

Avaya Solution & Interoperability Test Lab

Application Notes for Configuring a SonicWALL Continuous Data Protection (CDP) backup solution with Avaya VoiceMail Pro - Issue 1.0

Abstract

These Application Notes describe a sample configuration for the SonicWALL Continuous Data Protection (CDP) backup solution with Avaya VoiceMail Pro.

Information in these Application Notes has been obtained through DevConnect 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 sample configuration of the SonicWALL Continuous Data Protection (CDP) backup solution with Avaya VoiceMail Pro. Compliance testing emphasis was placed on validating the SonicWALL CDP backup solutions capability of backing up and restoring voicemail messages as well as the Avaya VoiceMail Pro configuration files. The SonicWALL CDP series has four models of varying drive capacities, CDP 100 = 500GB, CDP 210 = 1TB, CDP 5040 = 2.25TB and the CDP 6080 = 4.5TB. Being that all of the models have identical software and features, only the CDP 100 was tested and will be shown in this document.

1.1. Interoperability Compliance Testing

This document describes the interoperability compliance testing for the SonicWALL CDP Backup solution with Avaya VoiceMail Pro.

Compliance testing included the following:

- Installation of CDP Server
- Installation of CDP Agent Tool.
- Backups
- Restore
- Serviceability

The general test approach included installing and configuration of the CDP server and client software as well as backups and restores.

1.2. Support

Technical Support: http://www.sonicwall.com/us/Support.html

2. Reference Configuration

The configuration in **Figure 1** shows an Avaya Telephony Infrastructure using Avaya IP Office and Avaya VoiceMail Pro integrating a SonicWALL CDP Backup solution.

2.1. Corporate Headquarters

The Corporate Headquarters consisted of one SonicWall CDP 110, one router, one Avaya IP Office IP500, two Avaya IP Telephones, one Avaya digital phone, one PC running Avaya IP Office Manager, Avaya IP Office VoiceMail Pro and SonicWall CDP Backup Client.

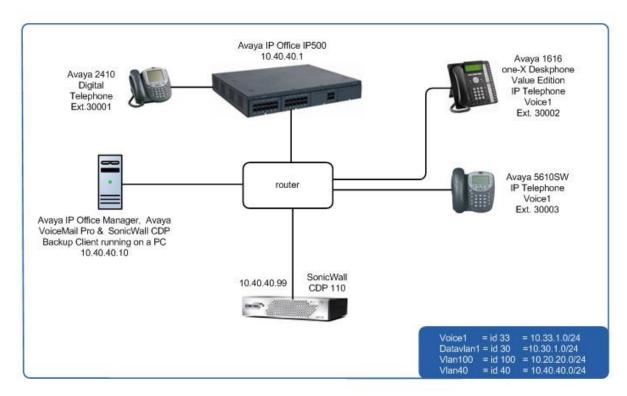


Figure 1: Sample Network Configuration

3. Equipment and Software Validated

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

Equipment	Software/Firmware				
Avaya PBX Products					
Avaya IP Office IP500	4.2 (17)				
Avaya IP Office Manager (running on HP	6.2 (17)				
Proliant Server)					
Avaya Messaging (V	oice Mail) Products				
Avaya VoiceMail Pro	4.2 (30)				
Avaya Telephony Sets					
Avaya 1600 Series IP Telephones	Avaya one-X Deskphone Value Edition 1.020				
Avaya 5600 Series IP Telephones	8.016				
Avaya 2410 Digital Telephone	5.0				
SonicWAL	L Products				
SonicWall CDP 110	5.0.3-43				
SonicWall CDP backup client	5.0.0.3				
MS Products					
	Microsoft Windows 2003 Server (Running				
PC	Avaya IP Office Manager, Avaya VoiceMail				
	Pro and SonicWall CDP backup client.				

4. Configure Avaya IP Office & Avaya VoiceMail Pro

- No SonicWALL CDP specific configuration is required on Avaya IP Office or Avaya VoiceMail Pro to support this solution.
- It is assumed that Avaya IP Office and Avaya VoiceMail Pro are already configured. Consult the Avaya IP Office and Avaya VoiceMail Pro documentation **Section 8** [1] for additional configuration details.

4.1. Configure SonicWALL CDP 110 Configuration

Step	Description
1.	Register the SonicWALL CDP with SonicWALL, Consult the SonicWALL CDP
	documentation Section 8 [6] for details.

Step	Description
2.	Configure the SonicWALL CDP using the built-in web-based Management Tool.
	• Using the supplied crossover cable and the computer you are using to administer the SonicWALL CDP appliance, connect the LAN port of computer to the LAN port on the back of your SonicWALL CDP appliance.
	• Set the computer IP address used to manage the SonicWALL CDP appliance to have a static IP address of 192.168.168.50 .
	• Open a Web browser on the computer you are using to administer the SonicWALL CDP appliance. Enter http://192.168.168.169 (the default IP address of the SonicWALL CDP appliance) in the Location or Address bar. The SonicWALL CDP Web management login screen displays.
	SONICWALL CDP Login
	Name:
	Password:
	Language: English 💌
	Login

Step	Descrip					
3.		icWALL CDP wi in the left pane of	ndow appears. The f f the window.	ollowing steps refer	to the Configu	ration Tree
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	SONICWALL	Continuous Data Protection Appliar	се	enet el enet el enet el		Help
	 ▶ ➡ System ▶ ➡ Network 	System / Status System Messages / Last 1 Mon Aug 31 10:16:107 200 2 Tue Aug 11 14:11:58 200 3 Wed Aug 51 11:4154 200 4 Tue Jul 21 07:52:33 2009 5 Wed Jul 1 14:01:05 2009	9	Appliance booted Appliance booted Appliance booted Appliance booted Appliance booted		
		System Information Model: Serial Number: CPU: Total Memory: Up Time: Version: OS:	CDP 110 0017c527E39E VIA Esther processor 1000MHz 439 MB 0 days 1 hours 50 minutes 5.0.3-43 SonicLinux			

Step	Description					
4.	Configure	the LAN por	t IP Address	5. From the Configuration Tre	e, click Network →	
	Settings, u	under Interfa	ces, click the	e Configure icon for eth0. Th	e Interfaceeth0Settings	5
				IP Address and Subnet Mas		
	-		-	II Mulless and Sublict Mas	R to remeet i igure i	
	settings.	Click OK to c	onunue.			
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		Domain				
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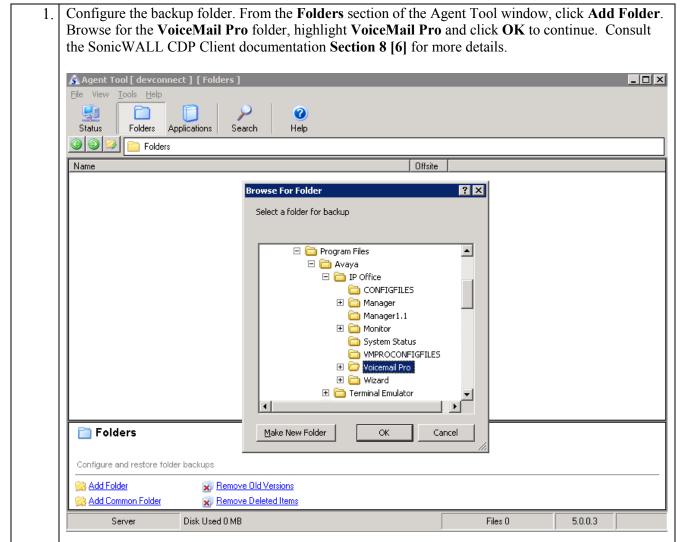
Description			
Settings, und Gateway dial	er Network Ro log box will app	utes, click the Configure icon for Defaul bear. Change Default Gateway, 10.40.40	It. The Default
-		-	🔹 🔂 🐇 🗔 👼 🍷 Page + Safety + Tools + 💽 +
SONICWALL Continu	uous Data Protection Appliance		Image: Constraint of the second se
System Settings Connectivity			Configure
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4.2. Configure SonicWALL CDP Client

2. T	onsult the SonicWALL CDP Client documentation Section 8 [6] for deta his Step is used to establish a connection from the SonicWALL CDP Cl	
L S C F E	onicWALL CDP 110 Appliance. og into the Avaya VoiceMail Pro PC and select Start \rightarrow Programs \rightarrow SonicWALL Continuous Data Protection \rightarrow SonicWALL CDP Enter lick the Manual Connection, enter the IP Address of the SonicWall CE igure 1, click Connect. Enter the Administrator Password and click Le nterprise Manager window will appear (not shown). This step is now c box to kill the window.	prise Manager. DP 110 as shown o gin. The
4		
	Manual Connection Enterprise Manager IP Address: 10 .40	5.0.0.3
	Appliance Name: Connect Cancel Administrator Password:	
	Lost Password	
	Local Archiving Data Restoration	
	Restore From Local Archive	
	Bestore From Local Archive Click to download the latest CDP software and documentation https://www.mysonicwall.com	

Agent Tool [de	evconnect] [Status]					
File View Tools		> 0 earch Help				
	ce 🔀 Add New Folder					
	>	File Activity Log	State: Normal			
SONICWA		Idle				
Agent Informa	tion					
Appliance: File Count: Disk Used: Disk Available:	devconnect 98 61 MB 409,539 MB	_Name	Start Date	Time	Size	Comple
Agent Status						
Agent State: Upload Queue:	Normal 0					
Policy Setting	s					
Policy Name: Offsite Backup: Management: Quota: Filters:	Default Policy Enabled Enabled 400 GB None set.					
		Selected File				

4.3. Configure SonicWALL CDP Client Backup

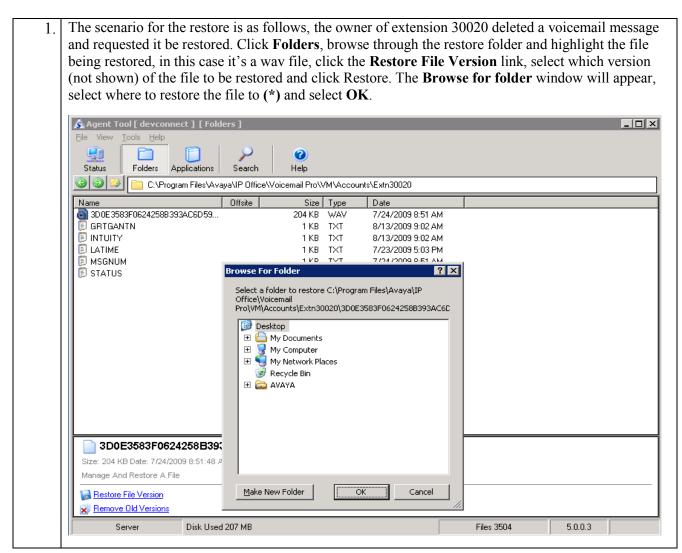


4.4. Configure SonicWALL CDP Client Restore

Restores can be done for the entire VoiceMail Pro directory in case of a disk failure or individual mailbox and voicemail messages. The scenario for the following example is to restore an individual voicemail message. Refer to the SonicWALL CDP Client documentation **Section 8** [6] for more details of restoring directories.

*Note:

- Restored files and folders for the VoiceMail Pro directory or individual user accounts must be restored to a NEW location and then moved into place. System crash may occur if the files are restored directly.
- Restored individual voicemail messages are not to be restored directly to the original location and are NOT to be moved back into the original location, System crash may occur if this is done.



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5. General Test Approach and Test Results

5.1. Test Approach

All test cases were performed manually. The general test approach entailed verifying the following list:

- Installation of CDP Server
- Installation of CDP Agent Tool.
- Backups
- Restores
- Serviceability

5.2. Test Results

The SonicWALL Continuous Data Protection (CDP) backup solution with Avaya VoiceMail Pro passed all test cases as described in Section 5.1.

6. Verification Steps

This section provides the steps for verifying The SonicWALL Continuous Data Protection (CDP) backup solution with Avaya VoiceMail Pro, the verification steps include

- Installation of CDP Server
- Installed the CDP Agent Tool on the PC that is running Avaya VoiceMail Pro.
- Backed up the Avaya VoiceMail Pro directory structure.
- Restored:
 - 1. Restored Avaya VoiceMail Pro directory structure
 - 2. Restored individual voicemail message
- Serviceability test included power cycling the SonicWall CDP 110 appliance and make sure it recovered

7. Conclusion

These Application Notes describe the configuration steps required for integrating the SonicWALL Continuous Data Protection backup solution with Avaya VoiceMail Pro. For the configuration described in these Application Notes, the SonicWALL Continuous Data Protection solution was responsible for backing up and restoration of file/folders on Avaya VoiceMail Pro.

8. Additional References

The documents referenced below were used for additional support and configuration information.

This section references the Avaya documentation relevant to these Application Notes. The following Avaya product documentation is available at <u>http://support.avaya.com</u>

- [1] Avaya IP Office 4.2 Installation Manual, Document Number 15-601042
- [2] Avaya IP Office 4.2 Embedded Voicemail User Guide, Document Number 15-601067
- [3] Avaya <u>IP Office 4.2 Phone Manager User Guide</u>, Document Number 15-600988
- [4] Avaya <u>IP Office 4.2 Manager 6.2</u>, Document # 16-601443
- [5] Deskphone Value Edition 1600 Series IP Telephones Installation and Maintenance Guide, Document # 16-601443

The SonicWALL product documentation can be found at

[6] <u>http://www.sonicwall.com/us/support/6832.html</u>

9. Change History

Issu	ue	Date	Reason
1.0		9/25/09	Initial issue

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