

## **Bulk Statistics Changes Quick Reference**

This chapter identifies bulk statistics changes added to, modified for, or deprecated from the StarOS 21.21 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 21.21 include:

- New Bulk Statistics, on page 1
- Modified Bulk Statistics, on page 5
- Deprecated Bulk Statistics, on page 5

### **New Bulk Statistics**

This section identifies new bulk statistics and new bulk statistic schemas introduced in release 21.21.

#### **Diameter Accounting Schema**

The following bulk statistics are added in the diameter-acct schema in support of the Diameter Error Code Counters feature.

| Bulk Statistics               | Description  |
|-------------------------------|--|
| acct-result-unable-to-deliver | Shows the total number of Diameter account results with a result code 3002, which cannot be delivered to the destination.  |
| acct-result-too-busy          | Shows the total number of Diameter account results with a result code 3004, which cannot be allowed for the requested service, when specific servers are requested for.                                  |
| acct-result-loop-detected     | Shows the total number of Diameter account results with a result code 3005. This Diameter error code is received when an agent detected a loop while trying to get the message to the inteded recipient. |

| Bulk Statistics                     | Description  |
|-------------------------------------|--|
| acct-result-invld-hdr-bits          | Shows the total number of Diameter account results with a result code 3008 for an invalid header bits request received. A request received could be related to bits in the diameter header, which is set either to an invalid combination or to a value that is inconsistent with the defintion of the Command Code. |
| acct-result-invld-avp-bits          | Shows the total number of Diameter account results with a result code 3009. The request received includes an AVP whose flag bits are set to an unrecognized value or that is inconsistent with the AVP definition.   |
| acct-result-authen-rej              | Shows the total number of Diameter account results with a result code 4001. The results received is for the user authentication failure due to an invalid password used by the user.   |
| acct-result-out-of-space            | Shows the total number of Diameter account results with a result code 4002. The results received is for a Diameter node but was unable to perform stable commit due to a temporary lack of space.  |
| acct-exp-result-user-unknown        | Shows the total number of Diameter account expected results with a result code 5001 for the unknown user error.  |
| acct-result-unk-sess-id             | Shows the total number of Diameter account results with a result code 5002 that contains unknown session Identifiers.  |
| acct-result-author-rej              | Shows the total number of Diameter account results with a result code 5003 where, the user requests could not be authorized.   |
| acct-exp-result-roaming-not-allowed | Shows the total number of Diameter expected account results with a result code 5004 for which roaming calls are not allowed.   |
| acct-result-missing-avp             | Shows the total number of Diameter account results with a result code 5005 that does not contain an AVP.   |
| acct-result-resrc-exceed            | Shows the total number of account results with result code 5006 that caanot be authorized because the user has already expended allowed resources.   |
| acct-result-unable-to-comply        | Shows the total number of account results with result code 5012 rejected for unspecified reasons.  |
| acct-result-user-unknown            | Shows the total number of account results with a result code 5030 that contains unknown users.   |

| Bulk Statistics              | Description  |
|------------------------------|--|
| acct-exp-result-no-wlan-subs | Shows the total number of expected account results with a result code 5041 for no VLAN Sub band. |

#### **Diameter Authentication Schema**

The following bulk statistics are added in the diameter-auth schema in support of the Diameter Error Code Counters feature.

| Bulk Statistics               | Description   |
|-------------------------------|---|
| auth-result-unable-to-deliver | Shows the total number of Diameter authentiction/authroization results with a result code 3002 that cannot be delivered to the destination.   |
| auth-result-too-busy          | Shows the total number of Diameter authentication/authorization results with a result code 3004 that cannot be allowed for the requested service, when specific servers are requested for.  |
| auth-result-loop-detected     | Shows the total number of Diameter authentication/authorization results for a result code 3005. This Diameter error code is received when an agent detects a loop while trying to get the message to the inteded recipient.   |
| auth-result-invld-hdr-bits    | Shows the total number of Diameter authentication/authorization results with a result code 3008 for an invalid header bits request received. A request received could be related to bits in the diameter header, which is set either to an invalid combination or to a value that is inconsistent with the defintion of the Command Code. |
| auth-result-invld-avp-bits    | Shows the total number of Diameter authentication/authorization results received with a result code 3009. The request received includes an AVP whose flag bits are set to an unrecognized value or that is inconsistent with the AVP definition.  |
| auth-result-authen-rej        | Shows the total number of Diameter authentication/authorization results with a result code 4001. This Diameter error code is received for the user authentication failure due to an invalid password used by the user.  |
| auth-result-out-of-space      | Shows the total number of Diameter authentication/authorization results with a result code 4002 for a Diameter node received but was unable to perform stable commit due to a temporary lack of space.  |

| Bulk Statistics                     | Description  |
|-------------------------------------|--|
| auth-exp-result-user-unknown        | Shows the total number of Diameter authentication/authorization expected results with a result 5001 for the unknown user error.  |
| auth-result-unk-sess-id             | Shows the total number of Diameter authentication/authorization results with a result code 5002 that contains unknown session Identifiers.   |
| auth-result-author-rej              | Shows the total number of Diameter authentication/authorization results with a result code 5003 where, the user requests could not be authorized.                                  |
| auth-exp-result-roaming-not-allowed | Shows the total number of Diameter authentication/authorization expected results with a result code 5004 for which roaming calls are not allowed.                                  |
| auth-result-missing-avp             | Shows the total number of Diameter authentication/authorization results with a result code 5005 that does not contain an AVP.  |
| auth-result-resrc-exceed            | Shows the total number of Diameter authentication/authorization results with a result code 5006 that caanot be authorized because the user has already expended allowed resources. |
| auth-result-unable-to-comply        | Shows the total number of Diameter authentication/authorization results with a result code 5012 rejected for unspecified reasons.  |
| auth-result-user-unknown            | Shows the total number of Diameter authentication/authorization results with a result code 5030 that contains unknown users.   |
| auth-exp-result-no-wlan-subs        | Shows the total number of expected Diameter authentication/authorization results with a result code 5041 for no VLAN Sub band.   |

#### **System Schema**

The following bulk statistics in the SaMOG schema supports Diameter Result Code specific counters on Gy interface.

| Bulk Statistics  | Description   |
|------------------|---|
| cca-init-4010-rc | Shows the total number of responses received for diameter end user service denied messages. |
| cca-init-5031-rc | Shows the total number of responses received for diameter rating failed messages.           |

| Bulk Statistics  | Description   |
|------------------|---|
| cca-updt-4010-rc | Shows the total number of responses received for diameter end user service denied messages. |
| cca-updt-5031-rc | Shows the total number of responses received for diameter rating failed messages.           |
| сса-5031-ге      | Shows the aggregate number of responses received for diameter rating failed messages.       |

### **Modified Bulk Statistics**

None in this release.

# **Deprecated Bulk Statistics**

None in this release.

**Deprecated Bulk Statistics**