### Avaya Definity G3 version 12 using T1 QSIG to Cisco Emergency Responder 1.3 and Cisco Unified Communications Manager 5.0

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#### December 20, 2007 Revision 4

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#### Introduction

- The following is an Application Note for Interoperability of a Cisco Unified Communications Manager 5.0, Cisco Emergency Responder 1.3 and Cisco3845 w/ CAMA interface and T1-QSIG trunk with an AVAYA CM Definity PBX interconnected via VWIC-2MFT-T1
- The Network Topology diagram shows the test set-up for interoperability between the Cisco Unified Communications Manager and Cisco Emergency Responder connected to the PBX via a T1 QSIG trunk using Cisco3845 MGCP Gateway

#### **Network Topology**

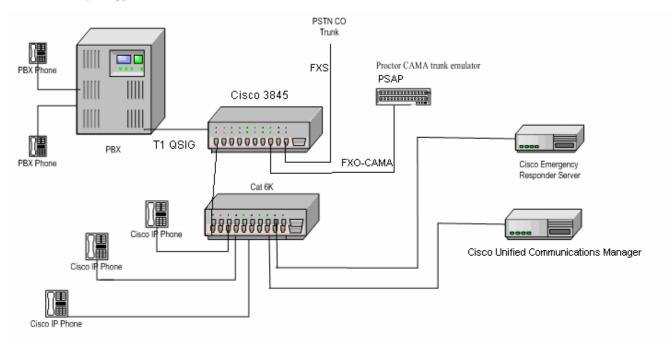


Figure 1. Network Topology or Test Setup

#### Limitations

- Unique DID numbers must be used to associate with each Emergency Response Location to allow the return call if the 911 caller is disconnected.
- Each available calling party that might dial 911 from the PBX side must have that calling party number configured in the Manually Configured Phones screen of the Cisco Emergency Responder.

#### **System Components**

#### **Hardware Requirements**

#### Cisco Hardware

- Cisco 3845 Gateway with NM-HD/VWIC-2MFT-T1 (QSIG trunk)and NM-HD-V2/VIC2-4FXO (CAMA trunk)
- Cisco Cat6K switch
- Cisco Unified Communications Manager server
- Cisco Emergency Responder server
- AVAYA Definity PBX

#### **Software Requirements**

- IOS Software releases "c3845-ipvoice-mz.123-14.T4".
- PBX Software: G3 version 12
- Cisco Unified Communications Manager 5.0 (1.51-346)
- Cisco Emergency Responder 1.3 (0.105)

#### **Features**

#### **Features Supported**

- Calling Number
- E911 ERL DID number passed to PSAP
- Incoming DID calling to disconnected 911 originating caller

#### Conclusion

Test emergency 911 call from a PBX digital station was routed to the T1 QSIG trunk, of the Cisco 3845 MGCP gateway, and was correctly associated to the appropriate Emergency Response Location. The call was connected through the Cisco 3845 CAMA trunk to the PSAP Emulator. The Emergency Response Location associated the ten digit DID call back number (ELIN) correctly and sent it to the PSAP, audio connection was also achieved. The PBX digital station was then disconnected.

A return call was originated from an incoming trunk (PSTN side) in the same Cisco Unified Communications Manager Partition. The number dialed was the DID digits of the 10 digit call back number sent to the PSAP on the previous 911 call (ELIN number). The call was routed through to the PBX digital station that had originated the E911 call. The call was disconnected and an alternate trunk was used to dial the same DID number and the call was routed through, again, to the PBX digital station that had originated the E911 call.

Test emergency 911calls were made from each PBX digital station and Cisco IP phone. All calls were confirmed to select its associated Emergency Response Location and the associated 10 digit DID call back number. In each case, the call was disconnected and the call back number was confirmed to reach the phone that had originated the E911 call.

Emergency 911calls made from an AVAYA CM 2.0 PBX utilizing a T1 QSIG trunk configured as ISO, associates with the correct Emergency Response Location and routes to the associated PSAP with the correctly formatted 10 digit DID call back number.

The call back DID number routes the return call to the correct phone that had originated the E911 call from the PBX digital phone.



#### Configuration

#### Configuring the Cisco Unified Communications Manager

Partitions

	Navigatior	🛛 Cisco CallManager Administration 💌 Go
Cisco CallManager Administratior	For Cisco IP Telecommunication Solutions	Logged in as:CCMAdministrator
System 👻 Call Routing 👻 Media Resources 👻 Voice Mail	<ul> <li>Device          <ul> <li>Application</li> <li>User Management</li> <li>Bulk Administration</li> </ul> </li> </ul>	Help 👻 Log Off
Find and List Partitions		
Status 2 records found Search Options Find partition where Partition Name vegins with (name begins with any)	Find Search Within Results	
Search Results		
Partition Name	Description E911	
Phones	Phones	
Add New Select All Clear All Delete	Selected Rows per Page 50 💌	



Phone Partition

r.

				Navigatio	On Cisco CallManager Admi	nistration 🔽 🖸
Cisco CallManager Admi	nistration	For Cisco IP Telecor	nmunication Solutio	ons	Logged in as:CC	MAdministrator
System ▼ Call Routing ▼ Media Resources	🗧 👻 Voice Mail 👻	Device - Application -	User Management 👻	Bulk Administration	🕶 Help 👻	Log Off
Partition Configuration				R	elated Links: Back To Find/	List 🔽 Go
⋳⋧⋎⋻₽						
Status (i) Status: Ready						
Partition Name*	Phones					
Description	Phones					
Time Schedule	< None >			~		
Time Zone 💿 Originating Device	•					
🔘 Specific Time Zone	Greenwich Stand	dard Time		>		
- Save Delete Reset Add New						<u>i</u> _/
*- indicates required item.						



E911 Partition

		Naviga	tion Cisco CallManager Administ	ration 🔽 Go
Cisco CallManager Admi	inistration For Cisco IP Telecor	nmunication Solutions	Logged in as:CCMA	dministrator
System 👻 Call Routing 👻 Media Resources	s 👻 Voice Mail 👻 Device 👻 Application 👻	User Management 👻 Bulk Administration	n ✔ Help ✔	Log Off
Partition Configuration			Related Links: Back To Find/Lis	e 🔽 Go
Status Status: Ready				\$
Partition Name*	E911			
Description	E911			
Time Schedule	< None >	~		
Time Zone 💿 Originating Device	3			
🔘 Specific Time Zone	Greenwich Standard Time	×		
- Save Delete Reset Add New				
*- indicates required item.				

#### Calling Search Space

		Navigation	🛛 Cisco CallManager Administration 😒 🖸
Cisco Cal	IIManager Administration	For Cisco IP Telecommunication Solutions	Logged in as:CCMAdministrato
System 👻 Call F	Routing 👻 Media Resources 👻 Voice Mail 👻	Device - Application - User Management - Bulk Administration -	Help 👻 Log Off
ind and List C	alling Search Spaces		
	t in the second s		
Status (1) 2 records for Search Optic Find where	ons	Find Search Within Results	
(name begins		Search Within Results	
19 (174) 1 - Angel - Ang			
- Search Resu	Its CSS Name	Description	Сору
Г	E911CSS	pescipción	6
Г	PhonesCSS	PhonesCSS	ß
Add New	Select All Clear All Delete S	elected Rows per Page 50 💌	



CSS phones

							Navigat	ion Cisco CallManag	er Administration 💌 🖸
Cisco (	CallMana	ger Adm	inistratio	<b>n</b> For Cis	co IP Teleco	mmunication Solut	ions	Logged in	as:CCMAdministrato
System 👻 🤇	Call Routing 👻	Media Resource	es 👻 Voice Mai	- Device -	<ul> <li>Application</li> </ul>	🗸 User Management 👻	Bulk Administration	✓ Help ✓	Log Off
Calling Sea	rch Space C	onfiguration						Related Links: Back 7	o Find/List 🛛 🔽 Go
	)-								
Status	Ready	at at at							
– Calling So Name*	earch Space PhonesCSS	Information	-						
Description	<sup>n</sup> PhonesCSS								
– <b>Route Pa</b> Available P		his Calling S E911	earch Space						
Selected Pa (Ordered b	artitions by highest pri	ority)		• •					
							^		

\*- indicates required item.

Add New

Save Delete Copy



#### CSS E911

Cisco	CallManager	Adminis	stration	For Cisc	o IP Telecor	nmunication Soluti	ions		Logged in as:CCMAc	Iministrator
System 👻	Call Routing 👻 Media I	Resources 👻	Voice Mail 👻	Device 👻	Application 👻	User Management 👻	Bulk Administra	ation 👻 Help	•	Log Off
Calling Sea	arch Space Configu	ration						Related L	inks: Back To Find/List	Go
	) <del>-}</del> -									
Status Status:	Ready									
Calling S Name* Descriptio	Search Space Infor E911CSS n	mation								
Route Pa Available F	artitions for this Ca Partitions	Illing Searc	n Space —							
Selected F (Ordered I	Partitions by highest priority)	E911 Phones	• •				<b>X</b>			
— (Save) [	Delete Copy Add	New								6 12

Image: the second se

#### CCM IP phones

ystem 👻 Call Routing 👻 Media Resources 👻 Voice Mail		Management 👻 Bulk Administration 👻 Help	•	Log Off
one Configuration		Related Links: Back To Find/Li	st	🗸 😡
<b></b>				
Status				
Status: Ready				
Association Information				
Modify Button Items	Product Type: Cisco 79	60		
1 tine [1] - 4200 in Phones	Device Protocol: SCCP			
2 Line [2] - Add a new DN	Device Information		DAD74	
3 @ <u>Add a new SD</u>		Registered with Cisco CallManager CM 172.20.110.253	-BARZA	
4 🖓 🗃 Add a new SD	MAC Address*	000A416B8539		
5 🖓 Add a new SD	Description	Auto 4202		
6 🖓 Add a new SD	Phone Button Template* Softkey Template	Default	~	
Unassigned Associated Items 7 @ <u>Add a new SD</u> 3 @ <u>Add a new SURL</u>		Standard 7960 SCCP	~	
		< None >	~	
		Standard Common Phone Profile	~	
9 🤤 Add a new BLF SD	Calling Search Space	PhonesCSS	~	
10 Privacy 11 None	AAR Calling Search Space	< None >	~	
	Hedia Resource Group List	< None >	~	
	User Hold Audio Source	< None >	~	
	Network Hold Audio Source	< None >	~	
	Location*	Hub_None	~	
	User Locale	< None >	~	
	Network Locale	< None >	~	
	Built In Bridge*	Default	~	
	Privacy*	Default	~	
	Owner User ID	< None >	~	
	Phone Load Name			
	Retry Video Call as Audio			
	Ignore Presentation Ind			
	Allow Control of Device f	rom CTI		

Protocol Specific Information Packet Capture Mode*	None
Packet Capture Duration	
Presence Group*	
SCCP Phone Security Profile*	
SUBSCRIBE Calling Search Space	Standard SCCP Profile for Auto Registration
	< None >
Require DTMF Reception	
Expansion Module Information	
Module 1 < None >	
Module 1 Load Name	
Module 2 < None >	✓
Module 2 Load Name	
External Data Locations Info Information	rmation (Leave blank to use default)
Directory	
Messages	
Services	
Authentication Server	
Proxy Server	
Idle	
Idle Timer (seconds)	
Extension Information	
	on Mobility
Log Out Profile Not Selected	💌
Login in User ID < None >	
Log in Time < None > Log out Time < None >	
	Punction (CAPF) Information
Authentication String	lo Pending Operation
Generate String	
	006 : 1 : 15 : 12 (YYYY:MM:DD:HH)
Certificate Operation Status: No	one II

	Enable Extension Mobility
Log Out Profile	Not Selected 💙
Login in User ID	
	< None > < None >
Certification A	uthority Proxy Function (CAPF) Information
Authentication S	itring
Generate St	ring
Operation Comp	oletes By 2006 : 1 : 15 : 12 (YYYY:MM:DD:HH)
Certificate Oper.	ation Status: None
— MLPP Informa MLPP Domain	
	< None >
MLPP Indication	Deladit
MLPP Preemptio	n* Default
— Secure Shell I	
Secure Shell Use	
Secure Shell Pas	
— Product Speci	fic Configuration —
	?
🔲 Disable Spea	akerphone
🗖 Disable Spea	akerphone and Headset
PC Port *	Enabled
Settings Access	* Enabled
Gratuitous ARP *	* Enabled V
PC Voice VLAN A	Access * Enabled
Video Capabilitie	es * Disabled 🗸
Auto Line Select	* Disabled
Web Access *	Enabled

- Save Delete Copy Reset Add New



Cisco CallManage	r Administration For Cisc	o IP Telecommunication Solutions
System 👻 Call Routing 👻 Medi	a Resources 👻 Voice Mail 👻 Device 👻	Application 👻 User Management 👻 Bulk Administration 👻 Help 👻
Directory Number Configura	ation	
╔╱╝		
Status (i) Status: Ready		
Note: Changes to Line or Dir	ectory Number settings require res	tart.
<b>Directory Number Inform</b> Directory Number*	ation	4200
Route Partition		Phones
Description		
Alerting Name		Rafa Marquez
ASCII Alerting Name		Rafa Marquez
Allow Control of Device f Assoc	rom CTI ciated Devices	
SEP000A416B8539	<b>~ ^</b>	Edit Line Appearance
Disso	ociate Devices	-
Directory Number Setting	js —————	
Voice Mail Profile	< None >	(Choose <none> to use system default)</none>
Calling Search Space	PhonesCSS	
Presence Group*	Standard Presence group	
AAR Group	< None >	
User Hold Audio Source	< None >	
Network Hold Audio Source	< None >	×
Auto Answer*	Auto Answer Off	×
Call Forward and Call Pic		
Forward All	Voice Mail Destination	Calling Search Space

Call Forward and C		Dectionation 0-	lling Copreh Coppe		
Forward All	voice Mail		Illing Search Space None >	~	
Secondary Calling Se	arch Space for Forwa	and All	None >		Find
Forward Busy Interna	al 🗌 or		None >	~	
Forward Busy Extern	al 🗌 or		None >	~	
Forward No Answer I	nternal 🔲 or		None >	*	
Forward No Answer B	External 🔲 or	<	None >	~	
Forward No Coverage	e Internal 🔲 or	<	None >	~	
Forward No Coverage	e External 🔲 or	<	None >	~	
Forward on CTI Failur	re 🗌 or	<	None >	~	
No Answer Ring Dura	tion (seconds)	L L			
Call Pickup Group	< No	ne >			
MLPP Alternate Par Target (Destination)	rty Settings				
MLPP Calling Search 9	Space	< None >			
MLPP No Answer Ring	Duration (seconds)				
Line 1 on Device S	FD000841680520				
Display (Internal	Rafa Marquez		Display text for a line appearance is inter	nded for displaying	text such as a name instead of a directory number for
Caller ID)	internal calls. If you	i specify a number, the person re	eceiving a call may not see the proper ident		
ASCII Display (Internal Caller ID)	Rafa Marquez				
Line Text Label	Rafa Marquez				
ASCII Line Text Label	Rafa Marquez				
External Phone Number Mask					
Message Waiting Lamp Policy*	Use System Policy	~			
Ring Setting (Phone	Use System Default	~			
Idle)* Ring Setting (Phone Active)	Use System Default	~	Applies to this line when any line on the ph	none has a call in pr	ogress.
└── Multiple Call/Call V	Vaiting Settings on	Device SEP000A416B8539 —			
Note:The range to se Maximum Number of	elect the Max Numbe	r of calls is: 1-200			
Busy Trigger*	Calls -	4			
Busy myger		2	(Le	ess than or equal to	Max. Calls)
Forwarded Call Inf	ormation Display or	n Device SEPOOOA416B8539 -			
1924 - 191	ormation Display or	n Device SEPOOOA416B8539 -			
Forwarded Ca	Il Information	Display on Device SEP(	DOOA416B8539		
Caller Name					
Caller Numbe	er				
Redirected N	lumber				
Dialed Numb					
	0.000				



#### **CTI Route Points**

Cisco CallMana	ger Admin	istration	For Cisco IP Telecommu	unication Solutions	Logged in as:CCMA	dministrat
System 👻 Call Routing 👻	Media Resources	🗸 Voice Mail 👻	Device - Application - U	ser Management 👻 Bulk Administration 👻 H	elp 🔻	Log Off
ind and List CTI Route	Points					
3 Status 2 records found						
- Search Options		ne 💌	begins with 💌	<b>Find</b> Search Withi Select item or enter searc		
(device.name begins w	ith any)					
Device Name	Description RP911	Device Pool Default	Calling Search Space E911CSS	Status Registered with CM-BARZA	IP Address 172.20.110.254	Сору
F RPELIN913	RPELIN913	Default	E911CSS	Registered with CM-BARZA	172.20.110.254	ß
Add New Select	All Clear All	Delete Se	lected Reset Selecte	ed 🛛 Rows per page 50 💌		

#### CTI Route Point 911

TI Route Point Configuration			Related Links: Back	To Find/List 🛛 🔽 🖸
_Status				
Status: Ready				
Device Information				
	Registered with Cisco CallManager CM-BARZA			
IP Address Device Name *	172.20.110.254	1		
	RP911			
Description	RP911			
Device Pool *	Default	~	( <u>View Details</u> )	
Calling Search Space	E911CSS	~		
Location	Hub_None	~		
User Locale	< None >	~		
Media Resource Group List	< None >	~		
Network Hold MOH Audio Source	< None >	~		
User Hold MOH Audio Source	< None >	~		
Association Information				
Tine [1] - 911 in Phones				
The [2] - Add a new DN				

(i) \*- indicates required item.



Cisco CallManage	r Administration	For Cisco IP Telecomr	nunication Solution	าร	
System 👻 Call Routing 👻 Med	lia Resources 👻 Voice Mail 👻	Device - Application -	User Management 👻	Bulk Administration 👻	Help 👻
Directory Number Configur	ation				
╔╱╝					
Status Status: Ready					
Note: Changes to Line or Di	rectory Number settings re	quire restart.			
RP911	ciated Devices	911 Phones Edit Device	a Appearance		
Diss					
Voice Mail Profile	< None >	~	(Choose <none></none>	to use system defa	ault)
Calling Search Space	E911CSS	×			
Presence Group*	Standard Presence group	· · · · · · · · · · · · · · · · · · ·			
AAR Group	< None >	· · · · · · · · · · · · · · · · · · ·			
User Hold Audio Source	< None >	. 💌			
Network Hold Audio Source	< None >	~			
Call Forward and Call Pic	Voice Mail Destination	Calling	Search Space		
Forward All	or	< Non	9 >		<b>~</b>
Secondary Calling Search S	pace for Forward All	< Non	e >		Find



	🗌 oi		< None >	
Secondary Calling Search Space f	or For	rward All	< None >	Find
Forward Busy Internal	10	r 912	E911CSS	×
Forward Busy External	0	r 912	E911CSS	×
Forward No Answer Internal	🗌 or	r 912	E911CSS	×
Forward No Answer External	0	r 912	E911CSS	~
Forward No Coverage Internal	🗆 or	r	< None >	×
Forward No Coverage External	🗌 or	r	< None >	×
Forward on CTI Failure	🗌 or	r 912	E911CSS	
No Answer Ring Duration (second	s)			
Call Pickup Group	< 1	None >	~	
MLPP Alternate Party Settings Target (Destination) MLPP Calling Search Space				
MLPP Calling Search space MLPP No Answer Ring Duration (s	econo	< None > ds)	<u>~</u>	
Line 1 on Device RP911     Display (Internal     Caller ID)     ASCII Display     (Internal Caller ID)     External Phone     Number Mask	s. If y	ou specify a number, the perso	Display text for a line appearance is in on receiving a call may not see the proper ide	tended for displaying text such as a name instead of a directory number for ntity of the caller.
Multiple Call/Call Waiting Setti Note:The range to select the Max Maximum Number of Calls* Busy Trigger*				(Less than or equal to Max. Calls)
Forwarded Call Information Di	splay	on Device RP911		
Caller Number				
Redirected Number				
Dialed Number				
- Save Delete Copy Reset	Add N	New		
Image: which it is a second state of the se				

#### CTI Route Point 913

			nmunication Solut	lions		LOG	ged in as:CCMAd	ministrator
urces 👻 Voice Mail 👻	Device 🔻	Application 👻	User Management 👻	• Bulk A	Administration 👻	Help 👻		Log Off
					Re	lated Links:	Back To Find/List	So Go
Registered with Cis 172.20.110.254 RPELIN913	co CallMan	ager CM-BAR	ZA					
RPELIN913								
Default				Y (Vie	w Details)			
E911CSS				*				
Hub_None				*				
< None >				*				
< None >				~				
< None >				~				
< None >				*				
E911 Add New ]								
	Registered with Ciso 172.20.110.254 RPELIN913 Default E911CSS Hub_None < None > < None > < None > < None > E911	Registered with Cisco CallMan 172.20.110.254 RPELIN913 Default E911CSS Hub_None < None > < None > < None > < None > E911	Registered with Cisco CallManager CM-BAR3 172.20.110.254 RPELIN913 RPELIN913 Default E911CSS Hub_None < None > < None > < None > < None > E911	Registered with Cisco CallManager CM-BARZA 172.20.110.254 RPELIN913 RPELIN913 Default E911CSS Hub_None < None > < None > < None > < None > < None >	Registered with Cisco CallManager CM-BARZA 172.20.110.254 RPELIN913 RPELIN913 Default	Registered with Cisco CallManager CM-BARZA 172.20.110.254 RPELIN913 Default	Registered with Cisco CallManager CM-BARZA 172.20.110.254 RPELIN913 Default	Related Links: Back To Find/List Registered with Cisco CallManager CM-BARZA 172.20.110.254 RPELIN913 RPELIN913 Default V(view Details) E911CSS V Hub_None V <none <none="" e911="" e911<="" td="" v=""></none>

I \*- indicates required item.



Cisco CallManage	r Administration For Cisc	co IP Telecommunication Solutions
System 👻 Call Routing 👻 Med	ia Resources 👻 Voice Mail 👻 Device 👻	Application 👻 User Management 👻 Bulk Administration 👻 Help 👻
Directory Number Configur	ation	
◶✖◧◷◒		
Status Status: Ready		
Note: Changes to Line or Dir	rectory Number settings require res	start.
<b>Directory Number Inform</b> Directory Number*	nation	913XXXXXXXXX
Route Partition		E911
Description		
Alerting Name		
ASCII Alerting Name		
Asso	ciated Devices	
RPELIN913		Edit Device
		Edit Line Appearance
	**	
Disso	ociate Devices	_
		_
Directory Number Setting Voice Mail Profile	gs < None >	Choose <none> to use system default)</none>
Calling Search Space	E911CSS	
Presence Group*	Standard Presence group	
AAR Group	< None >	
User Hold Audio Source	< None >	
Network Hold Audio Source	< None >	



Call Forward and Call Pi	ckup Settings Voice Mail Destination	Calling Search Space	
Forward All	or or	< None >	V
Secondary Calling Search S	ipace for Forward All	< None >	Find
Forward Busy Internal	🗖 or	< None >	
Forward Busy External	or	< None >	
Forward No Answer Intern		< None >	
Forward No Answer Extern		< None >	×
Forward No Coverage Inte		< None >	×
Forward No Coverage Exte		< None >	
Forward on CTI Failure	or	< None >	×
No Answer Ring Duration (s	The second se		
Call Pickup Group	< None >	~	
	s Hone s		
MLPP Alternate Party Se Target (Destination)	ettings		
MLPP Calling Search Space	< None >	~	
MLPP No Answer Ring Dura	17.5 AT 17.5 AT		
2004			
Line 1 on Device RPELIN Display (Internal	913		27 50705 80 80705 90 14 76 60 145 85 50 25 5170906 60 85 80 9
Caller ID)	al calls. If you specify a pu	Display text for a line appear Imber, the person receiving a call may not see the	ance is intended for displaying text such as a name instead of a directory number f
ASCII Display	lai calis. Il you specily a lic	iniber, die person receiving a can may not see die p	
(Internal Caller ID)			
Number Mask			
— Multiple Call/Call Waitin			
Note:The range to select the Maximum Number of Calls*			
Busy Trigger*		5000	
busy mgger		4500	(Less than or equal to Max. Calls)
- Forwarded Call Informat	tion Display on Device RP	ELIN913	
🗹 Caller Name			
Caller Number			
Redirected Number			
Dialed Number			
- Save Delete Copy Re	eset Add New		

I \*- indicates required item.

Note: A Backup CER server was not used during testing therefore CTI route point for 913 was not created.



CTI Port

Cisco CallManager Ad	ministration For Cisc	o IP Telecommunication Solutio	ns Logged in a	as: CCMAdministrato
System 👻 Call Routing 👻 Media Resou	irces ✔ Voice Mail ✔ Device ✔	Application 👻 User Management 👻	Bulk Administration 👻 Help 👻	Log Off
Phone Configuration			Related Links: Back To Find/L	ist 🔽 🔽 🖸
Status (1) Status: Ready				
Association Information 1 • • • • • • • • • • • • • • • • • • •	Phone Type Product Type: CTI Port Device Protocol: SCCP			
- (na	<b>Device Information</b> Registration IP Address Device Name*	Registered with Cisco CallManage 172.20.8.50 CERSec1	er CM-BARZA	
	Description			
	Device Pool* Common Phone Profile*	Default	×	
	Calling Search Space	Standard Common Phone Profile PhonesCSS	×	
	AAR Calling Search Space	< None >	~	
	Media Resource Group List	< None >	~	
	User Hold Audio Source	< None >	¥	
	Network Hold Audio Source		¥	
	Location* User Locale	Hub_None	×	
	Network Locale	< None >		
	Owner User ID	< None >		
	Ignore Presentation Ind	3000 500 500		
	Protocol Specific Informa Presence Group*	tion Standard Presence group	~	
	SCCP Phone Security Profile			
	SUBSCRIBE Calling Search S		<u> </u>	
	Unattended Port	L		
	MLPP Information MLPP Domain < None >		<b>v</b>	



C: C- UM	· · · · · · · · · · · · · · · · · · ·	
Cisco Calimanage	For Cit	sco IP Telecommunication Solutions
System ▼ Call Routing ▼ Med	dia Resources 👻 Voice Mail 👻 Device 🛛	✓ Application   User Management   Bulk Administration   Help
Directory Number Configur	ration	
╔╳╚┱		
Status Status: Ready		
Note: Changes to Line or Di	irectory Number settings require re	istart.
<ul> <li>Directory Number Inform Directory Number*</li> </ul>	nation ————	4250
Route Partition		Phones
Description		
Alerting Name		
ASCII Alerting Name		
Asso	ociated Devices	
		Edit Line Appearance
Diss	ociate Devices	
- Directory Number Settin	The second secon	
Voice Mail Profile	< None >	(Choose <none> to use system default)</none>
Calling Search Space	PhonesCSS	
Presence Group*	Standard Presence group	
AAR Group User Hold Audio Source	< None >	
Network Hold Audio Source	< None >	
Network Hold Addio Source	<sup>3</sup> < None >	×
— Call Forward and Call Pi		Colling County County
Forward All	Voice Mail Destination	Calling Search Space < None >
Secondary Calling Search S		< None > Find

Call Forward and Call Pickup S					
The second		Destination	Calling Search Space		
in the second	or		< None >	~	
Secondary Calling Search Space for	or Forw	ard All	< None >	~	Find
Forward Busy Internal	or		< None >	~	
Forward Busy External	or		< None >	*	
Forward No Answer Internal	or		< None >	*	
Forward No Answer External	or		< None >	*	
Forward No Coverage Internal	or		< None >	~	
Forward No Coverage External	or		< None >	~	
Forward on CTI Failure	or		< None >	~	
No Answer Ring Duration (second:	5)				
Call Pickup Group	< No	one >	~		
MLPP Alternate Party Settings Target (Destination) MLPP Calling Search Space MLPP No Answer Ring Duration (so	econds)	<pre></pre>			
Display (Internal Caller ID) internal calls ASCII Display (Internal Caller ID) External Phone Number Mask	. If you	u specify a number, the perso	Display text for a line appearance is in receiving a call may not see the proper in		g text such as a name instead of a directory number for
Multiple Call/Call Waiting Setti Note:The range to select the Max Maximum Number of Calls* Busy Trigger*				(Less than or equal t	o Max. Calls)
Forwarded Call Information Dis Caller Name Caller Number Redirected Number Dialed Number Save Delete Copy Reset * - indicates required item.	a <b>play o</b> l				
🐨 - indicates required item.					

#### Route Patterns for ELINs

em 👻 Call Routing	▼ Media Resources ▼	Voice Mail 👻 Device	✓ Application ✓ User	1anagement 👻 Bulk Administration 👻	Help 👻	Log
and List Route	Patterns					
· 🕂 🕂 🔀						
atus 4 records found						
Frecords round						
earch Options —						
earch Options —	where Pattern 💌	begins with 💌 🛛		Find Search Within Result:	5	
earch Options — d Route Patterns	where Pattern 💌	begins with 💌		Find Search Within Result	s	
earch Options — d Route Patterns Implan.dnorpatte	Where is allowing the	begins with 🔽		Find Search Within Result	s	
earch Options — d Route Patterns Implan.dnorpatte earch Results —	ern begins with any)	begins with 💌 🛛	Route Filter	Find Search Within Result:	s	Сору
e <b>arch Options</b> — d Route Patterns mplan.dnorpatte	Where is allowing the		Route Filter		s	Сору
earch Options — d Route Patterns mplan.dnorpatte earch Results — Pattern	ern begins with any)	Partition	Route Filter	Associated Device	5	
earch Options — d Route Patterns mplan.dnorpatte earch Results — Pattern — <u>10911.</u>	ern begins with any)	Partition E911	Route Filter	Associated Device AALN/S3/SU0/0@tony3845	5	ß

#### Route Pattern 10911

Cisco CallMan	ager Administratior	l For Cisco IP Telecommun	ication Solutions	Logged in as:C	CMAdministrator
System - Call Routing -	Media Resources 👻 Voice Mail	■ Device      ▼ Application      ▼ Use	r Management 👻 Bulk Administratio	on 🛨 Help 👻	Log Off
Route Pattern Configu	ration			Related Links: Back To	Find/List 🗸 Go
<b>Status</b> (j) Status: Ready					
– Pattern Definition –					
Route Pattern*	10911.				
Route Partition	E911	~			
Description					
Numbering Plan*	NANP	~			
Route Filter	< None >	~			
MLPP Precedence*	Default	~			
Gateway/Route List *	AALN/S3/SU0/0@tony3845 💌	(Edit)			
Route Option	Route this pattern	10			
	O Block this pattern No Erro	or 💌			
Call Classification*	OffNet	~			
Allow Device Overr	ide 🗹 Provide Outside Dial To	one 🔲 Allow Overlap Sending	Urgent Priority		
Require Forced Aut					
Authorization Level*	0				
Require Client Mat	ter Code				
Calling Party Trans	formations				
	s External Phone Number Mas	k			
Calling Party Transfor	m Mask				
Prefix Digits (Outgoin)	g Calls)				
Calling Line ID Preser	tation* Allowed	*			
Calling Name Present	ation* Default	*			
Connected Party Tr	ansformations				
Connected Line ID Pro			*		
Connected Name Pres	sentation* Default		~		
Called Party Transf	ormations				
Discard Digits	PreDot		~		12
— Called Party Transfe	ormations		1		1
Discard Digits	PreDot		*		
Called Party Transform					
Prefix Digits (Outgoing	(Calls) 4089994200				
- ISDN Network-Spec	cific Facilities Information El	ement			
Network Service Proto		~			
Carrier Identification (	Code				
Network Service		Service Parameter Name	Service Parar	neter Value	
Not Selected		Not Exist >			
- Save Delete Copy					

I \*- indicates required item.

#### Route Pattern 11911

Cisco CallMar	ager Administratio	<b>N</b> For Cisco IP Telecommun	ication Solution	s	Logged in as:CCM.	Administrator
System 👻 Call Routing 🔹	🗸 Media Resources 👻 Voice Mail		r Management 👻 E	Julk Administration 👻 Help	•	Log Off
Route Pattern Configu	Iration			Rela	ted Links: Back To Find	/List 🗸 Go
- Status						2
(j) Status: Ready						
– Pattern Definition - Route Pattern*	11911.					
Route Partition	E911	*				
Description		Nazari				
Numbering Plan*	NANP	*				
Route Filter	< None >	*				
MLPP Precedence*	Default	~				
Gateway/Route List *	AALN/S3/SU0/0@tony3845	(Edit)				
Route Option	Route this pattern					
\$1121111111111 201 414 ····	O Block this pattern No Er	ror 👻				
Call Classification*	OffNet	~				
Allow Device Over	ride 🗹 Provide Outside Dial 1	Fone 🔲 Allow Overlap Sending	Urgent Priori	Ξy		
Require Forced Au	and the second					
Authorization Level*	0					
Require Client Mat	ter Code					
— Calling Party Trans	formations					
	s External Phone Number Ma	sk				
Calling Party Transfor						
Prefix Digits (Outgoin	Brougher .					
Calling Line ID Preser	Dolaan	*				
Calling Name Present	ation* Default	*				
- Connected Party Tr	ansformations					
Connected Line ID Pr			~			
Connected Name Pre	sentation* Default		~			
- Called Party Transf	NEW CONCERNENCE CONTRACT		(7022)			
Discard Digits — Called Party Trans	PreDot formations		~			
Discard Digits	PreDot		*			
Called Party Transfo	rm Mask					
Prefix Digits (Outgoir	ng Calls) 4089994201					
– ISDN Network-Sp	ecific Facilities Information	Element				
Network Service Pro		*				
Carrier Identification	Code					
Network Service		Service Parameter Name		Service Parameter	Value	
Not Selected		Not Exist >				
						14
- Save Delete Co	py Add New					

(i) \*- indicates required item.

Route Pattern 13911

Cisco CallMan	nager Administration For Cisco IP Telecommunication Solutions Logged in	n as:CCMAdministrator
System 👻 Call Routing 👻	🔹 Media Resources 👻 Voice Mail 👻 Device 👻 Application 👻 User Management 👻 Bulk Administration 👻 Help 👻	Log Off
Route Pattern Configu	uration Related Links: Ba	ack To Find/List 👻 Go
Status Gilling Status: Ready		
– Pattern Definition -	0. 15	
Route Pattern*	13911.	
Route Partition	E911	
Description		
Numbering Plan*	NANP	
Route Filter	< None >	
MLPP Precedence*	Default	
Gateway/Route List *	* AALN/S3/SU0/0@tony3845 🛩 (Edit)	
Route Option	Route this pattern	
2	O Block this pattern No Error	
Call Classification*	OffNet	
	ride 🗹 Provide Outside Dial Tone 🔲 Allow Overlap Sending 🔲 Urgent Priority	
Require Forced Au Authorization Level*		
75.1	0	
Require Client Mat	ter Code	
– Calling Party Trans	formations	
	's External Phone Number Mask	
Calling Party Transfor		
Prefix Digits (Outgoin		
Calling Line ID Preser		
Calling Name Present	tation* Default	
- Connected Party Tr	ransformations	
Connected Line ID Pr		
Connected Name Pre	sentation* Default	
- Called Party Transf	formations	
Discard Digits	PreDot	
Called Party Transf		
Discard Digits Called Darty Transfor	m Mask	
Called Party Transfor		
Prefix Digits (Outgoin	g Calls) 4089994203	
ISDN Network-Sne	cific Facilities Information Element	
Network Service Proto		
Carrier Identification	Code	
Network Service	Service Parameter Name Service Parameter Value	
Not Selected	V < Not Exist >	
Save Delete Cop	y Add New	

③ \*- indicates required item.

Translation Pattern for ELINs

Cisco CallMar	ager Administration	For Cisco IP Telecor	nmunication Soluti	ons	Logged in as:CC	CMAdministrator
System 👻 Call Routing	🖌 Media Resources 👻 Voice Mail 👻	Device - Application -	User Management 👻	Bulk Administration 👻	Help 👻	Log Off
Translation Pattern C	onfiguration				Related Links: Back To P	Find/List 👻 Go
Status Status: Ready						
Pattern Definition -						
2020	408999XXXX					
Partition	E911	~				
Description						
Numbering Plan	< None >	~				
Route Filter	< None >	~				
MLPP Precedence*	Default	~				
Calling Search Space	E911CSS	~				
Route Option	Route this pattern					
-	O Block this pattern No Error	~				
Provide Outside [	Dial Tone 🗹 Urgent Priority					
Calling Party Trans	formations					
🔲 Use Calling Party	's External Phone Number Mask					
Calling Party Transfo	rm Mask					
Prefix Digits (Outgoin	g Calls)					
Calling Line ID Prese	ntation* Default		~			
Calling Name Present	ation* Default		~			
Connected Party Ti	ransformations					
Connected Line ID Pr			*			
Connected Name Pre	sentation* Default		~			
Called Party Transl	formations		~			
Called Party Transfor	Contraction of the Contraction o					
Prefix Digits (Outgoin	g Calls) 913					
- Save Delete Cop	y Add New		221			



1000000

#### PSAP Gateway configuration (CAMA TRUNK)

Product					
34 <u>-</u> 43966677878	Cisco MGCP F	(O Port			
	tony3845				
	Analog Access	: th Cisco CallManager (			
IP Address	172.20.8.26	un cisco calimanager (	JM-BAKZA		
	AALN/S3/SU0/	0@tonv3845			
Description	AALN/S3/SU0	and the second			
Device Pool*	Default		*		
Media Resource Group List	< None >		~		
Calling Search Space	E911CSS		~		
AAR Calling Search Space	< None >		~		
Location*	Hub_None		~		
AAR Group	< None >		~		
🔲 Transmit UTF-8 for Callii	ng Party Name	Ê.			
– Multilevel Precedence a	od Decomption		~		
MLPP Domain < None >	· · · · · · · · · · · · · · · · · · ·	r (MLPP) Information	~		
income and the second in the second sec	No				
MLPP Indication Not avail MLPP Preemption Not avail					
MLPP Indication Not avail MLPP Preemption Not avail					 
MLPP Preemption Not avail	able on this de			 	 
MLPP Preemption Not avail – <b>Port Information (Loop</b> Port Direction * Bothways	able on this de		~	 	 
MLPP Preemption Not avail	able on this de		×	 	 
MLPP Preemption Not avail - Port Information (Loop 9 Port Direction * Bothways	able on this de		V	 	 
MLPP Preemption Not avail Port Information (Loop : Port Direction * Bothways Attendant DN* 3000	able on this de		<b>v</b>		
MLPP Preemption Not avail Port Information (Loop 9 Port Direction * Bothways Attendant DN* 3000 Unattended Port Product Specific Configu	lable on this de Start)	evice	<b>V</b>	 9	
MLPP Preemption Not avail Port Information (Loop 9 Port Direction * Bothways Attendant DN* 3000 Unattended Port Product Specific Configu Hookflash Timer (50-1550r	able on this de Start) uration ns) *	evice		 ş	
MLPP Preemption Not avail Port Information (Loop 2 Port Direction * Bothways Attendant DN* 3000 Unattended Port Product Specific Configu Hookflash Timer (50-1550r Inter-digit Duration Timer (	able on this de Start) uration ns) *	evice		ş	
MLPP Preemption Not avail Port Information (Loop 9 Port Direction * Bothways Attendant DN* 3000 Unattended Port Product Specific Configu Hookflash Timer (50-1550r Inter-digit Duration Timer ( Input Gain (-614 db) *	able on this de Start) uration ns) * (50-500 ms) *	evice		9	
MLPP Preemption Not avail Port Information (Loop 2 Port Direction * Bothways Attendant DN* 3000 Unattended Port Product Specific Configu Hookflash Timer (50-1550r Inter-digit Duration Timer (	able on this de Start) uration ns) * (50-500 ms) *	50 100		ş	
MLPP Preemption Not avail Port Information (Loop 9 Port Direction * Bothways Attendant DN* 3000 Unattended Port Product Specific Configu Hookflash Timer (50-1550r Inter-digit Duration Timer ( Input Gain (-614 db) *	able on this de Start) uration ms) * (50-500 ms) * db) *	50 100 0		\$	
MLPP Preemption Not avail Port Information (Loop 2 Port Direction * Bothways Attendant DN* 3000 Unattended Port Product Specific Configu Hookflash Timer (50-1550n Inter-digit Duration Timer ( Input Gain (-614 db) * Output Attenuation (014	able on this de <b>Start)</b> <b>Jration</b> ns) * (50-500 ms) * db) * *	50 50 3			

\*- indicates required item.
 \*\*- Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.

Cisco Unified Communications Manager User

cisco.

Cisco CallMa	nager Admini	stration	For Cisc	o IP Telecor	nmunication Soluti	ions	Logged	l in as:CCMAdministrator
System 👻 Call Routing	✓ Media Resources ✓	Voice Mail 👻	Device 👻	Application 👻	User Management 👻	Bulk Administration $\bullet$	Help 👻	Log Off
End User Configurat	ion					Relate	ed Links: Back	to Find List Users 🔽 Go
Status Status: Ready								
User Information LDAP Sync Status User ID* Password* Confirm Password*	Active certest				••			
10100 NOTE	equired Field	•••••	•••••	•••••	••			
Confirm PIN*	•••••	•••••	•••••	•••••	••			
Last name* Middle name	CER							
First name Telephone Number								
Mail ID								
Manager User ID								
Department								
User Locale								
Associated PC	< None >				~			
Digest Credentials								
Confirm Digest Cred	lentials							
	ns CERSec1 RP911 RPELIN913				Device	Association		
<b>Extension Mobility</b> Available Profiles	,					_		

Extension Mobility	1
Available Profiles	
	Find
Controlled Profiles	
Controlled Profiles	
out and theory and	
Default Profile	< None >
Presence Group*	Standard Presence group
SUBSCRIBE Calling Search Space	
041100 811	
Allow Control of Device from C	,11
Directory Number Association	5
Primary Extension < None >	×
CAPF Information	
Associated CAPF Profiles	
	Edit Profile
Permissions Information	
Groups Standard CTI Allow Calling	Number Modification
Standard CTI Enabled	
Roles Standard CTI Allow Calling	Number Modification
Standard CTI Enabled	
Save Delete Add New	
🛈 - indicates required item.	



#### T1-QSIG Gateway

Cisco CallManager	Admini	stration	For Cisc	o IP Telecom	munication Soluti	ons	Logged in as:	CCMAdministrator
System 👻 Call Routing 👻 Media	Resources 👻	Voice Mail 👻	Device 🔻	Application $\bullet$	User Management 👻	Bulk Administration 👻	Help 👻	Log Off
Gateway Configuration						Related Lin	ks: Back to MGCP Co	onfiguration 🔽 🖸
<b>Status</b> (j) Status: Ready								
Gateway       ta         Device Protocol       D         Registration       R         IP Address       1         End-Point Name *       S         Description       S         Device Pool*       C         Call Classification*       C         NetworkLocale       A         Location*       F         AAR Group       A         Load Information       C	72.20.110.1 0/SU0/DS1- 30/SU0/DS1- Default Jse System < None > < None > < None > < None >	: PRI 04 02 0@tony3845 0@tony3845 Default	Manager C	M-BARZA				
V150 (subset)  Multilevel Precedence and MLPP Domain  MLPP Indication*  Off		n (MLPP) In	formation	~				
MLPP Preemption* Disabled				~				
<ul> <li>Interface Information</li> <li>PRI Protocol Type*</li> </ul>		PRI ISO QSIG	5 T1		~			
Protocol Side*		Network	2010		~			
Channel Selection Order*		Top Down			~			
Channel IE Type*		Timeslot Num	ber		~			
PCM Type*		µ-law			*			
Delay for first restart (1/8 se	ec ticks)*	32						

		JZ		1
Delay between restarts (3	1/8 sec ticks)*			]
Inhibit restarts at PRI	initialization			1
Enable status poll				
Unattended Port				
<ul> <li>Call Routing Informatio</li> <li>Significant Digits*</li> </ul>	n - Inbound C	alls	1	
Calling Search Space	PhonesCSS			
AAR Calling Search Space				
Prefix DN			<u> </u>	
– Call Routing Informatio	n - Outbound	Calls		
Calling Party Presentation	n*	Default	~	
Calling Party Selection*		Originator	*	
Called party IE number ty	/pe unknown*	Unknown	*	
Calling party IE number ty	ype unknown*	Unknown	*	
Called Numbering Plan*		Unknown	*	
Calling Numbering Plan*		Unknown	~	
Number of digits to strip*	6	0	~	
Caller ID DN				
SMDI Base Port*		0		
				3
- PRI Protocol Type Spec	cific Information	DN		
<ul> <li>Display IE Delivery</li> <li>Redirecting Number IE</li> </ul>	Delivery Out	le a const		
Redirecting Number IE				
Send Extra Leading Ch				
Setup non-ISDN Progr	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -			
MCDN Channel Numbe				
Send Calling Name In I				
Interface Identifier Pre				
Interface Identifier Value'	**	0		
Connected Line ID Preser	ntation (QSIG I	nbound Call)* Default		×
– UUIE Configuration —				

### 

Passing Precedence Level Through UUIE Security Access Level* 2					
Product Specific Configuration -		9			
Line Coding *	B8ZS				
Framing *	ESF				
Clock *	External	¥			
Input Gain (-614 db) *	0				
Output Attenuation (-614 db) *	0				
Echo Cancellation Enable *	Enable				
Echo Cancellation Coverage (ms) *	8	~			

③ \*- indicates required item.

\*\*- applies to DMS-100 protocol only.
 \*\*\*- applies to DMS-100 protocol and DMS-250 protocol only.
 \*\*\*\*- may be required to force ringback from some PBXs.
 \*\*\*\*- Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.

Route Pattern to QSIG Trunk

Cisco CallMan	ager Administration	For Cisco IP Telecor	nmunication Soluti	ons	Logged in as:CCM	Administrato
System - Call Routing -	🗸 Media Resources 👻 Voice Mail 👻	Device 👻 Application 👻	User Management 👻	Bulk Administration 👻	Help 👻	Log Off
Route Pattern Configu	uration				Related Links: Back To Fir	d/List 🔽 Go
Status (i) Status: Ready						
– Pattern Definition -						
Route Pattern*	40XX					
Route Partition	< None >	~				
Description						
Numbering Plan	Not Selected	×				
Route Filter	< None >	×				
MLPP Precedence*	Default	~				
Gateway/Route List *	S0/SU0/DS1-0@tonγ3845 🔽 (	Edit)				
Route Option	Route this pattern					
	O Block this pattern No Error	~				
Call Classification*	OnNet		~			
Allow Device Over	ride 🔲 Provide Outside Dial Tor	e 🔲 Allow Overlap Ser	nding 🔲 Urgent Pri	ority		
Require Forced Au	thorization Code					
Authorization Level*	0					
🗌 Require Client Mat	ter Code					
— Calling Party Trans						
	s External Phone Number Mask					
Calling Party Transfor						
Prefix Digits (Outgoin						
Calling Line ID Preser	Deladit		~			
Calling Name Present	ation* Default		~			
- Connected Party Tr						
Connected Line ID Pr	Delugit		~			
Connected Name Pre	sentation* Default		~			
– Called Party Transf	formations					
Discard Digits	< None >		~			

Note: For detailed information regarding QSIG interoperability between CCM and Avaya PBX go to: <u>http://www.cisco.com/warp/public/779/largeent/avvid/inter\_operability/flash/portal.html</u>

#### SNMP service must be active

Service Name	Status*	Activation Status
Cisco Serviceability Reporter	Started	Activated
Cisco CallManager SNMP Service	Started	Activated

#### **Configuring the Cisco Emergency Responder**

Cisco Unified Communications Manager Details

Cisco ER Groups	ERL Phone	Tracking	ERL Mer	mbership	Reports	Tools	Help	Logout
Cisco Eme For Cisco IP Telepho	rgency R	lespond	ler A	dminis	stration			Cisco Systems
Schedule							LAN	N Switch Details 🕨
Cisco Call	Manag	er Del	tails					
Cisco CallManager	S	Status: Plea	se enter a	anv change f	for the current C	isco Call	Manager	
172.20.110.254		Modify Cis						
		New U	pdate	Delete	Cancel Chan	ges		
		Cisco Callí	Manager	*		17	2.20.110	.254
						Cal	lManager	List
		CTI Manag	ger *			172	2.20.110.25	4
		CTI Mana	ger User	Name *		cer	rtest	
		CTI Manag	ger Pass	word *		alalak	64	
		BackUp C	TI Manag	ger 1				
		BackUp C	FI Manag	ger 2				
		Telephony	Port Be	gin Addres	s	425	50	
		Number of	Telepho	ony Ports		2		
		* indicates r	equired it	em				
								-
◄Schedule							LAN	V Switch Details 🕨



Cisco Emergency Responder Server group

Cisco ER Groups ERL	Phone Tracking	ERL Membership	Reports	Tools	Help	Logout
Cisco Emerge For Cisco IP Telephony S	ency Respon	der Admini	stration			Cisco Systems
					Tel	ephonySettings 🕨
Cisco ER Gr	oup Settir	igs				
		-				
Specify the values fo	r the configuration	n attributes and th	nen press Up	odate set	tings	
Obstant Decide						
Status : Ready						
Cisco ER Group Name *			CERServerG	iroup		
Peer TCP Port *			17001			
Heart beat Count *			3			
Heart beat Interval (in s	sec) *		30			
Active Call Time out (in	min) *		180			
SMTP Mail Server						
Source Mail ID (mandato	ry if SMTP Server confi	igured)				
System Administrator M	Iail ID					
Calling Party Modificatio	n		enable 💌			
SysLog			disable 💌			
Syslog Server (mandator (eg:logserver.cisco.com						
Notes						
* indicates required item						
Update Settings	Cancel Changes					



### **Telephony Settings**

Cisco ER Groups E	ERL Phone Tracking	ERL Membership	Reports 1	rools I	Help Logout
Cisco Eme For Cisco IP Telepho	rgency Respon	der Adminis	tration		CISCO SYSTEMS
< Cisco ER Group S	ettings				Server Settings
Telephony	/ settings				
Specify the value	s for the configuration	attributes and th	en press Upda	te settir	ngs.
Status :Ready					
UDP Port Begin *		3200	0		
Inter Cisco ER Group	o Route Pattern				
PSAP Callback Route	e Point Pattern *	913>	*****		
ELIN Digit Strip Patt	ern *	913			
Route Point for Prim	ary Cisco ER Server *	911			
Route Point for Star * indicates required ite	ndby Cisco ER Server m	912			
Update Settings	Cancel Changes	1			
Cisco ER Group S	ettings				Server Settings



Server Settings

Cisco ER Groups ERL	Phone Tracking ERL	Membership	Reports	Tools	Help Log	out
Cisco Emerger For Cisco IP Telephony So	ncy Responder	Adminis	tration			O SYSTEMS
Telephony Settings					Onsite Aler	t Settings 🕨
Server Settir	igs for CERS	ServerG	roup			
Servers	Status : Ready					
🗣 Publisher (primary)	Modify Server Settin	ngs				
	Update Delete	Cancel Chang	es			
	Server Name *		Publisher		]	
	Host Name *		CER-P			
	Debug Package List		Select All	]	Clear All	
	<ul> <li>✓ CER_DATABASE</li> <li>✓ CER_TELEPHONY</li> <li>✓ CER_ONSITEALERT</li> <li>✓ CER_CLUSTER</li> </ul>	<ul> <li>✓ CER_SYSAD</li> <li>✓ CER_PHONE</li> <li>✓ CER_GROUP</li> </ul>	TRACKINGEN	GINE 🗹 CE	R_REMOTEUF R_AGGREGAT R_CALLENGIN	OR
	Trace Package List		Select All		Clear All	
	CER_DATABASE CER_TELEPHONY CER_ONSITEALERT CER_CLUSTER indicates required item	CER_SYSAD	TRACKINGEN	GINE 🗹 CE	R_REMOTEUF R_AGGREGAT R_CALLENGIN	OR
A						



ERLs List

Cisco ER (	Groups	ERL	Phone T	racking	ERL Me	embership	Reports	Tools	Help	Logout	
Cisco For Cisco	D Eme	erger tony Sol	icy R	espon	der A	Adminis	tration			Cisco S million	YSTEMS Millium
< Onsite	Alert Set	ttings								SNMP Se	ettings 🕨
Find	and	List	ERL	S						ort ERL da ort ERL da	
Find Detai	ls of ERL	s Where	e ERLI	Name		<ul> <li>contains</li> </ul>	•		F	ind	
and show	20 💌 it	ems pei	r page								
To list all ite	ems, click	Find with	nout enteri	ng any sea	arch text.						
<u>Configure</u> <u>Add New</u> Status : De	ERL										
513135 - 20		,coordiny ,							Click on	record to	view/edit.
Matching	Record	s 1 to 4	4 of 4								
ERL Name	Route	e/Trans ternE	slation	Onsite Ids.		Street Name	Communit Name	y State	сору	Delete	Audit Trail
Default	100911	4000				Tasman	cisco	ca	_ <b>S</b>	×	view
Test1	10911-	-40899	94			Tasman	Big Sky	TX		8	view

Tasman

Tasman

Big Sky

Big Sky

Test3 13911--4089994....

11911--4089994....

First | Previous | Next | Last

Page 1 of 1

view...

view..

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ТΧ

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<u>Configure Default ERL</u> <u>Add New ERL</u>

Test2



ERL 1

ERL Information for Test1
* indicates required item 🔗 😵 Help for this screen
ERL Name * Test1 Notes
Test ERL (Select if this ERL is used for Synthetic Testing) ELIN Settings
Route/Translation pattern         Add         10911-4089994200           10911         Update         4089994200           4089994200         Remove         10911-4089994200
Onsite Alert Settings
Available Onsite Alert IDs Onsite Alert IDs for the ERL
ERL Address
ALI Details Update Copy Cancel Changes Close



ERL 2

ERL Information for Test2
* indicates required item 💡
ERL Name * Test2 Notes
Test ERL (Select if this ERL is used for Synthetic Testing) ELIN Settings
Route/Translation pattern         Add         11911-4089994201           I1911         Update         Update           4089994201         Remove         Image: Constraint of the second sec
Onsite Alert Settings
Available Onsite Alert IDs Onsite Alert IDs for the ERL
ERL Address
ALI Details Update Copy Cancel Changes Close



ERL 3

ERL Information for Test3
* indicates required item 💡
ERL Name * Test3 Notes Test ERL (Select if this ERL is used for Synthetic Testing)
ELIN Settings
Route/Translation pattern       Add       13911-4089994203         ELIN       Update       Pemove         Onsite Alert Settings       Considered Settings
Available Onsite Alert IDs Onsite Alert IDs for the ERL
ERL Address
ALI Details       Update     Copy     Cancel Changes     Close

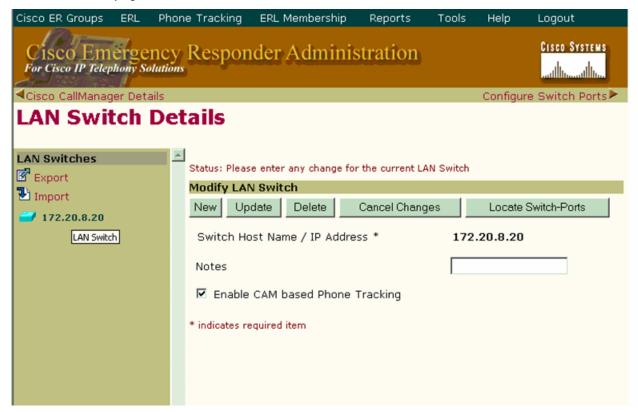


### SNMP connection

Cisco ER Groups	ERL Pho	ne Tracking	ERL Memb	ership	Reports	Tools	Help	Logout
Cisco Eme For Cisco IP Teleph	rgency	Respon	der Ad	minis	tration			Cisco Systems
Configure ERLs								Schedule 본
SNMP Set	tings							
<ul> <li>Entries can be added</li> <li>IP Address can consi</li> <li>Entry that is the clos</li> <li>If no match is found,</li> <li>Some valid IP example</li> </ul>	ist of a wild ( est match wi , <b>public</b> will ples:64.20.4	card '*' or range ill be used for a be used as the .9 64.20-30.3	given switch default Read 0-60.* *.*.*	or Cisco C Communit	allManager.	mber.		
Status: Please enter a		or the current S	NMP Setting					
Modify SNMP Sett IP Address/Host Na		Timeout(ir	isec)*	Retries	s * Read	Communit	·v *	
172.20.8.20		10	,	2	publi		· <u>·</u>	
New Update	Cancel C	hanges						
* indicates required its	em							
					Click on a n			
IP Address/Host	Name	Timeout(ir	isec) R	etries F	Read Com		Delete	1
172.20.8.20	Nume	10	2		oublic	nancy		
Configure FR								Cabadula
Configure ERLs								Schedule 본



LAN Switch identifying





#### Switch Port Details

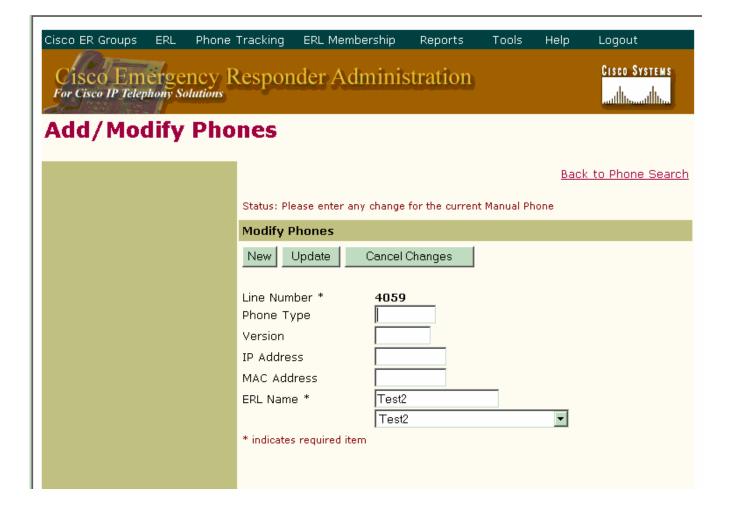
co ER Group	os ERL Phone	Tracking ER	L Membership	Reports	Tools	Help	Logout		
CISCO E or Cisco IP To	mergency R	lesponde	r Adminis	stration			Cisco Systems		
LAN Switch Details Configure IP Subnets 🕨									
witch	Port Deta	ils							
ıd <u>Configu</u>	re 🛛 🔀 Export 🕑	<u>Import</u>							
N Switch	Port Information	ı							
ind ports wh			ditions are satis	fied		_			
ERLName	<b>_</b>	contains •	-			- 11			
ERL Name Find More		contains _							
		contains _				l			
		contains _	<b>T</b>			l			
		contains	<u>view</u>			l			
		, -	_						
	172.20.8.20	3/23	<u>AIRM</u>						
	172.20.8.20 172.20.8.20	3/23 3/24	view View						
	172.20.8.20 172.20.8.20 172.20.8.20	3/23 3/24 3/25	<u>view</u> <u>View</u> <u>View</u>						
	172.20.8.20 172.20.8.20 172.20.8.20 172.20.8.20 172.20.8.20	3/23 3/24 3/25 3/26	View View View View						
	172.20.8.20 172.20.8.20 172.20.8.20 172.20.8.20 172.20.8.20 172.20.8.20	3/23 3/24 3/25 3/26 3/27	VIEW View View View View	4201	1	1	72.20.110.252		
Find More	172.20.8.20 172.20.8.20 172.20.8.20 172.20.8.20 172.20.8.20 172.20.8.20 172.20.8.20	3/23 3/24 3/25 3/26 3/27 3/28	VIBW View View View View View	4201	-		72.20.110.252 72.20.110.253		

Defining Manual Phones (PBX Stations)

Cisco ER Groups	ERL	Phone Tracking	ERL Membership	Reports	Tools	Help	Logout
Cisco Em For Cisco IP Telep	erge	ncy Respor	nder Adminis	stration			Cisco Systems
< Configure Unlo	cated P	hones			Cor	nfigure Sy	ynthetic Phones 🕨
						<u>Add n</u>	ew Manual phone
Find and	l Lis	st Manual	ly Configu	red Pl	hone	5	<mark>I Export</mark> ▶ <u>Import</u>
Find phone	es wher	e extension	contains 💌	Г		Find	
		items per page ms, click Find without	entering any search to	ext.			
List Manually	Confi	gured Phones					
Status: Ready							
Matching record							
Line Number		ERL Name	IP Ad	dress	MAC A	ddress	Delete
<i>4</i> 059		Test2					Û
🥔 4060		Test1					Û
First Previous I	Next I	_ast					Page 1 of 1

Cisco ER Groups	ERL	Phone Tracking	ERL Member	rship Repor	ts Tools	Help	Logout
Cisco Eme For Cisco IP Telept	erge	ncy Respor	nder Adm	ninistrati	on		CISCO SYSTEMS
Add/Mod	lify	Phones					
						Bac	<u>k to Phone Search</u>
		Status: Pl	ease enter any (	change for the c	urrent Manual	Phone	
		Modify F	hones				
		New	Update C	Cancel Changes			
		Line Num Phone Ty Version		4060			
		IP Addre					
		MAC Add ERL Nam		Test1			
		* indicate	s required item	Test1		•	
		indicate	roqui ou item				

· | | · · | | · · CISCO



Cisco 3845 IOS Gateway Configuration tony3845#sh run Building configuration... Current configuration : 3087 bytes ! Version 12.3 service timestamps debug datetime msec service timestamps log datetime msec no service password-encryption ! hostname tony3845 ! boot-start-marker boot system flash:c3845-ipvoice-mz.123-14.T4.bin

boot-end-marker

!

```
enable password cisco
!
no aaa new-model
!
resource policy
!
no network-clock-participate slot 3
no network-clock-participate slot 4
network-clock-participate wic 0
voice-card 0
no dspfarm
!
voice-card 3
no dspfarm
!
voice-card 4
dspfarm
!
ip subnet-zero
ip cef
!
!
no ip dhcp use vrf connected
!
!
ip host CM-GUANATOS 172.20.8.254
ip host CM-BARZA 172.20.110.254
no ftp-server write-enable
isdn switch-type primary-4ess
!
!
!
I
I
I
I
I
I
I
I
!
!
controller T1 0/0/0
framing esf
linecode b8zs
pri-group timeslots 1-24 service mgcp
!
controller T1 0/0/1
framing esf
```

```
linecode b8zs
!
controller E1 4/0/0
shutdown
pri-group timeslots 1-31 service mgcp
!
controller E1 4/0/1
!
!
!
interface GigabitEthernet0/0
ip address 172.20.8.26 255.255.255.0
duplex half
speed 100
media-type rj45
negotiation auto
!
interface GigabitEthernet0/1
ip address 172.20.110.104 255.255.255.0
shutdown
duplex auto
speed auto
media-type rj45
negotiation auto
!
interface Serial0/0/0:23
no ip address
isdn switch-type primary-qsig
isdn protocol-emulate network
isdn incoming-voice voice
isdn T310 120000
isdn bind-l3 ccm-manager
no cdp enable
!
interface Serial4/0/0:15
no ip address
shutdown
isdn switch-type primary-qsig
isdn incoming-voice voice
isdn bind-l3 ccm-manager
no cdp enable
!
ip default-gateway 172.20.8.1
ip classless
ip route 0.0.0.0 0.0.0.0 172.20.8.1
!
ip http server
!
!
!
```

```
!
control-plane
!
!
!
voice-port 0/0/0:23
!
voice-port 3/0/0
signal cama KP-NPD-NXX-XXXX-ST
dial-type mf
timing hookflash-out 500
I
voice-port 3/0/1
dial-type mf
timing hookflash-out 500
I
voice-port 3/0/2
dial-type mf
timing hookflash-out 500
!
voice-port 3/0/3
dial-type mf
timing hookflash-out 500
!
voice-port 3/1/0
!
voice-port 3/1/1
!
voice-port 4/0/0:15
!
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server CM-GUANATOS
ccm-manager config
!
mgcp
mgcp call-agent CM-GUANATOS 2427 service-type mgcp version 0.1
mgcp dtmf-relay voip codec all mode out-of-band
mgcp rtp unreachable timeout 1000 action notify
mgcp modem passthrough voip mode nse
mgcp package-capability rtp-package
no mgcp package-capability res-package
mgcp package-capability sst-package
no mgcp package-capability fxr-package
mgcp package-capability pre-package
no mgcp timer receive-rtcp
mgcp sdp simple
mgcp fax t38 inhibit
mgcp rtp payload-type g726r16 static
```

!

### ·IIIIII CISCO

```
mgcp profile default
!
ļ
!
dial-peer voice 999300 pots
service mgcpapp
port 3/0/0
!
dial-peer voice 999301 pots
service mgcpapp
port 3/0/1
!
dial-peer voice 999310 pots
service mgcpapp
port 3/1/0
I
dial-peer voice 999311 pots
service mgcpapp
port 3/1/1
!
dial-peer voice 999302 pots
service mgcpapp
port 3/0/2
!
dial-peer voice 999303 pots
service mgcpapp
port 3/0/3
!
!
line con 0
password cisco
stopbits 1
line aux 0
stopbits 1
line vty 0 4
password cisco
login
!
scheduler allocate 20000 1000
!
End
tony3845#sh ver
```

Cisco IOS Software, 3800 Software (C3845-IPVOICE-M), Version 12.3(14)T4, RELEASE SOFTWARE (fc2) Technical Support: http://www.cisco.com/techsupport Copyright (c) 1986-2005 by Cisco Systems, Inc. Compiled Thu 08-Sep-05 21:49 by kehsiao

ROM: System Bootstrap, Version 12.3(11r)T2, RELEASE SOFTWARE (fc1)



tony3845 uptime is 1 week, 2 days, 5 hours, 15 minutes System returned to ROM by power-on System image file is "flash:c3845-ipvoice-mz.123-14.T4.bin"

Cisco 3845 (revision 1.0) with 485376K/38912K bytes of memory. Processor board ID FTX0933A1JA 2 Gigabit Ethernet interfaces 55 Serial interfaces 2 Channelized E1/PRI ports 2 Channelized T1/PRI ports 4 Voice FXO interfaces 2 Voice FXS interfaces DRAM configuration is 64 bits wide with parity enabled. 479K bytes of NVRAM. 125184K bytes of ATA System CompactFlash (Read/Write)

Configuration register is 0x2102

tony3845#

tony3845#sh voice port 3/0/0

Foreign Exchange Office 3/0/0 Slot is 3, Sub-unit is 0, Port is 0 Type of VoicePort is FXO **Operation State is DORMANT** Administrative State is UP The Last Interface Down Failure Cause is Administrative Shutdown Description is not set Noise Regeneration is enabled Non Linear Processing is enabled Non Linear Mute is disabled Non Linear Threshold is -21 dB Music On Hold Threshold is Set to -38 dBm In Gain is Set to 0 dB Out Attenuation is Set to 3 dB Echo Cancellation is enabled Echo Cancellation NLP mute is disabled Echo Cancellation NLP threshold is -21 dB Echo Cancel Coverage is set to 64 ms Echo Cancel worst case ERL is set to 6 dB Playout-delay Mode is set to adaptive Playout-delay Nominal is set to 60 ms Playout-delay Maximum is set to 250 ms Playout-delay Minimum mode is set to default, value 40 ms Playout-delay Fax is set to 300 ms Connection Mode is normal Connection Number is not set Initial Time Out is set to 10 s Interdigit Time Out is set to 10 s



Call Disconnect Time Out is set to 60 s Ringing Time Out is set to 180 s Wait Release Time Out is set to 30 s Companding Type is u-law Region Tone is set for US

Analog Info Follows: Currently processing none Maintenance Mode Set to None (not in mtc mode) Number of signaling protocol errors are 8 Impedance is set to 600r Ohm Station name None, Station number None Translation profile (Incoming): Translation profile (Outgoing):

Voice card specific Info Follows:

Signal Type is cama

Cama Type is KP-NPD-NXX-XXXX-ST

NPD to NPA mapping is :

NPD NPA

- 0 0
- 1 0
- 2 0
- 3 0

Battery-Reversal is enabled Number Of Rings is set to 1 Supervisory Disconnect is signal Answer Supervision is inactive Hook Status is On Hook Ring Detect Status is inactive Ring Ground Status is inactive Tip Ground Status is inactive Dial Out Type is mf Digit Duration Timing is set to 100 ms InterDigit Duration Timing is set to 100 ms Pulse Rate Timing is set to 10 pulses/second InterDigit Pulse Duration Timing is set to 750 ms Percent Break of Pulse is 60 percent GuardOut timer is 2000 ms Minimum ring duration timer is 125 ms Hookflash-in Timing is set to 600 ms Hookflash-out Timing is set to 500 ms Supervisory Disconnnct Timing is set to 350 ms tony3845#

CAT6k configuration Console> (enable) sh snmp SNMP: Enabled RMON: Disabled Extended RMON Netflow Enabled : None. Memory usage limit for new RMON entries: 85 percent Engineld: 00:00:00:09:00:01:97:31:c8:00:00:00 Chassis Alias: Traps Enabled: None Port Traps Enabled: None Community-Access Community-String

read-only public read-write private read-write-all secret

Additional- Access-Community-String Access-Type Number View

Trap-Rec-Address Trap-Rec-Community Trap-Rec-Port Trap-Rec-Owner Trap-Rec-Index

Console> (enable) sh cdp CDP : enabled Message Interval : 60 Hold Time : 180 Version : V2 Device Id Format : Other Console> (enable)

set interface sc0 109 172.20.8.20/255.255.255.0 172.20.8.255



#### Configuring the Avaya Definity

DS1 CIRCUIT PACK

display ds1 1a12	Page 1 of 2
	DS1 CIRCUIT PACK
Location: 01A12	Name: T1 to CCM
Bit Rate: 1.544	Line Coding: b8zs
Line Compensation: 1	Framing Mode: esf
Signaling Mode: isdn-pri	le de la companya de
Connect: pbx	Interface: peer-master
TN-C7 Long Timers? n	Peer Protocol: Q-SIG
Interworking Message: PROGress	Side: a
Interface Companding: mulaw	CRC? n
Idle Code: 11111111	
D	CP/Analog Bearer Capability: 3.1kHz
Slip Detection? y	Near-end CSU Type: other



#### SIGNALING GROUP

display signaling-group 12	
S	IGNALING GROUP
	up Type: isdn-pri
Associated Si	
Primary D-	Channel: 01A1224 Max number of CA TSC: 5
	Trunk Group for NCA TSC: 12
Trunk Group for Channel Se	
Supplementary Service P	rotocol: b

TRUNK GROUP

display trunk-group 12		Page 1 of 10
TRUNK	ROUP	
Group Number: 12 Grou	ıp Type: isdn 👘	CDR Reports: y
		TN: 1 TAC: 612
Direction: two-way Outgoing D		
	eshold: 99	Night Service:
Queue Length: 0		
Service Type: tie Aut	:h Code? n	TestCall ITC: rest
Far End Test L	ine No:	
TestCall BCC: 4		
TRUNK PARAMETERS		
Codeset to Send Display: Ø		nd National IEs: 6
Max Message Size to Send: 260	Charge Advice	
Supplementary Service Protocol: b	Digit Handlin	g (in/out): enbloc/enbloc
Trunk Hunt: ascend		QSIG Value-Added? y
		gital Loss Group: 13
Calling Number - Delete: Insert:		Numbering Format: unk-unk
Bit Rate: 1200 Sy		async Duplex: full
Disconnect Supervision - In? y Out? y	)	
Answer Supervision Timeout: 0		

display trunk	-group 12			Page 3 of	10
Service/ Feature	I Called Len	NCOMING CAL Called Number	L HANDLING TREATMENT Del Insert	Per Call Night CPN/BN Serv	t



### Acronyms

Acronym	Definitions		
CAMA	Analog "Centralized Automatic Message Accounting" E911 Trunk		
PSAP	Public Service Answering Point		



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