

show samog-services

This chapter describes the output of the **show samog-services** command variants.

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- show samog-service name, on page 26

show samog-service statistics

Table 1: show samog-service statistics

Field	Description
SaMOG Statistics for all services	
MRME Service Stats	
Session Stats	
Total Attempted	Total number of sessions attempted.
Total Setup	Total number of sessions setup.
Total Current	Total number of sessions that are currently active.
Total Released	Total number of sessions released
Total Aborted	Total number of sessions aborted.
Total Disconnected	
Disconnected locally	Total number of sessions that were disconnected locally.
Disconnected by UE	Total number of sessions that were disconnected by the UE.
Disconnected by NAS	Total number of sessions that were disconnected by NAS.
Disconnected by CGW	Total number of sessions that were disconnected CGW.
Disconnected by AAA	Total number of sessions that were disconnected by AAA.

Field	Description
Radius Message Stats	
Total Start Req rcvd	Total number of RADIUS start request message received.
Total Start Req (Retransmitted) rcvd	Total number of RADIUS retransmitted start request message received.
Total Start Rsp sent	Total number of RADIUS start response message sent.
Total Interim Updt rcvd	Total number of RADIUS interim update received.
Total Interim Updt (Retransmitted) rcvd	Total number of RADIUS retransmitted interim update received.
Total Interim Updt Rsp sent	Total number of RADIUS interim update response sent.
Total Stop Req rcvd	Total number of RADIUS stop request message received.
Total Stop Req (Retransmitted) rcvd	Total number of RADIUS retransmitted stop request message received.
Total Stop Rsp sent	Total number of RADIUS stop response sent.
Total Accounting On rcvd	Total number of accounting on message received.
Total Accounting Off rcvd	Total number of accounting off message received.
Total Access Req rcvd	Total number of access request message received.
Total Access Req (Retransmitted) rcvd	Total number of retransmitted access request message received.
Total Access Challenge sent	Total number of Access Challenge message sent.
Total Access Accept sent	Total number of Access Accept sent due to congestion policy.
Total Access Reject sent	Total number of Access Rejected sent due to congestion policy.
Congestion control policy applied	
Total Unknown Req rcvd	Total number of unknown requests received for congestion control policy.
Total Send Failure	Total number of congestion control policy sent that failed.
Total Discarded	Total number of congestion control policy discarded.
Mandatory Attr Missing	Total number of missing mandatory attributes.
Start For Non-Existing Session	Total number of start messages sent to non-existing sessions.
Interim For Non-Existing Session	Total number of interim messages sent to non-existing sessions.
Stop For Non-Existing Session	Total number of stop messages sent to non-existing sessions.
Unknown Client	Total number of unknown client.

Field	Description
Invalid Authenticator	Total number of authenticators that is invalid
Stale Packets	Total number of stale packets.
Service Not Supported	Total number of services that are not supported.
No Resource	Total number of resources that are not available.
Internal Error	Total number of internal errors that occurred.
License Limit Exceeded	Total number of license limit exceeded.
Service Limit Exceeded	Total number of license limit exceeded.
Invalid Length	Total number of call control profiles with invalid length.
Invalid EAP	Total number of call control profiles with invalid EAP.
Pending Server Response	Total number of call control profiles with server response pending.
Congestion control policy applied	Total number of congestion control policies applied.
No Policy Match	Total number of Access-Requests dropped due to non-availability of matching PLMN based local policy.
DHCP Message Stats	
DHCP Messages Discarded	Total number of DHCP messages discarded.
Max Size Exceeded	Total number of DHCP messages discarded due to the maximum size exceeded.
Non-Existing Session	Total number of DHCP messages discarded due to a non-existing session.
GiAddr Mismatch	Total number of DHCP messages due to a Gi address mismatch.
Unsupported HW Type or Length	Total number of DHCP messages due to an unsupported hardware type or length.
Stale Packets	Total number of DHCP messages discarded due to stale packets.
Service Not Supported	Total number of DHCP messages discarded due to an unsupported service.
Reauthorization Stats	
Attempts	Total number of reauthorization attempts.
Success	Total number of reauthorization succeeded.
Failure	Total number of reauthorization failure.
Reauthentication Stats	
Attempts	Total number of reauthentication attempts.

Field	Description
Success	Total number of reauthentication succeeded.
Failure	Total number of reauthentication failure.
Handoff Stats	
With Authentication	
Attempts	Total number of sessions attempted for handoff using authentication mechanism.
Success	Total number of sessions with successful handoff using authentication mechanism.
Failure	Total number of handoff failure sessions using authentication mechanism.
With Accounting Start	
Attempts	Total number of sessions attempted for handoff using accounting mechanism.
Success	Total number of sessions with successful handoff using accounting mechanism.
Failure	Total number of sessions with handoff failure using accounting mechanism.
With Accounting Interim	
Attempts	Total number of sessions attempted for handoff using accounting interim mechanism.
Success	Total number of sessions with successful handoff using accounting interim mechanism.
Failure	Total number of sessions with handoff failure using accounting inerim mechanism.
DHCP to DHCP Handoff Statistics	
Received	Total number of DHCP to DHCP handoff statistics received.
Accepted	Total number of DHCP to DHCP handoff statistics accepted.
Denied	Total number of DHCP to DHCP handoff statistics denied.
EAP Client Stats	
Initial Identity Msgs	
NAI Formats	
Root NAI	Total number of UE Identity that uses the root NAI format.
Decorated NAI	Total number of UE Identity that uses the decorated NAI format.

Field	Description
UE Identity formats	
IMSI Identity	Total number of UE Identity that uses an IMSI identity.
Fast Reauth	Total number of UE Identity that uses the fast reauth NAI format.
Pseudonym	Total number of UE Identity that uses the pseudonym NAI format.
Emergency	Total number of UE Identity that uses the emergency NAI format.
Unknown NAI	Total number of UE Identity that uses an NAI format that is unknown.
EAP type	
EAP-AKA	Total number of Extensible Authentication Protocol AKA.
EAP-SIM	Total number of Extensible Authentication Protocol SIM.
EAP-AKA'	Total number of Extensible Authentication Protocol AKA'.
EAP-TLS	Total number of Extensible Authentication Protocol TLS.
EAP-TTLS	Total number of Extensible Authentication Protocol TTLS.
EAP-PEAP	Total number of Extensible Authentication Protocol PEAP.
EAP Unsupported	Total number of Extensible Authentication Protocol that is unsupported. **Important** This counter has been removed in Release 18 and later.
EAP Other	Total number of Extensible Authentication Protocol MSCHAPv2/other. Total number of Extensible Authentication Protocol EAP-TLS or EAP-TTLS/MSCHAPv2.
Initial Non-Identity Msgs	
Total Requested	Total number of initial non-identity messages requested.
Total Rejected	Total number of initial non-identity messages rejected.
Invalid Len	Total number of initial non-identity messages with invalid length.
Invalid Code	Total number of initial non-identity messages with invalid code.
Id Mismatch	Total number of initial non-identity messages with ID mismatch.
Invalid NAI	Total number of initial non-identity messages with invalid NAI.
Invalid IMSI	Total number of initial non-identity messages with invalid IMSI number.
Total Dropped	Total number of initial non-identity messages that were dropped.
Invalid code	Total number of initial non-identity messages with invalid code.

Field	Description
EAP Server Stats	
Total Sent	Total number of EAP server status sent.
Total Received	Total number of EAP server status received.
Success	Total number of EAP server connections succeeded.
Request	Total number of EAP server requests sent.
Failure	Total number of EAP server requests failed.
Drop	Total number of EAP server requests dropped.
Total Received- AKA	Total number of EAP AKA received.
Success	Total number of EAP AKA connections succeeded.
Request	Total number of EAP AKA requested.
Failure	Total number of EAP AKA requests failed.
Drop	Total number of EAP AKA requests dropped.
Total Received- AKA'	Total number of EAP AKA' received.
Success	Total number of EAP AKA' connections succeeded.
Request	Total number of EAP AKA' requested.
Failure	Total number of EAP AKA' requests failed.
Drop	Total number of EAP AKA' requests dropped.
Total Received- SIM	Total number of EAP SIM received.
Success	Total number of EAP SIM connections succeeded.
Request	Total number of EAP SIM requested.
Failure	Total number of EAP SIM requests failed.
Drop	Total number of EAP SIM requests dropped.
Total Received- TLS	Total number of EAP TLS received.
Success	Total number of EAP TLS connections succeeded.
Request	Total number of EAP TLS requested.
Failure	Total number of EAP TLS requests failed.
Drop	Total number of EAP TLS requests dropped.
Total Received- TTLS	Total number of EAP TTLS received.

Field	Description
Success	Total number of EAP TTLS connections succeeded.
Request	Total number of EAP TTLS requested.
Failure	Total number of EAP TTLS requests failed.
Drop	Total number of EAP TTLS requests dropped.
Total Received- PEAP	Total number of EAP PEAP received.
Success	Total number of EAP PEAP connections succeeded.
Request	Total number of EAP PEAP requested.
Failure	Total number of EAP PEAP requests failed.
Drop	Total number of EAP PEAP requests dropped.
Total Discarded	Total number of EAP server requests discarded
Framed MTU	Total number of framed MTUs sent.
Non-EAP Session Stats	
Attempted	Total number of non-EAP sessions attempted.
AAA Rejects	Total number of non-EAP sessions rejected by AAA server or rejected during AAA auth response parsing in SaMOG (invalid attributes, missing mandatory AVPs etc.)
Pre-authentication Calls	
Success	Total number of non-EAP sessions successfully established during the pre-authentication phase.
Failure	Total number of non-EAP sessions failed to be created during the pre-authentication phase. Possible reasons: internal errors, missing pre-auth phase configs, missing ACL/pool/rulebase etc.
AAA Disconnect with IMSI	Total number of AAA disconnects with IMSI during the pre-authentication phase.
AAA Disconnect without IMSI	Total number of AAA disconnects without IMSI during pre-authentication phase.
AAA Disconnect timeout	Total number of AAA disconnects due to a timeout during the pre-authentication phase.
Authentication & Authorization Calls	
Success	Total number of non-EAP sessions successfully established after UE is authenticated and authorized by AAA (i.e. TAL phase, wherein AAA provides User Identity).

Field	Description
Failure	Total number of non-EAP sessions failed to be created after UE is authenticated and authorized by AAA (i.e. TAL phase, wherein AAA provides User Identity). Possible reasons are network type selection failure, PGW selection failure, multi-device demux failure, internal errors etc.
Abort	Total number of non-EAP sessions aborted specifically due to IPSG demux failure, when multiple devices of same user are connected.
PGW/GGSN Selection Stats	
IP Address	Total number of PGW/GGSN IP addresses resolved during PGW selection.
Hostname	
SNAPTR Procedure	
Success	Total number of Snaptr queries that are successful for the given hostname for PGW selection.
Failure	Total number of Snaptr queries that failed for the given hostname for PGW selection.
APN FQDN	
SNAPTR Procedure	
Success	Total number of Snaptr queries that are successful for given APN FQDN for PGW selection.
Failure	Total number of Snaptr queries that failed for a given APN FQDN for PGW selection
A/AAAA Procedure	
Success	Total number of A/AAAA queries that are successful for given APN FQDN for PGW selection.
Failure	Total number of A/AAAA queries that failed for a given APN FQDN for PGW selection.
Network Access Mode Stats	
Local Offload	Total number of sessions selected for local offload network access mode.
GTPv1	Total number of sessions selected with network access mode as GTPv1.
GTPv2	Total number of sessions selected with network access mode as GTPv2.
PMIP	Total number of sessions selected with network access mode as PMIP.
Local Offload Flow Stats	
GTPv1	Total number of local offload flows with network mode as GTPv1.

Field	Description
GTPv2	Total number of local offload flows with network mode as GTPv2.
PMIP	Total number of local offload flows with network mode as PMIP.
Disconnect Messages Stats	
Disconnect Messages Sent	Total number of disconnect messages sent.
Disconnect Response Received	Total number of disconnect responses received.
Disconnect Response Ack Received	Total number of disconnect response acknowledgement received.
Residual Session Removed	Total number of residual sessions removed.
Disconnect Response Nack Received	Total number of disconnect response acknowledgement received.
Unsupported Attribute	Total number of unsupported attribute.
Missing Attribute	Total number of missing attribute.
NAS Id Mismatch	Total number of mismatch in the NAS ID.
Invalid Request	Total number of invalid requests.
Unsupported Service	Total number of unsupported services.
Unsupported Extension	Total number of unsupported extensions.
Admin Prohibited	Total number of administration prohibited.
Session Context Not Found	Total number of session context not found.
Session Context Not Removable	Total number of session context not removable.
Resource Unavailable	Total number of unavailable resources.
CGW Service Stats	
Subscribers Total	
Active	Total number of active subscribers.
Setup	Total number of subscribers setup.
Released	Total number of subscribers released.
PDNs Total	
Active	Total number of PDN connections active.
Setup	Total number of PDN connections setup.
Released	Total number of PDN connections released.

Field	Description
Rejected	Total number of PDN connections rejected.
PDNs By PDN-Type	
IPv4 PDNs	
Active	Total number of IPv4 PDNs active.
Setup	Total number of IPv4 PDNs connected.
Released	Total number of IPv4 PDNs released.
Rejected	Total number of IPv4 PDNs rejected.
IPv6 PDNs	
Active	Total number of IPv6 PDNs active.
Setup	Total number of IPv6 PDNs connected.
Released	Total number of IPv6 PDNs released.
Rejected	Total number of IPv6 PDNs rejected.
IPv4v6 PDNs	
Active	Total number of IPv4v6 PDNs active.
Setup	Total number of IPv4v6 PDNs connected.
Released	Total number of IPv4v6 PDNs released.
Rejected	Total number of IPv4v6 PDNs rejected.
PDNs By Network-Type	
GTPv1 PDNs	
Active	Total number of current active GTPv1 PDN connections.
Setup	Total number of GTPv1 PDN connections created.
Released	Total number of GTPv1 PDN connections released.
Rejected	Total number of GTPv1 PDN connections rejected.
GTPv2 PDNs	
Active	Total number of current active GTPv2 PDN connections.
Setup	Total number of GTPv2 PDN connections created.
Released	Total number of GTPv2 PDN connections released.
Rejected	Total number of GTPv2 PDN connections rejected.

Field	Description
Gi Redirect PDNs	
Active	Total number of locally offloaded PDN (including Pre-authentication) calls that are currently active.
Setup	Total number of locally offloaded PDN (including Pre-authentication) calls setup on SaMOG after a chassis reboot.
Released	Total number of locally offloaded PDN (including Pre-authentication) calls released by the SaMOG service.
Rejected	Total number of locally offloaded PDN (including Pre-authentication) calls rejected by the SaMOG service.
PDNs Released By Reason	
MAG Ini	Total number of PDN connections released by MAG.
PGW Ini	Total number of PDN connections released by PGW.
DHCP Client Ini	Total number of PDN connections released by DHCP.
GGSN Ini	Total number of PDN connections released by GGSN.
GTPC Path Failure	Total number of PDN connections released because of GTPC path failure.
GTPU Path Failure	Total number of PDN connections released because of GTPU path failure.
GTPU Error Ind	Total number of PDN connections released because of GTPU Error Indication.
Local	Total number of PDN connections released Locally.
Other	Total number of PDN connections released by reason undefined.
PDNs Aborted By Reason	
IP Allocation Failure	Total number of PDN connections aborted due to an IP allocation failure.
Bearer Id Alloc Failure	Total number of PDN connections aborted due to a bearer ID allocation failure.
IPv6 Neighbor Discovery Statistics	
IPv6 RS Received	Total number of IPv6 Router Solicitation messages received.
IPv6 RS Dropped	Total number of IPv6 Router Solicitation messages dropped.
IPv6 RA Sent	Total number of IPv6 Router Advertisement messages sent.
Data Statistics Per Interface	
S2A-GTP Total Data Statistics	

Field	Description
Uplink	
Total Pkts	
IPv4 Pkts(IPv4)	Total number of IPv4 payload packets sent over the IPv4 GTP tunnel towards P-GW.
IPv4 Pkts(IPv6)	Total number of IPv6 payload packets sent over the IPv4 GTP tunnel towards P-GW.
IPv6 Pkts(IPv4)	Total number of IPv4 payload packets sent over the IPv6 GTP tunnel towards P-GW.
IPv6 Pkts(IPv6)	Total number of IPv6 payload packets sent over the IPv6 GTP tunnel towards P-GW.
Total Bytes	
IPv4 Bytes(IPv4)	Total number of IPv4 payload bytes sent over the IPv4 GTP tunnel towards P-GW.
IPv4 Bytes(IPv6)	Total number of IPv6 payload bytes sent over the IPv4 GTP tunnel towards P-GW.
IPv6 Bytes(IPv4)	Total number of IPv4 payload bytes sent over the IPv6 GTP tunnel towards P-GW.
IPv6 Bytes(IPv6)	Total number of IPv6 payload bytes sent over the IPv6 GTP tunnel towards P-GW.
Dropped Pkts	
IPv4 Pkts(IPv4)	Total number of dropped IPv4 payload packets that were sent over the IPv4 GTP tunnel towards P-GW.
IPv4 Pkts(IPv6)	Total number of dropped IPv6 payload packets that were sent over the IPv4 GTP tunnel towards P-GW.
IPv6 Pkts(IPv4)	Total number of dropped IPv4 payload packets that were sent over the IPv6 GTP tunnel towards P-GW.
IPv6 Pkts(IPv6)	Total number of dropped IPv6 payload packets that were sent over the IPv6 GTP tunnel towards P-GW.
Dropped Bytes	
IPv4 Bytes(IPv4)	Total number of dropped IPv4 payload bytes that were sent over the IPv4 GTP tunnel towards P-GW.
IPv4 Bytes(IPv6)	Total number of dropped IPv6 payload bytes that were sent over the IPv4 GTP tunnel towards P-GW.

Field	Description
IPv6 Bytes(IPv4)	Total number of dropped IPv4 payload bytes that were sent over the IPv6 GTP tunnel towards P-GW.
IPv6 Bytes(IPv6)	Total number of dropped IPv6 payload bytes that were sent over the IPv6 GTP tunnel towards P-GW.
Downlink	
Total Pkts	Total number of downlink packets sent on S2a Interface.
IPv4 Pkts(IPv4)	Total number of IPv4 payload packets received over the IPv4 GTP tunnel towards P-GW.
IPv4 Pkts(IPv6)	Total number of IPv6 payload packets received over the IPv4 GTP tunnel towards P-GW.
IPv6 Pkts(IPv4)	Total number of IPv4 payload packets received over the IPv6 GTP tunnel towards P-GW.
IPv6 Pkts(IPv6)	Total number of IPv6 payload packets received over the IPv6 GTP tunnel towards P-GW.
Total Bytes	
IPv4 Bytes(IPv4)	Total number of IPv4 payload bytes received over the IPv4 GTP tunnel towards P-GW.
IPv4 Bytes(IPv6)	Total number of IPv6 payload bytes received over the IPv4 GTP tunnel towards P-GW.
IPv6 Bytes(IPv4)	Total number of IPv4 payload bytes received over the IPv6 GTP tunnel towards P-GW.
IPv6 Bytes(IPv6)	Total number of IPv6 payload bytes received over the IPv6 GTP tunnel towards P-GW.
Dropped Pkts	
IPv4 Pkts(IPv4)	Total number of dropped IPv4 payload packets that were received over the IPv4 GTP tunnel towards P-GW.
IPv4 Pkts(IPv6)	Total number of dropped IPv6 payload packets that were received over the IPv4 GTP tunnel towards P-GW.
IPv6 Pkts(IPv4)	Total number of dropped IPv4 payload packets that were received over the IPv6 GTP tunnel towards P-GW.
IPv6 Pkts(IPv6)	Total number of dropped IPv6 payload packets that were received over the IPv6 GTP tunnel towards P-GW.
Dropped Bytes	

Field	Description
IPv4 Bytes(IPv4)	Total number of dropped IPv4 payload bytes that were received over the IPv4 GTP tunnel towards P-GW.
IPv4 Bytes(IPv6)	Total number of dropped IPv6 payload bytes that were received over the IPv4 GTP tunnel towards P-GW.
IPv6 Bytes(IPv4)	Total number of dropped IPv4 payload bytes that were received over the IPv6 GTP tunnel towards P-GW.
IPv6 Bytes(IPv6)	Total number of dropped IPv6 payload bytes that were received over the IPv6 GTP tunnel towards P-GW.
S2A-PMIP Total Data Statistics	
Uplink	
Total Pkts	Total number of Uplink packets sent on S2a PMIP Interface.
Total Bytes	Total number of Uplink bytes sent on S2a PMIP Interface.
Dropped Pkts	Total number of Uplink packets dropped on S2a PMIP Interface.
Dropped Bytes	Total number of Uplink bytes dropped on S2a PMIP Interface.
Downlink	
Total Pkts	Total number of downlink packets sent on S2a PMIP Interface.
Total Bytes	Total number of downlink bytes sent on S2a PMIP Interface.
Dropped Pkts	Total number of downlink packets dropped on S2a PMIP Interface.
Dropped Bytes	Total number of downlink bytes dropped on S2a PMIP Interface.
Gn-U Total Data Statistics	
Uplink	
Total Pkts	Total number of Uplink packets sent on Gn-U Interface.
Total Bytes	Total number of Uplink data bytes sent on Gn-U Interface.
Dropped Pkts	Total number of Uplink packets dropped on Gn-U Interface.
Dropped Bytes	Total number of Uplink data bytes dropped on Gn-U Interface.
Downlink	
Total Pkts	Total number of Downlink packets sent on Gn-U Interface.
Total Bytes	Total number of Downlink data bytes sent on Gn-U Interface.
Dropped Pkts	Total number of Downlink packets dropped on Gn-U Interface.

Field	Description
Dropped Bytes	Total number of Downlink data bytes dropped on Gn-U Interface.
Data Statistics Per PDN-Type	
IPv4 PDNs	
Uplink	
Total Pkts	Total number of uplink packets sent for IPv4 PDNs.
Total Bytes	Total number of uplink bytes sent for IPv4 PDNs.
Downlink	
Total Pkts	Total number of downlink packets sent for IPv4 PDNs.
Total Bytes	Total number of downlink bytes sent for IPv4 PDNs.
IPv6 PDN	
Uplink	
Total Pkts	Total number of uplink packets sent for IPv6 PDNs.
Total Bytes	Total number of uplink bytes sent for IPv6 PDNs.
Downlink	
Total Pkts	Total number of downlink packets sent for IPv6 PDNs.
Total Bytes	Total number of downlink bytes sent for IPv6PDNs.
IPv4v6 PDNs	
Uplink v4	
Total Pkts	Total number of downlink packets sent for IPv4 PDNs.
Total Bytes	Total number of downlink bytes sent for IPv4PDNs.
Downlink v4	
Total Pkts	Total number of downlink packets sent for IPv4 PDNs.
Total Bytes	Total number of downlink bytes sent for IPv4 PDNs.
Uplink v6	
Total Pkts	Total number of downlink packets sent for IPv6 PDNs.
Total Bytes	Total number of downlink bytes sent for IPv6 PDNs.
Downlink v6	
Total Pkts	Total number of downlink packets sent for IPv6 PDNs.

Field	Description
Total Bytes	Total number of downlink bytes sent for IPv6 PDNs.
MIP AAA Authentication	
Attempts	Total number of sessions for MIP authentication attempts.
Success	Total number of successful MIP authentication sessions.
Total Failures	Total number of MIP authentication failures.
Actual Auth Failures	Total number of actual MIP Authentication failures.
Misc Auth Failures	Total number of Miscellaneous MIP Authentication failures.
Binding Updates Received	
Total Received	Total number of PMIPv6 PBUs received.
Total Accepted	Total number of PMIPv6 PBUs accepted.
Total Denied	Total number of PMIPv6 PBUs denied/failed during processing.
Total Discarded	Total number of PMIPv6 PBUs discarded or dropped.
Initial Binding Update Requests	
Received	Total number of initial binding update requests received.
Accepted	Total number of initial binding update requests accepted.
Denied	Total number of initial binding update requests denied.
Refresh Binding Update Requests	
Received	Total number of PMIPv6 PBUs received for renew.
Accepted	Total number of PMIPv6 PBUs for renew accepted.
Denied	Total number of PMIPv6 PBUs for renew denied/failed during processing.
DeReg Requests	
Received	Total number of PMIPv6 PBUs received for Deregistration.
Accepted	Total number of PMIPv6 PBUs for Deregistration accepted.
Denied	Total number of PMIPv6 PBUs for deregistration denied.
Handoff Requests	
Received	Total number of PMIPv6 PBUs received for Handoff.
Accepted	Total number of PMIPv6 PBUs for Handoff accepted.
Denied	Total number of PMIPv6 PBUs for handoff denied.

Field	Description
DHCP Discover Handoff Stats	
Received	Total number of DHCP Discover messages received during handoff.
Accepted	Total number of DHCP Discover messages accepted during handoff.
Denied	Total number of DHCP Discover messages denied during handoff.
Binding Acknowledgements Sent	
Total	Total number of PMIPv6 PBAs sent.
Accepted Reg	Total number of PMIPv6 PBAs sent accepting registrations and renew.
Accepted DeReg	Total number of PMIPv6 Deregistration PBUs accepted sending PBAs.
Denied	Total number of PMIPv6 PBUs denied sending PBAs.
Send Error	Total number of PMIPv6 PBAs failed to send.
Binding Update Deny Reasons	
Insufficient Resource	Total number of PMIPv6 PBUs rejected with insufficient resources.
Mismatched ID	Total number of PMIPv6 PBUs rejected for mismatch in ID.
MN Auth Failure	Total number of PMIPv6 PBUs rejected for MN Authentication failure.
Admin Prohibited	Total number of PMIPv6 PBUs rejected for Administratively Prohibited reason.
Msg ID Required	Total number of PMIPv6 PBUs rejected for Message ID Required.
DAD Failed	Total number of PMIPv6 PBUs rejected for requested Home Address allocation failure.
Not Home Subnet	Total number of PMIPv6 PBUs rejected for address allocation failure from address pool.
Sequence Out Of Window	Total number of PMIPv6 PBUs rejected for incorrect sequence number.
Reg Type Change Disallowed	Total number of PMIPv6 PBUs rejected for renews.
Unspecified Reason	Total number of PMIPv6 PBUs rejected for other reasons.
Service-Authorization Failed	Total number of PMIPv6 PBUs rejected for authorization failure.
Proxy Reg Not Enabled	Total number of PMIPv6 PBUs rejected when proxy registrations are not enabled.
Timestamp Mismatch	Total number of PMIPv6 PBUs rejected when timestamp in PBU is incorrect.
Timestamp Lower Than Expected	Total number of PMIPv6 PBUs rejected when timestamp in PBU is in past.

Field	Description
Missing MN-ID Option	Total number of PMIPv6 PBUs rejected when MN NAI Extension is missing.
Missing HNP Option	Total number of PMIPv6 PBUs rejected when Home Network Prefix Extension is missing.
Missing Access Tech Option	Total number of PMIPv6 PBUs rejected when Access Tech Type Extension is missing.
Missing Handoff Ind Option	Total number of PMIPv6 PBUs rejected when Handoff Indicator is missing.
Not Authorized For HNP	Total number of PMIPv6 PBUs rejected when Requested Home Address Prefix is not authorized.
Not LMA For Mobile	Total number of PMIPv6 PBUs rejected when LMA for Mobile is incorrect.
Not Authorized For Proxy Reg	Total number of PMIPv6 PBUs rejected when Proxy registrations are not allowed.
BCE Prefix Do Not Match	Total number of PMIPv6 PBUs rejected when requested Prefix session is not found.
GRE Key Option Required	Total number of PMIPv6 PBUs rejected when GRE key option is not found.
MCOA Unknown CoA	Total number of PMIPv6 PBUs rejected when Care of Address is incorrect.
Update Denied - Insufficient Resource Reasons	
No Session Manager	Total number of Binding Update Request Denied because of no Session Manager is available.
No Memory	Total number of Binding Update Request Denied because of no Memory available.
Session Manager Rejected	Total number of Binding Update Request Denied because of Session Manager Rejection.
Input-Q Exceeded	Total number of Binding Update Request Denied because of Input queue size is exceeded.
Simul Bindings Exceeded	Total number of Binding Update Request Denied because of number of simultaneous Binding Updates exceeded.
Address Alloc Failed	Total number of Binding Update Request Denied because of address allocation failed.
Update Denied - Admin Prohibited Reasons	
MN-AAA Auth Option Missing	Total number of PMIPv6 PBUs denied due to MN AAA Authentication mobility option missing.
H-bit Not Set	Total number of PMIPv6 PBUs are denied due to H (Home Registration)-Bit not set.

Field	Description
Invalid MN-AAA Option SPI	Total number of PMIPv6 PBUs denied due to invalid MN-AAA Authentication mobility option.
Invalid MN-HA Option SPI	Total number of PMIPv6 PBUs are denied due to invalid MN-HA Authentication mobility option.
Congestion Control Denied	Total number of PMIPv6 PBUs denied due to overload congestion control.
Policy Rejected	Total number of PMIPv6 PBUs are denied due to policy rejection.
HoA Not Authorized	Total number of PMIPv6 PBUs are denied as Home Address is not authorized.
No Permission	Total number of PMIPv6 PBUs denied with no permission.
Bad Request	Total number of PMIPv6 PBUs denied due to bad request.
Binding Updates Discard Reasons	
Congestion Discarded	Total number of PMIPv6 PBUs discarded due to overload congestion.
Checksum Error	Total number of PMIPv6 PBUs discarded due to checksum errors.
Initial Auth Pending	Total number of PMIPv6 PBUs are discarded due to initial authentication pending.
Session Not Found	Total number of PMIPv6 PBU denied and discarded due to session not found.
HAMGR Not Ready	Total number of PMIPv6 PBUs discarded as HAMgr is not ready.
Decode Failure	Total number of PMIPv6 PBUs discarded due to failure to decode.
Invalid Buffer Length	Total number of PMIPv6 PBUs discarded due to invalid buffer length.
Revocation Pending	Total number of PMIPv6 PBUs discarded due to revocation pending for the session.
Binding Revocation	
Sent	Total number of PMIPv6 Binding Revocations sent.
Retries Sent	Total number of PMIPv6 Binding Revocation retries sent.
Ack Rcvd	Total number of PMIPv6 Binding Revocation Ack Messages received.
Not Acknowledged	Total number of PMIPv6 Binding Revocation Ack Timeouts.
Rcvd	Total number of PMIPv6 Binding Revocations received.
Ack Sent	Total number of PMIPv6 Binding Revocation Ack sent.
Sent Revocation Trigger Reasons	

Field	Description
Unspecified	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason Unspecified (0).
Administrative Reason	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason Administrative Reason (1).
Inter-MAG Handoff-Same ATT	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason Inter-MAG Handover - same Access Type (2).
Inter-MAG - Unknown Handoff	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason Inter-MAG Handover - Unknown (4).
Inter-MAG Handoff-Diff ATT	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason Inter-MAG Handover - different Access Type (3).
Per-Peer Policy	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason Per-Peer Policy (128).
Revoking Node Local Policy	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason Revoking Mobility Node Local Policy (129).
User Initiated Session Term	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason User-Initiated Session(s) Termination (5).
Access Network Session Term	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason Access Network Session(s) Termination (6).
Out-of Sync BCE State	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason Possible Out-of-Sync BCE State (7).
Unknown	Total number of Binding Revocation Indications(BRI) sent with Revocation Trigger Reason other than defined values.
Received Revocation ACK Status	
Success	Total number of Binding Revocation Acknowledgements(BRA) received with Status Code as success (0).
Partial-Success	Total number of Binding Revocation Acknowledgements(BRA) received with Status Code as partial success (1).
Binding-Does-Not-Exist	Total number of Binding Revocation Acknowledgements(BRA) received with Status Code as Binding Does NOT Exist (128).
No IPv4-HoA-Bind	Total number of Binding Revocation Acknowledgements (BRA) received with Status Code as IPv4 Home Address Option Required (129).
Global-Revoc-Not-Authorized	Total number of Binding Revocation Acknowledgements (BRA) received with Status Code as Global Revocation NOT Authorized (130).
Revoc-MN-ID-Required	Total number of Binding Revocation Acknowledgements(BRA) received with Status Code as Revoked Mobile Nodes Identity Required (131).

Field	Description
Revoc-Failed-MN-Attached	Total number of Binding Revocation Acknowledgements(BRA) received with Status Code as Revocation Failed - MN is Attached (132).
Trigger-Not-Supported	Total number of Binding Revocation Acknowledgements(BRA) received with Status Code as Revocation Trigger NOT Supported (133).
Proxy-Bind-Rev-Not-Supported	Total number of Binding Revocation Acknowledgements(BRA) received with Status Code as Proxy Binding Revocation NOT Supported (135).
Revoc-Func-Not-Supported	Total number of Binding Revocation Acknowledgements(BRA) received with Status Code as Revocation Function NOT Supported (134).
Unknown	Total number of Binding Revocation Acknowledgements(BRA) received with Status Code other than defined values.
Binding Revocation ACK Discarded	
Total	Total number of received Binding Revocation Acknowledgements(BRA) discarded.
Session Not Found	Total number of received Binding Revocation Acknowledgements(BRA) discarded due to corresponding Session Not Found for the BRA.
Badly Formed Request	Total number of received Binding Revocation Acknowledgements(BRA) discarded due to Badly Formed message.
Decode Error	Total number of received Binding Revocation Acknowledgements(BRA) discarded due to Decode failure.
Checksum Error	Total number of received Binding Revocation Acknowledgements(BRA) discarded due to Checksum Error.
Invalid Message Type	Total number of received Binding Revocation Acknowledgements(BRA) discarded due to Invalid Message Type.
HAMGR Not Ready	Total number of received Binding Revocation Acknowledgements (BRA) discarded due to HAMGR Not Ready to process requests (recovering).
Matching Request Not Found	Total number of received Binding Revocation Acknowledgements(BRA) discarded due to matching revocation request not found.
Invalid Buffer Length	Total number of received Binding Revocation Acknowledgements (BRA) discarded due to Invalid Buffer Length found while decoding the message.
PMIPv6 Data Statistics	
Tunnel Data Received	
Total Packets	
IPv4 GRE(IPv4)	Total number of IPv4 data packets received on IPv4 GRE tunnel.
IPv4 GRE(IPv6)	Total number of IPv6 data packets received on IPv4 GRE tunnel.

Field	Description
IPv6 GRE(IPv4)	Total number of IPv4 data packets received on IPv6 GRE tunnel.
IPv6 GRE(IPv4)	Total number of IPv6 data packets received on IPv6 GRE tunnel.
Total Bytes	
IPv4 GRE(IPv4)	Total bytes of IPv4 bytes received on IPv6 GRE tunnel.
IPv4 GRE(IPv6)	Total bytes of IPv4 bytes received on IPv6 GRE tunnel.
IPv6 GRE(IPv4)	Total number of IPv4 bytes received on IPv6 GRE tunnel.
IPv6 GRE(IPv4)	Total number of IPv6 bytes received on IPv6 GRE tunnel.
Total Errors	
Protocol Type Error	Total number of data packets received on IPv6 GRE tunnel with invalid next header.
Invalid Pkt Length	Total number of data packets received on IPv6 GRE tunnel with invalid length.
No Session Foun	Total number of data packets received on IPv6 GRE tunnel for which binding is not found at SaMOG based on CoA address.
Tunnel Data Sent	
Total Packets	
IPv4 GRE(IPv4)	Total number of IPv4 data packets sent on IPv4 GRE tunnel.
IPv4 GRE(IPv6)	Total number of IPv6 data packets sent on IPv4 GRE tunnel.
IPv6 GRE(IPv4)	Total number of IPv4 data packets sent on IPv6 GRE tunnel.
IPv6 GRE(IPv4)	Total number of IPv6 data packets sent on IPv6 GRE tunnel.
Total Bytes	
IPv4 GRE(IPv4)	Total bytes of IPv4 bytes sent on IPv4 GRE tunnel.
IPv4 GRE(IPv6)	Total bytes of IPv6 bytes sent on IPv4 GRE tunnel.
IPv6 GRE(IPv4)	Total number of IPv4 bytes sent on IPv6 GRE tunnel.
IPv6 GRE(IPv4)	Total number of IPv6 bytes sent on IPv6 GRE tunnel.
EoGRE Data Statistics	
Tunnel Data Received	
Total Packets	

Field	Description
IPv4 EoGRE(IPv4)	Total number of IPv4 payload packets received over the IPv4 GRE tunnel (EoGRE tunnel with v4 transport).
IPv4 EoGRE(IPv6)	Total number of IPv6 payload packets received over the IPv4 GRE tunnel (EoGRE tunnel with v4 transport)
IPv6 EoGRE(IPv4)	Total number of IPv4 payload packets received over the IPv6 GRE tunnel (EoGRE tunnel with v6 transport)
IPv6 EoGRE(IPv6)	Total number of IPv6 payload packets received over the IPv6 GRE tunnel (EoGRE tunnel with v6 transport)
Total Bytes	
IPv4 EoGRE(IPv4)	Total number of IPv4 payload bytes received over the IPv4 GRE tunnel (EoGRE tunnel with v4 transport).
IPv4 EoGRE(IPv6)	Total number of IPv6 payload bytes received over the IPv4 GRE tunnel (EoGRE tunnel with v4 transport)
IPv6 EoGRE(IPv4)	Total number of IPv4 payload bytes received over the IPv6 GRE tunnel (EoGRE tunnel with v6 transport)
IPv6 EoGRE(IPv6)	Total number of IPv6 payload bytes received over the IPv6 GRE tunnel (EoGRE tunnel with v6 transport)
Total Errors	
Drop Error	Total number of Data Packets dropped on EoGRE Tunnel.
Dest MAC Violation	Total number of destination MAC address in the packet received over the EoGRE tunnel that does not match with SaMOG's virtual MAC, broadcast, or multicast address.
Tunnel Data Sent	
Total Packets	Total number of IPv4 payload packets sent over the IPv4 GRE tunnel (EoGRE tunnel with v4 transport).
IPv4 EoGRE(IPv4)	Total number of IPv6 payload packets sent over the IPv4 GRE tunnel (EoGRE tunnel with v4 transport)
IPv4 EoGRE(IPv6)	Total number of IPv4 payload packets sent over the IPv6 GRE tunnel (EoGRE tunnel with v6 transport)
IPv6 EoGRE(IPv4)	Total number of IPv6 payload packets sent over the IPv6 GRE tunnel (EoGRE tunnel with v6 transport)
IPv6 EoGRE(IPv6)	Total number of IPv4 payload packets sent over the IPv4 GRE tunnel (EoGRE tunnel with v4 transport).
Total Bytes	Total number of data bytes sent on the EoGRE tunnel.

Field	Description
IPv4 EoGRE(IPv4)	Total number of IPv4 payload bytes sent over the IPv4 GRE tunnel (EoGRE tunnel with v4 transport).
IPv4 EoGRE(IPv6)	Total number of IPv6 payload bytes sent over the IPv4 GRE tunnel (EoGRE tunnel with v4 transport)
IPv6 EoGRE(IPv4)	Total number of IPv4 payload bytes sent over the IPv6 GRE tunnel (EoGRE tunnel with v6 transport)
IPv6 EoGRE(IPv6)	Total number of IPv6 payload bytes sent over the IPv6 GRE tunnel (EoGRE tunnel with v6 transport)

show samog-service statistics plmn mcc <mcc1> mnc <mnc1>

Table 2:

Field	Description
System Statistics	
Active GTPv2 PDNs	Total number of active GTPv2 PDN sessions received.
GTPv2 Sessions	Total number of GTPv2 sessions received.
EAP Session Statistics	
Attempted	Total number of EAP sessions attempted.
Success	Total number of EAP sessions succeeded.
Failure	Total number of failed EAP sessions.
Current	Total number of active EAP sessions.
S2A Statistics	
Create Session Request TX	Total number of Create Session Request sessionstransmitted on S2A interface.
Create Session Response Accept RX	Total number of create session response accept messages received based on S2A interface.
Create Bearer Request RX	Total number of Create bearer Request messages received.
Create Bearer Response Accept TX	Total number of Create Bearer Response Accept sessions transmitted.
Delete Session Request TX	Total number of Delete session requests transmitted.
Delete Session Response Accept RX	Total number of Delete session responses received.
Delete Bearer Request RX	Total number of Delete Bearer request messages received.

Field	Description
Delete Bearer Response Accept TX	Total number of Delete Bearer response messages tansmitted.
Diameter Authentication Statistics	
DER TX	Total number of DER messages transmitted.
DEA Accept RX	Total number of DEA Accept messages received.
RAR RX	Total number of RAR messages received.
RAA TX	Total number of RAA messages transmitted.
ASR RX	Total number of ASA messages received.
ASA TX	Total number of ASA messages transmitted.
STR TX	Total number of STR messages transmitted.
STA RX	Total number of STA messages received.
DHCPv6 Statistics	
IPV6 RA TX	Total number of IPV6 RA messages transmitted.
DHCP Statistics	
DHCP Sessions Active	Total number of active DHCP sessions.
DHCP Sessions Setup	Total number of DHCP sessions set up.
DHCP Sessions Released	Total number of DHCP session released.
DHCP DISCOVER RX	Total number of DHCP discover messages received.
DHCP OFFER TX	Total number of DHCP offer messages transmitted.
DHCP REQUEST RX	Total number of DHCP request messages received.
DHCP ACK TX	Total number of DHCP acknowledgment messages transmitted.
DHCP NAK TX	Total number of DHCP NAK messages transmitted.
RADIUS Accounting Statistics	
Accounting-Request TX	Total number of RADIUS accounting request DHCP messages transmitted.
Accounting-Response RX	Total number of RADIUS accounting response messages reeceived..
Accounting-Start TX	Total number of RADIUS accounting start messages transmitted.
Accounting-Stop TX	Total number of RADIUS accounting stop messsages transmitted.
Accounting-Request Timeout	Total number of RADIUS accounting request messages that are timedout.

show samog-service name

Table 3: show samog-service name Command Output Descriptions

Field	Description
Reporting Action	
Event Record	Indicates if RTT feature is enabled or not.