

## show bcmcs

This chapter includes the **show bcmcs** command output tables.

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## show bcmcs counters all

Table 1: show bcmcs counters all Command Output Descriptions

| Field                            | Description   |
|----------------------------------|---|
| Username                         | BCMCS group username for this output.   |
| Callid                           | Call ID for this output.  |
| Flow-id                          | Flow ID for this output.  |
| BCMCS Service Request/Reply      |   |
| Renew SRQ Accepted               | The total number of service request renewals accepted.  |
| Discarded                        | The total number of service request renewals discarded.   |
| Response Send Error              | The total number of service replies for which errors were experienced during transmission.      |
| BCMCS Registration Request/Reply |   |
| Renew RRQ Accepted               | The total number of registration request renewals accepted.                                     |
| Discarded                        | The total number of registration request renewals discarded.                                    |
| Response Send Error              | The total number of registration replies for which errors were experienced during transmission. |
| BCMCS Registration Update/Ack    |   |
| Initial Update Transmitted       | The total number of registration updates that have been transmitted.                            |

| Field                                 | Description  |
|---------------------------------------|--|
| Update Retransmitted                  | The total number of registration updates that have been re-transmitted.  |
| Denied                                | The total number of registration updates that have been denied by the PCF.   |
| Not Acknowledged                      | The total number of registration updates and/or acknowledgements that have not been acknowledged by the PCF.   |
| Reg Ack Received                      | The total number of registration acknowledgements that have been received.   |
| Reg Ack Discarded                     | The total number of registration acknowledgements that have been discarded.  |
| Update Send Error                     | The total number of registration updates for which errors were experienced during transmission.  |
| BCMCS Registration Update Send Reason |  |
| Lifetime Expiry                       | The total number of registration updates that were sent due to the expiration of a lifetime timer during a subscriber session.   |
| Upper Layer Initiated                 | The total number of registration updates that were initiated by upper processing layers.   |
| Other Reasons                         | The total number of registration updates that were sent due to reasons other than those listed here.   |
| Session Manager Exited                | The total number of registration updates that were sent due to the termination of Session Manager tasks.   |
|                                       | <b>NOTE:</b> If any data is reported for this field, there may be an issue with either the software or hardware. If you continue to experience problems, refer to the System Administration and Administration Reference for information on troubleshooting the problem. |
| BCMCS Registration Update Denied      |  |
| Reason Unspecified                    | The total number of denied registration updates that were sent with a reply code of 80H (Registration Denied - reason unspecified).  |
| Admin Prohibited                      | The total number of denied registration updates that were sent with a reply code of 81H (Registration Denied - administratively prohibited).   |
| BSN Failed Authentication             | The total number of denied registration updates due to authentication failure by the mobile node.  |
| Identification Mismatch               | The total number of denied registration updates that were sent with a reply code of 85H (Registration Denied - identification mismatch).   |

| Field  | Description  |
|--|--|
| Poorly Formed Update                             | The total number of denied registration updates that were sent with a reply code of 86H (Registration Denied - poorly formed request). |
| GRE Send   |  |
| Total Packets Sent                               | Indicates the total number of Generic Routing Encapsulation (GRE) packets transmitted.   |
| Total Bytes Sent                                 | Indicates the total number of Generic Routing Encapsulation (GRE) bytes transmitted.   |
| Total BCMCS Sessions matching specified criteria | Total number of sessions matching specified criteria.  |

## show bcmcs statistics

## Table 2: show bcmcs statistics Command Output Descriptions

| Field                   | Description  |
|-------------------------|--|
| Session Stats           |  |
| Total Sessions Current  | Indicates the total number of sessions that are in progress. These could be either active, dormant, being set up, or being disconnected. |
| Current Flow-id session | Indicates the number of flow-id sessions in progress. These could be active, dormant, being set up or being disconnected.                |
| Current Pgm-Id Session  | Indicates the number of program-id sessions in progress. These could be active, dormant, being set up or being disconnected.             |
| Total Setup             | Indicates the total number of sessions that have been successfully set up since system started.  |
| Total Released          | Indicates the total number of sessions that have successfully been disconnected.   |
| Total Setup Flow-Id     | Indicates the total number of flow-id sessions that have been successfully set up since the system was started.                          |
| Total Setup Program-Id  | Indicates the total number of program-id sessions that have been successfully set up since the system was started.                       |
| Session Releases        | 1  |
| De-registered           | Indicates the total number of sessions that were disconnected through a normal de-registration process.                                  |

| Field                          | Description  |
|--------------------------------|--|
| Lifetime Expiry                | Indicates the total number of sessions that were disconnected due to the expiration of their lifetime timer. |
| PPP Layer Command              | Indicates the number of sessions disconnected due to PPP initiating a tear-down.                             |
| PCF-Monitor Fail               | The total number of sessions disconnected because the PCF monitor function detected that the PCF was down.   |
| GRE Key Mismatch               | The total number of sessions disconnected because the GRE key changed for a session.                         |
| Other Reasons                  | Indicates the number of sessions disconnected due to reasons other than those listed here.                   |
| BCMCS Service Request/Response |  |
| Total SRQ/Renew/Dereg RX       | The total number of service requests, renewals, and de-registrations received.                               |
| Total Accept                   | The total number of service requests that have been received and accepted.                                   |
| Total Denied                   | Total number of service requests that have been received and denied.   |
| Total Discard                  | Total number of service requests that have been received and discarded.                                      |
| Init SRQ RX                    | The total number of initial setup or start service requests that have been received.                         |
| Init SRQ Accept                | The total number of initial setup or start service requests that have been received and accepted.            |
| Init SRQ Denied                | The total number of initial setup or start service requests that have been received and denied.              |
| Init SRQ Discard               | The total number of initial setup or start service requests that have been received and discarded.           |
| Renew SRQ RX                   | The total number of service request renewals received.   |
| Renew SRQ Accept               | The total number of service request renewals received and accepted.  |
| Renew SRQ Denied               | The total number of service request renewals received and denied.  |
| Renew SRQ Discard              | The total number of service request renewals received discarded.   |
| Dereg SRQ RX                   | The total number of de-registration requests that have been received.  |

| Field  | Description  |
|--|--|
| Dereg SRQ Accept                                 | The total number of de-registration requests that have been received and accepted.   |
| Dereg SRQ Denied                                 | The total number of de-registration requests that have been received and denied.   |
| Dereg SRQ Discard                                | The total number of de-registration requests that have been received and discarded.  |
| Response Send Error                              | Indicates the total number of registration replies for which errors were experienced during transmission.  |
| BCMCS Service Request Denied                     |  |
| Requests Accepted                                | Indicates the total number of service requests that were denied based on the number of requests accepted.  |
| Unspecified Reason                               | Indicates the total number of service requests that were denied for unspecified reasons.   |
| PCF Failed Auth                                  | Indicates the total number of service requests that were denied due to mobile node authentication failure.   |
| Identification Mismatch                          | Indicates the total number of service requests that were denied due to an identification mismatch.   |
| Unknown BSN                                      | Indicates the total number of service requests that were denied due to an unknown BSN address.   |
| BCMCS SRQ Denied - Insufficient Resource Reasons |  |
| No Session Manager                               | Indicates the total number of service requests that were denied due to the lack of available Session Manager tasks. This may occur when the system is booting up in the event that a Session Manager task terminated unexpectedly. |
| No Memory  | Indicates the total number of service requests that were denied due to insufficient memory.  |
| Session Managers Retried                         | Indicates that the system unsuccessfully attempted to try multiple Session Manager tasks to establish a session.   |
| Input-Q Exceeded                                 | Indicates that the queue in which incoming calls are kept prior to being processed exceeded its capacity.  |
| BCMCS SRQ Denied - Poorly Formed Request Reasons |  |
| Session Already Dormant                          | The number of SRQs that had Active Stop for a session that was already dormant.  |
| Already Active                                   | The number of SRQs that had Active Start for a session that was already active.  |

| Field                                     | Description  |
|---|--|
| Other Reasons                             | The number of SRQs denied due to other reasons for a badly formed SRQ.                   |
| BCMCS SRQ Denied - Overload/Congestion Co | ontrol   |
| Admin Prohibited (reject)                 | SRQs denied due to congestion control mechanism.   |
| Unknown BSN (redirect)                    | SRQs denied due to congestion control mechanism.   |
| BCMCS Registration Request/Reply          | <u>'</u>   |
| Total RRQ/Renew/Dereg RX                  | The total number of registration requests, renewals, and de-registrations received.      |
| Total Accept                              | The total number of registration requests that have been accepted.                       |
| Total Denied                              | The total number of registration requests that have been rejected.                       |
| Total Discard                             | The total number of registration requests that have been discarded.                      |
| Init RRQ RX                               | The total number of initial registration requests that have been received.               |
| Init RRQ Accept                           | The total number of initial registration requests received and accepted.                 |
| Init RRQ Denied                           | The total number of initial registration requests received and rejected.                 |
| Init RRQ Discard                          | The total number of initial registration requests that have been received and discarded. |
| Renew RRQ RX                              | The total number of registration request renewals received.                              |
| Renew RRX Accept                          | The total number of registration request renewals received and accepted.                 |
| Renew Actv Start Accept                   | The total number of RRQ renewals with an Active Start record received and accepted.      |
| Renew Actv Stop Accept                    | The total number of RRQ renewals with an Active Stop record received and accepted.       |
| Renew RRQ Denied                          | The total number of registration request renewals received and rejected.                 |
| Renew RRQ Discard                         | The total number of registration request renewals received and discarded                 |
| Dereg RRQ RX                              | The total number of de-registration requests that have been received.                    |
| Dereg RRQ Accept                          | The total number of de-registration requests received and accepted.                      |

| Field                             | Description   |
|-----------------------------------|---|
| Dereg Active Stop Accept          | The total number of de-registration requests with an active stop that were accepted.  |
| Dereg RRQ Denied                  | The total number of de-registration requests received and rejected  |
| Dereg RRQ Discard                 | The total number of de-registration requests received and discarded.  |
| Reply Send Error                  | Indicates the total number of registration replies for which errors were experienced during transmission.   |
| BCMCS Registration Request Denied |   |
| Unspecified Reason                | Indicates the total number of registration requests that were denied using reply code of 80H (Registration Denied - reason unspecified)   |
| Admin Prohibited                  | Indicates the total number of registration requests that were denied using reply code of 81H (Registration Denied - administratively prohibited).                                   |
| Insufficient Resources            | Indicates the total number of registration requests that were denied using reply code of 82H (Registration Denied - insufficient resources).  |
| PCF Failed Auth                   | Indicates the total number of registration requests that were denied using reply code of 83H (Registration Denied - mobile node failed authentication).                             |
| Identification Mismatch           | Indicates the total number of registration requests that were denied using reply code of 85H (Registration Denied - identification mismatch).                                       |
| Poorly Formed Request             | Indicates the total number of registration requests that were denied using reply code of 86H (Registration Denied - poorly formed request).   |
| Unknown BSN Address               | Indicates the total number of registration requests that were denied due to an unknown BSN address.   |
| Reverse Tunnel Unavail            | Indicates the total number of registration requests that were denied using reply code of 89H (Registration Denied - requested reverse tunnel unavailable).                          |
| Reverse Tunnel Required           | Indicates the total number of registration requests that were denied using reply code of 8AH (Registration Denied - reverse tunnel is mandatory and "T"-bit not set).               |
| Unrecognized Vendor Id            | Indicates the total number of registration requests that were denied using reply code of 8DH (Registration Denied - unsupported vendor ID or unable to interpret data in the CVSE). |
| Session Already Closed            | Renew and RRQ denied due to the session not present in the PDSN Dereq. Error code 0x8e.   |

| Field  | Description   |
|--|---|
| BCMCS RRQ Denied - Insufficient Resource Rea | isons   |
| No Session Manager                           | Indicates the total number of registration requests that were denied due to the lack of available Session Manager tasks. This may occur when the system is booting up in the event that a Session Manager task terminated unexpectedly. |
| No Memory                                    | Indicates the total number of registration requests that were denied due to insufficient memory.  |
| Session Managers Retried                     | Indicates that the system unsuccessfully attempted to try multiple Session Manager tasks to establish a session.  |
| Input-Q Exceeded                             | Indicates that the queue in which incoming calls are kept prior to being processed exceeded its capacity.   |
| BCMCS RRQ Denied - Poorly Formed Request F   | Reasons   |
| Session Already Dormant                      | The number of RRQs that had Active Stop for a session that was already dormant.   |
| Already Active                               | The number of RRQs that had Active Start for a session that was already active.   |
| Other Reasons                                | The number of RRQs denied due to other reasons for a badly formed RRQ.  |
| BCMCS RRQ Denied - Overload/Congestion Cor   | ntrol   |
| Admin Prohibited (reject)                    | RRQs denied with error code 0x81h due to congestion control mechanism.  |
| Unknown BSN (redirect)                       | RRQs denied with error code 0x88 due to congestion control mechanism.   |
| BCMCS Registration Update/Ack                |   |
| Reg Update Transmitted                       | Indicates the total number of registration updates that were transmitted.   |
| Accepted                                     | Indicates the total number of registration updates that were accepted by the PCF.   |
| Denied                                       | Indicates the total number of registration updates that were denied.  |
| Not Acknowledged                             | Indicates the total number of registration updates that were not acknowledged.  |
| Initial Update TX                            | Indicates the total number of initial registration updates that were transmitted.   |
| Update Retransmitted                         | Indicates the total number of registration updates that were re-transmitted.  |

| Field                                  | Description  |
|--|--|
| Reg Ack Received                       | Indicates the total number of registration acknowledgements that were received.  |
| Reg Ack Discarded                      | Indicates the total number of registration acknowledgements that were discarded.   |
| Update Send Error                      | Indicates the total number of registration updates for which errors were experienced during transmission.  |
| BCMCS Registration Update Send Reason  | ·  |
| Lifetime Expiry                        | Indicates the total number of registration updates that were sent due to the expiration of a lifetime timer during a subscriber session.                           |
| Other Reasons                          | Indicates the total number of registration updates that were sent due to reasons other than those listed here.   |
| Upper Layer Initiated                  | Indicates the total number of registration updates that were initiated by upper processing layers.   |
| Session Manager Exited                 | Indicates the number of registration updates that were sent due to the termination of a Session Manager task.  |
| BCMCS Registration Update Denied       |  |
| Reason Unspecified                     | Indicates the total number of denied registration updates that were sent with a reply code of 80H (Registration Denied - reason unspecified).                      |
| Admin Prohibited                       | Indicates the total number of denied registration updates that were sent with a reply code of 81H (Registration Denied - administratively prohibited).             |
| BSN Failed Auth                        | Indicates the total number of denied registration updates that were sent due to failed authentication by the mobile node.  |
| Identification Mismatch                | Indicates the total number of denied registration updates that were sent with a reply code of 85H (Registration Denied - identification mismatch).                 |
| Poorly Formed Updated                  | Indicates the total number of denied registration updates that were sent with a reply code of 86H (Registration Denied - poorly formed request).                   |
| BCMCS Registration Ack Discard Reasons |  |
| Session Absent                         | Indicates the total number of registration acknowledgements that were discarded due to the session having been already ended because the acknowledgement was late. |
| No Memory                              | Indicates the total number of registration acknowledgements that were discarded due to insufficient memory.  |

| Field                 | Description  |
|-----------------------|--|
| Malformed             | Indicates the total number of registration acknowledgements that were discarded due to being poorly formed.                                  |
| Auth Failure          | Indicates the total number of registration acknowledgements that were discarded due to the mobile node failing authentication.               |
| Internal Bounce Error | Indicates that an internal communication message between an A11 Manager task and a Session Manager task bounced (was not successfully sent). |
| Input-Q Exceeded      | Indicates the number of times that the queue in which incoming calls are kept prior to being processed exceeded its capacity.                |
| Mismatched Id         | Indicates the total number of discarded registration acknowledgements due to reply code 85H (Registration Denied - identification mismatch). |
| Invalid Packet Length | Indicates the total number of registration acknowledgements that were discarded due to having an invalid packet length.                      |
| Misc Reasons          | Indicates the number of registration acknowledgements that were discarded due to reasons other than those listed here.                       |
| GRE Send              |  |
| Total Packets Sent    | Indicates the total number of Generic Routing Encapsulation (GRE) packets transmitted.   |
| Total Bytes Sent      | Indicates the total number of Generic Routing Encapsulation (GRE) bytes transmitted.   |