

Avaya Solution & Interoperability Test Lab

Application Notes for Witness Contact Store and Avaya Proactive Contact using Avaya PG230 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Witness Contact Store 7.7 to successfully interoperate with Avaya Proactive Contact 4.0 using Avaya PG230 switch. Witness Contact Store is a call recording solution capable of capturing audio from Avaya Communication Manager using a variety of integration mechanism. Witness Contact Store uses Avaya Proactive Contact Event Services to extract call event information and the DMCC interface to Avaya Application Enablement Services Server to obtain the audio.

Information in these Application Notes has been obtained through interoperability compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

These Application Notes describe a compliance-tested configuration comprised of Avaya Proactive Contact 4.0.1 using Avaya PG230 switch (HardDialer) and Witness Contact Store Server 7.7.1 using PDS connector 3.0.2 (Witness CSS). Witness CSS uses the Event Service of Avaya HardDialer to extract call event information and the DMCC interface to Avaya Application Enablement Services Server (AES) to obtain the audio from Avaya Communication Manager. Additionally, Witness CSS uses the DMCC interface to Avaya AES to receive inbound call information for Predictive Agent Blending (PAB) campaign. For Outbound, Managed and Intelligent Call Blending (ICB) campaigns, Avaya HardDialer interacts directly with Avaya Communication Manager. The Avaya Proactive Contact using PG230 is a software and hardware solution.

Witness CSS uses the CMAPI extensions on Avaya Communication Manager to service observe the stations/extensions to be recorded. Witness CSS connects to Avaya Communication Manager via the DMCC interface to Avaya AES to get the audio traffic. Figure 1 shows the configuration used for the compliance testing.

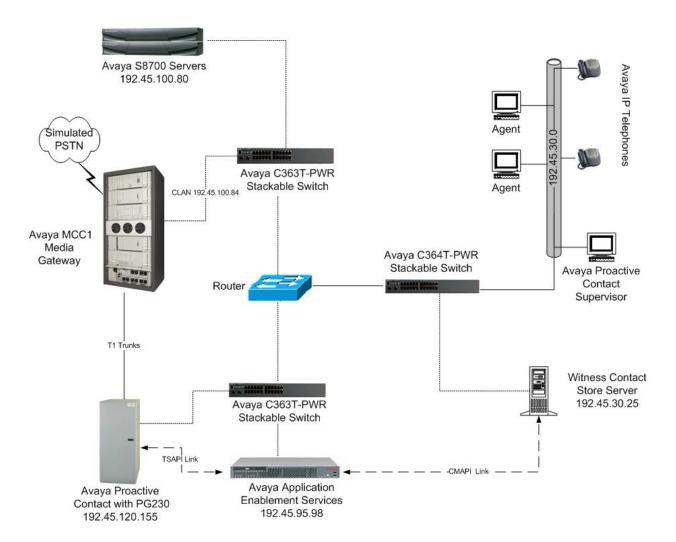


Figure 1: Avaya Proactive Contact, Avaya Communication Manager, Avaya AES and Witness Contact Store Configuration

2. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Equipment	Software
HP Proliant DL385G2	Avaya Proactive Contact 4.0.1
	Build 105
Avaya S8700 Media Server	Avaya Communication Manager
	4.0 (R014x.00.0.730.5)
Avaya MCC1 Media Gateway	
TN464 DS1 Interface	HW02, FW019
TN799DP C-LAN Interface	HW01 FW024
TN2302AP IP Media Processor	HW13 FW116
Avaya 4610 (H323)	2.1.3
Avaya Application Enablement Services Server	3.1.1
Avaya C363T-PWR Converged Stackable Switch	4.5.14
Witness Contact Store	7.7.1
Witness PDS connector	3.0.2

3. Configure Avaya Communication Manager

This section provides the procedures for configuring Avaya Communication Manager. The following will be configured:

- Configure Avaya Communication Manager for Intelligent Call Blending on Avaya HardDialer
- Configure Avaya Communication Manager for Predictive Agent Blending on Avaya HardDialer
- Configure Service Observing feature
- Configure CMAPI stations

Configuration in the following sections is only for the fields where a value needs to be entered or modified. Default values are used for all other fields. These steps are performed from the Avaya Communication Manager System Access Terminal (SAT) interface and all changes are saved. Refer to [1] for additional details.

3.1. Configure Avaya Communication Manager for Intelligent Call Blending

Intelligent Call Blending uses T1 ports configured as DS1FD stations for inbound calls. The AAS option is used to allow the inbound ports to automatically log into the hunt group via the Agent LoginIDs. Implementation of the required DS1FD stations on Avaya Communication Manager can be achieved using the following series of steps.

Step	Description
1.	Enter the add ds1 xxxxx command, where xxxxx is the location of the DS1 circuit pack. Configure the following.
	 Name – Set to any descriptive string value. Bit Rate – Set to 1.544. Line Coding – set to ami-zcs. Framing Mode – set to d4.
	• Signaling Mode – set to robbed-bit. add dsl lal4 Dsl CIRCUIT PACK
	Location: 01A14 Name: PDS 1-21-1 Bit Rate: 1.544 Line Coding: ami-zcs Line Compensation: 1 Framing Mode: d4 Signaling Mode: robbed-bit
	Interface Companding: mulaw Idle Code: 1111111
	Slip Detection? n Near-end CSU Type: other

Step		Description					
2.	Enter add station <i>n</i> command, where <i>n</i>	<i>is a valid extension a</i>	as per the dial	plan configure as			
	follows:		-				
	• Type – Set to DS1FD .	• Type – Set to DS1FD					
	• Port – Enter DS1 port number.	Ports 17 through 20 a	re used for in	bound calls			
	 Name – Set to any descriptive s 	U		oound cuns.			
	• •	U	inhound call	a			
	• Repeat this step to configure ad	attional DS1 ports for	indound calls	S.			
	add station 30501		Page 1 of	3			
		TATION	rage 1 01				
	Extension: 30501	Lock Messages? n	BCC:	0			
	Type: DS1FD	Security Code:	TN:				
	Port: 01A1417	Coverage Path 1:	COR:				
	Name: PDS Sta 30501 s1-21-1-17	Coverage Path 2:					
		Hunt-to Station:	Tests?	У			
	STATION OPTIONS						
	Loss Group: 4						
	Off Premises Station? y						
	R Balance Network? n						

Step		Des	cription		
3.	Enter add hunt-group n com	mand, where <i>i</i>	<i>i</i> is an unused hunt group number	er and configure	
	as follows:				
	• Group Name – Set to	any descriptiv	ve string value.		
	• Group Extension – S	et to a valid ex	tension provisioned in the dial p	olan.	
	• $ACD - Set to y.$				
	• Queue – Set to y.				
	• Vector – Set to y.				
	add hunt-group 621	HUNT	Page GROUP	1 of 3	
		-			
	Group Number: Group Name:		ACD? y Queue? y		
	Group Extension:		Vector? y		
	Group Type:		-		
	TN:	—			
	COR: Security Code:	T	MM Early Answer? n Local Agent Preference? n		
	ISDN/SIP Caller Display:		Local Agent Preretence: I		
	Queue Limit:	unlimited			
	Calls Warning Threshold:	Port:			
	Time Warning Threshold:	Port:			
		OUP form, set	the Skill and AAS fields to y as		
	add hunt-group 621	LITINT	Page GROUP	2 of 3	
	Skill	-	GROUP		
	AAS	-			
	Measured				
	Supervisor Extension Controlling Adjunct				
		110110			

p			ription		
	Enter add agent-loginID n co	ommand, where	<i>n</i> is valid and config	ure as follow	's:
	• Name – Set to any des	criptive string v	alue.		
	• $AAS - Set to y.$	1 0			
	 Port Extension – Set 	o Dort Extonsi	on field velue config	urad in Stan	2
				uieu iii Step	2.
	• Repeat this step for oth	ier agent login i	as to be configured.		
	add agent-loginID 20521	AGENT I	OGINID	Page 1	of 2
	Login ID:	20521		AAS?	У
		Dialer ICB		AUDIX?	
	TN:	-		Reception:	-
	COR:	1	LWC Log Exte AUDIX Name for		n
	Coverage Path: Security Code:		AUDIA Name IOI	Messaging.	
	becarrey couch		LoginID for IS	DN Display?	n
				Extension:	
				uto Answer: oss Skills:	
			ACW Agent Consi		-
			Aux Work Reason		-
			Logout Reason	Code Type:	system
	Maz	imum time ager	nt in ACW before lo	gout (sec):	system
	WARNING: Agent must	log in again b	pefore changes take	effect	
		109 111 aga111 x			
	Navigate to Page 2 on the AG	ENT LOCINI	D form Set the SN (Skill Numbe	r) field to
	621, this is the hunt group nur	nder administer	ed in Step 5. Set the	SL (SKIII Le	ever) field to
	1.				
				2	0 - 5 - 0
	change agent-loginID 20521	AGENT I	OCINID	Page	2 of 2
	Direct Agent Skill:	AGENII	IOGTINTD		
	Call Handling Preference:	skill-level	Local	Call Prefere	ence? n
	SN SL SI	I SL	SN SL	SN	SL
	1: 621 1 16:		31:	46:	
	0. 17.		20.	17.	
	2: 17: 3: 18:		32: 33:	47: 48:	

	Desc	ription
5.	Enter the change vector n command, where n be used to send inbound calls to Avaya Hardl configured in Step 4 .	n is an unused vector number. This vector will Dialer. The vector should queue to the skill
	change vector 621 CALL	Page 1 of 3 VECTOR
	Number: 621 Name: PDS Multimedia? n Basic? y EAS? y G3V4 Enhanced? Prompting? y LAI? y G3V4 Adv Route? Variables? n 3.0 Enhanced? y 01 queue-to skill 621 pri m 02 03	Meet-me Conf? n Lock? n y ANI/II-Digits? y ASAI Routing? y
6.	 This VDN will be used to send inbound calls command, where <i>n</i> is an unused extension an Name – Set to any descriptive string Vector Number – Set to vector configuration 	d configure as follows: value.
		Suroa în Step e.
	add vdn 20600 VECTOR DIRE	Page 1 of 3 CTORY NUMBER
	VECTOR DIRE Extension:	Page 1 of 3 CTORY NUMBER 20600 Dialer ICB
	VECTOR DIRE Extension: Name*:	Page 1 of 3 CTORY NUMBER 20600 Dialer ICB 621 n n 1 1 1 internal

3.2. Configure Avaya Communication Manager for Predictive Agent Blending

Avaya HardDialer via the CTI link monitors the activity on Avaya Communication Manager contact centre devices such as the inbound VDN and hunt groups, and uses this information to determine when to acquire agents for outbound calling and when to release the agents to handle inbound calls.

р	Description		
	Use the display system-parameters custome	r-options command. On Page 3, verify	tha
	the Computer Telephony Adjunct Links opt		
	the computer reception, majanet 2000 opt		
	display system-parameters customer-optio	ns Page 3 of 12	1
		FEATURES	-
	Abbreviated Dialing Enhanced List? n		n
	Access Security Gateway (ASG)? n		
		Backup Cluster Automatic Takeover?	n
	A/D Grp/Sys List Dialing Start at 01? n		
	Answer Supervision by Call Classifier? y	CAS Main?	n
	ARS? y	Change COR by FAC?	n
	ARS/AAR Partitioning? y		
	ARS/AAR Dialing without FAC? y	Cvg Of Calls Redirected Off-net?	n
	ASAI Link Core Capabilities? n	DCS (Basic)?	n
	ASAI Link Plus Capabilities? n	DCS Call Coverage?	n
	Async. Transfer Mode (ATM) PNC? n	9	n
	Async. Transfer Mode (ATM) Trunking? n		
	ATM WAN Spare Processor? n	5	
	ATMS? n	DS1 MSP?	n
	Attendant Vectoring? n	DS1 Echo Cancellation?	n
		DS1 Echo Cancellation?	n
	Attendant Vectoring? n On Page 6 , verify that the ACD and Vectorin	DS1 Echo Cancellation? g (Basic) fields are set to y.	
	Attendant Vectoring? n On Page 6 , verify that the ACD and Vectorin display system-parameters customer-optio	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 2	n 11
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 1 IONAL FEATURES	
	Attendant Vectoring? n On Page 6 , verify that the ACD and Vectorin display system-parameters customer-optio	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 1 IONAL FEATURES	11
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 1 IONAL FEATURES lease: 4.0	11 n
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 1 IONAL FEATURES lease: 4.0 Reason Codes?	11 n n
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 1 IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer? Service Observing (Basic)?	11 n n y
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n BCMS/VuStats Service Level? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of : IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer?	111 n y y
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n BCMS/VuStats Service Level? n BSR Local Treatment for IP & ISDN? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 1 IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer? Service Observing (Basic)? Service Observing (Remote/By FAC)?	111 n y y y y
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n BCMS/VuStats Service Level? n BSR Local Treatment for IP & ISDN? n Business Advocate? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 1 IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer? Service Observing (Basic)? Service Observing (Remote/By FAC)? Service Observing (VDNs)?	111 n y y y y n
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n BCMS/VUStats Service Level? n BSR Local Treatment for IP & ISDN? n Business Advocate? n Call Work Codes? n DTMF Feedback Signals For VRU? n Dynamic Advocate? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer? Service Observing (Basic)? Service Observing (Remote/By FAC)? Service Observing (VDNs)? Timed ACW?	111 n y y y y n y
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n BCMS/VuStats Service Level? n BSR Local Treatment for IP & ISDN? n Business Advocate? n Call Work Codes? n DTMF Feedback Signals For VRU? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 3 IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer? Service Observing (Basic)? Service Observing (VDNs)? Timed ACW? Vectoring (Basic)? Vectoring (G3V4 Enhanced)?	111 n y y y y n y y n
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n BCMS/VUStats Service Level? n BSR Local Treatment for IP & ISDN? n Business Advocate? n Call Work Codes? n DTMF Feedback Signals For VRU? n Dynamic Advocate? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 1 IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer? Service Observing (Basic)? Service Observing (Basic)? Service Observing (VDNs)? Timed ACW? Vectoring (Prompting)?	111 n y y y y n y y n
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n BCMS/VUStats Service Level? n BSR Local Treatment for IP & ISDN? n Business Advocate? n Call Work Codes? n DTMF Feedback Signals For VRU? n Dynamic Advocate? n Expert Agent Selection (EAS)? y EAS-PHD? n Forced ACD Calls? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 3 IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer? Service Observing (Basic)? Service Observing (Remote/By FAC)? Service Observing (VDNs)? Timed ACW? Vectoring (Basic)? Vectoring (Basic)? Vectoring (G3V4 Enhanced)? Vectoring (4.0 Enhanced)? Vectoring (ANI/II-Digits Routing)?	11 n y y y n y y n n n
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n BCMS/VUStats Service Level? n BSR Local Treatment for IP & ISDN? n Business Advocate? n Call Work Codes? n DTMF Feedback Signals For VRU? n Dynamic Advocate? n Expert Agent Selection (EAS)? y EAS-PHD? n Forced ACD Calls? n Least Occupied Agent? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 3 IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer? Service Observing (Basic)? Service Observing (Remote/By FAC)? Service Observing (VDNs)? Timed ACW? Vectoring (Remote/By FAC)? Vectoring (Basic)? Vectoring (Basic)? Vectoring (Basic)? Vectoring (G3V4 Enhanced)? Vectoring (ANI/II-Digits Routing)? Vectoring (G3V4 Advanced Routing)?	11 n y y y n y y n n n n
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	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n BCMS/VUStats Service Level? n BSR Local Treatment for IP & ISDN? n Business Advocate? n Call Work Codes? n DTMF Feedback Signals For VRU? n Dynamic Advocate? n Expert Agent Selection (EAS)? y EAS-PHD? n Forced ACD Calls? n Least Occupied Agent? n Lookahead Interflow (LAI)? n Multiple Call Handling (On Request)? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 3 IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer? Service Observing (Basic)? Service Observing (Remote/By FAC)? Service Observing (VDNs)? Timed ACW? Vectoring (Remote/By FAC)? Service Observing (VDNs)? Timed ACW? Vectoring (Basic)? Vectoring (G3V4 Enhanced)? Vectoring (G3V4 Enhanced)? Vectoring (G3V4 Advanced Routing)? Vectoring (CINFO)? Vectoring (Best Service Routing)?	11 n y y y n n n n n n n n
	Attendant Vectoring? n On Page 6, verify that the ACD and Vectorin display system-parameters customer-optio CALL CENTER OPT Call Center Re ACD? y BCMS (Basic)? n BCMS/VUStats Service Level? n BSR Local Treatment for IP & ISDN? n Business Advocate? n Call Work Codes? n DTMF Feedback Signals For VRU? n Dynamic Advocate? n Expert Agent Selection (EAS)? y EAS-PHD? n Forced ACD Calls? n Least Occupied Agent? n Lookahead Interflow (LAI)? n	DS1 Echo Cancellation? g (Basic) fields are set to y. ns Page 6 of 3 IONAL FEATURES lease: 4.0 Reason Codes? Service Level Maximizer? Service Observing (Basic)? Service Observing (Remote/By FAC)? Service Observing (VDNs)? Timed ACW? Vectoring (Remote/By FAC)? Service Observing (VDNs)? Timed ACW? Vectoring (Basic)? Vectoring (G3V4 Enhanced)? Vectoring (4.0 Enhanced)? Vectoring (G3V4 Advanced Routing)? Vectoring (CINFO)?	11 n y y y n y n n n n n n n

Add a CTI link using the add cti-link n command; where n is an available CTI link nur and configure as follows: • Extension – Set to an available extension as per the dial plan. • Type – Set to ADJ-IP • Name – Set to any descriptive string value. add cti-link 15 Page 1 of 2 CTI Link: 15 CTI LINK Type: ADJ-IP COR: 1 Name: AES DEVCON2715 COR: 1 Enter add hunt-group n command, where n is an unused hunt group number and config as follows: • Group Name – Set to any descriptive string value. • Group Extension – Set to a valid extension provisioned in the dial plan. • ACD – Set to y. • Vector – Set to y. • Weetor – Set to y. add hunt-group 402 Page 1 of 3 HUNT GROUP Page 1 of 3 Group Number: 402 MCD? y Group Number: 50402 Vector? y Group Number: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n ISDN/SIP Caller Display: Local Agent Preference? n		1		1 1			
 Extension – Set to an available extension as per the dial plan. Type – Set to ADJ-IP Name – Set to any descriptive string value. add cti-link 15 Page 1 of 2 CTI LINK TT LINK: 15 Extension: 24998 Type: ADJ-IP COR: 1 Name: AES DEVCON2715 COR: 1 Name: AES DEVCON2715 COR: 1 COR		-	cti-link	n command; wh	here <i>n</i> is an availab	le CTI	link nun
 Type - Set to ADJ-IP Name - Set to any descriptive string value. add cti-link 15 Page 1 of 2 CTI Link: 15 Extension: 24998 Type: ADJ-IP COR: 1 Name: AES DEVCON2715 COR: 1 Name: AES DEVCON2715 Enter add hunt-group <i>n</i> command, where <i>n</i> is an unused hunt group number and configation for the dial plan. Group Name - Set to any descriptive string value. Group Extension - Set to a valid extension provisioned in the dial plan. ACD - Set to y. Queue - Set to y. Vector - Set to y. Vector - Set to y. Group Number: 402 HUNT GROUP Group Number: 402 Group Statesion: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n 	and configure	as follows:					
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Type: ADJ-IP Name: AES DEVCON2715 Enter add hunt-group <i>n</i> command, where <i>n</i> is an unused hunt group number and confi, as follows: Group Name – Set to any descriptive string value. Group Extension – Set to a valid extension provisioned in the dial plan. ACD – Set to y. Queue – Set to y. Vector – Set to y. Vector – Set to y. ACD? y Group Number: 402 HUNT GROUP Group Number: 402 Group Number: 402 Group Number: 50402 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n							
COR: 1 Name: AES DEVCON2715 Enter add hunt-group <i>n</i> command, where <i>n</i> is an unused hunt group number and confi as follows: • Group Name – Set to any descriptive string value. • Group Extension – Set to a valid extension provisioned in the dial plan. • ACD – Set to y. • Queue – Set to y. • Vector – Set to y. • Vector – Set to y. add hunt-group 402 Fage 1 of 3 HUNT GROUP Group Number: 402 Group Number: 402 Group Number: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n							
Enter add hunt-group <i>n</i> command, where <i>n</i> is an unused hunt group number and confi as follows: • Group Name – Set to any descriptive string value. • Group Extension – Set to a valid extension provisioned in the dial plan. • ACD – Set to y. • Queue – Set to y. • Vector – Set to y. • Vector – Set to y. add hunt-group 402 Page 1 of 3 HUNT GROUP Group Number: 402 ACD? y Group Number: 402 Vector? y Group Number: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n	-11					CC	DR: 1
as follows: • Group Name – Set to any descriptive string value. • Group Extension – Set to a valid extension provisioned in the dial plan. • ACD – Set to y. • Queue – Set to y. • Vector – Set to y. add hunt-group 402 Page 1 of 3 HUNT GROUP Group Number: 402 ACD? y Group Number: 402 Vector? y Group Extension: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n	Name: 1	AES DEVCON2715					
as follows: Group Name – Set to any descriptive string value. Group Extension – Set to a valid extension provisioned in the dial plan. ACD – Set to y. Queue – Set to y. Vector – Set to y. add hunt-group 402 Page 1 of 3 HUNT GROUP Group Number: 402 Group Number: 402 Group Number: 50402 Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n							
 Group Name – Set to any descriptive string value. Group Extension – Set to a valid extension provisioned in the dial plan. ACD – Set to y. Queue – Set to y. Vector – Set to y. Vector – Set to y. add hunt-group 402 Page 1 of 3 HUNT GROUP Group Number: 402 ACD? y Group Extension: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n 	Enter add hur	nt-group <i>n</i> com	mand, w	where <i>n</i> is an unu	ised hunt group nu	mber an	d config
 Group Extension – Set to a valid extension provisioned in the dial plan. ACD – Set to y. Queue – Set to y. Vector – Set to y. add hunt-group 402 Page 1 of 3 HUNT GROUP Group Number: 402 ACD? y Group Name: Dialer Inbound Queue? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n 	as follows:						
 Group Extension – Set to a valid extension provisioned in the dial plan. ACD – Set to y. Queue – Set to y. Vector – Set to y. add hunt-group 402 Page 1 of 3 HUNT GROUP Group Number: 402 ACD? y Group Name: Dialer Inbound Queue? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n 	• Grour	Name – Set to	anv des	crintive string v	alue		
 ACD - Set to y. Queue - Set to y. Vector - Set to y. add hunt-group 402 HUNT GROUP Group Number: 402 ACD? y Group Name: Dialer Inbound Queue? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n 	-		•			al mlam	
 Queue – Set to y. Vector – Set to y. add hunt-group 402 HUNT GROUP Group Number: 402 ACD? y Group Name: Dialer Inbound Queue? y Group Extension: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n 	-		et to a v	and extension pr	ovisioned in the di	ai pian.	
 Vector – Set to y. add hunt-group 402 Page 1 of 3 HUNT GROUP Group Number: 402 ACD? y Group Name: Dialer Inbound Queue? y Group Extension: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: 		– Set to y.					
 Vector – Set to y. add hunt-group 402 Page 1 of 3 HUNT GROUP Group Number: 402 ACD? y Group Name: Dialer Inbound Queue? y Group Extension: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n 	• ACD	v					
add hunt-group 402 Page 1 of 3 HUNT GROUP Group Number: 402 ACD? y Group Name: Dialer Inbound Queue? y Group Extension: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code:		•					
HUNT GROUP Group Number: 402 ACD? y Group Name: Dialer Inbound Queue? y Group Extension: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n	• Queue	$\mathbf{e} - \mathbf{Set}$ to \mathbf{y} .					
HUNT GROUP Group Number: 402 ACD? y Group Name: Dialer Inbound Queue? y Group Extension: 50402 Vector? y Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n	• Queue	$\mathbf{e} - \mathbf{Set}$ to \mathbf{y} .					
Group Name: Dialer InboundQueue? yGroup Extension:50402Vector? yGroup Type:ucd-miaTN:1COR:1MM Early Answer?nSecurity Code:Local Agent Preference?	Queue Vector	$\mathbf{r} - \mathbf{Set}$ to \mathbf{y} . $\mathbf{r} - \mathbf{Set}$ to \mathbf{y} .			Page	1 of	3
Group Extension: 50402Vector? yGroup Type: ucd-miaTN: 1COR: 1MM Early Answer? nSecurity Code:Local Agent Preference? n	Queue Vector	$\mathbf{r} - \mathbf{Set}$ to \mathbf{y} . $\mathbf{r} - \mathbf{Set}$ to \mathbf{y} .		HUNT GROUP	Page	1 of	3
Group Type: ucd-mia TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n	Queue Vector	e - Set to y. r - Set to y.			-		3
TN: 1 COR: 1 MM Early Answer? n Security Code: Local Agent Preference? n	Queue Vector	e - Set to y. r - Set to y. Dup 402 Group Number: Group Name:	Dialer		ACD? Queue?	У У	3
COR: 1MM Early Answer? nSecurity Code:Local Agent Preference? n	Queue Vector	e - Set to y. r - Set to y. Dup 402 Group Number: Group Name: Dup Extension:	Dialer 50402	Inbound	ACD? Queue?	У У	3
Security Code: Local Agent Preference? n	Queue Vector	e - Set to y. r - Set to y. Coup 402 Group Number: Group Name: Dup Extension: Group Type:	Dialer 50402 ucd-mia	Inbound	ACD? Queue?	У У	3
ISDN/SIP Caller Display:	Queue Vector	e - Set to y. r - Set to y. Group Number: Group Name: Dup Extension: Group Type: TN:	Dialer 50402 ucd-mia 1	Inbound	ACD? Queue? Vector?	у У У	3
	• Queue • Vector	e - Set to y. r - Set to y. Group Number: Group Name: Dup Extension: Group Type: TN: COR:	Dialer 50402 ucd-mia 1	Inbound	ACD? Queue? Vector? MM Early Answer?	y y y	3
	• Queue • Vector	e - Set to y. r - Set to y. Group Number: Group Number: Group Name: Dup Extension: Group Type: TN: COR: Security Code:	Dialer 50402 ucd-mia 1	Inbound	ACD? Queue? Vector? MM Early Answer?	y y y	3
	• Queue • Vector	e - Set to y. r - Set to y. Group Number: Group Number: Group Name: Dup Extension: Group Type: TN: COR: Security Code:	Dialer 50402 ucd-mia 1	Inbound	ACD? Queue? Vector? MM Early Answer?	y y y	3
	• Queue • Vector	e - Set to y. r - Set to y. Group Number: Group Number: Group Name: Dup Extension: Group Type: TN: COR: Security Code:	Dialer 50402 ucd-mia 1	Inbound	ACD? Queue? Vector? MM Early Answer?	y y y	3
	• Queue • Vector add hunt-gro Gro ISDN/SIP Ca	e - Set to y. r - Set to y. Group Number: Group Number: Group Name: Oup Extension: Group Type: TN: COR: Security Code: aller Display:	Dialer 50402 ucd-mia 1	Inbound A Local A	ACD? Queue? Vector? MM Early Answer? gent Preference?	y y y n n	3
On Page 2 of the HUNT GROUP form, set the Skill field to y as shown below.	Queue Queue Vector add hunt-gro Gro ISDN/SIP Ca On Page 2 of	e - Set to y. r - Set to y. Group 402 Group Number: Group Name: Oup Extension: Group Type: TN: COR: Security Code: aller Display: the HUNT GR(Dialer 50402 ucd-mia 1	Inbound A Local A	ACD? Queue? Vector? MM Early Answer? gent Preference? field to y as shown	y y y n n below.	
add hunt-group 402Page 2 of 3	Queue Queue Vector add hunt-gro Gro ISDN/SIP Ca On Page 2 of	e - Set to y. r - Set to y. Group 402 Group Number: Group Name: Oup Extension: Group Type: TN: COR: Security Code: aller Display: the HUNT GR(Dialer 50402 ucd-mia 1	Inbound a Local A rm, set the Skill	ACD? Queue? Vector? MM Early Answer? gent Preference? field to y as shown	y y y n n below.	
add hunt-group 402Page 2 of 3HUNT GROUP	Queue Queue Vector add hunt-gro Gro ISDN/SIP Ca On Page 2 of	e - Set to y. r - Set to y. Group Number: Group Number: Group Name: Oup Extension: Group Type: TN: COR: Security Code: aller Display: the HUNT GR(Dup 402	Dialer 50402 ucd-mia 1 1	Inbound a Local A rm, set the Skill	ACD? Queue? Vector? MM Early Answer? gent Preference? field to y as shown	y y y n n below.	
add hunt-group 402 Page 2 of 3 HUNT GROUP Skill? y	Queue Queue Vector add hunt-gro Gro ISDN/SIP Ca On Page 2 of	e - Set to y. r - Set to y. Group Number: Group Number: Group Name: Oup Extension: Group Type: TN: COR: Security Code: aller Display: the HUNT GR(Dup 402 Skill?	Dialer 50402 ucd-mia 1 1 DUP for	Inbound a Local A rm, set the Skill	ACD? Queue? Vector? MM Early Answer? gent Preference? field to y as shown	y y y n n below.	
add hunt-group 402 Page 2 of 3 HUNT GROUP Skill? y AAS? n	Queue Queue Vector add hunt-gro Gro ISDN/SIP Ca On Page 2 of	e - Set to y. r - Set to y. Group Number: Group Number: Group Name: Oup Extension: COR: Security Code: aller Display: the HUNT GRO Dup 402 Skill? AAS?	Dialer 50402 ucd-mia 1 1 DUP for	Inbound a Local A rm, set the Skill	ACD? Queue? Vector? MM Early Answer? gent Preference? field to y as shown	y y y n n below.	
add hunt-group 402 Page 2 of 3 HUNT GROUP Skill? y	• Queue • Vector	e - Set to y. r - Set to y. coup 402 Group Number: Group Name: Oup Extension: Group Type: TN: COR: Security Code: aller Display: the HUNT GRO Dup 402 Skill? AAS? Measured:	Dialer 50402 ucd-mia 1 1 DUP for ? y ? n : none	Inbound a Local A rm, set the Skill	ACD? Queue? Vector? MM Early Answer? gent Preference? field to y as shown	y y y n n below.	

5.	Enter change vector <i>n</i> command, where <i>n</i> is associated to hunt group 402	. Enter the	
	commands to queue_to skill 402 as shown below.		
		ge 1 of	3
	CALL VECTOR Number: 402 Name: Dialer Inbound		
	Attendant Vectoring? n Meet-me Conf? n	Lock?	n
	Basic? y EAS? y G3V4 Enhanced? n ANI/II-Digits? n AS Prompting? y LAI? n G3V4 Adv Route? n CINFO? n BSR? n H		У
	Variables? n 4.0 Enhanced? n 01 queue-to skill 402 pri h		
	02 wait-time 60 secs hearing ringback		
	03		
	04		
6.	Enter add vdn <i>n</i> command, where <i>n</i> is an unused VDN and configure as f	allower	
0.	-	onows.	
	• Name – Set to any descriptive string value.		
	• Vector Number – Set to the vector configured in above step.		
	add vdn 54402 Page	1 of 2	1
	VECTOR DIRECTORY NUMBER		
	Extension: 54402		
	Name: Dialer Inbound		
	Vector Number: 402 Attendant Vectoring? N		
	Meet-me Conferencing? N		
	Allow VDN Override? N		
	COR: 1		
	TN: 1 Measured: none		
	1 st Skill:		
	2 nd Skill:		
	3 rd Skill:		

• Repeat this step to con	ntigure additiona	l agent login IDs.
add agent-loginID 25020		Page 1 of
add agene rogrnip 25020	AGENT L	5
Login ID:	-	AAS? n
0	Agent1	AUDIX? n
TN:	-	LWC Reception: sp
COR:	1	LWC Log External Calls? n
Coverage Path: Security Code:		AUDIX Name for Messaging:
		LoginID for ISDN Display? n
		Password:
		Password (enter again):
		Auto Answer: al
		MIA Across Skills: sy
		ACW Agent Considered Idle: sy
		Aux Work Reason Code Type: sy
Ma	wimum timo occor	Logout Reason Code Type: sy t in ACW before logout (sec): sy
On Page 2 of the AGENT LO	UGINID form, s	Poony the nation and an une bit (b)
Number) field and level in the below.		I) field assigned to this agent login a
Number) field and level in the	e SL (Skill Level	I) field assigned to this agent login a
Number) field and level in the below.		I) field assigned to this agent login a
Number) field and level in the below.	e SL (Skill Leve)	I) field assigned to this agent login a
Number) field and level in the below. Change agent-loginID 25020 Direct Agent Skill: Call Handling Preference: sk: SN SL SN	AGENT LOGINI	I) field assigned to this agent login a Page 2 of 2
Number) field and level in the below. Change agent-loginID 25020 Direct Agent Skill: Call Handling Preference: sk: SN SL SN 1: 402 2 16:	AGENT LOGINI AGENT LOGINI ill-level SL S 31:	I) field assigned to this agent login a Page 2 of 2 D Local Call Preference? n SL SN SL 46:
Number) field and level in the below. Change agent-loginID 25020 Direct Agent Skill: Call Handling Preference: sk: SN SL SN	AGENT LOGINI	I) field assigned to this agent login a Page 2 of 2 D Local Call Preference? n SL SN SL

8.	 used by the HardDialer. On Pa aux-work – agent is lo auto-in – agent goes to after-call –when the ag release – to drop the ca 	ere n is already configured agent phone/headset extension ge 3, configure the following button assignments: ogged on to the phone for outbound calls. o auto-in to accept inbound calls. gent is in wrap up state after the call has ended. all. figure additional agent phone/headset extensions.
	change station 22720 SITE DATA	Page 3 of 4 STATION
	Room: Jack: Cable: Floor: Building: ABBREVIATED DIALING	Headset? n Speaker? n Mounting: d Cord Length: 0 Set Color:
	List1: BUTTON ASSIGNMENTS 1: call-appr 2: call-appr 3: call-appr 4: call-fwd Ext:	List2: List3: 5: aux-work RC: Grp: 6: auto-in Grp: 7: after-call Grp: 8: release

3.3. Configure Service Observing

Witness CSS uses Avaya Communication Manager Service Observing feature to record calls on agent telephones. Implementation of the required Service Observing feature on Avaya Communication Manager can be achieved using the following steps.

Step	Description					
1.	Enter change system-parameters customer-options and configure as follows:					
	• Service Observing (Basic) – Set to y.					
	• Service Observing (Remote/By FAC) – Set to y.					
	Note: A license is required to activate these features					
	change system-parameters customer-options Page 6 of 11					
	CALL CENTER OPTIONAL FEATURES					
	Call Center Release: 12.0					
	ACD? y PASTE (Display PBX Data on Phone)? y BCMS (Basic)? y Reason Codes? y					
	BCMS/VuStats Service Level? y Service Level Maximizer? n					
	BSR Local Treatment for IP & ISDN? n Service Observing (Basic)? y					
	Business Advocate? n Service Observing (Remote/By FAC)? y					
	Call Work Codes? y Service Observing (VDNs)? y					
	DTMF Feedback Signals For VRU? n Timed ACW? y					
	Dynamic Advocate? n Vectoring (Basic)? y Expert Agent Selection (EAS)? y Vectoring (Prompting)? y					
	EAS-PHD? y Vectoring (G3V4 Enhanced)? y					
	Forced ACD Calls? n Vectoring (ANI/II-Digits Routing)? y					
	Least Occupied Agent? n Vectoring (G3V4 Advanced Routing)? y					
	Lookahead Interflow (LAI)? y Vectoring (CINFO)? y					
	Multiple Call Handling (On Request)? y Vectoring (Best Service Routing)? n					
	Multiple Call Handling (Forced)? y Vectoring (Holidays)? n					
	Vectoring (Variables)? n					
	(NOTE: You must logoff & login to effect the permission changes.)					
2.	Enter change feature-access-codes and set Service Observing Listen Only Access Code to					
	*05.					
	change feature-access-codes Page 5 of 8 FEATURE ACCESS CODE (FAC)					
	Automatic Call Distribution Features					
	After Call Work Access Code: *13					
	Assist Access Code:					
	Auto-In Access Code: *15					
	Aux Work Access Code: *16					
	Login Access Code: *17					
	Logout Access Code: *20 Manual-in Access Code: *12					
	Service Observing Listen Only Access Code: *12					
	Service Observing Listen/Talk Access Code: *06					
	Add Agent Skill Access Code:					
	Remove Agent Skill Access Code:					
	Remote Logout of Agent Access Code:					

3.4. Configure CMAPI stations for Witness Contact Store

CMAPI stations on Avaya Communication Manager are required to record telephone calls by Witness CSS. CMAPI stations are configured as follows:

Step	Description						
1.	Enter change cor 5 and configure as follows:						
	• COR Description – Enter any descriptive string value.						
	Can Be a Service Observe	er - Set to v.					
	change cor 5	Page	e 1 of 4				
	CLASS	OF RESTRICTION					
	COR Number: 5						
	COR Description: Witness	Server					
	FRL: 7	APLT? y					
	Can Be Service Observed? n	Calling Party Restriction: no					
	Can Be A Service Observer? y Time of Day Chart: 1	Called Party Restriction: no Forced Entry of Account Codes? n	one				
	Priority Queuing? n	Direct Agent Calling? n					
	Restriction Override: all	Facility Access Trunk Test? n					
	Restricted Call List? y	Can Change Coverage? n					
	Access to MCT? y	Fully Restricted Service? n					
	Group II Category For MFC: 7	Hear VDN of Origin Annc.? n					
	Send ANI for MFE? n	Add/Remove Agent Skills? n					
	MF ANI Prefix: Automatic Charge Display? n Hear System Music on Hold? y PASTE (Display PBX Data on Phone)? n						
		ed Up By Directed Call Pickup? n					
	Can Use Directed Call Pickup? n						
	Group Controlled Restri						
2.	Enter add station < s >, where s is a	an unused extension and configur	e as follows:				
	• Type – Set to 4610 .						
	• Name – Set to any descript	tive string value.					
	• COR – Set to the class of restriction configured in Step 1 .						
		8 r					
		STATION					
	Extension: 23301	Lock Messages? n	BCC: 0				
	Type: 4610	Security Code: ****	TN: 1				
	Port: IP	Coverage Path 1:	COR: 5				
	Name: CMAPI Recording line 1	Coverage Path 2: Hunt-to Station:	COS: 1				
	STATION OPTIONS	Hunt-to Station.					
		Time of Day Lock Table:					
	Loss Group: 19						
	Speakerphone: 2-way	Message Lamp Ext: 2 Mute Button Enabled? y					
	Display Language: english						
	Survivable GK Node Name:						
	Survivable COR: internal	Media Complex Ext: IP SoftPhone? y	7				
	Survivable Trunk Dest? y	The Porchuoues &	(
		IP Video Softphone? r	1				

tep	Description							
•	Go to Page 4 of the STATION form and add serv-obsrv in the BUTTON ASSIGNMENTS .							
	add station 23301		Page	4 of 6				
		STATION						
	SITE DATA							
	Room:		Headset? n					
	Jack:		Speaker? n					
	Cable:		Mounting: d					
	Floor:		Cord Length: 0					
	Building:		Set Color:					
	ABBREVIATED DIALING							
	List1:	List2:	List3:					
	BUTTON ASSIGNMENTS							
	1: call-appr	7:						
	2: call-appr	8:						
	3: call-appr	9:						
	4: conf-dsp	10:						
	5: serv-obsrv	11:						
	6: no-hld-cnf	12:						

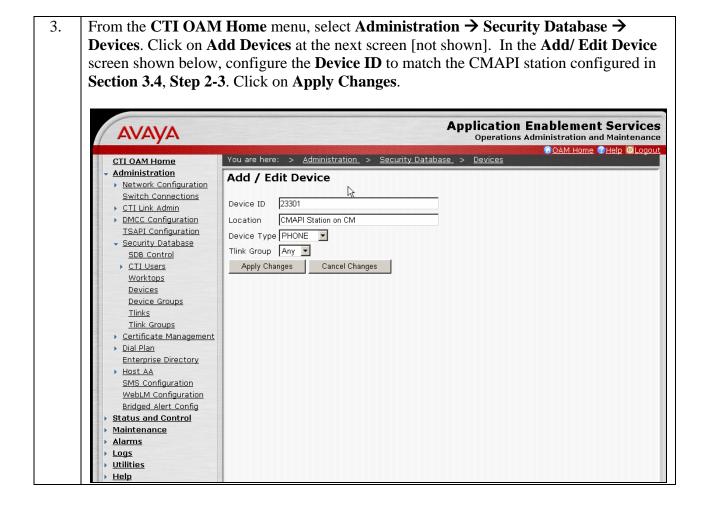
4. Configure Avaya Proactive Contact

These Application Notes assume that the interfaces between the Avaya Proactive Contact, Avaya S8700 Media Server and Avaya AES have been configured and are operational, and that a calling list has been successfully downloaded to Avaya HardDialer. Avaya HardDialer uses a TSAPI link to Avaya AES to monitor the inbound calls coming into Avaya Communication Manager. Since Witness CSS 7.7.1 does not support security features of Avaya Proactive Contact 4.0.1, security was turned off on the Avaya Proactive Contact Server and Supervisor. Refer to [6] for additional details to turn off the security.

5. Configure Avaya Application Enablement Services Server

This section provides the procedures for configuring Avaya Application Enablement Services. Basic configuration related to the switch connection between Avaya Communication Manager and Avaya Application Enablement Services is assumed. Configuration in the following sections is only for the fields where a value needs to be entered or modified. Default values are used for all other fields.

Step	Description	
1.	Launch a web browser,	enter https:// <ip address="" aes="" of="" server="">:8443/MVAP in the</ip>
	URL, and log in with th	he appropriate credentials for accessing the AES CTI OAM pages.
2.	From the OAM Home is licensed as shown be	menu, select CTI OAM Home and verify that the CMAPI service low under the heading License Information.
	CTI OAN Home Administration Status and Control Maintenance Logs Utilities	You are here: > CTLOAM Home Welcome to CTLOAM Screens [craft] logged in on Mon Apr 3 12:44:28 E.S.T. 2006
	Help > Logout	ServiceController StatusASAI Link ManagerRunningCMAPI ServiceRunningCVLAN ServiceRunningDLG ServiceRunningTransport Layer ServiceRunningTSAPI ServiceRunningFor status on actual services, please use Status and Control.
		IMPORTANT: AE Services must be restarted for administrative changes to fully take effect. Changes to the Security Database do not require a restart. License Information You are licensed to run Application Enablement (CTI) version 3.0. You are licensed for the following services • DLG • CVLAN • TSAPI
		S Coci intranet



4. From the User Man	agement Home Menu, navigate t	o User Management->Add User
and configure as fol	lows:	
• User Id	– Set to any descriptive value.	
Commo	n Name – Set to any descriptive v	alue.
	\mathbf{e} – Set to any descriptive value.	
	ssword – Set to a valid password.	
	_	in Haan Dagsmand field
	Password – Set to the same value	e in User Password field.
Click Ap	oply.	
AVAVA		Application Enablement Services
		GOAM Home CHelp OLogout
User Management Home	You are here: > <u>User Management</u> > <u>Add User</u>	
 <u>User Management</u> <u>List All Users</u> 	Add User	
Add User	Fields marked with * can not be empty.	
Search Users Modify Default User	* User Id cmapi	
Change User Password	* Common Name cmapi	
Service Management Help	* Surname cmapi	
	* User Password	
	* Confirm Password	
	Admin Note	
	Avaya Role None	
	Business Category	
	Car License	
	CM Home	
	Css Home	

6. Configure Witness Contact Store Server

The following steps describe the configuration to integrate Witness CSS with Avaya Proactive Contact Avaya HardDialer.

6.1. Witness Contact Store Server System Administration

The steps in this section describe the system configuration of Witness CSS.

Step	Description					
1.	Launch a web browser, enter http:// <ip address="" contact="" of="" server="" store="">:8080/ in the URL.</ip>					
2.	Login into Witness CSS using proper credentials.					
	WITNESS ContactStore for Communication Manager					
	Copyright © 1993-2006 Witness Systems, Inc. and its licensors. All rights reserved workdwide. The Witness Systems, Inc. products are protected by one or more of the following U.S., European or international patents: 5,790,798; 6,278,978; 6,370,574; 6,404,857; 6,510,220; 6,757,361; 6,782,093; European patent 0 833 489. Other U.S. and international patents pending. Witness, the Witness logo, Impact 360, and the Impact 360 logo are the trademarks (registered or otherwise) of Witness Systems, Inc., and Avaya, the Avaya logo and Communication Manager are the trademarks (registered or otherwise) of Avaya Inc. For additional ownership, use and other restriction information, please click the About link.					
	Login Information Username admin Password OK					

Step	Description
3.	Following screen is displayed after logging on to the system.
	ContactStore
	powered by AVAYA
	Replay System Administration
	Search and Benlay
	Use the links at the left to access the various areas of the system administration suite.
	Administration
	System Settings
	License Server
	Communication Manager
	Security
	Users
	Port Allocations On Demand
	Meeting
	Station Bulk
	Station Executive
	Conferenced
	Quality Unify/External
	Phone Replay
	Live Monitor
	Status
	Alarms and Events
4.	Select Server tab on the System Administration screen at Step 3 to configure the
	URL(s) of Unify/External Control port(s) to connect to field. The port number
	should match the value of CSCMRecorder.Port in Section 6.2 . The recommended
	value is 1919 .
	🖉 ContactStore for Communication Manager - Windows Intern 💶 🗖 💌
	URL(s) of
	Unify/External localhost:1415
	control port(s)
	to connect to
	Enter the node and port number(s) of the Unify or external server(s)
	that this recorder provides recording services to. Separate entries with a semi-colon. For example,
	unify.bigco.com:1414;myapp.bigco.com:1414
	X Close Window, Enter
	Close window, Enter

Step	Description						
5.	Select Commu	inication Manager tab on the System Administrat	ion screen at Step				
		s screen and verify the following:	ľ				
	1 •	t Avaya Communication Manager Name - Set to	CI AN IP				
		s of the Avaya Communication Manager.					
		•					
		unication Manager Version – Set to the right vers	sion of the Avaya				
	 Communication Manger. AE Server Address (es) – Set to the IP address of the Avaya AES server. 						
			•				
	• CMAP 5, Step	I Username – Set to the User Id field value config 4.	gured in Section				
	-	I Password – Set to the User Password field valu	e configured in				
		1 5, Step 4.	• • • • • • • • • • • • • • • • • • •				
		ion Security Code – Set to the Security Code fiel	d value in Section				
	3.4, Ste	-					
		ort range specified in the screen should match the					
		in Section 3.4, Step 2-3. In this example, Port ran	ge specified is				
	from 23	3301 to 23304 .					
	ContactStore powered by Replay	AVAYA Communication Manager Settings					
	Search and Replay	These settings determine how the recorder contacts and interacts with your Avaya Communication Manage	r				
	Administration	Item	Setting				
	System Settings	Default Avaya Communication Manager Name	192.45.100.84				
	License	Communication Manager Version AE Server Address(es)	3.x 192.45.95.98				
	Server	CMAPI Username	cmapi				
	Communication Manager		ante ante ante				
	Security	Encrypt Media Streams	No				
	Users Doub allo antione	IP Station Security Code	ato ato ato ato ato				
	Port Allocations	Avaya CT Server(s)					
1			Not defined				
	On Demand Meeting	Avaya CT Service Identifier(s)	Not defined				
	Meeting	Avaya CT Service Login ID	Not defined Not defined				
	<u>Meeting</u> <u>Station Bulk</u>	Avaya CT Service Login ID Avaya CT Service password	Not defined Not defined Not defined				
	Meeting	Avaya CT Service Login ID Avaya CT Service password Extensions assigned to recorder	Not defined Not defined Not defined 4				
	Meeting Station Bulk Station Executive Conferenced Quality	Avaya CT Service Login ID Avaya CT Service password Extensions assigned to recorder Unassigned Capacity	Not defined Not defined Not defined 4 158				
	Meeting Station Bulk Station Executive Conferenced Quality Unify/External	Avaya CT Service Login ID Avaya CT Service password Extensions assigned to recorder	Not defined Not defined Not defined 4 158				
	Meeting Station Bulk Station Executive Conferenced Quality Unify/External Phone Replay	Avaya CT Service Login ID Avaya CT Service password Extensions assigned to recorder Unassigned Capacity The table below lists the range(s) of station numbers that the recorder will register its ports as. These must	Not defined Not defined Not defined 4 158 : match the station numbers you have c				
	Meeting Station Bulk Station Executive Conferenced Quality Unify/External	Avaya CT Service Login ID Avaya CT Service password Extensions assigned to recorder Unassigned Capacity The table below lists the range(s) of station numbers that the recorder will register its ports as. These must Avaya Communication Manager;	Not defined Not defined Not defined 4 158 : match the station numbers you have c				
	Meeting Station Bulk Station Executive Conferenced Quality Unify/External Phone.Replay Live Monitor Status Alarms and Events	Avaya CT Service Login ID Avaya CT Service password Extensions assigned to recorder Unassigned Capacity The table below lists the range(s) of station numbers that the recorder will register its ports as. These must Avaya Communication Manager. Select Port(s)	Not defined Not defined Not defined 4 158 : match the station numbers you have c				
	Meeting Station Bulk Station Executive Conferenced Quality Unify/External Phone Replay Live Monitor Status Alarms and Events System Overview Port States	Avaya CT Service Login ID Avaya CT Service password Extensions assigned to recorder Unassigned Capacity The table below lists the range(s) of station numbers that the recorder will register its ports as. These must Avaya Communication Manager. Select Port(s) 23301-23304 4	Not defined Not defined Not defined 4 158 : match the station numbers you have c				
	Meeting Station Bulk Station Executive Conferenced Quality Unify/External Phone Replay Live Monitor Status Alarms and Events System Overview	Avaya CT Service Login ID Avaya CT Service password Extensions assigned to recorder Unassigned Capacity The table below lists the range(s) of station numbers that the recorder will register its ports as. These must Avaya Communication Manager. Select Port(s) 23301-23304 4	Not defined Not defined Not defined 4 158 : match the station numbers you have c				

р	Description		
	Select Station I	Bulk tab on the System Administration scree	n at Step 3 to display
		verify the following:	1 1 3
		•	
	Audio f	format – Set to G.729A .	
	Record	calls that do NOT have a VDN number? - S	Set to Yes .
	• Filter ca	alls by VND and/or Skill Hunt Group? – Set	t to ALL Calls with
	VDN.		
	• Station/	Station range encoified in the serven should me	atah tha Agant
		Station range specified in the screen should ma	-
	headset	extensions to be recorded by Witness CSS. In	this example, Station
		becified is from 22720 to 22721 .	I ,
		Decisied is from 22720 to 22721 .	
	range sp		
	ContactStore		
	ContactStore powered by		
	ContactStore	AVAYA Station Bulk Recording	
	ContactStore powered by J Replay Search and Replay	Αναγα	Setting
	ContactStore powered by J Replay Search and Replay Administration	AVAVA Station Bulk Recording The settings below summarize how ports using this mode are configured.	Setting No
	ContactStore powered by J Replay Search and Replay Administration System Settings	AVAYA Station Bulk Recording The settings below summerize how ports using this mode are configured. Recording Mode Setup	
	ContactStore powered by Replay Search and Replay Administration System Settings License	AVAVA Station Bulk Recording The settings below summarize how ports using this mode are configured. Recording Mode Setup Apply Beep Tone within recorder	No
	ContactStore powered by Replay Search and Replay Administration System Settings License Server	AVAVA Station Bulk Recording The settings below summarize how ports using this mode are configured. Recording Mode Setup Apply Beep Tone within recorder Audio format	No G.729A (8kbps) Not defined Yes
	ContactStore powered by Replay Search and Replay Administration System Settings License Server Communication Manager	AVAVA Station Bulk Recording The settings below summarize how ports using this mode are configured. Recording Mode Setup Apply Beep Tone within recorder Audio format Delete Recording by entering Record calls that do NOT have a VDN number? Filter calls by VDN and/or Skill Hunt Group?	No G.729A (8kbps) Not defined Yes ALL Calls with a VDN
	ContactStore powered by Replay Search and Replay Administration System Settings License Server Communication Manager Security	AVAVA Station Bulk Recording The settings below summarize how ports using this mode are configured. Recording Mode Setup Apply Beep Tone within recorder Audio format Delete Recording by entering Record calls that do NOT have a VDN number? Filter calls by VDN and/or Skill Hunt Group? Ports Configured	No G.729A (8kbps) Not defined Yes ALL Calls with a VDN 2
	ContactStore powered by Replay Search and Replay Administration System Settings License Server Communication Manager Security Users	AVAVA Station Bulk Recording The settings below summarize how ports using this mode are configured. Recording Mode Setup Apply Beep Tone within recorder Audio format Delete Recording by entering Record calls that do NOT have a VDN number? Filter calls by VDN and/or Skill Hunt Group?	No G.729A (8kbps) Not defined Yes ALL Calls with a VDN
	ContactStore powered by Replay Search and Replay Administration System Settings License Server Communication Manager Security	AVAVA Station Bulk Recording The settings below summarize how ports using this mode are configured. Recording Mode Setup Apply Beep Tone within recorder Audio format Delete Recording by entering Record calls that do NOT have a VDN number? Filter calls by VDN and/or Skill Hunt Group? Ports Configured Unassigned Capacity	No G.729A (8kbps) Not defined Yes ALL Calls with a VDN 2 98
	ContactStore powered by J Replay Search and Replay Administration System Settings License Server Communication Manager Security Users Port Allocations	AVAVA Station Bulk Recording The settings below summarize how ports using this mode are configured. Recording Mode Setup Apply Beep Tone within recorder Audio format Delete Recording by entering Record calls that do NOT have a VDN number? Filter calls by VDN and/or Skill Hunt Group? Ports Configured Unassigned Capacity The stations listed below will have their calls recorded automatically in accordance with the VDN/Ski only station numbers.	No G.729A (8kbps) Not defined Yes ALL Calls with a VDN 2 98
	ContactStore powered by J Replay Search and Replay Administration System Settings License Server Communication Manager Security Users Port Allocations On Demand	AVAYA Station Bulk Recording The settings below summarize how ports using this mode are configured. Recording Mode Setup Apply Beep Tone within recorder Audio format Delete Recording by entering Record calls that do NOT have a VDN number? Filter calls by VDN and/or Skill Hunt Group? Ports Configured Unassigned Capacity The stations listed below will have their calls recorded automatically in accordance with the VDI//Ske only station numbers. Select Station(5)	No G.729A (8kbps) Not defined Yes ALL Calls with a VDN 2 98
	ContactStore powered by Replay Search and Replay Administration System Settings License Server Communication Manager Security Users Port Allocations On Demand Meeting	AVAVA Station Bulk Recording The settings below summarize how ports using this mode are configured. Recording Mode Setup Apply Beep Tone within recorder Audio format Delete Recording by entering Record calls that do NOT have a VDN number? Filter calls by VDN and/or Skill Hunt Group? Ports Configured Unassigned Capacity The stations listed below will have their calls recorded automatically in accordance with the VDN/Ski only station numbers.	No G.729A (Bkbps) Not defined Yes ALL Calls with a VDN 2 98 till rules set above. Do NOT ENTER VDN, SKI

6.2. Witness Contact Store PDS Connection Configuration

For Witness CSS to work with the Avaya HardDialer, the PDS Connector needs to be configured as follows:

- Login into the Witness Contact Store Server as witness.
- Edit the /opt/witness/properties/pdscon.properties file to modify the following:
 - **PDS.UserName** User name created on the Avaya HardDialer Server.
 - **PDS.Password** Password corresponding to the **Username**.
 - **PDS.DialerHost** Name of the Avaya HardDialer Server. This name should be defined in /etc/hosts file.
 - CSCMRecorder.Port Set to the port no. of the URL in Section 6.1, Step 4.
 - Save the changes.
- Start/restart the PDS connector service by issuing the command service pdscon start.

7. Interoperability Compliance Testing

This interoperability compliance test covers feature functionality, serviceability and basic load testing. Feature functionality focused on verifying that Witness CSS could successfully record calls when using events from Avaya HardDialer Event Service. Serviceability testing verified that the Witness CSS server recovered from adverse conditions, such as rebooting, power failure and network disconnect. Basic load testing verified that Witness CSS could successfully record calls for an extended period of time.

7.1. General Test Approach

Serviceability and basic functionality test cases were performed manually. During the manual tests, outbound calls were placed by Avaya HardDialer and routed to an available agent. The agent accepted the call and the conversation between the customer and the agent was recorded. The recordings were viewed using Witness CSS web interface. During the basic load testing, Avaya HardDialer executed a calling list which delivered calls to the agents for sustained periods.

7.2. Test Results

Witness CSS successfully recorded, stored and played back the calls between the agents and the customers. Witness CSS was successfully able to record and correlate calls put on hold. For transfers and conferences, only first part of the call prior to completion of transfer is properly tagged. For serviceability testing, Witness CSS was able to resume recording calls after restoration of connectivity to the Avaya HardDialer, after network disconnect/re-connect, and after reset of Witness CSS. For stability testing, Witness CSS successfully recorded calls for a sustained period of time.

Following observations were made during testing:

- Witness CSS is not able to connect back to the Avaya HardDialer after the PDS connector on Witness CSS is stopped and restarted.
- Agent needs to logoff and log back on after the Avaya HardDialer restarts.

8. Verification

8.1. Port States

On the Witness CSS Administration interface, click on **Port States** to make sure that the ports configured in **Section 6.1**, **Step 5** are recording the Agent extensions to be supervised as configured in **Section 6.1**, **Step 6**.

Replay	Port S	tates					
Search and Replay		-1				refresh link above or belo	
Administration	i ne table b	elow shows the su	ate or all ports at the	ume the page wa	as requested. Click the	rerresh link above of bei	w the table to update
System Settings		Mode▼▲		Media▼▲			
License	Port▼▲ 23301	Station Bulk	Controller▼▲		Recording Enab	edV StateV Connecte	
Server	23301	Station Bulk		No	Yes	Connecte	
Communication Manager	23302	Station Bulk		No	Yes	Setup	22614
Security	Reset All,	Station Baik		110	105	Setup	22011
Users	,						
Port Allocations							
<u>On Demand</u>						2	
Meeting						•	
Station Bulk							
Station Executive							
Conferenced							
Quality							
Unify/External							
Phone Replay							
Live Monitor							
Status							
Alarms and Events							
System Overview							

8.2. PDS Connector Link

Login into the Witness Contact Store Server as **witness** and verify in the /opt/witness/logs/pdscon.log file that there is an entry **PDS Connector – checkTimeout : connected to PDS true** indicating that the connectivity to the Avaya HardDialer has been established.

8.3. Witness CSS Recording Playback

Step	Description				
1.		e search crite		nterface [not shown], click on Se select the recording to be heard b	
	ContactStore powered by AVA	АУА	-	5; 31:00	
	Administration	Results 1 <u>2 Next Show All</u> Call Start	Len Agent	Parties▼▲	and a state
	Search Filters	C 09/22/08 02:20:20 PM	VA VA	22721 (Customer)	Service▼▲ N/A
	09/22/08 12:00:00 AM	C 09/22/08 03:28:4:	¹ 00:07 N/A	12025234567 (IP TRUNK TO DEVCON3), 26614 (Shailja's station 26614)	54400 (PC4-lzpds4 Adju Link)
	09/22/08 11:59:59 PM	C 09/22/08 03:29:09 PM		12025234567 (IP TRUNK TO DEVCON3), 26614 (Shailja's station 26614)	54400 (PC4-Izpds4 Adju Link)
		O 09/22/08 03:29:23 PM	¹ 00:03 N/A	22721 (Customer)	N/A
	Agent	C 09/22/08 03:29:40 PM	⁵ 00:15 N/A	12025234567 (IP TRUNK TO DEVCON3), 26614 (Shailja's station 26614)	54400 (PC4-lzpds4 Adju Link)
	Length	O 09/22/08 03:29:49 PM	9 00:07 N/A	12025234567 (IP TRUNK TO DEVCON3), 22721 (Customer)	54400 (PC4-lzpds4 Adju Link)
		C 09/22/08 03:30:14	⁴ 00:08 N/A	12025234567 (IP TRUNK TO DEVCON3), 22721 (Customer)	54400 (PC4-lzpds4 Adju Link)
	Service	O 09/22/08 03:30:22 PM	² 00:15 N/A	12025234567 (IP TRUNK TO DEVCON3), 26614 (Shailja's station 26614)	54400 (PC4-lzpds4 Adju Link)
	Universal Call ID	C 09/22/08 03:30:39 PM	⁹ 00:59 N/A	12025234567 (IP TRUNK TO DEVCON3), 22721 (Customer)	54400 (PC4-lzpds4 Adju Link)
		• 09/22/08 03:30:58	^B 00:15 N/A	12025234567 (IP TRUNK TO DEVCON3), 26614 (Shailja's station 26614)	54400 (PC4-lzpds4 Adju Link)

9. Support

For technical support on any Witness product, contact Witness Systems Customer Support at 1-800-4-WITNESS (1-800-494-8637). Technical support email may be sent to support@witness.com.

10. Conclusion

These Application Notes describe the configuration steps required for Witness Systems Contact Store 7.7.1 to successfully interoperate with the Avaya HardDialer. All feature functionality and serviceability test cases were completed successfully.

11. Additional References

The following documents may be found at <u>http://support.avaya.com</u>:

- [1] Administrator Guide for Avaya Communication Manager, Document ID 03-300509, Issue 4.0, February 2007
- [2] Implementing Proactive Contact 4.0, May, 2008
- [3] Administering Avaya Proactive Contact (Linux-based Interface), January 2008
- [4] Sample Avaya Proactive Contact 3.0 with CTI Installation and Configuration, Issue 1.0
- [5] Sample Avaya Proactive Contact 3.0 Intelligent Call Blending Configuration, Issue 1.0
- [6] *PSN #2070U Instructions to disable CORBA SSL security on Avaya Proactive Contact* 4.0.1 <u>http://support.avaya.com/elmodocs2/PSN/PSN2070u.doc</u>

Witness Documentation:

[7] Witness Contact Store 7.7.1 documentation can be accessed using online help

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