Diag Commands

Revised: September 29. 2020

This chapter contains the following **diag** commands:

diag audio loopback disable

diag audio loopback disable

Syntax Description

This command has no arguments or keywords.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.5	This command was introduced.
1.5.10	The **help** option was added.

Usage Guidelines

Use this command to terminate a full diagnostic display loopback. You can also enter **help** in the command string to terminate a diagnostic audio loopback running on any of the microphones:

```
help diag audio loopback disable
```

Examples

```
admin:diag audio loopback disable

Stopping Audio Loopback
```

Related Commands

Command	Description
diag audio loopback enable	Turns on audio loopback.
diag audio loopback status	Gives the status of the audio loopback.

diag audio loopback enable

diag audio loopback enable [**center | left | right** [*timeout number*]]

Syntax Description

timeout *number*	Optional. Length of time loopback will run (in seconds). Value is 10 to 3600. Default is 60
center	Initiates a diagnostic audio loopback on the center microphone.
left	Initiates a diagnostic audio loopback on the left microphone.
right	Initiates a diagnostic audio loopback on the right microphone.

Command Default

60

Command History

Release	Modifications
1.5	This command was introduced.
1.5.10	The **center**, **left**, and **right** keywords were added. The **help** option was also added.

Usage Guidelines

Use this command to initiate a full diagnostic display loopback. You can also enter **help** in the commands string to initiate a diagnostic audio loopback on the center, left, or right microphone(s):

```
help diag audio loopback enable center
```

Note You must first end Calling Services by entering **utils service stop calling_services**. Be sure to restart calling services when done.

Examples

The following example sets the timeout to the default value of 60:

```
admin: diag audio loopback enable timeout 60
```

The following example sets the timeout to 60 on the left microphone:

```
admin: diag audio loopback enable left timeout 60

Loopback is now running
```

Related Commands

Command	Description
diag audio loopback disable	Cancels audio loopback.
diag audio loopback status	Gives the status of the audio loopback.
utils service stop	Terminates a service.

diag audio loopback enable status

diag audio loopback enable status

Syntax Description

This command has no arguments or keywords

Command Default

No default behavior or values.

Command History

Release	Modifications
IX 8.0.2.2	This command was introduced.

Usage Guidelines

This will give the status of the diagnostic audio loopback:

Examples

```
admin: diag audio loopback status
Loopback is not running
```

Related Commands

Command	Description
diag audio loopback enable	Initiates audio loopback
diag audio loopback disable	Cancels audio loopback.

diag audio loopback status

diag audio loopback status

Syntax Description

This command has no arguments or keywords.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.5	This command was introduced.
1.5.10	The **help** option was added.
IX 8.0	Deprecated. This command doesn't exist in IX 8.0.

Usage Guidelines

Use this command to check the audio loopback status. Indicates whether audio loopback is running. You can also enter **help** in the command string to view the status of the diagnostic audio loopback:

```
help diag audio loopback status
```

Examples

```
admin:diag audio loopback status

Loopback is not running
```

Related Commands

Command	Description
diag audio loopback enable	Initiates audio loopback.
diag audio loopback disable	Cancels audio loopback.

diag audio measurement

diag audio measurement [**rt60** | **soundpressure**]

Syntax Description

rt60	Stops call services to perform a sound pressure audio capture.
soundpressure	Captures sound pressure audio.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.7.0	This command was introduced.

Usage Guidelines

Use this command to stop call services to measure audio output.

Examples

```
admin diag audio measurement rt60

This will stop call services. Are you ready to continue?
[yes/no] yes

admin diag audio measurement soundPressure

This will stop call services. Are you ready to continue?
[yes/no] yes

It is imperative that you remain silent during the audio capture. Are you ready to begin
audio capture now?
[yes/no] yes

capturing sound pressure audio now. This could take a while, please be patient...
```

Related Commands

Command	Description
diag audio loopback enable	Turns on audio loopback.
diag audio loopback status	Gives the status of the audio loopback.

diag audio speaker test

diag audio speaker test [**nosubwoofer** | **subwoofer**]

Syntax Description

nosubwoofer	Tests speakers without subwoofer.
subwoofer	Tests speakers with subwoofer.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.9.0	This command was introduced.
IX 8.0	Parameter change from ‘right	left’ to ‘nosubwoofer	subwoofer’

Usage Guidelines

Use this command to test the speakers.

Examples

```
admin diag audio speaker test nosubwoofer
Running  test  now.  Please  be  patient...
Result:  0
```

diag camera switch

diag camera switch [center | left | right

Syntax Description

center	Initiates a switch focus to the center camera.
left	Initiates a switch focus to the left camera.
right	Initiates a switch focus to the right camera.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.7.0	This command was introduced on the CTS 1300.
IX 8.0	Deprecated. This command doesn't exist in IX 8.0

Usage Guidelines

Use this command to switches camera focus on the CTS 1300.

Examples

The following example switches the center camera focus:

```
admin:diag camera switch center
```

diag display capture loopback

diag display capture loopback [center | right | left]

Syntax Description

center	Captures the video loopback frame for the center camera.
left	Captures the video loopback frame for the left camera.
right	Captures the video loopback frame for the right camera.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.7.0	This command was introduced.
IX 8.0.2.2	Command modified from 'diag display capture loopback' to ‘diag display capture loopback [center	left	|right]’

Usage Guidelines

Use this command to create a still image of the meeting room environment exactly as seen from the CTS camera in loopback mode. This information in the form of a .bmp image file is then submitted with the system logs for use in installation verification, camera alignment, and further troubleshooting activities associated with a normal installation or a service request. When you initiate the tool, the system sends a confirmation pop-up in the SSH command window, which you can accept (allow capture) or decline (no capture will be made). See the “Troubleshooting Using the Camera Image Capture Tool” section on page 9-1.

Examples

```
admin:diag display capture loopback center
Loopback is not running. Please enable display loopback and try again
```

Related Commands

Command	Description
diag display loopback full enable	Initiates a full diagnostic display loopback.

diag display color-bars disable

diag display color-bars disable [**center** | **left** | **right**]

Syntax Description

center	Disables color bars on the center display.
left	Disables color bars on the left display.
right	Disables color bars on the right display.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.5	This command was introduced.
1.5.10	The **center**, **left**, and **right** keywords were added. The **help** option was also added.

Usage Guidelines

Use this command to terminate diagnostic color bar display. You can also enter **help** in the command string to disable the color bars on the specified screen, center, left, or right:

```
help diag display color-bars disable center
```

Examples

```
admin:diag display color-bars disable
```

Related Commands

Command	Description
diag display color-bars enable	Initiates diagnostic color bar display.

diag display color-bars enable

diag display color-bars enable [center | left | right]

Syntax Description

center	Disables color bars on the center display.
left	Disables color bars on the left display.
right	Disables color bars on the right display.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.5	This command was introduced.
1.5.10	The **center**, **left**, and **right** keywords were added. The **help** option was also added.

Usage Guidelines

Use this command to initiate diagnostic color bar display. You can also enter **help** in the command string to enable the color bars on the specified screen, center, left, or right:

```
help diag display color-bars enable center
```

Examples

```
admin:diag display color-bars enable
```

Related Commands

Command	Description
diag display color-bars disable	Terminates diagnostic color bar display.

diag display loopback full disable

diag display loopback full disable

Syntax Description

This command has no arguments or keywords.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.2	This command was introduced.
1.5.10	The **help** option was added.

Usage Guidelines

Use this command to terminate a full diagnostic display loopback. You can also enter **help** in the command string to terminate a full diagnostic display loopback:

```
help diag display loopback full disable
```

Examples

```
admin:diag display loopback full disable

Stopping Display Loopback
```

Related Commands

Command	Description
diag display loopback full enable	Initiates a full diagnostic display loopback.
diag display loopback full status	Gives the status of the full diagnostic display loopback.

diag display loopback full enable

diag display loopback full enable [**timeout** *number*]

Syntax Description

timeout *number*	Length of time the loopback should run (in seconds). Value is 10 to 3600. Default is 60

Command Default

60

Command History

Release	Modifications
1.2	This command was introduced.
1.5.10	The **help** option was added.

Usage Guidelines

Use this command to initiate a full diagnostic display loopback. You can also enter **help** in the command string to initiate a full diagnostic display loopback:

```
help diag display loopback full enable
```

Note You must first end Calling Services by entering **utils service stop calling_services**. Be sure to restart calling services when done.

See the "Troubleshooting Using the Camera Image Capture Tool" section on page 9-1.

Examples

```
admin:diag display loopback full enable timeout 60

Loopback is now running
```

Related Commands

Command	Description
diag display capture loopback	Initiates the camera image capture tool.
diag display loopback full disable	Terminates a full diagnostic display loopback.
diag display loopback full status	Displays status of the full diagnostic display loopback.

diag display loopback full status

diag display loopback full status

Syntax Description

This command has no arguments or keywords.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.2	This command was introduced.
1.5.10	The **help** option was added.

Usage Guidelines

Use this command to view the status of the full diagnostic display loopback. You can also enter **help** in the command string to give the status of the full diagnostic display loopback:

```
help diag display loopback full status
```

Examples

```
admin:diag display loopback full status

Loopback is not running
```

Related Commands

Command	Description
diag display loopback full disable	Terminates a full diagnostic display loopback.
diag display loopback full enable	Initiates a full diagnostic display loopback.

diag display register dump

diag display register dump

Syntax Description

This command has no arguments or keywords.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.4.1	This command was introduced.
IX 8.0	Deprecated. This command doesn't exist in IX 8.0.

Usage Guidelines

Use this command to download diagnostic display register information. To retrieve the diagnostic display register information, use the **utils logs generate** command. See Chapter 8, "Utils Commands."

Note The register dump can take up to two minutes to complete.

Examples

```
admin:diag display register dump
```

Related Commands

Command	Description
utils logs generate audio	Generates audio log files.
utils logs generate other	Generates log files for other devices, such as Auxiliary Control Unit (ACU), LEDs, and digital media player (DMP).
utils logs generate phone	Generates phone log files.
utils logs generate presentation	Generates presentation device log files.
utils logs generate recording	Generates sound recording log files.
utils logs generate video	Generates video log files.

diag display temperature get

diag display temperature get [**center** | **left** | **right**]

Syntax Description

center	Retrieves the temperature of the center display.
left	Retrieves the temperature of the left display.
right	Retrieves the temperature of the right display.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.5	This command was introduced.
1.5.10	The **center**, **left**, and **right** keywords were added. The **help** option was also added.
IX 8.0	Deprecated. This command does not exist in IX 8.0.

Usage Guidelines

Use this command to view the current display temperature. You can also enter **help** in the command string to retrieve the current temperature of the center display for the center, left, and right display:

```
help diag display temperature get center
```

Note You must first end Calling Services by entering **utils service stop calling_services**. Be sure to restart calling services when done.

Examples

```
admin:diag display temperature get

Current Display Temperature is: 3000K
```

Related Commands

Command	Description
diag display temperature set	Sets the display color temperature.
utils service stop	Terminates a service.

diag display temperature set

diag display temperature set [3000 | 3500 | 4000 | 5000 | 6500 | 7500] [center | left | right]

Syntax Description

3000	Sets color temperature to 3000.
3500	Sets color temperature to 3500.
4000	Sets color temperature to 4000.
5000	Sets color temperature to 5000.
6500	Sets color temperature to 6500.
7500	Sets color temperature to 7500.
center	Sets color temperature on the center display.
left	Sets color temperature on the left display.
right	Sets color temperature on the right display.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.5	This command was introduced.
1.5.10	The **center**, **left**, and **right** keywords were added. The **help** option was also added.
IX 8.0	Deprecated. This command does not exist in IX 8.0.

Usage Guidelines

Use this command to set the display color temperature. You can also enter **help** in the command string to set the temperature of a specified display (center, left, right) to a specified temperature:

```
help diag display temperature set 3000 center
```

Note You must first end Calling Services by entering **utils service stop calling_services**. Be sure to restart calling services when you are done.

Examples

```
admin:diag display temperature 3000
```

Related Commands

Command	Description
diag display temperature get	Displays the current display temperature.

diag system

diag system [**normal** | **quick** | **extensive**]

Syntax Description

normal	Runs a complete diagnostic check of the system.
quick	Runs a quick check of the system.
extensive	Runs an extensive diagnostics check on the system.

Command Default

No default behavior or values.

Command History

Release	Modifications
1.9	This command was introduced.
TX 6.0	Added the ‘extensive’ option. Note: ‘extensive’ option not available in 1.x releases.

Usage Guidelines

Use this command to retrieve full or partial system diagnostics. The quick iteration of this command returns a subset of the full iteration but takes less time to perform.

diag system normal

Note

- You must first end Calling Services by entering **utils service stop calling_services**. Be sure to restart calling services when you are done.
- Mic tests for the second row will fail in 1-row systems.

Examples

The following example shows output of the full iteration of this command:

```
admin:diag system normal
Host CPU Results
9FG830 Test                    ==> PASS
I2C Scan All                   ==> PASS
LM25066 Test All               ==> PASS
PCA9547 Test                   ==> PASS
PCI Test                       ==> PASS
PEX8796 EEPROM Test            ==> PASS
PIC 1 GPIO Test 0              ==> PASS
PIC 1 GPIO Test 1              ==> PASS
PIC 1 GPIO Test 2              ==> PASS
PIC 1 GPIO Test 3              ==> PASS
PIC 1 GPIO Test 4              ==> PASS
PIC 1 GPIO Test 5              ==> PASS
PIC 1 GPIO Test 6              ==> PASS
PIC 2 SPI Test 0               ==> PASS
PIC 2 SPI Test 1               ==> PASS
PIC 2 SPI Test 2               ==> PASS
```

```
USB PIC 1 Test                ==> PASS
USB PIC 2 Test                ==> PASS
USB PT Test                   ==> PASS

Camera Results
FPGA Clock Test 1             ==> PASS
FPGA Clock Test 2             ==> PASS
FPGA Clock Test 3             ==> PASS
FPGA Ping Test                ==> PASS
Get FPGA Version              ==> PASS
Get HW Version                ==> PASS
Get SW Version                ==> PASS
Get Temperature               ==> PASS
Get Vmetrics Dump             ==> PASS
I2C Test 0                    ==> PASS
I2C Test 1                    ==> PASS
I2C Test 2                    ==> PASS
I2C Test 3                    ==> PASS
Imager Test 1 Vid Type 0      ==> PASS
Imager Test 2 Vid Type 0      ==> PASS
Imager Test 3 Vid Type 0      ==> PASS
PFlash Quick Test             ==> PASS

Video Receiver Results
Clock Test                    ==> PASS
Ctrl1 version                 ==> PASS
PCI Link Speed                ==> PASS
PIC ADC Test                  ==> PASS
PIC GPIO Test                 ==> PASS
PIC SI5338 Test               ==> PASS
PIC TMP102 Test               ==> PASS
PIC TPS40422 Test             ==> PASS

Encoder/Decoder Results
Board Revision                ==> PASS
Clock Gx01                    ==> PASS
Clock Gx23                    ==> PASS
ECB ID                        ==> PASS
Outlet Fan ID                 ==> PASS
PLX Switch ID                 ==> PASS
System Power                  ==> PASS

Audio Card Results
I2C Test                      ==> PASS
Pic USB Test                  ==> PASS
Plekton ch 0 Mic Detect Test  ==> PASS
Plekton ch 0 i2c1 Test        ==> PASS
Plekton ch 0 i2c2 Test        ==> PASS
Plekton ch 0 i2c3 Test        ==> PASS
Plekton ch 1 Mic Detect Test  ==> FAILED
Plekton ch 1 i2c1 Test        ==> FAILED
Plekton ch 1 i2c2 Test        ==> FAILED
Plekton ch 1 i2c3 Test        ==> FAILED
Plekton ch 2 Mic Detect Test  ==> FAILED
Plekton ch 2 i2c1 Test        ==> FAILED
Plekton ch 2 i2c2 Test        ==> FAILED
Plekton ch 2 i2c3 Test        ==> FAILED
SPI Test                      ==> PASS
```

The following example shows output of the quick iteration of this command:

```
admin:diag system quick
stopping SSCD
```

```
Stopping sscd...
Stopping sscd... DONE
sscd status = 3

Tests running. Please be patient as this may take a while.

Host CPU Results
9FG830 Test                     ==> PASS
I2C Scan All                    ==> PASS
LM25066 Test All                ==> PASS
PCA9547 Test                    ==> PASS
PCI Test                        ==> PASS
PEX8796 EEPROM Test             ==> PASS
PIC 1 GPIO Test 0               ==> PASS
PIC 1 GPIO Test 1               ==> PASS
PIC 1 GPIO Test 2               ==> PASS
PIC 1 GPIO Test 3               ==> PASS
PIC 1 GPIO Test 4               ==> PASS
PIC 1 GPIO Test 5               ==> PASS
PIC 1 GPIO Test 6               ==> PASS
PIC 2 SPI Test 0                ==> PASS
PIC 2 SPI Test 1                ==> PASS
PIC 2 SPI Test 2                ==> PASS
USB PIC 1 Test                  ==> PASS
USB PIC 2 Test                  ==> PASS
USB PT Test                     ==> PASS

Camera Results
FPGA Clock Test 1               ==> PASS
FPGA Clock Test 2               ==> PASS
FPGA Clock Test 3               ==> PASS
FPGA Ping Test                  ==> PASS
Get FPGA Version                ==> PASS
Get HW Version                  ==> PASS
Get SW Version                  ==> PASS
Get Temperature                 ==> PASS
Get Vmetrics Dump               ==> PASS
PFlash Quick Test               ==> PASS

Video Receiver Results
Clock Test                      ==> PASS
Ctrl1 version                   ==> PASS
PCI Link Speed                  ==> PASS
PIC ADC Test                    ==> PASS
PIC GPIO Test                   ==> PASS
PIC SI5338 Test                 ==> PASS
PIC TMP102 Test                 ==> PASS
PIC TPS40422 Test               ==> PASS

Encoder/Decoder Results
Board Revision                  ==> PASS
Clock Gx01                      ==> PASS
Clock Gx23                      ==> PASS
ECB ID                          ==> PASS
Outlet Fan ID                   ==> PASS
PLX Switch ID                   ==> PASS
System Power                    ==> PASS

Audio Card Results
I2C Test                        ==> PASS
Plekton ch 0 Mic Detect Test    ==> PASS
Plekton ch 0 i2c1 Test          ==> PASS
Plekton ch 0 i2c2 Test          ==> PASS
Plekton ch 0 i2c3 Test          ==> PASS
```

```
Plekton ch 1 Mic Detect Test   ==> FAILED
Plekton ch 1 i2c1 Test         ==> FAILED
Plekton ch 1 i2c2 Test         ==> FAILED
Plekton ch 1 i2c3 Test         ==> FAILED
Plekton ch 2 Mic Detect Test   ==> FAILED
Plekton ch 2 i2c1 Test         ==> FAILED
Plekton ch 2 i2c2 Test         ==> FAILED
Plekton ch 2 i2c3 Test         ==> FAILED


Retrieve Log of Test Results With
file get log scp <username> <password> <destination> sysdiag/System_diag.log
```

Related Commands None.