

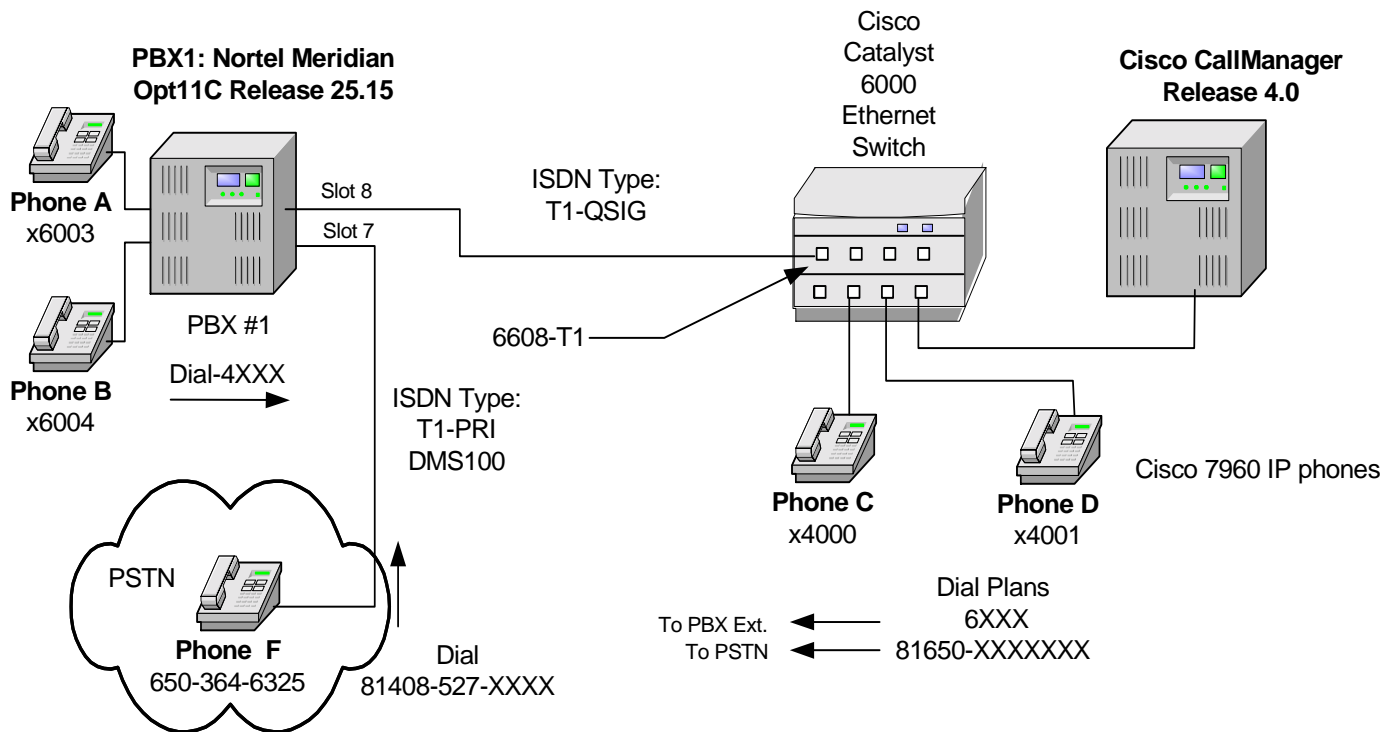
Cisco CallManager Release 4.0-PBX Interoperability: Nortel Meridian Opt11C Rel25 PBX with a Cisco 6608 Gateway using T1 QSIG as an MGCP Gateway

Introduction

- This is an Application Note for Connectivity of Nortel Meridian Opt11C Release 25 PBX with Cisco CallManager using Cisco 6608-T1 QSIG as MGCP Gateway.
- The Network Topology diagram shows the test set-up for end-to-end interoperability with the Cisco CallManager connected to the PBX via 6608-T1 QSIG link as MGCP Gateway.
- Connectivity is achieved by using the PRI ISO QSIG T1 protocol type on the MGCP gateway and ISGF switch type on the Nortel PBX.
- Basic Calls worked fine in both directions with Calling/Connected Name and Calling/Connected Number features support.

Network Topology

Basic Call Setup End-to-End Configuration





Limitations

System Components

Hardware Requirements

- Cisco Hardware
 - Cisco Catalyst 6000 Switch with 6608-T1 Gateway
 - Cisco CallManager 4.0
- Nortel Meridian Opt11C PBX.
 - Hardware: NTAK09BA, 1.5 Mb DTI/PRI.

Software Requirements

- PBX Software Release 2.5 (15)
- Cisco CallManager Release 4.0 (1)

Features

Key Features Supported

- Calling Line (Number) Identification Presentation (CLIP)
- Calling Line (Number) Identification Restriction (CLIR)
- Calling Name Identification Presentation (CNIP)
- Calling Name Identification Restriction (CNIR)
- Connected Line (Number) Identification Presentation (COLP)
- Connected Line (Number) Identification Restriction (COLR)
- Connected Name Identification Presentation (CONP)
- Connected Name Identification Restriction (CONR)
- Call Transfer (CT) (by join)
- Call Forwarding Unconditional (CFU) (by join)
- Call Forwarding Busy (CFB) (by join)
- Call Forwarding No Reply (CFNR) (by join)
- QSIG Message Waiting Indication (MWI) (lamp ON, lamp OFF) supported by Cisco CallManager 4.0 (not tested ¹)

Key Features Not Supported

- Cisco CallManager 4.0 does not support sending Alerting Name or Busy Name Identification information

Configuration

Configuration Sequence and Tasks

Configuring the Nortel Meridian Opt11C PBX

Configure in the following sequence:

¹ MWI is supported on CallManager 4.0 but was not tested because CallManager was not configured with a messaging System at the time of testing therefore it is not known at this time whether QSIG MWI integration with Nortel Meridian PBX will work. MWI will be tested when the CallManager 4.0 is configured with Unity as the message center PINX and PBX users as remote subscribers.



- Configure Common Equipment.
- Configure D-Channel.
- Configure Route Data Block.
- Configure Trunk.
- Configure Coordinated Dialing Plan
- Configure Dialing Plan for Tandem Call

Configuration Menus and Commands

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
  DDCS 04
  DTCS
  XCT 000
  CONF 029 030 031 062
        094 095
  DLOP NUM DCH FRM LCMT YALM T1TE TRSH
  PRI 007 24 ESF B8S FDL - 00
        008 24 ESF B8S FDL - 00
  PRI2 05 06
  APVL
  DTI2 03
  MISP 002
```



REQ ****

>

Configure D-Channel

>ld 22

PT2000

MARP NOT ACTIVATED

REQ prt

TYPE DA

SCH0111

TYPE ADAN DCH 18

ADAN DCH 18

CTYP MSDL

CARD 08

PORT 1

DES t1_isgf

USR PRI

DCHL 8

OTBF 32

PARM RS422 DTE

DRAT 64KC

CLOK EXT

IFC ISGF

PINX_CUST 0

ISDN_MCNT 300

CLID OPT0

CO_TYPE STD

SIDE NET

CNEG 1

RLS ID **

RCAP COLP NDI CCBI CCNI PRI DV3I CTI



```
PR_TRIGS DIV 2 3
      CNG 2 3

PR_RTN NO
MBGA NO
OVLN YES
DIDD 0
OVLS NO
T310 120
T200 3
T203 10
N200 3
N201 260
K      7
REQ   ****
>
```

Configure Route Data Block

```
>ld 21
PT1000
REQ: PRT
TYPE: RDB
CUST 0
ROUT 108
TYPE RDB
CUST 00
DMOD
ROUT 108
DES T1_ISGF
TKTP TIE
NPID_TBL_NUM 0
```



ESN NO
RPA NO
CNVT NO
SAT NO
RCLS EXT
DTRK YES
BRIP NO
DGTP PRI
ISDN YES
MODE PRA
IFC ISGF
SBN NO
PNI 00000
NCNA NO
NCRD NO
CHTY BCH
CTYP UKWN
INAC NO
ISAR NO
CPFXS YES
DAPC NO
INTC NO
DSEL VOD
PTYT PRI
AUTO NO
DNIS NO
DCDR NO
ICOG IAO
SRCH RRB
TRMB YES
STEP
ACOD 508



TCPP NO
TARG 01
BILN NO
OABS
INST
SIGO STD
MFC NO
ICIS YES
OGIS YES
TIMR ICF 1920
 OGF 1920
 EOD 13952
 LCT 256
 NRD 10112
 DDL 70
 ODT 4096
 RGV 640
 GTO 896
 GTI 896
 SFB 3
 PRPS 800
 NBS 2048
 NBL 4096
 IENB 5
PAGE 002
 TFD 0
 VSS 0
 VGD 6
DTD NO
SCDT NO
2 DT NO
DRNG NO



CDR NO
NATL YES
SSL
CFWR NO
IDOP NO
VRAT NO
MUS NO
PANS YES
OHQ NO
OHQT 00
CBQ NO
AUTH NO
TTBL 0
PLEV 2
OPR NO
ALRM NO
ART 0
TIDY 508 108
SGRP 0
AACR NO
REQ: ****
>

Configure Trunk

>ld 20
PT0000
MARP NOT ACTIVATED
REQ: PRT
TYPE: TNB
TN 8 1
DATE



PAGE

DES

TN 008 01

TYPE TIE

CDEN SD

CUST 0

TRK PRI

PDCA 1

PCML MU

NCOS 0

RTMB 108 1

B-CHANNEL SIGNALING

TGAR 0

AST NO

IAPG 0

CLS UNR DTN CND WTA LPR APN THFD XREP BARD HKD

P10 VNL

TKID

DATE 8 MAR 2004

NACT ****

>

Configure Coordinated Dialing Plan

>>LD 87

ESN000

MEM AVAIL: (U/P): 1260909 USED U P: 92556 39174 TOT: 1392639

DISK RECS AVAIL: 463

REQ PRT

CUST 0

FEAT CDP

TYPE DSC

DSC 4



DSC 4
FLEN 0
DSP LSC
RRPA NO
RLI 18
NPA
NXX
MEM AVAIL: (U/P): 1260909 USED U P: 92556 39174 TOT: 1392639
DISK RECS AVAIL: 463
REQ ****
>
OVL000
>LD 86
ESN000
MEM AVAIL: (U/P): 1260909 USED U P: 92556 39174 TOT: 1392639
DISK RECS AVAIL: 463
REQ PRT
CUST 0
FEAT RLB
RLI 18
RLI 18
ENTR 0
LTER NO
ROUT 108
TOD 0 ON 1 ON 2 ON 3 ON
4 ON 5 ON 6 ON 7 ON
VNS NO
CNV NO
EXP NO
FRL 0
DMI 0
FCI 0
FSNI 0



```
BNE NO
SBOC NRR
IDBB DEB
IOHQ NO
OHQ NO
CBQ NO
ISET 0
NALT 5
MFRL 0
OVLL 0
MEM AVAIL: (U/P): 1260909    USED U P: 92556 39174    TOT: 1392639
DISK RECS AVAIL: 463
REQ
DTC105
ESN004
REQ ****
```

>

Configure Dialing Plan for Tandem Call

Dial Plan Configuration when PBX received AC2 (8) + NPA (1408) digit string

```
>ld 90
ESN000
MEM AVAIL: (U/P): 1261180    USED U P: 92290 39169    TOT: 1392639
DISK RECS AVAIL: 463
REQ prt
CUST 0
FEAT net
TRAN ac2
TYPE npa
NPA 1408
NPA 1408
```



RLI 8
SDRR NONE
ITEI NONE
MEM AVAIL: (U/P): 1261180 USED U P: 92290 39169 TOT: 1392639
DISK RECS AVAIL: 463
REQ ****
>ld 86
ESN000
MEM AVAIL: (U/P): 1261180 USED U P: 92290 39169 TOT: 1392639
DISK RECS AVAIL: 463
REQ prt
CUST 0
FEAT rlb
RLI 8
RLI 8
ENTR 0
LTER NO
ROUT 108
TOD 0 ON 1 ON 2 ON 3 ON
4 ON 5 ON 6 ON 7 ON
VNS NO
CNV NO
EXP NO
FRL 0
DMI 8
FCI 0
FSNI 0
BNE NO
SBOC NRR
IDBB DBD
IOHQ NO
OHQ NO



CBQ NO
ISET 0
NALT 5
MFRL 0
OVLL 0
MEM AVAIL: (U/P): 1261180 USED U P: 92290 39169 TOT: 1392639

DISK RECS AVAIL: 463

REQ prt

CUST 0

FEAT dgt

DMI 8

DMI 8

DEL 7

CTYP UKWN

REQ ****

>

Dial Plan Configuration when PBX received AC2 (8) + NPA (1650) digit string

>ld 90

ESN000

MEM AVAIL: (U/P): 1261180 USED U P: 92290 39169 TOT: 1392639

DISK RECS AVAIL: 463

REQ prt

CUST 0

FEAT net

TRAN ac2

TYPE npa

NPA 1650

NPA 1650

RLI 7

SDRR NONE

ITEI NONE

MEM AVAIL: (U/P): 1261180 USED U P: 92290 39169 TOT: 1392639



DISK RECS AVAIL: 463

REQ ****

>

OVL000

>ld 86

ESN000

MEM AVAIL: (U/P): 1261180 USED U P: 92290 39169 TOT: 1392639

DISK RECS AVAIL: 463

REQ prt

CUST 0

FEAT rlb

RLI 7

RLI 7

ENTR 0

LTER NO

ROUT 107

TOD 0 ON 1 ON 2 ON 3 ON

4 ON 5 ON 6 ON 7 ON

VNS NO

CNV NO

EXP NO

FRL 0

DMI 7

FCI 0

FSNI 0

BNE NO

SBOC NRR

IDBB DBD

IOHQ NO

OHQ NO

CBQ NO

ISSET 0



NALT 5
MFRL 0
OVLL 0
MEM AVAIL: (U/P): 1261180 USED U P: 92290 39169 TOT: 1392639
DISK RECS AVAIL: 463
REQ prt
CUST 0
FEAT dgt

DMI 7
DMI 7
DEL 1
CTYP NCHG
MEM AVAIL: (U/P): 1261180 USED U P: 92290 39169 TOT: 1392639
DISK RECS AVAIL: 463
REQ ****
>
>

Station Configuration for CLIP, CNIP, COLP, and CONP (Number and Name presentation)

>LD 11
SL1000
MARP NOT ACTIVATED
MEM AVAIL: (U/P): 1260844 USED U P: 92556 39239 TOT: 1392639
DISK RECS AVAIL: 463
TNS AVAIL: 2318 USED: 182 TOT: 2500
ACD AGENTS AVAIL: 10 USED: 0 TOT: 10
AST AVAIL: 1000 USED: 0 TOT: 1000
DATA PORTS AVAIL: 2499 USED: 1 TOT: 2500
DIGITAL TELEPHONES AVAIL: 44 USED: 4 TOT: 48
INTERNET TELEPHONES AVAIL: 0 USED: 0 TOT: 0
REQ: PRT



TYPE: 2616

MARP NOT ACTIVATED

TN 1 0 0 2

DATE

PAGE

DES

DES TEST1

TN 001 0 00 02

TYPE 2616

CDEN 8D

CUST 0

AOM 0

FDN

TGAR 0

LDN NO

NCOS 0

SGRP 0

RNPG 0

SCI 0

SSU

XLST

SFLT NO

CAC_MFC 0

CLS CTD FBA WTA LPR MTD FNA HTD ADD HFD

MWA LMPN RMMD SMWD AAD IMD XHD IRD NID OLD VCE DRG1

POD DSX VMD CMSD CCSD SWD LND CNDA

CFTD SFD MRD DDV CNID CDCA MSID DAPA BFED RCBD

ICDD CDMD MCTD CLBD AUTU

GPUD DPUD DNDA CFXA ARHD CLTD ASCD

ABDD CFHD FICD NAID BUZZ AGRD MOAD

UDI RCC HBTD AHD IPND **DDGA NAMA** MIND PRSD NRWD NRCD NROD

DRDD EXR0



USRD ULAD RTDD RBDD RBHD PGND FLXD FTTC DNDY DNO3 MCBN

CPND_LANG ENG

RCO 0

HUNT 6004

LHK 0

PLEV 02

AST

IAPG 0

AACS NO

ITNA NO

DGRP

MLWU_LANG 0

DNDR 0

KEY 00 SCR 6003 0 MARP

CPND

CPND_LANG ROMAN

NAME THE COUNT

XPLN 13

DISPLAY_FMT FIRST, LAST

01 SCR 5011 0

CPND

CPND_LANG ROMAN

NAME MINI BIRD

XPLN 27

DISPLAY_FMT FIRST, LAST

02 MIK

03 CFW 12 4001

04 AO6

05 TRN

06 DSP

07

08 ADL 16



09 ADL 16

10 ADL 16

11 ADL 16

12 ADL 16

13 ADL 16

14 RGA

15 MCK

DATE 9 MAR 2004

NACT ****

>

Station Configuration for CLIR, COLR-Calling/Connected Line Identification Restriction

>LD 11

SL1000

MARP NOT ACTIVATED

MEM AVAIL: (U/P): 1260844 USED U P: 92556 39239 TOT: 1392639

DISK RECS AVAIL: 463

TNS AVAIL: 2318 USED: 182 TOT: 2500

ACD AGENTS AVAIL: 10 USED: 0 TOT: 10

AST AVAIL: 1000 USED: 0 TOT: 1000

DATA PORTS AVAIL: 2499 USED: 1 TOT: 2500

DIGITAL TELEPHONES AVAIL: 44 USED: 4 TOT: 48

INTERNET TELEPHONES AVAIL: 0 USED: 0 TOT: 0

REQ: PRT

TYPE: 2616

MARP NOT ACTIVATED

TN 1 0 0 2

DATE

PAGE

DES

DES TEST1

TN 001 0 00 02



TYPE 2616
CDEN 8D
CUST 0
AOM 0
FDN
TGAR 0
LDN NO
NCOS 0
SGRP 0
RNPG 0
SCI 0
SSU
XLST
SFLT NO
CAC_MFC 0
CLS CTD FBA WTA LPR MTD FNA HTD ADD HFD
MWA LMPN RMMD SMWD AAD IMD XHD IRD NID OLD VCE DRG1
POD DSX VMD CMSD CCSD SWD LND CNDA
CFTD SFD MRD DDV CNID CDCA MSID DAPA BFED RCB
ICDD CDMD MCTD CLBD AUTU
GPUD DPUD DNDA CFXA ARHD CLTD ASCD
ABDD CFHD FICD NAID BUZZ AGRD MOAD
UDI RCC HBT
AHD IPND **DDGD** NAMA MIND PRSD NRWD NRCD NROD
DRDD EXR0
USRD ULAD RTDD RBDD RBHD PGND FLXD FTTC DNDY DNO3 MCBN
CPND_LANG ENG
RCO 0
HUNT 6004
LHK 0
PLEV 02
AST
IAPG 0



AACS NO

ITNA NO

DGRP

MLWU_LANG 0

DNDR 0

KEY 00 SCR 6003 0 MARP

 CPND

 CPND_LANG ROMAN

 NAME THE COUNT

 XPLN 13

 DISPLAY_FMT FIRST, LAST

01 SCR 5011 0

 CPND

 CPND_LANG ROMAN

 NAME MINI BIRD

 XPLN 27

 DISPLAY_FMT FIRST, LAST

02 MIK

03 CFW 12 4001

04 AO6

05 TRN

06 DSP

07

08 ADL 16

09 ADL 16

10 ADL 16

11 ADL 16

12 ADL 16

13 ADL 16

14 RGA

15 MCK

DATE 9 MAR 2004



NACT ****

>

Station Configuration for CNIR, CONR-Calling/Connected Name Identification Restriction

>LD 11

SL1000

MARP NOT ACTIVATED

MEM AVAIL: (U/P): 1260844 USED U P: 92556 39239 TOT: 1392639

DISK RECS AVAIL: 463

TNS AVAIL: 2318 USED: 182 TOT: 2500

ACD AGENTS AVAIL: 10 USED: 0 TOT: 10

AST AVAIL: 1000 USED: 0 TOT: 1000

DATA PORTS AVAIL: 2499 USED: 1 TOT: 2500

DIGITAL TELEPHONES AVAIL: 44 USED: 4 TOT: 48

INTERNET TELEPHONES AVAIL: 0 USED: 0 TOT: 0

REQ: PRT

TYPE: 2616

MARP NOT ACTIVATED

TN 1 0 0 2

DATE

PAGE

DES

DES TEST1

TN 001 0 00 02

TYPE 2616

CDEN 8D

CUST 0

AOM 0

FDN

TGAR 0

LDN NO



NCOS 0
SGRP 0
RNPG 0
SCI 0
SSU
XLST
SFLT NO
CAC_MFC 0
CLS CTD FBA WTA LPR MTD FNA HTD ADD HFD
MWA LMPN RMMD SMWD AAD IMD XHD IRD NID OLD VCE DRG1
POD DSX VMD CMSD CCSD SWD LND CNDA
CFTD SFD MRD DDV CNID CDCA MSID DAPA BFED RCB
ICDD CDMD MCTD CLBD AUTU
GPUD DPUD DNDA CFXA ARHD CLTD ASCD
ABDD CFHD FICD NAID BUZZ AGRD MOAD
UDI RCC HBTD AHD IPND DDGA **NAMD** MIND PRSD NRWD NRCD NROD
DRDD EXR0
USRD ULAD RTDD RBDD RBHD PGND FLXD FTTC DNDY DNO3 MCBN
CPND_LANG ENG
RCO 0
HUNT 6004
LHK 0
PLEV 02
AST
IAPG 0
AACS NO
ITNA NO
DGRP
MLWU_LANG 0
DNDR 0
KEY 00 SCR 6003 0 MARP
CPND



```
CPND_LANG ROMAN
NAME THE COUNT
XPLN 13
DISPLAY_FMT FIRST, LAST
```

```
01 SCR 5011 0
```

```
CPND
```

```
CPND_LANG ROMAN
NAME MINI BIRD
XPLN 27
DISPLAY_FMT FIRST, LAST
```

```
02 MIK
```

```
03 CFW 12 4001
```

```
04 AO6
```

```
05 TRN
```

```
06 DSP
```

```
07
```

```
08 ADL 16
```

```
09 ADL 16
```

```
10 ADL 16
```

```
11 ADL 16
```

```
12 ADL 16
```

```
13 ADL 16
```

```
14 RGA
```

```
15 MCK
```

```
DATE 9 MAR 2004
```

```
NACT ****
```

Station Configuration for CFB- Call Forward on Busy

CF-Busy on Nortel requires setting up HUNT DN on Nortel station configuration by changing CLS parameter "HTD" (Hunt denied) to "HTA" (Hunt allowed) and specifying a DN for HUNT parameter.

```
>LD 11
```

```
SL1000
```



MARP NOT ACTIVATED

MEM AVAIL: (U/P): 1260844 USED U P: 92556 39239 TOT: 1392639

DISK RECS AVAIL: 463

TNS AVAIL: 2318 USED: 182 TOT: 2500

ACD AGENTS AVAIL: 10 USED: 0 TOT: 10

AST AVAIL: 1000 USED: 0 TOT: 1000

DATA PORTS AVAIL: 2499 USED: 1 TOT: 2500

DIGITAL TELEPHONES AVAIL: 44 USED: 4 TOT: 48

INTERNET TELEPHONES AVAIL: 0 USED: 0 TOT: 0

REQ: PRT

TYPE: 2616

MARP NOT ACTIVATED

TN 1 0 0 2

DATE

PAGE

DES

DES TEST1

TN 001 0 00 02

TYPE 2616

CDEN 8D

CUST 0

AOM 0

FDN

TGAR 0

LDN NO

NCOS 0

SGRP 0

RNPG 0

SCI 0

SSU

XLST

SFLT NO



CAC_MFC 0

CLS CTD FBA WTA LPR MTD FNA **HTA** ADD HFD

MWA LMPN RMMD SMWD AAD IMD XHD IRD NID OLD VCE DRG1

POD DSX VMD CMSD CCSD SWD LND CNDA

CFTD SFD MRD DDV CNID CDCA MSID DAPA BFED RCBF

ICDD CDMD MCTD CLBD AUTU

GPUD DPUD DNDA CFXA ARHD CLTD ASCD

ABDD CFHD FICD NAID BUZZ AGRD MOAD

UDI RCC HBTD AHD IPND DDGA NAMA MIND PRSD NRWD NRCD NROD

DRDD EXR0

USRD ULAD RTDD RBDD RBHD PGND FLXD FTTC DNDY DNO3 MCBN

CPND_LANG ENG

RCO 0

HUNT 6004

LHK 0

PLEV 02

AST

IAPG 0

AACS NO

ITNA NO

DGRP

MLWU_LANG 0

DNDR 0

KEY 00 SCR 6003 0 MARP

CPND

CPND_LANG ROMAN

NAME THE COUNT

XPLN 13

DISPLAY_FMT FIRST, LAST

01 SCR 5011 0

CPND

CPND_LANG ROMAN



NAME MINI BIRD

XPLN 27

DISPLAY_FMT FIRST, LAST

02 MIK

03 CFW 12 4001

04 AO6

05 TRN

06 DSP

07

08 ADL 16

09 ADL 16

10 ADL 16

11 ADL 16

12 ADL 16

13 ADL 16

14 RGA

15 MCK

DATE 9 MAR 2004

Station Configuration for CFNR- Call Forward No Reply

LD 11

SL1000

MARP NOT ACTIVATED

MEM AVAIL: (U/P): 1260844 USED U P: 92556 39239 TOT: 1392639

DISK RECS AVAIL: 463

TNS AVAIL: 2318 USED: 182 TOT: 2500

ACD AGENTS AVAIL: 10 USED: 0 TOT: 10

AST AVAIL: 1000 USED: 0 TOT: 1000

DATA PORTS AVAIL: 2499 USED: 1 TOT: 2500

DIGITAL TELEPHONES AVAIL: 44 USED: 4 TOT: 48

INTERNET TELEPHONES AVAIL: 0 USED: 0 TOT: 0

REQ: PRT



TYPE: 2616

MARP NOT ACTIVATED

TN 1 0 0 2

DATE

PAGE

DES

DES TEST1

TN 001 0 00 02

TYPE 2616

CDEN 8D

CUST 0

AOM 0

FDN 6004

TGAR 0

LDN NO

NCOS 0

SGRP 0

RNPG 0

SCI 0

SSU

XLST

SFLT NO

CAC_MFC 0

CLS CTD FBA WTA LPR MTD FNA HTA ADD HFD

MWA LMPN RMMD SMWD AAD IMD XHD IRD NID OLD VCE DRG1

POD DSX VMD CMSD CCSD SWD LND CNDA

CFTD SFD MRD DDV CNID CDCA MSID DAPA BFED RCBD

ICDD CDMD MCTD CLBD AUTU

GPUD DPUD DNDA CFXA ARHD CLTD ASCD

ABDD CFHD FICD NAID BUZZ AGRD MOAD

UDI RCC HBTB AHD IPND DDGA NAMA MIND PRSD NRWD NRCB NROD

DRDD EXR0



USRD ULAD RTDD RBDD RBHD PGND FLXD FTTC DNDY DNO3 MCBN

CPND_LANG ENG

RCO 0

HUNT 6004

LHK 0

PLEV 02

AST

IAPG 0

AACS NO

ITNA NO

DGRP

MLWU_LANG 0

DNDR 0

KEY 00 SCR 6003 0 MARP

CPND

CPND_LANG ROMAN

NAME THE COUNT

XPLN 13

DISPLAY_FMT FIRST, LAST

01 SCR 5011 0

CPND

CPND_LANG ROMAN

NAME MINI BIRD

XPLN 27

DISPLAY_FMT FIRST, LAST

02 MIK

03 CFW 12 4001

04 AO6

05 TRN

06 DSP

07

08 ADL 16



09 ADL 16

10 ADL 16

11 ADL 16

12 ADL 16

13 ADL 16

14 RGA

15 MCK

DATE 9 MAR 2004

Configuring Cisco CallManager



6608-T1 Gateway Configuration

Cisco CallManager 4.0 Administration - Gateway Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites IP Media Print

Address http://cm-klington/CCMAdmin/gatewayconfig.asp?pkid={DF71136E-4975-4B2C-BDE6-C24A840B4ABC}&type=1 Go Links

System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Gateway Configuration

[Back to Find/List Gateways](#)
[Dependency Records](#)

Product : Cisco Catalyst 6000 T1 VoIP Gateway
Gateway : S0/DS1-0@SDA0001C9D93A98
Device Protocol: Digital Access PRI
Registration: Registered with Cisco CallManager 172.20.32.254
IP Address: 172.20.32.112

Status: Ready

Device Information

MAC Address*	<input type="text" value="0001C9D93A98"/>
Description	<input type="text" value="SDA0001C9D93A98"/>
Device Pool*	<input type="text" value="Default"/>
Network Locale	<input type="text" value="United States"/>
Media Resource Group List	<input type="text" value="< None >"/>
Location	<input type="text" value="< None >"/>
AAR Group	<input type="text" value="< None >"/>
Load Information	<input type="text"/>

Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain (e.g., "0000FF")	<input type="text"/>
MLPP Indication	<input type="text" value="Off"/>
MLPP Preemption	<input type="text" value="Disabled"/>

Interface Information

PRI Protocol Type*	<input type="text" value="PRI ISO QSIG T1"/>
Protocol Side*	<input type="text" value="User"/>
Channel Selection Order*	<input type="text" value="Top Down"/>
Channel IE Type*	<input type="text" value="Timeslot Number"/>

Local intranet



Cisco CallManager 4.0 Administration - Gateway Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cm-klngon/CCMAdmin/gatewayconfig.asp?pkid={DF71136E-4975-4B2C-BDE6-C24A840B4ABC}&type=1> Go Links >>

PCM Type*

Delay for first restart (1/8 sec ticks)

Delay between restarts (1/8 sec ticks)

Inhibit restarts at PRI initialization

Enable status poll

Call Routing Information

Inbound Calls

Significant Digits*

Calling Search Space

AAR Calling Search Space

Prefix DN

Outbound Calls

Calling Line ID Presentation*

Calling Party Selection*

Called party IE number type unknown*

Calling party IE number type unknown*

Called Numbering Plan*

Calling Numbering Plan*

Number of digits to strip*

Caller ID DN

SMDI Base Port*

PRI Protocol Type Specific Information

Display IE Delivery

Redirecting Number IE Delivery - Outbound

Redirecting Number IE Delivery - Inbound

Send Extra Leading Character In DisplayIE***

Setup non-ISDN Progress Indicator IE Enable****

Local intranet



Cisco CallManager 4.0 Administration - Gateway Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cm-kingon/CCMAdmin/gatewayconfig.asp?pkid={DF71136E-4975-4B2C-BDE6-C24A840B4ABC}&type=1> Go Links

MCDN Channel Number Extension Bit Set to Zero**

Send Calling Name In Facility IE

Interface Identifier Present**

Interface Identifier Value**

Connected Line ID Presentation (QSIG Inbound Call)*

Connected PBX Model

Product Specific Configuration

Clock Reference*

TX-Level CSU*

FDL Channel*

Framing*

Audio Signal Adjustment into IP Network*

Audio Signal Adjustment from IP Network*

Yellow Alarm*

Zero Suppression*

Digit On Duration(50-500ms)*

Interdigit Duration(50-500msec)*

SNMP Community String

Disable SNMP Set operations*

Debug Port Enable*

Hold Tone Silence Duration*

Port Used for Voice Calls*

Port Used for Modem Calls*

Port Used for Fax Calls*

Fax and Modem Parameters

Fax Relay Enable*

Fax Error Correction Mode Override*

Maximum Fax Rate*

Local intranet



Cisco CallManager 4.0 Administration - Gateway Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address <http://cm-klngon/CCMAdmin/gatewayconfig.asp?pkid={DF71136E-4975-4B2C-BDE6-C24A840B4ABC}&Status=US&Action=> Go Links >>

Maximum Fax Rate*	14400bps
Fax Payload Size*	20
Non Standard Facilities Country Code*	65535
Non Standard Facilities Vendor Code*	65535
Fax/Modem Packet Redundancy*	<input type="checkbox"/>
NSE Type*	Non-IOS Gateways

Playout Delay Parameters

Initial Playout Delay*	40
Minimum Playout Delay*	20
Maximum Playout Delay*	150

Echo Canceller Configuration

Echo TailLength (ms)*	32 ms
Minimum ERL (db)*	6 db

* indicates required item
** applicable to DMS-100 protocol only
*** applicable to DMS-100 protocol and DMS-250 protocol only
**** may be required to force ringback from some PBXs

[Back to Find/List Gateways](#)

Reset succeeded. Local intranet



Enbloc Route Pattern Configuration

Cisco CallManager 4.0 Administration - Route Pattern/Hunt Pilot Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cm-kingon/CCMAdmin/routepatternconfig.asp?pkid={3F08903A-3126-4CE1-95DF-9E01A95B7DC4}> Go Links >>

Route Pattern/Hunt Pilot: 6XXX

Status: Ready
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

Copy Update Delete

Pattern Definition

Route Pattern/Hunt Pilot* 6XXX

Partition < None >

Description

Numbering Plan* North American Numbering Plan

Route Filter < None >

MLPP Precedence Default

Gateway or Route/Hunt List* S0/DS1-0@SDA0001C9D93A98 (Edit)

Route Option

Route this pattern

Block this pattern — Not Selected —

Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation Default

Calling Name Presentation Default

Connected Party Transformations

Connected Line ID Presentation Default

Connected Name Presentation Default

Called Party Transformations

Discard Digits < None >

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code

Network Service Protocol — Not Selected —

Done Local intranet



Overlap Sending Route Pattern Configuration

Cisco CallManager 4.0 Administration - Route Pattern/Hunt Pilot Configuration - Microsoft Internet Explorer

Address: http://cm-klngon/CCMAdmin/routepatternconfig.asp?pkid={E959BFF6-5645-4444-9E24-2768AFCAAD03}

Route Pattern/Hunt Pilot: 9.X

Status: Ready
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

Copy Update Delete

Pattern Definition

Route Pattern/Hunt Pilot* 9.X
Partition < None >
Description
Numbering Plan* North American Numbering Plan
Route Filter < None >
MLPP Precedence Default
Gateway or Route/Hunt List* S0/DS1-0@SDA0001C9D93A98 (Edit)
Route Option
 Route this pattern
 Block this pattern — Not Selected —

Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask
Prefix Digits (Outgoing Calls)
Calling Line ID Presentation Default
Calling Name Presentation Default

Connected Party Transformations

Connected Line ID Presentation Default
Connected Name Presentation Default

Called Party Transformations

Discard Digits PreDot
Called Party Transform Mask
Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code
Network Service Protocol — Not Selected —
Network Service Service Parameter Name Service Parameter Value
— Not Selected — < Not Exist >

Done Local intranet



Translation Pattern for Incoming Calls

Cisco CallManager 4.0 Administration - Translation Pattern Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address <http://cm-klngon/CCMAdmin/translationconfig.asp?pkid={89B55D17-7179-4943-A5CF-EED9D09BF290}> Go Links >>

Translation Pattern Configuration

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

Translation Pattern: 4XXX
Status: Ready

Copy Update Delete

Pattern Definition

Translation Pattern	<input type="text" value="4XXX"/>
Partition	Incoming Trunk
Description	<input type="text"/>
Numbering Plan*	North American Numbering Plan
Route Filter	< None >
Calling Search Space	Phones
MLPP Precedence	Default
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input type="text" value="-- Not Selected --"/>
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input checked="" 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"/>
Calling Line ID Presentation	Default
Calling Name Presentation	Default

Connected Party Transformations

Connected Line ID Presentation	Default
Connected Name Presentation	Default

Called Party Transformations

Discard Digits	< None >
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

* indicates required item.

Done Local intranet



CLIR Route Pattern Configuration

Cisco CallManager 4.0 Administration - Route Pattern/Hunt Pilot Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cm-kingon/CCMAdmin/routepatternconfig.asp?pkid={3F08903A-3126-4CE1-95DF-9E01A95B7DC4}&status=uc> Go Links >>

Route Pattern/Hunt Pilot: 6XXX

Status: Update completed
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

Copy Update Delete

Pattern Definition

Route Pattern/Hunt Pilot*	6XXX	
Partition	< None >	
Description		
Numbering Plan*	North American Numbering Plan	
Route Filter	< None >	
MLPP Precedence	Default	
Gateway or Route/Hunt List*	S0/DS1-0@SDA0001C9D93A98 (Edit)	
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern — Not Selected —	
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input type="checkbox"/> Allow Overlap Sending	<input type="checkbox"/> Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation	Restricted
Calling Name Presentation	Default

Connected Party Transformations

Connected Line ID Presentation	Default
Connected Name Presentation	Default

Called Party Transformations

Discard Digits	< None >
Called Party Transform Mask	
Prefix Digits (Outgoing Calls)	

ISDN Network-Specific Facilities Information Element

Carrier Identification Code		
Network Service Protocol	— Not Selected —	
Network Service	Service Parameter Name	Service Parameter Value
— Not Selected —	< Not Exist >	

Done Local intranet



CNIR Route Pattern Configuration

Cisco CallManager 4.0 Administration - Route Pattern/Hunt Pilot Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://cm-klngon/CCMAdmin/routepatternconfig.asp?pkid={3F08903A-3126-4CE1-95DF-9E01A95B7DC4}&status=uc

Route Pattern/Hunt Pilot: 6XXX

Status: Update completed
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

Copy Update Delete

Pattern Definition

Route Pattern/Hunt Pilot* 6XXX

Partition < None >

Description

Numbering Plan* North American Numbering Plan

Route Filter < None >

MLPP Precedence Default

Gateway or Route/Hunt List* S0/DS1-0@SDA0001C9D93A98 (Edit)

Route Option

Route this pattern

Block this pattern — Not Selected —

Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation Default

Calling Name Presentation Restricted

Connected Party Transformations

Connected Line ID Presentation Default

Connected Name Presentation Default

Called Party Transformations

Discard Digits < None >

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code

Network Service Protocol — Not Selected —

Network Service	Service Parameter Name	Service Parameter Value
— Not Selected —	< Not Exist >	

Done Local intranet



COLR Translation Pattern Configuration

Cisco CallManager 4.0 Administration - Translation Pattern Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address <http://cm-kingon/CCMAdmin/translationconfig.asp?pkid={89B55D17-7179-4943-A5CF-EED9D09BF290}&status=uc> Go Links >>

Translation Pattern Configuration

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

Translation Pattern: 4XXX
Status: Update completed

Copy Update Delete

Pattern Definition

Translation Pattern	4XXX
Partition	Incoming Trunk
Description	
Numbering Plan*	North American Numbering Plan
Route Filter	< None >
Calling Search Space	Phones
MLPP Precedence	Default
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern — Not Selected —
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input checked="" type="checkbox"/> Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation	Default
Calling Name Presentation	Default

Connected Party Transformations

Connected Line ID Presentation	Restricted
Connected Name Presentation	Default

Called Party Transformations

Discard Digits	< None >
Called Party Transform Mask	
Prefix Digits (Outgoing Calls)	

* indicates required item.

Done Local intranet



CONR Translation Pattern Configuration

Cisco CallManager 4.0 Administration - Translation Pattern Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cm-klngon/CCMAdmin/translationconfig.asp?pkid={89B55D17-7179-4943-A5CF-EED9D09BF290}&status=uc> Go Links >>

Translation Pattern Configuration

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

Translation Pattern: 4XXX
Status: Update completed

Pattern Definition

Translation Pattern	<input type="text" value="4XXX"/>
Partition	<input type="text" value="Incoming Trunk"/>
Description	<input type="text"/>
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>
Route Filter	<input type="text" value="< None >"/>
Calling Search Space	<input type="text" value="Phones"/>
MLPP Precedence	<input type="text" value="Default"/>
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input type="text" value="— Not Selected —"/>
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input checked="" 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"/>
Calling Line ID Presentation	<input type="text" value="Default"/>
Calling Name Presentation	<input type="text" value="Default"/>

Connected Party Transformations

Connected Line ID Presentation	<input type="text" value="Default"/>
Connected Name Presentation	<input type="text" value="Restricted"/>

Called Party Transformations

Discard Digits	<input type="text" value="< None >"/>
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

* indicates required item.

Done Local intranet



PSTN Route Pattern Configuration

Cisco CallManager 4.0 Administration - Route Pattern/Hunt Pilot Configuration - Microsoft Internet Explorer

Address: http://cm-kingon/CCMAdmin/routepatternconfig.asp?pkid={A0E58AC2-80ED-4857-9D43-DCC43AA6EA56}

Route Pattern/Hunt Pilot: 81650XXXXXXX

Status: Ready
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

Copy Update Delete

Pattern Definition

Route Pattern/Hunt Pilot* 81650XXXXXXX
Partition < None >
Description
Numbering Plan* North American Numbering Plan
Route Filter < None >
MLPP Precedence Default
Gateway or Route/Hunt List* S0/DS1-0@SDA0001C9D93A98 (Edit)
Route Option
 Route this pattern
 Block this pattern — Not Selected —

Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask
Calling Party Transform Mask
Prefix Digits (Outgoing Calls)
Calling Line ID Presentation Default
Calling Name Presentation Default

Connected Party Transformations

Connected Line ID Presentation Default
Connected Name Presentation Default

Called Party Transformations

Discard Digits < None >
Called Party Transform Mask
Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code
Network Service Protocol — Not Selected —
Network Service Service Parameter Name Service Parameter Value
— Not Selected — < Not Exist >

Done Local intranet



7960 IP phone Configuration

Cisco CallManager 4.0 Administration - Phone Configuration - Microsoft Internet Explorer

Address: <http://cm-klington/CCMAdmin/phoneconfig.asp?pkid={23EE0A35-0B85-42D6-8B13-18D674D3F2CE}>

Phone Configuration

[Add a new phone](#)
[Add/Update Speed Dials](#)
[Subscribe/Unsubscribe Services](#)
[Dependency Records](#)
[Back to Find/List Phones](#)

Directory Numbers

Base Phone

- Line 1 - 4000 in Phones
- Line 2 - Add new DN

Phone: SEP000B5FD22FE8 (Auto 4000)
Registration: Registered with Cisco CallManager 172.20.32.254
IP Address: [172.20.32.102](#)
Status: Ready

Phone Configuration (Model = Cisco 7960)

Device Information

MAC Address*	<input type="text" value="000B5FD22FE8"/>
Description	<input type="text" value="Auto 4000"/>
Owner User ID	<input type="text"/> (Select User ID)
Device Pool*	<input type="text" value="Default"/> (View details)
Calling Search Space	<input type="text" value="< None >"/>
AAR Calling Search Space	<input type="text" value="< None >"/>
Media Resource Group List	<input type="text" value="< None >"/>
User Hold Audio Source	<input type="text" value="< None >"/>
Network Hold Audio Source	<input type="text" value="< None >"/>
Location	<input type="text" value="< None >"/>
User Locale	<input type="text" value="< None >"/>
Network Locale	<input type="text" value="< None >"/>
Device Security Mode	<input type="text" value="Use System Default"/>
Built In Bridge	<input type="text" value="Default"/>
Privacy	<input type="text" value="Default"/>

Phone Button Template Information

Phone Button Template*	<input type="text" value="Standard 7960"/> (View button list)
------------------------	---

Softkey Template Information

Softkey Template	<input type="text" value="< None >"/>
------------------	---

Expansion Module Information

Module 1	<input type="text" value="< None >"/>
Module 2	<input type="text" value="< None >"/>

Local intranet



Cisco CallManager 4.0 Administration - Phone Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address <http://cm-klingson/CCMAdmin/phoneconfig.asp?pkid={23EE0A35-0B85-42D6-8B13-18D674D3F2CE}> Go Links

Firmware Load Information (leave blank to use default)

Phone Load Name

Module 1 Load Name (Module 1 selection required)

Module 2 Load Name (Module 2 selection required)

Cisco IP Phone - External Data Locations (leave blank to use default)

Information

Directory

Messages

Services

Authentication Server

Proxy Server

Idle

Idle Timer (seconds)

Extension Mobility (Device Profile) Information

Enable Extension Mobility Feature

Log Out Profile

Log In User ID

Log In Time

Log Out Time

Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain (e.g., "0000FF")

MLPP Indication

MLPP Preemption

Product Specific Configuration i

Disable Speakerphone

Disable Speakerphone and Headset

Forwarding Delay*

PC Port*

Settings Access*

Gratuitous ARP*

PC Voice VLAN Access*

Local intranet



Cisco CallManager 4.0 Administration - Directory Number Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cm-klngon/CCMAdmin/directorynumber.asp?NumPlanMapID={FDF4C8AE-583C-4480-9C58-36FC82BAA685}> Go Links >>

Directory Number Configuration

[Configure Device \(SEP000B5FD22FE8\)](#)
[Dependency Records](#)

Associated With
SEP000B5FD22FE8
7960 (Line 1)

Directory Number: 4000 (Phones)
Status: Ready
Note: Any update to this Directory Number automatically resets the associated devices

Update Remove from Device Reset Devices

Directory Number

Directory Number* 4000
Partition Phones

Directory Number Settings

Voice Mail Profile <None> (Choose <None> to use default)
Calling Search Space Phones
AAR Group <None>
User Hold Audio Source <None>
Network Hold Audio Source <None>
Auto Answer Auto Answer Off

Call Forward and Pickup Settings

	Voice Mail Destination	Calling Search Space
Forward All	<input type="checkbox"/>	<None>
Forward Busy	<input type="checkbox"/>	<None>
Forward No Answer	<input type="checkbox"/>	<None>
No Answer Ring Duration		(seconds)
Call Pickup Group	<None>	

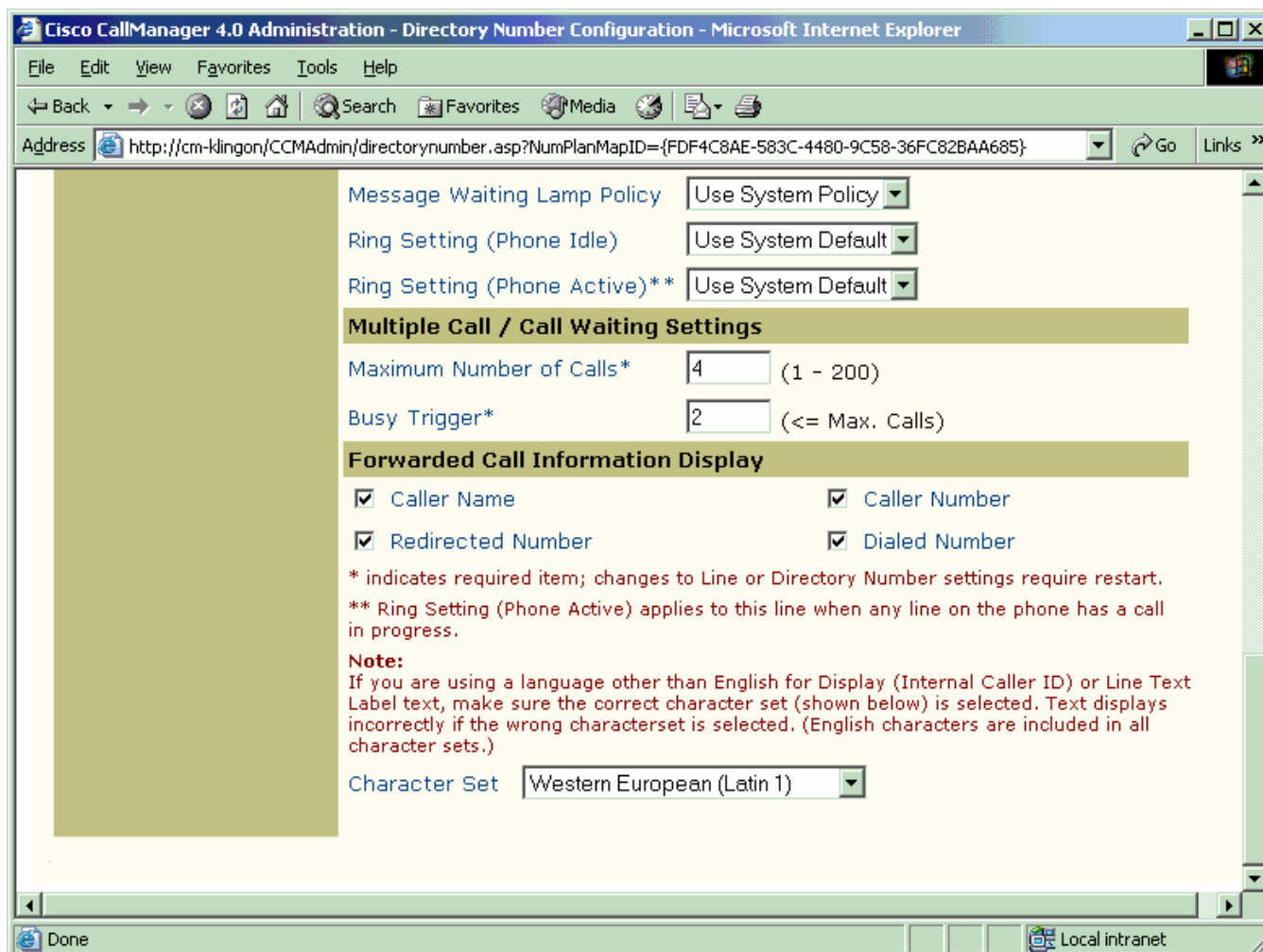
MLPP Alternate Party Settings

Target (Destination)
Calling Search Space <None>
No Answer Ring Duration (seconds)

Line Settings for this Device

Display (Internal Caller ID) JOHN DOE
Line Text Label
External Phone Number Mask

Done Local intranet



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