

# 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<br>• P-GW |
| Applicable Platform(s) | • ASR 5500<br>• 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 |
|---|---|
| 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.

# 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. |
| 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:** | |

| Field | Description |
|---|---|
| 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. |
| 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. |
| **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. |

| Field | Description |
|---|---|
| **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. |

## 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. |

| Field | Description |
|---|---|
| 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. |