CHAPTER 3

Database Definition

This chapter describes the StrataView Plus database column and row structure for each of the database tables. A description of how to interpret the contents of each field is included.

Structure

The database is an Informix SQL database and consists of the following 35 tables.

Table 3-1 Table of Tables

Table	Description
MAINTLOG	Contains an entry for each network log record
SV_SYSTEM	Contains StrataView name and system parameters
NETWORK	Contains ID and name of each IPX/BPX network in the database
NODE	Contains name and status of each node in each network
PACKET_LINE	Contains name, topology, technical details and status of each packet line in each network
CIRCUIT_LINE	Contains name, topology, technical details and status of each circuit line in each network
FRP	Contains name, topology, technical details and status of each frame relay port in each network
USER_CONNECTION	Contains details of each user connection in each network)
CONNECTION	Contains details of each connection in each network
STAT_ENABLE	Contains details of which and what type of network statistics are to be collected
PACKET_LN_DATA	Contains packet line statistic data
CIRCUIT_LN_DATA	Contains circuit line statistic data
FRP_DATA	Contains frame relay port statistic data
CONNECTION_DATA	Contains connection statistic data
IP_ADDRESS	Contains IP addresses for an attached AIP device
LOGICAL_CONN	Contains details of the network's logical connections
ROUTES	Contains network routing information
ATM_CONNECTION	Contains ATM connection information
ASI_LINE	Contains information about BPX ASI lines
ASI_PORT	Contains information about BPX ASI ports
FPD_CONNECTION	Contains information about FastPAD connections

Table	Description
FTC_PORT	Contains information about FastPAD IPX ports
FPD_NODE	Contains information about FastPAD nodes
FPD_CONN_DATA	Contains information about FastPAD statistics
ASI_LN_DATA	Contains information about ASI line statistics
ASI_PORT_DATA	Contains information about BPX ASI port statistics
FTC_PORT_DATA	Contains information about FastPAD IPX port statistics
BIS_OBJECT	Contains information about BASIS Interface shelf (BIS) object statistics
SHELF	Contains information about AXIS Shelves
PERIPHERAL	Contains information about AXIS Peripherals
CARD	Contains information about AXIS Cards
PLCP	Contains information about AXIS PLCPs
CESM_CONNECTION	Contains information about AXIS CESM connections
AUSM_PORT	Contains information about AXIS AUSM ports
DNS_NODE	Contains information about DNS nodes

Each row in a table may be referenced (accessed) through a unique identifier which is made up of one or more fields in the row. The fields that make up the unique identifier are indicated in bold in each of the table descriptions that follow.

Data Types

Table 3-2 Data Types

Data Type (C Format)	Data Type (Informix Format)	Remarks
int	integer	Signed 32 bit binary integer
long	integer	Signed 32 bit binary integer
short	smallint	Signed 16 bit binary integer
char (n+1)	char (n)	Fixed length character string n 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 shorter than the specified number of characters, the field is filled out on the right with blanks.
	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.

Table Definitions

Table 3-3 MAINTLOG

Column Name	Unique Identifier Field	Data Type	Description
rec_tag	yes	int	a unique record tag to identify the record
network		char (8+1)	SV Plus network name of network generating record
node_name		char (10+1)	IPX node name of node generating record
ntime		int	UNIX timestamp
edate		date	date field in Informix format
etime		char (8+1)	time field in hh:mm:ss format
time_zone		char (4+1)	timezone of the record in ASCII format
class		char (5+1)	class of log record “major” = major “minor” = minor “clear” = clear “info” = information “updt” = update
msg		char (256+1)	detail message of the record
ack_flag		short	event acknowledgment flag
reserved		int	reserved for future use

Table 3-4 SV_SYSTEM

Column Name	Unique Identifier Field	Data Type	Description
name	yes	char (8+1)	name of the SV Plus parameter
val		char (20+1)	character string including revision number of database

Table 3-5 NETWORK

Column Name	Unique Identifier Field	Data Type	Description
netw_id	yes	short	SV Plus network ID
ipx_netw_id		short	IPX network ID
netw_name		char (8+1)	SV Plus network name assigned by user
active		short	flag for network active state
reserved		int	reserved for future use

Table 3-6 NODE

Column Name	Unique Identifier Field	Data Type	Description
node_id	yes	int	SV Plus node ID
netw_id		short	IPX network ID
node_name		char (10+1)	IPX node name
ipx_netw_id		short	IPX network ID
ipx_node_id		short	IPX node ID
netw_ip_address		int	network IP address for the node
lan_ip_address		int	LAN IP address for the node In Rel 8.1, both netw_ip_address and lan_ip_address have same value.
alarm_state		short	node alarm state 0 = clear 1 = minor 2 = major 3 = unreachable 64 = clear & node is in SV+ mode 65 = minor & node is in SV+ mode 66 = major & node is in SV+ mode 67 = unreachable & node is in SV+ mode
gateway		short	flag for node acting as a gateway between two network domains 0 = not a gateway 1 = gateway
active		short	node active state flag 0 = inactive * 1 = active *
platform		short	flag for platform type: 0 = IPX, 1 = BPX. 2 = IGX, 3 = AXIS, 4 = INS (DAS)
subtype		short	flag for a shelf 0 = Routing nodf 1 = Feeder or shelf
release		char (11+1)	SV+ software release revision
fs_inc_rate		short	FRP Foresight increase rate
fs_dec_rate		short	FRP Foresight decrease rate
fs_fdec_rate		short	FRP Foresight fast decrease rate
rst_timeout		short	timeout for setting PVC rate to QIR
mode		short	Node mode (for AXIS node)
reserved		int	reserved for future use

Table 3-7 PACKET LINE

Column Name	Unique Identifier Field	Data Type	Description
pln_obj_id	yes	int	packet line object ID
l_network_id		short	local SV Plus network ID
l_node_id	yes	int	local SV Plus node ID
l_line		short	local logical trunk number
1_slot		short	local trunk slot number
l_port		short	local trunk logical port number
l_vtrk		short	local virtual trunk ID
card_type		short	packet line card type 3 = TXR 35 = FTC 22 = NTC 103 = BNI_T3 34 = AIT 104 = BNI_E3
interface		short	packet line interface type 0 = unknown 1 = T1 5 = E1 6 = subrate 7 = Broadband
line_load		int	packet line load in packets per second
r_network_id			remote SV Plus network ID
r_node_id		int	remote SV Plus node ID
r_line		short	remote line number
r_slot		short	remote trunk logical slot number
r_port		short	remote trunk logical port number
r_vtrk		short	remote virtual trunk ID
alarm_state		short	packet line alarm state 0 = clear 1 = minor 2 = major
comment		char (20+1)	comment field used to further qualify the packet line
active		short	packet line active state 0 = inactive 1 = active This field is unused.
status		short	packet line status field 1 = clear 2 = failed
stat_reserve		int	packet line statistical reserve field (in packets per second).
b_bq_depth		int	bursty data B queue depth
b_bq_efcn		int	bursty data B EFCN/ENCI threshold
clp_h_thresh		short	CLP high dropping threshold

Column Name	Unique Identifier Field	Data Type	Description
clp_l_thresh		short	CLP low dropping threshold
time_load		int	time stamped load units
non_time		int	non-time stamped load units
v_load		int	voice load units
bursty_a_load		int	bursty data A load units
bursty_b_load		int	bursty data B load units
bursty_a_cmax		short	bursty data A Credit Max
bursty_b_cmax		short	bursty data B Credit Max
reserved		int	reserved for future use

Table 3-8 CIRCUIT LINE

Column Name	Unique Identifier Field	Data Type	Description
cln_obj_id	yes	int	circuit line object ID
l_network_id		short	local SV Plus network ID
l_node_id	yes	int	local SV Plus node ID
l_line		short	local circuit line number
card_type		short	circuit line card type 3 = TXR ASI_T3 = 106 21 = CIP ASI_E3 = 107 29 = CDP
interface		short	circuit line interface type 0 = unknown 1 = T1 2 = E1 3 = T3/E3
comment		char (20+1)	comment field used to further qualify the circuit line
active		short	circuit line active state 0 = inactive 1 = active This field is unused.
status		short	circuit line status field 1 = clear 2 = failed
reserved		int	reserved for future use

Table 3-9 FRP

Column Name	Unique Identifier Field	Data Type	Description
frp_obj_id	yes	int	FRP port object ID
l_network_id		short	local SV Plus network ID
l_node_id	yes	int	local SV Plus node ID
shelf		int	shelf number
l_slot		short	local slot number
l -port		short	local port number
port_speed		int	port speed in hundreds of bits per second (e.g. 256 kbps displays as 2560)
comment		char (20+1)	comment field used to further qualify the FRP port
active		short	circuit line active state 0 = inactive * 1 = active * * This field is unused.
status		short	FRP line status field 1 = clear 2 = failed
port_type		short	type of port 0 = UNI FRP 1 = NNI FRP 2 = Port Concentrator
queue_depth		int	port queue depth
ecn_thresh		in_	ECN queue depth
de_thresh		short	DE threshold
logical_port		short	Logical port number used in the MIB (For FRSM Port only)
line		short	Line number associated with this port (For FRSM Port only)
timeslot_num		short	Number of timeslots (For FRSM Port only)
timeslot_speed		short	Timeslot speed (For FRSM Port only) 1- speed = 56k 2- speed = 64k
port_bitmap		int	Port bitmap (For FRSM Port only)
port_equ		short	Port Equeue service ratio (For FRSM Port only)
port_flag		short	Port flags between frames (For FRSM Port only)

Column Name	Unique Identifier Field	Data Type	Description
protocol_type		short	Signalling protocol type (For FRSM Port only) 1—other 2—noSignalling 3—strataLMI 4—annexAUNI 5—annexDUNI 6—annexANNI 7—annexDNNI
asyn_upd		short	Asynchronous Updates (For FRSM Port only)
link_timer		short	t391 Line Integrity Timer (For FRSM Port only)
poll_timer		short	t392 Polling Verification Timer (For FRSM Port only)
poll_counter		short	n391 Full Status Polling Counter (For FRSM Port only)
err_thresh		short	n392 Error Threshold (For FRSM Port only)
event_count		short	n393 Monitored Event Count (For FRSM Port only)
xmt_timer		short	Xmt CLLM Status Timer (For FRSM Port only)
rcv_timer		short	Rcv CLLM Status Timer (For FRSM Port only)
cllm_ena		short	CLLM enable/disable (For FRSM Port only)
signal_state		int	Port signalling state (For FRSM Port only) 1 = LMI failure 2 = CLLM failure
reserved		int	reserved for future use

Table 3-10 USER CONNECTION

Column Name	Unique Identifier Field	Data Type	Description
l_node_id	yes	int	local SV Plus node ID
num_segs		short	Number of segments
termination		short	Type of local and remote end-points. Bit(0) - Local end has feeder Bit(1) - Remote end has feeder Bit(2-4) - Local endpoint type Voice_Data (0) Frame-Relay (1) ATM (2) Bit(5-7) -Remote endpoint type Voice_Data (0) Frame-Relay (1) ATM (2)
l_slot	yes	short	Local slot number
l_line	yes	short	Local line number (For AXIS connection only)
l_port	yes	short	Local port number

Column Name	Unique Identifier Field	Data Type	Description
l_subchnl_1	yes	short	First local sub-channel number
l_subchnl_2	yes	int	Second local sub-channel number
lr_slot	yes	short	Local slot number
lr_line	yes	short	Local line number (For AXIS connection only)
lr_port	yes	short	Local port number
lr_subchnl_1	yes	short	First local sub-channel number
lr_subchnl_2	yes	int	Second local sub-channel number
lc_node_id	yes	int	Local hub SV+ node id. (Same as local node id for connections that originate in a hub.)
lc_slot	yes	short	Local hub slot number (Same as local slot id for connections that originate in a hub.)
lc_port	yes	short	Local hub port number (Same as local port id for connections that originate in a hub.)
lc_subchnl_1	yes	short	First local hub sub-channel number (Same as first local sub-channel number for connections that originate in a hub.)
lc_subchnl_2	yes	int	Second local hub sub-channel number (Same as second local sub-channel number for connections that originate in a hub.)
rc_node_id		int	Remote hub SV+ node id. (Same as remote node id for connections that originate in a hub.)
rr_slot		short	Remote hub slot number (Same as remote slot id for connections that originate in a hub.)
rr_port		short	Remote hub port number (Same as remote port id for connections that originate in a hub.)
rr_subchnl_1		short	First remote hub sub-channel number (Same as first remote sub-channel number for connections that originate in a hub.)
rr_subchnl_2		int	Second remote hub sub-channel number (Same as second remote sub-channel number for connections that originate in a hub.)
rc_slot		short	Remote hub slot number (Same as remote slot id for connections that originate in a hub.)
rc_port		short	Remote hub port number (Same as remote port id for connections that originate in a hub.)
rc_subchnl_1		short	First remote hub sub-channel number (Same as first remote sub-channel number for connections that originate in a hub.)

Column Name	Unique Identifier Field	Data Type	Description
rc_subchnl_2		int	Second remote hub sub-channel number (Same as second remote sub-channel number for connections that originate in a hub.)
r_node_id		int	Remote SV+ node id
r_slot		short	Remote slot number
r_line		short	Remote line number
r_port		short	Remote port number
r_subchnl_1		short	First remote sub-channel number
r_subchnl_2		int	Second remote sub-channel number
parm_type		short	A flag to indicate if StrataCom or standard FR parameters are used.
state		short	Clear(1), Fail(2), Down(3), Incomplete(4)
proc_state		short	The processing state (used by data broker).
con_type		short	Connection type (e.g. voice, data, frame relay, etc.) Frame Relay = 5 ATM = 6
sub_type		short	Connection subtype ATF = 1 VBR = 2 CBR = 3 unknown = 4 ABR = 5
comment		char (20+1)	comment field used to further qualify the connection
l_endpt_obj_id		int	Local endpoint object id.
lc_endpt_obj_id		int	Local hub endpoint object id.
rc_endpt_obj_id		int	Remote hub endpoint object id.
r_endpt_obj_id		int	Remote endpoint object id.
l_rate_info		short	Local end combination field of rate info: bit(7) Fast EIA Enabled(1)/Disabled(0) bit(6) DFM Enabled(1)/Disabled(0) bits(5-3) Encoding: undefined(0) 7/8(1) 8/8(2) 8/8l(3) 7/8E(4) bit(2-0) Load Type: undefined(0) voice(1) non-TS(2) TS(3) Bursty Data A(4) Bursty Data B(5)
l_mir		int	Local end minimum guaranteed bandwidth in hundreds of bits per second (e.g. 256 kbps displays as 2560)

Column Name	Unique Identifier Field	Data Type	Description
l_qir		int	Local end QIR in hundreds of bits per second
l_pir		int	Local end PIR in hundreds of bits per second
l_vc_q_depth		int	Local end VC queue depth in bytes
l_vc_q_thresh		int	Local end VC queue threshold in bytes
l_vc_q_de_thresh		int	Local end VC queue DE threshold in bytes
l_eg_q_depth		int	Local end Egress queue depth in bytes
l_eg_q_de_thresh		int	Local end Egress queue DE threshold in bytes
l_eg_q_ecn_thresh		int	Local end Egress queue ECN threshold in bytes
l_de_tag_ena		int	Local end DE tagging enable/disable
l_cmax		short	Local end maximum threshold for FRP credit manager in packets
l_per_util		short	Local end percent utilization
l_con_info_flag		short	Local end connection information flags bit(7) Foresight Enabled (1) Disabled (0) bit(6) High Priority (1) bit(5-0) unused
l_cir		short	Local end CIR in bits per second
l_bc		int	Local end committed burst in bytes.
l_be		int	Local end excess burst in bytes.
l_eg_q_select		short	egress queue selection
l_ibs		int	Local end initial burst size (IBS) in bytes
l_channel_type		short	Local end channel type (currently used by connections terminating on FRSM) 1= FR-NetworkInterWorking 2= FR-ServiceInterWorking-Transparent 3= FR-ServiceInterWorking-Translate 4= FR-FUNI default = 0
l_fecn		short	Local end forward explicit congestion notification default = 0
l_de_to_clp_map		short	Local end discard-eligible to CLP mapping default = 0
l_clp_to_de_map		short	Local end CLP to discard-eligible mapping default = 0
l_efci_q_threshold		short	Local end EFCI queue threshold
l_cbs		int	Local end committed burst size
l_mfs		int	Local end maximum frame size
l_ccdv		int	Local end CCDV

Column Name	Unique Identifier Field	Data Type	Description
l_clp_hi		short	Local end CLP high threshold
l_clp_lo		short	Local end CLP low threshold
l_fst_rate_up		short	Local end ForeSight rate up
l_fst_rate_dn		short	Local end ForeSight rate down
l_fst_fast_dn		short	Local end ForeSight fast down
l_fst_qir_to		short	Local end ForeSight QIR time out
l_fst_max_adj		int	Local end ForeSight maximum adjustment
l_clp_tagging		int	Local end CLP tagging
l_upc_enable		int	Local end UPC enable
l_rm_enable		int	Local end RM enable
l_u_fgcra		int	Local end FGCRA
l_u_scr_policing		int	Local end SCR policing
l_u_pcr01		int	Local end PCR 0 + 1
l_u_ccdv01		int	Local end CCDV 0 + 1
l_u_ccdv0		int	Local end CCDV 0
l_max_buf_size		int	Local end maximum buffer size
l_cell_loss_period		int	Local end cell loss period
l_cdv_rx_t		int	Local end CDV received
r_rate_info		short	Remote end combination field of rate info: bit(7) Fast EIA Enabled (1) Disabled (0) bit(6) DFM Enabled (1) Disabled (0) bits(5-3) Encoding: undefined (0) 7/8 (1) 8/8 (2) 8/8l (3) 7/8E (4) bit(2-0) Load Type: undefined (0) voice (1) non-TS (2) TS (3) Bursty Data A (4) Bursty Data B (5)
r_mir		int	Remote end minimum guaranteed bandwidth in hundreds of bits per second (e.g. 256 kbps displays as 2560)
r_qir		int	Remote end QIR
r_pir		int	Remote end PIR
r_vc_q_depth		int	Remote end VC queue depth

Column Name	Unique Identifier Field	Data Type	Description
r_vc_q_thresh		int	Remote end VC queue threshold
r_vc_de_thresh		int	Remote end VC queue DE threshold
r_eg_q_depth		int	Remote end Egress queue depth
r_eg_q_de_thresh		int	Remote end Egress queue DE threshold
r_eg_q_ecn_thresh		int	Remote end Egress queue ECN threshold
r_de_tag_ena		int	Remote end DE tagging enable/disable
r_cmax		short	Remote end maximum threshold for FRP credit manager
r_per_util		short	Remote end percent utilization
r_con_info_flag		short	Remote end connection information flags bit(7) Foresight Enabled(1)/Disabled(0) bit(6) High Priority(1) bit(5-0) unused
r_cir		int	Remote end CIR
r_bc		int	Remote end commited burst default = 0
r_be		int	Remote end excess burst default = 0
r_eg_q_select		short	egress queue selection
r_ibs		int	Remote end initial burst size
r_channel_type		short	Remote end channel type default = 0
r_fecn		short	Remote end forward explicit congestion notification default = 0
r_de_to_clp_map		short	Remote end discard-eligible to CLP mapping default = 0
r_clp_to_de_map		short	Remote end CLP to discard-eligible mapping default = 0
r_efci_q_threshold		short	Remote end EFCI queue threshold
r_cbs		int	Remote end committed burst size
r_mfs		int	Remote end maximum frame size
r_ccdv		int	Remote end CCDV
r_clp_hi		short	Remote end CLP high threshold
r_clp_lo		short	Remote end CLP low threshold
r_fst_rate_up		short	Remote end ForeSight rate up
r_fst_rate_dn		short	Remote end ForeSight rate down
r_fst_fast_dn		short	Remote end ForeSight fast down
r_fst_qir_to		short	Remote end ForeSight QIR time out
r_fst_max_adj		int	Remote end ForeSight maximum adjustment
r_clp_tagging		int	Remote end CLP tagging

Column Name	Unique Identifier Field	Data Type	Description
r_upc_enable		int	Remote end UPC enable
r_rm_enable		int	Remote end RM enable
r_u_fgcra		int	Remote end FGCRA
r_u_scr_policing		int	Remote end SCR policing
r_u_pcr01		int	Remote end PCR 0 + 1
r_u_ccdv01		int	Remote end CCDV 0 + 1
r_u_ccdv0		int	Remote end CCDV 0
r_max_buf_size		int	Remote end maximum buffer size
r_cell_loss_period		int	Remote end cell loss period
r_cdv_rx_t		int	Remote end CDV received
cos		short	Class of Service
avoid_trk_type		short	Trunk types to avoid: None (1) Satellite (2) Terrestrial (3)
avoid_zcs		short	Avoid ZCS trunks True (1) False (2)
pref_route		char (256)	The preferred route through the routing network.
snmp_index		int	The SNMP-Proxy index for user connection.

Table 3-11 CONNECTION

Column Name	Unique Identifier Field	Data Type	Description
con_obj_id	yes	int	connection IPX object ID
lcon_obj_id		short	Logical Connection Object ID
master_flag		short	Flag that indicates if this end is the master. True (1) False (0)
l_network_id		short	local SV Plus network ID
l_node_id	yes	int	local SV Plus node ID
shelf		int	Shelf number
termination		short	Type of local and remote end-points. Bit(0)—Local end has feeder Bit(1)—Remote end has feeder Bit(2–4)—Local endpoint type Voice_Data (0) Frame-Relay (1) ATM (2) Bit(5–7) -Remote endpoint type. Voice_Data (0) Frame-Relay (1) ATM (2)
l_slot		short	local slot number
l_line		short	local line number (FRSM only)
l_channel		short	local channel number
l_dlci		short	local DLCI number
l_vci		int	local VCI number
r_network_id		short	remote SV Plus network ID
r_node_id		int	remote SV Plus node ID
r_slot		short	remote slot number
r_channel		short	remote channel number
r_dlci		short	remote DLCI number
r_vci		int	remote VCI
con_type		short	connection type 0 = ADPCM voice 1 = ADPCM no voice activation detection (VAD) 2 = PCM voice 3 = transparent voice 4 = data (SDP) 5 = frame relay 6 = ATM

Column Name	Unique Identifier Field	Data Type	Description
rate_info		short	combination rate information. This field is a 16 bit value of which the lower order 8 bits are interpreted as 4 fields (bit 7, bit 6, bits 3-5, and bits 0-2). The values of the fields are the result of ORing together the following 16 bit values. * 0x08 = Fast EIA Enabled 0x40 = DFM enabled 0x08 = 7/8 Encoded 0x10 = 8/8 Encoded 0x18 = 8/8 Inverted Encoded 0x20 = 7/8 Inverted Encoded 0x01 = Voice 0x02 = Non-timed stamped 0x03 = Time-stamped 0x04 = Bursty data 0x05 = Multicast combination field of rate info: bit(7) Fast EIA Enabled(1)/Disabled(0) bit(6) DFM Enabled(1)/Disabled(0) bits(5-3) Encoding: undefined(0) 7/8(1) 8/8(2) 8/8l(3) 7/8E(4) bit(2-0) Load Type: undefined(0) voice(1) non-TS(2) TS(3) Bursty Data A(4) Bursty Data B(5)
l_load_unit		short	local maximum number of packets per second allocated to the connection
r_load_unit		short	remote maximum number of packets per second allocated to the connection
min_bw		short	minimum guaranteed bandwidth in bits per second
dax_con		short	DAX connection flag 0 = non DAX 1 = DAX
txr_card		short	flag to identify voice connection end point card is TXR card type 0 = non TXR 1 = TXR
comment		char (20+1)	comment field used to further qualify the connection
active		short	connection active state 0 = inactive * 1 = active * * This is unused.

Column Name	Unique Identifier Field	Data Type	Description
status		short	connection status 1 = clear 2 = failed 3 = down
qir		int	quiescent information rate in hundreds of bits per second.
pir		int	peak information rate in hundreds of bits per second.
vc_q_depth		int	vc queue depth in bytes
vc_q_thresh		int	vc queue threshol d in bytes (ingress queue ECN threshold)
vc_de_thresh		int	ingress queue DE threshold
eg_q_depth		int	egress queue depth in bytes
eg_q_de_thresh		int	egress queue DE threshold in bytes
eg_q_ecn_thresh		int	egress queue ECN threshold in bytes
de_tag_ena		int	DE tagging enable/disable
cmax		short	credit max.for a connection in packets
per_util		short	percent utilization
conn_info_flag		short	connection information flag bit(7) Foresight Enabled (1) Disabled (0) bit(6) High Priority (1) bit(5-0) unused
cir		int	committed information rate in bits per second
a_bit_status		short	connection a bit status field Bit 7 is 1 if NNI a-bit status is OK Bit 6 is 1 if NNI remote PVC does not exist. Bit 5 to Bit 0 unused.
ibs		int	initial burst size
bc		int	burst-committed in bytes default = 0
be		int	burst-excess in bytes default = 0
eg_q_select		short	egress queue selection
efci_q_threshold		short	EFCI queue threshold
cbs		int	committed burst size
mfs		int	maximum frame size
ccdv		int	CCDV
clp_hi		short	CLP high threshold
clp_lo		short	CLP low threshold
fst_rate_up		short	ForeSight rate up

Column Name	Unique Identifier Field	Data Type	Description
fst_rate_dn		short	ForeSight rate down
fst_fast_dn		short	ForeSight fast down
fst_qir_to		short	ForeSight QIR time out
fst_max_adj		int	ForeSight maximum adjustment
card_type		short	local endpoint card type 1 = CDP_SDP 2 = FRP 3 = AIT 4 = FRSM
channel_type		short	channel type(currently used by connections terminating on FRSM) 1= FR-NetworkInterWorking 2= FR-ServiceInterWorking-Transparent 3= FR-ServiceInterWorking-Translate 4= FR-FUNI default = 0
fecn		short	forward explicit congestion notification default = 0
de_to_clp_map		short	discard-eligible to CLP mapping default = 0
clp_to_de_map		short	CLP to discard-eligible mapping default = 0
reserved		int	reserved for future use

Table 3-12 STAT_ENABLE

Column Name	Unique Identifier Field	Data Type	Description
obj_id	yes	int	IPX/BPX object ID
l_node_id	yes	int	local SV Plus node ID
object_type	yes	short	object type 0 = connection 1 = circuit line 2 = packet line 3 = frame relay port
stat_type	yes	short	statistic type See Note 1
bucket_type	yes	short	duration, in minutes, of the bucket
owner_netw_id		short	IPX network ID to which SV Plus is connected
owner_node_id		short	IPX Node ID to which SV Plus is connected
num_buckets		short	maximum number of buckets residing in the IPX real-time memory
bucket_size		short	size of bucket in bytes
retain_peak		short	flag to indicate to have peak saved. A two byte value where: High order byte has the format: bit 7 (high) 0 = interval in minutes 1 = interval in seconds bits 0–6 = peak interval Low order byte has the format: 0 = don't save peak 1 = save peak
auto_stat		short	flag to indicate whether the statistic is enabled by system by default 0 = not enabled by default 1 = enabled by fault
enable_flag		short	flag to indicate the active status of the statistic type 0 = inactive 1 = active
collect_interval		int	the time interval in minutes to collect statistical data
enable_time		int	the UNIX time when the statistic was enabled
retain_period		int	the duration period in minutes of the records saved in the SV Plus database
reserved		int	reserved for future use

Table 3-13 PACKET_LN_DATA

Column Name	Unique Identifier Field	Data Type	Description
timestamp	yes	long	timestamp of the statistical record
pln_obj_id	yes	int	packet line IPX object ID
l_node_id	yes	int	local SV Plus node ID
stat_type	yes	short	statistic type See Note 1
bucket_type	yes	short	duration, in minutes, of each bucket
totald		int	total of raw data collected in the sample interval
peak		int	peak rate of raw data in the sample interval

Table 3-14 CIRCUIT_LN_DATA

Column Name	Unique Identifier Field	Data Type	Description
timestamp	yes	int	timestamp of the statistical record
cln_obj_id	yes	int	circuit line IPX object ID
l_node_id	yes	int	local SV Plus node ID
stat_type	yes	short	statistic type See Note 1
bucket_type	yes	short	duration, in minutes, of each bucket
totald		int	total of raw data collected in the sample interval
peak		int	peak rate of raw data in the sample interval

Table 3-15 FRP_DATA

Column Name	Unique Identifier Field	Data Type	Description
timestamp	yes	int	timestamp of the statistical record
frp_obj_id	yes	int	frame relay port IPX object ID
l_node_id	yes	int	local SV Plus node ID
stat_type	yes	short	statistic type See Note 1
bucket_type	yes	short	duration, in minutes, of each bucket
totald		int	total of raw data collected in the sample interval
peak		int	peak rate of raw data in the sample interval

Table 3-16 CONNECTION_DATA

Column Name	Unique Identifier Field	Data Type	Description
timestamp	yes	int	timestamp of the statistical record
con_obj_id	yes	int	connection IPX object ID
l_node_id	yes	int	local SV Plus node ID
stat_type	yes	short	statistic type See Note 1
bucket_type	yes	short	duration, in minutes, of each bucket
totald		int	total of raw data collected in the sample interval
peak		int	peak rate of raw data in the sample interval

Table 3-17 IP_ADDRESS

Column Name	Unique Identifier Field	Data Type	Description
network	yes	short	SV+ network ID
node_id	yes	int	SV+ node ID
slot	yes	short	slot number of FR card
port	yes	short	port number
IP address		char(16)	IP address of device on port
type		short	type of port 0 = UNI FRP 1 = NNI FRP 2 = ATM FRP
reserved		int	reserved for future use

Table 3-18 LOGICAL_CONN

Column Name	Unique Identifier Field	Data Type	Description
lcon_obj_id	yes	int	logical connection object id
src_node_id	yes	int	SV+ source node id in the routes
lcon_type	yes	short	local lcon or junction lcon lcon (0) junction (1)
round_trip_delay		short	round trip delay (only applicable to local lcon)
dst_node_id		int	SV+destination node id in the local routes
l_lcon_index		short	local logical connection index
r_lcon_index		short	remote logical connection index
r_lcon_p_index		short	remote logical partner connection index
j_dst_node_id		int	SV+ destination node in the junction route
cos		short	Class of ServiceFalse (0) True (1)
group_flag		short	grouped connection False (0) True (1)
avoid_trk_type		short	Trunk types to avoid: None (1) Satellite (2) Terrestrial (3)
avoid_zcs		short	Avoid ZCS trunks False (0) True (1)

Table 3-19 ROUTES

Column Name	Unique Identifier Field	Data Type	Description
l_con_id	yes	int	the logical connection object id. It can be either a junction logical connection id or a non-junction connection id.
owner_node_id	yes	int	the SV+ node id that owns the route
hop_node_id	yes	int	the source SV+ node id
route_type	yes	short	current or preferred route current (0) preferred (1) junction current (2) junction preferred (3)
hop_number		short	the hop number
src_line_number		short	the source trunk line number

Table 3-20 ATM CONNECTION

Column Name	Unique Identifier Field	Data Type	Description
con_obj_id	yes	int	ATM Connection BPX object id
lcon_obj_id		int	Logical Connection Object ID
master_flag		short	Flag that indicates if this end is the master. True (1) False (0)
l_network_id		short	local SV Plus network ID
l_node_id	yes	int	local SV Plus node ID
termination		short	Type of local and remote end-points. Bit(0)—Local end has feeder Bit(1)—Remote end has feeder Bit(2–4)—Local endpoint type Voice_Data (0) Frame-Relay (1) ATM (2) Bit(5–7)—Remote endpoint type. Voice_Data (0) Frame-Relay (1) ATM (2)
l_slot		short	Local slot number
l_port		short	Local port number
l_vpi		short	Local vpi number
l_vci		int	Local vci number
r_network_id		short	Remote SV+ network id
r_node_id		int	Remote SV+ node id
r_slot		short	Remote slot number
r_port		short	Remote port number
r_vpi		short	Remote vpi number
r_vci		int	Remote vci number
con_type		short	Connection type (e.g. voice, data, frame relay, atm connection etc.) ATM = 6
sub_type		short	Connection subtype ATF = 1 VBR = 2 CBR = 3 unknown = 4 ABR = 5
mir		int	minimum information rate in cells per second
qir		int	quiescent information rate in cells per second
pir		int	peak information rate in cells per second
cir		int	commited information rate in bits per second

Column Name	Unique Identifier Field	Data Type	Description
per_util		short	Percent Utilization
comment		char [20 + 1]	Comment field to be used to further qualify the ATM connection
active		short	Connection active state This field in unused.
status		short	Connection status field 1 = Clear 2 = Failed 3 = Down
con_info_flag		short	Connection information fla bit(7) Foresight Enabled (1) Disabled (0) bit(6) High Priority (1) bit(5-0) unused
ibs		int	initial burst size
vc_q_depth		int	vc queue depth in bytes
efci_q_threshold		short	EFCI queue threshold
cbs		int	committed burst size
mfs		int	maximum frame size
ccdv		int	CCDV
clp_hi		short	CLP high threshold
clp_lo		short	CLP low threshold
fst_rate_up		short	ForeSight rate up
fst_rate_dn		short	ForeSight rate down
fst_fast_dn		short	ForeSight fast down
fst_qir_to		short	ForeSight QIR time out
fst_max_adj		int	ForeSight maximum adjustment
clp_tagging		int	CLP tagging
upc_enable		int	UPC enable
rm_enable		int	RM enable
u_fgcra		int	FGCRA
u_scr_policing		int	SCR policing
u_pcr01		int	PCR 0 + 1
ccdv01		int	CCDV 0 + 1
ccdv0		int	CCDV 0
reserved		int	Reserved for future use

Table 3-21 ATF CONNECTION (ATF connections are saved in connection table.)

Column Name	Unique Identifier Field	Data Type	Description
atfcon_obj_id	yes	int	ATF Connection IPX/BPX object id
lcon_obj_id		int	Logical Conn. Object Id
l_network_id		short	Local SV+ network id
l_node_id	yes	int	Local SV+ node id
l_slot		short	Local slot number
l_port		short	Local port number
l_dlci		short	Local dlci number
l_vpi		short	Local vpi number
l_vci		int	Local vci number
r_network_id		short	Remote SV+ network id
r_node_id		int	Remote SV+ node id
r_slot		short	Remote slot number
r_port		short	Remote port number
r_dlci		short	Remote dlci number
r_vpi		short	Remote vpi number
r_vci		int	Remote vci number
con_type		short	Connection type (e.g. voice, data, frame relay, atf connection etc.)
mir		int	MIR
qir		short	QIR
pir		int	PIR
cir		int	CIR
per_util		short	Percent Utilization
comment		char [20 + 1]	Comment field to be used to further qualify the ATF connection
active		short	Connection active state
status		short	Connection status field
con_info_flag		short	Connection information flags
reserved		int	Reserved for future use

Table 3-22 ASI_LINE

ColumnName	Unique Identifier Field	Data Type	Description
asiLine_obj_id	yes	int	ASI line BPX object id
l_network_id		short	Local SV+ network id
l_node_id	yes	int	Local SV+ node id
card_type		short	ASI line card type (ASI_T3 = 106, ASI_E3 = 107)
interface		short	ASI line interface type (3 = T3/E3)
l_slot		short	ASI line slot number
l_port		short	ASI line port number
comment		char [20 + 1]	Comment field to be used to further qualify the ASI Line
active		short	ASI line active state (This field is unused)
status		short	ASI line status field 1 = Clear 2 = Failed
reserved		int	Reserved for future use

Table 3-23 ASI_PORT

ColumnName	Unique Identifier Field	Data Type	Description
asiPort_obj_id	yes	int	ASI port BPX object id
l_network_id		short	Local SV+ network id
l_node_id	yes	int	Local SV+ node id
l_slot		short	ASI slot number
l_port		short	ASI port number
port_speed		int	Port speed (baud rate) in 100 bps
comment		char [20 + 1]	Comment field to be used to further qualify the ASI Port
active		short	ASI port active state (This field is unused)
status		short	ASI port status field 1 = Clear 2 = Failed.
reserved		int	Reserved for future use

Table 3-24 FPD_CONNECTION

ColumnName	Unique Identifier Field	Data Type	Description
fpdcon_obj_id	yes	int	FastPAD Connection FastPAD object id
lcon_obj_id		int	Logical Conn. Object Id
l_network_id		short	Local SV+ network id
l_node_id	yes	int	Local SV+ node id
l_slot		short	Local slot number
l_port		short	Local port number
l_subtype		short	Local FastPAD connection subtype (e.g. voice, data, session, etc.)
l_fpdslot		short	Local FastPAD slot number
l_fpdport		short	Local FastPAD port number
l_fpddlci		int	Local FastPAD DLCI number
r_network_id		short	Remote SV+ network id
r_node_id		int	Remote SV+ node id
r_slot		short	Remote slot number
r_port		short	Remote port number
r_subtype		short	Remote FastPAD connection subtype (e.g. voice, data, session, etc.)
r_fpdslot		short	Remote FastPAD slot number
r_fpdport		short	Remote FastPAD port number
r_fpddlci		int	Remote FastPAD DLCI number
con_type		short	Connection type (e.g. voice, data, frame relay, atm, atf, FastPAD etc.) 0 = ADPCM voice 1 = ADPCM no voice activation detection (VAD) 2 = PCM voice 3 = transparent voice 4 = data (SDP) 5 = frame relay 6 = ATM
rate_info		short	Combination field of rate info: bit(7) Fast EIA Enabled(1)/Disabled(0) bit(6) DFM Enabled(1)/Disabled(0) bits(5-3) Encoding: undefined(0) 7/8(1) 8/8(2) 8/8l(3) 7/8E(4) bit(2-0) Load Type: undefined(0) voice(1) non-TS(2) TS(3) Bursty Data A(4) Bursty Data B(5)
l_load_unit		short	Local max number of packets per second allocated

ColumnName	Unique Identifier Field	Data Type	Description
r_load_unit		short	Remote max number of packets per second allocated
mir		short	Minimum Information Rate in hundreds of bits per second.
comment		char [20 + 1]	Comment field to be used to further qualify the FastPAD connection.
active		short	Connection active state (This field is unused).
status		short	Connection status field 1 = Clear 2 = Failed 3 = Down
conn_info_flag		short	Connection information flags bit(7) Foresight Enabled (1) Disabled (0) bit(6) High Priority (1) bit(5-0) unused
reserved		int	Reserved for future use

Table 3-25 FTC_PORT

Column Name	Unique Identifier Field	Data Type	Description
ftcPort_obj_id	yes	int	FTC port IPX object id
l_network_id		short	Local SV+ network id
l_node_id	yes	int	Local SV+ node id
l_slot		short	FTC slot number
l_port		short	FTC port number
port_speed		int	Port speed (baud rate x 100 bps)
comment		char [20 + 1]	Comment field to be used to further qualify the FTC Port
active		short	FTC port active state (This field is unused)
status		short	FTC port status field 1 = Clear 2 = Failed
reserved		int	Reserved for future use

Table 3-26 FPD_NODE

Column Name	Unique Identifier Field	Data Type	Description
fpdNode_obj_id	yes	int	FastPAD node object id
network_id		short	SV+ network id
node_id	yes	int	SV+ node id
ipx_netw_id		short	IPX network id
ipx_node_id		int	IPX node id
l_slot		short	FastPAD slot number
l_port		short	FastPAD port number
fpd_name		char [9 + 1]	FastPAD name
active		short	FastPAD active state
status		short	FastPAD status field
reserved		int	Reserved for future use

Table 3-27 FPD_CONN_DATA

ColumnName	Unique Identifier Field	Data Type	Description
timestamp	yes	int	Timestamp of the statistical data record
fpdcon_obj_id	yes	int	FastPAD connection IPX object id
l_node_id	yes	int	Local SV+ node id
stat_type	yes	short	Statistic type (object dependent field)
bucket_type	yes	short	Bucket type (duration in minutes of each collection bucket)
totald		int	Total raw data collected in the sample interval
peak		int	Peak raw data in the sample interval

Table 3-28 ASI_LN_DATA

ColumnName	Unique Identifier Field	Data Type	Description
timestamp	yes	int	Timestamp of the statistical data record
asiLine_obj_id	yes	int	ASI line BPX object id
l_node_id	yes	int	Local SV+ node id
stat_type	yes	short	Statistic type (object dependent field)
bucket_type	yes	short	Bucket type (duration in minutes of each collection bucket)
totald		int	Total raw data collected in the sample interval
peak		int	Peak raw data in the sample interval

Table 3-29 ASI_PORT_DATA

ColumnName	Unique Identifier Field	Data Type	Description
timestamp	yes	int	Timestamp of the statistical data record
asiPort_obj_id	yes	int	ASI port BPX object id
l_node_id	yes	int	Local SV+ node id
stat_type	yes	short	Statistic type (object dependent field)
bucket_type	yes	short	Bucket type (duration in minutes of each collection bucket)
totald		int	Total raw data collected in the sample interval
peak		int	Peak raw data in the sample interval

Table 3-30 FTC_PORT_DATA

ColumnName	Unique Identifier Field	Data Type	Description
timestamp	yes	int	Timestamp of the statistical data record
ftcPort_obj_id	yes	int	FTC port IPX object id
l_node_id	yes	int	Local SV+ node id
stat_type	yes	short	Statistic type (object dependent field)
bucket_type	yes	short	Bucket type (duration in minutes of each collection bucket)
totald		int	Total raw data collected in the sample interval
peak		int	Peak raw data in the sample interval

Table 3-31 BIS_OBJECT

ColumnName	Unique Identifier Field	Data Type	Description
obj_id		int	Feeder (BIS) object id
name		char(11)	name of BIS
type		short	feeder type
subtype		short	Flag that indicates if this BIS is a feeder. True (feeder only) (1) False (routing only) (0)
ipaddress	yes	int	IP address of Feeder shelf
p_ipaddress	yes	int	IP address of Feeder's parent node
p_slot		short	Parent slot number
p_port		short	Parent port number
f_slot		short	Feeder slot number
f_port		short	Feeder port number
status		short	Alarm status of a BIS object 0 = clear 1 = minor 2 = major 3 = unreachable
active		short	BIS object active state

Table 3-32 SHELF

ColumnName	Unique Identifier Field	Data Type	Description
node_id	yes	int	SV+ node id of the AXIS
network_id		short	SV+ network id
name		char(10)	name of shelf
mac_addr		char(6)	MAC address
routing_ip_addr		int	IP address for routing
lan_ip_addr		int	IP address of Feeder shelf
slip_ip_addr		int	SLIP IP address
shelf	yes	int	shelf number
serial_id		char(21)	backplane serial number
shelf_type		short	Shelf type based on number of slots 1 = 16 slot shelf (currently only used by AXIS)
status		short	ASM Alarm status of the shelf object ASM alarm off (1) ASM alarm on (2)
reserved		int	reserved for future use

Table 3-33 PERIPHERAL

ColumnName	Unique Identifier Field	Data Type	Description
node_id	yes	int	SV+ node id of the AXIS
network_id		small	SV+ network id
shelf	yes	int	shelf number
alarm_type	yes	short	Alarm status of the Shelf: other (1) temprature (2) Power Supply (3) DC level (4) Fan unit (5)
unit_num.	yes	short	Unit numbers
status		int	Physical Alarm state
severity		short	Alarm severity minor (1) major (2)
alarm_num.		short	Alarm number
reserved		int	reserved for future use

Table 3-34 CARD

ColumnName	Unique Identifier Field	Data Type	Description
node_id	yes	int	SV+ node id of the AXIS
network_id		short	SV+ network id
shelf	yes	int	shelf number
slot	yes	short	Slot number
fc_type		short	Front card type other (1), bsc (2), aum-T3 (10), tim (20), frsm-4T1 (30), frsm-4E1 (31), ausm-4T1 (40), ausm-4E1 (41)
fc_dscrp		char(21)	Front card description
fc_serial_num		char(7)	Front card serial number
fc_hw_rev		char(3)	Front card hardware revision
fc_fw_rev		char(21)	Front card firmware revision
fc_reset_reason		int	Front card Reset reason Power Up (1), Parity Error (2), watchDog (3), Resource Overflow (4), Clear All Config (5), Missing Task (6)
fc_state		int	Front card state No Card (1), Standby (2), Active (3), Failed (4), Self Test (5), Held in Reset (6),
mib_version		int	MIB version number

ColumnName	Unique Identifier Field	Data Type	Description
bc_type		short	Back card type lm-ASC (2), lm-DB15-4T1 (16), lm-DB15-4E1 (17), lm-BNC-4E1 (18), lm-T3-E3-D (32), lm-T3-E3-B (33)
bc_dscrp		char(21)	Back card description
bc_serial_num		char(7)	Back card serial number
bc_hw_rev		char(3)	Back card hardware revision
bc_fw_rev		char(9)	Back card firmware revision
bc_state		short	Back card state Not Present (1) Present (2)
rate_up		int	Rate up (FRSM only)
rate_dn		int	Rate down (FRSM only)
fast_dn		int	Rate fast down (FRSM only)
measure_time		int	RTD measure time (FRSM only)
qir_timeout		int	QIR timeout (FRSM only)
chan_allowed		short	Channelized data allowed (FRSM only)
rate_ctrl_allowed		short	Rate control allowed (FRSM only)
out_of_sync		short	Configuration upload failed during last resynchronization
reserved		int	reserved for future use

Table 3-35 LINE

ColumnName	Unique Identifier Field	Data Type	Description
node_id	yes	int	SV+ node id of the AXIS
obj_id	yes	int	dsx1 or dsx3 line object id
network_id		small	SV+ network id
shelf		int	shelf number
slot		short	slot number
line		short	line number
line_type		short	line type DS1_LINE (T1/E1) = 1 DS3_LINE (T3/E3) = 2
connector		short	dsx1 line connector type (dsx1 only) DB-15 (1) BNC (2)
enable		short	dsx1 line enable/disable(dsx1 only) enable (1) disable (2)
subtype		short	dsx1 or dsx3 line type For dsx1-line: dsx1ESF (1), dsx1D4 (2), dsx1E1 (3), dsx1E1CRC (4), dsx1E1MF (5), dsx1E1CRC-MF (6), dsx1E1clearchannel (7) For dsx3-line: dsx3 Cbit Parity (1), g834-g804 (2)
coding		short	Line coding dsx1JBZS (1), dsx1B8ZS (2), dsx1HDB3 (3), dsx1AMI (4)

ColumnName	Unique Identifier Field	Data Type	Description
length		short	Line length For T1 lines: 0 to 110 Feet (1), 110 to 220 Feet (2), 220 to 330 Feet (3), 330 to 440 Feet (4), 440 to 550 Feet (5), 550 to 660 Feet (6), 660 Feet Plus (7), For E1 lines: lineLength—75-Ohm (8), lineLength—120-Ohm (9)
clock_src		short	Line Xmt clock source (dsx1 only) LoopTiming (1), LocalTiming (2)
loopback		short	Line loopback command
line_bitmap		int	Bit map of used DS0 for line (bit 0 corresponds to timeslot1, bit 31 corresponds to timeslot 32, FRSM only)
oof_criteria		short	Line Out of Frame Criteria (dsx3 only) 1=3 of 8 Framing bits in error 2 = 3 0f 16 Framing bits in error
aisc_check		small	Line AISc Bits Check (dsx3 only) 1 = Check ‘C’ bits 2 = Ignore ‘C’ bits
tx_timing_marker		small	Transmit Timing Marker
tx_payload_type		small	Transmit Payload Type
comment		char(21)	Comment field to be used to further qualify the line
red_severity		short	Received LOS/OOF alarm severity 1 = Minor 2 = Major
rai_severity		short	RAI alarm severity 1 = Minor 2 = Major
stat_severity		short	Statistical alarm severity 1 = Minor 2 = Major

ColumnName	Unique Identifier Field	Data Type	Description
alarm_state		int	Line alarm state It is represented by bitmap 0 = No Alarm 1 = Receiving RAI 2 = Transmitting RAI 4 = Receiving AIS 8 = Transmitting AIS 16= Receiving OOF 32= Receiving LOS 64= Near End Local Loopback in effect 128= Near End Remote Loopback in effect 256= Receiving test pattern
stat_alarm_state		int	Statistical Alarm state (Currently unused in SV+)
agg_state		short	Aggregate Alarm state 0 = No alarm 15 = One of the parents in object hierarchy (such as card) is in alarm.
reserved		int	reserved for future use

Table 3-36 PLCP

ColumnName	Unique Identifier Field	Data Type	Description
node_id	yes	int	SV+ node id of the AXIS
obj_id	yes	int	PLCP object id
network_id		short	SV+ network id
shelf		int	shelf number
slot		short	Slot number
line		short	line number
plcp		short	PLCP number
enable		short	enable/disable Not used in Release 8.1
cell_frm		short	PLCP Cell framing (PLCP, ATM)
scramble		short	PLCP payload scramble enable/disable 1 = enableScrambling 2 = disableScrambling
loopback		short	PLCP loopback configuration
commentc		char(21)	Comment field to be used to further qualify the PLCP

ColumnName	Unique Identifier Field	Data Type	Description
red_severity		short	Received LOS/OOF alarm severity 1 = Minor 2 = Major
rai_severity		short	RAI alarm severity 1 = Minor 2 = Major
lss_severity		short	LSS alarm severity 1 = Minor 2 = Major
stat_severity		short	Statistical alarm severity 1 = Minor 2 = Major
alarm_state		int	PLCP alarm state Its represented by bitmap 0 = No Alarm 1 = Receiving RAI 2 = Transmitting RAI 4 = Receiving OOF State 8 = Receiving LSS Link UP 16 = Trasmitting LSS Link UP 32 = Receiving LSS Link Down 64 = Trasmitting LSS Link Down 128 = Local Loopback state 256 = Remote Line Loopback state
stat_alarm_state		int	Statistical Alarm state (Unused in Release 8.1)
agg_state		short	Aggregate Alarm state: 0 = No alarm 15 = One of the parents in object hierarchy (such as card) is in alarm.
reserved		int	reserved for future use

Table 3-37 CESM_CONNECTION

ColumnName	Unique Identifier Field	Data Type	Description
con_obj_id	yes	int	Connection object id (a.k.a. VC/End-Point Index)
master_flag		short	Flag that indicates if this end is the master.
l_network_id		short	Local SV+ network id
l_node_id	yes	int	Local SV+ node id for IPX or AXIS
shelf		int	Shelf number
termination		short	Local and remote termination type
l_slot		short	Local slot number
l_port		short	Local port number (physical port number)
l_vpi		short	Local vpi number
l_vci		short	Local vci number
r_network_id		short	Remote SV+ network id
r_node_id		int	Remote SV+ node id
r_slot		short	Remote slot number
r_port		short	Remote port number (physical port number)
r_vpi		short	Remote vpi number
r_vci		short	Remote vci number
r_subtype		short	Remote FastPAD connection subtype (e.g. voice, data, session, etc.)
con_type		short	Connection type (e.g. voice, data, frame relay, atm, atf, FastPAD etc.) 0 = ADPCM voice 1 = ADPCM no voice activation detection (VAD) 2 = PCM voice 3 = transparent voice 4 = data (SDP) 5 = frame relay 6 = ATM
rate_info		short	Combination field of rate info: bit(7) Fast EIA Enabled(1)/Disabled(0) bit(6) DFM Enabled(1)/Disabled(0) bits(5-3) Encoding: undefined(0) 7/8(1) 8/8(2) 8/8l(3) 7/8E(4) bit(2-0) Load Type: undefined(0) voice(1) non-TS(2) TS(3) Bursty Data A(4) Bursty Data B(5)
l_load_unit		int	Max size of the reassembly buffer (in octets)
cell_loss_period		int	Cell loss integration period in milliseconds.

ColumnName	Unique Identifier Field	Data Type	Description
cdv_rx_t		int	Maximum cell arrival jitter tolerated by the reassembly process (in 10 microsecond increments)
comment		char [20 + 1]	Comment field to be used to further qualify the CESM connection.
active		short	Connection active state (This field is unused).
status		short	Connection status field 1 = Clear 2 = Failed 3 = Down

Table 3-38 AUSM_PORT

ColumnName	Unique Identifier Field	Data Type	Description
ausmp_obj_id	yes	int	ATM port object id
l_network_id		short	Local SV+ network id
l_node_id	yes	int	Local SV+ node id
shelf		int	Shelf number
l_slot		short	Local slot number
line		short	Line number associated with this port
l_port		short	Local port number for frp and starting channel number
port_speed		int	Port speed (baud rate x 100 bps)
comment		char [20 + 1]	Comment field to be used to further qualify the AUSM port
active		short	AUSM port active state (This field is unused)
status		short	AUSM port alarm status field 1 = Clear 2 = Failed
signal_state		int	Port signalling state
port_type		short	Type of port
interface_type		short	Type of interface
protocol_type		short	Signalling protocol type (No signalling, ILMI)
poll_timer		short	T491 polling interval
err_thresh		short	N491 error threshold
signalling_vpi		int	Signalling VPI
signalling_vci		int	Signalling VCI
ilmi_trap_enable		short	ILMI Trap Enable state

ColumnName	Unique Identifier Field	Data Type	Description
trap_interval		short	Minimum interval between traps
keep_alive		short	Keep alive polling state
event_thresh		short	N492 event threshold
min_enquiry		short	T493 minimum enquiry interval
addr_Prefix		char [20 + 1]	Network Prefix for the ATM address
reserved		int	Reserved for future use

Table 3-39 DNS_NODE

ColumnName	Unique Identifier Field	Data Type	Description
node_id	yes	int	SV+ node id of the AXIS
name		char (10 +1)	name of DNS node
ip_addr		int	IP address of the DNS node
p_node_name		char (10 +1)	name of primary DNS node
redun_name		char (10 +1)	name of redundant DNS node
redun_ip_addr		int	IP address of the redundant DNS node
alarm_status		short	Alarm status of the DNS node object Alarm off (1) Alarm on (2)
oper_status		short	Current operating status of the DNS node object Active (1) Standby (2)
reserved		int	reserved for future use

Statistic Types

The value in the statistic type field depends upon the object type and the type of statistic as follows:

Connections (Object type = 0)

Voice (Sub-type = 0)

4 = packets received
5 = receive packets discarded
6 = packets transmitted
7 = projected packets transmitted
8 = supervisory packets transmitted
13 = seconds V.35 modem on
14 = seconds DSI enabled
15 = seconds off-hook
16 = seconds in service
19 = supervisory packets received

Data (Sub-type = 1)

6 = packets transmitted
7 = projected packets transmitted
8 = supervisory packets transmitted
16 = seconds in service
19 = supervisory packets received

Frame Relay (Sub-type = 2)

0 = frames received
1 = received frames discarded
2 = frames transmitted
3 = transmitted frames discarded
4 = packets received
6 = packets transmitted
9 = bytes received
10 = receive bytes discarded
11 = bytes transmitted
12 = transmit bytes discarded
16 = seconds in service
17 = frames transmitted with FECN
18 = frames transmitted with BECN
20 = minutes congested
21 = DE frames received
22 = DE frames transmitted
23 = DE frames dropped
24 = DE bytes received
25 = frames received in excess of CIR
26 = bytes received in excess of CIR
27 = frames transmitted in excess of CIR
28 = bytes transmitted in excess of CIR
29 = IWF Frames received and Aborted
30 = IWF Frames received with the EFCI bit set
31 = Rx frames discarded-deroute/down
32 = Rx bytes discarded-deroute/down
33 = Rx frames discarded VC Q overflow
34 = Rx bytes discarded VC Q overflow
35 = Tx frames discarded Q overflow
36 = Tx bytes discarded Q overflow
37 = Tx frames discarded ingress CRC
38 = Tx bytes discarded ingress CRC
39 = Tx frames discarded trunk discard
40 = Tx bytes discarded trunk discard
41 = Tx frames during egress LMI fail
42 = Tx bytes during egress LMI fail

FastPAD Voice (Sub-type = 3)

0 = Frames received
1 = Received frames discarded
2 = Frames transmitted
3 = Transmit frames discarded
4 = Packets received
5 = Receive packets discarded
6 = Packet transmitted
9 = Bytes received
10 = Received bytes discarded
11 = Bytes transmitted
12 = Transmitted bytes discarded
16 = Seconds in service
17 = Frames transmitted with FECN
18 = Frames transmitted with BECN
20 = Minutes congested
21 = DE frames received
22 = DE frames transmitted
23 = DE frames dropped
24 = DE bytes received
25 = Frames received in excess of CIR
26 = Bytes received in excess of CIR
27 = Frames transmitted in excess of CIR
28 = Bytes transmitted in excess of CIR
29 = IWF frames received and aborted
30 = IWF frames received with EFCI bit set.
31 = Rx frames discarded- deroute/down
32 = Rx bytes discarded-deroute/down
33 = Rx frames discarded-VC-Q-overflow
34 = Rx bytes discarded-VC-Q-overflow
35 = Tx frame discarded-trunk discard
36 = Tx bytes discarded-Q-overflow
37 = Tx frames discarded-trunk discard
38 = Tx bytes discarded-ingress CRC
39 = Tx frames discarded-trunk discard
40 = Tx bytes discarded--trunk discard
41 = Tx frames during ingress LMI fail
42 =Tx bytes during ingress LMI fail

FastPAD Switched Voice (Sub-type = 4)

0 = Frames received
1 = Received frames discarded
2 = Frames transmitted
3 = Transmitted frames discarded
4 = Packets received
5 = Receive packets discarded
6 = Packets transmitted
9 = Bytes received
10 = Receive bytes discarded
11 = Bytes transmitted
12 = Transmitted bytes discarded
16 = seconds in service
17 = Frames transmitted with BECN
18 = Frames transmitted with FECN
20 = Minutes congested
21 = DE frames received
22 = DE frames transmitted
23 = DE frames dropped
24 = DE bytes received
25 = Frames received in excess of CIR
26 = Bytes received in excess of CIR
27 = Frames transmitted in excess of CIR
28 = Bytes transmitted in excess of CIR
29 = IWF frames received and aborted
30 = IWF frames received with EFCI bit set.
31 = Rx frames discarded-deroute/down
32 = Rx bytes discarded-deroute/down
33 = Rx frames discarded-VC-Q-overflow
34 = Rx bytes discarded-VC-Q-overflow
35 = Tx frames discarded-Q-overflow
36 = Tx bytes discarded-Q-overflow
37 = Tx frames discarded-ingress CRC
38 = Tx bytes discarded-ingress CRC
39 = Tx frames discarded-trunk discard
40 = Tx bytes discarded-trunk discard
41 = Tx frames du ring ingress LMI fail
42 = Tx bytes during ingress LMI fail

FastPAD Data (Sub-type = 5)

0 = Frames received
1 = Received frames discarded
2 = Frames transmitted
3 = Transmitted frames discarded
4 = Packets received
5 = Receive packets discarded
6 = Packets transmitted
9 = Bytes received
10 = Receive bytes discarded
11 = Bytes transmitted
12 = Transmitted bytes discarded
16 = seconds in service
17 = Frames transmitted with FECN
18 = Frames transmitted with BECN
20 = Minutes congested
21 = DE frames received
22 = DE frames transmitted
23 = DE frames dropped
24 = DE bytes received
25 = Frames received in excess of CIR
26 = Bytes received in excess of CIR
27 = Frames transmitted in excess of CIR
28 = Bytes transmitted in excess of CIR
29 = IWF frames received and aborted
30 = IWF frames received with EFCI bit set.
31 = Rx frames discarded-deroute/down
32 = Rx bytes discarded-deroute/down
33 = Rx frames discarded-VC-Q-overflow
34 = Rx bytes discarded-VC-Q-overflow
35 = Tx frames discarded-Q-overflow
36 = Tx bytes discarded-Q-overflow
37 = Tx frames discarded-ingress CRC
38 = Tx bytes discarded-ingress CRC
39 = Tx frames discarded-trunk discard
40 = Tx bytes discarded-trunk discard
42 = Tx bytes during ingress LMI fail

FastPAD Frame Relay (Sub-type = 6)

0 = Frames received
1 = Received frames discarded
2 = Frames transmitted
3 = Transmitted frames discarded
4 = Packets received
5 = Receive packets discarded
6 = Packets transmitted
9 = Bytes received
10 = Receive bytes discarded
11 = Bytes transmitted
12 = Transmitted bytes discarded
16 = Seconds in service
17 = Frames transmitted with FECN
18 = Frames transmitted with BECN
20 = Minutes congested
21 = DE frames received
22 = DE frames transmitted
23 = DE frames dropped
24 = DE bytes received
25 = Frames received in excess of CIR
26 = Bytes received in excess of CIR
27 = Frames transmitted in excess of CIR
28 = Bytes transmitted in excess of CIR
31 = Rx frames discarded-deroute/down
32 = Rx bytes discarded-deroute/down
33 = Rx frames discarded-VC-Q-overflow
34 = Rx bytes discarded-VC-Q-overflow
35 = Tx frames discarded-Q-overflow
36 = Tx bytes discarded-Q-overflow
37 = Tx frames discarded-ingress CRC
38 = Tx bytes discarded-ingress CRC
39 = Tx frames discarded-trunk discard
40 = Tx bytes discarded-trunk discard
41 = Tx frames during ingress LMI fail
42 =Tx bytes during ingress LMI fail

ASI Connection (Sub-type = 7)

1 = Received frames discarded
6 = Packets transmitted
12 = Transmitted bytes discarded
16 = Seconds in service
21 = DE frames received
28 = Bytes transmitted in excess of CIR
29 = Cells Rx port
30 = Frames Rx port
31 = Cells Tx network
32 = CLP Rx port
33 = Non-comp CLP Rx port
34 = Discard CLPth Rx port
35 = Discard Qfull Rx port
36 = EFCI Rx port
37 = AAL5 Rx port
38 = Non-comp Rx port
39 = Discarded failed Rx port
40 = AAL5 discarded Qfull Rx port
41 = Average Cell Q Depth
42 = Discarded Rsrc overflow Rx port
43 = Discarded Sbin full Rx port
44 = EFCI Tx port
45 = Cells Tx port
46 = Cells Rx network
47 = Discarded Qbin full
48 = Discarded Qbin CLPth port
49 = CLP Tx port
50 = BCM Rx port
51 = BCM Tx network
52 = OAM Tx network
53 = AIS Rx port
54 = FERF Rx port

AXIS Frame Relay (Sub-type = 8)

0 = Frames received
1 = Received frames discarded
2 = Frames transmitted
3 = Transmitted frames discarded
9 = Bytes received
10 = Receive bytes discarded
11 = Bytes transmitted
12 = Transmitted bytes discarded
17 = Frames transmitted with FECN
18 = Frames transmitted with BECN
21 = DE frames received
22 = DE frames transmitted
23 = DE frames dropped
24 = DE bytes received
33 = Rx frames discarded-VC-Q-overflow
34 = Rx bytes discarded-VC-Q-overflow
35 = Tx frames discarded-Q-overflow
36 = Tx bytes discarded-Q-overflow
37 = Tx frames discarded-ingress CRC
39 = Tx frames discarded-trunk discard
41 = Tx frames during ingress LMI fail
42 =Tx bytes during ingress LMI fail

AXIS ATM (Sub-type = 9)

16 = Seconds In Service
20 = Minutes Congested
34 = Discard CLPth Rx Port
35 = Discard Qfull Rx Port
55 = Number of Cells Rx w/CLP Set
56 = Number Of Cells Rx w/EFCI Set
57 = Number of Cells Rx w/UPC CLP Set
58 = AAL1 Sequence Mismatch
59 = Discarded Cells for Shelf Alarm
60 = Receive Bytes Discarded
61 = Total Cells Tx from Line
62 = Rx Buffer Underflows
63 = Rx Buffer Overflows
64 = Total Cells Tx to Line
65 = Loss of Pointer
66 = Loss of Cell Delineation
68 = Total Cells Rx from Line
69 = Tx Bytes Discarded-Q-Overflow
70 = Tx Bytes Discarded-Q-Underflow
71 = Total Cells Rx to Line
72 =HCS Correctable Error

Data Connection (Object type = 1)

T1 (Sub-type = 0)

0 = bipolar violations
1 = frame slips
2 = out of frames
3 = losses of signal
4 = frame bit errors
5 = CRC errors

E1/J1 (Sub-type = 1)

0 = bipolar violations
1 = frame slips
2 = out of frames
3 = losses of signal
4 = frame bit errors
5 = CRC errors
6 = out of multi-frames
16 = all ones in timeslot 0

ASI (Sub-type = 2)

28 = B3ZS Line Code Violations
29 = Line Errored Seconds
30 = Line Severely Errored Seconds
31 = P-bit Line Parity Errors
32 = Errored Seconds - Parity
33 = Severely Errored Seconds - Parity
39 = Unavailable seconds
40 = PLCP BIP-8 Errors
41 = BIP-8 Errored Seconds
42 = BIP-8 Severely Errored Seconds
43 = PLCP Severely Errored Framing Seconds
44 = PLCP Unavailable Seconds
45 = HCS Errors
147 = HCS Errored Seconds
147 = HCS Severely Errored Seconds
150 = YEL Transitions
152 = Alarm Indication Signal
169 = Loss of Cell Delineation
170 = Loss of Pointer
171 = OC3 Path AIS
172 = OC3 Path YEL
173 = Section BIP-8
174 = Line BIP-24
175 = Line FEBE
176 = Path BIP-8
177 = Path FEBE
178 = Section BIP-8 Errored Seconds
179 = Line BIP-24 Errored Seconds
180 = Line FEBE Errored Seconds

181 = Path BIP-8 Errored Seconds
182 = Path FEBE Errored Seconds
184 = Section Severely Errored Framing Seconds
185 = Line BIP-24 Severely Errored Seconds
186 = Line FEBE Severely Errored Seconds
187 = Path BIP-8 Severely Errored Seconds
188 = Path FEBE Severely Errored Seconds
189 = Line Unavailable Seconds
190 = Line Far End Unavailable Seconds
191 = Path Unavailable Seconds
192 = Path Far End Unavailable Seconds
193 = HCS Correctable Error
194 = HCS Correctable Error Errored Seconds
195 = HCS Correctable Error Severely Errored Seconds

AXIS E1/T1 (Sub-type = 3)

2 = out of frames
3 = losses of signal
4 = frame bit errors

Trunk Lines (Object type = 2)

Narrowband (Sub-type = 0)

0 = bipolar violations
1 = frame slips
2 = out of frames
3 = losses of signal
4 = frame bit errors
5 = CRC errors
8 = packet out of frames
9 = packet CRC errors
10 = bad clock errors
11 = voice packets dropped
12 = TS packets dropped
13 = non-TS packets dropped
14 = High Priority packets dropped
15 = BData A packets dropped
16 = BData B packets dropped
17 = voice packets transmitted
18 = TS packets transmitted
19 = non-TS packets transmitted
20 = High Priority packets transmitted
21 = BData A packets transmitted
22 = BData B packets transmitted
23 = total packets transmitted
24 = BData A CLP packets dropped
25 = BData B CLP packets dropped
26 = BData A EFCN packets transmitted
27 = BData B EFCN packets transmitted
148 = BData A CLP packets transmitted
149 = BData B CLP packets transmitted

IPX_ATM (Sub-type = 1)

2 = out of frames
3 = losses of signal
9 = packet CRC errors
11 = voice packets dropped
12 = TS packets dropped
13 = non-TS packets dropped
14 = high priority packets dropped
15 = BData A packets dropped
16 = BData B packets dropped
17 = voice packets transmitted
18 = TS packets transmitted
19 = non-TS packets transmitted
20 = high priority packets transmitted
21 = BData A packets transmitted
22 = BData B packets transmitted
23 = total packets transmitted
24 = BData A CLP packets dropped
25 = BData B CLP packets dropped
26 = BData A EFCN packets transmitted
27 = BData B EFCN packets transmitted
28 = line code violations
29 = line errored seconds
30 = line severely errored seconds
31 = P-bit parity code violations
32 = errored seconds - line
33 = severely errored seconds - line
34 = C-bit parity code violations
35 = errored seconds - path
36 = severely errored seconds - path
37 = severely errored framing seconds
38 = alarm indication signal seconds
39 = unavailable seconds
45 = ATM cell header HEC errors
47 = Tx voice cells dropped
48 = Tx TS cells dropped
49 = Tx non-TS cells dropped
50 = Tx high priority cells dropped
51 = Tx Bdata A cells dropped
52 = Tx Bdata B cells dropped
53 = voice cells Tx to line
54 = TS cells Tx to line
55 = non TS cells Tx to line
56 = high priority cells Tx to line
57 = Bdata A cells Tx to line
58 = Bdata B cells Tx to line
59 = half full cells Tx to line
60 = full cells Tx to line
61 = total cells Tx to line
62 = Tx Bdata A CLP cells dropped
63 = Tx Bdata B CLP cells dropped
64 = Bdata A EFCN cells Tx to line
65 = Bdata B EFCN cells Tx to line

66 = half full cells Rx from line
67 = full cells Rx from line
68 = total cells Rx from line
69 = total packets Rx from line
70 = Rx voice packets dropped
71 = Rx TS packets dropped
72 = Rx non-TS packets dropped
73 = Rx high priority packets dropped
74 = Rx Bdata A packets dropped
75 = Rx Bdata B packets dropped
82 = Rx Bdata A CLP packets dropped
83 = Rx Bdata B CLP packets dropped
87 = Rx voice cells dropped
88 = Rx TS cells dropped
89 = Rx non-TS cells dropped
90 = Rx high priority cells dropped
91 = Rx Bdata A cells dropped
92 = Rx Bdata B cells dropped
93 = Rx Bdata A CLP cells dropped
94 = Rx Bdata B CLP cells dropped
140 = FEBE counts
141 = FERR counts (M-bit or F-bit)
142 = PLCP FEBE errored seconds
143 = PLCP FEBE severely errored seconds
144 = PLCP FEBE counts
145 = PLCP FE counts
146 = ATM HEC errored seconds
147 = ATM HEC severely errored seconds
148 = BData A CLP Packets Transmitted
149 = BData B CLP Packets Transmitted
160 = CGW Packets Received from the IPX Network
161 = CGW Cells Transmitted to Line
162 = CGW Frames Relayed to Line
163 = CGW Aborted Frames Transmitted to Line
166 = CGW Packets Transmitted to the IPX Network
167 = CGW Cells Receivedfrom Line
171 = CGW Bad CRC-32 Frames Rx From Line
173 = CGW Bad CRC-16 Frames Rx From IPX
177 = OAM Loopback Cells Transmitted
178 = OAM AIS Cells Transmitted
179 = OAM FERF Cells Transmitted
180 = OAM RTD Cells Transmitted
181 = OAM RA Cells Transmitted
183 = OAM CC Cells Transmitted
185 = OAM Loopback Cells Received
186 = OAM AIS Cells Received
187 = OAM FERF Cells Received
188 = OAM RTD Cells Received
189 = OAM RA Cells Received
191 = OAM CC Cells Received

BPX_ATM (Sub-type = 2)

2 = out of frames
3 = losses of signal
28 = B3ZS line code violations
29 = line errored seconds
30 = line severely errored seconds
31 = P-bit parity code violations
32 = errored seconds - line
33 = severely errored seconds - line
34 = C-bit parity code violations
35 = errored seconds - path
36 = severely errored seconds - path
37 = severely errored framing seconds
38 = alarm indication signal seconds
39 = unavailable seconds
45 = ATM cell header HEC errors
47 = Tx voice cells dropped
48 = Tx TS cells dropped
49 = Tx non-TS cells dropped
50 = Tx high priority cells dropped
51 = Tx Bdata A cells dropped
52 = Tx Bdata B cells dropped
53 = voice cells Tx to line
54 = TS cells Tx to line
55 = non TS cells Tx to line
56 = high priority cells Tx to line
57 = Bdata A cells Tx to line
58 = Bdata B cells Tx to line
61 = total cells Tx to line
62 = Tx Bdata A CLP cells dropped
63 = Tx Bdata B CLP cells dropped
64 = Bdata A EFCN cells Tx to line
65 = Bdata B EFCN cells Tx to line
68 = total cells Rx from line
69 = total packets Rx from line
87 = Rx voice cells dropped
88 = Rx TS cells dropped
89 = Rx non-TS cells dropped
90 = Rx high priority cells dropped
91 = Rx Bdata A cells dropped
92 = Rx Bdata B cells dropped
93 = Rx Bdata A CLP cells dropped
94 = Rx Bdata B CLP cells dropped
140 = FEBE counts
141 = FERR counts (M-bit or F-bit)
142 = PLCP FEBE errored seconds
143 = PLCP FEBE severely errored seconds
144 = PLCP FEBE counts
145 = PLCP FE errored seconds
146 = ATM HEC errored counts
147 = ATM HEC severely errored counts
150 = DS3 yellow transition counts
151 = PLCP yellow transition counts

152 = AIS transition counts
155 = Tx voice CLP cells dropped
156 = Tx TS CLP cells dropped
157 = Tx non-TS CLP cells dropped
158 = Tx high priority CLP cells dropped
160 = Tx CBR Cells Served
161 = Tx VBR Cells Served
162 = Tx ABR Cells Served
163 =Tx CBR CLP cells dropped
164 =Tx VBR CLP cells dropped
165 =Tx ABR CLP cells dropped
166 =Tx CBR Overflow cells dropped
167 =Tx VBR Overflow cells dropped
168 =Tx ABR Overflow cells dropped
169 = Loss of Cell Delineation
170 = Loss of Pointer
171 = OC3 Path AIS
172 = OC3 Path YEL
173 = Section BIP-8
174 = Line BIP-24
175 = Line FEBE
176 = Path BIP-8
177 = Path FEBE
178 = Section BIP-8 Errored Seconds
179 = Line BIP-24 Errored Seconds
180 = Line FEBE Errored Seconds
181 = Path BIP-8 Errored Seconds
182 = Path FEBE Errored Seconds
184 = Section Severely Errored Framing Seconds
185 = Line BIP-24 Severely Errored Seconds
186 = Line FEBE Severely Errored Seconds
187 = Path BIP-8 Severely Errored Seconds
188 = Path FEBE Severely Errored Seconds
189 = Line Unavailable Seconds
190 = Line Far End Unavailable Seconds
191 = Path Unavailable Seconds
192 = Path Far End Unavailable Seconds
193 = HCS Correctable Error
194 = HCS Correctable Error Errored Seconds
195 = HCS Correctable Error Severely Errored Seconds

AXIS Narrowband (Sub-type = 3)

2 = out of frames
3 = losses of signal
4 = frame bit errors

AXIS ATM (Sub-type = 4)

2 = out of frames
3 = losses of signal
45 = ATM Cell Header HEC Errors
142 = PLCP FEBE errored seconds
143 = PLCP FEBE severely errored seconds
144 = PLCP FEBE counts
145 = PLCP FE counts
146 = ATM HEC errored seconds
147 = ATM HEC severely errored seconds
150 = DS3 yellow transition counts

Ports (Object type = 3)

Frame Relay Port (Sub-type = 0)

0 = frames received
1 = frames transmitted
2 = bytes received
3 = bytes transmitted
4 = frames transmitted with FECN
5 = frames transmitted with BECN
6 = receive frame CRC errors
7 = invalid format receive frames
8 = receive frame alignment errors
9 = illegal length receive frames
10 = number of DMA overruns
11 = LMI status enquiries
12 = LMI status transmit count
13 = LMI status update count
14 = LMI invalid status enquiries
15 = LMI link timeout errors
16 = LMI keepalive sequence errors
17 = receive frames undefined DLCI errors
18 = DE frames dropped
19 = transmit status enquiries
20 = received status counter
21 = asynchronous status counter
22 = invalid sequence number count
23 = transmit protocol timeout count
24 = CLLM messages frames transmitted
25 = CLLM messages bytes transmitted
26 = CLLM messages frames received
27 = CLLM messages bytes received
28 = CLLM failures
29 = Tx frames discarded queue overflow
30 = Tx bytes discarded queue overflow
31 = Tx frames while ingress LMI fail
32 = Tx bytes while ingress LMI fail

ASI Port (Sub-type = 1)

0 = Unknown VPI/VCI
1 = Cell buffer overflow
2 = Non-zero GFC count
5 = AIS Cells received
6 = Ex FERF Cell
7 = Number of cells Rx
8 = Number of cells Rx w/CLP set
9 = Number of cells Rx w/EFCI set
10 = Number of BCM cells Rx
11 = Number of cells Tx
12 = OAM cells Rx count
13 = Tx Payload Err Due to BIP-16 Err
14 = Number of cells Tx w/CLP set
15 = Number of cells Tx w/EFCI set
16 = Tx Header Error Discard
17 = Get Request Rx
18 = GetNextReq Rx
19 = GetNextReq Tx
20 = SetRequest Rx
21 =Traps Rx
22 = GetResp Rx
23 = GetRequest Tx
24 = GetResp Tx
25 = Trap Tx
26 = Unknown Rx
27 = Status Tx
28 = UpdtStatus Tx
29 = Status Ack Tx
30 = Status Enq Rx
31 = Status Enq Tx
32 = Status Rx
33 = UpdtStatus Rx
34 = Status Ack Rx
35 = Invalid LMI Rx
36 = Invalid LMI Length Rx
37 = Unknown LMI Rx
38 = Invalid LMI IE Rx
39 = Invalid Transaction IDs

FastPAD Port (Sub-type = 2)

0 = Frames received
1 = Frames transmitted
2 = Bytes received
3 = Bytes transmitted
4 = Frames transmitted with.FECN
5 = Frames transmitted with.BECN
6 = Receive frame CRC errors
7 = Invalid format receive frames
8 = Receive frame alignment errors
9 = Illegal length receive frames
10 = Number of DMA overruns
11 = LMI status enquiries
12 = LMI status transmit count
13 = LMI status update count
14 = LMI invalid status enquiries
15 = LMI link timeout errors
16 = LMI keepalive sequence errors
17 = Receive frame undefined DLCI errors
18 = DE frames dropped
19 = Transmit status enquiries
20 = Receive status counter
21 = Asynchronous status counter
22 = Invalid sequence number count
23 = Transmit protocol timeout count
24 = CLLM message frames transmitted
25 = CLLM message bytes transmitted
26 = CLLM message frames received
27 = CLLM message bytes received
28 = CLLM failures
29 = Tx frames discarded-queue overflow
30 = Tx bytes discarded-queue overflow
31 = Tx frames while ingress LMI fail
32 =Tx bytes while ingress LMI fail

AXIS Frame Relay Port (Sub-type = 3)

0 = Frames received
1 = Frames transmitted
2 = Bytes received
3 = Bytes transmitted
4 = Frames transmitted with.FECN
5 = Frames transmitted with.BECN
6 = Receive frame CRC errors
7 = Invalid format receive frames
8 = Receive frame alignment errors
9 = Illegal length receive frames
11 = LMI status enquiries
13 = LMI status update count
14 = LMI invalid status enquiries
15 = LMI link timeout errors
17 = Receive frame undefined DLCI errors
18 = DE frames dropped
19 = Transmit status enquiries
22 = Invalid sequence number count
29 = Tx frames discarded-queue overflow
30 = Tx bytes discarded-queue overflow
31 = Tx frames while ingress LMI fail
32 =Tx bytes while ingress LMI fail

AXIS ATM Port (Sub-type = 4)

0 = Unknown VPI/VCI
2 = Non-zero GFC count
5 = Rx AIS Cells
6 = Rx FERF Cells
14 = Number of Cells Tx w/CLP Set
15 = Number of Cells Tx w/EFCI Set
17 = Get Request Rx
18 = GetNext Request Rx
20 = Set Request Rx
21 = Trap Rx
22 = Get Response Rx
23 = Get Request Tx
24 = Get Response Tx
25 = Trap Tx
40 = Total Cells Rx from Line
41 = Total Cells Tx to Line
42 = OAM Loopback Cells Rx
43 = OAM Loopback Cells Tx
44 = OAM CRC Err Cells Rx
45 = Tx AIS Cells
46 = Discard Cells Tx for Port Alarm
47 = SNMP PDU Received
48 = Invalid PDU Received
49 = ASN1 Parse Error
50 = No Such Name Error
51 =Too Big Error