

# show asnpc-service

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


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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:<br>• ALLOW: Enforce tid validation procedure as per NWG specification, section 3.1.<br>• DISALLOW: Do not enforce tid validation procedure as per NWG specification, section 3.1. |
| Policy zero-function-type | Possible values are:<br>• ALLOW: If configured, function type is not considered for transaction id generation/validation.<br>• DISALLOW: If configured, function type is considered for transaction id generation/validation. |
| 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:<br>• Anchor<br>• Non-anchor |
| 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. |
| **Paging Information** | |
| 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 |
|---|---|
| **MS Information** | |
| Idle Mode Authorization Indication | Indicates the idle mode authorization status. |
| SA Descriptor Information | Indicates the Security Association description information.<br>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:<br>• 0: Primary SA<br>• 1: Static SA<br>• 3: Dynamic SA<br>• 4. Group SA<br>• 5: MBS SA |
| SA Service Type | Indicates the service types of the corresponding SA type. Possible values are:<br>• 0: Unicast service<br>• 1: Group multicast service<br>• 2: MBS service<br>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. |
| **Message Groups** | |
| 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. |
| **Message Statistics** | |
| 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. |
| **Data messages** | |
| 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. |
| **Message Statistics** | |
| 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. |
| **Message Groups** | |
| 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 Responsemessages 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. |
| **Message Statistics** | |
| 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. |