



show cs-network

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show cs-network all status



Important

In Release 20 and later, HNBGW is not supported. For more information, contact your Cisco account representative.

Table 1: show cs-network all status Command Output Descriptions

| Field | Description |
|--------------------------|---|
| CS Network name | Indicates the name of the Circuit Switched (CS) network instance for which status is displayed. |
| Associated SCCP-Network | Indicates the name of the Signalling Connection Control Part (SCCP) network service instance which is associated with the referenced CS network instance. |
| Associated Alcap-Service | Indicates the name of the Access Link Control Application Protocol (ALCAP) service instance which is associated with the referenced CS network instance. |
| Alcap Context Name | Indicates the name of the context in which the ALCAP service instance is configured. |
| Associated RTP Pool | Indicates the name of the RTP IP pool configured and associated with the referenced CS network instance for RTP stream management. |
| RTP Pool Context Name | Indicates the name of the context in which the RTP IP pool is configured for RTP stream management. |

| Field | Description |
|---|---|
| MSC Point Code | Indicates the address of MSC in SS7 point code notation which is serving the referenced CS network instance. |
| Status | Indicates the status of MSC which is serving the referenced CS network instance. |
| Network Status | Indicates the status of network in which the referenced CS network instance is placed. |
| RTP IP Addresses | Indicates the session manager instances and associated IP pools with them for RTP stream management support. |
| NRI | Indicates the Network Resource Identification (NRI) bit configuration status for the referenced CS network. |
| IDNNS | Indicates the Intra-Domain NAS Node Selector (IDNNS) configuration status for the referenced CS network to transport the NRI value. |
| Lac range <nnn> to <nnn> MSC Point-code <x.x.x> | Indicates the mapping configured between MSC point-code and range of LAC for multiple MSC selection without Iu-Flex in CS network. |
| CORE NODE MAP | Indicates the core node mapping configuration status for the referenced CS network. |
| Initiated Ranap Reset | Indicates if the HNB-GW Initiated RANAP Reset function is enabled or disabled. Important Before StarOS 14.0 release, this counter was displayed in show hnbgw-service command outputs. |
| Ranap Reset Ack Timer | The timer value, in seconds, that defines how long the HNB-GW waits for a RESET ACK message from the MSC after transmitting a RESET message. This setting is used only if the HNB-GW Initiated RANAP Reset function is enabled. Important Before StarOS 14.0 release, this counter was displayed in show hnbgw-service command outputs. |
| Ranap Reset Maximum Retransmissions | Sets the maximum number of retries allowed for the HNB-GW to transmit a RANAP RESET message to the MSC if the RESET ACK timer expires. This setting is used only if the HNB-GW Initiated RANAP Reset function is enabled. Important Before StarOS 14.0 release, this counter was displayed in show hnbgw-service command outputs. |

| Field | Description |
|-------------------------|--|
| Ranap Reset Guard Timer | The timer that the HNB-GW starts after receiving a RESET message from the CS core network. While this timer is running, the HNB-GW discards any new RESET messages that it receives. Important Before StarOS 14.0 release, this counter was displayed in show hnbgw-service command outputs. |
| Global RNC-Id | This group displays the information related to global Radio Network Controller settings for use by the CS core network for HNB-GW service(s) on a chassis. It is configured under the PLMN-ID. |
| MCC | The Mobile Country Code defined for use with this HNB-GW 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 HNB-GW service. It consists of the last 3 digits of the Available Radio Network PLMN ID. |
| Id | The Radio Network Controller ID provided to HNBs for use by the CS core network for this HNB-GW service. It is configured under the PLMN-ID |

show cs-network statistics ranap-only

Table 2: show cs-network statistics ranap-only Command Output Descriptions

| Field | Description |
|--------------------|---|
| RANAP | This group displays the statistics of RANAP in a CS network on chassis. |
| Initial UE Tx | Total number of initial UE requests transmitted. |
| Direct Transfer Rx | Total number of Direct Transfer requests received. |
| Direct Transfer Tx | Total number of Direct Transfer responses sent. |
| Reset Rx | Total number of RESET requests received. |
| Reset Tx | Total number of RESET responses sent. |
| Reset Ack Rx | Total number of RESET Ack requests received. |
| Reset Ack Tx | Total number of responses against RESET Ack request sent. |
| Reset Resource Rx | Total number of RESET RESOURCE requests received. |
| Reset Resource Tx | Total number of RESET RESOURCE responses sent. |

| Field | Description |
|------------------------------|---|
| Reset Resource Ack Rx | Total number of RESET RESOURCE Ack requests received. |
| Reset Resource Ack Tx | Total number of responses against RESET RESOURCE Ack request sent. |
| Iu Release Request Tx | Total number of Iu RELEASE requests sent. |
| Iu Release Command Rx | Total number of Iu RELEASE command received. |
| Iu Release Complete Tx | Total number of Iu RELEASE Complete response sent. |
| Paging Request Rx | Total number of Paging requests received. |
| RAB Assignment Request Rx | Total number of RAB assignment requests received. |
| RAB Setup/Mod Rx | Total number of RAB setup or modification requests received. |
| RAB Release Rx | Total number of RAB Release requests received. |
| RAB Assignment Response Tx | Total number of responses against RAB assignment requests sent. |
| RAB Setup/Mod Success Tx | Total number of RAB setup or modification Success response sent. |
| Total RAB Setup/Mod Fail Tx | Total number of RAB setup or modification Fail response sent. |
| RAB Setup/Mod Fail(Local) Tx | Total number of RAB setup or modification Fail response sent where RAB setup or modification failed due to local reason/cause. |
| RAB Release Success Tx | Total number of RAB Release Success response sent. |
| Total RAB Release Fail Tx | Total number of RAB Release Success response sent. |
| RAB Release Fail(Local) Tx | Total number of RAB Release Fail response sent where RAB Release failed due to local reason/cause. |
| RAB Queued Tx | Total number of RAB messages queued for transmission. |
| RAB Setup/Mod Timer Exp | Total number of instances where RAB setup/modification timer expired before process of request. |
| RAB Release Timer Exp | Total number of instances where RAB Release timer expired before process of request. |
| RAB Set/Mod/Rel Local Fail | This group displays the total number of RAB setup or modification or release requests failed due to local reason/cause. |
| Local Failure Cause | This group identifies the local cause for RAB setup or modification or release request failure. |
| Radio Network Layer Cause | This group identifies the total number of RAB setup or modification or release request failure due to error in radio network layer. |

| Field | Description |
|------------------------------|---|
| Invalid Rab Id | Total number of RAB setup or modification or release requests failed due to invalid RAB id in radio network layer. |
| Interaction With Other Proc | Total number of RAB setup or modification or release requests failed as system was interacting with another process. |
| Transport Layer Cause | This group identifies the total number of RAB setup or modification or release request failure due to error in Transport layer. |
| Sig Trans Res Fail | Total number of RAB setup or modification or release requests failed due to Sig trans Resource failure in transport layer. |
| Iu Tran Conn failed to Estab | Total number of RAB setup or modification or release requests failed where Iu Transmission connection failed to establish in transport layer. |
| Protocol Layer Cause | This group identifies the total number of RAB setup or modification or release request failure due to error in Protocol layer. |
| Transfer syntax error | Total number of RAB setup or modification or release requests failed due to transfer syntax error in Protocol layer. |
| Asn error(Reject) | Total number of RAB setup or modification or release requests failed due to ASN (Reject) syntax error in Protocol layer. |
| Asn error | Total number of RAB setup or modification or release requests failed due to ASN syntax error in Protocol layer. |
| Msg not comp with Rcvr state | Total number of RAB setup or modification or release requests failed as message was not compatible with Recovery state in Protocol layer. |
| Semantic error | Total number of RAB setup or modification or release requests failed due to semantic error in Protocol layer. |
| Asn error(Falsely const msg) | Total number of RAB setup or modification or release requests failed due to ASN error (falsely constructed messages) in Protocol layer. |
| Miscellaneous Cause | This group identifies the total number of RAB setup or modification or release request failure due to miscellaneous cause (not listed in this table). |
| No Resource Available | Total number of RAB setup or modification or release requests failed due to non availability of resource. |
| Unspecified | Total number of RAB setup or modification or release request failure due to unspecified cause (not listed in this table). |

| Field | Description |
|------------------------------|--|
| <codec_name> Codec | This group displays the total number of RAB setup or modification or release request failure grouped in Codec name <codec_name>. Following groups are supported: <ul style="list-style-type: none"> • UMTS AMR Codec • UMTS AMR2 Codec • Other Codec • No Codec • Unknown Codec |
| RAB Setup/Mod Rx | Total number of RAB setup or modification requests received for specific codec. |
| RAB Setup/Mod Success Tx | Total number of RAB setup or modification success messages sent for specific codec. |
| RAB Release Rx | Total number of RAB Release requests received for specific codec. |
| Total RAB Setup/Mod Fail Tx | Total number of RAB setup or modification failure messages sent for specific codec. |
| RAB Setup/Mod Fail(Local) Tx | Total number of RAB setup or modification failure messages sent for specific codec where RAB setup or modification failed due to local reason/cause. |
| RAB Release Success Tx | Total number of RAB Release success messages sent for specific codec. |
| Total RAB Release Fail Tx | Total number of RAB Release fail messages sent for specific codec. |
| RAB Release Fail(Local) Tx | Total number of RAB Release fail messages sent for specific codec where RAB setup or modification failed due to local reason/cause. |
| RAB Queued Tx | Total number of RAB messages queued for processing or transmission. |
| Relocation Request Rx | Total number of RAB Relocation request received by system for this CS network. |
| RAB Setup Rx | Total number of RAB Relocation setup request received by system for this CS network. |
| Relocation Request ACK Tx | Total number of RAB Relocation Ack messages sent against setup request received by system for this CS network. |
| RAB Setup Success Tx | Total number of RAB setup success messages sent against setup request received by system for this CS network. |
| Total RAB Setup Fail Tx | Total number of RAB setup fail messages sent against setup request received by system for this CS network. |

| Field | Description |
|------------------------------|---|
| RAB Setup Fail(Local) Tx | Total number of RAB setup failure messages sent from this system where RAB setup or modification failed due to local reason/cause. |
| Local Failure Cause | This group identifies the local cause for RAB setup or modification or release request failure. |
| Radio Network Layer Cause | This group identifies the total number of RAB setup or modification or release request failure due to error in radio network layer. |
| Invalid Rab Id | Total number of RAB setup or modification or release requests failed due to invalid RAB id in radio network layer. |
| Interaction With Other Proc | Total number of RAB setup or modification or release requests failed as system was interacting with another process. |
| Transport Layer Cause | This group identifies the total number of RAB setup or modification or release request failure due to error in Transport layer. |
| Sig Trans Res Fail | Total number of RAB setup or modification or release requests failed due to Sig trans Resource failure in transport layer. |
| Iu Tran Conn failed to Estab | Total number of RAB setup or modification or release requests failed where Iu Transmission connection failed to establish in transport layer. |
| Protocol Layer Cause | This group identifies the total number of RAB setup or modification or release request failure due to error in Protocol layer. |
| Transfer syntax error | Total number of RAB setup or modification or release requests failed due to transfer syntax error in Protocol layer. |
| Asn error(Reject) | Total number of RAB setup or modification or release requests failed due to ASN (Reject) syntax error in Protocol layer. |
| Asn error | Total number of RAB setup or modification or release requests failed due to ASN syntax error in Protocol layer. |
| Msg not comp with Rcvr state | Total number of RAB setup or modification or release requests failed as message was not compatible with Recovery state in Protocol layer. |
| Semantic error | Total number of RAB setup or modification or release requests failed due to semantic error in Protocol layer. |
| Asn error(Falsely const msg) | Total number of RAB setup or modification or release requests failed due to ASN error (falsely constructed messages) in Protocol layer. |

| Field | Description |
|-----------------------------|---|
| Miscellaneous Cause | This group identifies the total number of RAB setup or modification or release request failure due to miscellaneous cause (not listed in this table). |
| No Resource Available | Total number of RAB setup or modification or release requests failed due to non availability of resource. |
| Unspecified | Total number of RAB setup or modification or release request failure due to unspecified cause (not listed in this table). |
| <codec_name> Codec | This group displays the total number of RAB Setup request grouped in Codec name <codec_name>. |
| RAB Setup Rx | Total number of RAB setup requests received for specific codec. |
| RAB Setup Success Tx | Total number of RAB setup success messages sent for specific codec. |
| Total RAB Setup Fail Tx | Total number of RAB setup failure messages sent for specific codec. |
| RAB Setup Fail(Local) Tx | Total number of RAB setup failure messages sent for specific codec where RAB setup failed due to local reason/cause. |
| Relocation Detect Tx | Total number of RAB Relocation Detect messages sent by system in this CS network. |
| Relocation Required Tx | Total number of RAB Relocation Required request messages sent by system in this CS network. |
| Fwd SRNS Context Request Tx | Total number of FWD SRNS Context request messages sent by system in this CS network. |
| Relocation Prep Failure Rx | Total number of Relocation Preparation failure response messages sent by system in this CS network. |
| Relocation Cancel Tx | Total number of Relocation cancel command messages received by system in this CS network. |
| Relocation Command Rx | Total number of Relocation command messages received by system in this CS network. |
| Srns Context Request Rx | Total number of SRNS Context Request messages received by system in this CS network. |
| Srns Context Response Tx | Total number of response sent for SRNS Context Request messages received by system in this CS network. |

show cs-network statistics sccp-only



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

Table 3: show cs-network statistics sccp-only Command Output Descriptions

| Field | Description |
|----------------------------|---|
| SCCP | This group displays the statistics of SCCP in a CS network on chassis. |
| SCCP Connection Request Rx | Total number of SCCP connection Request received by HNB-GW from the Core Node. This counter changes when Core Node initiates SCCP connection during Relocation. |
| SCCP Connection Request Tx | Total number of SCCP connection Request sent by HNB-GW towards the CN after getting RUA Connect Request for a Registered UE. This counter changes when RUA Connect Request sent for a Registered UE. |
| SCCP Connection Confirm Rx | Total number of SCCP Connection Confirmation messages received by HNB-GW from the Core Node. This counter changes when CN sends the SCCP connection confirmation for a requested SCCP Connection Request. |
| SCCP Connection Confirm Tx | Total number of SCCP Connection Confirmation response messages sent by HNB-GW to the Core Node. This counter changes when HNB-GW sends the SCCP connection confirmation response for a requested SCCP Connection Request to CN. |
| SCCP Connection Reject Rx | Total number of SCCP Connection Reject messages received by HNB-GW from the Core Node. This counter changes when Core node Rejects the SCCP Conn Request due to some parameter mismatch, etc. |
| SCCP Connection Reject Tx | Total number of SCCP Connection Rejection response messages sent by HNB-GW to the Core Node. This counter changes when HNBGW initiates the tear Down on receiving RUA disconnect from HNB which doesn't contain RANAP Iu-release complete message and other failure scenarios. |

| Field | Description |
|-------------------------|--|
| SCCP Connection Data Rx | Total data received by HNB-GW over SCCP connection between HNB-GW and Core Node. This counter changes when CN sends the data towards HNB-GW over SCCP connection. |
| SCCP Connection Data Tx | Total data sent by HNB-GW over SCCP connection between HNB-GW and Core Node. This counter changes when HNB-GW sends the data towards CN over SCCP connection. |
| SCCP Disconnect Rx | Total number of SCCP Disconnect messages received by HNB-GW from Core Node. This counter changes when CN initiate tear-down procedure for SCCP connection. |
| SCCP Disconnect Tx | Total number of SCCP Disconnect response messages sent by HNB-GW to Core Node. This counter changes when HNBGW initiates the tear-down procedure on receiving RUA disconnect from HNB which doesn't contain RANAP Iu-release complete message and other failure scenarios. |
| SCCP Uni Data Rx | Total Connection-less data, like paging, received by HNB-GW over SCCP connection between HNB-GW and Core Node. This counter changes when CN sends any connection-less data, like paging, towards HNB-GW over SCCP connection. |
| SCCP Uni Data Tx | Total Connection-less data, RANAP Reset, RANAP reset Resource, sent by HNB-GW over SCCP connection between HNB-GW and Core Node. This counter changes when HNB-GW sends or forward any Connection-less data, like RANAP reset, RANAP Reset Resource, towards CN over SCCP connection. |