



# Monitoring and Troubleshooting Sx Interface in CUPS

---

This section provides information about the CLI commands available to monitor and/or troubleshoot Sx Interface in CUPS.

- [Show Command\(s\) and/or Outputs, on page 1](#)
- [Monitor Protocol, on page 7](#)

## Show Command(s) and/or Outputs

This section provides information regarding show commands and/or their outputs in support of this feature.

### show sx-service all

The output of this command has been enhanced to include the following new fields in support of the Sx Service in CUPS.

- Service name
- Service-Id
- Context
- Status
- Instance Type
- SX Bind IPv4 Address
- SX Bind IPv6 Address
- SX Association Reattempt Timeout
- SX Recovery Time Stamp
- SxA
  - SX Retransmission Timeout
  - SX Maximum Request Retransmissions

- SxB
  - SX Retransmission Timeout
  - SX Maximum Request Retransmissions
- SXAB
  - SX Retransmission Timeout
  - SX Maximum Request Retransmissions
- SX Heartbeat
  - Interval
  - Retransmission Timeout
  - Max Retransmission
- SX path failure detection policy
  - Heartbeat Timeout
  - Heartbeat Req/Rsp Recovery timestamp change
  - Control Msg Recovery timestamp change

## show sx-service name

The output of this command is similar to the **show sx-service all** CLI command and displays the field for the specified sx-service name.

## show saegw-service all

The output of this command has been enhanced to include the following new field in support of the Sx Service associated with an SAEGW Service.

sx-service

## show saegw-service name

The output of this command is similar to the **show saegw-service all** CLI command and displays the field for the specified saegw-service name.

## show sx-service statistics all

The output of this command has been enhanced to include the following new fields and statistics in support of the Sx Service.

- Session Management Messages
- Session Establishment Request

- Total TX
- Total RX
- Initial TX
- Initial RX
- Retrans TX
- Retrans RX
- Discarded
- No Rsp RX
  
- Session Establishment Response
  - Total TX
  - Total RX
  - Initial TX
  - Accepted
  - Denied
  - Initial RX
  - Accepted
  - Denied
  - Retrans RX
  - Discarded
  
- Session Modification Request
  - Total TX
  - Total RX
  - Initial TX
  - Initial RX
  - Retrans TX
  - Retrans RX
  - Discarded
  - No Rsp RX
  
- Session Modification Response
  - Total TX
  - Total RX

- Initial TX
  - Accepted
  - Denied
- Initial RX
  - Accepted
  - Denied
- Retrans TX
  - Discarded
- Session Deletion Request
  - Total TX
  - Total RX
  - Initial TX
  - Initial RX
  - Retrans TX
  - Retrans RX
  - Discarded
  - No Rsp RX
- Session Deletion Response
  - Total TX
    - Accepted
    - Denied
  - Total RX
    - Accepted
    - Denied
  - Discarded
- Session Report Request
  - Total TX
  - Total RX
  - Initial TX
  - Initial RX
  - Retrans TX

- Retrans RX
- Discarded
- No Rsp RX
- Session Report Response
  - Total TX
  - Total RX
  - Initial TX
  - Accepted
  - Denied
  - Initial RX
  - Accepted
  - Denied
  - Retrans TX
  - Discarded
- Node Management Messages
- Prime PFD Management Request
  - Total TX
  - Total RX
  - Initial TX
  - Initial RX
  - Retrans TX
  - Retrans RX
  - No Rsp received TX
  - Discarded
- Prime PFD Management Response
  - Total TX
  - Total RX
  - Initial TX
  - Accepted
  - Denied
  - Initial RX

- Accepted
- Denied
- Retrans TX
- Discarded
- Total Signalling Bytes
  - TX
  - RX

## show sx-service statistics header-decoder-error

the output of this command has been enhanced to include the following new fields in the header decoder error statistics for the Sx-service

- Message header decoder errors at SX
  - Incorrect PFCP version
  - Incorrect PFCP version discard rsp msg
  - Unsupported msg received
  - Incorrect msg length
  - Invalid msg format

## show logging active

The output of this command has been enhanced to include the following new field in support of the Sx Demux in CUPS.

sxdemux

## show task resources facility sxdemux

The output of this command has been enhanced to include the following new field in support of the Sx Demux in CUPS.

sxdemux

## show task resources facility sxdemux all

The output of this command has been enhanced to include the following new field in support of the Sx Demux in CUPS.

sxdemux

## show task memory facility sxdemux all

The output of this command has been enhanced to include the following new field in support of the Sx Demux in CUPS.

sxdemux

## Monitor Protocol

When using the monitor protocol command, enable option 49 to see all Sx Session Establishment Request and Sx Session Establishment Response on C-Plane.

