



## show asnpc-service

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## show asnpc-service all

*Table 1: show asnpc-service all Command Output Descriptions*

Field	Description
Service name	The ASN GW service name.
Context	The context in which the service is configured.
Anchor PC ID	The anchor paging controller identifier.
Bind	The bind status.
Max Subscribers	The maximum number of subscribers.
IP address	IP address of ASN GW server where this service is located.
UDP Port	The UDP port number.
Service Status	Status of this service.
Maximum number of retransmissions	The maximum number of retransmissions.
Maximum number of paging-announce retransmissions	The maximum number of paging-announce retransmissions.
Retransmission timeout	The retransmission timeout duration.
Setup timeout	The session setup timeout duration.

Field	Description
Active-relay timeout	Indicates the timeout duration for active relay of R4 or R6 messages.
Paging-announce timeout	Indicates the paging announce timeout duration in seconds.
Paging-announce retransmission timeout	Indicates the paging announce retransmission timeout duration in seconds.
Policy transaction-id-validation	Possible values are: <ul style="list-style-type: none"> <li>• ALLOW: Enforce tid validation procedure as per NWG specification, section 3.1.</li> <li>• DISALLOW: Do not enforce tid validation procedure as per NWG specification, section 3.1.</li> </ul>
Policy zero-function-type	Possible values are: <ul style="list-style-type: none"> <li>• ALLOW: If configured, function type is not considered for transaction id generation/validation.</li> <li>• DISALLOW: If configured, function type is considered for transaction id generation/validation.</li> </ul>
Transaction Id. Seed	If configured, initial value of tid is set to this configured value, otherwise, initial value of tid is set to a random number.
Peer ASNGW address	The list of ASN GW IP addresses with which the PCLR is permitted to interact.
Number of Paging Groups configured	The total number of paging groups configured for this service.
Paging Group	The paging group ID associated with this service.
Paging Offset	The offsets configured for the Paging Group.
Number of MSIDs	The current total number of MNs assigned/using the offset.

## show asnpc-service session all

Table 2: show asnpc-service session all Command Output Descriptions

Field	Description
CALLID	The subscriber's call identification number.
MSID	The subscriber's Mobile Station Identification number.
BS/PA Address	IP address of the base-station or paging agent.

Field	Description
Session Type	Indicates the type of ASN PC session. Possible type of sessions are: <ul style="list-style-type: none"> <li>• Anchor</li> <li>• Non-anchor</li> </ul>
Total ASNPC Sessions	The total number of ASN PC sessions on chassis including all modes.

## show asnpc-service session full

Table 3: show asnpc-service session full Command Output Descriptions

Field	Description
Username	The subscriber's user name.
Callid	The subscriber's call identification number.
MSID	The subscriber's Mobile Station Identification number.
ASNPC Service Address	IP address of system where ASN PC service is running.
BS/PA Address	IP address of the base-station or paging agent.
BS ID	The identifier of base station. Generally it is MAC address of the BS.
Authenticator Address	IP address of the authenticator ASN GW.
DPF/ASNGW Address	IP address of the system where data path function/ASN GW service is running.
Idle-mode timeout	Indicates the total configured timeout duration in seconds for an MS to enter the idle mode from active mode.
Remaining Idle Mode Timeout	Indicates the remaining timeout duration in seconds for an MS to enter the idle mode from active mode.
<b>Paging Information</b>	
Paging Cycle	Indicates the number of paging cycles happened in this ASN PC service session.
Paging Offset	Indicates the paging offset for paging announce.
Paging Group ID	Indicates the paging group identifier which contains the group of paging agents bounded with this paging controller session.
Paging Interval	Interval time in seconds between two paging announces.

Field	Description
<b>MS Information</b>	
Idle Mode Authorization Indication	Indicates the idle mode authorization status.
SA Descriptor Information	Indicates the Security Association description information. SA descriptor is a compound attribute whose sub-attributes describe the properties of a Security Association (SA). These properties include the SA ID, the SA type, the SA service type, and the cryptographic suite employed within the SA.
SA ID	Indicates the identifier for the security association.
SA Type	Indicates the types of security association. Possible values are:
Cryptographic Suite	Indicates the cryptographic suite employed within the security association. Possible values are: <ul style="list-style-type: none"> <li>• 0: Primary SA</li> <li>• 1: Static SA</li> <li>• 3: Dynamic SA</li> <li>• 4. Group SA</li> <li>• 5: MBS SA</li> </ul>
SA Service Type	Indicates the service types of the corresponding SA type. Possible values are: <ul style="list-style-type: none"> <li>• 0: Unicast service</li> <li>• 1: Group multicast service</li> <li>• 2: MBS service</li> </ul> Note that this shall be defined only when SA type is Static SA or Dynamic SA.
SA Index	Indicates the index of security association.
Older/Newer TEK Parameters	Indicates the older or newer Traffic Encryption Key (TEK) parameters involved.
TEK TLV (in hex)	Indicates the TEK total length value in hexadecimal.
TEK Sequence Number	Indicates the TEK sequence number.
TEK Lifetime	Indicates the TEK lifetime in seconds.
PN Counter	Indicates the packet number counter in downlink direction that are used for encryption and decryption by the Base Station.

Field	Description
RxPN Counter	Indicates the packet number counter in uplink direction that are used for encryption and decryption by the Base Station.
Total ASNPC Sessions	The total number of ASN PC sessions on chassis including all modes.

## show asnpc-service session counters verbose

Table 4: show asnpc-service session counters verbose Command Output Descriptions

Field	Description
Username	The subscriber's user name.
Callid	The subscriber's call identification number.
MSID	The subscriber's Mobile Station Identification number.
<b>Message Groups</b>	
R6 Idle Mode Entry MS State Change Request Msg	Groups the statistics of the Idle Mode Entry MS State Change Request messages on R6 interface.
R6 Idle Mode Entry MS State Change Response Msg	Groups the statistics of the Idle Mode Entry MS State Change Response messages on R6 interface.
R6 Idle Mode Entry MS State Change Ack Msg	Groups the statistics of the Idle Mode Entry MS State Change Ack messages on R6 interface.
R6 Idle Mode Exit MS State Change Request Msg	Groups the statistics of the Idle Mode Exit MS State Change Request messages on R6 interface.
R6 Idle Mode Exit MS State Change Response Msg	Groups the statistics of the Idle Mode Exit MS State Change Response messages on R6 interface.
R6 Location Update Request Msg	Groups the statistics of the Location Update Request messages on R6 interface.
R6 Location Update Response Msg	Groups the statistics of the Location Update Response messages on R6 interface.
R6 Location Update Confirm Msg	Groups the statistics of the Location Update Confirm messages on R6 interface.
R6 Paging Announce Msg	Groups the statistics of the Paging Announce messages on R6 interface.
R4 Idle Mode Entry MS State Change Request Msg	Groups the statistics of the Idle Mode Entry MS State Change Request messages on R4 interface.

Field	Description
R4 Idle Mode Entry MS State Change Response Msg	Groups the statistics of the Idle Mode Entry MS State Change Response messages on R4 interface.
R4 Idle Mode Entry MS State Change Ack Msg	Groups the statistics of the Idle Mode Entry MS State Change Ack messages on R4 interface.
R4 Idle Mode Exit MS State Change Request Msg	Groups the statistics of the Idle Mode Exit MS State Change Request messages on R4 interface.
R4 Idle Mode Exit MS State Change Response Msg	Groups the statistics of the Idle Mode Exit MS State Change Response messages on R4 interface.
R4 Network Exit MS State Change Request Msg	Groups the statistics of the Network Exit MS State Change Request messages on R4 interface.
R4 Network Exit MS State Change Response Msg	Groups the statistics of the Network Exit MS State Change Response messages on R4 interface.
R4 Delete MS Entry Request Msg	Groups the statistics of the Delete MS Entry Request messages on R4 interface.
R4 Delete MS Entry Response Msg	Groups the statistics of the Delete MS Entry Response messages on R4 interface.
R4 Initiate Paging Request Msg	Groups the statistics of the Initiate Paging Request messages on R4 interface.
R4 Initiate Paging Response Msg	Groups the statistics of the Initiate Paging Response messages on R4 interface.
R4 Anchor PC Ind Msg	Groups the statistics of the Anchor Paging Controller Indicator messages on R4 interface.
R4 Anchor PC Ack Msg	Groups the statistics of the Anchor Paging Controller Ack messages on R4 interface.
R4 Context Request Msg	Groups the statistics of the Context Request messages on R4 interface.
R4 Context Report Msg	Groups the statistics of the Context Report messages on R4 interface.
R6/R4 Unknown Messages	Groups the statistics of the Unknown type of messages on R6 and/or R4 interface.
<b>Message Statistics</b>	
Total Sent	The total number of this type of message sent on specific interface.
Total Send Failures	The total number of failures occurred during transaction id generation and message not sent for specific interface. This counter is used to count the error while sending the R6/R4 packets.

Field	Description
Retransmissions Sent	The total number of this type of message re-transmitted on specific interface.
Total Received	The total number of this type of message received on specific interface.
Total Accepted	The total number of this type of message accepted on specific interface.
Total Relayed	The total number of this type of message relayed on specific interface.
Total Denied	The total number of this type of message denied on specific interface.
Total Discarded	The total number of this type of message discarded on specific interface.
Badly Formed	The total number of badly formed this type of message on specific interface.
Decode Error	The total number of this type of message on specific interface with decode error.
Unspecified Error	The total number of this type of message on specific interface with unspecified error.
Paging Config Error	The total number of this type of errors messages on specified interface occurred. This error occurs when paging node id (BS id) is not configured in configured paging groups.
Missing Mandatory TLV	The total number of this type of message on specific interface with missing mandatory TLVs.
TLV Value Invalid	The total number of this type of message on specific interface with invalid TLV value.
Unknown TLV	The total number of this type of message on specific interface with unknown TLVs.
Duplicate TLV Found	The total number of this type of message on specific interface with duplicate TLVs.
No session Found	The total number of this type of message on specific interface without any session information.
Transaction Id. Error	The total number of this type of message on specific interface with transaction id error.
<b>Data messages</b>	
GRE R6 Receive	The total number of data message received with through GRE tunnel on R6 interface.

Field	Description
GRE R4 Receive	The total number of data message received through GRE tunnel on R4 interface.
Packets Received	The total number of data packets received/sent through GRE tunnel on R4/R6 interface.
Bytes Received	The total number of data bytes received/sent through GRE tunnel on R4/R6 interface.
Protocol Type Error	The total number of data message received/sent with protocol type error through GRE tunnel on R4/R6 interface.
GRE Key Absent	The total number of data message received/sent without GRE key through GRE tunnel on R4/R6 interface.
GRE Checksum Error	The total number of data message received/sent with checksum error through GRE tunnel on R4/R6 interface.
Invalid Packet Length	The total number of data message received/sent with invalid packet length through GRE tunnel on R4/R6 interface.
No Session found	The total number of data message received/sent without any session information through GRE tunnel on R4/R6 interface.
Unspecified Error	The total number of data message received/sent with unknown error through GRE tunnel on R4/R6 interface.
GRE R6 Send	The total number of data message sent through GRE tunnel on R6 interface.
GRE R4 Send	The total number of data message sent through GRE tunnel on R4 interface.
Packets Sent	The total number of data packets sent through GRE tunnel on R4/R6 interface.
Send Error	The total number of data message sent with error through GRE tunnel on R4/R6 interface.
Bytes Sent	The total number of data bytes sent through GRE tunnel on R4/R6 interface.

## show asnpc-service statistics verbose

Table 5: show asnpc-service statistics verbose Command Output Descriptions

Field	Description
Message Groups	



Field	Description
R6 Idle Mode Entry MS State Change Request Msg	Groups the statistics of the Idle Mode Entry MS State Change Request messages on R6 interface.
<b>Message Statistics</b>	
Total Sent	The total number of this type of message sent on specific interface.
Total Send Failures	The total number of failures occurred during transaction id generation and message not sent for specific interface. This counter is used to count the error while sending the R6/R4 packets.
Retransmissions Sent	The total number of this type of message re-transmitted on specific interface.
Total Received	The total number of this type of message received on specific interface.
Total Accepted	The total number of this type of message accepted on specific interface.
Total Relayed	The total number of this type of message relayed on specific interface.
Total Denied	The total number of this type of message denied on specific interface.
Total Discarded	The total number of this type of message discarded on specific interface.
Badly Formed	The number of badly formed this type of message on specific interface.
Decode Error	The number of this type of message on specific interface with decode error.
Unspecified Error	The number of this type of message on specific interface with unspecified error.
Missing Mandatory TLV	The number of this type of message on specific interface with missing mandatory TLVs.
TLV Value Invalid	The number of this type of message on specific interface with invalid TLV value.
Unknown TLV	The number of this type of message on specific interface with unknown TLVs.
Duplicate TLV Found	The number of this type of message on specific interface with duplicate TLVs.
No session Found	The number of this type of message on specific interface without any session information.

Field	Description
No Resource Drops	The number of this type of message on specific interface without resource drops.
Admin Prohibited	The number of this type of message on specific interface with admin prohibited.
Transaction Id. Error	The number of this type of message on specific interface. with transaction id error.
Congestion/Overloaded	Number of R4/R6 control messages received with a congestion/overload error.
<b>Message Groups</b>	
R6 Idle Mode Entry MS State Change Response Msg	Groups the statistics of the Idle Mode Entry MS State Change Response messages on R6 interface.
R6 Idle Mode Entry MS State Change Ack Msg	Groups the statistics of the Idle Mode Entry MS State Change Ack messages on R6 interface.
R6 Idle Mode Exit MS State Change Request Msg	Groups the statistics of the Idle Mode Exit MS State Change Request messages on R6 interface.
R6 Idle Mode Exit MS State Change Response Msg	Groups the statistics of the Idle Mode Exit MS State Change Response messages on R6 interface.
R6 Location Update Request Msg	Groups the statistics of the Location Update Request messages on R6 interface.
R6 Location Update Response Msg	Groups the statistics of the Location Update Response messages on R6 interface.
R6 Location Update Confirm Msg	Groups the statistics of the Location Update Confirm messages on R6 interface.
R6 Paging Announce Msg	Groups the statistics of the Paging Announce messages on R6 interface.
R4 Idle Mode Entry MS State Change Request Msg	Groups the statistics of the Idle Mode Entry MS State Change Request messages on R4 interface.
R4 Idle Mode Entry MS State Change Response Msg	Groups the statistics of the Idle Mode Entry MS State Change Response messages on R4 interface.
R4 Idle Mode Entry MS State Change Ack Msg	Groups the statistics of the Idle Mode Entry MS State Change Ack messages on R4 interface.
R4 Idle Mode Exit MS State Change Request Msg	Groups the statistics of the Idle Mode Exit MS State Change Request messages on R4 interface.
R4 Idle Mode Exit MS State Change Response Msg	Groups the statistics of the Idle Mode Exit MS State Change Response messages on R4 interface.

Field	Description
R4 Initiate Paging Request Msg	Groups the statistics of the Initiate Paging Request messages on R4 interface.
R4 Initiate Paging Response Msg	Groups the statistics of the Initiate Paging Response messages on R4 interface.
R4 Location Update Request Msg	Groups the statistics of the Location Update Request messages on R4 interface.
R4 Location Update Response Msg	Groups the statistics of the Location Update Response messages on R4 interface.
R4 Location Update Confirm Msg	Groups the statistics of the Location Update Confirm messages on R4 interface.
R4 Network Exit MS State Change Request Msg	Groups the statistics of the Network Exit MS State Change Request messages on R4 interface.
R4 Network Exit MS State Change Response Msg	Groups the statistics of the Network Exit MS State Change Response messages on R4 interface.
R4 Delete MS Entry Request Msg	Groups the statistics of the Delete MS Entry Request messages on R4 interface.
R4 Delete MS Entry Response Msg	Groups the statistics of the Delete MS Entry Response messages on R4 interface.
R4 Anchor PC Ind Msg	Groups the statistics of the Anchor Paging Controller Indicator messages on R4 interface.
R4 Anchor PC Ack Msg	Groups the statistics of the Anchor Paging Controller Ack messages on R4 interface.
R4 PC Relocation Ind Msg	Groups the statistics of the PC Relocation Ind messages on the R4 interface.
R4 PC Relocation Ack Msg	Groups the statistics of the PC Relocation Ack messages on the R4 interface.
R4 Context Request Msg	Groups the statistics of the Context Request messages on R4 interface.
R4 Context Report Msg	Groups the statistics of the Context Report messages on R4 interface.
R4 CMAC Key Count Update Msg	Groups the statistics of the CMAC Key Count Update messages on the R4 interface.
R4 CMAC Key Count Ack Msg	Groups the statistics of the CMAC Key Count Ack messages on the R4 interface.
R6 Keep Alive Request Msg	Groups the statistics of the R6 Keep Alive Request messages on the R4 interface.

Field	Description
R6 Keep Alive Response Msg	Groups the statistics of the R6 Keep Alive Response messages on the R4 interface.
Total Sessions Connected	Groups the statistics of the CMAC Key Count Ack messages on the R4 interface.
R6/R4 Unknown Messages	Groups the statistics of the Unknown type of messages on R6 and/or R4 interface.
<b>Message Statistics</b>	
Total Sent	The total number of this type of message sent on specific interface.
Total Send Failures	The total number of failures occurred during transaction id generation and message not sent for specific interface. This counter is used to count the error while sending the R6/R4 packets.
Retransmissions Sent	The number of this type of message re-transmitted on specific interface.
Total Received	The total number of this type of message received on specific interface.
Total Accepted	The total number of this type of message accepted on specific interface.
Total Relayed	The total number of this type of message relayed on specific interface.
Total Denied	The total number of this type of message denied on specific interface.
Total Discarded	The total number of this type of message discarded on specific interface.
Badly Formed	The number of badly formed this type of message on specific interface.
Decode Error	The number of this type of message on specific interface with decode error.
Unspecified Error	The number of this type of message on specific interface with unspecified error.
Missing Mandatory TLV	The number of this type of message on specific interface with missing mandatory TLVs.
TLV Value Invalid	The number of this type of message on specific interface with invalid TLV value.
Unknown TLV	The number of this type of message on specific interface with unknown TLVs.

Field	Description
Duplicate TLV Found	The number of this type of message on specific interface with duplicate TLVs.
No session Found	The number of this type of message on specific interface without any session information.
No Resource Drops	The number of this type of message on specific interface without resource drops.
Admin Prohibited	The number of this type of message on specific interface with admin prohibited.
Transaction Id. Error	The number of this type of message on specific interface. with transaction id error.

