Database Tables: Formats and Field Contents

Revised: September 23, 2015

Introduction

Each RDR is sent to the Cisco SCMS Collection Manager. On the Collection Manager, adapters convert the RDRs and store them in database tables. There is a separate table for each RDR type. This chapter presents these tables and their columns (field names and types).

For additional information, such as RDR structure, RDR column, and field descriptions, and how the RDRs are generated, see the "Raw Data Records: Formats and Field Contents" section on page 2-1.

Database Tables Overview

Each RDR is routed to the appropriate adapter—the Java Database Connectivity (JDBC), Topper/Aggregator (TA), or Real-Time Aggregating (RAG) adapter—converted, and written into a database table row. There is a separate table for each RDR type, with a column designated for each RDR field.

In addition to the RDR fields that are specific to each RDR type, the RPT_NUR, RPT_SUR, RPT_PUR, RPT_LUR, and RPT_TR tables contain two universal columns TIME_STAMP and RECORD_SOURCE. The following values are placed in these two universal columns (field numbers 1 and 2, respectively):

- TIME_STAMP—The RDR time stamp assigned by the SCMS Collection Manager. The field is in UNIX time_t format, which is the number of seconds since midnight of 1 January 1970.
- RECORD_SOURCE—Contains the IP address of the Cisco SCE platform that generated the RDR.

  The IP address is in 32-bit binary format (displayed as a 4-byte integer).

Table RPT_NUR

Database table RPT_NUR stores data from SUBSCRIBER_USAGE_RDRs.

Note This table is not part of the default configuration.

These RDRs have the tag 4042321920.

Table 3-1 list the columns of Table RPT_NUR.

Table 3-1 Columns of Table RPT_NUR

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
SUBSCRIBER_ID	String
PACKAGE_ID	Number
SUBS_USG_CNT_ID	Number
BREACH_STATE	Number
REASON	Number
CONFIGURED_DURATION	Number
DURATION	Number
END_TIME	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
SESSIONS	Number
SECONDS	Number
UP_VLINK_ID	Number
DOWN_VLINK_ID	Number
OS_FINGER_PRINTING	String
IP_TYPE	Number

Table RPT_SUR

Database table RPT_SUR stores data from REALTIME_SUBSCRIBER_USAGE_RDRs.

These RDRs have the tag 4042321922.

Table 3-2 list the columns of Table RPT_SUR.

Table 3-2 Columns of Table RPT_SUR

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
SUBSCRIBER_ID	String
PACKAGE_ID	Number
SUBS_USG_CNT_ID	Number
MONITORED_OBJECT_ID	Number
BREACH_STATE	Number
REASON	Number
CONFIGURED_DURATION	Number
DURATION	Number
END_TIME	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
SESSIONS	Number
SECONDS	Number
OS_FINGER_PRINTING	String
IP_TYPE	Number

Table RPT_PUR

Database table RPT_PUR stores data from PACKAGE_USAGE_RDRs.

These RDRs have the tag 4042321924.

Table 3-3 list the columns of Table RPT_PUR.

Table 3-3 Columns of Table RPT_PUR

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
PKG_USG_CNT_ID	Number
GENERATOR_ID	Number
GLBL_USG_CNT_ID	Number
CONFIGURED_DURATION	Number
DURATION	Number
END_TIME	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
SESSIONS	Number
SECONDS	Number
CONCURRENT_SESSIONS	Number
ACTIVE_SUBSCRIBERS	Number
TOTAL_ACTIVE_SUBSCRIBERS	Number
IP_TYPE	Number
IPTYPE_ACTIVE_SUBS	Number
IPTYPE_TOTAL_ACTIVE_SUBS	Number

Table RPT_LUR

Database table RPT_LUR stores data from LINK_USAGE_RDRs.

These RDRs have the tag 4042321925.

Table 3-4 list the columns of Table RPT_LUR.

Table 3-4 Columns of Table RPT_LUR

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
LINK_ID	Number
GENERATOR_ID	Number
GLBL_USG_CNT_ID	Number
CONFIGURED_DURATION	Number
DURATION	Number
END_TIME	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
SESSIONS	Number
SECONDS	Number
CONCURRENT_SESSIONS	Number
ACTIVE_SUBSCRIBERS	Number
TOTAL_ACTIVE_SUBSCRIBERS	Number
IP_TYPE	Number
IPTYPE_ACTIVE_SUBS	Number
IPTYPE_TOTAL_ACTIVE_SUBS	Number

Table RPT_GUR

Database table RPT_GUR stores data from GENERIC USAGE_RDRs.

These RDRs have the tag 4042322064.

Table 3-5 list the columns of Table RPT_GUR.

Table 3-5 Columns of Table RPT_GUR

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
GUR_TYPE	Number
LINK_ID	Number
GENERATOR_ID	Number
GLBL_USG_CNT_ID	Number
SUBS_USG_CNT_ID	Number
PKG_USG_CNT_ID	Number
SERVICE_ID	Number
SUBSCRIBER_ID	String
PACKAGE_ID	Number
PROTOCOL_ID	Number
SIGNATURE_ID	Number
PEER_IP	Number
PEER_PORT	Number
SOURCE_IP	Number
SOURCE_PORT	Number
INITIATING_SIDE	Number
ZONE_ID	Number
FLAVOR_ID	Number
SESSION_ID	Number
START_TIME	Number
END_TIME	Number
ACCESS_STRING	String
INFO_STRING	String
INT_KEY0	Number
INT_KEY1	Number
INT_KEY2	Number
INT_KEY3	Number
STR_KEY0	String
STR_KEY1	String

Table 3-5 Columns of Table RPT_GUR (continued)

Field Name	Type
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
TOTAL_VOLUME	Number
SESSIONS	Number
SECONDS	Number
CONCURRENT_SESSIONS	Number
ACTIVE_SUBSCRIBERS	Number
TOTAL_ACTIVE_SUBSCRIBERS	Number
CONFIGURED_DURATION	Number
DURATION	Number
DATA0	Number
DATA1	Number
DATA2	Number
DATA3	Number

Table RPT_TR

Database table RPT_TR stores data from TRANSACTION_RDRs.

These RDRs have the tag 4042321936.

Table 3-6 list the columns of Table RPT_TR.

Table 3-6 Columns of Table RPT_TR

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
SUBSCRIBER_ID	String
PACKAGE_ID	Number
SERVICE_ID	Number
PROTOCOL_ID	Number
SAMPLE_SIZE	Number
PEER_IP	Number
PEER_PORT	Number
ACCESS_String	String
INFO_String	String
SOURCE_IP	Number
SOURCE_PORT	Number
INITIATING_SIDE	Number
END_TIME	Number
MILISEC_DURATION	Number
TIME_FRAME	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
SUBS_CNT_ID	Number
GLBL_CNT_ID	Number
GLBL_CNT_ID	Number
IP_PROTOCOL	Number
PROTOCOL_SIGNATURE	Number
ZONE_ID	Number
FLAVOR_ID	Number
FLOW_CLOSE_MODE	Number
IP_TYPE	Number
PEER_IP_V6	String
SOURCE_IP_V6	String

Table RPT_OSFP

Database Table RPT_OSFP stores the operating system usage information for each subscriber.

Table 3-7 Columns of Table RPT_OSFP

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
SUBSCRIBER_ID	String
OSFP_ID	Number
NAT_ENV	Number

Table OSFP_TYPES

Database Table OSFP_TYPES stores the operating system mapping information.

Table 3-8 Columns of Table OSFP_Types

Field Name	Type
TIME_STAMP	Date_Time
OSFP_ID	Number
OSFP_DESC	String

Table RPT_MEDIA

Database table RPT_MEDIA stores data from MEDIA_FLOW_RDRs.

These RDRs have the tag 4042323052.

Table 3-9 list the columns of Table RPT_MEDIA.

Table 3-9 Columns of Table RPT_MEDIA

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
SUBSCRIBER_ID	String
PACKAGE_ID	Number
SERVICE_ID	Number
PROTOCOL_ID	Number
PEER_IP	Number
PEER_PORT	Number
SOURCE_IP	Number
SOURCE_PORT	Number
INITIATING_SIDE	Number
ZONE_ID	Number
FLAVOR_ID	Number
SIP_DOMAIN	String
SIP_USER_AGENT	String
MGCP_DOMAIN	String
MGCP_USER_AGENT	String
START_TIME	Number
END_TIME	Number
SEC_DURATION	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
IP_PROTOCOL	Number
FLOW_TYPE	Number
SESSION_ID	Number
UPSTREAM_AVERAGE_JITTER	Number
DOWNSTREAM_AVERAGE_JITTER	Number
UPSTREAM_PACKET_LOSS	Number
DOWNSTREAM_PACKET_LOSS	Number
UPSTREAM_PAYLOAD_TYPE	Number
DOWNSTREAM_PAYLOAD_TYPE	Number

Table 3-9 Columns of Table RPT_MEDIA (continued)

Field Name	Type
IP_TYPE	Number
PEER_IP_V6	String
SOURCE_IP_V6	String

Table RPT_MALUR

Database table RPT_MALUR stores data from MALICIOUS_TRAFFIC_PERIODIC_RDRs. These RDRs have the tag 4042322000.

Table 3-10 list the columns of Table RPT_MALUR.

Table 3-10 Columns of Table RPT_MALUR

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
ATTACK_ID	Number
SUBSCRIBER_ID	String
ATTACK_IP	Number
OTHER_IP	Number
PORT_NUMBER	Number
ATTACK_TYPE	Number
SIDE	Number
IP_PROTOCOL	Number
CONFIGURED_DURATION	Number
DURATION	Number
END_TIME	Number
ATTACKS	Number
MALICIOUS_SESSIONS	Number

Table RPT_TOPS_PERIOD0

The TA adapter generates database table RPT_TOPS_PERIOD0 for its shorter aggregation interval (by default, one hour).

Table 3-11 list the columns of Table RPT_TOPS_PERIOD0.

Table 3-11 Columns of Table RPT_TOPS_PERIOD0

Field Name	Type
RECORD_SOURCE	Number
METRIC_ID	Number
SUBS_USG_CNT_ID	Number
TIME_STAMP	Date_Time
AGG_PERIOD	Number
SUBSCRIBER_ID	String
CONSUMPTION	Number
PACKAGE_ID	Number
IP_TYPE	Number

For each Top Report, the TA adapter sorts the subscriber/consumption pairs from the highest consumption to lowest. At the end of each report is a statistic giving the sum of all subscribers for this metric.

If the report is empty, typically when no traffic is reported for the designated service/metric pair during the aggregation period, the database is updated, but only the final row in the report is updated to show a total consumption of zero.

Table 3-12 list the possible values for the METRIC_ID field.

Table 3-12 Metric_ID Values

Metric_ID	Metric
0	Up Volume
1	Down Volume
2	Combined Volume
3	Sessions
4	Seconds

Table RPT_TOPS_PERIOD1

The TA adapter generates database table RPT_TOPS_PERIOD1 for its longer aggregation interval (by default, 24 hour).

Table 3-13 list the columns of Table RPT_TOPS_PERIOD1.

Table 3-13 Columns of Table RPT_TOPS_PERIOD1

Field Name	Type
RECORD_SOURCE	Number
METRIC_ID	Number
SUBS_USG_CNT_ID	Number
TIME_STAMP	Date_Time
AGG_PERIOD	Number
SUBSCRIBER_ID	String
CONSUMPTION	Number
PACKAGE_ID	Number
IP_TYPE	Number

For each Top Report, the TA adapter sorts the subscriber/consumption pairs from the highest consumption to lowest. At the end of each report is a statistic giving the sum of all subscribers for this metric.

If the report is empty, typically when no traffic was reported for the designated service/metric pair during the aggregation period, the database is still updated, but the only row in the report is the final row showing a total consumption of zero.

Table 3-14 lists the possible values for the METRIC_ID field.

Table 3-14 Metric_ID Values

Metric_ID	Metric
0	Up Volume
1	Down Volume
2	Combined Volume
3	Sessions
4	Seconds

Table RPT_TOPS_PERIOD0_CUMULATIVE

The TA adapter generates database table RPT_TOPS_PERIOD0_CUMULATIVE for its shorter aggregation interval (by default, one hour).

Table 3-15 list the columns of Table RPT_TOPS_PERIOD0_CUMULATIVE.

Table 3-15 Columns of Table RPT_TOPS_PERIOD0_CUMULATIVE

Field Name	Type
RECORD_SOURCE	Number
METRIC_ID	Number
SUBS_USG_CNT_ID	Number
TIME_STAMP	Date_Time
AGG_PERIOD	Number
SUBSCRIBERS	Number
CONSUMPTION	Number
TOTAL_SUBSCRIBERS	Number
TOTAL_CONSUMPTION	Number
LAST_SUBS_CONSUMPTION	Number
PACKAGE_ID	Number
IP_TYPE	Number

Table 3-16 list the possible values for the METRIC_ID field.

Table 3-16 Metric_ID Values

Metric_ID	Metric
0	Up Volume
1	Down Volume

Table RPT_TOPS_PERIOD1_CUMULATIVE

The TA adapter generates database table RPT_TOPS_PERIOD1_CUMULATIVE for its longer aggregation interval (by default, one day).

Table 3-17 list the columns of Table RPT_TOPS_PERIOD1_CUMULATIVE.

Table 3-17 Columns of Table RPT_TOPS_PERIOD1_CUMULATIVE

Field Name	Type
RECORD_SOURCE	Number
METRIC_ID	Number
SUBS_USG_CNT_ID	Number
TIME_STAMP	Date_Time
AGG_PERIOD	Number
SUBSCRIBERS	Number
CONSUMPTION	Number
TOTAL_SUBSCRIBERS	Number
TOTAL_CONSUMPTION	Number
LAST_SUBS_CONSUMPTION	Number
PACKAGE_ID	Number
IP_TYPE	Number

Table 3-18 lists the possible values for the METRIC_ID field.

Table 3-18 Metric_ID Values

Metric_ID	Metric
0	Up Volume
1	Down Volume

Table RPT_TOPS_PEAK_PERIOD

The TA adapter generates database table RPT_TOPS_PEAK_PERIOD for the configured period in the peak_hours section in taadapter.conf.

Table 3-19 lists the columns of the RPT_TOPS_PEAK_PERIOD table.

Table 3-19 Columns of Table RPT_TOPS_PEAK_PERIOD

Field Name	Type
RECORD_SOURCE	Number
METRIC_ID	Number
SUBS_USG_CNT_ID	Number
TIME_STAMP	Date_Time
AGG_PERIOD	Number
SUBSCRIBER_ID	String
CONSUMPTION	Number
PACKAGE_ID	Number
IP_TYPE	Number

Table 3-20 lists the possible values for the METRIC_ID field.

Table 3-20 Metric_ID Values

Metric_ID	Metric
0	Up Volume
1	Down Volume

Table RPT_TOPS_PEAK_CUMULATIVE

The TA adapter generates database table RPT_TOPS_PEAK_CUMULATIVE for the configured period in the peak_hours section in taadapter.conf.

Table 3-21 lists the columns of the RPT_TOPS_PEAK_CUMULATIVE table.

Table 3-21 Columns of Table RPT_TOPS_PEAK_CUMULATIVE

Field Name	Type
RECORD_SOURCE	Number
METRIC_ID	Number
SUBS_USG_CNT_ID	Number
TIME_STAMP	Date_Time
AGG_PERIOD	Number
SUBSCRIBERS	Number
CONSUMPTION	Number
TOTAL_SUBSCRIBERS	Number
TOTAL_CONSUMPTION	Number
LAST_SUBS_CONSUMPTION	Number
PACKAGE_ID	Number
IP_TYPE	Number

Table 3-22 lists the possible values for the METRIC_ID field.

Table 3-22 METRIC_ID Values

Metric_ID	Metric
0	Up Volume
1	Down Volume

Table RPT_VLUR

Database table RPT_VLUR stores data from VIRTUAL_LINKS_USAGE_RDRs.

These RDRs have the tag 4042321926.

Table 3-23 lists the columns of the RPT_VLUR table.

Table 3-23 Columns of Table RPT_VLUR

Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
VLINK_ID	Number
VLINK_DIRECTION	Number
GENERATOR_ID	Number
SRVC_USG_CNT_ID	Number
CONFIGURED_DURATION	Number
DURATION	Number
END_TIME	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
SESSIONS	Number
SECONDS	Number
CONCURRENT_SESSIONS	Number
ACTIVE_SUBSCRIBERS	Number
TOTAL_ACTIVE_SUBSCRIBERS	Number
IP_TYPE	Number
IPTYPE_ACTIVE_SUBS	Number
IPTYPE_TOTAL_ACTIVE_SUBS	Number
PACKETS_DROPPED	Number
PIR_CROSSED_COUNT	Number

Table INI_VALUES

Database table INI_VALUES is updated whenever the service configuration is applied to the SCE platform. This table contains, for each SCE IP address, mappings between numeric identifiers and textual representation for services, packages, and other service configuration components. The mapping is represented as a standard properties file in string form, where each mapping file is stored in one row. Cisco Insight uses the mappings contained in this table.

Table 3-24 lists the columns of the INI_VALUES table.

Table 3-24 Columns of Table INI_VALUES

Field Name	Type	Description
TIME_STAMP	Date_Time	—
SE_IP	String	Identification of the SCE platform where these values were applied.
VALUE_TYPE	Number	Key/Value family type.
VALUE_KEY	String	Key name. For example, Gold, Silver, or Adult Browsing.
VALUE	Number	Numeric reference.

Possible values for VALUE_TYPE field are:

- 1—Service ID/service name
- 2—Package ID/package name
- 3—TCP port number/port name
- 4—Time frame ID/time frame name
- 5—SCE address 32-bit/dotted notation
- 6—IP protocol number/IP protocol name
- 7—Signature protocol ID/protocol name
- 8—P2P signature protocol ID/protocol name
- 11—Global service usage counter ID/counter name
- 12—Subscriber service usage counter ID/counter name
- 13—Package usage counter ID/counter name
- 15—UDP port number/port name
- 16—Policy/Flags
- 17—Service Names
- 18—All links
- 19—Zone name/Zone Id
- 20—Zone name/Zone counter
- 21—Operating System name/Operating System index
- 1002—VoIP protocol family/Protocol name
- 1003—Worm protocol family/Protocol name

- 1005—Packet Stream Pattern-Based Protocols/Protocol name
- 1006—Bundled protocol family/Protocol name
- 1007—Unidirectionally Detected protocol family/Protocol name
- 1008—RTCP protocol family/Protocol name
- 1009—SPAM Detected protocol family/Protocol name
- 1010—Behavioral protocol family/Protocol name
- 1011—E-mail and Newsgroups protocol family/Protocol v
- 1012—Gaming protocol family/Protocol name
- 1013—Generic protocol family/Protocol name
- 1014—HTTP protocol family/Protocol name
- 1015—Instant Messaging protocol family/Protocol name
- 1016—Net Admin protocol family/Protocol name
- 1017—Video protocol family/Protocol name
- 1018—Tunneling protocol family/Protocol name
- 1019—ClickStream protocol family/Protocol name
- 2001—P2P protocol family/Global Counter name
- 2002—VoIP protocol family/Global Counter name
- 2003—Worm protocol family/Global Counter name
- 2005—Packet Stream Pattern-Based Protocols/Global Counter name
- 2006—Bundled protocol family/Global Counter name
- 2007—Unidirectionally Detected protocol family/Global Counter name
- 2008—RTCP protocol family/Global Counter name
- 2009—SPAM Detected protocol family/Global Counter name
- 2010—Behavioral protocol family/Global Counter name
- 2011—E-mail and Newsgroups protocol family/Global Counter name
- 2013—Generic protocol family/Global Counter name
- 2014—HTTP protocol family/Global Counter name
- 2015—Instant Messaging protocol family/Global Counter name
- 2017—Video protocol family/Global Counter name
- 2018—Tunneling protocol family/Global Counter name
- 2019—ClickStream protocol family/Global Counter name
- 2020—Download Counts
- 2021—Message Counts
- 3001—P2P protocol family/Subscriber Counter name
- 3002—VoIP protocol family/Subscriber Counter name
- 3005—Packet Stream Pattern-Based Protocols/Subscriber Counter name
- 3007—Unidirectionally Detected protocol family/Subscriber Counter name
- 3010—Behavioral protocol family/Subscriber Counter name

- 3013—Generic protocol family/Subscriber Counter name
- 3014—HTTP protocol family/Subscriber Counter name
- 3015—Instant Messaging protocol family/Subscriber Counter name
- 3017—Video protocol family/Subscriber Counter name
- 3019—Tunneling protocol family/Subscriber Counter name
- 4001—P2P protocol family/Signature
- 4002—VoIP protocol family/Signature
- 4003—Worm protocol family/Signature
- 4005—Packet Stream Pattern-Based Protocols/Signature
- 4006—Bundled protocol family/Signature
- 4007—Unidirectionally Detected protocol family/Signature
- 4008—RTCP protocol family/Signature
- 4009—SPAM Detected protocol family/Signature
- 4010—Behavioral protocol family/Signature
- 4011—E-mail and Newsgroups protocol family/Signature
- 4012—Gaming protocol family/Signature
- 4013—Generic protocol family/Signature
- 4014—HTTP protocol family/Signature
- 4015—Instant Messaging protocol family/Signature
- 4016—Net Admin protocol family/Signature
- 4017—Video protocol family/Signature
- 4018—Tunneling protocol family/Signature
- 4019—ClickStream protocol family/Signature

Table VLINK_INI

Database table VLINK_INI is updated when the Collection Manager utility update_vlinks.sh is run. This table contains the name and ID of each virtual link defined in the SCE platform. Cisco Insight uses the mappings contained in this table for the Virtual Links reports.

Table 3-25 lists the columns of the VLINK_INI table.

Table 3-25 Columns of Table VLINK_INI

Field Name	Type	Description
TIME_STAMP	Date_Time	
SE_IP	String	Identification of the SCE platform where these values were applied.
VLINK_ID	UINT16	Virtual link ID.
VLINK_DIRECTION	INT8	Virtual link direction.
VLINK_NAME	String	Virtual link name.
CHANNEL_ID	UINT16	Channel ID.
CHANNEL_NAME	String	Name of the channel.
CMTS_NAME	String	Name of the CMTS.

Table CONF_SE_TZ_OFFSET

Database table CONF_SE_TZ_OFFSET contains the time-zone offset in minutes for the clock of each SCE platform as configured by the select-sce-tz.sh script.

Table 3-26 lists the columns of table CONF_SE_TZ_OFFSET.

Table 3-26 Columns of Table CONF_SE_TZ_OFFSET

Field Name	Type
TIME_STAMP	Date_Time
OFFSET_MIN	Number

Table RPT_TOP_APN

The RAG adapter generates database table RPT_TOP_APN for the configured aggregation interval (1 hour by default) as configured in vsa_SURs.xml.

Table 3-27 lists the columns of the RPT_TOP_APN table.

Table 3-27 Columns of Table RPT_TOP_APN

Field Name	Type
TIME_STAMP	Date_Time
AGG_PERIOD	Number
APN	String
SERVICE_USAGE_COUNTER_ID	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
RANK_VOLUME	Number
RECORD_SOURCE	Number

At the end of the each aggregation period, the Cisco SCMS Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. The ranks of VSA attributes are based on usage (downstream, upstream) of particular services.

From the RPT_TOP_APN table, you can generate reports such as Usage per APN and Application Usage per APN.

Table RPT_TOP_DEVICE_TYPE

The RAG adapter generates database table RPT_TOP_DEVICE_TYPE for the configured aggregation interval (1 hour by default) as configured in vsa_SURs.xml.

Table 3-28 lists the columns of the RPT_TOP_DEVICE_TYPE table.

Table 3-28 Columns of Table RPT_TOP_DEVICE_TYPE

Field Name	Type
TIME_STAMP	Date_Time
AGG_PERIOD	Number
IMEI_TAC	String
SERVICE_USAGE_COUNTER_ID	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
UNIQ_SUBS	Number
RANK_VOLUME	Number

Table 3-28 Columns of Table RPT_TOP_DEVICE_TYPE (continued)

Field Name	Type
RANK_UNIQ_SUBS	Number
RECORD_SOURCE	Number

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream) of particular services. RANK_UNIQ_SUBS is derived based on the total number of unique subscribers on a particular service.

From the RPT_TOP_DEVICE_TYPE table, we can generate reports such as Device Type Distribution (IMEI), Usage per Device, and Application Usage per Device.

Table RPT_TOP_NETWORK_TYPE

The RAG adapter generates database table RPT_TOP_NETWORK_TYPE for the configured aggregation interval (1 hour by default) as configured in vsa_SURs.xml.

Table 3-29 lists the columns of the RPT_TOP_NETWORK_TYPE table.

Table 3-29 Columns of Table RPT_TOP_NETWORK_TYPE

Field Name	Type
TIME_STAMP	Date_Time
AGG_PERIOD	Number
NETWORK_TYPE	String
SERVICE_USAGE_COUNTER_ID	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
RANK_VOLUME	Number
RECORD_SOURCE	Number

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream) of particular services.

From the RPT_TOP_NETWORK_TYPE table, you can generate reports such as Usage per Network Type and Application Usage per Network Type.

Table RPT_TOP_SGSN

The RAG adapter generates database table RPT_TOP_SGSN for the configured aggregation interval (1 hour by default) as configured in vsa_SURs.xml.

Table 3-30 lists the columns of the RPT_TOP_SGSN table.

Table 3-30 Columns of Table RPT_TOP_SGSN

Field Name	Type
TIME_STAMP	Date_Time
AGG_PERIOD	Number
SGSN	String
SERVICE_USAGE_COUNTER_ID	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
RANK_VOLUME	Number
RECORD_SOURCE	Number

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream) of particular services.

From the RPT_TOP_SGSN table, you can generate a Usage per SGSN report.

Table RPT_TOP_USER_LOCATION

The RAG adapter generates database table RPT_TOP_USER_LOCATION for the configured aggregation interval (1 hour by default) as configured in vsa_SURs.xml.

Table 3-31 lists the columns of the RPT_TOP_USER_LOCATION table.

Table 3-31 Columns of Table RPT_TOP_USER_LOCATION

Field Name	Type
TIME_STAMP	Date_Time
AGG_PERIOD	Number
USER_LOCATION	String
SERVICE_USAGE_COUNTER_ID	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
UNIQ_SUBS	Number
RANK_VOLUME	Number
RECORD_SOURCE	Number

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream) of particular services.

From the RPT_TOP_USER_LOCATION table, you can generate reports such as Number of Subscribers per Location and Usage per Location.

Table RPT_DVLINK

The RAG adapter generates database table RPT_DVLINK. It aggregates the subscriber usage RDR data. Aggregation is based on per package and per VLINK (DOWN VLINK). You can generate a report.

Table 3-32 lists the columns of the RPT_DVLINK table.

Table 3-32 Columns of Table RPT_DVLINK

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
SUBSCRIBER_ID	String
PACKAGE_ID	Number
SUBS_USG_CNT_ID	Number
BREACH_STATE	Number
REASON	Number
CONFIGURED_DURATION	Number
DURATION	Number
END_TIME	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
SESSIONS	Number
SECONDS	Number
UP_VLINK_ID	Number
DOWN_VLINK_ID	Number
IP_TYPE	Number

Table RPT_UVLINK

The RAG adapter generates database table RPT_UVLINK. It aggregates the subscriber usage RDR data. Aggregation is based on per package and per VLINK (UP VLINK). You can generate a report.

Table 3-33 lists the columns of the RPT_UVLINK table.

Table 3-33 Columns of Table RPT_UVLINK

Field Name	Type
TIME_STAMP	Date_Time
RECORD_SOURCE	Number
SUBSCRIBER_ID	String
PACKAGE_ID	Number
SUBS_USG_CNT_ID	Number
BREACH_STATE	Number
REASON	Number
CONFIGURED_DURATION	Number
DURATION	Number
END_TIME	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
SESSIONS	Number
SECONDS	Number
UP_VLINK_ID	Number
DOWN_VLINK_ID	Number
IP_TYPE	Number

Table RPT_TOP_HTTP_DOMAINS

The RAG adapter generates database table RPT_TOP_HTTP_DOMAINS for the configured aggregation interval (1 hour by default) as configured in http_TURs.xml. It aggregates the HTTP transaction usage RDR data. Aggregation is based on domain, service, and package. You can generate reports.

Table 3-34 lists the columns of the RPT_TOP_HTTP_DOMAINS table.

Table 3-34 Columns of Table RPT_TOP_HTTP_DOMAINS

Field Name	Type
TIME_STAMP	Date_Time
AGG_PERIOD	Number
DOMAIN	String
SERVICE_ID	Number
PACKAGE_ID	Number
SESSIONS	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
DURATION	Number
UNIQ_SUBS	Number
RANK_VOLUME	Number
RANK_SESSIONS	Number
RANK_UNIQ_SUBS	Number
RECORD_SOURCE	Number

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream), package, and service. RANK_SESSIONS is derived based on the total sessions, package, and service. RANK_UNIQ_SUBS is derived based on the total number of unique subscribers, package, and service.

Table RPT_TOP_HTTP_HOSTS

The RAG adapter generates database table RPT_TOP_HTTP_HOSTS for the configured aggregation interval (1 hour by default) as configured in http_TURs.xml. It aggregates the HTTP transaction usage RDR data. Aggregation is based on domain, service, and package. You can generate reports.

Table 3-35 lists the columns of the RPT_TOP_HTTP_HOSTS table.

Table 3-35 Columns of Table RPT_TOP_HTTP_HOSTS

Field Name	Type
TIME_STAMP	Date_Time
AGG_PERIOD	Number
HOST	String
SERVICE_ID	Number
PACKAGE_ID	Number
SESSIONS	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
DURATION	Number
UNIQ_SUBS	Number
RANK_VOLUME	Number
RANK_SESSIONS	Number
RANK_UNIQ_SUBS	Number
DOMAIN	String
RECORD_SOURCE	Number

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream), package, and service. RANK_SESSIONS is derived based on the total sessions, package, and service. RANK_UNIQ_SUBS is derived based on the total number of unique subscribers, package, and service.

Table RPT_TOP_VIDEO_DOMAINS

The RAG adapter generates database table RPT_TOP_VIDEO_DOMAINS for the configured aggregation interval (1 hour by default) as configured in video_TURs.xml. It aggregates the video transaction usage RDR data. Aggregation is based on domain, service, and package. You can generate reports.

Table 3-36 lists the columns of the RPT_TOP_VIDEO_DOMAINS table.

Table 3-36 Columns of Table RPT_TOP_VIDEO_DOMAINS

Field Name	Type
TIME_STAMP	Date_Time
AGG_PERIOD	Number
DOMAIN	String
SERVICE_ID	Number
PACKAGE_ID	Number
SESSIONS	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
DURATION	Number
UNIQ_SUBS	Number
RANK_VOLUME	Number
RANK_SESSIONS	Number
RANK_UNIQ_SUBS	Number
BIT_RATE	Number
RANK_BIT_RATE	Number
RECORD_SOURCE	Number

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream), package, and service. RANK_SESSIONS is derived based on the total sessions, package, and service. RANK_UNIQ_SUBS is derived based on the total number of unique subscribers, package, and service.

Table RPT_TOP_VIDEO_HOSTS

The RAG adapter generates database table RPT_TOP_VIDEO_HOSTS for the configured aggregation interval (1 hour by default) as configured in video_TURs.xml. It aggregates the video transaction usage RDR data. Aggregation is based on domain, service, and package. You can generate reports.

Table 3-37 lists the columns of the RPT_TOP_VIDEO_HOSTS table.

Table 3-37 Columns of Table RPT_TOP_VIDEO_HOSTS

Field Name	Type
TIME_STAMP	Date_Time
AGG_PERIOD	Number
HOST	String
SERVICE_ID	Number
PACKAGE_ID	Number
SESSIONS	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
DURATION	Number
UNIQ_SUBS	Number
RANK_VOLUME	Number
RANK_SESSIONS	Number
RANK_UNIQ_SUBS	Number
DOMAIN	String
BIT_RATE	Number
RANK_BIT_RATE	Number
RECORD_SOURCE	Number

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream), package, and service. RANK_SESSIONS is derived based on the total sessions, package, and service. RANK_UNIQ_SUBS is derived based on the total number of unique subscribers, package, and service.

Table RPT_ZUR

The RPT_ZUR database table stores data from ZONE_USAGE_RDRs.

These RDRs have the tag 4042321928.

Table 3-38 lists the columns of the RPT_ZUR table.

Table 3-38 Columns of Table RPT_ZUR

Field Name	Type
ZONE_COUNTER_ID	Number
GENERATOR_ID	Number
GLBL_USG_CNT_ID	Number
CONFIGURED_DURATION	Number
DURATION	Number
END_TIME	Number
UPSTREAM_VOLUME	Number
DOWNSTREAM_VOLUME	Number
SESSIONS	Number
SECONDS	Number
CONCURRENT_SESSIONS	Number
ACTIVE_SUBSCRIBERS	Number
TOTAL_ACTIVE_SUBSCRIBERS	Number
IP_TYPE	Number

Table RPT_SPAM

The RPT_SPAM database table stores data from SPAM_RDRs.

These RDRs have the tag 4042322048.

Table 3-39 lists the columns of the RPT_SPAM table.

Table 3-39 Columns of Table RPT_SPAM

Field Name	Type
SUBSCRIBER_ID	String
PACKAGE_ID	Number
SERVICE_ID	Number
PROTOCOL_ID	Number
CLIENT_IP	Number
CLIENT_PORT	Number
SERVER_IP	Number
SERVER_PORT	Number
INITIATING_SIDE	Number
ACCESS_STRING	String
INFO_STRING	String
SPAM_FOUND	Number
THRESHOLD_LEVEL	Number
SESSION_COUNTER	Number
TIME_INTERVAL	Number
DEFINED_SESSION_COUNTER	Number
DEFINED_TIME_INTERVAL	Number
REPORT_TIME	Number
AGGR_MESSAGES_COUNTER	Number
TIME_INTERVAL_MSG_COUNTER	Number
NO_OF_MSG_SMTP_SESSION	Number
NO_OF_FAILED_MSG_SMTP_SESSION	Number
FAILED_MSG_SMTP_SESSION	Number
PROTOCOL_NON_COMPLIANCE	Number
DEFINED_MSG_COUNTER	Number
DEFINED_MSG_TIME_INTERVAL	Number
DEFINED_NO_OF_MSG_SMTP_SESSION	Number
EMAIL_HARVEST_MSGSMTP_SESSION	Number
DEFINED_FAILED_MSGSMTP_SESSION	Number
PROTOCOL_COMPLIANCE	Number
IP_TYPE	Number

Table 3-39 Columns of Table RPT_SPAM (continued)

Field Name	Type
CLIENT_IP_V6	String
SERVER_IP_V6	String

Table RPT_FUR

The RPT_SPAM database table stores data from Online_Flow_Usage_RDRs.

These RDRs have the tag 4042321927.

Table 3-40 lists the columns of the RPT_FUR table.

Table 3-40 Columns of Table RPT_FUR

Field Name	Type
SUBSCRIBER_ID	String
PACKAGE_ID	Number
SERVICE_ID	Number
PROTOCOL_ID	Number
REASON	Number
SERVER_IP	Number
SERVER_PORT	Number
ACCESS_STRING	String
INFO_STRING	String
CLIENT_IP	Number
CLIENT_PORT	Number
INITIATING_SIDE	Number
END_TIME	Number
MILLISEC_DURATION	Number
TIME_FRAME	Number
SESSION_UPSTREAM_VOLUME	Number
SESSION_DOWNSTREAM_VOLUME	Number
SUBSCRIBER_COUNTER_ID	Number
GLOBAL_COUNTER_ID	Number
PACKAGE_COUNTER_ID	Number
IP_PROTOCOL	Number
PROTOCOL_SIGNATURE	Number
ZONE_ID	Number
FLAVOR_ID	Number
FLOW_CLOSE_MODE	Number

Table 3-40 Columns of Table RPT_FUR (continued)

Field Name	Type
FLOW_ID	Number
SESSION_ID	Number

Table IMEI_DEVICETYPE

The IMEI_DEVICETYPE database table contains mappings for the device types with IMEI_TAC. Cisco Insight uses the IMEI_TAC column for the Device Type Reports.

Table 3-41 lists the columns of the IMEI_DEVICETYPE table.

Table 3-41 Columns of Table IMEI_DEVICETYPE

Field Name	Type
TIME_STAMP	Timestamp
IMEI_TAC	String
DEVICE_TYPE	String

Table RPT_VIDEO_QOE

The RPT_VIDEO_QOE database table contains the video quality of experience (QoE) rate and the number of videos watched by the subscriber.

Table 3-42 lists the columns of the RPT_VIDEO_QOE table.

Table 3-42 Columns of Table RPT_VIDEO_QOE

Field Name	Type
TIME_STAMP	Timestamp
PACKAGE_ID	INT16
SERVICE_ID	INT16
VIDEO_COUNT	UINT32
QOE_RATING	REAL
AGG_PERIOD	UINT8
RECORD_SOURCE	INT32

Table RPT_VIDEO_DURATION

The RPT_VIDEO_DURATION database table contains the video quality information based on the video duration.

Table 3-43 lists the columns of the RPT_VIDEO_DURATION table.

Table 3-43 Columns of Table RPT_VIDEO_DURATION

Field Name	Type
TIME_STAMP	Timestamp
PACKAGE_ID	INT16
SERVICE_ID	INT16
VIDEO_MONITOR_ID	UINT8
UPSTREAM_VOLUME	UINT32
DOWNSTREAM_VOLUME	UINT32
VIDEO_COUNT	UINT32
AGG_PERIOD	UINT16
RECORD_SOURCE	INT32

Table RPT_VIDEO_RESOLUTION

The RPT_VIDEO_RESOLUTION database table contains the video quality information based on the video resolution.

Table 3-44 lists the columns of the RPT_VIDEO_RESOLUTION table.

Table 3-44 Columns of Table RPT_VIDEO_RESOLUTION

Field Name	Type
TIME_STAMP	Timestamp
PACKAGE_ID	INT16
SERVICE_ID	INT16
VIDEO_MONITOR_ID	UINT8
UPSTREAM_VOLUME	UINT32
DOWNSTREAM_VOLUME	UINT32
VIDEO_COUNT	UINT32
AVG_BIT_RATE	UINT32
AGG_PERIOD	UINT16
RECORD_SOURCE	INT32

Table RPT_VIDEO_BITRATE

The RPT_VIDEO_BITRATE database table contains the video quality information based on the video bitrate.

Table 3-45 lists the columns of the RPT_VIDEO_BITRATE table.

Table 3-45 Columns of Table RPT_VIDEO_BITRATE

Field Name	Type
TIME_STAMP	Timestamp
PACKAGE_ID	INT16
SERVICE_ID	INT16
VIDEO_MONITOR_ID	UINT8
UPSTREAM_VOLUME	UINT32
DOWNSTREAM_VOLUME	UINT32
VIDEO_COUNT	UINT32
AGG_PERIOD	UINT16
RECORD_SOURCE	INT32

Table VIDEO_MONITOR_TYPES

The VIDEO_MONITOR_TYPES contains the mapping information for video duration, bitrate, and resolution for reporting.

Table 3-46 lists the columns of the VIDEO_MONITOR_TYPES table.

Table 3-46 Columns of Table VIDEO_MONITOR_TYPES

Field Name	Type
TIME_STAMP	Timestamp
VIDEO_MONITOR_ID	UINT16
VIDEO_MONITOR_DESC	String
VIDEO_MONITOR_TYPE	UINT16
MIN_VALUE	UINT32
MAX_VALUE	UINT32

Table RPT_DEVICE_COUNT

The RPT_DEVICE_COUNT database table contains the unique subscriber details and information about the consumed volume of devices during an aggregation period.

Table 3-47 lists the columns of the RPT_DEVICE_COUNT table.

Table 3-47 Columns of Table RPT_DEVICE_COUNT

Field Name	Type
TIME_STAMP	Timestamp
PACKAGE_ID	INT16
DEVICE_ID	String

Table 3-47 Columns of Table RPT_DEVICE_COUNT

Field Name	Type
UPSTREAM_VOLUME	UNSIGN_BIGINT
DOWNSTREAM_VOLUME	UNSIGN_BIGINT
UNIQ_SUBS	UINT32
AGG_PERIOD	UINT16
RECORD_SOURCE	INT32

Table DEVICE_TYPES

The DEVICE_TYPES database table contains mapping infomation for device counting based reporting.

Table 3-48 lists the columns of the DEVICE_TYPES table.

Table 3-48 Columns of Table DEVICE_TYPES

Field Name	Type
TIME_STAMP	Timestamp
DEVICE_ID	String
DEVICE_DESC	String
DEVICE_TYPE	UNIT8

Table OS_TYPES

The OS_TYPES database table contains mapping information for OS Based tethering reports.

Table 3-49 lists the columns of the OS_TYPES table.

Table 3-49 Columns of Table OS_TYPES

Field Name	Type
TIME_STAMP	Timestamp
OS_ID	UINT16
OS_DESC	String
TETHERED_OS	UNIT8

Table RPT_QUOTA_BREACH

Database able RPT_QUOTA_BREACH stores data from QUOTA_BREACH_RDR.

These RDRs have the tag 4042322034.

Table 3-50 lists the columns of the DEVICE_TYPES table.

Table 3-50 Columns of Table RPT_QUOTA_BREACH

Field Name	Type
TIME_STAMP	Timestamp
RECORD_SOURCE	INT32
QUOTA_MODEL_TYPE	UINT8
RDR_REASON	UINT8
SUBSCRIBER_ID	String
PACKAGE_ID	UINT16
ADDITIONAL_INFO	UINT32
END_TIME	UINT32
BUCKET_ID	UINT16
BUCKET_TYPE	UINT16
UNIT_AMOUNT_IN	UINT32
UNIT_AMOUNT_OUT	UINT32
BUCKET_SIZE_IN	UINT32
BUCKET_SIZE_OUT	UINT32
FINAL_UNIT_SPECIFIED	UINT8

Table RPT_TOP_MEID

The RAG adapter generates database table RPT_TOP_MEID for the configured aggregation interval (1 hour by default) as configured in cdma_SURs.xml.

Database table RPT_TOP_MEID stores aggregated data's from SUBSCRIBER_USAGE_RDR. These RDRs have the tag 4042321920.

Table 3-51 list the columns of Table RPT_TOP_MEID.

Table 3-51 Columns of Table RPT_TOP_MEID

Field Name	Type
TIME_STAMP	Timestamp
AGG_PERIOD	UINT16
MEID_TAC	String
SERVICE_USAGE_COUNTER_ID	INT32
UPSTREAM_VOLUME	UNSIGN_BIGINT
DOWNSTREAM_VOLUME	UNSIGN_BIGINT
UNIQ_SUBS	UINT32

Table 3-51 Columns of Table RPT_TOP_MEID

Field Name	Type
RANK_VOLUME	UINT16
RANK_UNIQ_SUBS	UINT16
RECORD_SOURCE	INT32

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream) of particular services.

From the RPT_TOP_MEID table, you can generate reports such as Usage per MEID Type.

Table RPT_TOP_HOME_AGENT

The RAG adapter generates database table RPT_TOP_HOME_AGENT for the configured aggregation interval (1 hour by default) as configured in cdma_SURs.xml.

Database table RPT_TOP_HOME_AGENT stores aggregated data's from SUBSCRIBER_USAGE _RDR.These RDRs have the tag 4042321920.

Table 3-52 list the columns of Table RPT_TOP_HOME_AGENT.

Table 3-52 Columns of Table RPT_TOP_HOME_AGENT

Field Name	Type
TIME_STAMP	Timestamp
AGG_PERIOD	UINT16
HOME_AGENT	String
SERVICE_USAGE_COUNTER_ID	INT32
UPSTREAM_VOLUME	UNSIGN_BIGINT
DOWNSTREAM_VOLUME	UNSIGN_BIGINT
RANK_VOLUME	UINT16
RECORD_SOURCE	INT32

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream) of particular services.

From the RPT_TOP_HOME_AGENT table, you can generate reports such as Usage per HOME_AGENT.

Table RPT_TOP_PCF

The RAG adapter generates database table RPT_TOP_PCF for the configured aggregation interval (1 hour by default) as configured in cdma_SURs.xml.

Database table RPT_TOP_PCF stores aggregated data's from SUBSCRIBER_USAGE_RDR. These RDRs have the tag 4042321920.

Table 3-53 list the columns of Table RPT_TOP_PCF.

Table 3-53 Columns of Table RPT_TOP_PCF

Field Name	Type
TIME_STAMP	Timestamp
AGG_PERIOD	UINT16
PCF	String
SERVICE_USAGE_COUNTER_ID	INT32
UPSTREAM_VOLUME	UNSIGN_BIGINT
DOWNSTREAM_VOLUME	UNSIGN_BIGINT
RANK_VOLUME	UINT16
RECORD_SOURCE	INT32

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. Rank is a sequential numerical value that indicates the top entries. RANK_VOLUME is derived based on the usage (downstream, upstream) of particular services.

From the RPT_TOP_PCF table, you can generate reports such as Usage per PCF.

Table RPT_SUBS_OS_INFO

The Custom adapter generates database table RPT_SUBS_OS_INFO for the configured aggregation interval (1 day by default) as configured.

Database RPT_SUBS_OS_INFO stores aggregated data's from SUBSCRIBER_USAGE_RDR (4042321920) & . HTTP_TRANSACTION_USAGE_RDR (4042323004).

Table 3-54 list the columns of Table RPT_SUBS_OS_INFO.

Table 3-54 Columns of Table RPT_SUBS_OS_INFO

Field Name	Type
TIME_STAMP	Timestamp
END_TIME	UINT32
RECORD_SOURCE	INT32
SUBSCRIBER_ID	String
PACKAGE_ID	INT16
OS_ID	UINT16
NAT_ENV	UINT8
DETECTION_TYPE	UINT8
DEVICE_ID	UINT16

At the end of the each aggregation period, the Collection Manager inserts the aggregated records into the table. The table RPT_SUBS_OS_INFO stores operating system usage information & device usage information for each subscriber.

Table MEID_DEVICETYPE

The MEID_DEVICETYPE database table contains mappings for the device types with MEID_TAC. Cisco Insight uses the MEID_TAC column for the Device Type Reports.

Table 3-55 list the columns of Table MEID_DEVICETYPE.

Table 3-55 Columns of Table MEID_DEVICETYPE

Field Name	Type
TIME_STAMP	Timestamp
MEID_TAC	String
DEVICE_TYPE	String