



New and Modified Database Format

This chapter describes how to access the Cisco WAN Manager (CWM) database and provides an overview of the tables that comprise the CWM database. The list of tables includes a status column to indicate whether a table is new, modified, or obsolete in Release 11.

CWM Release 11 includes the following default databases:

- scm—Contains tables used by the Statistics Collection Manager (SCM) server and the client.
- statsdb—Contains data tables.
- stratacom—Contains the CWM tables and statistics covered in Chapters 2 and 4.
- sysutils—Contains Informix utilities.

Accessing the Database

CWM maintains an Informix OnLine database containing information about the Cisco WAN elements within the network. Informix OnLine is a product of Informix Software Inc. and is shipped as a part of the standard CWM package.

To access the database, open a terminal window and type **dbaccess** at the prompt.

```
DBACCESS:  Query-language  Connection Database Table Session Exit
Use SQL query language.
```

```
----- Press CTRL-W for Help -----
```

To show the list of the default databases included in the CWM package, complete the following steps:

1. Use the right arrow to move the cursor to Database and press **Return**.
2. Choose Select and press **Return**.
3. Use the up and down arrows to select the database and press **Return**.

Use Structured Query Language (SQL) to query the database. For information about using SQL and Informix, refer to the Informix documentation located at the following URL:

<http://www.informix.com/answers/english/pids92.htm>

Data Types

Data types describe the format of the fields in the database. The following table lists the data types used in the CWM stratacom database.

Table 1-1 Data Types

Data Type (C Format)	Data Type (Informix Format)	Description
int	integer	Signed 32-bit binary integer.
long	integer	Signed 32-bit binary integer.
smallint	smallint	Signed 16-bit binary integer.
char (n+1)	char (n)	Fixed length character string <i>n</i> bytes in length. In the C format, the length is specified as one byte longer to accommodate the terminating null character that is required in C character strings. When the actual character string is smaller than the specified number of characters, the field is filled out on the right with blanks.
float	float	Signed 32-bit binary real number. Float, sometimes called double precision, can store data with a precision of 8 to 15.
date	date	Signed 32-bit binary integer containing the date expressed as the number of days from (or before) December 31, 1899. January 1, 1900 is day 1.

Structure of the CWM Database

The stratacom database is an Informix SQL database. [Table 1-2](#) lists the tables used in the stratacom database. For more information about the database tables, see [Chapter 2, “Database Tables”](#).

Table 1-2 Database Structure

Table Name	Status	Description
access_node	—	Contains information about access devices, for example the Cisco 3810.
aps	Modified	Contains information about configuring the automatic protection switching (APS) feature on a SONET line.
asi_line	—	Contains information about BPX ASI/BXM lines and physical lines.
asi_ln_data	—	Contains information about ASI/BXM line statistics.
asi_port	—	Contains information about ATM (ASI/BXM/UXM) ports.
asi_port_data	Modified	Contains information about ASI/BXM line statistics.
atm_connection	Modified	Contains ATM connection segment information.
atm_phy	—	Contains information about ATM physical lines.
ausm_port	Modified	Contains information about AUSM, AXSM, and PXM1 ports.
ausm_port_data	—	Contains information about AUSM and PXM1 port statistics.

Table 1-2 Database Structure (continued)

Table Name	Status	Description
axsm_cd_data	Obsolete in Release 11	This table is not used.
axsm_ln_data	Obsolete in Release 11	This table is not used.
axsm_conn_data	New	Contains information about AXSM connection statistics.
axsme_conn_data	New	Contains information about AXSM-E connection statistics.
bis_object	—	Contains information about BPX Interface shelf (BIS) object.
card	—	Contains information about cards, including IPX/BPX/IGX cards.
ces_fru	Obsolete in Release 11	This table is not used.
ces_port	Obsolete in Release 11	This table is not used.
cesm_connection	Modified	Contains information about CESM connections.
channel_route	Obsolete in Release 11	Contains channel route information for FRASM. This table is not used.
circuit_line	—	Contains information about all circuit lines in all the networks.
circuit_ln_data	—	Contains circuit line statistic data.
conn_template	—	Contains information about each of the connection templates that are created.
conn_tmpl_param	—	Contains the actual connection template parameters.
connection	Modified	Contains details of the Frame Relay, voice, and/or data connection segment in each network.
connection_data	—	Contains connection statistic data.
controller	—	Contains the information about the virtual switch interface (VSI) controller. This table is different from the VSI controller table that was provided in Release 9.2 of CWM.
data_channel	—	Contains information about the data channel.
dbkr_temp	—	Contains data for the data broker. This table is not used.
dns_node	Obsolete in Release 11	Contains information about DNS nodes.
fax_relay	New	Contains fax relay configuration information used in VoIP cells.
fpd_conn_data	Modified	Contains information about FastPAD statistics.
fpd_connection	—	Contains information about FastPAD connections.
fpd_node	—	Contains information about FastPAD nodes.
frp	Modified	Contains information on the Frame Relay ports in the networks.
frp_data	—	Contains Frame Relay port statistic data.
frsm12_conn_data	New	Contains FRSM12T3E3 connection statistics.
ftc_port	—	Contains information about FastPAD IPX ports.
ftc_port_data	Modified	Contains information about FastPAD IPX port statistics.

Table 1-2 Database Structure (continued)

Table Name	Status	Description
ima_group	New	Contains IMA group information.
ima_link	New	Contains IMA link information.
itf_rsc	Obsolete in Release 11	This table is not used.
lapd_trunk	New	Contains attributes of an LAPD trunk connection between two VISM to transport PRI D channel information.
line	Modified	Contains information about all lines in the networks.
linedistribution	—	Contains information about line distribution (MGX 8220 only).
link_station	Obsolete in Release 11	Contains link station information for FRASM. This table is not used.
load	New	Contains information about the available bandwidth for different service types.
logical_conn	—	Contains details of logical connections.
maintlog	Obsolete in Release 11	This table is not used.
mg_dname	New	Contains the VISM domain name.
mgc_grp	—	Contains information about the VISM media gateway supported protocol.
mgc_grp	New	Contains media gateway controller redundancy group information.
mgc_res	Modified	Contains information about the VISM media gateway controller resolution table.
mgcg_param	New	Contains the VISM media gateway controller redundancy group parameters.
mgcg_protocol	New	Contains the VISM media gateway controller redundancy group protocols.
mgx3_cd_data	Modified	Contains information related to MGX 8850 (PXM45) card statistics. This table was previously the axsm_cd_data table.
mgx3_ln_data	Modified	Contains information related to MGX 8850 (PXM45) line statistics. This table was previously the axsm_ln_data table.
mgx3_pl_data	Modified	Contains information related to MGX 8850 (PXM45) physical line statistics. This table was previously the axsm_pl_data table.
mgx3_port_data	Modified	Contains information related to MGX 8850 (PXM45) port statistics. Information in this table was previously in the ausm_port_data table.
network	—	Contains the ID and name of each managed network in the database.
node	Modified	Contains the name and status of each node in each network.
node_info	—	Contains information about nodes.
node_parent	Obsolete in Release 11	This table is not used.
packet_line	Modified	Contains information about all trunks in the networks.
packet_ln_data	Modified	Contains packet line statistics data.
peripheral	—	Contains information about peripherals.
phy_line	—	Contains information about physical lines.
phy_ln_data	Modified	Contains physical line statistics data.
plcp	—	Contains information about DS3 lines.

Table 1-2 Database Structure (continued)

Table Name	Status	Description
pnni_if	New	Contains information about Private Network-Network Interface (PNNI).
port_ques	Modified	Contains information about service and OAM/LMI queues on an AUSM card. In the AUSM4 card (contains four ports), the Service Queue table contains 64 entries, 16 for each port. In addition, the table includes information about the four queues that are used for OAM/ILMI traffic. In the AUSM8 card (contains eight ports), the Service Queue table contains 128 entries, 16 each for each port. In addition, the table includes information about the eight queues that are used for OAM/ILMI traffic.
protocol_group	Obsolete in Release 11	Contains information about the protocol groups available with the FRASM card.
pxm1E_conn_data	New	Contains statistics for PXM1E slot.
redundantcard	—	Contains information about redundant cards.
routes	Obsolete in Release 11	This table is not used.
rpm_connection	—	Contains information about RPM connections.
rpm_port	Modified	Contains information about RPM ports.
rsc_part	Modified	Contains information about VSI resource partitions.
rtp_connection	New	Defines attributes that are used to set up a static trunked VoIP connection between a local VISM endpoint and a remote VISM endpoint.
rudp_session	Modified	Contains information about the reliable user data protocol (RUDP) session.
scmcardcoll	New	Contains card based statistics collection information.
scmcardcollhost	New	Contains collection information for each card and host collecting statistics for the card.
scmcardenable	—	Stores all cards that have been enabled or started. The enable list of the node is specified by the colpar_id column that references the scmcolpar table. One record represents one node.
scmcardfamily	—	Stores card family information. One record represents one card family.
scmcardfamilydef	—	Stores cards that are members of the card families. One record represents one type of card specified by its node platform, release, front card type (fctype), card version, and back card type (bctype).
scmcardfamilystat	—	Stores all statistics that are applicable for the card families.
scmcardtemplate	New	Contains the templates for cards (for card based enabling).
scmcolsvr	—	Stores all SCM Collection Servers managed by this SCM Control Server. One record represents one SCM Collection Server.
scmcolpar	—	Stores instances of collection parameters referenced by the nodes and templates. One record represents one collection parameter that includes interval and enable lists.
scmcolparstat	—	Stores the collection parameters CWM statistics.
scmcolparsubobj	—	Stores the collection parameters CWM statistic subobjects.
scmenabletype	New	Stores the enable method for each card.

Table 1-2 Database Structure (continued)

Table Name	Status	Description
scmidmap	—	Stores a statistic ID mapper. One record represents one type of mapping. The nodes/cards that use this mapping are specified in the scmidmapdef table.
scmmethod	—	Stores all nodes/cards that uses the ID mapper specified in the scmidmap table.
scmmethod	Modified	Stores the meta methods for SCM enabling.
scmmethoddef	Modified	Stores information about the node and card that use the meta methods defined in scmmethod table.
scmnodecoll	Modified	Stores information about the nodes that have started collection.
scmnodecollhost	Modified	Stores information about the hosts that are collecting statistics from a node.
scmnodeenable	—	Stores all nodes that are enabled or started. The enabled list specified by the colpar_id column references the scmcolpar table. One record represents one node.
scmnodestat	—	Stores the mapping between the CWM statistic ID and the node statistic ID for the idmapper table.
scmnodetemplate	New	Stores all templates for node based statistics enabling.
scmobj	—	Stores CWM statistic objects. One record represents one statistic object.
scmstat	—	Stores CWM statistics. One record represents one statistic type.
scmsubobj	—	Stores CWM statistic subobjects. One record represents one statistic subobject.
scmtemplate	—	Stores all templates. The template enable list is specified by the colpar_id column that references the scmcolpar table. One record represents one template.
sct	—	Stores general information about the Service Class template.
sct_cosb	—	Stores the Service Class Template class of service buffer (CoSb) descriptor table.
sct_deployment	—	Contains information about the Service Class Template files.
sct_usage	—	Stores the Service Class Template download information.
sct_vc	—	Stores the Service Class Template virtual channel (VC) information.
sct_vcdesc	—	Stores SCT VC traffic priority information.
sec_profile	—	Contains the access privileges for each module.
serial_ln_data	—	Contains serial line statistic data.
session_group	—	Contains information about the session group.
session_set	—	Contains information about the session set.
shelf	Modified	Contains information about shelves.
srcp_param	New	Contains VISM SRCP peer group parameters.
srcp_peer	—	Contains VISM SRCP peer information.
stat_enable	Obsolete in Release 11	Contains details of network statistics that can be collected. This table is not used.
station_data	Obsolete in Release 11	Contains the FRASM Station statistics. This table is not used.
statsdbhost	New	Stores the information of each statistics sparser looking into this CWM.
sv_system	—	Contains CWM name and system parameters.

Table 1-2 Database Structure (continued)

Table Name	Status	Description
sv_version	—	Contains CWM release number and date.
svc_cac	—	Contains the port connection admission control (CAC) configuration table, specifying the CAC information for each interface.
svc_operation	—	Contains the switched virtual circuit (SVC) operation table.
svc_port	Modified	Contains the interface configuration table that collects attributes affecting the operation of the controller interface.
tone_plan	New	Contains configuration information about different tone plans.
user_conn_desc	—	Contains the description about the user connection.
user_connection	Modified	Contains the end-to-end connection data.
user_info	—	Contains the CWM user name and security profile information.
virtual_port	—	Contains ATM virtual interface information for RPM and VISM cards.
vism_card	Modified	Contains information about the VISM card.
vism_cid	New	Contains information about VISM channel IDs.
vism_codec	New	Contains information about the VISM coder decoder parameters.
vism_ds0	Modified	Contains information about DS0s on the VISM card.
vism_endpt	—	Contains information about the VISM endpoints.
vism_hdlc	—	Contains information about high level data link control (HDLC) on the VISM card.
vism_lapd	Modified	Contains information about the link access procedure on the D channel (LAPD) of the VISM card.
vism_line	New	Contains information about VISM line configurations.
vism_mgc	—	Contains information about the VISM media gateway controller.
vism_mgcp	—	Contains information about the VISM media gateway controller protocol (MGCP).
vism_profile	New	Contains information about the VISM AAL2 configurations.
vism_template	New	Contains information about VISM Codec template configurations.
voice_channel	—	Contains information about the voice channel.
voice_conn	Modified	Contains information about VISM connections.
vprange	—	Contains information about the VP range (MGX 8220 only).
xgcp_peer	—	Contains information about the VISM peer Gateway Control Protocol information.
xlmi	—	Contains information about the extended Local Management Interface (XLMI).
xpvc	—	Contains information about extended permanent virtual connections (XPVCs). Unless otherwise noted, the information in this table applies to extended permanent virtual paths (XPVPs).
xpvc_dangler	—	Contains information about discovered XPVC segments that are not joined with other XPVCs. These segments are created from the switch CLI. Unless otherwise noted, the information in this table applies to extended permanent virtual paths (XPVPs).

Table 1-2 Database Structure (continued)

Table Name	Status	Description
xpvc_preferred	—	Contains information about the preferred XPVC.
xpvc_segment	—	Contains information individual segments of an XPVC.