Avaya Solution & Interoperability Test Lab

Application Notes to Configure and Administer Avaya Aura® Workforce Optimization Workforce Management R11.0 with Avaya Aura® Contact Center R6.2 - Issue 1.0

Abstract

The Application Notes document the configuration of Avaya Aura® Workforce Optimization Workflow Management R11.0 with an Avaya Aura® Contact Center R6.2. Avaya Aura® Workforce Optimization Workforce Management simplifies the complex task of managing contact center forecasting and scheduling and maximizing skills and proficiencies of agents. Comprehensive contact center analytics and reporting, compliance recording and quality monitoring, workforce management, real-time and historical customer and operational data can be collected, organized, and analyzed allowing customers to make decisions faster, optimizing business processes and returns.

Information in these Application Notes has been obtained through Solution and Interoperability Lab Full Stack testing and additional technical discussions.
1. Introduction

Avaya Aura® Workforce Optimization is a comprehensive solution portfolio for capturing and analyzing customer opinions and interactions with Avaya Aura® Contact Center (AACC), i.e., Contact Recording, Quality Monitoring, Speech Analytics, and Customer Feedback. Avaya Aura® Workforce Optimization Workforce Management R11.0 is a component of Avaya Aura® Workforce Optimization that interfaces with Avaya Aura® Contact Center R6.2 to collect data on call handling, agent availability and contact center statistics. Avaya Aura® Workforce Optimization Workforce Management R11.0 includes powerful performance and personnel management functions, e-learning and analytics engines. No connection or interface is required to the underlying telecommunications infrastructure; Avaya Aura® Workforce Optimization Workforce Management R11.0 directly retrieves call data from contact center database and reporting data tables. When fully operational and configured, Avaya Aura® Workforce Optimization Workforce Management R11.0 can connect to multiple contact centers and manage real time or historical data related to customer/contact center interactions.

2. Interoperability Testing

These application Notes are restricted to describing an Avaya Workforce Management R11.0 (WFM) configuration. Prior to commencing WFM configuration, server hardware should be checked against the specifications in the Customer Furnished Equipment Guide, see Section 8 for information. Installation of the Avaya Workforce Management R11.0 software components should be done in accordance with Avaya WFO Release R11.0 Administration Guide, see Section 8 for document details.

2.1. Test Description and Coverage

WFM is installed on customer supplied servers running Windows 2008 R2 operating system (64 bit). Each server hosts a single platform. A platform is a logical grouping of server roles, i.e., Data Center, Framework Database and Reporting Framework Database. Several deployment models exist, the lowest being a single server installation of Consolidated/Data Center which encompasses several WFM system sub blocks (Databases, Web Services, Web Applications, Reporting Services and Framework Integration Services).

Integration with AACC is via the WFM Framework Integration Service and uses a variety of interface adapters to extract data from the contact center. For the purposes of these Application Notes, a Level 1 installation (Consolidated/Data Center platform for single server solution) is the deployment model used, interfaced to an AACC (High Availability) installation and an Avaya Aura Communication Manager telephony solution. Configuration of the WFM installation was limited to functions and settings necessary to interface with AACC R6.2 and Communication Manager; and to obtain data and reports on contact center agent states and call handling.
2.2. Test Results and Observations

The following observations and outcomes are brought to the attention of users to highlight unexpected actions observed when generating these Application Notes.

- When configuring Workforce Optimization Workforce Management, the **Switch/Sub Type** can be chosen from a drop down list.
  - If the **Avaya Communication Manager/Definity** switch setting is chosen; when later configuring **Data Source Groups**, the **Group Type** setting can only be either **VDN** or **Hunt Group**. This may cause confusion if the AACC is a SIP contact center installation as these configuration settings are not correct for call handling in a SIP contact center. In a SIP contact center installation, call routing functions are handled by Session Manager using SIP messaging. Therefore, either the **VDN** or **Hunt Group** setting may be used. For these Application Notes, the **VDN** setting was chosen.

3. Reference Configuration

The following diagram shows the network diagram for WFM. The WFM server is installed on the local LAN and connects to CCMS server using standard IP network protocols and database access methods.

![Network Diagram](image)

Figure 1: Avaya Aura® Workforce Optimization Workforce Management installation
4. Equipment and Software Validated

The equipment and software used in the WFM installation are shown in the following table:

<table>
<thead>
<tr>
<th>Equipment/Software</th>
<th>Release/Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avaya Aura® Workforce Optimization Workforce Management running on a Dell PowerEdge R610</td>
<td>R11.0 Data Center, R11.0 Service Pack 1, System Hotfix Rollup 3, R11.0 Framework Integration Service, Integration Server KB106435</td>
</tr>
<tr>
<td>Avaya Aura® Contact Centre CCMS / CCT / CCMA running on a Dell PowerEdge R610</td>
<td>R6.2 SP5 + RU01, RU02, RU03 (roll-up) GA patches.</td>
</tr>
<tr>
<td>Avaya Aura® Contact Centre CCMM running on a Dell Poweredge 1950</td>
<td>R6.2 SP5 + RU01, RU02, RU03 (roll-up) GA patches.</td>
</tr>
<tr>
<td>Avaya Media Server running on a Dell Poweredge 1950</td>
<td>R7.0.0.466 + QFE Patches 1 – 11 (GA patches).</td>
</tr>
</tbody>
</table>
5. Configure Avaya Workforce Management

Full details and further information on configuration can be found in the Aura® WFO Release 11.0 Configuration Guide, see Section 8 for document details. To access and configure the WFM server, the wsuperuser logon credentials are used and the server IP address must be known. A License file is required to activate WFM features; this should be supplied by the WFM installer. Avaya highly recommends that default passwords be changed as soon as possible.

5.1. Accessing Avaya Aura® Workforce Management for the first time

Using a web browser (Microsoft Internet Explorer version 7 or later), enter the following URL http://<ip-address-of-WFM-server>:7001/wfo, ensuring any browser pop-up blocker is disabled. ip-address-of-WFM-server is the IPv4 address of the WFM installation; do not use the server FQDN. The browser window will close and the following window appears.

- Username: Enter wsuperuser
- Password: pumpkin1 (default)

Click the Login button when ready.

A new stacked tabbed window appears, this is the WFM dashboard. If there are too many visible tabs and the window is too large for the screen size, click on the arrow icon on the right hand side (see highlighted screenshot below) to raise or lower the bottom line of tabs.
Before WFM can be configured a license file must be installed. Click on the **System Management** tab and under **General Settings**, click on the **License Management** entry.

The **License Management** page opens. The default license state is **expired** and a license file is required to activate the WFM installation. The License is based on the **Registration Key** (generated by the WFM installer) and a **License Reference Number** (vendor generated) and is unique to each WFM server. Click on the **Upload License** button, browse to the license file location (not shown) and load the license into WFM.
After the license file is uploaded, the page refreshes and displays the **Customer Name**. All purchased applications are shown pre-checked; additional features may need to be manually activated. Click on the checkboxes next to the features to activate them as per the following screenshot. **Language Support (Localization)** entries may be selected as required. When finished, click on the **Save** button.
The WFM task needs to be restarted before these changes will take effect. Right click on the Windows taskbar (not shown) and click the **Start** button and then select the **Run...** entry. Type `services.msc` in the dialog box and press the **OK** button.

![Run dialog box](image)

The **Services** window will open, showing all running services’ status. Scroll down to the **WFO_ProductionDomain_ProductionServer** service, right click on the entry and in the ensuing popup menu (not shown), click on the **Restart** entry. The selected service will now restart. The WFM server will not allow logins until this service has completely restarted.

![Services window](image)

Either wait approx. 10 minutes and then attempt a login or else monitor application memory usage in the WFM server using **Windows Task Manager**. When the `beasvcX64.exe Memory` value is greater than 1,389,000K bytes, WFM will accept logins.

![Windows Task Manager](image)
5.2. Pre-configuring Avaya Workforce Management

Prior to readying the WFM installation for contact center integration, a basic hierarchical formation comprising a site and server(s) that reflect an organizational structure must be set up. Use the Enterprise Manager tool to create a new site, then include the WFM server in this site Server roles can then be configured. Log in to WFM as per Section 5.1 and in the main window, click on the System Management → Enterprise Management → Settings entry.

The Enterprise Management Settings page opens. Under the Installations hierarchical list a default entry called Enterprise is already present. This is the basic WFM server previously installed; settings cannot be changed here. Click on the Create Site button in the page to open the site creation page.
The **Site** page allows the creation of a new site. Enter the site name in the **Name** field and some text to describe the site in the **Description** field (this is optional). Click on the **Save** button when done.

The page refreshes and the newly added site is shown under the **Enterprise** installation.
Click on the new site in the side bar, and then click on the **Create Installation** button.

A dialog box appears with a choice of **Installation Type** (not shown), click on the **Server** entry. In the new page, fill in the following values:-

- **Name**  
  New installation name (no spaces allowed)
- **Description**  
  Optional text to describe the installation
- **Server Name**  
  Server host name
- **HTTP alias**  
  Same as the server name
- **Fully Qualified Domain Name**  
  WFM server FQDN as entered in the local DNS

The port values are automatically populated. Click the **Save** button when ready.
Server roles are a predefined set of software components configured to control the functionality of the licensed applications suite. Roles are the lowest level of installation. Click on the newly created server in the Installations hierarchy then click on the **Server Roles** tab. WFM requires all the **Framework** roles to be selected, ensure all are checked. Click the **Save** button when ready.

Click on the arrow to the right of the server entry in the hierarchical menu to expand the role list. Ensure all the Framework entries selected previously are present.

This completes the server configuration; restart the WFM service as in **Section 5.1**.
5.3. Avaya Workforce Management Database Connections

The Framework Database server role supports the core Framework database that is required for use with Enterprise modules in the suite, such as Enterprise Management, Organization Management, User Management, as well as the Framework applications. The SQL server parameter details need to be set for various server roles. Click on **Framework Data Warehouse** in the hierarchical list. A new **Settings** Window opens.

- **SQL Server Name** Server hostname i.e. **wfm**
- **Port** Value is **1433**

The remaining values are default. Click on the **Save** button when ready.
Click on **Framework Database** in the hierarchical list. A new **Settings** Window opens.

- **SQL Server Name**: Server hostname i.e. **wfm**
- **Port**: Value is **1433**

The remaining values are default. Click on the **Save** button when ready.

Click on **Framework Reports** in the hierarchical list. A new **Settings** Window opens.

- **SQL Server Name**: Server hostname i.e. **wfm**
- **Port**: Value is **1433**

Click on the **Save** button when ready.
5.4. Add an Organization to Avaya Workforce Management

Before data sources and agent configuration can be accomplished, a top level organization structure must be created for the enterprise. In the WFM home page, click on the Organization Management tab then the Organization Settings entry in the subsequent list (not shown). A blank page is presented, click on the Create Organization button on the page and fill in the fields in the new property page.

- **Organization Name**: Organization’s name
- **Description**: Optional text to describe the organization
- **Scheduling Options**: Configure these if known
- **Days and Hours of Operation**: Configure as required

Click on the Save button when finished.
Create a new Data source for the organization by clicking on the **System Management** tab then the **Data Sources → Settings** entry in the subsequent list (not shown). A new page appears, click on the **Create Data Source** button at the bottom of the page.

![Image of System Management Settings page]

A dialog box appears. Ensure **Type** is set to **Phone** and select the **Avaya Communication Manager/Definity** entry from the **Switch/Sub Type** drop down list. Click on the **Select** button when ready.

![Image of Data Source Type dialog box]
The page refreshes and presents the **Data Source Settings** property page. Type a **Name** for the new data Source and add a **Description** if required. Click on the **Save** button when ready.

Having configured the Data Source, the next step is to configure agent Phone details. Click on the **Phones** tab and in the new window, click on the **Create** button.
The phone property page opens. Enter a valid phone number for the Extension. Recording Mode should be set to Do Not Record. The remaining settings are default. The screenshot shows the settings for Phone: 22001. Click on the Save button when ready. Repeat this step for all agent telephones.

Data Source Groups are the source for statistical data and reporting. Click on the Data Source Groups tab, click on the Create Group button (not shown). A property page opens. The Data Source Group Name must match the skillset name configuration on the AACC (confirm this with the CCMS administrator). Click on the arrows next to the Type drop down list and select the VDN entry. Click on the Save button when ready.
5.5. Creating Agents on Avaya Workforce Management

Contact center agents are configured as users in WFM. Obtain the relevant agent data from the contact center administrator prior to commencing agent configuration steps in WFM. Click on the User Management tab and then the Profiles entry (under Employees). In the new screen, click on the Create button at the bottom of the screen (not shown). The Profiles properties page opens. Fill in the following data as a minimum:

- **Last Name and First Name**  
  As required

- **Start Date and End Date**  
  Select from the calendars

- **Employee ID**  
  Must be the same as the agent’s ID on AACC

- **PhoneDataSource**  
  Agent’s phone extension (as entered in Section 5.4)

- **Organization**  
  Created previously in Section 5.4

Click on the Save button when completed. Repeat this procedure for all agents.
5.6. Create reason codes in Avaya Workforce Management

Contact center agent events are continuously monitored and the information is retrieved by WFM. This data is used to ensure agent and contact center performance meets expected criteria and is used in adherence reports which measure how well employees’ scheduled activities match their real-time activities. Events and mode numerical data are combined into reason codes. A detailed discussion of reason codes is outside the scope of these Application Notes; consult the AACC documents listed in Section 8 to determine the correct event values to use in WFM.

Mapping of contact center events to reason codes is arranged by clicking on the System Management tab and selecting the Reason Codes entry under Data Sources (not shown). Ensure the same Data Source Name created in Section 5.4 is selected in the side panel and then click on the Create Reason Code button (not shown). Fill in the data fields in the page as in the example below. Click on the Save button when ready.

Repeat this procedure for all required reason codes. Ensure all Event Modes are unique numerical values.
5.7. Map agent activities to reason codes and time mapping

Activity types are objects that have similar activities; WFM comes pre-configured with several activity types, click on the Organization Management tab, then Activity Types for examples.

Activities represent work agents can execute. Each activity has a name, a description, a setting specifying if the activity is paid, a color, a code, a tolerance, and an activity type. Click on the Organization Management tab, then Activities. In the new window select the organization in the left pane, then click the Create Activity button (not shown) and define the activity properties. The screenshot shows data for General Absence. Click the Save button when ready. Repeat this procedure for all required activity definitions.
Agent activities are continuously monitored to ensure adherence to the schedule. Alternate activities which also meet adherence criteria may be mapped using the Adherence Mapping tab. See below for examples.
Time collector mappings are used in conjunction with event codes to graph the organizations activities. Click on the **Organization Management** tab, then the **Time Collector Mapping** tab to view mapped codes and events for the data source. See below for some examples.

![Time Collector Mapping](image)

To edit a mapping, select a mapping, and then click on the **Edit Time Collector Mappings** button (not shown). In the **Time Collector Mapping Details** section, click on the arrows in the Activity drop down list and select the activity to map to the **Reason Code**. Click on the **Save** button to preserve the mapping.

![Time Collector Mapping Details](image)
5.8. Create Work Queues in Avaya Workforce Management

Pulse reports are used to view and manage contact center statistics. These are typically used by managers and schedulers to track contact center performance. The Pulse module collects contact center data throughout the day and compares actual performance to forecasted requirements. Pulse needs a queue to extract data, click on the Organization Management menu, and then select Settings (under Queues). Click the Create Queue button (not shown). Enter a Name for the queue. For Media, select Phone. Ensure the Organizations setting is correct as defined in Section 5.4. Click the Save button when ready.

Click on the Queue Group Mapping tab. Select the data source defined in Section 5.4 and click on the >> arrow to complete the mapping. Use the Save Mapping button when ready.
5.9. Generate KPIs and Scorecards report for Agents

Scorecards are a set of adapters which extract source measure data from data sources, populate the Scorecards data warehouse, and perform calculations to derive Key Performance Indicator (KPI) data. WFM contains pre-defined role-appropriate scorecards with pre-packaged Workforce Management and Quality Key Performance Indicators (KPI’s), which can be utilized to display agent performance information on a daily basis. KPI data must be imported to WFM before scorecards can be configured. Click on the Organization Management tab, then the KPIs entry (under Scorecards). In the new window, click in the Organization Name in the left pane and then click the Import KPI button at the bottom of the page.

The page refreshes and shows the KPI’s available to import. Select a KPI and click the Load button. Scroll down the page to see more KPI’s. Repeat this until all required KPI’s are loaded.
Objectives need to be created for the imported KPI’s. Click on the **Objectives** tab, the page changes to show the organizations objectives (currently blank). Highlight the organization in the left pane and click on the **Create Objectives** button (not shown). The screen refreshes and presents the **Objective Details** property page for the organization (see below). Under **Objective Details**, fill in the objective **Name** and a description (if required). Ensure **Perspective** is **Internal** and the **Apply to this org only** radio button is checked. A list of KPI’s is shown in the **Available** section of the property page. Select one of these and click on the >> button to transfer the KPI to the **Assigned** pane. Repeat this until all required KPI’s have been assigned then click on the **Save** button.

Click on the **Scorecard Settings** tab. Ensure the **Default Objective** value is the recently created objective and the **Default Periodicity** is set to **Daily**. Click the **Save** or **Cancel** button as needed.
5.10. Install adapters in Avaya Workforce Management

WFM uses adapters to connect to AACC and extract real time data and historical reports. Adapter purpose and configuration depends on what AACC open interface it connects to. There are four plugins/adapters which must be configured in WFM to connect to the three open interfaces provided by AACC. The four adapter plugins that must be configured are:

<table>
<thead>
<tr>
<th>Plugin/Adapter name</th>
<th>Open interface used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent Scorecard Metrics adapter (ASCM)</td>
<td>Avaya SQL Adapter [RIExtender]</td>
</tr>
<tr>
<td>Avaya Contact Statistics Interface (CSI)</td>
<td>CCMS Adapter [RIExtender13]</td>
</tr>
<tr>
<td>Avaya Streaming Time Collection Interface (STCI) for Real Time Data (RTD)</td>
<td>Avaya RTD Time Collection Adapter [ContinuousExtender]</td>
</tr>
<tr>
<td>Avaya Streaming Time Collection Interface (STCI) for Realtime Statistical Multicast (RSM).</td>
<td>Avaya RSM 5.0 Time Collection Adapter [ContinuosExtender40]</td>
</tr>
</tbody>
</table>

These adapters must be activated and configured in the WFM Integration Server. WFM Integration server is an open integration platform controlling information flow between contact center data sources/applications, and WFM Framework Applications. Integration adapters and interfaces collect real time statistics, historical data, agent stats and call volume records.

Prior to activating the integration server for the first time, the WFM service needs to be restarted as in Section 5.1. After restarting the service, login to the WFM server as per Section 5.1. When ready, click on the System Management tab, then the Integration Server entry in the drop down menu. Highlight the WFM server entry and click on the Edit Configuration button.
A new page opens showing the Integration Packages in the left pane and the WFM Integration Server, currently with no installed adapters. Click on **Integration Server** [Root@WFM].

The page refreshes and presents new information tabs. Click on the **Workflow** tab, the screen refreshes and shows the **Integration Server Configuration** property page. The **Available Packages** pane shows the plugins and adapters which can be selected and installed. The **Selected Packages** pane shows what has already been installed. Click on an entry to select a package from the left pane and then use the >> button to transfer the selected package to the right pane. Four packages need to be installed; these are shown highlighted in the **Selected Packages** pane. The **Internal – Report Dump** and **Internal – Time Report Auto Close** packages are selected by default. Click on the **Save** button when ready.
Each adapter package has to be associated with a data source before it can collect data. Click on Integration Server (Root@WFM) in the left pane, and then click on the ASCM for Contact Center [CS] package. The Monitor screen appears, click on the Data Source tab.

The Data Source page is shown. The Available Data Sources pane displays unassigned data sources and is currently blank as the only data source has been assigned. Select an entry in the Available Data Sources pane and click on the >> button to move it to the Selected Data Sources pane. Click on the Save button when done. The following screenshot shows PhoneDataSource selected. Repeat this procedure for the Avaya – CSI for CC6 and CC7, Avaya – STCI for Symposium RTD and Avaya – STCI for Symposium RSM adapters.
5.11. Install an ODBC driver in Avaya Workforce Management

An ODBC driver must be installed to interface WFM with CCMS. This is necessary to enable the ASCM for Contact Center adapter [CS] installed in Section 5.10. An Intersystems Cache ODBC driver is provided on the WFM install media in the \ThirdParty\Cache ODBC Driver folder. The file is called ODBCdriver_2007.1_x86.exe. Load the install media into the WFM server and browse to the file ODBCdriver_2007.1_x86.exe. Double click on the file, the installer launches. Click on the Next button to begin installation.

![InstallShield Wizard]

When the installation is completed, the following screen is shown. Click on the Finish button.

![InstallShield Wizard Completed]

The ODBC driver just installed is a 32 bit driver, where as WFM is running on Windows Server 2008 R2 64 bit operating system. This driver will not show up in windows ODBC configuration screens. This is expected behavior when installing a 32 bit driver on a 64 bit operating system. To configure the driver to work with CCMS, right click on the windows Start button and select the Open Windows Explorer entry (not shown). The Windows Explorer interface opens. Under Computer in the side menu, click on the Local Disk C: entry.

Navigate to C\Windows\SysWOW64 and launch odbcad32.
This opens up the **ODBC Data Source Administrator** interface. Click on the **Add** button.

A new dialog appears, select **InterSystems ODBC** and click **Finish**.

A new dialog appears, type a **Data Source Name** in the space provided and a **Description** if required. Click on the **OK** button when finished.
The dialog closes and the ODBC Data Source Administrator window updates to show the recently added data source, Click on the entry under Name and then click on the Configure button.

A new dialog appears, fill in the server Host (IP Address) in the space provided. Port is 1972, Cache Namespace must be CCMS_STAT. Check the Password radio button. The Password is avaya1 (default). Click the OK button when ready.
Restart the WFM Integration service by clicking on the System Management tab, then the Integration Servers entry (not shown). Select the Integration Server [Root@WFM] entry from the side pane in the new window and click the Monitor tab. Click the Stop button in the Integration Server Status area.

The window redraws with the Integration Server Status icon changed from a green light bulb to a red stop sign. The service status in the service window shows Stopped. Click on the Start button to restart the integration service.

The integration service restarts, the screen redraws to show the status. The status icon should be a green light bulb, the service status in the service window shows Started.
The ASCM and CSI adapters previously configured in Section 5.10 need to be re-imported into WFM to connect with the new ODBC driver. Click on the arrow to the right of Integration Server [Root@WFM] in the left pane to expand the adapter list. Select the ASCM for Contact Center [CS] entry. Click the Stop button to stop the service. Click the Import Now button in the ACM for Contact Center status area. Click the Start button (not shown) to restart the service.

Repeat this procedure for the Avaya – CSI for CC6 and CC7 [CS12] adapter (see below).

This completes the ODBC driver installation.
5.12. Configure adapters in Avaya Workforce Management

The adapters installed in Section 5.10 must be configured before contact center data can be retrieved and database connections established. Click on the arrow to the right of the ASCM for Contact Center [CS] entry in the left pane and in the drop down list, select Avaya SQL Adapter [RIExtender]. Click on the Configure tab, the configuration screen is drawn. In the Configuration Parameters area, use the following values:-

- Data Source Name (DSN)  Configured in Section 5.11 for the ODBC driver
- Password  avaya1 (default)

The remaining values are default. Click the Save button when ready.

Repeat this procedure for the Avaya – CSI for CC6 and CC& [CS12] adapter, selecting the CCMS Adapter [RIExtender13] entry, using the following values and saving when ready.

- DB Name or DSN  Configured in Section 5.11 for the ODBC driver
- CCMS Host Name  CCMS IP address
- CCMS Port Number  6060
- Password  avaya1 (default)
Repeat this procedure for the Avaya – STCI for Symposium RTD [PluginManager] adapter, selecting the Avaya RTD Time Collection Adapter [ContinuousExtender] entry, using the following values:-

- SCCS Server IP address
- Password

The remaining values are default. Click the Save button when ready.

Repeat this procedure for the Avaya – STCI for Symposium RSM 5.0 [PluginManager18] adapter, selecting the Avaya RSM 5.0 Time Collection Adapter [ContinuousExtender19] entry, using the following values:

- Multicast IP Address
- Multicast Port Number

The remaining values are default. Click on the Save button when finished.

This completes adapter configuration. This completes all WFM configuration steps.
6. Verification Steps

To confirm WFM has been installed correctly, examine some reports which display contact center activity or agent activity and ensure the data is present and correct. Click on the Tracking tab, and then select the Pulse entry (not shown). The Pulse report window opens. Click on a queue in the left pane to select an active queue (Master Script Queue was chosen in this example). Click on the View button at the bottom of the left pane, the Master Script queue Data is shown in the middle pane for today’s date. To alter the displayed date range, use the controls above the middle and left panes (highlighted) to change the date(s). Confirm the displayed data matches expectations. The Pulse report shows four key contact center measures, namely:

- **Average Speed to Answer**  Average answer waiting time for calls to the queue in a period
- **Average Handling Time**  Average time taken for calls to the queue or a skillset to be handled
- **Abandons**  Contacts initiated to the queue that ended before any conversation occurs
- **Contact Volume**  Number of calls to the queue in a given time period
Click on the **Tracking** tab, and then select the **Adherence** entry (not shown). The Adherence report window opens. Click on the **Quick View** tab and click the **Select All** button at the bottom of the left pane to get data for all agents. Click on the **View** button at the bottom of the left pane, the Adherence data is presented in the middle pane for today’s date and current time.

The report shows agent Adherence for the contact center. In the example shown, two agents (22001 and 22001) are not meeting their scheduled activities and have been idle or away from their stations for long periods of time.
7. Conclusion
These Application Notes document the configuration and administration of Avaya Aura® Workforce Optimization Workforce Management R11.0 with Avaya Aura® Contact Center R6.2. By following these procedures, the Avaya Aura® Workforce Optimization Workforce Management R11.0 installation will be placed in service with the necessary configuration to retrieve live contact center data and produce management reports. Some unexpected minor issues were discovered during the testing, see Section 2.2 for details.

8. Additional References
The following documents and guides may be of assistance when configuring Avaya Aura® Workforce Optimization Workforce Management R11.0 and may provide further information on technical aspects of product operation. These documents can be found on https://support.avaya.com in the Products section.

[5] Avaya Aura® Contact Center Fundamentals Release 6.2 (NN44400-110.03.03.11,October 2011)
[6] Avaya Aura® Contact Center Overview Release 6.2 (NN44400-111.03.01,21-June 2011)