



Siemens HiPath 4000 Release 1.0 to a Cisco IAD243X using E1-ISDN NET5 with SIP

January 11, 2007 Initial Version

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Introduction

This is an application note for connectivity to a Siemens HiPath 4000 Release 1.0 with a Cisco IAD243X Gateway via E1 ISDN NET5-to-SIP communication (10/100baseT).

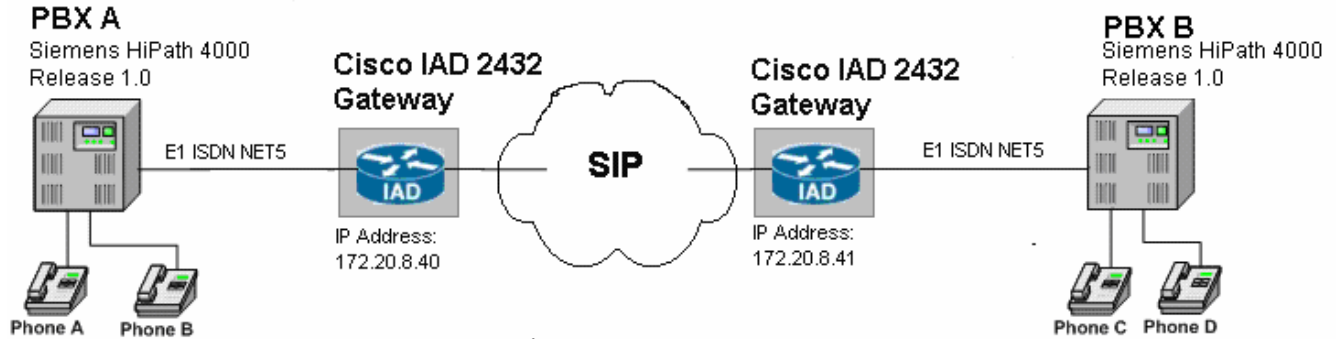
The network topology diagram (Figure 1) shows the test setup for end-to-end interoperability with the Cisco IAD243X Gateway connected to the PBX via NET5 (E1 PRI). IP trunk connectivity between the Cisco IAD243X's is achieved by using SIP protocol.



Network Topology

Figure 1. Basic Call Setup

Basic Call Setup End-to-End Configuration



Limitations

On Call Forward No Answer local (e.g. Phone A calls Phone C CFNA to Phone D); the Cisco IAD243X must be set to Q921/Q931 Network side. If the Cisco IAD 243X is set to Q921/Q931 user side CFNA will not work.

Connected number (COLP) does not interoperate This is an Cisco IAD2432 limitation.



Hardware Requirements

- 2 Cisco IAD2432 24FXS
- 1 Cisco Catalyst switch (CAT6500)
- (1) Siemens HiPath 40000
- DIU-N2

Software Requirements

- Siemens HiPath 4000 Release 1.0
- Cisco IOS Release: c2430-ik9o3s-mz-124-9.T1

Features

Features Supported

- Basic end-to-end calls with CLIP (Calling Number)
- Calling Number Restricted
- Overlap Receiving
- Call Transfer – Local and Network/External
- Call on-hold
- Call Forward (Unconditional, Busy and No answer) – local and network/external
- 3-way Conference
- DTMF end-to-end

Features Not Supported

- Calling Name and Connected Name presentation
- Connected Number presentation

Configuration

Configuring the Siemens HiPath 4000 PBX

1. Add the new access code to Dialing Plans using WABE + LDPLN.
2. Add the new trunk board using BCSU.
3. Configure Class of Trunk using COT.
4. Configure Class of Parameter for device handler using COP.
5. Configure Class of Service using COSSU.
6. Add the new trunk group access code using BUEND.
7. Configure trunk using TDCSU.
8. Configure Reference Clock using REFTA.
9. Configure trunk Least Cost Routing using LDAT + RICHT.
10. Configure LCR Out-dial Rules using LODR.
11. Enable In-Band DTMF signaling for the Digital Stations using SBCSU.



Configuring the Hipath 4000 PBX

DPLN

```
<dis-wabe:gen;
DIS-WABE:GEN;
H500: AMO WABE STARTED
```

DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS									
CODE		CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO				
		1	11111	11112	22						
		0	12345	67890	12345	67890	12	*			
0		.	****	..	***	**	..	..	*	CO	R
001	- 009	*	....	....	....	....	....	....	..	NETRTE	
111		.	****	*****	**	..	..	..	*	TIE	
12		.	****	*****	**	..	..	..	*	TIE	R
13	- 14	.	****	*****	**	..	..	..	*	TIE	
21		.	....	....	....	....	....	....	*	KNOVRKY	
22		.	....	....	....	....	....	....	*	DNDKY	
222		.	****	*****	**	..	..	..	*	TIE	
23		.	....	....	....	....	....	....	*	FWDKY	
24		.	....	....	....	....	....	....	*	MBKY	
25		.	....	....	....	....	....	....	*	MSGRKY	
26		.	....	....	....	....	....	....	*	DAKY	
27		.	....	....	....	....	....	....	*	DSSKY	
28		.	....	....	....	....	....	....	*	VCRKY	
29		.	....	....	....	....	....	....	*	VCKY	
30		.	....	....	....	....	....	....	*	CONFKY	

DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS									
CODE		CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO				
		1	11111	11112	22						
		0	12345	67890	12345	67890	12	*			
3000	- 3010	.	****	*****	**	..	..	..	*	STN	DESTNO 30 DNNO 0- 0-222
3011	- 3020	.	****	*****	**	..	..	..	*	STN	DESTNO 31 DNNO 0- 0- 31
3021	- 3030	.	****	*****	**	..	..	..	*	STN	DESTNO 32 DNNO 0- 0- 32
3031	- 3040	.	****	*****	**	..	..	..	*	STN	DESTNO 33 DNNO 0- 0- 33
3041	- 3050	.	****	*****	**	..	..	..	*	STN	DESTNO 35 DNNO 0- 0- 35
31		.	....	....	....	....	....	....	*	NAMEKY	
32		.	....	....	....	....	....	....	*	PARKKY	

DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS									
CODE		CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO				
		1	11111	11112	22						
		0	12345	67890	12345	67890	12	*			
33		.	....	....	....	....	....	....	*	CCKY	
34		.	....	....	....	....	....	....	*	HTKY	
35		.	....	....	....	....	....	....	*	STKY	
36		.	....	....	....	....	....	....	*	REMKY	
36	- 37	.	****	..	***	**	..	..	*	CO	
38		.	....	....	....	....	....	....	*	TIMEKY	



39		. . . . .	****	*****	**	. . . . .	*	TIE	
4000	- 4050	. . . . .	****	*****	**	. . . . .	*	STN	DESTNO 111
									DNNO 0- 0-111
4051	- 4566	. . . . .	****	*****	**	. . . . .	*	STN	DESTNO 222
									DNNO 0- 0-222
4567		. . . . .	****	*****	**	. . . . .	*	STN	DESTNO 34
									DNNO 0- 0-200

DIGIT INTERPRETATION VALID FOR ALL DIAL PLANS

CODE	CALL PROGRESS STATE						DIGIT ANALYSIS	RESERVED/CONVERT DNI/ADD-INFO
	1	11111	11112	22	0	12345 67890 12345 67890 12		
							RESULT	*=OWN NODE

4568	- 4999	. . . . .	****	*****	**	. . . . .	*	STN	DESTNO 222
									DNNO 0- 0-222
5000	- 5040	. . . . .	****	*****	**	. . . . .	*	STN	DESTNO 0
									DNNO 0- 0-555*
5500	- 5501	. . . . .	****	*****	**	. . . . .	*	STN	DESTNO 56
									DNNO 0- 0-560
555		. . . . .	****	*****	**	. . . . .	*	OWNNODE	
560		. . . . .	****	*****	**	. . . . .	*	TIE	
59		. . . . .	****	*****	**	. . . . .	*	TIE	
6000	- 6009	. . . . .	****	*****	**	. . . . .	*	STN	R
									DESTNO 0
									DNNO 0- 0-555*

DIGIT INTERPRETATION VALID FOR ALL DIAL PLANS

CODE	CALL PROGRESS STATE						DIGIT ANALYSIS	RESERVED/CONVERT DNI/ADD-INFO
	1	11111	11112	22	0	12345 67890 12345 67890 12		
							RESULT	*=OWN NODE

7000	- 7002	. . . . .	****	*****	**	. . . . .	*	STN	DESTNO 56
									DNNO 0- 0-560
8000	- 8050	. . . . .	****	*****	**	. . . . .	*	STN	DESTNO 222
									DNNO 0- 0-222
8060		. . . . .	****	*****	**	. . . . .	*	TIE	
8070		. . . . .	****	*****	**	. . . . .	*	TIE	
83		. . . . .	****	*****	**	. . . . .	*	SPDC1	
84		. . . . .	****	*****	**	. . . . .	*	SPDC2	
88		. . . . .	****	*****	**	. . . . .	*	SCONSI	R
89		. . . . .	****	*****	**	. . . . .	*	SCONSCO	R
9		. . . . .	****	*****	**	. . . . .	*	TIE	
*13		. . . . .	****	*****	**	. . . . .	*	AHTVCE	
*15		. . . . .	****	*****	**	. . . . .	*	SPLIT	
*16		. . . . .	****	*****	**	. . . . .	*	AREM	
*17		. . . . .	****	*****	**	. . . . .	*	TRACE	

DIGIT INTERPRETATION VALID FOR ALL DIAL PLANS

CODE	CALL PROGRESS STATE						DIGIT ANALYSIS	RESERVED/CONVERT DNI/ADD-INFO
	1	11111	11112	22	0	12345 67890 12345 67890 12		
							RESULT	*=OWN NODE

*18		. . . . .	****	*****	**	. . . . .	*	ACOSX	
*19		. . . . .	****	*****	**	. . . . .	*	KNOVR	
*20		. . . . .	****	*****	**	. . . . .	*	ADND	
*25		. . . . .	****	*****	**	. . . . .	*	FWDTERM	



```
| *29          | . ....* .....* ..... ..| AFFWDVCE |
```

```
AMO-WABE -111      DIALLING PLANS, FEATURE ACCESS CODES
DISPLAY COMPLETED;
```

BCSU

PRI Board

```
<DISPLAY-BCSU:TYPE=TBL,LTG=1,LTU=2,SLOT=49;
DISPLAY-BCSU:TYPE=TBL,LTG=1,LTU=2,SLOT=49;
H500: AMO BCSU STARTED
```

```
ADDRESS :  LTG  1    LTU  2    SOURCE GROUP 1
-----+-----+-----+-----+-----+-----+-----+-----+-----+
PEN | ASSIGNED | MODULE | FCT|HWY| | INSERTED |   |   | MODULE |
   | MODULE   | TYPE   | ID |BDL| | MODULE   | STATE | HW-INFO | STATUS |
-----+-----+-----+-----+-----+-----+-----+-----+
 49 | Q2196-X  | DIU-N2 | 1  A | | Q2196-X  | 1  | -06 - | READY |
```

```
AMO-BCSU -111      BOARD CONFIGURATION, SWITCHING UNIT
DISPLAY COMPLETED;
```

Class of Trunk, COT

```
<dis-cot:21;
DIS-COT:21;
H500: AMO COT STARTED
```

```
COT: 21 INFO:
DEVICE: INDEP          SOURCE: DB
PARAMETER:
  PRIORITY FOR AC WILL BE DETERMINED FROM MESSAGE          PRI
  RECALL IF USER HANGS UP IN CONSULTATION CALL            RCL
  TRUNK CALL TRANSFER                                       XFER
  TRUNK SIGNALING ANSWER                                     ANS
  CHANGEOVER FROM HOLD TO RING TONE                         CHRT
  KNOCKING OVERRIDE POSSIBLE                                KNOR
  CALL EXTEND FOR BUSY, RING OR CALL STATE                  CEBC
  NETWORKWIDE AUTOMATIC CALLBACK ON BUSY                   CBBN
  NETWORKWIDE AUTOMATIC CALLBACK ON FREE                   CBFN
  DON'T RELEASE CALL TO BUSY HUNT GROUP                    BSHT
  CONNECTION TO ROUTE OPTIMIZATION NODE                    ROPT
  TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)       TSXS
  INCOMING CDR BY ZONE OR FROM LINE                         ICZL
  AOC PER CALL (AUTOMATICAL OR ON REQUEST), MAND. CORNET-NQ AOCX
  LINE WITH IMPLICIT NUMBERS                                LINO
  NO TONE                                                    NTON
```

```
AMO-COT -111      CLASS OF TRUNK FOR CALL PROCESSING
DISPLAY COMPLETED;
```



Class of Parameter for Device Handler, COP

```

<DISPLAY-COP:COPNO=21;
DISPLAY-COP:COPNO=21;
H500: AMO COP STARTED

COP: 21 INFO:
DEVICE: INDEP SOURCE: DB
PARAMETER:
  LINE WITH END-OF-DIAL EOD
  SPECIAL MODE SFRM
  CODE CALLING RELEASE AFTER EVERY TASK CCR
  REGISTRATION OF LAYER 3 ADVISORIES L3AR
  MAKE/BREAK RATIO FOR DTMF 1 (PULSE=80MS,PAUSE=80MS) DTML

CO TRUNK ACCESS: TA
  TRUNK ACCESS

TOLL ACCESS: TA
  TRUNK ACCESS

AMO-COP -111 CLASS OF PARAMETER FOR DEVICE HANDLER
DISPLAY COMPLETED;

```

Class of Service, COSSU

```

<DISPLAY-COSSU:TYPE=COS,COS=10;
DISPLAY-COSSU:TYPE=COS,COS=10;
H500: AMO COSSU STARTED

```

COS	VOICE	FAX	DTE
10	>		
	TA	NOCO	NOCO
	TSUID	NOTIE	NOTIE
	TNOTCR		
	RKOABS		
	CDRINT		
	CDRS		
	CDRC		
	COSXCD		
	VCE		
	FWDNWK		
	MSN		
	FWDECA		
	CFB		
	CFNR		
	FWDEXT		

```

AMO-COSSU-111 CLASSES OF SERVICE
DISPLAY COMPLETED;

```



```
<DISPLAY-COSSU:TYPE=LCOSV,LCOSV=1;
DISPLAY-COSSU:TYPE=LCOSV,LCOSV=1;
H500: AMO COSSU STARTED
```

```

+-----+-----+-----+-----+-----+-----+-----+
| LCOS |                                     LAUTH |           |
|  V   |      1      2      3      4      5      6 |           |
| 12345678901234567890123456789012345678901234 | COPIN |
| >SERVICE INFORMATION | NUM |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | X..... | ..... | ..... | ..... | ..... | ..... | 0 |
| >LCR ATTENDANT FOR VOICE | | | | | | | |
+-----+-----+-----+-----+-----+-----+-----+

```

```
AMO-COSSU-111          CLASSES OF SERVICE
DISPLAY COMPLETED;
<DISPLAY-COSSU:TYPE=LCOSD,LCOSD=1;
DISPLAY-COSSU:TYPE=LCOSD,LCOSD=1;
H500: AMO COSSU STARTED
```

```

+-----+-----+-----+-----+-----+-----+-----+
| LCOS |                                     LAUTH |           |
|  D   |      1      2      3      4      5      6 |           |
| 12345678901234567890123456789012345678901234 | COPIN |
| >SERVICE INFORMATION | NUM |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | X..... | ..... | ..... | ..... | ..... | ..... | . |
+-----+-----+-----+-----+-----+-----+-----+

```

```
AMO-COSSU-111          CLASSES OF SERVICE
DISPLAY COMPLETED;
```

Trunk Group Access Code, BUEND

```
<DISPLAY-BUEND:TGRP=20,FORMAT=L;
DISPLAY-BUEND:TGRP=20,FORMAT=L;
H500: AMO BUEND STARTED
```

```

+-----+-----+-----+-----+-----+-----+-----+
|                                     FORMAT = L |
| TGRP NUMBER :      20  TGRP NAME   : PRI PSSV1      MAXIMUM NO. :      70 |
|                                     CHARCON   : NEUTRAL |
| SUBGROUP NO. :       3  DEVICE TYPE : S2CONN        TRACENO      :       0 |
| RESERVED     :        N  SEARCH MODE : ASCENDING     ACD THRESHOLD :      * |
| NUMBER OF ASSOCIATED ROUTES :      2                PRIORITY     :       2 |
| TDDRFLAG     :      ON  TDDRTHRESHOLD: 3            SOURCEGROUPIDX :       1 |
| GDTRRULE     :       0   ACDCMGRP  : 0 |
| THE FOLLOWING TRUNKS (LTG-LTU-SLOT-CCT) HAVE BEEN ALLOCATED: |
+-----+-----+-----+-----+-----+-----+-----+
| 1- 2- 49-0    1 | 1- 2- 49-0    2 | 1- 2- 49-0    3 |
| 1- 2- 49-0    4 | 1- 2- 49-0    5 | 1- 2- 49-0    6 |
| 1- 2- 49-0    7 | 1- 2- 49-0    8 | 1- 2- 49-0    9 |
| 1- 2- 49-0   10 | 1- 2- 49-0   11 | 1- 2- 49-0   12 |
| 1- 2- 49-0   13 | 1- 2- 49-0   14 | 1- 2- 49-0   15 |
| 1- 2- 49-0   16 | 1- 2- 49-0   17 | 1- 2- 49-0   18 |
| 1- 2- 49-0   19 | 1- 2- 49-0   20 | 1- 2- 49-0   21 |
| 1- 2- 49-0   22 | 1- 2- 49-0   23 | 1- 2- 49-0   24 |
| 1- 2- 49-0   25 | 1- 2- 49-0   26 | 1- 2- 49-0   27 |
| 1- 2- 49-0   28 | 1- 2- 49-0   29 | 1- 2- 49-0   30 |
+-----+-----+-----+-----+-----+-----+-----+

```

```
AMO-BUEND-111          TRUNK GROUP
DISPLAY COMPLETED;
```



Trunk Configuration, TDCSU

For Master-side Configuration

<DISPLAY-TDCSU: PEN1=1-2-49-0;

DISPLAY-TDCSU: PEN1=1-2-49-0;

H500: AMO TDCSU STARTED

```
----- DIGITAL TRUNK (FORMAT=L) -----
| DEV      = S2CONN      PEN      = 1-02-049-0  TGRP      = 20
|-----|
| PROTVAR  = ETSI        INS       = Y          SRCHMODE  = ASC
| COTNO    = 21          COPNO    = 21          DPLN      = 0
| ITR      = 1           COS       = 10         LCOSV     = 1
| LCOSD    = 1          CCT       = HICOM S2    DESTNO    = 1
| SEGMENT  = 1          DEDSCC  =          DEDSVC    = NONE
| FACILITY =             DITIDX  =          SRTIDX    =
| TRTBL    = GDTR       SIDANI   = N          ATNTYP    = TIE
| CBMATTR  = NONE       NWMUXTIM = 10        TCHARG    = N
| SUPPRESS = 0          DGTPR   =          CHIMAP    = N
| ISDNIP   =           ISDNNP  =
| PNPL2P   =           PNPL1P  =          PNPAC     =
| TRACOUNT = 31         SATCOUNT = MANY  NNO       = 1 -1 -300
| ALARMNO  = 0          FIDX    = 1          CARRIER  = 1
| ZONE     = EMPTY     COTX    = 21        FWDX      = 5
| DOMTYPE  =           DOMAINNO =          TPROFNO  =
| INIGHT   =           UUSCCY   = 8          CCHDL    =
| UUSCCX   = 16         && G711  && G729OPT  FNIDX     = 1
| CLASSMRK = EC        && G711  && G729OPT  SRCGRP    =
| TCCID    =
|-----|
| BCNEG    = N          BCGR    = 1          LWPARG    = 1
| LWPP     = 0          LWLT    = 0          LWPS      = 0
| LWR1     = 0          LWR2    = 0
| SVCDOM   =
| BCHAN    = 1 && 30
|-----|
```

AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111 DIGITAL TRUNKS
DISPLAY COMPLETED;

<DISPLAY-LWPAR: FORMAT=L, TYPE=DIUS2, BLNO=1;

DISPLAY-LWPAR: FORMAT=L, TYPE=DIUS2, BLNO=1;

H500: AMO LWPAR STARTED

```
-----
| LOADWARE PARAMETERS      CIRCUIT TYPE: DIUS2  SOURCE:DB  BLOCK: 1
|-----|
| LNTYPE  = COPPER         VERSION  = S2          QUAL      = ON
| MASTER  = Y              DCHAN1  = 16          DCHAN2   = 0
| PATTERN = D5H           QUAL1   = 10 SEC.    QUAL2    = 10 MIN.
| SMD     = Y              PERMACT = Y           FCBAB    = DFH
| CDG     = N              FIXEDTEI = 0          CNTRNR   = 255
| TEIVERIF = N            CRC4REP  = N
| DEV     = INDEP
| INFO    =
|-----|
```

AMO-LWPAR-111 LOADWARE PARAMETERS FOR NETWORKING MODULES
DISPLAY COMPLETED;



For Slave-side Configuration

<DISPLAY-TDCSU: PEN1=1-2-49-0;

DISPLAY-TDCSU: PEN1=1-2-49-0;

H500: AMO TDCSU STARTED

```

+-----+-----+-----+-----+-----+
| DEV      = S2CONN      PEN      = 1-02-049-0  TGRP      = 20
+-----+-----+-----+-----+
| PROTVAR  = ETSI        INS       = Y          SRCHMODE  = ASC
| COTNO    = 21          COPNO    = 21          DPLN      = 0
| ITR      = 1           COS       = 10          LCOSV     = 1
| LCOSD    = 1           CCT       = HICOM S2     DESTNO    = 1
| SEGMENT  = 1           DEDSCC  =          DEDSVC    = NONE
| FACILITY =          DITIDX  =          SRTIDX    =
| TRTBL    = GDTR        SIDANI  = N          ATNTYP    = TIE
| CBMATTR  = NONE        NWMUXTIM = 10       TCHARG    = N
| SUPPRESS = 0           DGTPR   =          CHIMAP    = N
| ISDNIP   =          ISDNPN  =
| PNPL2P   =          PNPL1P  =          PNPAC     =
| TRACOUNT = 31          SATCOUNT = MANY     NNO       = 1  -1  -300
| ALARMNO  = 0           FIDX    = 1          CARRIER  = 1
| ZONE     = EMPTY       COTX    = 21         FWDX     = 5
| DOMTYPE  =          DOMAINNO =          TPROFNO  =
| INIGHT   =
| UUSCCX   = 16          UUSCCY  = 8          FNIDX    = 1
| CLASSMRK = EC          & G711  & G729OPT  SRCGRP    =
| TCCID    =
+-----+-----+-----+-----+
| BCNEG    = N           BCGR     = 1          LWPAR     = 0
| LWPP     = 0           LWLT    = 0          LWPS     = 0
| LWR1     = 0           LWR2    = 0
| SVCDOM   =
| BCHAN    = 1 && 30
+-----+-----+-----+-----+

```

AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111 DIGITAL TRUNKS

DISPLAY COMPLETED;

<DISPLAY-LWPAR: FORMAT=L, TYPE=DIUS2, BLNO=0;

DISPLAY-LWPAR: FORMAT=L, TYPE=DIUS2, BLNO=0;

H500: AMO LWPAR STARTED

```

+-----+-----+-----+-----+
| LOADWARE PARAMETERS      CIRCUIT TYPE: DIUS2  SOURCE:DB  BLOCK: 0
+-----+-----+-----+-----+
| LNTYPE  = COPPER          VERSION  = S2          QUAL      = ON
| MASTER  = N              DCHAN1  = 16          DCHAN2   = 0
| PATTERN = D5H            QUAL1   = 10 SEC.     QUAL2    = 10 MIN.
| SMD     = N              PERMACT = Y           FCBAB    = DFH
| CDG     = N              FIXEDTEI = 0          CNTRNR   = 255
| TEIVERIF = N            CRC4REP  = N
| DEV     = INDEP
| INFO    =
+-----+-----+-----+-----+

```

AMO-LWPAR-111 LOADWARE PARAMETERS FOR NETWORKING MODULES

DISPLAY COMPLETED;



Configuring the Cisco IAD2432 24FXS

```
Ericsson-1#sh run
Building configuration...

*Mar 6 19:04:55.133: %SYS-5-CONFIG_I: Configured from console by vty0 (172.20.1
10.100)
Current configuration : 2367 bytes
!
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname Ericsson-1
!
boot-start-marker
boot system flash:c2430-ik9o3s-mz-124-9.T1.bin
boot-end-marker
!
card type e1 1
logging buffered 10000000 debugging
no logging console
enable secret 5 $1$WJPz$ZoIKHvDdxxTEDUc2AwOoM0
!
no aaa new-model
!
resource policy
!
network-clock-participate E1 1/0
network-clock-participate E1 1/1
network-clock-select 1 E1 1/0
!
!
no ip domain lookup
!
!
!
isdn switch-type primary-qsig
isdn gateway-max-interworking
!
voice-card 0
!
!
!
!
!
voice service voip
  notify redirect ip2pots
!
  controller E1 1/0
  pri-group timeslots 1-31
!
  controller E1 1/1
```



```
mode cas
framing NO-CRC4
!
!
!
!
!
interface FastEthernet0/0
ip address 172.20.8.40 255.255.255.0
ip broadcast-address 0.0.0.0
duplex auto
speed auto
!
interface FastEthernet0/1
no ip address
ip broadcast-address 0.0.0.0
shutdown
duplex auto
speed auto
!
interface Serial1/0:15
no ip address
encapsulation hdlc
isdn switch-type primary-net5
isdn overlap-receiving
isdn protocol-emulate network
isdn incoming-voice voice
isdn T310 120000
no cdp enable
!
ip default-gateway 172.20.8.1
ip http server
no ip http secure-server
!
ip route 0.0.0.0 0.0.0.0 172.20.8.1
!
!
!
tftp-server flash:c2430-is-mz.sb93109
!
!
control-plane
!
!
!
voice-port 1/0:15
!
voice-port 2/0
!
voice-port 2/1
!
voice-port 2/2
!
voice-port 2/3
!
voice-port 2/4
!
voice-port 2/5
```



```
!  
voice-port 2/6  
!  
voice-port 2/7  
!  
voice-port 2/8  
!  
voice-port 2/9  
!  
voice-port 2/10  
!  
voice-port 2/11  
!  
voice-port 2/12  
!  
voice-port 2/13  
!  
voice-port 2/14  
!  
voice-port 2/15  
!  
voice-port 2/16  
!  
voice-port 2/17  
!  
voice-port 2/18  
!  
voice-port 2/19  
!  
voice-port 2/20  
!  
voice-port 2/21  
!  
voice-port 2/22  
!  
voice-port 2/23  
!  
!  
!  
!  
dial-peer voice 1100 pots  
destination-pattern 11..  
supplementary-service pass-through  
direct-inward-dial  
port 1/0:15  
forward-digits all  
!  
dial-peer voice 4200 voip  
destination-pattern 42..  
session protocol sipv2  
session target ipv4:172.20.8.41  
dtmf-relay rtp-nte  
supplementary-service pass-through  
!  
!  
gateway  
timer receive-rtp 1200  
!  
sip-ua
```



```
!  
!  
!  
line con 0  
password cisco  
login  
line aux 0  
line vty 0 4  
exec-timeout 0 0  
password cisco  
login  
!  
end
```

Ericsson-1#



Acronyms

Acronym	Definitions
IAD	Integrated Access Device
SIP	Session Initiation Protocol



Important Information

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