



Inter-Tel Key System with CallManager using 6608-T1 PRI NI-2 Gateway

This application note illustrates for connectivity of Inter-Tel Key System with CallManager using 6608-T1 PRI NI-2 Gateway.

Integration Description

Connectivity is achieved by using the industry standard PRI NI-2 protocol. The Inter-Tel system can be configured as USER side only.

Cisco Systems Equipment needed

Hardware (Gateway): 6608 T1 Port

Software: CallManager Release 3.1

Inter-Tel Hardware and Software Requirements

Hardware: Axxess 256

Software: Version 5.2

Features Supported

Key features supported:

- Calling/Called Number

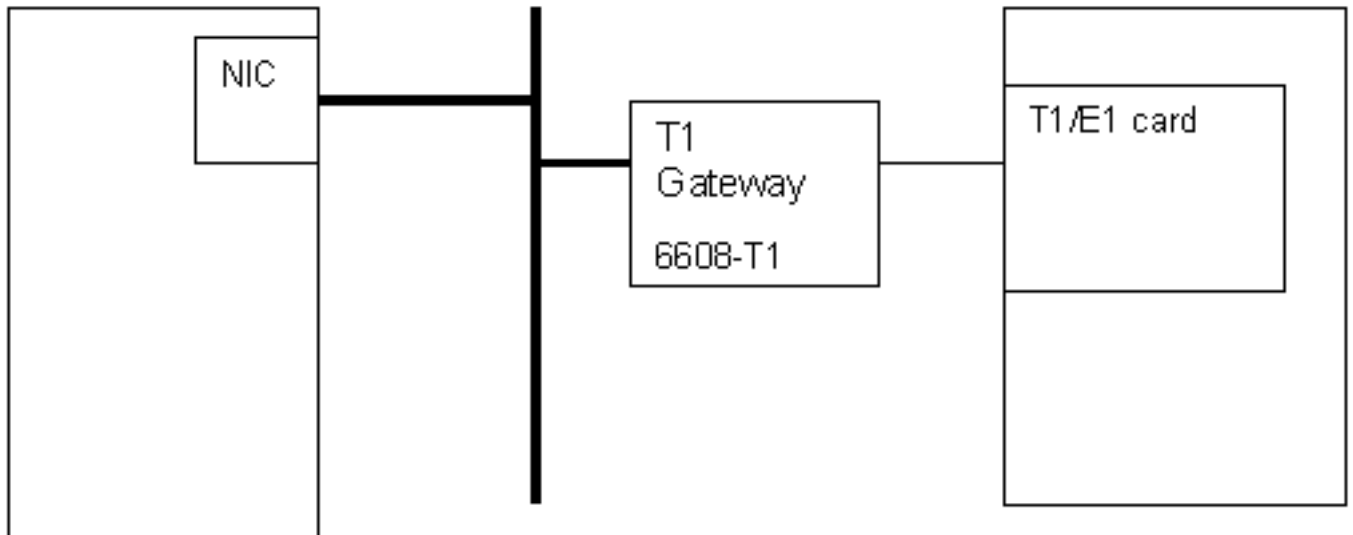
Key features not supported:

- Calling/Called Name



Network Diagram

Figure 1
Network Test Topology



Configuring the Inter-Tel Key System

Configure in the following sequence:

1. ["Configure T1 Trunk" on page 3](#)
2. ["Configure B-Channels Circuits" on page 4](#)
3. ["Configure Reference Clock" on page 6](#)
4. ["Configure T1 PRI Timers" on page 7](#)
5. ["Configure Call Routing Table" on page 8](#)



Configure T1 Trunk

The screenshot shows the DB Studio interface for configuring a T1 Primary Rate Interface Card. The window title is "DB Studio - System\Cabinets\01:06 T1 Primary Rate Interface Card". The left pane shows a tree view of the system configuration, with "01:06 T1 Primary Rate Interface" selected. The right pane displays a table of configuration parameters for the selected card.

Name	Value
T1 Circuits	
T1 Diagnostics	
Timers	
Call Type	
Description	T1 PRI Card
Framing Type	Extended Superframe
Zero Code Suppression	B8ZS
Line Build-Out	0 dB (DSX-1)
Central Office Switch Type	National ISDN 2
CO Provides Progress Tones	No
Connect on Call Proceeding	Yes
Operator System Access	No

At the bottom of the window, there are buttons for "Node 1", "Direct Cable", and "New Session".



Configure B-Channels Circuits

The screenshot shows the DB Studio interface for configuring T1 circuits. The title bar reads "DB Studio - System\Cabinets\01:06 T1 Primary Rate Interface Card\T1 Circuits". The menu bar includes File, Edit, View, Operations, Favorites, and Help. The tree view on the left shows a hierarchy: Inter-Tel 5.2F0 > System > Cabinets > T1 Circuits. The main pane displays a table of T1 circuits:

T1 Circuit Type	T1 Circuit Device
01:06.01.01 B-Channel	94101
01:06.01.02 B-Channel	94102
01:06.01.03 B-Channel	94103
01:06.01.04 B-Channel	94104
01:06.01.05 B-Channel	94105
01:06.01.06 B-Channel	94106
01:06.01.07 B-Channel	94107
01:06.01.08 B-Channel	94108
01:06.01.09 B-Channel	94109
01:06.01.10 B-Channel	94110
01:06.01.11 B-Channel	94111
01:06.01.12 B-Channel	94112
01:06.01.13 B-Channel	94113
01:06.01.14 B-Channel	94114
01:06.01.15 B-Channel	94115
01:06.01.16 B-Channel	94116
01:06.01.17 B-Channel	94117
01:06.01.18 B-Channel	94118
01:06.01.19 B-Channel	94119
01:06.01.20 B-Channel	94120

The status bar at the bottom shows "Node 1", "Direct Cable", and "New Session".



DB Studio - System\Cabinets\01:06 T1 Primary Rate Interface Card\T1 Circuits

File Edit View Operations Favorites Help

← → ↻ ? [Icons]

Inter-Tel 5.2F0

- System
 - Cabinets
 - T1 Error Thresholds
 - T1 Reference-Clock List
 - 01:01 Digital Keypad 16 C
 - 01:02 Uninstalled
 - 01:03 Uninstalled
 - 01:04 Uninstalled
 - 01:05 Loop Start Card
 - 01:06 T1 Primary Rate Interface Card
 - T1 Circuits**
 - T1 Diagnostics
 - Hourly
 - Daily
 - T1 Status
 - Timers
 - Call Type
 - 01:07 T1 Card
 - T1 Circuits
 - T1 Diagnostics
 - 01:08 Central Processor

T1 Circuit Type	T1 Circuit Device
01:06.01.04 B-Channel	94104
01:06.01.05 B-Channel	94105
01:06.01.06 B-Channel	94106
01:06.01.07 B-Channel	94107
01:06.01.08 B-Channel	94108
01:06.01.09 B-Channel	94109
01:06.01.10 B-Channel	94110
01:06.01.11 B-Channel	94111
01:06.01.12 B-Channel	94112
01:06.01.13 B-Channel	94113
01:06.01.14 B-Channel	94114
01:06.01.15 B-Channel	94115
01:06.01.16 B-Channel	94116
01:06.01.17 B-Channel	94117
01:06.01.18 B-Channel	94118
01:06.01.19 B-Channel	94119
01:06.01.20 B-Channel	94120
01:06.01.21 B-Channel	94121
01:06.01.22 B-Channel	94122
01:06.01.23 B-Channel	94123

Node 1 Direct Cable New Session



Configure Reference Clock

The screenshot shows the DB Studio interface for configuring a T1 Reference-Clock List. The left pane displays a tree view of the system configuration, with 'T1 Reference-Clock List' selected. The right pane shows a table with two columns: 'Name' and 'Value'. The table contains two entries: '01:07 T1 Card' and '01:06 T1 PRI Card', both with the value 'Slaves to Private Network'.

Name	Value
01:07 T1 Card	Slaves to Private Network
01:06 T1 PRI Card	Slaves to Private Network



Configure T1 PRI Timers

The screenshot shows the DB Studio interface for configuring T1 PRI Timers. The title bar reads "DB Studio - System\Cabinets\01:06 T1 Primary Rate Interface Card\Timers". The menu bar includes File, Edit, View, Operations, Favorites, and Help. The tree view on the left shows the hierarchy: Inter-Tel 5.2F0 > System > Cabinets > 01:06 T1 Primary Rate Interface Card > Timers. The main pane displays a table of timer settings:

Name	Value	Units	Range (Default)
Call Proceeding (T310)	25	Seconds	1 - 255 (10)
Connect Acknowledge (T313)	9	Seconds	1 - 255 (9)
Data Link Disconnect (T309)	90	Seconds	1 - 255 (90)
Disconnect (T305)	4	Seconds	1 - 255 (4)
Idle Link (T203)	100	Tenths	1 - 65535 (100)
Release (T308)	4	Seconds	1 - 255 (4)
Restart Acknowledge (T316)	5	Seconds	1 - 255 (120)
Re-Transmission (T200)	10	Tenths	1 - 65535 (10)
Setup Request Acknowledge (T303)	9	Seconds	1 - 255 (9)
XID Request (T204)	20	Tenths	1 - 65535 (20)

At the bottom of the window, there are buttons for "Node 1", "Direct Cable", and "New Session".



Configure Call Routing Table

Pattern	Description	Ring-In Type	Ring-In Destination
2000	2000	Single	2000
2001	2001	Single	2001
2002	2002	Single	2002
2003	2003	Single	2003
2004	2004	Single	2004
2005	2005	Single	2005
2006	2006	Single	NONE
4000	4000	Single	4000
4001	4001	Single	4001
4002	4002	Single	4002
4003	4003	Single	4003
4004	4004	Single	NONE
4005	4005	Single	NONE
4006	4006	Single	NONE
5000	5000	Single	5000
5001	5001	Single	5001
5002	5002	Single	5002
5003	5003	Single	5003
5004	5004	Single	NONE



Configuring Cisco CallManager

6680 Gateway Configuration

The screenshot shows the Cisco CallManager Administration web interface. At the top, there is a navigation menu with links for System, Route Plan, Service, Feature, Device, User, Application, and Help. Below the menu is a header banner with the text "Cisco CallManager Administration For Cisco IP Telephony Solutions" and the Cisco Systems logo. The main content area is titled "Gateway Configuration" and includes a link to "Back to Find/List Gateways". The configuration details for a gateway are displayed:

- 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**

The status is "Ready". Below the status are four buttons: Update, Delete, Reset Gateway, and Cancel Changes. At the bottom, there are four configuration fields:

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

The browser's address bar at the bottom shows "Local intranet".




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 type="checkbox"/>
Redirecting Number IE Delivery	<input checked="" type="checkbox"/>
Delay for first restart (1/8 sec ticks)	32



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



Product Specific Configuration 

Clock Reference*	Internal
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*	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="6XXXX"/>
Partition	<input type="text" value="< None >"/>
Numbering Plan*	<input type="text" value="North American Numbering Pl"/>
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	
<input type="checkbox"/> 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.

Considerations

Calling Name and Number Feature

Calling Name delivery and presentation features are not supported by the Inter-Tel Key System for PRI link.

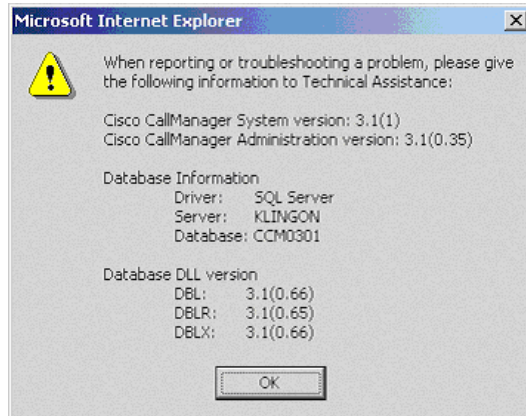
When calling from Cisco 7960 IP phone to Inter-Tel digital phone, Calling/Called Number is displayed on both phones after the call is answered as expected.

When calling from Inter-Tel digital phone to Cisco 7960 IP phone, IP phone displays Connected Number after the call is answered. Inter-Tel phone however does NOT get updated when the call is answered. It displays the numbers being dialed instead. (i.e. Access Code, extension number). It was verified using ISDN protocol analyzer that the CallManager was not sending "Connected Number" information in the connect message back to Inter-Tel Key System.



Appendix A

CallManager Software Release





Inter-Tel Software Release

The screenshot shows the DB Studio application window. The title bar reads "DB Studio". The menu bar includes "File", "Edit", "View", "Operations", "Favorites", and "Help". Below the menu bar is a toolbar with various icons. The main window is divided into two panes. The left pane shows a tree view of the system configuration for "Inter-Tel 5.2F0". The right pane shows a table of system parameters.

Name	Value
System	
Passwords	
Date	8/23/01
Time	2:45 PM
Time Zone	(GMT-08:00) Pacific Time (US & Canada)
Primary Language	American English
Secondary Language	Spanish

The left pane tree view includes the following items:

- Inter-Tel 5.2F0
 - System
 - Cabinets
 - T1 Error Thresholds
 - T1 Reference-Clock List
 - 01:01 Digital Keypset 16 Card
 - 01:02 Uninstalled
 - 01:03 Uninstalled
 - 01:04 Uninstalled
 - 01:05 Loop Start Card
 - 01:06 T1 Primary Rate Interf
 - 01:07 T1 Card
 - 01:08 Central Processor/PC
 - 01:09 Uninstalled
 - 01:10 Uninstalled
 - 01:11 Uninstalled
 - 01:12 Uninstalled
 - 01:13 Uninstalled
 - 01:14 Uninstalled
 - 01:15 Uninstalled
 - 01:16 Not Used
 - Devices and Feature Codes



Catalyst 6000 Switch Configuration

```

Console> 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)
5	8	WS-X6608-T1	SAD04400EM0	HP : A00203010007; DSP : A003C031 (3.3.30) Hw : 1.1 Fw : 5.4(2) Sw : 5.5(6a) HP1: D00403010013; DSP1: D005C031 (3.3.30) HP2: D00403010013; DSP2: D005C031 (3.3.30) HP3: D00403010013; DSP3: D005C031 (3.3.30) HP4: D00403010013; DSP4: D005C031 (3.3.30) HP5: D00403010013; DSP5: D005C031 (3.3.30) HP6: D00403010013; DSP6: D005C031 (3.3.30) HP7: D00403010013; DSP7: D005C031 (3.3.30) HP8: D00403010013; DSP8: D005C031 (3.3.30)
6	8	WS-X6608-E1	SAD04380DW1	Hw : 1.1 Fw : 5.4(2) Sw : 5.5(6a) HP1: D00403010013; DSP1: D005C031 (3.3.30) HP2: D00403010013; DSP2: D005C031 (3.3.30) HP3: D00403010013; DSP3: D005C031 (3.3.30) HP4: D00403010013; DSP4: D005C031 (3.3.30) HP5: D00403010013; DSP5: D005C031 (3.3.30) HP6: D00403010013; DSP6: D005C031 (3.3.30) HP7: D00403010013; DSP7: D005C031 (3.3.30) HP8: D00403010013; DSP8: D005C031 (3.3.30)

Module	DRAM			FLASH			NVRAM		
	Total	Used	Free	Total	Used	Free	Total	Used	Free
1	65408K	37527K	27881K	16384K	11546K	4838K	512K	198K	314K

```
Uptime is 22 days, 23 hours, 13 minutes
```



Console>

Console> 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 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>

Console> 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

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```
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

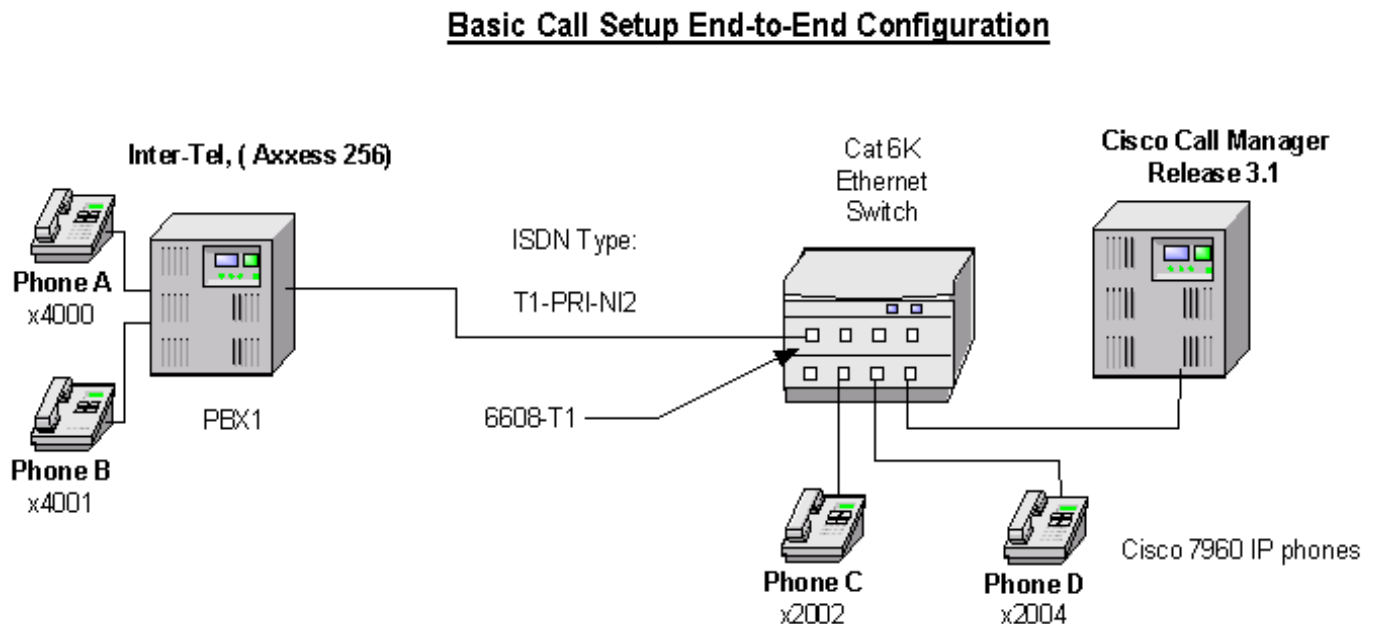
Port	NoiseRegen	NonLinearProcessing
5/1	enabled	enabled
5/2	enabled	enabled
5/3	enabled	enabled
5/4	enabled	enabled
5/5	enabled	enabled
5/6	enabled	enabled
5/7	enabled	enabled
5/8	enabled	enabled

Console>



Test Configuration

Figure 2
Test Topology



The above diagram is representative of the various configurations used for testing.

As shown in the diagram above, an Inter-Tel Axxess 256 Key System 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 Key System.

Layer 1 (Physical Layer)

The Inter-Tel configuration screen for the T1 PRI trunk's physical layer parameters are under System -> Cabinets -> T1 Primary Rate Interface screen.

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 Inter-Tel/6608 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-NI2 supports both protocol sides by selecting “Network/User” in the protocol side field when configuring the Gateway via CallManager.

The Inter-Tel T1 PRI, when set to NI2, supports “USER” protocol side only. Therefore Cisco 6608-T1 should be configured as Network side.

Test Results

Testing was performed by Test Engineer(s): Samir Batio, August 24, 2001

Test Setup 1

Test configuration:

- PBX1 configured as NI2, emulates User
- Cisco 6608-T1 Gateway configured as PRI NI2, emulates Network

Table 1 Test Setup 1 Switch and Gateway Settings

Inter-Tel Axxess 256 Switch-type/ Protocol -side Setting	Cisco 6608-T1 ISDN Protocol/Protocol-side Setting
NI2/User	PRI NI2/Network

Table 2 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	No	No ¹	No ²	
Phone C to Phone A	Yes	Yes	No	Yes	No	

1. CallManager is not sending “Connected Number” information in the connect message back to PBX.

2. The Inter-Tel PRI interface with NI2 setting does not support “Calling Name” presentation Feature.



Table 3 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	No	No	No	
Phone A to Phone C Xfr to Phone D	Yes	Yes	No	No	No	

Table 4 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) No	(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 5 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. " Connecte d Number" updated at orig. side?	Final dest. " Connecte d Name" updated at orig. side?
Phone C to Phone A fwd to Phone B	Yes	Yes	No	No	Yes	No	No
Phone A to Phone C fwd to Phone D	Yes	Yes	No	No	No	No	No



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