



Bulk Statistics Changes Quick Reference

This chapter identifies bulk statistics changes added to, modified for, or deprecated from the StarOS 21.16 software release.



Important

For more information regarding bulk statistics identified in this section, see the latest version of the *BulkstatStatistics_document.xls* spreadsheet supplied with the release.

Bulk statistics changes for 21.16 include:

- [New Bulk Statistics, on page 1](#)
- [Modified Bulk Statistics, on page 3](#)
- [Deprecated Bulk Statistics, on page 3](#)

New Bulk Statistics

This section identifies new bulk statistics and new bulk statistic schemas introduced in release 21.16.

MME Schema

The following bulk statistics are added in the MME schema in support of the Secondary RAT Usage Reporting feature.

Bulk Statistics	Description
s1ap-recdata-secratdatausagerep	Total number of Secondary RAT Data Usage Report messages received by MME.
dcnr-s1ap-rx-srur-uectxrelreq	Total number of reports received in UE Context Release Request.
dcnr-s1ap-rx-srur-uectxrelcpl	Total number of reports received in UE Context Release Complete.
dcnr-s1ap-rx-srur-erabmodind	Total number of reports received in eRAB Modification Indication.
dcnr-s1ap-rx-srur-erabrelind	Total number of reports received in eRAB Release Indication.

Bulk Statistics	Description
dcnr-s1ap-rx-srur-erabrelres	Total number of reports received in eRAB Release Response.
dcnr-s10-rx-srur-fwdrelcmpack	Total number of reports received in Forward Relocation Complete Acknowledgement.
dcnr-s11-tx-srur-csreq	Total number of reports sent in Create Session Request.
dcnr-s11-tx-srur-dsreq	Total number of reports sent in Delete Session Request.
dcnr-s11-tx-srur-dbrsp	Total number of reports sent in Delete Bearer Response.
dcnr-s11-tx-srur-rabreq	Total number of reports sent in Release Access bearer Request.
dcnr-s11-tx-srur-dbcmd	Total number of reports sent in Delete Bearer Command.
dcnr-s11-tx-srur-mbreq	Total number of reports sent in Modify Bearer Request.
dcnr-s11-tx-srur-chngnot	Total number of reports sent in Change Notification.
dcnr-s10-tx-srur-fwdrelcmpack	Total number of reports sent in Forward Relocation Complete Acknowledgement.
dcnr-s1ap-rx-srur-periodicdropped	Total number of reports dropped when Secondary RAT Data Usage Report message was received without Handover flag during handover.
dcnr-s1ap-rx-srdur-periodic	Total number of reports received in Secondary RAT Data Usage Report message without Handover flag.
dcnr-s1ap-rx-srdur-ho	Total number of reports received in Secondary RAT Data Usage Report message with Handover flag.

HSS Schema

The following bulk statistics are included in the HSS peer service statistics to track overall statistics

Table 1: Bulk Statistics Counters in the HSS Peer Service Statistics

Counters	Description
UL Request	The total number of Update Location Request messages containing the result code "Other Errors" received by the HSS peer service from the HSS.
UL Answer	The total number of Update Location Answer messages containing the result code "Other Errors" received by the HSS peer service from the HSS.

Modified Bulk Statistics

None in this release.

Deprecated Bulk Statistics

None in this release.

