

Bulk Statistics for Average Data Rate Per IP Pool

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Feature Summary and Revision History

Summary Data

Applicable Product(s) or Functional Area	• GGSN • P-GW
Applicable Platform(s)	• ASR 5500 • VPC-DI
Feature Default	Enabled - Always-on
Related Changes in This Release	Not Applicable
Related Documentation	*Statistics and Counters Reference*

Revision History

Revision Details	Release
The number of IP pool groups is increased from 2000 to 5000.	21.26
First introduced.	21.3

Feature Description

The bulk statistics support is enhanced to fetch the subscriber average data rate per IP pool (cumulative of all session managers). The average data rate consists of all the IP pools configured in the system.

The bulk statistics collection time is enhanced for the datarate-ippool schema. This schema supports up to 5000 IP pool groups when configured.

Monitoring and Troubleshooting

This section provides information on how to monitor and troubleshoot using show commands and bulk statistics available in support of this feature.

Bulk Statistics

This feature supports the following bulk statistics:

Datarate-IPPool Schema

The following bulk statistics are added to the Datarate-IPPool schema:

- sess-datarate-ippool-name—Indicates the name of the IP pool for which average data rates are fetched.
- sess-ave-rate-fuser-bps—Indicates the average data-rate (bits/sec) from the user in uplink direction per IP pool basis.
- sess-ave-rate-tuser-bps—Indicates the average data-rate (bits/sec) to the user in downlink direction per IP pool basis.
- sess-ave-rate-fuser-pps—Indicates the average packets/second from the user in uplink direction per IP pool basis.
- sess-ave-rate-tuser-pps—Indicates the average packets/second to the user in downlink direction per IP pool basis.

Show Commands and/or Outputs

This section provides information regarding show commands and their outputs for this feature.

show bulkstats schema

Table 1: show bulkstats schema Command Output Descriptions

Field	Description
Bulk Statistics Server Configuration:	
Server State	Indicates the server state—enabled or disabled.
File Limit	Indicates the file size limit in KB.

Field	Description
Sample Interval	Indicates the sampling interval.
Transfer Interval	Indicates the transfer interval.
Receiver Mode	Indicates the receiver mode.
Local File Storage	Indicates the local file storage.
Bulk Statistics Server Statistics:	
Records awaiting transmission	Indicates the number of records awaiting transmission.
Bytes awaiting transmission	Indicates the number of bytes awaiting transmission.
Total records collected	Indicates the total number of records collected.
Total bytes collected	Indicates the total number of bytes collected.
Total records transmitted	Indicates the total number of records transmitted.
Total bytes transmitted	Indicates the total number of bytes transmitted.
Total records discarded	Indicates the total number of records discarded.
Total bytes discarded	Indicates the total number of bytes discarded.
Last collection time required	Indicates the last collection time required.
Last transfer time required	Indicates the last transfer time required.
Fine n	
Remote File Format	The remote file format—for example, %date%-%time%
File Header	The file's header.
File Footer	The file's footer.
File Statistics:	
Records awaiting transmission	Indicates the number of records awaiting transmission.
Bytes awaiting transmission	Indicates the number of bytes awaiting transmissions.
Total records collected	Indicates the total number of records collected.
Total bytes collected	Indicates the total number of bytes collected.
Total records transmitted	Indicates the total number of records transmitted.
Total bytes transmitted	Indicates the total number of bytes transmitted.
Total records discarded	Indicates the total number of records discarded.
Total bytes discarded	Indicates the total number of bytes discarded.

Field	Description
Last transfer time required	Indicates the last transfer time required.
No successful data transfers	Indicates the total number of successful data transfers.
No attempted data transfers	Indicates the total number of attempted data transfers.

show bulkstats data

Table 2: show bulkstats data Command Output Descriptions

Field	Description
Bulk Statistics Server Configuration:	
Server State	Indicates the server state—enabled or disabled.
File Limit	Indicates the file size limit in KB.
Sample Interval	Indicates the sampling interval.
Transfer Interval	Indicates the transfer interval.
Receiver Mode	Indicates the receiver mode.
Local File Storage	Indicates the local file storage.
Historical Data Collection	Indicates the Historical Data Collection state—enabled or disabled.
Bulk Statistics Server Statistics:	
Records awaiting transmission	Indicates the number of records awaiting transmission.
Bytes awaiting transmission	Indicates the number of bytes awaiting transmission.
Total records collected	Indicates the total number of records collected.
Total bytes collected	Indicates the total number of bytes collected.
Total records transmitted	Indicates the total number of records transmitted.
Total bytes transmitted	Indicates the total number of bytes transmitted.
Total records discarded	Indicates the total number of records discarded.
Total bytes discarded	Indicates the total number of bytes discarded.
Last collection time required	Indicates the last collection time required.
Last transfer time required	Indicates the last transfer time required.
No successful data transfers	Indicates the total number of successful data transfers.
No attempted data transfers	Indicates the total number of attempted data transfers.

Field	Description
Fine n	
Remote File Format	The remote file format—for example, %date%-%time%
File Header	The file's header.
File Footer	The file's footer.
No bulkstats receivers	Indicates the total number of bulk statistics collection servers configured.
File Statistics:	
Records awaiting transmission	Indicates the number of records awaiting transmission.
Bytes awaiting transmission	Indicates the number of bytes awaiting transmission.
Total records collected	Indicates the total number of records collected.
Total bytes collected	Indicates the total number of bytes collected.
Total records transmitted	Indicates the total number of records transmitted.
Total bytes transmitted	Indicates the total number of bytes transmitted.
Total records discarded	Indicates the total number of records discarded.
Total bytes discarded	Indicates the total number of bytes discarded.
Last transfer time required	Indicates the last transfer time required.
No successful data transfers	Indicates the total number of successful data transfers.
No attempted data transfers	Indicates the total number of attempted data transfers.
Handoff Statistics	
epdg-handoff-disc	Configures LTE to Wi-Fi HO disconnect reason statistics.
show epdg-service statistics handoff-disc-reasons	Displays the statistics corresponding to LTE to Wi-Fi HO disconnect reasons for all services.
clear epdg-service statistics handoff-disc-reasons	Removes the statistics corresponding to LTE to Wi-Fi HO disconnect reasons for all services.
User Plane Service Statistics	
curr-pdn-rat-nr-redcap	Current PDN RAT is NR RedCap.
uplink-total-pkts-pdn-rat-nr-redcap	Total uplink packets in RedCap type PDN RAT.
uplink-total-bytes-pdn-rat-nr-redcap	Total uplink bytes in RedCap type PDN RAT.
uplink-total-pkts-dropped-pdn-rat-nr-redcap	Total dropped uplink packets in RedCap type PDN RAT.
uplink-total-bytes-dropped-pdn-rat-nr-redcap	Total dropped uplink bytes in RedCap type PDN RAT.

Field	Description
downlink-total-pkts-pdn-rat-nr-redcap	Total downlink packets in RedCap type PDN RAT.
downlink-total-bytes-pdn-rat-nr-redcap	Total downlink bytes in RedCap type PDN RAT.
downlink-total-pkts-dropped-pdn-rat-nr-redcap	Total dropped downlink packets in RedCap type PDN RAT.
downlink-total-bytes-dropped-pdn-rat-nr-redcap	Total dropped downlink bytes in RedCap type PDN RAT.

show subscribers data-rate ip-pool <pool_name>

Table 3: show subscribers data-rate ip-pool <pool_name> Command Output Descriptions

Field	Description
pk rate from user (bps)	The peak data rate, in bits per second, obtained for data sent from the subscriber to the network during the last sampling period.
peak rate to user (bps)	The peak data rate, in bits per second, obtained for data received from the network by the subscriber during the last sampling period.
ave rate from user (bps)	The average data rate, in bits per second, obtained for data sent from the subscriber to the network during the last sampling period.
ave rate to user (bps)	The average data rate, in bits per second, obtained for data received from the network by the subscriber during the last sampling period.
sust rate from user (pps)	The mean data rate, in packets per second, obtained for data sent from the subscriber to the network during the last three sampling periods.
sust rate to user(pps)	The mean data rate, in packets per second, obtained for data received from the network by the subscriber during the last three sampling periods.