Cisco Analog Video Gateway Command Reference

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This chapter documents commands for the Cisco Analog Video Gateway module application and new commands for Cisco IOS:

Cisco Analog Gateway Module Commands

Whenever possible, configuration and management of the Cisco Analog Video Gateway module should be configured using the Video Surveillance Operations Manager (VSOM) graphical user interface. The following lists the command-line interface commands.

- **alarm-monitor destination-profile**
- **alarm-monitor monitor-profile**
- **alarm-monitor notifier-profile**
- **contactclosure-port**
- **rs485-port**
- **show alarm-monitor destination-profile**
- **show alarm-monitor monitor-profile**
- **show alarm-monitor notifier-profile**
- **show contactclosure-port**
- **show rs485-port**
- **show videoport-led summary**
- **show video codec-profile**
- **show video dsp**
- **show video motion-detection**
- **show video motion-region**
- **show video port**
- **show video session**

- show video stream-profile
- show video xconn-lpbk-conn
- video codec-profile
- video motion-detection
- video motion-region
- video port
- video stream-profile
- video xconn-lpbk-conn

alarm-monitor destination-profile

To configure an alarm-monitor destination profile, use the **alarm-monitor destination-profile** command in global configuration mode. To use a default alarm-monitor destination profile, use the **no** form of this command.

alarm-monitor destination-profile *tag* [**default | description | primaryURL | secondaryURL**]

no alarm-monitor destination-profile *tag*

Syntax Description

tag	Identifier for the alarm-monitor destination profile values in the range of dest000 to dest999.
default	Use the default values for the alarm monitor destination profile. Use the **no** form of this command to restore the default alarm-monitor destination profile values.
description	Description for the alarm monitor destination profile. Text with up to 80 string characters within quotation marks.
primaryurl	URL used to notify the client when the configured alarm event is detected. (For example “http://www.somewhere.com/cgi-bin/grabAlarm”)
secondaryurl	Backup URL used to notify the client when the configured alarm event is detected. (For example, “http://nowhere.com/cgi-bin/captureAlarm”)

Command Default

No alarm monitor destination profile is configured.

Command Modes

Global configuration

Command History

version	Modification
1.0	This command was introduced.

Usage Guidelines

Alarm monitor profiles should be configured in the following order (see Figure 3 on page 53):

1. Destination profile
2. Monitor profile
3. Notifier profile

Examples

The following example shows an alarm-monitor destination-profile configuration:

```
vse-module> show alarm-monitor destination-profile dest111

description "sample destination profile"
primaryURL "http://www.somewhere.com/cgi-bin/grabAlarm"
secondaryURL "http://nowhere.com/cgi-bin/captureAlarm"
end destination-profile
```

Related Commands

Command	Description
show alarm-monitor destination-profile	Displays alarm-monitor destination-profile configuration parameters.

alarm-monitor monitor-profile

To configure an alarm-monitor monitor profile, use the **alarm-monitor monitor-profile** command in global configuration mode. To remove an alarm-monitor monitor profile, use the **no** form of this command.

alarm-monitor monitor-profile *tag* [**default** | **description** | **event** | **sourceTrigger** | **state**]

no alarm-monitor monitor-profile *tag*

Syntax Description

tag	Identifier for the alarm-monitor monitor-profile values in the range of mon000 to mon999.
default	Uses the default values for the alarm-monitor monitor profile. Use the **no** form of this command to restore the default alarm-monitor monitor-profile values.
description	Description for the alarm-monitor monitor profile. Text with up to 80 string characters within quotation marks.
event	Event to monitor. • **ccporrt-any-state-change**: Any change in the state of the contact-closure port. • **ccport-close-to-open**: Contact-closure state changes from closed to open. • **ccport-open-to-close**: Contact-closure state changes from open to closed. • **system-reload**: System reload. • **video-motion-detection**: Configured video motion detected. • **video-signal-change**: Monitor any change in the video port signal (loss or detect) that is configured by the **sourceTrigger** keyword. • **video-signal-detect**: Monitor valid signal detected on the video port that is configured by the **sourceTrigger** keyword. • **vport-signal-loss**: Signal loss on the video port that is configured using the **sourceTrigger** keyword. • **vport-state-change**: Any state change on the video port that is configured using the **sourceTrigger** keyword.
sourceTrigger	String value to define the trigger event source to monitor. • vp-any: Event on any video port. • vp0 to vp15 for a video port event. • cc0 to cc7 for a contact-closure port event. • stream000 to stream999 for video motion detected (see Figure 4 on page 70).
state	Operational state of the alarm-monitor monitor profile: enabled or disabled. Default: enabled.

Command Modes

Global configuration

Command History

Version	Modification
1.0	This command was introduced.

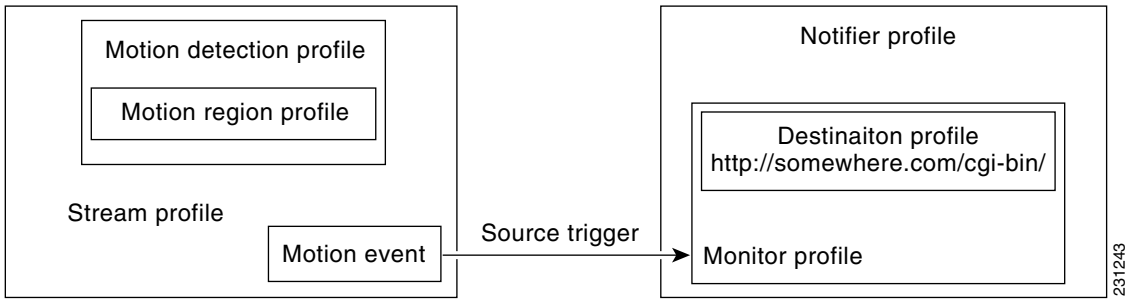
Usage Guidelines

Alarm monitor profiles should be configured in the following order (see Figure 3 on page 53):

1. destination profile
2. monitor profile
3. notifier profile

Figure 4 shows how a motion detection event source triggers the video stream.

Figure 4 Source Trigger Motion Detection Triggers Video Stream



Examples

The following example shows an alarm-monitor monitor-profile configuration:

```
vse-module> show alarm-monitor monitor-profile mon000
description "alarm monitor profile mon000"
state enabled
event ccport-any-state-change
sourceTrigger -
```

Related Commands

Command	Description
show alarm-monitor monitor-profile	Displays alarm-monitor monitor-profile configuration parameters.

alarm-monitor notifier-profile

To configure an alarm-monitor notifier profile, use the **alarm-monitor notifier-profile** command in global configuration mode. To remove an alarm-monitor notifier profile, use the **no** form of this command.

alarm-monitor notifier-profile *tag* [**default | description | destinationprofiletag | monitorprofiletag | state**]

no alarm-monitor notifier-profile *tag*

Syntax Description

tag	Identifier for the alarm-monitor notifier profile. Values are in the range of not000 to not999.
default	Use the default settings for the notifier profile. Use the **no** form of this command to restore the default alarm-monitor notifier profile values.
description	Description for the alarm-monitor notifier profile. Text with up to 80 string characters within quotation marks.
destinationprofiletag	Unique identifier for the destination profile to use with this notifier profile. String value in the range of dest000 to dest999.
monitorprofiletag	Unique identifier for the monitor profile to use with this notifier profile. String in the range of mon000 to mon999.
state	Operational state of the notifier profile: enabled or disabled. Default: enabled.

Command Default

No alarm monitor notifier profile is configured.

Command Modes

Global configuration

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

You must configure a destination and monitor profiles first. Alarm monitor profiles should be configured in the following order:

1. Destination profiles
2. Monitor profiles
3. Notifier profiles

Examples

The following example shows an alarm-monitor notifier-profile configuration:

```
vse-module> show alarm-monitor notifier-profile not000
description "alarm notifier profile not000"
```

```
state enabled
monitorProfileTag mon000
destinationProfileTag dest000
```

Related Commands

Command	Description
show alarm-monitor notifier-profile	Displays alarm-monitor notifier-profile configuration parameters.

contactclosure-port

To configure a contact closure port, use the **contactclosure-port** command in global configuration mode. To restore the default values on the contact closure port, use the **no** form of this command.

contactclosure-port *portnum* [**default | description | direction | relaystate | state**]

Syntax Description

portnum	Port number of contact closure ports in the integer value range of 0 to 7.
default	Use the default values for the contact closure port. Use the **no** form of this command to restore the default contact closure values.
description	Description of the contact closure port. Text with up to 80 string characters within quotation marks.
direction	Direction of the contact closure port: • in: input direction • out: output direction Default: in.
relaystate	Relay state of the contact closure port: open or close. Default: close.
state	Operational state of the contact closure port: enabled or disabled. Default: enabled.

Command Default

The contact closure ports retain their default configurations.

Command Modes

Global configuration

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

Each module has eight contact closure interfaces. The first four contact closure interfaces can be configured as alarm inputs or relay outputs. The other interfaces can be configured only as inputs. The contact closure inputs are used to detect contact trigger events and the outputs are used to control external devices.

Examples

The following example shows a contact closure port configuration:

```
vse-module> show contactclosure-port 0
description ""
state enabled
direction in
relayState close
```

Related Commands

Command	Description
show contactclosure-port	Displays contact closure port configuration parameters.

rs485-port

To enter RS-485-port configuration mode to set pan, tilt, and zoom camera control, use the **rs485-port** command in global configuration mode. To restore the default values of the RS-485 port configuration, use the **no** form of this command.

rs485-port *portnum* [**baudrate | databits | default | description | parity | state | stopbits | termination-state**]

Syntax Description

portnum	RS-485 port number: 0 or 1.
baudrate	Baud rate for the RS-485 port. Set to integer value 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, or 115200. Default: 9600.
databits	Data bits for the RS-485 port. Set to integer values 5, 6, 7, or 8. Default: 8.
default	Use the default values for the RS-485 port. Use the **no** form of this command to restore the default RS-485 port values.
description	Description of the RS-485 port. Text with up to 80 string characters within quotation marks.
parity	Parity for RS-485 port. Values are even, mark, none, odd, and space. Default: none.
state	Operational state of RS-485 port: enabled or disabled. Default: enabled.
stopbits	Stop bits for RS-485 port. Set stop bit value to: 1, 1.5, or 2. Use 1.5 for data bit 5, and 2 for data bits 6, 7, or 8. Default: 1.
termination-state	Termination resistor state for RS-485 port. Values are open and connected. Default: open.

Command Default

No RS-485 port is configured.

Command Modes

Global configuration

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

Observe the following guidelines:

- **stopbit** 1.5 applies only to **databit** 5.
- **stopbit** 2 applies only to **databit** 6, 7, or 8.

Use the **end** keyword to reprogram the serial port after a parameter (**baud rate, databit, stop bit, or parity**) has been changed.

Examples

The following example shows the configuration for an RS-485 port:

```
vse-module> show rs485-port 0

baudrate 19200
databits 7
description "sample rs485-port"
parity mark
state disabled
stopbits 2
termination-state connected
end rs485-port
```

Related Commands

Command	Description
show rs485-port	Shows the current configuration of the RS-485 port.

show alarm-monitor destination-profile

To display configuration parameters for alarm-monitor destination profiles, use the **show alarm-monitor destination-profile** command in user EXEC configuration mode.

show alarm-monitor destination-profile {*tag* | **summary**}

Syntax Description

tag	Identifier for the alarm-monitor destination profile values in the range of dest000 to dest999.
summary	Displays all configured alarm-monitor destination profiles.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

You can display a specified destination profile or a summary of all configured destination profiles.

Note The primary URLs and secondary URLs can carry messages, such as the identity of the source port.

Examples

The following example shows a specific alarm-monitor destination profile:

```
vse-module> show alarm-monitor destination-profile dest111
description "Capture Alarms Message"
primaryURL "http://www.somewhere.com/cgi-bin/grabAlarm"
secondaryURL "http://nowhere.com/cgi-bin/captureAlarm"
```

The following example shows all configured alarm-monitor destination profiles:

```
vse-module> show alarm-monitor destination-profile summary
tag      URL          address
================================================
dest111  primaryURL   http://www.somewhere.com/cgi-bin/grabAlarm
         secondaryURL http://nowhere.com/cgi-bin/captureAlarm
```

Table 8 describes the significant fields in the example.

Table 8 show alarm-monitor destination-profile Field Descriptions

Field	Description
description	Description of the alarm monitor. Text with up to 80 string characters within quotation marks.
tag	Identifier for the monitor profile value in the range of dest000 to dest999.

Table 8 show alarm-monitor destination-profile Field Descriptions (continued)

Field	Description
primaryURL SecondaryURL URL	URLs to receive notification when the configured alarm event is detected: • primaryURL: Primary URL to receive notification. • secondaryURL: Backup URL to receive notification.
address	Address of the primary and secondary URLs.

Related Commands

Command	Description
alarm-monitor destination-profile	Configures an alarm-monitor destination profile.

show alarm-monitor monitor-profile

To display configuration parameters for alarm-monitor monitor profiles, use the **show alarm-monitor monitor-profile** command in user EXEC configuration mode.

show alarm-monitor monitor-profile {*tag* | **summary**}

Syntax Description

tag	Identifier for the alarm-monitor monitor profile values in the range of mon000 to mon999.
summary	Displays all configured alarm-monitor monitor profiles.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

You can display a specified monitor profile or a summary of all configured monitor profiles.

Examples

The following example shows the alarm-monitor monitor profile for a specific monitor profile:

```
vse-module> show alarm-monitor monitor-profile mon017
description "sample monitor profile"
state enabled
event vport-state-change
sourceTrigger vp1
```

The following example shows all configured alarm-monitor monitor profiles:

```
vse-module> show alarm-monitor monitor-profile summary
tag      state  sourceTrigger    event
=======================================================
mon000   ena    -                video-motion-detection
mon001   ena    cc0              ccport-open-to-close
mon002   ena    -                video-motion-detection
mon017   ena    vp1              vport-state-change
```

Table 9 describes the significant fields in the example.

Table 9 show alarm-monitor monitor-profile Field Descriptions

Field	Description
tag	Identifier for the monitor profile in the range of mon000 to mon999.
state	Operational state of the monitor profile: enabled or disabled.

Table 9 show alarm-monitor monitor-profile Field Descriptions (continued)

Field	Description
sourceTrigger	Source that triggers the event being monitored: • vp0 to vp15 for a video port event. • cc0 to cc7 for a contact-closure port event. • stream000 to stream999 for video motion detected.
event	Type of event to monitor: • **ccporrt-any-state-change**: Any change in the state of the contact closure port. • **ccport-close-to-open**: Contact closure state changes from closed to open. • **ccport-open-to-close**: Contact closure state changes from open to closed. • **system-reload**: System reload. • **video-motion-detection**: Configured video motion detected. • **vport-signal-loss**: Signal loss on the video port that is configured using the **sourceTrigger** keyword. • **vport-state-change**: Any state change on the video port that is configured using the **sourceTrigger** keyword.

Related Commands

Command	Description
alarm-monitor monitor-profile	Configures an alarm-monitor monitor profile.

show alarm-monitor notifier-profile

To display configuration parameters for alarm monitor notifier profiles, use the **show alarm-monitor notifier-profile** command in user EXEC configuration mode.

show alarm-monitor notifier-profile {*tag* | **summary**}

Syntax Description

tag	Identifier for the alarm-monitor notifier profile. Values are in the range of not000 to not999.
summary	Displays all configured alarm-monitor notifier profiles.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

You must first configure an alarm-monitor destination profile and an alarm-monitor monitor profile before you can associate them with the notifier profile.

You can display a specified notifier profile or a summary of all configured notifier profiles.

Examples

The following example shows the alarm-monitor notifier profile for a specific monitor profile:

```
vse-module> show alarm-monitor notifier-profile not111
description "sample notifier profile"
state disabled
monitorProfileTag mon111
destinationProfileTag dest111
```

The following example shows all configured alarm-monitor notifier profiles:

```
vse-module> show alarm-monitor notifier-profile summary
tag     state   destinationProfileTag   monitorProfileTag
============================================================
not000    ena
not111    dis       dest111                mon111
```

Table 10 describes the significant fields in the example.

Table 10 show alarm-monitor notifier-profile Field Descriptions

Field	Description
tag	Identifier for the alarm monitor notifier profile values in the range of not000 to not999.
state	Operational state of the notifier profile: enabled or disabled.

Table 10 show alarm-monitor notifier-profile Field Descriptions (continued)

Field	Description
destinationProfileTag	Destination profile to associate with the notifier profile. Values in the range of dest000 to dest999.
monitorProfileTag	Monitor profile to associate with the notifier profile. Values in the range of mon000 to mon999.

Related Commands

Command	Description
alarm-monitor notifier-profile	Configures an alarm-monitor notifier profile.

show contactclosure-port

To show the configuration and status of contact closure ports, use the **show contactclosure-port** command in user EXEC mode.

show contactclosure {**portnum** | **summary** | **hw-state**}

Syntax Description

portnum	Port number of contact closure port integer values in the range of 0 to 7.
summary	Displays all configured contact closure ports.
hw-state	Displays all contact closure port hardware states.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

To display the configuration for:

- A specific contact closure port, enter the port number.
- All contact closure ports, use the **summary** keyword.

To list the state (open or close) of all contact closure ports, use the **hw-state** keyword. For example, **show contactclosure hw-state**.

Examples

The following example shows the configuration for a specific contact closure port:

```
vse-module> show contactclosure 0
description ""
state disabled
direction in
relayState open
```

The following example shows the configuration for all configure contact closure ports:

```
vse-module> show contactclosure-port summary
port   state  direction   relayState
====================================
  0     dis     in          open
  1     dis     in          open
  2     dis     in          open
  3     dis     in          open
  4     dis     in          open
  5     dis     in          open
  6     dis     in          open
  7     dis     in          open
```

The following example shows the hardware state for all contact closure ports:

```
vse-module> show contactclosure hw-state
0: close
```

```
1: close
2: close
3: close
4: close
5: close
6: close
7: close
```

Table 11 describes the significant fields in the example.

Table 11 show contactclosure-port Field Descriptions

Field	Description
port	Port number integer value in the range of 0 to 7.
state	Operational state of the contact closure port: enabled or disabled.
direction	• in: Input direction. • out: Output direction.
relayState	Relay state: open or close.

Related Commands

Command	Description
contactclosure-port	Configures contact closure ports.

show rs485-port

To display RS-485 port configuration parameters, use the **show rs485-port** command in user EXEC mode.

show rs485-port {**portnum** | **summary**}

Syntax Description

portnum	RS-485 port number: 0 or 1.
summary	Displays configuration parameters for all RS-485 ports.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

To display the configuration for a specific RS-485 port, enter the port number. To display the configuration for all RS-485 ports, use the **summary** keyword.

Examples

The following example shows the configuration for the specific RS-485 port 0:

```
vse-module> show rs485-port 0
description "sample rs485 port 0"
state enabled
baudrate 19200
databits 7
stopbits 2
parity odd
termination-state connected
```

The following example shows the configuration for the specific RS-485 port 1:

```
vse-module> show rs485-port 1
description ""
state enabled
baudrate 9600
databits 8
stopbits 1
parity none
termination-state open
```

The following example shows all configured RS-485 ports:

```
vse-module> show rs485-port summary
port   state  baudrate  databits  stopbits  parity  termState
=============================================================
  0     ena     19200        7         2       odd       connected
  1     ena     9600         8         1       none      open
```

Table 12 describes the significant fields in the example.

Table 12 show rs485-port Field Descriptions

Field	Description
port	RS-485 port number: 0 or 1.
state	Operational state of RS-485 port: enabled or disabled.
baudrate	Baud rate of the RS-485 port.
databits	Data bits of the RS-485 port.
stopbits	Stop bits of the RS-485 port.
parity	Parity of the RS-485 port.
termState	Termination resistor state of the RS-485 port.

Related Commands

Command	Description
rs485-port	Configures an RS-485 port.

show videoport-led summary

To display the status summary of the video port LEDs on the Cisco Analog Video Gateway module, use the **show videoport-led** command in user EXEC mode.

show videoport-led summary

Syntax Description

summary	Displays a summary of all configured video port LED states.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

Table 13 defines the video port LED states for video ports 0 to 15.

Table 13 Video Port LED States

Port	Status	Description
Video Ports 0 to 15	Dual color: Amber Green	Video port 0 LED status indicator: Off: Video port is idle. Amber: Video port is initializing. Green: Video port is up; video input is detected or video output is active.

Examples

The following example shows the states of the video port LEDs.

```
vse-module> show videoPortLed summary
PortNum          Status
======================
0                AMBER
1                GREEN
2                OFF
3                OFF
4                OFF
5                OFF
6                OFF
7                OFF
8                OFF
9                OFF
10               OFF
11               OFF
12               OFF
13               OFF
14               OFF
15               OFF
```

Related Commands

Command	Description
video port	Configures a video port profile.

show video codec-profile

To display video codec profile configuration parameters, use the **show video codec-profile** command in user EXEC mode.

show video codec-profile {*tag* | **dynamically-generated summary** | **user-configured summary**}

Syntax Description

tag	Identifier for the codec profile value in the range of codec000 to codec999.
dynamically-generated summary	Displays configuration summary for dynamically generated codec profiles.
user-configured summary	Displays configuration summary for all user-configured codec profiles.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.
1.1	This command was enhanced by adding selection options.

Usage Guidelines

You cannot configure or request a dynamically generated codec or stream profile. You can only view these types of profiles by using the **show video codec-profile dynamically-generated** command.

Dynamically generated codec profiles apply only to an HTTP-initiated session and cannot be saved.

Examples

The following example shows specific configuration parameters for a codec001 profile:

```
vse-module> show video codec-profile codec001
description "p_test2"
state enabled
codec mjpeg
format ntsc
frameRate 15.0
skipFactor 2
resolution 2cif
bitRate vbr
qualityFactor 70
deinterlace enabled
skipfactor 2
```

The following example shows a configuration summary for dynamically generated video codec profiles:

```
vse-module> show video codec-profile dynamically-generated summary
 tag     state codec format frameRate bitRate mxBR gopSize QF  SF  resolution deinterlace
================================================================================================
httpx    ena   mjpeg ntsc      5      vbr     384    30    70   2  cif         enabled
```

The following example shows a configuration summary for all user-configured video codec profiles:

```
vse-module> show video codec-profile user-configured summary
 tag     state codec format frameRate bitRate mxBR gopSize QF  SF  resolution deinterlace
=============================================================================================
codec000 ena   mpeg4 ntsc     30       cbr     2000   30    -    1  4cif       enabled
```

Table 14 describes the significant fields in the example.

Table 14 show video codec-profile Field Descriptions

Field	Description
tag	Identifier for the video codec profile in the range of codec000 to codec999.
state	Operational state of the codec profile: enabled or disabled.
codec	Codec type associated with the codec profile: H.264, MPEG4, or MJPEG.
format	Video format of the codec profile: NTSC or PAL.
frameRate	Frame rate of the codec profile: NTSC or PAL frame rate in fps. (See video codec-profile, page 106 for more details.)
bitRate	Bit rate of the codec profile: CBR or VBR.
mxBR	Maximum bit rate of the codec profile: 168 to 2000 KBps for codec MPEG4 and 168 to 3000 KBps for codec H.264.
gopSize	Group-of-picture size of the codec profile in the range of 0 to 600.
QF	Quality factor of the codec profile for MJPEG video codec only in the range of 0 to 100 percent.
SF	Skip factor of the codec profile in the range of 1 to 100.
resolution	Resolution of the codec profile: 4cif, 2cif, or cif.
deinterlace	Indicates whether or not deinterlace mode is enabled. This indicator is available only in 1.1 and later versions.

Related Commands

Command	Description
video codec-profile	Configures a video codec profile.

show video dsp

To display video digital signal processor (DSP) brief, detailed, internal statistics, or objects summaries, use the **show video dsp** command in user EXEC mode.

show video dsp [**detail** | **internal** | **objects**]

Syntax Description

detail	Displays video DSP status details.
internal	Displays video DSP internal statistics.
objects	Displays video DSP internal object handles.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Examples

The following example shows a brief summary of the DSP status:

```
vse-module> show video dsp
Resources used and ports in use (U) and not in use (F)
DS MEDWARE   CREDITS   BUF  PORTS  I CPU Load   Intern Mem     Extern Mem
P# VERSION CPU IMM XMM POL 2 3 4 5 S  cu/av/mx  (used/max)     (used/max)
-- ------- --- --- --- --- - - - - - --------- ----------- -----------------
 0  0.2.44  99 100 100 100 F F F F Y    1/1/57     8/16384    15320/10485760
 1  0.2.44  99 100 100 100 F F F F Y    1/1/95     8/16384    15320/10485760
 2  0.2.44  99 100 100 100 F F F F Y    1/1/56     8/16384    15320/10485760
 3  0.2.44  99 100 100 100 F F F F Y    1/1/58     8/16384    15320/10485760
```

Table 15 describes the significant fields in the example.

Table 15 show video dsp Field Descriptions

Field	Description
DSP#	Identifier for the DSP resource.
MEDWARE VERSION	MediaWare software version running in DSPs. MediaWare provides video, audio, and voice/fax/modem/text gateway processing.
CREDITS	Credit-based resource allocation: • CPU: CPU resource usage. • IMM: Internal memory resource usage. • XMM: External memory resource usage.
BUF POL	Buffer pool resource usage.

Table 15 show video dsp Field Descriptions (continued)

Field	Description
PORTS	Video port resource usage for ports 2, 3, 4, and 5. • F: Ports not in use. • U: Ports in use.
CPU Load	CPU loading: • cu: Current CPU load. • av: Average CPU load. • mx: Maximum CPU load.
Intern Mem	Internal memory resources: • used: Internal memory used, in bytes. • max: Maximum memory available, in bytes.
Extern Mem	External memory resources: • used: Internal memory used, in bytes. • max: Maximum memory available, in bytes.

Related Commands

Command	Description
video port	Configures video port profiles.

show video motion-detection

To display video motion detection configuration parameters, use the **show video motion-detection** command in user EXEC mode.

show video motion-detection {*tag* | **summary**}

Syntax Description

tag	Identifier for the video motion detection parameter. Values are in the range of md000 to md999.
summary	Displays all configured video motion detection parameters.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

You must first configure a motion region before you can associate it with a motion detection parameter.

Examples

The following example shows configuration parameters for motion detection parameter mr111:

```
mpc8349e> show video motion-detection md111
description "sample motion detection 1"
state disabled
motionRegionTag_1 mr111
motionRegionTag_2 mr222
```

The following example shows configuration parameters for motion detection parameter mr222:

```
mpc8349e> show video motion-detection md222
description "sample motion detection 2"
state enabled
motionRegionTag_1 mr111
motionRegionTag_2 mr222
```

The following example shows configuration parameters for all motion detection parameters:

```
mpc8349e> show video motion-detection summary
tag md011
state enabled

tag md111
state disabled
motionRegionTag_1 mr111
motionRegionTag_2 mr222

tag md222
state enabled
motionRegionTag_1 mr111
motionRegionTag_2 mr222
```

Table 16 describes the significant fields in the example.

Table 16 show video motion-detection Field Descriptions

Field	Description
tag	Identifier for the motion detection parameter.
state	Operational state of the motion region: enabled or disabled.
motionRegionTag_x	Motion region associated with motion detection parameters (where x is the number for the motion region tag). You can specify multiple motion region tags.

Related Commands

Command	Description
video motion-detection	Configures video motion detection parameters.

show video motion-region

To display video motion region configuration, use the **show video motion-region** command in user EXEC mode.

show video motion-region {*tag* | **summary**}

Syntax Description

tag	Identifier for the video motion region.
summary	Displays all configured video motion regions.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

This command-line interface (CLI) command is used to show the motion region configuration. The upper-x motion region coordinate must be a smaller percentage than the lower-y coordinate.

Examples

The following example shows a configuration parameters summary for all motion regions:

```
mpc8349e> show video motion-region summary
 tag   state  upper-x   lower-x   upper-y   lower-y  threshold
============================================================
mr222  dis     20        300       30        250       90
mr111  ena     40        280       60        270       95
```

The following example shows configuration parameters for motion region mr111:

```
mpc8349e> show video motion-region mr111
description "sample motion region 1"
state enabled
upperLeftCoordx 40
upperLeftCoordy 60
lowerRightCoordx 280
lowerRightCoordy 270
threshold 95
```

The following example shows configuration parameters for motion region mr222:

```
mpc8349e> show video motion-region mr222
description "sample motion region 2"
state disabled
upperLeftCoordx 20
upperLeftCoordy 30
lowerRightCoordx 300
lowerRightCoordy 250
threshold 90
```

Table 17 describes the significant fields in the example.

Table 17 show video motion-region Field Descriptions

Field	Description
tag	Identifier for the motion region.
state	Operational state of the motion region: enabled or disabled.
upper-x	Coordinate percentage for the upper-left area of the video screen.
lower-x	Coordinate percentage for the lower-left area of the video screen.
upper-y	Coordinate percentage for the upper-right area of the video screen.
lower-y	Coordinate percentage for the lower-right area of the video screen.
threshold	Motion vector threshold for the specified motion region.

Related Commands

Command	Description
video motion-region	Configures video motion region parameters.

show video port

To display configuration parameters for video ports, use the **show video port** command in EXEC mode.

show video port {*portnum* | **summary**}

Syntax Description

portnum	Specifies the video port number.
summary	Displays configuration parameters for all video ports.

Command Modes

EXEC

Command History

Version	Modification
1.0	This command was introduced.

Examples

The following example shows configuration parameters for video port 0:

```
vse-module> show video port 0
description ""
state enabled
direction in
brightness 0
contrast 0
hue 0
saturation 0
sharpness 0
```

The following example shows configuration parameters for all video ports:

```
vse-module> show video port summary
port state dir mxRes brightness contrast hue  saturation sharpness
================================================================
0    ena   in  4cif  0          0        0    0          0
1    ena   in  4cif  0          0        0    0          0
2    ena   in  4cif  0          0        0    0          0
3    ena   in  4cif  0          0        0    0          0
4    ena   in  4cif  0          0        0    0          0
5    ena   in  4cif  0          0        0    0          0
6    ena   in  4cif  0          0        0    0          0
7    ena   in  4cif  0          0        0    0          0
8    ena   in  4cif  0          0        0    0          0
9    ena   in  4cif  0          0        0    0          0
10   ena   in  4cif  0          0        0    0          0
11   ena   in  4cif  0          0        0    0          0
12   ena   in  4cif  0          0        0    0          0
13   ena   in  4cif  0          0        0    0          0
14   ena   in  4cif  0          0        0    0          0
15   ena   in  4cif  0          0        0    0          0
```

Table 18 describes the significant fields in the example.

Table 18 show video port Field Descriptions

Field	Description
port	Video port number.
state	Operational state of the video port: enabled or disabled.
dir (direction)	Direction of the video port: in for input, and out for output.
brightness	Brightness setting of video port as an integer value in the range of –128 to 127.
contrast	Contrast setting of video port as an integer value in the range of –128 to 127.
hue	Hue setting for the video port as an integer value in the range of –128 to 127.
saturation	Saturation setting for the video port as an integer value in the range of –128 to 127.
sharpness	Sharpness setting for the video port as an integer value in the range of 0 to 3.

Related Commands

Command	Description
video port	Modifies an existing video port configuration.

show video session

To display video session statistics, use the **show video session** command in user EXEC mode.

show video session {**connection** | **history** | **library** | **rtcp** | **stream**}

Syntax Description

connection	Displays video session connection statistics.
history	Displays video session historical statistics.
library	Displays video session library statistics.
rtcp	Displays video session real-time control protocol (RTCP) statistics.
stream	Displays video session stream statistics.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Examples

The following example shows output from the **show video session stream** command:

```
vse-module# show video session stream

StreamId Sockfd      IP Address    Port  Prot   D  O Pkts Count   Bytes(K)   TxDp  kbps
-------- ------ ---------------    ----- ----   -  - ----------   ---------- ----  -----
00000001 000030 128.107.146.235 4730  RTP   O  Y 3330        3110       0     980
00000002 000031 128.107.146.235 4731  RTCP  O  N 0           0          0     0
00000101 000032 128.107.146.235 4730  RTP   I  N 0           0          0     0
00000102 000033 128.107.146.235 4731  RTCP  I  N 0           0          0     0
```

Table 19 describes the significant fields in the example.

Table 19 show video session stream Field Descriptions

Field	Description
StreamID	Video stream identifier.
Sockfd	Socket field.
IP Address	IP address.
Port	Port number.
Prot	Streaming protocol type.
D	Direction (*in* or *out*).
O	On: *Yes* or *No*.
Pkts Count	Number of packets.
Bytes (K)	Number of bytes (in thousands of bytes).

Table 19 show video session stream Field Descriptions (continued)

Field	Description
TxDrp	Number of transmission packets dropped.
kbps	Session streaming rate, in kilobytes per second (KBps).

The following example shows output from the **show video session rtcp** command:

```
vse-module# show video session rtcp

SessionID     site   RTPtx(s) RTPrx(s) DRate(%) DropCnt Jitter(ms) loopDelay
00000002-001f local  44bd54a7 00000000 0        0       0           ----
              remote ----     ----     0        0       4          28
```

Table 20 describes the significant fields in the example.

Table 20 show video session rtcp Field Descriptions

Field	Description
SessionID	Video streaming session identifier.
site	Site: *local* or *remote*.
RTPtx(s)	Real-time Transport Protocol packet(s) transmitted.
RTPrx(s)	Real-time Transport Protocol packet(s) received.
DRate(%)	Drop rate, in percentage.
DropCnt	Number of packets dropped.
Jitter(ms)	Jitter signal variation, in milliseconds.
loopDelay	Real-time Transport Control Protocol loop delay (in milliseconds).

The following example shows output from the **show video session connection** command:

```
vse-module# show video session connection

 S T R E A M     M A N A G E R                                    MW API     C L I
ConnId AnEp isId Port PkEp osId        IpAdress Encap Codec StreamId   Profile
------ ---- ---- ---- ---- ---- --------------- ----- ----- -------- ---------
   188  180  180    2  179  179 128.107.146.235   rtp mpeg4 00000001 stream000
```

Table 21 describes the significant fields in the example.

Table 21 show video session connection Field Descriptions

Field	Description
ConnId	Connection identifier.
AnEp	Analog endpoints
isId	Input stream identifier.
Port	Physical port number.
PkEp	Packet endpoints.
osId	Output stream identifier.

Table 21 show video session connection Field Descriptions (continued)

Field	Description
IpAdress	IP address.
Encap	Encapsulation type.
Codec	Codec type.
StreamId	Streaming video identifier.
Profile	Streaming video profile (for example, stream000).

Related Commands

Command	Description
video stream-profile	Configures the video stream profile.

show video stream-profile

To display video stream profile configuration parameters, use the **show video stream-profile** command in user EXEC mode.

show video stream-profile {*tag* | **dynamically-generated summary** | **user-configured summary**}

Syntax Description

tag	Identifier for the video stream profile. String values are in the range of stream000 to stream999.
dynamically-generated summary	Displays a summary of dynamically generated video stream profiles.
user-configured summary	Displays a summary of user-configured video stream profiles.

Command Modes

User EXEC

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

This command-line interface (CLI) command shows the video stream profile configuration.

Examples

The following example shows a specific video stream profile:

```
vse-module> show video stream-profile stream011
description "sample stream profile 011”
state enabled
portNum 0
codecProfileTag -
motionDetectionTag -
```

The following example shows all user-configured video stream profiles:

```
vse-module> show video stream-profile user-configured summary
   tag      state  codecProfileTag  motionDetectionTag  portNum
============================================================
stream001   ena      -                 -                  0
stream010   ena      -                 -                  0
stream011   ena      -                 -                  0
stream017   ena      -                 -                  0
```

The following example shows dynamically-generated video stream profiles:

```
vse-module> show video stream-profile dynamically-generated summary
   tag      state  codecProfileTag  motionDetectionTag  portNum
============================================================
httpx      ena      -                 -                  0
```

Table 22 describes the significant fields in the example.

Table 22 show video stream-profile Field Descriptions

Field	Description
tag	Identifier for the stream profile in the range of stream000 to stream999.
state	Operational state of the stream profile: enabled or disabled.
codecProfileTag	Identifier for the codec profile associated with the stream profile.
motionDetectionTag	Identifier for the motion detection parameters associated with the stream profile.
portNum	Port number associated with the stream profile.

Related Commands

Command	Description
video stream-profile	Creates a video stream profile.

show video xconn-lpbk-conn

To display video cross-connect loopback configuration parameters, use the **show video xconn-lpbk-conn** command in user EXEC mode.

show video xconn-lpbk-conn {*0–1* | **summary**}

Syntax Description

0–1	Identifies the video cross-connect loopback connection in the range of 0 to 1.
summary	Displays a summary video cross-connect loopback connections.

Command Modes

User EXEC

Command History

Version	Modification
1.2	This command was introduced.

Usage Guidelines

This command-line interface (CLI) command shows the video cross-connect loopback configuration to conduct video loopback diagnostic tests.

The video cross-connect loopback diagnostic command transmits a signal that is returned to the sending port after passing through all or a portion of a network or circuit. The returned signal is compared with the transmitted signal to evaluate the integrity of the equipment or transmission path. The video cross-connect loopback test mode is persistent across the Cisco Analog Video Gateway encoder reload.

Examples

The following example shows the specific video cross-connect loopback connection parameters:

```
VSE-Module> show video xconn-lpbk-conn 0

description "video connection 0"
state enabled
import 2
outport 0
```

The following example shows a summary of video cross-connect loopback connection parameters:

```
VSE-Module> show video xconn-lpbk-conn summary

xconn-lpbk-conn     state      inport       outport
=======================================================
conn0               ena        1            0
conn1               ena        1            0
```

Table 23 describes the significant fields in the example.

Table 23 show video cross-connect loopback Field Descriptions

Field	Description
xconn-lpbk-conn	Identifies the connection as either conn0 or conn1.
state	Operational state of the video cross-connect loopback test: enabled or disabled.
inport	Displays the video cross-connect loopback inport.
outport	Displays the video cross-connect loopback to outport.

Related Commands

Command	Description
video xconn-lpbk-conn	Configures and enables the Cisco Analog Video Gateway cross connect test mode.

video codec-profile

To create a video codec profile, use the **video codec-profile** command in video port configuration mode. To use the default video codec profile, use the **no** form of this command.

video codec-profile *tag* [**bitrate** | **codec** | **default** | **deinterlace** | **description** | **format** | **framerate** | **gopsize** | **maxbitrate** | **qualityfactor** | **skipfactor** | **resolution** | **state**]

no video codec-profile *tag*

Note The video codec profile cannot be removed until the streaming profile is removed.

Syntax Description

tag	Identifier for the video codec profile. String values are in the range of codec000 to codec999.
bitrate	Bit rate for the video codec profile. • variable bit rate (vbr): VBR. Used for MJPEG, MPEG4, and H.264. • constant bit rate (cbr): CBR. Used for MPEG4 and H264 only. Default: cbr.
codec	Codec type for the video codec profile. • h264: H.264. • mjpeg: MJPEG. • mpeg4: MPEG4. Default: mpeg4.
default	Use default values for the video codec profile. Use the **no** form of this command to use or restore the default video codec profile values.
deinterlace	Enables or disables deinterlace mode. This option is available only in version 1.1 or later. Default: enabled
description	Description for the video codec profile. Text with up to 80 string characters within quotation marks.
format	Format for the video codec profile: • ntsc: NTSC video format. • pal: PAL video format.
framerate	Frame rate for the video codec profile, in frames per second (fps): • NTSC frame rate: 30, 15, 10, 7.5, 6, 5, 4.28, 3.75, 3.33, 3, 2.72, 2.5, 2.31, 2.14, 2, 1.87, 1.76, 1.67, 1.58, 1.5, 1.43, 1.36, 1.3, 1.25, 1.2, 1.15, 1.11, 1.07, 1.03, 1, 0.99, 0.98, ..., 0.02, 0.01. Default: 5. • PAL frame rate: 25, 12.5, 8.33, 6.25, 5, 4.17, 3.57, 3.13, 2.78, 2.5, 2.27, 2.08, 1.92, 1.79, 1.67, 1.56, 1.47, 1.39, 1.32, 1.25, 1.19, 1.14, 1.09, 1.04, 1.00, 0.99, 0.98, ..., 0.02, 0.01. Default: 10.
gopsize	Group-of-picture (GOP) size for the video codec profile in the range of 0 to 600. Default: 20.

maxbitrate	Maximum bit rate for the video codec profile. • Integer value in the range of 168 to 2000 KBps for codec MPEG4. • Integer value in the range of 168 to 3000 KBps for codec H.264. Default: 768. **Note** You cannot set a **maxbitrate** value for MJPEG because it uses a VBR algorithm.
qualityfactor	Quality factor for MJPEG video codec only. Integer value in the range of 0 to 100 percent. Default: 70.
skipfactor	Skip factor for the video codec profile. Integer value in the range of 1 to 100.
resolution	Resolution for the video codec profile: • 4cif: 4CIF • 2cif: 2CIF (This option is only available in version 1.1 or later.) • cif: CIF Default: 4cif
state	Operational state of the video codec profile: enabled or disabled. Default: enabled.

Command Default

No video codec profile is configured.

Command Modes

Video port configuration

Command History

Version	Modification
1.0	This command was introduced.
1.1	De-interlace enable/disable option added to this command. Resolution option 2CIF added to this command.

Usage Guidelines

When setting **framerate**, the default is 5 frames per second (fps). For example, a frame rate of 0.01 means 1 frame every 100 seconds.

When setting **gopsize**, set it for MPEG4 and H.264 only in frames. For example, if you have a frame rate of 15 fps and GOP size of 30 frames, it is set to 30/15 or 2 seconds.

When setting **maxbitrate**, it cannot be set for MJPEG because it uses a VBR algorithm.

The NTSC CIF resolution is:

- NTSC-CIF = 352 x 240 pixels
- NTSC-2CIF = 704 x 240 pixels
- NTSC-4CIF = 704 x 480 pixels

The PAL CIF resolution is:

- PAL-CIF = 352 x 288 pixels
- PAL-2CIF = 704 x 288 pixels
- PAL-4CIF = 704 x 576 pixels

Examples

This example shows video codec profile and stream profile configuration for video streaming with **codec** set to MPEG4, **bitrate** set to VBR, format set to NTSC, **framerate** is set to 30, **gopsize** is set to 20, and **maxbitrate** is set to 1000 KBps on video port 4.

```
VSE-module(config)> video codec-profile codec000
VSE-module(config-codec-profile)> codec mpeg4
VSE-module(config-codec-profile)> bitrate vbr
VSE-module(config-codec-profile)> format ntsc
VSE-module(config-codec-profile)> framerate 30
VSE-module(config-codec-profile)> gopsize 20
VSE-module(config-codec-profile)> maxbitrate 1000
VSE-module(config-codec-profile)> end
VSE-module(config)> video stream-profile stream000
VSE-module(config-stream-profile)> codecprofiletag codec000
VSE-module(config-stream-profile)> portnum 4
```

Related Commands

Command	Description
show video codec-profile	Displays video codec profile configuration parameters.

video motion-detection

To create a video motion detection profile, use the **video motion-detection** command in video port configuration mode. To use a default video motion detection profile, use the **no** form of this command.

video motion-detection *tag* [**default** | **description** | **motion-region-tag** *x y* | **state**]

no video motion-detection *tag*

Syntax Description

tag	Identifier for the motion detection profile. String values are in the range of md000 to md999.
default	Use default values for the video motion detection profile. Use the **no** form of this command to restore the default video motion detection profile values.
description	Description for the video motion detection profile. Text with up to 80 string characters within quotation marks.
motion-region-tag *x y*	Motion region to use for the video motion detection profile, where *x* specifies the motion region integer tag number in the range of 0 to 31, and *y* specifies the motion region tag in the range of mr000 to mr999.
state	Operational state of the video motion detection profile: enabled or disabled. Default: enabled

Command Default

No video motion detection profiles are configured.

Command Modes

Video port configuration

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

A video motion region profile must be configured before it can be used by a video codec motion detection profile; otherwise, the following error message appears:

```
The specified video motion region tag has not been configured
```

Examples

The following example shows a configuration for video motion detection md000:

```
vse-module> show video motion-detection md000
description "video motion detection md000"
state enabled
motion-region-tag 30 mr000
```

Related Commands

Command	Description
show video motion-detection	Displays video motion detection configuration parameters.

video motion-region

To create a video motion region profile, use the **video motion-region** command in video port configuration mode. To use a default video motion region profile, use the **no** form of this command.

video motion-region *tag* [**default | description | lowerrightcoordx | lowerrightcoordy | state | threshold | upperleftcoordx | upperleftcoordy**]

no video motion-region *tag*

Syntax Description

tag	Identifier for the motion region profile. String values are in the range of mr000 to mr999.
default	Use default values for the video motion region profile. Use the **no** form of this command to restore the default video motion region profile values.
description	Description for the video motion region profile. Text with up to 80 string characters within quotation marks.
lowerrightcoordx	Lower-right x coordinate integer percentage value in the range of 0 to 100. Default: 0.
lowerrightcoordy	Lower-right y coordinate integer percentage value in the range of 0 to 100. Default: 0.
state	Operational state of the video motion region: enabled or disabled. Default: enabled.
threshold	Motion region threshold value in the range of 1 to 100. Default: 10.
upperleftcoordx	Upper-left x coordinate integer percentage value in the range of 0 to 100. Default: 0.
upperleftcoordy	Upper-left y coordinate integer percentage value in the range of 0 to 100. Default: 0.

Command Default

No video motion region is configured.

Command Modes

Video port configuration

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

The lower-right and upper-left coordinate values are whole percentage values. The upper-left x coordinate must be a smaller percentage value than the lower-right x coordinate.

Examples

The following example shows the configuration for video motion region mr000.

```
vse-module> show video motion-region mr000
description "video motion region mr000"
```

```
state enabled
upperLeftCoordx 25
upperLeftCoordy 35
lowerRightCoordx 30
lowerRightCoordy 40
threshold 10
```

Related Commands

Command	Description
show video motion-region	Displays video motion region configuration parameters.

video port

To enter video port configuration mode or to modify the default video port configuration, use the **video port** command in global configuration mode. To use the video port to the default values, use the **no** form of this command.

Note The following command is valid for version 1.2 and later.

video port *portnum* [**brightness | contrast | default | description | direction | hue | saturation | sharpness | state**]

Note The following command is only valid for versions 1.0 and 1.2.

video port *portnum* [**brightness | contrast | default | description | direction | hue | maxresolution | saturation | sharpness | state**]

no video port *portnum*

Syntax Description

portnum	Video port number in the range of 0 to 15.
brightness	Brightness setting of video port as an integer value in the range of –128 to 127. Default: 0
contrast	Contrast setting of video port as an integer value in the range of –128 to 127. Default: 0
default	Returns the configuration to default values. Use the **no** form of this command to restore the default video port profile values.
description	Description of the video port. Text with up to 80 string characters within quotation marks.
direction	Video port direction: • in: input direction. • out: output direction. Default: in.
hue	Hue setting for the video port as an integer value in the range of –128 to 127. Default: 0.
maxresolution	**Note** This command is valid only for versions 1.0 and 1.1. Maximum resolution of the video port: • 4cif: 4CIF resolution. • 2cif: 2CIF resolution. This option is only available in version 1.1 or later. • cif: CIF resolution. Default: 4cif.
saturation	Saturation setting for the video port as an integer value in the range of –128 to 127. Default: 0.

sharpness	Sharpness setting for the video port as an integer value in the range of 0 to 3. Default: 0.
state	Operational state of the video port: enabled or disabled. Default: enabled.

Command Default

Video ports retain default configuration parameters.

Command Modes

Global configuration

Command History

Version	Modification
1.0	This command was introduced.
1.1	Maximum resolution option 2CIF added to the command.
1.2	Maximum reslolution (**maxresolution**) command removed.

Usage Guidelines

Video format is automatically detected, based on the hardware setting.

The **maxresolution** command is applicable only in versions 1.0 and 1.1 for the in (input) direction, so the *Invalid input* error appears if an attempt is made to apply the **maxresolution** command in the out (output) direction.

```
vse-module(config)> video port 0
Modifying existing port
vse-module(config-port)> description "sample video port 0"
vse-module(config-port)> direction out
vse-module(config-port)> maxresolution ?
  cif          CIF resolution
vse-module(config-port)> maxresolution cif
Invalid input. maxResolution is not applicable to output direction
```

Examples

The following example shows the parameters configured for video port 0.

```
vse-module> show video port 0
description ""
state enabled
direction in
brightness 125
contrast 80
hue 100
saturation 0
sharpness 0
```

Related Commands

Command	Description
show video port	Displays configuration parameters for video ports.

video stream-profile

To create a video stream profile, use the **video stream-profile** command in video port configuration mode. To use a default video stream profile, use the **no** form of this command.

video stream-profile *tag* [**codecprofiletag | default | description | motiondetectiontag | packetization-mode | portnum | state**]

no video stream-profile *tag*

Syntax Description

tag	Identifier for this video stream profile values in the range of stream000 to stream999.
codecprofiletag	Identifier for the video codec profile to use with the video stream profile values in the range of codec000 to codec999.
default	Use default values for the video stream profile. Use the **no** form of this command to restore the default video stream profile values.
description	Description for the video stream profile. Text with up to 80 string characters within quotation marks.
motiondetectiontag	Identifier for video motion detection profile profile values in the range of md000 to md999 to use with the video stream profile.
packetization-mode	H.264 real-time transport protocol (RTP) packetization mode (RFC-3984): • non-interleaved: Non-interleaved mode. • single-NAL: single Network Abstraction Layer (NAL) unit mode. Default: non-interleaved.
portnum	Port number to use for the video stream profile values in the range of 0 to 15.
state	Operational state of the video stream profile: enabled or disabled. Default: enabled.

Command Default

No video stream profile is configured.

Command Modes

Video port configuration

Command History

Version	Modification
1.0	This command was introduced.

Usage Guidelines

A video codec profile must be configured before it can be used by a video stream profile.

Note With the exception of motion detection configurations, once the video stream is initiated based on a profile, any changes to the corresponding codec or port configurations will have no effect on the video stream already in progress. Any changes to motion detection configurations will have an immediate effect on the video stream already in progress.

Examples

The following example shows a streaming profile configuration of stream000:

```
vse-module> show video stream-profile stream000
description "video stream profile 000"
state enabled
portNum 2
codecProfileTag codec000
packetization-mode non-interleaved
motionDetectionTag - md000
```

Related Commands

Command	Description
show video stream-profile	Displays video stream profile configuration parameters.

video xconn-lpbk-conn

To configure a video cross-connect loopback diagnostic test, use the **video xconn-lpbk-conn** command in video cross-connect loopback configuration mode. To restore the video cross-connect loopback command to the default condition, use the **no** form of this command.

video xconn-lpbk-conn *0–1* [**default | description | inport | state**]

no video xconn-lpbk-conn

Syntax Description

0–1	Identifies the video cross-connect loopback connection 0 or 1.
default	Use default values for the video cross-connect loopback test. Use the **no** form of this command to restore the default condition.
description	Description for the video cross-connect loopback configuration. Text with up to 80 string characters within quotation marks.
inport	Identifies the video cross-connect inport.
state	Operational state of the video stream profile: enabled or disabled. Default: enabled.

Command Default

No video cross-connect loopback is configured.

Command Modes

Video cross-connect loopback configuration

Command History

Version	Modification
1.2	This command was introduced.

Examples

The following example shows the specific video cross-connect loopback connection parameters:

```
VSE-Module> show video xconn-lpbk-conn 0

description "video connection 0"
state enabled
import 2
outport 0
```

The following example shows a summary of video cross-connect loopback connection parameters:

```
VSE-Module> show video xconn-lpbk-conn summary

xconn-lpbk-conn     state      inport       outport
=======================================================
conn0               ena        1            0
conn1               ena        1            0
```

Related Commands

Command	Description
show video xconn-lpbk-conn	Displays the video cross-connect loopback configuration summary.

Cisco IOS Commands

This section documents new Cisco IOS commands. Use these commands to access and configure the Cisco Analog Video Gateway module from the host router.

service-module video-service-engine

To begin a network module session through a console connection, use the **service-module video-service-engine** command in privileged EXEC configuration mode.

service-module video-service-engine *slot/port* {**session | password-reset | reload | reset | session | shutdown | statistics | status**}

Syntax Description

slot	Number of the router chassis slot for the network module.
port	Number of the video port on the network module. For network modules, always use 0. The slash mark (/) is required between the slot argument and the port argument.
password-reset	Reset of network module password.
reload	Reload network module.
reset	Hardware reset of the network module.
session	Network module session. Opens a Telnet session that provides the Cisco video encoder command-line interface (CLI) from the Cisco IOS interface side.
shutdown	Shutdown of the network module.
statistics	Shows the video network module reset statistics.
status	Operational information about the network module.

Command Default

None.

Command Modes

Privileged EXEC

Command History

Version	Modification
12.4(11)T	This command was introduced.

Usage Guidelines

Use the **service-module video-service-engine** *slot/port* **shutdown** command before you remove the video network module from the router.

Removing the video encoder without using the proper shutdown sequence can result in corruption of the hard disk. After successful shutdown of the application, the Cisco IOS software displays a message indicating that the network module can be removed.

Only one session at a time is allowed into the network module from the internal network-module-side interface.

After starting a session, you can perform any video module configuration task. You first access the console in a user-level shell. To access the privileged EXEC command shell, in which most commands are available, use the **enable** command.

After you finish configuring the module and exit the module console session, clear the session by using the **service-module video-service-engine** *slot/port* **session clear** command. At the confirmation prompt, press **Enter** to confirm the action, or press **n** to cancel.

Examples

The following example shows a session being opened for a Cisco Analog Video Gateway module in slot 1:

```
Router# service-module video-service-engine 1/0 session

Trying 31.0.0.99, 2066 ... Open
vse-module>
```

Related Commands

Command	Description
enable	Enters privileged EXEC mode.
interface	Configures an interface and enters interface configuration mode.
show diag	Displays controller information for a network module.
show interface video-service engine	Displays basic interface configuration information for the Cisco Analog Video Gateway network module.

show interfaces video-service-engine

To display basic interface configuration information for an the video interface, use the **show interfaces video-service-engine** command in user EXEC mode.

show interfaces video-service-engine *slot/port*

Syntax Description

slot	Number of the router chassis slot for the Cisco Analog Video Gateway module.
port	Number of the video Cisco Analog Video Gateway module. For network modules, always use 0. The slash mark (/) is required between the *slot* argument and the *port* argument.

Defaults

None

Command Modes

User EXEC

Command History

Version	Modification
12.4(11)T	This command was introduced.

Examples

The following example shows the output from the **show interfaces video-Service-Engine 1/0** command:

```
Router# show interfaces video-service-Engine 1/0

Video-Service-Engine1/0 is up, line protocol is up
  Hardware is BCM5703, address is 0015.629a.efe0 (bia 0015.629a.efe0)
  Internet address is 31.0.0.99/16
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive not set
  Full-duplex, 1000Mb/s, link type is force-up, media type is internal
  output flow-control is XON, input flow-control is XON
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:09, output 00:00:09, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/512 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     43797 packets input, 1854377 bytes, 0 no buffer
     Received 18 broadcasts, 0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 0 multicast, 0 pause input
     0 input packets with dribble condition detected
     31682 packets output, 10485509 bytes, 0 underruns
     0 output errors, 0 collisions, 4 interface resets
     0 babbles, 0 late collision, 0 deferred
```

```
     0 lost carrier, 0 no carrier, 0 pause output
     0 output buffer failures, 0 output buffers swapped out
Router#
```

Related Commands

Command	Description
interface video-service-engine	Configures the interface slot and port numbers where the network module resides.

show controllers video-service-engine

To display controller information for video network module, use the **show controllers video-service-engine** command in the privileged EXEC mode.

show controllers video-service-engine *slot/unit*

Syntax Description

slot	Number of the router chassis slot for the video module.
unit	Number of the video module. For network modules, always use 0. The slash mark (/) is required between the slot argument and the unit argument.

Command Default

None

Command Modes

Privileged EXEC

Command History

Version	Modification
12.4(11)T	This command was introduced.

Examples

The following example shows the output from the **show controllers video-service-engine** *slot/unit* command:

```
Router# show controllers video-Service-Engine 1/0
Interface Video-Service-Engine1/0
Hardware is BCM5703 Gig Ethernet
IDB: 657C708C, FASTSEND: 60E21D2C, MCI_INDEX: 0

INSTANCE=0x657C819C
  Rx Ring entries = 512
  Rx Shadow = 0x657C8AEC
  Rx Ring = 0x2D7C3040
  Rx Ring Head = 184
  Rx Ring Last = 183
  Rx Jumbo Ring entries = 256
  Rx Jumbo Shadow = 0x657C9324
  Rx Jumbo Ring = 0x2D7C7080
  Rx Jumbo Ring Head = 0
  Rx Jumbo Ring Last = 255
  Rx Return Ring = 0x2D7CB0C0
  Rx Return Ring Head = 696
  Rx Return Ring Last = 695
  Rx STD Ring Shadow (malloc) = 0x657C8AEC
  Rx STD Ring (malloc) = 0x2D7C3040
  Rx JUMBO Ring Shadow (malloc) = 0x657C9324
  Rx JUMBO Ring (malloc) = 0x2D7C7080
  Rx Buffer Descr (malloc) = 0x2D7CB0C0
  Tx Ring entries = 512
  Tx Shadow = 0x657CA35C
  Tx Shadow Head = 2
  Tx Shadow Tail = 2
```

```
  Tx Shadow Tail Last = 1
  Tx Shadow Free = 512
  Tx Ring = 0x2D7D3100
  Tx Count = 0
  Tx Free = 512
  Tx Buffer Descr = 0x2D7D3100
  Tx Shadow (malloc) = 0x657CA35C
  Tx Ring (malloc) = 0x2D7D3100

Status block and mail_box information
  Status = 0x0, StatusTag = 0xB1
  Status::RcvStdConIdx: 184 , RcvJumboConIdx: 0   , RcvMiniConIdx: 0
  MBOX::RcvStdProdIdx:183 , RcvJumboProdIdx:255 , RcvMiniProdIdx: 0
  Status::Send 0, SendConIdx: 2   , Rx Rtn 0, RcvProdIdx: 696
  mail_box::Send 0,SendHostProdIdx: 2   , Rx Rtn 0,RcvRetConIdx: 695

Rings Status:
 *** RX Entry: 3   , Tx Entry: 14   ***

  RX #  duration  RtnHead  RtnTail ProdHead ProdTail
  [0 ]     35        693      694      181      182
  [1 ]     31        694      695      182      183
  [2 ]     40        695      696      183      184
  [3 ]     29        676      677      164      165
  [4 ]     35        677      678      165      166
  [5 ]     30        678      679      166      167
  [6 ]     31        679      680      167      168
  [7 ]     31        680      681      168      169
  [8 ]     29        681      682      169      170
  [9 ]     28        682      683      170      171
  [10]     35        683      684      171      172
  [11]     38        684      685      172      173
  [12]     38        685      686      173      174
  [13]     35        686      687      174      175
  [14]     36        687      688      175      176
  [15]     34        688      689      176      177
  [16]     36        689      690      177      178
  [17]     41        690      691      178      179
  [18]     31        691      692      179      180
  [19]     32        692      693      180      181

  TX #  duration  Send_head Send_tail
  [0 ]     3         442      443
  [1 ]     5         504      505
  [2 ]     4         505      506
  [3 ]     3         506      507
  [4 ]     5         443      444
  [5 ]     4         507      508
  [6 ]     2         444      445
  [7 ]     0         508      509
  [8 ]     3         509      510
  [9 ]     3         510      511
  [10]     3         445      446
  [11]     4         511      0
  [12]     4         0        1
  [13]     5         1        2
  [14]     4         499      500
  [15]     3         500      501
  [16]     3         441      442
  [17]     4         501      502
  [18]     3         502      503
  [19]     3         503      504

PCI Register [0x4B000000]
```

```
  PCI Msi Control = 0x5
  PCI Msi addr = 0xBFFD7DF7, 0xDFFF97F4
  PCI MiscHostCtrl = 0x10020098
  PCI DMA Control = 0x763F0000
  PCI PciState = 0x20FE
  PCI clk ctrl = 0xBF
  PCI ModeCtrl = 0x4030034
  PCI MiscCfg = 0x83082
  PCI MiscLocalCtrl = 0x1016F09

Mac Control Register [0x4B000400]
  MAC Mode = 0xE0480C
  Mac Status = 0x403
  Mac Event = 0x1000
  Mac Led = 0x880
  Mac RX MTU = 0x2808
  Mac Tx AutoNeg = 0x0
  MAC Rx AutoNeg = 0x0
  Mac Tx Mode  = 0x52
  Mac Tx Status = 0x8
  Mac Tx Length = 0x2620
  Mac Rx Mode  = 0x406
  Mac Rx Status = 0x0
  Mac Serdes Ctrl = 0x616000
  Mac Serdes Status = 0x140

General Control Register [0x4B006800]
  GCR Mode = 0x4030034, GCR MiscCfg = 0x83082
  GCR LocalCtrl = 0x1016F09, GCR Timer    = 0x878ABA6
  Buf Mgr Address Space Begin = 0x4B004400
  Buf Mgr Flow Control Low Water Mark Adr = 0x4B004414 Data = 0x130
  Buf Mgr Flow Control High Water Mark Adr = 0x4B004418 Data = 0x17C

Hardware MAC Address Filters
----------------------------
  Hardware Perfect Address Filters
MAC addr[00] = 00-15-62-9A-EF-E0
MAC addr[01] = 01-00-0C-CC-CC-CC
MAC addr[02] = 01-80-C2-00-00-07
MAC addr[03] = 00-00-00-00-00-00
MAC addr[04] = 00-00-00-00-00-00
MAC addr[05] = 00-00-00-00-00-00
MAC addr[06] = 00-00-00-00-00-00
MAC addr[07] = 00-00-00-00-00-00
MAC addr[08] = 00-00-00-00-00-00
MAC addr[09] = 00-00-00-00-00-00
MAC addr[10] = 00-00-00-00-00-00
MAC addr[11] = 00-00-00-00-00-00
MAC addr[12] = 00-00-00-00-00-00
MAC addr[13] = 00-00-00-00-00-00
MAC addr[14] = 00-00-00-00-00-00
MAC addr[15] = 00-00-00-00-00-00
  Hardware Multicast Hash Filters
MAC Hash addr[00] = 00000000
MAC Hash addr[01] = 00000000
MAC Hash addr[02] = 00000000
MAC Hash addr[03] = 00000000
  Hardware Receive Rules Filters
Receive Rules Config = 00000008
 Rule:  [00]  = 0x42000000
 Value: [00]  = 0x7FFFFFFF
 Rule:  [01]  = 0x06000004
 Value: [01]  = 0x7FFFFFFF
 Rule:  [02]  = 0x00000000
```

```
 Value: [02]  = 0x00000000
 Rule:  [03]  = 0x00000000
 Value: [03]  = 0x00000000
 Rule:  [04]  = 0x00000000
 Value: [04]  = 0x00000000
 Rule:  [05]  = 0x00000000
 Value: [05]  = 0x00000000
 Rule:  [06]  = 0x00000000
 Value: [06]  = 0x00000000
 Rule:  [07]  = 0x00000000
 Value: [07]  = 0x00000000
 Rule:  [08]  = 0x00000000
 Value: [08]  = 0x00000000
 Rule:  [09]  = 0x00000000
 Value: [09]  = 0x00000000
 Rule:  [10]  = 0x00000000
 Value: [10]  = 0x00000000
 Rule:  [11]  = 0x00000000
 Value: [11]  = 0x00000000
 Rule:  [12]  = 0x00000000
 Value: [12]  = 0x00000000
 Rule:  [13]  = 0x00000000
 Value: [13]  = 0x00000000
 Rule:  [14]  = 0x00000000
 Value: [14]  = 0x00000000
 Rule:  [15]  = 0x00000000
 Value: [15]  = 0x00000000

Software MAC Address Filter (hash:length/addr/mask/hits)
---------------------------------------------------------
  0x000:  0  ffff.ffff.ffff  0000.0000.0000         0
  0x082:  0  0015.629a.efe0  0000.0000.0000         0
  0x0C0:  0  0100.0ccc.cccc  0000.0000.0000         0
  0x0C5:  0  0180.c200.0007  0000.0000.0000         0

  Software filtered frames: 0
  Unicast software filter needed: 0
  Multicast software filter needed: 0
  Promiscuous mode: 0

HARDWARE STATISTICS
  Rx good packets: 20152
  Rx CRC:          0
  Rx alignment:    0
  Rx short:        0

  Tx good frames:        31234
  Tx maxm collisions:    0
  Tx late collisions:    0
  Tx underruns:          0
  Tx lost carrier:       0
  Tx deferred:           0
  Tx single collision:   0
  Tx multiple collision: 0
  Tx total collisions:   0
  -------- HW FLOW CONTROL STATS ---------
  Rx XON PAUSE Frames Received:   0
  Rx XOFF PAUSE Frames Received:   0
  Rx XOFF State Entered:   0
  Tx XON Sent:   0
  Tx XOFF Sent:   0

INTERRUPT STATISTICS
  CX  = 75443
```

```
  FR  = 43763
  CNA = 0
  RNR = 0
  MDI = 0
  SWI = 0
  FCP = 0

Full Promiscuous Mode = disabled
Loopback Mode = disabled

I/O Congestion Counters:
     Standard Packet Count : 0
     Jumbo Packet Count    : 0

I2C Registers:
  AFS - Control Register   : 0x4000D000
  SMBUS Input Register     : 0x00000464
  SMBUS Output Register    : 0x00004C61
  SMBUS GRC Local Register : 0x01016F09

I2C Error Counter:
  Total I2C Output Errors  : 0
  Total I2C Input Errors   : 0
  I2C Transaction Errors   : 0

Module Reset Statistics:
  CLI reset count = 3
  CLI reload count = 0
  Registration request timeout reset count = 2
  Error recovery timeout reset count = 3
  Module registration count = 4

The last IOS initiated event was a error recovery timeout reset at 23:26:57.306
UTC Wed May 9 2007
Router#
```

Related Commands

Command	Description
show interfaces integrated-service-engine	Displays basic interface configuration information for the video network module.