

DG102SH Console Command Set(set coding, set h323, and show)

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1. set coding

1.1. set coding [prof_id] usage

Definition: This command is used to set allowed usage for a coding profile.

Parameter(s): <voice | fax | modem | data> <on | off>

Example: set coding 1 usage voice on

1.2. set coding [prof_id] vif

Definition: This command is used to set the size of the Voice Information Field (VIF), in bits, for a coding profile. The appropriate VIF sizes to use are related to the Coding type.

Parameter(s): [tx|rx]-(optional) <Voice Information Field size, in bits>

Example: set coding 1 vif 480

Example: set coding 2 tx vif 480

Example: set coding 2 rx vif 480

1.3. set coding [prof_id] encap

Definition: This command is used to select the Encapsulation mode for a coding profile. This mode specifies the format of the packets exchanged between the DSP and the microprocessor.

Parameter(s): [t3|frf11|rtpt|upd|aa12] (Telogy T3 mode, FRF.11, H.323 RTP, User Datagram Protocol, ATM Adaptation Layer type 2)

Example: set coding 1 encap rtp

1.4. set coding [prof_id] vad

Definition: This command is used to set the Voice Activity Detector (VAD) mode for a coding profile.

Parameter(s): [on|off]

Example: set coding 1 vad on

1.5. set coding [prof_id] vad_thresh

Definition: This command is used to set audio threshold level for the VAD for a coding profile.

Parameter(s): <value in dBm, -20 to +10, or 32767 for Adaptive VAD>

Example: set coding 0 vad_thresh -10

1.6. set coding [prof_id] min_delay

Definition: This command sets the minimum delay for a coding profile. Typically, it is equal

to the time of one packet.

Parameter(s): <value in msec>

Example: set coding 1 max_delay 30

1.7. set coding [prof_id] nom_delay

Definition: This command is used to set the nominal delay for a coding profile.

Parameter(s): <value in ms>

Example: set coding 0 nom_delay 60

The Nominal Delay should be at least twice the packet time (in milliseconds).

Nom delay = k * packet time, where k >= 2

1.8. set coding [prof_id] max_delay

Definition: This command is used to set the maximum delay for a coding profile.

Parameter(s): <value in ms>

Example: set coding 1 max_delay 120

The maximum delay should be at least 2 packet times greater than the nominal delay.

Max delay = j * packet time, where j >= k+ 2

The maximum delays are listed :

Coding Maximum Delay

G.729B, G.729AB 500 ms

G.729E 500 ms

G.728 500 ms

G.723.1A 500 ms

GSM EFR 500 ms

GSM FR 500 ms

G.726, G.727 16 kbps 500 ms

G.726, G.727 24 kbps 370 ms

G.726, G.727 32 kbps 290 ms

G.726, G.727 40 kbps 240 ms

(250ms on C5440)

G.722 64 kbps 160ms

G.711 64 kbps 145 ms

(250ms on C5440)

1.9. set coding [prof_id] adaptive playout

Definition: This command is used to enable/disable the Adaptive Playback function for a coding profile.

Parameter(s): [off | adj_silence | adj_immed]]

Example: set coding 0 adaptive playout on

1.10. set coding [prof_id] rate

Definition: This command is used to set the Fax maximum data rate for a coding profile.

Parameter(s): [2400 | 4800 | 7200 | 9600 | 12000 | 14400]

Example: set coding 1 rate 12000

1.11. set coding [prof_id] dtmf_relay

Definition: This command is used to select the DTMF Relay mode for a TCID, in which DTMF tones are detected during voice processing and separately packetized for transmission. If DTMF Relay mode is enabled, oob must be selected.

Example: set coding 0 dtmf_relay on

1.12. set coding [prof_id] tone_detect

Definition: Tone_detect has to be ON in the Voice Profile used if fax/modem switchover is desired, since switchover relies on tone detection. (For a fax profile it does not matter if it is on or off).

Parameter(s): [on|off]

Example: set coding 0 tone_detect on

1.13. set coding [prof_id] cp_tone_detect

Definition: This command is used to specify a secondary level of control of call progress detection. If the call progress detection control for a TCID is set to "As per coding profile" (see the "set tcid n cp_tone_det_ctrl" command), this parameter determines if detection is to be enabled or not.

Parameter(s): [on|off] (on - Enable call progress tone detection, off - Disable call progress detection)

Example: set coding 0 cp_tone_detect off

1.14. set coding [prof_id] v18_tone_detect

Definition: This command is used to enable or disable V.18 Annex A tone detection. (A 1400Hz tone is detected for 100ms, for channel configuration purposes.)

Parameter(s): [on|off] (on - Enable V18 tone detection, off - Disable V18 tone detection)

Example: set coding 0 v18_tone_detect on

1.15. set coding [prof_id] ss7_cot_tone_detect

Definition: This command enables or disables SS7 COT tone detection.

Parameter(s): [on|off] (on - Enable ss7 cot tone detection, off - Disable ss7 cot tone)

detection)

Example: `set coding 0 ss7_cot_tone_detect on`

1.16. set coding [prof_id] sf_sig_tone_detect

Definition: This command enables or disables SF signal tone detection.

Parameter(s): [on|off] (on - Enable sf signal tone detection, off - Disable sf signal tone detection)

Example: `set coding 0 sf_sig_tone_detect on`

1.17. set coding [prof_id] ec

Definition: This command is used to select the Echo Cancellor mode for a coding profile.

Parameter(s): [on|off]

Example: `set coding 0 ec on`

1.18. set coding [prof_id] ec_nl

Definition: This command is used to set the Non-Linear Processor mode of the Echo Cancellor for a coding profile. This command only has an effect if the Echo Cancellor is enabled.

Parameter(s): [on|off]

Example: `set tcid 0 ec_nl on`

1.19. set coding [prof_id] ec_tail

Definition: This command is used to set the Echo Cancellor Tail length for a coding profile.

Parameter(s): <value in ms>

Valid values for the tail length depend upon the codecs available and the number of channels configured in the DSP.

Example: `set coding 0 ec_tail 16`

1.20. set coding [prof_id] ec_refresh

Definition: This commands sets the EC refresh state to remain frozen or refresh.

Parameter(s): [freeze | update]

Example: `set coding 0 ec_refresh freeze`

1.21. set coding [prof_id] ec_coeffs

Definition: This command sets the EC coefficient refresh state to enable/disable.

Parameter(s): [reset | normal]

Example: `set coding 0 ec_coeffs reset`

1.22. set coding [prof_id] ec_auto_update

Definition: This command sets automatic switchover between fast and slow update. When set to On, automatic switchover is allowed; when set to Off, only fast update is allowed.

Parameter(s): [on | off]

Example: set coding 0 ec_auto_update on

1.23. set coding [prof_id] ec_auto_search

Definition: This command sets whether search filters update automatically.

Parameter(s): [on | off]

Example: set coding 0 ec_auto_search on

1.24. set coding [prof_id] ec_search_freeze

Definition: This command allows updates to the search filters to be frozen. It is intended for use only during debugging.

Parameter(s): [on | off]

Example: set coding 0 off

1.25. set coding [prof_id] silence_detect time

Definition: This command is used to set the silent time for declaring silence detection for a coding profile.

Parameter(s): <silent time – in ms, 0 means disabled>

Example: set coding 0 silence_detect time 2000

1.26. set coding [prof_id] silence_detect level

Definition: This command is used to set the “silence” signal level for declaring silence detection for a coding profile.

Parameter(s): <level, in dB, (-40 to -50)>

Example: set tcid 1 silence_detect level -43

1.27. set coding [prof_id] modem_relay_pkt_size

Definition: This command sets the packet size for modem relay.

Parameter(s): <20-48 bytes>

Example: set coding 0 modem_relay_pkt_size 25

1.28. set coding [prof_id] modem_relay_max_rate

Definition: This command sets the maximum modem relay rate.

Parameter(s): <300 | 1200 | 2400>

Example: set coding 0 modem_relay_max_rate 2400

1.29. set coding [prof_id] modem_relay_redundancy

Definition: This command specifies the number of redundant packets that will be sent for modem relay to guard against the loss of consecutive packets.

Parameter(s): <1-10 pkts>

Example: set coding 0 modem_relay_redundancy 3

1.30. set coding [prof_id] modem_relay_dbg_level

Definition: This command sets the level for debugging for modem relay.

Parameter(s): <0=off | 1 | 2>

Example: set coding 0 modem_relay_dbg_level

1.31. set coding [prof_id] modem_tx_level

Definition: This command is used to set the fax modem TX gain for a coding profile.

Parameter(s): <value -- In dB (0 to -13)>

Example: set coding 0 modem_tx_level -13

1.32. set coding [prof_id] modem_cd_threshold

Definition: This command is used to set the fax modem carrier-detection threshold for a coding profile.

Three signal power levels are selectable for the detection threshold.

Parameter(s): <value – 0= -26dBm, 1= -33dBm, 2= -43dBm>

Example: set coding 0 modem_cd_threshold 1

1.33. set coding [prof_id] modem_timeout

Definition: This command is used to set, for a coding profile, the amount of time of “no activity” on a fax modem connection before the call will be cleared.

Parameter(s): <value – in seconds, 10 to 32000>

Example: set coding 0 modem_timeout 6000

1.34. set coding [prof_id] payload

Definition: This command is used to set the payload status, for a coding profile. This only applies in FRF.11 encapsulation

Parameter(s): [primary | secondary]

Example: set coding 1 payload primary

1.35. set coding [prof_id] xfer

Definition: This command is used to select the transfer syntax mode (for FRF.11

encapsulation only) for a coding profile.

Parameter(s): [g729 | g727 | pcm | fax]

Example: set coding 0 xfer g729

1.36. set coding [prof_id] blocksplit

Definition: This command is used to set the Block Split option mode for a coding profile configured for G.727 coding. It is only meaningful when the number of enhancement bits is greater than 0 and when the encapsulation is FRF.11.

Parameter(s): [on|off]

Example: set coding 0 blocksplit off

1.37. set coding [prof_id] enhbits

Definition: This command is used to set the number of enhancement bits for a coding profile configured for G.727 coding. It is not meaningful for any other coding type.

Parameter(s): <bits>

Example: set coding 1 enhbits 2

1.38. set coding [prof_id] aal2 prof_src

Definition: This command

Parameter(s): [atmf | itut | prop]

Example: set coding 0 aal2 prof_src atmf

1.39. set coding [prof_id] aal2 prof_id

Definition: This command sets the AAL2 profile ID that will be used by the voice coding profile.

Parameter(s): <0-255>

Example: set coding 0 aal2 prof_id 15

1.40. set coding [prof_id] fax_dbg_level

Definition: This command is used to set the Faxmon _ level for debug, for a fax coding profile.

(0 = none, 1 = Level 1, 2 = Level 2.)

Parameter(s): <0, 1, or 2>

Example: set coding 1 fax_dbg_level 0

1.41. set coding [prof_id] fax_hs_pkt_rate

Definition: This T-38 mode command is used to set the rate at which high speed data will be

sent across the network, for a fax coding profile (i.e., determines the size of the high-speed IFPs).

Parameter(s): <value in msec -- 10, 20, 30 or 40>

Example: `set coding 0 fax_hs_pkt_rate 30`

1.42. set coding [prof_id] fax_ls_redundancy

Definition: This T-38 mode command is used to specify the packet-level redundancy for low-speed data transmissions (i.e., T.30 handshaking information), for a fax coding profile. The strategy used is to assemble an additional *n* prior packets after the primary with decreasing sequence numbers. Therefore, if each payload contains a primary and two or more secondary fields, this will protect against a loss of two consecutive UDPTL packets.

Parameter(s): <0, 1, 2, 3, 4 or 5>

Example: `set coding 1 fax_ls_redundancy 2`

1.43. set coding [prof_id] fax_hs_redundancy

Definition: The T-38 mode command is used to specify the packet-level redundancy for high-speed data transmissions (i.e., T.4 image data) for a fax coding profile. **Parameter(s):** <0, 1 or 2>

Example: `set coding 1 fax_hs_redundancy 1`

1.44. set coding [prof_id] fax_tcf_method

Definition: This T.38 mode command is used to control the method with which data is handled over the network, for a fax coding profile. Method 1 (Local) requires that the TCF training signal be generated and checked locally by the gateway and is not forwarded over the network. In Method 2 (Network), TCF data is sent over the network. These correspond to Data Management methods 1 and 2 in specification T.38.

Parameter(s): <method -- 1 (local) or 2 (over the network)>

Example: `set coding 1 fax_tcf_method 2`

1.45. set coding [prof_id] fax_max_ls_pkt

Definition: This command allows low speed data packetization to be specified.

Note: This parameter is not used currently. It is reserved for use in future releases. The value should be set to 1.

Parameter(s): <bytes>

Example: `set coding 0 1`

1.46. set coding [prof_id] fax_tx_net_timeout

Definition: This command sets the timeout period after which the DSP will declare a fax

clear-down event, if no data is received from the packet network while the gateway is in a local transmit state. It is a safeguard to ensure the channel is not left in a fax relay state in a transparent signaling environment.

Parameter(s): <10 to 32000 sec <recommend 150>

Example: `set coding 0 fax_tx_net_timeout 150`

1.47. set coding [prof_id] fax_eflag_start_tmr

Definition: This command is a debug configuration parameter for use by Telogy Networks, Inc. personnel.

Parameter(s): <msec (recommend 2600)>

Note: This parameter should always be set to 2600.

Example: `set coding 0 fax_eflag_start_tmr 2600`

1.48. set coding [prof_id] fax_eflag_stop_tmr

Definition: This command is a debug configuration parameter for use by Telogy Networks, Inc. personnel.

Parameter(s): <msec (recommend 2300)>

Note: This parameter should always be set to 2300.

Example: `set coding 0 fax_eflag_stop_tmr 2300`

1.49. set coding [prof_id] fax_relay_features

Definition: This command is used to enable specific fax software capabilities.

Parameter(s):

<scanlon | scanloff>: Enable/disable concealment of page data errors due to network packet loss.

<fdison | fdisoff>: Enable/disable prolonging of the second DIS retransmission. Set it to fdisoff.

<tfofon | tfofoff>: Enable/disable enhanced Telogy Networks, Inc. fax network protocol to improve robustness in the packet loss environment. The default, and recommended value, is tfofon.

<nsson | nssoff>: Enable/disable overriding of Non-standard Facility (NSF) data and prevent end fax devices from employing proprietary capabilities.

Example: `set coding 0 fax_relay_features scanlon fdisoff tfofon nssoff`

1.50. set coding [prof_id] fax_t30_features

Definition: This command is used to disable the use of specific fax capabilities between two end fax devices.

Parameter(s):

<ecmon | ecmoff>: Enable/disable Error Correction Mode (ECM). Disabling ECM improves call success rates.

<mron | mroff>: Enable/disable MR page compression. This setting is intended for debugging use.

Example: `set coding 0 fax_t30_features ecmoff mroff`

1.51. set coding [prof_id] fax_nsf_country

Definition: This command is used to specify the 8-bit country code to be used when overriding a received NSF data frame.

Parameter(s): <code>

1.52. set coding [prof_id] fax_nsf_vendor

Definition: This command is used to specify the 16-bit vendor code to be used when overriding a received NSF data frame.

Parameter(s): <code>

1.53. set coding [prof_id] resamp

Definition: This command toggles resampling on or off.

Parameter(s): [on | off]

Example: `set coding 0 resamp on`

Note: The Resampler is used only for Modem operation and only with the G.711 codec.

The following recommendations should be observed:

- VPU maximum delay set to maximum for G.711
- VPU nominal delay set to half the VPU max. delay
- VAD disabled
- Adaptive Playout Delay disabled

1.54. set coding [prof_id] ec_cfg

Definition: This command sets the EC configuration.

Parameter(s): [nlp_fix | 4w_det]

Example: `set coding 0 ec_cfg nlp_fix`

1.55. set coding [prof_id] nlp_fix

Definition: This command sets the comfort noise level.

Parameter(s): [noise_level]

Range: <-40 dBm to -70 dBm>

Example: `set coding [prof_id] nlp_fix -40`

1.56. set coding [prof_id] cid support

Definition: This command is used to control Caller ID functionality. Default is off. Setting it to on means that the DSP Image selected for this coding must support Caller ID.

Parameter(s): [on | off]

Example: set coding [prof_id] cid support on

1.57. set coding [prof_id] copyof [prof_id]

Definition: This command is used to copy the settings of the second specified coding profile to the first specified coding profile.

Example: set coding 1 copyof 0

1.58. set coding [prof_id]

Definition: This command is used to control the entire contents of the designated coding profile, by declaring them to be either valid, invalid, or to clear the settings of the specified coding profile. Setting a coding profile to invalid status makes it unavailable to the platform channels, while setting it to clear erases all the parameter values for the specified profile and makes it unavailable.

Parameter(s): [valid|invalid|clear]

Example: set coding 0 invalid

1.59. set coding clearall

Definition: This command is used to clear all the coding profiles in the RAM storage of the platform, but does not erase the contents of the Flash memory.

Parameter(s): None

Example: set coding clearall

1.60. set coding [prof_id] sid_retx_rate

Definition: This command specifies the retransmission rate of SID packets.

Note: This parameter should be set only for AAL2 encapsulation; disable it for other encapsulation types.

Parameter(s): <value in msec (0=disable)>

Example: set coding 0 sid_retx_rate 0

1.61. set coding [prof_id] aal2_pob_starve_timeout

Definition: This command defines the for playout buffer starvation event timer.

Parameter(s): <val in ms (0=disable)>

Example: set coding 0 aal2_pob_starve_timeout 0

1.62. set coding [prof_id] rtp_digit_payload

Definition: This command sets the payload type for DTMF digits and specifies whether the payload is transmitted or received.

Parameter(s): [tx | rx] <payload>

Example: set coding 0 rtp_digit_payload 0

1.63. set coding [prof_id] rtp_digit_repetitions

Definition: This command sets the number of times the DTMF digits will be repeated.

Parameter(s): <repetitions 0-3>

Example: set coding 0 rtp_digit_repetitions 2

1.64. set coding [prof_id] rtp_tx_ssrc

Definition: This command sets the transmit Synchronization Source (SSRC).

Parameter(s): SSRC Value

1.65. set coding [prof_id] rtp_rx_ssrc

Definition: This command sets the receive SSRC.

Parameter(s): SSRC Value

1.66. set coding [prof_id] rtp_tx_ts

Definition: This command sets transmit timestamp.

Parameter(s): Timestamp Value

1.67. set coding [prof_id] rtp_rx_ts

Definition: This command sets the receive timestamp.

Parameter(s): Timestamp Value

2. set h323

2.1. set h323 display_name

Definition: This command is used to set the display name information that is carried in the H.323 setup messages. The display_name string is inserted into the Q.931 display information field and in the sourceAddress field (as an H.323_ID alias address) of the H.323 setup-UUIE.

Parameter(s): [display_name]

Range: Any string up to 64 bytes. If the command is entered with multiple words, the words are put into the display string separated by a space.

Example: set h323 display_name DLink VoIP Gateway

2.2. set h323 h323_ID

Definition: This command is used to set the H323 ID information that is carried in the H.323 Q.931 SETUP messages.

Parameter(s): [h323_ID]

Range: Any string up to 128 bytes. If the command is entered with multiple words, the words are put into the display string separated by a space.

Example: `set h323 h323_ID DLink VoIP gateway`

2.3. set h323 h245_term_type

Definition: This command is used to set the H.245 terminal type. The terminal type is used as part of the master/slave determination process of H.245. The “master” side of the call is responsible for resolving conflicts when conflicting conditions occur. For example, both sides simultaneously requesting logical channels been opened.

Parameter(s): [numeric_value]

Example: `set h323 h245_term_type 60`

2.4. set h323 endpoint_reg_type

Definition: This command is used to set the endpoint registration type. This should not be confused with the H.245 terminal type, although the two parameters should be programmed consistently. This parameter specifies how the endpoint will register itself with the gatekeeper, and has nothing to do with master/slave determination.

Parameter(s): [gw | terminal]

Range: One of `gw` or `terminal` must be selected

Example: `set h323 endpoint_reg_type gw`

Note: Under most normal circumstances, the endpoint should be registered as a Gateway (GW).

2.5. set h323 rtp_port_base

Definition: This command is used to select the starting port number for assignment of RTP and RTCP ports. When H.323 calls are made an RTP and RTCP port is opened for each call. The H.323 specification states that the RTP port number should be even in value and the RTCP port number should be one greater than the RTP port value.

Parameter(s): [port value]

Ranges: The port number can be specified as any 16-bit value. Typically, numbers from 0 to 1023 are reserved on most systems. The recommended value is 30000.

Examples:

`set h323 rtp_port_base 30000`

2.6. set h323 rtp_tos

Definition: This command is used to set type of service value in IP header for RTP packets

Parameter(s): [on | off]

Example: set h323 rtp_tos 176

2.7. set h323 ras_tos

Definition: This command is used to set type of service value in IP header for RAS packets

Parameter(s): [on | off]

Example: set h323 ras_tos 4

2.8. set h323 h225h245_tos

Definition: This command is used to set type of service value in IP header for H.225 and H.245 packets

Parameter(s): [on | off]

Example: set h323 h225h245_tos 0

2.9. set h323 fast_start

Definition: This command is used to select the H.323 Fast Start mode

Parameter(s): [on | off]

Example: set h323 fast_start on

2.10. set h323 t38

Definition: This command select the way of fax transmission. rtp_on is for T.38 fax encapsulated by RTP , off is for G.711 fax encapsulated by UDP

Parameter(s): [rtp_on | off]

Example: set h323 t38 rtp_on

2.11. set h323 auto_answer

Definition: This command enables or disables early call connection. If disabled, the call is not connected until the called user initiates the connection. For example, offhook the phone.

Parameter(s): [on | off]

Example: set h323 auto_answer on

2.12. set h323 gk_mode

Definition: This command is used to control gatekeeper operation.

Parameter(s): [off | manual | auto]

Ranges: off disables gatekeeper operation.

manual enables gatekeeper operation in manual mode.

auto enables auto-discovery of the gatekeeper..

Examples: `set h323 gk_mode off`

2.13. set h323 gk_addr

Definition: This command is used to specify the address of the gatekeeper when configured for manual mode. Only the IP address needs to be specified, as port 1719 is used.

Parameter(s): [X.X.X.X]

Range: Any valid IP address may be entered, in dotted notation.

Example: `set h323 gk_addr 192.168.5.231`

2.14. set h323 gk_identifier

Definition: This command is used to set the gatekeeper identifier information that is carried in the H.323 RAS messages.

Parameter(s): [gk_identifier]

Range: Any string up to 128 bytes. If the command is entered with multiple words, the words are put into the display string separated by a space.

Example: `set h323 gk_identifier DLink Gatekeeper`

2.15. set h323 keepalive_to_gk

Definition: This command is used to send keepalive message in RRQ packet to gatekeeper voluntary.

Parameter(s): [on | off]

Examples: `set h323 keepalive_to_gk off`

2.16. set h323 keepalive_interval

Definition: This command is used to set the keepalive interval.

Parameters: [numeric value in second]

Example: `set h323 keepalive_interval 120`

2.17. set h323 gk_max_tries

Definition: This command is used to control how many RAS message attempts will be made before the endpoint considers itself to fail.

Parameters: [numeric value]

Example: `set h323 gk_max_tries 2`

2.18. set h323 gk_rsp_timeout

Definition: This command is used to set the RAS packet response time. When RAS request send out to gatekeeper, it expect to get the RAS response from gatekeeper. If the response time longer than gk_rsp_timeout, the endpoint will re-send this RAS request. If more than

gk_max_tries times, gatekeeper is considered as lost connection.

Parameters: [numeric value in msec]

Example: set h323 gk_rap_timeout 5

2.19. set h323 alias

Definition: This command is used to create and delete aliases that are registered with the Gatekeeper. Only E.164 aliases may be registered.

Parameter(s): [add <alias> | delete <alias> | delete all]

Examples: set h323 alias add 5551212

set h323 alias delete 5551212

set h323 alias delete all

3. SHOW

3.1. show version

Definition: Displays information that identifies the code version, build characteristics, and aspects of the DSP configuration.

ggdbg>show version

PROM Version Label: 0.00-B12

TSG Version: V1.0 H.323 VoIP Gateway

CM Version Label: 0.00-B23

TBD-TBD, H323 Build, 100 Ticks/Sec Clock

2 Voice TCIDS, 0 Data TCIDS

System has FLASH

TIU Continuous Polling (1)

DSP Configuration:

DSPs = 1

Channels per DSP = 2

HPI Mapping = 2 (FIFO)

Clock Mult = 4

Fsx Fsr = 2

Pwr Dn Tmr Period = 5000

Wake Up Int Mask = 0

HW Comanding = 1

Serial Port Config = 0

Sync Int Config = 1

Clock Out Config = 1

Hint Control = 0x0

BDX Delay Control = 0

HW Gain Control = 0
PktIsr TS Offset = 0
Sample Freq (IPP) = 0
Serial Port Type = 1
Analog Codec Type = 0
Hpi Fifo Size = 894

3.2. show coding

Definition: The coding profile is used to store voice/Fax/modem/data coding information about a TCID.

If **show coding** is entered alone, all available profiles will be shown. If a number is specified, only that profile will be shown.

Example:

```
ggdbg>show coding 1
```

Configuration for coding profile id 1:

```
Tx Coding = G.711 MU  
Rx Coding = G.711 MU  
Coding profile for voice  
  
Tx VIF size = 1280 (bits)  
Rx VIF size = 1280 (bits)  
VAD = Disabled  
VAD threshold = Adaptive VAD  
Playout nominal delay = 60 (msec)  
Playout maximum delay = 120 (msec)  
Playout minimum delay = 0 (msec)  
Adaptive Playout = Adjust immediately  
Rate = 14400  
DTMF Relay = out-of-band:report to host, don't pass as voice  
Tone detect = Enabled  
Call Progress Tone detect = Disabled  
V.18 Tone detect = Disabled  
SS7 COT Tone detect = Disabled  
SF Sig Tone detect = Disabled  
EC = Enabled  
EC NL = Enabled  
EC NL Sens = 327
```

```
EC Tail = 8 (msec)
EC Refresh = Update
EC Coeffs = Normal
EC Auto Update = Disabled
EC Auto Search = Disabled
EC Search Freeze = Disabled
Modem TX level = 0 (dB)
Modem CD threshold = 0
Modem no activity timeout = 0 (sec)
```

```
Caller ID Support = Enabled
```

```
Resampling          = Disabled
EC Config           = NLP_FIXED
NLP Confort Noise   = 65486
```

```
SID Retx Rate       = 0
```

```
Encapsulation = RTP
Tx ssrc = 0
Tx start timestamp = 0
Rx ssrc = 0
Rx start timestamp = 0
Tx digit payload = 0
Rx digit payload = 0
Digit repetitions = 3
Secondary Decoder = Disabled
```

3.3. show tcid [tcid]

Definition: Displays the current settings for channel configuration, dial out parameters, dial in parameters, call timing parameters, and telephony signaling parameters. The example has preferred Coding Profiles selected for voice and Fax.

Parameter(s): [tcid]

Range: 0 (channels-1) , 1(channes-2) or blank (for all tcids)

Example:

```
ggdbg>show tcid 0
```

```
Configuration for TCID 0:
```

Mode: Switched CAS

Pref Voice coding profile: 4

Pref Fax coding profile: 6

Pref Modem coding profile: 0

Pref Data coding profile: 0

Allowed Coding Prof Ids\Call Caps: (x - y means x to y both inclusive)

Coding prof: 0-127. Call cap: 0- 63.

Telephony Interface Configuration:

Companding = Mu-Law

Gain (RX,TX) = (-2,-4)

Idle noise level = -6500 x .01 dB

Call Progress Tone Detection Control = Always off

Call Progress Tone Detection Configuration = Default

Signaling Protocol: FXS Loop Start

FXS Loop Start Parameters:

Offhook Debounce: 50 msec

Onhook Debounce: 50 msec

Seize Detect: 100 msec

Originator Clear Detect: 450 msec

Answering Party Clear Detect: 150 msec

CPC Wait: 200 msec

CPC Duration: 850 msec

Ring Id: Default (-1)

Caller Id Generation: ON

Dial Out Parameters:

Out Wait: 250 msec

Out Type: tone

Tone Out Off Time: 100 msec

Tone Out On Time: 100 msec

Tone Out Power: -130 x 0.1 dB (not configurable)

Dial In Parameters:

Plar addr: None

Call Timing Parameters:

Call Limit: forever
Answer Wait: forever
Hangup Wait: forever
Fax Holdover: 2000 msec

Echo Cancellation Parameters:

Mode: LINE
Output: HANDS FREE

V.18A Tone Detect Parameters:

Hangover: 0
Threshold: 0
Fraction: 0

SS7 COT Tone Detect Parameters:

Hangover: 0
Threshold: 0
Fraction: 0

Single Frequency Signaling Tone Detect Parameters:

Hangover: 0
Threshold: 0
Fraction: 0

Tone Table:

Default

Caller ID Parameters:

Caller ID Number: 2001
Caller ID Name: tcid0

Prefer Codec:

g723_63

3.4. show tlevels [tcid]

Definition: Displays the current and mean transmit and receive levels at the PCM interface of the DSP.

“rx” means received from the telephony interface, and “tx” means transmitted to that interface.

Current levels are given in 0.1 dBm0 units. Mean values are in 0.1 linear PCM units.

Example:

```
ggdbg>show tlevels 1
ggdbg>000030610 NMM: 1, Tele Levels Received
000030610 rx_level = -410
000030610 tx_level = -500
000030610 rx_mean = -60
000030610 tx_mean = 0
000030610 bkg noise= 0
```

3.5. SHOW TSTAT [TCID]

Definition: Displays telephony channel statistics, cumulative since the telephone interface was brought into service.

Example:

```
ggdbg>show tstat 1
000244301 NMM: 1, Tele Stats
000244301 num_offhooks = 5
000244301 num_onhooks = 4
000244301 num_seizures = 4
000244301 num_tone_digits = 20
000244301 num_pulse_digits = 0
```

3.6. show vpstat [tcid]

Definition: Displays the DSP voice playout statistics for a channel, cumulative for the current call.

Example:

```
ggdbg>show vpstat 1
ggdbg>000043786 NMM: 1, Voice Playout Stats
000043786 Avg Playout Delay = 80 (ms)
000043786 Lost Segments = 0
000043786 Replayed Segments = 0
000043786 Idle Segments = 64
000043786 FIFO Dropped Segments = 0
000043786 Rx Segments = 18170
000043786 Rx Avg Frame Jitter = 0 (ms)
```

```
000043786 Adptv Buf Del Inc Cnt = 0
000043786 Adptv Buf Del Dec Cnt = 5
000043786 PO Buf Underflow Cnt = 0
000043786 Cell Starve Ev Cnt = 0
```

3.7. show rxtxstat [tcid]

Definition: Displays the DSP receive and transmit statistics for a channel, cumulative for the current call.

Example:

```
ggdbg>show rxtxstat 1
ggdbg>000063394 NMM: 1, RXTX Stats
000063394 Rx Voice Packets = 18890
000063394 Tx Voice Packets = 19122
000063394 Tx Silence Suppressed Frames = 0
000063394 Rx Min Jitter = 10 (ms)
000063394 Rx Max Jitter = 30 (ms)
000063394 Rx RTP Avg Jitter = 0 (pcm samples)
000063394 Tx Grant Sync Dropped Frames = 0
000063394 Tx Octets = 3059520
000063394 Rx Octets = 3022400
000063394 AAL2 Coding Profile Changes = 0
000063394 DTMF Tx Packets = 0
000063394 DTMF Rx Packets = 0
000063394 SID Rx Packets = 0
000063394 SID Tx Packets = 0
000063394 TX Last Timestamp = 3059360
000063394 TX Exended Sequence number = 0
000063394 TX Last Sequence Number = 19121
000063394 TX Last Packet Type = 0
000063394 RX Last Timestamp = 3035200
000063394 RX Last SSRC = 634f
000063394 RX Extended Sequence number = 0
000063394 RX Last Sequence Number = 18970
000063394 RX Last Packet Type = 0
000063394 Packets lost by Net = 0
000063394 Packets out of order = 0
000063394 Packets received late = 0
000063394 Packets received early = 0
```

3.8. show errstat [tcid]

Definition: Displays the DSP error statistics for a channel, cumulative for the current call.

Example:

```
ggdbg>show errstat 1
ggdbg>000068257 NMM: 1, Voice Error Stats
000068257 Invalid Header Count = 0
000068257 Micro Overflow Count = 0
000068257 Lost Enh. Packets = 0
000068257 Missing Core Packets = 0
000068257 Pkts Lost by Network = 0
000068257 RC4 Lost While Update= 0
000068257 MMH MAC Failed On Pkt= 0
000068257 Invalid SSRC Seen = 0
000068257 Invalid Payload Seen = 0
```

3.9. show faxstat [tcid]

Definition: Displays the DSP Fax statistics for a channel, cumulative for the current call.

Example:

```
000026993 NMM: 0, Fax Stats
000026993 Tx Packets = 5675
000026994 Rx Packets = 272
000026994 Lost Packets = 65536
000026994 Dropped Packets = 2751
000026994 Rx Out of Seq pkts = 0
000026994 debug1 = 2
000026994 debug2 = 1
000026994 debug3 = 0
000026994 debug4 = 0
000026994 Dropped Tx Pkts = 34729
```

3.10. show fax_call_stat [tcid]

Definition: Displays the DSP Fax statistics for the current call.

Example:

```
ggdbg>show fax_call_stat 0
000034208 NMM: 0, Fax Call Stats
000034208 Modulation = 4 (V.29 9600 bps)
000034208 Page_cnt = 1
```

```
000034208 debug1 = 2
000034208 debug2 = 1
000034208 debug3 = 5
000034208 debug4 = 0
000034208 debug5 = 0
000034208 Ecm Used = False
000034208 Fax Dir = Orig
000034208 NSF Country= 0 (Hex)
000034208 NSF Vendor = 0 (Hex)
```

3.11. show_call_record [tcid]

Definition: Show the current or most recent Call Record values for the TCID.

Example:

```
ggdbg>show call_record 1
000086465 NMM: 1, Call Record received '', DSP 0:1
000086465 Originated: remote
000086465 Call state: CONNECTED
000086465 Seized ts = 251490 msec (since system startup)
000086465 Connected ts = 3700 msec (since line seizure)
000086466 Call duration = 613160 msec (since line seizure)
000086466 = 609460 msec (since connected ts)
000086466 Neg. coding = 1, ts = 30 msec (since line seizure)
```

3.12. show_ec_debug_stat [tcid]

Definition: Shows the current Debug Statistics for the Echo Canceller.

Example:

```
ggdbg>show ec_debug_stat 1
ggdbg>000093960 NMM: 1, Echo Canceller Debug Stats
000093960 Px Level = 0
000093960 Py Level = 165019648
000093960 Pe Level = 780140544
000093960 ecu_state = 4260223
000093960 Attempt Update Cnt = 26479
000093960 Attempt_search = 26479
000093960 ERLE Bypass Cnt = 0
000093960 XTONE Count = 0
000093960 Other Bypass Cnt = 160
```



```

000093960  Xidle Count                = 252
000093960  Estimated ERL in Q4         = 11176
000093960  Divergence Cnt              = 0
000093960  Search Divergence Cnt      = 0
000093960  Fore Switch Cnt             = 0
000093960  Back Switch Cnt             = 4659
000093960  State Changes in O/L Det.   = 0
000093960  Total codec MIPS Q8         = 0
000093960  Total ECU MIPS Q8           = 65480
000093960  ECU search/update MIPS Q8   = 65515
000093960  Total echo removal MIPS Q8  = 65452
000093960  Total search func MIPS Q8   = 0
000093960  BG update func MIPS Q8      = 0
000093960  Num of active search func   = 46
000093960  Num of active update func   = 20544

```

3.13. show ecpath_coeff [tcid]

Definition: Requests the echo canceller coefficients for foreground or background filters from the DSP.

Because of buffer limitations, the command must be issued more than once, as shown in the examples,

and the results combined, to get the final result. Each coefficient is a signed 16-bit value.

Field(s) / Option(s): <tcid> <filter> <start_idx> <num_coefs>

<tcid>: TCID whose echo canceller coefficients are to be obtained

□ <filter>: 0=foreground filter, 1=background filter

□ <start_idx>: must be in [0,N-1] range where N is filter length

□ <num_coefs>: number of coefficients to transfer. Must be in the range [1, min (N,L)], where N is the filter length and L is the maximum number of coefficients that can fit in a message buffer [L=59]

Examples:

1. For an 8ms echo canceller tail (64 coefficients):

```
ggdbg> ecpath_coeff 1 0 0 59 (yields coefficients 1 -59)
```

```
ggdbg> ecpath_coeff 1 0 59 5 (yields coefficients 60-64)
```

Example:

Note: For brevity, this example is limited to four.

```
ggdbg>show ecpath_coeff 1 0 59 5
```

```
ggdbg>Tsg 1: Echo Canceller coeffs
```

2755
1952
341
-788
-419

3.14. show dsp_version [dsp]

Definition: Displays the character string that identifies the version of the DSP software.

Parameter(s): [dsp]

Range: 0 (presently only works if 0 is entered)

Example:

```
ggdbg>show dsp_version 0
DSP Version: Cap 0xfc0e, Rel 8.1.0.2, Build g24 , DSP C5402, Platform
VPBX/GG6E,
  Cap2 0x26fa, Cap3 0x4000, Chans 2, EC tail len 64, PCM chans 0
```

3.15. show h323

Definition: Displays the current H.323 configuration. Depending on whether the Gatekeeper mode (h323 gk_mode) is off or on, the display will show the short version of the report (minus Gatekeeper information), or the long version (with Gatekeeper information).

Example:

```
ggdbg>show h323
h323 display_name      = 'DG-102SH'
h323 h323_ID          = 'DEFAULT_H323_ID'
h323 h245_term_type   = 60
h323 rtp_port_base    = 30000
h323 rtp_tos          = 176
h323 ras_tos          = 4
h323 h225h245_tos     = 0
h323 fast_start       = on
h323 t38              = off
h323 auto_answer      = off . The user picks up the phone to answer.
h323 gk_mode          = off
```

Example:

```
ggdbg>show h323
h323 display_name      = 'DG-102SH'
h323 h323_ID          = 'DEFAULT_H323_ID'
h323 h245_term_type   = 60
```

```
h323 endpoint_reg_type = gw
h323 rtp_port_base     = 30000
h323 rtp_tos           = 176
h323 ras_tos           = 4
h323 h225h245_tos     = 0
h323 fast_start       = on
h323 t38               = off
h323 auto_answer      = off . The user picks up the phone to answer.
h323 gk_mode           = auto
h323 gk_addr           = auto
h323 gk_identifier     = ''
h323 keepalive_to_gk   = off
h323 keepalive_interval = 120
  h323 gk_max_fails     = 0
h323 gk_rsp_timeout    = 5
h323 aliases (E.164)   =
    2001
    2002
```