Membuat Call Center Sederhana Menggunakan Cisco IP Communicator Berbasis CUCM

Alkindi Hafidz

Alkindi.h@outlook.com

Lisensi Dokumen:

Copyright © 2003-2007 IlmuKomputer.Com Seluruh dokumen di IlmuKomputer.Com dapat digunakan, dimodifikasi dan disebarkan secara bebas untuk tujuan bukan komersial (nonprofit), dengan syarat tidak menghapus atau merubah atribut penulis dan pernyataan copyright yang disertakan dalam setiap dokumen. Tidak diperbolehkan melakukan penulisan ulang, kecuali mendapatkan ijin terlebih dahulu dari IlmuKomputer.Com.

Call Center adalah suatu tempat untuk memenuhi permintaan dan menerima panggilan masuk yang berhubungan dengan permintaan, gangguan, dan lain sebagainya. Call center biasanya dikelola oleh suatu organisasi/perusahaan/ instansi yang mempunyai layanan bagi stakeholdernya (user).

Sebuah Call Center sederhana dapat dibuat dengan menggunakan CIPC (Cisco IP Communicator) yang terhubung dengan CUCM (Cisco Unified Communication Manager) sebagai sistem pengolah panggilan berbasis software yang dikembangkan oleh Cisco Systems yang memanfaatkan Skinny Client Control Protocol (SCCP) sebagai protokol komunikasinya. CUCM melacak semua komponen jaringan VoIP yang aktif, termasuk ponsel, gateway, conference bridge, sumber daya transcoding, dan kotak pesan suara diantara yang lainnya.

Cisco IP Communicator adalah aplikasi PC berbasis Windows yang memungkinkan kita menggunakan komputer pribadi untuk membuat suara dan panggilan video. Dengan headset USB atau USB speakerphone dan Cisco IP Communicator, kita dapat dengan mudah mengakses nomor telepon perusahaan/kantor kita dan juga pesan suara. Yang dibutuhkan adalah koneksi internet dan akses jarak jauh ke jaringan perusahaan/kantor kita, Aplikasi CIPC ini sangat berguna sebagai contact center, untuk bekerja dari rumah ataupun ketika sedang dalam tugas kantor.

Saat ini, penulis akan membuat Call Center sederhana dengan menggunakan CUCM sebagai platformnya. Siapkan PC yang akan diinstal Cisco IP Communicator (CIPC) sebanyak yang dibutuhkan. Dalam artikel ini, penulis menggunakan 4 PC untuk digunakan sebagai Call Center. Untuk spesifikasi minimum PC yang akan digunakan sebagai call center, dapat dilihat pada table dibawah ini :

1. Konfigurasi Sistem Jaringan

a. Spesifikasi PC yang akan diinstal Cisco IP Phone Ada 4 PC yang akan di Install Cisco IP Phone, dengan spesifikasi sebagai berikut :

Spesifikasi	Call Center 1060	Call Center 1061	Call Center 1062	Call Center 1063	Call Center 1064	
/ Nama						
Merk	Dell Vostro 460	Dell Optiplex 980	HP Compaq	Dell Optiplex 980	Acer Aspire	
			DX2310MT		M3910	
Processor	Intel ^(R) Core ^(TM)	Intel ^(R) Core ^(TM) i5	Intel ^(R) Core ^(TM) 2	Intel ^(R) Core ^(TM) i5	Intel ^(R) Core ^(TM)	
	i5-2500 CPU @	CPU 650 @	Duo CPU	CPU 650 @	i3 CPU 540 @	
	3.30GHz	3.20GHz	E7300@2.66GHz	3.20GHz	3.07GHz	
RAM	4GB	4GB	1 GB	4GB	2GB	
O/S	Windows 7 Home	Windows 7	Windows 7	Windows 7	Windows 7	
	Premium	Professional	Ultimate	Professional	Professional	

Langkah pertama yang harus dilakukan dalam implementasi call center adalah mendaftarkan PC kita yang telah terinstall CIPC ke server CUCM.

1. Seting TFTP Server pada CIPC yang sudah kita install di PC kita, TFTP ini diisi dengan IP Address dari server CUCM yang telah dipersiapkan sebelumnya.

Preferences	? 💌
User Network Audio Directories	
Device Name	
O Use Network Adapter to generate Devic	ce Name
Network Adapter:	
Device Name:	SEP4437E612879E
Use this Device Name	SEP4437E612879E
TFTP Servers	
Ouse these TFTP servers:	
TFTP Server 1:	
TFTP Server 2: 0	. 0 . 0 . 0
	OK Cancel

"Use this Device name" berfungsi mendeteksi MAC-Address dari NIC PCkita untuk digunakan sebagai nama pada saat registrasi di server TFTP CUCM.

Ikatlah limu dengan menuliskannya

Preferences	-? <mark>-</mark>
User Network Au	lio Directories
Devices for Audio N	odes
Headset	Default Windows Audio Device 💌
Speakerphone	Default Windows Audio Device 🔹
Handset	Default Windows Audio Device 🗸
Device for Ringer	
Ringer	Speakers (Realtek High Definiti
Network Advanced	
	OK Cancel

Agar komunikasi 2 arah dapat dilakukan, maka kita harus melakukan seting pada audio di Software CIPC yang telah diinstal.

- 2. Setelah seting TFTP server dan seting audio selesai dilakukan, maka selanjutnya adalah membuat Directory Call Number untuk masing-masing Call Center. Langkah-langkahnya adalah adalah sebagai berikut :
 - Directory Call Number untuk Agen Call Center 1060
 Membuat Directory Call Number untuk Call Center : Pilih menu "Call Routing", lalu pilih "Directory Number" :

cisco Fo	isco Unified CM Administration r Cisco Unified Communications Solutions			Navigation Cisco Unified CM Administration V Go pengembangan About Logout							
System 👻 Call	Routing ▼ Media Resources ▼ Voice Mail ▼ Device ▼ Application ▼ User Managem	ent 👻 Bulk Administration 👻 Help 🗣									
Find and List I	ind and List Directory Numbers										
Add New	🕂 Add New III Select All III Clear All 🙀 Delete Selected										
Status											
(1) 02 month	found										
U 92 records											
Directory Nu	mber (51 - 92 of 92)			Rows per Page 50 V							
Find Directory N	Number where Directory Number V begins with V Find	Clear Filter									
	Pattern/Directory Number *	Partition	Description	Сору							
	1055	PT_		D							
	1059	PT_	Call Center	ß							
	1060	PT_	Call Center 1060	D							
	1061	PT_	Call Center 1061	ra di seconda di secon							
	1052	PT_	Call Center 1062	ß							
	1063	PT_	Call Center 1063	rs.							

Directory Number 1060

Add New kemudian isi semua informasi yang dibutuhkan, lalu lakukan "Save" :

Ikatlah limu dengan menuliskannya

cisco For Cisco	Unified CM Administration o Unified Communications Solutions										
System - Call Routing	g 🕶 Media Resources 💌 Voice Mail 💌 Device 👻 Application 👻 User Management 👻 Bulk Administration 💌 H										
Directory Number Configuration											
🔚 Save 💢 Delete 📋 Copy 省 Reset 🥒 Apply Config 🕂 Add New											
Status											
i Status: Ready											
Directory Number I	Information										
Directory Number*	1060										
Route Partition											
Description	Call Center 1060										
Alerting Name	Call Center 1060										
ASCII Alerting Name	Call Center 1060										
Allow Control of D	levice from CTI										
Line Group	HUNTGROUP-CallCenter Edit Line Group										
Associated Devices	SEPD4BED992CCD6										
	Edit Device										
	Edit Line Appearance										
	**										
Dissociate Devices											

Pada Description, dapat diisi dengan sembarang keterangan, paling tidak yang merepresentasikan peruntukan pembuatan Call Center ini.

- 3. Setelah Directory Call Number selesai dibuat, langkah selanjutnya adalah mendaftarkan perangkat CIPC kita yang tadi telah kita install ke server CUCM. Langkah-langkahnya seperti berikut ini :
 - Buka pada tab Device, lalu pilih Phone :

Cisco Unified CM Administrations Solut	ation ons	Navigation Cisco Unified CM Administrat pengembangan Abo	tion 🚽
System - Call Routing - Media Resources - Voice Mail -	Device - Application - User Management - Bulk Adm	istration 👻 Help 👻	
	CTI Route Point		
	Gatekeeper		
	Gateway		2137
	Phone	- Au	1
Cisco Unified CM Administra	Trunk		
System version: 7.1.5.20000-6	Remote Destination		
	Device Settings		
			ar annua an
Last Successful Logon: Sep 20, 2013 10:12:41 AM			
Copyright © 1999 - 2009 Cisco Systems, Inc. All rights reserved.			
This product contains cryptographic features and is subject export, distribute or use encryption. Importers, exporters, or unable to comply with U.S. and local laws, return this produ	 United States and local country laws governing impor istributors and users are responsible for compliance wil t immediately. 	, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to U.S. and local country laws. By using this product you agree to comply with applicable laws and regulation	o import, Ins. If you
A summary of U.S. laws governing Cisco cryptographic prod	ucts may be found at our Export Compliance t R	aport web site.	
For information about Cisco Unified Communications Manag	r please visit our Unified Communications System Doc	imentation web site.	
For Cisco Technical Support please visit our Technical Support	rt web site.		

Ikatlah limu dengan menuliskannya

\div Setelah tampilan berikut ini keluar, lalu pilih Add New :

_													
cis	co	Cisco U For Cisco (nified CM A	dministrati	on					Navigation Cisco Unit	ied CM Adm nbangan	inistration 🚽	
System	n 🔻	Call Routing 👻	Media Resources 👻	Voice Mail - Dev	rice - Application -	User Management 👻	Bulk Administration 👻	Help 👻					
Find a	Find and List Phones Related Links: Actively Logged In Device Report -												
- - /	Add Ne	w Selec	t All 🔛 Clear All	Delete Selected	Reset Selected	🖉 Apply Config to	Selected						
	9971	SEP68BD	ABA4A120	SEP68BDABA4A1	20		DP_JKT	SIP	Unknown	Unknown	6	1	
	9971	SEP68BD	ABA4A179	SEP68BDABA4A1	79		DP_JKT	SIP	Registered		ß	1	
	9971	SEP68BD	ABA4A431	SEP68BDABA4A4	31		DP_JKT	SIP	Registered		0	1	
	9971	SEP68BD	ABA4A868	SEP68BDABA4A8	68		DP_JKT	SIP	Registered		6	1	
	9971	SEP68BD	ABA4A991	SEP68BDABA4A9	91		DP_JKT	SIP	Unknown	Unknown	6	1	
	9971	SEP68BD	ABA4A9E6	SEP68BDABA4A9	E6		DP_JKT	SIP	Registered		6	1	
		SEP70F14	1D00440				DP_JKT	SCCP	Unknown	Unknown	6	1	
		SEP7A79	19233F56	SEP7A7919233F5	6		DP_JKT	SCCP	Unknown	Unknown	6	1	
		SEP842B	2BB61789	Call Center			DP_JKT	SCCP	Unregistered		0	1	
	1	SEP842B	2BB618CF	Call Center			DP JKT	SCCP	Unregistered		6	1	
	1	SEP8C73	6E7A95EF				DP JKT	SCCP	Unknown	Unknown	6	1	
	1	SEPC80A	A9FDE13D				DP JKT	SCCP	Unknown	Unknown	6	1	
	1	SEPCC05	1B84AF0D				DP JKT	SIP	Unknown	Unknown	6	1	
	1	SEPD4BE	D992CCD6				DP JKT	SCCP	Registered		6	1	
	1	SEPE4113	5B54D66E	LaptopHP			DP JKT	SCCP	Unknown	Unknown	6	1	
	1	SEPE8046	52139F57	SEPE80462139F5	7		DP JKT	SIP	Registered		6	1	
	1	SEPFODE	F1263F15				DP_JKT	SCCP	Unknown	Unknown	6	1	
		SEPFODE	F1264A6E	SEPF0DEF1264A6	E		DP JKT	SCCP	Unknown	Unknown	6	1	
	1	SEPFODE	F1264A7B				DP JKT	SCCP	Unknown	Unknown	6	1	

Pada Phone Typenya pilih "Cisco IP Communicator ", lalu next :





Ikatlah limu dengan menuliskannya

Selanjutnya Pada Protokol, pilih "SCCP", lalu next :

			-								
diada cisco	Cisco Unif	Fied CM Ad	lministra ations Soluti	ation ions							
System 👻	Call Routing 👻 Mee	dia Resources 🔻	Voice Mail 👻	Device 💌	Application -	User Management 👻	Bulk Administration 👻	Help 🔻			
Phone Configuration											
Next											
- Status -											
i) Status	is: Ready										
- Select th	e type of phone	vou would like	to create-								
Product Ty	/ne:	isco IR Commun	nicator								
Select the	device protocol:	SCCR	licator								
	denice protocon .	3005			•						
- Next											
 *- indicates required item. **- Create a phone template using the Bulk Administration Tool to enable template-based phone creation. 											

Setelah tampilan Add New terbuka, isi data-data yang dibutuhkan untuk registrasi ini, lalu lakukan save :

Cisco Unified CM Ac Cisco For Cisco Unified Communic	Iministration ations Solutions	
System - Call Routing - Media Resources -	Voice Mail - Device - Application - User Management	nt 👻 Bulk Administration 👻 Help 👻
Phone Configuration		
Save		
Device is trusted Device Name* Description		
Device Pool*	Not Selected	View Details
Common Device Configuration	< None >	View Details
Phone Button Template*	Not Selected	
Softkey Template	< None >	
Common Phone Profile*	Standard Common Phone Profile 🗸	
Calling Search Space	< None >	
AAR Calling Search Space	< None >	
Media Resource Group List	< None >	
User Hold MOH Audio Source	< None >]
Network Hold MOH Audio Source	< None > -	
Location*	Hub_None +]
AAR Group	< None >	
User Locale	< None >	
Network Locale	< None >]
Built In Bridge*	Default 🗸	
Privacy*	Default 🗸	
Device Mobility Mode*	Default 🗸	View Current Device Mobility Settings
Owner User ID	< None > -	



Device is trusted		
Device Name*	SEP4437E612879E	
Description	Alkindi Hafidz - CIPC	
Device Pool*	DP_JKT	✓ <u>View Details</u>
Common Device Configuration	< None >	<u>View Details</u>
Phone Button Template*	Standard CIPC SCCP	•
Softkey Template	< None >	~
Common Phone Profile*	Standard Common Phone Profile	•
Calling Search Space	< None >	~
AAR Calling Search Space	< None >	-
Media Resource Group List	< None >	•
User Hold MOH Audio Source	< None >	•
Network Hold MOH Audio Source	< None >	•
Location*	Jakarta	▼
AAR Group	< None >	•
User Locale	< None >	•
Network Locale	< None >	-
Built In Bridge*	Default	•
Privacy*	Default	•
Device Mobility Mode*	Default	 View Current Device Mobility Setting

Ketika save telah dilakukan, maka akan kembali ke tampilan ini, lalu pilih pada device yg tadi kita daftarkan, untuk mengassign Directory Number yang telah kita buat di awal tadi.

- 4. Setelah mendaftarkan CIPC selesai dilakukan, langkah selanjutnya adalah mengassign Directory Number pada Call Center 1060 yang telah kita buat tadi. Langkah-langkahnya adalah sebagai berikut :
 - Buka kembali tab Device, lalu pilih Phone.

		Cisc	Unified CM A	dministr	ation						Navigation Cinco Unifi	od CM Ade	ninistration
Ċ	isco	For Cis	co Unified Communi	cations Soluti	ons						pengem	ibangan	About L
Sys	tem 👻	Call Routing	👻 Media Resources 🔻	Voice Mail 👻	Device 👻	Application -	User Management 🔻	 Bulk Administration 	Help 👻				
Fin	d and	List Phon	95							R	elated Links: Actively Logo	ed In Dev	vice Report 💌
л.	Add		Salaat All III Char All	Delete Sel	natad On	Depat Salacted	Apply Coofie t	a Salactad					
5	Auui					Reset Selected	Apply Coning to	0 Selected					
E	1	SEPE	8BDABA4A120	SEP68BDABA	4A120			DP_JKT	SIP	Unknown	Unknown	6	1
E	1	SEPE	8BDABA4A179	SEP68BDABA	4A179			DP_JKT	SIP	Registered		6	1
E	1	SEPE	8BDABA4A431	SEP68BDABA	4A431			DP_JKT	SIP	Registered		6	1
E	1	SEP6	8BDABA4A868	SEP68BDAB	4A868			DP_JKT	SIP	Registered		6	1
E	1	SEP6	8BDABA4A991	SEP68BDABA	4A991			DP_JKT	SIP	Unknown	Unknown	6	1
E	1	SEP6	8BDABA4A9E6	SEP68BDAB	4A9E6			DP_JKT	SIP	Registered		6	1
E	1	SEP7	0F1A1D00440					DP_JKT	SCCP	Unknown	Unknown	6	1
E	1	SEP7	A7919233F56	SEP7A79192	33F56			DP_JKT	SCCP	Unknown	Unknown	6	1
E	1		43838861780	Coll Conter				DP_JKT	SCCP	Unregistered		ß	1
E	1	SER	428288618CF	Call Center				DP JKT	SCCP	Unregistered		6	1
E	1	SEPC	<u>Yiik d</u> isin	L				DP_JKT	SCCP	Unknown	Unknown	ß	1
E	1	SEPC	80AA9FDE13D	Maher				DP JKT	SCCP	Unknown	Unknown	6	1
E	1		COST 664AFUD					DP_JKT	SIP	Unknown	Unknown	6	1
10	1 6	SEPC	4BED992CCD6	Call center -				DP JKT	SCCP	Registered		6	1
E	1	SEPE	4115B54D66E	LaptopHP				DP_JKT	SCCP	Unknown	Unknown	ß	1
E	1	SEPE	80462139F57	SEPE804621	39F57			DP JKT	SIP	Registered		6	1
E	1	SEPF	0DEF1263F15	Den				DP_JKT	SCCP	Unknown	Unknown	6	1
E	1	SEPF	0DEF1264A6E	SEPF0DEF12	54A6E			DP JKT	SCCP	Unknown	Unknown	6	1
E	1	SEPF	0DEF1264A7B					DP_JKT	SCCP	Unknown	Unknown	ß	1

Setelah tampilan dibawah ini terbuka, klik di "line [1]" pada samping kiri dibawah Modify Button Items :

		,	-	M	,		
cis	Co Cisco Unified CM Administ	ration _{utions}			Navigation	Cisco Unified CM Adm pengembangan	ninistration 👻 About L
System	▼ Call Routing ▼ Media Resources ▼ Voice Mail ▼	Device - Application - User Management	nt 🕶 Bulk Administration 👻 Help 👻				
Phone	e Configuration			Related Links:	Back To Find/List		-
🔒 s	save 🗙 Delete 📋 Copy ရ Reset 🧷 App	ly Config 🕂 Add New					
- Ctate							
	15						
	Status: Ready						
Asso	ciation Information	Phone Type					
	Modify Button Items	Product Type: Cisco IP Comm	unicator				
1	•771: Line [1] - 1060	Device Protocol: SCCP					
2	stas Line [2] - Add a new DN	Device Information					
-		Registration	Registered with Cisco Unified Communica	tions Manager			
3	Carl Add a new SD	IPv4 Address	University				
4	Can Add a new SD	Active Load ID	Unknown				
5	Ga Add a new SD	Device is Active					
6	Ga Add a new SD	Device Name*	SEPD4BED992CCD6				
7		Description	Call center				
· ·	Contract a new SD	Device Pool*	DP JKT	✓ View Deta	ils		
8	C Add a new SD	Common Device Configuration	< None >	View Deta	ils		
	Unassigned Associated Items	Phone Button Template*	Standard CIPC SCCP	•			
9	Com Add a new SD	Softkey Template	< None >	•			
10	Add a new SURL	Common Phone Profile*	Standard Common Phone Profile	-			
11		Calling Search Space	< None >	-			
1 11	And a new ptr 3D	AAR Calling Search Space	< Nono s				

Setelah muncul tampilan seperti ini, lalu isi semua informasi seperti dibawah ini, lalu lakukan save :

Directory Number I	Information	
Directory Number*	1060	
Route Partition	PT	
Description	Call Center 1060]
Alerting Name	Call Center 1060	
ASCII Alerting Name	Call Center 1060]
Allow Control of D	Device from CTI	
Line Group	HUNTGROUP-CallCenter	Edit Line Group
Associated Devices	SEPD4BED992CCD6	Edit Device Edit Line Appearance
	**	
Dissociate Devices	A	

Setelah Directory Number diisi, maka pada nomor 1060 akan terseting pada Line[1]

•					
cis	Cisco Unified CM Administ	ration ns		Navigation <mark>Cisco Unified CM Adr</mark> pengembangan	ministration 🗸 Go About Logout
System	▼ Call Routing ▼ Media Resources ▼ Voice Mail	▪ Device ▪ Application ▪ User Mana	gement - Bulk Administration - Help -		
Phone	Configuration			Related Links: Back To Find/List	✓ G0
:	iave 🗙 Delete 📄 Copy 🎦 Reset 🧷 App	oly Config 🕂 Add New			
Statu	c				
i	Jpdate successful				Î
- 4000	cistion Information				
1	Modify Button Items	Product Type: Cisco IP Comm Device Protocol: SCCP	unicator		
2	778 Line [2] - Add a new DN	Device Information			
3	Add a new SD	Registration IPv4 Address	Registered with Cisco Unified Communications	Manager 10.100.90.4	
4	and Add a new SD	Active Load ID	Unknown		
5	Can Add a new SD	Device is Active			
6	Add a new SD	Device is trusted			
7	Ca Add a new SD	Description	SEPD4BED992CCD6		
8	Car Add a new SD	Device Pool*		View Details	
	Unassigned Associated Items	Common Device Configuration	< None >	View Details	
9	Add a new SD	Phone Button Template*	Standard CIPC SCCP	×	
10	Add a new SURL	Softkey Template	< None >	~	
11	Add a new BLF SD	Common Phone Profile*	Standard Common Phone Profile	\checkmark	
12	The Add a new BLF Directed Call Park	Calling Search Space	< None >	×	
13	Call Park	AAR Calling Search Space	< None >		
14	Call Pickup	User Hold MOH Audio Source	< None >	× ×	~

Cara seting pada Call Center 1060 berlaku sama dengan ketiga Call Center lain yang lainnya (1061, 1062, 1063), dengan keterangan sebagai berikut :

	Call Center 1060	Call Center 1061	Call Center 1062	Call Center
				1063
Description	Call Center 1060	Call Center 1	Call Center 3	Call Center 4
Device	SEPD4BED992CCD6	SEP842B2BB618CF	SEP00237DBDB452	SEP842B2BB
Name				61789
Directory	1060	1061	1062	1063
Number				

Ikatlah limu dengan menuliskannya

- 5. Setelah selesai mengassign Directory Number pada Call Center 1060-1063, langkah selanjutnya adalah membuat Hunt Group untuk Call Center yang kita buat. Langkah-langkahnya sebagai berikut :
 - Pilih menu Call Routing Route/Hunt, lalu pilih Line Group :



Setelah itu tampilan ini terbuka, lalu pilih Add New :

\sim ,	·
Gisco Unified CM Administration For Cisco Unified Communications Solutions	Navigation Cisco Unified CM Administration 🚽 Go pengembangan About Logout
System 🔹 Call Routing 👻 Media Resources 👻 Voice Mail 👻 Device 👻 Application 👻 User Management 👻 Bulk Administration 👻 Help 👻	
Find and List Line Groups	
Add New Elect All 🔛 Clear All 💥 Delete Selected	
r Status	
(i) 3 records found	
Line Groups (1 - 3 of 3)	Rows per Page 50 👻
Find Line Groups where Line Group Name begins with 🔹 🛛 Find Clear Filter 🕀 📟	
Line Group Name *	
HUNTGROUP-CallCenter	
HUNTKIND	
TESTHUNTGROUP	
Add New Select All Clear All Delete Selected	

Ikatlah limu dengan menuliskannya

CISCO For Cisco	Jnified CM Administration Unified Communications Solutions
System 👻 Call Routing 👻	Media Resources - Voice Mail - Device - Application - User Management
ine Group Configurat.	tion
Save	
Line Group Informati	on
Line Group Name*	
RNA Reversion Timeout	* 10
Distribution Algorithm*	Longest Idle Time
Usert Ontings	
Hunt Options	
No Answer Try r	next member; then, try next group in Hunt List 👻
Not Available**	hext member; then, try hext group in Hunt List 👻
INOU AVAILABLE TRY I	hext member; then, try hext group in Hunt List 👻
Line Group Member I	nformation
cine droup Heinber 1	inomation
Find Directory Num	bers to Add to Line Group
Partition	< None >
Directory Number Cor	Find
Directory Number Cor Available DN/Route Pa	ntains Find arthion 1000/ 1001 1002/ 1003 *
Directory Number Cor Available DN/Route Pa	ntains Find Tritlion 1000/ 1001/ 1002/ 1002/ 1003 * Add to Line Group
Directory Number Cor Available DN/Route Pa Current Line Group	tains Find 100/
Directory Number Cor Available DN/Route Pa Current Line Group	tains Find Trition 1000/ 1001/ 1001/ 1002/ 1003 v Members See Order of Selected DM/Route Partitions
Directory Number Cor Available DN/Route Pa Current Line Group	tains Find Trition 1000/ 1001/ 1001/ 1002/ 1003 Add to Line Group Members se Order of Selected DN/Route Partitions Tition

Setelah tampilan diatas terbuka, isi data-datanya sesuai gambar dibawah ini :

CISCO Unified CM Administration For Cisco Unified Communications Solutions	
System Call Routing Media Resources Voice Mail Device Application User Ma	
Line Group Configuration	
Save X Delete 🕂 Add New	
Line Group Name* HUNTGROUP-CallCenter RNA Reversion Timeout* 10 Distribution Algorithm* Longest Idle Time	
Hunt Options No Answer* Try next member; then, try next group in Hunt List v Busy** Try next member; then, try next group in Hunt List v Not Available** Try next member; then, try next group in Hunt List v	
Line Group Member Information	Cari Directory Number yang tadi telah kita buat (1060, 1061, 1062,
Partition < None > ∨ Directory Number Contains Find Find Available DN/Route Partition 1000/ 1001/	1063) untuk dimasukkan kedalam Line Group yg baru saja kita buat.
1002/ 1003 Add to Line Group	lika Telah dimasukkan maka
Current Line Group Members Reverse Order of Selected DN/Route Partitions Selected DN/Route Partition 1060/ 1063/ 1063/ 1063/	Directory Numbernya akan masuk ke Kolom ini.

Hunt Group berfungsi untuk memasukkan Directory Number yang sebelumnya telah dibuat khusus untuk Call Center yaitu 1060, 1061, 1062, 1063 kedalam Hunt Group bernama HUNTGROUP-Description, agar jika ada panggilan dari luar, panggilan dapat diterima oleh semua directory number yang telah dipersiapkan sebelumnya (1060, 1061, 1062, 1063).

- 6. Setelah Hunt Group telah selesai kita buat, langkah selanjutnya yaitu membuat Hunt List. Langkahnya adalah sebagai berikut :
 - Pilih menu Call Routing Route/Hunt, lalu pilih Hunt List :



Setelah dibawah ini terbuka, selanjutnya pilih Add New

Firefox	Find and List Hunt Lists +		. · · · · ·		- 1	×
🗲 🔒 h	tps://10.100.90.3:8443/ccmadmin/huntListFindList.do	$\diamondsuit \lor \texttt{C}$	8 - Google	م		∔ ♠
cisco	Cisco Unified CM Administration For Cisco Unified Communications Solutions		Navigation Cisco	o Unified CM Admini Ingembangan	stration About	- Go Logout
System 👻	Call Routing 👻 Media Resources 👻 Voice Mail 👻 Device 👻 Application 👻 User Management 👻 Bulk Administration 👻 Help 👻					
Find and	ist Hunt Lists					
da N						
Hunt Lis	Add New					
Find Hunt	ist where Name 🔹 begins with 🔹 🛛 Find Clear Filter 🖓 📼					
	No active query. Please enter your search criteria using the options above.					
Add Ne	ч					

Setelah tampilan ini terbuka, segera isi data-datanya seperti berikut ini, lalu save :

Cisco Unified CM Administration For Cisco Unified Communications Solutions
System • Call Routing • Media Resources • Voice Mail • Device • Application • User Management • Bulk Administration • Help •
Hunt List Configuration
Save
_ Status
Status: Ready
- Hunt List Information-
Device is trusted
Name*
Description
Cisco Unified Communications Manager Group* Not Selected
Enable this Hunt List (change effective on Save; no reset required)
For Voice Mail Usage
- Save
(i) *- indicates required item.
(i) **ordered by highest priority
***will be removed from Hunt List when you click Save

Ikatlah limu dengan menuliskannya

Cisco Unified CM Adu Cisco Eor Cisco Unified Communication	ministration s Solutions	Navigation Cisco Unified CM Administration So pengembangan About Logout			
System Call Routing Media Resources	Voice Mail Device Application User Management Bulk Administration Help				
Hunt List Configuration		Related Links: Back To Find/List 🗸 Go			
🕞 Save 🗙 Delete 🗋 Copy 資 Reset	🖌 🖉 Apply Config 🖧 Add New				
- Hunt List Information					
Device is trusted		^			
Name *					
Name	HUNTLIST-CallCenter				
Description	Call Center				
Cisco Unified Communications Manager Group*	Default				
WARNINGI The selected Cisco Unified Commun Communications Manager configured. For the c select a Cisco Unified Communications Manager Communications Manager.	Sizeo Unified Communications Manager Group [*] [Default VARNINGI The selected Cisco Unified Communications Manager Group has only one Cisco Unified Communications Manager confugued. For the control process to have redundancy protection, please select a Cisco Unified Communications Manager. Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager. (Communications Manager Group with more than one Cisco Unified Communications Manager Group with more than one Cisco Unified Communications (Communications Manager Group with more than one Cisco Unified Communications (Communications Manager Group with more than one Cisco Unified Communications (Communications Manager Group with more than one Cisco Unified Communications (Communications Manager Group with more than one Cisco Unified Communications (Communications Manager Group with more than one Cisco Unified Communications (Communications (Communi				
Enable this Hunt List (change effective on S	iave; no reset required)				
For Voice Mail Usage					
-					

Hunt list Call Center nantinya akan terhubung dengan Hunt Group untuk menentukan line mana yang akan diakses jika ada panggilan masuk.

- 7. Langkah Terakhir dalam konfigurasi untuk membuat Call Center adalah membuat Hunt Pilot Call Center. Langkah-langkahnya adalah sebagai berikut :
 - Pilih Call Routing Route/Hunt, lalu pilih Hunt Pilot :



Setelah tampilan dibawah ini terbuka, pilih Add New :

cisco	Cisco Unified CM Administration For Cisco Unified Communications Solutions	Navigation Cisco Unified CM Administration 👻 Go pengembangan About Logout
System 👻	Call Routing 👻 Media Resources 👻 Voice Mail 👻 Device 👻 Application 👻 User Management 👻 Bulk Administration 👻 Help 👻	
Find and I	ist Hunt Pilots	
🕂 Add N	w	
Add N	ew	
Hunt Pil	ots	
Find Hunt I	Plots where Pattern 🔹 begins with 🔹 Find Clear Filter	
	No active query. Please enter your search criteria using the options above.	
Add Net		

Setelah itu isi data-data yang diperlukan, seperti Hunt Pilotnya, ini yg terpenting dan menentukan. Sebaiknya pilih nomer yang mudah diingat dan tidak terlalu berbeda dengan pattern dari Link E1 yg terhubung dengan provider.

Ikatlah limu dengan menuliskannya

cisco For C	co Unified C	M Administra	tion						
System 👻 Call Rou	iting 👻 Media Reso	urces 👻 Voice Mail 👻	Device 👻	Application 👻	User Management 👻	Bulk Administration \bullet	Help 👻		
Hunt Pilot Configuration									
Save 🗙 De	🔚 Save 💥 Delefe 🗋 Copy 🕂 Add New								
Status									
i Status: Read	y								
Pattern Definitio	n								
Hunt Pilot*	1022			1					
Route Partition	PT_			, •					
Description	HUNTPILOT-CallC	enter		1					
Numbering Plan	< None >			~ ~					
Route Filter	< None >		×	~					
MLPP Precedence*	Default			 Image: A set of the set of the					
Hunt List*	HUNTLIST-CallCe	nter		 (Edit) 					
Route Option	Route this pat	tern							
	O Block this patt	ern No Error	~						
Provide Outside	e Dial Tone 🗌 Urge	ent Priority							
Hunt Forward Se	ttings								
		Use Personal Pret	erences			Destination			
Forward Hunt No	Answer	or					1		
Forward Hunt Bu	Forward Hunt Busy Or]		
Maximum Hunt Tir	ner								

Hunt Pilot yang berfungsi untuk mengarahkan panggilan dari luar (GSM, CDMA) ke Directory Number yang telah dikonfigurasi sebagai Hunt Pilot yaitu 1022. 1022 adalah Directory Number yang telah dibuat di CUCM untuk difungsikan sebagai Hunt Pilot Call Center dalam percobaan ini. Nomer 1022 ini telah terhubung ke Link E1 Telkom sehingga dapat dihubungi dari luar (GSM,CDMA).

8. Jika Hunt Pilot telah selesai diseting. Maka telah seselailah seluruh proses konfigurasi Call Center kita. Cobalah melakukan panggilan ke nomer call center anda, tentunya yang sudah terhubung dengan link E1 agar dapat menerima dan melakukan panggilan dari/ke luar. Selamat mencoba.

Demikianlah tutorial singkat membuat Call Center sederhana menggunakan Cisco IP Communicator (CIPC) berbasis CUCM ini, semoga dapat bermanfaat bagi penulis sendiri dan teman-teman semua ©

Biografi Penulis



Alkindi Hafidz.

Menyelesaikan S1 di universitas Muhammadiyah Malang Jurusan Teknik Informatika lulus tahun 2009. Berminat dengan dunia networking terutama Voip.