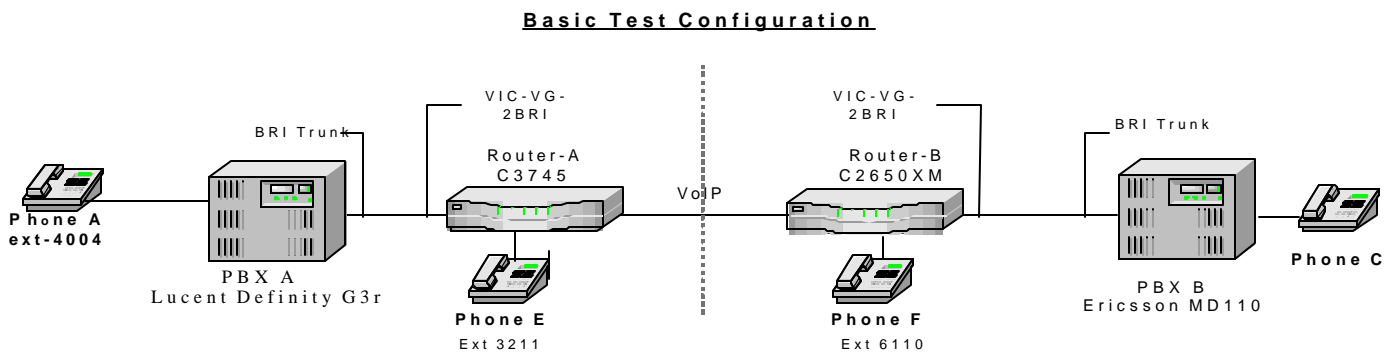


Cisco 3745 Gateway-PBX Interoperability: Lucent Definity G3r Using Q.931 BRI Interfaces to an H.323 Gateway

Introduction

- This note describes the connectivity or interoperability of a Lucent Definity G3r PBX to a Cisco 3745 router.
- The network topology diagram shows the set up for end-to-end interoperability between PBXs.

Network Topology



System Components

Hardware Requirements

- Cisco Hardware
 - Cisco 3745 router with IP Communications Voice or Fax Network Module using the Voice Interface Card (VIC)-Voice Grade (VG)-dual Basic Rate Interface (BRI)
- PBX Hardware.
 - Lucent Definity G3r - G3V7i.01.0.343.7



Software Requirements

- Cisco IOS Software Release 12(15)ZJ
- PBX Software Release 7

Configuration

Configuring the Lucent Definity G3r

CO Trunk

The screenshot shows the Avaya Site Administration interface for a Lucent_V7 GEDI system. The main window displays the configuration for an ISDN-BRI Trunk Circuit Pack. The configuration includes the location (01A08), name (user), interface companding (a-law), DCP/Analog Bearer Capability (speech), and T3 Timer Length (15 seconds). A table lists the port configurations for ports 1 through 8.

Port	Interface	Side	Cntry/Peer Protocol	TEI	Time Fill	Invert Bits?	Synch Source?	Layer 1 Stable?	Detect Slips?
1:	network		etsi	auto	ones	n	n	y	n
2:	network		etsi	auto	ones	n	n	y	n
3:				0	ones	n	n	y	n
4:				0	ones	n	n	y	n
5:				0	ones	n	n	y	n
6:				0	ones	n	n	y	n
7:				0	ones	n	n	y	n
8:				0	ones	n	n	y	n



Avaya Site Administration - [lucent_V7 GEDI]

File Edit View System Action Tools Window Help

display bri-trunk-board a08 send (return) help (f5) cancel (esc) enter (f3) schedule (f9) next (f7) previous (f8)

1 2

ISDN-BRI TRUNK CIRCUIT PACK

Port	XID Test?	Endpt Init?	SPID	Endpt ID	Max NCA TSC
1:	n	n			0
2:	n	n			0
3:	n	n			0
4:	n	n			0
5:	n	n			0
6:	n	n			0
7:	n	n			0
8:	n	n			0

Ready



Trunk Group

Avaya Site Administration - [lucent_V7 GEDI]

File Edit View System Action Tools Window Help

lucent_V7

change trunk-group 8 send (return) help (f5) cancel (esc) enter (f3) schedule (f9) next (f7) previous (f8)

1 2 3 4 5 6 7 8 9 10

TRUNK GROUP

Group Number: 8 Group Type: isdn CDR Reports: n
Group Name: ISDN BRI COR: 1 TN: 1 TAC: 608
Direction: two-way Outgoing Display? y
Dial Access? y Busy Threshold: 99 Night Service:
Queue Length: 0
Service Type: tie Auth Code? n TestCall ITC: rest
Far End Test Line No:
TestCall BCC: 4

TRUNK PARAMETERS

Codeset to Send Display: 0 Codeset to Send TCM,Lookahead: 7
Max Message Size to Send: 260
Supplementary Service Protocol: a Digit Handling (in/out): enbloc/enbloc

Trunk Hunt: cyclical
Connected to Toll? y DTT to DCO Loss: normal
Calling Number - Delete: Insert: Numbering Format:
Bit Rate: 1200 Synchronization: async Duplex: full
Disconnect Supervision - In? y Out? n
Answer Supervision Timeout: 0

Right-click in a field to see a list of valid entries or help text
Ready



Avaya Site Administration - [lucent_V7 GEDI]

File Edit View System Action Tools Window Help

lucent_V7

change trunk-group 8 send (return) help (f5) cancel (esc) enter (f3) schedule (f9) next (f7) previous (f8)

1 2 3 4 5 6 7 8 9 10

TRUNK FEATURES

ACA Assignment? Measured: Wideband Support?
Internal Alert? Maintenance Tests?
Data Restriction? NCA-TSC Trunk Member:
Send Name: Send Calling Number:

Used for DCS?
Suppress # Outpulsing? Numbering Format:
Outgoing Channel ID Encoding: UUI IE Treatment:

Send Connected Number:

Send UCID?
Send Codeset 6/7 LAI IE?

Right-click in a field to see a list of valid entries or help text
Ready

Configuring the Cisco 3745 Router

Building configuration...

Current configuration : 2202 bytes

```
!  
version 12.3  
service timestamps debug uptime  
service timestamps log uptime  
no service password-encryption  
!  
hostname c3745  
!  
boot system slot0:c3745-js-mz.mcebu_sb.0.5.0  
logging queue-limit 100  
logging buffered 1000000 debugging
```



```
!  
ip subnet-zero  
!  
! no ip domain lookup  
!  
mpls ldp logging neighbor-changes  
isdn switch-type primary-qsig  
voice-card 2  
    no dspfarm  
!  
voice-card 3  
    no dspfarm  
!  
voice-card 4  
    no dspfarm  
!  
no voice hpi capture buffer  
no voice hpi capture destination  
!  
mta receive maximum-recipients 0  
!  
interface FastEthernet0/0  
    ip address 100.1.1.1 255.255.255.0  
    duplex auto  
    speed auto  
!  
interface FastEthernet0/1  
    ip address 10.1.1.9 255.255.255.0  
    duplex auto  
    speed auto  
!
```



```
interface BRI4/0
  no ip address
  no ip route-cache
  no ip mroute-cache
  isdn switch-type basic-net3
  isdn layer1-emulate network
  isdn overlap-receiving
  isdn incoming-voice voice
  isdn static-tei 0
  isdn skipsend-idverify
!
interface BRI4/1
  no ip address
  shutdown
  isdn switch-type basic-net3
!
ip default-gateway 10.1.1.2
ip http server
ip classless
!
call rsvp-sync
!
voice-port 4/0/0
  compand-type a-law
!
voice-port 4/0/1
!
voice-port 2/1/0
  ring cadence pattern06
!
voice-port 2/1/1
```



```
ring cadence pattern06
!
mgcp profile default
!
dial-peer cor custom
!
dial-peer voice 1 pots
  destination-pattern 4...
  direct-inward-dial
  port 4/0/0
  prefix 4
!
dial-peer voice 3 voip
  destination-pattern 5...
  session target ipv4:100.1.1.2
!
dial-peer voice 4 voip
  destination-pattern 6...
  session target ipv4:100.1.1.2
!
dial-peer voice 11 pots
  destination-pattern 3211
  port 2/1/1
!
dial-peer voice 10 pots
  destination-pattern 3210
  port 2/1/0
!
gatekeeper
  shutdown
!
```




```
line con 0  
line aux 0  
line vty 0 4  
login
```

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