



Avaya Solution & Interoperability Test Lab

Application Notes for ALI Solutions OnQ with Avaya Proactive Contact 5.0 with PG230 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for ALI Solutions OnQ to interoperate with Avaya Proactive Contact 5.0 with PG230. ALI Solutions OnQ is a solution for automating and centralizing call center campaign management.

In the compliance testing, ALI Solutions OnQ used the Event Services interface from Avaya Proactive Contact to monitor activities associated with an infinite job, and used the SFTP interface to dynamically retrieve call results and send call records. The call records were processed by customized scripts on Avaya Proactive Contact and appended to the calling list for the infinite job.

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 ALI Solutions OnQ to interoperate with Avaya Proactive Contact 5.0 with PG230. ALI Solutions OnQ is a solution for automating and centralizing call center campaign management.

In the compliance testing, ALI Solutions OnQ used the Event Services interface from Avaya Proactive Contact to monitor job statistics, call events, and agent events associated with an infinite job, and used the SFTP interface to dynamically retrieve call results to determine when and what to send in the next batch of call records. The batch of call records were sent via the SFTP interface, processed by customized scripts on Avaya Proactive Contact, and appended to the calling list for the infinite job.

The integration required custom scripts on Avaya Proactive Contact that were developed by Avaya Professional Services. The functions of the custom scripts included checking and appending received call records to the applicable calling list, posting of call transaction results, posting of daily cumulative call transaction results, and nightly clearing of calling list. The development and deployment of the customized scripts are assumed to be in place and not described in these Application Notes.

This compliance test covered the Avaya Proactive Contact with PG230 deployment option. The results should be applicable to the Avaya Proactive Contact Standalone deployment option.

2. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Upon start of the ALI Solutions OnQ application, the application automatically used Event Services to check job statistics, call events, and agent states associated with the infinite job, and sent call records on an as-needed basis to append to the calling list.

For the manual part of the testing, each call was handled manually using the Avaya Proactive Contact Agent application to pace the outbound calls.

The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet connection to ALI Solutions OnQ.

The verification of tests included using the ALI Solutions OnQ logs for proper message exchanges, and comparing the statistics reported by the ALI Solutions OnQ Client application against the job monitoring tool on Avaya Proactive Contact.

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following on ALI Solutions OnQ:

- Handling of real-time job statistics, call events, and agent states from Avaya Proactive Contact Event Services.
- Proper reporting of statistics for the infinite job.
- Proper retrieval of call transaction results and sending of call records using SFTP.
- Proper interpretation of call transaction results from both the SFTP and Event Services call event methods.

The serviceability testing focused on verifying the ability of ALI Solutions OnQ to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet connection to the ALI Solutions OnQ server.

2.2. Test Results

All test cases were executed and passed. The one observation from the compliance testing is that ALI Solutions OnQ does not currently utilize the cumulative statistics that are generated and posted by the Proactive Contact custom scripts.

2.3. Support

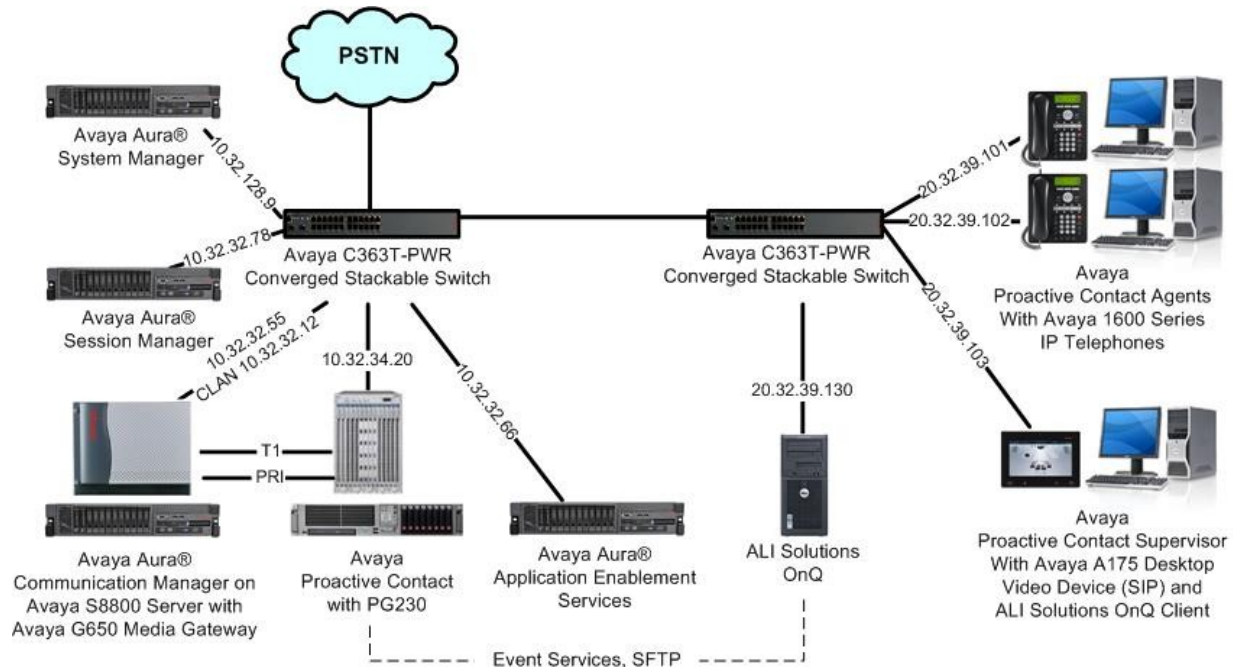
Technical support on ALI Solutions OnQ can be obtained through the following:

- **Phone:** (512) 328-8215
- **Email:** support@alisolutions.com

3. Reference Configuration

As shown in the test configuration below, ALI Solutions OnQ solution consists of the OnQ server, and the OnQ client. In the compliance testing, the ALI Solutions OnQ Client application was running on the supervisor PC.

The Avaya Aura® Session Manager and Avaya Aura® System Manager were used in the configuration to support the Avaya A175 Desktop Video Device.



4. Equipment and Software Validated

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

Equipment	Software
Avaya Aura® Communication Manager on Avaya S8800 Server	6.0.1 SP3 (R016x.00.1.510.1-19009)
Avaya G650 Media Gateway <ul style="list-style-type: none">• TN799DP C-LAN Circuit Pack• TN2302AP IP Media Processor	HW01 FW038 HW20 FW122
Avaya Proactive Contact with PG230	5.0
Avaya Proactive Contact Supervisor	5.0
Avaya Proactive Contact Agent	5.0
Avaya Aura® Application Enablement Services	6.1
Avaya Aura® Session Manager	6.1 SP2
Avaya Aura® System Manager	6.1 SP2
Avaya A175 Desktop Video Device (SIP)	1.0.2
Avaya 1608 IP Telephone (H.323)	1.3
ALI Solutions OnQ	3.3
ALI Solutions OnQ Client	3.3

5. Configure Avaya Proactive Contact

This section provides the procedures for configuring Avaya Proactive Contact. The procedures include the following areas:

- Obtain host name
- Administer SFTP user
- Obtain job name
- Obtain calling list details

5.1. Obtain Host Name

Log in to the Linux shell of the Proactive Contact server. Use the “uname -a” command to obtain the host name, which will be used later to configure ALI Solutions OnQ.

In the compliance testing, the host name of the Proactive Contact server is “lzpds4”, as shown below.

```
$ uname -a
Linux lzpds4b 2.6.18-238.1.1.el5PAE #1 SMP Tue Jan 4 13:53:16 EST 2011 i686 athlon
i386 GNU/Linux
LZPDS4B(admin)@/opt/avaya/pds [1001]
$
```

5.2. Administer SFTP User

At the Linux prompt, enter the command “menu sysadm” to display the **ADMINISTRATOR MAIN MENU** screen shown below. Enter “2” to select **Administrative tasks**.

```
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 APS information

Enter Command Number: 2
```

The **ADMINISTRATIVE TASKS** screen is displayed. Enter “2” to select **Manage user accounts**.

```

                                ADMINISTRATIVE TASKS

COMMANDS
-----
0. Exit to previous menu
1. Display help

2. Manage user accounts
3. Change sysadm password
4. Restart the system
5. Shut down the system
6. Set the system date and time
7. Monitor agent lines
8. Terminate a user session
9. Edit area codes/prefixes

Enter Command Number: 2

```

The **MANAGE USER ACCOUNTS** screen is displayed next. Enter **CTRL-L** to add a new user login. Enter desired **USER NAME**, **PASSWORD**, and **DESCRIPTION** for the new login. For **GROUP FOR LOGIN**, enter “sysadm”.

```

                                MANAGE USER ACCOUNTS
-----

USER NAME:                    alionq2                                UID:
PASSWORD:                    *****

GROUP FOR LOGIN:              sysadm

DESCRIPTION:                  ALI OnQ SFTP user

COMMANDS:                     GROUPS:
CTRL-L   Add a user LOGIN      system      SYSTEM OPERATOR
CTRL-C   CHANGE a field        agent        AGENTS
CTRL-D   DELETE current user   pcanal      ANALYSIS OPERATOR
CTRL-F   FIND a user           sysadm      SYSTEM ADMINISTRATOR
CTRL-X   EXIT user editing     auditor      SYSTEM AUDITOR
CTRL-U   RESET Failcount for user rbac        RBAC GROUP
                                      rbacadmin   RBAC Admin GROUP

                                ADD USER

```

At the Linux prompt, switch to the super user account and use the “usermod -d” command to set the home directory for the SFTP user, as shown below.

In the compliance testing, the shared directory “opt/avaya/pds/xfer/pub” was created as part of the custom script development, and was used for sharing file transfers with ALI Solutions OnQ. Make a note of the directory path, which will be used later to configure ALI Solutions OnQ.

```
$ usermod -d /opt/avaya/pds/xfer/public/onq alionq2
lzpds4b@opt/avaya/pds [117]
```

5.3. Obtain Job Name

From a PC running the Proactive Contact Supervisor application, select **Programs > Avaya > Proactive Contact 5.0 > Supervisor > Editor** to display the **Editor** screen below.

Follow [2] to create an infinite job that will be used to integrate with ALI Solutions OnQ. In the compliance testing, the job name was “onq_list70”, as shown below.

In the **Job Detail** tab, note the **Earliest start** and **Latest stop time** values, which will be used later to configure ALI Solutions OnQ.

The screenshot shows the 'Editor - [Jobs: Active onq_list70]' window. The 'Job Detail' tab is selected, displaying a table of job settings. The 'Basic' section is expanded, showing the following values:

Setting	Value
Job description	infinity
Tagged trunk-to-trunk	
Percentage complete	0
Line type(s) for use on	REG
Earliest start time	08:00
Latest stop time	18:00
Calling party number	
Require unit ID for	<input type="checkbox"/>
Transaction completion	93

The 'Call Pacing' section is also expanded, showing the following values:

Setting	Value
Call Pacing Method	Expert Calling
Expert calling ratio	W40
Initial hit rate	100
Minimum hit rate	20

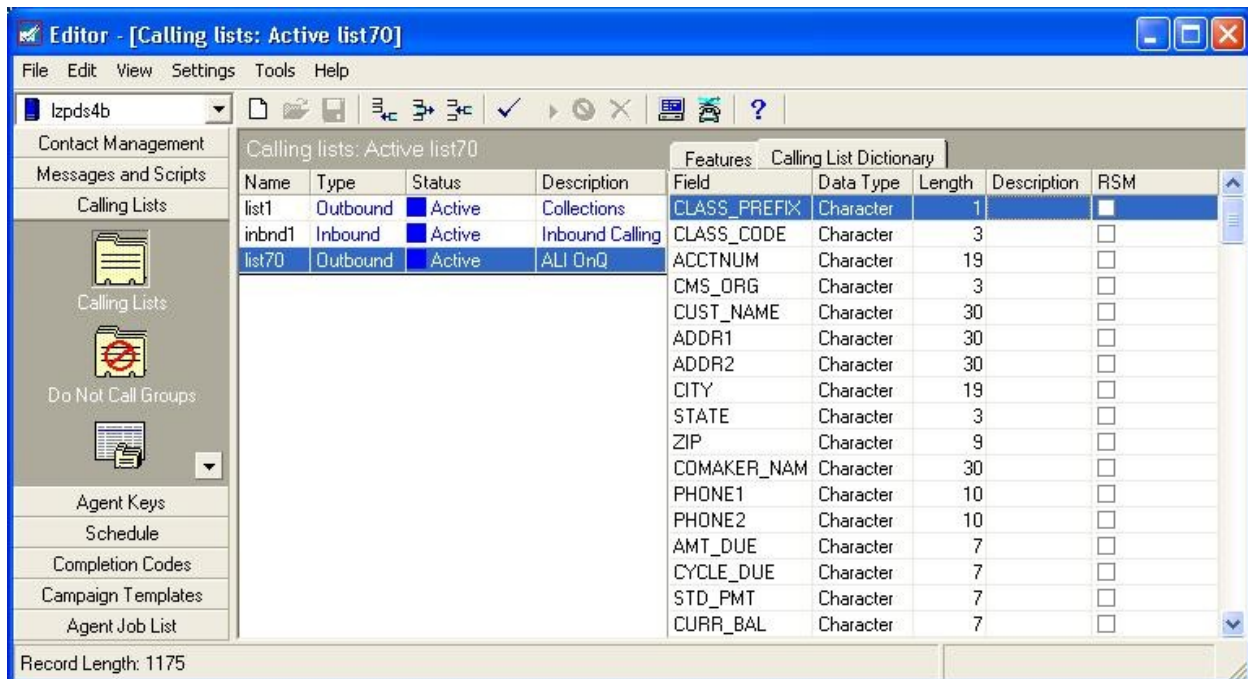
The 'Jobs: Active onq_list70' table in the background shows the following data:

Job	Job type	File Version	Outbound list	Inbound list	Status
blend	Blend	Active	lzpds4b-list1	lzpds4b-inbnd1	Stopped
inbnd1	Inbound	Active		lzpds4b-inbnd1	Stopped
managed	Managed	Active	lzpds4b-list1		Stopped
onq_list70	Outbound	Active	lzpds4b-list70		Stopped
outbnd	Outbound	Active	lzpds4b-list1		Stopped
verify	Outbound	Active	lzpds4b-list1		Stopped
virtual	Virtual	Active	lzpds4b-list1		Stopped

5.4. Obtain Calling List Details

Note that the calling list created for the infinite job was “list70”, as shown in the screenshot below. The Proactive Contact custom scripts will expect the file name of the raw call records from ALI Solutions OnQ to use the syntax “rcvfilexx.raw”, where “xx” is the applicable list number, in this case “70”.

Prior to the integration, the details of the calling list shown in the **Calling List Dictionary** tab needs to be sent to ALI Solutions OnQ, which will be used to dictate the format of the call records.



6. Configure ALI Solutions OnQ

This section provides the procedures for configuring ALI Solutions OnQ. The procedures include the following areas:

- Launch OnQ Client
- Administer dialer
- Administer queue
- Administer extraction

6.1. Launch OnQ Client

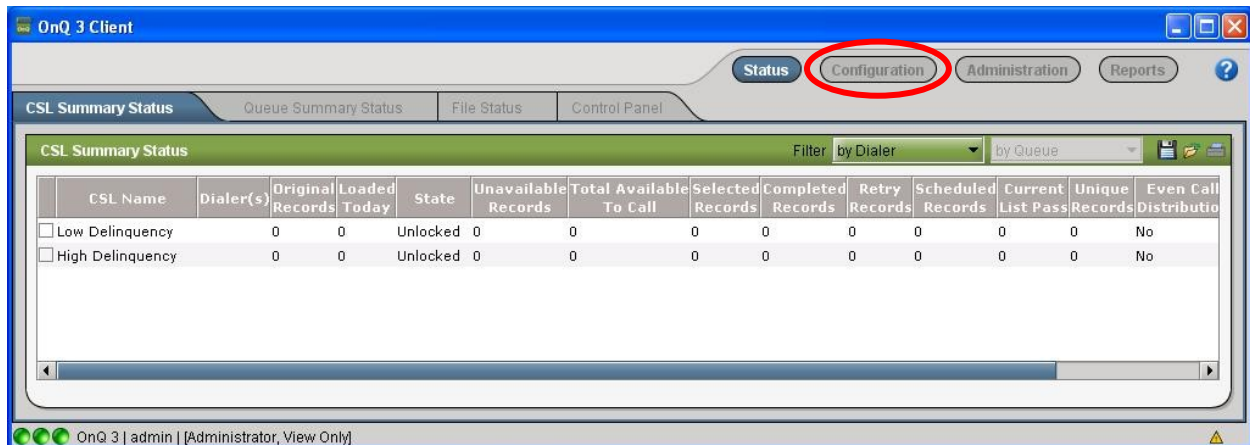
From a PC running the OnQ Client application, select **Start > All Programs > OnQ Client 3.3 > OnQ Client 3.3** to display the **Login** screen shown below. Enter the appropriate credentials.



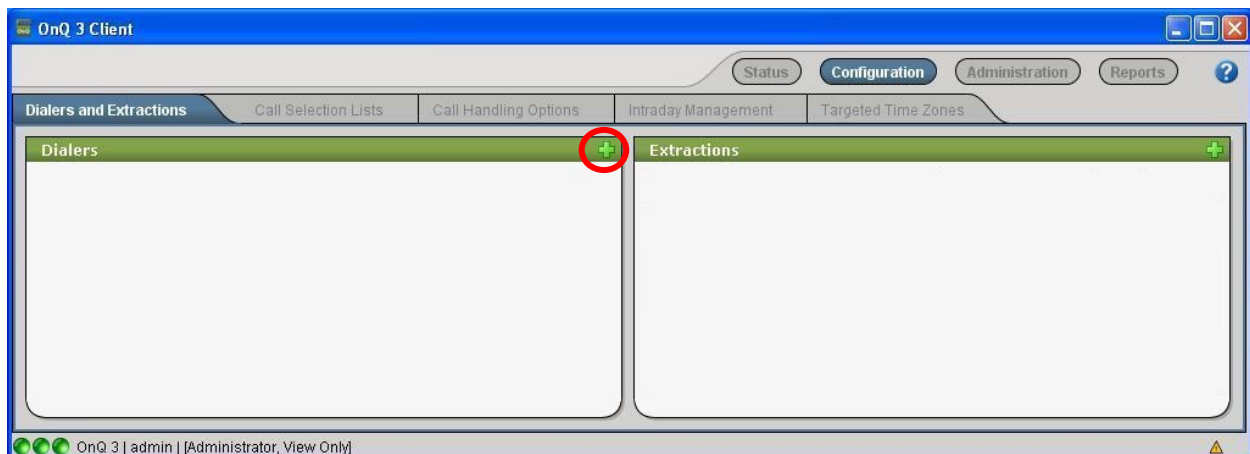
The image shows a Windows-style dialog box titled "Login" with a blue header bar. Below the header is a green and blue wavy graphic with the "OnQ™" logo. The main area is light gray and contains four labels with corresponding input fields: "Server Name:" with a dropdown menu showing "Local Connections", "Connection Name:" with a dropdown menu showing "OnQconnection", "User Name:" with a text box, and "Password:" with a text box. At the bottom are "OK" and "Cancel" buttons. A copyright notice at the very bottom reads: "© 2011 ALI Solutions Incorporated. All Rights Reserved Worldwide."

6.2. Administer Dialer

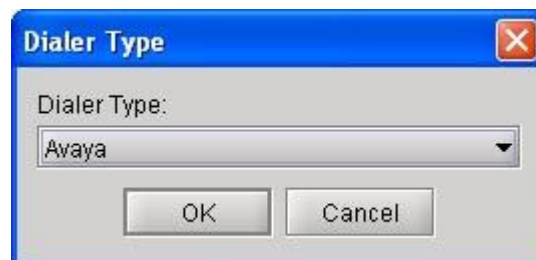
The **OnQ 3 Client** screen is displayed. Select **Configuration** from the top menu.



The screen below is displayed next. Click on the **Add Dialer** icon to add a dialer.



The **Dialer type** pop-up box is displayed. Select “Avaya” from the drop-down list.



The screen below is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Dialer Name:** A desired name.
- **Dialer Version:** “PC5”
- **Dialer Time Zone:** Select the appropriate time zone.
- **FTP Hostname:** Host name of Avaya Proact Contact from **Section 5.1**.
- **FTP Username:** The SFTP user name from **Section 5.2**.
- **Password/Passphrase:** The SFTP user password from **Section 5.2**.
- **Results Directory:** The shared directory path from **Section 5.2**.
- **Local Temp Directory:** A desired local directory for temporary files.
- **Use Secure FTP:** Check this field.
- **Results File:** Enter “results.dat”.
- **Name service Host:** Host name of Avaya Proactive Contact from **Section 5.1**.
- **Event Server Host:** Host name of Avaya Proactive Contact from **Section 5.1**.
- **Event Server User:** Name of the Avaya Proactive Contact Event Service client.
- **Event Server Password:** Password of the Avaya Proactive Contact Event Service client.
- **Use Event Services SSL:** Check this field.

The screenshot shows the 'OnQ 3 Client' window with the 'Configuration' tab selected. The 'Avaya Dialer Configuration' section is active, displaying two main panels: 'Dialer Attributes' and 'FTP Attributes'.

Dialer Attributes:

- Dialer Name: Proactive Contact
- Description: (empty)
- Dialer Type: Avaya
- Dialer Version: PC5
- Status: Active
- Time Settings:
 - Process Day Rollover Start: 2 AM
 - Process Day Rollover Stop: 4 AM
 - Dialer Time Zone: America/Los_Angeles
- Driver Settings:
 - Driver Timeout (minutes): 1

FTP Attributes:

- FTP Hostname: lzpds4b
- FTP Username: alionq2
- Password/Passphrase: (masked with dots)
- Results Directory: /opt/avaya/pds/ker/public/onq
- Local Temp Directory: /tmp
- Use Secure FTP: ☒
- Public Key File: (empty)
- Results File: results.dat
- Results Done File: (empty)

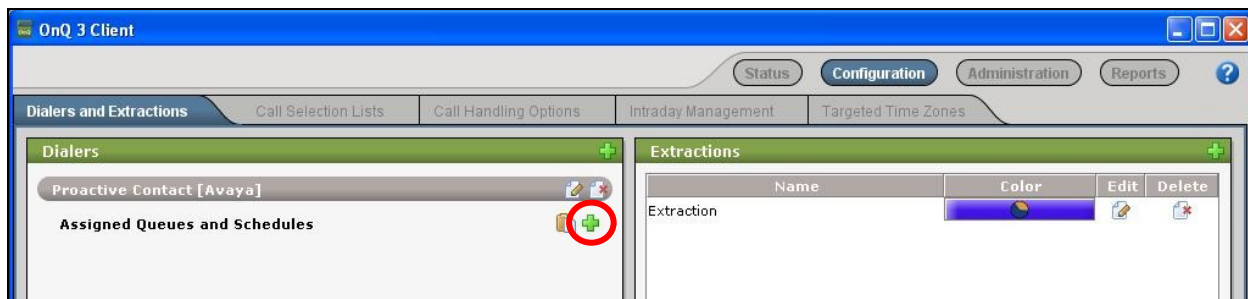
CORBA Client Attributes:

- Name service Host: lzpds4b
- Event Server Host: lzpds4b
- Event Server User: client1
- Event Server Password: (masked with dots)
- Event Client Port: 3000
- Use Event Services SSL: ☒
- Use Event Services Call Results: ☒

At the bottom of the configuration window are 'OK' and 'Cancel' buttons. The status bar at the very bottom indicates 'OnQ 3 | admin | [Administrator, View Only]'.

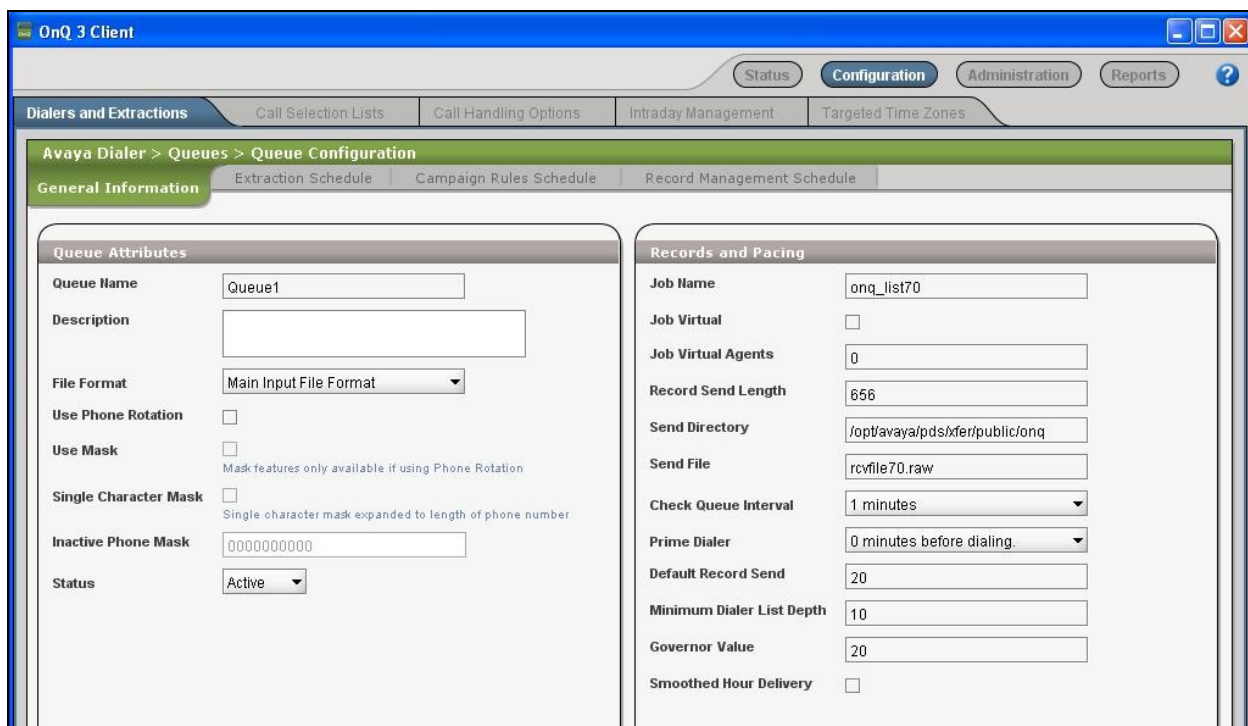
6.3. Administer Queue

The screen is updated with the newly added dialer, as shown below. Click on the **Add Queue** icon to add a queue to the dialer.



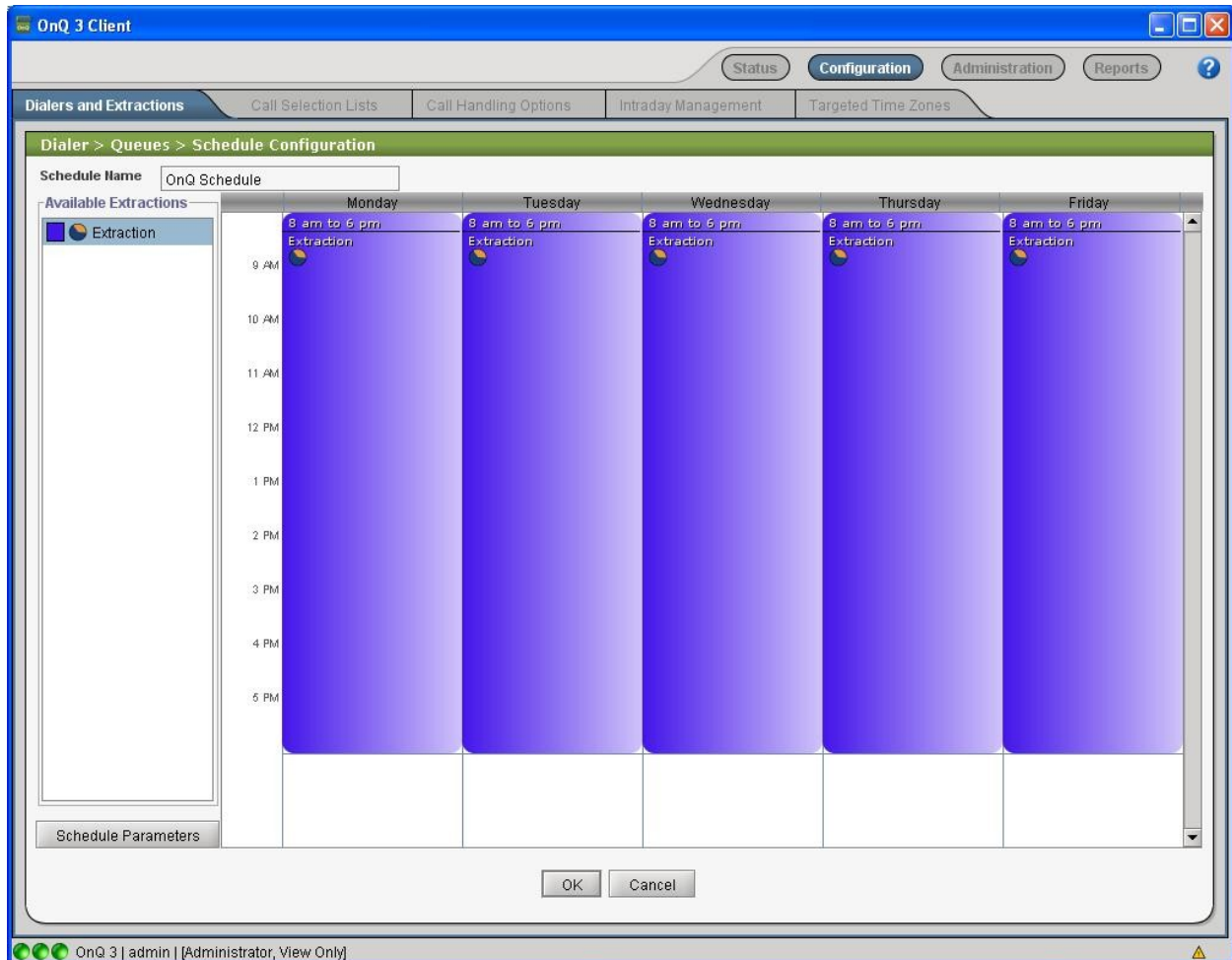
The screen below is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Queue Name:** A descriptive name.
- **Job Name:** The name of the infinite job from **Section 5.3**.
- **Record Send Length:** Enter the applicable length of the call record.
- **Send Directory:** The shared directory path from **Section 5.2**.
- **Send File:** The file name to use for raw call records from **Section 5.4**.
- **Default Record Send:** The desired number of records to send in the initial batch.
- **Minimum Dialer List Depth:** The minimum number of records to maintain on the dialer.
- **Governor Value:** The maximum number of records in a single batch.



6.4. Administer Extraction

Follow [4] to create an extraction schedule for the new queue, which should match the infinite job schedule from **Section 5.3**. The extraction schedule used for the compliance testing is shown below.



7. Verification Steps

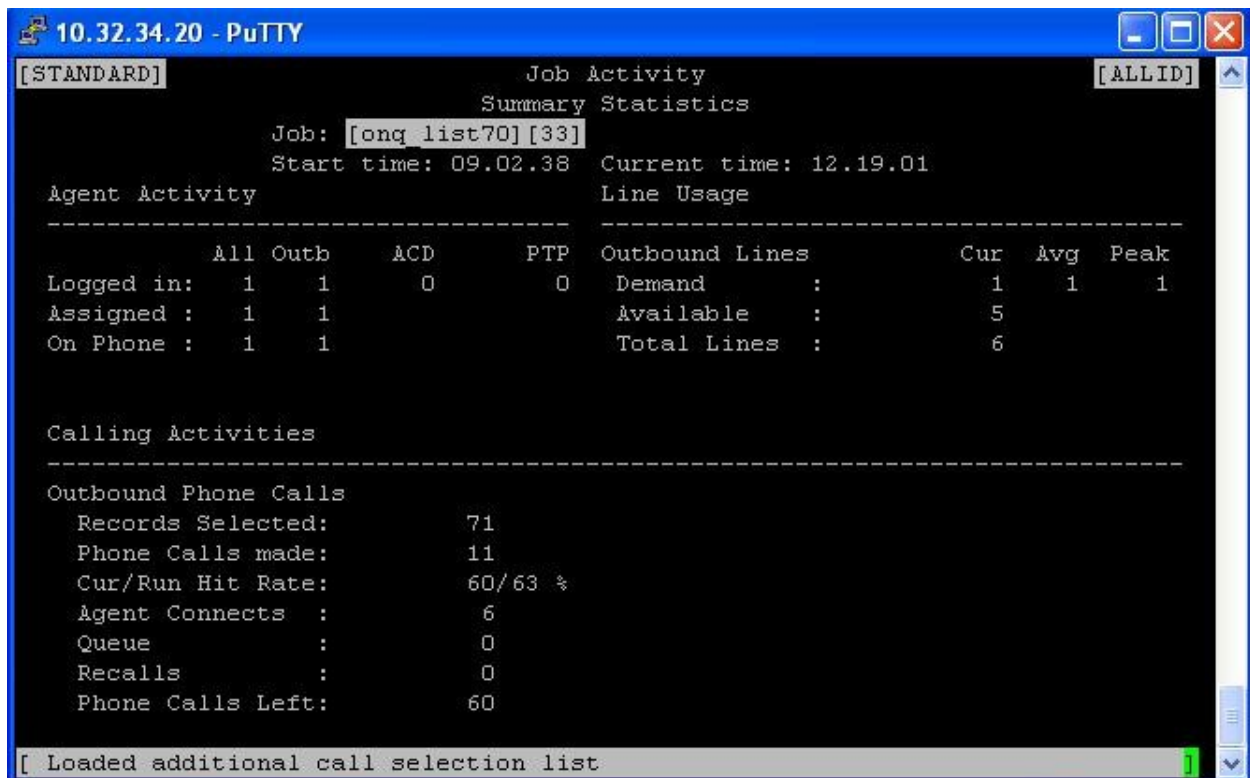
This section provides the tests that can be performed to verify proper configuration of Avaya Proactive Contact and ALI Solutions OnQ.

7.1. Verify Avaya Proactive Contact

Log into the Linux shell of the Proactive Contact server, and issue the “netstat | grep enserver” command. Verify that there is an entry showing an **ESTABLISHED** connection between the Proactive Contact Event Server and ALI Solutions OnQ, as shown below.

tcp	0	0	lzpds4b:enserver_ssl	lzpds4:40267	ESTABLISHED
tcp	0	0	lzpds4b:enserver_ssl	20.32.39.130:14675	ESTABLISHED
tcp	0	0	lzpds4b:40267	lzpds4b:enserver_ssl	ESTABLISHED

Start the infinite job, and log agents in to handle the outbound calls. Issue the “jobmon” command and select the applicable job to monitor. In the **Job Activity Summary Statistics** screen, verify that records are being selected and that phone calls are being made, as shown below.



The screenshot shows a PuTTY terminal window titled "10.32.34.20 - PuTTY". The terminal displays the "Job Activity Summary Statistics" screen. At the top, it shows "Job: [onq_list70] [33]" and "Start time: 09.02.38 Current time: 12.19.01". Below this, there are two main sections: "Agent Activity" and "Calling Activities".

Agent Activity

	All	Outb	ACD	PTP
Logged in:	1	1	0	0
Assigned :	1	1		
On Phone :	1	1		

Line Usage

	Cur	Avg	Peak
Demand :	1	1	1
Available :	5		
Total Lines :	6		

Calling Activities

Records Selected:	71
Phone Calls made:	11
Cur/Run Hit Rate:	60/63 %
Agent Connects :	6
Queue :	0
Recalls :	0
Phone Calls Left:	60

At the bottom of the screen, a status bar indicates "[Loaded additional call selection list]".

7.2. Verify ALI Solutions OnQ

From the OnQ Client application, select **Status** from the top menu, followed by **Queue Summary Status** to display the screen below. In the lower pane, verify that the following field values match to the corresponding values from Proactive Contact.

- **Status:** “Active”
- **Job Depth:** The number of phone calls left from **Section 7.1**.
- **Job State:** “Active”
- **Current Hit Rate:** The current hit rate from **Section 7.1**.
- **Running Hit Rate:** The run hit rate from **Section 7.1**.
- **Outbound Connections:** The number agent connects from **Section 7.1**.

The screenshot displays the OnQ 3 Client application window. The top menu bar includes 'Status', 'Configuration', 'Administration', and 'Reports'. The 'Status' menu is open, showing 'Queue Summary Status' as the selected option. Below the menu, the 'Queue Summary Status' pane shows a table with columns: Queue Name, Status, CSLs in Use, Active Schedule, Extraction, Records Sent, Completed, Last Send, and Last Update. The table contains one entry for 'Queue1' with status 'Active', 'Low Delinquency OnQ Schedule', 'Extraction', 31 records sent, 0 completed, and last send on 08/08/2011. Below this, the 'Queue Queue1 Status' pane is open, showing three sections: 'General Information and Statistics', 'Record and Agent Data', and 'Avaya Dialer Info'. The 'General Information and Statistics' section shows Status: Active, CSLs in Use: Low Delinquency High Delinquency, Active Schedule: OnQ Schedule, Extraction: Extraction, Active Campaign Rule, and Last Update: 03:28:20 PM, EDT. The 'Record and Agent Data' section shows Records Sent: 31, Completed Records: 0, Last Send: 11, Last Record Send Time: 12:39:29 PM, EDT, and Released From Dialer: 0. The 'Avaya Dialer Info' section shows Need More: 0, Job Depth: 60, Job State: Active, Current Hit Rate: 60, Running Hit Rate: 63, Outbound Connections: 6, and Initial Send Complete: true.

Queue Name	Status	CSLs in Use	Active Schedule	Extraction	Records Sent	Completed	Last Send	Last Update
Queue1	Active	Low Delinquency OnQ Schedule	Extraction	Extraction	31	0	11	08/08/2011 ...

General Information and Statistics		Record and Agent Data		Avaya Dialer Info	
Status	Active	Records Sent	31	Need More	0
CSLs in Use	Low Delinquency High Delinquency	Completed Records	0	Job Depth	60
Active Schedule	OnQ Schedule	Last Send	11	Job State	Active
Extraction	Extraction	Last Record Send Time	12:39:29 PM, EDT	Current Hit Rate	60
Active Campaign Rule		Released From Dialer	0	Running Hit Rate	63
Last Update	03:28:20 PM, EDT			Outbound Connections	6
				Initial Send Complete	true

8. Conclusion

These Application Notes describe the configuration steps required for ALI Solution OnQ to successfully interoperate with Avaya Proactive Contact 5.0 with PG230. All feature and serviceability test cases were completed.

9. Additional References

This section references the product documentation relevant to these Application Notes.

1. *Administering Avaya AuraTM Communication Manager*, Document 03-300509, Issue 6.0, Release 6.0, June 2010, available at <http://support.avaya.com>.
2. *Administering Avaya Proactive Contact*, Release 5.0, April 2011, available at <http://support.avaya.com>.
3. *OnQ 3.3 Avaya Dialer Integration Guide*, June 30, 2011, available upon request to ALI Solutions Support.
4. *OnQ 3.3 Configuration Guide*, June 30, 2011, available upon request to ALI Solutions Support.

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