

show user-plane-service

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show user-plane-service statistics drop-counter

The output of the **show user-plane-service statistics drop-counter** command displays the following fields:

Field	Description
Packet Drop Data Statistics:	I
NAT packets processing failure:	
NAT on demand handling	The total number of NAT packets failed due to on-demand handling.
IP allocation is in progress	The total number of NAT packets failed due to IP allocation in progress.
ICMP Packet translation	The total number of NAT packets failed due to ICMP packet translations.
FIREWALL packets processing failur	re:

Field	Description
Policy not found	The total number of Firewall packets failed due to missing policy.
No Matching GX rule found	The total number of Firewall packets failed due to unmatched Gx rules.
Flow apply action:	
Discard	The total number of packets dropped due to discard action.
Readdress Failure	The total number of packets dropped due to readdress failure.
Packet exceeds the MTU size	The total number of packets dropped due to excess MTU size.
Failure in processing FAR Buffer packets	The total number of packets dropped due to failure in processing the FAR buffer.
FAR Apply Action Drop	The total number of packets dropped due to FAR apply action.
Traffic Steering Failure	The total number of packets dropped due to traffic steering failure.
QER Gate Status Closed	The total number of packets dropped due to QER gate status closure.
Content-filtering Discard Action	The total number of packets dropped due to content-filtering discard action.
IP Header Validation Failed	The total number of packets dropped due to IP header validation failure.
ADF level failure:	
UL TEID/QFI key mismatch	The total number of packets dropped due to UL TEID/QFI key mismatch.
DL TFT mismatch	The total number of packets dropped due to DL TFT mismatch.
DL QFI mismatch	The total number of packets dropped due to DL QFI mismatch.
URL Blacklisting Discard Action	The total number of packets dropped due to URL blacklisting discard action.
DDN buffer overflow drop packets	The total number of packets dropped due to DDN buffer overflow.

Field	Description
APN AMBR Packets Drop	The total number of packets dropped due to APN AMBR.
ITC Packets Drop	The total number of ITC dropped packets.
ACL Drop	The total number of ACL dropped packets.
CC Dropped Packets	The total number of CC dropped packets.
FastPath Misc Drops:	
Overload Protection	The total number of packets dropped due to overload protection.
Invalid Client	The total number of packets dropped due to invalid client.
Stream ID 0	The total number of packets dropped due to 0 stream ID.
Invalid Stream ID	The total number of packets dropped due to invalid stream ID.
OHR Mismatch Packet Drops	The total number of packets dropped due to outer header removal mismatch.
SGACL Packet Drops	Total number of SGACL packets dropped.
SGACL No Policy Packet Drops	Total number of SGACL packets not dropped.
No Default SGT cell Packet Drops	Total number of no default SGT cell packets dropped.
	Note This field is obsolete.
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show user-plane-service all

The output of the **show user-plane-service all** command displays the following fields:

Field	Description
Service name	The name of the configured user plane service.
Service ID	The user plane service identifier.
Context	The context in which the service is configured.
Status	The status of the user plane service.
UPF Ingress GTPU Service	Displays the type of UPF Ingress GTPU Service.

	Description
UPF Ingress N3 Interface Type GTPU Service	Displays the type of UPF Ingress N3 Interface Type GTPU Service.
UPF Ingress N9 Interface Type GTPU Service	Displays the type of UPF Ingress N9 Interface Type GTPU Service.
UPF Ingress S5U Interface Type GTPU Service	Displays the type of UPF Ingress S5U Interface Type GTPU Service.
UPF Ingress S8U Interface Type GTPU Service	Displays the type of UPF Ingress S8U Interface Type GTPU Service.
UPF Egress GTPU Service	Displays the type of UPF Egress GTPU Service.
SGW Ingress GTPU Service	Displays the type of SGW Ingress GTPU Service.
SGW Egress GTPU Service	Displays the type of SGW Egress GTPU service.
Control Plane Tunnel GTPU Service	Displays the name of control plane tunnel GTPU service.
Sx Service	Displays the type of Sx Service.
Control Plane Group	Displays the type of control plane group.
Fast-Path service	Indicates the status of the fast-path service.
Load Control Parameters	Displays the Load Control related parameters.
Capacity	Displays the Load Control capacity.
NRF Management Service	Displays the name of Network Resource Functions (NRF) management service.
Nf-Instance-Id	Displays the value of Network function (NF) instance ID for NRF.
Session Priority Profile	Displays the name Session priority profile.
Ise Server Profile	Displays the name of the ISE server profile.
UPF Load Control Profile	Displays the load control profile name of the UPF.
UPF Overoad Control Profile	Displays the overload control profile name of the UPF.

show user-plane-service name

The output of the **show user-plane-service name** service_name command displays the following fields:

Field	Description
Service name	The name of the configured user plane service.
Service ID	The user plane service identifier.
Context	The context in which the service is configured.
Status	The status of the user plane service.
UPF Ingress GTPU Service	Displays the type of UPF Ingress GTPU Service.
UPF Ingress N3 Interface Type GTPU Service	Displays the type of UPF Ingress N3 Interface Type GTPU Service.
UPF Ingress N9 Interface Type GTPU Service	Displays the type of UPF Ingress N9 Interface Type GTPU Service.
UPF Ingress S5U Interface Type GTPU Service	Displays the type of UPF Ingress S5U Interface Type GTPU Service.
UPF Ingress S8U Interface Type GTPU Service	Displays the type of UPF Ingress S8U Interface Type GTPU Service.
UPF Egress GTPU Service	Displays the type of UPF Egress GTPU Service.
SGW Ingress GTPU Service	Displays the type of SGW Ingress GTPU Service.
SGW Egress GTPU Service	Displays the type of SGW Egress GTPU service.
Control Plane Tunnel GTPU Service	Displays the name of control plane tunnel GTPU service.
Sx Service	Displays the type of Sx Service.
Control Plane Group	Displays the type of control plane group.
Fast-Path service	Indicates the status of the fast-path service.
Load Control Parameters	Displays the Load Control related parameters.
Capacity	Displays the Load Control capacity.
NRF Management Service	Displays the name of Network Resource Functions (NRF) management service.
Nf-Instance-Id	Displays the value of Network function (NF) instance ID for NRF.
Session Priority Profile	Displays the name Session priority profile.
Ise Server Profile	Displays the name of the ISE server profile.
UPF Load Control Profile	Displays the UPF load control profile name.
UPF Overoad Control Profile	Displays the UPF overload control profile name.

show user-plane-service gtpu local-addresses

Table 1: show user-plane-service gtpu local-addresses Command Output Descriptions

Field	Description
Service Name	The name of the configured user plane service.
Address List	The IP addresses used to transmit/receive GTP-U packets.
GTPv1 Sessions	The number of active GTP-1 sessions.

show user-plane-service gtpu statistics local-address

Table 2: show user-plane-service gtpu statistics local-address table Command Output Descriptions

Field	Description	
Session Stats		
Current	The total number of current sessions set up using GTPU service.	
Current (IMS-media)	The total number of current (IMS-media) sessions set up using GTPU service	
Total Setup	The total number of sessions set up using GTPU service.	
Total Setup (IMS-media)	The total number of sessions set up (IMS-media) using GTPU service.	
Current gtpu v0 sessions	The total number of current GTP-0 sessions.	
Current gtpu v1 sessions	The total number of current GTP-1 sessions.	
Total Data Stats		
Uplink Packets	The total number of uplink packets.	
Uplink Bytes	The total number of uplink bytes.	
Downlink Packets	The total number of downlink packets.	
Downlink Bytes	The total number of downlink bytes.	
Packets Discarded	The total number of discarded packets.	
Bytes Discarded	The total number of discarded bytes.	
Uplink Packets (IMS-media)	The total number of uplink packets (IMS-media).	
Uplink Bytes (IMS-media)	The total number of uplink bytes (IMS-media).	
Downlink Packets (IMS-media)	The total number of downlink packets (IMS-media).	

Field	Description	
Downlink Bytes (IMS-media)	The total number of downlink bytes (IMS-media).	
Packets Discarded (IMS-media)	The total number of discarded packets (IMS-media).	
Bytes Discarded (IMS-media)	The total number of discarded bytes (IMS-media).	
QoS Stats		
Uplink Packets	The total number of QCI <n> uplink packets.</n>	
Uplink Bytes	The total number of QCI <n> uplink bytes.</n>	
Downlink Packets	The total number of QCI <n> downlink packets.</n>	
Downlink Bytes	The total number of QCI <n> downlink bytes.</n>	
Packets Discarded	The total number of discarded QCI <n> packets.</n>	
Non-Std QCI(Non-GBR)		
Uplink Packets	The total number of non-standard QCI, non-GBR uplink packets.	
Uplink Bytes	The total number of non-standard QCI, non-GBR uplink bytes.	
Downlink Packets	The total number of non-standard QCI, non-GBR downlink packets.	
Downlink Bytes	The total number of non-standard QCI, non-GBR downlink bytes.	
Packets Discarded	The total number of discarded non-standard QCI, non-GBR packets.	
Path Management Messages		
Echo Request Rx	The total number of GTPU echo requests received.	
Echo Response Rx	The total number of GTPU echo responses received.	
Echo Request Tx	The total number of GTPU echo requests transmitted.	
Echo Response Tx	The total number of GTPU echo responses transmitted.	
SuppExtnHdr Tx	Total GTPU messages with supported extension headers transmitted.	
Peer Stats		
Total GTPU Peers	Total number of GTPU Peers available in the system.	
Total GTPU Peers with Stats	The total number of GTPU Peers available in the system with statistics.	
Tunnel Management Messages		
Error Indication Tx	The number of Error Indication messages transmitted.	
Error Indication Rx	The number of Error Indication messages received.	
Error Indication Rx Discarded	The total number of error indications discarded.	

show user-plane-service sgacl name sgacl-name

Table 3: show user-plane-service sgacl name Command Output Descriptions

Field	Description
SGACL Name	Displays the name of the Secure Group Tag-based Access Control List (SGACL).
SGACL Definitions	Displays the ACL definitions.
protocol	Displays the protocol field for SGACL (IPV4, IPV6, or IP_AGNOSTIC.
Total SGACL(s) found	Displays the total number of SGACLs found.

show user-plane-service sgt-column dsgt dsgt-value

Table 4: show user-plane-service sgt-column dsgt dsgt_value Command Output Descriptions

Field	Description
D-SGT	Displays the Destination SGT (D-SGT) value.
S-SGT	Displays the Source SGT (S-SGT) value.
SGACL Name Version	Displays the version of the SGACL name.
SGACL name	Displays the SGACL name.
Total SGT column(s) found	Displays the total number of the SGT columns.

show user-plane-service sgt-column summary

Table 5: show user-plane-service sgt-column summary Command Output Descriptions

Field	Description
D-SGT Columns fetched	Displays the fetched Destination SGT (D-SGT) columns.
D-SGT Version	Displays the version of the D-SGT.
Total D-SGT column(s) found	Displays the total number of the D-SGT columns.

show user-plane-service s-nssai statistics [all | id]

The output of the **show user-plane-service s-nssai statistics [all | id]** command displays the following fields:

Field	Description
S-NSSAI	Indicates the S-NSSAI value.
Active Subscribers	Displays the number of active subscribers.
Total Subscribers	Displays the total number of subscribers.

show user-plane-service statistics all

The output of the **show user-plane-service statistics all** command displays the following fields:

Field	Description
UPF Overload Stats:	
Current State	The current load or overload state of the UPF.
Overload Mode Count	The total number of times the UPF reached the overload condition.
Self-protection Mode Count	The total number of times the UPF reached the self-protection mode.
Last Detected Overload state	Timestamp of when UPF was last in the Overload state.
Last Detected Out-of Overload state	Timestamp of when UPF was last out of the Overload state.
Last Reported (System) Overload Factor:	
СРИ	Timestamp of when UPF last reported overloaded based on CPU load.
Memory	Timestamp of when UPF last reported overloaded based on Memory load.
Session Capacity	Timestamp of when UPF last reported overloaded based on Session Capacity.
Last Reported (VPP CPU) Overload Factor	Timestamp of when UPF last reported overloaded based on CPU load.
Last Reported Reduction Metric	Timestamp of when UPF last reported reduction metric.
Session Stats:	
Sx-Sessions Removed in Self-Protection Mode	The number of Sx-Sessions removed in self-protection mode
Non-Priority Sx Messages:	

Field	Description	
Sx-Establishment Requests Received in Overload Mode	The total number of times UPF received the Sx Session Establishment Request while in self-protection mode.	
Sx-Establishment Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx Session Establishment Request while in self-protection mode.	
Sx-Modification Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx-Session Modification Request while in self-protection mode.	
Unclassified Sx Messages:		
Sx-Establishment Requests Received in Overload Mode	The total number of times UPF received the Sx Session Establishment Request while in self-protection mode.	
Sx-Establishment Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx Session Establishment Request while in self-protection mode.	
Sx-Modification Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx-Session Modification Request while in self-protection mode.	
IMS Sx Messages:		
Sx-Establishment Requests Received in Overload Mode	The total number of times UPF received the Sx Session Establishment Request while in overload mode.	
Sx-Establishment Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx Session Establishment Request while in self-protection mode.	
Sx-Modification Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx-Session Modification Request while in self-protection mode.	
Sx-Establishment Requests Allowed in Self-protection Mode	The total number of times UPF allowed the Sx Session Establishment Requests while in self-protection mode.	
Sx-Modification Requests Allowed in Self-protection Mode	The total number of times UPF allowed the Sx Session Modification Requests while in self-protection mode.	
WPS/Emergency Sx Messages:		
Sx-Establishment Requests Received in Overload Mode	The total number of times UPF received the Sx Session Establishment Request while in overload mode.	
Sx-Establishment Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx Session Establishment Request while in self-protection mode.	
Sx-Modification Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx-Session Modification Request while in self-protection mode.	

de	The total number of times UPF allowed the Sx Session Establishment Requests while in self-protection mode. The total number of times UPF allowed the Sx Session Modification Requests while in self-protection mode.
ta Stats: erload Mode: PS/Emergency New Flows Allowed PS/Emergency New Flows Dropped In WPS/Emergency New Flows Allowed	
PS/Emergency New Flows Allowed PS/Emergency New Flows Dropped In WPS/Emergency New Flows Allowed	
PS/Emergency New Flows Allowed PS/Emergency New Flows Dropped In WPS/Emergency New Flows Allowed	
PS/Emergency New Flows Dropped n WPS/Emergency New Flows Allowed	
n WPS/Emergency New Flows Allowed	The total number of new WPS or Emergency flows allowed while in overload mode.
	The total number of new WPS or Emergency flows dropped while in overload mode.
1 WPS/Emergency New Flows Dronned	The total number of new non-WPS or Emergency flows allowed while in overload mode.
1 W15/Emergency New 1 lows Bropped	The total number of new non-WPS or Emergency flows dropped while in overload mode.
classified New Flows Dropped	The total number of new unclassified packets dropped while in overload mode.
al Packets Dropped	The total number of packets dropped while in overload mode.
f-Protection Mode:	
PS/Emergency New Flows Allowed	The total number of new WPS or Emergency flows allowed while in self-protection mode.
PS/Emergency New Flows Dropped	The total number of new WPS or Emergency flows dropped while in self-protection mode.
n WPS/Emergency New flows Allowed	The total number of new non-WPS or Emergency flows allowed while in self-protection mode.
n WPS/Emergency New Flows Dropped	The total number of new non-WPS or Emergency flows dropped while in self-protection mode.
classified New Flows Dropped	The total number of new unclassified packets dropped while in self-protection mode.
al Packets Dropped	The total number of packets dropped while in self-protection mode.
F Load Stats:	
rrent (system) Load Factor	

Field	Description
CPU	The last reported load factor of the UPF based on CPU load.
Memory	The last reported load factor of the UPF based on Memory load.
Session Capacity	The last reported load factor of the UPF based on Session Capacity load.
Last Reported Sequence Number	The last reported sequence number.

show user-plane-service statistics name

The output of the **show user-plane-service statistics name** command displays the following fields:

Field	Description
UPF Overload Stats:	
Current State	The current load or overload state of the UPF.
Overload Mode Count	The total number of times the UPF reached the overload condition.
Self-protection Mode Count	The total number of times the UPF reached the self-protection mode.
Last Detected Overload state	Timestamp of when UPF was last in the Overload state.
Last Detected Out-of Overload state	Timestamp of when UPF was last out of the Overload state.
Last Reported (System) Overload Factor:	
CPU	Timestamp of when UPF last reported overloaded based on CPU load.
Memory	Timestamp of when UPF last reported overloaded based on Memory load.
Session Capacity	Timestamp of when UPF last reported overloaded based on Session Capacity.
Last Reported (VPP CPU) Overload Factor	Timestamp of when UPF last reported overloaded based on CPU load.
Last Reported Reduction Metric	Timestamp of when UPF last reported reduction metric.
Session Stats:	1

Field	Description
Sx-Sessions Removed in Self-Protection Mode	The number of Sx-Sessions removed in self-protection mode
Non-Priority Sx Messages:	
Sx-Establishment Requests Received in Overload Mode	The total number of times UPF received the Sx Session Establishment Request while in self-protection mode.
Sx-Establishment Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx Session Establishment Request while in self-protection mode.
Sx-Modification Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx-Session Modification Request while in self-protection mode.
Unclassified Sx Messages:	
Sx-Establishment Requests Received in Overload Mode	The total number of times UPF received the Sx Session Establishment Request while in self-protection mode.
Sx-Establishment Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx Session Establishment Request while in self-protection mode.
Sx-Modification Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx-Session Modification Request while in self-protection mode.
IMS Sx Messages:	
Sx-Establishment Requests Received in Overload Mode	The total number of times UPF received the Sx Session Establishment Request while in overload mode.
Sx-Establishment Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx Session Establishment Request while in self-protection mode.
Sx-Modification Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx-Session Modification Request while in self-protection mode.
Sx-Establishment Requests Allowed in Self-protection Mode	The total number of times UPF allowed the Sx Session Establishment Requests while in self-protection mode.
Sx-Modification Requests Allowed in Self-protection Mode	The total number of times UPF allowed the Sx Session Modification Requests while in self-protection mode.
WPS/Emergency Sx Messages:	
Sx-Establishment Requests Received in Overload Mode	The total number of times UPF received the Sx Session Establishment Request while in overload mode.
Sx-Establishment Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx Session Establishment Request while in self-protection mode.

Field	Description
Sx-Modification Requests Rejected in Self-protection Mode	The total number of times UPF rejected the Sx-Session Modification Request while in self-protection mode.
Sx-Establishment Requests Allowed in Self-protection Mode	The total number of times UPF allowed the Sx Session Establishment Requests while in self-protection mode.
Sx-Modification Requests Allowed in Self-protection Mode	The total number of times UPF allowed the Sx Session Modification Requests while in self-protection mode.
Data Stats:	
Overload Mode:	
WPS/Emergency New Flows Allowed	The total number of new WPS or Emergency flows allowed while in overload mode.
WPS/Emergency New Flows Dropped	The total number of new WPS or Emergency flows dropped while in overload mode.
Non WPS/Emergency New flows Allowed	The total number of new non-WPS or Emergency flows allowed while in overload mode.
Non WPS/Emergency New Flows Dropped	The total number of new non-WPS or Emergency flows dropped while in overload mode.
Unclassified New Flows Dropped	The total number of new unclassified packets dropped while in overload mode.
Total Packets Dropped	The total number of packets dropped while in overload mode.
Self-Protection Mode:	
WPS/Emergency New Flows Allowed	The total number of new WPS or Emergency flows allowed while in self-protection mode.
WPS/Emergency New Flows Dropped	The total number of new WPS or Emergency flows dropped while in self-protection mode.
Non WPS/Emergency New flows Allowed	The total number of new non-WPS or Emergency flows allowed while in self-protection mode.
Non WPS/Emergency New Flows Dropped	The total number of new non-WPS or Emergency flows dropped while in self-protection mode.
Unclassified New Flows Dropped	The total number of new unclassified packets dropped while in self-protection mode.
Total Packets Dropped	The total number of packets dropped while in self-protection mode.
UPF Load Stats:	

Field	Description
Current (system) Load Factor	
СРИ	The last reported load factor of the UPF based on CPU load.
Memory	The last reported load factor of the UPF based on Memory load.
Session Capacity	The last reported load factor of the UPF based on Session Capacity load.
Last Reported Sequence Number	The last reported sequence number.

show user-plane-service statistics charging-action [name | all

The output of the **show user-plane-service statistics charging-action [name | all]** command displays the following fields:

Field	Description
X-Header Bytes Injected	Indicates the number of X-Header bytes injected.
X-Header Packets Injected	Indicates the number of X-Header packets injected.
X-Header Bytes Removed	Indicates the number of X-Header bytes removed.
X-Header Packets Removed	Indicates the number of X-Header packets removed.

show user-plane-service statistics rulebase [name | all]

The output of the **show user-plane-service statistics rulebase [name | all]** command displays the following header enrichment field:

Field	Description
HTTP header buffering limit reached	Indicates when the HTTP buffering limit is reached.

show user-plane-service statistics sgacl all

Table 6: show user-plane-service statistics sgacl all Command Output Descriptions

Field	Description
ACL Name	Specifies the name of the access control list.

Field	Description
Pkts-Down	Specifies the total number of downlink packets for subscriber matching SGACL.
Bytes-Down	Specifies the total number of downlink bytes for subscriber matching SGACL.
Pkts-Up	Specifies the total number of dropped packets for subscriber matching SGACL.
	Note This field is added for as part of the CLI for completeness. However, the counters are always 0 as currently SGACL is applied only for downlink packets.
Bytes-Up	Specifies the total number of uplink bytes for a subscriber. Note This field is added for as part of the CLI for completeness. However, the counters are always 0 as currently SGACL is applied only for downlink packets.
Pkts dropped	Specifies the total number of dropped packets.
Total SGACL(s)	Specifies the total number of SGACLs for a subscriber.