

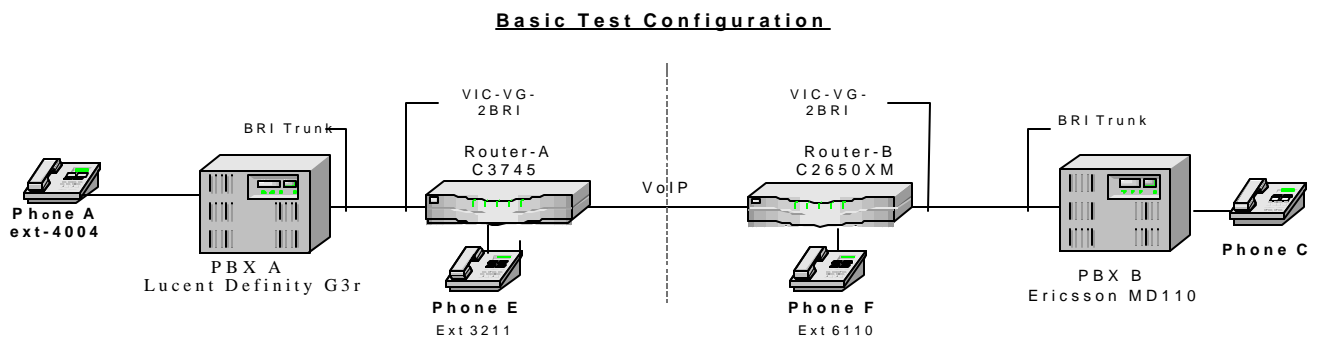
# Cisco 3745 Gateway - PBX Interoperability: Avaya Definity G3 PBX using Q.931 BRI User Side Interfaces to an H.323 Gateway

## Introduction

- This note describes the interoperability between the Avaya Definity G3 PBX using Q.931 BRI user side interfaces to a Cisco 3745 gateway.
- The Network Topology diagram shows the end-to-end interoperability.

## Network Topology

Figure 1. Network Topology



## Limitations

- None noted.

## System Components

### Hardware Requirements

- Avaya Definity G3r PBX
- Cisco 3745 gateway
- VIC-VG-2BRI

### Software Requirements

- Cisco IOS Software Release 12.2(15)ZJ
- PBX Software Release, G3V7i.01.0.343.7



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 details include:

- Location: 01A08
- Name: user
- Interface Companding: a-law
- DCP/Analog Bearer Capability: speech
- T3 Timer Length (sec): 15

A table lists the port configurations for the trunk circuit pack:

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

The status bar at the bottom left shows "Ready".



Avaya Site Administration - [lucent\_V7 GEDI]

File Edit View System Action Tools Window Help

lucent\_V7

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

The following sample output shows the router configuration for interoperability with the PBX.

```
c3745#wr t
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 basic-net3
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 protocol-emulate network
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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