



## **Avaya Solution & Interoperability Test Lab**

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# **Application Notes for VPI EMPOWER Suite Performance Reporting Data Collector with Avaya Proactive Contact 5.1 – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required for Voice Print International EMPOWER Suite Performance Reporting Data Collector to interoperate with Avaya Proactive Contact 5.1. Voice Print International EMPOWER Suite provides solutions for interaction recording, quality monitoring, performance management, and eLearning. The compliance testing focused on the Performance Reporting Data Collector solution.

In the testing, Voice Print International EMPOWER Suite Performance Reporting Data Collector used the Event Services interface from Avaya Proactive Contact to capture and store real-time statistics on jobs and agent.

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 Voice Print International (VPI) EMPOWER Suite Performance Reporting Data Collector to interoperate with Avaya Proactive Contact 5.1. VPI EMPOWER Suite provides solutions for interaction recording, quality monitoring, performance management, and eLearning. The compliance testing focused on the Performance Reporting Data Collector solution.

In the testing, VPI EMPOWER Suite Performance Reporting Data Collector used the Event Services interface from Avaya Proactive Contact to capture and store real-time statistics on jobs and agent.

VPI EMPOWER Suite Performance Reporting Data Collector collected real-time job and agent statistics from Avaya Proactive Contact using the Event Services JobStatNotify and AgentStatNotify methods. The collected data were saved to the local server data store and made available for other applications for retrieval and display on dashboards, score cards, and reports. The compliance testing focused on the collecting and storing of data from Avaya Proactive Contact.

## 2. General Test Approach and Test Results

The feature test cases were performed semi-automatically. Outbound calls were launched automatically from Proactive Contact, whereas inbound calls were placed manually. Different jobs were launched with manual actions from the Proactive Contact agents to generate different statistical data for verification purposes.

The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet cable to the EMPOWER Suite server.

The verification of tests included comparing the stored statistical data on EMPOWER Suite Performance Reporting Data Collector with the enclinet command output from Proactive Contact.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

## 2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following on EMPOWER Suite Performance Reporting Data Collector:

- Parsing and storing of JobStatNotify data from Proactive Contact.
- Parsing and storing of AgentStatNotify data from Proactive Contact.

The serviceability testing focused on verifying the ability of EMPOWER Suite Performance Reporting Data Collector to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet cable to EMPOWER Suite.

## 2.2. Test Results

All test cases were executed. The following were the observations on EMPOWER Suite Performance Reporting Data Collector from the compliance testing.

- The jobEndTime, agentWorkstationID, headsetID, loginTimeStamp, and offlineTimeStamp parameter values in the tables were picked up from the very initial job and agent statistical events, and not updated subsequently.
- The mgdPreviewTime, loginTimeStamp, offlineTimeStamp, acqFmAcidTimeStamp, relToAcidTimeStamp, lastLogonTimeStamp, lastLogoffTimeStamp, and lastStatusChgTimeStamp parameter values in the tables were rounded to the nearest minute, with zeroes as seconds in some cases.
- After Proactive Contact performs a pds\_stop/pds\_start, pds\_maintenance or reboot, Performance Reporting Data Collector did not re-establish the connection. The workaround is to manually restart the VPI DCS for Avaya PC4 service.

## 2.3. Support

Technical support on EMPOWER Suite Performance Reporting Data Collector can be obtained through the following:

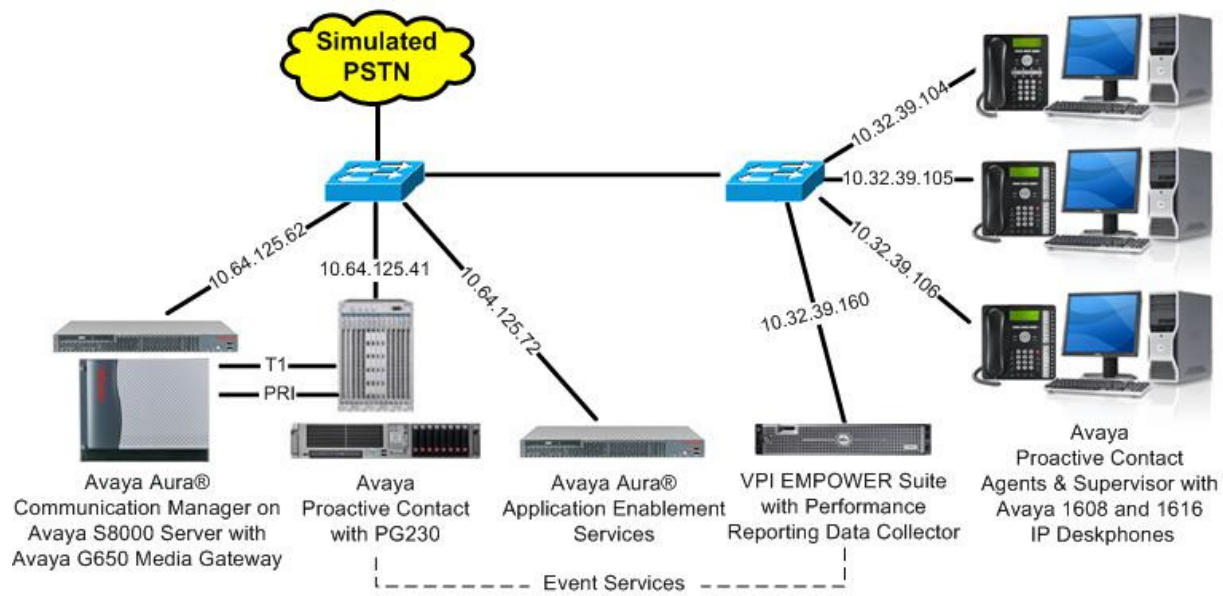
- **Phone:** (805) 389-5201
- **Email:** [support@vpi-corp.com](mailto:support@vpi-corp.com)
- **Web:** <http://www.vpi-corp.com/support.asp>

### 3. Reference Configuration

EMPOWER Suite with Performance Reporting Data Collector can be configured on a single server or with components distributed across multiple servers. The compliance test configuration used a single server configuration.

The detailed administration of basic connectivity between Communication Manager and Proactive Contact, between Communication Manager and Application Enablement Services, and of contact center devices are not the focus of these Application Notes and will not be described.

The Proactive Contact with PG230 deployment option was used in the test, and the results should be applicable to other Proactive Contact deployment options.



**Figure 1: Compliance Testing Configuration**

## 4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager on Avaya S8800 Server with Avaya G650 Media Gateway	6.3.2 (R016x.03.0.124.0-21053)
Avaya Aura® Application Enablement Services	6.3.1 (6.3.1.0.19-0)
Avaya Proactive Contact with PG230	5.1
Avaya Proactive Contact Agent	5.1
Avaya Proactive Contact Supervisor	5.1
Avaya 1608 IP Deskphone (H.323)	1.3.4
Avaya 1616 IP Deskphone (H.323)	1.3.4
VPI EMPOWER Suite with Performance Reporting Data Collector on Windows Server 2008 <ul style="list-style-type: none"><li>• Microsoft SQL Server 2012</li></ul>	5.4 SP3  R2 Standard 11.0.3000.0

## 5. Configure Avaya Proactive Contact

This section provides the procedures for configuring Proactive Contact.

### 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 for configuring EMPOWER Suite.

In the compliance testing, the host name of the Proactive Contact server is “lzpds4b”, as shown below.

```
$ uname -a
Linux lzpds4b 2.6.18-308.16.1.el5PAE #1 SMP Tue Sep 18 07:29:37 EDT 2012 i686 athlon
i386 GNU/Linux
```

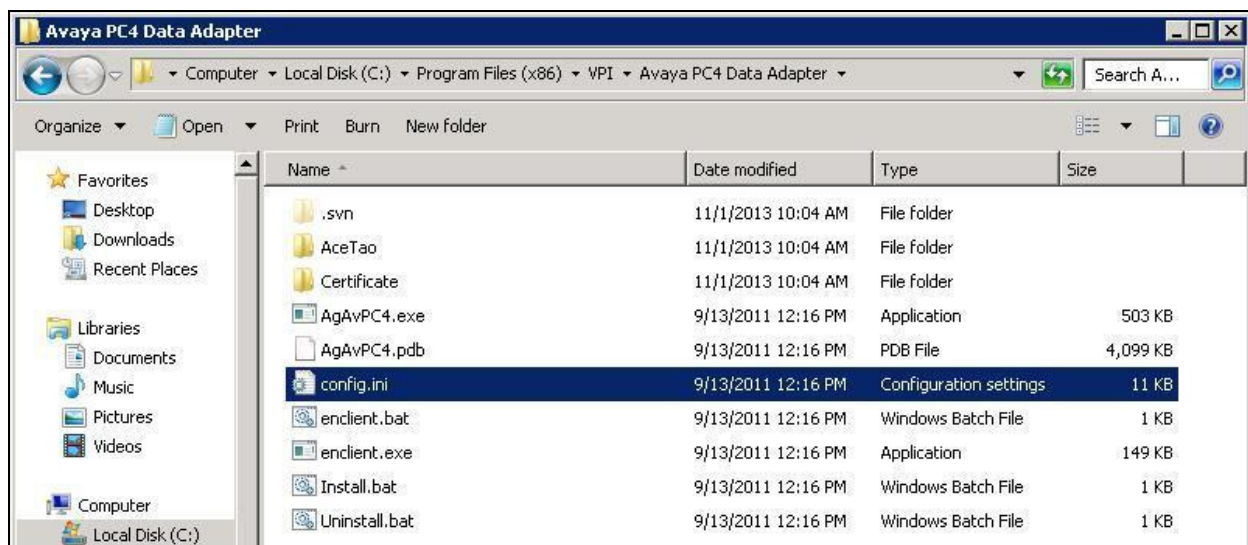
## 6. Configure VPI EMPOWER Suite Performance Reporting Data Collector

This section provides the procedures for configuring EMPOWER Suite Performance Reporting Data Collector.

The configuration of EMPOWER Suite is performed by VPI installers. The procedural steps are presented in these Application Notes for informational purposes.

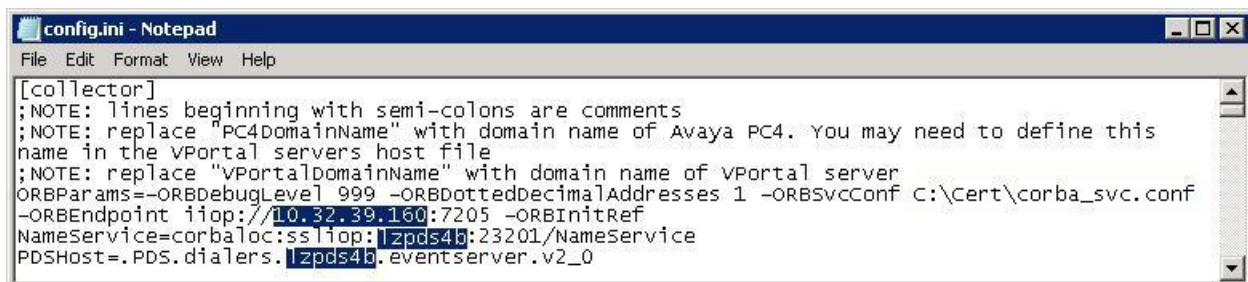
### 6.1. Configure config.ini

From the EMPOWER Suite server, navigate to the **C:\Program Files (x86)\VPI\Avaya PC4 Data Adapter** directory to locate the **config.ini** file shown below.



Open the **config.ini** file with the Notepad application. Search for **PC4DomainName**, and replace the string in two occurrences with the Proactive Contact host name from **Section 5.1**.

Search for **VPortalDomainName**, and replace the string in one occurrence with the IP address of the EMPOWER Suite server, as shown below.



## 7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Proactive Contact and EMPOWER Suite Performance Reporting Data Collector.

### 7.1. Verify Avaya Proactive Contact

Log in to the Linux shell of the Proactive Contact server, and issue the “netstat | grep enservice” command. Verify that there is an entry showing an **ESTABLISHED** connection between the Proactive Contact Event Server and EMPOWER Suite, as shown below.

tcp	0	0	lzpds4b:enservice_ssl	lzpds4b:53124	ESTABLISHED
tcp	0	0	lzpds4b:enservice_ssl	10.32.39.160:49177	ESTABLISHED
tcp	0	0	lzpds4b:53124	lzpds4b:enservice_ssl	ESTABLISHED

### 7.2. Verify VPI EMPOWER Suite Performance Reporting Data Collector

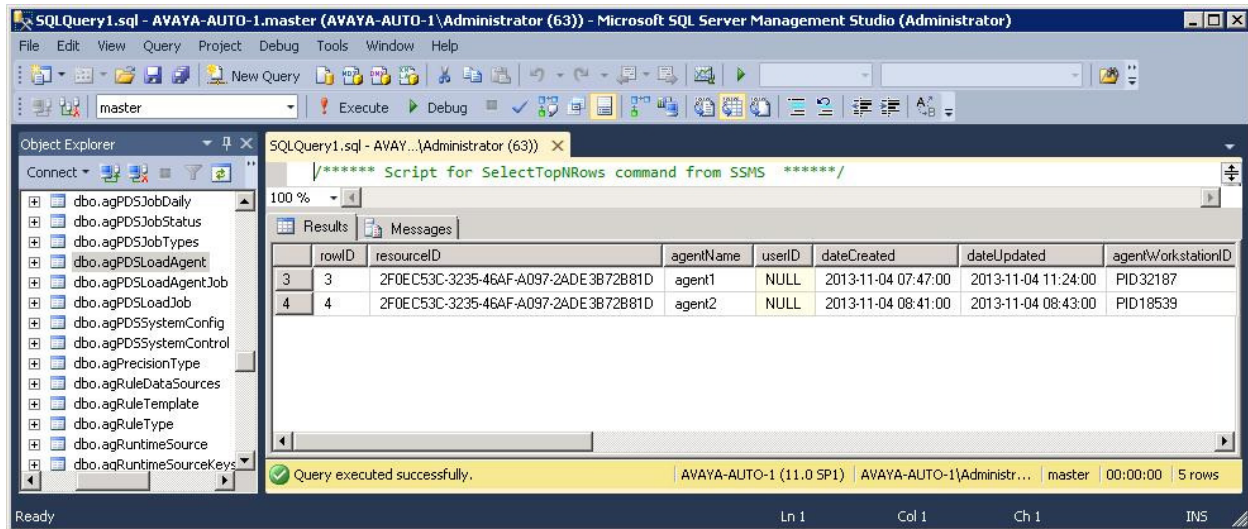
From the EMPOWER Suite server, connect to the data store by selecting **Start → All Programs → Microsoft SQL Server 2012 → SQL Server Management Studio**. The **Connect to Server** screen is displayed. Click **Connect**.



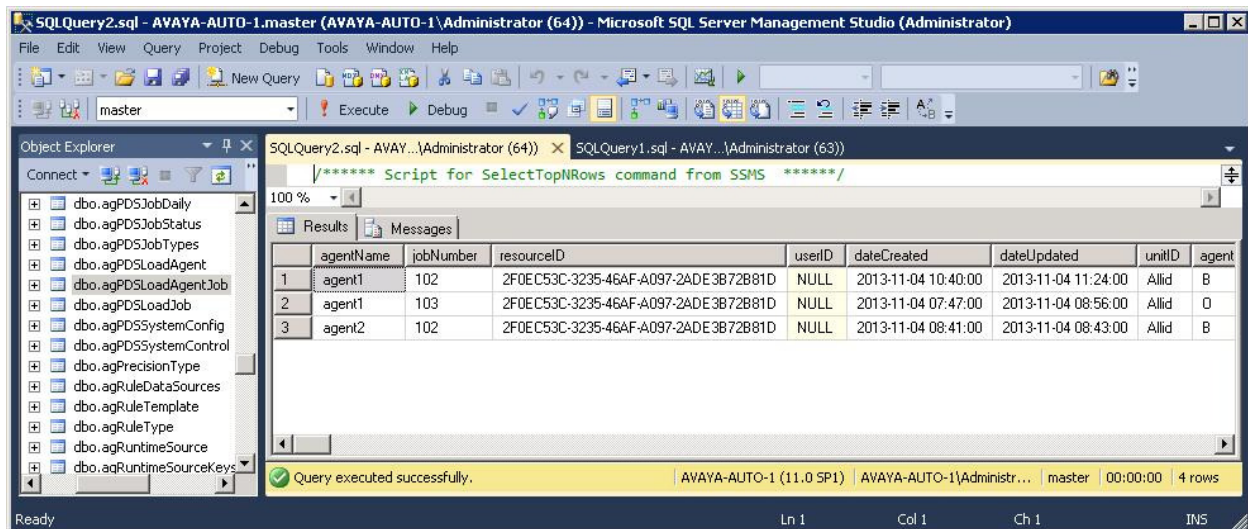


The **Microsoft SQL Server Management Studio** screen is displayed. Expand **AVAYA-AUTO-1 → Databases → vpiPerformance → Tables** from the left pane, where **AVAYA-AUTO-1** is the local computer name.

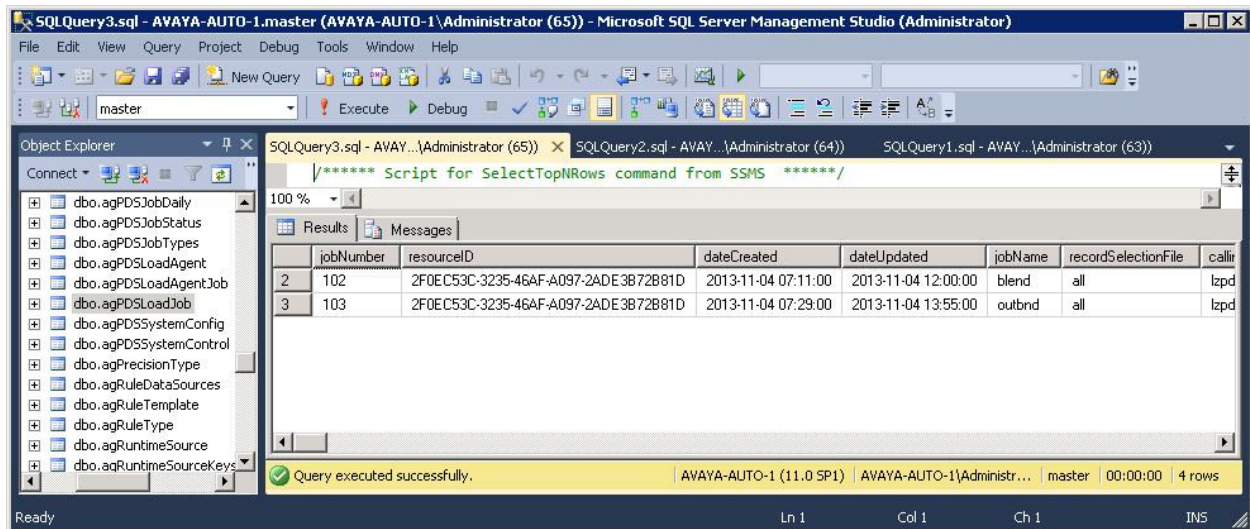
Scroll down to **dbo.agPDSLoadAgent** in the left pane, right-click on the entry and choose **Select Top 1000 Rows**. Verify that the right pane is populated, and that an entry exists for each agent, as shown below.



Scroll down to **dbo.agPDSLoadAgentJob** in the left pane, right-click on the entry and choose **Select Top 1000 Rows**. Verify that the right pane is populated, and that an entry exists for each applicable agent and job combination, as shown below.



Scroll down to **dbo.agPDSLoadJob** in the left pane, right-click on the entry and choose **Select Top 1000 Rows**. Verify that the right pane is populated,, and that an entry exists for each job, as shown below.



## 8. Conclusion

These Application Notes describe the configuration steps required for VPI EMPOWER Suite Performance Reporting Data Collector to successfully interoperate with Avaya Proactive Contact 5.1. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

## 9. Additional References

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

1. *Administering Avaya Aura® Communication Manager*, Document 03-300509, Issue 9, Release 6.3, October 2013, available at <http://support.avaya.com>.
2. *Avaya Aura® Application Enablement Services Administration and Maintenance Guide*, Release 6.3, Issue 2, October 2013, available at <http://support.avaya.com>.
3. *VPI EMPOWER Avaya Channel Manager Guide*, September 2013, available on the VPI EMPOWER Suite server as part of installation.

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