



## Viewing Conferences via System Administration

System administration offers four diagnostic screens to allow visibility into the operation of conference resources. These screens are used primarily in the development and test phase of an application, but can also be used to identify the source of errors in a deployed application.

This chapter provides an example of how information can be obtained from the Card Display, Port Display, Conference Menu, and Conference Display. These screens can be accessed via the system administration Diagnostics menu. Field definitions and full instructions for using each screen are contained in the *Cisco VCO/4K System Administrator's Guide*.

### Example Scenario

For this example, assume ports 1 through 8 on an SPC located at hardware address 1,3,7 have been reserved for an active conference; the port address of port 1 is \$04 08. Six of the conference ports are actively participating in the conference. The remaining two are held so that additional conference parties may be added. The line/trunk ports in Table 4-1 are participating in this conference.

*Table 4-1 System Administration Conference Example—Line/Trunk Ports*

Port Address	RLSP	Port Type
\$00 21	1,1,5,10	T1
\$00 37	1,1,6,8	T1
\$01 3D	1,2,10,6	UTC
\$00 FD	1,2,6,6	UTC
\$00 18	1,1,5,1	T1
\$00 30	1,1,6,1	T1
\$00 67	1,1,8,8	T1

### Card Display of Conference Card

The following information can be obtained using the Card Display screen for an SPC:

- Hardware address, if information is requested by the first port address of the card
- First software port address, if information is requested by hardware address
- In-service/out-of-service state for each conference port

- Card Status (Active, Maintenance, Diagnostic, Out-of-Service)
- Number of communication errors (number of times the NBC detected an error in response to a poll)
- NBC Poll Queue state

Refer to the *Cisco VCO/4K System Administrator's Guide* for a definition of each of these items.

The Card Display screen is accessed from the Diagnostics Menu by typing **B** and pressing **Enter**. The Card Display screen is displayed, with the cursor located in the R,L,S data entry field. To view the display for an SPC, specify the card by R,L,S hardware address.

Figure 4-1 shows the information for the conference card in this example. The system continues to update this information every 10 seconds.

*Figure 4-1 Card Display Screen*

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CARD DISPLAY
R,L,S 1 3 7   Display Port (Y/N) N 1st Port Adr 408 Card Type SPC FW 2.02
Card Status (81) Active           Comm Errors 0   Poll Queue Active

1 --- 8 9 --- 16 17--- 24 25 --- 32 ALARM STATES
Port Available          11111111 11111111 11100111 11111101
On (0)/Off (1) Hook    00000000 00000000 00000000 00000000
Diagnostics            00000000 00000000 00000000 00000000
Voice Path Trace       00000000 00000000 00000000 00000000
Internal Trace         00000000 00000000 00000000 00000000
Network Trace

33 --- 40 41 --- 48 49 --- 56 57 --- 64
Port Available          11111111 11110111 11111101 11111111
On (0)/Off (1) Hook    00000000 00000000 00000000 00000000
Diagnostics            00000000 00000000 00000000 00000000
Voice Path Trace       00000000 00000000 00000000 00000000
Internal Trace         00000000 00000000 00000000 00000000
Network Trace

16-JAN-2000 14:54                               Press Any Key to Halt Screen Updates

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From the display shown in Figure 4-1, the following information can be derived:

- The first logical port address of the SPC at hardware address 1,3,7 is \$408.
- The card is Active, and being polled as such.
- There have been no CommErrors for this card since system boot.
- Ports 20, 21, 31, 45, and 55 are deactivated and not available for use by the system.
- There are no alarms currently active for this card.

The Port Display screen can be accessed directly from the Card Display screen using the following steps:

- 
- Step 1** Halt the screen updates. The cursor moves to the R,L,S data entry field.
  - Step 2** Press **Next Field** until the cursor moves to the Display Port (Y/N) command field.

- Step 3** Type **Y** and press **Enter**. The Port Display screen is displayed, and the hardware address of the card is shown in the R,L,S,P data entry field. Refer to the “Port Display of Conference Card” section on page 4-3 for more information about using the Port Display screen.
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## Port Display of Conference Card

The following information can be obtained for an individual conference port using the Port Display screen:

- Hardware address, if information is requested by port address
- Port address, if information is requested by hardware address
- Current MState and SState (refer to Chapter 3, “Call Processing States”)
- Resource group to which the SPC port belongs
- Conference number in which the port is participating (the Conference field is also used to access the Conference Display screen)
- Links established for this port
- Line/trunk port associated with this conference port
- Various statistical and internal processing information

Refer to the *Cisco VCO/4K System Administrator's Guide* for a definition of these items. You can access the Port Display screen from the Diagnostics menu, the Card Display screen, or the Conference Display screen. To access the Port Display screen from the Diagnostics menu, type **C** and press **Enter**. To access the screen from the Card Display or Conference Display screen, follow the directions detailed in the *Cisco VCO/4K System Administrator's Guide*. Whichever method is used, the Port Display screen is displayed with the cursor located in the R,L,S,P data entry field. To view the display for a conference port, specify the port by either hardware address (R,L,S,P) or port address.

For the purpose of this example, assume the hardware address 1,3,7,5 is entered. The information for this port would then be displayed as shown in Figure 4-2. The system continues to update this information every few seconds.

Figure 4-2 Port Display Screen

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                                P O R T   D I S P L A Y

R,L,S,P: 1 3 7 5                PA 40C   COS          TRACE: Net   Int 0   Voice 0
CURRENT STATE                   In/Outpulse Rule      Token
Major                            CP_CONF   Resource Group   5   Conference 20
Supplementary                     CP_R2ACK Listening To RLSP          PA
Conf/Assoc Port   RLSP 1 1 6 1   PA 30

Port Pointer          1e9630
Dynamic Data Pointer
Start Record Pointer
End Record Pointer
Attempts              1
Completions
Errors/Threshold     /
Rehunts/Threshold   /

                                C U R R E N T   L I N K S
                                R   L   S   P       R   L   S   P
                                1   3   7   8       1   3   7   2
                                1   3   7   7       1   3   7   1
                                1   3   7   6       -   -   -   -
                                1   3   7   4       -   -   -   -
                                1   3   7   3       -   -   -   -
                                -   -   -   -       -   -   -   -

Originating Number
Digit Field 1
Digit Field 2

                                Digit Field 3
                                Digit Field 4

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From the display shown in Figure 4-2, the following information can be derived:

- The logical port address for the port at 1,3,7,5 is hexadecimal 04 0C.
- Current MState is CP\_CONF, with an SState of CF\_R2ACK. This indicates the port is actively involved in a conference and the conference port has acknowledged commands to reserve it and establish a two-way voice path. When the line/trunk port goes on hook or is deleted from the conference, the SPC port remains reserved.
- Resource group is 5.
- Conference number is 20.
- Line/trunk port associated with this conference port is located at 1,1,6,1 with a port address of \$00 30.
- Links are established with seven other conference ports on the card located at 1,3,7; ports 1 to 4 and 6 to 8.
- Port has been allocated to a conference once since the beginning of the current statistics period; port table record pointer is 1e9630.

Access the Conference Display screen directly from the Port Display screen with the following steps:

- 
- Step 1** Halt the screen updates. The cursor moves to the R,L,S,P data entry field.
- Step 2** Press **Tab** until the cursor moves to the Conference field. There must be a conference number shown in the field.
- Step 3** Press **Enter**. The Conference Display screen is displayed for that conference number. Refer to the “Conference Display” section on page 4-6 for more information about using the Conference Display screen.
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## Conference Menu

The Conference Menu screen provides a listing of all conferences in the system. This listing can consist of up to four screens, with each screen containing listings for up to 32 conferences. A conference is listed as long as conference ports are allocated to the conference, regardless of whether any line/trunk ports are associated with the conference. The following information can be obtained using the Conference Menu:

- Total number of active conferences
- Number assigned to each conference (conference number)
- Number of ports allocated to each conference
- Number of ports reserved for each conference but not currently associated with a line/trunk port (unused)
- Number of line/trunk ports with one-way voice paths in each conference
- Number of line/trunk ports with two-way voice paths in each conference

Access the Conference Menu screen from the Diagnostics menu by typing **D** and pressing **Enter**. The Conference menu is displayed, with the cursor located in the Disp data entry field of the first active conference. This field is used to access the Conference Display screen for an individual conference. Figure 4-3 shows what the Conference Menu screen might contain for this example.

*Figure 4-3 Conference Menu Screen*

CONFERENCE MENU											
No	CONF PORTS		LINE S/TRNK S			CONF PORTS			LINES /TRNK S		
	Alloc	Unused	1Way	2Way	Disp	No	Alloc	Unused	1Way	2Way	Disp
1	4	0	0	4		20	8	2	2	5	
2	3	0	0	3		23	8	0	0	8	
4	8	0	7	9		24	6	6	0	0	
5	4	0	1	3		—	—	—	—	—	—
6	4	4	0	0		—	—	—	—	—	—
8	5	1	0	4		—	—	—	—	—	—
9	4	1	1	2		—	—	—	—	—	—
10	8	0	0	8		—	—	—	—	—	—
11	8	5	0	3		—	—	—	—	—	—
12	6	0	2	5		—	—	—	—	—	—
13	8	1	12	6		—	—	—	—	—	—
15	3	1	25	1		—	—	—	—	—	—
16	5	0	0	5		—	—	—	—	—	—
17	8	8	0	0		—	—	—	—	—	—
18	8	0	0	8		—	—	—	—	—	—
19	4	0	6	3		—	—	—	—	—	—

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From the display in Figure 4-3, the following information can be derived:

- There are 19 active conferences in the system.
- For conference 20, there are 8 DCC ports allocated.
- For conference 20, there are 2 reserved ports not currently being used.
- For conference 20, there are 2 line/trunk ports with one-way voice paths.
- For conference 20, there are 5 line/trunk ports with two-way voice paths.

More detailed information for any conference listed on the menu can be obtained by accessing the Conference Display screen as described below:

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- Step 1** Use the **Prev Field** or **Next Field** key to position the cursor in the Disp field corresponding to the conference number for which you want to display information.
- Step 2** Type any character and press **Enter**.
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## Conference Display

The following information can be obtained for an individual conference using the Conference Display:

- Status (Active, Reserved) of the conference
- Number of SPC ports reserved but not in use
- Number of SPC ports in use
- All links for the conference
- Hardware and port addresses of all SPC ports and their associated line/trunk ports
- Number of line/trunk ports listening to an SPC port
- Path type (one-way or two-way voice path)
- Scaling factors (input/output gain/attenuation)

Refer to the *Cisco VCO/4K System Administrator's Guide* for a definition of each of these items.

Access the Conference Display screen from the Diagnostics menu, Port Display screen, or Conference menu. To access the Conference Display screen from the Diagnostics menu, type **E** and press **Enter**. To access the screen from the Port Display or Conference Display screen, follow the directions detailed in the *Cisco VCO/4K System Administrator's Guide*. Whichever method is used, the Conference Display screen is displayed with the cursor located in the Conference No. data entry field.

To view the display for a conference, type the conference number (in this case 20) then press **Enter**. The screen is updated to show the current status of the conference specified (see Figure 4-4).

Figure 4-4 Conference Display Screen

CONFERENCE DISPLAY													
Conference No.				20	Status	Active	Avail.				2	Act.	6
CONFERENCE				PORTS	In	Out	Path				LINE/TRUNK	PORTS	
R	L	S	P	PA	Scale	Scale	Users	Type	R	L	S	P	PA
1	3	7	8	40F			1	2	1	1	6	8	037
1	3	7	7	40E			1	2	1	1	5	1	018
1	3	7	6	40D			2	1	1	2	10	6	13D
								1	1	2	6	6	0FD
1	3	7	5	40C			1	2	1	1	6	1	030
1	3	7	4	40B			1	2	1	1	5	10	021
1	3	7	3	40A			1	2	1	1	8	8	067
1	3	7	2	409									
1	3	7	1	408									

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The Conference Display provides a listing of all resources in the conference. From the display in Figure 4-4, the following information can be derived:

- Conference 20 is considered Active.
- Two SPC ports are reserved for conference 20.
- Six SPC ports are in use for conference 20.
- Conference 20 has the following links and voice paths established:
  - All SPC ports (1,3,7,1 to 1,3,7,8 or PA \$04 08 to \$04 0F) linked in a single chain
  - Line/trunk port at 1,1,6,8 (PA \$00 37) is a two-way conference party linked to 1,3,7,8 (PA \$04 0F)
  - Line/trunk port at 1,1,5,1 (PA \$00 18) is a two-way conference party linked to 1,3,7,7 (PA \$04 0E)
  - Line/trunk port at 1,2,10,6 (PA \$01 3D) is a one-way (receive-only) conference party linked to 1,3,7,6 (PA \$04 0D); PA \$01 3D is listening to \$04 0D
  - Line/trunk port at 1,2,6,6 (PA \$00 FD) is a one-way (receive-only) conference party linked to 1,3,7,6 (PA \$04 0D); PA 00 FD is listening to \$04 0D
  - Line/trunk port at 1,1,6,1 (PA \$00 30) is a two-way conference party linked to 1,3,7,5 (PA \$04 0C)
  - Line/trunk port at 1,1,5,10 (PA \$00 21) is a two-way conference party linked to 1,3,7,4 (PA \$04 0B)
  - Line/trunk port at 1,1,8,8 (PA \$00 67) is a two-way conference party linked to 1,3,7,3 (PA \$04 0A)
- DCC ports 1,3,7,2 (PA \$04 09) and 1,3,7,1 (PA \$04 08) are reserved for conference 20 but not currently participating in the conference.
- Two line/trunk ports are listening to SPC port 1,3,7,6 (PA \$04 0D).
- Input/output gain/attenuation has not been specified for any port in this conference.

