

show sgs-service

This chapter describes the output of the **show sgs-service** command.

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show sgs-service all

The output of this command is enhanced to display the following fields.

Table 1: show sgs-service all Command Output Descriptions

Field	Description
Non-Broadcast LAI	
MCC	Displays the configured MCC value.
MNC	Displays the configured MNC value.
LAC	Displays the configured LAC value.

show sgs-service offload-status service-name

Displays statistics for all VLRs flagged for offload for the specified SGs service.

Table 2: show sgs-service offload-status service-name Command Output Descriptions

Field	Description
VLR Name	The VLR name as configured in the SGs service.
VLR Offload	Displays if the VLR is configured/marked for offload.
Offload Marked Subscriber Count	The number of subscribers that have yet to be offloaded.

Field	Description
Total Attached Attached Subscribers	The total number of subscribers to be offloaded.

show sgs-service statistics all

Displays SGs service statistics for all SGs services configured on the system.

Table 3: show sgs-service statistics all Command Output Descriptions

Field	Description
SCTP Statistics	
Transmitted SCTP Data	
Init Chunks	The total number of initial chunks transmitted by this service.
Init Ack Chunks	The total number of initial ack chunks transmitted by this service.
Shutdown Chunks	The total number of shutdown chunks transmitted by this service.
Cookie Chunks	The total number of cookie chunks transmitted by this service.
Data Chunks	The total number of chunks transmitted by this service.
Data Ack Chunks	The total number of data ack chunks transmitted by this service.
Shutdown Complete Chunks	The total number of shutdown complete chunks transmitted by this service.
Heartbeat Chunks	The total number of heartbeat chunks transmitted by this service.
HeartBeat Ack Chunks	The total number of heartbeat ack chunks transmitted by this service.
Abort Chunks	The total number of abort chunks transmitted by this service.
Error Chunks	The total number of error chunks transmitted by this service.
Init Chunks	The total number of initial chunks received by this service.
Init Ack Chunks	The total number of initial ack chunks received by this service.
Shutdown Chunks	The total number of shutdown chunks received by this service.
Cookie Chunks	The total number of cookie chunks received by this service.
Data Chunks	The total number of chunks received by this service.
Data Ack Chunks	The total number of data ack chunks received by this service.
Shutdown Complete Chunks	The total number of shutdown complete chunks received by this service.
Heartbeat Chunks	The total number of heartbeat chunks received by this service.
HeartBeat Ack Chunks	The total number of heartbeat ack chunks received by this service.
Abort Chunks	The total number of abort chunks received by this service.
Error Chunks	The total number of error chunks received by this service.
Init Chunks	The total number of initial chunks retransmitted by this service.

Field	Description
Total Bytes Sent	The total number of SCTP bytes sent by this service.
Total Bytes Received	The total number of SCTP bytes received by this service.
Total Packets Sent	The total number of SCTP packets sent by this service.
Total Packets Received	The total number of SCTP packets received by this service.
SGS-AP Statistics	
SGS-AP Data	
Tx	The total number of messages transmitted by this service for the associated message type.
ReTx	The total number of messages retransmitted by this service for the associated message type.
Rx	The total number of messages received by this service for the associated message type.
Paging Request	The total number of paging request messages.
Paging Reject	The total number of paging reject messages.
Service Request	The total number of service request messages.
Downlink Unitdata	The total number of downlink unit data messages.
Uplink Unitdata	The total number of uplink unit data messages.
Location Update Request	The total number of Location Update Request messages.
Location Update Accept	The total number of Location Update Accept messages.
Location Update Reject	The total number of Location Update Reject messages.
Location Update Timeout	The total number of Location Update Request messages not received from HSS/MSC due to ts6-1 timeout. Note that only the Rx counter will increment. Tx and ReTx counters are not supported.
TMSI Reallocation Complete	The total number of TMSI reallocation complete messages.
Alert Request	The total number of alert request messages.
Alert Ack	The total number of alert ack messages.
Alert Reject	The total number of alert reject messages.
UE Activity Indication	The total number of UE activity indication messages.
EPS Detach Indication	The total number of EPS detach indication messages.
EPS Detach Ack	The total number of EPS detach ack messages.
IMSI Detach Indication	The total number of IMSI detach indication messages.
IMSI Detach Ack	The total number of IMSI detach ack messages.
Reset Indication	The total number of reset indication messages.

Field	Description
Reset Ack	The total number of reset ack messages.
MM Information Request	The total number of MM information request messages.
Release Request	The total number of release request messages.
Status	The total number of status messages.
UE Unreachable	The total number of UE unreachable messages.
Service Abort Request	The total number of SGsAP-SERVICE-ABORT-REQUEST messages.
Unknown MSG	The total number of unknown messages.

show sgs-service vlr-status full

Table 4: show sgs-service vlr-status Command Output Descriptions

Field	Description
MMEMGR	The MME manager instance where the SGs service is running.
MME Reset	A system-wide parameter which is set to "Yes" when the MME service (and SGS service) is up or after the MME restarts after a failure. This is a restoration indicator at MME service.
Service ID	The system generated identification number of the SGs service.
Peer ID	The system generated identification number of the VLR's SCTP connection.
VLR Name	The VLR name as configured in the SGs service.
SGS Service Name	The configured SGs service name.
VLR Offload	Displays if the VLR is configured/marked for offload state.
SGS Service Address	The IP address of the interface to which the SGs service is bound.
SGS Service Port	The port number of the interface to which the SGs service is bound.
VLR IP Address (es)	The VLR IP address as configured in the SGs service. If multi-homing is configured, both addresses will be shown. The path status for each is displayed as either UP or DOWN.
VLR Port	The VLR port number as configured in the SGs service.
Assoc State	The current state of the SCTP association, either UP or DOWN.
Assoc Uptime	The total amount of time (hours | minutes | seconds) the current SCTP association has been active (up). The format of Assoc UpTime is 0000d00h00m (where d= day, h=hour, m=minutes) when h > =24 hrs, otherwise it will be displayed as 00h00m00s.

Field	Description
Assoc State Up Count	The total number of times the SCTP association has come up.
VLR Failure Detach	Indicates if the **sgs vlr-failure** Exec Mode command is enabled (Yes) or disabled (No). Detach Count: The total number of subscribers that have already been detached as a result of the sgs vlr-failure command. Total: Indicates the total number of subscribers that have to be detached. **Note:** This field is **not** displayed when the **vlr-recover** Config Mode command is enabled.
SGs Service Configured VLR Failure	Indicates if the SGs service **vlr-recover** Config Mode command is enabled (Yes) or disabled (No). Detach Count: The total number of subscribers that have already been detached as a result of the SGs Service VLR Failure feature. Total: Indicates the total number of subscribers that have to be detached. **Note:** This field is only displayed when the SGs Service VLR Failure feature has been configured.
VLR Recover Detach	Indicates if the **sgs vlr-recover** Exec Mode command is enabled (Yes) or disabled (No). Detach Count: The total number of subscribers that have already been detached as a result of the sgs vlr-recover command. Total: Indicates the total number of subscribers that have to be detached.
SGS-AP Statistics	
Tx	The total number of messages transmitted by this service for the associated message type.
ReTx	The total number of messages retransmitted by this service for the associated message type.
Rx	The total number of messages received by this service for the associated message type.
Paging Request	The total number of paging request messages.
Paging Reject	The total number of paging reject messages.
Service Request	The total number of service request messages.
Downlink Unitdata	The total number of downlink unit data messages.
Uplink Unitdata	The total number of uplink unit data messages.
Location Update Request	The total number of Location Update Request messages.
Location Update Accept	The total number of Location Update Accept messages.
Location Update Reject	The total number of Location Update Reject messages.

Field	Description
Location Update Timeout	The total number of Location Update Request messages not received from HSS/MSC due to ts6-1 timeout. Note that only the Rx counter will increment. Tx and ReTx counters are not supported.
TMSI Reallocation Complete	The total number of TMSI reallocation complete messages.
Alert Request	The total number of alert request messages.
Alert Ack	The total number of alert ack messages.
Alert Reject	The total number of alert reject messages.
UE Activity Indication	The total number of UE activity indication messages.
EPS Detach Indication	The total number of EPS detach indication messages.
EPS Detach Ack	The total number of EPS detach ack messages.
IMSI Detach Indication	The total number of IMSI detach indication messages.
IMSI Detach Ack	The total number of IMSI detach ack messages.
Reset Indication	This statistic has been deprecated.
Reset Ack	This statistic has been deprecated.
MM Information Request	The total number of MM information request messages.
Release Request	The total number of release request messages.
Status	The total number of status messages.
UE Unreachable	The total number of UE unreachable messages.
Service Abort Request	The total number of SGsAP-SERVICE-ABORT-REQUEST messages.
Unknown MSG	The total number of unknown messages.
Flow debug stats for VLR address index : *Each of the following statistics is only displayed if the stat's value is non-zero. These stats are typically used for debugging.*	
NPU Flow created for Primary IPA	The total number of NPU Flow created for Primary IPA.
NPU Flow created for Secondary IPA	The total number of NPU Flow created for Secondary IPA.
Primary IPA flow add requests sent	The total number of Primary IPA flow add requests sent.
Secondary IPA flow add requests sent	The total number of Secondary IPA flow add requests sent.
Primary IPA flow add success received	The total number of Primary IPA flow add success received.
Secondary IPA flow add success received	The total number of Secondary IPA flow add success received.
Primary IPA flow add failed	The total number of Primary IPA flow add failed.

Field	Description
Secondary IPA flow add failed	The total number of Secondary IPA flow add failed.
Primary IPA flow alloc failed	The total number of Primary IPA flow alloc failed.
Secondary IPA flow alloc failed	The total number of Secondary IPA flow alloc failed .
Primary IPA flow insert failed	The total number of Primary IPA flow insert failed.
Secondary IPA flow insert failed	The total number of Secondary IPA flow insert failed.
Primary IPA flow delete requests sent	The total number of Primary IPA flow delete requests sent.
Secondary IPA flow delete requests sent	The total number of Secondary IPA flow delete requests sent.
Primary IPA flow delete success	The total number of Primary IPA flow delete success.
Secondary IPA flow delete success	The total number of Secondary IPA flow delete success .
Primary IPA flow delete failed	The total number of Primary IPA flow delete failed .
Secondary IPA flow delete failed	The total number of Secondary IPA flow delete failed.
Primary IPA flow delete no match	The total number of Primary IPA flow delete no match.
Secondary IPA flow delete no match	The total number of Secondary IPA flow delete no match.
Primary IPA invalid flowid	The total number of Primary IPA invalid flowid.
Secondary IPA invalid flowid	The total number of Secondary IPA invalid flowid.
Primary IPA invalid NPU response	The total number of Primary IPA invalid NPU response.
Secondary IPA invalid NPU response	The total number of Secondary IPA invalid NPU response.
Max per VLR associations reached	The total number of Max per VLR associations reached .
Invalid NPU response codes	The total number of Invalid NPU response codes .
Primary IPA flow resp code[%s] count	The total number of Primary IPA flow resp code[%s] count.
Secondary IPA flow resp code[%s] count	The total number of Secondary IPA flow resp code[%s] count.
Total VLRs	The total number of VLRs configured in the SGs service.