

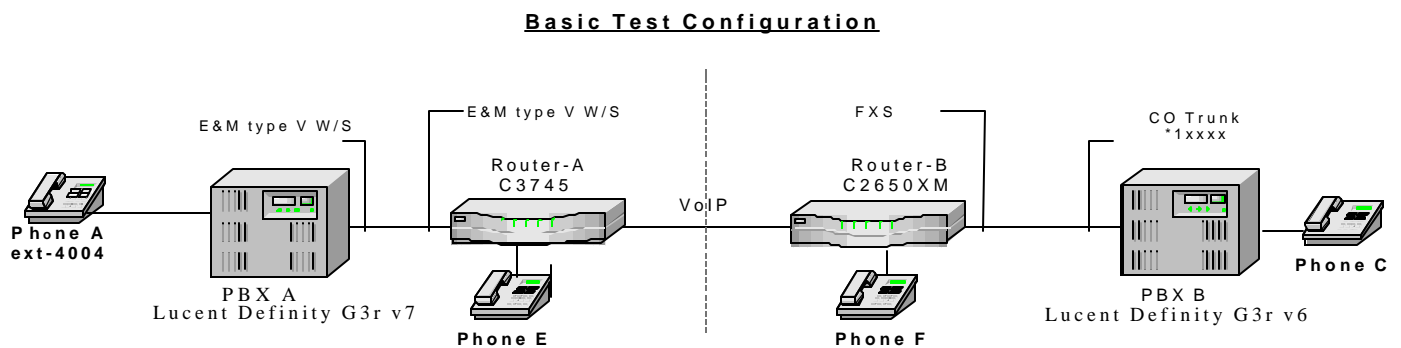
# Cisco 2651XM Gateway - PBX Interoperability: Avaya Definity G3 PBX using Analog FXO Interfaces to an H.323 Gateway

## Introduction

- This note describes the interoperability between the Avaya Definity G3 PBX to a Cisco 2651XM using analog FXO interfaces to an H.323 Gateway.
- The Network Topology diagram shows the end-to-end interoperability.

## Network Topology

Figure 1. Network Topology



## Limitations

None noted.

## System Components

### Hardware Requirements

- Cisco 2651XM router
- Cisco VIC-VG-2FXS
- Avaya Definity G3r PBX

### Software Requirements

- Cisco IOS Software Release 12.2(15)ZJ
- PBX Software Release, Version 6



## Configuration

### Configuring the Avaya Definity G3r

Configure the Avaya Definity G3r PBX. Use the following screens as a reference.

#### Trunks Group

The screenshot shows the Avaya Site Administration interface for configuring a Trunk Group. The window title is "Avaya Site Administration - [Lucent\_V6 GEDI]". The menu bar includes File, Edit, View, System, Action, Tools, Window, and Help. The toolbar contains various icons for file operations and navigation. The main area displays the configuration for Trunk Group 7.

**TRUNK GROUP**

Group Number: 7      Group Type: co      CDR Reports: y  
Group Name: CO TRUNK - SLOT 7      COR: 1      TN: 1      TAC: 607  
Direction: two-way      Outgoing Display? y  
Dial Access? y      Busy Threshold: 99      Night Service:     
Queue Length: 0      Country: 1      Incoming Destination: 4004  
Comm Type: voice      Auth Code? n      Digit Absorption List:     
Prefix-1? n      Trunk Flash? n      Toll Restricted? n

**TRUNK PARAMETERS**

Trunk Type: loop-start  
Outgoing Dial Type: tone      Cut-Through? y  
Trunk Termination: 600ohm      Disconnect Timing(msec): 500  
Auto Guard? n      Call Still Held? n      Sig Bit Inversion: none  
Terminal Balanced? n      RA Trunk Loss: 0db  
Trunk Gain: high

Disconnect Supervision - In? y      Out? n      Cyclical Hunt? n  
Answer Supervision Timeout: 10      Receive Answer Supervision? n

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



Avaya Site Administration - [Lucent\_V6 GEDI]

File Edit View System Action Tools Window Help

Lucent\_V6

change trunk-group 7 send (return) help (F5) cancel (esc) enter (F3) schedule (F9) next (F7) previous

1 2 3 4 5 6 7 8 9 10 11

**TRUNK FEATURES**

ACA Assignment?  Measured:  Maintenance Tests?

Data Restriction?

Abandoned Call Search?

Suppress # Outpulsing?

Charge Conversion:

Decimal Point:

Currency Symbol:

Charge Type:

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

Ready  NUM



Avaya Site Administration - [Lucent\_V6 GEDI]

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change trunk-group 7 send (return) help (F5) cancel (esc) enter (F3) schedule (F9) next (F7) previous

1 2 3 4 5 6 7 8 9 10 11

**TRUNK GROUP**

**ADMINISTRABLE TIMERS**

Incoming Disconnect(msec):	500	Outgoing Disconnect(msec):	500
Incoming Glare Guard(msec):	1500	Outgoing Dial Guard(msec):	1600
		Outgoing Glare Guard(msec):	1500
Ringing Monitor(msec):	5200	Incoming Seizure(msec):	500
Outgoing End of Dial(sec):	10	Outgoing Seizure Response(sec):	5
Programmed Dial Pause(msec):	1500		
Flash Length(msec):	540		

**END TO END SIGNALING**

Tone(msec):	350	Pause(msec):	150
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**OUTPUTSING INFORMATION**

PPS:	10	Make(msec):	40	Break(msec):	60	PPM?	n
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Right-click in a field to see a list of valid entries or help text

Ready

NUM



Avaya Site Administration - [Lucent\_V6 GEDI]

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change trunk-group 7 send (return) help (F5) cancel (esc) enter (f3) schedule (f9) next (f7) previous

1 2 3 4 5 6 7 8 9 10 11

**ATMS THRESHOLDS**

TTL Type: 105-w-r1 Far End Test No:

TTL Vendor:  TTL Contact:

Trunk Vendor:  Trunk Contact:

Trunk Length:

	MARGINAL		UNACCEPTABLE	
	Min	Max	Min	Max
1004 Hz Loss:	-2	21	-2	21
	-Dev	+Dev	-Dev	+Dev
404 Hz Loss:	9	9	9	9
2804 Hz Loss:	9	9	9	9
Maximum C Message Noise:	55		55	
Maximum C Notched Noise:	74		74	
Minimum SRL-HI:	0		0	
Minimum SRL-LO:	0		0	
Minimum ERL:	0		0	

Allow ATMS Busyout, Error Logging and Alarming?

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

Ready  NUM



Avaya Site Administration - [Lucent\_V6 GEDI]

File Edit View System Action Tools Window Help

Lucent\_V6

change trunk-group 7 send (return) help (F5) cancel (esc) enter (F3) schedule (F9) next (F7) previous

1 2 3 4 5 6 7 8 9 10 11

**TRUNK GROUP**  
Administered Members (min/max): 1/1  
Total Administered Members: 1

**GROUP MEMBER ASSIGNMENTS**

	Port	Code	Sfx	Name	Night	Mode	Type	Ans	Delay
1:	01A0701	TN747	B	CO-TRK-701					
2:									
3:									
4:									
5:									
6:									
7:									
8:									
9:									
10:									
11:									
12:									
13:									
14:									
15:									

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

### Configuring the Cisco 2651XM Router

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

Building configuration...

Current configuration : 1591 bytes

```
!  
version 12.2  
service timestamps debug datetime msec  
service timestamps log uptime  
no service password-encryption  
!  
hostname C2651XM  
!  
boot system flash:c2600-jsx-mz-v122_15_zj_throttle.0.5.0  
logging queue-limit 100  
logging buffered 1000000 debugging  
!  
ip subnet-zero  
ip tcp synwait-time 13  
!  
no ip domain lookup  
!  
mpls ldp logging neighbor-changes
```



```
!  
voice-card 1  
!  
voice call carrier capacity active  
!  
no voice hpi capture buffer  
no voice hpi capture destination  
!  
!  
mta receive maximum-recipients 0  
!  
interface FastEthernet0/0  
 ip address 100.1.1.2 255.255.255.0  
 no ip mroute-cache  
 duplex auto  
 speed 100  
!  
interface FastEthernet0/1  
 ip address 172.20.8.30 255.255.255.0  
 no ip mroute-cache  
 duplex auto  
 speed auto  
!  
ip http server  
ip classless  
ip route 0.0.0.0 0.0.0.0 FastEthernet0/1  
!  
dialer-list 1 protocol ip permit  
!  
call rsvp-sync  
!  
voice-port 1/1/0  
!  
voice-port 1/1/1  
!  
mgcp profile default  
!  
dial-peer cor custom  
!  
dial-peer voice 2 voip  
 destination-pattern 20..  
 session target ipv4:100.1.1.1  
!  
dial-peer voice 1 voip  
 destination-pattern 3000  
 session target ipv4:100.1.1.1  
!  
dial-peer voice 3 pots  
 destination-pattern 26..  
 prefix 26  
!  
dial-peer voice 4 pots  
 destination-pattern 4000  
 port 1/1/0  
!  
dial-peer voice 999 pots  
 incoming called-number .
```



```
destination-pattern 26..
direct-inward-dial
!
dial-peer voice 5 pots
destination-pattern 4004
port 1/1/1
!
gatekeeper
shutdown
!
line con 0
exec-timeout 0 0
line aux 0
exec-timeout 0 0
line vty 0 4
exec-timeout 0 0
password c
no login
line vty 5 15
no login
!
end
```

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