

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

This application note discusses the integration of the Nortel Meridian Opt11C Rel 25 PBX with CallManager using the Cisco 6608-T1 PRI DMS-100 Gateway.

Integration Description

Connectivity is achieved by using the Nortel Meridian DMS-100 PRI protocol. The Nortel Meridian Opt11C supports the USER side only when switch type is set to DMS-100. The figure below shows the general network layout for the integration.

Features

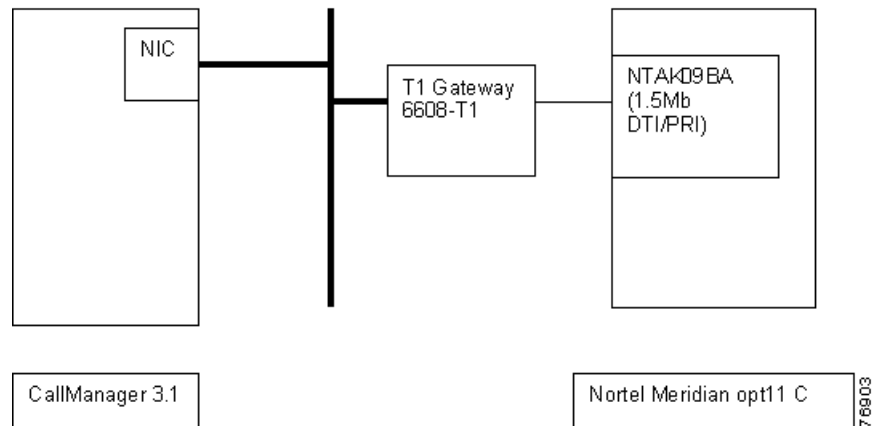
Key features supported:

- Calling/Called Number
- Calling/Called Name

Key features not supported:

- N/A

Network Layout



Cisco Systems Equipment Needed

- Hardware (Gateway): Cisco 6608 T1 Port
- Software: CallManager Release 3.1

PBX Requirements

- Hardware: NTAk09BA, 1.5 Mb DTI/PRI, Release 02
- Software: Release 25



Configuring the Nortel Meridian Opt11C PBX

To configure the Nortel Meridian Opt11C PBX, do the following:

- Step 1.** Configure the common equipment.
- Step 2.** Configure the D-channel.
- Step 3.** Configure the Route Data Block.
- Step 4.** Configure the trunk.
- Step 5.** Configure the coordinated dialing plan.

Configure the Common Equipment

The following example shows the configuration of the common equipment.

Common Equipment Configuration

```
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 the D-Channel

The following example shows the configuration of the 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 the Route Data Block

The following example shows the configuration of the 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 the Trunk

The following example shows the configuration of the 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 the Coordinated Dialing Plan

The following example shows the configuration of the coordinated dialing plan.

Coordinated Dialing Plan Configuration

```
>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

Configuring Cisco CallManager

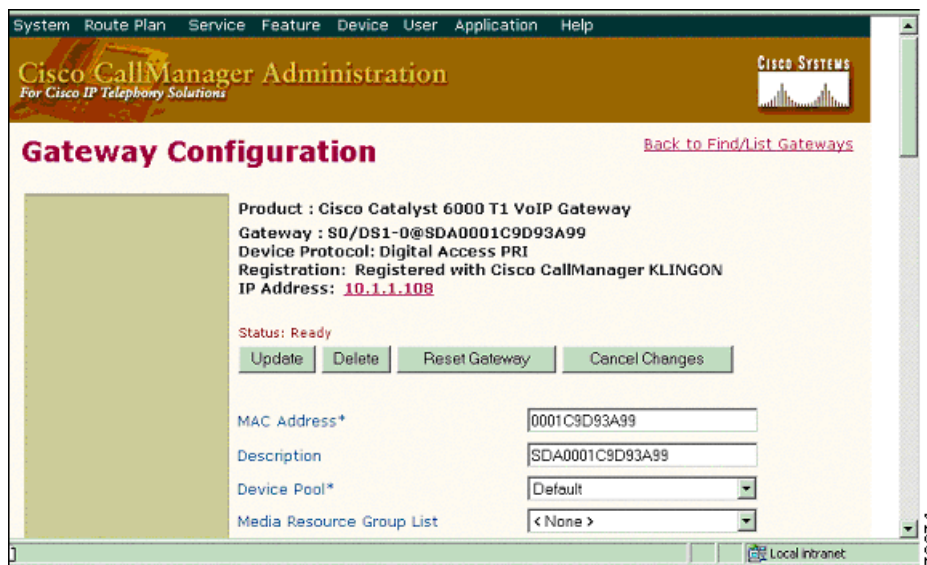
To configure Cisco CallManager, do the following:

- Step 1.** Configure the gateway.
- Step 2.** Configure the route pattern.

Gateway Configuration

The following figures show the configuration of the Cisco 6608 Gateway.

Cisco 6608 Gateway Configuration





Cisco 6608 Gateway Configuration Continued

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

Local intranet 76875

Cisco 6608 Gateway Configuration Continued

Delay between restarts (1/8 sec ticks)	4
Num Digits*	23
Sig Digits	<input checked="" type="checkbox"/>
Prefix DN	
Presentation Bit*	Allowed
Called party IE number type unknown*	Cisco CallManager
Calling party IE number type unknown*	Cisco CallManager
Called Numbering Plan*	Cisco CallManager
Calling Numbering Plan*	Cisco CallManager
PRI Protocol Type*	PRI NI2
Inhibit restarts at PRI initialization	<input checked="" type="checkbox"/>
Enable status poll	<input type="checkbox"/>
Number of digits to strip*	0
Country Code*	North America
Setup non-ISDN Progress Indicator IE Enable***	<input type="checkbox"/>

Local intranet 76876



Cisco 6608 Gateway Configuration Continued

Product Specific Configuration	
Clock Reference*	Network
TX-Level CSU*	0dB
FDL Channel*	ATT 54016
Framing*	ESF
Audio Signal Adjustment into IP Network*	NoDbPadding
Audio Signal Adjustment from IP Network*	NoDbPadding
Yellow Alarm*	Bit2
Zero Suppression*	B&ZS

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

[Back to Find/List Gateways](#)

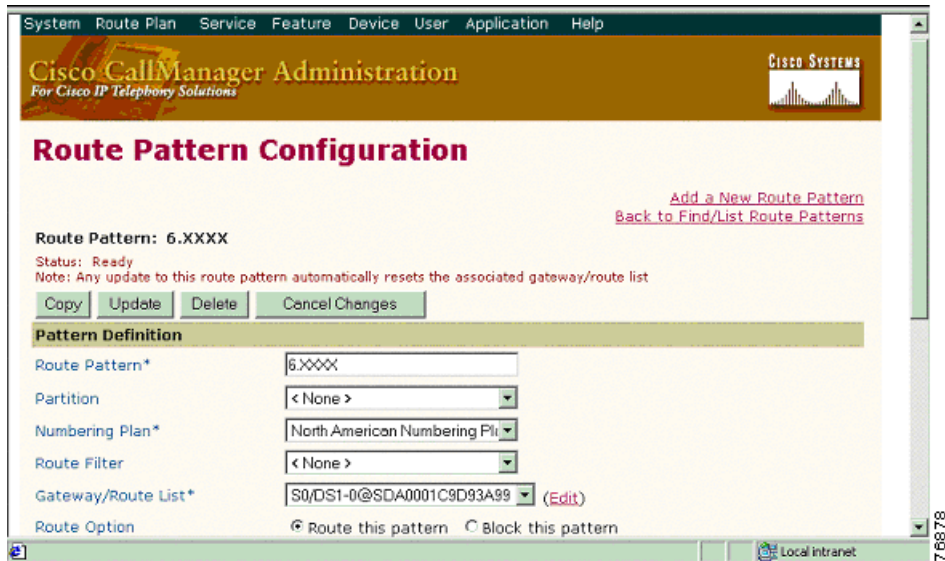
Local Intranet 76877



Route Pattern Configuration

The following figures show the configuration of the route pattern.

Route Pattern Configuration



System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

Route Pattern Configuration

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

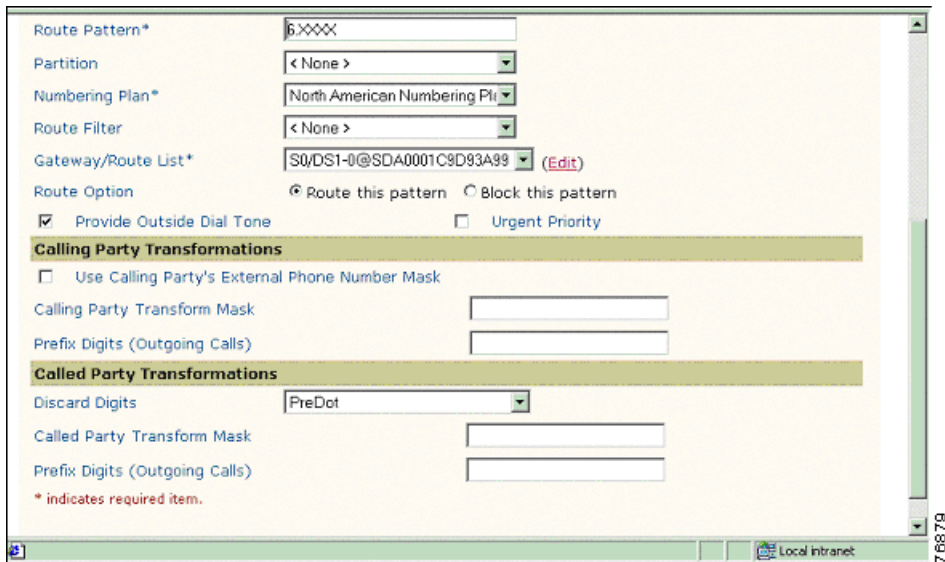
Route Pattern: 6.XXXX
Status: Ready
Note: Any update to this route pattern automatically resets the associated gateway/route list

Pattern Definition

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

Local intranet 78878

Route Pattern Configuration Continued



Route Pattern*	6.XXXX
Partition	< None >
Numbering Plan*	North American Numbering Pl
Route Filter	< None >
Gateway/Route List*	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

Prefix Digits (Outgoing Calls)

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

* indicates required item.

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Considerations

Calling Name and Number Feature

Calling Name delivery and presentation features are supported by the Nortel PBX as of Release 25 for DMS-100 switch-type. The Nortel Meridian Opt11C supports the USER side only when the switch type is set to DMS-100. Therefore, the Cisco 6608 Gateway should be configured to emulate the NETWORK side.

When calling from a Cisco 7960 IP phone to a Nortel digital phone, the Calling/Called Name and Number are displayed on both phones after the call is answered as expected.

When calling from a Nortel digital phone to a Cisco 7960 IP phone, the IP phone displays the Connected Name and Number after the call is answered. The Nortel phone, however, is not updated when the call is answered. It displays the numbers being dialed instead. (the access code and the extension number). It was verified using ISDN protocol analyzer that the CallManager was not sending the Connected Number information in the connect message back to PBX.

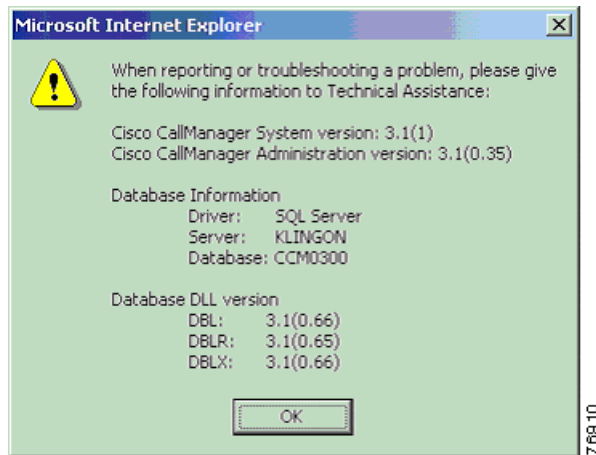
Integration Testing

This section contains information about the setup used in testing the integration of the Nortel Meridian Opt11C Release 25 PBX and the Cisco 6608-T1 PRI DMS-100 Gateway.

CallManager Software Release:

The following figure shows the information about the release of CallManager being used.

CallManager Software Release



Nortel Meridian Opt11C Software Release

The following provides information about the release of the Nortel Meridian Opt11C used.

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
OVLP	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

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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
```

Catalyst 6000 Switch Configuration

The following shows the configuration of the Catalyst 6000 Switch.

```
Console> (enable) show 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)
5	8	WS-X6608-T1	SAD04400EM0	HP : A00203010010; DSP : A003E031 (3.3.32) 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) **show 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 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	7.0	5.3(1)	5.5(6a)
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) **show 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



```

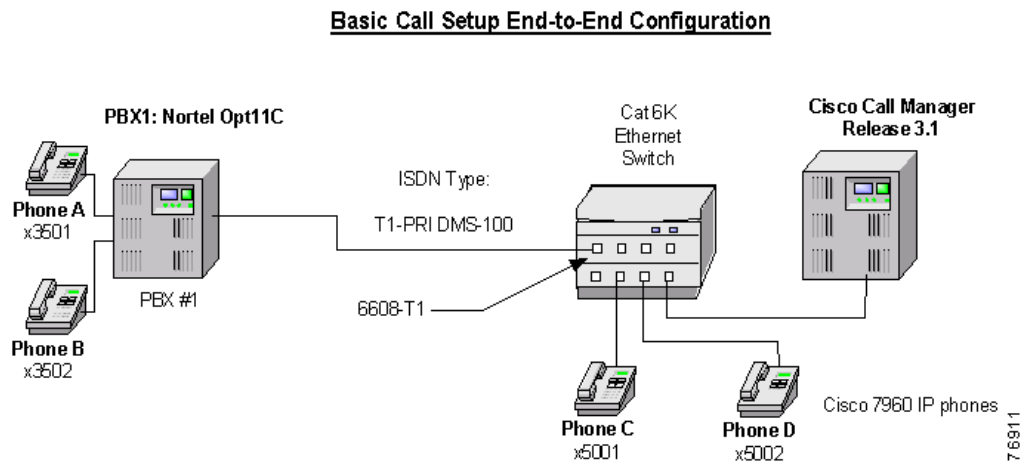
Port   NoiseRegen NonLinearProcessing
-----
5/1    enabled    enabled
5/2    enabled    enabled
5/3    enabled    enabled
5/4    enabled    enabled
5/5    enabled    enabled
5/6    enabled    enabled
5/7    enabled    enabled
5/8    enabled    enabled
Console> (enable)

```

Test Configuration

The following figure represents the various configurations used for testing.

Testbed Network Configuration



As shown in the figure above, a Nortel Meridian Opt 11C PBX was connected via an ISDN T1 PRI link to a Cisco 6608-T1 Gateway, which in turn, was 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 & 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/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 IEs 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/Network Settings

The Cisco 6608-T1 Gateway with ISDN protocol type setting of PRI DMS-100 supports both protocol sides by selecting “Network/User” in the protocol side field when configuring the Gateway via CallManager.

The Nortel Meridian Opt11C supports the USER side only when the switch type is set to DMS-100. Therefore, the Cisco 6608 Gateway should be configured to emulate the NETWORK side. This USER choice is set on the Nortel by using LD 17.

Test Results

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

Test 1

In test 1:

- The PBX1 country-protocol is set to DMS-100 to emulate the Network.
- The Cisco 6608-T1 Gateway was configured as a PRI DMS-100 to emulate the User.

The results are shown in the following tables.

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 original side?	Called Name passed to the original side?
Phone A to Phone C	Yes	Yes	Yes	No ¹	No ²
Phone C to Phone A	Yes	Yes	Yes	Yes	Yes

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

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



Table 2 Call Transfers (Supervised Local Transfers)

Calls Made	Call Comp?	Original Calling Number displayed on final dest phone?	Original Calling Name displayed on final dest phone?	Called Number display on original phone updated after transfer?	Called Name display on original phone updated after transfer?
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 the remaining conferee when the conferencing phone drops out?	Calling Name passed to the remaining conferee when the conferencing phone drops out?	Connected Number updated on original caller phone display when a conferee drops out?	Connected Name updated on original caller phone display when a conferee drops out?
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 destination Connected Number updated at original side?	Final destination Connected Name updated at original side?
Phone C to Phone A fwd to Phone B	Yes	Yes	No	Yes	Yes	No	Yes



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 destination Connected Number updated at original side?	Final destination Connected Name updated at original side?
Phone A to Phone C fwd to Phone D	Yes	Yes	Yes	No	No	No	No