

show hss-peer-service

This chapter includes the **show hss-peer-service** command output tables.

- show hss-peer-service service name <name>, on page 1
- show hss-peer-service session full, on page 3
- show hss-peer-service statistics all, on page 5

show hss-peer-service service name <name>

Table 1: show hss-peer-service service name <name> Command Output Descriptions

Field	Description
Service name	The name of the HSS peer service configured and running on the system.
Context	The name of the VPN context in which HSS peer service configured and running on the system.
Status	Indicates whether the HSS peer service is started or not.
Diameter hss-endpoint	The Diameter endpoint name configured in the HSS peer service configuration mode for the S6a HSS interface.
Diameter eir-endpoint	The Diameter endpoint name configured in the HSS peer service configuration mode for the S13 EIR interface.
Diameter hss-dictionary	The name of Diameter dictionary configured for messaging which is to be used for HSS peer service sessions.
Update-Dictionary-AVPs	The release of 3GPP 29.272 that is configured to be used for the HSS peer service, either 3gpp-r10, 3gpp-r9, or N/A if **diameter update-dictionary-avps** command is not configured.
Request timeout	The timeout duration in seconds set for heartbeat checking of Diameter requests with the HSS server.
Request Auth-vectors	The number of authentication vectors the MME requests in an Authentication-Information-Request (AIR) message to the HSS for each UE requiring authentication.

Field	Description
Zone Code format	Displays how the MME is to interpret the zone-code received from the HSS. This field displays the setting, as configured using the **zone-code-format** command in the HSS Peer Service configuration mode. The possible values are "octet-string" (default) and "ascii-string".
Notify-Req-Msg	Displays if the MME is configured to send Notify-Request-Messages to the HSS. Possible values are Enable and Disable.
Destination Realm	Displays the configuration of the **dynamic-destination-realm** HSS Peer Service command. Possible values are "Configured Peer Realm" (default) or "Dynamic Realm".
Failure-Handling	This group shows the configuration/settings of failure handling actions on various type of Diameter messages for different type of failure.
Message Type	The type of Diameter messages configured for failure handling on specific type of failure or error. The following types of Diameter messages can be configured for failure handling: • Authentication-Information-Request • Check-Identity-Request • Notify-Request • Purge-UE-Request • Update-Location-Request
Failure Type	The type of message failures to trigger the failure handing actions on specific Diameter messages. The following types of failure can be handled for different types of diameter messages: • Diameter Result Code (3000 to 9999) single or a range of code. • Request Timeout
Action	The type of action to be taken of a type of failure for specific type of Diameter messages. The following types of action can be configured for different types of diameter message failures: • Continue • Retry-and-terminate • Terminate

show hss-peer-service session full

Table 2: show hss-peer-service session full Command Output Descriptions

Field	Description
HSS	
Peer	The HSS peer name.
Mode	The mode of the session.
Callid	The EPS subscriber's call identity in 8 digit hex number of the connected call to an HSS peer service session.
NAI	The network access identifier (NAI) of MME-HSS session on the HSS peer service.
MDN	The mobile directory number (MDN) of the MME-HSS session on the HSS peer service.
Service Name	The name of HSS peer service for which statistics are displayed.
State	The status of MME-HSS session on the HSS peer service.
Pending Requests	The status of pending request between the MME and the HSS over the S6a interface during this MME-HSS session on the HSS peer service.
API Requests	
Open	The number of api sessions opened.
Close	The number of api sessions closed.
Update Locations	The number of ULR messages initiated by the MME or SGSN application.
Purge UE	The number of Purge Request messages initiated by the MME or SGSN application.
Authenticate	The number of AIR messages initiated by the MME or SGSN application.
Notify	The number of Notify Request messages initiated by the MME or SGSN application.
Identity Check	The number of MICR messages initiated by the MME or SGSN application.
Recoveries	The number of api session recoveries initiated.
Micro Checkpoint	Not used.
Full Checkpoint	Note used.
User Data Query	The number of user data requests sent by the MME or SGSN application.
API Successes	
Open	The number of api sessions opened successfully.
Close	The number of api sessions closed successfully.

Field	Description
Update Locations	The number of ULR messages successfully sent by the MME or SGSN application.
Purge UE	The number of Purge Request messages successfully sent by the MME or SGSN application.
Authenticate	The number of AIR messages successfully sent by the MME or SGSN application.
Notify	The number of Notify Request messages successfully sent by the MME or SGSN application.
Identity Check	The number of MICR messages successfully sent by the MME or SGSN application.
Recoveries	The number of api sessions recovered successfully.
Micro Checkpoint	Not used.
Full Checkpoint	Not used.
User Data Query	Not used.
API Errors	
Open	The number of api sessions which encountered an error when opened.
Close	The number of api sessions which encountered an error when closed.
Update Locations	The number of ULR messages that failed to be sent by the MME or SGSN application.
Purge UE	The number of Purge Request messages that failed to be sent by the MME or SGSN application.
Authenticate	The number of AIR messages that failed to be sent by the MME or SGSN application.
Notify	The number of Notify Request messages that failed to be sent by the MME or SGSN application.
Identity Check	The number of MICR messages that failed to be sent by the MME or SGSN application.
Recoveries	The number of api sessions that failed recovering.
Micro Checkpoint	Not used.
Full Checkpoint	Not used.
User Data Query	The number of user data request that couldn not be processed.
Server Requests	
Update Locations	The number of ULR messages created at the session level.
Purge UE	The number of Purge Request messages created at the session level.
Authenticate	The number of AIR messages created at the session level.
Notify	The number of Notify Request messages created at the session level.

Field	Description
Identity Check	The number of MICR messages created at the session level.
User Data Req	Not used.
Server Successes	
Update Locations	The number of ULR messages successfully sent.
Purge UE	The number of Purge Request messages successfully sent.
Authenticate	The number of AIR messages successfully sent.
Notify	The number of Notify Request messages successfully sent.
Identity Check	The number of MICR messages successfully sent.
User Data Req	Not used.
Server Errors	
Update Locations	The number of ULR messages which could not be sent. The peer is unavailable, down, or the session could not be opened.
Purge UE	The number of Purge Request messages which could not be sent. The peer is unavailable, down, or the session could not be opened.
Authenticate	The number of AIR messages which could not be sent. The peer is unavailable, down, or the session could not be opened.
Notify	The number of Notify Request messages which could not be sent. The peer is unavailable, down, or the session could not be opened.
Identity Check	The number of MICR messages which could not be sent. The peer is unavailable, down, or the session could not be opened.
User Data Req	Not used.

show hss-peer-service statistics all

Table 3: show hss-peer-service statistics all Command Output Descriptions

Field	Description
HSS Statistics for all services	
Session Stats	
Total Current Sessions	The total number of sessions currently accessing the HSS peer service.
Session Failovers	The total number of session failovers occurring on the SS peer service.

Field	Description
Total Starts	The total number os sessions started on the HSS peer service.
Total Session Updates	The total number of sessions updated on the HSS peer service.
Total Terminated	The total number of sessions that were terminated on the HSS peer service.
Message Stats	
UL Request	The total number of Update Location Request messages sent by the HSS peer service to the HSS.
UL Answer	The total number of Update Location Answer messages received by the HSS peer service from the HSS.
ULR Retries	The total number of Update Location Request Retry messages sent by the HSS peer service to the HSS.
ULA Timeouts	The total number of Update Location Answer Timeout messages received by the HSS peer service from the HSS.
ULA Dropped	The total number of Update Location Answer Dropped messages received by the HSS peer service from the HSS.
PU Request	The total number of Purge UE Request messages sent by the HSS peer service to the HSS.
PU Answer	The total number of Purge UE Answer messages received by the HSS peer service from the HSS.
PUR Retries	The total number of Purge UE Request Retry messages sent by the HSS peer service to the HSS.
PUA Timeouts	The total number of Purge UE Answer Timeout messages received by the HSS peer service from the HSS.
PUA Dropped	The total number of Purge UE Answer Dropped messages received by the HSS peer service from the HSS.
AI Request	The total number of Authentication Information Request messages sent by the HSS peer service to the HSS.
AI Answer	The total number of Authentication Information Answer messages received by the HSS peer service from the HSS.
AIR Retries	The total number of Authentication Information Request Retry messages sent by the HSS peer service to the HSS.
AIA Timeouts	The total number of Authentication Information Answer Timeout messages received by the HSS peer service from the HSS.
AIA Dropped	The total number of Authentication Information Answer Dropped messages received by the HSS peer service from the HSS.

Field	Description
CL Request	The total number of Cancel Location Request messages sent by the HSS peer service to the HSS.
CL Answer	The total number of Cancel Location Answer messages received by the HSS peer service from the HSS.
CLR Retries	The total number of Cancel Location Request Retry messages sent by the HSS peer service to the HSS.
CLA Timeouts	The total number of Cancel Location Answer Timeout messages received by the HSS peer service from the HSS.
CLA Dropped	The total number of Cancel Location Answer Dropped messages received by the HSS peer service from the HSS.
ISD Request	The total number of Insert Subscriber Data Request messages received by the HSS peer service from the HSS.
ISD Answer	The total number of Insert Subscriber Data Answer messages sent by the HSS peer service to the HSS.
ISDR Retries	The total number of Insert Subscriber Data Request Retry messages received by the HSS peer service from the HSS.
ISDA Timeouts	The total number of Insert Subscriber Data Answer Timeout messages sent by the HSS peer service to the HSS.
ISDA Dropped	The total number of Insert Subscriber Data Answer Dropped messages sent by the HSS peer service to the HSS.
DSD Request	The total number of Delete Subscriber Data Request messages received by the HSS peer service from the HSS.
DSD Answer	The total number of Delete Subscriber Data Answer messages sent by the HSS peer service to the HSS.
DSDR Retries	The total number of Delete Subscriber Data Request Retry messages received by the HSS peer service from the HSS.
DSDA Timeouts	The total number of Delete Subscriber Data Answer Timeout messages sent by the HSS peer service to the HSS.
DSDA Dropped	The total number of Delete Subscriber Data Answer Dropped messages sent by the HSS peer service to the HSS.
R Request	The total number of Reset Request messages received by the HSS peer service from the HSS.
R Answer	The total number of Reset Answer messages sent by the HSS peer service to the HSS.
RR Retries	The total number of Reset Request Retry messages received by the HSS peer service from the HSS.

Field	Description
RA Timeouts	The total number of Reset Answer Timeout messages sent by the HSS peer service to the HSS.
RA Dropped	The total number of Reset Answer Dropped messages sent by the HSS peer service to the HSS.
N Request	The total number of Notify Request messages sent by the HSS peer service to the HSS.
N Answer	The total number of Notify Answer messages received by the HSS peer service from the HSS.
NR Retries	The total number of Notify Request Retry messages sent by the HSS peer service to the HSS.
NA Timeouts	The total number of Notify Answer Timeout messages received by the HSS peer service from the HSS.
NA Dropped	The total number of Notify Answer Dropped messages received by the HSS peer service from the HSS.
MIC Request	The total number of Mobile Identity Check Request messages sent by the HSS peer service to the HSS.
MIC Answer	The total number of Mobile Identity Check Answer messages received by the HSS peer service from the HSS.
MICR Retries	The total number of Mobile Identity Check Request Retry messages sent by the HSS peer service to the HSS.
MICA Timeouts	The total number of Mobile Identity Check Answer Timeout messages received by the HSS peer service from the HSS.
MICA Dropped	The total number of Mobile Identity Check Answer Dropped messages received by the HSS peer service to the HSS.
Message Error Stats	
Unable To Comply	The total number of Update Location Answer messages containing the result code "Unable To Comply" received by the HSS peer service from the HSS.
Auth Data Unavailable	The total number of Update Location Answer messages containing the result code "Auth Data Unavailable" received by the HSS peer service from the HSS.
User Unknown	The total number of Update Location Answer messages containing the result code "User Unknown" received by the HSS peer service from the HSS.
Equipment Unknown	The total number of Update Location Answer messages containing the result code "Equipment Unknown" received by the HSS peer service from the HSS.
Unknown EPS Subscription	The total number of Update Location Answer messages containing the result code "Unknown EPS Subscription" received by the HSS peer service from the HSS.

Field	Description
RAT Not Allowed	The total number of Update Location Answer messages containing the result code "RAT Not Allowed" received by the HSS peer service from the HSS.
Authorization Rejected	The total number of Update Location Answer messages containing the result code "Authorization Rejected" received by the HSS peer service from the HSS.
Roaming Not Allowed	The total number of Update Location Answer messages containing the result code "Roaming Not Allowed" received by the HSS peer service from the HSS.
Other Errors	The total number of Update Location Answer messages containing the result code "Other Errors" received by the HSS peer service from the HSS.
Subscription-Data Stats	
Skip Subscription Data	The Skip Subscription Data statistic is incremented when the ULR is sent with the skip-subscription-data flag set.
Subscription-Data Not Received	The Subscription-Data Not Received statistic is incremented if the HSS does not send the subscription data in the ULA when skip-subscription-data flag is set in ULR. The difference between the Skip Subscription Data and Subscription-Data Not Received gives us the number of times HSS does not honour the skip-subscription-data flag.
Location Message Stats	
Asynchronous ISDR Req	
Asynchronous ISDR Dropped	This counter pegs the asynchronous ISD request dropped.
Asynchronous ISDA	
Aynchronous ISDA Dropped	
ISDR Req with Current Location	This statistics is updated when ISDR is received with the Current Location bit set in the IDR flags.
ISDA with Cached Location	This statistics is updated when an ISDR is responded with the current location information immediately from the cache, before the location validity timer expires.