

show henbgw

Important In Release 20, 21.0 and 21.1, HeNBGW is not supported. For more information, contact your Cisco account representative.

This chapter includes the **show henbgw** command output tables.

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show henbgw-access-service all

Table 1: show henbgw-access-service all Command Output Descriptions

Field	Description
Service name	The name used to identify the HeNB-GW Access service to the system. **Important** At a time only one HeNB-GW Access Service can be configured per system.
Context name	The name of the system context in which the HeNB-GW Access service is defined.
Status	The status of the configured HeNB-GW Access Service, e.g. Started or Not Started.
SCTP IP Address	The IP address used to transmit SCTP messages from HeNBs to the HeNB-GW.
SCTP Port	The HeNB-GW uses this port to listen for SCTP messages from HeNBs.
MME Code	The HeNB-GW Access Service uses MME Code which is a configurable option used to send HENB prior to 17.0 release in S1 Setup Resp.

Field	Description
MME Group	The HeNB-GW Access Service uses this MME group ID to identify the MME for communication. This configurable option used to be sent to HENB prior to 17.0 in S1 Setup Resp.
PLMN Id	The Public Land Mobile Network ID configured for this HeNB-GW Access service. It consists of the MCC and MNC (see below).
MCC	The Mobile Country Code defined for use with this HeNB-GW Access service. It consists of the first 3 digits of the Available Radio Network PLMN ID.
MNC	The Mobile Network Code defined for use with this HeNB-GW Access service. It consists of the last 3 digits of the Available Radio Network PLMN ID.
S1-U Relay	Identifies if the S1-U Relay is configured or not for this HeNB-GW Access Service. If S1-U Relay is disabled, the data path is established directly between HeNB and S-GW.

show henbgw-access-service henb-association full

Table 2: show henbgw-access-service henb-association full peer address peer_addr Command Output Descriptions

Field	Description
SessMgr	Session Manager instance used for the entrance of S1AP signaling messages from access side.
Peerid	ID of the associated peer(s) to the HeNB-GW Access Service.
Global HENB ID	Globally Unique ID of HENB.
HENB Name	The name used to identify the Home eNodeB coonected to the HeNB-GW Access service.
HENBGW Access Service Name	The name used to identify the HeNB-GW Access service to the system.
HENBGW Access Service Address	The IP address used to bind the HeNB-GW Access service to the system.
HENBGW ACCESS Service Port	The IP Port associated to the IP address of the configured HeNB-GW Access service to the system.
HENB IP Address(s)	IP address(s) assigned to the connected Home eNode B(s).
HENB Port	Port(s) associated to the HeNB's IP address(s)
Paging DRX	Paging Drx value received from HeNB in S1 Setup Request.
Supported TAI(s)	TAI of HeNB received.

Field	Description
CSG ID(s)	CSG ID of HeNB received.

show henbgw-access-service statistics verbose

Table 3: show henbgw-access-service verbose Command Output Descriptions

Field	Description
SCTP Statistics: Transmitted SCTP Data	
Init Chunks	The total SCTP packets with INIT transmitted over SCTP interface by this HeNBGW.
Init Ack Chunks	The total SCTP packets with INIT-ACK transmitted over SCTP interface by this HeNBGW.
Shutdown Chunks	The total SCTP packets with SHUTDOWN transmitted over SCTP interface by this HeNBGW.
Shutdown Ack Chunks	The total SCTP packets with SHUTDOWN-ACK transmitted over SCTP interface by this HeNBGW.
Cookie Chunks	The total SCTP packets with COOKIE transmitted over SCTP interface by this HeNBGW.
Cookie Ack Chunks	The total SCTP packets with COOKIE-ACK transmitted over SCTP interface by this HeNBGW.
Data Chunks	The total SCTP packets with DATA transmitted over SCTP interface by this HeNBGW.
Data Ack Chunks	The total SCTP packets with DATA-ACK transmitted over SCTP interface by this HeNBGW.
Shutdown Complete Chunks	The total SCTP packets with SHUTDOWN-COMPLETE transmitted over SCTP interface by this HeNBGW.
Heartbeat Chunks	The total SCTP packets with HEARTBEAT transmitted over SCTP interface by this HeNBGW.
HeartBeat Ack Chunks	The total SCTP packets with HEARTBEAT-ACK transmitted over SCTP interface by thisHeNBGW.
Abort Chunks	The total SCTP packets with ABORT transmitted over SCTP interface by this HeNBGW.
Error Chunks	The total SCTP packets with ERROR transmitted over SCTP interface by this HeNBGW.
SCTP Statistics: Received SCTP Data	

Field	Description
Init Chunks	This sub-group displays the statistics of the total data received over SCTP interface and processed by this HeNBGW.
Init Ack Chunks	The total SCTP packets with INIT-ACK received over SCTP interface by this HeNBGW.
Shutdown Chunks	The total SCTP packets with SHUTDOWN received over SCTP interface by this HeNBGW.
Shutdown Ack Chunks	The total SCTP packets with SHUTDOWN-ACK received over SCTP interface by this HeNBGW.
Cookie Chunks	The total SCTP packets with COOKIE received over SCTP interface by this HeNBGW.
Cookie Ack Chunks	The total SCTP packets with COOKIE-ACK received over SCTP interface by this HeNBGW.
Data Chunks	The total SCTP packets with DATA received over SCTP interface by this HeNBGW.
Data Ack Chunks	The total SCTP packets with DATA-ACK received over SCTP interface by this HeNBGW.
Shutdown Complete Chunks	The total SCTP packets with SHUTDOWN-COMPLETE received over SCTP interface by this HeNBGW.
Heartbeat Chunks	The total SCTP packets with HEARTBEAT received over SCTP interface by this MMEmanager.
HeartBeat Ack Chunks	The total SCTP packets with HEARTBEAT-ACK received over SCTP interface by this HeNBGW.
Abort Chunks	The total SCTP packets with ABORT received over SCTP interface by this HeNBGW.
Error Chunks	The total SCTP packets with ERROR received over SCTP interface by this HeNBGW.
SCTP Statistics: Retransmitted SCTP Data	
Init Chunks	The total SCTP packets with INIT retransmitted over SCTP interface by this HeNBGW.
Shutdown Chunks	The total SCTP packets with SHUTDOWN retransmitted over SCTP interface by this HeNBGW.
Shutdown Ack Chunks	The total SCTP packets with SHUTDOWN-ACK retransmitted over SCTP interface by this HeNBGW.
Cookie Chunks	The total SCTP packets with COOKIE retransmitted over SCTP interface by this HeNBGW.

Field	Description
Data Chunks	The total SCTP packets with DATA transmitted over SCTP interface by this HeNBGW.
Total Bytes Sent	The total bytes processed and sent over SCTP interface by this HeNBGW.
Total Bytes Received	The total bytes received over SCTP interface by this HeNBGW for processing.
Total Packets Sent	The total packets processed and sent over SCTP interface by this HeNBGW.
Total Packets Received	The total packets received over SCTP interface by this HeNBGW for processing.
S1AP Statistics: Transmitted S1AP Data	
S1 Setup Resp	The total number of S1 SETUP RESPONSE messages for S1 setup procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
S1 Setup Fail	The total number of S1 SETUP FAILURE messages for S1 setup procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Reset	The total number of S1 RESET messages for S1 reset procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Reset Ack	The total number of S1 RESET-ACK messages for S1 reset procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Overload Start	The total number of OVERLOAD-START messages for S1 overload start procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Overload Stop	The total number of OVERLOAD-START messages for S1 overload start procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
MME Dir Info Transfer	The total number of MME DIRECT INFORMATION TRANSFER messages for MME Direct Information Transfer procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Paging	The total number of PAGING messages for paging procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
eNB Config Update Ack	The total number of ENB CONFIGURATION UPDATE ACK messages for eNodeB Configuration Update procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
eNB Config Update Fail	The total number of ENB CONFIGURATION UPDATE FAILURE messages for eNB Configuration Update procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.

Field	Description
S1AP Msg Encode Fail	The total number of failure occurred during S1AP encode procedure and S1AP ENCODE FAILURE messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
E-RAB Setup Req	The total number of E-RAB setup request messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
E-RAB Modify Req	The total number of E-RAB modify request messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
E-RAB Release Command	The total number of E-RAB release request messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Initial Ctxt Setup Req	The total number of initial context setup request messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
UE Ctxt Release Command	The total number of initial UE context release command messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
UE Context Modify Req	The total number of UE context modify request messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Downlink NAS Transport	The total number of NAS Transport in downlink messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Error Ind	The total number of S1AP messages with error-indication processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Handover Command	The total number of S1AP messages with handover command processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Handover Prep Fail	The total number of S1AP messages generated for handover preparation failure procedure and transmitted over S1AP interface by this HeNBGW to eNodeB.
Handover Request	The total number of S1AP messages with handover request processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Handover Cancel Ack	The total number of HANDOVER_CANCEL_ACK messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Path Switch Request Ack	The total number of PATH_SWITCH_REQ_ACK messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Path Switch Req Fail	The total number of PATH_SWITCH_REQ_FAIL messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
Downlink S1 CDMA2000	The total number of CDMA2000 request messages processed and transmitted over S1AP interface by S1 tunneling to interact with cdma2000 network in downlink direction by this HeNBGW to eNodeB.

Field	Description
Trace Start	The total number of messages processed and transmitted over S1AP interface to indicate that Session Trace started for specific session by this HeNBGW to eNodeB.
Deactivate Trace	The total number of messages processed and transmitted over S1AP interface to indicate that Session Trace deactivated for specific session by this HeNBGW to eNodeB.
MME Status Transfer	The total number of messages processed and transmitted over S1AP interface to indicate the MME status by this HeNBGW to eNodeB.
Loc Report Control	The total number of LOCATION REPORT CONTROL messages sent by the MME to the eNodeB requesting the current location of the UE.
MME Config Update	The total number of MME CONFIGURATION UPDATE messages sent by the MME to the eNodeB for the purpose of updating the Transport Network Layer (TNL) association. The TNL association is required for the MME and eNodeB to interoperate correctly across the S1 interface.
S1AP Encode Fail	The total number of failure occurred during S1AP encode procedure and S1AP ENCODE FAILURE messages processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
MME Config Transfer	The total number of MME CONFIGURATION TRANSFER messages sent by the MME to the eNodeB for the purpose of transferring RAN configuration information.
Kill Request	The total number of KILL REQUEST messages sent by the MME to the eNodeB.
Downlink Non-UE LPPaTpt	The total number of non-UE downlink transport messages sent by the MME to the eNodeB for LPPa (LTE Positioning Protocol annex).
Downlink UE LPPaTpt	The total number of UE downlink transport messages sent by the MME to the eNodeB for LPPa.
S1AP Statistics: Received S1AP Data	
S1 Setup Req	The total number of S1 SETUP REQUEST messages for S1 setup procedure received over S1AP interface by this HeNBGW from eNodeB.
Reset	The total number of S1 RESET messages for S1 reset procedure received over S1AP interface by this HeNBGW from eNodeB.
Reset Ack	The total number of S1 RESET-ACK messages for S1 reset procedure received over S1-P interface by this HeNBGW from eNodeB.
eNB Dir Info Transfer	The total number of ENB DIRECT INFORMATION TRANSFER messages for eNodeB Direct Information Transfer procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.

Field	Description
eNB Config Update	The total number of ENB CONFIGURATION UPDATE messages for eNB Configuration Update procedure processed and transmitted over S1AP interface by this HeNBGW to eNodeB.
S1AP Msg Decode Failure	The total number of failure occurred during S1AP control message decoding procedure by eNodeB and S1AP DECODE FAILURE messages received over S1AP interface by this HeNBGW from eNodeB.
S1AP Msg Unexpected	The total number of failure occurred due to unexpected events during S1AP control message procedure at eNodeB and S1AP UNEXPECTED EVENT messages received over S1AP interface by this HeNBGW from eNodeB.
E-RAB Setup Resp	The total number of E-RAB setup request response messages received over S1AP interface by this HeNBGW from eNodeB.
E-RAB Modify Resp	The total number of E-RAB modify request response messages received over S1AP interface by this HeNBGW from eNodeB.
E-RAB Release Resp	The total number of E-RAB release request response messages received over S1AP interface by this HeNBGW from eNodeB.
E-RAB Release Ind	The total number of E-RAB release indicator messages received over S1AP interface by this HeNBGW from eNodeB.
Initial Ctxt Setup Resp	The total number of initial context setup request response messages received over S1AP interface by this HeNBGW from eNodeB.
Initial Ctxt Setup Fail	The total number of initial UE context setup failure messages received over S1AP interface by this HeNBGW from eNodeB.
UE Context Release Req	The total number of initial UE context release command messages received over S1AP interface by this HeNBGW from eNodeB.
UE Ctxt Release Comp	The total number of UE context release request messages received over S1AP interface by this HeNBGW from eNodeB.
UE Context Modify Resp	The total number of UE context modify request messages received over S1AP interface by this HeNBGW from eNodeB.
UE Ctxt Modify Fail	The total number of UE context modify request failure messages received over S1AP interface by this HeNBGW from eNodeB.
Initial UE Message	The total number of initial UE messages received over S1AP interface by this HeNBGW from eNodeB.
Uplink NAS Transport	The total number of NAS Transport in Uplink direction messages received over S1AP interface by this HeNBGW from eNodeB.
NAS Non-Delivery Ind	The total number of S1AP messages for NAS non delivery indication received over S1AP interface by this HeNBGW from eNodeB.
Error Indication	The total number of S1AP messages with error-indication received over S1AP interface by this HeNBGW from eNodeB.

Field	Description
Handover Request Ack	The total number of ACK messages for handover request received over S1AP interface by this HeNBGW from eNodeB.
Handover Cancel	The total number of handover cancel messages received over S1AP interface by this HeNBGW from eNodeB.
Handover Required	The total number of handover required messages received over S1AP interface by this HeNBGW from eNodeB.
Handover Fail	The total number of HANDOVER_FAILURE messages received over S1AP interface by this HeNBGW from eNodeB.
Handover Notify	The total number of HANDOVER_NOTIFY messages received over S1AP interface by this HeNBGW from eNodeB.
Path Switch Req	The total number of PATH_SWITCH_REQ messages received over S1AP interface by this HeNBGW from eNodeB.
eNB Status Transfer	The total number of messages received for eNodeB status transfer message over S1AP interface by this HeNBGW from eNodeB.
UE Capability Info Ind	The total number of messages with UE capability information indication received over S1AP interface by this HeNBGW from eNodeB.
Uplink S1 CDMA2000	The total number of response messages for S1 tunneling with cdma2000 network in uplink direction received over S1AP interface by this HeNBGW from eNodeB.
Trace Failure Ind	The total number of response messages with Session Trace failure indication for specific session received over S1AP interface by this HeNBGW from eNodeB.
Location Report	The total number of LOCATION REPORT messages sent by the eNodeB to the MME providing the UE's location.
Loc Report Fail Ind	The total number of LOCATION REPORT FAILURE INDICATION messages sent by the eNodeB to the MME indicating that a LOCATION REPORT CONTROL procedure has failed due to an interaction with a handover procedure.
S1AP Decode Fail	The total number of response message indicating S1AP decode failure received over S1AP interface by this HeNBGW from eNodeB.
MME Config Update Fail	The total number of MME CONFIGURATION UPDATE FAILURE messages sent by the eNodeB to the MME indicating an S1-MME configuration update failure.
MME Config Update Ack	The total number of MME CONFIGURATION UPDATE ACKNOWLEDGEMENT messages sent by the eNodeB indicating the receipt of the Transport Network Layer (TNL) association information.
S1AP Unexpected Event	The total number of message indicating failure due to unexpected event received over S1AP interface by this HeNBGW from eNodeB.

Field	Description
eNB Config Transfer	The total number of ENB CONFIGURATION TRANSFER message received by the MME from the eNodeB for the purpose of transferring RAN configuration information.
Uplink Non-UE LPPaTpt	The total number of non-UE uplink transport messages received by the MME from the eNodeB for LPPa (LTE Positioning Protocol annex).
Uplink UE LPPaTpt	The total number of UE uplink transport messages received by the MME from the eNodeB for LPPa.
Kill Response	The total number of CMAS Kill Response messages received by the MME from the eNodeB. This message is sent by the eNodeB to indicate the list of warning areas where cancellation of the broadcast of the identified message was successful and unsuccessful.
Radio Network Error Statistics	
Unknown MME UE S1AP Id	The total number of times an MME UE S1AP ID was not included in an error indication message received by the MME from the eNodeB.
Unknown ENB UE S1AP Id	The total number of times an ENB UE S1AP ID was not included in an error indication message received by the MME from the eNodeB.
Unknown UE S1AP Id Pair	The total number of times an ENB and MME UE S1AP ID was not included in an error indication message received by the MME from the eNodeB.
Protocol Error Statistics	
Transfer Syntax Error	The total number of messages received by the MME from the eNodeB containing a Transfer Syntax Error.
Semantic Error	The total number of messages received by the MME from the eNodeB containing a Semantic Error.
Message Not Compatible	The total number of messages received by the MME from the eNodeB that were not compatible with the receiver state.
Abstract Syntax Error	This sub-group displays abstract syntax error statistics for S1AP messages received by the MME from the eNodeB.
Reject	The total number of S1AP messages received by the MME from the eNodeB containing an Abstract Syntax Error with a criticality of "reject".
Ignore And Notify	The total number of S1AP messages received by the MME from the eNodeB containing an Abstract Syntax Error with a criticality of "ignore and notify".
Falsely Constr Msg	The total number of S1AP messages received by the MME from the eNodeB containing an Abstract Syntax Error because the message contained IEs or IE groups in the wrong order or with too many occurrences.
Total eNodeB Associations	The total number of eNodeB associations

Field	Description
License Exceeded	Total number of messages discarded due to license getting exceeded.

show henbgw-network-service all

Table 4: show henbgw-network-service all Command Output Descriptions

Field	Description
Service name	The name used to identify the HeNB-GW Network service to the system. **Important** At a time only one HeNB-GW Network Service can be configured per system.
Context name	The name of the system context in which the HeNB-GW Network service is defined.
Status	The status of the configured HeNB-GW Network Service, e.g. Started or Not Started.
Logical eNodeB	Displays the configured MCC, MNC, and Macro eNodeB or Home eNodeB ID configured for this Logical eNodeB. More configuration details pertaining to this Logical eNodeB are listed below: **Important** This information is listed for each individual Logical eNodeB, since multiple Logical eNodeBs can be configured per HeNB-GW Network service.
SCTP Port	The HeNB-GW uses this port to communicate with the MME(s) over S1-MME interface
SCTP IP Address	The IP address used by HeNB-GW for establishing S1 associations with MME(s).
TAI List DB	The name of the TAI database used to configure the list of TAI(s) supported by the Logical eNodeB instance
MME Pool Name	The MME pool name used to associate an MME Pool with the Logical eNodeB instance.