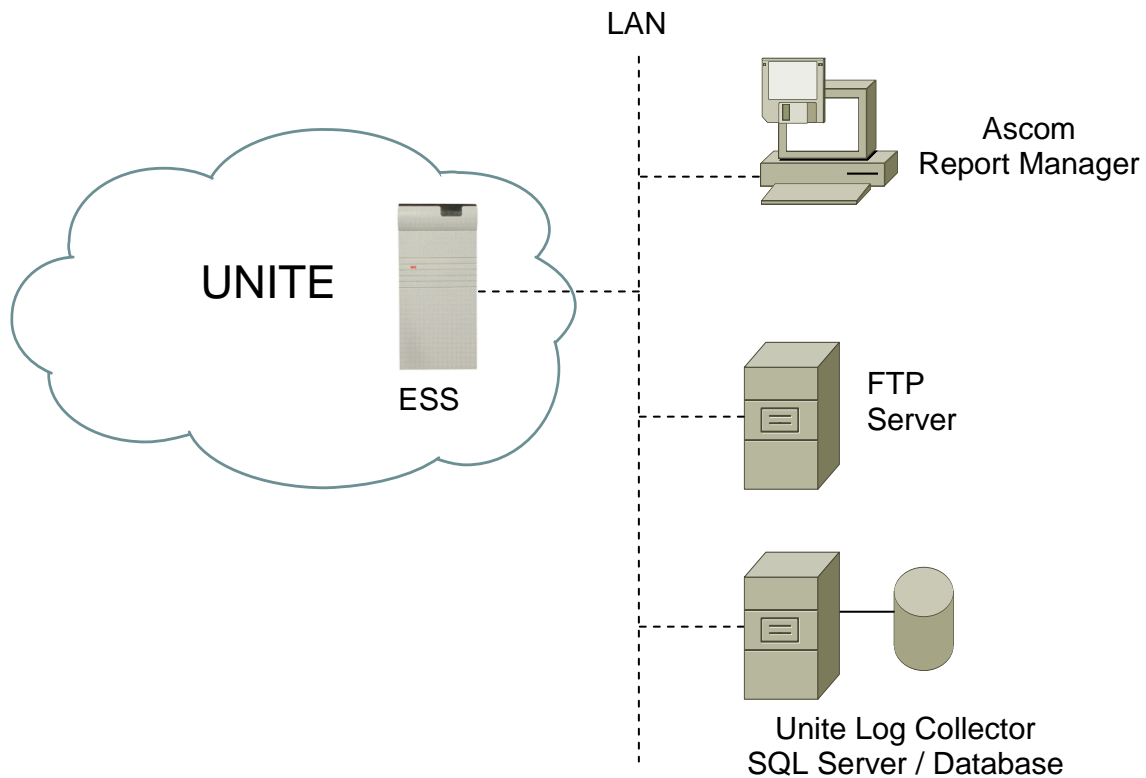
Ascom Report Manager also serves as an effective application to trace a particular event or activity that occurred in the past, providing a root-cause analysis for evident-based audit reporting.

1.1 Abbreviations and Glossary

ESS	Enhanced System Service: Unite module that handles centralized number planning, remote connection, system supervision, fault handling, group handling, message routing, centralized logging, activity logging, and user access administration.
SQL	Structured Query Language A programming language used to store and retrieve data in databases.

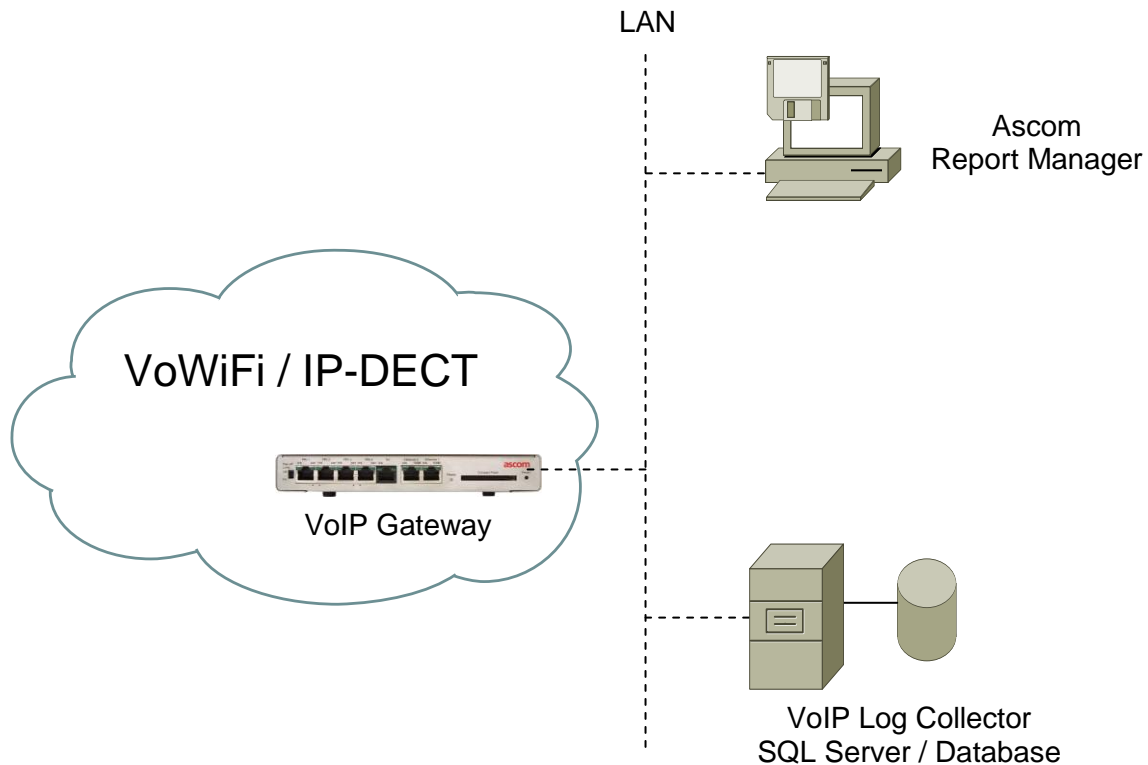
2 Technical Solution

2.1 Message Logging Overview



Events in the Unite system, such as messages, data, and alarms, are logged by the ESS and stored in a log database. The logs are exported from the ESS to an FTP server. The Log Collector imports the logs from the FTP server and stores them in an SQL database. The Report Manager fetches data from the SQL server to display in the generated reports.

2.2 Call Logging Overview



VoIP Gateway calls can be exported from the VoIP Gateway by the CDR feature (Note: for software version 1.3.1 and lower, only calls that traverse over the T1/E1 interfaces can be exported from the VoIP Gateway). This call information is captured by the VoIP Log Collector service and stored in an SQL database. The Report Manager fetches data from the SQL server to display in the generated reports.

2.3 Requirements

2.3.1 Hardware

- Unite Components
 - ACS (ESS) appliance
 - Desired Unite appliances
- VoIP Gateway Components
 - IGWP unit with active T1/E1 interfaces
- Server
 - 1 gigahertz (GHz) processor
 - 1 gigabyte (GB) of RAM
 - TCP/IP network connection
 - Windows XP®, Service Pack 2 (SP2).

- Client Computer
 - 1 gigahertz (GHz) processor
 - 512 megabytes (MB) of RAM
 - TCP/IP network connection
 - Windows XP®, Service Pack 2 (SP2)

2.3.2 Software

Note: The required Microsoft software can be downloaded from Microsoft's homepage. The installation of Microsoft software is beyond the scope of this document.

- ESS version 2.15 or later
 - License for creating logs (ESS-LEX)
 - ESS set up to send logs to the FTP server
 - Unite appliances set up to send logs to the ESS
- VoIP Gateway version 7.00hf3 or later
 - CDR output directed toward server running VoIP Collector Service
- Server
 - Windows Server 2003 or Windows XP (SP2)
 - Microsoft SQL Server 2005 or SQL Server 2005 Express Edition
 - Microsoft .NET framework 2.0
- Client
 - Windows XP (SP2)
 - Microsoft .NET framework 2.0
 - Microsoft Office 2003 web component (for UNITE Analyzer application only)

2.3.3 IT Security

It is recommended that the security level is in accordance with related IT solutions. For more information about IT security, see also System Planning Unite, TD 92258GB.

All communication between the different parts of the reporting applications, that is, between the ESS/VoIP Gateway and the servers, and between the SQL server and the clients, is unencrypted. Because of this no parts of the application should be run on a public network.

3 Installation and Configuration, Unite Log Components

Please read the Unite Log Analyzer Installation and Operation Manual (TD92421gb), section 4, for details regarding how to install and configure the following components:

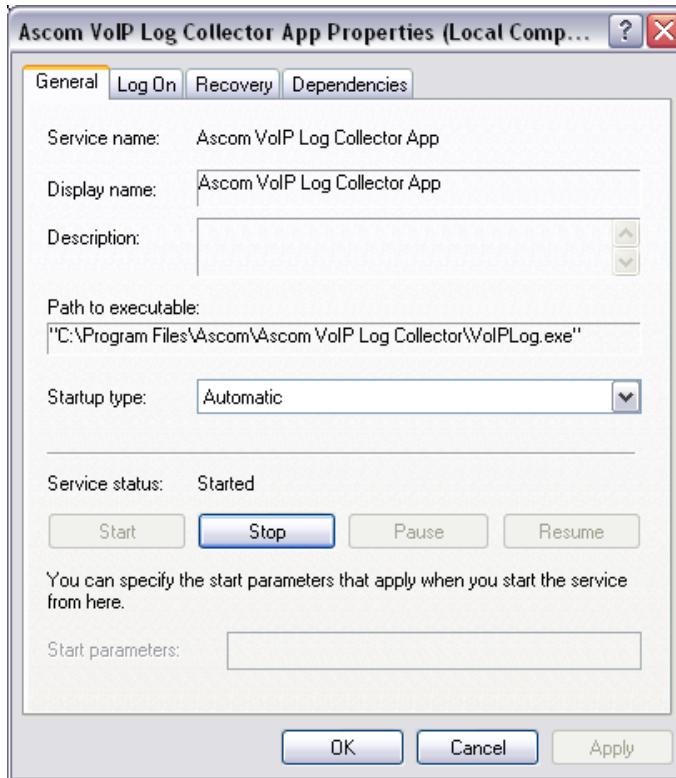
- Unite Log database
- Unite Log Collector
- Unite Log Analyzer Client (optional)

4 Installation and Configuration, VoIP Log Components

4.1 Install VoIP Log Collector Service

1. Make sure that the “*.inf” license file is in the same directory as the Install.exe executable. This license file and license key are unique per installation and shall be obtained from Ascom Technical Support. If you do not have a license file and key, please contact Ascom Technical Support at 1-877-71-ASCOM, option 3.
2. Run “Install.exe”
3. Fill in the appropriate Name, Company Name, and License Key and click OK.
4. Execute the steps of the install wizard until successfully completed and then click CLOSE.
5. Verify that the *Ascom VoIP Log Collector App* windows service is started and Startup type set to automatic.

Note: Ensure that the server running the VoIP Log Collector service has the same time source as the VoIP Gateway in order for the Date and Time values of the CDRs to be aligned.

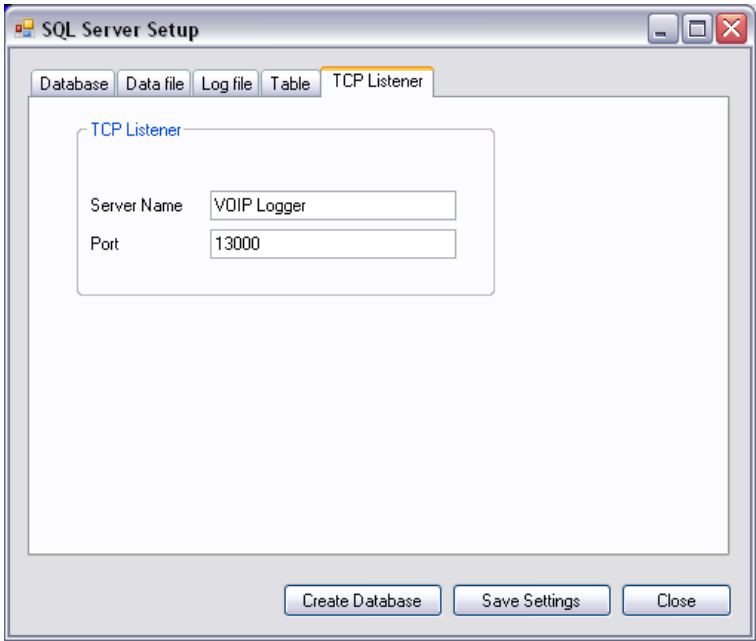
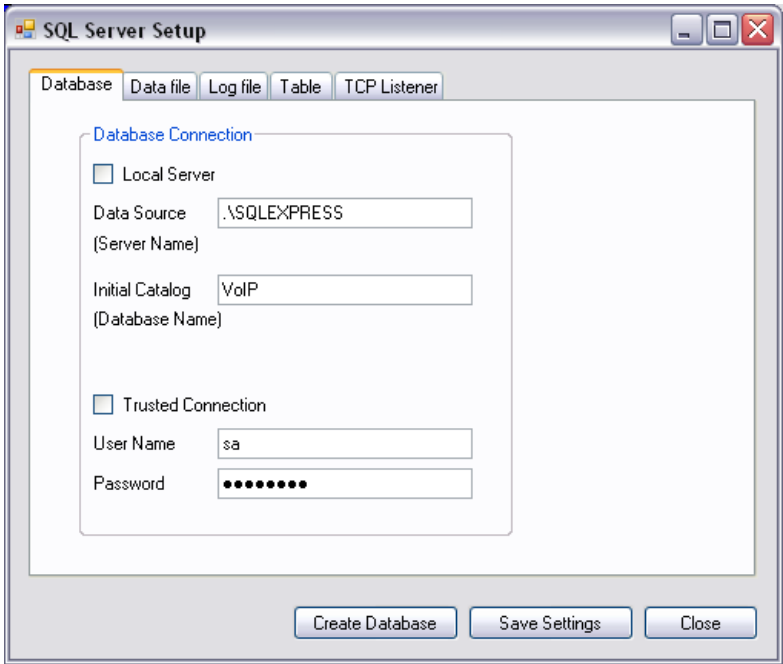


4.2 Install and Configure VoIP Log SQL database

1. Navigate to the VoIP Log Collector installation folder (default is C:\Program Files\Ascom\Ascom VoIP Log Collector) and start the SQLServerSetup.exe application.
2. In the newly opened window, click on the *Database* tab and fill in the Database Connection information.
3. Click on the *TCP Listener* tab and fill in the listening port number. This port shall be the same port number defined in the Ascom VoIP Gateway's CDR configuration.
4. When all data fill is completed, click the *Create Database* button. A success confirmation shall be shown if the database and table were created successfully.

The *Data file*, *Log file*, and *Table* tabs are for advanced settings and normally do not need to be modified under normal circumstances.

The following example illustrates that a database called "VoIP" will be created on the local SQL Server, called "SQLEXPRESS", using the "sa" account. Also, the VoIP Log Collector Service will be listening on port 13000 for incoming Call Detail Records from the VoIP Gateway(s).



5 Installation and Configuration, Report Manager Client

5.1 Install Report Manager Client

1. Run “AscomReportManagerSetup.exe” to start the installation wizard. Execute the steps of the install wizard until successfully completed and then click CLOSE.

5.2 Configure Report Manager Client, for UNITE

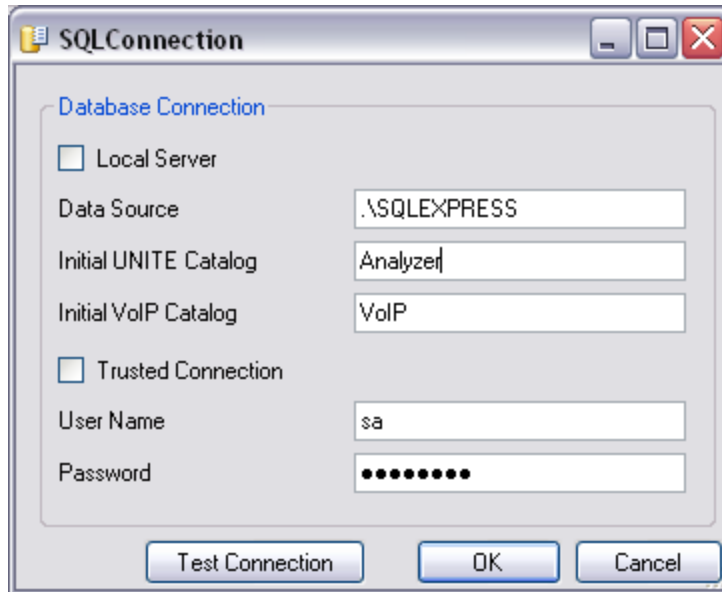
The following sections describe how to configure the Report Manager application to generate UNITE activity reports.

1. Start the Ascom Report Manager application (default shortcut placed on desktop or Start→Programs→Ascom→Ascom Report Manager)

5.2.1 Configure Database Settings

Allows you to configure the necessary settings in order for the Report Manager Application to access the log information stored in the SQL database.

1. Navigate to *Admin Options*→*Database Settings*. If this is the first time that an admin option is selected since this instance of Report Manager was started, you will be prompted to enter a password (default password is “changeme”).
2. Set *Data Source* to the name of the SQL Server where the Unite Analyzer database is located (e.g. “.\SQLEXPRESS”)
3. Set *Initial UNITE Catalog* to the name of the UNITE Analyzer database (e.g. “Analyzer”).
4. Configure the SQL database user credentials appropriately. For trusted connections, click the *Trusted Connection* box and for SQL accounts, enter the username and associated password.
5. To verify the connection the SQL server, click *Test Connection* button.
6. Click *OK* to save the settings and close the window.



5.2.2 Configure Report Settings

1. Navigate to *Admin Options* → *Report Settings*.
2. Enter the appropriate values for the available parameters and click *OK* to save the settings and close the window. Table 1 lists the available parameters and their description.

Parameter	Description
Report Title, UNITE	Title of the generated UNITE report
Report Title, VoIP	Title of the generated VoIP report
Report Title, Summary	Title of the generated Summary report
Orientation	Decides whether the generated report is shown in <i>portrait</i> or <i>landscape</i> mode
Table, Row Height	Default row height of generated report
UNITE Column Headers, Date	Text value for Date column on generated report
UNITE Column Headers, Sent to Device	Text value for Device column on generated report
UNITE Column Headers, Delivery Time	Text value for Delivery column on generated report
UNITE Column Headers, Response	Text value for Response column on generated report
UNITE Column Headers, Response Time	Text value for Response Time column on generated report

Table 1

5.2.3 Set UNITE Values

5.2.3.1 Origin / Receiver Options

The Origin / Receiver Options allow the report conditions to include origin and/or receiver rules. If an option record is defined, it's used to filter the report data based upon the configured criteria.

1. Navigate to Admin Options→Set UNITE Values→Origin/Receiver Options

5.2.3.1.1 Add record

1. Select the desired database Table and Field. See appendix A for details regarding the UNITE Analyzer database.
2. Enter the desired value(s) in the value list box. These value entries must match the value located in the SQL database for a result to be returned. Values entered into the list box for a single option are "OR". Value entries are case insensitive and a '*' character, represents a wild card that can precede and/or follow a value. For example, "*85" will match any value that ends with 85 (1285,485,etc.) and "85*" will match any value that begins with 85 (8512, 859,etc.) and "*85*" will match any value that includes 85 (1285, 859,34857,etc.)
3. Click *Add Record* button to add the configured option record. Once a record has been added, it will be displayed in the summary data grid below.

5.2.3.1.2 Edit record

1. To edit a record, click the edit button associated with the defined record in the summary data grid. The record values will be shown in the *Add New Record Values* fields
2. Make the desired edit, then click *Add Record* button to add the option record. The edited option record shall be displayed in the summary data grid below with the new values.

5.2.3.1.3 Delete record

1. To delete a record, select the entire desired record and press the *Delete* key on the keyboard.

5.2.3.1.4 Select active records

The selected checkbox for each record chooses whether this added record is active or inactive. If selected (active), the record is included in the report criteria.

5.2.3.1.5 Configure records

The summary data grid displays the currently added records. The added records can be “AND” or “OR” with one another:

- “AND” records: Select *All checked values* in the Summary of Values dropdown box.
- “OR” records: Select *Any checked value* in the Summary of Values dropdown box.

The following example illustrates a report that will only include activity that was originated from the WLAN UNITE service.

The screenshot shows a dialog box titled "Select Origin/Receiver Options". It has a section for "Add New Record Values" with a "TABLE" dropdown set to "Details" and a "FIELD" dropdown set to "DetailId". There is a "Values" input field and an "Add Value" button. Below this is a "Summary of Values" dropdown set to "Any checked value". A table with columns "Selected", "Table", "Field", "Values", and "Edit" is shown. The first row has a checked box, "Origins", "UniteService", and "WLAN". The second row has an unchecked box and an asterisk. "OK" and "Cancel" buttons are at the bottom.

5.2.3.2 Send Response Options

The Send Response Options dictates what get's classified as a “Send” event and a “Response” event for the active report template.

1. Navigate to *Admin Options*→*Set UNITE Values*→*Send Response Options*

5.2.3.2.1 Configure Values

1. Select the desired database Table and Field. See appendix A for details regarding the UNITE Analyzer database.

2. Enter the desired value(s) in the value list box. These value entries must match the value located in the SQL database for a result to be returned. Values entered into the list box for a single option are “OR”. Value entries are case insensitive and a “*” character, represents a wild card that can precede and/or follow a value. For example, “*85” will match any value that ends with 85 (1285,485,etc.) and “85*” will match any value that begins with 85 (8512, 859,etc.) and “*85*” will match any value that includes 85 (1285, 859,34857,etc.)
3. Click the *OK* button to save the configuration and exit.

The example below will classify UNITE paging with Confirmation activity as sent events and paging confirmation responses as response events for the generated report.

5.2.3.3 Response Mapping

The Response Mapping configuration controls what gets classified as a “Send” event and a “Response” event for the active report template.

1. Navigate to *Admin Options*→*Set UNITE Values*→*Response Mapping*

5.2.3.3.1 Add record

1. Select the desired database Table and Field. See appendix A for details regarding the UNITE Analyzer database.
2. Enter the desired text that will be displayed on the generated report in the *TEXT* textbox.

3. Enter the desired value(s) in the value list box. These value entries must match the value located in the SQL database for a result to be returned. Values entered into the list box for a single option are “OR”. Value entries are case insensitive and a ‘*’ character, represents a wild card that can precede and/or follow a value. For example, “*85” will match any value that ends with 85 (1285,485,etc.) and “85*” will match any value that begins with 85 (8512, 859,etc.) and “*85*” will match any value that includes 85 (1285, 859,34857,etc.)
4. Select whether the option belongs to “Send” or “Response” options by selecting the appropriate tab in the summary data grid.
5. Click *Add Record* button to add the configured option record. Once a record has been added, it will be displayed in the summary data grid below.

5.2.3.3.2 Edit record

1. To edit a record, click the edit button associated with the defined record in the summary data grid. The record values will be shown in the *Add New Record Values* fields
2. Make the desired edit, then click *Add Record* button to add the option record. The edited option record shall be displayed in the summary data grid below with the new values.

5.2.3.3.3 Delete record

1. To delete a record, select the entire desired record and press the *Delete* key on the keyboard.

5.2.3.3.4 Select active records

The selected checkbox for each record chooses whether this added record is active or inactive. If selected (active), the record is included in the report criteria.

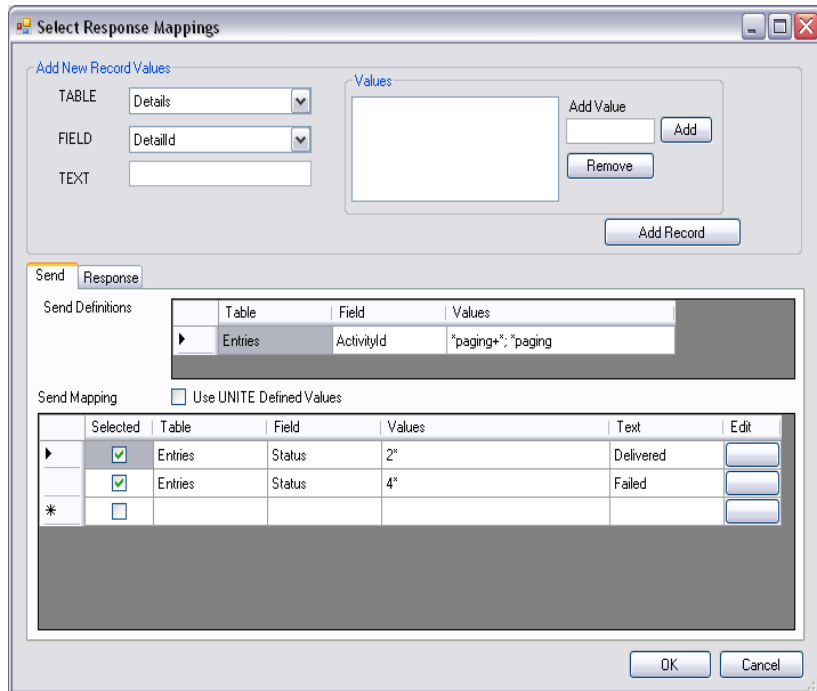
5.2.3.3.5 Configure records

The summary data grid includes two tabs (Send and Response) that display the currently added records for each.

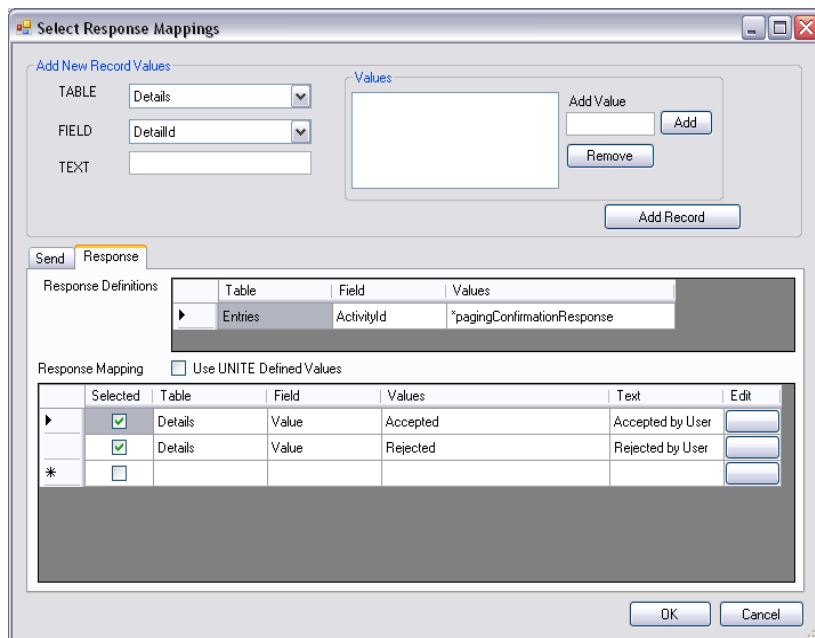
The Send Definition field displays the configured Send and Response options that are defined under the *Send Response Options* form. A configured Send Response Mapping Option is not performed unless first the defined Send Response Definition is matched.

The direct values that are recorded in the Unite Analyzer database can be included in the generated report by clicking the *Use UNITE Defined Values* checkbox. When activated, the generated report will display the exact database value for the defined TABLE and FIELD in the 1st record option.

The example below will display “Delivered” on the generated report for paging and paging+confirmation Unite activities that result in a status of 2xx and “Failed” for 4xx.



The example below will display “Accepted by User” on the generated report for pagingConfirmationResponse Unite activities that result an “Accepted” value and “Rejected by User” that result a “Rejected” value.



5.2.3.4 Event Notification Options

The Event Notification Options configuration defines the triggered events for the active report template. This allows the report to narrow down the entries to specific events (i.e. only lab critical value notifications).

1. Navigate to *Admin Options*→*Set UNITE Values*→*Event Notification Options*

5.2.3.4.1 Add record

1. Select the desired database Table and Field. See appendix A for details regarding the UNITE Analyzer database.
2. Enter the desired value(s) in the value list box. These value entries must match the value located in the SQL database for a result to be returned. Values entered into the list box for a single option are “OR”. Value entries are case insensitive and a “*” character, represents a wild card that can precede and/or follow a value. For example, “*85” will match any value that ends with 85 (1285,485,etc.) and “85*” will match any value that begins with 85 (8512, 859,etc.) and “*85*” will match any value that includes 85 (1285, 859,34857,etc.)

3. Click *Add Record* button to add the configured option record. Once a record has been added, it will be displayed in the summary data grid below.

5.2.3.4.2 Edit record

1. To edit a record, click the edit button associated with the defined record in the summary data grid. The record values will be shown in the *Add New Record Values* fields
2. Make the desired edit, then click *Add Record* button to add the option record. The edited option record shall be displayed in the summary data grid below with the new values.

5.2.3.4.3 Delete record

1. To delete a record, select the entire desired record and press the Delete key on the keyboard.

5.2.3.4.4 Select active records

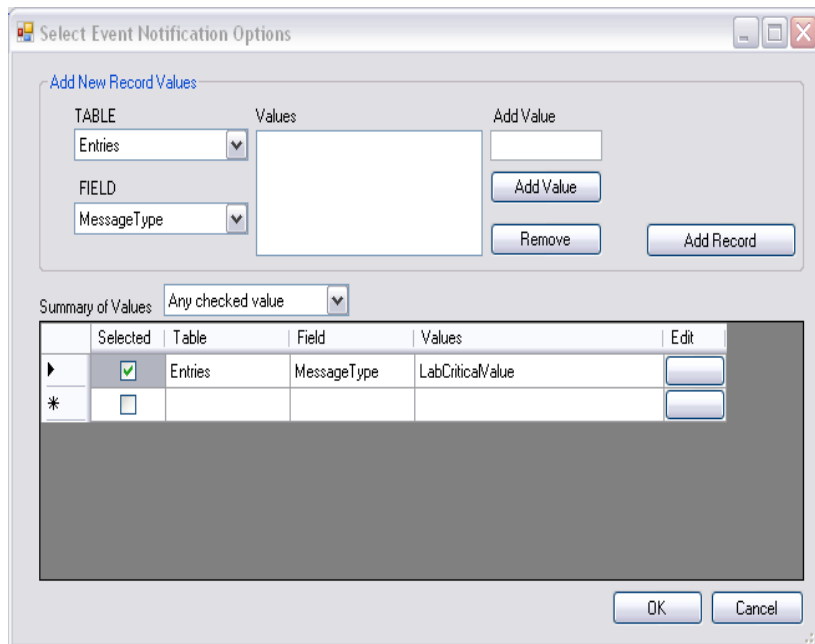
The selected checkbox for each record chooses whether this added record is active or inactive. If selected (active), the record is included in the report criteria.

5.2.3.4.5 Configure records

The summary data grid displays the currently added records. The added records can be “AND” or “OR” with one another:

- “AND” records: Select *All checked values* in the Summary of Values dropdown box.
- “OR” records: Select *Any checked value* in the Summary of Values dropdown box.

The example below is configured for the generated report to only display Unite activities that include Message Type values of “LabCriticalValue”.



5.2.3.5 Message Body Fields

The Message Body Fields configuration defines how the generated report shall segment, parse and display the text included in the Unite activity’s message body element and additional user search criteria for a given report template.

1. Navigate to *Admin Options*→*Set UNITE Values*→*Message Body Fields*

5.2.3.5.1 Create Custom Report columns

The generated report can include up to 10 custom columns that include data that is parsed from the Unite activity’s message body element.

Follow these steps for each custom column desired:

1. Check the *Visible* checkbox to allow the column to be visible on the generated report.
2. Enter the column label text in the *Field Name* textbox.
3. Enter the start delimiter string in the *Start* textbox.
4. Enter the end delimiter string in the *End* textbox.

Note:

- Only displayable ASCII characters are allowed as delimiters
- Empty start and end delimiters will result in the entire message body element to be included for the desired column.
- Empty start delimiter will parse from the beginning of the text to the first instance of the defined end delimiter.
- Empty end delimiter will parse from the first instance of the defined start delimiter to the end of the text.

The example below will place the entire body text in the “Message” column, will parse the text by ‘:’ and place the 1st segment in the “Type” column and the 2nd segment in the “Location” column. For example, the body text “Entry Request: Lab Door” would store the following:

Message column = “Entry Request: Lab Door”

Location column = “Lab Door”

Type column = “Entry Request”

Visible	Field Name	Start	End
<input checked="" type="checkbox"/>	Field 1 Message		
<input checked="" type="checkbox"/>	Field 2 Location	:	
<input checked="" type="checkbox"/>	Field 3 Type		:
<input type="checkbox"/>	Field 4		
<input type="checkbox"/>	Field 5		
<input type="checkbox"/>	Field 6		
<input type="checkbox"/>	Field 7		
<input type="checkbox"/>	Field 8		
<input type="checkbox"/>	Field 9		
<input type="checkbox"/>	Field 10		

5.2.3.5.2 Create Custom User Search criteria options

The custom report columns are automatically added to the user search criteria on the main form. This provides maximum flexibility to the user by narrowing the report criteria on a dynamic basis without any administration changes.

By not checking (or unchecking) the desired Field’s *Visible* checkbox, the report template would provide additional user search

criteria on the main form without having the columns visible on the generated report.

5.3 Configure Report Manager Client, for VoIP

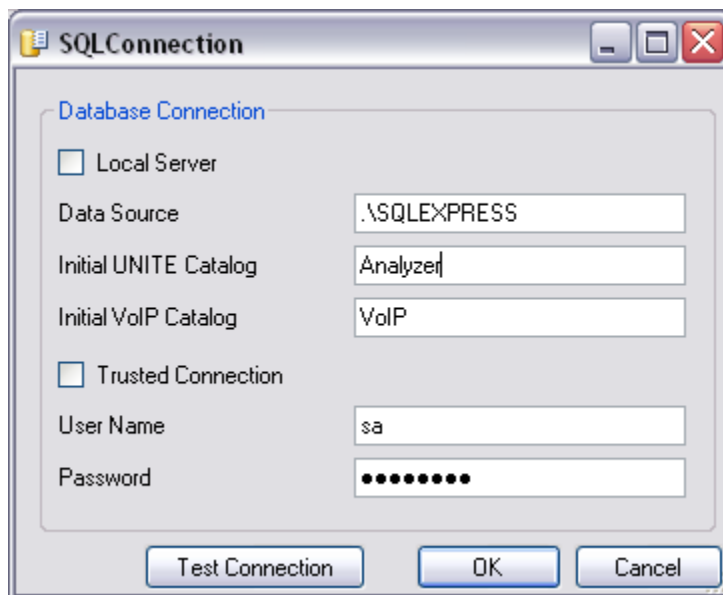
The following sections describe how to configure the Report Manager application to generate VoIP call activity reports.

1. Start the Ascom Report Manager application (default shortcut placed on desktop or Start→Programs→Ascom→Ascom Report Manager)

5.3.1 Configure Database Settings

Allows you to configure the necessary settings in order for the Report Manager Application to access the log information stored in the SQL database.

1. Navigate to *Admin Options*→*Database Settings*. If this is the first time that an admin option is selected since this instance of Report Manager was started, you will be prompted to enter a password (default password is “changeme”).
2. Set *Data Source* to the name of the SQL Server where the VoIP database is located (e.g. “.\SQLEXPRESS”)
3. Set *Initial VoIP Catalog* to the name of the VoIP database (e.g. “VoIP”).
4. Configure the SQL database user credentials appropriately. For trusted connections, click the *Trusted Connection* box and for SQL accounts, enter the username and associated password.
5. To verify the connection the SQL server, click *Test Connection* button.
6. Click *OK* to save the settings and close the window.



5.3.2 Set VoIP Values

5.3.2.1 Cause Selection

The Cause Selection Option configuration defines the available causes able to be selected in the report search criteria.

1. Navigate to *Admin Options*→*Set VoIP Values*→*Cause Selection*

The left list box shows the available causes that are available. The right list box shows the selected causes that will be available in the report search criteria.

5.3.2.1.1 Add Cause

1. Highlight the desired causes in the left list box and press the right arrow button located in the middle of the form. The selected causes shall be moved to the right list box.
2. Click *OK* to save the changes and exit.

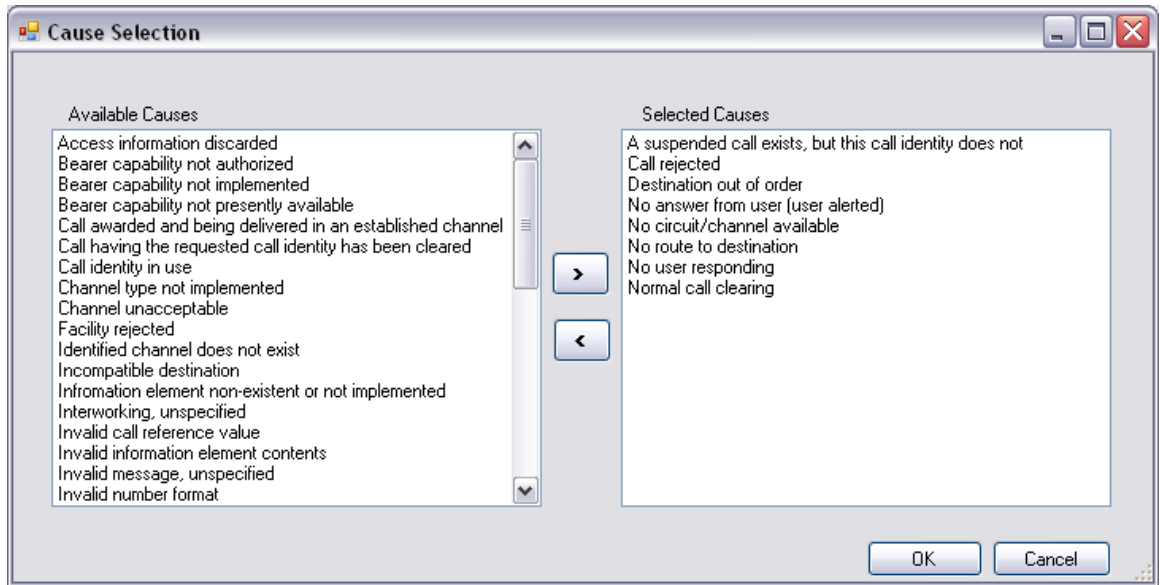
5.3.2.1.2 Delete Cause

1. Highlight the desired causes in the right list box and press the left arrow button located in the middle of the form. The selected causes shall be moved to the left list box.

Note: for IGWP software version 7.0 and later the only valid causes are: Normal call clearing, Non-selected user clearing, Requested circuit/channel not available, User busy, Call rejected, Normal unspecified.

2. Click *OK* to save the changes and exit.

The example below illustrates that “Call rejected”, “Destination out of order”, etc. causes are selected and are available in the report search criteria.



5.3.2.2 Report Fields

The Report Fields configuration defines the report columns for the desired report template.

1. Navigate to *Admin Options*→*Set VoIP Values*→*Report Fields*

5.3.2.2.1 Configure Report Fields

The generated report can include up to 10 custom columns. Perform the following steps on each desired column:

1. Click the *Visible* checkbox to allow the column to be shown on the generated report.
2. Insert the desired column name in the *Field Name* entry box.
3. Select the desired *Database Value* from the drop down box. See appendix B for details regarding each available value.

5.4 Report Template Administration

The Report Manager Client includes templates that allow an administrator to configure various report criteria options for specific reports that can be easily loaded by a user. Templates allow the user to easily generate a wide variety of reports without having to perform configuration changes. All parameters, except the Date, Time, and Query Timeout search criteria are stored in a template.

5.4.1 Save Templates

1. To build a template, first configure the desired report admin options and search criteria
2. Next, press *File* → *Save Report Template As*
3. When prompted to enter a desired save location, select the location and enter the desired file name, then press *Save*

5.4.2 Load Templates

1. To load a report template, press *File* → *Load Report Template*
2. When prompted to enter a desired report template file, select the location and desired report template file, then press *Open*
3. The name of the loaded report template will be shown in the top window title bar.

5.5 Unite Log Analyzer administration

The Unite Log Analyzer application is an application for detailed Unite log analysis and troubleshooting. The Unite Log Analyzer can also create graphical presentation of activities over time that can be exported into external applications for presentational charts.

Please read the Unite Log Analyzer Installation and Operation Manual (TD92421gb) for configuration and operation details.

5.5.1 Unite Log Analyzer shortcut configuration

The Report Manager Client can be configured to provide a shortcut to the Unite Log Analyzer.

1. Create a shortcut to the Unite Log Analyzer executable.
2. Store this shortcut in the Analyzer folder located under the Ascom Report Manager installation folder.

5.5.2 Unite Log Analyzer shortcut operation

The Report Manager provides the ability to seamlessly start the Unite Log Analyzer application from the Report Manager Client.

When the shortcut link is configured properly, click *File*→*Open Analyzer* to start the application.

5.6 Help Contents configuration

The Report Manager provides the ability to link a help document to the Report Manager Client.

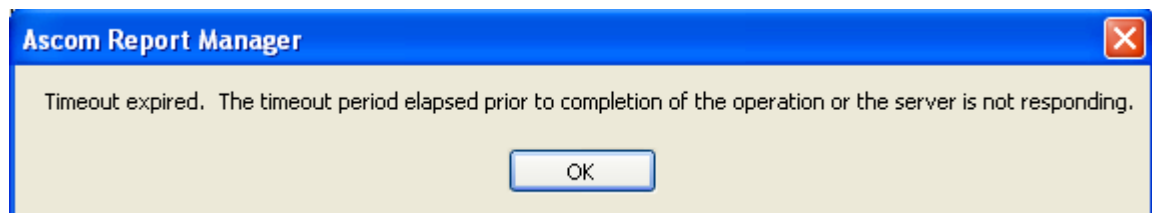
1. Store the desired document in the Help folder located under the Ascom Report Manager installation folder.
2. Verify that correct operation by clicking *Help*→*Contents* and ensure that the desired document successfully opens.

6 Report Operation

The following sections describe how to operate the Report Manager application to generate reports.

Please note: In general, to activate a search criteria option, check the respective check box located to the right of the option. If an option is not checked, it will be ignored in the search criteria.

1. Start the Ascom Report Manager application (default shortcut placed on desktop or *Start*→*Programs*→*Ascom*→*Ascom Report Manager*)
2. If the currently loaded report template is not the desired report, then load the desired report template. The name of the currently loaded report template is displayed in the top window title bar.
3. Select the desired Date and Time search criteria.
4. Query Timeout is the number of minutes before a query times out. (Note: a query timeout of 0 could result in a query running indefinitely and never timing out). The query timeout period can be extended, if a particular query ends with the following message:



6.1 Create UNITE Report

1. Select the UNITE tab in the main form.
2. Check the *Include in Report Preview* checkbox. If not checked, the previewed report will not include the UNITE report.
3. With the *Select From* drop down box, choose whether the selected user search criteria options are “AND” or “OR” together.
4. Fill in other desired user search criteria options and press the *Preview* button.

Note: Value entries are case insensitive and a ‘*’ character, represents a wild card that can precede and/or follow a value. For example, “*85” will match any value that ends with 85 (1285, 485, etc.) and “85*” will match any value that begins with 85 (8512, 859, etc.) and “*85*” will match any value that includes 85 (1285, 859, 34857, etc.)

5. When completed, the generated report will be presented in a new window.

6.2 Create VoIP Report

1. Select the VoIP tab in the main form.
2. Check the *Include in Report Preview* checkbox. If not checked, the previewed report will not include the VoIP report.
3. Fill in the desired user search criteria options and press the *Preview* button.

Note: To, From, and Cause entries are “AND” together, while the Name and Number fields are “OR”.

Value entries are case insensitive and a ‘*’ character, represents a wild card that can precede and/or follow a value. For example, “*85” will match any value that ends with 85 (1285, 485, etc.) and “85*” will match any value that begins with 85 (8512, 859, etc.) and “*85*” will match any value that includes 85 (1285, 859, 34857, etc.)

4. When completed, the generated report will be presented in a new window.

6.3 Create Summary Report

The Summary Report provides an overview of the VoIP calling records. It can report Number of Calls and Call Duration matrices.

1. Select the Summary tab in the main form.
2. Check the *Include in Report Preview* checkbox. If not checked, the previewed report will not include the Summary report.
3. Ensure that the desired date/time range is covering the desired summary report span criteria.
4. Select the desired Number of Calls options and period to be included in the report.
5. Select the desired Call Duration options and period to be included in the report.

6. When ready, press the *Preview* button.
7. When completed, the generated report will be presented in a new window.

6.4 Report overview

When a report is generated, it will be presented in a separate window. The presented data in the generated report is dependent on how the active report template has been configured.

6.4.1 Save Report

The report can be saved to a file for archiving purposes, post-processing with other applications, etc. To save the selected report:

1. Press *File* → *Save As*
2. When prompted, choose the desired location, filename, and file format and press *Save*.

6.4.2 Print Report

The report can be printed for hard copy archiving purposes, sharing among colleagues, etc. To print the selected report:

1. Press *File* → *Print Preview*
2. A print preview window will be presented in which the user can decide to print the report by pressing the *Print* icon.

Note: The currently assigned default printer on the client PC is the printer that will be utilized for the print job.

7 Appendix A – Unite database Tables/Fields

Refer to “Activity Logging in Unite Function Description”, TD92341GB, appendix E for details on the Unite Analyzer database table/field descriptions.

8 Appendix B – VoIP database values (IGWP v7.00 and earlier)

Field	Description
cause	Cause for call termination. These are coded <size>_<coding-standard/location>_<causecode> [_<diagnostics>].
bcaps	Bearer capabilities as received in the incoming call. Coded as hexadecimal octet string according to Q.931. Octets are separated by ‘_’. Bearer capabilities are used to describe the type of calls (voice, fax, data, etc).
refs	Call destination. This is a per-call unique identifier and shall not occur twice.
dst_cdpn	The called party number as dialed on the outgoing interface.
dst_cgpn	The calling party number as presented on the outgoing interface.
dst_dgpn	The diverting party number as presented on the outgoing interface. This field occurs on calls that have been diverted after passing the gateway.
dst_name	The called H.323 alias name as presented on the outgoing interface.
dir	The direction of the call-leg the event is posted for. E.g. if the record has an event=B:Connect and dir=out, then the direction of the B call leg is outgoing (as seen at the destination interface given as dst_if). Either in or out.
xref	The ref of the call being merged into the current call due to a call transfer.
xleg	The leg of the call referenced by xleg that is merged in. Either A or B.
event	The event triggering this particular CDR entry.
src_cdpn	The called party number as received in the incoming call.
src_cgpn	The calling party number of the calling party as received in the incoming call.

src_dgpn	The diverting party number as received in the incoming call. This field occurs on calls that have been diverted before passing the gateway.
src_name	The H.323 alias name of the calling party as received in the incoming call.
src_reg_name	The H.323 alias name of the calling party as defined by the gatekeeper.
src_if	The originating interface of the call. E.g. GW2 can be a Gatekeeper interface.
dst_if	The destination interface of the call. E.g. PPP is a physical Isdn interface.
time	A time-stamp in 1 second resolution since 01.01.1970. The time base does not change during a call (it might change between calls due to clock settings).
alert_time	A time-stamp in 1 second resolution since 01.01.1970. This timestamp is comprised within a CONNECT CDR, in order to ease the duration calculation of the alerting phase. (alert_duration=time(CONNECT) – alert_time)
connect_time	A time-stamp in 1 second resolution since 01.01.1970. This timestamp is comprised within a DISC or REL CDR, in order to ease the duration calculation of the phase a call was in the connected state. (connect_duration=time(DISC) – connect_time)
disc_time	A time-stamp in 1 second resolution since 01.01.1970. This timestamp is comprised within a REL CDR, in order to ease the calculation of the amount of time it took to completely release a call. (release_duration=time(REL) – disc_time)
date	The "human readable" date and time: 4 digit year, 2 digit month, 2 digit day of month, 2 digit hours (24h clock), 2 digit minutes, 2 digit seconds.
xcoder	The media codec being applied in transmit direction. If present, the info conveyed is: Codec[string],Framesize[ms](Receive Jitter[ms],Roundtrip Delay[ms])
rcoder	The media codec being applied in receive direction. If present, the info conveyed is: Codec[string],Framesize[ms](Receive Jitter[ms],Roundtrip Delay[ms])
xstats	The media statistics of the outgoing audio stream as measured on the remote party. The five fields are: Average Roundtrip Delay, Maximum Roundtrip Delay, Average Jitter, Maximum Jitter, Packet Loss.
rstats	The media statistics of the received audio stream. The five fields are: Average Roundtrip Delay, Maximum

	Roundtrip Delay, Average Jitter, Maximum Jitter, Packet Loss.
srv_id	The server id. The purpose is to provide a constant unique id serving as an originator address for CDRs. The actual aim is to support billing applications.

9 Appendix C – VoIP database values (IGWP v7.00 and later)

With the introduction of IGWP software version 7.0, the database values populated by the CDR records are a subset of the original database values. The original entries have been reduced to the entries outlined in the table below.

Field	Description
cause	Cause for call termination. These are coded <size>_<coding-standard/location>_<causecode> [_<diagnostics>].
refs	Call destination. This is a per-call unique identifier and shall not occur twice.
dst_cdpn	The called party number as dialed on the outgoing interface.
dst_cgpn	The calling party number as presented on the outgoing interface.
dst_name	The called H.323 alias name as presented on the outgoing interface.
xref	The ref of the call being merged into the current call due to a call transfer.
event	A list of events associated with this particular CDR entry.
src_cdpn	The called party number as received in the incoming call.
src_cgpn	The calling party number of the calling party as received in the incoming call.
src_name	The H.323 alias name of the calling party as received in the incoming call.
time	A time-stamp in 1 second resolution since 01.01.1970. The time base does not change during a call (it might change between calls due to clock settings).
alert_time	A time-stamp in 1 second resolution since 01.01.1970. This timestamp shows the alert_duration. (alert_duration=time(CONNECT) – alert_time)

connect_time	A time-stamp in 1 second resolution since 01.01.1970. This timestamp shows connect_duration. (connect_duration=time(DISC) – connect_time)
disc_time	A time-stamp in 1 second resolution since 01.01.1970. This timestamp shows the time at which a call is released.
date	The "human readable" date and time: 4 digit year, 2 digit month, 2 digit day of month, 2 digit hours (24h clock), 2 digit minutes, 2 digit seconds.

10 Related Documents

Function Description, Activity Logging in Unite	TD92341GB
Installation and Operation Manual, Unite Log Analyzer	TD92421GB
Installation and Operation Manual, ESS	TD92253GB
Installation and Operation Manual, VoIP Gateway	TD92326GB