

Avaya Solution & Interoperability Test Lab

# Application Notes for R Systems Indus Collections with Avaya Proactive Contact using Avaya PG230 Digital Switch - Issue 1.0

#### Abstract

These Application Notes describe the configuration steps required for R Systems Indus Collections to successfully interoperate with Avaya Proactive Contact using Avaya PG230 Digital Switch. Indus Collections is one of the three modules in Lending Solutions from Indus (LSI). Indus Collections helps manage recovery from delinquent accounts. This feature-rich multi-user software product provides tracking and recovering of overdue payments. Indus Collections integrates to Proactive Contact using the Proactive Contact Agent API through its web-based client.

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 compliance tested configuration comprised of Avaya Proactive Contact using Avaya PG230 Digital Switch (also known as hard dialer) and R Systems Indus Collections. Indus Collections helps companies manage recovery from delinquent accounts. This feature-rich multi-user software product provides speed and flexibility in tracking and recovering of overdue payments. Indus Collection used the Avaya Proactive Contact Agent API to provide integration between the Indus Collections clients running on the agent desktops with Avaya Proactive Contact.

### 1.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing. The feature testing focused on verifying Indus Collections' interoperability with Avaya Proactive Contact to handle Outbound and Managed campaigns.

The following features on the Indus Collections were tested:

- Login / Logout
- Available / Not Available
- Join Job / Leave Job
- Finish Call
- Hang Up Call
- Call Back
- Agent Owned Recall
- Hold / Unhold
- Auto Release Line with status message
- Manual Call
- Preview Call
- Supervised Transfer (voice only)
- Supervised Conference (voice only)
- Job End

The serviceability testing focused on verifying the ability of Indus Collections to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet cable to the Indus Collections agent desktop and restarting the agent desktop and Avaya Proactive Contact server.

### 1.2. Support

Technical support for the Indus Collections is available as follows:

- Telephone Help Desk: +91-120-4303500
- Email: <u>india@rsystems.com</u>

# 2. Reference Configuration

**Figure 1** illustrates the test configuration used to verify the R Systems Indus Collections solution. The configuration comprised of an Avaya S8500 Server running Avaya Aura<sup>™</sup> Communication Manager and an Avaya G650 Media Gateway with connections to the following: Avaya 9630 IP Telephones, an ISDN-PRI trunk to the PG230 Digital Switch and an ISDN-BRI trunk to the PSTN. R Systems Indus Collections is installed on a server running Microsoft Windows Server 2003. Indus Collections integration library (AvayaDialer.ocx) is installed on the agent desktops running Microsoft Windows XP Professional, together with the Avaya Proactive Contact Agent SDK which provides the moagent32.dll library. The Avaya C364T-PWR Converged Stackable Switch provides Ethernet connectivity to the servers and IP telephones.



Figure 1: Test Configuration

### 3. Equipment and Software Validated

The following equipment and software were used for the sample configuration.

| Equipment                                     | Software                                       |
|---|--|
| Avaya Proactive Contact Server on HP Proliant | 4.1.1  |
| DL385G2 using PG230 Digital Switch            | (Build 105)                                    |
| Avaya Proactive Contact Agent API             | 4.101.0001 (Moagent32.dll)                     |
| Avaya S8500 Server                            | Avaya Aura <sup>TM</sup> Communication Manager |
|   | 5.2 with                                       |
|   | Service Pack 02.0.947.3-17579                  |
| Avaya G650 Media Gateway                      |  |
| TN2312BP IP Server Interface                  | HW07, FW046                                    |
| • TN799DP C-LAN Interface                     | HW01, FW032                                    |
| TN2602AP IP Media Processor                   | HW02, FW049                                    |
| • TN2464CP DS1 Interface                      | HW02, FW024                                    |
| Avaya C363T-PWR Converged Stackable Switch    | 4.5.18   |
| Avaya 9630 IP Telephones                      | 3.1 (H.323)                                    |
| R Systems Indus Collections Server            | 4.0  |
| Agent Desktops                                |  |
| Web Browser                                   | Microsoft Internet Explorer 8.0                |
| R Systems Indus Collections Client            | 1.0  |
| Library (AvayaDialer.ocx)                     |  |

# 4. Configure Avaya Proactive Contact

These Application Notes assume that the interface between Avaya PG230 Digital Switch, Avaya Proactive Contact has been configured and is operational. Refer to Avaya Documentation [2] and [3] for configuration instructions.

The following campaign types were configured on Avaya Proactive Contact:

- Outbound Calls
- Managed Calls

The following features were configured on Avaya Proactive Contact. Refer to [2], [3] and [4] for reference.

- Completion Codes
- Recall (Callback)
- Agent Owned Recall
- Auto wrap
- Voice Call Transfer

The screen shots below for Avaya PG230 Digital Switch Ports and Avaya Proactive Contact Configuration Files are displayed as a reference for configuring ports on Communication Manager.

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|----------------|--|
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#### 4.1. Avaya PG230 Digital Switch Ports

Start telnet session to Avaya PG230 Digital Switch and login to the system using an appropriate username and password. In the Administration Main Menu screen, enter selection A for Data Base Administration Menu and pres Enter. In the Data Base Administration Menu screen, enter selection B for Resource Group Summary (not shown) and press Enter. The Resource Group Summary is displayed as shown below.

|    |          | ]      | RES  | O U R | СE    | G   | R O | U P   | S | UMM    | ARY  |        |       |     |
|----|----------|--------|------|-------|-------|-----|-----|-------|---|--------|------|--------|-------|-----|
|    |          | HUNT   | PORT | THRES | HOLDS |     |     |       |   | HUNT   | PORT | THRESI | HOLDS |     |
| NO | NAME     | TYPE   | CNT  | RHUNT | BUSY  | DSP | NO  | NAME  |   | TYPE   | CNT  | RHUNT  | BUSY  | DSP |
|    |          |        |      |       |       |     |     |       |   |        |      |        |       |     |
| 1  | bc       | CYCLIC | 128  | 0     | 0     | _   | 17  |       |   |        | 0    | 0      | 0     | _   |
| 2  | ecpa     | CYCLIC | 192  | 0     | 0     | _   | 18  |       |   |        | 0    | 0      | 0     | _   |
| 3  | dcc/ecc  | CYCLIC | 128  | 0     | 0     | _   | 19  | txfe1 |   | CYCLIC | 3    | 0      | 0     | _   |
| 4  |          |        | 0    | 0     | 0     | _   | 20  |       |   |        | 0    | 0      | 0     | _   |
| 5  |          |        | 0    | 0     | 0     | _   | 21  |       |   |        | 0    | 0      | 0     | _   |
| 6  |          |        | 0    | 0     | 0     | _   | 22  |       |   |        | 0    | 0      | 0     | _   |
| 7  |          |        | 0    | 0     | 0     |     | 23  |       |   |        | 0    | 0      | 0     |     |
| 8  |          |        | 0    | 0     | 0     | _   | 24  |       |   |        | 0    | 0      | 0     | _   |
| 9  |          |        | 0    | 0     | 0     | _   | 25  |       |   |        | 0    | 0      | 0     | _   |
| 10 | outbound | CYCLIC | 0    | 0     | 0     | _   | 26  |       |   |        | 0    | 0      | 0     | _   |
| 11 | outqe1   | CYCLIC | 10   | 0     | 0     | _   | 27  |       |   |        | 0    | 0      | 0     | _   |
| 12 | inbqe1   | CYCLIC | 5    | 0     | 0     | _   | 28  |       |   |        | 0    | 0      | 0     | _   |
| 13 |          |        | 0    | 0     | 0     | _   | 29  |       |   |        | 0    | 0      | 0     | _   |
| 14 |          |        | 0    | 0     | 0     | _   | 30  |       |   |        | 0    | 0      | 0     | _   |
| 15 | agents   | CYCLIC | 0    | 0     | 0     | _   | 31  |       |   |        | 0    | 0      | 0     | _   |
| 16 | agtqe1   | CYCLIC | 5    | 0     | 0     | _   | 32  |       |   |        | 0    | 0      | 0     | _   |
|    |          |        |      |       |       | _   |     |       |   |        |      |        |       | _   |

On the **Resource Group Summary** screen use ctrl+n to get to the **outqe1** row, enter any character in the **DSP** column for the **outqe1**, for example enter **d** and then press Enter. The screen below displays configured outbound ports (2-11) on the PG230 Digital Switch. These ports correspond to the ports of the inbound trunk group configured on Communication Manager in **Section 5.1**. Repeat this step to obtain the ports configured for agent headsets (**agtqe1**) and transfer (**txfe1**) resource groups, which are (12-16) and (18-20) respectively.

| RESC | R E S O U<br>DURCE GROUP | J R C<br>- #11 | E   | G R<br>N | OUP<br>AME - c | CONF<br>outqe1 | IGURA | TION     |   |
|------|--------------------------|----------------|-----|----------|----------------|----------------|-------|----------|---|
|      | PORT                     | LO             | CAI | TION     |                |                | PORT  | LOCATION |   |
| POS  | NAME                     | R              | L   | S        | P              | POS            | NAME  | R L S    | P |
|      |                          | -              | -   |          |                |                |       |          |   |
| 1    |                          | 1              | 1   | 18-1     | 2              |                |       |          |   |
| 2    |                          | 1              | 1   | 18-1     | 3              |                |       |          |   |
| 3    |                          | 1              | 1   | 18-1     | 4              |                |       |          |   |
| 4    |                          | 1              | 1   | 18-1     | 5              |                |       |          |   |
| 5    |                          | 1              | 1   | 18-1     | 6              |                |       |          |   |
| 6    |                          | 1              | 1   | 18-1     | 7              |                |       |          |   |
| 7    |                          | 1              | 1   | 18-1     | 8              |                |       |          |   |
| 8    |                          | 1              | 1   | 18-1     | 9              |                |       |          |   |
| 9    |                          | 1              | 1   | 18-1     | 10             |                |       |          |   |
| 10   |                          | 1              | 1   | 18-1     | 11             |                |       |          |   |
| 10   |                          | -              | -   |          |                |                |       |          |   |
|      |                          | _              | _   |          |                |                |       |          |   |
|      | ADD/DE                   | ELETE/         | CAF | RD (A    | /D/C)          | POS            | RLSP_ |          |   |
|      |                          |                |     |          |                |                |       |          |   |

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### 4.2. Avaya Proactive Contact Configuration Files

The **dgswitch.cfg** file is automatically configured by running **dg\_import** command. The format used is based on the location of the ports in the PG230 Digital Switch; therefore Proactive Contact is configured with the same number of **Outbound Ports** as the number of outbound lines on the PG230 Digital Switch. The outbound ports configured on Proactive Contact correspond to the ports of the outbound trunk group configured on Communication Manager in **Section 5.1**. The **dgswitch.cfg** file is located in the **/opt/avaya/pds/config** directory.

```
# Headset Ports
H:1:259:1::#H:16:1:1-1-18-12
H:2:260:1::#H:16:1:1-1-18-13
H:3:261:1::#H:16:1:1-1-18-14
H:4:262:1::#H:16:1:1-1-18-15
H:5:263:1::#H:16:1:1-1-18-16
# Outbound Ports
N:1:249:1::#0:11:1:1-1-18-2
N:2:250:1::#0:11:1:1-1-18-3
N:3:251:1::#0:11:1:1-1-18-4
N:4:252:1::#0:11:1:1-1-18-5
N:5:253:1::#0:11:1:1-1-18-6
N:6:254:1::#0:11:1:1-1-18-7
N:7:255:1::#0:11:1:1-1-18-8
N:8:256:1::#0:11:1:1-1-18-9
N:9:257:1::#0:11:1:1-1-18-10
N:10:258:1::#0:11:1:1-1-18-11
# Inbound Ports
# Transfer Trunks
T:1:265:1::#T:19:1:1-1-18-18
T:2:266:1::#T:19:1:1-1-18-19
T:3:267:1::#T:19:1:1-1-18-20
```

The **master.cfg** file located in the **/opt/avaya/pds/etc** directory sets the basic parameters for the operation of Proactive Contact. The following parameters were configured.

- AGENTOWNRECALL set to YES to allow agents to schedule a recall to be delivered back to them.
- LINEASSIGN set to the port numbers of the outbound trunk lines as configured in dgswitch.cfg and on PG230 Digital Switch.

```
AGENTOWNRECALL: YES
LINEASSIGN: REG, O=1-10; INB, I=11-15; IVR, I=21
```

#### 4.3. Obtain Customer Record Fields

A sample of customer records were retrieved from Indus Collections and uploaded to Proactive Contact as the calling lists. The following table shows the fields that are used in this compliance testing. Note that the mandatory fields that are required for integration is highlighted in bold (i.e. the agreement number and the telephone numbers). The rest of the fields are optional as they are retrieved directly from Indus Collections when the call is delivered to the agent.

|    | Field Name  | Description        | Column Width |
|----|-------------|--------------------|--------------|
| 1  | AGREEMENTNO | Agreement Number   | 20           |
| 2  | ADDRESS1    | Address 1          | 50           |
| 3  | PHONE1      | Phone 1            | 20           |
| 4  | PHONE2      | Phone 2            | 20           |
| 5  | PHONE3      | Phone 3            | 20           |
| 6  | TELEX1      | Telex 1            | 10           |
| 7  | TELEX2      | Telex 2            | 10           |
| 8  | PORTFOLIO   | Portfolio          | 1            |
| 9  | PRODUCT     | Product            | 5            |
| 10 | LOANAMT     | Loan Amount        | 14           |
| 11 | OVERDUEAMT  | Overdue Amount     | 14           |
| 12 | OSAMT       | Outstanding Amount | 14           |
| 13 | WFCODE      | Workflow           | 20           |
| 14 | WFSTATECODE | Workflow State     | 20           |
| 15 | CUSTOMERNO  | Customer Number    | 20           |
| 16 | MOBILENO    | Mobile Number      | 20           |
| 17 | NAME        | Customer Name      | 120          |
| 18 | BUCKETCODE  | Bucket             | 5            |
| 19 | IODDAYS     | Overdue Days       | 3            |

The creation of the Calling Lists, Phone Strategies, Record Selections and Jobs using the Proactive Contact Supervisor application are beyond the scope of these application notes. For details, refer to [4].

# 5. Configure Communication Manager

The basic configuration of Communication Manager is beyond the scope of these Application Notes. This section provides the procedures for verifying and configuring Communication Manager with PG230 Digital Switch. The following was configured:

• E1 trunk on Communication Manager to PG230 Digital Switch

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 Communication Manager System Access Terminal (SAT) interface and all changes are saved by entering the **save translation** command. Refer to [1] for additional details.

### 5.1. E1 Trunk on Communication Manager to PG230 Digital Switch

An ISDN-PRI E1 trunk was configured between Communication Manager and PG230 Digital Switch for Agent Headsets (Dial Back), Outbound and Transfer calls. The physical link was between the PG230 Digital Switch and the DS1 circuit pack on G650 Media Gateway. Enter the **add ds1 n** command, where **n** is the location of the DS1 circuit pack. Configure the following:

- Name set to any descriptive string value, in this case, it was PG230.
- Bit Rate set to 2.048.
- Line Coding set to hdb3.
- Signaling Mode set to isdn-pri.
- Connect set to pbx.
- Interface set to network.
- **Country Protocol** set to **etsi**.
- Interface Companding set to alaw.

```
add ds1 1a08
                                                               Page 1 of 1
                               DS1 CIRCUIT PACK
           Location: 01A08
                                                     Name: PG230
           Bit Rate: 2.048
                                              Line Coding: hdb3
     Signaling Mode: isdn-pri
            Connect: pbx
                                                Interface: network
  TN-C7 Long Timers? n
                                         Country Protocol: etsi
Interworking Message: PROGress
Interface Companding: alaw
                                                      CRC? n
          Idle Code: 01010100
                             DCP/Analog Bearer Capability: 3.1kHz
                                          T303 Timer(sec): 4
                                         Disable Restarts? n
     Slip Detection? n
                                       Near-end CSU Type: other
   Echo Cancellation? n
```

Configure a trunk group to use the DS1 circuit pack. Enter the **add trunk-group n** command, where **n** is an available trunk group number. Configure the following on **Page 1**.

- **Group Type** set to **isdn**.
- Group Name set to any descriptive string value, in this case, it was Avaya CM PG230.
- TAC enter a Trunk Access Code that is valid in the provisioned dial plan.
- Carrier Medium set to PRI/BRI.
- **Dial Access** set to y.
- Service Type set to tie.

| add trunk-group 7          |                          | Page 1 of 21            |
|----------------------------|--------------------------|-------------------------|
|                            | TRUNK GROUP              |                         |
|                            |                          |                         |
| Group Number: 7            | Group Type: isdn         | CDR Reports: y          |
| Group Name: Avaya CM - PG2 | 230 COR: 1               | TN: 1 <b>TAC: #07</b>   |
| Direction: two-way         | Outgoing Display? n      | Carrier Medium: PRI/BRI |
| Dial Access? y             | Busy Threshold: 99 Night | Service:                |
| Queue Length: 0            |                          |                         |
| Service Type: tie          | Auth Code? n             | TestCall ITC: rest      |
| Fai                        | End Test Line No:        |                         |
| TestCall BCC: 4            |                          |                         |

On Page 2 of the trunk group form, specify the following:

- Disconnect Supervision
  - $\circ$  In set to y.
  - $\circ$  **Out** set to y.

```
add trunk-group 7

Group Type: isdn

TRUNK PARAMETERS

Codeset to Send Display: 6

Max Message Size to Send: 260

Supplementary Service Protocol: a

Trunk Hunt: cyclical

Digit Handling (in/out): enbloc/enbloc

Trunk Hunt: cyclical

Digital Loss Group: 13

Incoming Calling Number - Delete: Insert: Format:

Bit Rate: 1200

Disconnect Supervision - In? y Out? y

Answer Supervision Timeout: 10

Administer Timers? n

Connect Reliable When Call Leaves ISDN? n
```

Configure a signaling group for the previously configured DS1 board 01A08. Enter the **add signaling-group n** command, where **n** is an unused signaling group number. Configure the following.

- **Group Type** set to **isdn-pri**.
- Primary D-Channel enter the DS1 board number followed by 16.
- **Trunk Group for NCA TSC** enter the trunk group number that was configured above; in this case that was trunk group 7.
- **Trunk Group for Channel Selection** enter the trunk group number that was configured above; in this case that was trunk group 7.

```
add signaling-group 7

SIGNALING GROUP

Group Number: 1

Associated Signaling? y

Primary D-Channel: 01A0816

Trunk Group for Channel Selection: 7

TSC Supplementary Service Protocol: a

Page 1 of 1

Max number of NCA TSC: 0

Max number of NCA TSC: 0

Trunk Group for Channel Selection: 7

TSC Supplementary Service Protocol: a
```

Enter the **change trunk-group n** command, where **n** is the trunk group number previously configured for inbound calls. On **Page 5**, configure **GROUP MEMBER ASSIGNMENTS** as follows:

- **Port** enter the DS1 board number followed by the trunk member number. The ports configured on Communication Manager must be mapped to the ports configured on the PG230 Digital Switch.
- Name enter a descriptive name to identify the trunk member.
- **Sig Grp** enter the number of the signaling group configured for the DS1 board 01A08, in this case it is Signaling Group 7.

| chan  | ge trunk | -group 7   |          |           | Page                        | e 5 of 21 |
|-------|----------|------------|----------|-----------|-----------------------------|-----------|
|       | -        |            |          | TRUNK GRO | OUP                         |           |
|       |          |            |          | Adm       | inistered Members (min/max) | : 1/19    |
| GROUI | P MEMBER | ASSIGNMENT | S        |           | Total Administered Members  | : 18      |
|       |          |            |          |           |                             |           |
|       | Port     | Code Sfx   | Name     | Night     | Sig Grp                     |           |
| 1:    | 01A0801  | TN2464 C   | outbound | 2         | 7                           |           |
| 2:    | 01A0802  | TN2464 C   | outbound |           | 7                           |           |
| 3:    | 01A0803  | TN2464 C   | outbound |           | 7                           |           |
| 4:    | 01A0804  | TN2464 C   | outbound |           | 7                           |           |
| 5:    | 01A0805  | TN2464 C   | outbound |           | 7                           |           |
| 6:    | 01A0806  | TN2464 C   | outbound |           | 7                           |           |
| 7:    | 01A0807  | TN2464 C   | outbound |           | 7                           |           |
| 8:    | 01A0808  | TN2464 C   | outbound |           | 7                           |           |
| 9:    | 01A0809  | TN2464 C   | outbound |           | 7                           |           |
| 10:   | 01A0810  | TN2464 C   | outbound |           | 7                           |           |
| 11:   | 01A0811  | TN2464 C   | headset  |           | 7                           |           |
| 12:   | 01A0812  | TN2464 C   | headset  |           | 7                           |           |
| 13:   | 01A0813  | TN2464 C   | headset  |           | 7                           |           |
| 14:   | 01A0814  | TN2464 C   | headset  |           | 7                           |           |
| 15:   | 01A0815  | TN2464 C   | headset  |           | 7                           |           |
|       |          |            |          |           |                             |           |

**Note**: There is different port numbering between PG230 Digital Switch and Communication Manager; therefore ports 2-11 on PG230 Digital Switch correspond to ports 1-10 on Communication Manager.

Repeat the above configuration steps to configure the trunk members for Agent Headsets (Dial Back) and Transfer calls.

| change trunk-group 7     |                    | Page 6 of 21        |
|--------------------------|--------------------|---------------------|
|                          | TRUNK GROUP        |                     |
|                          | Administered Membe | ers (min/max): 1/19 |
| GROUP MEMBER ASSIGNMENTS | Total Administ     | ered Members: 18    |
| Port Code Sfy Nar        | me Night Sig       | Grn                 |
| 16:                      | inte Nigite 519    | Sip                 |
| 17: 01A0817 TN2464 C tra | cansfer 7          |                     |
| 18: 01A0818 TN2464 C tra | cansfer 7          |                     |
| 19: 01A0819 TN2464 C tra | cansfer 7          |                     |
|                          |                    |                     |

# 6. Configure R Systems Indus Collections Client

This section describes the steps to configure R Systems Indus Collections Client. 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. The following configuration is described below:

- Configure Microsoft Internet Explorer
- Configure hosts file
- Configure moagent32.ini file

#### 6.1. Configure Microsoft Internet Explorer

Indus Collections Client is a web-based client that uses Microsoft Internet Explorer to log in to the Indus Collections server. The integration to Proactive Contact uses an additional integration library file AvayaDialer.ocx which required additional configuration in Internet Explorer as described below.

From Internet Explorer, select **Tools**  $\rightarrow$  **Internet Options** (not shown). In the **General** tab, click **Settings** under the **Browsing history** section.

|                           | -                                | ·                        | · · · · ·                         | -                                 | -            | ~                       |
|---------------------------|----------------------------------|--------------------------|-----------------------------------|-----------------------------------|--------------|-------------------------|
| General                   | Security                         | Privacy                  | Content                           | Connections                       | Programs     | Advance                 |
| Home p                    | age                              |                          |                                   |                                   |              |                         |
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|                           | De                               | lete brows               | sing history                      | on exit                           |              |                         |
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| Search                    | ) Chang                          | je search (              | defaults.                         | Delete                            | Set          | tings                   |
| Search                    | ) Chang                          | je search (              | defaults.                         | Delete                            | Set          | ttings                  |
| Search<br>F<br>Tabs       | Chang                            | je search (              | defaults.                         | Delete                            | Set          | tings                   |
| Search                    | Chang<br>Chang<br>tabs,          | je search (<br>je how we | defaults.<br>bpages are           | Delete                            | Set          | tings<br>tings          |
| Search<br>Tabs -          | Chang<br>Chang<br>tabs.          | je search (<br>je how we | defaults.<br>bpages are           | Delete                            | Set          | tings<br>tings          |
| Search<br>Tabs<br>Appea   | Chang<br>Chang<br>tabs.          | je search (<br>je how we | defaults.<br>bpages are           | Delete                            | Set          | tings<br>tings<br>tings |
| Search<br>Tabs -<br>Appea | Chang<br>Chang<br>tabs.<br>rance | je search (<br>je how we | defaults.<br>bpages are<br>guages | Delete<br>e displayed in<br>Fonts | Set          | tings<br>tings<br>tings |
| Search<br>Tabs -<br>Appea | Chang<br>Chang<br>tabs.<br>rance | ie search (<br>ie how we | defaults.<br>bpages ar<br>guages  | Delete<br>e displayed in<br>Fonts | Set          | tings<br>tings<br>tings |

Select Every time I visit the webpage and click OK.

| Temporary Internet Files and History Settings   |
|---|
| Temporary Internet Files  |
| Internet Explorer stores copies of webpages, images, and media<br>for faster viewing later.   |
| Check for newer versions of stored pages:   |
| O Every time I start Internet Explorer  |
| O Automatically   |
| O Never   |
| Disk space to use (8-1024MB) (Recommended: 50-250MB) 50 📚                                     |
| Current location:   |
| C:\Documents and Settings\Administrator\Local<br>Settings\Temporary Internet Files\           |
| Move folder View objects View files   |
| History   |
| Specify how many days Internet Explorer should save the list<br>of websites you have visited. |
| Days to keep pages in history: 20 📚   |
| OK Cancel   |

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|          | Security Pri   | ivacy Conti                                      | ent Connec                              | tions Pr                              | ograms            | Advance |
|----------|--|--|---|---------------------------------------|-------------------|---------|
| Select a | zone to view   | or change se                                     | ecurity settin                          | gs.                                   |                   |         |
|          | 2  | 5  | $\checkmark$                            |                                       |                   |         |
| Inte     | rnet Loca  | l intranet 👖                                     | rusted sites                            | Restri                                | ted               |         |
| 45       | Trusted sit  | tes .  |   | - sice                                | 5                 | _       |
| ~        | This zone co<br>trust not to<br>your files.<br>You have we | intains websi<br>damage youi<br>ebsites in this  | tes that you<br>r computer o<br>s zone. | r                                     | Site              | s       |
| Securi   | ty level for th  | is zone  |   |                                       |                   |         |
|          | <b>Custon</b><br>Custo<br>- To d<br>- To u                 | n<br>m settings.<br>hange the se<br>se the recom | attings, click (<br>Imended sett        | Eustom le <sup>,</sup><br>ings, click | vel.<br>Default k | evel.   |
|          |  |  | Custom level                            |                                       | Default l         | evel    |
|          |  |  | Reset a                                 | II zones to                           | o default l       | evel    |

In the ActiveX controls and plug-ins section, set all options to Enable and click OK.

| curity Set  | tings - Trusted Site       | s Zone                    |               |
|-------------|----------------------------|---------------------------|---------------|
| Settings    |                            |                           |               |
| 👔 Activ     | eX controls and plug-ins   |                           | ~             |
| e e e       | llow previously unused A   | ctiveX controls to run wi | thout prom    |
| -           | 2 Disable                  |                           |               |
| 0           | Denable                    |                           |               |
| 1 F         | llow Scriptlets            |                           |               |
| - F         | 2 Disable                  |                           |               |
|             |                            |                           |               |
|             | ) Prompt                   | stive V controls          |               |
|             | Disable                    | COVER CONCLOS             |               |
| C C         | Enable                     |                           |               |
|             | inary and script behavior  | <                         |               |
|             | Administrator approve      | ď                         |               |
| Č           | Disable                    | 100                       |               |
|             | Enable                     |                           | 1000          |
|             | icnlau video and animatic  | on on a webnade that do   | iec not uce 🎽 |
| <           |                            |                           | >             |
| *Takes eff  | ect after you restart Inte | ernet Explorer            |               |
| Reset custo | m settings                 |                           |               |
| Reset to:   | Medium (default)           | ▼                         | Reset         |
|             |                            |                           |               |
|             |                            | ОК                        | Cancel        |
|             |                            |                           |               |

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| eneral Security                                  | Privacy Conte   | nt Connection                         | ns Programs                       | Advanc |
|--|---|---------------------------------------|-----------------------------------|--------|
| 5elect a zone to vi                              | ew or change se   | curity settings.                      |                                   |        |
|  |   | 1                                     | $\bigcirc$                        |        |
| Internet L                                       | ocal intranet 👖   | usted sites                           | Restricted<br>sites               |        |
| Trusted  | sites   |                                       | Che Che                           | _      |
| This zone<br>trust not<br>your files<br>You have | e contains websit<br>to damage your<br>:.<br>e websites in this | es that you<br>computer or<br>zone.   |                                   |        |
| Security level for                               | this zone   |                                       |                                   |        |
| Cust<br>Cu<br>- T<br>- T                         | om<br>stom settings.<br>o change the sel<br>o use the recom     | ttings, click Cust<br>mended settings | :om level,<br>5, click Default le | evel.  |
|  |   | Custom level                          | Default le                        | evel   |
|  | J.  | Reset all zo                          | nes to default l                  | evel   |
|  |   |                                       |                                   |        |

Uncheck **Require server verification (https:) for all sites in this zone**. Enter the URL to access the Indus Collections server, in this case it is <u>http://10.1.10.107:8080/collections/Welcome.do</u> and click **Add**. This will specify the Indus Collections server as a trusted site.

| Trusted sites   |                      |
|---|----------------------|
| You can add and remove websites from this zo<br>this zone will use the zone's security settings.<br>Add this website to the zone: | one. All websites in |
| http://10.1.10.107:8080/collections/Welcome.do  | Add                  |
| Websites:   |                      |
|   | Remove               |
|   |                      |
| Require server verification (https:) for all sites in thi   | is zone              |

In the Privacy tab, uncheck Turn on Pop-up Blocker. Click OK to complete.



### 6.2. Configure Hosts File

The Avaya Proactive Contact Agent API that is used by Indus Collections Client checks the hosts file to obtain the IP address of the Proactive Contact. Configure the **hosts** file located in **C:\WINDOWS\system32\drivers\etc** directory and specify the IP address and hostname for the Avaya Proactive Contact as shown below:

127.0.0.1 localhost 10.1.10.75 pcontact

### 6.3. Configure moagent32.ini File

The Indus Collections Client checks the **moagent32.ini** file to obtain the IP address or hostname of Avaya Proactive Contact. Edit the **moagent32.ini** file located in **C:\WINDOWS** directory and configure the **servername** parameter with IP address or hostname of the Proactive Contact as shown below:

```
[logon]
servername = pcontact
servicename = agent
portnumber = 22700
headset =
```

# 7. General Test Approach and Test Results

The feature test cases were performed manually. Agents would log on using Microsoft Internet Explorer into Indus Collections and Proactive Contact. During log in, the specified headsets were reserved for the agents and the agents were joined into the specified jobs.

The verification of tests included checking of proper states on the Indus Collections Client and on the telephones that were used as the headsets.

The serviceability test cases were performed manually by disconnecting and reconnecting the LAN cables on the agent desktops, by restarting the agent desktops and Proactive Contact server.

All test cases passed successfully.

# 8. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Proactive Contact and Indus Collections Client.

### 8.1. Verify Proactive Contact

From a desktop installed with Proactive Contact Supervisor, click Start  $\rightarrow$  All Programs  $\rightarrow$  Avaya  $\rightarrow$  Proactive Contact 4.1  $\rightarrow$  Supervisor  $\rightarrow$  Monitor and log in using an account with administrative privileges. Select Job Status from the left navigation pane and verify that the required jobs are in the Active state as shown below.

| 🔲 Monitor - [Job Status]   |         |            |          |         |             |           |                 |              |                        |    |       |
|----------------------------|---------|------------|----------|---------|-------------|-----------|-----------------|--------------|------------------------|----|-------|
| 🝌 File View Settings Tools | Window  | Help       |          |         |             |           |                 |              |                        |    | - 8 × |
| D 🚅 🖬 🗛 🖾 😤 🔅              | . 🗏 🛛 ? |            |          |         |             |           |                 |              |                        |    |       |
| View Set                   | 111 😽   | <b>7</b> 🕅 | 🐴 😤 All  | Level 1 | ▼ 索 All Lev | el 2 🔻 🦷  | 🏩 All Level 3 💌 | * 🕗 🖻        |                        |    |       |
| Dialer                     | Job     | Dialer     | Job Type | Status  | Start Time  | Stop Time | Est. End Time   | Total Agents | Total Lines % Complete |    |       |
| Job                        | list4   | pcontact   | Managed  | Active  | 1:13:34 PM  | ÷-        | - Her           | 0            | 10                     | 0% |       |
|                            | list5   | pcontact   | Outbound | Active  | 1:13:44 PM  | ÷*        | 4-              | 0            | 10                     | 0% |       |
| Leb Clabor                 |         |            |          |         |             |           |                 |              |                        |    |       |
|                            |         |            |          |         |             |           |                 |              |                        |    |       |
| <u>a</u>                   |         |            |          |         |             |           |                 |              |                        |    |       |
| Job Detail                 |         |            |          |         |             |           |                 |              |                        |    |       |
| 🔜 💽                        |         |            |          |         |             |           |                 |              |                        |    |       |
| Supervisor                 |         |            |          |         |             |           |                 |              |                        |    |       |
| Agent                      |         |            |          |         |             |           |                 |              |                        |    |       |
| Custom                     |         |            |          |         |             |           |                 |              |                        |    |       |
|                            |         |            |          |         |             |           |                 |              |                        |    | 1     |

#### 8.2. Verify Indus Collections

From an agent desktop using Internet Explorer, browse to the Indus Collection server URL <u>http://10.1.10.107:8080/collections/Welcome.do</u> and log in using an agent's account. Select **Operations**  $\rightarrow$  **Dialer Operations** (not shown) to display the **Dialer Login** screen as shown below. Enter an extension to use as agent headset for **Station Id**, select the desired **Campaign** (**Outbound** or **Managed**), select a **Job Name** and click **Sign in** to log in to Proactive Contact.

| C http://          | /10.1.10.1         | 07:8           | 080/ - Collect                  | tions - Window | s Internet Ex  | plorer                      |                 |         |      |        |  |
|--------------------|--------------------|----------------|---------------------------------|----------------|----------------|-----------------------------|-----------------|---------|------|--------|--|
| ind                | US "               | /elcor<br>47AV | me, agent1 (ag<br>/AYA(30.10.20 | ent1)<br>09)   |                |                             |                 |         |      | Logout |  |
| System<br>Dialer ( | Operal<br>Operatio | tions          | Tools                           | Configuration  | Administration | Commission                  | Receipts        | Reports | Help |        |  |
|                    |                    |                |                                 |                |                |                             |                 |         |      |        |  |
|                    |                    |                |                                 |                |                |                             |                 |         |      |        |  |
|                    |                    |                |                                 |                |                |                             |                 |         |      |        |  |
|                    |                    |                |                                 |                | Dialer Lo      | gin                         |                 |         |      |        |  |
|                    |                    |                |                                 |                |                | Uploaded by :<br>Station Id | agent1<br>10001 |         |      |        |  |
|                    |                    |                |                                 |                |                | Password :                  | ••••••          |         |      |        |  |
|                    |                    |                |                                 |                |                | Campaign :<br>Job Name :    | OutBound        | ~       |      |        |  |
|                    |                    |                |                                 |                |                | Job Hame I                  | Sign in         |         |      |        |  |
|                    |                    |                |                                 |                |                |                             |                 |         |      |        |  |
|                    |                    |                |                                 |                |                |                             |                 |         |      |        |  |
|                    |                    |                |                                 |                |                |                             |                 |         |      |        |  |
|                    |                    |                |                                 |                |                |                             |                 |         |      |        |  |
|                    |                    |                |                                 |                |                |                             |                 |         |      |        |  |
|                    |                    |                |                                 |                |                |                             |                 |         |      |        |  |

The agent is automatically put into the **Available** mode upon successful log in. Verify that the agent receives an outbound call and the customer information is displayed on the screen.

| 6 http://10.1.10.107:8080                                     | / - Collections - Windows I  | nternet Explorer     |  |                            |   |  |
|---|--|----------------------|--|----------------------------|---|--|
| Welcome, a<br>IC47AVAYA                                       | agent1 (agent1)<br>A(30.10.2009)   |                      |  |                            | Campaign: C<br>Job Name: li   | 0 Active 00:36   |
| System Operations 🔆   | Tools Configuration A  | dministration Commis | sion Receipts                            | Reports                    | Help  |  |
| Dialer Operations   |  |                      |  | Search Agree               | ement:  | Clip Search Advanced Search (G)                            |
| Favorites   | Mobile #: ALN4B10000<br>Customer #: C001AL0010<br>Customer: Darlene Berg           | 30<br>30<br>Isten    | Credit Limit:<br>Min Amount:<br>Balance: | 0<br>3,819.48<br>64,353.19 | Portfolio: <sub>A</sub><br>OD Days: <sub>88</sub><br>Bucket: <sub>3</sub> | Group: CALLING<br>Work flow State: TELE-PEND<br>Collector: |
|   | Individual Followup  |                      |  |                            |   | 🗐 🌩 🔝  |
|   | Action :   |                      |  |                            | — Promise Sche  | dule   |
|   | Result:  | 🖉 🔄                  |  |                            | Promise Star  | rt Date :  |
|   | Next Action:   |                      |  |                            | Fre   | quency: Monthly  |
|   | Planned Date:  | -                    | Show Limit                               |                            | Each Promise  | Amount:  |
|   |  |                      |  |                            | Number of Pr  | romises: Generate  |
| Follow Up Review  | Notes:   |                      |  |                            | + =   | Date Amount  |
| Agreement Management  | - Options  |                      | - Agreement Pa                           | ameter                     | — Cu  | istomer Parameter  |
| Customer Management<br>Collection History                     | Charge Fee :   |                      | Delinguency Rea                          | ison :                     |   | Customer on watch :  |
| Supervision   | Apply to : 🗌 All ag  | reements             |  |                            |   | Best time to call :  |
| Initiate Workflow<br>Workflow Specific<br>Collateral<br>Asset | Party Contacted :<br>Mode of Contact :<br>Place of Contact :<br>Contacted Person : |                      |  |                            |   | (HEIMM HEIMM)  |
|   |  |                      | HangUp Dia                               | l Hold                     | Transfer LeaveJob   | Break Save Clear Close                                     |

# 9. Conclusion

These Application Notes describe the required configuration steps for R Systems Indus Collections to successfully interoperate with Avaya Proactive Contact using Avaya PG230 Digital Switch. All test cases were completed successfully

# 10. Additional References

This section references Avaya and R Systems product documentation that are relevant to these Application Notes.

Avaya product documentation can be found at <u>http://support.avaya.com</u>.

- [1] *Administering Avaya Aura™ Communication Manager*, Release 5.2, Issue 5.0, May 2009, Document Number 03-300509.
- [2] *Implementing Proactive Contact 4.1*, March, 2009.
- [3] Avaya Proactive Contact 4.1 Administering Avaya Proactive Contact (Linux-based Interface), March 2009.
- [4] Avaya Proactive Contact 4.1 Using Avaya Proactive Contact Supervisor, March 2009.
- [5] Avaya Proactive Contact 4.1 Agent API Reference, March 2009.

Product information on Indus Collections can be found at: <u>http://www.indussoft.com/Products\_Collections.htm</u>.

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