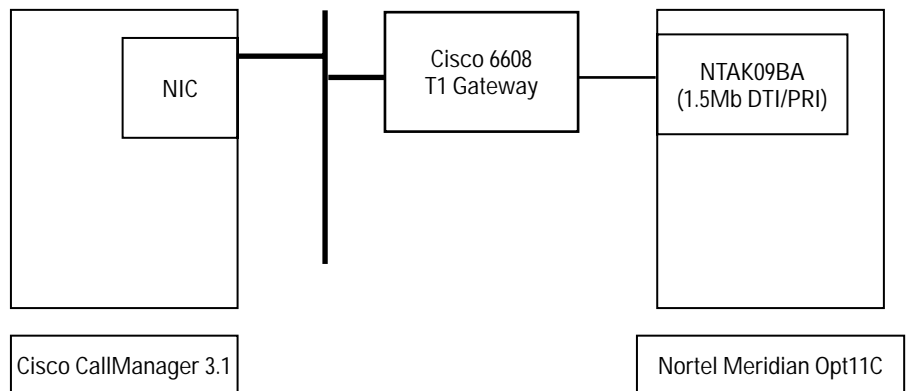


Nortel Meridian Opt11C Release 25 PBX with Cisco CallManager Using the Cisco 6608-T1 PRI DMS-100 Gateway



Integration Description

Connectivity is achieved by using the Nortel DMS-100 PRI protocol. The Nortel Meridian Opt11C supports the USER side only when you set the switch type to DMS-100.

Cisco Systems Equipment Requirements

Hardware: Cisco 6608 T1 Gateway

Software: Cisco CallManager Version 3.1

PBX Hardware and Software Requirements

Hardware: NTAK09BA, 1.5 Mb DTI/PRI, Release 02

Software: Release 25

Features Supported

Key features supported:

- Calling/called number
- Calling/called name

Key features not supported:

Configuring the Nortel Meridian Opt11C PBX

Configure in the following sequence:

1. Configure Common Equipment
2. Configure D-Channel
3. Configure Route Data Block
4. Configure Trunk
5. Configure Coordinated Dialing Plan

Configure Common Equipment

Common Equipment

LD 22

PT2000
MARP NOT ACTIVATED

REQ PRT
TYPE CEQU

CEQU

MPED 8D

SUPL 000 004 008 012
016 032 036 040
044 048 064 068
072

XCT 000

CONF 029 030 031 062
094 095

DLOP	NUM	DCH	FRM	LCMT	YALM	T1TE	TRSH
PRI	004	23	ESF	B8S	FDL	-	00
	005	23	ESF	B8S	FDL	-	00

MISP

REQ ****
>

Configure D-Channel

D-Channel Configuration

```
>LD 22  
PT2000  
MARP NOT ACTIVATED
```

```
REQ PRT  
TYPE ADAN DCH 5
```

```
ADAN      DCH 5  
  CTYP MSDL  
  CARD 05  
  PORT 1  
  DES DMS-100  
  USR PRI  
  DCHL 5  
  OTBF 32  
  PARM RS422 DTE  
  DRAT 64KC  
  CLOK EXT  
  IFC D100  
  SIDE USR  
  CNEG 1  
  RLS ID **  
  RCAP ND2  
  MBGA NO  
  OVLR NO  
  OVLS NO  
  T200 3  
  T203 10  
  N200 3  
  N201 260  
  K 7
```

```
REQ ****  
>
```

Configure Route Data Block

Route Data Block Configuration

```
>LD 21
PT1000

REQ: PRT
TYPE: RDB
CUST 0
ROUT 105

TYPE RDB
CUST 00
DMOD
ROUT 105
DES DMS-100
TKTP TIE
NPID_TBL_NUM 0
ESN NO
CNVT NO
SAT NO
RCLS EXT
DTRK YES
BRIP NO
DGTP PRI
ISDN YES
    MODE PRA
    IFC D100
    SBN NO
    PNI 00000
    NCNA YES
    NCRD NO
    CHTY BCH
    CTYP UKWN
    INAC NO
    ISAR NO
    CPUB OFF
    DAPC NO
    BCOT 0
DSEL VOD
PTYP PRI
AUTO NO
DNIS NO
DCDR NO
ICOG IAO
SRCH RRB
TRMB YES
STEP
ACOD 705
TCPP NO
PII NO
TARG 01
CLEN 1
BILN NO
OABS
INST
ANTK
SIGO STD
ICIS YES
TIMR ICF 512
    OGF 512
    EOD 13952
    NRD 10112
    DDL 70
    ODT 4096
```

RGV 640
GRD 896
SFB 3
NBS 2048
NBL 4096
TFD 0
DRNG NO
CDR NO
MUS NO

PAGE 002

OHQ NO
OHQT 00
CBQ NO
AUTH NO
TTBL 0
PLEV 2
ALRM NO
ART 0
SGRP 0
AACR NO

REQ: ****
>

Configure Trunk

Trunk Configuration

>ld 20

PT0000
MARP NOT ACTIVATED

REQ: PRT
TYPE: TNB
TN 5 1
DATE
PAGE
DES

TN 005 01
TYPE TIE
CDEN SD
CUST 0
TRK PRI
PDCA 1
PCML MU
NCOS 0
RTMB 105 1
B-CHANNEL SIGNALING
TGAR 1
AST NO
IAPG 0
CLS UNR DTN CND WTA LPR APN THFD HKD
P10 VNL
TKID
DATE 13 MAR 2001

NACT ****
>

Configure Coordinated Dialing Plan

>LD 87
ESN000

MEM AVAIL: (U/P): 1302848 USED U P: 62313 27478 TOT: 1392639
DISK RECS AVAIL: 491
REQ PRT
CUST 0
FEAT CDP
TYPE DSC
DSC 50
DSC 50
FLEN 0
DSP LSC
RLI 5
NPA
NXX

MEM AVAIL: (U/P): 1302848 USED U P: 62313 27478 TOT: 1392639
DISK RECS AVAIL: 491
REQ ****

>
OVL000
>LD 86
ESN000

MEM AVAIL: (U/P): 1302848 USED U P: 62313 27478 TOT: 1392639
DISK RECS AVAIL: 491
REQ PRT
CUST 0
FEAT RLB
RLI 5

RLI 5
ENTR 0
LTER NO
ROUT 105
TOD 0 ON 1 ON 2 ON 3 ON
4 ON 5 ON 6 ON 7 ON
CNV NO
EXP NO
FRL 0
DMI 0
FCI 0
FSNI 0
SBOC NRR
OHQ NO
CBQ NO

ISET 0
NALT 5
MFRL 0
OVL 0

MEM AVAIL: (U/P): 1302848 USED U P: 62313 27478 TOT: 1392639
DISK RECS AVAIL: 491
REQ
DTC103

>

The screenshot shows the Cisco CallManager Administration interface for Gateway Configuration. The top navigation bar includes 'System', 'Route Plan', 'Service', 'Feature', 'Device', 'User', 'Application', and 'Help'. The page title is 'Gateway Configuration' with a 'Back to Find/List Gateways' link. The configuration details are as follows:

Product	Cisco Catalyst 6000 T1 VoIP Gateway
Gateway	S0/DS1-0@SDA0001C9D93A99
Device Protocol	Digital Access PRI
Registration	Registered with Cisco CallManager KLINGON
IP Address	10.1.1.108

Status: Ready

Buttons: Update, Delete, Reset Gateway, Cancel Changes

MAC Address*	0001C9D93A99
Description	SDA0001C9D93A99
Device Pool*	Default
Media Resource Group List	< None >

Local intranet

The screenshot shows the advanced configuration settings for the gateway. The settings are as follows:

Network Hold Audio Source	< None >
User Hold Audio Source	< None >
Calling Search Space	< None >
Location	< None >
Load Information	
Channel Selection Order*	Top Down
PCM Type*	µ-Law
Protocol Side*	Network
Caller ID DN	
Calling Party Selection*	Originator
Channel IE Type*	Use Number when 1B
Interface Identifier Present**	<input type="checkbox"/>
Interface Identifier Value**	0
Display IE Delivery	<input checked="" type="checkbox"/>
Redirecting Number IE Delivery	<input checked="" type="checkbox"/>
Delay for first restart (1/8 sec ticks)	32

Restart succeeded.

Local intranet

Delay between restarts (1/8 sec ticks)	<input type="text" value="4"/>
Num Digits*	<input type="text" value="23"/>
Sig Digits	<input checked="" type="checkbox"/>
Prefix DN	<input type="text"/>
Presentation Bit*	<input type="text" value="Allowed"/>
Called party IE number type unknown*	<input type="text" value="Cisco CallManager"/>
Calling party IE number type unknown*	<input type="text" value="Cisco CallManager"/>
Called Numbering Plan*	<input type="text" value="Cisco CallManager"/>
Calling Numbering Plan*	<input type="text" value="Cisco CallManager"/>
PRI Protocol Type*	<input type="text" value="PRI DMS-100"/>
Inhibit restarts at PRI initialization	<input checked="" type="checkbox"/>
Enable status poll	<input type="checkbox"/>
Number of digits to strip*	<input type="text" value="0"/>
Country Code*	<input type="text" value="North America"/>
Setup non-ISDN Progress Indicator IE Enable***	<input type="checkbox"/>

Restart succeeded. Local intranet

Product Specific Configuration

Clock Reference*	<input type="text" value="Network"/>
TX-Level CSU*	<input type="text" value="0dB"/>
FDL Channel*	<input type="text" value="ATT 54016"/>
Framing*	<input type="text" value="ESF"/>
Audio Signal Adjustment into IP Network*	<input type="text" value="NoDbPadding"/>
Audio Signal Adjustment from IP Network*	<input type="text" value="NoDbPadding"/>
Yellow Alarm*	<input type="text" value="Bit2"/>
Zero Suppression*	<input type="text" value="B8ZS"/>

* indicates required item
 ** applicable to DMS-100 protocol only
 *** may be required to force ringback from some PBXs

[Back to Find/List Gateways](#)

Local intranet

Route Pattern Configuration

System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Route Pattern Configuration

[Add a New Route Pattern](#)
[Back to Find/List Route Patterns](#)

Route Pattern: 6.XXXX
Status: Ready
Note: Any update to this route pattern automatically resets the associated gateway/route list

Pattern Definition

Route Pattern*	<input type="text" value="6.XXXX"/>
Partition	<input type="text" value="< None >"/>
Numbering Plan*	<input type="text" value="North American Numbering Plk"/>
Route Filter	<input type="text" value="< None >"/>
Gateway/Route List*	<input type="text" value="S0/DS1-0@SDA0001C9D93A99"/> (Edit)
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern

Local intranet

Route Pattern*	<input type="text" value="6.XXXX"/>
Partition	<input type="text" value="< None >"/>
Numbering Plan*	<input type="text" value="North American Numbering Plk"/>
Route Filter	<input type="text" value="< None >"/>
Gateway/Route List*	<input type="text" value="S0/DS1-0@SDA0001C9D93A99"/> (Edit)
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input type="checkbox"/> Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

Called Party Transformations

Discard Digits	<input type="text" value="PreDot"/>
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

* indicates required item.

Local intranet

Considerations

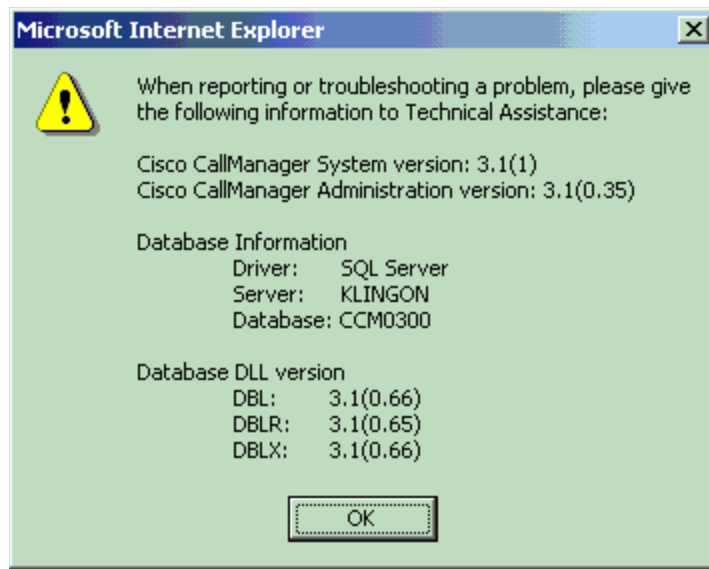
Calling Name and Number Feature

- Beginning with Release 25, the Nortel PBX for the DMS-100 switch type supports calling name delivery and presentation features.
- The Nortel Meridian Opt11C supports the USER side only when you set the switch type to DMS-100. Therefore, you must configure the Cisco 6608 Gateway to emulate the Network side.

- When calling from the Cisco IP Phone 7960 to the Nortel digital phone, the calling/called name and number are displayed on both phones after the call is answered as expected.
- When calling from the Nortel digital phone to the Cisco IP Phone 7960, the IP phone displays the connected name and number after the call is answered. However, the Nortel phone is *not* updated when the call is answered. The phone displays the numbers being dialed instead (that is, access code + extension number). Using the ISDN protocol analyzer, it was verified that the Cisco CallManager did not send the “connected number” information in the connect message back to the PBX.

Appendix

Cisco CallManager Software Version:



Nortel Meridian Opt 11C Software Release

Software Release

```
>LD 22
PT2000
MARP NOT ACTIVATED
```

```
REQ ISS
```

```
VERSION 2111
RELEASE 25
ISSUE 15 +
PSWV VERSION: PSWV 33
```

```
REQ
DTC103
****
>
```

Software Packages Installed (Release 25)

>LD 22
PT2000
MARP NOT ACTIVATED

REQ	PRT
TYPE	PKG
OPTF	1
CUST	2
CDR	4
CTY	5
RAN	7
TAD	8
DNDI	9
EES	10
INTR	11
ANI	12
ANIR	13
BRTE	14
DNDG	16
MSB	17
SS25	18
DDSP	19
ODAS	20
DI	21
CHG	23
CAB	24
BAUT	25
CASM	26
CASR	27
BQUE	28
NTRF	29
NCOS	32
CPRK	33
SSC	34
IMS	35
UST	35
UMG	35
ROA	36
NSIG	37
MCBQ	38
NSC	39
BACD	40
ACDB	41
ACDC	42
LMAN	43
MUS	44
ACDA	45
MWC	46
AAB	47
GRP	48
NFCR	49
ACDD	50
LNK	51
FCA	52
SR	53
AA	54
HIST	55
AOP	56
BARS	57
NARS	58
CDP	59
PQUE	60

FCBQ	61
OHQ	62
NAUT	63
SNR	64

PAGE 001

NXFR	67
HOT	70
DHLD	71
LSEL	72
SS5	73
DRNG	74
PBXI	75
DLDN	76
CSL	77
OOD	79
SCI	80
CCOS	81
CDRQ	83
TENS	86
FTDS	87
DSET	88
TSET	89
LNR	90
DLT2	91
PXLT	92
SUPV	93
CPND	95
DNIS	98
BGD	99
RMS	100
MR	101
AWU	102
PMSI	103
LLC	105
MCT	107
ICDR	108
APL	109
TVS	110
TOF	111
IDC	113
AUXS	114
DCP	115
PAGT	116
CBC	117
CCDR	118
EMUS	119
SCMP	121
FTC	125
BKI	127
DTI2	129
TBAR	132
ENS	133
FFC	139
DCON	140
MPO	141
ISDN	145
PRA	146
ISL	147
NTWK	148
IEC	149
DNXP	150

CDRE 151
IAP3P 153
PRI2 154
ACNT 155
THF 157

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FGD 158
FNP 160
ISDN INTL SUP 161
SAR 162
LAPW 164
GPRI 167
ARIE 170
CPGS 172
ECCS 173
AAA 174
NMS 175
EOVF 178
HVS 179
DKS 180
SACP 181
OVL P 184
EDRG 185
POVR 186
SECL 191
ORC-RVQ 192
AINS 200
IPRA 202
XPE 203
XCT0 204
XCT1 205
MLWU 206
NACD 207
HSE 208
MLM 209
MAID 210
VAWU 212
EAR 214
ECT 215
BRI 216
IVR 218
MWI 219
MSDL 222
FC68 223
M911 224
CWNT 225
SSAU 229
BRIT 233
FCDR 234
BRIL 235
MCMO 240
MULTI_USER 242
ALRM_FILTER 243
VMBA 246
CALL ID 247
M911 ENH 249
DPNA 250
SCDR 251
ARFW 253
PHTN 254
ADMINSET 256

ATX 258
QSIG 263
NI-2 291
MAT 296
MQA 297
CPP 301

PAGE 003

QSIGGF 305
CPRKNET 306
PAGENET 307
CPCI 310
NGCC 311
TATO 312
TATO 312
QSIG-SS 316
QTN 321
NGEN 324
RANBRD 327
MUSBRD 328
ESA 329
ESA_SUPP 330
ESA_CLMP 331
CNUMB 332
CNAME 333
NI-2 CBC 334
MEET 348
MC32 350
DBA 351
FDID 362
NMCE 364
STS_MSG 380
CDIR 381
VIRTUAL_OFFICE 382

REQ ****
>
OVL000
>

Cisco Catalyst 6000 Switch Configuration

```
Console> (enable) sh version
WS-C6006 Software, Version NmpSW: 5.5(6a)
Copyright (c) 1995-2001 by Cisco Systems
NMP S/W compiled on Feb 23 2001, 10:23:18
```

System Bootstrap Version: 5.3(1)

Hardware Version: 2.0 Model: WS-C6006 Serial #: TBA04511172

Mod	Port	Model	Serial #	Versions
1	2	WS-X6K-SUP1A-2GE	SAD05010NBK	Hw : 7.0 Fw : 5.3(1) Fw1: 5.4(2) Sw : 5.5(6a) Sw1: 5.5(6a)
3	48	WS-F6K-PFC WS-X6348-RJ-45	SAD05020221 SAD04420N7B	Hw : 1.1 Hw : 1.4 Fw : 5.4(2) Sw : 5.5(6a)
4	24	WS-F6K-VPWR WS-X6624-FXS	SAD050203M8	Hw : 1.0 Hw : 3.0 Fw : 5.4(2) Sw : 5.5(6a) HP : A00203010010; DSP : A003E031 (3.3.
32)				
5	8	WS-X6608-T1	SAD04400EM0	Hw : 1.1 Fw : 5.4(2) Sw : 5.5(6a) HP1: D00403010017; DSP1: D005E031 (3.3.
32)				HP2: D00403010017; DSP2: D005E031 (3.3.
32)				HP3: D00403010017; DSP3: D005E031 (3.3.
32)				HP4: D00403010017; DSP4: D005E031 (3.3.
32)				HP5: D00403010017; DSP5: D005E031 (3.3.
32)				HP6: D00403010017; DSP6: D005E031 (3.3.
32)				HP7: D00403010017; DSP7: D005E031 (3.3.
32)				HP8: D00403010017; DSP8: D005E031 (3.3.
32)				
6	8	WS-X6608-E1	SAD04380DW1	Hw : 1.1 Fw : 5.4(2) Sw : 5.5(6a) HP1: D00403010017; DSP1: D005E031 (3.3.
32)				HP2: D00403010017; DSP2: D005E031 (3.3.
32)				HP3: D00403010017; DSP3: D005E031 (3.3.
32)				HP4: D00403010017; DSP4: D005E031 (3.3.
32)				HP5: D00403010017; DSP5: D005E031 (3.3.
32)				HP6: D00403010017; DSP6: D005E031 (3.3.
32)				HP7: D00403010017; DSP7: D005E031 (3.3.
32)				HP8: D00403010017; DSP8: D005E031 (3.3.
32)				

Module	DRAM			FLASH			NVRAM		
	Total	Used	Free	Total	Used	Free	Total	Used	Free
1	65408K	37863K	27545K	16384K	11546K	4838K	512K	198K	314K

Uptime is 83 days, 2 hours, 34 minutes
 Console> (enable)

Console> (enable) **sh module**

Mod	Slot	Ports	Module-Type	Model	Sub	Status
1	1	2	1000BaseX Supervisor	WS-X6K-SUP1A-2GE	yes	ok
3	3	48	10/100BaseTX Ethernet	WS-X6348-RJ-45	yes	ok
4	4	24	FXS	WS-X6624-FXS	no	ok
5	5	8	T1	WS-X6608-T1	no	ok
6	6	8	E1	WS-X6608-E1	no	ok

Mod	Module-Name	Serial-Num
1		SAD05010NBK
3		SAD04420N7B
4		SAD050203M8
5		SAD04400EM0
6		SAD04380DW1

Mod	MAC-Address(es)	Hw	Fw	Sw
1	00-04-c0-f8-42-02 to 00-04-c0-f8-42-03	7.0	5.3(1)	5.5(6a)
	00-04-c0-f8-42-00 to 00-04-c0-f8-42-01			
	00-04-9b-f0-78-00 to 00-04-9b-f0-7b-ff			
3	00-02-fc-20-5e-50 to 00-02-fc-20-5e-7f	1.4	5.4(2)	5.5(6a)
4	00-03-32-ba-2e-35	3.0	5.4(2)	5.5(6a)
5	00-01-c9-d9-3a-98 to 00-01-c9-d9-3a-9f	1.1	5.4(2)	5.5(6a)
6	00-01-c9-d8-63-3e to 00-01-c9-d8-63-45	1.1	5.4(2)	5.5(6a)

Mod	Sub-Type	Sub-Model	Sub-Serial	Sub-Hw
1	L3 Switching Engine	WS-F6K-PFC	SAD05020221	1.1
3	Inline Power Module	WS-F6K-VPWR		1.0

Console> (enable)

Console> (enable) **sh port 5**

Port	Name	Status	Vlan	Duplex	Speed	Type
5/1		notconnect	1	full	1.544	T1
5/2		connected	1	full	1.544	T1
5/3		notconnect	1	full	1.544	T1
5/4		notconnect	1	full	1.544	T1
5/5		notconnect	1	full	1.544	T1
5/6		notconnect	1	full	1.544	T1
5/7		notconnect	1	full	1.544	T1
5/8		notconnect	1	full	1.544	T1

Port	DHCP	MAC-Address	IP-Address	Subnet-Mask
5/1	enable	00-01-c9-d9-3a-98	10.1.1.107	255.255.255.0
5/2	enable	00-01-c9-d9-3a-99	10.1.1.108	255.255.255.0
5/3	enable	00-01-c9-d9-3a-9a	10.1.1.109	255.255.255.0
5/4	enable	00-01-c9-d9-3a-9b	10.1.1.110	255.255.255.0
5/5	enable	00-01-c9-d9-3a-9c	10.1.1.111	255.255.255.0


```

5/6    enable  00-01-c9-d9-3a-9d 10.1.1.112    255.255.255.0
5/7    enable  00-01-c9-d9-3a-9e 10.1.1.113    255.255.255.0
5/8    enable  00-01-c9-d9-3a-9f 10.1.1.114    255.255.255.0

```

```

Port      Call-Manager(s)  DHCP-Server      TFTP-Server      Gateway
-----
5/1       10.1.1.2         10.1.1.2         10.1.1.2         10.1.1.7
5/2       10.1.1.2         10.1.1.2         10.1.1.2         10.1.1.7
5/3       10.1.1.2         10.1.1.2         10.1.1.2         10.1.1.7
5/4       10.1.1.2         10.1.1.2         10.1.1.2         10.1.1.7
5/5       10.1.1.2         10.1.1.2         10.1.1.2         10.1.1.7
5/6       10.1.1.2         10.1.1.2         10.1.1.2         10.1.1.7
5/7       10.1.1.2         10.1.1.2         10.1.1.2         10.1.1.7
5/8       10.1.1.2         10.1.1.2         10.1.1.2         10.1.1.7

```

```

Port      DNS-Server(s)    Domain
-----
5/1       -                -
5/2       -                -
5/3       -                -
5/4       -                -
5/5       -                -
5/6       -                -
5/7       -                -
5/8       -                -

```

```

Port      CallManagerState DSP-Type
-----
5/1       registered       C549
5/2       registered       C549
5/3       registered       C549
5/4       registered       C549
5/5       registered       C549
5/6       registered       C549
5/7       registered       C549
5/8       registered       C549

```

```

Port      NoiseRegen  NonLinearProcessing
-----
5/1       enabled     enabled
5/2       enabled     enabled
5/3       enabled     enabled
5/4       enabled     enabled
5/5       enabled     enabled
5/6       enabled     enabled
5/7       enabled     enabled
5/8       enabled     enabled

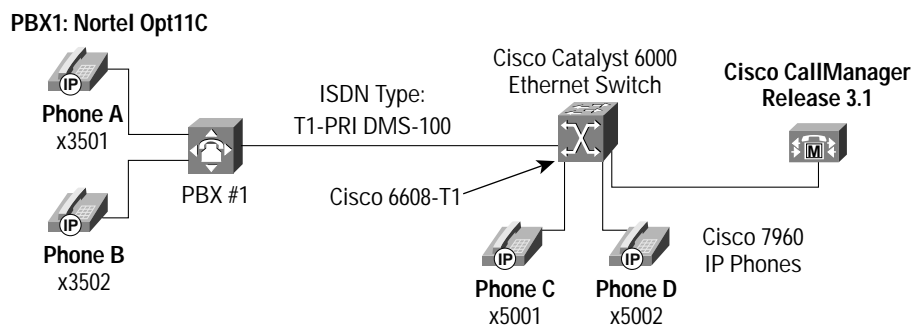
```

Console> (enable)

Test Configuration

Figure 1 illustrates the various configurations used for testing.

Basic End-to-End Configuration for Basic Call Setup



In the previous figure, a Nortel Meridian Opt 11C PBX is connected using an ISDN T1 Primary Rate Interface (PRI) link to a Cisco 6608 T1 Gateway, which in turn, is connected to an Ethernet switch. The interoperability testing involved Layers 1, 2, and 3 on the ISDN PRI link between a Cisco 6608 T1 and the PBX.

Layer 1 (Physical Layer)

The Nortel configuration screen for the T1 trunk interface is reached using LD 17, setting the CEQU (Common Equipment parameters).

Layers 2 and 3 (Q.921 and Q.931)

Layer 2 and 3 packet exchanges were monitored using an Acacia Clarinet protocol analyzer, bridged across the PRI link in high impedance mode.

Layer 2 Q.921 packets were monitored to ensure that each PBX/2621 software configuration properly exchanged SABME/UA packets to initialize the ISDN link, and then RR packets were exchanged every 30 seconds.

Layer 3 Q.931 packets were monitored to ensure that the appropriate call setup and teardown packets were exchanged for each configuration, and that the SETUP packets contained the mandatory information elements with the necessary details, as well as optional information elements such as calling name and number.

Telephone calls were made end to end in both directions through the Cisco 6608 T1 Gateway, and a check was made to ensure that there was an audio path in both directions for each call.

User and Network Settings

When you configure the Cisco 6608-T1 Gateway using Cisco CallManager, use the ISDN protocol type setting of PRI DMS-100 and select Network/User in the protocol side field to support both protocol sides.

The Nortel Meridian Opt11C supports the USER side only when you set the switch type to DMS-100. Therefore, you must configure the Cisco 6608 Gateway to emulate the Network side. Use LD 17 on the Nortel phone to set USER.

Test Results

Testing was performed by Test Engineer(s): Samir Batio, September 11, 2001

PBX1 configured as DMS-100, emulate User and Cisco 6608-T1 Gateway configured as PRI DMS-100, emulate Network.

Nortel Option 11C Switch-type/ Protocol side setting	Cisco 6608-T1 ISDN protocol-type/Protocol side setting
DMS-100/User	PRI DMS-100/Network

Table 1 Basic Calls: (Enbloc Sending)

Calls Made	Call Comp?	" Calling Number" Passed to Final Destination?	" Calling Name" Passed to Final Destination?	" Called Number" Passed to Orig. Side?	" Called Name" Passed to Orig. Side?	Notes
Phone A to Phone C	Yes	Yes	Yes	No ¹	No ²	
Phone C to Phone A	Yes	Yes	Yes	Yes	Yes	

1. Cisco CallManager is not sending "Connected Number" information in the CONNECT message back to PBX.

2. Cisco CallManager is sending "Connected Name" (IE Display) information in the CONNECT message but Nortel does not show it on phone display.

Table 2 Call Transfers: (Supervised Local Transfers)

Calls Made	Call Comp?	Orig. " Calling Number" displayed on Final Dest. phone?	Orig. " Calling Name" displayed on Final Dest. phone?	" Called Number" display on Orig. phone updated after transfer?	" Called Name" display on Orig. phone updated after transfer?	Notes
Phone C to Phone A Xfr to Phone B	Yes	Yes	Yes	No	No	
Phone A to Phone C Xfr to Phone D	Yes	Yes	Yes	No	No	

Table 3 Call Conferencing (Local)

Calls Made	Call Comp?	" Calling Number" passed to remaining conferee when the conferencing phone drops out?	" Calling Name" passed to remaining conferee when the conferencing phone drops out?	" Connected Number" updated on Orig. Caller phone display when a conferee drops out?	" Connected Name" updated on Orig. Caller phone display when a conferee drops out?	Notes
Phone C to Phone A, Phone A conf Phone B	Yes	(A Drops out) Yes	(A Drops out) Yes	(A Drops out) No	(A Drops out) No	
Phone C to Phone A, Phone C conf Phone D	Yes	(C Drops out) No	(C Drops out) No	(D Drops out) No	(D Drops out) No	
Phone A to Phone C, Phone C conf Phone D	Yes	(C Drops out) No	(C Drops out) No	(C Drops out) No	(C Drops out) No	
Phone A to Phone C, Phone A conf Phone B	Yes	(A Drops out) No	(A Drops out) No	(B Drops out) No	(B Drops out) No	

Table 4 Call Forward (Local)

Calls Made	Call Comp?	Original " Calling Number" passed to Final Dest.?	Original " Calling Name" passed to Final Dest.?	Forwarding " Called Number" passed to Final Dest.?	Forwarding " Called Name" passed to Final Dest.?	Final dest. " Connected Number" updated at orig. side?	Final dest. " Connected Name" updated at orig. side?	Notes
Phone C to Phone A fwd to Phone B	Yes	Yes	No	Yes	Yes	No	Yes	
Phone A to Phone C fwd to Phone D	Yes	Yes	Yes	No	No	No	No	

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