



Avaya Solution & Interoperability Test Lab

Application Notes for Magnetic North Optimise and Avaya Proactive Contact with Avaya PG230 Gateway - Issue 1.0

Abstract

These Application Notes describe a solution-tested configuration comprised of Magnetic North Optimise, Avaya Proactive Contact with Avaya PG230 Gateway and Avaya Aura™ Communication Manager. Magnetic North Optimise delivers call recording and quality monitoring for Outbound calls made with Proactive Contact in a typical Call Centre VoIP environment. These Application Notes describe the configuration steps required for Magnetic North Optimise to successfully interoperate with Avaya Proactive Contact and Avaya PG230 Gateway.

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 the configuration steps required for Magnetic North Optimise using VoIP call recording to interoperate with Avaya Proactive Contact and Avaya Aura™ Communication Manager.

The integration of Magnetic North Optimise with Avaya Proactive Contact enables Optimise to capture, package up and deliver recorded calls through a standard internet browser. Magnetic North Optimise provides a driver that integrates with the Avaya Proactive Contact to monitor agent activity which will be used to capture and record the audio for outbound calls.

Magnetic North Optimise provides recording based on packet mirroring of voice over IP (VoIP) data across an IP network. The Event Services API is used by Magnetic North Optimise to monitor Avaya Proactive Contact Agents, Magnetic North Optimise uses Event Services to determine when to start and stop recording. VoIP call recording is performed using network packet mirroring of the Real-time Transport Protocol (RTP) traffic transmitted by the Media Processor (MedPro) card that is used by the telephone sets to be recorded. The Magnetic North Optimise server must be equipped with dedicated Gigabit network interface cards (NIC) to receive, analyze & subsequently de-code the RTP traffic. There are several options as to how the RTP traffic is presented to the NIC cards. For the compliance testing the network port of the MedPro card was mirrored to the Network port being used by Magnetic North Optimise. This configuration is shown in the following diagram.

It is assumed that Avaya Aura™ Communication Manager, Avaya Aura™ Application Enablement Services and Avaya Proactive Contact dialer have been installed and are operational. The detailed administration and basic connectivity amongst the Avaya products is not the focus of these Application Notes and will not be described.

1.1 Interoperability Compliance Testing

The interoperability solution test included both feature functionality and serviceability testing. The general test approach entailed:

- Establishing connectivity between Magnetic North Optimise and Avaya Proactive Contact
- Verifying outbound call and agent events could be monitored by Magnetic North Optimise through Event services API using the CORBA connection provided by Avaya Proactive Contact.
- Verifying calls by dialer agents could be recorded in a VoIP environment using the mirrored Med-Pro port on a network switch.
- Verifying call recording using basic telephony operations such as answer, hold/retrieve, transfer, consult, conference, and disconnect.
- Verifying serviceability events such as disconnect, reboot, network failure, restarting processes etc.

The feature functionality testing focused on the ability of Magnetic North Optimise to record calls during the operation of various Avaya Proactive Contact Jobs including

- Outbound jobs
- Blended Agent jobs
- Inbound jobs
- Managed jobs

For each job type various scenarios were tested such as job linking, managed job acceptance and rejection and call failures to busy or unobtainable.

The serviceability testing focused on verifying the ability of Magnetic North Optimise to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet cable to the Magnetic North Optimise server.

1.2 Support

Technical support for the Avaya products can be obtained from Avaya. See the support link at support.avaya.com for contact information.

Technical support can be obtained for Magnetic North products from the support link at support.magneticnorth.com

2 Reference Configuration

Figure 1 illustrates the test configuration used during interoperability testing to verify the Magnetic North solution. Avaya Proactive Contact has two main components, Avaya Proactive Contact server and PG230 Gateway, they are connected via cross-over cable and the Avaya Proactive Contact server is housed in the PG230 rack represented towards the left of the diagram. Avaya Aura™ Communication Manager consists of Avaya S8730 Server running Communication Manager and an Avaya G650 Media Gateway as the PBX, PG230 Gateway is connected to G650 Media Gateway by an E1-PRI trunk which is used both to reserve dialer agents residing on the Communication Manager and make outbound calls to the simulated PSTN. The Proactive Contact Agent application is installed on desktop computers and the associated IP telephone is connected to the Communication Manager. Magnetic North Optimise is connected to the IP switch on the specific port which is mirroring the port the Med-Pro is connected to. Magnetic North Optimise also has a CORBA connection to Avaya Proactive Contact to monitor Agent events through Event Services API. Although not the focus of these Application Notes Optimise is able to record inbound as well as out bound calls, on initialization Optimise requires that it can authenticate a CTI user to Avaya Aura™ Application Enablement Services. Although the AES will not be used beyond this, it has been shown in the reference configuration below as it is a requirement for Optimise to function.

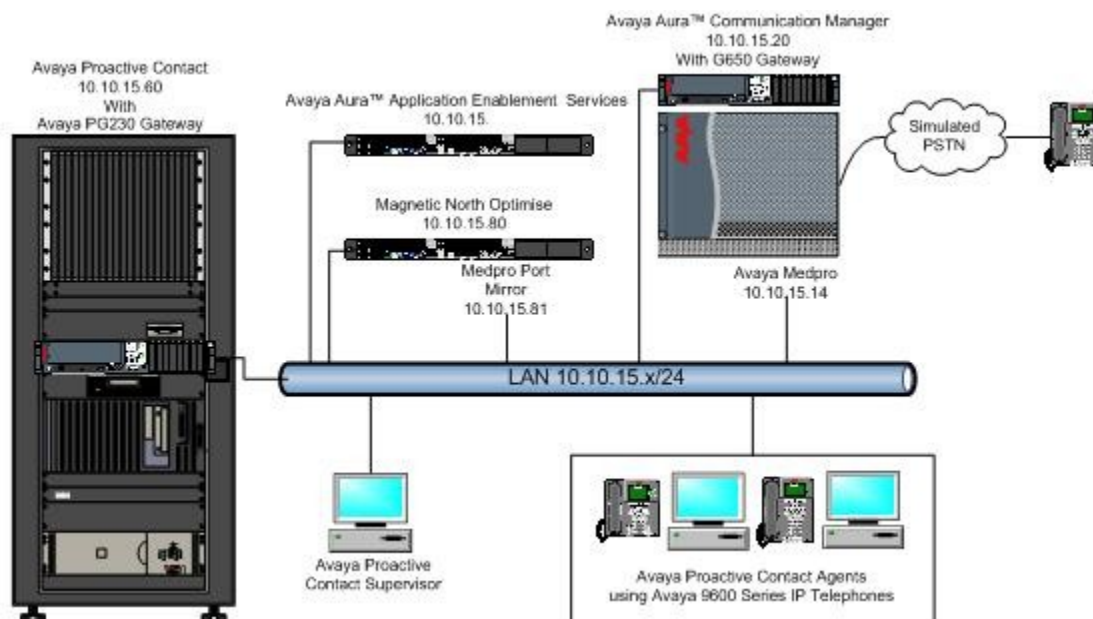


Figure 1: Network Topology

3 Equipment and Software Validated

All the hardware and associated software used in the compliance testing is listed below.

Equipment	Software Version
HP ProLiant DL 385 G2 Server	Avaya Proactive Contact 4.1.2, Super Patch 189
Avaya PG230	Digital Switch Version 15.3.1
PC Desktop Running Avaya Proactive Contact Agent	Avaya Proactive Contact Agent 4.1.2
PC Desktop Running Avaya Proactive Contact Supervisor	Avaya Proactive Contact Supervisor 4.1.2 (Patch 205-207)
Avaya S8730 Server	Avaya Aura™ Communication Manager 5.2.1 (R015x.02.1.016.4) Service Pack 3
Avaya G650 Media Gateway - CLAN TN799DP - IP Media Processor TN2602AP	HW16, FW038 HW08, FW055
Avaya S8800 server	Avaya Aura™ Application Enablement Services 5.2.2
Magnetic North Optimise Server	v4.1.5 Hot Fix 98 Mosaix Driver 2.1.5.105

Table 1: Hardware and Software Version Numbers

4 Configuration of Avaya Aura™ Communication Manager

These Application Notes assume that Communication Manager is configured and operational and the basic connectivity to Proactive Contact is in place. This section focuses only on the configuration required to enable Optimise to record calls and that of the station that will be used by the Proactive Contact Agent and recorded by Magnetic North Optimise. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

4.1 Configure Proactive Contact Agent Station

Use the **add station n** command to add a station that will be used by Proactive Contact Agent. Set the **Type** field to the handset type being used. Enter a descriptive name in the **Name** field and specify a **Security Code** that will be used for the phone to log in.

add station 6620		Page 1 of 5
STATION		
Extension: 6620	Lock Messages? n	BCC: 0
Type: 9620	Security Code: 6620	TN: 1
Port: IP	Coverage Path 1:	COR: 1
Name: IP Station	Coverage Path 2:	COS: 1
	Hunt-to Station:	

As Optimise uses a mirrored network port of the Med-Pro card, the station must not use IP to IP direct media or 'shuffling'. To ensure that the voice path always uses a Med-Pro resource, on **Page 2** of the station set the **Direct IP-IP Audio Connections** and **IP Audio Hairpinning** to **n**.

Note: The station settings will prevent direct IP to IP connections on a station by station basis. The same effect can be achieved for multiple stations by setting the **Intra-region IP-IP Direct Audio** and **Inter-region IP-IP Direct Audio** fields on the relevant IP network region to **no**. if this behavior is required for every station connected to Communication Manager then the **Direct IP-IP Audio Connections** and **IP Audio Hairpinning** fields can be set to **n** on page 18 of the system-parameters features screen.

add station 6620		Page 2 of 5
STATION		
FEATURE OPTIONS		
LWC Reception: spe	Auto Select Any Idle Appearance? n	
LWC Activation? y	Coverage Msg Retrieval? y	
LWC Log External Calls? n	Auto Answer: none	
CDR Privacy? n	Data Restriction? n	
Redirect Notification? y	Idle Appearance Preference? n	
Per Button Ring Control? n	Bridged Idle Line Preference? n	
Bridged Call Alerting? y	Restrict Last Appearance? n	
Active Station Ringing: single		
	EMU Login Allowed? n	
H.320 Conversion? n	Per Station CPN - Send Calling Number? y	
Service Link Mode: as-needed	EC500 State: enabled	
Multimedia Mode: enhanced		
MWI Served User Type: qsig-mwi	Display Client Redirection? n	
	Select Last Used Appearance? n	
	Coverage After Forwarding? s	
	Multimedia Early Answer? n	
Emergency Location Ext: 6620	Direct IP-IP Audio Connections? n	
Precedence Call Waiting? Y	Always Use? n IP Audio Hairpinning? n	

5 Configuration of Avaya Aura™ Application Enablement Services

This section covers the administration of a CTI user on AES (Application Enablement Services) that Optimise requires upon initialization. AES is configured via an Internet browser to access the administration web interface enter **https://<ip-addr>/** as the URL in an Internet browser, where <ip-addr> is the active IP address of AES. The login screen is displayed, log in with the appropriate credentials and then select the **Login** button



Application Enablement Services Management Console

[Help](#)

Please login here:

Username

Password

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5.1 Configure CTI User

From the left pane of the Administration web interface, navigate to **User Management → User Admin → Add User**. From the **Add User** screen enter values for all of the compulsory fields marked with *. The **User ID** and **User Password** are used in the configuration of Optimise. In addition to the compulsory fields the **CT User** field should be set to **Yes**. When finished select the **Apply** button (not shown) towards the bottom of the screen.

AVAYA Application Enablement Services Management Console

User Management | User Admin | Add User

Add User

Fields marked with * can not be empty.

* User Id: CTIUser

* Common Name: Magnetic

* Surname: North

* User Password:

* Confirm Password:

Admin Note:

Avaya Role: None

Business Category:

Car License:

CM Home:

Csx Home:

CT User: Yes

Department Number:

Display Name:

Employee Number:

Along with the CTI user a Tlink must also be specified within Optimise, to view the Tlink name navigate to **Security → Security Database → Tlinks** to view the administered Tlink.

AVAYA Application Enablement Services Management Console

Security | Security Database | Tlinks

Tlinks

Tlink Name: AVAYA#CM#CSTA#AES

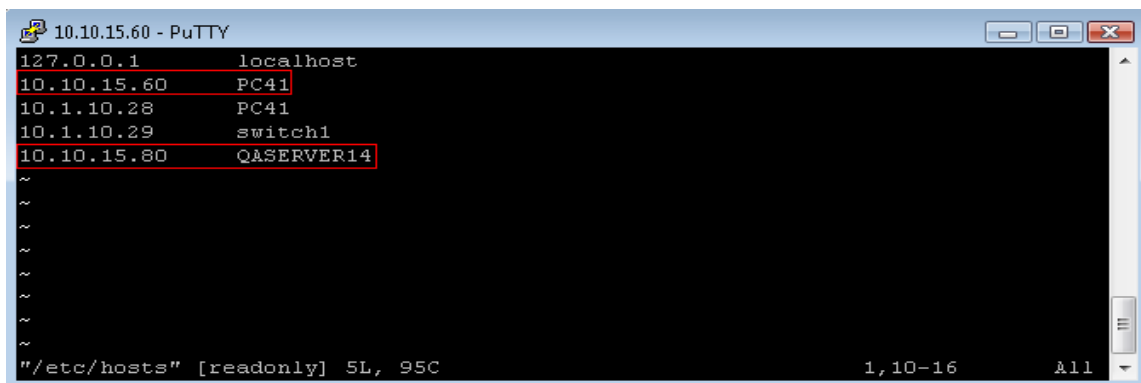
Edit Tlink Delete Tlink

6 Configure Avaya Proactive Contact

This section describes the configuration required on the Proactive Contact Server to allow Optimise to monitor the Proactive Contact Agent activity. The commands run in this section are Linux commands executed using an SSH client to connect to the Proactive Contact server

6.1 Configure Avaya Proactive Contact Host File

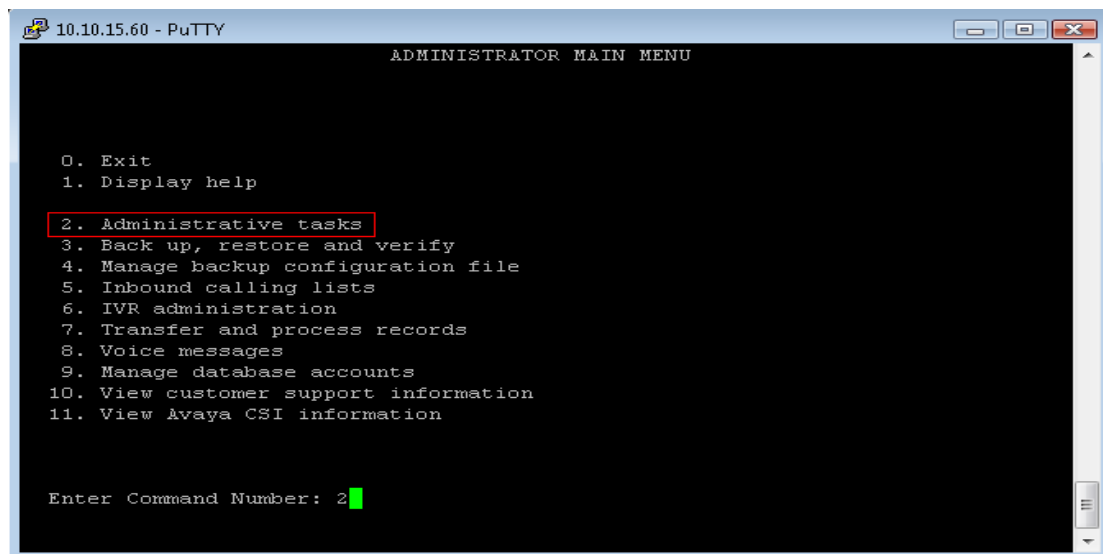
Log in to Proactive contact with administrative privileges and type the command **vi /etc/hosts** and add the hostnames and IP addresses of Magnetic North Optimise. Confirm an entry exists for the Proactive Contact server itself. As highlighted in the screen below. This is required so that Proactive Contact can resolve the IP address associated with either host name.



```
10.10.15.60 - PuTTY
127.0.0.1      localhost
10.10.15.60    PC41
10.1.10.28     PC41
10.1.10.29     switch1
10.10.15.80    QASERVER14
~
~
~
~
~
~
~
"/etc/hosts" [readonly] 5L, 95C          1,10-16      All
```

6.2 Configure Avaya Proactive Contact Agents

A user account needs to be setup for each agent that will log in to Proactive Contact. One of the ways to setup an agent user account is to use the Linux administration menus. Log in to Proactive Contact with system administrative privileges. To add an agent account, from the **ADMINISTRATOR MAIN MENU** screen. Select **Administrative tasks** by entering **2** at the **Enter Command Number** prompt.

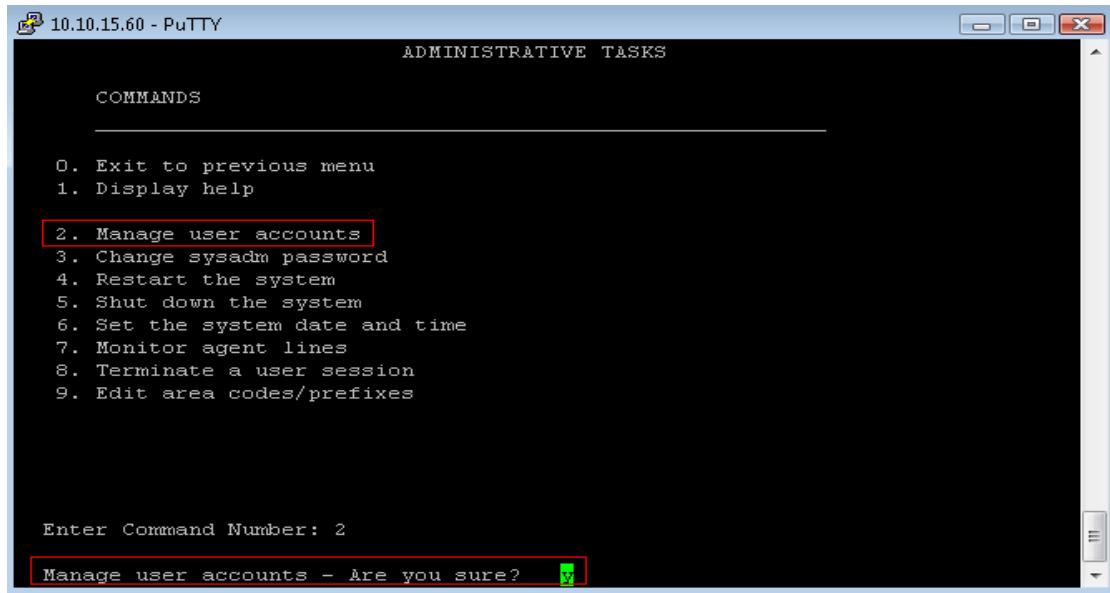


```
10.10.15.60 - PuTTY
ADMINISTRATOR MAIN MENU

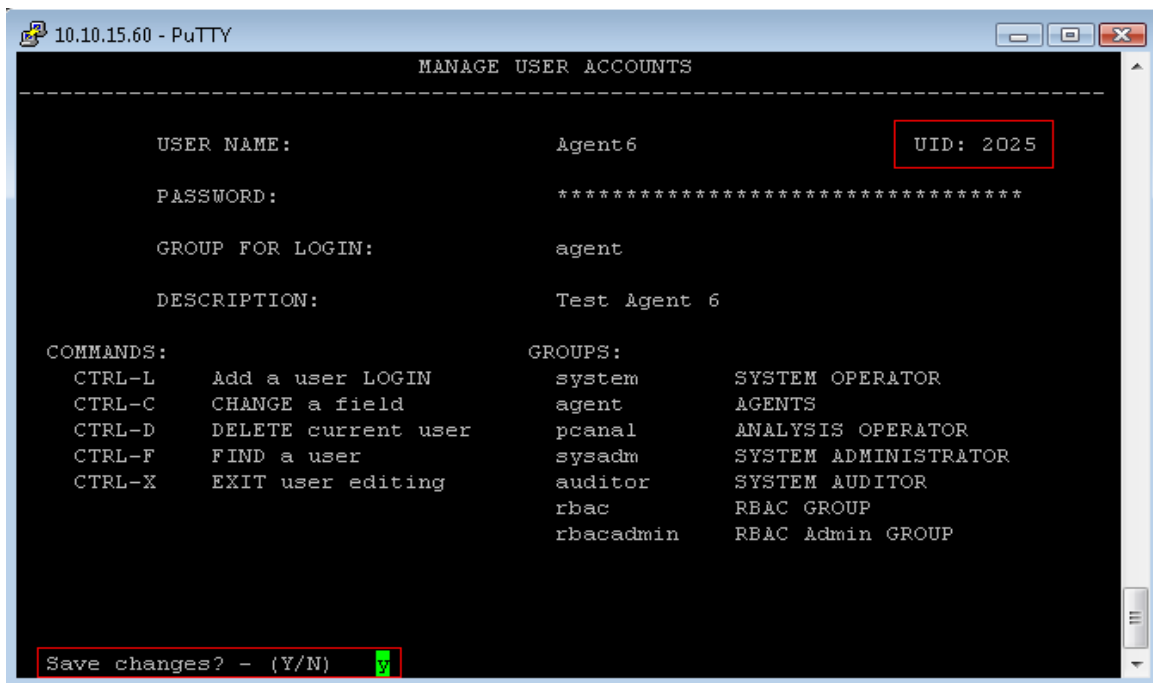
0. Exit
1. Display help
2. Administrative tasks
3. Back up, restore and verify
4. Manage backup configuration file
5. Inbound calling lists
6. IVR administration
7. Transfer and process records
8. Voice messages
9. Manage database accounts
10. View customer support information
11. View Avaya CSI information

Enter Command Number: 2
```

In the resulting menu select **Manage user accounts** by entering **2** in the **Enter Command Number** prompt, and enter **y** in the **Manager use accounts – Are you sure?** prompt.

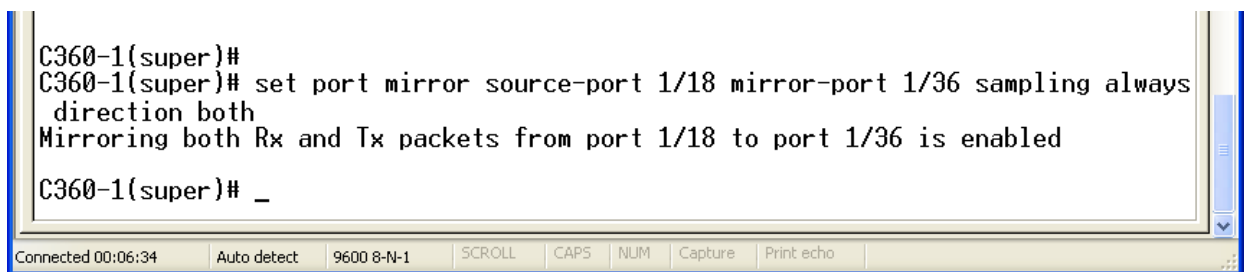


In the resulting screen press **CTRL-L** to add a new agent login. Enter values in the **USER NAME**, **PASSWORD**, **GROUP FOR LOGIN** and **DESCRIPTION** fields, and press **Enter**. This will assign the agent a **UID** which can be seen in the top right corner of the screen. The UID should be noted for each agent as it is used in the administration of Optimise when adding users to be recorded in **Section 8.2.2**. Repeat this for each agent that will log in to Proactive Contact. Press **CTRL-X** to exit the screen and enter **y** at the **Save changes?** prompt.



7 Configure Network Port Mirror on Avaya C364T-PWR

A port mirror must be set up on the C364T PWR IP network switch that is providing IP network connectivity for the solution to enable Optimise to record VoIP calls. For the solution test an Avaya C364T PWR IP switch was used. The network switch port that Optimise is connected to is configured to mirror the network switch port that the Med-Pro card is connected to. This means that all of the IP traffic that is sent to and from the network switch port that the Med-Pro card is connected to, will be duplicated and sent to the mirroring network switch port that Optimise is connected to, thus allowing Optimise to record calls. The Med-Pro card is connected to port **1/18** and Optimise is connected to Port **1/36**. To set the port mirror, login to the console of the C364T PWR switch with the appropriate administrative credentials and run the command **set port mirror source-port 1/18 mirror-port 1/36 sampling always direction both** confirmation that the port mirror has been enabled is then received.



```
C360-1(super)#  
C360-1(super)# set port mirror source-port 1/18 mirror-port 1/36 sampling always  
direction both  
Mirroring both Rx and Tx packets from port 1/18 to port 1/36 is enabled  
C360-1(super)# _
```

Connected 00:06:34 Auto detect 9600 8-N-1 SCROLL CAPS NUM Capture Print echo

8 Configure Magnetic North Optimise

This section covers the installation and configuration steps to allow Optimise to interoperate with Avaya.

8.1 Optimise Installation Information

For Optimise to be able to work with Avaya products, some information is required at the time of install. Magnetic North uses an installation configuration tool to administer the required settings for Optimise. This section describes the parts of the Optimise installation that require Avaya information. To access the installation configuration tool, from the Optimise server click **start** and navigate to **Programs→Magnetic North→Optimise→InstallConfigTool**.

8.1.1 TSAPI Connection

Select the **avayadefinitymnsp** option from the left panel of the configuration tool and enter the Tlink name shown in **Section 5** in the **ACT Server** field. For the **User Name** and **Password** fields enter the CTI user name and password set up in **Section 5** respectively.

Magnetic North Install Config Tool [new] - QA - Avaya (QASERVER14 - avayadefinitymnsp)

File View Tools Help

QASERVER14

OptimiseSolution
Storage Server
Screen Recorder
Uncompressed Calls Folder
Temp Calls Folder
esprit
Optimise WebClient
MediaService
File Copy Server
Compression Server
Optimise Central Server
Optimise Server
MNHalRecordingServerTranspo
MNHalCompressionDll
RecordingServer
avayadefinitymnsp
avaya ip span driver
generic esprit driver
mosaix driver
MN Generic TSP
MNArms
MNLogManager
MNArmTransport
MNScheduleServer
MNWebUpdate
MNLicenceServer
Finalise

Enter details used by the Avaya CTI Connection

ACT Server: AVAYA#CM#CSTA#AES

User Name: CTIUser

Password: XXXXXXXXXX

Back Next

Advanced Mode

8.1.2 IP Phone Address Range

The IP address range that will be used by the Avaya IP phones is declared during the Optimise installation. The IP telephones used in this testing have IP addresses range from 10.10.15.110 to 10.10.15.119. Select the **avaya ip span driver** option from the left panel of the configuration tool, for **Span Ports** select the relevant NIC from the drop down menu under **NIC Device**. For **Phone IP Ranges** specify the **1st IP Address** in the range and enter an **IP Address Count** to equal the number of IP addresses in the range.

The screenshot shows the 'Magnetic North Install Config Tool' window. The title bar reads 'Magnetic North Install Config Tool [new] - QA - Avaya (QASERVER14 - avaya ip span driver)'. The left sidebar contains a list of configuration options, with 'avaya ip span driver' selected. The main area is titled 'Enter the details for the Avaya IP Span settings'. It includes a 'Number of Ports' field set to '30'. Below it, the 'Span Ports' section shows a table with a 'NIC Device' dropdown menu, currently displaying 'Local Area Connection 3 (NetServer 10/100...)'. The 'Phone IP Ranges' section contains a table with columns '1st IP Address' and 'IP Address Count'. The first row shows '10.10.15.110' and '10'. At the bottom, there are 'Back' and 'Next' buttons, and a status bar indicating 'Advanced Mode'.

Span Ports	
	NIC Device
▶	Local Area Connection 3 (NetServer 10/100...)
*	

Phone IP Ranges		
	1st IP Address	IP Address Count
✎	10.10.15.110	10
*		

8.1.3 Event Services Connection

For Optimise to receive events from Proactive Contact Event Services some connection details are required. Select the **mosaix driver** option from the left panel of the configuration tool. Set the **Server** field to the host name of the Proactive Contact Server. Enter a valid username and password in the **User Name** and **Password** fields respectively. The default user name and password provided by Avaya Proactive Contact were used during testing. Set **Corba Port** to **23120** which is the default Corba Connection port provided by Avaya Proactive Contact.

Magnetic North Install Config Tool [new] - QA - Avaya (QASERVER14 - mosaix driver)

File View Tools Help

QASERVER14

OptimiseSolution
Storage Server
Screen Recorder
Uncompressed Calls Folder
Temp Calls Folder
esprit
Optimise WebClient
MediaService
File Copy Server
Compression Server
Optimise Central Server
Optimise Server
MNHalRecordingServerTranspo
MNHalCompressionDll
RecordingServer
avaya definitymnsp
avaya ip span driver
generic esprit driver
mosaix driver
MN Generic TSP
MNAIarms
MNLogManager
MNAIarmTransport
MNScheduleServer
MNWebUpdate
MNLicenceServer
Finalise

Enter details used for the Avaya Proactive Contact (PDS, Mosaix) Connection

Server: PC41

User Name: client1

Password: xxxxxxx

Corba Port: 23120

Back Next

Advanced Mode

8.1.4 Extensions to be Recorded

The extension number for each station that is to be recorded should be specified during the install although it is possible to add stations by editing the server registry. In the screen below stations **1600** to **1602** have been defined.

Magnetic North Install Config Tool [new] - QA - Avaya (QASERVER14 - MN Generic TSP)

File View Tools Help

QASERVER14

OptimiseSolution
Storage Server
Screen Recorder
Uncompressed Calls Folder
Temp Calls Folder
esprit
Optimise WebClient
MediaService
File Copy Server
Compression Server
Optimise Central Server
Optimise Server
MNHalRecordingServerTranspo
MNHalCompressionDll
RecordingServer
avayaDefinitymnsp
avaya ip span driver
generic esprit driver
mosaix driver
MN Generic TSP
MNArms
MNLogManager
MNArmTransport
MNScheduleServer
MNWebUpdate
MNLicenceServer
Finalise

Enter the phones to be recorded, and any add queues the agents log into

Phones:

	DN
	1600
	1601
	1602
*	

Queues:

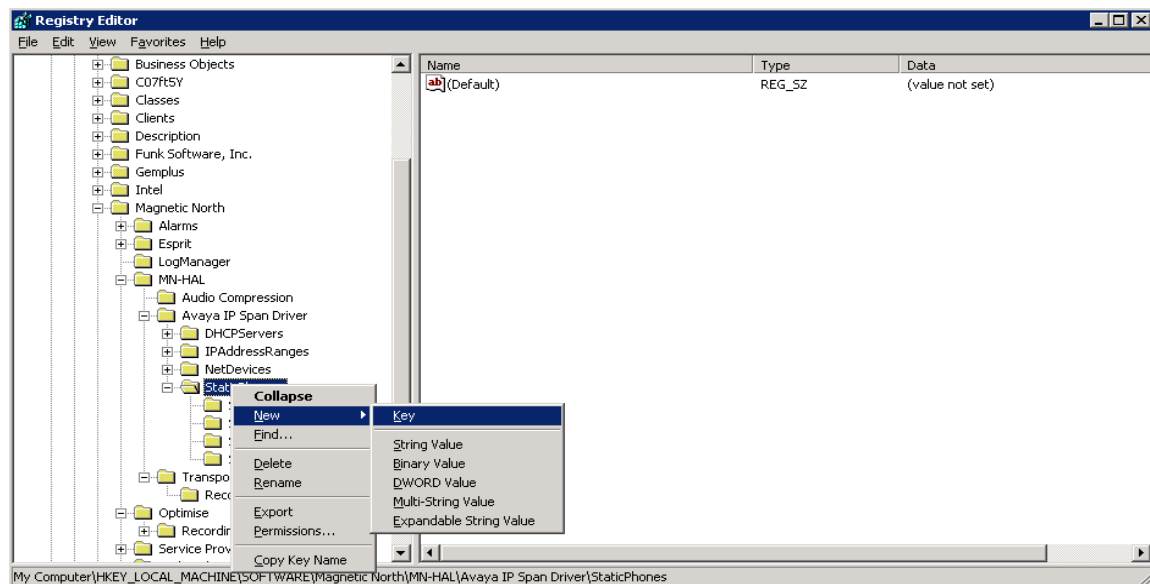
	Queue
*	

Back Next

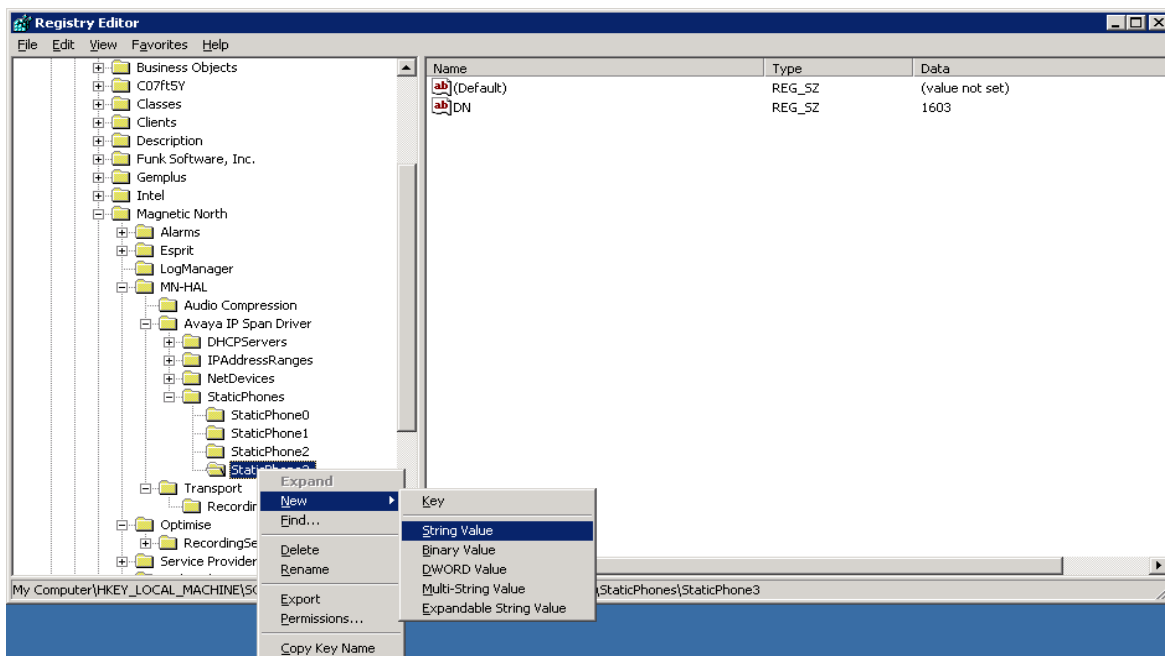
Advanced Mode

8.1.5 Declare Static Phones Using Registry

To declare static phone within the registry navigate to **My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Magnetic North\MN-HAL\Avaya IP Span Driver- StaticPhones**. Right click on **StaticPhones** and select **New → Key**. Name the new key **StaticPhone<x>** where **<x>** is the next available number in sequence to the previously configured **StaticPhones** sub keys.

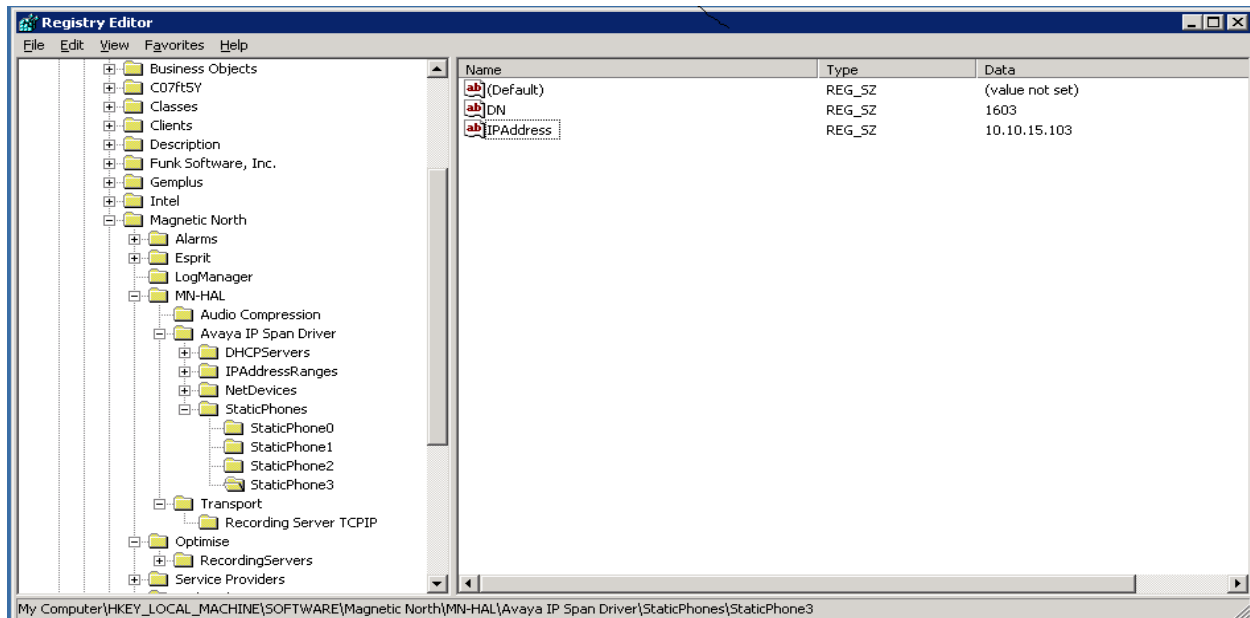


Two values must be added to the new key. Right click on the new key and select **New → String Value**. The values **DN** and **IPAddress** should be created.



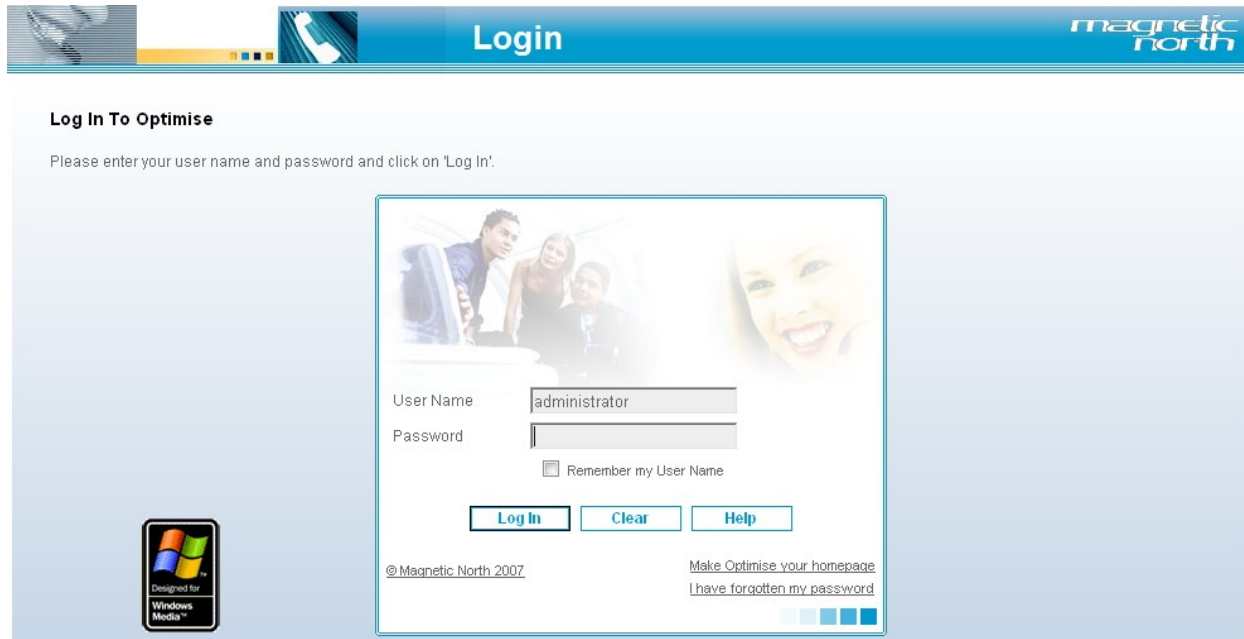
A Sub key and relevant registry values must be set up for each static phone. In the screen below **StaticPhone3** is shown as a sample phone. There are two entries within **StaticPhone3** that need to be set. **DN** should be set to the extension number to be recorded and **IPAddress** should be set to the IP address of the configured DN.

Note: The **StaticPhones** sub keys must start at 0 and be consecutive.



8.2 Optimise Administration

This section covers the administration of Optimise. Optimise is administered via an Internet browser. To access the administration web interface enter **http://<ip-addr>/Optimise** as the URL in an Internet browser, where <ip-addr> is the IP address of the Optimise server. The login screen is displayed, log in with the appropriate administrator user credentials.



The screenshot shows the login interface for the Optimise Administration web application. At the top, there is a blue header bar with the word "Login" in white text and the "magnetic north" logo on the right. Below the header, the page title is "Log In To Optimise". A message states: "Please enter your user name and password and click on 'Log In'." The main content area contains a login form with a background image of three people smiling. The form has two input fields: "User Name" with the text "administrator" and "Password" which is empty. Below the password field is a checkbox labeled "Remember my User Name". There are three buttons: "Log In", "Clear", and "Help". At the bottom left of the form area is a "Designed for Windows Media" logo. At the bottom right, there is copyright text "@ Magnetic North 2007" and two links: "Make Optimise your homepage" and "I have forgotten my password".

Log In To Optimise

Please enter your user name and password and click on 'Log In'.

User Name: administrator

Password:

☐ Remember my User Name

[Log In](#) [Clear](#) [Help](#)

@ Magnetic North 2007

[Make Optimise your homepage](#)
[I have forgotten my password](#)

8.2.1 Administer Location

Click the **Setup** option on the left side of the screen and select **Location** from the resulting sub menu. On the right hand side of the screen click **Add New** (not Shown). Under the **Location Details** section specify a **Location Name**. Set the **Location Server** and **Esprit Server** fields to the hostname or IP address of the Optimise server, the IP address was used during the compliance test. Under the **Default Drivers** section, for the **Esprit** field select **avaya proactive contact** from the drop down menu and under the **Call Recording** section check the **Record All Calls** check box. All other field can retain their default values. When finished click **Next**, located on the top right of the screen.

Configure Locations

Pick Location >> **Details** >> Server >> Archiving >> Screen Recording >> Post Call Processing [Next](#)

Location Details

Location Name : ?

Location Server : ?

Esprit Server : ?

Reserved Licences : ?

Ports : ?

Screen Recording : ?

Disable Location : ☐ ?

Default Drivers

Esprit : ?

Observation : ?

Recording : ?

Call Recording

Record All Calls : ☒ ?

Enable Screen Recording : ☐ ?

Use 'File Compressing' icon : ☒ ?

[Save](#)

In the resulting screen under the **Configure General Optimise Settings** section, set **Operating Mode** to **Agent** by clicking the **Agent** radio button as Optimise will be used to record Proactive Contact Agents. All other field can retain their default values. When finished click **Save**, located on the bottom right of the screen (not shown) to save the location entries.

Configure Locations

Pick Location >> Details >> **Server** >> Archiving >> Screen Recording >> Post Call Processing

Next

The settings below apply to location: **NewLocation**

Configure General Optimise Settings

Operating Mode : ☒ Agent ☐ Position ☐ Mixed ?

Ignore call reference of zero : ☐ ?

Configure Audio Directories

Temporary Recording : C:\Program Files\Magnetic North\Optimise\Calls\Temp ?

Recording Storage : \\10.10.15.80\Optimise\Calls ?

Emergency Fallback Recording

Pattern : None ?

Media Server

Internal Host Name : 10.10.15.80 mms://10.10.15.80/optimise/... ?

External Host Name : 10.10.15.80 mms://10.10.15.80/optimise/... ?

Publishing Point : optimise ?

Save

8.2.2 Administer Users to be Recorded

Each Proactive Contact agent that is to be recorded should be configured as a user within Optimise. Select the **Administration** option on the left side of the screen and select **Users/Passwords** from the resulting sub menu. Under the **Add User** section, enter a **User Name** and **Full Name** for the agent to be recorded. Provide an email address of a valid format for the **Email Address** field, the email address provided in this example is not an active account and was not used during testing. Set **Agent Id** according to the Agent ID identified in **Section 6.2**. Set the agent to be monitored by selecting the **Yes** radio button next to **Monitor Agent**. Under the **Security** section set a password for the agent being configured by filling in the **Password** and **Password Again** fields. Under the **Access Profile** section set the **Agent** field to **Agent**. Under the **Esprit Drivers** section set the **Primary Driver** to **avaya proactive contact** so that Optimise is aware that this agent is a Proactive Contact agent. Set **Secondary Driver** to **None** as there is no other driver involved in this testing. When finished click **Update User** located toward the bottom right of the screen. The screen below shows a user that was previously administered in Optimise. Repeat these steps for each Proactive Contact Agent/User that will be recorded by Optimise.

Users / Passwords

Configure/View Users and Passwords

Use this page to view the current users you have set up in Optimise. You can add/delete and amend the users in the system. You may also alter your current password.

Edit User: Avaya1 | Client ☒ Agent ☐ Reviewer ☐ Administrator ☐ Assign Agent to yourself? ☒ Close

Location: NewLocation

User Name: Avaya1

Full Name: Avaya 1

Email Address: avaya1@avaya.com

Agent Id: 2022

Monitor Agent? ☒ Yes ☐ No

User Type: Agent Mode

Department: No Department Selected

Team: No Team Selected

Manager: No Manager Selected

Disable Account? ☐ Yes ☒ No

Auto-License User? ☒ Yes ☐ No

Security

Password: [Masked]

Password Again: [Masked]

Account Locked: ☐ Yes ☒ No

Signoff Gradings: ☐ Yes ☒ No

Signoff Own Gradings: ☐ Yes ☒ No

Access Profile

Administrator: Administrator

Reviewer: Reviewer

Agent: Agent

Client: Client

Esprit Drivers

Primary Driver: avaya proactive contact

Second Driver: None

Agent Id: [Empty]

Screen Recording

Domain Logon: [Empty]

Gateway: [Empty]

Update User **Delete**

8.2.3 Define Search Filter

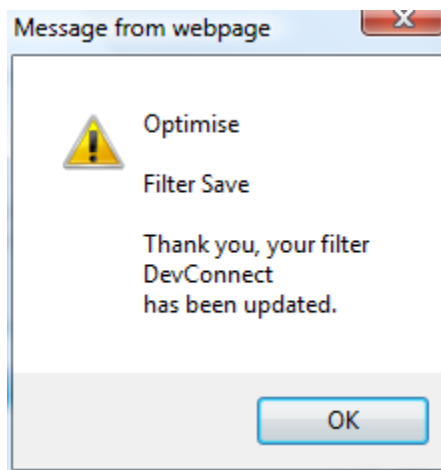
A number of options to refine the search filters are available to Optimise users. The filter refinement options are out of scope for these Application Notes and will not be discussed. No filter refinements were used during the testing. To define a search filter select the **Calls** button on left side of the screen and select **Define Filter** from the resulting submenu. Click **New** located towards the right of the screen.

Filter Name	Filter Description	Select
All Calls	All Calls	<input type="radio"/>
Avaya - All Calls on 28th July 2010	Avaya - All Calls on 28th July 2010	<input type="radio"/>

In the **Save Filter** screen select **new filter** from the drop down menu for **Available Filters**. Enter a name for the filter in the **Filter Name** field and click **Save Filter** located towards the bottom right of the screen.

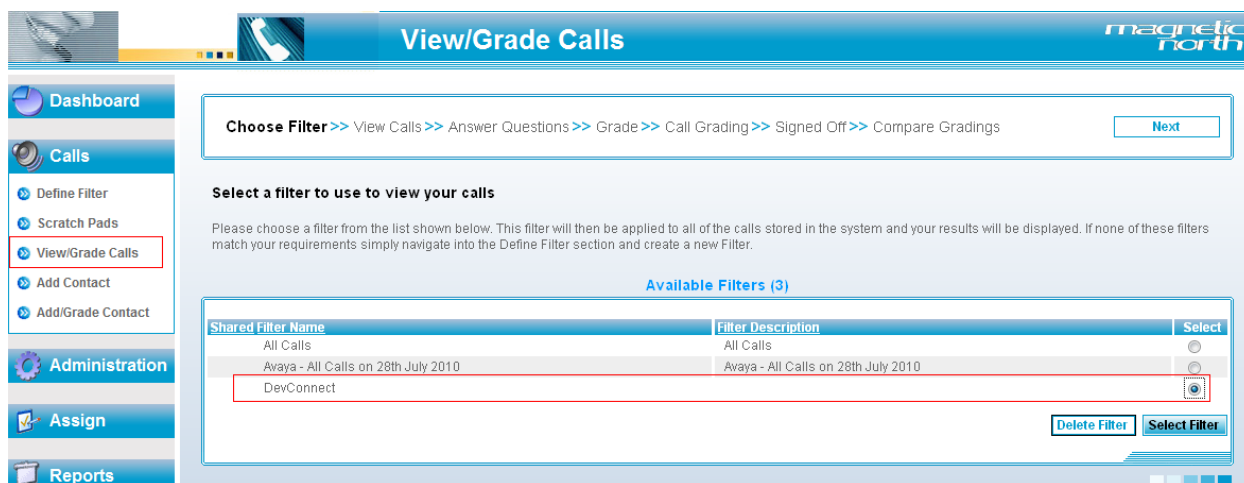
Filter Detail	Filter Detail
Current Name : new filter (id: new filter)	Agents : 0 Agents
Service Numbers : 0 Service Numbers	Call Types : 0 Call Types
Contact Reasons : 0 Contact Reasons	More Details : view

Confirmation that the filter has been saved is displayed



8.2.4 View Recorded Calls

To view recorded calls select the **Calls** button on left side of the screen and then select **View/Grade Calls** from the resulting submenu. In the **Choose Filter** screen select the radio button relating to the filter defined in **Section 8.2.3** and click **Select Filter**.



The resulting screen will list the recorded calls that match the selected filter. To listen to a call, scroll to the right hand side of the screen and click the speaker icon (not shown). A graphical representation of the call is then displayed towards the top left of the screen and the audio will be played back.

View/Grade Calls

Choose Filter >> **View Calls** >> Answer Questions >> Grade >> Call Grading >> Signed Off >> Compare Gradings

Username : Adr

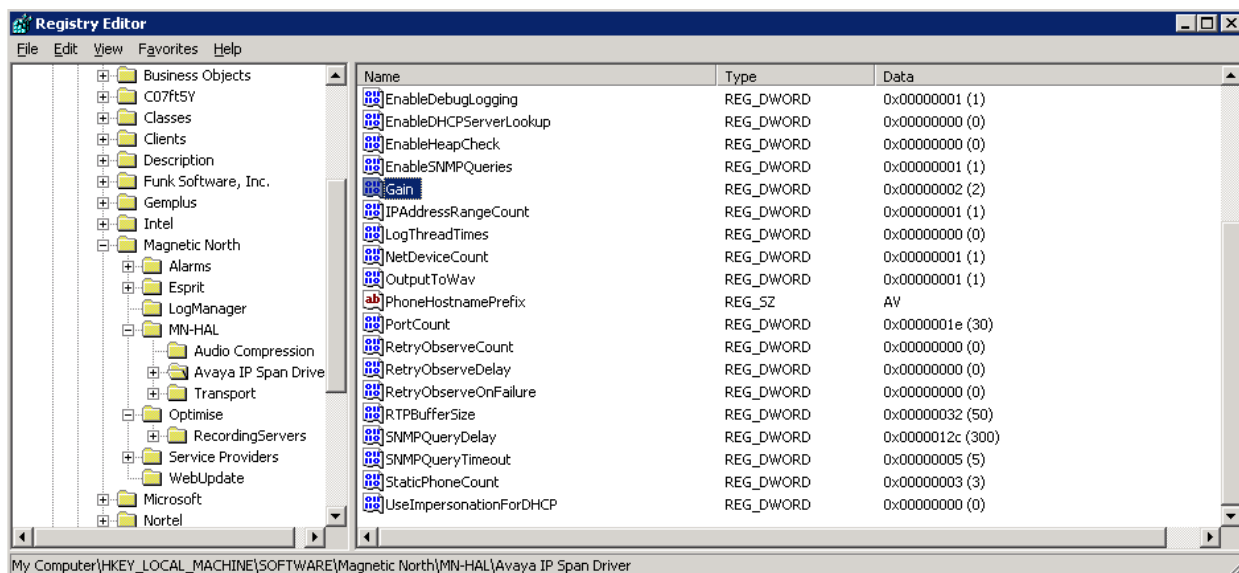
Now Playing: 28/07/2010 18:51:46 on 1 - Avaya 1 (2022)

Time Of Call	Duration	Agent	Agent ID	Service No.	Contact Reason	DN Type	Score	Grading Notes	CLID
28/07/2010 12:30:03	00:02:28	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:03:17	00:00:09	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:03:56	00:00:26	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:13:21	00:02:21	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:25:21	00:01:15	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:31:14	00:10:57	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:43:11	00:00:30	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 14:46:57	00:01:52	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 14:49:59	00:01:48	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750

8.2.5 Adjusting Recorded Volume

If the play back of recorded calls seems faint then the playback audio gain can be adjusted. Navigate to **My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Magnetic North\MN-HAL\Avaya IP Span Driver** and edit **Gain** to achieve the required playback level. For the compliance tests a **Gain** level of **2** was used.

Note: Magnetic North should be consulted before any **Gain** alteration is made.



9 General Test Approach and Test Results

The compliance testing focused on the ability of magnetic North Optimise to record and replay calls handled by Proactive Contact agents. All feature functionality test cases were performed manually to verify proper operation. The general test approach entailed:

- Verifying outbound agent events could be monitored by Optimise through Event services API using the CORBA connection provided by Avaya Proactive Contact.
- Verifying calls by dialer agents could be recorded in a VoIP environment using the mirrored Med-Pro port on a network switch and a range of Avaya Proactive Contact Jobs including
 - Outbound jobs
 - Blended Agent jobs
 - Inbound jobs
 - Managed jobs
- Verifying call recording using basic telephony operations such as answer, hold/retrieve, transfer, consult, conference, and disconnect.
- Verifying Proactive Contact specific tasks such as job linking, managed job acceptance and rejection and call failures to busy or unobtainable.

The serviceability tests were performed by disconnecting and reconnecting Optimise from the network and restarting the server based components used in the testing including Proactive Contact and Optimise servers. Dialer processes were also stopped and re-started.

All feature and serviceability tests passed. Magnetic North Optimise successfully recorded, displayed and replayed the record calls of Proactive Contact agents. For serviceability testing, Optimise was able to resume call recording after restoration of connectivity to the Proactive Contact server, from network disconnect/re-connect, and Optimise resets. The following observations are noted from testing:

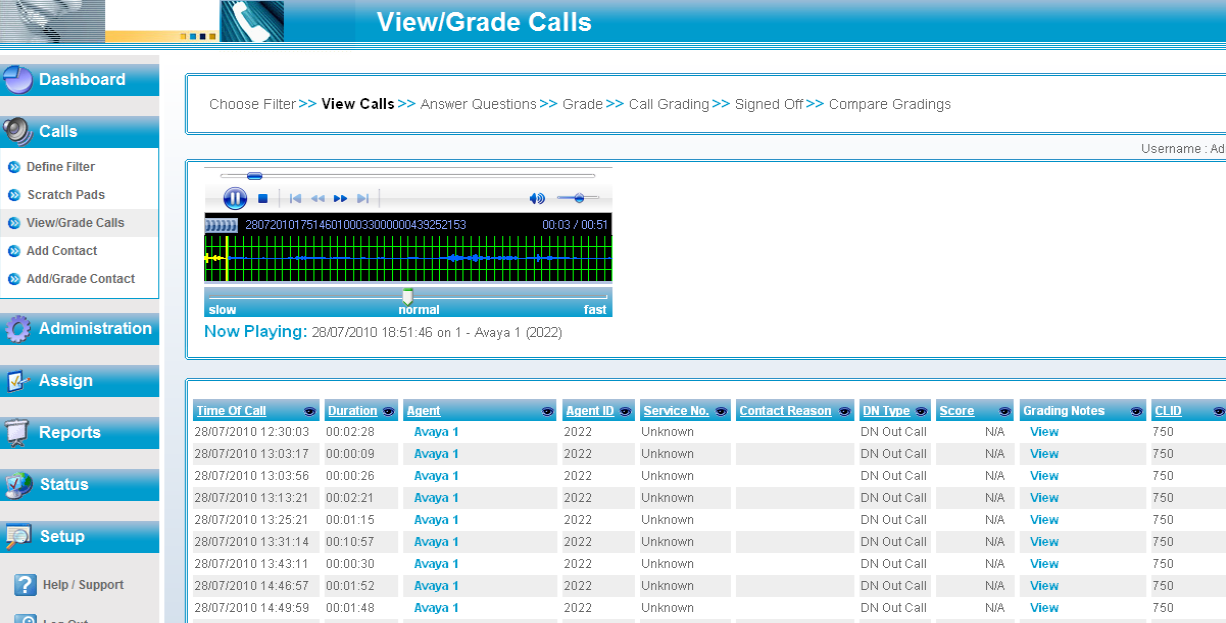
- Following a simulated network failure (disconnection and reconnection to the network) at either Optimise or Proactive Contact server components, Magnetic North services needed to be restarted on Optimise for any connections to be re-established.

10 Verification Steps

The '**netstat -an | grep 23120 | more**' command can be used from the command prompt on the Proactive Contact server to verify the communication between Proactive Contact and Optimise. The above command should show an established **Event Server** connection between Proactive Contact (10.10.15.60) and Optimise (10.10.15.80).

```
PC41(admin)@/opt/avaya/pds [1016]
$ netstat -an | grep 23120 | more
tcp        0      0 10.10.15.60:23120      0.0.0.0:*               LISTEN
EN
tcp        0      0 10.10.15.60:23120      10.10.15.80:2021        ESTABLISHED
PC41(admin)@/opt/avaya/pds [1017]
$
```

To verify Optimise, check calls are being recorded and can be played back from Optimise web interface. Navigate to **Calls → View/Grade Calls** and select the radio button relating to the filter defined in **Section 8.2.3** and click **Select Filter** (not shown), the **View Calls** page will be displayed. Click the speaker icon and the call will automatically be played back.



View/Grade Calls

Choose Filter >> **View Calls** >> Answer Questions >> Grade >> Call Grading >> Signed Off >> Compare Gradings

Username : Adr

Now Playing: 28/07/2010 18:51:46 on 1 - Avaya 1 (2022)

Time Of Call	Duration	Agent	Agent ID	Service No.	Contact Reason	DN Type	Score	Grading Notes	CLID
28/07/2010 12:30:03	00:02:28	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:03:17	00:00:09	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:03:56	00:00:26	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:13:21	00:02:21	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:25:21	00:01:15	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:31:14	00:10:57	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 13:43:11	00:00:30	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 14:46:57	00:01:52	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750
28/07/2010 14:49:59	00:01:48	Avaya 1	2022	Unknown		DN Out Call	N/A	View	750

11 Conclusion

These Application Notes describe the required configuration steps for Magnetic North Optimise to successfully interoperate with Avaya Proactive Contact by recording Proactive Contact Agents in a VoIP environment. All feature functionality and serviceability test cases were completed successfully.

12 Additional References

This section references the Avaya and Magnetic North product documentation that is relevant to these Application Notes.

Product documentation for Avaya products may be found at <http://support.avaya.com>

1. *Administering Avaya Proactive Contact (Linux-based Interface)*; Mar 2009
2. *Administering Avaya Proactive Contact 4.*; April-2009
3. *Using Avaya Proactive Contact Supervisor 4.1*; April 2009
4. *Administering Avaya Aura™ Communication Manager*; Doc No 03-300509, May-2009

Product documentation for Magnetic North products may be found at:

<http://support.magneticnorth.com> by accessing the Online Help Documents section and selecting the appropriate link.

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