This article includes the following examples:

- User-Specific Configurations for Call Statistic Collection: Example
- Manually Clearing Statistics: Example
- Collection of Aggregation-Level Statistics: Example
- Memory Usage: Example
- Collection of Statistics Since System Reset: Examples
- Designated Server Group: Example
- Location of the FTP Server: Example
- Maximum File Size for the Syslog Server: Example
- Maximum Duration for Storage: Example

Guide Contents
Troubleshooting Cisco IOS Voice Overview
Debug Command Output on Cisco IOS Voice Gateways
Filtering Troubleshooting Output
Cisco VoIP Internal Error Codes
Troubleshooting Cisco IOS Voice Telephony
Troubleshooting Cisco IOS Voice Protocols
Troubleshooting Cisco IOS Telephony Applications
Monitoring the Cisco IOS Voice Network
Cause Codes and Debug Values

Contents

- 1 User-Specific Configurations for Call Statistic Collection: Example
- 2 Manually Clearing Statistics: Example
- 3 Collection of Aggregation-Level Statistics: Example
- 4 Memory Usage: Example
- 5 Collection of Statistics Since System Reset: Examples
  - 5.1 Example of the show voice statistics csr since-reset accounting all Command
  - 5.2 Example of the show voice statistics csr since-reset aggregation-level all Command
  - 5.3 Example of the show voice statistics csr since-reset aggregation-level gateway Command
  - 5.4 Example of the show voice statistics csr since-reset aggregation-level ip Command
  - 5.5 Example of the show voice statistics csr since-reset aggregation-level pstn Command
  - 5.6 Example of the show voice statistics csr since-reset aggregation-level trunk-group all Command
  - 5.7 Example of the show voice statistics csr since-reset aggregation-level voice-port all Command
- 6 Designated Server Group: Example
- 7 Location of the FTP Server: Example
- 8 Maximum File Size for the Syslog Server: Example
- 9 Maximum Duration for Storage: Example

User-Specific Configurations for Call Statistic Collection: Example

The following example shows the user-specific configuration that includes accounting method, time ranges, maximum storage duration, and the archiving of the statistics to an FTP and syslog server:

```
Router# show running-config | include voice statistics
```

```
voice statistics accounting method h323-1 pass start-interim-stop
voice statistics time-range since-reset
voice statistics time-range periodic 5minutes start 00:00 end 00:00 days-of-week daily
voice statistics max-storage-duration minute 40
voice statistics push ftp url ftp://sgcp:sgcp@anyone-pc:21//ftp_files
voice statistics push syslog max-file-size 4000000000
voice statistics display-format separator new-line
voice statistics field-params lost-packet 1000
voice statistics field-params mcd 2
voice statistics field-params packet-jitter 255
voice statistics field-params packet-latency 150
```

Note: The type of statistics is not shown in a running configuration because the **voice statistics type csr** command activates only the collection of statistics. If you do not specify a type, both signaling and accounting statistics are collected.

Manually Clearing Statistics: Example

The following example shows how to clear all of the voice statistics that have been collected:

```
Router# clear voice statistics csr
```

The following example verifies the clearing by showing that all of the parameters have been set to zero:

```
Router# show voice statistics csr since-reset all
Client Type: VCSR
        Start Time: 2002-04-25T01:48:12Z        End Time: 2002-04-25T01:49:27Z
record_type=gw,trunk_group_id=,voice_port_id=,in_call=0,in_ans=0,in_fail=0,out_c
all=0,out_ans=0,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,
out_pdd=0,in_setup_delay=0,out_setup_delay=0,lost_pkt=0,latency=0,
jitter=0,in_disc_cc_16=0out_disc_cc_16=0
!
record_type=ip,trunk_group_id=,voice_port_id=,in_call=0,in_ans=0,in_fail=0,out_c
all=0,out_ans=0,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,lost_pkt=0,latency=0,jitter=0,in_disc_cc_16=0,
out_disc_cc_16=0
!
record_type=pstn,trunk_group_id=,voice_port_id=,in_call=0,in_ans=0,in_fail=0,out_call=0,
out_ans=0,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,orig_disconn=0,
in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,in_setup_delay=0,
out_setup_delay=0,in_disc_cc_16=0,out_disc_cc_16=0
!
record_type=vp,trunk_group_id=,voice_port_id=4/0/0,in_call=0,in_ans=0,in_fail=0,
out_call=0,out_ans=0,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,
out_pdd=0,in_setup_delay=0,out_setup_delay=0,in_disc_cc_16=0,out_disc_cc_16=0
!
Client Type: Voice ACCT Stats
        Start Time: 2002-04-25T01:48:04Z        End Time: 2002-04-25T01:49:30Z
methodlist=h323-1,acc_pass_criteria=0,pstn_in_pass=0,pstn_in_fail=0,pstn_out_pass=0,
pstn_out_fail=0,ip_in_pass=0,ip_in_fail=0,ip_out_pass=0,ip_out_fail=0
```

Collection of Aggregation-Level Statistics: Example

The following example shows the different levels of signaling statistics that can be collected:

```
Router# show voice statistics csr since-reset aggregation-level ?
  all          Statistics at all signaling levels
  gateway      Gateway wide
```

```
  ip           Voip interface level
  pstn         Telephony interface level
  trunk-group  Trunk group level
  voice-port   Voice-port level
```

The following example shows the collected statistics:

```
Router# show voice statistics csr since-reset aggregation-level all
Client Type: VCSR
        Start Time: 2002-04-25T01:48:12Z        End Time: 2002-04-25T01:50:01Z
record_type=gw,trunk_group_id=12,voice_port_id=1/0,in_call=10,in_ans=10,in_fail=0,
out_call=3,out_ans=0,out_fail=3,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
!
record_type=ip,trunk_group_id=1,voice_port_id=2/0,in_call=1,in_ans=1,in_fail=0
!
record_type=pstn,trunk_group_id=,voice_port_id=,in_call=0,in_ans=0,in_fail=0,out_call=0,
out_ans=0,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,o
!
record_type=vp,trunk_group_id=1,voice_port_id=4/0/0,in_call=0,in_ans=0,in_fail=0,
out_call=0,out_ans=0,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,in_disc_cc_16=0,out_disc_cc_16=0
!
```

The following example shows the intervals at which statistics were collected:

```
Router# show voice statistics interval-tag
Current Time: 2002-04-25T01:52:11Z
INTERVAL-TAG   START TIME             END TIME
============== ====================== ======================
10             2002-04-25T01:10:00Z   2002-04-25T01:15:00Z
11             2002-04-25T01:15:00Z   2002-04-25T01:20:00Z
12             2002-04-25T01:20:00Z   2002-04-25T01:25:00Z
13             2002-04-25T01:25:00Z   2002-04-25T01:30:00Z
14             2002-04-25T01:30:00Z   2002-04-25T01:35:00Z
15             2002-04-25T01:35:00Z   2002-04-25T01:40:00Z
16             2002-04-25T01:40:00Z   2002-04-25T01:45:00Z
17             2002-04-25T01:45:00Z   2002-04-25T01:50:00Z
18             2002-04-25T01:50:00Z   2002-04-25T01:52:11Z
```

Memory Usage: Example

The following example shows the amount of memory being used for accounting and signaling CSRs by fixed interval and since a reset or reboot. It also shows the estimated memory allocated for future use.

```
Router# show voice statistics memory-usage csr
*** Voice Call Statistics Record Memory Usage ***
        Fixed Interval Option -
                CSR size: 136 bytes
                Number of CSR per interval: 9
                Used memory size (proximate): 0
                Estimated future claimed memory size (proximate): 10
        Since Reset Option -
                CSR size: 136 bytes
                Total count of CSR: 9
                Used memory size (proximate): 1224
*** Voice Call Statistics Accounting Record Memory Usage ***
        Fixed Interval Option -
                ACCT REC size: 80 bytes
```

```
                Number of ACCT REC per interval: 1
                Used memory size (proximate): 0
                Estimated future claimed memory size (proximate): 25
        Since Reset Option -
                ACCT REC size: 80 bytes
                Total count of ACCT REC: 1
                Used memory size (proximate): 80
```

Collection of Statistics Since System Reset: Examples

This section provides the following examples:

- Example of the show voice statistics csr since-reset accounting all Command
- Example of the show voice statistics csr since-reset aggregation-level all Command
- Example of the show voice statistics csr since-reset aggregation-level gateway Command
- Example of the show voice statistics csr since-reset aggregation-level ip Command
- Example of the show voice statistics csr since-reset aggregation-level pstn Command
- Example of the show voice statistics csr since-reset aggregation-level trunk-group all Command
- Example of the show voice statistics csr since-reset aggregation-level voice-port all Command

Example of the show voice statistics csr since-reset accounting all Command

The following example shows all accounting statistics:

```
Router# show voice statistics csr since-reset accounting all
Client Type: VCSR
        Start Time: 2002-04-25T01:48:12Z        End Time:2002-04-25T01:50:01Z
methodlist=h323-1,acc_pass_criteria=1,pstn_in_pass=10,pstn_in_fail=0,pstn_out_pass=10
pstn_out_fail=0,ip_in_pass=15,ip_in_fail=0,ip_out_pass=15,ip_out_fail=0
```

Example of the show voice statistics csr since-reset aggregation-level all Command

The following example shows all aggregation level statistics:

```
Router# show voice statistics csr since-reset aggregation-level all
Client Type: VCSR
        Start Time: 2002-04-25T01:48:12Z        End Time: 2002-04-25T01:50:01Z
record_type=gw,trunk_group_id=1,voice_port_id=2,in_call=120,in_ans=120,in_fail=0
out_call=10,out_ans=10,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,lost_pkt=0,latency=0,jitter=0,in_disc_cc_16=0,
out_disc_cc_16=0
!
record_type=ip,trunk_group_id=2,voice_port_id=3,in_call=120,in_ans=120,in_fail=0
out_call=10,out_ans=10,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,lost_pkt=0,latency=0,jitter=0,in_disc_cc_16=0,
out_disc_cc_16=0
!
record_type=pstn,trunk_group_id=5,voice_port_id=2,in_call=150,in_ans=100,in_fail=50,
out_call=0,out_ans=0,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,in_disc_cc_16=0,out_disc_cc_16=0
```

Example of the show voice statistics csr since-reset aggregation-level gateway Command

The following example shows the gateway aggregation level statistics:

```
Router# show voice statistics csr since-reset aggregation-level gateway
```

```
Client Type: VCSR
        Start Time: 2002-04-25T01:48:12Z        End Time: 2002-05-02T21:21:14Z
record_type=gw,trunk_group_id=1,voice_port_id=1,in_call=10,in_ans=10,in_fail=0,out_call=50
out_ans=10,out_fail=40,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,orig_disconn=0,
in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,in_setup_delay=0,
out_setup_delay=0,lost_pkt=0,latency=0,jitter=0,in_disc_cc_16=0,out_disc_cc_16=0
```

Example of the show voice statistics csr since-reset aggregation-level ip Command

The following example shows the IP aggregation level statistics:

```
Router# show voice statistics csr since-reset aggregation-level ip
Client Type: VCSR
        Start Time: 2002-04-25T01:48:12Z        End Time: 2002-05-02T21:21:27Z
record_type=ip,trunk_group_id=1,voice_port_id=1,in_call=10,in_ans=10,in_fail=0,out_call=50
out_ans=10,out_fail=40,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,orig_disconn=0,
in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,in_setup_delay=0,
out_setup_delay=0,lost_pkt=0,latency=0,jitter=0,in_disc_cc_16=0,out_disc_cc_16=0
```

Example of the show voice statistics csr since-reset aggregation-level pstn Command

The following example shows the PSTN aggregation level statistics:

```
Router# show voice statistics csr since-reset aggregation-level pstn
Client Type: VCSR
        Start Time: 2002-04-25T01:48:12Z        End Time: 2002-05-02T21:21:42Z
record_type=pstn,trunk_group_id=1,voice_port_id=1,in_call=10,in_ans=10,in_fail=0,
out_call=50,out_ans=10,out_fail=40,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,lost_pkt=0,latency=0,jitter=0,in_disc_cc_16=0,
out_disc_cc_16=0
```

Example of the show voice statistics csr since-reset aggregation-level trunk-group all Command

The following example shows the trunk-group aggregation level statistics:

```
Router# show voice statistics csr since-reset aggregation-level trunk-group all
Client Type: VCSR
        Start Time: 2002-04-25T01:48:12Z        End Time: 2002-05-02T21:22:08Z
record_type=pstn,trunk_group_id=15,voice_port_id=3,in_call=20,in_ans=20,in_fail=0,
out_call=10,out_ans=10,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,in_disc_cc_16=0,out_disc_cc_16=0
!
record_type=pstn,trunk_group_id=16,voice_port_id=4,in_call=20,in_ans=20,in_fail=0,
out_call=10,out_ans=10,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,in_disc_cc_16=0,out_disc_cc_16=0
!
record_type=pstn,trunk_group_id=17,voice_port_id=5,in_call=20,in_ans=20,in_fail=0,
out_call=10,out_ans=10,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,in_disc_cc_16=0,out_disc_cc_16=0
!
record_type=pstn,trunk_group_id=18,voice_port_id=6,in_call=20,in_ans=20,in_fail=0,
out_call=10,out_ans=10,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,in_disc_cc_16=0,out_disc_cc_16=0
```

Example of the show voice statistics csr since-reset aggregation-level voice-port all Command

The following example shows the voice-port aggregation level statistics:

```
Router# show voice statistics csr since-reset aggregation-level voice-port all
Client Type: VCSR
        Start Time: 2002-04-25T01:48:12Z        End Time: 2002-05-02T21:22:52Z
record_type=vp,trunk_group_id=a,voice_port_id=4/0/0,in_call=22,in_ans=14,in_fail=8,
out_call=0,out_ans=0,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,in_disc_cc_16=0,out_disc_cc_16=0
!
record_type=vp,trunk_group_id=b,voice_port_id=4/0/1,in_call=22,in_ans=14,in_fail=8,
out_call=0,out_ans=0,out_fail=0,in_szre_d=0,out_szre_d=0,in_conn_d=0,out_conn_d=0,
orig_disconn=0,in_ans_abnorm=0,out_ans_abnorm=0,in_mcd=0,out_mcd=0,in_pdd=0,out_pdd=0,
in_setup_delay=0,out_setup_delay=0,in_disc_cc_16=0,out_disc_cc_16=0
```

Designated Server Group: Example

The following example shows that a designated server group has been configured for a broadcast method list.

```
Router# show voice statistics | begin aaa group server
aaa group server radius billing-grp
 server 1.6.37.20 auth-port 1645 acct-port 1646
 accounting acknowledge broadcast
```

Location of the FTP Server: Example

The following example shows the location of the FTP server:

```
Router# show running-config
Building configuration...
Current configuration : 5444 bytes
!
version 12.3
!
voice statistics push ftp url ftp://sgcp:sgcp@abc-pc:21//ftp_files
voice statistics push ftp max-file-size 4000000000
!
```

Maximum File Size for the Syslog Server: Example

The following example shows the maximum file size to be downloaded to the syslog server:

```
Router# show running-config
Building configuration...
Current configuration : 5444 bytes
!
version 12.3
!
voice statistics push syslog max-msg-size 4000000000
```

Maximum Duration for Storage: Example

The following configuration example shows a maximum storage of 60 minutes:

```
Router# show running-config | include voice statistics
!
voice statistics max-storage-duration minute 60
```