Abstract

These Application Notes describe the configuration steps required to integrate Inova LightLink with Avaya Call Management System using the Inova Historical interface to capture ACD call center data from Avaya Communication Manager. The Inova Historical interface is used to obtain splits/skills, Vector Directory Numbers (VDNs), and agents data periodically. This interface is provided by the Avaya Communication Solutions and Integration (CSI) group within Avaya Global Services.

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 to integrate Inova LightLink with Avaya Call Management System using the Inova Historical interface to capture ACD call center data from Avaya Communication Manager. The Inova Historical interface is used to obtain splits/skills, Vector Directory Numbers (VDNs), and agents data periodically. This interface is provided by the Avaya Communication Solutions and Integration (CSI) group within Avaya Global Services.

Inova LightLink is a middleware platform that supports the integration, management, and delivery of real-time data. Inova LightLink utilizes the real-time call center data from Avaya Communication Manager for splits/skills, VDNs, and agents, and provides the information to applications or contact center organizations for effective management.

The data streams of ACD call center historical data are obtained by Inova LightLink from Avaya CMS. A TCP client-server model is used for the connection, with Avaya CMS being the “client” and Inova LightLink being the “server”. Inova LightLink runs a TCP “listener” process to accept the data connection from the Inova Historical interface of Avaya CMS. Avaya CMS can send data to Inova LightLink at 15, 30, or 60 minute intervals (configurable).

Avaya CSI installs and configures the Inova Historical interface on Avaya CMS, and provides the TCP port number associated with each historical interface session to Inova for configuring LightLink. LightLink parses the raw data streams received and makes the data available on various output devices. The historical data can be monitored by customers via customized viewing models.
2. Equipment and Software Validated

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

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avaya S8700 Servers</td>
<td>Avaya Communication Manager 4.0, load 730.5</td>
</tr>
<tr>
<td>Avaya G650 Media Gateway</td>
<td></td>
</tr>
<tr>
<td>▪ TN799DP C-LAN Circuit Pack</td>
<td>HW01 FW024</td>
</tr>
<tr>
<td>Avaya Call Management System</td>
<td>r14aa.h</td>
</tr>
<tr>
<td>Avaya 4600 Series IP Telephones</td>
<td>2.8 (H.323)</td>
</tr>
<tr>
<td>Inova LightLink</td>
<td>5.6.264.0</td>
</tr>
</tbody>
</table>

3. Configure Avaya Communication Manager

This section provides the procedures for configuring Avaya Communication Manager. The procedures include the following areas:

- Verify Avaya Communication Manager Options
- Administer adjunct CMS release
- Administer IP node names for C-LAN
- Administer IP interface for C-LAN
- Administer data module for C-LAN
- Administer processor interface channel
- Administer measured VDN
- Administer measured Skill

The detailed administration of contact center devices such as ACD/Skill, VDN, Vector, and Agents are assumed to be in place. These Application Notes will only cover how to enable ACD/Skill, VDN, and Agent data to be sent to Avaya CMS.
3.1. Verify Avaya Communication Manager Software Options

Log into the System Access Terminal (SAT) to verify that the Avaya Communication Manager license has proper permissions for features illustrated in these Application Notes. Use the “display system-parameters customer-options” command to verify that the G3 Version field is set to “V14” on Page 1, as shown below.

```
display system-parameters customer-options

G3 Version: V14
Location: 1
Platform: 6
RFA System ID (SID): 1
RFA Module ID (MID): 1

Platform Maximum Ports: 44000 727
Maximum Stations: 36000 239
Maximum XMObILE Stations: 0 0
Maximum Off-PBX Telephones - EC500: 0 0
Maximum Off-PBX Telephones - OPS: 50 8
Maximum Off-PBX Telephones - PBFMC: 0 0
Maximum Off-PBX Telephones - PVFMC: 0 0
Maximum Off-PBX Telephones - SCCAN: 0 0

(Optional: You must logoff & login to effect the permission changes.)
```

Navigate to Page 6, and verify that the Call Center Release field is set to “4.0”, as shown below.

```
display system-parameters customer-options

CALL CENTER OPTIONAL FEATURES

Call Center Release: 4.0
ACD? y
BCMS (Basic)? y
BCMS/VuStats Service Level? y
BSR Local Treatment for IP & ISDN? n
Business Advocate? y
Call Work Codes? n
DTMF Feedback Signals For VRU? y
Dynamic Advocate? y
Expert Agent Selection (EAS)? y
EAS-PHD? y
Forced ACD Calls? n
Lookahead Interflow (LAI)? n
Multiple Call Handling (On Request)? y
Multiple Call Handling (Forced)? y
PASTE (Display PBX Data on Phone)? y
Reason Codes? y
Service Level Maximizer? n
Service Observing (Basic)? y
Service Observing (Remote/By FAC)? y
Service Observing (VDNs)? y
Timed ACM? y
Vectoring (Basic)? y
Vectoring (Prompting)? y
Vectoring (G3V4 Enhanced)? y
Vectoring (G3V4 Advanced Routing)? y
Vectoring (ANI/II-Digits Routing)? y
Vectoring (G3V4 Advanced Routing)? y
Vectoring (ANI/II-Digits Routing)? y
Vectoring (CINFO)? y
Vectoring (Best Service Routing)? y
Vectoring (Holidays)? y
Vectoring (Variables)? n

(Optional: You must logoff & login to effect the permission changes.)
```
3.2. Administer Adjunct CMS Release

Use the “change system-parameters features” command and navigate to Page 12. Set the Adjunct CMS Release field to the software release of the Avaya CMS. In this case, “R14” is used to correspond to Avaya CMS software release R14.0.

3.3. Administer IP Node Name for C-LAN

Use the “change node-names ip” command, to add entries for Avaya CMS and the C-LAN that will be used for connectivity. In this case, “cms” and “192.45.120.50” are entered as Name and IP Address for the Avaya CMS server, and “clan2” and “192.45.100.70” are entered as Name and IP Address for the C-LAN. The actual node names and IP addresses may vary. Submit these changes.
3.4. Administer IP Interface for C-LAN

Add the C-LAN to the system configuration using the “add ip-interface 2a02” command. The actual slot number may vary. In this case, “2a02” is used as the slot number. Enter the C-LAN node name assigned from Section 3.3 into the Node Name field. The IP Address field will be populated automatically.

Enter proper values for the Subnet Mask and Gateway Address fields. In this case, “255.255.255.0” and “192.45.100.1” are used to correspond to the network configuration in these Application Notes. Set the Enable Ethernet Port field to “y”. Default values may be used in the remaining fields. Submit these changes.

3.5. Administer Data Module for C-LAN

Add a new data module using the “add data-module n” command, where “n” is an available extension. Enter the following values, and submit these changes.

- **Name:** A descriptive name.
- **Type:** “ethernet”
- **Port:** Same slot number from Section 3.4 above and port “17”.
- **Link:** An available link number.
3.6. Administer Processor Interface Channel

Assign a new processor interface channel with the “change communication-interface processor-channels” command. Add an entry with the following values, and submit these changes.

- **Enable:** “y”
- **Appl.:** “mis”
- **Mode:** “s” for server mode.
- **Interface Link:** Link number for data module Ethernet port from Section 3.5.
- **Interface Chan:** TCP channel number for Avaya CMS. In this case “5001”.
- **Destination Node:** Avaya CMS server node name from Section 3.3.
- **Destination Port:** “0”
- **Session Local:** Corresponding channel number in **Proc Chan** field. In this case “1”.
- **Session Remote:** Corresponding channel number in **Proc Chan** field. In this case “1”.

The **Interface Chan** field contains the Avaya CMS TCP channel number, which is defined as part of the Avaya CMS installation. For the compliance testing, the default TCP channel number of “5001” was used.

<table>
<thead>
<tr>
<th>Chan</th>
<th>Enable</th>
<th>Appl.</th>
<th>To Mode</th>
<th>Interface</th>
<th>Destination</th>
<th>Session</th>
<th>Mach</th>
<th>Local/Remote</th>
<th>IDnp</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:</td>
<td>y</td>
<td>mis</td>
<td>s</td>
<td>2</td>
<td>5001</td>
<td>cms</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2:</td>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.7. 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” or “both” to enable measurement data on the VDN to be sent to Avaya CMS. Repeat this step for all VDNs that will be monitored by Avaya CMS.

<table>
<thead>
<tr>
<th>VDN</th>
<th>Extension</th>
<th>Name</th>
<th>Vector Number</th>
<th>Meet-me Conferencing?</th>
<th>Allow VDN Override?</th>
<th>COR</th>
<th>TN</th>
<th>Measured</th>
<th>Acceptable Service Level (sec)</th>
<th>Service Objective (sec)</th>
<th>VDN of Origin Annc. Extension*</th>
<th>1st Skill*</th>
<th>2nd Skill*</th>
<th>3rd Skill*</th>
</tr>
</thead>
<tbody>
<tr>
<td>38000</td>
<td>38000</td>
<td>Inova VDN 1</td>
<td>380</td>
<td>n</td>
<td>n</td>
<td>1</td>
<td>1</td>
<td>both</td>
<td>10</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Follows VDN Override Rules
3.8. Administer Measured Skill and Agent

Use the “change hunt-group n” command, where “n” is the extension of the ACD/Skill group number to be measured by Avaya CMS. Set the Measured field to “external” or “both” to enable real-time measurement data on the ACD/Skill group and the associated agents to be sent to Avaya CMS. Repeat this step for all ACD/Skill groups that will be measured by Avaya CMS.

<table>
<thead>
<tr>
<th>Service Level Target (% in sec): 80 in 20</th>
<th>Service Objective (sec): 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill? y</td>
<td>Expected Call Handling Time (sec): 180</td>
</tr>
<tr>
<td>AAS? n</td>
<td>Activate on Oldest Call Waiting? y</td>
</tr>
<tr>
<td>Supervisor Extension:</td>
<td>Call Selection Override? n</td>
</tr>
<tr>
<td>Controlling Adjunct: none</td>
<td>Level 1 Threshold (sec): 50</td>
</tr>
<tr>
<td>VuStats Objective:</td>
<td>Level 2 Threshold (sec):</td>
</tr>
<tr>
<td>Timed ACW Interval (sec):</td>
<td>Dynamic Threshold Adjustment? n</td>
</tr>
<tr>
<td>Multiple Call Handling: none</td>
<td>Dynamic Queue Position? n</td>
</tr>
<tr>
<td>Redirect on No Answer (rings):</td>
<td>Redirect to VDN:</td>
</tr>
<tr>
<td>Forced Entry of Stroke Counts or Call Work Codes? n</td>
<td></td>
</tr>
</tbody>
</table>
4. Configure Avaya Call Management System
Configuration of the Inova Historical interface is performed by Avaya CSI and is outside the scope of these Application Notes. After the interfaces are configured, the user can follow the procedures below to enable the interface.

4.1. Verify Inova Historical Interface
The Inova Historical Interface is always enabled and monitoring splits/skills, VDNs, and agents on Avaya Communication Manager. To verify that ACD call center data is being monitored, use a terminal emulator to connect to Avaya CMS and log in with the proper credentials. The Main Menu is displayed as shown below. Select Inova from the Main Menu.
After selecting the Inova option, the Inova Reports Interface menu appears as shown below.

![Inova Reports Interface Menu](image-url)
Enter “1” to display the configuration information, followed by the Enter key. The Configured Sessions screen appears. A description of the screenshot fields appear.

- **SESSION**: Each session defines a connection that Avaya CMS establishes with Inova LightLink.
- **ACD**: This column displays the ACD number associated with Avaya Communication Manager as configured on Avaya CMS.
- **SERVER**: Always displays “inova” as the name for Inova LightLink.
- **PORT**: Shows the TCP port that will be used to transfer data during each session.
- **TYPE**: This column defines what type of data will be transferred during each session.

![Configured Sessions Screen](image-url)
5. Configure Inova LightLink
This section provides the procedures for configuring Inova LightLink. The procedures fall into the following areas:

- Administer Inova historical interface for Skill data
- Administer Inova historical interface for VDN data
- Administer Inova historical interface for Agent data

Configuration of LightLink is typically performed by Inova technicians. The procedural steps are presented in these Application Notes for informational purposes.

5.1. Administer Inova Historical Interface for Skill Data
From the LightLink server, start the Administrator application by launching Programs ➔ Inova LightLink ➔ Administrator. The Administrator screen is displayed.

5.1.1. Administer New Custom Data Source
Right-click on Input Manager in the left pane and select New Data Source Connection from the pop-up menu.
The **New Data Source** screen is displayed on top of the **Administrator** screen. Scroll down the window and select **Custom Data Source**. Click **OK**.

### 5.1.2. Administer Custom Data General Tab

The **Custom Data Source Properties** screen is displayed next. Select the **General** tab and enter a descriptive name for the new data source. In this case, “Avaya CMS RT Socket Skill – Historical” is used. Retain the default value for the **Preferred ID** field.
5.1.3. Administer Custom Data Connection Tab

Select the **Connection** tab. For the **Connection port** field, select “TCP/IP Connection” from the drop-down list. Enter the IP address of the LightLink server into the **Hostname or IP address** field. For the **Listening port** field, enter the TCP port number that the Avaya CMS server uses for transferring Skills data. This port number is provided by Avaya CSI. For the compliance testing, the port number used was “7002”.

![Custom Data Source Properties](image)
5.1.4. Administer Custom Data Settings Tab

Select the Settings tab. Select the Data format file field, and click on Browse. From the Select File screen, select “avaya_rtsocket_historical_skill.sdf” from the file list. Repeat the same procedure to select “avaya_rtsocket_historical_skill.dss” for the Script file field. For the Connect timeout (sec.) field, increase the value to “99999” seconds, as shown below. Retain the default values for the remaining fields, and click on Advanced.

The Warning pop-up window below is displayed on top of the Custom Data Source Properties screen. Click Yes to continue.
The Advanced Properties screen is displayed on top of the Custom Data Source Properties screen. Set the value of the ActsAsServer parameter to “1” as shown in the textbox below, to enable the LightLink server to take on the role of the “server” in communicating with Avaya CMS. Also, set the DataFieldsOkOnDisconnect parameter to “1”. Click OK to submit the changes for the Advanced Properties screen. Click OK on the Custom Data Source Properties screen to submit the changes for that screen.
The **Administrator** screen is displayed next, and updated with the newly created custom data source “Avaya CMS RT Socket Skill – Historical” as shown below. A green checkmark is displayed by the data source when the connection to Avaya CMS is established.
5.2. Administer Inova Historical Interface for VDN Data

The procedure for administering the VDN data source is similar to the procedure described for administering the Skill data source. Follow all the steps in the procedure described in Section 5.1 with the following exceptions:

- **Section 5.1.2** Use a different Name for the VDN data source.
Section 5.1.3 Use the corresponding TCP port number for the Listening Port field. The corresponding TCP port number on the Avaya CMS server used for transferring VDN data is provided by Avaya CSI. For the compliance testing, the port number used was “7003”.

![Custom Data Source Properties](image)
Section 5.1.4  Select “avaya_rtsocket_historical_vdn.sdf” for the **Data format file** field and select “avaya_rtsocket_historical_vdn.dss” for the **Script file** field as shown below.
A green checkmark will be displayed by the VDN data source in the **Administrator** screen once the connection to Avaya CMS is established.
5.3. **Administer RT_Socket Interface for Agent Data**

The procedure for administering the Agent data source requires more steps than configuring the Skill and VDN data sources, and includes the following areas:

- Administer Agent data source
- Administer data set contract
- Administer database output device
- Administer database updater

### 5.3.1. Administer Agent Data Source

The procedure for administering the Agent data source is similar to the procedure described for administering the Skill data source. Follow all the steps in the procedure described in Section 5.1 with the following exceptions:

- **Section 5.1.2** Use a different Name for the Agent data source.

![Custom Data Source Properties](image-url)
Section 5.1.3 Use the corresponding TCP port number for the Listening Port field. The corresponding TCP port number on the Avaya CMS server used for transferring Agent data is provided by the Avaya CSI group. For the compliance testing, the port number used was “7004”.

![Custom Data Source Properties](image-url)
- **Section 5.1.4** Select “avayaagent_historicalcontract.sdf” for the **Data format file** field and select “avayaagent_historicalcontract.dss” for the **Script file** field as shown below.

![Custom Data Source Properties](image)
5.3.2. Administer Data Set Contract

From the Administrator screen, right-click on Input Manager and select Configure Contracts from the pop-up menu to create a new data set contract.
The **Data Set Contract Properties** screen is displayed on top of the **Administrator** screen. Click on **Import From File**.

Contracts are assigned by data table in the .sdf file for the Data Source, using the `DataSetContractTcopic` entity in the table definition. Use the **Settings** tab of the **Data Source Properties** dialog to access and edit its .sdf file.
The **Select a Data Set Contract File** screen is displayed. Navigate to the directory “C:\Program Files\Inova Solutions\Server\srvcfg\dsms” and select “avayaagent_historicalcontract.ini” as shown below. Click **Open**.
The **Imported Contract Properties** screen is displayed. For the **Topic Name** field, enter “/agenthistorical” as shown below. Retain the default values for the remaining fields, and click **OK**.

The **Save Contract** pop-up screen is displayed next. Click on **Yes** to save the contract.
At the **Data Set Contract Properties** screen, click **OK**.

Contracts are assigned by data table in the .sdf file for the Data Source, using the DataSetContractTopic entry in the table definition. Use the Settings Tab of the Data Source Properties dialog to access and edit its .sdf file.
Next, build the connection from the data set contract to the database. Inova LightLink supports any ODBC-compliant database. For compliance testing, a Microsoft Access database was used. From the Administrative Tools folder in Microsoft Windows, double-click on Data Sources (ODBC).
In the Create New Data Source screen, select “Microsoft Access Driver (*.mdb)” as shown below. Click Finish.

In the ODBC Microsoft Access Setup screen, enter a descriptive Data Source Name and then click Select.
In the Select Database screen, navigate to the directory where the database table is stored. For the compliance testing, a database table named “avayaagent.mdb” stored in the “C:\Program Files\Inova Solutions\Server\srvcfg\dsms” directory was selected for Microsoft Access. Click OK.

The Agent database should now appear under the System DSN tab in the ODBC Data Source Administrator screen. Click OK.
5.3.3. Administer Database Output Device

From the Administrator screen, right-click on Output Manager and select New Output Device Connection from the pop-up menu to associate the Agent data with an output device.

The New Output Device Connection screen is displayed on top of the Administrator screen. Select Database Publisher Output and click OK.
The **Database Publisher Output Properties** screen is displayed next. Select the **General** tab, and enter a descriptive name in the **Name** field.

Under the **Settings** tab of the **Data Publisher Output Properties** screen, select the “ODBC DSN” option in the **Connection String Type** section. Click **Browse**.
The **Select Data Source** screen is displayed. Select the data source corresponding to the Agent database and click **OK**.

![Select Data Source](image)

In the **Login** screen, specify the login credentials if required. Click **OK**.

![Login](image)
Return to the **Database Publisher Output Properties** screen and click **OK**.
5.3.4. Administer Database Updater

From the Administrator screen, expand Output Manager. Right-click on the newly created Avaya Database Publisher and select New Device from the pop-up menu to create a database updater for the new database output device.
The **Create Database Updater** screen is displayed. Select the radio button for **Create a New Table**, and enter “agenthistorical” for the **New Table Name**. Click **OK**.

In the **Update Settings** screen, select the options shown in the screen below. Click **OK**.
The **Field Mappings for Table** screen is displayed next and filled in with the table name. Click on the **AutoFill** menu option and select the **Create Columns From Group** in the pop-up menu.

The **Automated Column Creation** screen is displayed on top of the **Field Mappings for Table** screen. Update the options as shown below and then click **Select a Group**.
The Create Columns from Group screen is displayed next. Expand Contract Data Sets and select “/agenthistorical” as shown below. Click OK.

Click OK in the Automated Column Creation screen.
The **Field Mappings for Table** screen is updated with the columns for the database as shown below. Select the **Period** column and right-click to select **Edit Column** from the pop-up menu.

![Field Mappings for Table](image1)

The **Column Configuration** screen is displayed on top of the **Field Mappings for Table** screen. Select the radio button for **Data Field, Expression, or Constant** and check **Is a Key Field**. Repeat this step for the **ACD**, **LogID** and **Skill** fields. Together, the Period, ACD, LogID, and Skill fields comprise the key for each database row.

![Column Configuration](image2)
The **Administrator** screen will now display the “agenthistorical” table in the left pane.
6. **Interoperability Compliance Testing**

The interoperability compliance test included feature and serviceability testing. The feature testing focused on verifying Inova LightLink parsing and displaying of ACD/Skill, VDN, and Agent data from Avaya CMS.

The serviceability testing focused on verifying the ability of Inova LightLink to recover from adverse conditions, such as restarting the RT_Socket interface interfaces.

### 6.1. General Test Approach

The feature test cases were performed manually. Incoming calls were made to the monitored Skill and VDN groups to enable data streams to be sent to LightLink. Manual call controls and work mode changes from the Agent telephones were exercised as necessary to populate specific fields in the data streams.

The serviceability test cases were performed manually by stopping and restarting the RT_Socket interface, and by disconnecting and reconnecting the LAN cable to the LightLink server.

The verification of all tests included checking of proper display of real-time data at the LightLink server, and of comparing the displayed data with the real-time 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 Communication Manager and Inova LightLink.

7.1. Verify Avaya Communication Manager

Verify the status of the processor interface channel by using the “status processor-channels n” command, where “n” is the processor channel number from Section 3.6. Verify that the Session Layer Status is “In Service”, and that the Socket Status is “TCP connected”, as shown below.

```
status processor-channels 1
PROCESSOR-CHANNEL STATUS

Channel Number: 1
Session Layer Status: In Service
Socket Status: TCP connected
Link Number: 2
Link Type: ethernet
Message Buffer Number: 0

Last Failure: Far end sent disconnect message
At: 03/31/08 15:04
```

Verify the status of the TCP/IP link number by using the “status link n” command, where “n” is the TCP/IP link number assigned to the C-LAN used to connect to the Avaya CMS server from Section 3.5. Verify that the Link Status is “connected”, and that the Service State is “in-service/active”, as shown below.

```
status link 2
LINK/PORT STATUS

Link Number: 2
Link Status: connected
Link Type: ethernet
Link Name: Clan2
Service Port Location: 02A0217
Service Port Data Extension: 24981
Service State: in-service/active
Node Name: clan2
Source IP Address: 192.45.100.70
Subnet Mask: 255.255.255.0
Broadcast Address: 192.45.100.255
Physical Address: 00:04:0d:4b:28:08
Enabled? yes
Maintenance Busy? no
Active Channels: 1
```
7.2. Verify Avaya Call Management System

From the MainMenu, verify the status of the connection to Avaya Communication Manager by selecting Maintenance → Connection Status, as shown below.

Enter the corresponding ACD(s) number, which is provided by the Avaya CSI group. For the compliance testing, the corresponding switch connection is ACD system “3”. Tab over to Find one and press Enter.
The switch connection status is displayed. Check the status in the Session and Connection fields, as shown below.
7.3. Verify Inova LightLink

From the **Administrator** screen, verify that **Avaya CMS RT Socket Agent – Historical**, **Avaya CMS RT Socket Skill – Historical**, and **Avaya CMS RT Socket VDN – Historical** under **Input Manager** in the left pane are all up and running with a green check mark as shown below. Note that different names may be used for these interfaces.
7.3.1. Verify Historical Skill Data

From the Administrator screen, expand on Avaya CMS RT Socket Skill – Historical under Input Manager. A list of fields that can be viewed from the Skill data streams is displayed in the left pane. Initially, the right pane will be empty (not shown). Click on File from the top left of the screen, and select New to create a new window for viewing.

The View Window Attributes screen is displayed on top of the Administrator screen. Enter a descriptive name for the view window and click OK.

An empty verify data screen is displayed (not shown). Click and drag data fields under Avaya CMS RT Socket Skill – Historical from the left pane into the new verify data window in the right pane. Data values from subsequent data streams will then be displayed into the right pane as shown in the Administrator screen above.
7.3.2. Verify Historical VDN Data

Follow the procedures in Section 7.3.1, to expand Avaya CMS RT Socket VDN – Historical and create a new window for viewing the selected VDN data.

7.3.3. Verify Historical Agent Data

From the LightLink server, navigate to the database table used for storing the Agent data in Microsoft Access. Double-click on the “agenthistorical” database table to display the Agent data received by LightLink from Avaya CMS.
The Agent data is displayed as shown in the screen below. The Agent data will be populated in real-time as call center activity takes place. To view the latest Agent data, re-open the “agenthistorical” table.
8. Support
Contact Inova Solutions for technical support and for other display options such as real-time and historical dashboards, digital signage and desktop products.

- **Web:** [www.inova-support.com](http://www.inova-support.com)
- **Phone:** (888) 637-1080
- **Email:** support@inovasolutions.com

9. Conclusion
These Application Notes describe the configuration steps required for Inova LightLink to successfully interoperate with Avaya Communication Manager using the Inova Historical interface of Avaya Call Management System. All feature and serviceability test cases were completed successfully.

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


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