Show Commands for CUBE

This section provides examples of the following SBC **show** commands that can be used to verify SBC configurations:

For descriptions of the various fields of the display outputs, see *Cisco Unified Border Element (SP Edition) Command Reference: Unified Model*, which is available at:

http://www.cisco.com/en/US/docs/ios/sbc/command/reference/sbcu_book.html

Display Adjacency States

The **show sbc sbe adjacencies** command displays the state of the adjacencies that are configured on SBEs, as shown in the following example:

```
Router# show sbc MY_SBC sbe adjacencies

SBC Service "MY_SBC"
      Name                      Type    State        Description
      ------------------------------------------------------------
      CUCM1                     SIP     Attached
      CUCM2                     SIP     Attached
Router#
```

Display Active Calls

The **show sbc sbe calls** command displays a list of active calls, as shown in the following example:

```
Router# show sbc MY_SBC sbe calls

SBC Service "MY_SBC"
  Call          State        Type     Src Adjacency      Dest Adjacency
  ------------------------------------------------------------------------
    78       Active     Audio             CUCM2               CUCM1
Router#
```

Display Call Details

The **show sbc sbe call** command displays various details about calls in process. In the following example, the details are for six branches of a call:

```
Router# show sbc MY_SBC sbe call 6 branches

SBC Service "MY_SBC"
Call: 78
State: Active
Type: Audio

Branch
Capabilities   Calling Number Called Number  Billing ID                                                DTMF
1              22222                        4C17E116202020203939383300000000000000000000009BMedia(RFC2833)
2                             003072211111   4C17E116202020203939383300000000000000000000009CMedia(RFC2833)
```

Display Call Statistics

The **show sbc sbe call-stats** command displays a list of the statistics for all the calls for a specified duration, as shown in the following example:

```
Router# show sbc MY_SBC sbe call-stats

SBC Service ''global''
Active calls: 0
Active Ipv6 calls: 0
Activating calls = 0
Deactivating calls = 0
Total call attempts = 8
Failed call attempts = 8
Successful call attempts = 0
Call routing failed = 8
Call resources failed = 0
Call media failed = 0
Call signaling failed = 0
Active call failures = 0
Congestion failures = 0
Policy control failures:
Total call setup failures = 8
Total call update failures = 0
Call setup failed due to NA = 0
Call setup failed due to rtg = 8
Call setup failed due to CAC = 0
CAC fails due to num call lim = 0
CAC fails due to call rate lim = 0
CAC fails due to num media channels lim = 0
CAC fails due to num media updates lim = 0
CAC fails due to bandwidth lim = 0
CAC fails due to in-call rate lim = 0
CAC fails due to out-call rate lim = 0
```

Display SIP Statistics

The **show sbc sbe sip statistics** command displays the aggregated SIP statistics handled by SBC, as shown in the following example:

```
Router# show sbc global sbe sip statistics

SIP Statistics
--------------
Total SIP Transactions: 6
In Out
---------- ----------
Total SIP Requests 4 4
Total SIP Responses 3 5
SIP Request Messages:
SIP INVITEs 2 2
SIP ACKs 1 1
SIP BYEs 1 1
SIP CANCELs 0 0
SIP OPTIONS 0 0
SIP REGISTERs 0 0
SIP SUBSCRIBEs 0 0
SIP REFERs 0 0
SIP NOTIFY 0 0
SIP Response Classes:
SIP Info (1xx) 1 3
SIP Success (2xx) 2 2
SIP Redirects (3xx) 0 0
SIP Client Errors (4xx) 0 0
SIP Server Errors (5xx) 0 0
SIP Global Errors (6xx) 0 0
Internally Generated SIP Response Classes:
SIP Info (1xx) 0
SIP Success (2xx) 0
SIP Redirects (3xx) 0
SIP Client Errors (4xx) 0
SIP Server Errors (5xx) 0
SIP Global Errors (6xx) 0
Transaction Manager (TM) Internal Statistics:
Request/Response Congestion Failures = 0
Current Transactions awaiting response = 0
Free Buffers in TM inbound pool = 1200
Free Buffers in TM outbound pool = 20000
TM Congestion Level (uncongested = 0) = 0
Congestion Queue - Packets Accepted = 0
Congestion Queue - Packets Rejected = 0
Congestion Queue - Length = 0
Congestion Queue - Time Since Reset(ms)= 904270
Congestion Queue - Oldest Pkt Age (ms) = 0
Congestion Queue - Max Pkt Delay (ms) = 0
Control Block (CB) utilization:
Server Location NAPTR CBs = 0
Server Location SRV CBs = 0
Server Location address CBs = 2
Server Location Cache CBs = 0
Server Location Alias CBs = 0
Call CBs = 0
UA Dialog CBs = 0
UA INVITE Dialog CBs = 0
UA Subscription CBs = 0
SBC-673
Proxy Forking CBs = 0
Proxy Dialog CBs = 0
```

```
Proxy Proto Dialog CBs = 0
Proxy Server Transaction CBs = 0
Proxy Client Transaction CBs = 0
Transaction CBs = 0
Response CBs = 0
Extension Method CBs = 0
Status Code CBs = 0
```

Display Overall Media Statistics

The show **sbc dbe media-stats** command displays the statistics about media streams that have been processed, as shown in the following example:

```
Router# show sbc mySbc dbe media-stats
SBC Service "mySbc"
Max Term per Context = 68
Available Bandwidth = Unlimited
Available Flows = 9998
Available Packet Rate = 999800 (packets/second)
Active Media Flows = 0
Peak Media Flows = 0
Total Media Flows = 1
Active Signaling Flows = 0
Peak Signaling Flows = 0
Total Signaling Flows = 1
SBC Packets Received = 0
SBC Octets Received = 0
SBC Packets Sent = 0
SBC Octets Sent = 0
SBC Packets Discarded = 0
SBC Octets Discarded = 0
No Media Count = 0
```

Display Collected Media Flow Statistics

The **show sbc dbe media-flow-statsf** command displays conformance and failure statistics for a media flow, as shown in the following example:

```
Router# show sbc global dbe media-flow-stats

SBC Service "global"
Media Flow:
Context ID: 6
Stream ID: 2
State of Media Flow: Allocated
Call Established Time: 16:54:29 UTC Feb 20 2008
Flow Priority: Unspecified
Side A:
Name mycompany/voice/gn/0/1/0/1/ac/3
Reserved Bandwidth: 12600 (bytes/second)
Status OutofService
VRF Name: Global
VLAN Tags(Priorities): 0(0), 0(0)
Local Address: 202.50.2.1
Local Port: 10002
Remote Address: 10.10.127.22
Remote Port: 17384
Packets Received: 0
Packets Sent: 0
Packets Discarded: 0
Data Received: 0 (bytes)
Data Sent: 0 (bytes)
Data Discarded: 0 (bytes)
GM Discarded Packets: 0
Time To Recovery: Not known
RTCP Packets Sent: Not known
RTCP Packets Received: Not known
RTCP Packets Lost: Not known
DTMF Interworking: No
Media Flowing: No
Unexpected SrcAddr Packets: No
Billing ID: 00000000000000000000000000000000000000000000000000
Media directions allowed: inactive
Max Burst size: 3250 (bytes) <===== additional fields for side A
Delay variation tolerance: 0 (ms)
SDP string: m=audio $ RTP/AVP 0
Graceful deactivation: No
DiffServ Code Point: 0
Media Loss Event: No
NAT Latch Event: No
Side B:
Name mycompany/voice/gn/0/2/0/1/bb/4
Reserved Bandwidth: 12600 (bytes/second)
Status OutofService
VRF Name: Global
VLAN Tags(Priorities): 0(0), 0(0)
Local Address: 202.50.2.1
Local Port: 10004
Remote Address: 200.0.0.1
Remote Port: 19384
Packets Received: 0
Packets Sent: 0
Packets Discarded: 0
Data Received: 0 (bytes)
Data Sent: 0 (bytes)
Data Discarded: 0 (bytes)
```

```
GM Discarded Packets: 0
Time To Recovery: Not known
RTCP Packets Sent: Not known
RTCP Packets Received: Not known
RTCP Packets Lost: Not known
DTMF Interworking: No
Media Flowing: No
Unexpected SrcAddr Packets: No
Billing ID: 00000000000000000000000000000000000000000000000000
Media directions allowed: inactive
Max Burst size: 3250 (bytes) <===== additional fields for Side B
Delay variation tolerance: 0 (ms)
SDP string: m=audio $ RTP/AVP 0
Graceful deactivation: No
DiffServ Code Point: 0
Media Loss Event: No
NAT Latch Event: No
```

Display Global List of Media Statistics

The **show sbc dbe forwarder-stats** command displays global conformance and failure statistics, as shown in the following example:

```
Router# show sbc global dbe forwarder-stats
IOSd MPF Stub Message statistics
--------------------------------
Total global PMI messages received = 1
Total global PMI messages transmitted = 1
Total call PMI messages received = 0
Total call PMI messages transmitted = 0
Total global PMI message handling failures = 0
Total call PMI message handling failures = 0
Total global TDL messages received = 1
Total global TDL messages transmitted = 1
Total call TDL messages received = 0
Total call TDL messages transmitted = 0
Total global TDL message handling failures = 0
Total call TDL message handling failures = 0
Total packets injected = 0
Total packets punted = 0
Total injected packets dropped = 0
Total punted packets dropped = 0
Total global message timeouts = 0
Total call message timeouts = 0
Call ID database is NOT Initialised
IOSd MPF Stub Call statistics
-----------------------------
Number of currently in-use Calls = 0
High-water number of in-use Calls = 0
Maximum number of in-use Calls supported = 0
SBC Media Forwarder Statistics
------------------------------
Summary information:
Total packets received = 28416
Total packets forwarded = 14336
Total packets dropped = 14080
Total packets punted = 0
Incoming packets diverted to SBC subsystem = 0
Outgoing packets inserted by SBC subsystem = 0
Detailed breakdown of statistics:
Dropped packets:
IP TTL expired = 0
No associated flow = 0
Wrong source for flow = 0
Ingress flow receive disabled = 0
Egress flow send disabled = 0
Not conforming to flowspec = 14080
Badly formed RTP = 0
Badly formed RTCP = 0
Excessive RTCP packet rate = 0
Borrowed for outgoing DTMF = 0
Unknown destination address = 0
Misdirected = 0
Feature disabled = 0
Reprocess limit exceeded = 0
Punted packets:
H.248 control packets = not implemented
Packets containing options = 0
Fragmented packets = 0
Unexpected IP protocol = 0
Packets from invalid port range = 0
```

```
Punted packets dropped through rate limiting = 0
Packets colored with configured DSCP = 0
Diverted DTMF packets dropped:
Excessive DTMF packet rate = 0
Bad UDP checksum = 0
Diverted packet queue full = not implemented
Other = not implemented
Inserted packets dropped:
Flow inactive or disabled = 0
No outgoing packet buffer available = 0
Outgoing Queue full = 0
Other = 0
Generated event information:
Number of media UP events = 0
Number of media DOWN events = 0
Number of unexpected source events = 0
Platform specific statistics:
Packets learn source address = 0
Packets Learn source address timed out = 0
Packets conformed = 1982
Packets violated = 18
Packets exceed = 0
Packets RTCP receive = 0
SBC Media Forwarder statistics can wrap after
approximately 18 quintillion packets. For more accurate
statistics on completed calls, please use
show sbc ... dbe media-stats
```

Display Platform Software Status Control Processor

The **show platform software status control-processor brief** command displays information about the usage of the route processor, as shown in the following example:

```
Router# show platform software status control-processor brief

Load Average
 Slot  Status  1-Min  5-Min 15-Min
  RP0 Healthy   0.02   0.10   0.08
  RP1 Healthy   0.00   0.13   0.09
 ESP0 Healthy   0.00   0.15   0.10
 ESP1 Healthy   0.01   0.18   0.13
 SIP0 Healthy   0.00   0.06   0.04

Memory (kB)
 Slot  Status    Total     Used (Pct)     Free (Pct) Committed (Pct)
  RP0 Healthy  8133924  1804132 (22%)  6329792 (77%)   5132856 (63%)
  RP1 Healthy  8133924  1758800 (21%)  6375124 (78%)   5130308 (63%)
 ESP0 Healthy  2022288   552424 (26%)  1469864 (70%)   2464260 (117%)
 ESP1 Healthy  2022288   552616 (26%)  1469672 (70%)   2464680 (117%)
 SIP0 Healthy   478904   331268 (63%)   147636 (28%)    271072 (51%)

CPU Utilization
 Slot  CPU   User System   Nice   Idle    IRQ   SIRQ IOwait
  RP0    0   0.19   0.29   0.00  99.40   0.00   0.09   0.00
         1   0.00   0.00   0.00 100.00   0.00   0.00   0.00
  RP1    0   0.20   0.60   0.00  99.19   0.00   0.00   0.00
         1   0.10   1.20   0.00  98.70   0.00   0.00   0.00
 ESP0    0   1.60   2.70   0.00  95.69   0.00   0.00   0.00
 ESP1    0   0.20   0.10   0.00  99.69   0.00   0.00   0.00
 SIP0    0   1.60   2.00   0.00  96.40   0.00   0.00   0.00
```

Other Useful Show Commands

General

show clock
show version
show running-config

DBE

show sbc dbe address
show sbc dbe controllers
show sbc dbe forwarder-stats
show sbc dbe media-flow-stats
show sbc dbe media-stats
show sbc dbe signaling-flow-stats
show sbc dbe history

SBE

show sbc sbe sip stats
show sbc sbe call-rate-stats
show sbc sbe calls
show sbc sbe adjacency
show sbc sbe call-stats-currenthour
show sbc sbe policy-failure-stats currenthour