

show pcc-service

This chapter describes the output of the **show pcc-service** command.

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show pcc-service all

Table 1: show pcc-service all Command Output Description

Field	Description
Service name	Indicates the name of the PCC service for which counters are displayed.
Context name	Indicates the name of the context in which the PCC service is configured and running.
Charging-Method	Indicates the charging methods communicated to PCEF at command level for this PCC service. Possible methods are: • None • Offline • Online • Offline and Online By default "None" is the enabled option.
Online Charging-Server(s)	This group displays information of online charging servers (primary and secondary) configured and used in this PCC service.
Primary	Indicates the name of the primary online charging server configured and used in this PCC service.
Secondary	Indicates the name of the secondary online charging server configured and used in this PCC service.

Field	Description
Offline Charging-Server(s)	This group displays information of offline charging servers (primary and secondary) configured and used in this PCC service.
Primary	Indicates the name of the primary offline charging server configured and used in this PCC service.
Secondary	Indicates the name of the secondary offline charging server configured and used in this PCC service.
Subscriber-Profile Refresh Interval (sec)	Indicates the interval duration in seconds after which Subscriber profile is refreshed from SSC/SPR in a PCC service.
Multiple PCEF Per Subscriber	Indicates status of support for more than one Gx-session for single subscriber session coming from multiple PCEF in this PCC service instance. By default this feature is enabled.
Setup Timeout	Indicates IPCF setup timeout duration set on a system for setup timer. Possible range of duration is 1 to 120 in seconds. By default Setup timeout value is 60 seconds. Special value of 0 indicates that timer is disabled.
Idle Timeout	Indicates the idle session timeout duration set for a subscriber session timer. Possible range of duration is 1 to 4294967295 in seconds. Special value of 0 indicates that timer is disabled and it is the default behavior. It also displays the action configured for initiation when idle timer expires. Possible actions are: • None • Reauthorization of session. • Disconnection of session if reauthorization of session fails.
Long-duration Timeout	Indicates the long duration idle session timeout set for a subscriber session timer. Possible range of duration is 1 to 4294967295 in seconds. Special value of 0 indicates that timer is disabled and it is the default behavior. It also displays the action configured for initiation when long duration timeout timer expires. Possible actions are: • None • Detection of idle session and sending of SNMP traps or CORBA notification. • Detection of idle session and then disconnect the session after sending of SNMP traps or CORBA notification

show pcc-service session all

Table 2: show pcc-service session all Command Output Descriptions

Field	Description
vvvv	Displays service and session state information. This column provides a code consisting of four characters. From left-to-right, the first character represents the **Session State** that the subscriber is using. The possible call types are: • **c**: Closed • **C**: Connected • **D**: Disconnected • **o**: Open • **S**: Waiting on SPR • **r**: Waiting on DREG • **s**: Waiting on STR • **e**: Waiting on deallocate • **t**: Waiting on CCR-T • **A**: Waiting on ASR • **R**: Waiting on RAR From left-to-right, the second character represents the **Gx Session Count**. It indicates the total number of Gx sessions between PCEF and IPCF active in this session. From left-to-right, the third character represents the **Gy Session Count**. It indicates the total number of Gy sessions active in this session. From left-to-right, the second character represents the **Gxa Session Count**. It indicates the total number of Gx sessions between PCEF (eHRPD) and IPCF active in this session.
CALLID	Indicates the IP-CAN session subscriber's call identification number.
IMSI/MSID	Indicates the IP-CAN session subscriber's IMSI/MSID number used in this session in **bindmux**.
User Name	Indicates the user name used in IP-CAN session to identify the subscriber in this session in **bindmux**. This is typically used in IP-CAN session between PDSN and IPCF/PCRF over Gx interface.
Total number of PCC sessions	The total number of PCC sessions on chassis including all modes.

show pcc-service session full

Table 3: show pcc-service session full Command Output Descriptions

Field	Description
CALLID	Indicates the IP-CAN session subscriber's call identification number.
IMSI/MSID	Indicates the IP-CAN session subscriber's IMSI/MSID number used in this session in **bindmux**.
User Name	Indicates the user name used in IP-CAN session to identify the subscriber in this session in **bindmux**. This is typically used in IP-CAN session between PDSN and IPCF/PCRF over Gx interface.
Profile Name	Indicates the name of the subscriber used in IP-CAN session to provide QoS parameters.
Default-EPS-Bearer	Indicates whether default EPS bearer is provisioned for subscriber in IP-CAN session for which information is displayed
APN-AMBR	Indicates whether an Aggregate Maximum Bit Rate (AMBR) associated with APN is provisioned for subscriber in IP-CAN session for which information is displayed.
Authorized QCIs	This group displays the parameters for authorized Quality Class Identifiers (QCIs) used in IP-CAN session for which information is displayed.
QCI	Indicates the Quality Class Identifier (QCI) authorized and used in IP-CAN session for which information is displayed.
Uplink	Indicates the uplink bit rate provisioned in authorized QCI for IP-CAN session for which information is displayed.
Downlink	Indicates the downlink bit rate provisioned in authorized QCI for IP-CAN session for which information is displayed.
Total Predefined Rules	Indicates the total predefined Rules applicable for IP-CAN session for which information is displayed.
Predefined Rules	Indicates the name of the predefined Rules, if applicable, for IP-CAN session for which information is displayed.
Rule Status	Indicates the status of the predefined Rules, if applicable, for IP-CAN session for which information is displayed. Possible status are: • Active • Inactive • Temporarily Active

Field	Description
Rule Failure Code	Indicates the predefined Rule failure codes, if applicable, for IP-CAN session for which information is displayed. Possible failure codes are: • Out-of-credit • Reallocation-of-credit • Unknown rule name • Invalid Rating Group • Invalid Service Identifier • GW/PCEF Malfunction • Limited Resources • Max No. of Bearers Reached • Unknown Bearer Id • Missing Bearer Id • Missing Flow Description • Resource Allocation Failure • QoS Validation Failure
Rule Activation Time	Indicates the time configured to activate predefined Rule for IP-CAN session for which information is displayed.
Rule deactivation Time	Indicates the time configured to deactivate predefined Rule for IP-CAN session for which information is displayed.
Total Dynamic Rules	Indicates the total dynamic Rules applicable for IP-CAN session for which information is displayed.
Dynamic Rules	Indicates the name of the dynamic Rules, if applicable, for IP-CAN session for which information is displayed.
Rating-Group	Indicates the rating group configured to the dynamic Rules, if applicable, for IP-CAN session for which information is displayed.
Precedence	Indicates the precedence configured to the dynamic Rules, if applicable, for IP-CAN session for which information is displayed.
Gate Status	Indicates the status of the Gate configured to the dynamic Rules, if applicable, for IP-CAN session for which information is displayed.
QoS Profile	Indicates the QoS profile configured to the dynamic Rules, if applicable, for IP-CAN session for which information is displayed.
Flow	Indicates the total number of flows applicable for IP-CAN session for which information is displayed.
AF Information	Indicates the Application Function information for dynamic Rules, if applicable, for IP-CAN session for which information is displayed.

Field	Description
Rule Status	Indicates the status of the predefined Rules, if applicable, for IP-CAN session for which information is displayed. Possible status are: • Active • Inactive • Temporarily Active
Rule Failure Code	Indicates the predefined Rule failure codes, if applicable, for IP-CAN session for which information is displayed. Possible failure codes are: • Out-of-credit • Reallocation-of-credit • Unknown rule name • Invalid Rating Group • Invalid Service Identifier • GW/PCEF Malfunction • Limited Resources • Max No. of Bearers Reached • Unknown Bearer Id • Missing Bearer Id • Missing Flow Description • Resource Allocation Failure • QoS Validation Failure
Rule Activation Time	Indicates the time configured to activate dynamic Rule for IP-CAN session for which information is displayed.
Rule deactivation Time	Indicates the time configured to deactivate dynamic Rule for IP-CAN session for which information is displayed.
Quota Information	This group displays the Quota related information applicable for IP-CAN session for which information is displayed.
Usage Monitor Information	Indicates the Usage Monitor status applicable for IP-CAN session for which information is displayed.
Total number of PCC sessions	The total number of PCC sessions on chassis including all modes.

show pcc-service statistics

Table 4: show pcc-service statistics Command Output Description

Field	Description
Service name	Indicates the name of the PCC service for which counters are displayed.

Field	Description
Total Gx req processed	Indicates the total number of Gx request messages from PCEF processed by PCC-service node.
Total Gy req processed	Indicates the total number of Gy request messages from OCS processed by PCC-service node.
Total SSC req processed	Indicates the total number of request messages from SSC/SPR processed by PCC-service node.
Total Unknown requests	Indicates the total number of unknown type of request messages from network nodes received by PCC-service node.
PUR Updates	Indicates the total number of Profile-Update-Request update messages from network nodes received at PCC-service node.
SNR Updates	Indicates the total number of Subscribe-Notifications-Request update messages from network nodes received at PCC-service node.
PNR Updates	Indicates the total number of Push-Notifications-Request update messages from network nodes received at PCC-service node.
Total Profile Hits	Indicates the total number of Subscribe profiles accessed by PCC-service node.
Total Profile Miss	Indicates the total number of Subscribe profiles missed by PCC-service node.
Total Quota Reports	Indicates the total number of quota reports processed by PCC-service node.
Total Unknown rating-groups	Indicates the total number of unknown type of rating groups received by PCC-service node.
Total Rules Activated	Indicates the total number of Rules at PCEF activated by PCC-service node.
Total Rules Deactivated	Indicates the total number of Rules at PCEF deactivated by PCC-service node.
Total Rulebases Activated	Indicates the total number of Rulebases at PCEF activated by PCC-service node.
Total Rulebases Deactivated	Indicates the total number of Rulebases at PCEF deactivated by PCC-service node.
Total Rules Installed	Indicates the total number of Rules installed at PCEF by PCC-service node.
Total Rules Uninstalled	Indicates the total number of Rules installed at PCEF by PCC-service node.
Profile Name	Indicates the name of the subscriber profiles accessed by PCC-service node.

Field	Description
Profile Hits	Indicates the total number of hits received by specific subscriber profile at PCC-service node.
Eval-Priority Hits	This group displays the statistics of Evaluation Priority hits at PCC-service node.
Action Statistics	This group displays the statistics of actions triggered at PCC-service node.
Default EPS Bearer Auth	Indicates the total number of authorization action processed for the default EPS bearer authorization on PCC-service node.
APN AMBR Auth	Indicates the total number of authorization action processed for the APN associated Aggregate Maximum Bit Rate (AMBR) on PCC-service node.
QCI Auth	Indicates the total number of authorization action processed for the Quality Class Indicator (QCI) on PCC-service node.
Event-trigger Statistics	This group displays the statistics of event triggers at PCC-service node.
SGSN Change	Indicates the total number of "SGSN change" events triggered on PCC-service node.
QoS Change	Indicates the total number of "QoS change" events triggered on PCC-service node.
RAT Change	Indicates the total number of "RAT (Radio Access Technology) change" events triggered on PCC-service node.
TFT Change	Indicates the total number of "TFT (traffic flow template) change" events triggered on PCC-service node.
PLMN Change	Indicates the total number of "PLMN change" events triggered on PCC-service node.
Loss of flow	Indicates the total number of "Loss of Flow" events triggered on PCC-service node.
Recovery of flow	Indicates the total number of "Recovery of Flow" events triggered on PCC-service node.
IP-CAN Change	Indicates the total number of "IP-CAN Change" events triggered on PCC-service node.
Qos Change Exceeding Auth	Indicates the total number of QoS change event triggers exceeded from authorized limit on PCC-service node.
RAI Change	Indicates the total number of "RAI (Routing Area Indicator) Change" events triggered on PCC-service node.
User Location Change	Indicates the total number of "User Location Change" events triggered on PCC-service node.

Field	Description
Out Of Credit	Indicates the total number of "Out of Credit" events triggered on PCC-service node.
Reallocation of Credit	Indicates the total number of "Reallocation of Credit" events triggered on PCC-service node.
Revalidation timeout	Indicates the total number of timeout events triggered for "Revalidation" on PCC-service node.
IP Address Allocation	Indicates the total number of "IP Address Allocation" events triggered on PCC-service node.
IP Address Release	Indicates the total number of "IP Address Release" events triggered on PCC-service node.
Def EPS Bearer QoS Change	Indicates the total number of QoS change events triggered for Default EPS bearer on PCC-service node.
AN-GW Change	Indicates the total number of "AN-GW (Access Network Gateway)" events triggered on PCC-service node.
Successful Resource Alloc	Indicates the total number of "Successful Resource Allocation" events triggered on PCC-service node.
Resource Modification Req	Indicates the total number of resource modification request messages received by PCC-service node.
PGW Trace Control	Indicates the status of subscriber session trace control reported on PCC-service node for P-GW.
UE Timezone Change	Indicates the total number of "UE Timezone Change" events triggered on PCC-service node.
Usage Report	Indicates the total number of Usage Reports processed on PCC-service node.