

show session

This chapter describes the output of the **show session** command variants.

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show session counters historical all

Table 1: show session counters historical all Command Output Descriptions

Header	Description
Intv	The identification number of the sample interval.
Timestamp	The approximate time when the data was gathered. It is in the format YYYY:MM:DD:HH:MM:SS.
Number of Calls	
Arrived	Displays data for "total calls arrived" counters. **Note** This counter is not supported for the CUPS user plane service.
Rejected	Displays data for "total calls rejected" counters. **Note** This counter is not supported for the CUPS user plane service.
Connected	Displays data for "total calls connected" counters.
Disconn	Displays data for "total calls disconnected" counters.
Failed	Displays data for "total calls failed" counters.
Handoffs	Displays data for "total handoffs" counters. **Note** This counter is not supported for the CUPS user plane service.
Renewals	Displays data for "total renewal" counters. **Note** This counter is not supported for the CUPS user plane service.
(A+R+D+F+H+R) CallOps	Displays data for all call operations. This is a calculated value based on the following formula: (arrived + rejected + disconnected + failed + handoffs + renewals) **Note** This counter is not supported for the CUPS user plane service.
Access Technology Categories	
Number of Calls 2G (GERAN)	The number of calls using 2G GERAN (GSM/EDGE Radio Access Network) technology.

Header	Description
Number of Calls 3G (UTRAN)	The number of calls using 3G UTRAN (UMTS Terrestrial Radio Access Network) technology.
Number of Calls 4G (EUTRAN)	The number of calls using 4G EUTRAN (Enhanced UMTS Terrestrial Radio Access Network) technology.
Number of Calls eHRPD	The number of eHRPD (evolved High Rate Packet Data [3GPP2]) calls.
Number of Calls WiFi (Wireless LAN)	The number of WiFi calls.

show session disconnect-reasons

Table 2: show session disconnect-reasons Header Descriptions

Field	Description
Session Disconnect Statistics	
Total Disconnects	The total number of sessions disconnected since the system was started or since the last time that session disconnect reasons was cleared.
Disconnect Reason	The reason sessions were disconnected. Only reasons that have disconnects associated with them are listed.
Num Disc	The number of sessions disconnected for the reason.
Percentage mme-reselection-to-amf	The percentage of total disconnects. This disconnect reason is incremented, if the subscriber reslects to AMF as part of EPS to 5GS Idle Mobility Registration procedure.
mme-relocation-to-amf	This disconnect reason is incremented, if the subscriber relocates to AMF as part of EPS to 5GS Handover procedure

show session disconnect-reasons buckets

This command only displays output if bucket interval CONNECTION_TIME has been configured via the Global Configuration mode **session disconnect-reasons bucket-interval** command.

This feature is configured via the CLI command which sets a time interval value that is sent to all sessmgrs. Each sessmgr fills buckets with disconnect reason counts indexed by the time interval. The time interval for filling the buckets is indexed relative to time hh:00. For example: if the time interval is 5 minutes, the bucket is filled at hh:00, hh:05, hh:10, hh:15. So if current time is 06:57, buckets with values will be 06:55:00, 06:50:00 and 06:45:00.

Table 3: show session disconnect-reasons buckets Header Descriptions

Header	Description
Total Disconnects	The total number of sessions disconnected since the system was started or since the last time that session disconnect reasons was cleared. If CONNECTION_TIME is recently configured and the first timer has not expired (no buckets are filled yet), "NA" is displayed in place of timestamps for those buckets which are not filled. "NA" also appears if the buckets have been cleared with the **clear session disconnect-reasons [buckets]** command.
Disconnect Reason	The reason sessions were disconnected. Only reasons that have disconnects associated with them are listed.
interval	Month-Day-Timestamp of the bucket interval. This column displays the cumulative count of disconnect reasons at that timestamp calculated since beginning.
Num Disc	The number of sessions disconnected for the associated reason during this bucket interval.
Percentage	The percentage of total disconnects for the associated reason during this bucket interval.

show session disconnect-reasons verbose

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

Table 4: show session disconnect-reasons verbose Header Descriptions

Header	Description
Total Disconnects	The total number of sessions disconnected since the system was started or since the last time that session disconnect reasons was cleared.
Disconnect Reason	The reason sessions were disconnected. Only reasons that have disconnects associated with them are listed unless the verbose keyword is specified.
Num Disc	The total number of sessions disconnected for the associated reason.
Percentage	The percentage of total disconnects for the associated reason.

In the following table, the indicator number at the end of the disconnect field name will vary depending upon the software build in which the **show session disconnect-reason** command is issued.

Table 5: show session disconnect-reasons Field Descriptions

Field	Description
Unknown (0)	The total number of sessions disconnected due to unknown reason.

Admin-disconnect (1)	The total number of sessions disconnected due to any of the following reasons:
	• Sessions disconnected when the Administrator issues the **clear subscribers all** CLI command.
	• Sessions disconnected by ECS due to any of the following reasons:
	  • Bearer does not contain active rules—when the last bearer has no rules left as part of some PCRF trigger.
	  • Charging-action has the **flow action** parameter configured as **terminate-session**.
	• Sessions disconnected by Diameter Credit Control Application (DCCA) due to any of the following reasons:
	  • Result code 4010 or 4012 is received at the command level, and for CCR-Initial and CCR-Update Credit Control Failure Handling (CCFH) is configured as Terminate or Retry-and-Terminate.
	  • Result code 5003 or 5030 is received at the command level.
	  • Abort-Session-Request message is received.

Remote-disconnect (2)	The total number of sessions disconnected by the remote system.
Local-disconnect (3)	The total number of sessions disconnected by local system.
No-resource (4)	The total number of sessions disconnected due to non-availability of resources.
Service-limit-exceeded (5)	The total number of sessions disconnected due to exceed in service limit.
PPP-LCP-negotiation-failed (6)	The total number of sessions disconnected due to LCP negotiation failed.
PPP-LCP-no-response (7)	The total number of sessions disconnected due to no response in PPP-LCP session.
PPP-LCP-loopback-detected (8)	The total number of sessions disconnected due to loop back detected in PPP-LCP.
PPP-LCP-max-retry-reached (9)	The total number of sessions disconnected due to maximum retries in PPP-LCP session.

Field	Description
PPP-LCP-echo-failed (10)	The total number of sessions disconnected due to PPP-LCP echo not received.
PPP-Auth-failed (11)	The total number of sessions disconnected due to authorization failed in PPP.
PPP-Auth-failed-no-AAA-response (12)	The total number of sessions disconnected due to authorization failed by no response on AAA server.
PPP-Auth-failed-no-peer-response (13)	The total number of sessions disconnected due to PPP authorization failed on no peer response.
PPP-Auth-failed-max-retry-reached (14)	The total number of sessions disconnected due to PPP authorization failed and reaching maximum retries limit.
Invalid-APN	If ePDG will receive APN-NI that is not according to 3GPP standard then ePDG will reject the call.
Invalid-AAA-attr-in-auth-response (15)	The total number of sessions disconnected due to invalid AAA attributes in authorization response.
Could-not-apply-subscriber-ACL (16)	The total number of sessions disconnected due to inability in applying subscriber's Access Control List (ACL).
Could-not-provide-service (17)	The total number of sessions disconnected due to service is not available.
AAA-return-IP-address-not-valid (18)	The total number of sessions disconnected due to return IP address from AAA server is invalid.
Pool-IP-address-not-valid (19)	The total number of sessions disconnected due to IP address in pool is invalid.
PPP-IPCP-negotiation-failed (20)	The total number of sessions disconnected due to PPP-IPCP negotiation failed.
PPP-IPCP-no-response (21)	The total number of sessions disconnected due to no response in PPP-IPCP.
PPP-IPCP-max-retry-reached (22)	The total number of sessions disconnected due to maximum retries in PPP-IPCP session.
No-IPV4-address-for-subscriber (23)	The total number of sessions disconnected due to no IPv4 address are available for subscriber.
Inactivity-timeout (24)	The total number of sessions disconnected due to system time out limit for silence (ideal) reached.
Absolute-timeout (25)	The total number of sessions disconnected due to timeout in complete session.
Max-data-limit-exceeded (26)	The total number of sessions disconnected due to maximum data limit exceeded.

Field	Description
Invalid-source-IPV4-address (27)	The total number of sessions disconnected due to invalid IPv4 address of subscriber.
MSID-auth-failed (28)	The total number of sessions disconnected due to MSID authentication failed.
MSID-auth-failed-no-aaa-response (29)	The total number of sessions disconnected due to MSID authentication failed and/or no response from AAA server.
A11-max-retry-reached (30)	The total number of sessions disconnected due to maximum limit for retries reached for A11 interface.
A11-lifetime-expired (31)	The total number of sessions disconnected due to A11 interface lifetime expired.
A11-msg-integrity-failure (32)	The total number of sessions disconnected due to failure in message integrity in A11 interface.
PPP-LCP-remote-disconnect (33)	The total number of sessions disconnected due to PPP-LCP remote disconnect.
Session-setup-timeout (34)	The total number of sessions disconnected due to timeout in setting up of session.
PPP-keepalive-failure (35)	The total number of sessions disconnected due to PPP keepalive attribute failure.
Flow-add-failed (36)	The total number of sessions disconnected due to fail in adding flow to session.
Call-type-detection-failed (37)	The total number of sessions disconnected due to failure in call type detection.
Wrong-ipcp-params (38)	The total number of sessions disconnected due to IPCP parameters are wrong.
MIP-remote-dereg (39)	The total number of sessions disconnected due to de-registration of Mobile IP on remote system.
MIP-lifetime-expiry (40)	The total number of sessions disconnected due to expiry of Mobile IP life time.
MIP-proto-error (41)	The total number of sessions disconnected due to protocol error in Mobile IP.
MIP-auth-failure (42)	The total number of sessions disconnected due to Mobile IP authentication failure.
MIP-reg-timeout (43)	The total number of sessions disconnected due to registration request timeout.
Invalid-dest-context (44)	The total number of sessions disconnected due to invalid destination context.

Field	Description
Source-context-removed (45)	The total number of sessions disconnected due to source context is removed from system.
Destination-context-removed (46)	The total number of sessions disconnected due to destination context is removed from system.
Required-service-address-unavailable (47)	The total number of sessions disconnected due to unavailability of required service address.
demux-mgr-failed-could-not-restart (48)	The total number of sessions disconnected due to failure in demux-mgr.
internal-error (49)	The total number of sessions disconnected due to some internal system error.
AAA-context-removed (50)	The total number of sessions disconnected due to AAA context is removed from system.
invalid-service-type (51)	The total number of sessions disconnected due to invalid service type.
mip-relay-req-failed (52)	The total number of sessions disconnected due to failure in Mobile IP relay request.
mip-rcvd-relay-failure (53)	The total number of sessions disconnected due to failure in Mobile IP received.
ppp_restart_inter_pdsn_handoff (54)	The total number of sessions disconnected due to restart in inter PDSN handoff.
gre-key-mismatch (55)	The total number of sessions disconnected due to mismatch in Generic Routing Encapsulation (GRE) key.
invalid-tunnel-context (56)	The total number of sessions disconnected due to invalid Tunnel context.
no-peer-lns-address (57)	The total number of sessions disconnected due to no peer LNS address
failed-tunnel-connect (58)	The total number of sessions disconnected due to failure in Tunnel connect.
l2tp-tunnel-disconnect-remote (59)	The total number of sessions disconnected due to tunnel disconnected by remote system.
l2tp-tunnel-timeout (60)	The total number of sessions disconnected due to tunnel timeout.
l2tp-protocol-error-remote (61)	The total number of sessions disconnected due to protocol error on remote system.
l2tp-protocol-error-local (62)	The total number of sessions disconnected due to protocol error on local system.
l2tp-auth-failed-remote (63)	The total number of sessions disconnected due to authorization failed on remote system.

Field	Description
l2tp-auth-failed-local (64)	The total number of sessions disconnected due to authorization failed on local system
l2tp-try-another-lns-from-remote (65)	The total number of sessions disconnected due to remote system tried for another LNS.
l2tp-no-resource-local (66)	The total number of sessions disconnected due to non-availability of resource on local system.
l2tp-no-resource-remote (67)	The total number of sessions disconnected due to non-availability of resource on remote system.
l2tp-tunnel-disconnect-local (68)	The total number of sessions disconnected due to tunnel disconnected on local system.
l2tp-admin-disconnect-remote (69)	The total number of sessions disconnected by administrator on remote system.
l2tpmgr-reached-max-capacity (70)	The total number of sessions disconnected due to L2TP Manager logging facility reached to maximum logging capacity.
MIP-Reg-Revocation (71)	The total number of sessions disconnected due to a failure in Mobile IP registration revocation.
path-failure (72)	The total number of sessions disconnected due to path failure in connecting session.
Dhcp-Relay-IP-Validation-Failed (73)	The total number of sessions disconnected due to a failure with the validation of the IP addresses with DHCP relay method.
Gtp-unknown-pdp-addr-or-pdp-type (74)	The total number of sessions disconnected due to unknown PDP address or PDP type.
Gtp-all-dynamic-pdp-addr-occupied (75)	The total number of sessions disconnected due to all dynamic PDP addresses are occupied and no PDP address is available to allocate.
Gtp-no-memory-is-available (76)	The total number of sessions disconnected due to out of memory problem.
dhcp-relay-static-ip-addr-not-allowed (77)	The total number of sessions disconnected due to the mobile requesting the use of a static IP address when static IP address requests are not allowed.
dhcp-no-ip-addr-allocated (78)	The total number of sessions disconnected as no IP address is allocated on DHCP Server.
dhcp-ip-addr-allocation-tmr-exp (79)	The total number of sessions disconnected due to time expired for IP address allocation on DHCP Server.
dhcp-ip-validation-failed (80)	The total number of sessions disconnected due to a failure with the validation of the IP address. This occurs because the IP address returned by DHCP Server is not present in the static pool in the destination context.

Field	Description
dhcp-static-addr-not-allowed (81)	The total number of sessions disconnected due to a failure with IP address in the static pool on destination context is not allowed by DHCP Server.
dhcp-ip-addr-not-available-at-present (82)	The total number of sessions disconnected due to non availability of IP address on DHCP Server.
dhcp-lease-expired (83)	The total number of sessions disconnected due to expiration of IP address lease time.
lpool-ip-validation-failed (84)	The total number of sessions disconnected due to validation failure of IP address in IP pool.
lpool-static-ip-addr-not-allowed (85)	The total number of sessions disconnected due to specified static IP address is not allowed in IP pool.
static-ip-validation-failed (86)	The total number of sessions disconnected due to a failure in validation of static IP address on remote system.
static-ip-addr-not-present (87)	The total number of sessions disconnected due to allocated static address is removed or not available.
static-ip-addr-not-allowed (88)	The total number of sessions disconnected due to prohibition of defined static IP address.
radius-ip-validation-failed (89)	The total number of sessions disconnected due to a failure in IP address validation on RADIUS.
radius-ip-addr-not-provided (90)	The total number of sessions disconnected due to IP address is not provided by RADIUS.
invalid-ip-addr-from-sgsn (91)	The total number of sessions disconnected due to invalid IP address received from SGSN.
no-more-sessions-in-aaa (92)	The total number of sessions disconnected due to sessions cleared in AAA.
ggsn-aaa-auth-req-failed (93)	The total number of sessions disconnected due to authentication request failure between GGSN and AAA server.
conflict-in-ip-addr-assignment (94)	The total number of sessions disconnected due to conflict in IP address assignment.
apn-removed (95)	The total number of sessions disconnected due to APN removed during session.
credits-used-bytes-in (96)	The total number of sessions disconnected due to exceeding the incoming data/bytes credit.
credits-used-bytes-out (97)	The total number of sessions disconnected due to exceeding the outgoing data/bytes credit.

Field	Description
credits-used-bytes-total (98)	The total number of sessions disconnected due to exceeding the total data/bytes credit.
prepaid-failed (99)	The total number of sessions disconnected due to a failure in processing prepaid account information.
l2tp-ipsec-tunnel-failure (100)	The total number of sessions disconnected due to the IPSec tunnel being failed to connect.
l2tp-ipsec-tunnel-disconnected (101)	The total number of sessions disconnected due to the IPSec tunnel being disconnected.
mip-ipsec-sa-inactive (102)	The total number of sessions disconnected due to in active security association (sa) of IPSec for specific Mobile IP address.
Long-duration-timeout (103)	The total number of sessions disconnected due to the expiration of the configured long-duration timer.
proxy-mip-registration-failure (104)	The total number of Proxy Mobile IP sessions disconnected due to Registration failures.
proxy-mip-binding-update (105)	The total number of Proxy Mobile IP sessions disconnected due to errors occurring during binding updates.
proxy-mip-inter-pdsn-handoff-require-ip-address (106)	The total number of Proxy Mobile IP sessions disconnected due to the mobile not providing the IP address it was assigned during IPCP negotiations resulting from inter-PDSN handoffs.
proxy-mip-inter-pdsn-handoff-mismatched-address (107)	The total number of Proxy Mobile IP sessions disconnected due to the mobile providing an IP address other than what it was assigned during IPCP negotiations resulting from inter-PDSN handoffs.
Local-purge (108)	The total number of sessions disconnected due to a locally-initiated purge.
failed-update-handoff (109)	The total number of sessions disconnected due to failure in update handoff.
closed_rp-handoff-complete (110)	The total number of sessions disconnected due to handoff completed.
closed_rp-duplicate-session (111)	The total number of sessions disconnected due to duplicate session.
closed_rp-handoff-session-not-found (112)	The total number of sessions disconnected due to hand off session not found.
closed_rp-handoff-failed (113)	The total number of sessions disconnected due to handoff failed for session.
pcf-monitor-keep-alive-failed (114)	The total number of sessions disconnected due to the expiration of the configured max-inactivity timer indicating that the PCF was unavailable.

Field	Description
call-internal-reject (115)	The total number of sessions disconnected due to call rejected internally.
call-restarted (116)	The total number of sessions disconnected due to call restarted on unknown reason.
a11-mn-ha-auth-failure (117)	The total number of sessions disconnected due to failure in authentication between Mobile node and Home Agent (HA).
a11-badly-formed (118)	The total number of sessions disconnected as A11 interface is formed badly.
a11-t-bit-not-set (119)	The total number of sessions disconnected due to t-bit is not set in interface.
a11-unsupported-vendor-id (120)	The total number of sessions disconnected due to unsupported vendor Id in interface.
a11-mismatched-id (121)	The total number of sessions disconnected due to mismatched Id in A11 interface.
mipha-dup-home-addr-req (122)	The total number of sessions disconnected due to duplicate home address request on HA.
mipha-dup-imsi-session (123)	The total number of sessions disconnected due to duplicate IMSI in session on HA.
ha-unreachable (124)	The total number of sessions disconnected due to unreachable HA.
IPSP-addr-in-use (125)	The total number of sessions disconnected due to IP Pool Sharing Protocol address is in use/not free on HA.
mipfa-dup-home-addr-req (126)	The total number of sessions disconnected due to duplicate home address request on FA.
mipha-ip-pool-busyout (127)	The total number of sessions disconnected due to IP pool busyout.
inter-pdsn-handoff (128)	The total number of sessions disconnected due to inter-PDSN handoff failure.
active-to-dormant (129)	The total number of sessions disconnected due to system enters to dormant state from active state. **Note:** Sessions facilitated through PDSN Closed R-P services are always displayed as "Active" due to the fact that PDSN Closed R-P services do not receive dormancy information from the PCF.
ppp-renegotiation (130)	The total number of sessions disconnected due to failure/conflict in PPP renegotiation.
active-start-parameter-change (131)	The total number of sessions disconnected due to change in start parameters.

Field	Description
accounting-tariff-boundary (132)	The total number of sessions disconnected due to the closure of an accounting record based configured tariff time.
a11-disconnect-no-active-stop (133)	The total number of sessions disconnected due to A11 interface is not active or stopped.
nw-reachability-failed-reject (134)	The total number of sessions disconnected due to failure in network reachability and request rejected.
nw-reachability-failed-redirect (135)	The total number of sessions disconnected due to failure in network reachability and request redirected.
container-max-exceeded (136)	The total number of sessions disconnected due to the closure of an accounting record based on the configured maximum number of container changes being exceeded.
static-addr-not-allowed-in-apn (137)	The total number of sessions disconnected due to static IP address is not allowed in APN.
static-addr-required-by-radius (138)	The total number of sessions disconnected due to static IP address required by RADIUS.
static-addr-not-allowed-by-radius (139)	The total number of sessions disconnected due to static IP address is not allowed by RADIUS.
mip-registration-dropped (140)	The total number of sessions disconnected due to registration dropped for Mobile IP address.
counter-rollover (141)	The total number of sessions disconnected due to counter rollover.
constructed-nai-auth-failed (142)	The total number of sessions disconnected due to authentication failure in subscriber's Network Access Identifier (NAI).
inter-pdsn-service-optimize-handoff-disabled (143)	The total number of sessions disconnected due to disabled inter-PDSN service optimization handoff.
gre-key-collision (144)	The total number of sessions disconnected due to collision in Generic Routing Encapsulation (GRE) key.
inter-pdsn-service-optimize-handoff-triggered (145)	The total number of sessions disconnected when inter PDSN service optimization handoff triggered.
intra-pdsn-handoff-triggered (146)	The total number of sessions disconnected when intra-PDSN service optimization handoff triggered.
delayed-abort-timer-expired (147)	The total number of sessions disconnected due to abort timer duration expired.
Admin-AAA-disconnect (148)	The total number of sessions disconnected as AAA server disconnected Administratively.
Admin-AAA-disconnect-handoff (149)	The total number of sessions disconnected due to AAA handoff disconnected Administratively.

Field	Description
PPP-IPV6CP-negotiation-failed (150)	The total number of sessions disconnected due to IPv6CP negotiation failed.
PPP-IPV6CP-no-response (151)	The total number of sessions disconnected due to no response during IPv6CP negotiation.
PPP-IPV6CP-max-retry-reached (152)	The total number of sessions disconnected due to maximum retries failed on IPv6CP negotiation.
PPP-Restart-Invalid-source-IPV4-address (153)	The total number of sessions disconnected due to PPP restarted by invalid Pv4 address of source.
a11-disconnect-handoff-no-active-stop (154)	The total number of sessions disconnected due to handoff in A11 interface is not active or stopped.
call-restarted-inter-pdsn-handoff (155)	The total number of sessions disconnected due to call restarted during inter PDSN handoff.
call-restarted-ppp-termination (156)	The total number of sessions disconnected due to call restarted on PPP termination.
mipfa-resource-conflict (157)	The total number of sessions disconnected due to resource conflict on FA.
failed-auth-with-charging-svc (158)	The total number of sessions disconnected due to authentication failure in charging services.
mipha-dup-imsi-session-purge (159)	The total number of sessions disconnected due to clearing of duplicate IMSI in session on HA.
mipha-rev-pending-newcall (160)	The total number of sessions disconnected due to revival of pending new calls.
volume-quota-reached (161)	The total number of sessions disconnected due to allocated data quota volume reached.
duration-quota-reached (162)	The total number of sessions disconnected due to time-out reached.
gtp-user-auth-failed (163)	The total number of sessions disconnected due to a failure in user/subscriber authentication.
MIP-Reg-Revocation-no-lcp-term (164)	The total number of sessions disconnected due to termination of an MIP Session for a Revocation being received from the HA and the PDSN is not configured to send a LCP Terminate Request.
MIP-private-ip-no-rev-tunnel (165)	The total number of sessions disconnected due to no reverse tunnel for MIP.
Invalid-Prepaid-AAA-attr-in-auth-response (166)	The total number of sessions disconnected due to invalid Prepaid attribute in authentication response.
mipha-prepaid-reset-dynamic-newcall (167)	The total number of MIP HA sessions disconnected due to receiving MIP registration with a home address of 0.0.0.0.

Field	Description
gre-flow-control-timeout (168)	The total number of RP sessions disconnected due to the PCF not removing flow control for a specified amount of time if GRE flow control for RP sessions is enabled.
mip-paaa-bc-query-not-found (169)	The total number of sessions that were disconnected because the binding cache was not found.
mipha-dynamic-ip-addr-not-available (170)	The total number of MIP HA sessions that were disconnected because a dynamic IP address was not available.
a11-mismatched-id-on-handoff (171)	The total number of sessions disconnected due to a mismatched ID in the A11 interface during a handoff.
a11-badly-formed-on-handoff (172)	The total number of sessions disconnected because the A11 interface is formed badly during a handoff.
a11-unsupported-vendor-id-on-handoff (173)	The total number of sessions disconnected due to unsupported vendor Id in the A11 interface during a handoff.
a11-t-bit-not-set-on-handoff (174)	The total number of sessions disconnected due to t-bit is not set in the A11 interface during a handoff.
MIP-Reg-Revocation-i-bit-on (175)	The total number of Mobile IP sessions disconnected at the PDSN/FA due to Revocation received from HA (with I bit set).
a11-RRQ-Deny-Max-Count (176)	The total number of sessions disconnected due to failures in processing A11-Registration-Request despite retries of the message by the PCF.
Dormant-Transition-During-Session-Setup (177)	The total number of sessions disconnected because they entered the dormant state during session setup. **Note:** Sessions facilitated through PDSN Closed R-P services are always displayed as "Active" due to the fact that PDSN Closed R-P services do not receive dormancy information from the PCF.
PPP-Rem-Reneg-Disc-Always-Cfg (178)	The total number of PPP sessions disconnected because they were renegotiated by the remote side by sending LCP Conf-req/nak/ack and the "always" option was used for the **remote-renegotiation disconnect** command/attribute.
PPP-Rem-Reneg-Disc-NAI-MSID-Mismatch (179)	The total number of PPP sessions disconnected because they were renegotiated by the remote side by sending LCP Conf-req/nak/ack and the "nai-prefix-msid-mismatch" option was used for the **remote-renegotiation disconnect** command/attribute.
mipha-subscriber-ipsec-tunnel-down (180)	The total number of subscribers disconnected because the IPSec tunnel facilitating their sessions went down.
mipha-subscriber-ipsec-tunnel-failed (181)	The total number of subscribers disconnected because an IPSec tunnel failed to be established.
mipha-subscriber-ipsecmgr-death (182)	The total number of subscribers disconnected because the IPSec Manager software task facilitating their sessions crashed.

Field	Description
flow-is-deactivated (183)	The total number of sessions disconnected because their respective flow was deactivated.
ecs-license-exceeded (184)	The total number of sessions disconnected because the licensed session capacity for the Enhanced Charging Service feature has been exceeded.
IPSG-Auth-failed (185)	The total number of sessions disconnected because IPSG authentication failed.
driver-initiated (186)	The total number of sessions disconnected due to driver initiation.
ims-authorization-failed (187)	The total number of sessions disconnected because of IMS authorization failures.
service-instance-released (188)	The total number of sessions disconnected because they were released by the service instances facilitating them.
flow-released (189)	The total number of sessions disconnected because their respective flows were released.
ppp-renego-no-ha-addr (190)	The total number of sessions disconnect because no HA address was supplied during PPP renegotiation.
intra-pdsn-handoff (191)	The total number of sessions disconnected during an intra-PDSN service handoff.
overload-disconnect (192)	The total number of sessions disconnected because the configured overload-disconnect threshold has been exceeded.
css-service-not-found (193)	The total number of sessions because the CSS service specified for handling the session was not found.
Auth-failed (194)	Total number of session authorizations failed due to rejection at OCS (Gy) or other AAA servers.
dhcp-client-sent-release (195)	The total number of sessions disconnected because the DHCP client sent a release.
dhcp-client-sent-nak (196)	The total number of sessions disconnected because the DHCP client sent a negative acknowledge message.
msid-dhcp-chaddr-mismatch (197)	The total number of sessions disconnected because the DHCP Client Hardware (MAC) Address (CHADDR) does not match with MSID of the ASN-GW session.
link-broken(198)	The total number of sessions disconnected because the link between the SGSN and the GGSN is broken resulting in the termination of ongoing Diameter Credit-Control sessions with the DIAMETER_LINK_BROKEN termination-cause.
prog-end-timeout(199)	The total number of sessions disconnected because the allowed BCMCS program limit time expires.

Field	Description
qos-update-wait-timeout(200)	The total number of sessions disconnected because the PDSN failed to update QoS for them.
css-synch-cause(201)	The total number of sessions disconnected because the session-audit between the ACS Manager task and Session Manager disconnects any dangling sessions in the Session Manager.
Gtp-context-replacement(202)	The total number of sessions disconnected due to GTP context replacement.
PDIF-Auth-failed(203)	The total number of sessions disconnected due to PDIF authentication process unable to set up a secure IPSec tunnel to subscriber.
l2tp-unknown-apn(204)	The total number of sessions disconnected due to unknown APN in L2TP message.
ms-unexpected-network-reentry(205)	The total number of sessions disconnected due unexpected network reentry by MS in WiMAX network.
r6-invalid-nai(206)	The total number of sessions disconnected due invalid NAI in R6 message in WiMAX network.
eap-max-retry-reached(207)	The total number of sessions disconnected due maximum retry limit for EAP authentication exhausted in WiMAX network.
vbm-hoa-session-disconnected(208)	vbm-hoa-session-disconnected
vbm-voa-session-disconnected(209)	vbm-voa-session-disconnected
in-acl-disconnect-on-violation(210)	in-acl-disconnect-on-violation
eap-msk-lifetime-expiry(211)	The total number of sessions disconnected due to EAP Master Session Key lifetime expiry in WiMAX network.
eap-msk-lifetime-too-low(212)	The total number of sessions disconnected due to EAP Master Session Key lifetime is too less to allow session.
inter-service-handoff(213)	The total number of sessions disconnected due to inter-service handoff in WiMAX network.
r6-max-retry-reached(214)	The total number of sessions disconnected due to maximum retry limit for R6 message exhausted in WiMAX network.
r6-nwexit-recd(215)	The total number of sessions disconnected due to network exit message received on R6 interface in WiMAX network.
r6-dereg-req-recd(216)	The total number of sessions disconnected due to de-registration message received on R6 interface in WiMAX network.
r6-remote-failure(217)	The total number of sessions disconnected due to remote peer failure on R6 interface in WiMAX network.

Field	Description
r6r4-protocol-errors(218)	The total number of sessions disconnected due to protocol error on R6 and/or R4 interface in WiMAX network.
wimax-qos-invalid-aaa-attr(219)	The total number of sessions disconnected due to invalid AAA attributes for QoS to a subscriber in WiMAX network.
npu-gre-flows-not-available(220)	The total number of sessions disconnected due to requested NPU GRE flow is not available for a subscriber in WiMAX network.
r4-max-retry-reached(221)	The total number of sessions disconnected due to maximum retry limit for R4 message exhausted in WiMAX network.
r4-nwexit-recd(222)	The total number of sessions disconnected due to network exit message received on R4 interface in WiMAX network.
r4-dereg-req-recd(223)	The total number of sessions disconnected due to de-registration message received on R4 interface in WiMAX network.
r4-remote-failure(224)	The total number of sessions disconnected due to remote peer failure on R4 interface in WiMAX network.
ims-authorization-revoked(225)	The total number of sessions disconnected due to IMS authorization revoked.
ims-authorization-released(226)	The total number of sessions disconnected due to IMS authorization released.
ims-auth-decision-invalid(227)	The total number of sessions disconnected due to invalid IMS authorization decision.
mac-addr-validation-failed(228)	The total number of sessions disconnected due to MAC address validation failure in WiMAX network.
excessive-wimax-pd-flows-configured(229)	The total number of sessions disconnected due to excessive packet data flows are configured in WiMAX network.
sgsn-cancel-location-subs-withdrawn(230)	The total number of sessions disconnected due to cancellation of the request to location substitution withdrawn.
sgsn-cancel-location-update(231)	The total number of sessions disconnected because the cancellation of the location update.
sgsn-mnr-expiry(232)	The total number of sessions disconnected due to manager expiry.
sgsn-identity-failure(233)	The total number of sessions disconnected due to identity check failure.
sgsn-security-failure(234)	The total number of sessions disconnected due to security verification failure.
sgsn-auth-failure(235)	The total number of sessions disconnected due to authentication failure.

Field	Description
sgsn-glu-failure(236)	The total number of sessions disconnected due to GLU failure.
sgsn-implicit-detach(237)	**Description:** The total number of sessions disconnected due to an implicit detach. **Trigger:** Pegs when the 2G-SGSN rejects an Attach Request due to same Random-TLLI collision If handling of Random-TLLI collision is enabled via the SGSN Global Configuration mode command 'gmm-message attach-with-tlli-in-use discard-message [only-on-same-nsei]'.
sgsn-subscriber-moved-to-different-smgr-instanc(238)	The total number of sessions disconnected due to subscriber moving to a different SMGR instance.
sgsn-subscriber-moved-to-peer-sgsn(239)	The total number of sessions disconnected due to subscriber moving to a peer SGSN.
sgsn-dns-failure-inter-rau(240)	The total number of sessions disconnected due to DNS failure during Inter-RAU.
sgsn-context-response-failure(241)	The total number of sessions disconnected due to context response failure.
sgsn-hlr-not-found-for-imsi(242)	The total number of sessions disconnected due to HLR not found for particular IMSI.
sgsn-ms-init-detach(243)	The total number of sessions disconnected due to MS initiated detach.
sgsn-roaming-not-allowed(244)	The total number of sessions disconnected because MS was not allowed to roam.
sgsn-duplicate-context(245)	The total number of sessions disconnected due to duplicate context.
hss-profile-update-failed(246)	The total number of sessions disconnected due to failure of profile update.
inactive-without-activating-any-pdp(247)	The total number of sessions disconnected where session is inactive and no PDP context is activated from this session.
asnpc-idle-mode-timeout(248)	The total number of sessions disconnected due to configured idle mode timeout duration is exhausted for ASN paging controller in WiMAX network.
asnpc-idle-mode-exit(249)	The total number of sessions disconnected due to idle mode exit message for ASN paging controller in WiMAX network.
asnpc-idle-mode-entry-auth-failed(250)	The total number of sessions disconnected due to authentication failure during idle mode entry for ASN paging controller in WiMAX network.
asngw-invalid-qos-configuration(251)	The total number of sessions disconnected due to invalid QoS configuration for subscriber in WiMAX network.

Field	Description
sgsn-dsd-allgprswithdrawn(252)	The total number of sessions disconnected due to the SGSN receiving a DSD message from the HLR, with the "All GPRS subscription withdrawn" flag set to true. The SGSN responds as if receiving a cancel location (subscription withdrawn) and clears the subscriber fully using this disconnect reason.
r6-pmk-key-change-failure(253)	The total number of sessions disconnected due to primary master key change failure on R6 interface in WiMAX network.
sgsn-illegal-me(254)	The total number of sessions disconnected because the ME was illegal.
sess-termination-timeout(255)	The total number of sessions disconnected due to failure monitored through BS monitor keep-alive probe.
sgsn-sai-failure(256)	The total number of sessions disconnected due to error in SGSN attachment in registration state.
sgsn-rnc-removal(257)	The total number of sessions disconnected due to error in SGSN inbound SRNS in registration state.
sgsn-rai-removal(258)	The total number of sessions disconnected due to error in Update PDP Context Response message for direct tunnel functionality. Direct tunnel functionality at GGSN was expecting some fields which were not received in the Update PDP Context Response message. Hence, GGSN was not able to establish tunnel appropriately with SGSN or RNC.
sgsn-init-deact(259)	The total number of sessions disconnected at SGSN due to unknown PDP context.
ggsn-init-deact(260)	The total number of sessions disconnected at SGSN due to PDP authentication failed.
hlr-init-deact(261)	The total number of sessions disconnected at SGSN due to duplicate PDP context
ms-init-deact(262)	The total number of sessions disconnected at SGSN due to no response from GGSN.
sgsn-detach-init-deact(263)	The total number of sessions disconnected at SGSN due to failed response from GGSN.
sgsn-rab-rel-init-deact(264)	The total number of sessions disconnected at SGSN due to unknown APN.
sgsn-iu-rel-init-deact(265)	The total number of sessions disconnected at SGSN due to service request initiated deactivation.
sgsn-gtpu-path-failure(266)	The total number of sessions disconnected at SGSN due to attachment procedure initiated abort.
sgsn-gtpc-path-failure(267)	The total number of sessions disconnected at SGSN due to ISRAU initiated abort procedure.

Field	Description
sgsn-local-handoff-init-deact(268)	The total number of sessions disconnected at SGSN due to unknown APN.
sgsn-remote-handoff-init-deact(269)	The total number of sessions disconnected at SGSN due to MM context cleanup initiated abort procedure.
sgsn-gtp-no-resource(270)	The total number of sessions disconnected at SGSN due to unknown abort procedure.
sgsn-rnc-no-resource(271)	The total number of sessions disconnected at SGSN due to abort procedure started by guard timeout.
sgsn-odb-init-deact(272)	The total number of sessions disconnected at SGSN due to abort procedure initiated on DHCP IP validate request.
sgsn-invalid-ti(273)	The total number of sessions disconnected due to id mismatch in MIPv6 session.
sgsn-actv-rejected-due-to-rnc(274)	The total number of sessions disconnected as AAA session id not-found
sgsn-apn-restrict-vio(275)	The total number of sessions disconnected due to security associate rekeying failure.
sgsn-actv-rejected-by-sgsn(276)	The total number of sessions disconnected due to failure in relocation in ASN-PC service.
sgsn-abnormal-deact(277)	The total number of sessions disconnected due to failure in paging controller relocation in ASN PC service.
sgsn-actv-rejected-by-ggsn(278)	The total number of sessions disconnected due to mismatch in authentication policy.
sgsn-err-ind(279)	The total number of sessions disconnected as DELETE MS ENTRY message received by the ASN Paging Controller.
asngw-non-anchor-prohibited(280)	The total number of sessions disconnected due to non-anchor ASN GW being prohibited.
asngw-im-entry-prohibited(281)	The total number of sessions disconnected due to unknown reason.
Session-idle-mode-entry-timeout(282)	The total number of sessions disconnected Administratively.
session-idle-mode-exit-timeout(283)	The total number of sessions disconnected by remote system
asnpc-ms-power-down-nwexit(284)	The total number of sessions disconnected by local system.
asnpc-r4-nwexit-recd(285)	The total number of sessions disconnected due to non-availability of resources.
sgsn-iu-rel-before-call-est(286)	The total number of sessions disconnected because of Iu Release during call establishment when service limits exceeded.

Field	Description
ikev2-subscriber-ipsecmgr-death(287)	The total number of sessions disconnected due to LCP negotiation failed.
All-dynamic-pool-addr-occupied(288)	The total number of sessions disconnected due to no response in PPP-LCP session.
mipv6ha-ip-addr-not-available(289)	The total number of sessions disconnected due to loop back detected in PPP-LCP.
bs-monitor-keep-alive-failed(290)	The total number of sessions disconnected due to failure monitored through BS monitor keep-alive probe.
sgsn-attach-in-reg-state(291)	The total number of SGSN sessions disconnected due to an error in the SGSN attachment during the registration state.
sgsn-inbound-srns-in-reg-state(292)	The total number of SGSN sessions disconnected due to an error in the SGSN inbound SRNS in a registration state.
dt-ggsn-tun-reestablish-failed(293)	The total number of SGSN sessions disconnected due to error in Update PDP Context Response message for direct tunnel functionality. Direct tunnel functionality at GGSN was expecting some fields which were not received in the Update PDP Context Response message. Hence, the GGSN was not able to establish a tunnel appropriately with the SGSN or the RNC.
sgsn-pdp-unknown(294)	The total number of SGSN sessions disconnected due to an unknown PDP context.
sgsn-pdp-auth-failure(295)	The total number of SGSN sessions disconnected because the PDP authentication failed.
sgsn-duplicate-pdp-context(296)	The total number of SGSN sessions disconnected due to duplicate PDP contexts.
sgsn-no-rsp-from-ggsn(297)	The total number of SGSN sessions disconnected because the SGSN does note receive a response from the GGSN.
sgsn-failure-rsp-from-ggsn(298)	The total number of SGSN sessions disconnected due to failed response from the GGSN.
sgsn-apn-unknown(299)	The total number of SGSN sessions disconnected due to an unknown APN.
sgsn-pdp-status-mismatch(300)	The total number of SGSN sessions disconnected due to deactivation initiated by a service request.
sgsn-attach-on-attch-init-abort(301)	The total number of SGSN sessions disconnected due to an attachment procedure-initiated abort.
sgsn-iu-rel-in-israu-init-abort(302)	The total number of SGSN sessions disconnected due to an ISRAU-initiated abort procedure.

Field	Description
sgsn-smgr-init-abort(303)	The total number of SGSN sessions disconnected because the SessMgr initiates an abort.
sgsn-mm-ctx-cleanup-init-abort(304)	The total number of SGSN sessions disconnected due to the MM context cleanup-initiated abort procedure.
sgsn-unknown-abort(305)	The total number of SGSN sessions disconnected due to an unknown abort procedure.
sgsn-guard-timeout-abort(306)	The total number of SGSN sessions disconnected because the abort procedure was started by the guard timer timeout.
vpn-bounce-dhcpip-validate-req(307)	The total number of SGSN sessions disconnected because the abort procedure was initiated upon receiving a DHCP IP validate request.
mipv6-id-mismatch(308)	The total number of sessions disconnected due to id mismatch in MIPv6 session.
aaa-session-id-not-found(309)	The total number of sessions disconnected as AAA session id not-found
x1/x5-max-retry-reached(310)	The total number of sessions disconnected due to security associate rekeying failure.
x1-nwexit-recd(311)	The total number of sessions disconnected due to failure in relocation in ASN-PC service.
x1-dereg-req-recd(312)	The total number of sessions disconnected due to failure in paging controller relocation in ASN PC service.
x1-remote-failure(313)	The total number of sessions disconnected due to mismatch in authentication policy.
x1x2-protocol-errors(314)	The total number of sessions disconnected as DELETE MS ENTRY message received by the ASN Paging Controller.
x2/x6-max-retry-reached(315)	The total number of sessions disconnected because the ASNGW TID entry was not found.
x2/x6-nwexit-recd(316)	The total number of sessions disconnected due to network exit message received on X2 interface in PHS network.
x2-dereg-req-recd(317)	The total number of sessions disconnected due to deregistration request received on X2 interface in PHS network.
x2-remote-failure(318)	The total number of sessions disconnected by remote system due to failure on X2 interface in PHS network.
x1-pmk-key-change-failure(319)	The total number of sessions disconnected due to primary master key change failure on X1 interface in PHS network.
SA-Rekeying-Failure(320)	The total number of sessions disconnected due to security associate rekeying failure.

Field	Description
Sess-sleep-mode-entry-timeout(321)	The total number of sessions disconnected due to session sleep mode entry timeout on PHS GW.
phsgw-non-anchor-prohibited(322)	The total number of sessions disconnected due to non-anchor PHS GW being prohibited.
asnpc-pc-relocation-failed(323)	The total number of sessions disconnected due to failure in relocation in ASN-PC service.
asnpc-pc-relocation(324)	The total number of sessions disconnected due to failure in paging controller relocation in ASN PC service.
auth_policy_mismatch(325)	The total number of sessions disconnected due to mismatch in authentication policy.
ike/ipsec-sa-lifetime-expired(326)	The total number of sessions disconnected due to IKE/IPsec security associate lifetime timer expiration.
asnpc-del-ms-entry-recd(327)	The total number of sessions disconnected as DELETE MS ENTRY message received by the ASN Paging Controller.
phspc-sleep-mode-timeout(328)	The total number of sessions disconnected due to sleep mode timeout by the PHS Paging Controller.
phspc-sleep-mode-exit(329)	The total number of sessions disconnected due to sleep mode exit by the PHS Paging Controller.
phspc-sleep-mode-entry-auth-failed(330)	The total number of sessions disconnected due to failed sleep mode entry authorization by the PHS Paging Controller.
phspc-ms-power-down-nwexit(331)	The total number of sessions disconnected due to ms power down network exit message received by the PHS Paging Controller.
phspc-x6-nwexit-recd(332)	The total number of PHS Paging Controller sessions disconnected due to network exit message received from X2 interface in PHS network.
invalid-nat-config(333)	The total number of sessions disconnected due to the following reasons: 1. SessMgr and ACSMgr are running in non-optimized mode. 2. An undefined NAT pool is configured for subscriber. NAT must be disabled if ACS is not running in optimized mode.
asngw-tid-entry-not-found(334)	The total number of sessions disconnected because the ASNGW TID entry was not found.
No-NAT-IP-Addr-for-subscriber(335)	The total number of sessions disconnected due to NAT IP address being unavailable during call setup for allocation to a subscriber.
excessive-phs-pd-flows-configured(336)	The total number of sessions disconnected due to configuration of excessive PHS pd flows.

Field	Description
phsgw-invalid-qos-configuration(337)	The total number of sessions disconnected due to invalid QoS configuration for subscriber in PHS network.
Interim-Update(338)	The total number of sessions disconnected due to Interim Update.
sgsn-inbound-attach-abort-radio-status-bad-lost(339)	The total number of SGSN sessions disconnected because the inbound attach requests aborted due to poor radio status or lost radio connections.
sgsn-inbound-irau-abort-radio-status-bad-lost(340)	The total number of SGSN sessions disconnected due to inbound IRAU requests aborting as the radio status was poor or the radio connection lost.
ike-keep-alive-failed(341)	The total number of sessions disconnected due to IKE keepalive failure.
sgsn-attach-abort-ms-suspend(342)	The total number of SGSN sessions disconnected due to attach requests aborting because MS was in suspend mode.
sgsn-inbound-irau-abort-ms-suspend(343)	The total number of SGSN sessions disconnected due to IRAU requests aborted when MS was in suspend mode.
duplicate-session-detected(344)	The total number of sessions disconnected due to detection of duplicate sessions for the same session id.
sgsn-xid-response-failure(345)	The total number of SGSN sessions disconnected due to XID response failure.
sgsn-nse-cleanup(346)	The total number of SGSN sessions disconnected due to record cleanup or reset on the network service entity (NSE).
sgsn-gtp-req-failure(347)	The total number of SGSN sessions disconnected due to failure of the GTPP request.
sgsn-imsi-mismatch(348)	The total number of SGSN sessions disconnected due to mismatches of the IMSIs.
sgsn-bvc-blocked(349)	The total number of SGSN sessions disconnected because the BSSGP Virtual Connection (BVC) was blocked.
sgsn-attach-on-inbound-irau(350)	The total number of SGSN sessions disconnected as the session was attached on inbound IRAU requests.
sgsn-attach-on-outbound-irau(351)	The total number of SGSN sessions disconnected while the session was attached on outbound IRAU requests.
sgsn-incorrect-state(352)	The total number of SGSN sessions disconnected due to incorrect state of network elements.
sgsn-t3350-expiry(353)	The total number of SGSN sessions disconnected due to expiry of the T-3350 timer.

Field	Description
sgsn-page-timer-expiry(354)	The total number of SGSN sessions disconnected due to expiry of the paging timer.
phsgw-tid-entry-not-found(355)	The total number of SGSN sessions disconnected due to local purging of PDP contexts.
sgsn-pdp-local-purge(357)	The total number of SGSN sessions disconnected due to local purging of PDP contexts.
sgsn-offload-phase2(360)	With Iu/Gb flex enabled, this is the total number of SGSN sessions disconnected when the subscribers has been forcefully cleared via phase2 offloading from one SGSN to another SGSN within the SGSN pool.
Remote-error-notification(362)	The total number of sessions disconnected due to remote error notification.
no-response(363)	The total number of sessions disconnected due to no response from any of the network entity.
PDG-Auth-failed(364)	The total number of sessions disconnected due to re-authorization failure at any stage.
mme-s1AP-send-failed(365)	The total number of sessions disconnected due to message sent on S1AP interface failed.
mme-egtpc-connection-failed(366)	The total number of sessions disconnected as connection between MME and eGTP service/node failed due to any reason.
mme-egtpc-create-session-failed(367)	The total number of sessions disconnected as session creation failed between MME and eGTP service/node.
mme-authentication-failure(368)	The total number of sessions disconnected as authentication procedure failed between MME and HSS.
mme-ue-detach(369)	The total number of sessions disconnected as UE detached explicitly.
mme-mme-detach(370)	The total number of sessions disconnected on serving MME due to detach procedure occurred between anchored MME and service MME.
mme-hss-detach(371)	The total number of sessions disconnected due to DETACH procedure started from HSS.
mme-pgw-detach(372)	The total number of sessions disconnected due to DETACH procedure started from P-GW.
mme-sub-validation-failure(373)	The total number of sessions disconnected as subscriber validation failed at MME or HSS during authentication procedure.
mme-hss-connection-failure(374)	The total number of sessions disconnected due to connection failure between MME and associated HSS during authentication procedure.

Field	Description
mme-hss-user-unknown(375)	The total number of sessions disconnected by MME service due to UNKNOWN USER response from HSS during authentication procedure.
dhcp-lease-mismatch-detected(376)	The total number of sessions disconnected due to mismatch in DHCP lease time mismatch.
nemo-link-layer-down(377)	The total number of disconnected sessions due to the NEMO (Network Mobility) link layer being down.
sgsn-offload-phase3(379)	With Iu/Gb flex enabled, this is the total number of SGSN sessions disconnected when the subscribers has been forcefully cleared via phase3 offloading from one SGSN to another SGSN within the SGSN pool.
mbms-bearer-service-disconnect(380)	The total number of sessions disconnected due to disconnect in MBMS bearer service.
disconnect-on-violation-odb(381)	The total number of sessions disconnected due to violation on Operator Determined Barring (ODB) of services.
disconn-on-violation-focs-odb(382)	The total number of sessions disconnected due to violation on Operator Determined Barring (ODB) of Free-of-Charge Service (FOCS).
CSCF-REG-Admin-disconnect(383)	The total number of CSCF sessions disconnected through CLI registration clearing by administrator.
CSCF-REG-User-disconnect(384)	The total number of CSCF sessions disconnected by UE with an explicit deregister message.
CSCF-REG-Inactivity-timeout(385)	The total number of CSCF sessions disconnected due to registration expiry.
CSCF-REG-Network-disconnect(386)	The total number of CSCF sessions disconnected due to network-initiated deregistration.
CSCF-Call-Admin-disconnect(387)	The total number of CSCF sessions disconnected through CLI call clearing by administrator.
CSCF-Call-User-disconnect(388)	The total number of CSCF sessions disconnected by UE using BYE message.
CSCF-CALL-Local-disconnect(389)	The total number of CSCF sessions disconnected locally due to some processing failure, task death, recovery failure, etc.
CSCF-CALL-No-Resource(390)	The total number of CSCF sessions disconnected because locally due to congestion caused by max calline/flow usage from high cpu/memory utilization in sessmgr.
CSCF-CALL-No-Response(391)	The total number of CSCF sessions disconnected due to response timeout (SIP response code 408).

Field	Description
CSCF-CALL-Inactivity-timeout(392)	The total number of CSCF sessions disconnected due to session timer timeout
CSCF-CALL-Media-Auth-Failure(393)	The total number of CSCF sessions disconnected due to media authorization failure.
CSCF-REG-No-Resource(394)	The total number of CSCF sessions disconnected because register message is rejected due to congestion caused by max calline/flow usage from high cpu/memory utilization in sessmgr.
ms-unexpected-idle-mode-entry(395)	The total number of sessions disconnected while MS unexpectedly started the IDLE mode procedure and enters the Idle mode.
Re-Auth-failed(396)	The total number of sessions disconnected during re-authentication when MS started activation after coming out of idle mode.
sgsn-pdp-nse-cleanup(397)	The total number of SGSN sessions disconnected because the NSE configured in the GPRS service is removed and there are PDP contexts associated with the subscribers attached in this NSE.
sgsn-mm-ctxt-gtp-no-resource(398)	The total number of SGSN sessions disconnected because an SGTP service could not be assigned to an MM context.
unknown-apn(399)	The total number of sessions disconnected due to invalid and/or unknown APN name received from AAA or subscriber template.
gtpc-path-failure(400)	The total number of sessions disconnected due to failure of GTP-C interface path between two nodes.
gtpu-path-failure(401)	The total number of sessions disconnected due to failure of GTP-U interface path between two nodes.
actv-rejected-by-ggsn(402)	The total number of sessions disconnected due as session activation procedure, started by an MS which was in idle mode, was rejected by GGSN.
sgsn-pdp-gprs-camel-release(403)	The total number of PDP activation failures due to release from CAMEL. *This counter is visible but not yet fully supported.*
sgsn-check-imei-failure(404)	The total number of of Attaches / RAUs rejected due to failure in the IMEI checking (i.e. due either to black listing or to grey listing and an SGSN operator policy is configured with deny-grey-list).
sgsn-sndcp-init-deact(405)	The total number of PDP contexts deactivated upon receiving a cleanup indication from the SNDCP layer.
sgsn-pdp-inactivity-timeout(406)	The total number of subscribers detached or PDP context(s) deactivated due to subscriber inactivity during a configured (in the SGSN operator policy) time.
No-IPV6-address-for-subscriber(410)	The total number of disconnects due to No-IPv6-address-for-subscriber.

Field	Description
prefix-registration-failure(411)	The total number of disconnects due to prefix-registration-failure.
disconnect-from-policy-server(412)	The total number of sessions disconnected due to disconnect from policy server.
s6b-auth-failed (413)	The total number of subscriber sessions disconnected due to failure of authentication over S6b interface with HSS. This support is added for interoperability of GGSN with P-GW and HA.
gtpc-err-ind(414)	The total number of sessions disconnected due to a GTP control plane error indication message.
gtpu-err-ind(415)	The total number of sessions disconnected due to a GTP user plane error indication message.
invalid-pdn-type(416)	The total number of sessions disconnected due to an invalid PDN-type error.
aaa-auth-req-failed(417)	The total number of sessions disconnected due to a AAA authentication request failure.
apn-denied-no-subscription (418)	The total number of subscriber sessions disconnected due to denial of APN as requested APN was not subscribed to subscriber.
sgw-context-replacement(419)	The total number of sessions disconnected due to an S-GW context replacement.
dup-static-ip-addr-req (420)	The total number of subscriber sessions disconnected due to new session request received with duplicate IP address at GGSN. This support is added for interoperability of GGSN with P-GW and HA.
apn-restrict-violation (421)	The total number of subscriber sessions disconnected due to violation of level of restriction to ensure controlled co-existence of the Primary PDP Contexts in APN.
invalid-wapn(422)	The total number of sessions disconnected due to invalid or no W-APN details received from the UE.
ttg-nsapi-allocation-failed(423)	The total number of TTG sessions disconnected due to an NSAPI (Network Service Access Point Identifier) allocation failure.
mandatory-gtp-ie-missing(424)	The total number of sessions disconnected due to the unavailability of a mandatory GTP Information-Element during PDP context creation.
aaa-unreachable(425)	The total number of sessions disconnected due to unreachable AAA server.

Field	Description
asngw-service-flow-deletion(426)	Sent in the Accounting-Stop message for the particular service flow when that service flow is deleted by the Network- or MS-initiated service flow detection procedure.
CT-PMIP-RRQ-NVSE-Value-Change(427)	he total number of disconnects resulting from a PMIP (Proxy-MIP) registration request (RRQ) returning an NVSE (Normal/Vendor organization Special Extension) value change [WiMAX].
tcp-read-failed (428)	The total number of disconnected IP-CAN sessions due to a TCP read failure.
tcp-write-failed (429)	The total number of disconnected IP-CAN sessions due to a TCP write failure.
ssl-handshake-failed (430)	The total number of disconnected SSL ssessions due to a handshake failure.
ssl-renegotiate-failed (431)	The total number of disconnected SSL ssessions due to a renegotiation failure.
ssl-bad-message (432)	The total number of disconnected SSL ssessions due to corrupted messages.
ssl-alert-received (433)	The total number of disconnected SSL ssessions due to an alert.
ssl-disconnect (434)	The total number of SSL disconnections.
ssl-migration (435)	The total number of SSL migrations.
sgsn-ard-failure(436)	The total number of session disconnects due to ARD (access restriction data) subscription restriction received from the HLR.
sgsn-camel-release(437)	The total number of session disconnects experienced by the SGSN when Detach/Attach Rejects were due to explicit "Release GPRS" received from the CAMEL component GSM-SCF or due to failures during CAMEL handling.
sgsn-egtpc-connection-failed(438)	Replaced by sgsn-egtpc-create-session-failed(439) in Release 14.0.
sgsn-egtpc-create-session-failed(439)	Supported in Release 14.0 The total number of session disconnects occurring when the S4-SGSN is not able to establish a PDP context when the SGW returned a failure cause in "Create Session Response" or the SGW did not respond at all to "Create Session Request". Counter
sgsn-hss-detach(440)	Replaced by sgsn-cancel-location-subs-withdrawn(230) in Release 14.0.
sgsn-hss-connection-failure(441)	Replaced by sgsn-glu-failure(236) in Release 14.0
sgsn-pgw-detach(442)	Not yet supported.

Field	Description
sgsn-s5-s8-no-support-for-apn(443)	Supported in Release 14.0. The total number of session disconnects resulting from the S4-SGSN's inability to establish a PDP context for an APN in the following scenario: **1.** An EPS subscription is used for a subscriber. **2.** The SGSN tries to find an S5 / S8 address of the PGW for the requested APN. **3.** The DNS response does not contain an S5/S8 address. **4.** The PDP activation is rejected.
sgsn-no-rab-for-gbr-bearer(444)	Not yet supported. In development for future use.
sgsn-sgw-selection-failure(445)	Supported in Release 14.0. The total number of session disconnects resulting from the S4-SGSN's inability to establish a PDP context in the following scenario: **1.** Either EPS or GPRS subscription is used. **2.** S4-SGSN chooses S4 interface for PDP activation because • The UE is EPC-capable. • EGTP service is configured. • Operator Policy does not override the core-nw-interface to Gn. **3.** The SGSN successfully resolves P-GW address (S5/S8 address) for the APN requested. **4.** The SGSN tries S-GW resolution. If the DNS response fails and no local S-GW is configured for the RAI, then the PDP activation is reected with this disconnect reason.
sgsn-pgw-selection-failure(446)	Supported in Release 14.0. The total number of sessions disconnected by the S4-enabled SGSN when the P-GW DNS resolution fails due to any cause other than the DNS response does not contain an S5/S8 address.
wimax-hotlining-status-change(447)	The total number of disconnects resulting from a status change in the Hotlining-Capabilities sub-attribute in the WiMAX-Capabilities attribute.
ggsn-no-rsp-from-sgsn(448)	The total number of sessions disconnected on GGSN node due to no response received from SGSN for a request.
diameter-protocol-error(449)	The total number of sessions disconnected on IPCF node due to an error in Diameter protocol (such as, CCR-I parse failure).

Field	Description
diameter-request-timeout(450)	The total number of sessions disconnected on IPCF node due to Diameter (RAR/ASR) request timeout on IPCF node.
operator-policy(451)	The total number of session disconnected on IPCF node due to parameters configured by operator for PCC policy.
spr-connection-error(452)	The total number of sessions disconnected on IPCF node due to an error in connection between SSC and IPCF node or non-availability of SSC.
mipha-dup-wimax-session(453)	The total number of WiMAX session disconnects resulting from duplicate Mobile IP Home Agent (MIPHA) logins.
invalid-version-attr(454)	This disconnect reason is set, if there is mismatch of WiMAX-Release version supported by ASNGW and that supported by AAA. This statistic is incremented when there is a mismatch of WiMAX-Release version supported by ASNGW and that supported by AAA. AAA sends WiMAX release in Radius packet. This statistic is cumulative for all ASNGW services configured on the system.
sgsn-zone-code-failure(455)	The total number of session disconnects experienced by the SGSN due to verification failure during the zone-code checking procedure.
invalid-qci(456)	The total number of session disconnects resulting from the receipt of invalid QoS class identifiers (QCIs). This error is returned if an invalid QCI is used in certain operations such as create bearer, which expects a QCI. A QCI is deemed invalid if it is not a standard QCI (1-9) or the QCI is not defined in the QCI table associated with the service.
no_rules(457)	This session disconnect counter increases for eGCDR when the call is terminated because of the PCRF deleting a rulebase through RAR.
sgsn-rnc-no-dual-pdp-init-pdp-deact(458)	Indicates the number of times the SGSN has deactivated a PDP because the MS/UE has roamed into an area where the RNC does not support dual PDP types. Deactivation would have been done with cause code "reactivation required".
mme-init-ctxt-setup-failure(459)	The total number of session disconnects resulting from context setup failures in the ENodeB during EMM/ECM procedures.
mme-driver-initiated(460)	The total number of session disconnects resulting from the default value for mme-sessions.
mme-s1ap-connection-down(461)	The total number of session disconnects resulting from S1AP connection failures.
mme-s1ap-reset-recd(462)	The total number of session disconnects resulting from partial or full resets received for the S1 connection.
mme-s6a-response-timeout(463)	The total number of session disconnects resulting from requests to the HSS that timed out (AIR or ULR).

Field	Description
mme-s13-response-timeout(464)	The total number of session disconnects resulting from EIR query time outs.
mme-Illegal-equipment(465)	The total number of session disconnects resulting from EIR query failures.
mme-unexpected-attach(466)	The total number of session disconnects resulting from older sessions getting disconnected due to the UE executing an ATTACH procedure.
mme-sgw-selection-failure(467)	The total number of session disconnects resulting from failed selections of S-GWs for the UE's current location.
mme-pgw-selection-failure(468)	The total number of session disconnects resulting from failed selections of P-GWs for default APNs.
mme-reselection-to-sgsn(469)	The total number of session disconnects resulting from a context request from an SGSN relocated call to 3G.
mme-relocation-to-sgsn(470)	The total number of session disconnects resulting from calls transitioned to an SGSN using handover signaling.
mme-reselection-to-mme(471)	The total number of session disconnects resulting from a context request from an MME relocated call to a different MME.
mme-relocation-to-mme(472)	The total number of session disconnects resulting from calls transitioned to an MME using handover signaling.
mme-tau-attach-collision(473)	The total number of session disconnects resulting from processing a TAU request with a foreign GUTI that cleared an existing session on the MME.
mme-old-sgsn-resolution-failure(474)	The total number of session disconnects resulting from calls setup using a PTMSI that failed due to failure in resolution of the old SGSN context.
mme-old-mme-resolution-failure(475)	The total number of session disconnects resulting from calls setup using a foreign GUTI that failed due to a failure in resolution of the old MME context.
mme-reloc-ho-notify-timeout (476)	The total number of session disconnects resulting from a handover based session origination failure due to an ho-notify timeout.
mme-reloc-ho-req-ack-timeout(477)	The total number of session disconnects resulting from a handover based session origination failure due to an ho-request-ack timeout.
mme-create-session-timeout(478)	The total number of session disconnects resulting from a create session request to the S-GW that timed out.
mme-create-session-failure(479)	The total number of session disconnects resulting from a create session request to the S-GW that returned a failure response.
mme-s11-path-failure(480)	The total number of session disconnects resulting from a call cleared due to an S11 path failure.

Field	Description
mme-policy-no-ue-irat(481)	The total number of session disconnects resulting from a call cleared due to policy restrictions on inter-rat handovers.
mme-x2-handover-failed(482)	The total number of session disconnects resulting from a call cleared due to failures in x2 handovers.
mme-attach-restrict(483)	The total number of session disconnects resulting from an operator policy based attach restriction.
mme-regional-zone-code(484)	In StarOS 15.0 and earlier releases: The total number of session disconnects resulting from the UE being in a zone code where the UE is not allowed to roam. This information is also available from the following counter: mme-zone-code-validation-failed(492).
mme-reloc-to-non-3GPP(484)	In StarOS 16.0 and later releases: The total number of session disconnects resulting from outbound EUTRAN to Non-3GPP handovers.
mme-no-response-from-ue(485)	The total number of session disconnects resulting from the maximum retransmission of a NAS message during session setup.
mme-sgw-relocation-failed(486)	The total number of session disconnects resulting from an S-GW relocation procedure failing.
mme-implicit-detach(487)	The total number of session disconnects resulting from the UE being implicitly detached due to inactivity.
sgsn-detach-notify(488)	Replaced by sgsn-isr-mme-init-detach(505) in Release 14.0.
policy-initiated-release(489) in StarOS 12.1 and earlier releases	
emergency-inactivity-timeout (489) in StarOS 12.2 and later releases	The total number of sessions disconnected due to emergency inactivity timeout. The emergency session inactivity timeout is set on an APN configured as an emergency APN for VoLTE-based E911 support.
gy-result-code-system-failure (490) in StarOS 12.1 and earlier releases	The total number of sessions disconnected due to failure result codes received from the Online Charging Server that resulted in system failure on the GTP side.
policy-initiated-release(490) in StarOS 12.2 and later releases	The total number of times that a call disconnect occurs due to a Gx-initiated bearer release. For example, this disconnect reason may be used if there are any errors in the manner of the policy or rule configurations.
emergency-inactivity-timeout (491) in StarOS 12.1 and earlier releases	The total number of sessions disconnected due to emergency inactivity timeout. The emergency session inactivity timeout is set on an APN configured as an emergency APN for VoLTE-based E911 support.

Field	Description
gy-result-code-system-failure (491) in StarOS 12.2 and later releases	The total number of sessions disconnected due to failure result codes received from the Online Charging Server that resulted in system failure on the GTP side.
mme-zone-code-validation-failed(492)	The total number of session disconnects resulting from the UE being in a zone code where the UE is not allowed to roam.
sgsn-pgw-init-deact(493)	Supported in Release 14.0. The total number of session disconnects resulting from an initial deactivation between the SGSN and the P-GW when the P-GW sends "Delete Bearer Request" to deactivate a PDP or a PDP bundle.
s6b-ip-validation-failed(494)	Not supported in releases 12.0 or 12.2 . Supported in release 14.0 and later. The total number of session disconnects resulting from an IP validation failure on the S6b (3GPP AAA) interface.
sgsn-failure-rsp-from-sgw(495)	The total number of session disconnects resulting from the SGSN receiving a failure response from the S-GW. This occurs in any of the following scenarios: • The UE has successfully attached and activated the PDP contexts through the S4 interface and then the UE does a RAU to a new RA. During this RAU, the SGSN will do S-GW selection for the new RA. If the SGSN selects a new S-GW for this RA and sends "Create Session Request" to the new S-GW to setup a tunnel. But the new S-GW does not respond or the responds with a failure cause. The SGSN deactivates the PDP with this disconnect cause. • In the case of a new-SGSN RAU without S-GW relocation, the new-SGSN sends "Modify Bearer Req" to inform the S-GW that the UE has moved to the new-SGSN but the SGSN does not receive any response from the S-GW. • During intra-SGSN RAU with a change in the PLMN but without a change in the S-GW. In this case, SGSN will send "Modify Bearer Req" to inform the S-GW of the change in PLMN ID but SGSN does not receive any response from the S-GW. • During intra-SGSN 3G-to-2G or 2G-to-3G inter-RAT RAU without an S-GW change. In this case, the SGSN sends "Modify Bearer Req" to inform the S-GW of the change in RAT type but the SGSN dpes not receive any response from the S-GW.
tcp-remote-close (496)	The total number of sessions disconnected due to a TCP FIN (finished sending) message received from the UE.
tcp-reset-received (497)	The total number of sessions disconnected due to a TCP RST (reset) message received from the UE.

Field	Description
tcp-socket-error (498)	The total number of sessions disconnected due to a socket error received from the trek stack at the access-side TCP socket connection between the UE and the TTG.
ptmsi-signature-mismatch(499)	The number of times the SGSN was unable to validate the P-TMSI signature, present in the Attach Request, against the PTMSI-SIGNATURE stored in SGSN. The SGSN sent an Attach Reject to MS if it did not match. This occurs when the GPRS service is configured to reject Attaches with mismatching P-TMSI-signature. This configuration is used to prevent collision of 2 Attach procedures from 2 subscribers with the same P-TMSI and then quickly enforces an IMSI Attach.
camel-invalid-configuration(500)	The number of times the SGSN has encountered an invalid Customized Applications for Mobile network Enhanced Logic (CAMEL) configuration. This condition typically occurs when a subscriber moves from 3G service to 2G service or vice versa and the CAMEL service is associated only in the source service but not in the target service. In such cases, RAU requests are rejected with disconnect reason "camel-invalid-configuration".
4Gto3G-context-replacement(501)	Supported in Release 14.0. The total number of times a PGW call has been cleared when a new call request came on GGSN and PGW already had a call with the same IMSI. ISR is enabled.
mme-isr-sgsn-init-detach(502)	Supported in Release 14.0. The total number of times an MME, with IRS enabled, deletes a subscriber to detach the UE after receiving an S3 Detach Notification from the SGSN with cause code "complete detach".

Field	Description
sgsn-isr-addl-ptmsi-rai(503)	The total number times the SGSN has disconnected a session because the SGSN has sent an additional P-TMSI Attach request during ISR. This cause is used to peg the clearing of stale contexts. This can occur in the following scenario: **1.** The UE is registered with both the MME and the SGSN and ISR is active. **2.** Due to one of the reasons mentioned in Annex J.6 of TS 23.401, ISR is deactivated at the UE but has not deactivated at either the SGSN or the MME which means the UE's last point of attachment at the time of ISR deactivation is the MME. **3.** Now the UE does a RAU to the SGSN. The UE will send old-RAI mapped from the GUTI (since the ISR is deactivated and the UE's last point of attachment was the MME) and also an additional RAI / P-TMSI which is the P-TMSI/RAI given by the SGSN at the time of ISR activation in step 1. This additional P-TMSI / RAI helps the SGSN to locate the stale UE context and clean it up. (The SGSN received a RAU with an old-RAI mapped from the GUTI so the SGSN needs to build a fresh UE context by fetching information from the MME - "Context Req/Rsp/Ack".)
sgsn-sgw-dbr-cause-isr-deact(504)	The number of times "Delete Bearer Requests" occurred between the SGSN and the S-GW due to ISR being deactivated. This occurs when the SGSN locally deactivate PDP contexts after receiving "Delete Bearer Requests" with cause "ISR Deactivation" from the S-GW.
sgsn-isr-mme-init-detach(505)	The number of times Init Detach occurred between the SGSN and the MME with ISR activated. This occurs when the SGSN receives "S3 Detach Notification" with cause "Complete Detach" from the MME.
mme-sgw-dbr-cause-isr-deact(506)	Supported in Release14.0. The number of times Delete Bearer Requests occurred between MME and SGW due to ISR being deactivated.
sgsn-ptmsi-crunch(507)	The total number of sessions disconnected by the SGSN when there is a shortage of P-TMSIs which can occur when the number of possible subscribers per SessMgr has increased (with a PSC3) but the number of local NRI has not been increased in the configuration.
3Gto4G-context-replacement(508)	Supported in Release14.0. The total number of times a GGSN call has been cleared when a new call request came on PGW and GGSN already had a call with the same IMSI. Idle mode Signaling Reduction (ISR) is enabled.
sgsn-actv-reject-on-dns-failure(509)	Never used. Removed in Release 14.0.

Field	Description
mme-no-eps-bearers-activated(509)	Supported in Release14.0. The number of times the MME has rejected a TAU Attach Request due to any of the following reasons: • EPS Context Status IE value = 0 (which implies no EPS bearers were active in UE). • The SGSN Context Response received by the MME did not have any PDP Contexts or the Response which included the PDP Contexts encountered basic decoding issues (like incorrectly encoded APN, etc.).
sgsn-cancel-loc-inital-attach(513)	Supported in Release14.0. The number of times a subscriber disconnects due to CLR with "initial attach procedure" as the cancellation type.
Local-fallback-timeout(514)	The total number of times the call gets disconnected due to the local policy timeout when Gx is not reachable.
sgsn-nrspca-actv-rej-by-sgsn(515)	The total number of times the network requested secondary PDP context activation (NRSPCA) procedure did not complete successfully for any reason other than the MS rejecting the procedure by sending a Request Secondary PDP Context Activation Reject message to the SGSN.
sgsn-nrspca-actv-rej-by-ms(516)	The total number of times the MS rejects the NRSPCA procedure by sending Request Secondary PDP Context Activation Reject message to the SGSN.
ims-authorization-config-delete(517)	The total number of times the sessions are disconnected due to IMS Authorization configuration being deleted.
sgsn-no-ptmsi-signature(518)	The total number of times the SGSN disconnects a subscriber (from an MME) because no PTMSI-signature was included in the RAU Request.
ePDG-dns-server-not-reachable(519)	The total number of disconnected sessions due to DNS server not reachable.
ePDG-dns-no-resource-records(520)	The total number of disconnected sessions when no valid record is fetched from DNS server.
ePDG-dns-no-service-params(521)	The total number of disconnected sessions when the fetched service parameters from DNS record does not match the configured protocol (GTP/PMIPv6).
pgw-sel-dns-server-nt-reachable(519) Release 15.0+	The number of sessions disconnected by the P-GW when its selected DNS server was not reachable.

Field	Description
pgw-sel-dns-no-resource-records(520) Release 15.0+	The number of sessions disconnected by the P-GW when its selected DNS server had no resource records.
pgw-sel-dns-no-service-params(521) Release 15.0+	The number of sessions disconnected by the P-GW when its selected DNS server had no service parameters.
ePDG-Auth-failed(522)	The total number of times ePDG authentication failed. **Note** Invalid-AAA-attr-in-auth-response is incremented and as of now ePDG-Auth-failed is not used.
ePDG-pgw-sel-failure-initial(523)	The total number of disconnected sessions due to PGW selection failure in initial state.
ePDG-pgw-sel-failure-handoff(524)	The total number of disconnected sessions due to PGW selection failure in handoff state.
sgsn-ho-sgw-reloc-collision(525)	The total number of Relocation Collisions encountered during an SGSN handover to S-GW.
ePDG-dbr-from-pgw(526)	The total number of disconnected sessions due to Delete Bearer Request GTP message coming from PGW.
ePDG-gtpc-abort-session(527)	The total number of disconnected sessions due to GTP control plane path failure.
ePDG-gtpu-abort-session(528)	The total number of disconnected sessions due to GTP user plane path failure.
ePDG-gtpu-error-ind(529)	The total number of disconnected sessions due to error indication message on GTP user plane.
ePDG-pgw-not-reachable(530)	The total number of disconnected sessions due to PGW being down.
ePDG-reject-from-pgw(531)	The total number of disconnected sessions due to PGW rejecting the create session request.
IPSG-session-replacement(532)	The total number of times existing IPSG sessions have been replaced by new sessions. IPSG session replacement must be enabled.
ePDG-release-due-to-handoff(533)	The total number of disconnected sessions when ePDG gets a Delete Bearer Request from PGW due to hand-off.
mme-foreign-plmn-guti-rejected(534)	The total number of sessions rejected where the session contained a foreign GUTI and where the MME is configured to reject such foreign GUTIs as defined in the Foreign PLMN GUTI Management Database (foreign-plmn-guti-mgmt-db) configured in the lte-policy mode and which has been associated with the MME service.
sgsn-dsd-allepswithdrawn(535)	

Field	Description
NAT-Pool-BusyOut-Or-Pend-Delete(536)	The number of sessions disconnected because the NAT pool was busied-out or in Pending Delete state.
Invalid-APN(537)	The number of sessions disconnected because an ePDG rejected the incoming new call due to an APN syntax error (invalid length).
srvcc-ps-to-cs-handover(538)	The number of sessions disconnected because bearers were deactivated as a part of an SRVCC PS-to-CS handover.
henbgw-mme-s1ap-reset-recd(539)	The number of sessions disconnected by the HeNBGW when an S1 Application Protocol (S1AP) RESET was received from the MME.
henbgw-henb-s1ap-reset-recd(540)	The number of sessions disconnected by the HeNBGW when an S1AP RESET was received from the HeNB.
henbgw-mme-sctp-conn-down(541)	The number of sessions disconnected by the HeNBGW when an SCTP Connection Down was received from the MME.
henbgw-henb-sctp-conn-down(542)	The number of sessions disconnected by the HeNBGW when an SCTP Connection Down was received from the HeNB.
henbgw-handoff-complete(543)	The number of sessions disconnected by the HeNBGW when a handoff was completed.
henbgw-handover-failed(544)	The number of sessions disconnected by the HeNBGW when a handoff failed.
henbgw-mme-error-indication(545)	The number of sessions disconnected by the HeNBGW when an MME error indication was received.
henbgw-henb-error-indication(546)	The number of sessions disconnected by the HeNBGW when an HeNB error indication was received.
henbgw-henb-initiated-release(547)	The number of sessions disconnected by the HeNBGW due to an HeNB initiated release.
henbgw-mme-initiated-release(548)	The number of sessions disconnected by the HeNBGW due to an MME initiated release.
henbgw-duplicate-session(549)	The number of sessions disconnected by the HeNBGW because of duplicate sessions.
Transport-mismatch-with-PGW(550)	The number of sessions disconnected by the ePDG due to a DNS server IPv4-IPv6 mismatch for the P-GW IP address.
icsr-ipsec-chkpt-failed(551)	The number of sessions disconnected due IPSec checkpoint failure in ICSR setup.
sgsn-dbr-cause-isr-deact-detach(552)	The number of times subscribers are detached from the SGSN as a result of Delete Bearer Request messages being received from the SGW which causes Idle-mode Signaling Reduction (ISR) deactivation for ISR-activated subscribers.

Field	Description
unexpected-scenario(553)	The number of times that an unexpected call processing scenario has been encountered. This scenario may have caused an assertion failure with an associated core dump.
icsr-delete-standby(554)	The number of times that a session was deleted on the standby ICSR chassis when a call clear trigger is received from the active chassis or the call is removed for re-establishment when a full checkpoint was received
ePDG-local-pgw-resolution-failed(555)	The number of times that local resolution of an ePDG session failed due to a configuration error. This scenario occurs if PGW resolution is enabled, the existing DNS/AAA server PGW resolution mechanism failed, and no disconnect reason has been already set from a another mechanism.
sgsn-iovui-negotiation-failure(556)	If 'reject' is the configured option for **random-value-in-iov-ui negotiation-failure-action** under GPRS service configuration, then the SGSN uses this disconnect-reason to track the number of calls cleared due to the default behavior, which rejects any call when random IOV-UI negotiation fails.
henbgw-gw2henb-inv-mmeues1apid(557)	The number of times an HeNB gateway to HeNB session disconnected due to an invalid UE S1 Application Protocol (S1AP) ID.
henbgw-gw2mme-inv-mmeues1apid(558)	The number of times an HeNB gateway to MME session disconnected due to an invalid UE S1AP ID.
henbgw-henb-sess-henb-conn-down(559)	The number of times an HeNB gateway to HeNB session disconnected because the HeNB connection went down.
henbgw-nw-path-unavailable(560)	The number of HeNB gateway session disconnects because a network path was unavailable.
pgw-transaction-timeout(561)	The number of session disconnects due to a P-GW transaction timeout.
samog-multi-dev-pgw-sel-failure(562)	The number of times a SaMOG multiple device session disconnect has occured due a P-GW selection failure.
samog-multi-dev-demux-failure(563)	The number of times a SaMOG multiple device session disconnect has occured due a demux failure.
mme-pgw-restarted(564)	The number of times a session disconnect has occured due to a P-GW Restart Notification (PRN).
samog-session-replacement(565)	The number of times a SaMOG session was replaced.
authorization-failed(566)	The number of times a SaMOG session was disconnected because authorization failed.
mm-apn-congestion-control(567)	The number of times an SGSN Attach or Inter SGSN RAU call was dropped due to APN congestion control.

Field	Description
samog-pgw-init-detach(568)	The number of times a SaMOG session was disconnected due to PGW initial detach failure.
samog-ggsn-init-detach(569)	The number of times a SaMOG session was disconnected due to GGSN initial detach failure.
samog-pgw-rejected(570)	The number of times a SaMOG session was disconnected due to PGW rejection.
samog-ggsn-rejected(571)	The number of times a SaMOG session was disconnected due to GGSN rejection.
samog-pgw-no-response(572)	The number of times a SaMOG session was disconnected due to no response from the PGW.
samog-ggsn-no-response(573)	The number of times a SaMOG session was disconnected due to no response from the GGSN.
samog-gtpc-path-failure(574)	The number of times a SaMOG session was disconnected due to GTPC path failure.
samog-gtpu-path-failure(575)	The number of times a SaMOG session was disconnected due to GTPU path failure.
samog-gtpu-err-ind(576)	The number of times a SaMOG session was disconnected due to a GTPU error indication.
samog-mandatory-ie-missing(577)	The number of times a SaMOG session was disconnected due to a missing mandatory information element.
samog-mandatory-ie-incorrect(578)	The number of times a SaMOG session was disconnected because of an incorrect mandatory information element.
samog-ip-alloc-failed(579)	The number of times a SaMOG session was disconnected because of an IP address allocation failure.
samog-default-gw-not-found(580)	The number of times a SaMOG session was disconnected because the default gateway was not found.
samog-dns-unreachable(581)	The number of times a SaMOG session was disconnected because the DNS server was unreachable.
samog-dns-no-resource-records(582)	The number of times a SaMOG session was disconnected because there were no DNS resource records.
samog-dns-no-service-params(583)	The number of times a SaMOG session was disconnected because of DNS no-service parameters.
samog-internal-error(584)	The number of times a SaMOG session was disconnected because of an internal error.

Field	Description
handoff-pcf-restriction(585)	This disconnect reason is incremented for the case when handoffs happen from restricted to unrestricted PCF, or conversely from unrestricted PCF to restricted PCF, or handoffs between restricted PCFs.
ue-ctxt-normal-del-ntsr-ddn(587)	The number of UE contexts that were created to handle Network Triggered Service Restoration (NTSR) DDNs and are destroyed when the UE re-attaches.
session-auto-delete(588)	This disconnect reason is used to indicate the percentage of the total number of GGSN, P-GW, S-GW, SAEGW or ePDG sessions that have been auto deleted.
mme-qos-pgw-upgrade-reject(589)	The number of sessions disconnected when a QoS upgrade by P-GW is rejected by the MME during initial attach.
path-failure-s5(590)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions disconnected due to an S5 GTPC path failure.
path-failure-s11(591)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions disconnected due to an S11 GTPC path failure.
path-failure-s4(592)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions disconnected due to an S4 GTPC path failure.
gtpu-path-failure-s5u(593)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions disconnected due to an S5u GTPU path failure.
gtpu-path-failure-s1u(594)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions disconnected due to an S1u GTPU path failure.
gtpu-path-failure-s4u(595)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions disconnected due to an S4u GTPU path failure.
gtpu-path-failure-s12(596)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions disconnected due to an S12 GTPU path failure.
gtpu-err-ind-s5u(597)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions that failed due to an S5u GTPU error indication.

Field	Description
gtpu-err-ind-s1u(598)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions that failed due to an S1u GTPU error indication.
gtpu-err-ind-s4u(599)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions that failed due to an S4u GTPU error indication.
gtpu-err-ind-s12(600)	Supported in release 18.0 and later releases. The number of S-GW/SAEGW sessions that failed due to an S12 GTPU error indication.
diameter-network-too-busy(601)	Supported in release 18 and later releases. The number of ePDG sessions disconnected due to a network too busy indication.
diameter-network-failure(602)	Supported in release 18 and later releases. A temporary network failure has prevented establishing a Diameter session.
diameter-roaming-not-allowed(603)	Supported in release 18 and later releases. Total number of times a session is disconnected when the user is not allowed to roam in the visited network.
diameter-rat-disallowed(604)	Supported in release 18 and later releases. Sent by the HSS to indicate the RAT type the UE is using is not allowed for the IMSI.
diameter-no-subscription(605)	Supported in release 18 and later releases. Sent by the 3GPP AAA Server to indicate that the requested APN is not included in the user's profile, and therefore is not authorized for that user.
pcc-data-mismatch(606)	Supported in release 18 and later releases. The number of times a session has been disconnected due to a Policy and Charging Control (PCC) Packet Control Function (PCF) mismatch.
mme-embms-call-setup-timeout(607)	Supported in release 18 and later releases. Triggered when an eMBMS call setup has timed out.
mme-embms-normal-disconnect(608)	Supported in release 18 and later releases. Triggered by a normal eMBMS call disconnect.
mme-embms-sctp-down(609)	Supported in release 18 and later releases. Triggered when an eMBMS call experiences a Stream Control Transmission Protocol (SCTP) failure.

Field	Description
disconnect-from-charging-server(610)	Supported in release 18 and later releases. The number of times a call is terminated due to a Gy server being down.
disconnect-irat-fail-hi-missing(611)	Supported in release 18 and later releases. The number of times a call is terminated due to HI=1 is not being received (Mandatory id) during a WiFi to LTE handoff.
apn-not-supported-in-plmn-rat(612)	Not yet supported. In development for future use. The requested APN is not supported in current RAT and PLMN combination (cause code 66).
ue-pcscf-reselect-not-supported(613)	Supported in release 18 and later releases. If the UE does not support P-CSCF Reselection (PCO based optional extension as per Rel 12, 3GPP 23.380 section 5.4.3), the P-GW initiates a DBReq with cause Reactivation Requested on receiving an MBReq with PCRI (P-CSCF Restoration Indication). The call is then torn down.
newer-session-detected(614)	The total number of times a session is disconnected when Diameter Experimental-Result-Code "DIAMETER_NEWER_SESSION_DETECTED (5199) is received in Assume Positive mode. On receiving this result code, the Diameter application does not retry to a secondary AAA server. This result code is used to maintain session uniqueness and detect stale message requests from ePDG/MME.
mme-guti_realloc_failed-detach(615)	MME will detach the UE after 10 consecutive unsuccessful GUTI Reallocation attempts with this disconnect reason.
mme-pcscf-rest-detach(616)	The MME detaches the subscribers due to HSS-based P-CSCF Restoration. The restoration method for P-CSCF Restoration in this scenario is PDN Deactivate. The MME performs a PDN disconnect procedure to deactivate the PDN with cause "reactivation requested". All subscriber PDNs are restored during P-CSCF Restoration.
Reject-ho-old-tun-path-failure(617) gx-vapn-selection-failed(618)	Supported in release 18 and later releases. A tunnel path failure occurred during an LTE/Wi-Fi handoff. The number of times a P-GW/GGSN/SAEGW session was disconnected due to validation failure of virtual APN received from PCRF. This disconnect reason is associated with Gx based Virtual APN Selection feature. **Note** This feature is license dependent. For more information, contact your Cisco account representative.

Field	Description
dup-static-ipv6-addr-req(619)	This disconnect reason is incremented when the existing PDN gets gracefully aborted due to a duplicate IPv6 address request received from new PDN. The existing call gets aborted only when the CLI "newcall duplicate-subscriber-requested-v6-address accept" is configured under GGSN/PGW service.
mip-path-failure(620)	This disconnect reason will be incremented when the peer is not reachable or when the peer restarts and sends new restart counter.
apn-congestion(621)	This disconnect reason will be incremened when an incoming call is identified as Low Access Priority Indicator (LAPI), and PGW is in Overload state and Backoff timer is configured and the call is rejected with cause "APN congestion".
ue-redirected(622)	Total number of sessions disconnected due to UE redirection.
ePDG-s2b-access-denied(623)	Total number of sessions disconnected on ePDG due to s2b cause codes mapped to private IKEv2 notify payload type "access denied".
ePDG-s2b-network-failure(624)	Total number of sessions disconnected on ePDG due to s2b cause codes mapped to private IKEv2 notify payload type "network failure".
ePDG-s2b-msg-failure(625)	Total number of sessions disconnected on ePDG due to s2b cause codes mapped to private IKEv2 notify payload type"message failure".
ePDG-s2b-rat-disallowed(626)	Total number of sessions disconnected on ePDG due to s2b cause code "RAT disallowed" which is mapped to private IKEv2 notify payload type "RAT Disallowed".
ePDG-roaming-mandatory(627)	Total the number of sessions disconnected due to DNS failure when roaming is mandatory.
Gtpv2-context-not-found(628)	Total the number of sessions disconnected due to GTP cause code "Context Not Found".
SaMOG-access-switch-timeout(629)	Increments when the access switch from PMIPv6 access-type to EoGRE access-type is not completed.
Decrypt-fail-count-exceeded(630)	Total number of sessions disconnected due to decryption failure count exceeded.
emergency-idle-timeout(631)	Total number of emergency sessions disconnected due to idle session timeout.
gtpu-path-failure-s11u(632)	Supported in release 21.3 and later releases. The number of times a SGW session has been disconnected due to GTPU echo failure on s11u interface.
gtpu-err-ind-s11u(633)	Supported in release 21.3 and later releases. The number of times a SGW session has been disconnected due to Error Indication on s11u interface.

Field	Description
mme-gtpu-path-failure-s11u (634)	The total number of disconnect reasons for the calls aborted due to GTPU path failure.
mme-gtpu-err-ind-s11u (635)	The total number of disconnect reasons for the calls aborted when there is an indication of GTPU error at the s11 interface.
ePDG-pcscf-restoration (636)	The total number of disconnect reasons returned due to the receipt of Delete Bearer request for the PCSCF reactivation.
samog-lbo-user-logout (637)	The total number of disconnect reasons incremented when the session of SaMOG service using S-GW service disconnects due to the duplicate IP address.
sx-req-re (638)	The total number of disconnect reasons incremented at the User Plane due to incorrect URR or PFCP rejection in CUPS.
sx-cntxt-not-found (639)	The total number of disconnect reason returned if the PFCP context is not found.
sx-mand-ie-missing (640)	The total number of disconnect reason set at the UPLANE because of the mandatory IE is missing.
sx-cond-ie-missing (641)	The total number of disconnect reason incremented when conditional IE is missing in PFCP or Uplane QER is missing or UE IP address not present.
sx-msg-invalid-length (642)	The total number of disconnect reason incremented when the message length is insufficient or invalid.
sx-mand-ie-incorrect (643)	The total number of disconnect reason incremented when the mandatory IE is incorrect in the sx interface.
sx-invld-fwd-policy (644)	The total number of disconnect reasons incremented if the forwarding policy is invalid.
sx-invld-fteid-alloc-opt (645)	The total number of disconnect reasons incremented when the fully qualified Tunnel ID allocation option is invalid
sx-no-establshd-sx-association (646)	The total number of disconnect reasons incremented when peer entry were not in the Associated state.
sx-no-response (647)	The total number of disconnect reasons returned if the Sx proclet fails or there is no response from the sx interface.
sx-no-resource (648)	The total number of disconnect reasons returned when resources were not available on the sx interface.
sx-fteid-ipaddr-type-mismatch (649)	The total number of disconnect reasons returned when a mismatch between FTEID IP Address type is received in Sx session create or modify response and remote GTP peer.
sx-invalid-response (650)	The total number of disconnect reasons returned during an Sx session establish or modify response received with an invalid response.

Field	Description
user-plane-info-not-available (651)	The total number of disconnect reasons when the User plane selection fails for GGSN, P-GW, or SAEGW In the case of S-GW, the selection fails if there is an internal failure while creating a transient transaction.
user-plane-info-mismatch (652)	The total number of disconnect reasons returned when user plane information mismatches.
IKEv2-request-rate-exceeded (653)	The total number of disconnect reasons returned when IKEv2 (Internet Key Exchange version 2) request rate is exceeded.
mme-decor-call-rerouted (654)	The total number of disconnect reasons incremented when the MME-DCN (dedicated core n/w) does not support UE usage type and a reroute process gets triggered.
mme-decor-call-rejected (655)	The total number of disconnect reasons incremented if the MMEGI of the rerouted message doesn't belong to the new MME and the MME rejects the call.
origin-state-id-change (656)	The total number of disconnect reasons returned when the call is cleared because of the Origin State ID change.
mme-ducon-path-update-failed (657)	The total number of disconnect reasons returned when the MME *du* connection path update fails
diam-no-non-3gpp-subscription (658)	The total number of disconnect reasons returned when there is no non-3gpp subscription.
diameter-user-unknown (659)	The total number of disconnect reasons returned when the Diameter user is unknown.
diameter-illegal-equipment (660)	The total number of disconnect reasons returned when the Diameter illegal equipment is used.
epdg-invalid-imei (661)	The total number of sessions disconnected due to Invalid IMEI received from the UE.
sx-path-failure (662)	The total number of disconnected reasons returned due to sx interface path failure.
sxfail-opr-revert-info (663)	The total number of disconnected reasons returned due to the Sx Modification Request failure. **Note** This reason for the Sx Modification request failure is because of failure in reverting information on User Plane, Control Plane, and User Plane are out of sync or Triggering PDN deletion.
sxfail-opr-get-usagereport (664)	The total number of disconnected reasons returned due to the Sx Modification Request failure.

Field	Description
sxfail-opr-create-rulebase-pdr (665)	The total number of disconnect reasons returned if the Sx Modification Request failed because of the failure in creating a Rulebase PDR.
sxfail-opr-remove-pdr (666)	The total number of disconnect reasons returned if the Sx Modification Request fails because of the failure in removing PDR on User Plane.
gtp-remote-data-teid-invalid (667)	The total number of disconnect reasons returned if the call is rejected because of the invalid TEID in GTP remote data.
smp-fp-tep-oper-failure (668)	The total number of disconnect reasons is set, if the Failure in Fast Path TEP entry operation is detected.
smp-fp-ambr-oper-failure (669)	The total number of disconnect reasons set if the Fast path Uplink or Downlink Policer configuration or Policer Bucket operations such as add, modify, or delete operation fails.
smp-fp-brr-stream-oper-failure (670)	The total number of disconnect reasons set for the failure of Bearer stream operations . For example, creating and updating in SessMgr Fastpath.
smp-fp-brr-strm-chrgng-op-fail (671)	The total number of disconnect reasons set for the failure of Bearer stream charging operations. For example,creating and updating in SessMgr Fastpath.
smp-fp-itc-bw-oper-failure (672)	The total number of disconnect reason set if the ACS detect session setup failure or Delete indication due to Gx/Gy server being down.
smp-fp-strm-chrg-oper-failure (673)	The total number of errors returned if Session deletion initiated with charging operation failure or sessMgr UP disconnected with Fastpath stream charging operation failure.
vpp-next-hop-failure (674)	The total number of the reasons returned if the next-hop row addition failed in the iCUPS platform.
graceful-cleanup-up-audit-fail (675)	The total number of the reasons returned if Sx Session reported graceful termination for User plane audit failure.
sx-max-trans-threshold-reached (676)	The total number of disconnect reasons returned if the call dropped with the reason transaction pending queue reached its maximum.
sx-db-ub-collision (677)	The total number of disconnect reasons is set if the system detects UBReq collision on deleting the bearer or if the call drops with the reason transaction pending queue reached its maximum.
sx-failure-ntsr (678)	The total number of disconnect reasons is set for the Sx path failure with NTSR (Network Triggered Service Restoration) enabled on the node.
graceful-term-up-self-protectn (679)	The total number of disconnect reasons is set if the Sx Session Reports UP Self Protection Termination is received.
sx-gtpu-sess-repl (680)	The total number of disconnect reasons set if the UPLANE abort session request is received.

Field	Description
mme-reselection-to-amf (681)	The total number of disconnect reasons set if the subscriber reselects AMF as part of the EPS to 5GS Idle Mobility Registration procedure.
mme-relocation-to-amf (682)	The total number of disconnect reasons is set if the subscriber relocates to AMF as part of the EPS to 5GS Handover procedure.
rbase-del-pending (683)	The total number of disconnect reasons if the rulebase is in maintenance mode.
late-overlapping-request (684)	The total number of reason codes returned if IMSA receives an experimental result response as a late overlapping request.
timed-out-request (685)	The total number of reason codes returned if IMSA receives an experimental result response as the time-out request.
Sgi-reachability-reject (686)	The total number of disconnect reasons if the call gets rejected because of the down APN status.
Sgi-reachability-clear (687)	The total number of disconnect reasons if the call gets cleared as the APN status is down.

show session progress



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

Table 6: show session progress Command Output Descriptions

Field	Description
In-progress calls	The number of calls that are currently in progress (active, dormant, being set up, or being disconnected) and being processed by either the system (if no keywords were used), a specific PDSN service (if the **pdsn-service** keyword was used), or a specific PCF (if the **pcf** keyword was used).
In-progress active calls	The total number of active sessions.
In-progress dormant calls	The total number of dormant sessions. **NOTE:** Sessions facilitated through PDSN Closed R-P services are always displayed as "Active" due to the fact that PDSN Closed R-P services do not receive dormancy information from the PCF.
In-progress always-on calls	The number of calls that have always on enabled.
In-progress calls @ ARRIVED state	The total number of sessions that are at the onset of the registration process.

Field	Description
In-progress calls @ CSCF-CALL-ARRIVED state	The total number of Call Session Control Function (CSCF) sessions that are at the onset of the registration process.
In-progress calls @ CSCF-REGISTERING state	Total number of CSCF sessions which are in registration processing state.
In-progress calls @ CSCF-REGISTERED state	Total number of CSCF sessions which are in registered state.
In-progress calls @ LCP-NEG state	The total number of sessions that are in the Link Control Protocol (LCP) negotiation phase of the registration process.
In-progress calls @ LCP-UP state	The total number of sessions that have just completed the Link Control Protocol (LCP) negotiation phase of the registration process.
In-progress calls @ AUTHENTICATING state	The total number of sessions that are in the process of being authenticated.
In-progress calls @ BCMCS SERVICE AUTHENTICATING state	The total number of BCMCS sessions that are in the process of being authenticated.
In-progress calls @ AUTHENTICATED state	The total number of sessions that have completed the authentication phase with AAA but the session is not yet established.
In-progress calls @ PDG AUTHORIZING state	The total number of Packet Data Gateway (PDG) calls in the process of being authorized.
In-progress calls @ PDG AUTHORIZED state	The total number of PDG calls that have been authorized.
In-progress calls @ IMS AUTHORIZING state	The total number of IP Multimedia Subsystem (IMS) calls in the process of being authorized.
In-progress calls @ IMS AUTHORIZED state	The total number of IMS calls that have been authorized.
In-progress calls @ MBMS UE AUTHORIZING state	The total number of Multimedia Broadcast Multicast Services (MBMS) sessions currently in User Equipment (UE) authorization state.
In-progress calls @ MBMS BEARER AUTHORIZING state	The total number of MBMS sessions currently in bearer authorization state.
In-progress calls @ DHCP PENDING state	The total number of Dynamic Host Configuration Protocol (DHCP) calls that are currently in pending state.
In-progress calls @ L2TP-LAC CONNECTING state	The number of calls that have an L2TP tunnel in the process of being brought up.
In-progress calls @ MBMS BEARER CONNECTING state	The total number of MBMS calls in the bearer connecting state.

Field	Description
In-progress calls @ CSCF-CALL-CONNECTING state	The total number of CSCF calls in the call connecting state.
In-progress calls @ IPCP-UP state	The total number of sessions that have just completed the Internet Protocol Control Protocol (IPCP) phase of the registration process.
In-progress calls @ NON-ANCHOR CONNECTED state	Indicates the total number of WiMAX sessions being processed by this Session Manager instance that are currently connected in non-anchor mode.
In-progress calls @ SIMPLE IPv4 CONNECTED state	The total number of simple IPv4 data sessions that are currently connected.
In-progress calls @ SIMPLE IPv6 CONNECTED state	The total number of simple IPv6 data sessions that are currently connected.
In-progress calls @ SIMPLE-IPv4+IPv6 CONNECTED state	The total number of simple IPv4/IPv6 data sessions that are currently connected.
In-progress calls @ MOBILE-IPv4 CONNECTED state	The total number of Mobile IPv4 (MIP) data sessions that are currently connected.
In-progress calls @ MOBILE-IPv6 CONNECTED state	Total number of Proxy Mobile IPv6 (MIPv6) sessions currently established.
In-progress calls @ GTP CONNECTING state	Total number of GTPv2 sessions in connecting state which are awaiting Create Session Response message in reply to Create Session Request already sent.
In-progress calls @ GTP CONNECTED state	Total number of GTPv2 sessions currently established.
In-progress calls @ PROXY-MOBILE-IP CONNECTING state	Total number of Proxy Mobile IPv6 sessions in connecting state and are waiting for PBA in reply to PBU already sent.
In-progress calls @ PROXY-MOBILE-IP CONNECTED state	The total number of Proxy Mobile IP data sessions that are currently connected.
In-progress calls @ EPDG RE-AUTHORIZING state	the total number of Evolved Packet Data Gateway (ePDG) calls that are re-authorizing.
In-progress calls @ HA-IPSEC CONNECTED state	The number of calls that have negotiated IP Security.
In-progress calls @ L2TP-LAC CONNECTED state	The number of calls that are passing data through an L2TP tunnel.
In-progress calls @ HNBGW CONNECTED state	The number of UMTS-Femto calls connected to HNB-GW.
In-progress calls @ PDP-TYPE-PPP CONNECTED state	The total number of PDP contexts of type PPP (Point to Point Protocol) that are currently connected. This field applies to GGSN only.

Field	Description
In-progress calls @ IPSG CONNECTED state	The total number of IP Services Gateway (IPSG) sessions currently connected.
In-progress calls @ BCMCS CONNECTED state	The total number of BCMCS sessions currently connected.
In-progress calls @ PCC CONNECTED state	The total number of IP-Connectivity Access Network (IP-CAN) sessions currently in connected state.
In-progress calls @ MBMS UE CONNECTED state	The total number of MBMS sessions currently in UE connected state.
In-progress calls @ MBMS BEARER CONNECTED state	The total number of MBMS sessions currently in bearer connected state.
In-progress calls @ ASNPC CONNECTED state	Indicates the number of ASN Paging Controller calls that are currently connected.
In-progress calls @ CSCF-CALL-CONNECTING state	Total number of CSCF sessions which are in call connecting state (waiting for ACK).
In-progress calls @ CSCF-CALL-CONNECTED state	Total number of CSCF sessions which are in call connected state.
In-progress calls @ CSCF-CALL-DISCONNECTING state	Total number of CSCF sessions which are in call disconnecting state (such as, processing BYE, waiting for BYE response, etc.).
In-progress calls @ MME ATTACHED state	Indicates the number of MME subscriber session currently attached.
In-progress calls @ HENBGW CONNECTED state	The total number of Home evolved Node B Gateway (HENBGW) calls in the connected state.
In-progress calls @ CSCF-CALL-DISCONNECTING state	Total number of CSCF sessions which are disconnecting.
In-progress calls @ DISCONNECTING state	The total number of sessions that are in the process of disconnecting.

show session recovery status verbose

Table 7: show session recovery status verbose Output Descriptions

Field	Description
Last Status Update	The duration from the last time the Resource Manager did a health check on the session managers. This is informational info only, and does not reflect the last time a subscriber was checkpointed.

Field	Description
cpu	This indicates the card and slot number of the CPU listed.
state	Indicates the state of the specified CPU. This is either Active or Standby.
sessmgr	This lists the number of Session Managers in the active and standby state on the specified CPU.
aaamgr	Indicates the number of AAA managers in the active and standby state on the specified CPU.
demux active	Indicates the number of demux managers on the CPU.
status	This indicates the session recovery state for the specified CPU. This can be one of the following values: • Good (Demux) • Demux With Non-Demux • Non-Demux With Demux • Pair on Processing Cards • SESSMGR Not Ready • Missing AAAMGR • No Standby • Good • SESSMGR Not Ready • Too Few Standby • Good • Unknown

show session subsystem

This show command is used for monitoring the session related statistics per RAT type.

Field	Description
LTE-M Connection Statistics:	
Total Sessions	Indicates that the total number of active LTE-M sessions.
Total calls arrived	Indicates the total number of sessions received for the selected LTE-M RAT type.
Total calls Connected	Indicates that the total number of calls connected for the LTE-M RAT type.
Total calls disconnected	Indicates the total number of calls disconnected for the LTE-M RAT type.

show session subsystem full

This show command is used for monitoring the Data packets per RAT type and subscribers count per RAT type.

Field	Description
LTE-M Data Statistics	
Total Sessions	Shows the total number of active data packets.
Total calls arrived	Shows the total number of calls arrived.
Total calls connected	Shows the total number of calls connected.
Total calls disconnected	Shows the total number of calls disconnected.
LTE-M Connection Statistics:	
Total Sessions	Indicates that the total number of active LTE-M sessions
Total calls arrived	Indicates the total number of sessions received for the selected LTE-M RAT type.
Total calls Connected	Indicates that the total number of calls connected for the LTE-M RAT type.
Total calls disconnected	Indicates the total number of calls disconnected for the LTE-M RAT type.

show session subsystem verbose

The **show session subsystem verbose** command displays the following output for the selected LTE-M RAT type:

Field	Description
LTE-M Data Statistics:	
Packets to User	The number of Data packets received by the user
Octets to User	The number of Data octets received by the user.
Packets from User	The number of Data packets send from the user.
Octets from User	The number of Data octets sent from the user.
LTE-M Connection Statistics :	
Total Sessions	Indicates that the total number of active LTE-M sessions.
Total calls arrived	Indicates the total number of sessions received for the selected LTE-M RAT type.
Total calls Connected	Indicates that the total number of calls connected for the LTE-M RAT type.
Total calls disconnected	Indicates the total number of calls disconnected for the LTE-M RAT type.

show session subsystem debug-info

Table 8: show session subsystem debug-info Output Descriptions

Field	Description
USF	
No of packet drops on sessmgr	Indicates number of packet drops on Session Manager.
Peer Salvation Stats	
No of peer salvation requests received on sessmgr	Indicates the number of peer salvation requests received on the Session Manager.
No of peer salvaged on sessmgr	Indicates the number of peers salvaged on the Session Manager.
1 AAA Managers	
10 Total aaa requests	Indicates the number of AAA requests. The total number is 10.
2 Total aaa auth requests	Indicates the number of AAA authorization requests. The total number is 2.
0 Total aaa auth probes	ndicates the number of AAA authorization probes. The total number is 0.

show session subsystem facility a11mgr all



Important These statistics are from the perspective of the Session Manager (SessMgr) and A11 Manager (A11Mgr) task itself (not from the perspective of subscribers).

Table 9: show session subsystem facility a11mgr Command Output Descriptions

Field	Description
A11Mgr	The A11 Manager task instance number. Since multiple A11 Manager tasks can be operating simultaneously in the system, each one is assigned an instance number.
Total calls arrived	Indicates the total number of sessions received by this A11 Manager instance for processing.
Total calls rejected	Indicates the total number of sessions that were rejected by this A11 Manager instance.
Total calls demultiplexed	Indicates the total number of sessions that were successfully setup by this by this A11 Manager instance.
Total dereg reply sent	Indicates the total number of sessions that were successfully de-registered, or disconnected, by this by this A11 Manager instance.

Field	Description
Current active calls	Indicates the total number of active sessions currently being facilitated by this A11 Manager instance.
Total active services	The total number of PDSN services that are currently facilitating subscriber sessions.

show session subsystem facility aaamgr all



Important These statistics are from the perspective of the Session Manager (SessMgr) and AAA Manager (AAAMgr) task itself (not from the subscriber perspective).

Table 10: show session subsystem facility aaamgr all Command Output Descriptions

Field	Description
AAA Manager	The AAA Manager task instance number. Since multiple AAA Manager tasks can be operating simultaneously in the system, each one is assigned an instance number.
Total aaa requests	The total number of AAA requests received by this AAAMgr instance for processing.
Current aaa requests	The number of AAA requests that this AAAMgr instance is currently processing.
Total aaa auth requests	The total number of AAA authentication requests that were received by this AAAMgr instance.
Current aaa auth requests	The number of AAA authentication requests that this AAAMgr instance is currently processing.
Total aaa auth probes	The total number of Authorization Probes that this AAAMgr instance has initiated.
Current aaa auth probes	The number of Authorization Probe requests that this AAAMgr instance is currently processing.
Total aaa auth keepalive	The total number of AAA authentication keepalive requests that were sent by this AAAMgr instance.
Current aaa auth keepalive	The number of AAA authentication keepalive requests that this AAAMgr instance is currently processing.
Total aaa acct requests	The total number of AAA accounting requests that were received by this AAAMgr instance.
Current aaa acct requests	The number of AAA accounting requests that this AAAMgr instance is currently processing.
Total aaa acct keepalive	The total number of AAA accounting keepalive requests that were sent by this AAAMgr instance.

Field	Description
Current aaa acct keepalive	The number of AAA accounting keepalive requests that this AAAMgr instance is currently processing.
Total aaa auth success	The total number of successful AAA authentications facilitated by this AAAMgr instance.
Total aaa no-auth null-username	The total number of AAA authentication requests dropped because of a null user name, or because there is no RADIUS null-username configured.
Total aaa auth failure	The total number of failed AAA authentications facilitated by this AAAMgr instance.
Total aaa auth purged	The total number of AAA authentication requests received by this AAAMgr instance that failed to get a response from the AAA server.
Total aaa auth cancelled	The total number of canceled AAA authentication requests facilitated by this AAAMgr instance.
Total auth keepalive success	The total number of successful authentication keepalives facilitated by this AAAMgr instance.
Total auth keepalive failure	The total number of failed authentication keepalives facilitated by this AAAMgr instance.
Total auth keepalive purged	The total number of authentication keepalive requests received by this AAAMgr instance that failed to get a response from the AAA server.
Total aaa auth DMU challenged	The total number of AAA authentication requests that were challenged for Dynamic Mobile Keying update.
aaa request (used/max)	The total number of AAA requests used and the maximum allowed for this AAAMgr instance.
Total Diameter auth requests	The total number of AAA authentication requests of the type Diameter authentication protocol facilitated by this AAAMgr instance.
Current Diameter auth requests	The number of AAA authentication requests of the type Diameter authentication protocol currently being processed by this AAAMgr instance.
Total Diameter auth requests retried	The total number of AAA authentication requests of the type Diameter authentication protocol that this AAAMgr instance retried. Retries occur when the AAAMgr instance does not receive a response from the AAA server to an initial request. The AAAMgr instance retries a request triggered by a timeout value configured under the AAA group.
Total Diameter auth requests dropped	The total number of AAA authentication requests of the type Diameter authentication protocol dropped by this AAAMgr instance due to the AAA server being unavailable or the system being out of memory.
Total radius auth requests	The total number of RADIUS authentication requests received by this AAAMgr instance.
Current radius auth requests	The number of RADIUS authentication requests currently being processed by this AAAMgr instance.
Total radius auth requests retried	The total number of RADIUS authentication requests processed by this AAAMgr instance that were retried.

Field	Description
Total radius auth responses dropped	The total number of RADIUS authentication responses dropped by the AAAMgr instance.
Total radius malformed auth responses	The total number of RADIUS authentication responses received with multiple rulebase attributes.
Total local auth requests	The total number of authentication requests received by this AAAMgr instance for locally configured subscribes.
Current local auth requests	The number of authentication requests currently being processed by this AAAMgr instance for locally configured subscribes.
Total pseudo auth requests	The total number of AAA requests for user profiles received by this AAAMgr instance.
Current pseudo auth requests	The number of current pending AAA requests for user profiles in this AAAMgr instance.
Total null-username auth requests (rejected)	The total number of AAA requests for un-attempted user profiles received by this AAAMgr instance.
Total aaa acct completed	The total number of AAA accounting requests received by this AAAMgr instance that were delivered successfully to the AAA server.
Total aaa acct purged	The total number of AAA accounting requests received by this AAAMgr instance that had to be purged because the storage limit of pending accounting requests had been exceeded.
Total acct keepalive success	The total number of successful accounting keepalives facilitated by this AAAMgr instance.
Total acct keepalive timeout	The total number of failed accounting keepalives facilitated by this AAAMgr instance.
Total acct keepalive purged	The total number of accounting keepalive requests received by this AAAMgr instance that failed to get a response from the AAA server.
Total aaa acct cancelled	The total number of AAA accounting requests received by this AAAMgr instance that were cancelled.
Total Diameter acct requests	The total number of AAA accounting requests of the type Diameter accounting protocol facilitated by this AAAMgr instance. This includes active and deleted requests.
Current Diameter acct requests	The number of AAA accounting requests of the type Diameter accounting protocol currently being processed by this AAAMgr instance.
Total Diameter acct requests retried	The total number of AAA accounting requests of the type Diameter accounting protocol that this AAAMgr instance retried. Retries occur when the AAAMgr instance does not receive a response from the AAA server to an initial request. The AAAMgr instance retries a request triggered by a timeout value configured under the AAA group.
Total diameter acct requests dropped	The total number of dropped AAA accounting requests of the type Diameter accounting protocol.
Total diameter acct responses dropped	The total number of dropped AAA accounting responses of the type Diameter accounting protocol.

Field	Description
Total diameter acct cancelled	The total number of cancelled AAA accounting requests of the type Diameter accounting protocol.
Total diameter acct purged	The total number of purged AAA accounting requests of the type Diameter accounting protocol.
Total radius acct requests	The total number of AAA accounting requests received by this AAAMgr instance for which the RADIUS protocol was used to deliver the accounting message to the AAA server.
Current radius acct requests	The number of AAA accounting requests currently being processed by this AAAMgr instance for which the RADIUS protocol is being used to deliver the accounting message to the AAA server.
Total radius acct cancelled	The total number of cancelled RADIUS accounting requests received by this AAAMgr instance.
Total radius acct purged	The total number of RADIUS accounting requests received by this AAAMgr instance that had to be purged because the storage limit of pending accounting requests had been exceeded.
Total radius acct requests retried	The total number of AAA accounting requests received by this AAAMgr instance for which the RADIUS protocol was used to deliver the accounting message to the AAA server that were retried.
Total radius acct responses dropped	The total number of RADIUS accounting responses dropped by the AAAMgr instance.
Total radius sec acct requests	The total number of AAA secondary accounting requests received by this AAAMgr instance for which the RADIUS protocol was used to deliver the accounting message to the AAA server.
Current radius sec acct requests	The number of AAA secondary accounting requests currently being processed by this AAAMgr instance for which the RADIUS protocol is being used to deliver the accounting message to the AAA server.
Total radius sec acct cancelled	The total number of cancelled RADIUS secondary accounting requests received by this AAAMgr instance.
Total radius sec acct purged	The total number of RADIUS secondary accounting requests received by this AAAMgr instance that had to be purged because the storage limit of pending accounting requests had been exceeded.
Total radius sec acct requests retried	The total number of AAA secondary accounting requests received by this AAAMgr instance for which the RADIUS protocol was used to deliver the accounting message to the AAA server that were retried.
Total gtpp acct requests	The total number of AAA accounting requests received by this AAAMgr instance for which the GTPP protocol was used to deliver the accounting message to the Charging Gateway Function (CGF).

Field	Description
Current gtpp acct requests	The current number of AAA accounting requests being processed by this AAAMgr instance for which the GTPP protocol is being used to deliver the accounting message to the Charging Gateway Function (CGF).
Total gtpp acct cancelled	The total number of accounting requests that were cancelled.
Total gtpp acct purged	The total number of accounting requests that were purged.
Total gtpp sec acct requests	The total number of secondary G-CDR requests being processed by this AAAMgr instance for which the GTPP protocol is being used to deliver the accounting message to the Charging Gateway Function (CGF). It counts total secondary G-CDRs generated by this AAAMgr instance.
Total gtpp sec acct purged	The total number of secondary G-CDR requests being processed and purged by this AAAMgr instance for which the GTPP protocol is being used to deliver the accounting message to the Charging Gateway Function (CGF). It counts total secondary G-CDRs purged by this AAAMgr instance.
Total null acct requests	The total number of AAA accounting requests received by this AAAMgr instance that were not required to be delivered to a AAA server.
Current null acct requests	The current number of AAA accounting requests being processed by this AAAMgr instance that are not required to be delivered to a AAA server.
Total aaa acct sessions	The total number of AAA accounting sessions facilitated by this AAAMgr instance.
Current aaa acct sessions	The number of AAA accounting sessions currently being facilitated by this AAAMgr instance.
Total aaa acct archived	The total number of AAA accounting requests received by this AAAMgr instance that initially failed to be delivered to a AAA server, and was subsequently archived for later transmission.
Current aaa acct archived	The current number of AAA accounting requests being processed by this AAAMgr instance that initially failed to be delivered to a AAA server and is currently archived for later transmission.
Current recovery archives	The number of AAA state records being maintained within the AAAMgr. They are used to generate accounting stops when a session manager fails or to recover the call in the Session Manager.
Current valid recovery records	The number of valid call recovery records that exist for current sessions.
Total aaa sockets opened	The total number of communication sockets opened by the AAAMgr instance for the purposes of communication with AAA servers.
Current aaa sockets open	The current number of communication sockets open by the AAAMgr instance for communication with AAA servers.
Total aaa requests pend socket open	The total number of AAA requests received by this AAAMgr instance that had to wait in queue while a socket to the AAA server was being opened.

Field	Description
Current aaa requests pend socket open	The number of AAA requests received by this AAAMgr instance that are currently waiting in queue while a socket to the AAA server is being opened.
Total radius requests pend server max-outstanding	The total number of RADIUS requests received by this AAAMgr instance that had to wait in queue because the limit of the number of outstanding RADIUS messages had been reached.
Current radius requests pend server max-outstanding	The number of RADIUS requests received by this AAAMgr instance that are currently waiting in queue because the limit of the number of outstanding RADIUS messages has been reached.
Total aaa radius coa requests	The total number of RADIUS Change Authorization Requests received from the RADIUS server.
Total aaa radius dm requests	The total number of RADIUS Disconnect Requests Received from the RADIUS server.
Total aaa radius coa acks	The total number of RADIUS Change Authorization Acknowledgement sent to the RADIUS server.
Total aaa radius dm acks	The total number of RADIUS Disconnect Acknowledgments sent to the RADIUS Server.
Total aaa radius coa naks	The total number of RADIUS Change Authorization Negative Acknowledgement sent to the RADIUS server.
Total aaa radius dm naks	The total number of RADIUS Disconnect Negative Acknowledgments sent to the RADIUS Server.
Total radius charg auth	The total number of authentication requests sent to the RADIUS charging server.
Total radius charg auth purg	The total number of RADIUS charging authentication requests purged.
Current radius charg auth	The total number of current authentication requests sent to the RADIUS charging server.
Total radius charg auth succ	The total number of successful authentication requests sent to the RADIUS charging server.
Total radius charg auth fail	The total number of access reject received from the RADIUS charging server.
Total radius charg auth cancel	The total number of accounting authorization request that were cancelled.
Total radius charg acct	The total number of accounting requests sent to the RADIUS charging server.
Current radius charg acct	The total number of current accounting requests sent to the RADIUS charging server
Total radius charg acct succ	The total number of accounting responses from the RADIUS charging server.
Total radius charg acct cancel	The total number of accounting requests that were cancelled.
Total gtpp charg	The total number of GTPP accounting requests sent to the server.
Current gtpp charg	The total number of current GTPP requests sent to the charging server.
Total gtpp charg success	The total number of successful GTPP accounting responses from the charging server.

Field	Description
Total gtpp charg failure	The total number of failed GTPP accounting requests from the charging server.
Total gtpp charg cancelled	The total number of cancelled GTPP accounting requests from the charging server.
Total gtpp charg purged	The total number of purged GTPP accounting requests.
Total radius charg acct purg	The total number of accounting requests purged.
Total gtpp sec charg	The total number of secondary eG-CDR charging requests being processed by this AAAMgr instance for which the GTPP protocol is being used to deliver the charging message to the Charging Gateway Function (CGF). It counts total secondary eG-CDRs generated by this AAAMgr instance.
Total gtpp sec charg purged	The total number of secondary eG-CDRs charging requests being processed and purged by this AAAMgr instance for which the GTPP protocol is being used to deliver the charging message to the Charging Gateway Function (CGF) . It counts total secondary eG-CDRs purged by this AAAMgr instance
Total prepaid online requests	The total number of prepaid online requests.
Current prepaid online requests	The number of prepaid online requests that this AAAMgr instance is currently processing.
Total prepaid online success	The total number of prepaid online requests succeed.
Current prepaid online failure	The number of failed prepaid online requests that this AAAMgr instance is currently processing.
Total prepaid online retried	The total number of prepaid online requests retried.
Total prepaid online cancelled	The total number of prepaid online requests cancelled.
Current prepaid online purged	The total prepaid online cancelled.
Total aaamgr purged requests	The total number of purged AAAMgr requests.
SGSN: Total mm records	Total number of Mobility Management (MM) records in database of this AAAMgr instance for SGSN service.
SGSN: Total pdp records	Total number of PDP context records in database of this AAAMgr instance for SGSN service.
SGSN: Total auth records	Total number of authentication records in database of this AAAMgr instance for SGSN service.
MME: Total extension records	Total number of extension records in database of this AAAMgr instance for MME service.
MME: Total apn records	Total number of APN records in database of this AAAMgr instance for MME service.
MME: Total apn extension records	Total number of extended APN records in database of this AAAMgr instance for MME service.
MME: Total auth records	Total number of authentication records in database of this AAAMgr instance for MME service.

Field	Description
MME: Total auth extension records	Total number of extended authentication records in database of this AAAMgr instance for MME service.
Current active subscriber traces	Total number of subscribers currently enabled with Subscriber Tracing function in database of this AAAMgr instance for MME service.

show session subsystem facility aaaproxy all



Important These statistics are from the perspective of the Session manager (SessMgr) and AAA Proxy Manager (AAAProxyMgr) task itself (not from the perspective of subscribers).

Table 11: show session subsystem facility aaaproxy all Command Output Descriptions

Field	Description
Total gtpp requests	The total number of GTPP requests sent.
Current gtpp requests	The total number of outstanding GTPP requests waiting for response from CGF/storage server.
Total GCDRs	The total number of G-CDRs sent.
Current GCDRs	The total number of outstanding G-CDRs waiting for response from CGF/storage server.
Total eGCDRs	The total number of eG-CDRs sent to CGF/storage server.
Current eGCDRs	The total number of outstanding eG-CDRs waiting for response from CGF/storage server.
Total PGW-GCDRs	The total number of PGW-CDRs sent to CGF/storage server.
Current PGW-GCDRs	The total number of outstanding PGW-CDRs waiting for response from CGF/storage server.
Total G-MB-CDRs	The total number of G-MB-CDRs sent.
Current G-MB-CDRs	The total number of outstanding G-MB_CDRs waiting for response from CGF/storage server.
Total SCDRs	The total number of S-CDRs sent.
Current SCDRs	The total number of outstanding S-CDRs waiting for response from CGF/storage server.
Total MCDRs	The total number of M-CDRs sent.
Current MCDRs	The total number of outstanding M-CDRs waiting for response from CGF/storage server.
Total S-SMO-CDRs	The total number of S-SMO-CDRs sent.

Field	Description
Current S-SMO-CDRs	The total number of outstanding S-SMO-CDRs waiting for response from CGF/storage server.
Total S-SMT-CDRs	The total number of S-SMT-CDRs sent.
Current S-SMT-CDRs	The total number of outstanding S-SMT-CDRs waiting for response from CGF/storage server.
Total LCS-MT-CDRs	The total number of LCS-MT-CDRs sent.
Current LCS-MT-CDRs	The total number of outstanding LCS-MT-CDRs waiting for response from CGF/storage server.
Total LCS-MO-CDRs	The total number of LCS-MO-CDRs sent.
Current LCS-MO-CDRs	The total number of outstanding LCS-MO-CDRs waiting for response from CGF/storage server.
Total SMBMSCDRs	The total number of outstanding SMBMS CDRs waiting for response from CGF/storage server.
Total SGW-CDRs	The total number of outstanding S-GW CDRs waiting for response from CGF/storage server.
Current SGW-GCDRs	The total number of SGW-CDRs sent to CGF/storage server.
Total ePDG-CDRs	The total number of outstanding ePDG CDRs waiting for response from CGF/storage server.
Current ePDG-GCDRs	The total number of ePDG-CDRs sent to CGF/storage server.
Total WLAN-CDRs	The total number of outstanding WLANGW CDRs waiting for response from CGF/storage server.
Total sockets opened	The total number of sockets opened.
Current sockets opened	The total number of sockets waiting to open.
Total files closed	The total number of files that have been already closed.
Current Open files	The number of files that are currently open and still in use.

show session subsystem facility asngwmgr all



Important These statistics are from the perspective of the Session manager (SessMgr) and ASNGW Manager (ASNGWMgr) task itself (not from the perspective of subscribers).

Table 12: show session subsystem facility asngwmgr all Command Output Descriptions

Field	Description
ASNGW Managers	Total number of active ASN GW Managers.
Total active services	Total number of active ASN GW services.
Anchor Session	Specifies the subsystem statistics for ASN GW service sessions in anchored mode.
Non-Anchor Session	Specifies the subsystem statistics for ASN GW service sessions in non-anchored mode.
Total calls arrived	Indicates the total number of sessions received by this ASN Gateway Manager instance for processing.
Total calls rejected	Indicates the total number of sessions that were rejected by this ASN Gateway Manager instance.
Total calls demultiplexed	Indicates the total number of sessions that were successfully setup by this by this ASN Gateway Manager instance.
Total dereg reply sent	Indicates the total number of sessions that were successfully de-registered, or disconnected, by this ASN Gateway Manager instance.
Total control pkts relayed	Indicates the total number of R6 control packets relayed via demux manager.
Current active calls	Indicates the total number of active sessions currently being facilitated by this ASN Gateway Manager instance.
Total active services	The total number of ASN Gateway services that are currently facilitating subscriber sessions.

show session subsystem facility asnpcmgr all



Important These statistics are from the perspective of the Session Manager (SessMgr) and ASN-PC Manager (ASNPCMgr) task itself (not from the subscriber perspective).

Table 13: show session subsystem facility asngwmgr all Command Output Descriptions 0

Field	Description
ASNPC Managers	Total number of active ASN PC Manager instances.
Total active services	Total number of active ASN PC services.
Total calls arrived	Indicates the total number of sessions received by this ASN PC Manager instance for processing.
Total calls rejected	Indicates the total number of sessions that were rejected by this ASN PC Manager instance.

Field	Description
Total calls demultiplexed	Indicates the total number of sessions that were successfully setup by this by this ASN PC Manager instance.
Total calls released	Indicates the total number of sessions that were successfully de-registered, or disconnected, by this ASN PC Manager instance.
Total control pkts relayed	Indicates the total number of R6 control packets relayed via demux manager.
Current active calls	Indicates the total number of active sessions currently being facilitated by this ASN Gateway Manager instance.
context name	Indicates the name of the context where ASN PC service is configured.

show session subsystem facility egtpegmgr all



Important These statistics are from the perspective of the Session Manager (SessMgr) and EGTP Egress Demux Manager (EGTPCegMgr) task itself (not from the subscriber perspective).

Table 14: show session subsystem facility egtpegmgr Command Output Descriptions

Field	Description
EGTPEGMgr	The EGTP Egress Demux Manager task instance number. Since multiple EGTP Manager tasks can be operating simultaneously in the system, each one is assigned an instance number.
Total messages arrived	Indicates the total number of messages received by this EGTP Manager instance for processing.
Total messages rejected	Indicates the total number of messages that were rejected by this EGTP Manager instance.
Total messages demultiplexed	Indicates the total number of messages that were successfully set up by this by this EGTP Manager instance.
Total Peer Nodes	Indicates the total number of peer nodes available for facilitating subscriber sessions.
Total Active Peer Nodes	The total number of peer nodes that are currently facilitating subscriber sessions.
Total active services	The total number of EGTP services that are currently facilitating subscriber sessions.
Total Path Failure Detected	The total number of path failure errors detected by both the Session Manager and EGTP Egress Demux Manager.
Informed by sessmgr	The total number of path failure errors detected by the Session Manager
Detected by demuxmgr	The total number of path failure errors detected by the EGTP Egress Demux Manager.
context name	The context to which this EGTP Egress Manager belongs.

show session subsystem facility egtpinmgr all

Important These statistics are from the perspective of the Session Manager (SessMgr) and EGTP Ingress Demux Manager (EGTPCinMgr) task itself (not from the subscriber perspective).

Table 15: show session subsystem facility egtpinmgr Command Output Descriptions

Field	Description
EGTPINMgr	The EGTP Ingress Demux Manager task instance number. Since multiple EGTP Manager tasks can be operating simultaneously in the system, each one is assigned an instance number.
Total calls arrived	Indicates the total number of sessions received by this EGTP Manager instance for processing.
Total calls rejected	Indicates the total number of sessions that were rejected by this EGTP Manager instance.
Total calls demultiplexed	Indicates the total number of sessions that were successfully setup by this by this EGTP Manager instance.
Total SGSNs	Indicates the total number of SGSNs available for facilitating subscriber sessions.
Total Active SGSNs	The total number of SGSNs that are currently facilitating subscriber sessions.
Total active services	The total number of EGTP services that are currently facilitating subscriber sessions.

show session subsystem facility famgr all

Important These statistics are from the perspective of the Session Manager (SessMgr) and FA Manager (FAMgr) task itself (not from the subscriber perspective).

Table 16: show session subsystem facility famgr Command Output Descriptions

Field	Description
FAMgr	The FA Manager task instance number. Since multiple FA Manager tasks can be operating simultaneously in the system, each one is assigned an instance number.
Total calls arrived	Indicates the total number of sessions received by this FA Manager instance for processing.
Total calls rejected	Indicates the total number of sessions that were rejected by this FA Manager instance.

Field	Description
Total calls demultiplexed	Indicates the total number of sessions that were successfully setup by this by this FA Manager instance.
Total dereg reply sent	Indicates the total number of sessions that were successfully de-registered, or disconnected, by this by this FA Manager instance.
Current active calls	Indicates the total number of active sessions currently being facilitated by this FA Manager instance.
Total active services	The total number of FA services that are currently facilitating subscriber sessions.

show session subsystem facility gtpcmgr all



Important These statistics are from the perspective of the Session Manager (SessMgr) and GTPC Manager (GTPCMgr) task itself (not from the subscriber perspective).



Important This command is not supported release 14.0 onwards. Look for new command **show session subsystem facility egtpinmgr all** instead.

Table 17: show session subsystem facility gtpcmgr Command Output Descriptions

Field	Description
GTPCMgr	The GTPC Manager task instance number. Since multiple GTPC Manager tasks can be operating simultaneously in the system, each one is assigned an instance number.
Total calls arrived	Indicates the total number of sessions received by this GTPC Manager instance for processing.
Total calls rejected	Indicates the total number of sessions that were rejected by this GTPC Manager instance.
Total calls demultiplexed	Indicates the total number of sessions that were successfully setup by this by this GTPC Manager instance.
Total SGSNs	Indicates the total number of SGSNs available for facilitating subscriber sessions.
Total Active SGSNs	The total number of SGSNs that are currently facilitating subscriber sessions.
Current active calls	Indicates the total number of active sessions currently being facilitated by this GTPC Manager instance.
Total active services	The total number of GTPC services that are currently facilitating subscriber sessions.

show session subsystem facility hamgr all

Important These statistics are from the perspective of the Session Manager (SessMgr) and HA Manager (HAMgr) task itself (not from the subscriber perspective).

Table 18: show session subsystem facility hamgr all Command Output Descriptions

Field	Description
HAMgr	The HA Manager task instance number. Since multiple HA Manager tasks can be operating simultaneously in the system, each one is assigned an instance number.
Total calls arrived	Indicates the total number of sessions received by this HA Manager instance for processing.
Total calls rejected	Indicates the total number of sessions that were rejected by this HA Manager instance.
Total calls demultiplexed	Indicates the total number of sessions that were successfully setup by this by this HA Manager instance.
Total dereg reply sent	Indicates the total number of sessions that were successfully de-registered, or disconnected, by this by this HA Manager instance.
Current active calls	Indicates the total number of active sessions currently being facilitated by this HA Manager instance.
Total active services	The total number of HA services that are currently facilitating subscriber sessions.

show session subsystem facility ipsgmgr

Important These statistics are from the perspective of the IPSG Manager (IPSGMgr) task itself (not from the subscriber perspective).

Table 19: show session subsystem facility ipsgmgr Output Descriptions

Field	Description
IPSG Managers	The total number of IPSG Managers running on the chassis.
Total calls arrived	The total number of calls received and processed by the IPSG Managers.
Total calls rejected	The total number of calls rejected by the IPSG Managers.
Total calls demultiplexed	The total number of calls demultiplexed by the IPSG Managers.

Field	Description
Total dereg reply sent	The total number of deregestration replies sent by the IPSG Manager.
Current active calls	The total number of active sessions currently being facilitated by the IPSG Manager instances.
Total active services	The total number of IPSG services that are currently facilitating subscriber sessions.

show session subsystem facility mmedemux



Important These statistics are from the perspective of the MME Demux Manager (MMEDemuxr) task itself (not from the subscriber perspective).

Table 20: show session subsystem facility mmedemux Output Descriptions

Field	Description
MME Demux Managers	The total number of MME managers running on a chassis.
Total number of packets received	The total number of packets received and processed for EPS session by the MME Demux manager.
Total number of packets received (IPSec)	The total number of encrypted packets received and processed for EPS session by the MME Demux manager.
Total number of packets dropped	The total number of packets received but dropped by the MME Demux manager.
Total number of packets dropped (Total MME Unavail)	The total number incoming packets dropped by the MME Demux subsystem (at S1 interface, coming from eNodeB) while waiting for all MME Managers to be activated (status = UP). The MME waits to start processing traffic only after the expected number of MME Managers are UP after an MME restart.
Total number of packets dropped (Assurance Violation)	The total number of packets received but dropped due to not being encrypted.
Total number of octets received	The total number of packets received and processed for EPS session by the MME Demux manager.
Total number of octets received (IPSec)	The total number of encrypted octets received and processed for EPS session by the MME Demux manager.
Total number of octets dropped	The total number of octets received but dropped by the MME Demux manager.
Total number of octets dropped (Assurance Violation)	The total number of octets received but dropped due to not being encrypted.
Total Services	The total number of MME services managed by the MME Demux Manager.

Field	Description
Total Services (IPSec)	The total number of IPSec-enabled MME services managed by the MME Demux Manager.
Enodeb Associations	The total number of eNodeBs connected/associated with MME services managed by the MME Demux Manager.
Enodeb Associations (IPSec)	The total number of IPSec-enabled eNodeBs connected/associated with MME services managed by the MME Demux Manager.
Total SBC Associations Rejected	The total number of SBc Associations rejected by the MME Demux Manager.
Total number of S1 sctp packets dropped (rate-limit)	This counter displays the number of SCTP packets dropped due to the configured rate limit for incoming S1 SCTP connections in MME per chassis.

show session subsystem facility mmemgr all



Important These statistics are from the perspective of the MME Manager (MMEMgr) task itself (not from the subscriber perspective).

Table 21: show session subsystem facility mmemgr all Output Descriptions

Field	Description
MME Managers	Indicates the total number of MME managers running on a chassis.
SCTP Statistics	This group displays the statistics captured over the SCTP interface and processed by this MME manager.
Transmitted SCTP Data	This sub-group displays the statistics of the total data processed and transmitted over SCTP interface by this MME manager.
Init Chunks	Indicates the total SCTP packets with INIT transmitted over SCTP interface by this MME manager.
Init Ack Chunks	Indicates the total SCTP packets with INIT-ACK transmitted over SCTP interface by this MME manager.
Shutdown Chunks	Indicates the total SCTP packets with SHUTDOWN transmitted over SCTP interface by this MME manager.
Shutdown Ack Chunks	Indicates the total SCTP packets with SHUTDOWN-ACK transmitted over SCTP interface by this MME manager.
Cookie Chunks	Indicates the total SCTP packets with COOKIE transmitted over SCTP interface by this MME manager.

Field	Description
Cookie Ack Chunks	Indicates the total SCTP packets with COOKIE-ACK transmitted over SCTP interface by this MME manager.
Data Chunks	Indicates the total SCTP packets with DATA transmitted over SCTP interface by this MME manager.
Data Ack Chunks	Indicates the total SCTP packets with DATA-ACK transmitted over SCTP interface by this MME manager.
Shutdown Complete Chunks	Indicates the total SCTP packets with SHUTDOWN-COMPLETE transmitted over SCTP interface by this MME manager.
Heartbeat Chunks	Indicates the total SCTP packets with HEARTBEAT transmitted over SCTP interface by this MME manager.
HeartBeat Ack Chunks	Indicates the total SCTP packets with HEARTBEAT-ACK transmitted over SCTP interface by this MME manager.
Abort Chunks	Indicates the total SCTP packets with ABORT transmitted over SCTP interface by this MME manager.
Error Chunks	Indicates the total SCTP packets with ERROR transmitted over SCTP interface by this MME manager.
Received SCTP Data	This sub-group displays the statistics of the total data received over SCTP interface and processed by this MME manager.
Init Chunks	Indicates the total SCTP packets with INIT received over SCTP interface by this MME manager.
Init Ack Chunks	Indicates the total SCTP packets with INIT-ACK received over SCTP interface by this MME manager.
Shutdown Chunks	Indicates the total SCTP packets with SHUTDOWN received over SCTP interface by this MME manager.
Shutdown Ack Chunks	Indicates the total SCTP packets with SHUTDOWN-ACK received over SCTP interface by this MME manager.
Cookie Chunks	Indicates the total SCTP packets with COOKIE received over SCTP interface by this MME manager.
Cookie Ack Chunks	Indicates the total SCTP packets with COOKIE-ACK received over SCTP interface by this MME manager.
Data Chunks	Indicates the total SCTP packets with DATA received over SCTP interface by this MME manager.
Data Ack Chunks	Indicates the total SCTP packets with DATA-ACK received over SCTP interface by this MME manager.
Shutdown Complete Chunks	Indicates the total SCTP packets with SHUTDOWN-COMPLETE received over SCTP interface by this MME manager.

Field	Description
Heartbeat Chunks	Indicates the total SCTP packets with HEARTBEAT received over SCTP interface by this MME manager.
HeartBeat Ack Chunks	Indicates the total SCTP packets with HEARTBEAT-ACK received over SCTP interface by this MME manager.
Abort Chunks	Indicates the total SCTP packets with ABORT received over SCTP interface by this MME manager.
Error Chunks	Indicates the total SCTP packets with ERROR received over SCTP interface by this MME manager.
Retransmitted SCTP Data	This sub-group displays the statistics of the total data processed and retransmitted over SCTP interface by this MME manager.
Init Chunks	Indicates the total SCTP packets with INIT retransmitted over SCTP interface by this MME manager.
Shutdown Chunks	Indicates the total SCTP packets with SHUTDOWN retransmitted over SCTP interface by this MME manager.
Shutdown Ack Chunks	indicates the total SCTP packets with SHUTDOWN-ACK retransmitted over SCTP interface by this MME manager.
Cookie Chunks	Indicates the total SCTP packets with COOKIE retransmitted over SCTP interface by this MME manager.
Data Chunks	Indicates the total SCTP packets with DATA transmitted over SCTP interface by this MME manager.
Total Bytes Sent To Lower Layer	Indicates the total bytes processed and sent to lower layer over SCTP interface by this MME manager.
Total Bytes Received From Lower Layer	Indicates the total bytes received from lower layer over SCTP interface by this MME manager for processing.
Total Packets Sent To Lower Layer	Indicates the total packets processed and sent to lower layer over SCTP interface by this MME manager.
Total Packets Received From Lower Layer	Indicates the total packets received from lower layer over SCTP interface by this MME manager for processing.
S1AP Statistics	This group displays the statistics captured over S1-AP interface and processed by this MME manager received or transmitted from/to eNodeB.
Transmitted S1AP Data	This sub-group displays the statistics of the total data processed and transmitted over S1-AP interface by this MME manager to eNodeB.
S1 Setup Response	Indicates the total number of S1 SETUP RESPONSE messages for S1 setup procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
S1 Setup Failure	Indicates the total number of S1 SETUP FAILURE messages for S1 setup procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.

Field	Description
Reset	Indicates the total number of S1 RESET messages for S1 reset procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
Reset Acknowledge	Indicates the total number of S1 RESET-ACK messages for S1 reset procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
Overload Start	Indicates the total number of OVERLOAD-START messages for S1 overload start procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
Overload Stop	Indicates the total number of OVERLOAD-START messages for S1 overload start procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
MME Dir Information Transfer	Indicates the total number of MME DIRECT INFORMATION TRANSFER messages for MME Direct Information Transfer procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
Paging	Indicates the total number of PAGING messages for paging procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
EnodeB Configuration Update Acknowledge	Indicates the total number of ENB CONFIGURATION UPDATE ACK messages for eNodeB Configuration Update procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
EnodeB Configuration Update Failure	Indicates the total number of ENB CONFIGURATION UPDATE FAILURE messages for eNodeB Configuration Update procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
MME Configuration Update	Indicates the total number of MME CONFIGURATION UPDATE messages sent by this MME manager 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 Failure	Indicates the total number of failure occurred during S1AP encode procedure and S1AP ENCODE FAILURE messages processed and transmitted over S1-AP interface by this MME manager to eNodeB.
Paging Dropped	Indicates the total number S1 paging requests to all eNodeBs which were dropped because the number of paging requests exceeded the S1 paging rate threshold as configured in the Global Config Mode command: **network-overload-protection mme-tx-msg-rate-control enb s1-paging**.
Received S1AP Data	This sub-group displays the statistics for the total amont of data received over the S1-AP interface by this MME manager from eNodeB.
S1 Setup Request	Indicates the total number of S1 SETUP REQUEST messages for S1 setup procedure received over S1-AP interface by this MME manager from eNodeB.
Reset	Indicates the total number of S1 RESET messages for S1 reset procedure received over S1-AP interface by this MME manager from eNodeB.

Field	Description
Reset Acknowledge	Indicates the total number of S1 RESET-ACK messages for S1 reset procedure received over S1-AP interface by this MME manager from eNodeB.
EnodeB Dir Information Transfer	Indicates the total number of ENB DIRECT INFORMATION TRANSFER messages for eNB Direct Information Transfer procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
EnodeB Configuration Update	Indicates the total number of ENB CONFIGURATION UPDATE messages for eNB Configuration Update procedure processed and transmitted over S1-AP interface by this MME manager to eNodeB.
S1AP Decode Failure	Indicates the total number of failure occurred during S1AP decoding procedure by eNodeB and S1AP DECODE FAILURE messages received over S1-AP interface by this MME manager from eNodeB.
S1AP Unexpected Event	Indicates the total number of failure occurred due to unexpected events during S1AP procedure at eNodeB and S1AP UNEXPECTED EVENT messages received over S1-AP interface by this MME manager from eNodeB.
Total Services	Indicates the total number of MME services managed by this MME Manager.
Total Services (IPSec)	Indicates the total number of IPSec-enabled MME services managed by this MME Manager.
Enodeb Associations	Indicates the total number of eNodeBs connected/associated with MME services managed by this MME Manager.
Enodeb Associations (IPSec)	Indicates the total number of IPSec-enabled eNodeBs connected/associated with MME services managed by this MME Manager.
S1AP Partial Reset to Sessmgr(Non-Vector)	Indicates the total number of Partial Reset messages received by each Session Manager.
Service Start Request	The total number of service start requests received by MMEMgr.
Service Modify Request	The total number of service modify requests received by MMEMgr.
Service Stop Request	The total number of service stop requests received by MMEMgr.
Paging Messages Sent	The total number of paging messages sent by MMEMgr.
Temporary EnodeB entries(For Trap Generation)	The total number of eNodeB entries cached for generating SNMP traps.
PLMN Validation Failure	The total number of PLMN validations failed at MMEMgr.
EnodeB Id Validation Failure	The total number of eNodeB id validations failed at MMEMgr.
usap(SCTP Endpoints) Allocated	The total number of SCTP user service access points allocated at MMEMgr.
Current Number of SCTP Flows	Current number of SCTP flows at MMEMgr.

Field	Description
Dropped Packets Reason	The following group of counters displays the number of packets dropped at the MME Manager due to various reasons.
Incorrect Length	The total number of dropped packets with reason: Received PDU length at MED layer is less than Length value found after decoding the IP Packet.
Oversized PDU	The total number of dropped packets with reason: Received PDU length at MED layer is more than DBUF size(10K bytes).
No Flow exists	The total number of dropped packets with reason: There is no SCTP flow existing for the flowId received from underlying layer.
Flow Inactive	The total number of dropped packets with reason: Flow entry is not Active when the message is received.
Invalid IP Ver	The total number of dropped packets with reason: Received PDU length at MED layer is less than Length value found after decoding the IP Packet.
Port Mismatch	The total number of dropped packets with reason: Received PDU length at MED layer is less than Length value found after decoding the IP Packet.
Invalid Protocol	The total number of dropped packets with reason: Received PDU length at MED layer is less than Length value found after decoding the IP Packet.
Total Services(SBc)	Total number of SBc services configured on this system.
SBc Statistics	
Transmitted SBc Data	This subgroup includes counters for data transmitted for all SBc services.
Total Transmitted	Total number of messages transmitted from the MME to all CBCs.
Transmit Errors	This subgroup includes counters for errors encountered while transmitting SBc messages towards CBC.
Transport Errors	Total number of failures, due to SCTP, while transmitting SBc messages towards CBC.
Encode Failures	Total number of failures in sending messages to CBC due to message encoding failures.
No buffers	Total number of failures in sending messages to CBC due to memory allocation failures.
Transport Buffer Failure	Total memory allocation failures during sending of SBc message over SCTP.
Encode Buffer Failure	Total memory allocation failures during encoding of IEs for SBc message.
Write Replace Warning Response	The total number of Write-Replace Warning Responses sent for all SBc services (Tracking Area Not Valid + MME Capacity Exceeded + Warn Bcast Not Operational + Message Accepted).
Tracking Area Not Valid	The total number of Write-Replace Warning Response messages sent from the MME to the CBC with cause Tracking Area Not Valid.
MME Capacity Exceeded	The total number of Write-Replace Warning Response messages sent from the MME to the CBC with cause MME Capacity Exceeded.

Field	Description
Warn Bcast NotOperational	The total number of Write-Replace Warning Response messages sent from the MME to the CBC with cause Warning Broadcast Not Operational.
Message Accepted	The total number of Write-Replace Warning Response messages sent from the MME to the CBC with cause Message Accepted.
Stop Warning Response	The total number of Stop Warning Responses sent for all SBc services (Tracking Area Not Valid + MME Capacity Exceeded + Warn Bcast Not Operational + Message Accepted).
Tracking Area Not Valid	The total number of Stop Warning Response messages sent from the MME to the CBC with cause Tracking Area Not Valid.
MME Capacity Exceeded	The total number of Stop Warning Response messages sent from the MME to the CBC with cause MME Capacity Exceeded.
Warn Bcast NotOperational	The total number of Stop Warning Response messages sent from the MME to the CBC with cause Warning Broadcast Not Operational.
Message Accepted	The total number of Stop Warning Response messages sent from the MME to the CBC with cause Message Accepted.
Error Indication	The total number of Error Indication messages sent from the MME to the CBC.
Received SBc Data	This subgroup includes counters for data received for all SBc services.
Total Received PDUs	The total number of messages received from all CBCs.
PDU Decode Success	The total number of successful PDU decodes.
Receive Errors	This subgroup includes counters for PDU receive errors.
No Sbc Association	The total number of received SBc messages dropped due to no matching association.
PDU Decode Failures	The total number of received SBc messages dropped due to PDU decode failure.
Write Replace Warning Request	The total number of Write Replace Warning Request messages received from the CBC.
TAI List Not Present	The total number of Write Replace Warning Request messages received from the CBC without a List-Of-TAIs IE.
Stop Warning Request	The total number of Stop Warning Request messages received from the CBC.
TAI List Not Present	The total number of Stop Warning Request messages received from the CBC without a List-Of-TAIs IE.
Error Indication	The total number of Error Indication messages received from the CBC.
IE Errors	The total number of CBC IE failures.
Protocol Error Statistics	This subgroup includes counters for Protocol Errors for all SBc services.
Unknown Procedures	The total number of messages encountered with Unknown Procedure codes.

Field	Description
Unknown IEs	The total number of messages encountered with Unknown IEs.
Unknown Messages	The total number of unrecognized messages encountered.
Missing Mandatory IEs	The total number of messages encountered with Missing Mandatory IE.
Transfer Syntax Error	The total number of messages encountered with a Transfer Syntax Error.
Semantic Error	The total number of messages encountered with a Semantic Error.
Message Not Compatible	The total number of messages encountered with error: Message Not Compatible.
Others	The total number of parser internal messages.
Abstract Syntax Errors	This subgroup includes counters for Abstract Syntax Errors for all SBc services.
Reject	The total number of messages encountered with Abstract Syntax Error with Criticality: Reject.
Ignore and notify	The total number of messages encountered with Abstract Syntax Error with Criticality: Ignore and Notify.
Ignore	The total number of messages encountered with Abstract Syntax Error with Criticality: Ignore.
Falsely Constr Message	The total number of messages encountered with Abstract Syntax Error: Falsely Constructed message.
SBc Association Statistics	This subgroup includes counters related to SBc Associations for all SBc services.
Total Active	The total number of SBc Associations currently Active.
Total Created	The total number of SBc Associations created.
Total Closed	The total number of SBc Associations closed.
CBC Transactions Created	The total number of CBC transactions created.
CBC Transaction Failed	The total number of CBC transactions failed.
CBC Transaction Timeout	The total number of CBC transactions timed out.
SCTP Flows	The current number of SCTP flows for SBc data at the MMEMgr.
CBC Not Found	The total number of errors due to CBC not found.
IMSIMGR Selection counters	Displays the IMSI Manager Selection Counters
IMSIMGR 1	Displays the number of requests at the IMSI Manager "1".
IMSIMGR 2	Displays the number of requests at the IMSI Manager "2".
IMSIMGR 3	Displays the number of requests at the IMSI Manager "3".
IMSIMGR 4	Displays the number of requests at the IMSI Manager "4".

Field	Description
Paging CS Priority	Displays the configured CS Priority value
Paging PS priority	Displays the configured PS Priority value
Congestion-Configuration:	
CPU Congestion	Indicates whether CPU congestion control is enabled or disabled - Enabled/Disabled.
Thresholds:	
CPU Utilization	Displays the configured CPU utilization value.
CPU Tolerance	Displays the configured CPU tolerance value.
Congestion-State	Indicates the congestion state - Busy/Not Busy.
Congestion History:	
Timestamp	Displays the timestamp.
CPU usage	Displays the CPU usage.

show session subsystem facility sessmgr all



Important These statistics are from the perspective of the Session Manager (SessMgr) task itself (not from the subscriber perspective).

Table 22: show session subsystem facility sessmgr all Output Descriptions

Field	Description
SessMgr	Displays the Session Manager task instance number. Since multiple Session Manager tasks can be operating simultaneously in the system, each one is assigned an instance number.
Total calls arrived	The total number of calls for which registration requests were received by this Session Manager instance.
Total calls rejected	The total number of calls that were rejected by this Session Manager instance.
Total calls connected	The total number of calls that are connected (including active, dormant, being set up, and being disconnected) by this Session Manager instance.
Total calls failed	The total number of calls processed by this Session Manager instance which have failed.
Total calls disconnected	The total number of calls that were disconnected by this Session Manager instance.
Total handoffs	The total number of calls that are handed off by this Session Manager instance.

Field	Description
Total renewals	The total number of call that were reprocessed by this Session Manager instance.
Total active-to-idle transitions	The total number of call sessions passed through active mode to idle mode.
Total idle-to-active transitions	The total number of call sessions passed through idle mode to active mode.
Total auth successes	The total number of successful authentications for calls being processed by this Session Manager instance.
Total auth failure	The total number of failed authentications for calls being processed by this Session Manager instance.
Current aaa active sessions	The total number of calls being processed by this Session Manager instance for which there are active AAA authentication and/or accounting sessions.
Current aaa deleting sessions	The total number of calls being processed by this Session Manager instance for which the AAA accounting is being terminated.
Current aaa acct pending	The total number of calls being processed by this Session Manager instance for which there are pending AAA authentication and/or accounting sessions.
aaa acct items (used/max)	The total number of AAA accounting items used and the maximum allowed by this Session Manager instance.
aaa buffer (used in MB/max in MB)	The AAA buffer space used and the maximum allowed in megabytes for this Session Manager instance.
Total aaa cancel auth	The total number of canceled AAA authentication requests for this Session Manager instance.
Total aaa acct purged	The total number of AAA accounting requests received by this Session Manager instance that had to be purged because the storage limit of pending accounting requests had been exceeded.
Total radius acct purged	The total number of RADIUS accounting requests received by this Session Manager instance that had to be purged because the storage limit of pending accounting requests had been exceeded.
Total LCP up	The total number of calls being processed by this Session Manager instance that have completed the Link Control Protocol (LCP) phase of the registration process.
Total IPCP up	The total number of calls being processed by this Session Manager instance that have completed the Internet Protocol Control Protocol (IPCP) phase of the registration process.
Total IPv6CP up	The total number of calls being processed by this Session Manager instance that have completed the Internet Protocol version 6 (IPv6) phase of the registration process.
Total source violation	The total number of source violations experienced for all calls being processed by this Session Manager instance.
Total keepalive failure	The total number of keep-alive failures experienced for all calls being processed by this Session Manager instance.

Field	Description
Empty fwd pkt sessions	The total number of calls that were processed by this session manager instance for which there were no data packets being sent to the subscriber.
Empty rev pkt sessions	The total number of calls that were processed by this session manager instance for which there were no data packets being received from the subscriber.
Total 3gpp2 prepaid sess	The total number of 3gpp2 prepaid sessions on the system.
Current 3gpp2 prepaid sess	The current number of active 3gpp2 prepaid sessions on the system.
Total 3gpp2 online auth requests	The total number of 3gpp2 sessions requesting authentication on the system.
Total 3gpp2 online auth success	The total number of authenticated 3gpp2 active sessions on the system.
Total 3gpp2 online auth failures	The total number of 3gpp2 sessions that had authentication failures.
Total 3gpp2 online prepaid errors	The total number of prepaid 3gpp2 sessions that incurred errors.
Total 3gpp2 prepaid initial auth errors	The total number of prepaid initial 3gpp2 sessions that had authentication errors.
Total Rfc3261 subscribers	Total number of subscribers registered in CSCF Rfc3261 service.
Total Proxy Cscf subscribers	Total number of subscribers registered in Proxy-CSCF service.
Total Serving Cscf subscribers	Total number of subscribers registered in Serving-CSCF service.
Total Proxy-Serving cscf subscribers	Total number of subscribers registered in Collapsed Proxy-Serving-CSCF service.
Total voice-push sessions	The total number of voice-push sessions.
Current voice-push sessions	The current number of active voice-push sessions.
Total voice-push-filt sessions	The total number of voice-push-filt sessions.
Current voice-push-filt sessions	The current number of voice-push-filt sessions.
Total non-voice-push sessions	The total number of non-voice-push session.
Current non-voice-push sessions	The current number of non-voice-push sessions
Total undetermined sessions	The total number of undetermined sessions.
Current undetermined sessions	The current number of undetermined sessions.
Intra-ASNGW HO attempted	The total number of inter-BS (Intra-ASN GW) handovers attempted by system.
Intra-ASNGW HO succeeded	The total number of inter-BS (Intra-ASN GW) handover attempts succeeded.
Inter-ASNGW HO attempted	The total number of inter-ASN GW handovers attempted by system.
Inter-ASNGW HO succeeded	The total number of inter-ASN GW handover attempts succeeded.
ASNPC IM Entry attempted	The total number of idle mode entry attempted by Paging Controller.

Field	Description
ASNPC IM Entry Succeeded	The total number of idle mode entry by Paging Controller succeeded.
ASNPC IM Exit attempted	The total number of idle mode exit attempted by Paging Controller.
ASNPC IM Exit Succeeded	The total number of idle mode exit by Paging Controller succeeded.
ASNPC LU attempted	The total number of location updates attempted by Paging Controller.
ASNPC LU Succeeded	The total number of location updates by Paging Controller succeeded.
ASNPC Paging Triggered	The total number of pagings triggered by Paging Controller.
ASN Ctrl packets received	The total number of control packets received for ASN GW service session.
ASN Ctrl packets runt received	The total number of control packets with run-time error discarded for ASN GW service session.
ASN Ctrl packets csum received	The total number of control packets with checksum error discarded for ASN GW service session.
ASN Ctrl packets no-flow discarded	The total number of control packets (without any flow) discarded for ASN GW service session.
ASNGW data pkts stored (during paging)	The total number of data packets stored during paging.
ASNGW data pkts flushed (during paging)	The total number of data packets flushed during paging.
CRP-RP handoff attempted	The total number of Closed RP to RP handoffs that were attempted.
CRP-RP handoff succeeded	The total number of Closed RP to RP handoffs that succeeded.
RP-CRP handoff attempted	The total number of RP to Closed RP handoffs that were attempted.
RP-CRP handoff succeeded	The total number of RP to Closed RP handoffs that succeeded.
Current active subscriber traces	Total number of subscribers currently enabled with Subscriber Tracing function in database of this SessMgr instance for MME service.
Current MME EGTP path failure queued for ecm-idle sessions	The current number of ECM Idle sessions queued for deactivation due to an EGTP path failure for this Session Manager instance (for MME services).
Current MME EGTP path failure queued for ecm-connected sessions	The current number of ECM Connected sessions queued for deactivation due to an EGTP path failure for this Session Manager instance (for MME services).
Maximum MME EGTP path failure queued for ecm-idle sessions	The maximum number of ECM Idle sessions queued for deactivation due to an EGTP path failure for this Session Manager instance (for MME services). This is the maximum value of the current ecm-idle sessions reached since the Session Manager started.
Maximum MME EGTP path failure queued for ecm-connected sessions	The maximum number of ECM Connected sessions queued for deactivation due to an EGTP path failure for this Session Manager instance (for MME services). This is the maximum value of the current ecm-connected sessions reached since the Session Manager started.

Field	Description
Data statistics	This table categorizes the number of Receive and Transmit packets into packet size ranges. These statistics are totals for all calls being processed by this Session Manager instance.
In-Progress Call Duration Statistics	This table categorizes the total number of calls being processed by this Session Manager according to various time durations ranging from less than (<) 1 minute to greater than (>) 24 hours.
Setup Time Statistics	This table categorizes the amount of time it took to set up calls according to various time durations ranging from less than (<) 100 ms to greater than (>) 18 seconds.
Total SGSN Fast Path statistics update	Total number of updates for statistical information from NPU in fast path support. The title of this counter is valid in release 12.2 and earlier versions.
Total Gtpu Fast Path statistics update	Total number of updates for statistical information from NPU in fast path support. The title of this counter is valid in release 14.0 and later versions.
Total SGSN Fast Path out-of-order statistics updates	Total number of updates for out of order packet statistics from NPU in fast path support. The title of this counter is valid in release 12.2 and earlier versions.
Total Gtpu Fast Path out-of-order statistics updates	Total number of updates for out of order packet statistics from NPU in fast path support. The title of this counter is valid in release 14.0 and later versions.
Total SGSN Fast Path statistics updates lost	Total number of packets lost for statistical updates from NPU in fast path support. The title of this counter is valid in release 12.2 and earlier versions.
Total Gtpu Fast Path statistics updates lost	Total number of packets lost for statistical updates from NPU in fast path support. The title of this counter is valid in release 14.0 and later versions.
Total SGSN Fast Path packets lost	Total number of lost packets of all types from NPU in fast path support. The title of this counter is valid in release 12.2 and earlier versions.
Total Gtpu Fast Path packets lost	Total number of lost packets of all types from NPU in fast path support. The title of this counter is valid in release 14.0 and later versions.
Total SGSN Fast Path bytes lost	Total number of lost bytes from NPU in fast path support. The title of this counter is valid in release 12.2 and earlier versions.
Total Gtpu Fast Path bytes lost	Total number of lost bytes from NPU in fast path support. The title of this counter is valid in release 14.0 and later versions.
Total SGSN Fast Path packets received	Total number of all type of packets received from NPU in fast path support. The title of this counter is valid in release 12.2 and earlier versions.
Total Gtpu Fast Path packets received	Total number of all type of packets received from NPU in fast path support. The title of this counter is valid in release 14.0 and later versions.

Field	Description
Total SGSN Fast Path bytes received	Total number of all type of bytes received from NPU in fast path support. The title of this counter is valid in release 12.2 and earlier versions.
Total Gtpu Fast Path bytes received	Total number of all type of bytes received from NPU in fast path support. The title of this counter is valid in release 14.0 and later versions.
In-progress calls	The number of calls that are currently in progress (active, dormant, being set up, or being disconnected) and being processed by either the system (if no keywords were used), a specific PDSN service (if the **pdsn-service** keyword was used), or a specific PCF (if the **pcf** keyword was used).
In-progress active calls	The total number of active sessions being processed by this Session Manager instance.
In-progress dormant calls	The total number of dormant sessions being processed by this Session Manager instance. **Note:** Sessions facilitated through PDSN Closed R-P services are always displayed as "Active" due to the fact that PDSN Closed R-P services do not receive dormancy information from the PCF.
In-progress always-on calls	The total number of always-on sessions being processed by this Session Manager instance.
In-progress calls @ MBMS UE AUTHORIZING state	The total number of MBMS sessions currently in UE authorization state.
In-progress calls @ MBMS BEARER AUTHORIZING state	The total number of MBMS sessions currently in bearer authorization state.
In-progress calls @ ARRIVED state	The total number of sessions being processed by this Session Manager instance that are at the onset of the registration process.
In-progress calls @ LCP-NEG state	The total number of sessions being processed by this Session Manager instance that are in the Link Control Protocol (LCP) negotiation phase of the registration process.
In-progress calls @ LCP-UP state	The total number of sessions being processed by this Session Manager instance that have just completed the Link Control Protocol (LCP) negotiation phase of the registration process.
In-progress calls @ AUTHENTICATING state	The total number of sessions being processed by this Session Manager instance that are in the process of being authenticated.
In-progress calls @ AUTHENTICATED state	The total number of sessions being processed by this Session Manager instance that have just completed the authentication phase of the registration process.
In-progress calls @ L2TP-LAC CONNECTING state	The number of calls that have an L2TP tunnel in the process of being brought up.
In-progress calls @ IPCP-UP state	The total number of sessions being processed by this Session Manager instance that have just completed the Internet Protocol Control Protocol (IPCP) phase of the registration process.
In-progress calls @ NON-ANCHOR CONNECTED state	The total number of WiMAX sessions being processed by this Session Manager instance that are currently being in connected state in non-anchor mode.

Field	Description
In-progress calls @ MOBILE-IPv6 CONNECTED state	Total number of Proxy Mobile IPv6 sessions currently established.
In-progress calls @ GTP CONNECTING state	Total number of GTPv2 sessions in connecting state which are awaiting Create Session Response message in reply to Create Session Request already sent.
In-progress calls @ GTP CONNECTED state	Total number of GTPv2 sessions currently established.
In-progress calls @ PROXY-MOBILE-IP CONNECTING state	Total number of Proxy Mobile IPv6 sessions in connecting state and are waiting for PBA in reply to PBU already sent.
In-progress calls @ SIMPLE-IP CONNECTED state	The total number of Simple IP data sessions being processed by this Session Manager instance that are currently being supported.
In-progress calls @ MOBILE-IP CONNECTED state	The total number of Mobile IP data sessions being processed by this Session Manager instance that are currently being supported.
In-progress calls @ PROXY-MOBILE-IP CONNECTED state	The total number of Proxy Mobile IP data sessions being processed by this Session Manager instance that are currently being supported.
In-progress calls @ EPDG RE-AUTHORIZING state	Total number of sessions for which RAR is received from AAA and are in phase of reauthorization.
In-progress calls @ L2TP-LAC CONNECTED state	The number of calls that are passing data through an L2TP tunnel.
In-progress calls @ PDP-TYPE-IP CONNECTED state	The total number of PDP contexts of type IP that are currently connected. This field applies to GGSN only.
In-progress calls @ PDP-TYPE-PPP CONNECTED state	The total number of PDP contexts of type PPP that are currently connected. This field applies to GGSN only.
In-progress calls @ BCMCS CONNECTED state	The total number of BCMCS sessions currently in connected state.
In-progress calls @ MBMS UE CONNECTED state	The total number of MBMS sessions currently in UE connected state.
In-progress calls @ MBMS BEARER CONNECTED state	The total number of MBMS sessions currently in bearer connected state.
In-progress calls @ ASNPC CONNECTED state	The number of ASN Paging Controller calls that are currently connected.
In-progress calls @ DISCONNECTING state	The total number of sessions being processed by this Session Manager instance that are in the process of disconnecting.
In-progress calls @ CSCF-REGISTERING state	Total number of CSCF sessions which are in registration processing state.

Field	Description
In-progress calls @ CSCF-REGISTERED state	Total number of cscf sessions which are in registered state.
In-progress calls @ CSCF-CALL-ARRIVED state	Total number of CSCF sessions which are processing the newly arrived CSCF calls (i.e., processing initial Invite, waiting for provisional response, waiting for final response, etc.).
In-progress calls @ CSCF-CALL-CONNECTING state	Total number of CSCF sessions which are in call connecting state (waiting for ACK).
In-progress calls @ CSCF-CALL-CONNECTED state	Total number of CSCF sessions which are in call connected state.
In-progress calls @ CSCF-CALL-DISCONNECTING state	Total number of CSCF sessions which are in call disconnecting state (i.e., processing BYE , waiting for BYE response, etc.).
In-progress calls @ MME ATTACHED state	Indicates the number of MME subscriber session currently attached.
User Data statistics	This section indicates the Data octets and Data packets received and send by a user.
Data octets from User	The number of Data octets send from the user.
Data octets to User	The number of Data octets received by the user.
Data packets from User	The number of Data packets send from the user.
Data packets to User	The number of Data packets received by the user.
Pilot packet statistics	
VPN name	Name of the VPN
Server name	Name of the server
Total NAT Alloc Pilot-Packets Sent	The total number of Pilot Packets sent per VPN/server for every IP/Port allocation for all NAT enabled calls.
Total NAT De-alloc Pilot-Packets Sent	The total number of Pilot Packets sent per VPN/server for every IP/Port deallocation for all NAT enabled calls.
Total Non NAT Alloc Pilot-Packets Sent	The total number of Pilot Packets sent per VPN/server for every IP/Port allocation for all non-NAT calls.
Total Non NAT De-alloc Pilot-Packets Sent	The total number of Pilot Packets sent per VPN/server for every IP/Port deallocation for all non-NAT calls.
Total Alloc Pilot-Packets Sent	The total number of Pilot Packets sent per VPN/server for every IP/Port allocation for all call types.
Total De-alloc Pilot-Packets Sent	The total number of Pilot Packets sent per VPN/server for every IP/Port deallocation for all call types.

Field	Description
RAT-Change-User-Info	The total number of Pilot Packets sent for every subscriber IP allocation on RAT type change.
RAT-Change-NAT-Info	The total number of Pilot Packets sent for every NAT port chunk allocation on RAT type change.
Geog Redundancy Compression Info	The Service Redundancy Protocol (SRP) compression algorithm used for payload messaging between Interchassis Session Recovery (ICSR) chassis in support of geographical redundancy.
Chkpoint Compress Supported	Indicates the current compression algorithm supported on this chassis: none (SRP not enabled), lz4 or zlib (default).
Chkpoint Compress Agreed	Indicates the negotiated compression algorithm agreed to by both the Active and Standby chassis: none (SRP not enabled), lz4 or zlib (default).
<lz4 or Zlib> Compression Statisics	Specifies the algorithm for which the following statistics apply.
CompSuccess	The total number of successful compression attempts.
DeCompSuccess	The total number of successful decompression attempts.
CompFailure	The total number of failed compression attempts.
DeCompFailure	The total number of failed decompression attempts.
init	Debug only
deinit	Debug only
CompInbyte	The total number of incoming (received) compressed bytes.
CompOutbytes	The total number of outgoing (sent) compressed bytes.
DeCompInbytes	The total number of incoming (received) decompressed bytes.
DeCompOutbyte	The total number of outgoing (sent) decompressed bytes.
Compr ratio	Debug only

show session summary

Table 23: show session summary Command Output Descriptions

Field	Description
4G LTE (EUTRAN)	The number of sessions using 4G LTE access technology (P-GW, S-GW). For example, NB-IoT= 2, LTE-M = 0

Field	Description
2G (GERAN)	The number of sessions using 2G GERAN access technology (GGSN, P-GW/S-GW, S4 SGSN).
3G (UTRAN)	The number of sessions using 3G UTRAN access technology (GGSN, P-GW/S-GW, S4 SGSN).
WiFi (WIRELSS LAN)	The number of sessions using WiFI access technology (P-GW, CGW).
eHRPD	The number of eHRPD (evolved High Rate Packet Data) sessions.
Others	The number of sessions using other access technologies.
Total sessions	The total number of sessions encompassing all access technologies.
Active	The total number of active sessions.
Dormant	The total number of dormant sessions.
pdsn-simple-ipv4	The number of PDSN (Packet Data Serving Node) Simple IPv4 sessions.
pdsn-simple-ipv6	The number of PDSN Simple 6 sessions.
pdsn-mobile-ip	The number of PDSN Mobile IPv4 sessions.
ha-mobile-ipv6	The number of PDSN Mobile IPv6 sessions.
hsgw-ipv6	The number of HSGW (HRPD Serving Gateway) IPv6 sessions.
hsgw-ipv4	The number of HSGW IPv4 sessions.
hsgw-ipv4-ipv6	The number of HSGW IPv4-IPv6 sessions.
pgw-pmip-ipv6	The number of P-GW (Packet Data Network-Gateway) PMIPv6 (Proxy Mobile IPv6) sessions
pgw-pmip-ipv4	The number of P-GW PMIP IPv4 sessions
pgw-pmip-ipv4-ipv6	The number of P-GW PMIP IPv4-IPv6 sessions
pgw-gtp-ipv6	The number of P-GW GTP (GPRS Tunneling Protocol) IPv6 sessions.
pgw-gtp-ipv4	The number of P-GW GTP IPv4 sessions.
pgw-gtp-ipv4-ipv6	The number of P-GW GTP IPv4-IPv6 sessions.
sgw-gtp-ipv6	The number of S-GW (Serving Gateway) GTP IPv6 sessions.
sgw-gtp-ipv4	The number of S-GW GTP IPv4 sessions.
sgw-gtp-ipv4-ipv6	The number of S-GW GTP IPv4-IPv6 sessions.
sgw-pmip-ipv6	The number of S-GW PMIPv6 sessions.
sgw-pmip-ipv4	The number of S-GW PMIP (IPv4) sessions.

Field	Description
sgw-pmip-ipv4-ipv6	The number of S-GW PMIP (IPv4-IPv6) sessions.
pgw-gtps2b-ipv4	The number of GTP S2b IPv4 sessions.
pgw-gtps2b-ipv6	The number of GTP S2b IPv6 sessions.
pgw-gtps2b-ipv4-ipv6	The number of GTP S2b IPv4-IPv6 sessions.
mme	The number of MME (Mobility Management Entity) sessions.
ipsg-rad-snoop	The number of IPSG (IP Services Gateway) RADIUS snoop sessions.
ipsg-rad-server	The number of IPSG RADIUS server sessions.
ha-mobile-ip	The number of HA (Home Agent) Mobile IP sessions.
ggsn-pdp-type-ppp	The number of GGSN (Gateway GPRS Serving Node) PDP (Packet Data Protocol) type PPP (Point-to-Point Protocol) sessions.
ggsn-pdp-type-ipv4	The number of GGSN PDP type IPv4 sessions.
lns-l2tp	The number of LNS (L2TP Network Server) L2TP (Layer 2 Tunneling Protocol) sessions.

show session trace statistics

Table 24: show session trace statistics Command Output Descriptions

Field	Description
Network Element Status	Specifies if session traces are enabled for the listed network elements.
Number of current trace sessions	The total number of session traces currently active.
Total trace sessions activated	The total number of session traces activated.
Total number of trace session activation failures	The total number of session activation failures.
Total number of trace recording sessions triggered	The total number of trace recording sessions triggered
Total number of messages traced	The total number of messages traced for the activated session traces.
Number of messages dropped	
No memory	The total number of messages dropped due to a no memory condition.
No trace recording session	The total number of messages dropped due to a failure to receive the start trigger.
Interface not traced	The total number of messages dropped due to the messages being received on interfaces not part of the trace interface list.

Field	Description
Total number of file generated	The total number of session trace files generated.
Number of Cell Traffic Trace files generated	The total number of Cell Traffic trace files generated.
Number of files deleted	
No space	The total number of files deleted due to a lack of space on the storage device.
TCE Timeout	The total number of files deleted due to a Trace Collection Entity timeout.
Number of Cell Traffic Trace files deleted	
No space	The total number of Cell Traffic Trace files deleted due to a lack of space on the storage device.
TCE Timeout	The total number of Cell Traffic Trace files deleted due to a Trace Collection Entity timeout.
Number of current TCE connections	The total number of trace collection entity connections currently configured.
Total number of TCE connections	The total number of trace collection entity connections configured.
Total number of files uploaded to all TCEs	The total number of files uploaded to all trace collection entities.

show session trace subscriber

The full command is as follows:

show session trace subscriber network-element <*type*> trace-ref <*id*>

Table 25: show session trace subscriber Command Output Descriptions

Field	Description
Trace reference	The trace reference ID for the trace displayed. The ID is the MCC (3 digits), followed by the MNC (3 digits), then the trace ID number (3 byte octet string).
Activation time	The date and time when the trace was initiated.
IMEI or IMSI	The subscriber identification. • **IMEI**: The International Mobile Equipment Identification number of the subscriber's UE. • **IMSI**: The International Mobile Subscriber Identification (IMSI) which is the 3-digit MCC (Mobile Country Code), 2 or 3-digit MNC (Mobile Network Code), and the MSIN (Mobile Subscriber Identification Number).
Actively Tracing	Specifies if the trace is currently active.

Field	Description
Trace Recording Session Reference	The current active trace recording session reference number.
Recording start time	The date and time when the session trace recording started.
Total number of trace recording sessions triggered	The total number of trace recording sessions initiated.
Total number of messages traced	The total number of messages traced for this trace reference.
Number of messages dropped	
No memory	The total number of messages dropped due to a no memory condition.
No trace recording session	The total number of messages dropped due to a failure to receive the start trigger.
Interface not traced	The total number of messages dropped due to the messages being received on interfaces not part of the trace interface list.
Total number of files created	The total number of trace recording files created.
Number of files deleted	
No space	The total number of files deleted due to a lack of space on the storage device.
Traced Interfaces	List of interfaces configured for the session trace.
Trace Triggers	Identifies the triggers used by this subscriber.

show session fp-flow-state-change statistics

Field	Description
Onload/Offload event logging	Displays the status of logging to show if it is currently enabled or disabled.
Start time	Displays the start time of the last logging. If the logging was never started, the start time shows "NA".
End time	Displays the time when logging was stopped. If logging was never started, the end time shows NA. If the logging is currently enabled, it shows "In progress".
Total events recorded	Displays the total number of logs generated.
Logging enabled for *number of events/ duration*	The number of events or duration in seconds.
Sessmgr Instance	The session manager instance for which the logging is enabled.