



Avaya Solution & Interoperability Test Lab

Application Notes for Pipkins Vantage Point with Avaya Call Management System – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Pipkins Vantage Point to interoperate with Avaya Call Management System. Pipkins Vantage Point utilizes the historical call measurement data from Avaya Call Management System to forecast and create optimized work schedules for contact center agents. The real-time call measurement data from Avaya Call Management System are then utilized by Pipkins Vantage Point to monitor the agent adherence to the developed schedules.

Information in these Application Notes has been obtained through compliance testing and additional technical discussions. Testing was conducted via the *DeveloperConnection* Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

Pipkins Vantage Point is a work force management solution that provides forecasting, scheduling, and monitoring of work for contact center agents across multiple media channels. The compliance testing focused on the voice channel data integration with Avaya Call Management System (CMS).

On Avaya Communication Manager, relevant contact center resources consisting of Vector Directory Number (VDN), Split/Skill, and Agent are configured to be “measured” by Avaya CMS. When a call travels through a “measured” resource on Avaya Communication Manager, the call measurement data is sent to Avaya CMS. The historical call measurement data from Avaya CMS are utilized by Pipkins Vantage Point to produce forecasts and work schedules for the contact center agents. The real-time call measurement data from Avaya Call Management System are then utilized by Pipkins Vantage Point to monitor the agent adherence to the developed schedules.

Contact center users such as supervisors and/or agents can run the Pipkins Vantage Point client software on their desktops, and access the Pipkins Vantage Point server to review any collected data and/or produced forecasts and schedules. For the compliance testing, the Pipkins Vantage Point client software was installed on the same machine that hosts the Pipkins Vantage Point server. The Pipkins Vantage Point client software was used to verify the collected call measurement data from Avaya CMS.

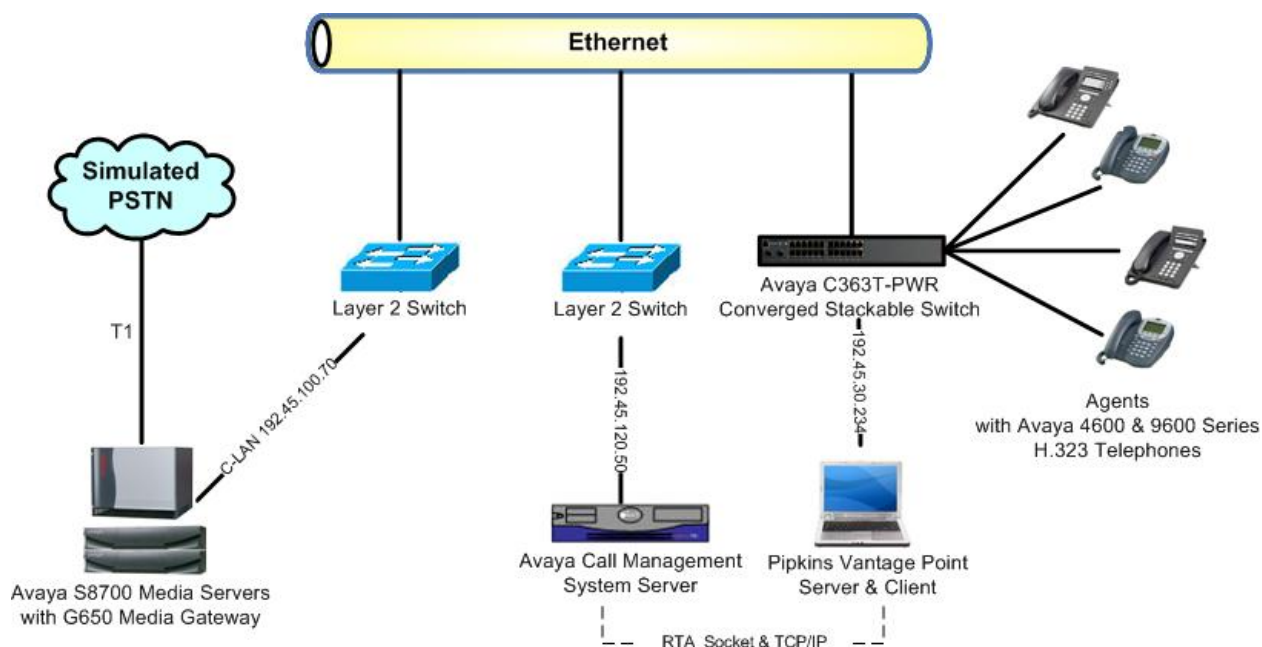


Figure 1: Pipkins Vantage Point with Avaya Call Management System

The integration of historical VDN/Split/Skill/Agent call measurement data with Avaya CMS is a customization provided by the Avaya Communication Solutions and Integration (CSI) group within Avaya Global Services. The customized historical data is generated on Avaya CMS and sent to a shared directory from the Avaya CMS server for storage. A script is written by Pipkins for the compliance testing, to allow the Pipkins Vantage Point server to use a TCP/IP connection to pull the historical data from the shared directory in the Avaya CMS server on a regularly scheduled intra-hour interval. Note that the intra-hour interval is an administrable parameter on Avaya CMS, which can contain the value of 15, 30, or 60 minutes. This method of retrieving the historical data is referred to as the Active Network Mode by Pipkins, and was used for the compliance testing. Consult with the Pipkins implementation analyst for two other methods for historical data retrieval.

The integration of real-time Agent call measurement data with Avaya CMS is a customization achieved through the Generic Real Time Agent (Generic-RTA) interface. A TCP client-server model is used for the connection, with the Avaya CMS server being the “client”, and the Pipkins Vantage Point server being the “server”. The Pipkins Vantage Point server runs a TCP “listener” process to accept the data connection from the Avaya CMS server. The customized Generic-RTA interface on the Avaya CMS is also provided by the Avaya CSI group.

The Avaya CSI group installs and configures the customized interfaces on the Avaya CMS, and provides the TCP port number associated with the Generic-RTA interface to Pipkins for configuring the Pipkins Vantage Point server.

These Application Notes assume the configuration and connectivity between Avaya Communication Manager and Avaya CMS is already in place and will not be described. Furthermore, the development and deployment of the customized scripts for Avaya CMS and Pipkins Vantage Point are outside the scope of this document.

2. Equipment and Software Validated

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

Equipment	Software
Avaya S8700 Media Servers	Avaya Communication Manager 3.1.2, R013x.01.2.632.1
Avaya G650 Media Gateway <ul style="list-style-type: none">• TN799DP C-LAN Circuit Pack	HW01 FW017
Avaya Call Management System Server	r13.1ca.i
Avaya C363T-PWR Converged Stackable Switch	4.3.12
Avaya 4610SW IP Telephones (H.323)	2.30
Avaya 9620 one-X™ Deskphone Edition (H.323)	1.0
Avaya 9630 one-X™ Deskphone Edition (H.323)	1.0
Pipkins Vantage Point Server & Client running on Dell Inspiron 1100	8.05.01.01 Windows 2000 SP4

3. Configure Avaya Communication Manager

The detailed administration of contact center resources and connectivity between Avaya Communication Manager and Avaya CMS are not the focus of these Application Notes and will not be described. For administration of contact center resources and connectivity to Avaya CMS, refer to the appropriate documentation listed in **Section 10**.

This section provides the procedures for how to enable VDN, Split/Skill, and Agent measurement data to be sent to Avaya CMS. The procedures include the following areas:

- Administer measured VDN
- Administer measured Split/Skill and Agent

3.1. Administer Measured VDN

Use the “change vdn n” command, where “n” is the extension of the VDN to be measured by Avaya CMS. Set the **Measured** field to “external” to enable measurement data on the VDN to be sent to Avaya CMS. Repeat this step for all VDNs that will be measured by Avaya CMS.

```
change vdn 24597                                     Page 1 of 2
                                         VECTOR DIRECTORY NUMBER
                                         Extension: 24597
                                         Name: Pipkins VDN 24597
                                         Vector Number: 510
                                         Meet-me Conferencing? n
                                         Allow VDN Override? n
                                         COR: 1
                                         TN: 1
                                         Measured: external
                                         Acceptable Service Level (sec): 20
                                         VDN of Origin Annc. Extension:
                                         1st Skill:
                                         2nd Skill:
                                         3rd Skill:
```

For the compliance testing, two VDNs with extensions 24597-24598 were configured to be measured, as shown below.

```
list vdn 24597 count 2
                                         VECTOR DIRECTORY NUMBERS
                                         Evt
                                         Name (22 characters) Ext VDN   Vec   Orig   Noti   Skills
                                         Ovr COR TN   Num   Meas Annc Adj  1st  2nd  3rd
Pipkins VDN 24597    24597   n   1   1   510  ext
Pipkins VDN 24598    24598   n   1   1   520  ext
```

3.2. Administer Measured Split/Skill and Agent

Use the “change hunt-group n” command, where “n” is the number of the Split/Skill group to be measured by Avaya CMS. Navigate to **Page 2**, and set the **Measured** field to “external” to enable measurement data on the Split/Skill group and the associated Agents to be sent to Avaya CMS. Repeat this step for all Split/Skill groups that will be measured by Avaya CMS.

change hunt-group 510		Page 2 of 3
HUNT GROUP		
Skill? y	Expected Call Handling Time (sec): 180	
AAS? n	Service Level Target (% in sec): 80 in 20	
Measured: external		
Supervisor Extension:		
Controlling Adjunct: none		
Timed ACW Interval (sec):		
Multiple Call Handling: none		
Redirect on No Answer (rings):		
Redirect to VDN:		
Forced Entry of Stroke Counts or Call Work Codes? N		

For the compliance testing, two Split/Skill groups with group numbers 510 and 520 were configured to be measured, as shown below.

list hunt-group 510 count 2											
HUNT GROUPS											
Grp No.	Grp Name/Ext	Grp Type	ACD/MEAS	Vec	MCH	Que	Mem	Cov Path	Notif/ Ctg	Dom Adj	Message Center
510	Pipkins Skill 34510	510 ucd-mia	y/E	SK	none	y	0		n		n
520	Pipkins Skill 34520	520 ucd-mia	y/E	SK	none	y	0		n		n

In the compliance testing, two agents with physical extensions 24511-24512 and logical extensions 35511-35512 were used as available agents for the above Split/Skill groups.

list agent-loginID 35511 count 2											
AGENT LOGINID											
Login ID	Name/ Extension	Dir Agt	AAS/ AUD	Ag COR	Pr	SO	Skil/Lv	Skil/Lv	Skil/Lv	Skil/Lv	
35511	Pipkins 24511	35511					1 lv1	510/01	520/02	/	/
								/	/	/	/
35512	Pipkins 24512	35512					1 lv1	510/01	520/02	/	/
								/	/	/	/

4. Configure Avaya Call Management System

The connectivity between Avaya CMS and Avaya Communication Manager is assumed to be in place and will not be described. In addition, these Application Notes assume a user name and password of “cmssite1” has been created with report access permissions, and that the intra-hour interval is already administered.

This section provides the procedures for the following:

- Enable Generic-RTA interface
- Obtain intra-hour interval

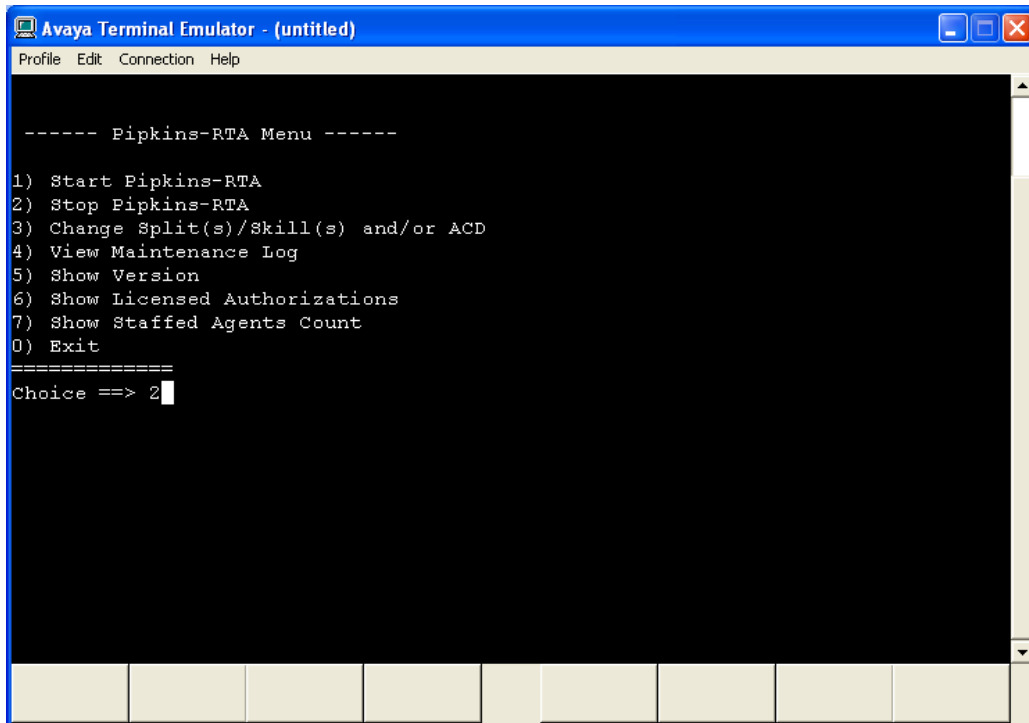
Note that no special procedure is required to enable the customized historical data interface.

4.1. Enable Generic-RTA Interface

Use a terminal emulator to connect to the Avaya CMS server, and log in with the proper credentials. Enter “cms” at the command prompt to display the **MainMenu** screen. Select the option that corresponds to the customized real-time agent interface created by Avaya CSI for Pipkins, in this case the option is **Pipkins_RT_Agent**. Note that the actual option name may vary. Press the **Enter** key.

```
Avaya Terminal Emulator - (untitled)
Profile Edit Connection Help
11/29/06 13:58 Avaya(TM) CMS Windows: 0 of 10 ^^
MainMenu
Reports>
Dictionary>
Exceptions>
Agent Administration>
Call Center Administration>
Custom Reports>
User Permissions>
System Setup>
Maintenance>
RT_Socket>
Generic-RTA>
GMT_Historical>
Pipkins>
Pipkins_RT_Agent
Logout
;
Help Window Commands Keep Exit Scroll Current MainMenu
```

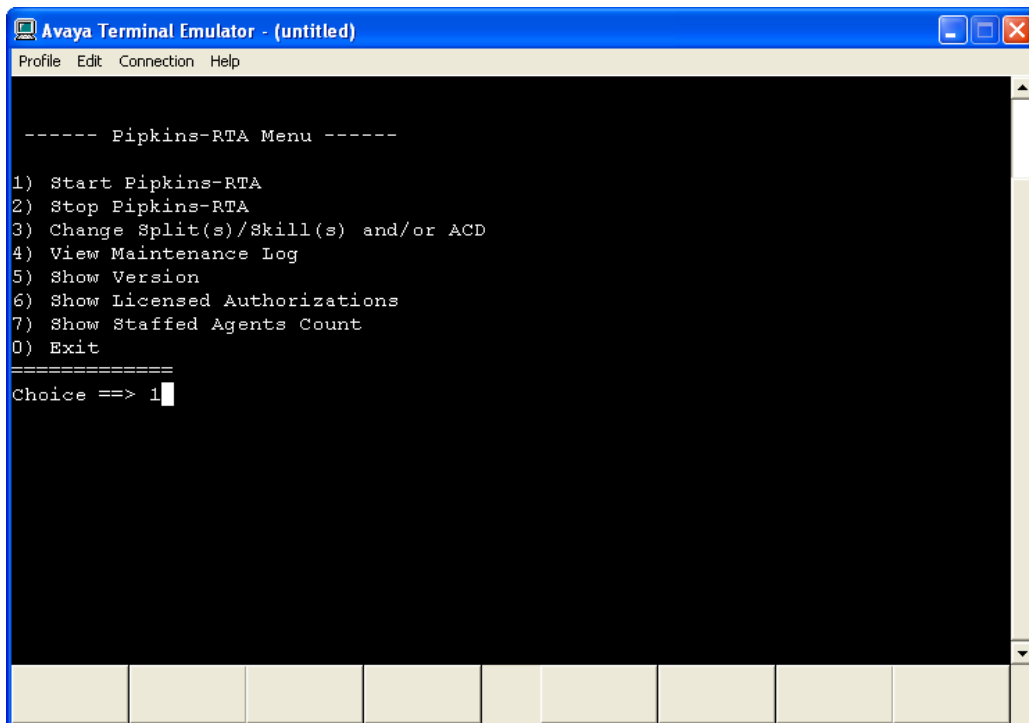
The **Pipkins-RTA Menu** is displayed. Enter “2” followed by the Enter key , to stop the interface.



```
Avaya Terminal Emulator - (untitled)
Profile Edit Connection Help

----- Pipkins-RTA Menu -----
1) Start Pipkins-RTA
2) Stop Pipkins-RTA
3) Change Split(s)/Skill(s) and/or ACD
4) View Maintenance Log
5) Show Version
6) Show Licensed Authorizations
7) Show Staffed Agents Count
0) Exit
=====
Choice ==> 2
```

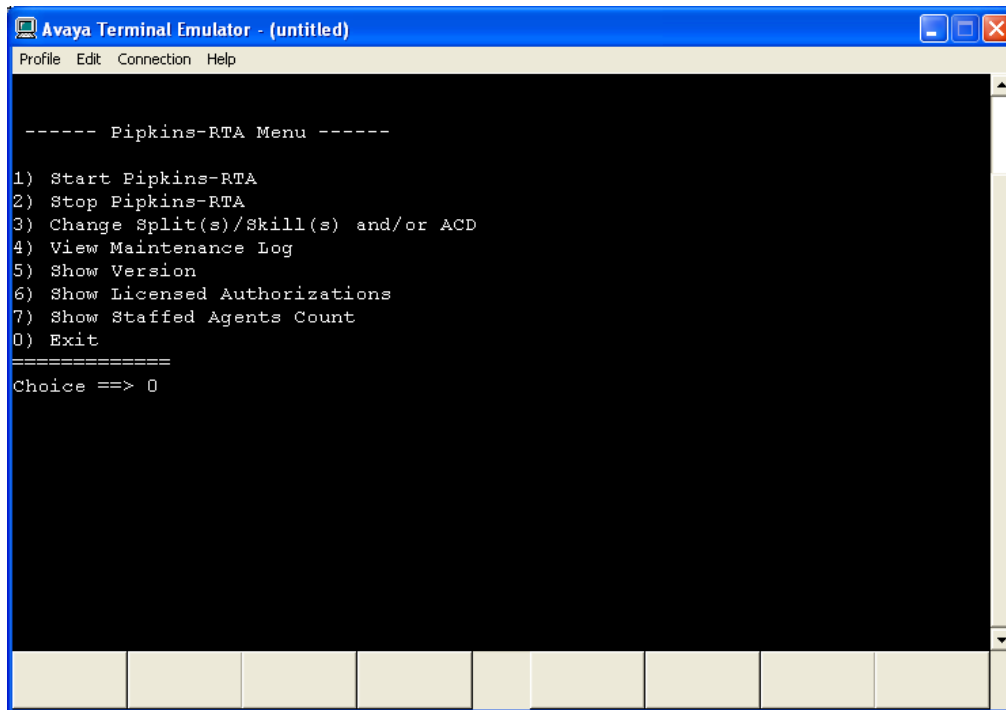
Enter “1” followed by the **Enter** key, to restart the interface.



```
Avaya Terminal Emulator - (untitled)
Profile Edit Connection Help

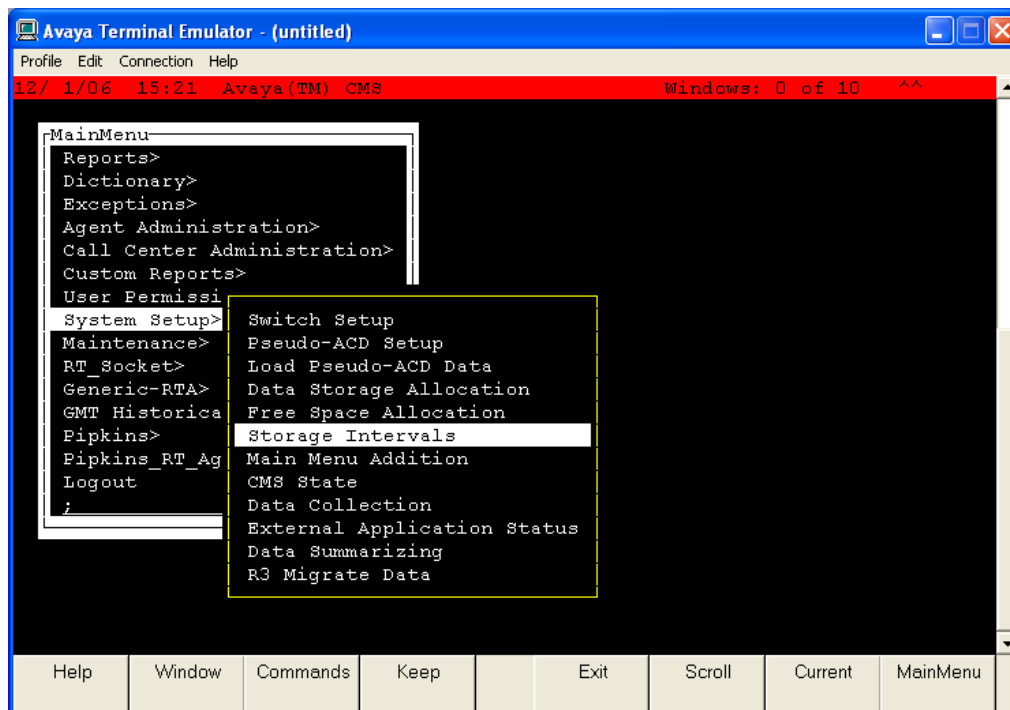
----- Pipkins-RTA Menu -----
1) Start Pipkins-RTA
2) Stop Pipkins-RTA
3) Change Split(s)/Skill(s) and/or ACD
4) View Maintenance Log
5) Show Version
6) Show Licensed Authorizations
7) Show Staffed Agents Count
0) Exit
=====
Choice ==> 1
```


Enter “0” followed by the **Enter** key, to exit and return back to the main menu.

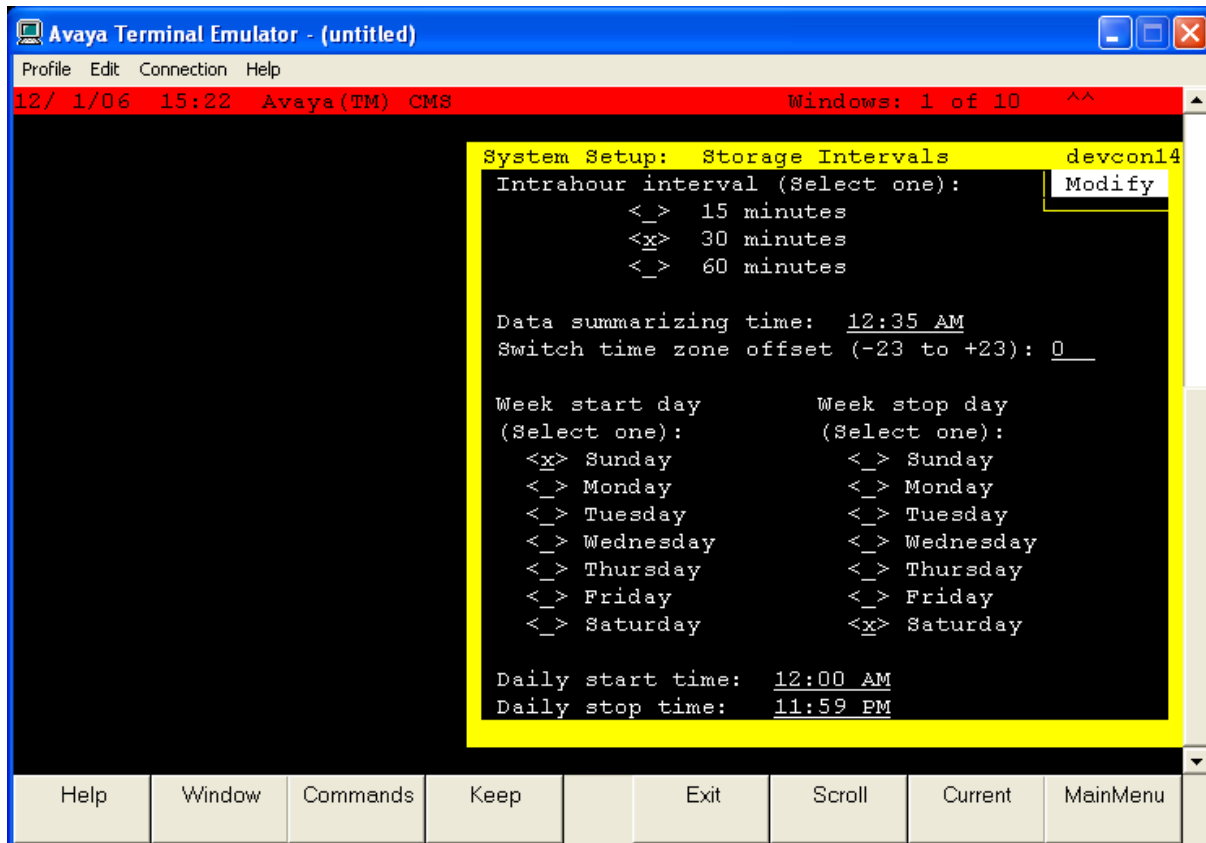


4.2. Obtain Intra-Hour Interval

From the **MainMenu** screen, select **System Setup > Storage Intervals** and press the **Enter** key.



The **System Setup: Storage Intervals** screen is displayed. Make a note of the administered intra-hour interval for the historical reports, which is “30 minutes” for the compliance testing as shown below. This interval will be used to administer the Pipkins Vantage Point server in **Section 5.3**.



5. Configure Pipkins Vantage Point

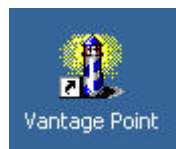
This section provides the procedures for configuring the Pipkins Vantage Point server. The procedures include the following areas:

- Launch Vantage Point
- Administer ACD system
- Administer system queues
- Administer inbound queues
- Administer extension team group
- Administer login team
- Administer real-time adherence
- Administer staff

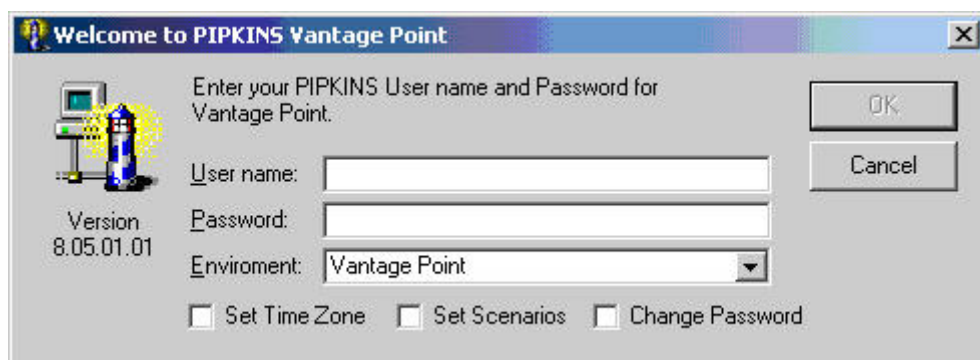
Note that configuration of Pipkins Vantage Point is typically performed by the Pipkins implementation analysts. The procedural steps are presented in these Application Notes for informational purposes.

5.1. Launch Vantage Point

From the Vantage Point server, start the application by double-clicking on the **Vantage Point** icon shown below. This icon is created as part of the Pipkins Vantage Point server installation.



The **Welcome to PIPKINS Vantage Point** screen is displayed, as shown below. Log in using the proper user name and password. Maintain the default value of “Vantage Point” in the **Environment** field, and click **OK**.

The dialog box has a title bar that says "Welcome to PIPKINS Vantage Point". On the left, there is a small icon of a computer monitor and a lighthouse, with the text "Version 8.05.01.01" below it. The main area contains the text "Enter your PIPKINS User name and Password for Vantage Point." followed by three input fields: "User name:", "Password:", and "Environment:". The "Environment:" field is a dropdown menu with "Vantage Point" selected. At the bottom, there are three checkboxes: "Set Time Zone", "Set Scenarios", and "Change Password", all of which are currently unchecked. On the right side, there are two buttons: "OK" and "Cancel".

5.2. Administer ACD System

The **PIPKINS Vantage Point – [Default System VP]** screen is displayed next. Expand the **Data Collection Setup** directory in the middle pane, and select **Inbound ACD System**. A list of existing ACD systems are displayed into the right pane, as shown below. Right click in a blank area in the right pane, and select **New** to add an ACD system (not shown below).

Name	Timezone	Time Step Size	Description
Agent Statistics - Avaya	US/Central	15	
Agent Statistics - Symp	US/Central	15	
CentralOffice	US/Central	15	Central Office Demand Work
Dallas	US/Central	15	FEMA Office Demand
Denver	US/Mountain	15	Denver Office Demand work
eMedNY-Albany	US/Eastern	15	Medicaid Calls
Memphis	US/Central	15	Memphis Office Demand work
PartDAlbany	US/Eastern	15	Part D Beneficiary Calls
PartD-Cleveland	US/Eastern	15	Part D Beneficiary Calls
Simi Valley	US/Pacific	15	Simi Valley ACD
St. Louis ACD System	US/Central	15	STL Sales Office and Fulfillment Center
StLouis	US/Central	15	St. Louis Office Demand work
StLouis-Multit	US/Central	15	St. Louis Office Blended Demand Teams

The **Inbound ACD System Configuration - New** screen is displayed next. Enter the following values for the specified fields, and maintain the default values for the remaining fields.

- **Name:** A descriptive name for the new ACD system, in this case “Lincroft”.
- **Model:** Select the appropriate model from the drop down list.
- **Time Step:** Select the Avaya CMS historical report schedule interval from **Section 4.2**.
- **Time Zone:** Select the proper time zone from the drop down list.

Note that the “Avaya DevConct – all” model is created as part of the Pipkins Vantage Point server installation for the compliance testing, and contains the parsing and calculation rules for the report data fields. Consult with the Pipkins implementation analyst for the proper model value to use.

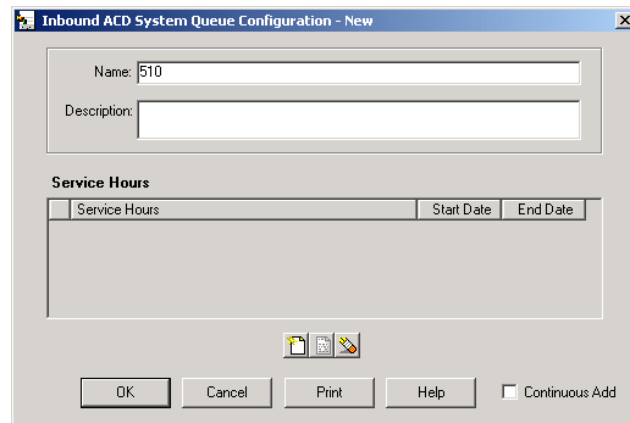
Click on the first icon below **Inbound ACD System Queues** to configure system queue information to correspond to the administered Split/Skill groups and VDNs on Avaya Communication Manager.

The screenshot shows the 'Inbound ACD System Configuration - New' window. The 'Name' field is set to 'Lincroft' and the 'Model' dropdown is set to 'Avaya DevConct - all'. The 'Time Step' is '30 min' and the 'Time Zone' is 'US/Eastern'. The 'Observe Daylight Savings' checkbox is checked. The 'Delete Date' is '00/00/0000'. The 'Serial Connection Information' section shows 'Port' as empty, 'Baud Rate' as '9600', 'Data Bits' as '8', 'Flow Control' as 'RTS/CTS', 'Parity' as 'NONE', and 'Stop Bits' as '1'. The 'Inbound ACD System Queues' list box is empty, and the first icon (a document with a plus sign) is circled in red. The 'Inbound ACD System Serving Teams' list box is also empty. The bottom of the window has buttons for 'OK', 'Cancel', 'Apply', 'Print', 'Help', and a 'Continuous Add' checkbox.

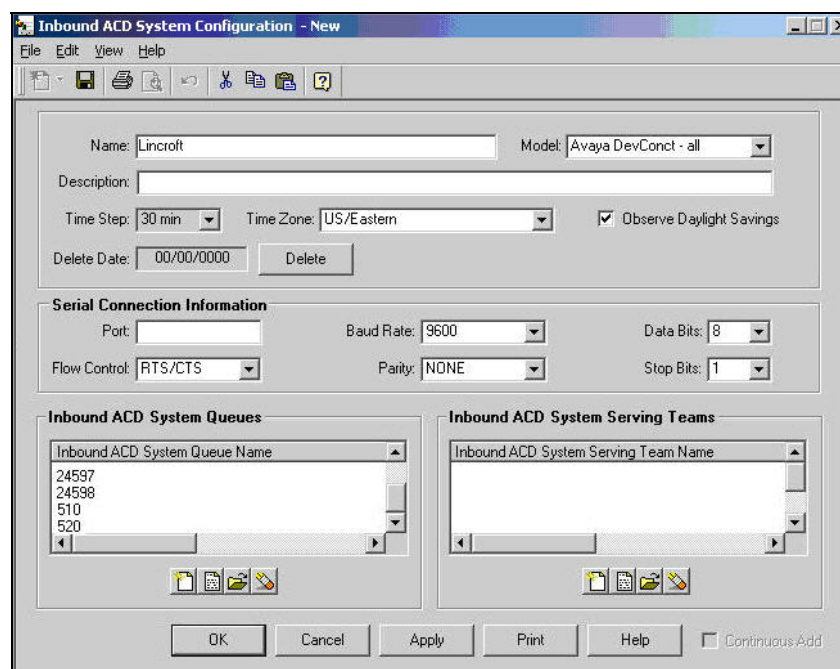
5.3. Administer System Queues

The **Inbound ACD System Queue Configuration - New** screen is displayed. Enter the Avaya Communication Manager Split/Skill group number from **Section 3.2** into the **Name** field (in this case “510”). Note that this field is case and space sensitive, and must be an exact match of the Split/Skill group number from **Section 3.2**. Click **OK**.

When creating a system queue to correspond to the Avaya Communication Manager VDN, use the VDN extension from **Section 3.1** for the **Name** field.

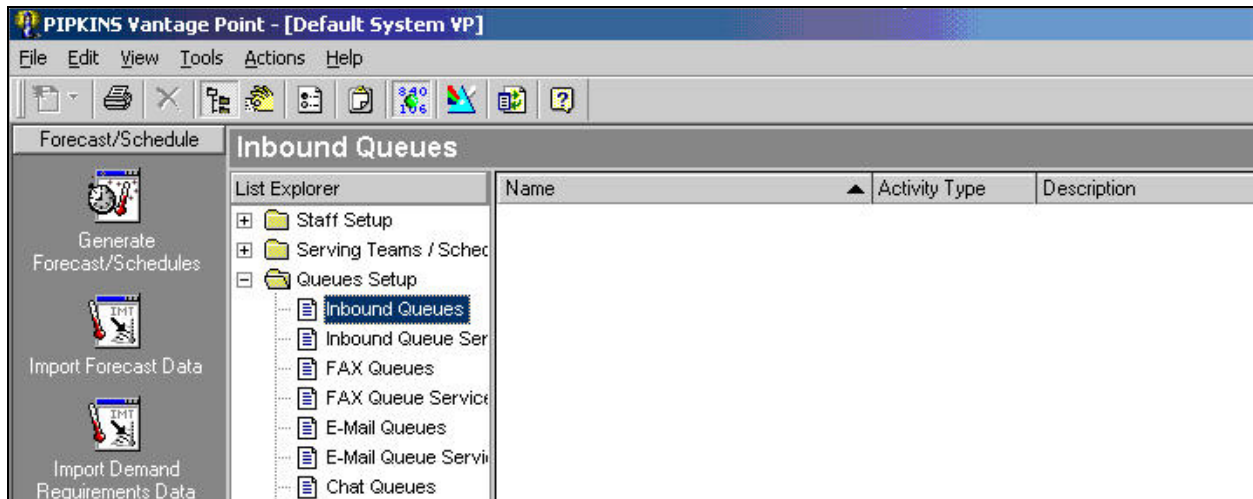


The **Inbound ACD System Configuration - New** screen is displayed again, and updated with the newly created system queue. Repeat this procedure to create a system queue to correspond to each Split/Skill group and VDN created in **Sections 3.2** and **3.1** respectively. For the compliance testing, four queues were configured, as shown below. Click **OK**.

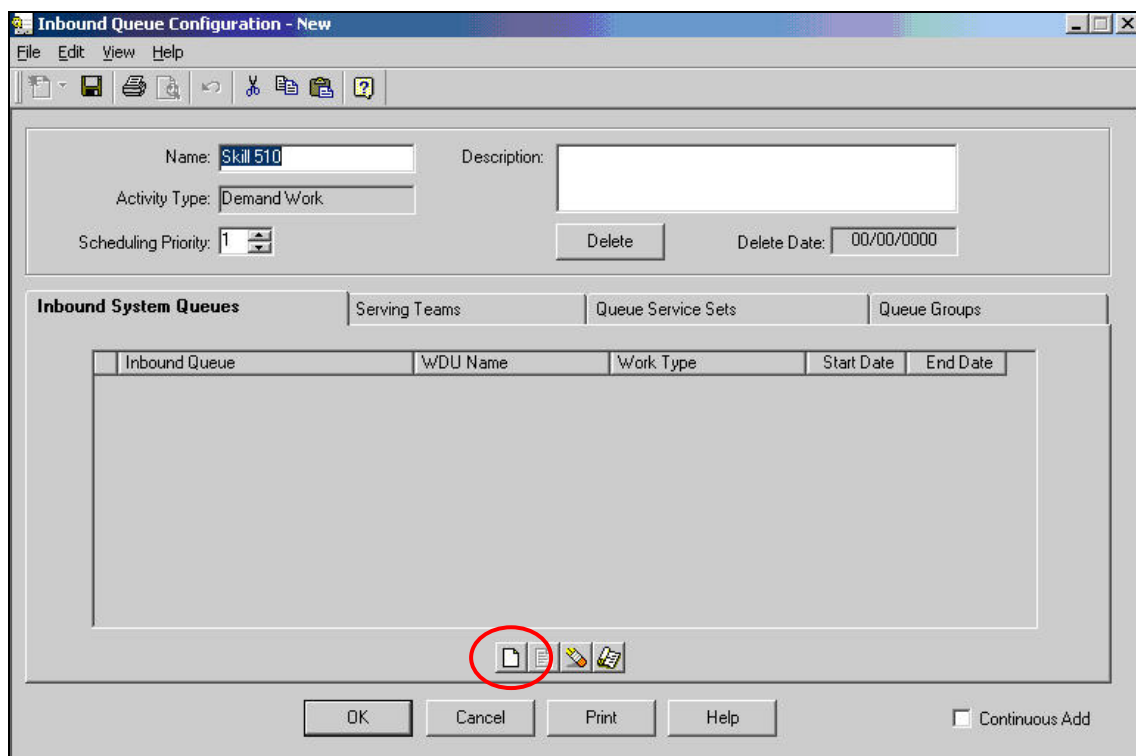


5.4. Administer Inbound Queues

The **PIPKINS Vantage Point – [Default System VP]** screen is displayed again. Expand the **Queues Setup** directory in the middle pane, and select **Inbound Queues**. Right click in the right pane, and select **New** to add an inbound queue (not shown below).



The **Inbound Queue Configuration - New** screen is displayed. Enter a descriptive name for the **Name** field (in this case “Skill 510”), and maintain the default values in the remaining fields. Select the **Inbound Systems Queues** tab, and click on the first icon toward the bottom of the screen.



A new entry row is displayed in the **Inbound Systems Queues** tab, as shown below. For the **Inbound Queue** field, use the drop down list to associate this inbound queue with the desired system queue from **Section 5.3** (in this case “510”). Enter an appropriate value into the **Start Date** field, in this case “11/29/2006”. Maintain the default values in all remaining fields. Click **OK**.

Inbound Queue Configuration - New

Name: Description:

Activity Type:

Scheduling Priority: Delete Date:

Inbound System Queues | Serving Teams | Queue Service Sets | Queue Groups

Inbound Queue	WDU Name	Work Type	Start Date	End Date
510	Lincroft	Inbound	11/29/2006	00/00/0000

☐ Continuous Add

Repeat the procedures to create an inbound queue to correspond to each system queue created in **Section 5.3**. For the compliance testing, four inbound queues were configured, as shown below.

PIPKINS Vantage Point - [Default System VP]

File Edit View Tools Actions Help

Forecast/Schedule

Inbound Queues

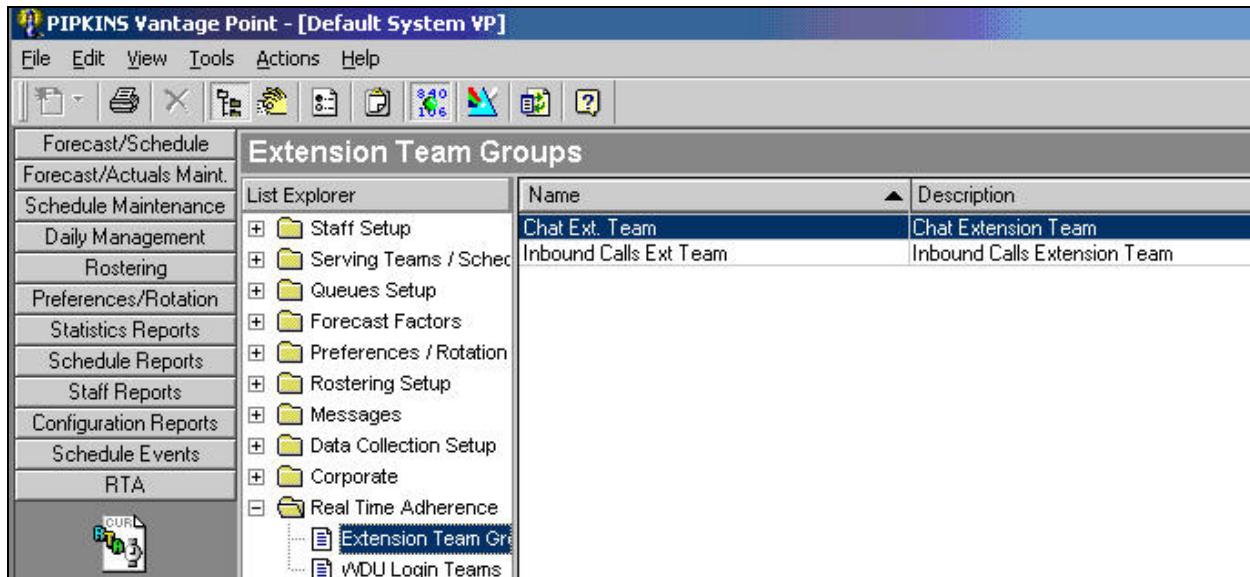
List Explorer

- Staff Setup
 - Serving Teams / Sched
 - Queues Setup
 - Inbound Queues**
 - Inbound Queue Ser
 - FAX Queues

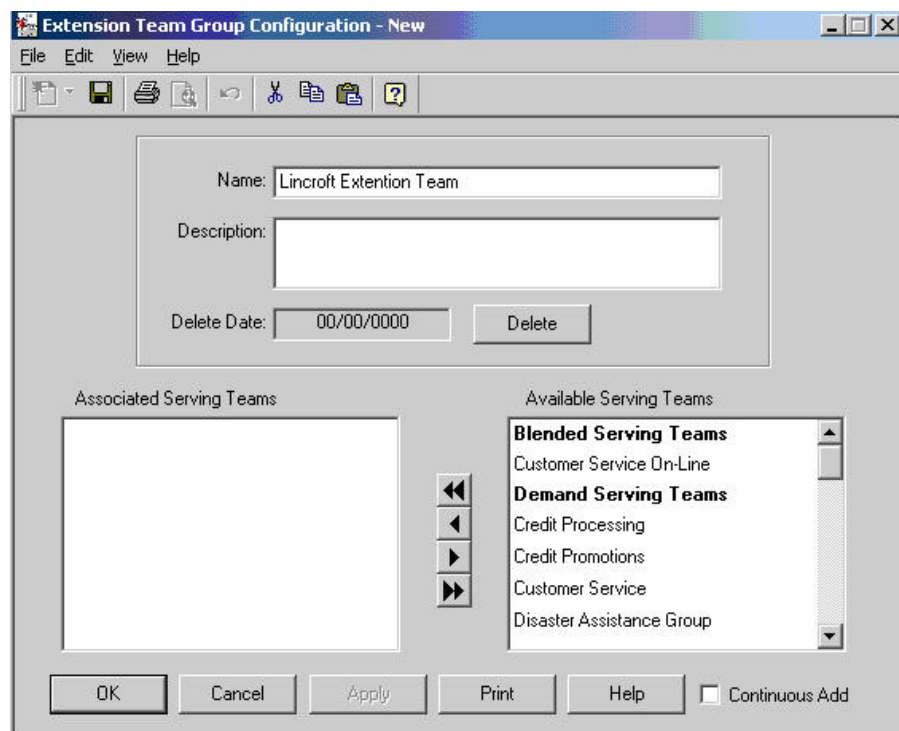
Name	Activity Type	Description
Skill 510	Demand Work	
Skill 520	Demand Work	
VDN 24597	Demand Work	
VDN 24598	Demand Work	

5.5. Administer Extension Team Group

In the **PIPKINS Vantage Point – [Default System VP]** screen, expand the **Real Time Adherence** directory in the middle pane, and select **Extension Team Group**. Right click in a blank area in the right pane, and select **New** to add an extension team group (not shown below).

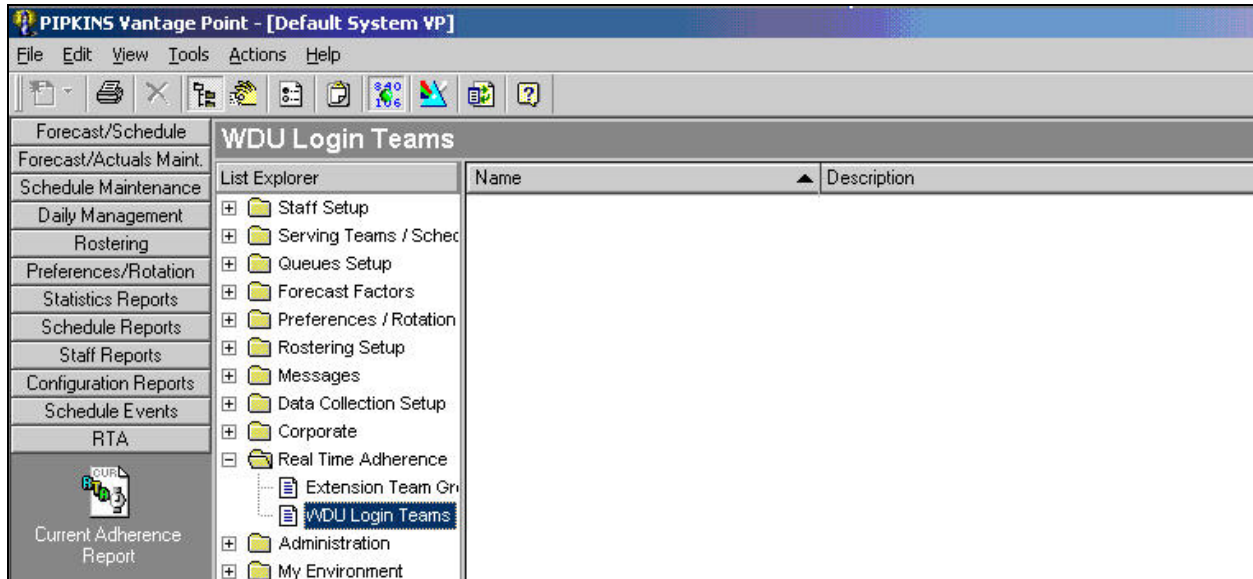


The **Extension Team Group Configuration - New** screen is displayed. Enter a descriptive name for the **Name** field (in this case “Lincroft Extension Team”). Click **OK**.

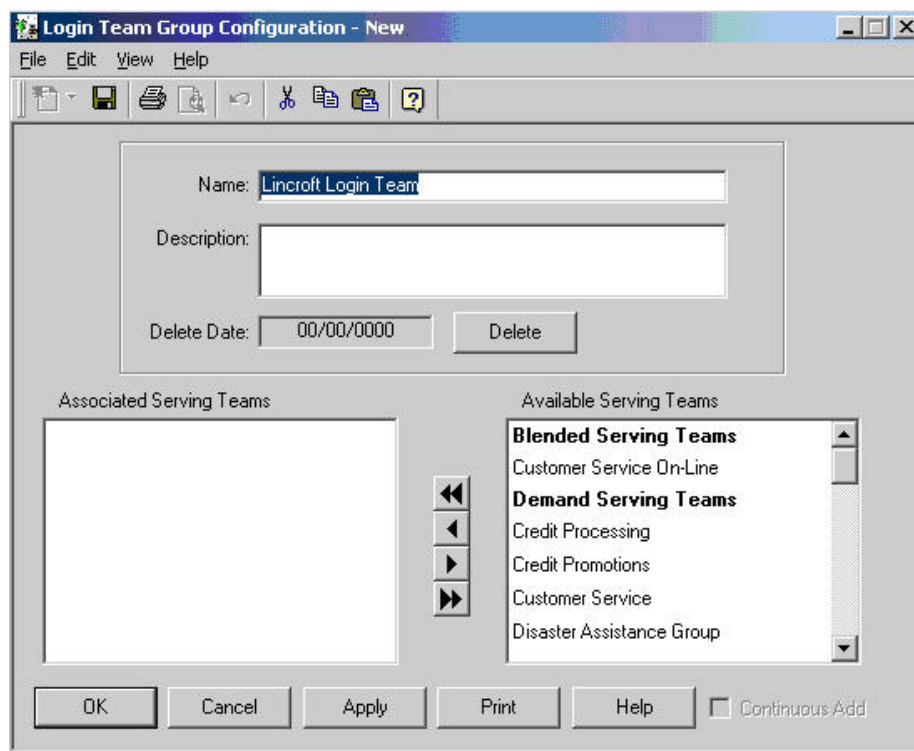


5.6. Administer Login Team

In the **PIPKINS Vantage Point – [Default System VP]** screen, expand the **Real Time Adherence** directory in the middle pane, and select **WDU Login Teams**. Right click in a blank area in the right pane, and select **New** to add a login team (not shown below).

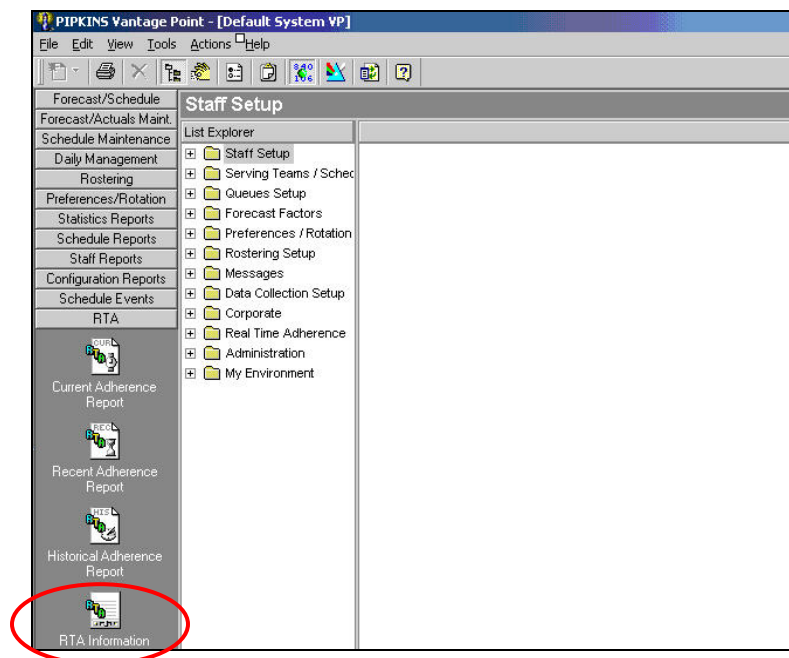


The **Login Team Group Configuration - New** screen is displayed. Enter a descriptive name for the **Name** field (in this case “Lincroft Login Team”). Click **OK**.



5.7. Administer Real-Time Adherence

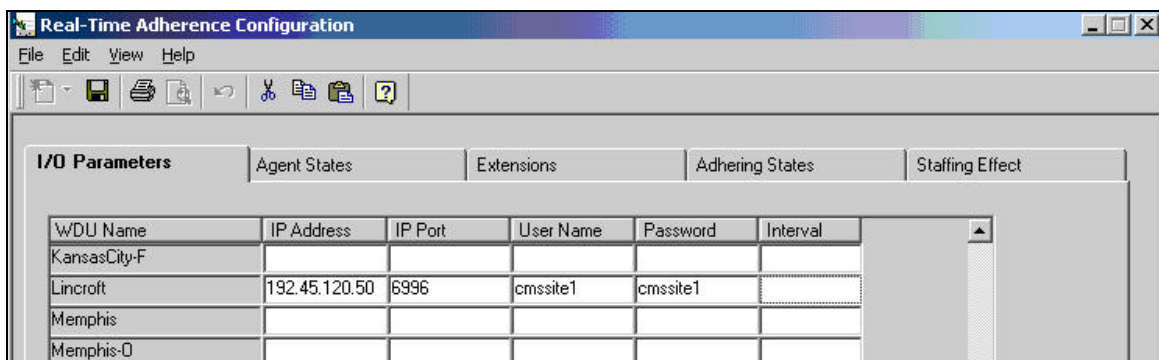
In the **PIPKINS Vantage Point – [Default System VP]** screen, expand **RTA** in the left pane, and click on the **RTA Information** icon.



The **Real-Time Adherence Configuration** screen is displayed. Select the **I/O Parameters** tab. Locate the row in the WDU Name column corresponding to the ACD system created in **Section 5.2**, in this case “Lincroft”, and enter the following values for the specified fields:

- **IP Address:** IP address of the Avaya CMS server, in this case “192.45.120.50”.
- **IP Port:** TCP port number of the Avaya CMS server for real time Agent reports.
- **User Name:** User name on the Avaya CMS server for retrieval of historical reports.
- **Password:** Password on the Avaya CMS server for retrieval of historical reports.

Note that the TCP port number, user name and password are provided by the Avaya CSI group. For the compliance testing, the values are “6996”, “cmsiste1”, and “cmssite1” respectively.



Select the **Extensions** tab. For the **Extension Range** fields, enter the range of the physical telephone extensions administered on Avaya Communication Manager for the agents. For the compliance testing, the agent physical extensions were 24511-24512 from **Section 3.2**. Select the name of the ACD system from **Section 5.3** for the **WDU** field, and select the name of the extension team group from **Section 5.5** for the **Extension Team Group** field. Click **Add/Modify**, followed by **OK** at the bottom of the screen (not shown below).

The screenshot shows the 'Real-Time Adherence Configuration' window with the 'Extensions' tab selected. The 'Edit Range' section contains three fields: 'Extension Range' with the value '24511 - 24512', 'WDU' with a dropdown menu showing 'Lincroft', and 'Extension Team Group' with a dropdown menu showing 'Lincroft Extension Team'. Below these fields are two buttons: 'Add/Modify' and 'Delete'.

5.8. Administer Staff

The **PIPKINS Vantage Point – [Default System VP]** screen is displayed again. Expand the **Staff Setup** directory in the middle pane, and select **Staff**. Right click in the right pane, and select **New** to add an inbound queue (not shown below).

The screenshot shows the 'PIPKINS Vantage Point - [Default System VP]' screen. The left pane contains a 'List Explorer' with a tree structure. The 'Staff' directory is expanded, showing 'Staff Setup', 'Staff', and 'Staff Groups'. The 'Staff' item is selected. The right pane shows a table with columns 'Last Name', 'First Name', and 'Middle Name'. The table is currently empty.

The **Staff Management – New** screen is displayed. Enter the following values for the specified fields, and maintain the default values for the remaining fields.

- **Last Name:** Last name of the agent.
- **First Name:** First name of the agent.
- **Staff ID:** The logical agent extension from **Section 4.2**.
- **Hire Date:** Enter the agent hiring date.
- **Seniority Date:** Enter an appropriate date for seniority tracking purposes.

Select the **Offices** tab, and click on the first icon toward the bottom of the screen.

Staff Management - New

File Edit View Help

Staff Data

Last Name: Doe First Name: John Middle Name: Suffix: Staff ID: 35511

Hire Date: 01/01/2005 Seniority Date: 01/01/2005 12:00:00 Terminate

Supervisor: ☐ Yes ☒ No

Supervisors **Offices** Departments Job Classification WDU Login ID Staff Group Memos Optional Data Advanced

Office	Start Date	End Date
--------	------------	----------

OK Cancel Print Help ☐ Continuous Add

A new entry row is displayed in the **Offices** tab, as shown below. For the **Office** field, use the drop down list to associate this agent with the ACD system created in **Section 5.2** (in this case “Lincroft”). Maintain the default values in the remaining fields, and click **OK**.

Supervisors **Offices** Departments Job Classification WDU Login ID Staff Group Memos Optional Data Advanced

Office	Start Date	End Date
Lincroft	01/01/2005	00/00/0000

OK Cancel Print Help ☐ Continuous Add

Select the **WDU Login ID** tab. Create a new entry row by clicking on the first icon toward the bottom of the screen. Select the ACD system created in **Section 5.2** from the **WDU** drop down list, and select the login team group created in **Section 5.6** from the **Login Team Group** drop down list. Maintain the default values in all remaining fields, and click **OK**. Repeat these procedures for each agent from **Section 4.2**.

Operator ID	WDU	Login Team Group	Start Date	End Date
35511	Lincroft	Lincroft Login Team	01/01/2005 12:00 AM	00/00/0000 00:00 AM

OK Cancel Print Help ☐ Continuous Add

6. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying Pipkins Vantage Point parsing and displaying of VDN, Split/Skill, and Agent data from Avaya CMS.

The serviceability testing focused on verifying the ability of the Pipkins Vantage Point server to recover from adverse conditions, such as stopping the Generic-RTA interface on the Avaya CMS server, and disconnecting the Ethernet cable to the Pipkins Vantage Point server.

6.1. General Test Approach

The feature test cases were performed manually. Incoming calls were made to the measured VDN, Split/Skill, and Agent to enable measurement data to be sent to Avaya CMS. Manual call controls and work mode changes from the agent telephones were exercised to populate specific fields in the database records.

The serviceability test cases were performed manually by stopping/restarting the Generic-RTA interface, and by disconnecting/reconnecting the LAN cable to the Pipkins Vantage Point server.

The verification of all tests included checking of proper display of data at the Pipkins Vantage Point client, and of comparing the displayed data with the historical reports from the Avaya CMS server.

6.2. Test Results

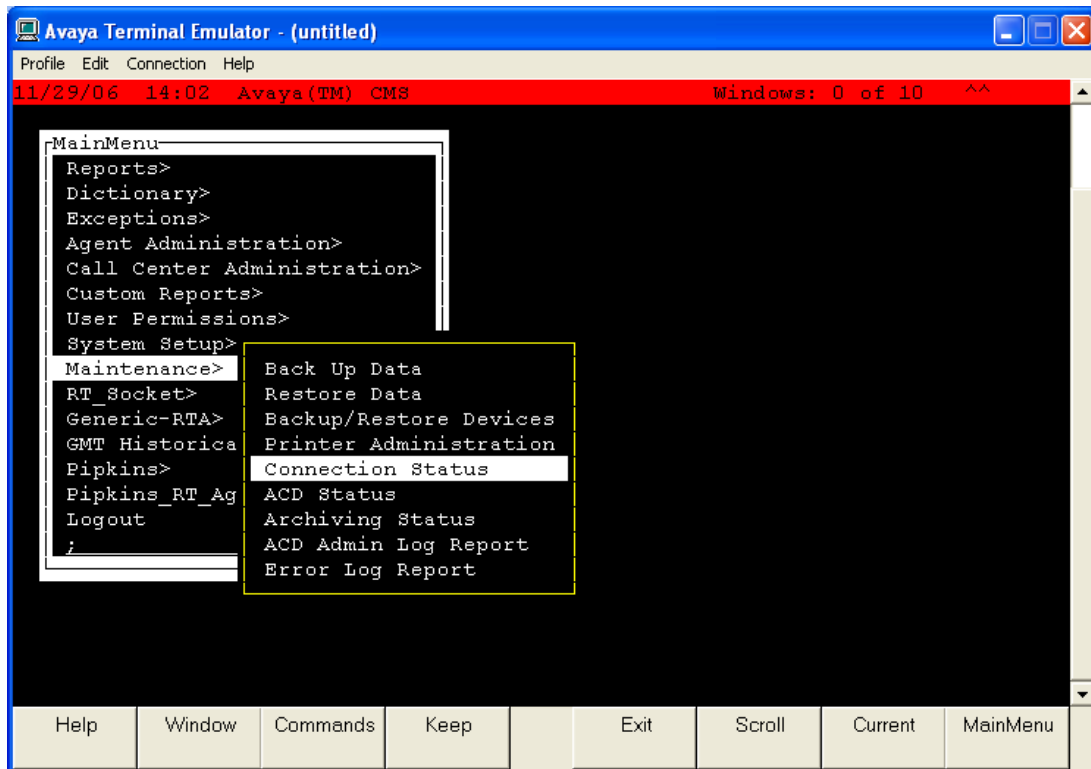
All test cases were executed and passed.

7. Verification Steps

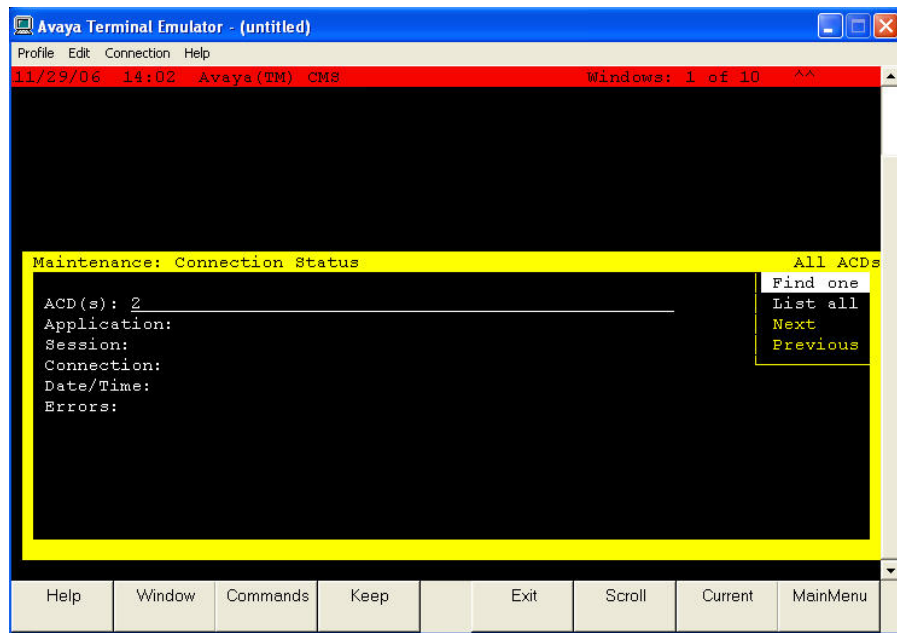
This section provides the tests that can be performed to verify proper configuration of Avaya CMS and Pipkins Vantage Point.

7.1. Verify Avaya Call Management System

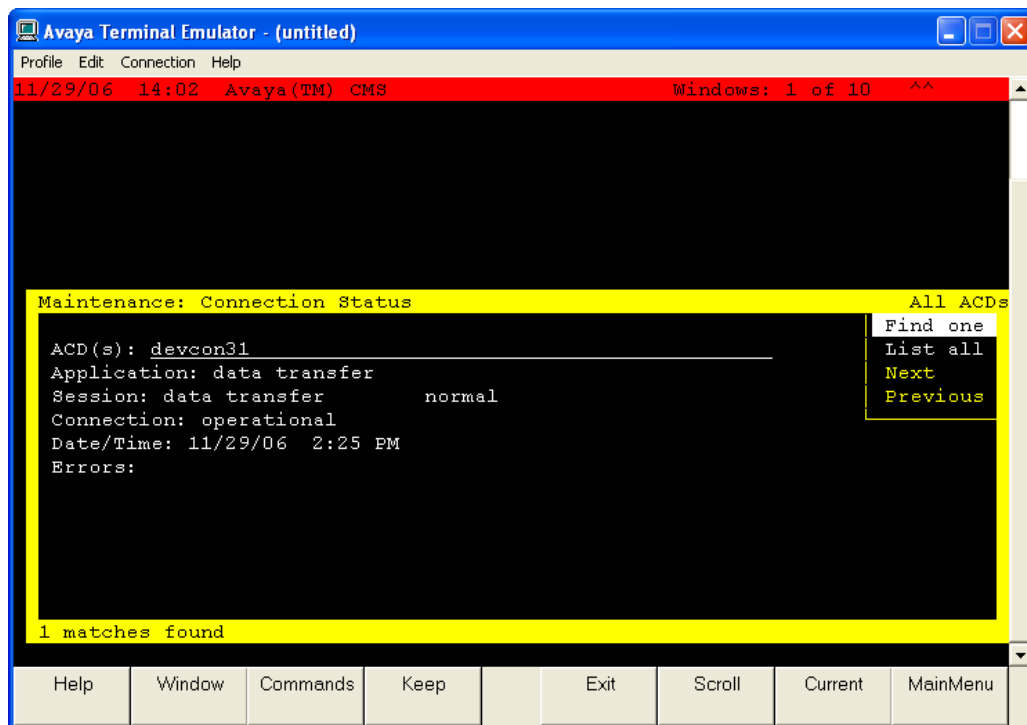
From the Avaya CMS server, follow the procedures in **Section 4.1** to display the **MainMenu**. Verify the status of the connection to Avaya Communication Manager by selecting **Maintenance > Connection Status**, and press the **Enter** key.



In the **Maintenance: Connection Status** dialog box, enter the corresponding **ACD(s)** number. For the compliance testing, the corresponding switch connection is ACD system “2”. Tab over to **Find one** and press **Enter**.



The **Maintenance: Connection Status** dialog box is updated with status information. Verify that the **Session** status is “data transfer” and “normal”, and that the **Connection** status is “operational”, as shown below.

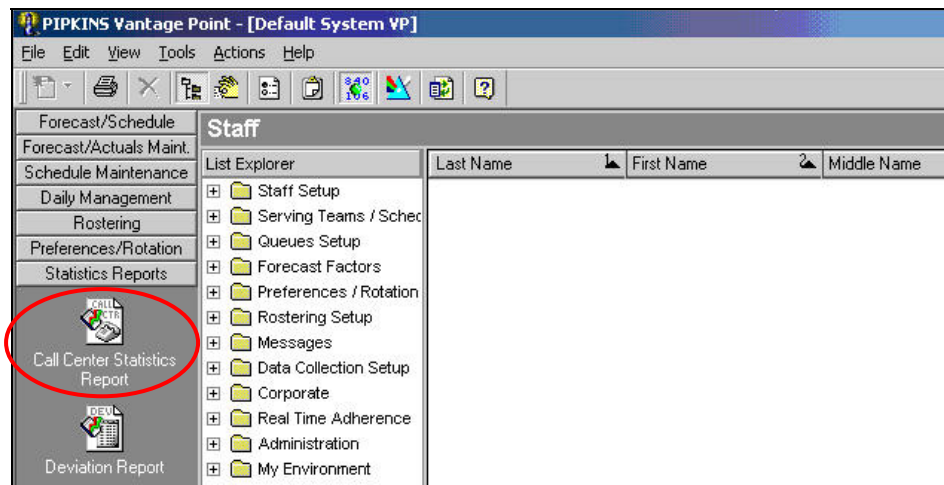


7.2. Verify Pipkins Vantage Point

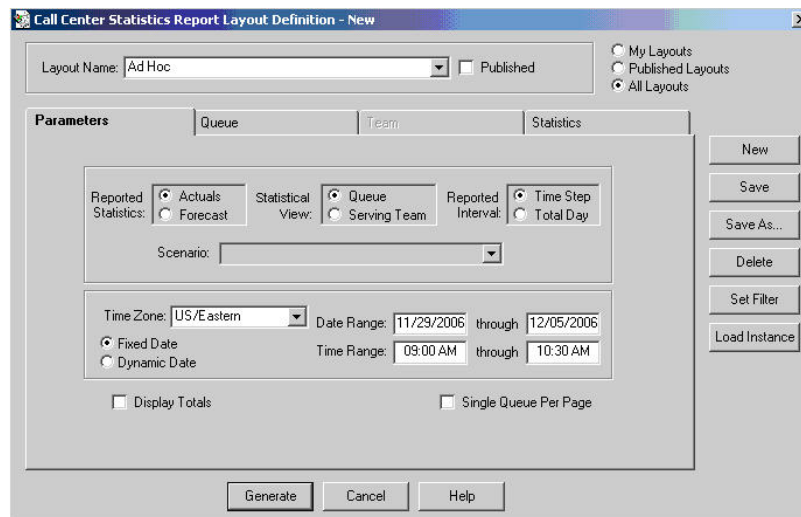
Prior to verifying Pipkins Vantage point, make calls to the measured resources on Avaya Communication Manager, to enable measurement data to be sent to Avaya CMS.

7.2.1. Verify Historical VDN and Split/Skill Data

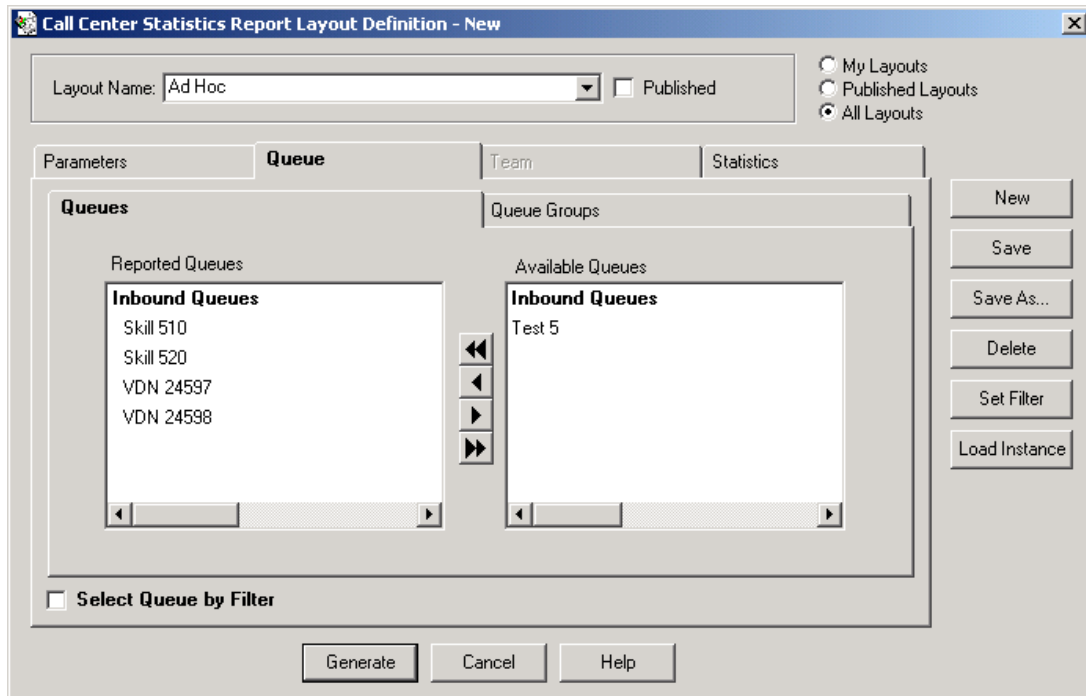
From the Pipkins Vantage Point client, follow the procedures in **Section 5.1** to start the application. Note that the Vantage Point icon is created as part of the Pipkins Vantage Point client installation, and that the interface screens are exactly the same as the ones from the server. From the **PIPKINS Vantage Point – [Default System VP]** screen, expand **Statistics Reports** in the left pane, and click on the **Call Center Statistics Report** icon, as shown below.



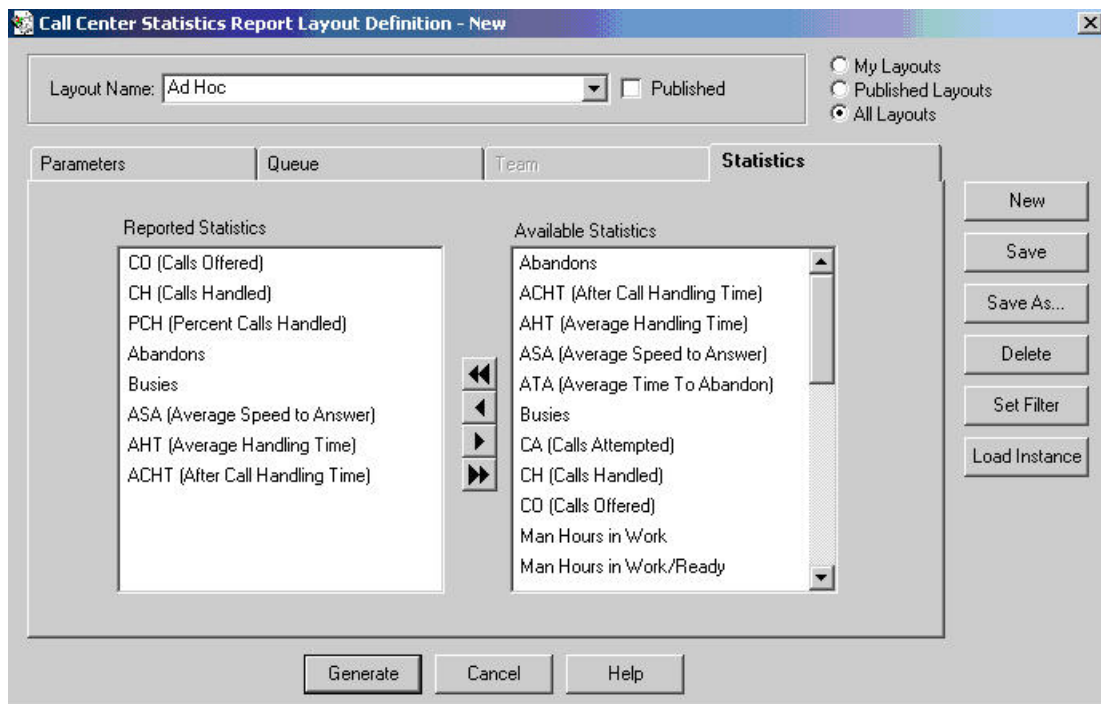
The **Call Center Statistics Report Layout Definition – New** screen is displayed. Select the **Parameters** tab, and check the radio buttons for the **Actuals**, **Queue**, **Time Step**, and **Fixed Date** fields. Select the proper value for the **Time Zone** field, and enter the proper values for the **Date Range** and **Time Range** fields. Maintain the default values in all remaining fields.



In the **Queue** tab, select the desired Split/Skill groups and VDNs from the **Available Queues** pane and move to the **Reported Queues** pane using the left-arrow icon.



In the **Statistics** tab, select the desired data fields from the **Available Statistics** pane and move to the **Reported Statistics** pane using the left-arrow icon. Click on **Generate** at the bottom of the screen.

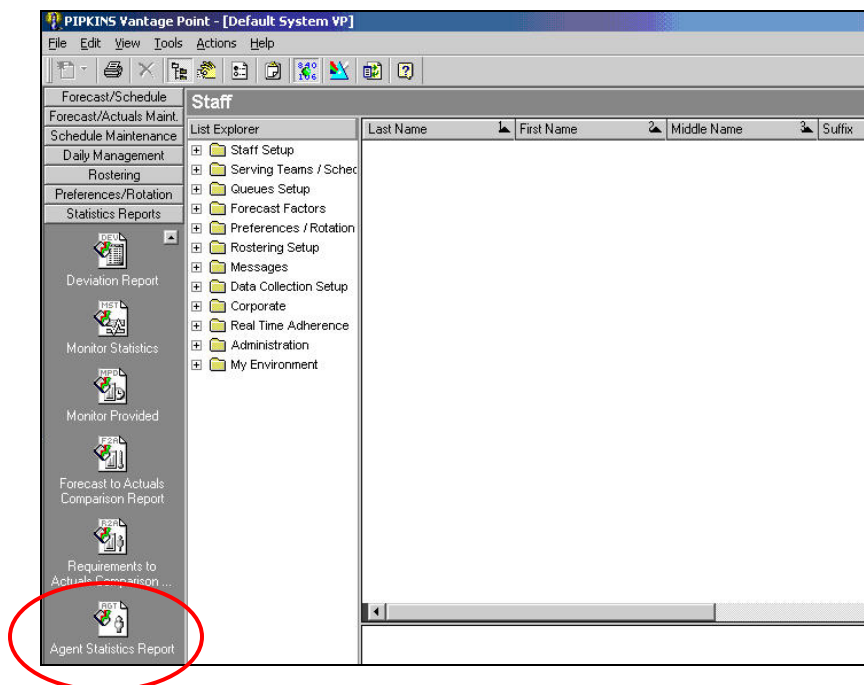


The **Call Center Statistics Report – Ad Hoc** screen is displayed. Verify that the historical measurement data for VDN and Split/Skill are displayed, as shown below.

Call Center Statistics Report - Ad Hoc							
<div> <div>File Edit View Actions Help</div> <div> </div> </div>							
Queue Actuals Time Step Report				Printed: 11/29/2006 03:28 PM			
From: Wednesday, November 29, 2006		Start Time: 09:00 AM		Time Zone: US/Eastern			
To: Tuesday, December 05, 2006		End Time: 10:30 AM		Printed By: avaya1			
	CO	CH	PCH	Abandons	Busies	ASA	AHT
Skill 510							
11/29/2006 09:00 AM - 09:30 AM	3	2	66.67	1	0	64.5	70.0
11/29/2006 09:30 AM - 10:00 AM	18	9	50.00	9	0	3.8	107.6
11/29/2006 10:00 AM - 10:30 AM	0	0	0.00	0	0	0.0	0.0
Skill 520							
11/29/2006 09:00 AM - 09:30 AM	2	2	100.00	0	0	1.5	60.0
11/29/2006 09:30 AM - 10:00 AM	9	6	66.67	3	0	5.0	67.2
11/29/2006 10:00 AM - 10:30 AM	0	0	0.00	0	0	0.0	0.0
VDN 24597							
11/29/2006 09:00 AM - 09:30 AM	3	2	66.67	1	0	64.5	70.0
11/29/2006 09:30 AM - 10:00 AM	18	9	50.00	9	5	3.8	107.6
VDN 24598							
11/29/2006 09:00 AM - 09:30 AM	2	2	100.00	0	0	1.5	60.0
11/29/2006 09:30 AM - 10:00 AM	9	6	66.67	3	7	5.0	67.2

7.2.2. Verify Historical Agent Data

From the **PIPKINS Vantage Point – [Default System VP]** screen, select the **Agent Statistics Report** icon from the left pane.



The **Agent Statistics Report Layout Definition - New** screen is displayed. In the **General** tab, select the name of the ACD system from **Section 5.3** in the **WDU** drop down list. Select the proper value for the **Time Zone** field, and enter proper values for the **Date Range** and **Time Range** fields. Maintain the default values for all remaining fields.

The screenshot shows the 'Agent Statistic Report Layout Definition - New' window. The 'General' tab is selected. The 'Layout Name' is 'Ad Hoc'. The 'Published' checkbox is unchecked. The 'WDU' dropdown is set to 'Lincroft'. The 'Time Zone' is 'US/Eastern'. The 'Date Range' is '11/26/2006 through 12/02/2006'. The 'Time Range' is '11:00 AM through 12:00 PM'. The 'Fixed Date' radio button is selected. The 'Dynamic Date' radio button is unselected. The 'Generate', 'Cancel', and 'Help' buttons are at the bottom. The 'New', 'Save', 'Save As...', 'Delete', 'Set Filter', and 'Load Instance' buttons are on the right.

Select the **Staff** tab. In the **By Staff** sub-tab, select the desired agents from the **Available Staff** pane and move to the **Reported Staff** pane using the left-arrow icon.

The screenshot shows the 'Agent Statistic Report Layout Definition - New' window with the 'Staff' tab selected. The 'By Staff' sub-tab is selected. The 'Reported Staff' pane contains a table with the following data:

Staff Name	Staff ID
Doe, John	35511
Steve, Smith	35512

The 'Available Staff' pane contains a table with the following data:

Last Name	First Name
Agent	24001
Agent	32410
Agent	50004

The 'Select Staff by Filter' checkbox is unchecked. The 'Generate', 'Cancel', and 'Help' buttons are at the bottom. The 'New', 'Save', 'Save As...', 'Delete', 'Set Filter', and 'Load Instance' buttons are on the right.

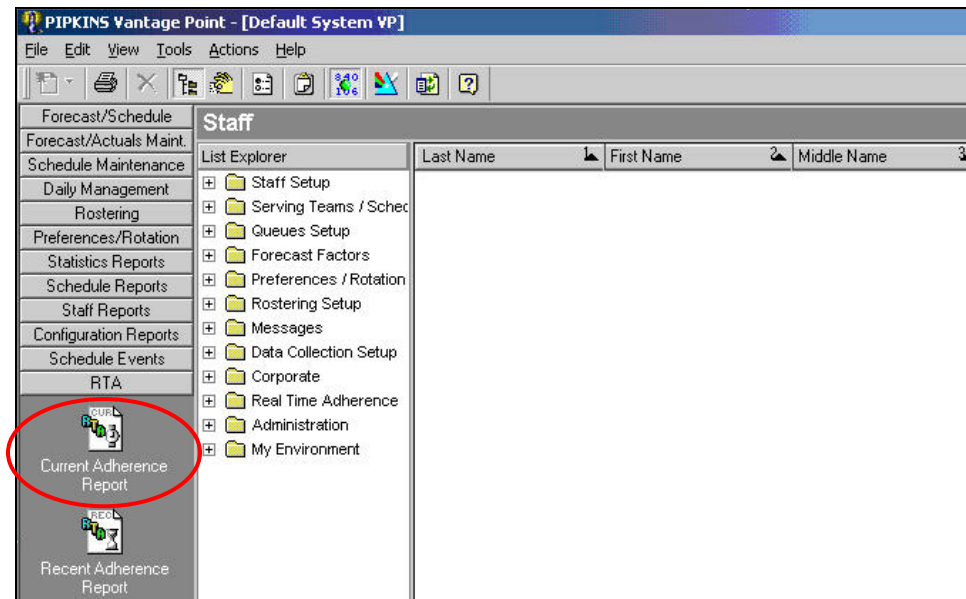
In the **Statistics** tab, select the desired data fields from the **Available Statistics** pane and move to the **Reported Statistics** pane using the left-arrow icon. Click on **Generate** at the bottom of the screen.

The **Agent Statistics Report – Ad Hoc** screen is displayed. Verify that the historical measurement data for Agent are displayed, as shown below.

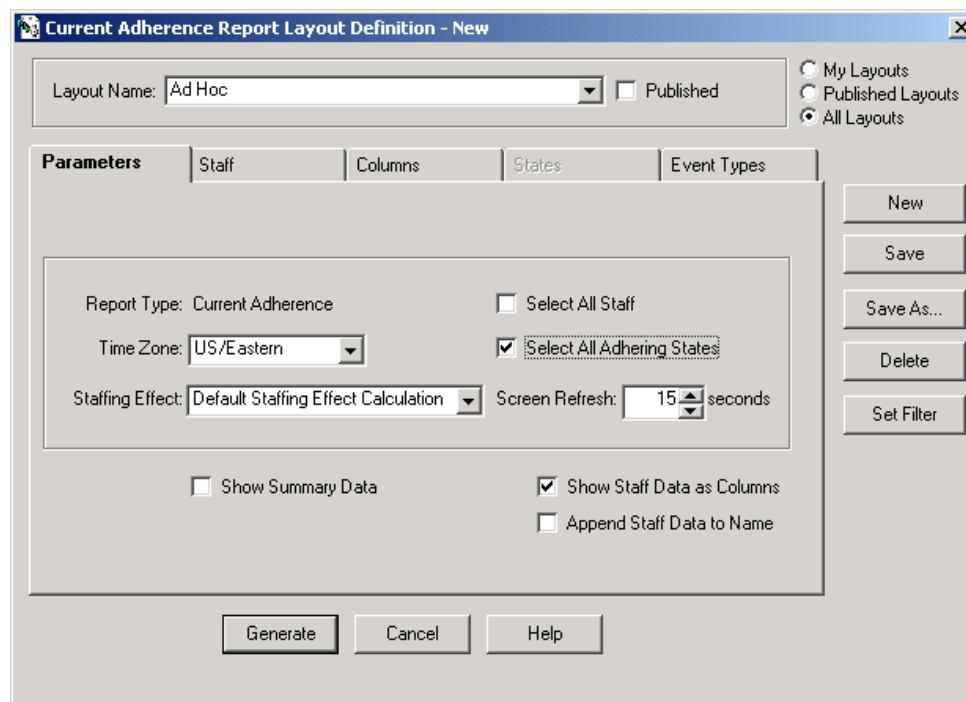
Agent Statistics Report										
From: Sunday, November 26, 2006				Start Time: 11:00 AM		Printed: 11/29/2006 03:35 PM				
To: Saturday, December 02, 2006				End Time: 12:00 PM		Time Zone: US/Eastern				
WDU: Lincroft						Printed By: avaya1				
	Extension	ACD Calls	Aux Out Calls	ACD Aux Out Time	ACD Time	ACW Time	Aux In Time	Aux Out Time	Aux Time	Avail Time
Doe, John - 35511 - 35511										
11/28/2006 11:30 AM - 12:00 PM	24511.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1800.00
11/28/2006 11:30 AM - 12:00 PM	24511.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11/29/2006 11:00 AM - 11:30 AM	24511.00	0.00	0.00	0.00	6.00	751.00	15.00	0.00	15.00	890.00
11/29/2006 11:00 AM - 11:30 AM	24511.00	1.00	0.00	0.00	6.00	93.00	0.00	0.00	15.00	0.00
11/29/2006 11:30 AM - 12:00 PM	24511.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11/29/2006 11:30 AM - 12:00 PM	24511.00	1.00	0.00	0.00	6.00	1713.00	0.00	0.00	0.00	31.00
Steve, Smith - 35512 - 35512										
11/28/2006 11:30 AM - 12:00 PM	24512.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11/28/2006 11:30 AM - 12:00 PM	24512.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1800.00
11/29/2006 11:00 AM - 11:30 AM	24512.00	1.00	3.00	21.00	14.00	42.00	0.00	21.00	55.00	0.00
11/29/2006 11:00 AM - 11:30 AM	24512.00	0.00	1.00	12.00	18.00	879.00	0.00	12.00	55.00	744.00
11/29/2006 11:30 AM - 12:00 PM	24512.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11/29/2006 11:30 AM - 12:00 PM	24512.00	2.00	0.00	0.00	15.00	1740.00	0.00	0.00	0.00	19.00

7.2.3. Verify Real-Time Agent Data

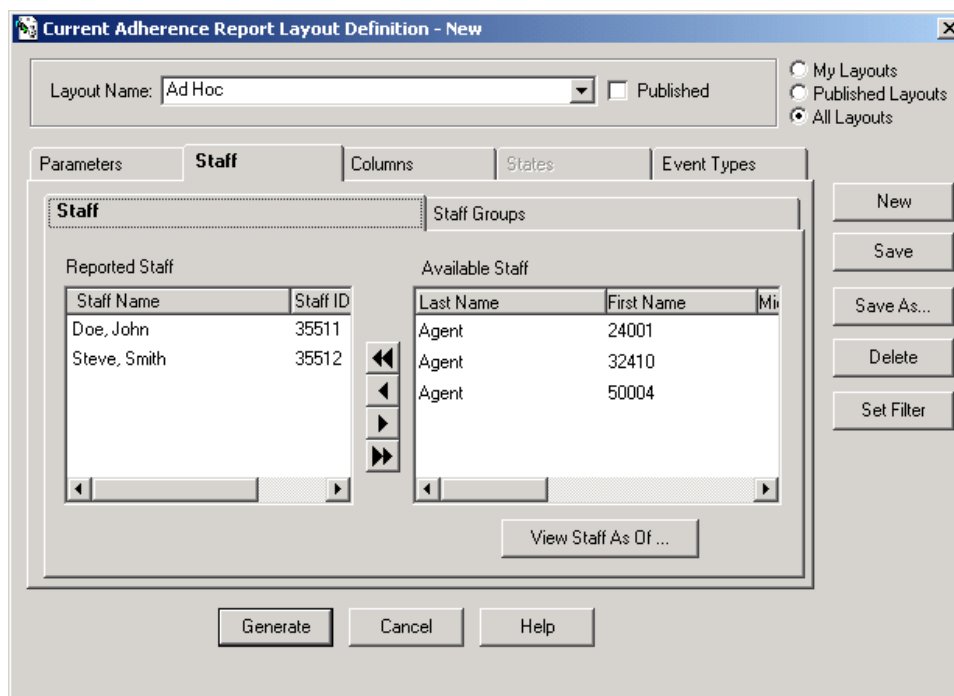
From the **PIPKINS Vantage Point – [Default System VP]** screen, select the **Current Adherence Report** icon from the left pane.



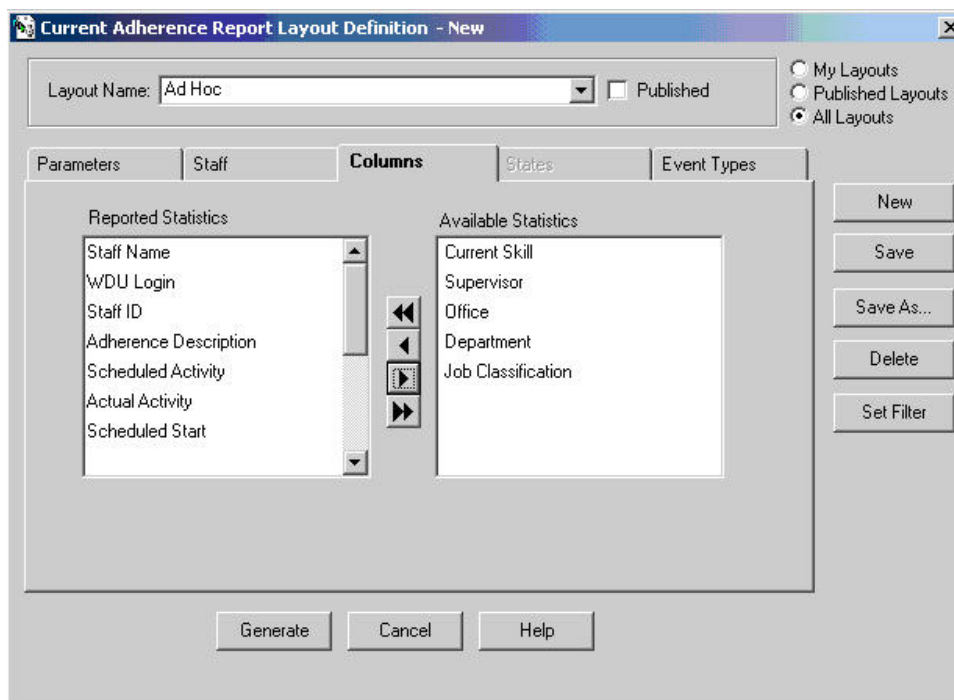
The **Current Adherence Report Layout Definition - New** screen is displayed. In the **Parameters** tab, select the proper value for the **Time Zone** field, and check **Select All Adhering States**. Maintain the default values for all remaining fields.



Select the **Staff** tab. In the **Staff** sub-tab, select the desired agents from the **Available Staff** pane and move to the **Reported Staff** pane using the left-arrow icon.



In the **Columns** tab, select the desired data fields from the **Available Statistics** pane and move to the **Reported Statistics** pane using the left-arrow icon. Click on **Generate** at the bottom of the screen.



The **Real-Time Adherence Report – Current – Ad Hoc** screen is displayed. Verify that the real-time Agent measurement data are displayed, as shown below. The report shows the adherence of the real-time data to the agent schedule Pipkins Vantage Point developed from the historical measurement data.

Real-Time Adherence Report - Current - Ad Hoc

File Edit View Tools Actions Help

Date: 12/05/2006 Refresh Rate: 15 secs Reported staff scheduled/active: 2 Non-adhering: 0
 Last Update: 11:53:05 AM US/Eastern Net Staffing Effect: 0 Percent: 0.00

Name	W/DU Login	Staff ID	Adherence Description	Scheduled Activity	Actual Activity	Scheduled Start	Scheduled End	Actual Time	Staffing Effect	NonAdh Time	Agent State	Time in State	Extension
Doe, John	35511	35511	Adhering	Team 1	Team 1	11:45 AM	12:30 PM	11:46:32 AM	0	00:00:00	avail	00:06:33	24511
Steve, Smith	35512	35512	Adhering	Break	Break	11:45 AM	12:00 PM	11:44:11 AM	0	00:00:00	aux1	00:08:54	24512

Current Schedule for: Doe, John **Staff ID:** 35511

Date	Start	End	Scheduled Activity	Task Category
12/05/2006	10:00 AM - 11:30 AM	Team 1	Regular	
	11:30 AM - 11:45 AM	Break	Unpaid Entitlement	
	11:45 AM - 12:30 PM	Team 1	Regular	
	12:30 PM - 01:00 PM	Lunch	Unpaid Entitlement	
	01:00 PM - 01:45 PM	Team 1	Regular	
	01:45 PM - 02:00 PM	Break	Unpaid Entitlement	
	02:00 PM - 04:00 PM	Team 1	Regular	

8. Support

Technical support on Pipkins Vantage point can be obtained through the following:

- **Phone:** 1-800-469-6106
- **Email:** support@pipkins.com

9. Conclusion

These Application Notes describe the configuration steps required for Pipkins Vantage Point 8.05 to interoperate with Avaya Call Management System R13.1, via the customized real-time and historical call measurement data interfaces provided by Avaya CSI. All feature and serviceability test cases were completed successfully.

10. Additional References

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

- *Administrator Guide for Avaya Communication Manager*, Document 03-300509, Issue 2.1, May 2006, available at <http://support.avaya.com>
- *Avaya Call Management System Switch Connections, Administration, and Troubleshooting*, Document ID 07-300739, February 2006, available at <http://support.avaya.com>.
- *Avaya Call Management System Release 13 Software Installation, Maintenance, and Troubleshooting Guide*, Document ID 07-600954, May 2006, available at <http://support.avaya.com>.
- *Vantage Point System Overview Guide*, available as part of the Pipkins Vantage Point client software install.
- *8.05 Basic Training Guide*, available as part of the Pipkins Vantage Point client software install.

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