Avaya Solution & Interoperability Test Lab

Application Notes for Inova LightLink with Avaya Aura® Communication Manager and Avaya Call Management System with RT_Socket Interface – Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Inova LightLink with Avaya Call Management System using the Real-Time Socket interface to capture ACD call center data from Avaya Aura® Communication Manager. The Real-Time Socket (RT_Socket) interface is used to obtain real-time data for splits/skills, Vector Directory Numbers (VDNs), and agents. This interface is provided by Avaya Professional 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 Real-Time Socket interface to capture ACD call center data from Avaya Aura® Communication Manager. The Real-Time Socket (RT_Socket) interface is used to obtain real-time data for splits/skills, Vector Directory Numbers (VDNs), and agents. This interface is provided by Avaya Professional 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 Aura® 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 real-time 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 RT_Socket interface of Avaya CMS. Avaya CMS can send data to Inova LightLink every 15 seconds (configurable).

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

2. General Test Approach and Test Results

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

The feature test cases were performed manually. Incoming calls were made to the monitored ACD/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 comparing the displayed data with the real-time reports from the Avaya CMS server.

2.1. 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.

2.2. Test Results

The test objectives listed in **Section 2.1** were verified and all test cases were executed and passed.

2.3. Support

Contact Inova Solutions for technical support and for other display options such as real-time andhistorical dashboards, digital signage and desktop products.

- **Web:** support.inovasolutions.com (Log in Required email for username)
- **Phone:** (888) 637-1080
- **Email:** support@inovasolutions.com

3. Reference Configuration

Figure 1 illustrates the configuration used for compliance testing. The network consisted of Communication Manager running on an S8300D card that was installed in the G450 Media gateway, Avaya Call Management System and Inova LightLink.

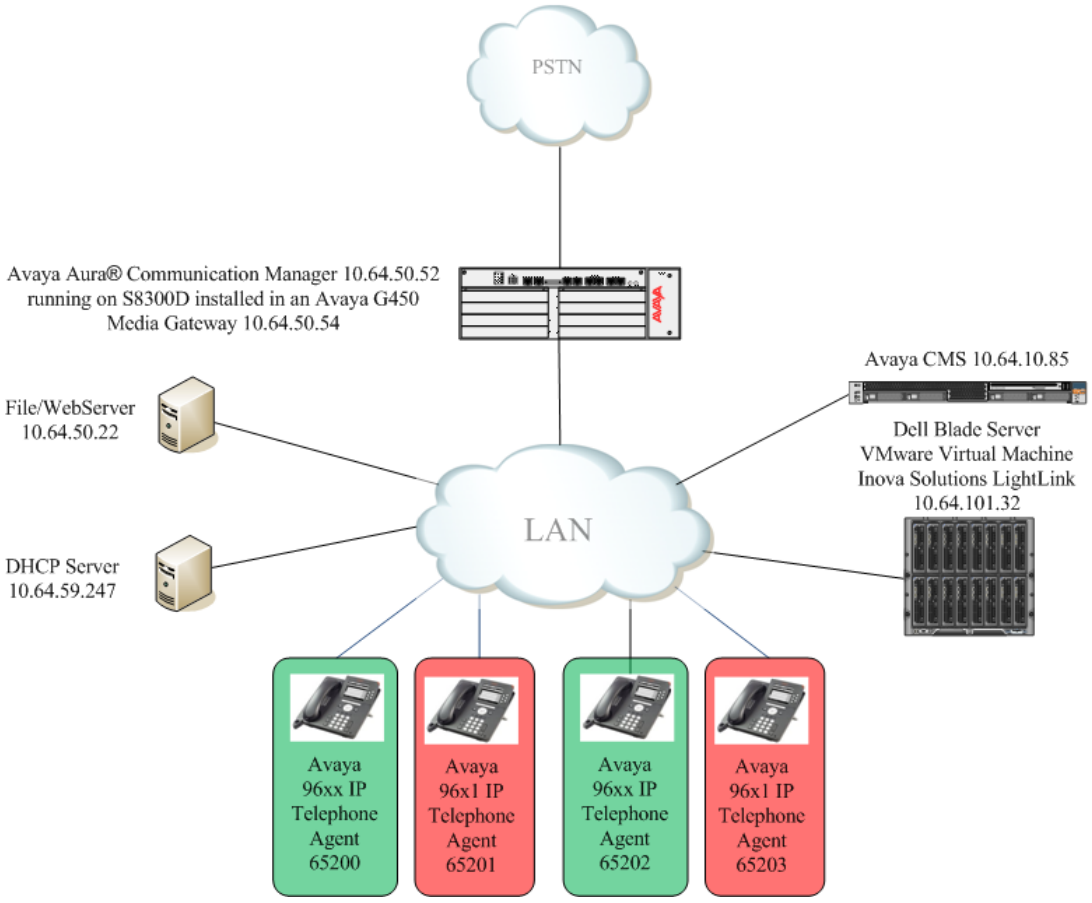


Figure 1: Network Configuration

4. Equipment and Software Validated

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

Equipment	Software/Firmware
Avaya PBX Products	
Avaya S8300D Server running Avaya Aura® Communication Manager	Avaya Aura® Communication Manager 6.2
Avaya G450 Media Gateway MGP MM710 T1 Module MM711 Analog Module MM712 DCP Media Module MP80 VoIP-DSP	HW 2 FW 31.20.0 HW 5 FW 22 HW 23 FW 73 HW 7 FW 14 HW 6 FW 67
Avaya Call Management System	
SUN SPARC Enterprise T5120	Avaya Call Management System R16.3
Inova LightLink	
Windows Server 2008 R2 Enterprise SP1 VMware Virtual Machine	Inova LightLink 5.7

5. Configure Avaya Aura® Communication Manager

This section describes the steps required for Communication Manager to support the configuration in **Figure 1**. The following pages provide step-by-step instructions on how to administer parameters specific to the Inova LightLink solution only. The assumption is that the appropriate license and authentication files have been installed on the servers and that login and password credentials are available and that the reader has a basic understanding of the administration of Communication Manager. It is assumed that all other connections, (e.g., to PSTN, to LAN) are configured and will not be covered in this document. The reader will need access to the System Access Terminal (SAT). For detailed information on the installation, maintenance, and configuration of Communication Manager, please refer to **Section 9** ([1]).

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

- Verify Communication Manager Options
- Administer adjunct CMS release
- 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.

5.1. Verify Avaya Aura® Communication Manager Software Options

Log into the System Access Terminal (SAT) to verify that the 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                    Page   1 of  11
                              OPTIONAL FEATURES

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

                                                          USED
                                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

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

Navigate to **Page 6**, and verify that the **Call Center Release** field is set to "6.0", as shown below.

```
                        display system-parameters customer-options
Page   6 of  11
                         CALL CENTER OPTIONAL FEATURES

                           Call Center Release: 6.0

                                 ACD? y                        Reason Codes? y
                       BCMS (Basic)? y                Service Level Maximizer? n
         BCMS/VuStats Service Level? y              Service Observing (Basic)? y
  BSR Local Treatment for IP & ISDN? y     Service Observing (Remote/By FAC)? y
                  Business Advocate? y              Service Observing (VDNs)? y
                    Call Work Codes? y                          Timed ACW? y
      DTMF Feedback Signals For VRU? y                   Vectoring (Basic)? y
                  Dynamic Advocate? y                Vectoring (Prompting)? y
       Expert Agent Selection (EAS)? y              Vectoring (G3V4 Enhanced)? y
                           EAS-PHD? y               Vectoring (3.0 Enhanced)? y
                  Forced ACD Calls? n     Vectoring (ANI/II-Digits Routing)? y
                                          Vectoring (G3V4 Advanced Routing)? y
          Lookahead Interflow (LAI)? y                   Vectoring (CINFO)? y
Multiple Call Handling (On Request)? y      Vectoring (Best Service Routing)? y
    Multiple Call Handling (Forced)? y                 Vectoring (Holidays)? y
  PASTE (Display PBX Data on Phone)? y                 Vectoring (Variables)? y
        (NOTE: You must logoff & login to effect the permission changes.)
```

5.2. Administer Adjunct CMS Release

Use the "change system-parameters features" command and navigate to **Page 12**. Set the **Reporting Adjunct Release** field for **CMS** to the software release of the Avaya CMS. In this case, "R16.1/R16.x" is used to correspond to Avaya CMS software release R16.3.

```
change system-parameters features                              Page  12 of  19
                        FEATURE-RELATED SYSTEM PARAMETERS

 AGENT AND CALL SELECTION
                          MIA Across Splits or Skills? n
                           ACW Agents Considered Idle? y
                           Call Selection Measurement: predicted-wait-time
   Service Level Supervisor Call Selection Override? n
                                Auto Reserve Agents: all
      Block Hang-up by Logged-in Auto-Answer Agents? n

 CALL MANAGEMENT SYSTEM
    REPORTING ADJUNCT RELEASE (determines protocol used by appl link)
                                      CMS (appl mis): R16.1/R16.x
                                   AAPC/IQ (appl ccr): 5.1/5.2/7.0

                                BCMS/VuStats LoginIDs? y
                    BCMS/VuStats Measurement Interval: hour
           BCMS/VuStats Abandon Call Timer (seconds): 10
                     Validate BCMS/VuStats Login IDs? n
                              Clear VuStats Shift Data: on-login
                  Remove Inactive BCMS/VuStats Agents? n
```

5.3. 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 TCP channel number of **"5001"** was used.

```
change communication-interface processor-channels                Page   1 of  24
                        PROCESSOR CHANNEL ASSIGNMENT
Proc                  Gtwy      Interface          Destination      Session   Mach
Chan Enable   Appl.    To  Mode Link/Chan        Node          Port  Local/Remote ID
  1:   y    ccr             s    pv4 5002  iq1               0      1     1
  2:   y    mis             s    pv4 5001  cms               0      4     4
```

5.4. 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.

```
change vdn 66101                                                 Page   1 of   3
                            VECTOR DIRECTORY NUMBER

                              Extension: 66101
                                  Name*: Inova LightLink 2
                            Destination: Vector Number        21
                     Attendant Vectoring? n
                   Meet-me Conferencing? n
                     Allow VDN Override? n
                                   COR: 1
                                   TN*: 1
                              Measured: both
          Acceptable Service Level (sec): 10
                 Service Objective (sec): 20
          VDN of Origin Annc. Extension*:
                              1st Skill*:
                              2nd Skill*:
                              3rd Skill*:



* Follows VDN Override Rules
```

5.5. Administer Measured Skill

Use the "change hunt-group n" command, where "n" is the extension of the ACD/Skill group number to be measured by Avaya CMS. On **Page 2** 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.

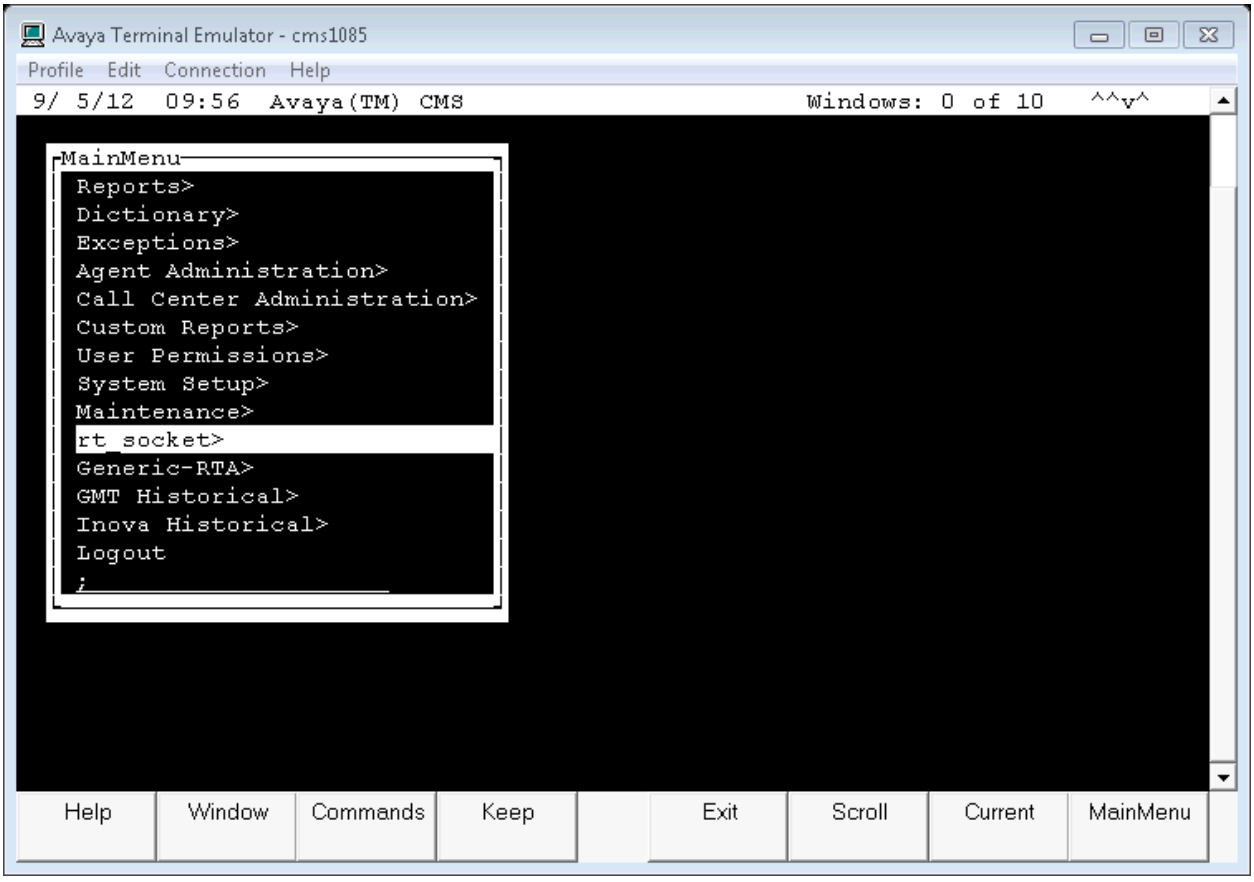
```
change hunt-group 20                                        Page   2 of   4
                                  HUNT GROUP

                    Skill? y      Expected Call Handling Time (sec): 2
                      AAS? n        Service Level Target (% in sec): 10 in 60
                 Measured: both             Service Objective (sec): 60
     Supervisor Extension:                Service Level Supervisor? y
                                    Activate on Oldest Call Waiting? y
                                             Call Selection Override? n
      Controlling Adjunct: none              Level 1 Threshold (sec): 2
                                             Level 2 Threshold (sec): 5
                                        Dynamic Threshold Adjustment? n
        VuStats Objective:
                                              Dynamic Queue Position? y
   Multiple Call Handling: none


 Timed ACW Interval (sec):          After Xfer or Held Call Drops? n
```

6. Configure Avaya Call Management System

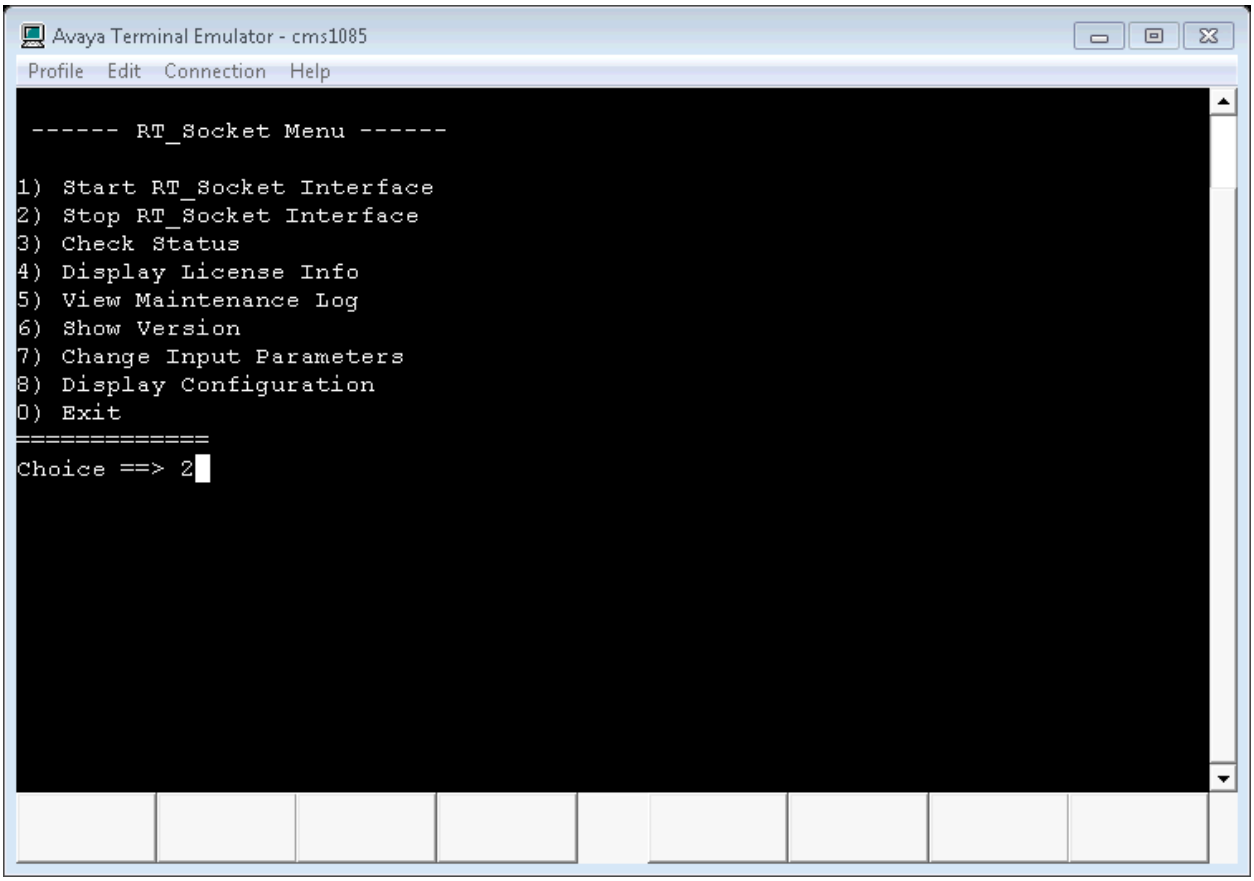
Configuration of the RT_Socket interface is performed by Avaya CSI and is outside the scope of these Application Notes. After the interfaces are configured, the user can follow the procedures below to enable the interface.

6.1. Enable RT_Socket Interface

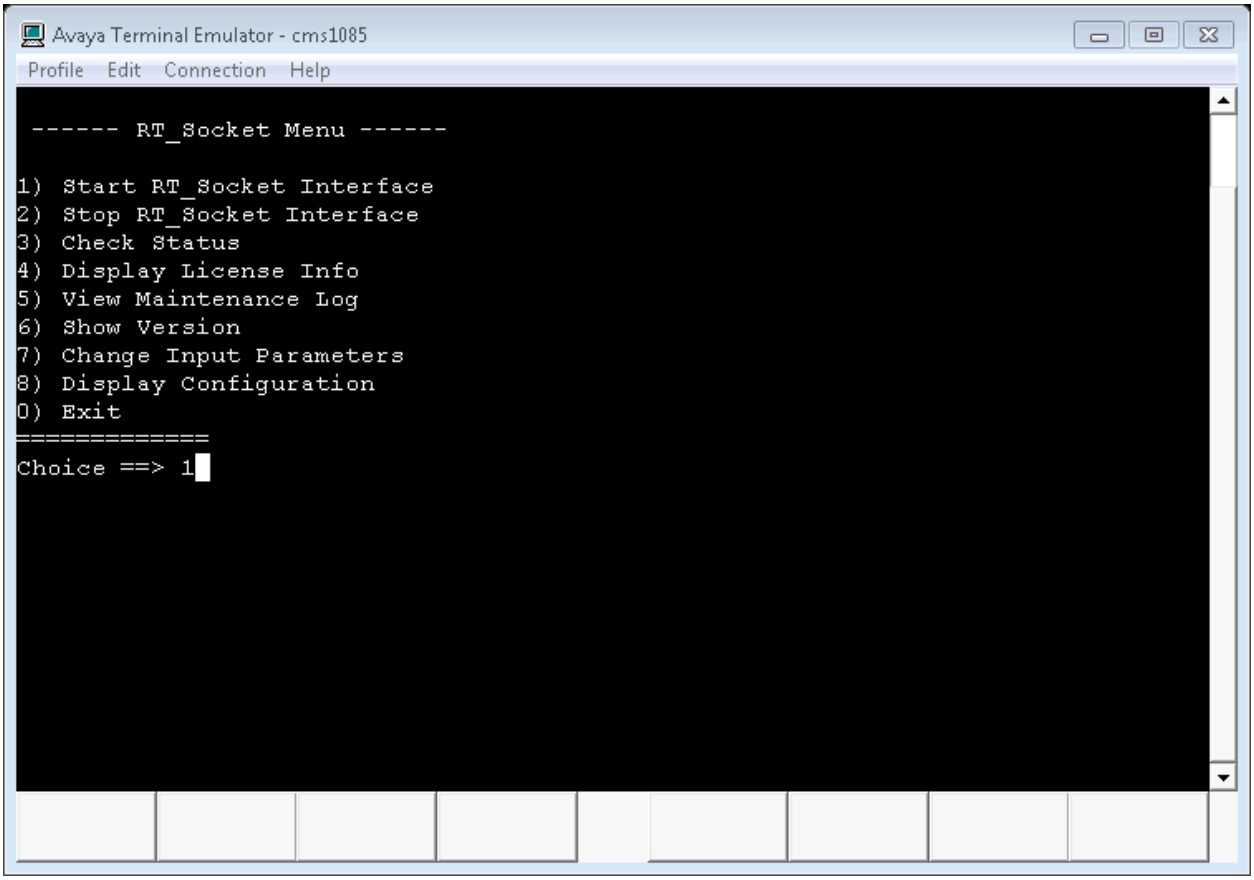
Use a terminal emulator to connect to Avaya CMS, and log in with the proper credentials. The **Main Menu** is displayed. Select **rt_socket** from the screen below.



The RT_Socket interface needs to be stopped and restarted. Enter "2" to stop the interface, followed by the **Enter** key.



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



Enter “0” to exit from this screen, followed by the **Enter** key.

7. Configure Inova LightLink

This section provides the procedures for configuring Inova LightLink. The procedures fall into the following areas:

- Administer RT_Socket interface for Skill data
- Administer RT_Socket interface for VDN data
- Administer RT_Socket interface for Agent data

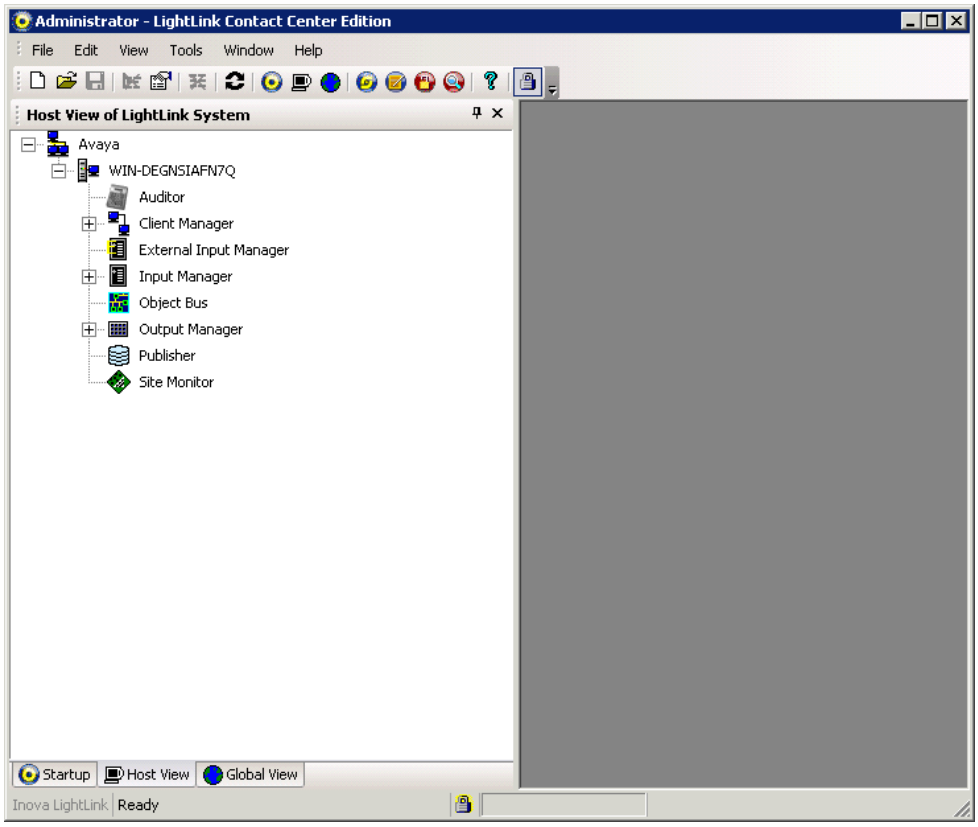
Configuration of LightLink is typically performed by Inova technicians. The procedural steps are presented in these Application Notes for informational purposes.

7.1. Administer RT_Socket Interface for Skill Data

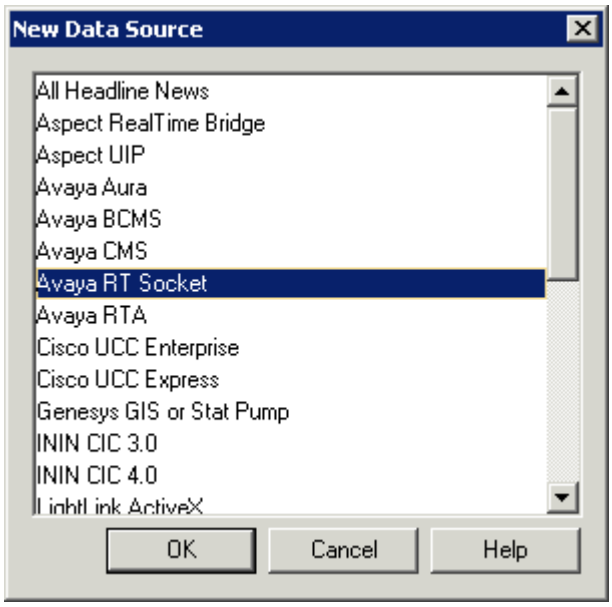
From the LightLink server, start the **Administrator** application by launching **All Programs → Inova Solutions → LightLink Middleware → Administrator**. The **Administrator** screen is displayed.

7.1.1. 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 (Not Shown).

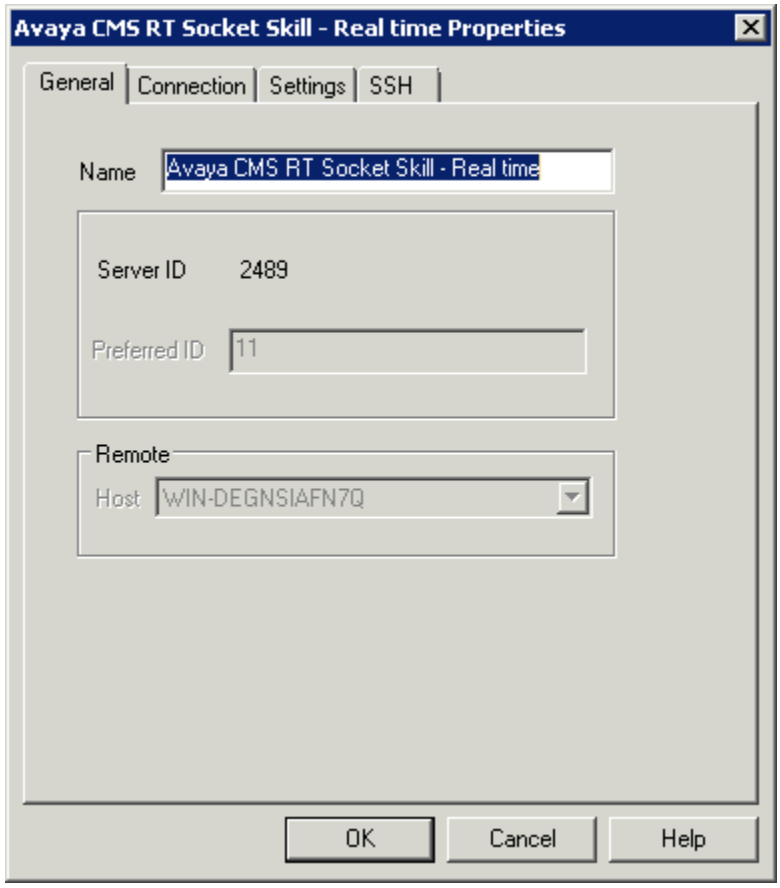


The **New Data Source** screen is displayed on top of the **Administrator** screen. Scroll down the window and select **Avaya RT Socket**. Click **OK**.



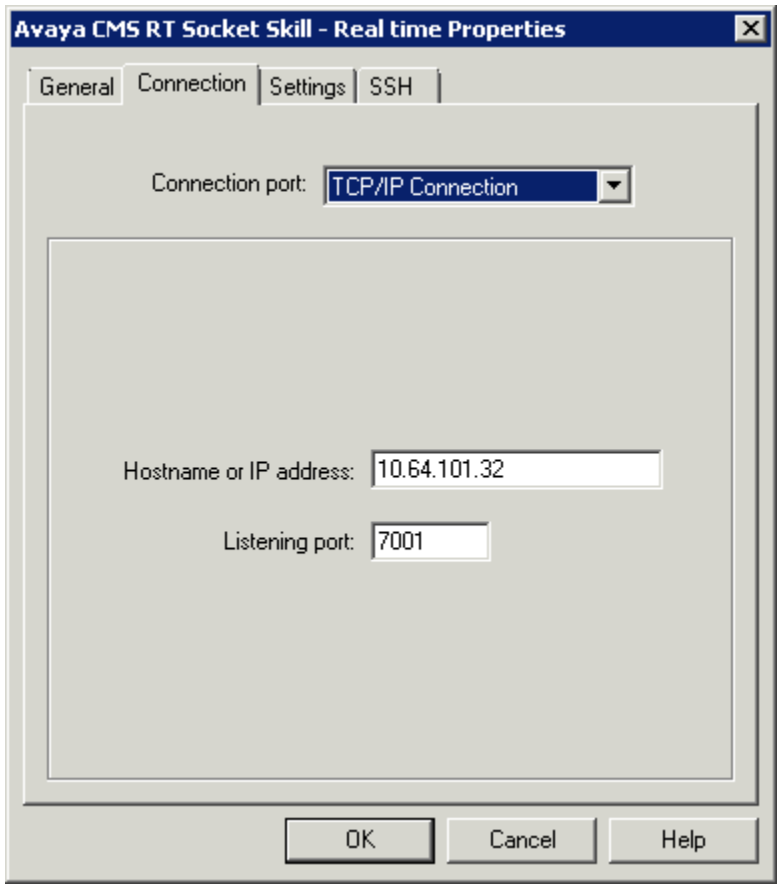
7.1.2. Administer Custom Data General Tab

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 – Real Time" is used. Retain the default value for the **Preferred ID** field.



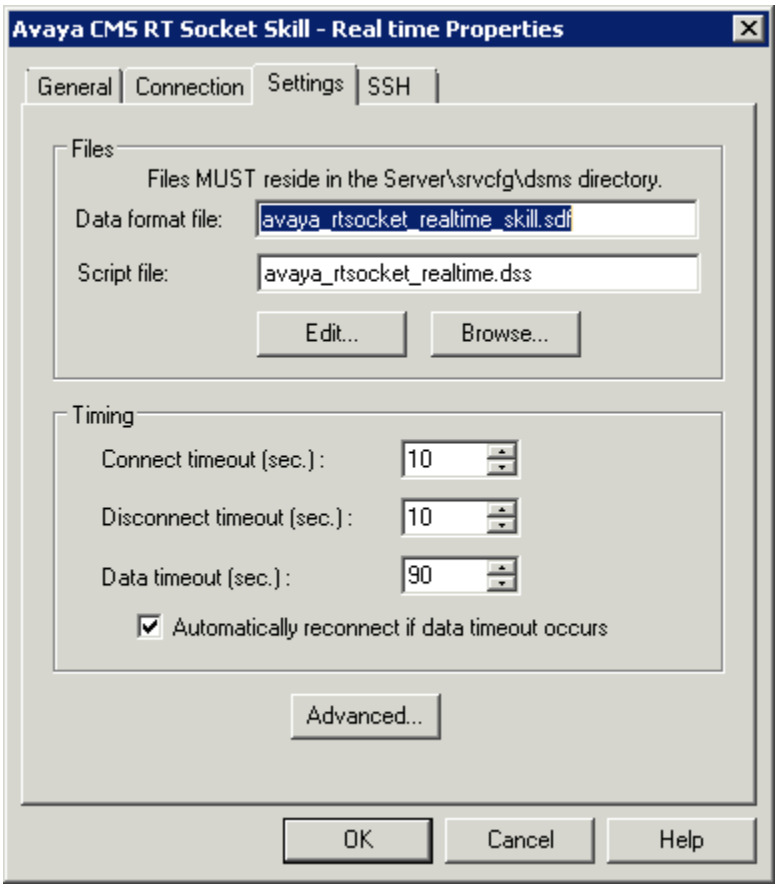
7.1.3. Administer Custom Data Connection Tab

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 Professional Services. For the compliance testing, the port number used was "7001".

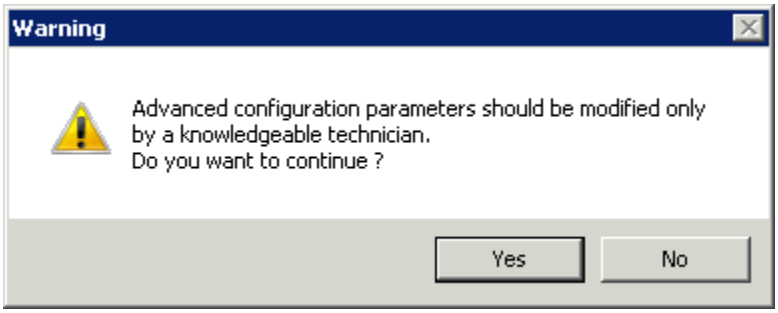


7.1.4. Administer Custom Data Settings Tab

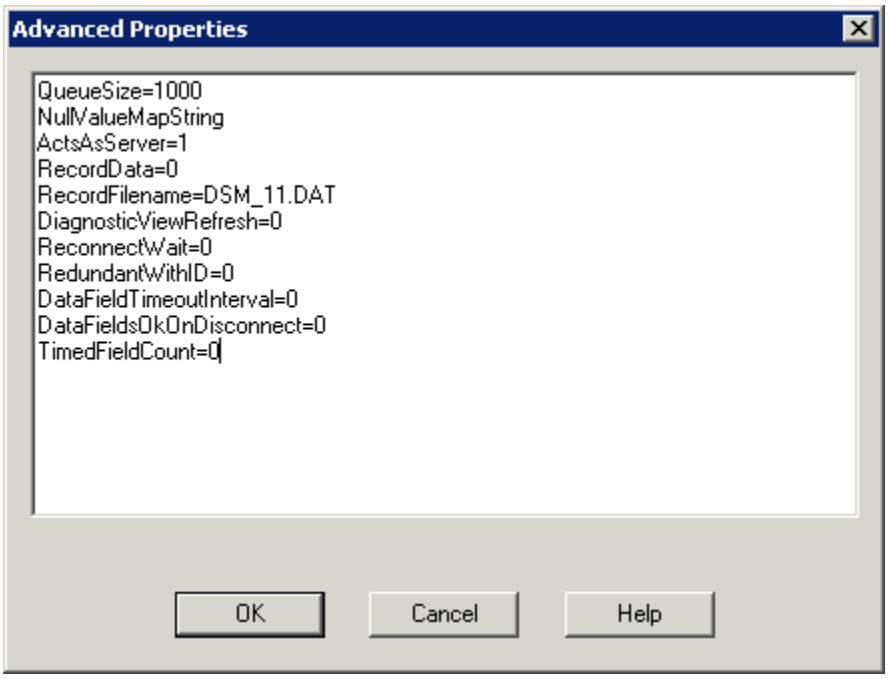
Select the **Settings** tab. Select the **Data format file** field, and click on **Browse**. From the **Select File** screen, select "avaya_rtsocket_realtime_skill.sdf" from the file list. Repeat the same procedure to select "avaya_rtsocket_realtime.dss" for the **Script file** field. For the **Connect timeout (sec.)** field, increase the value to "10" seconds, as shown below. Retain the default values for the remaining fields, and click on **Advanced**.



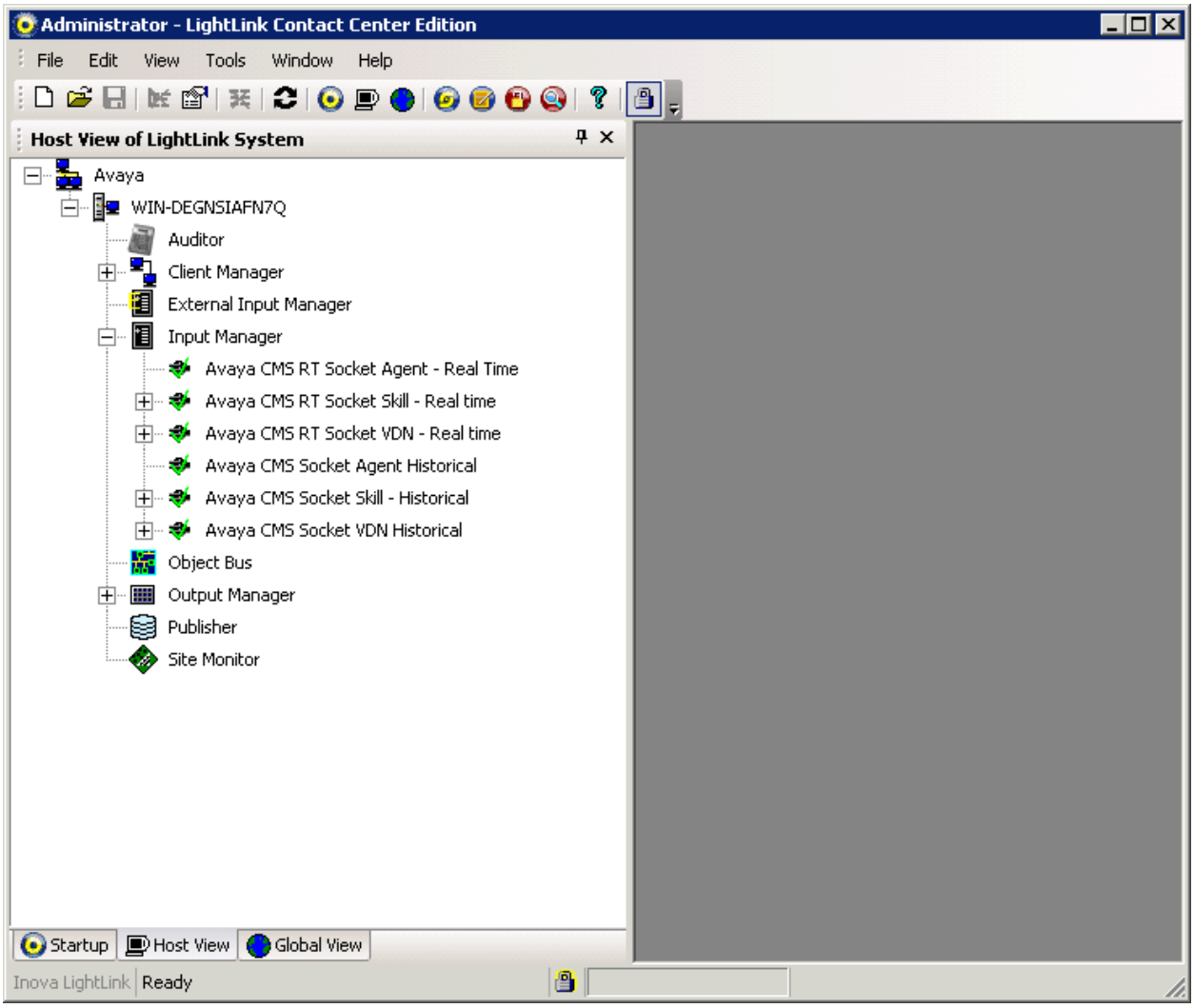
The **Warning** pop-up window below is displayed on top of the **Custom Data Source Properties** screen. Click **Yes** to continue.



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. This will enable the LightLink server to take on the role of the "server" in communicating with Avaya CMS. 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.



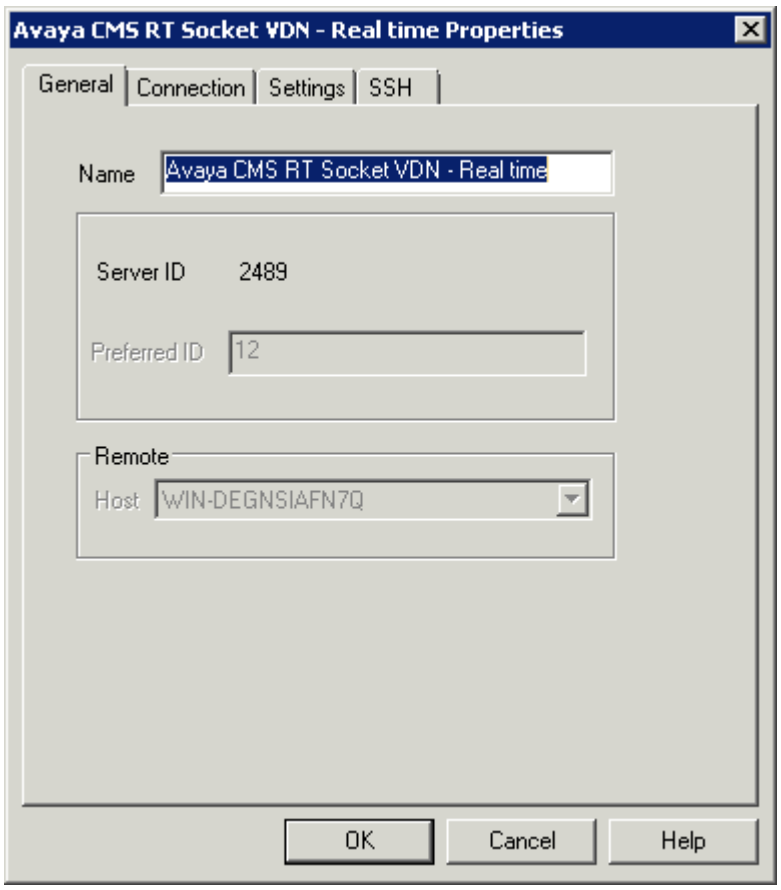
The **Administrator** screen is displayed next, and updated with the newly created custom data source "Avaya CMS RT Socket Skill – Real-Time" as shown below. A green checkmark is displayed by the data source when the connection to Avaya CMS is established.



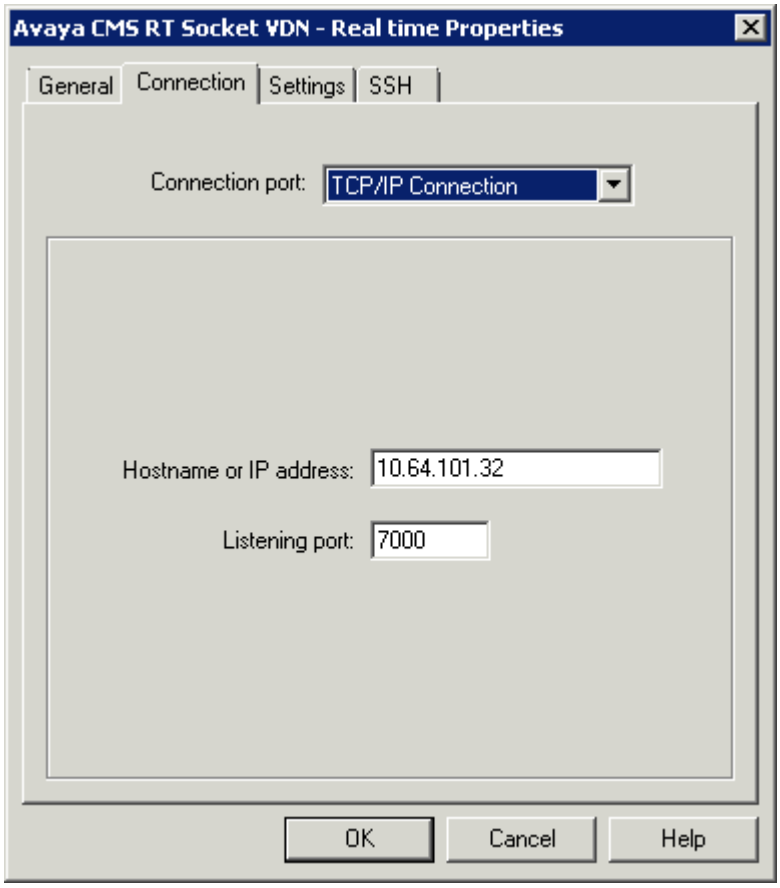
7.2. Administer RT_Socket Interface for VDN Data

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 7.1** with the following exceptions:

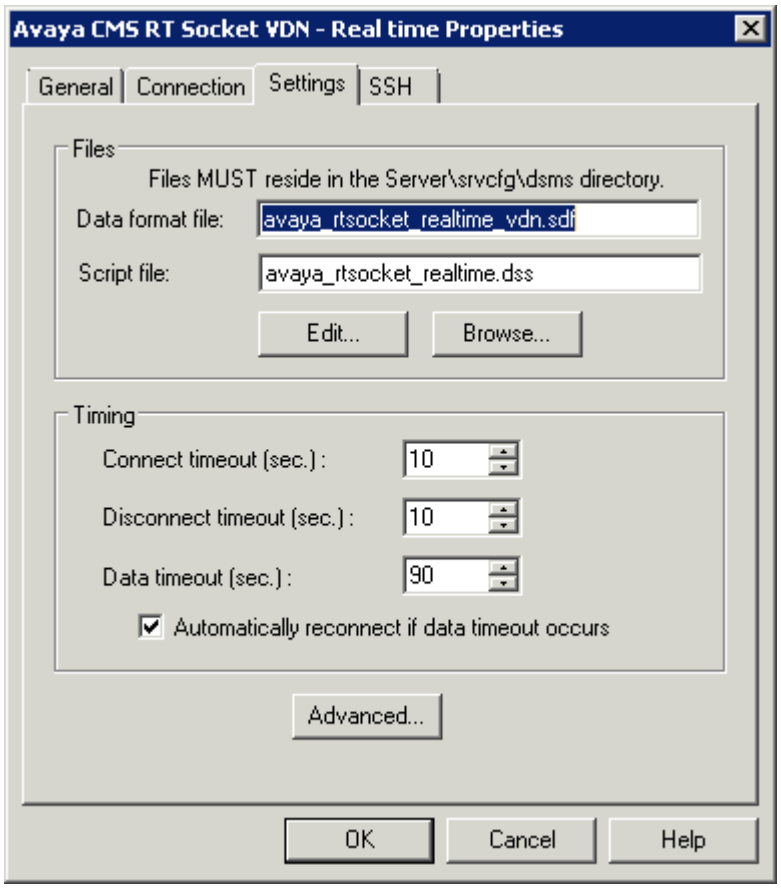
- **Section 7.1.2** Use a different **Name** for the VDN data source.



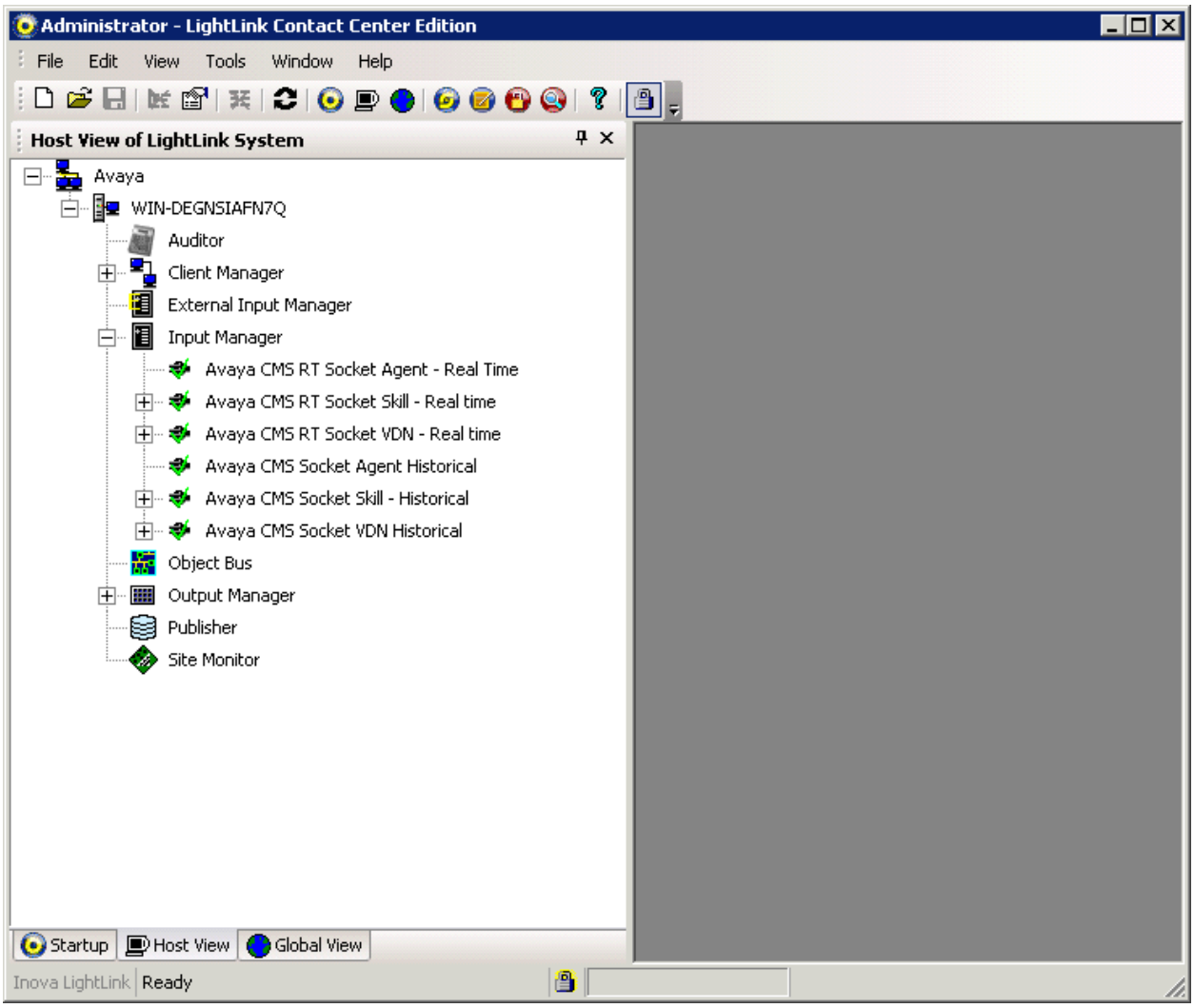
- **Section 7.1.3** Use the corresponding TCP port number for the **Listening Port** field. The corresponding TCP port number on the Avaya CMS server used for transferring VDN data is provided by Avaya Professional Services. For the compliance testing, the port number used was "7000".



- **Section 7.1.4** Select "avaya_rtsocket_realtime_vdn.sdf" for the **Data format file** field and select "avaya_rtsocket_realtime.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.



7.3. Administer RT_Socket Interface for Agent Data

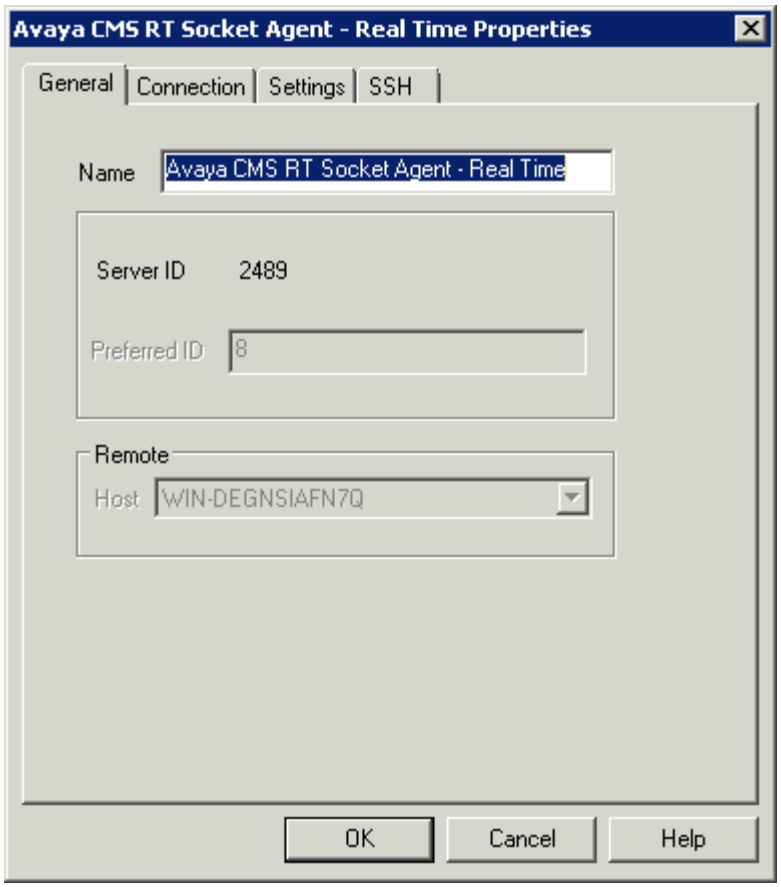
The procedure for administering the Agent data source requires more steps than configuring the Skill and VDN data sources, and includes the following areas:

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

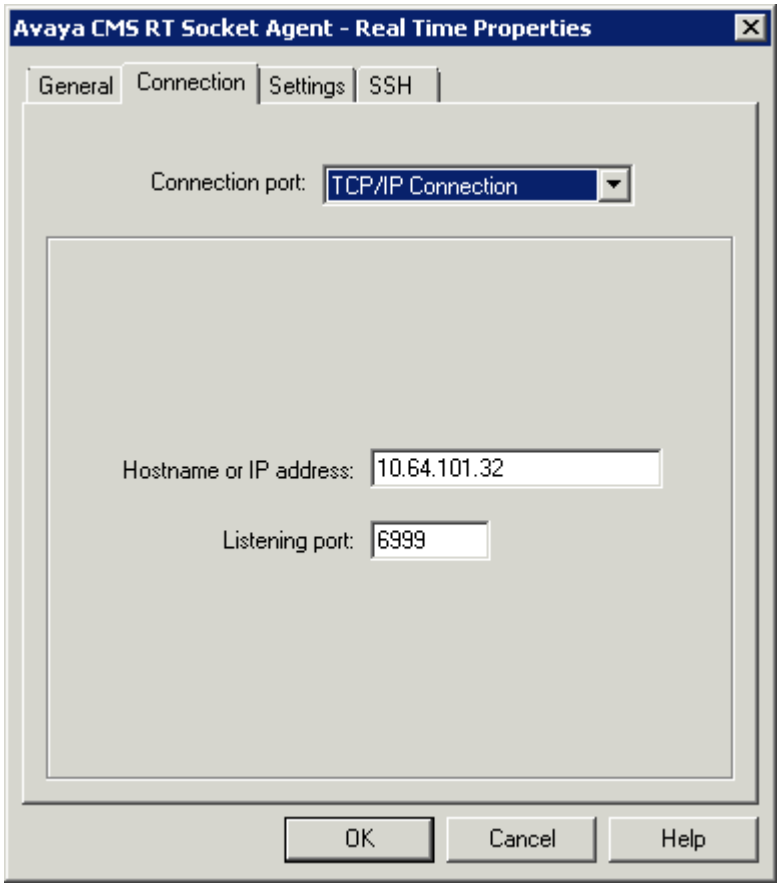
7.3.1. Administer Agent Data Source

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 7.1** with the following exceptions:

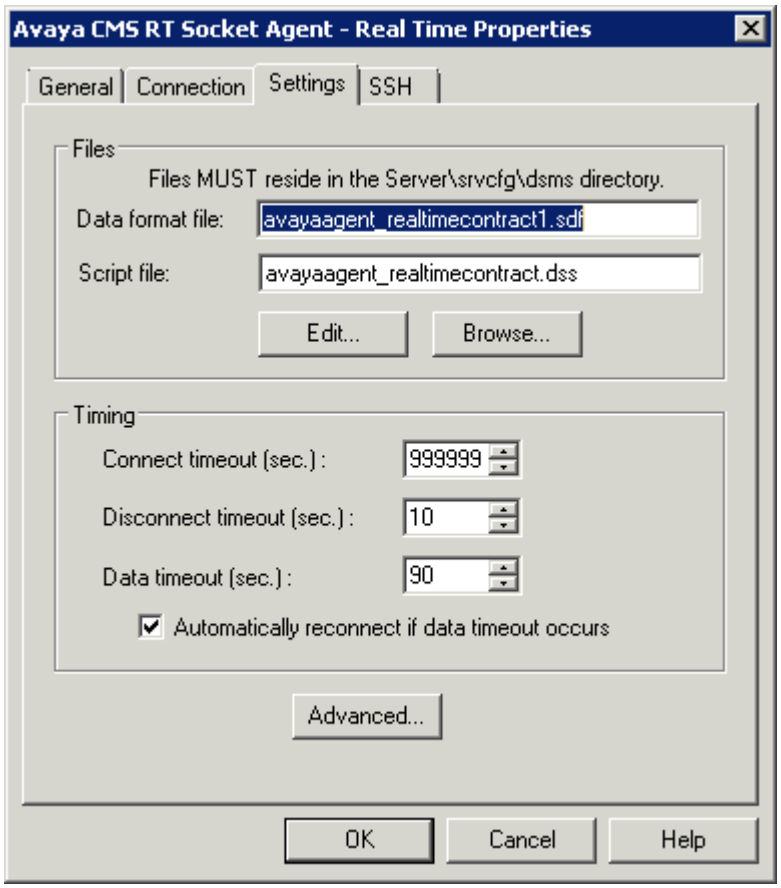
- **Section 7.1.2** Use a different **Name** for the Agent data source.



- **Section 7.1.3** 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 the Avaya CSI group. For the compliance testing, the port number used was "6999".

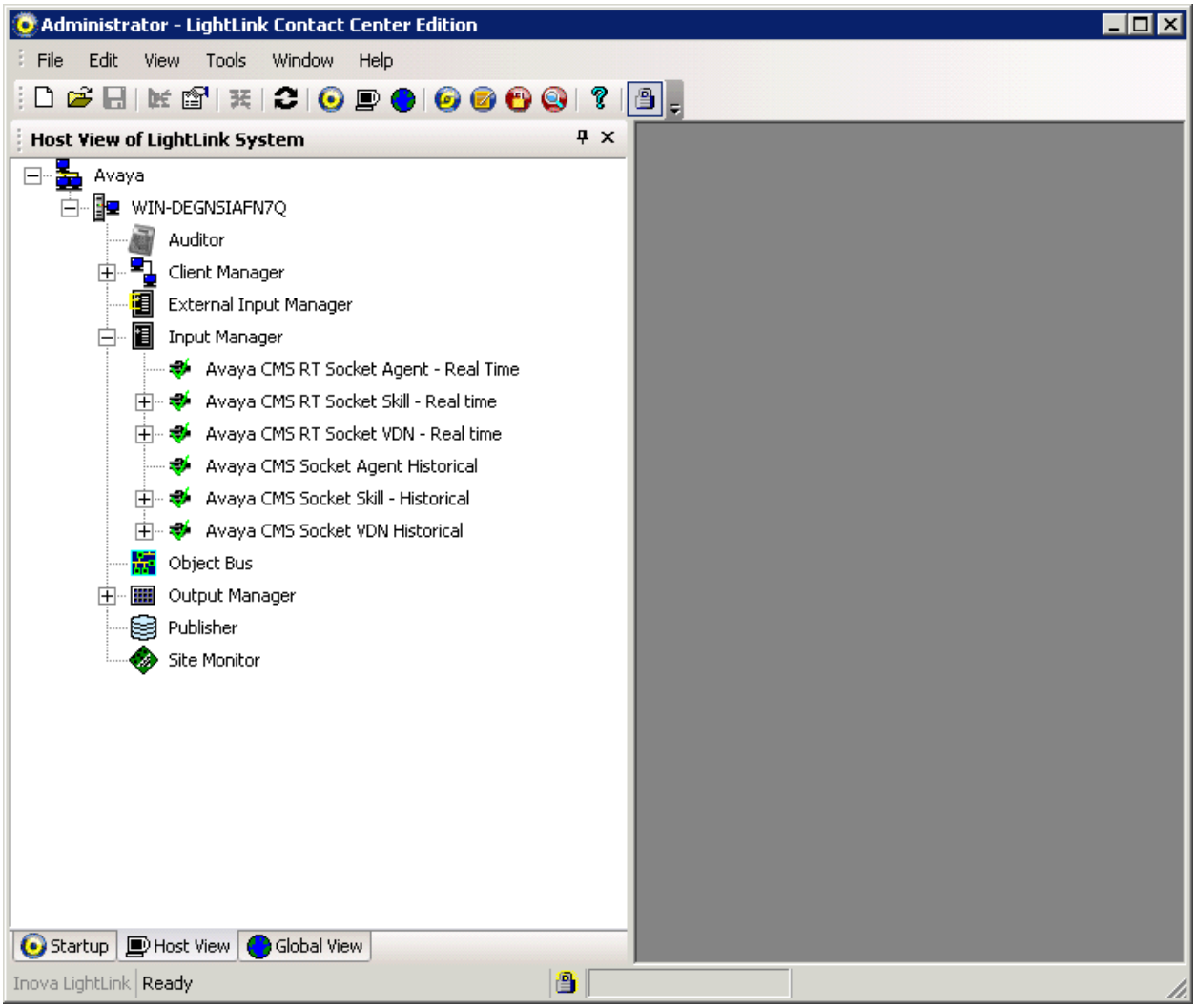


- **Section 7.1.4** Select "avayaagent_realtimecontract1.sdf" for the **Data format file** field and select "avayaagent_realtimecontract.dss" for the **Script file** field as shown below.

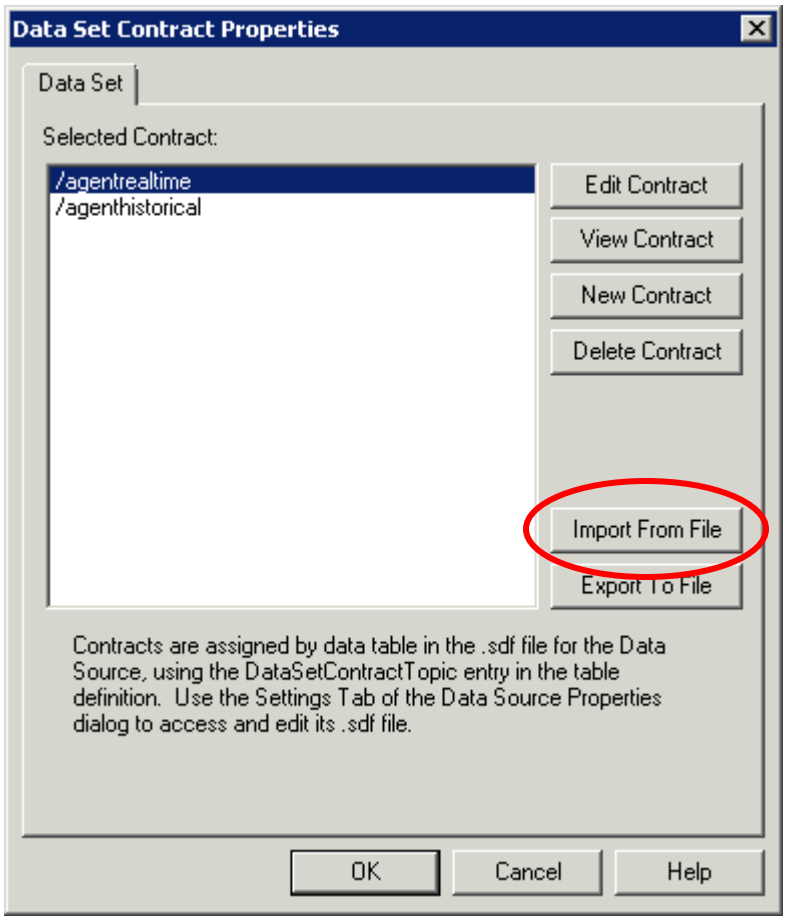


7.3.2. Administer Data Set Contract

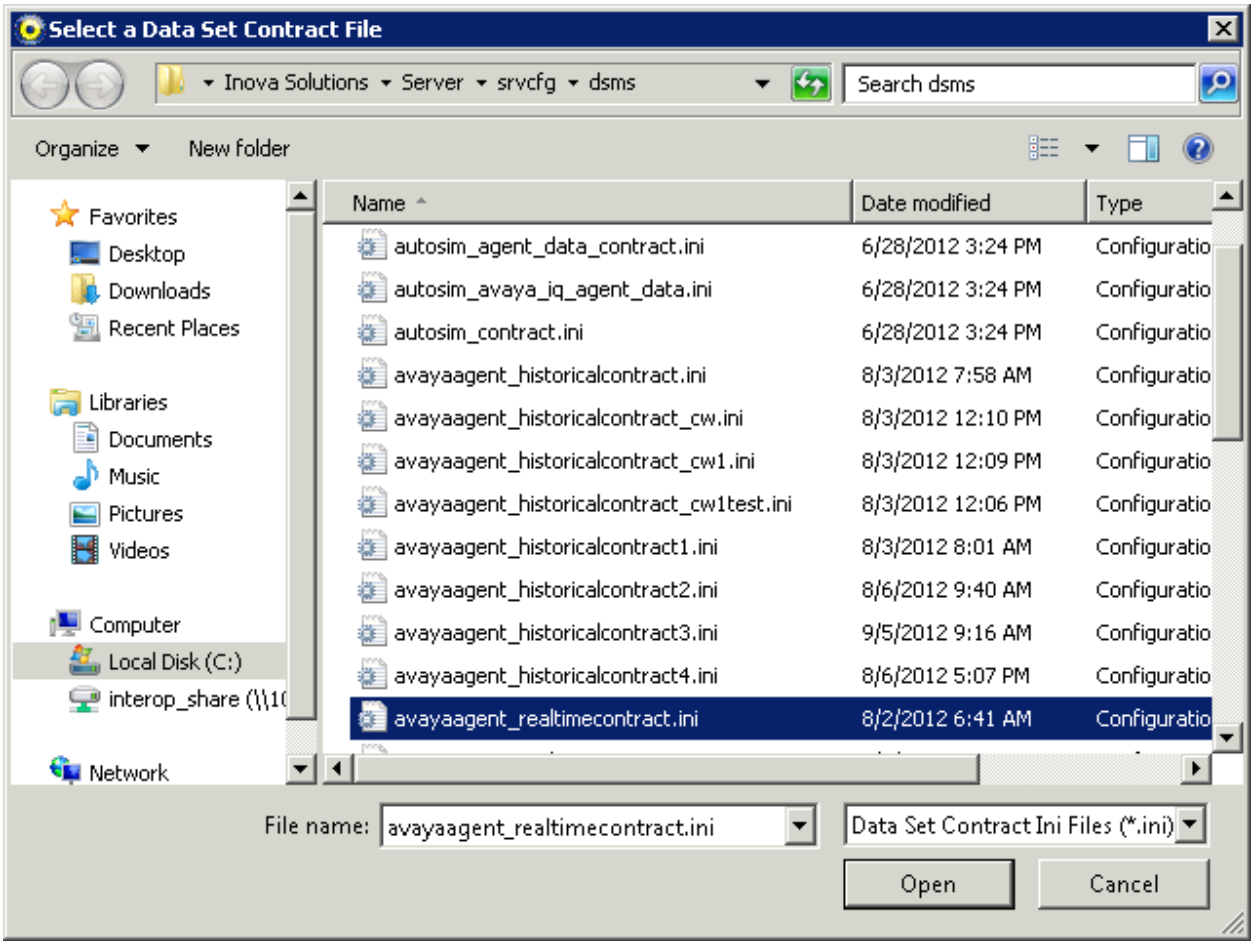
From the **Administrator** screen, right-click on **Input Manager** and select **Configure Contracts** from the pop-up menu (Not Shown) to create a new data set contract.



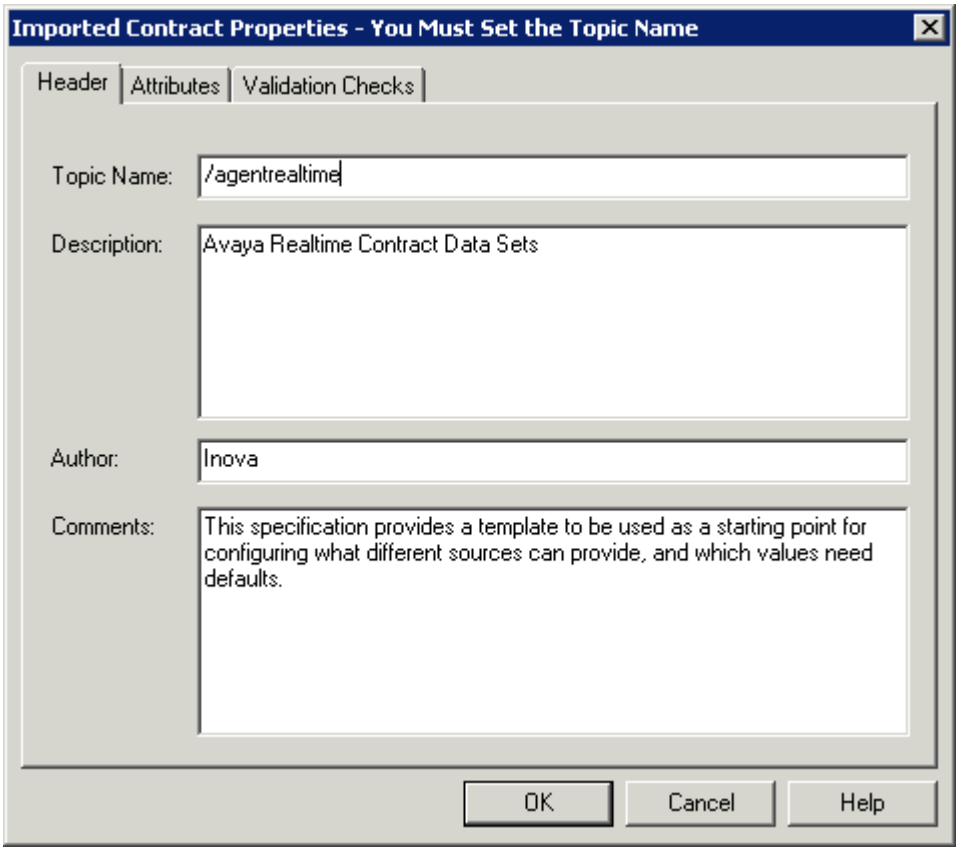
The **Data Set Contract Properties** screen is displayed on top of the **Administrator** screen. Click on **Import From File**.



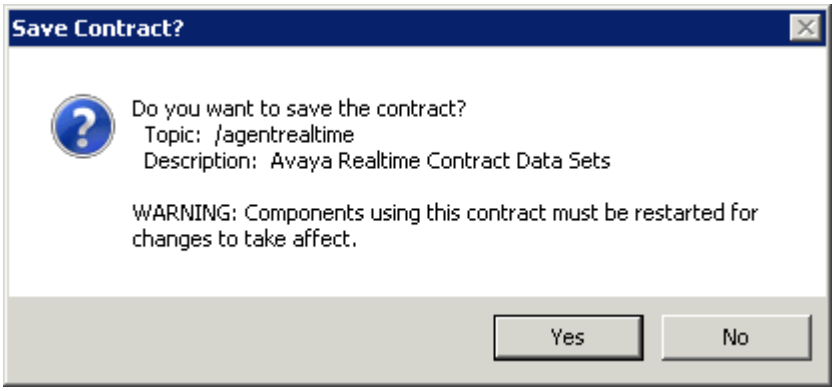
The **Select a Data Set Contract File** screen is displayed. Navigate to the directory "Program Files\Inova Solutions\Server\srvcfg\dsms" and select "avayaagent_realtimecontract.ini" as shown below. Click **Open**.



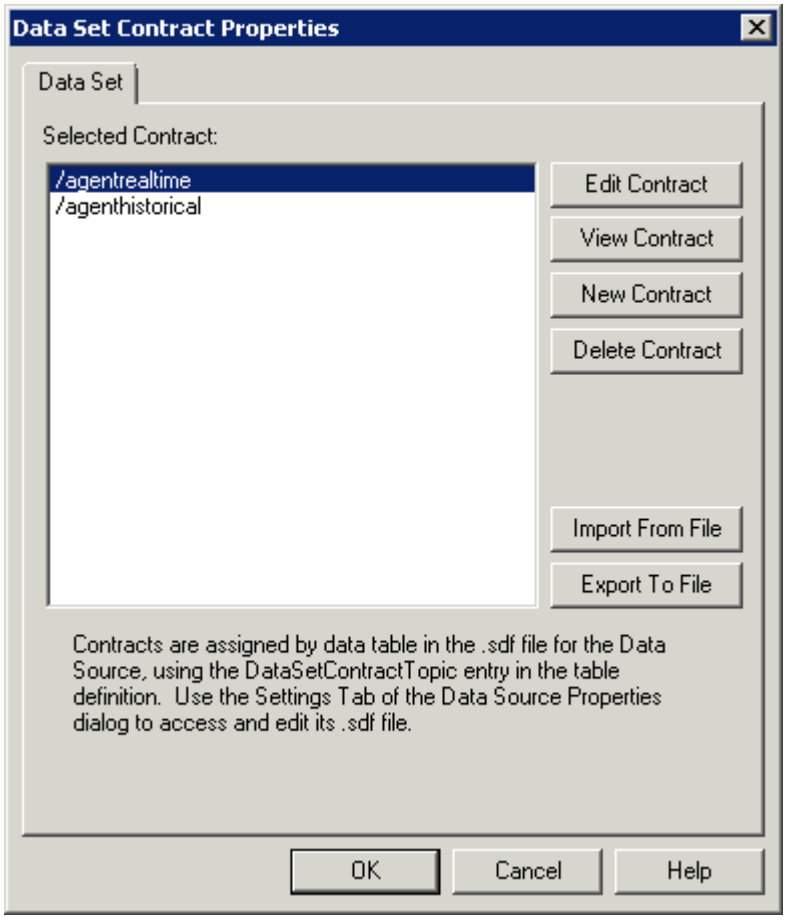
The **Imported Contract Properties** screen is displayed. For the **Topic Name** field, enter "/agentrealtime" as shown below. Retain the default values for the remaining fields, and click **OK**.



The **Save Contract** pop-up screen is displayed next. Click on **Yes** to save the contract.

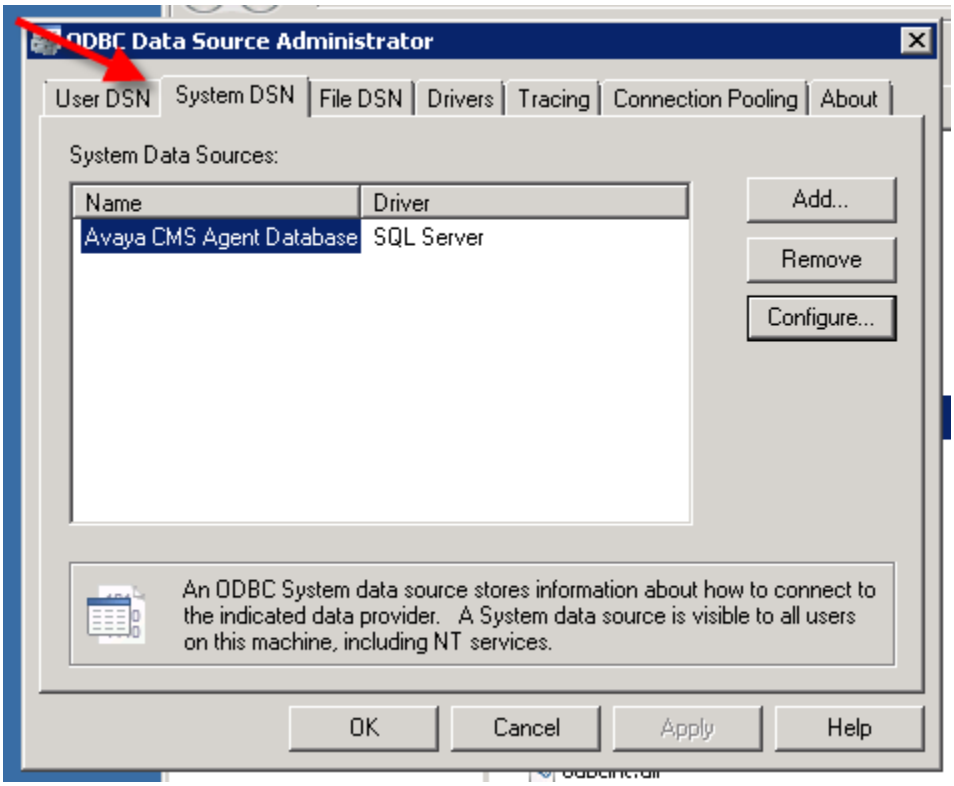


At the **Data Set Contract Properties** screen, click **OK**.

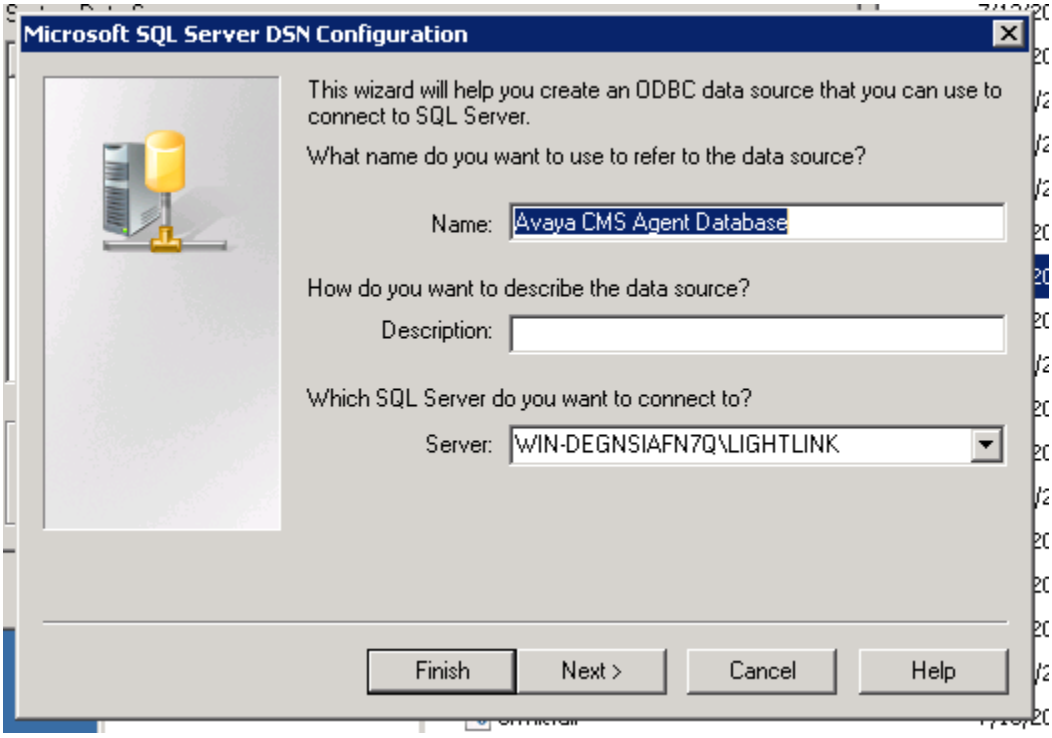


Next, build the connection from the data set contract to the database. Inova LightLink supports any ODBC-compliant database. For compliance testing, a Microsoft SQL 2005 database was used. From the Windows Start Menu select **Administrative Tools → Data Sources (ODBC)**.

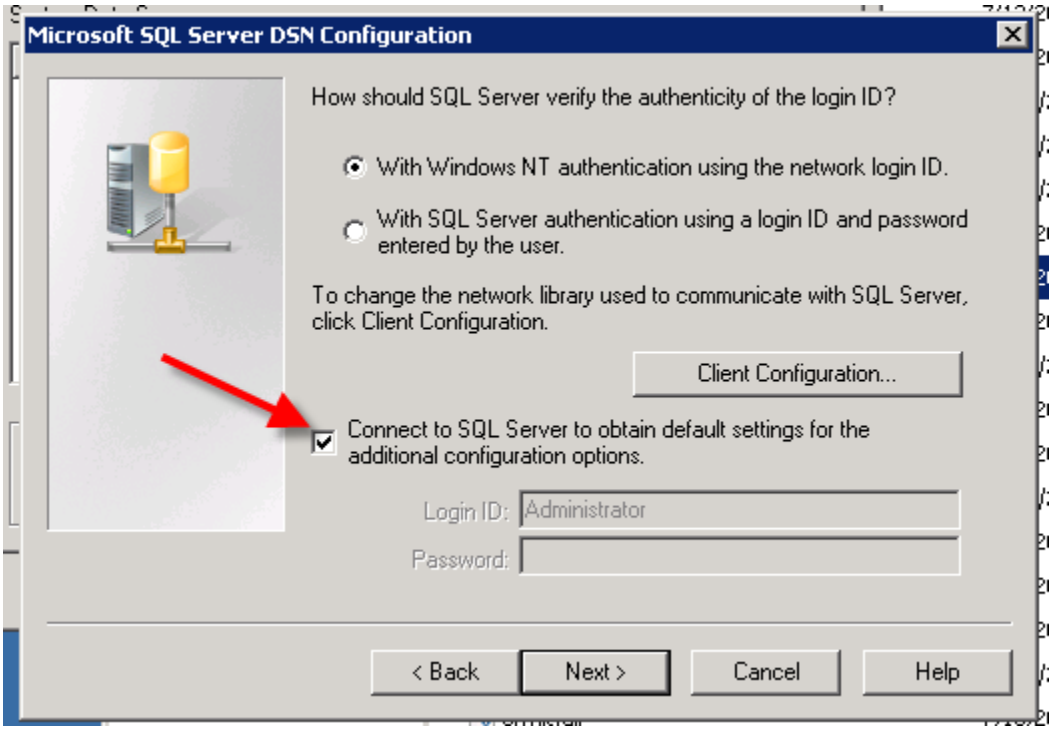
In the ODBC Data Source Administrator screen, select the System DSN tab and click **Add.**



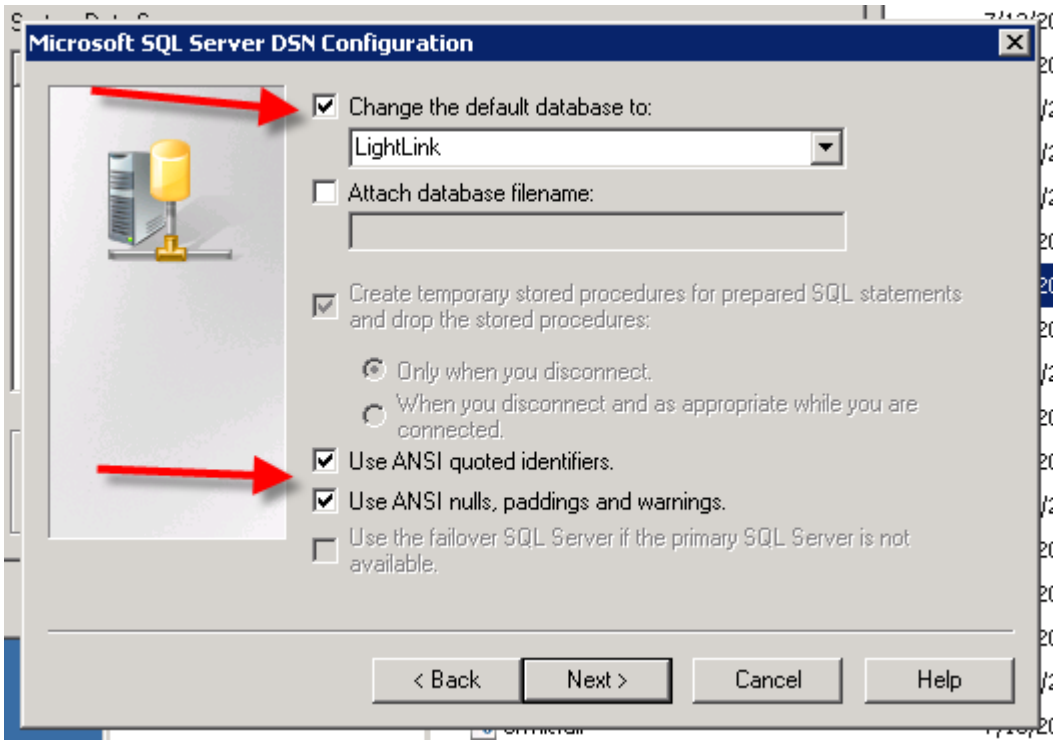
In the **ODBC Microsoft SQL Configuration** screen, enter a descriptive **Name** for the data source. Select **Next**.



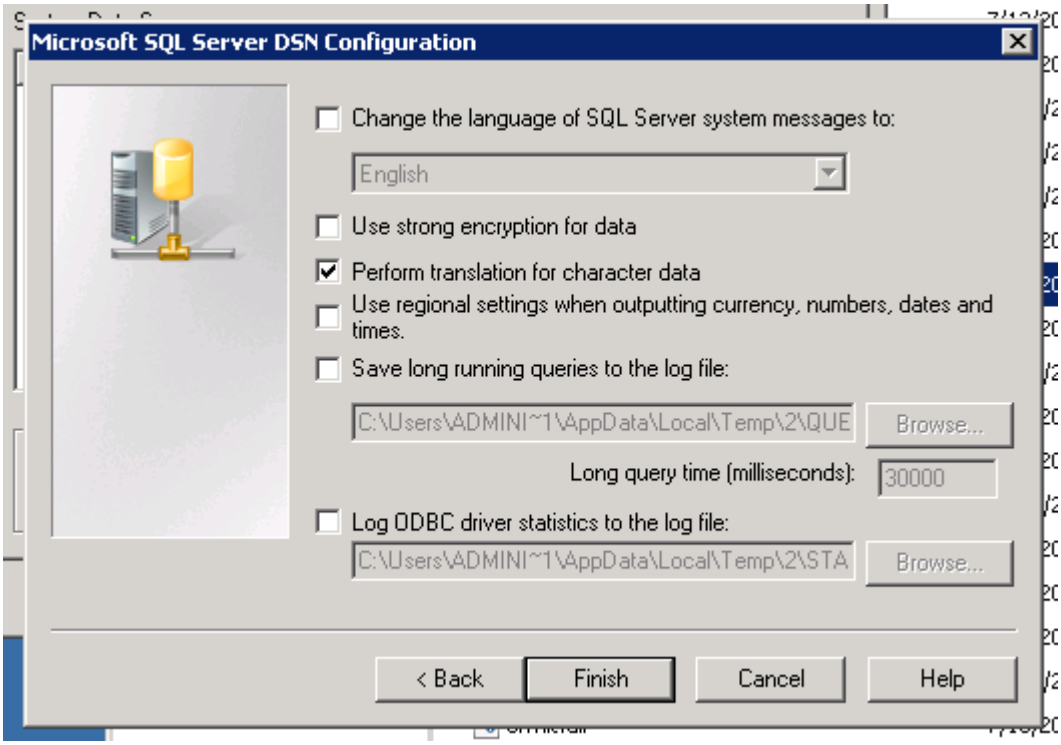
Next, select Windows NT Authentication for the Login ID. Also make sure that there is a check mark in the check box below. Then click **Next**.



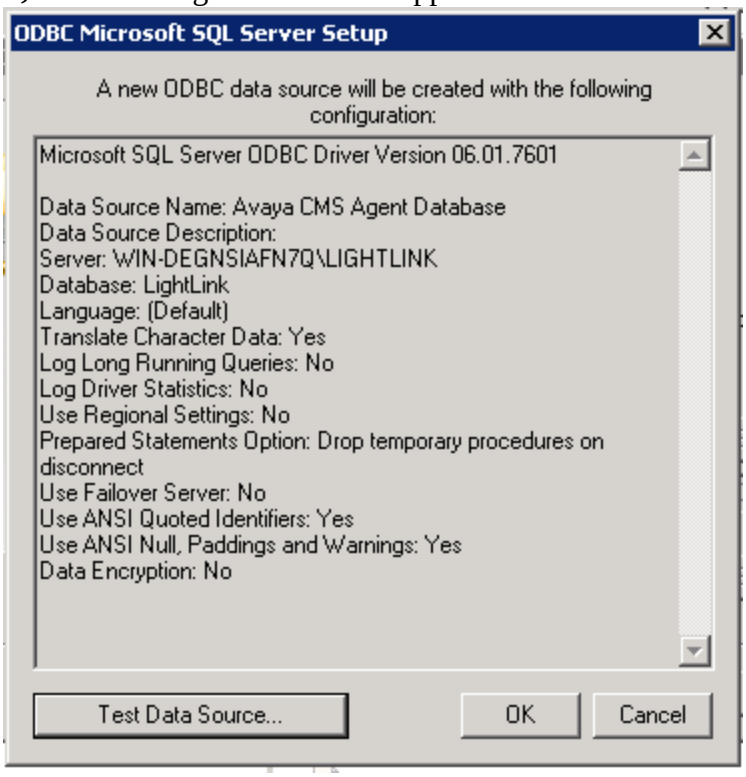
Next, check the "Change the default database to" box and select the database name. Also make sure to check the other boxes below. Then click **Next**.

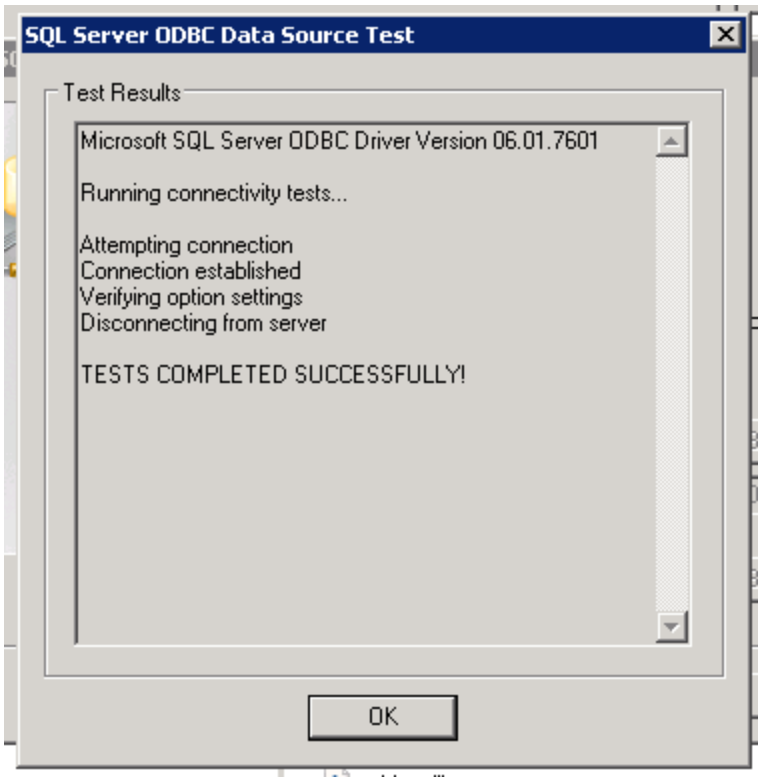


On the next screen leave everything as default. Click **Finish**.

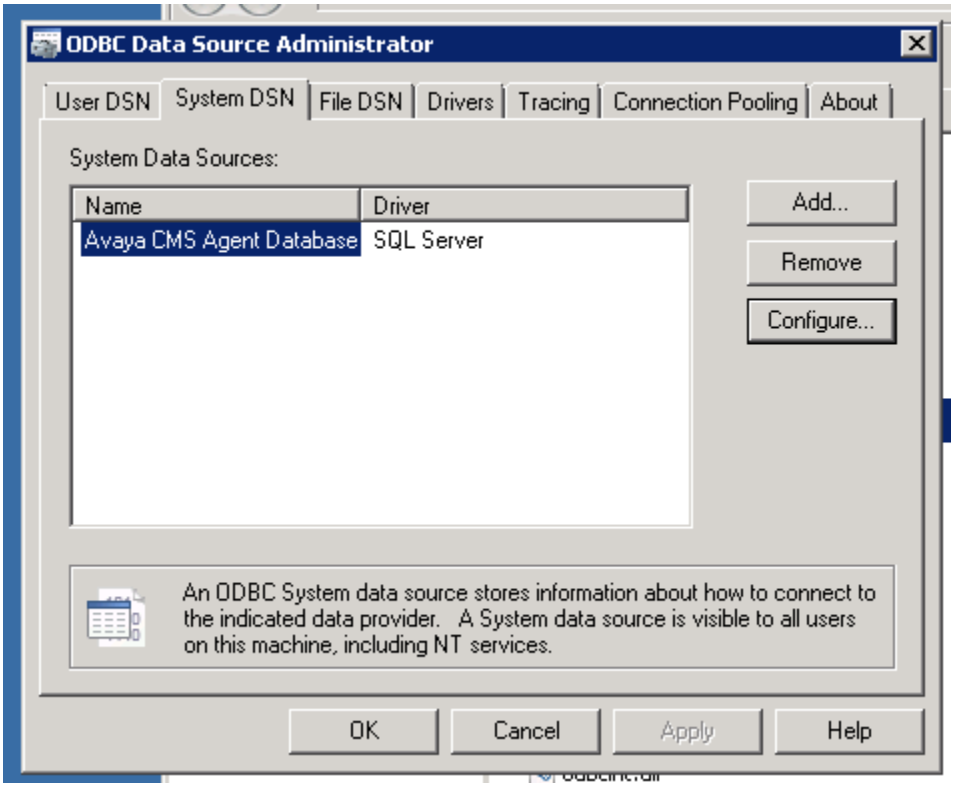


After clicking **Finish,** the following screen should appear. Click **Test Data Source**.



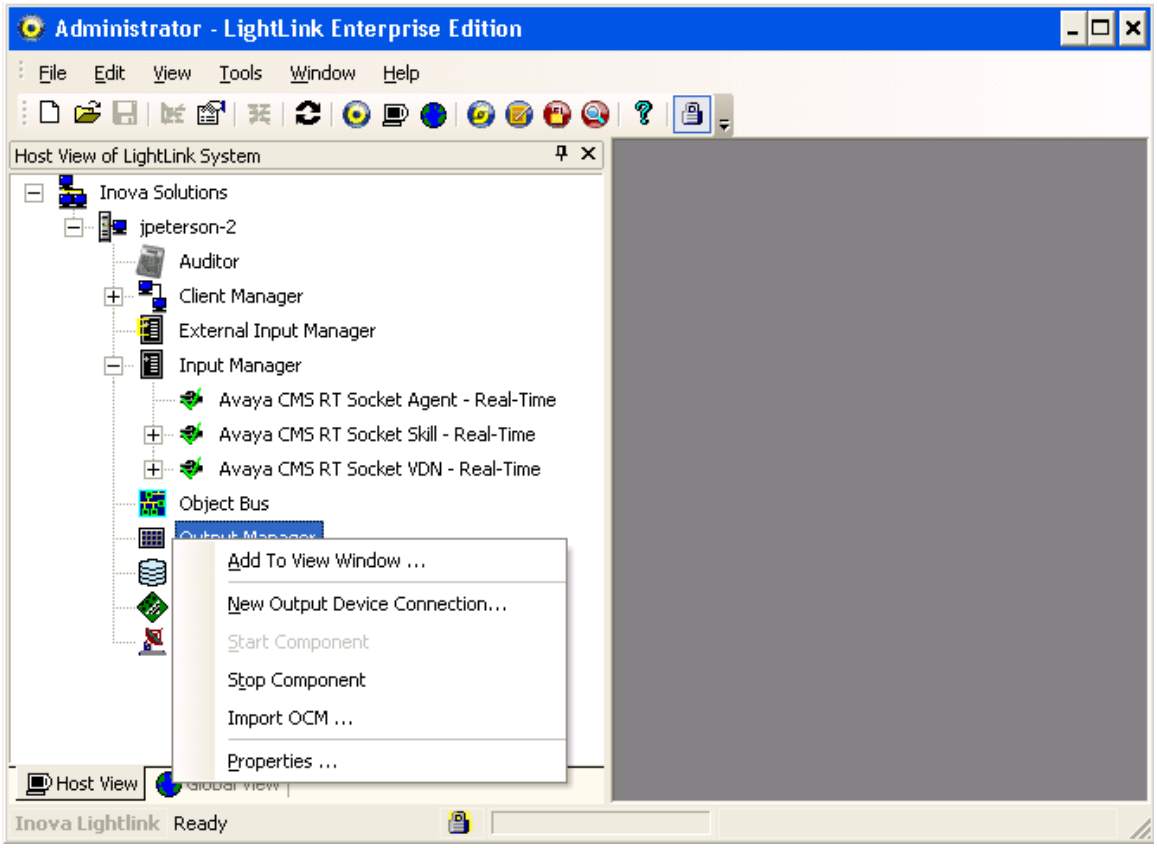


Now click **OK** twice and the new ODBC connection should be listed.

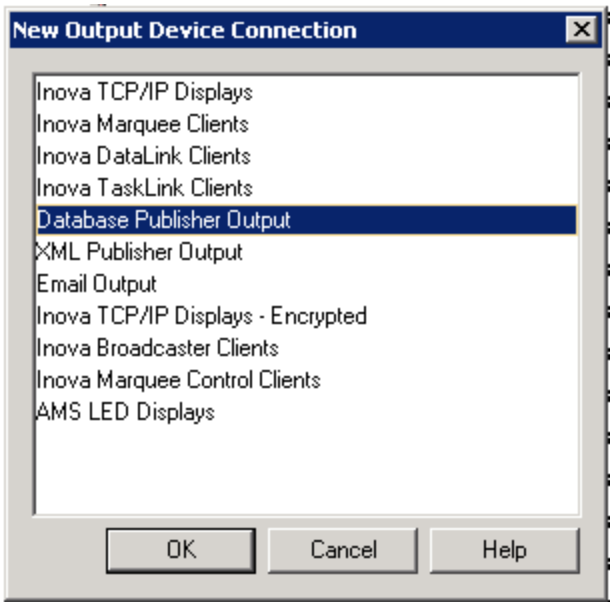


7.3.3. Administer Database Output Device

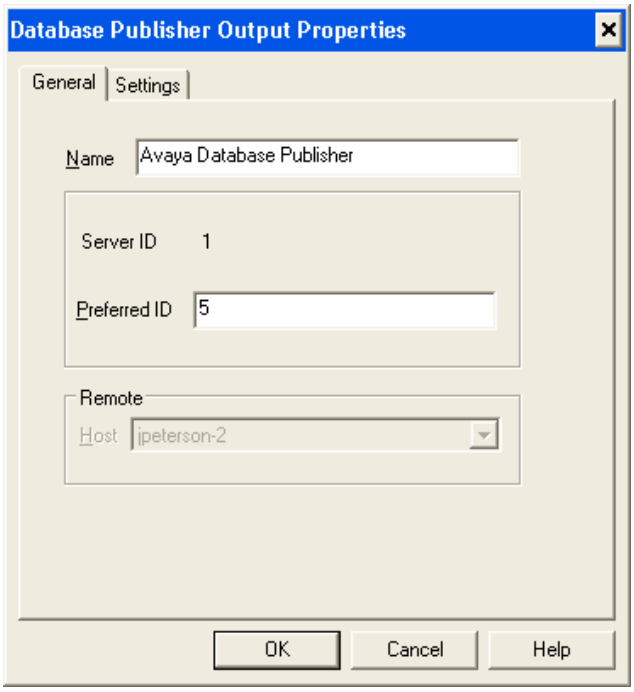
From the **Administrator** screen, right-click on **Output Manager** and select **New Output Device Connection** from the pop-up menu to associate the Agent data with an output device.



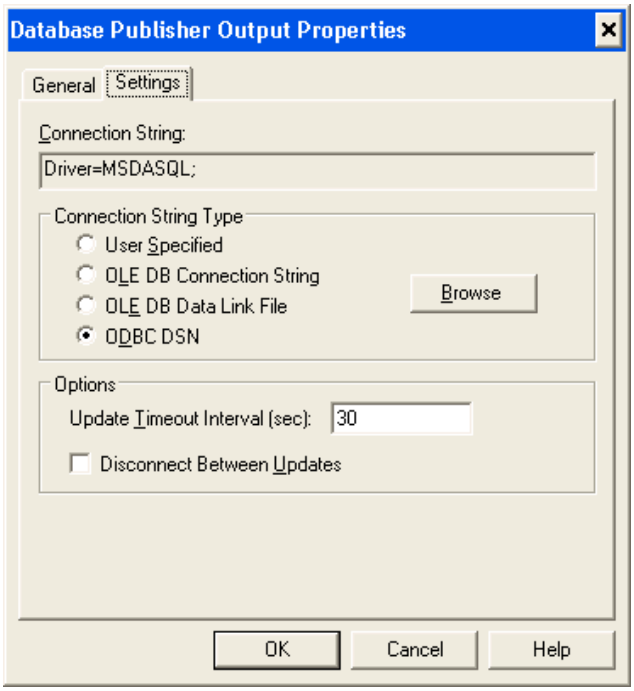
The **New Output Device Connection** screen is displayed on top of the **Administrator** screen. Select **Database Publisher Output** and click **OK**.



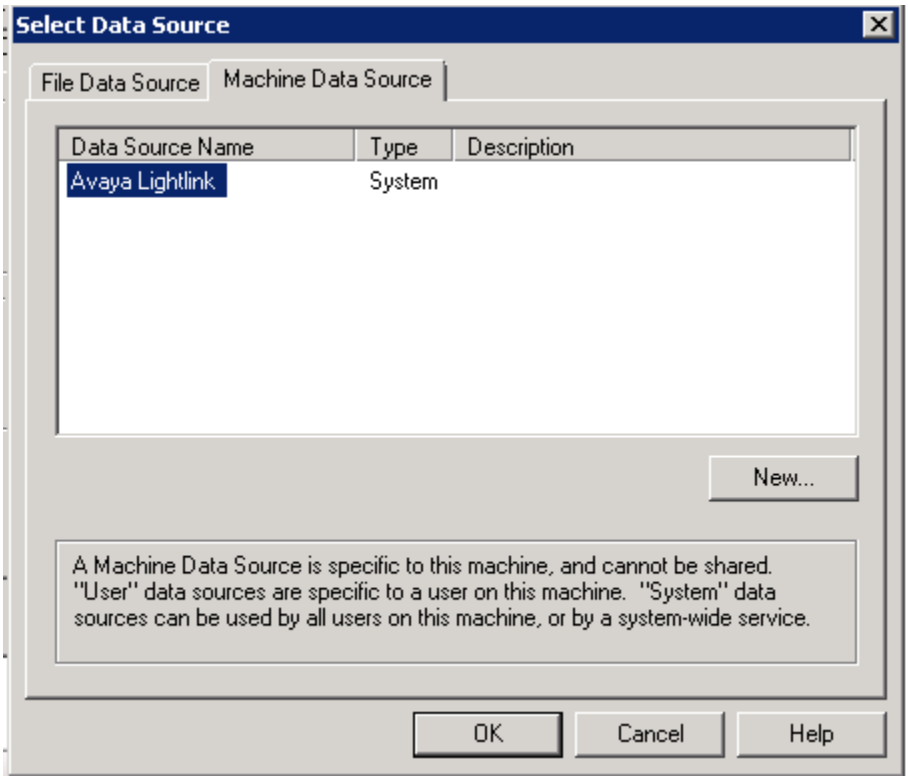
The **Database Publisher Output Properties** screen is displayed next. Select the **General** tab, and enter a descriptive name in the **Name** field.



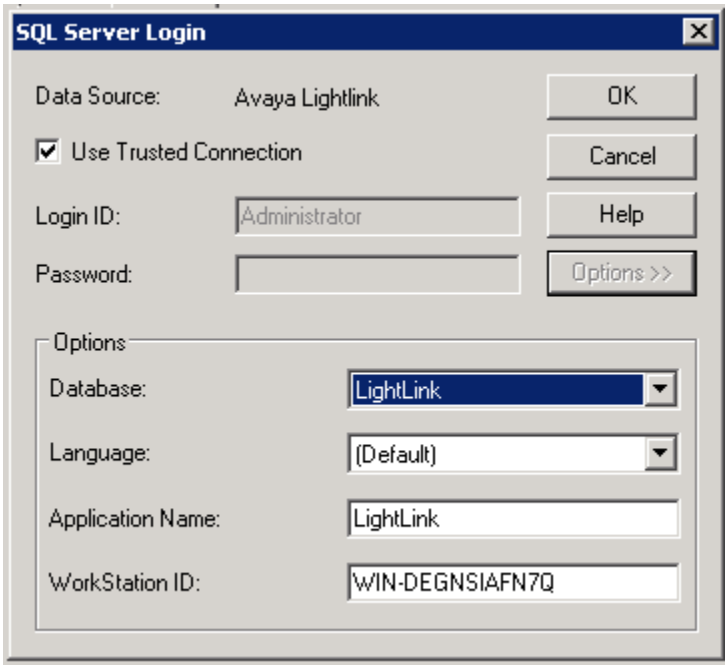
Under the **Settings** tab of the **Data Publisher Output Properties** screen, select the "ODBC DSN" option in the **Connection String Type** section. Click **Browse**.



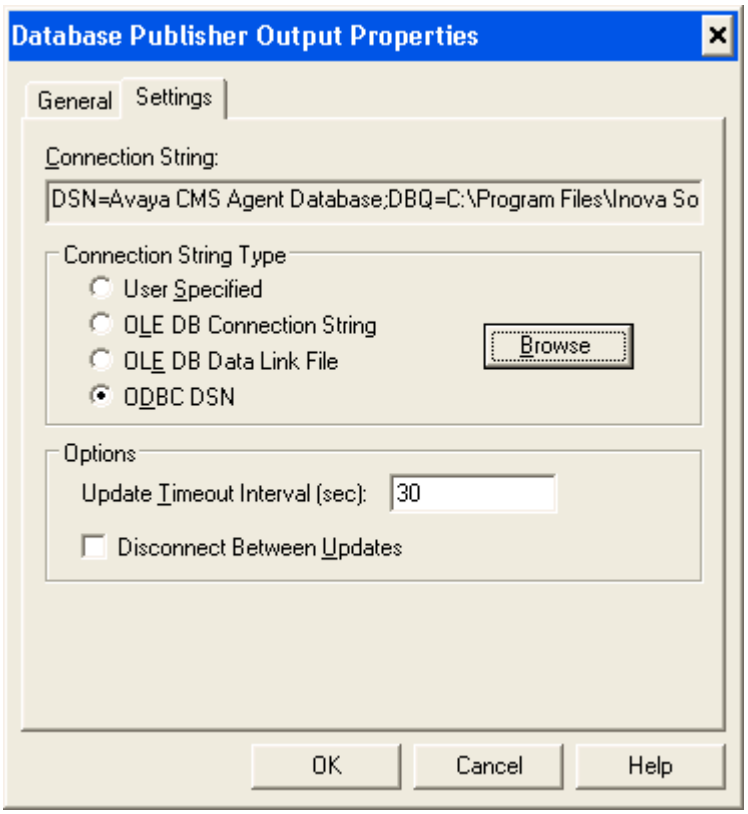
The **Select Data Source** screen is displayed. Select the data source corresponding to the Agent database under the Machine Data Source tab and click **OK**.



In the **Login** screen, specify the login credentials if required. Make sure to connect to the correct Database. Click **OK**.

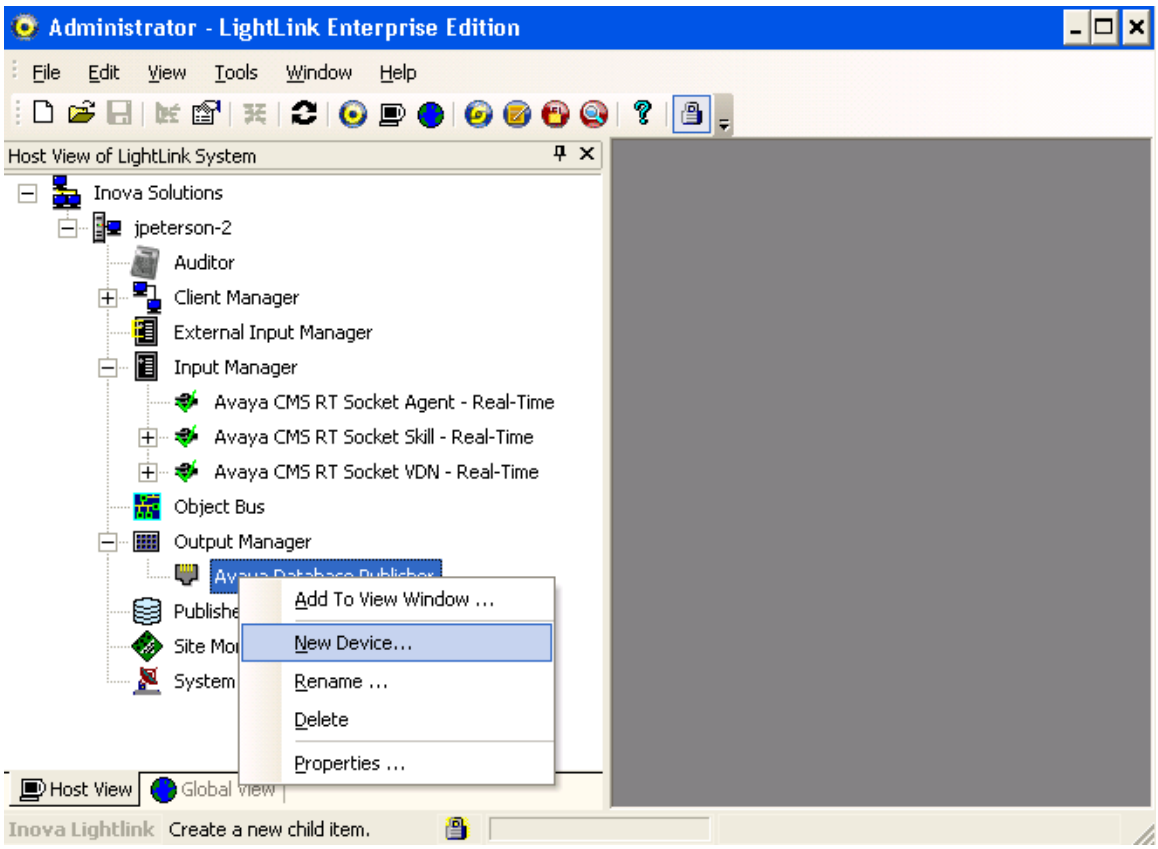


Return to the **Database Publisher Output Properties** screen and click **OK**.

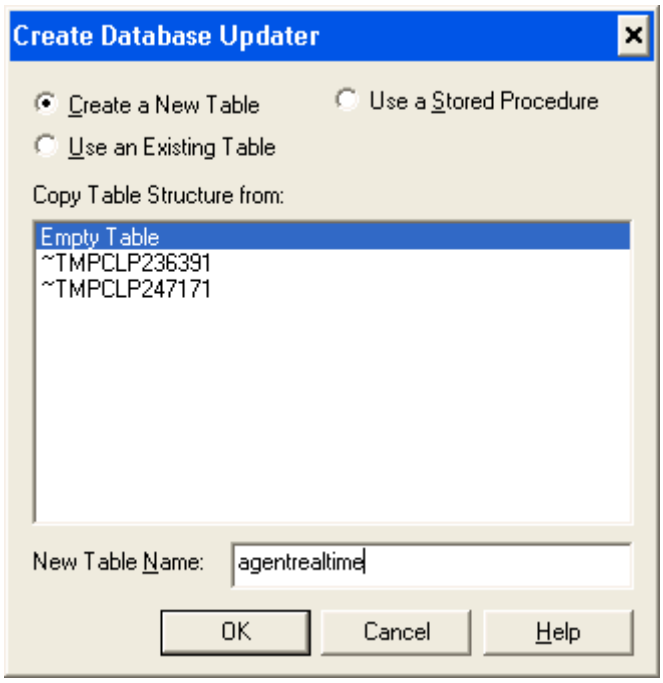


7.3.4. Administer Database Updater

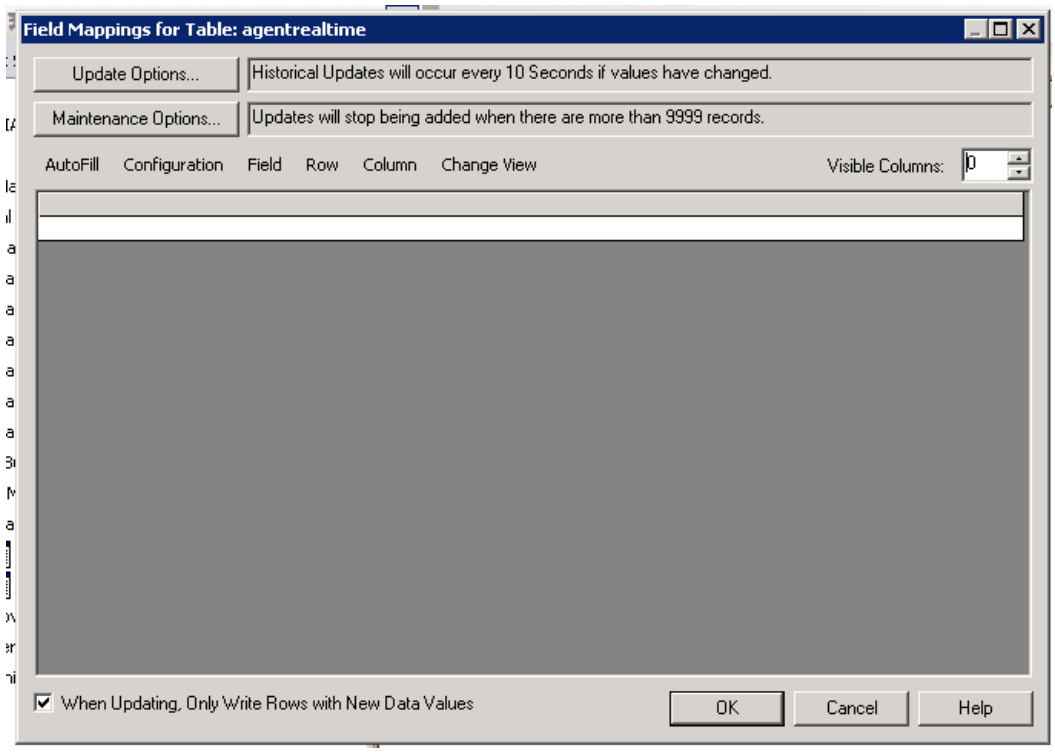
From the **Administrator** screen, expand **Output Manager**. Right-click on the newly created **Avaya Database Publisher** and select **New Device** from the pop-up menu to create a database updater for the new database output device.



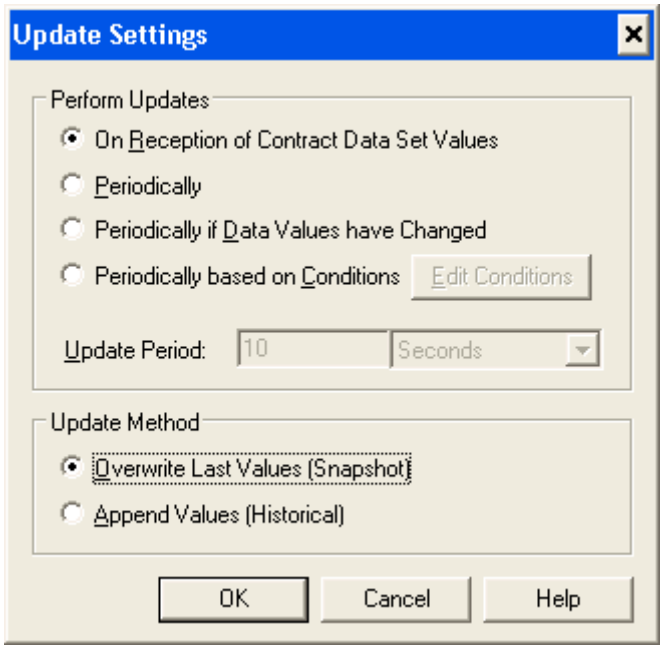
The **Create Database Updater** screen is displayed. Select the radio button for **Create a New Table**, and enter "agentrealtime" for the **New Table Name**. Click **OK.**



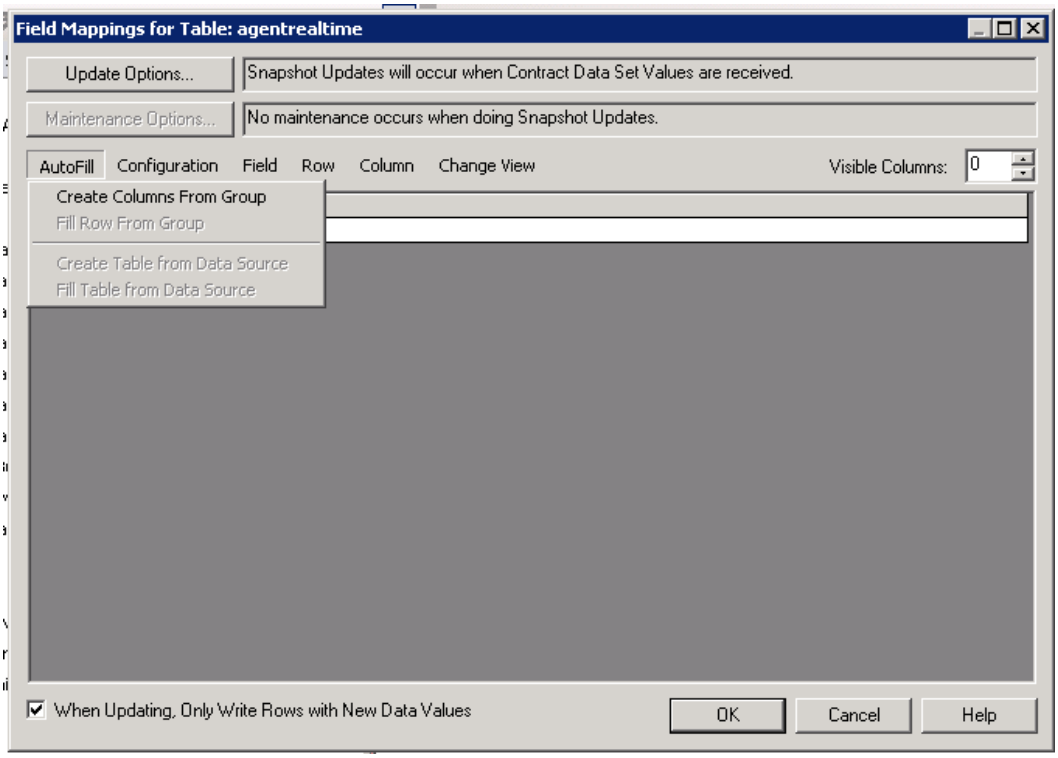
Select the **Update Options** in the **Field Mappings For Table** screen.



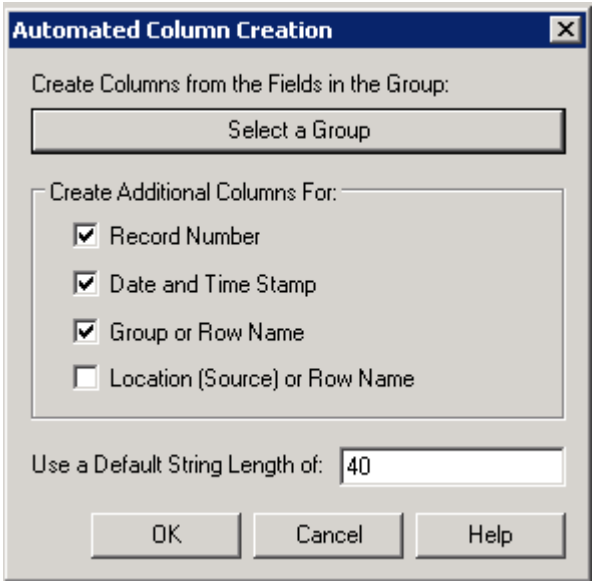
In the **Update Settings** screen, select the options shown in the screen below. Click **OK**.



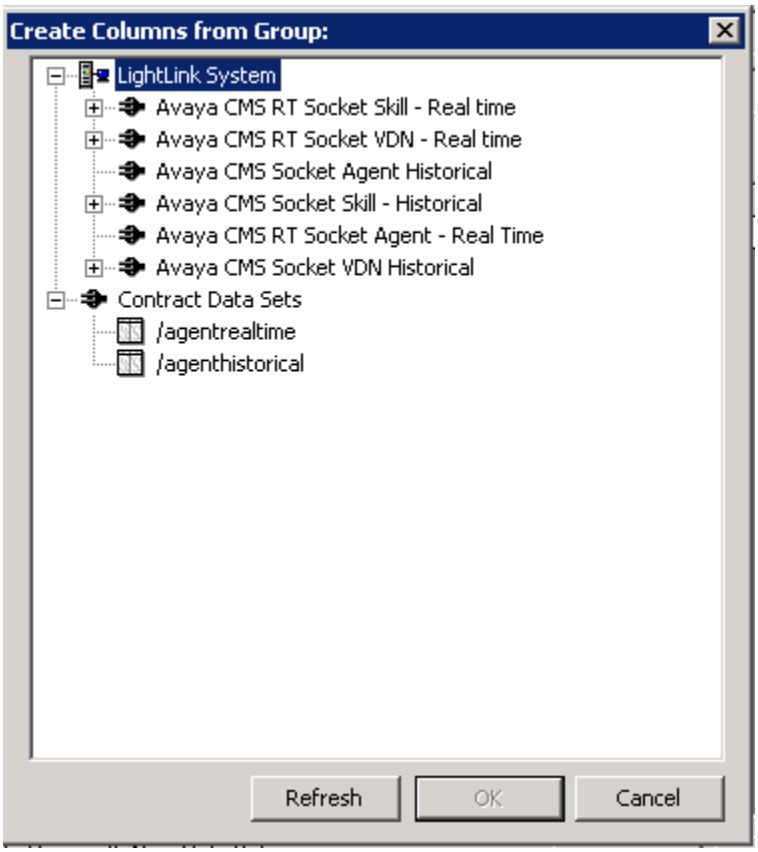
The **Field Mappings for Table** screen is displayed again and filled in with the table name. Click on the **AutoFill** menu option and select the **Create Columns From Group** in the pop-up menu.



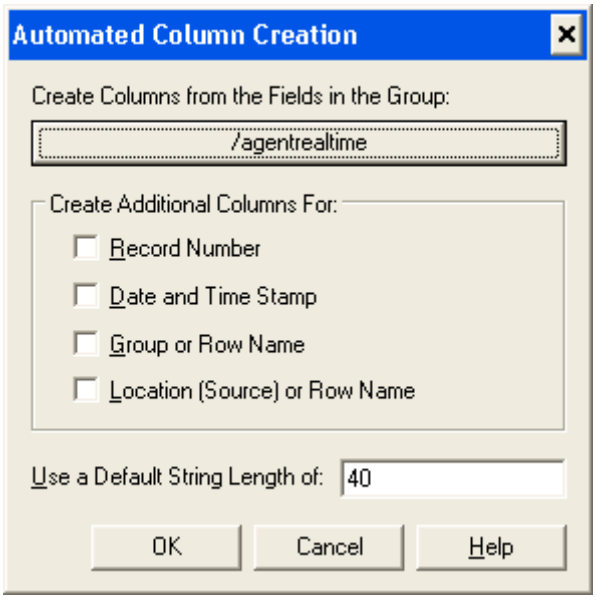
The **Automated Column Creation** screen is displayed on top of the **Field Mappings for Table** screen. Update the options as shown below and then click **Select a Group**.



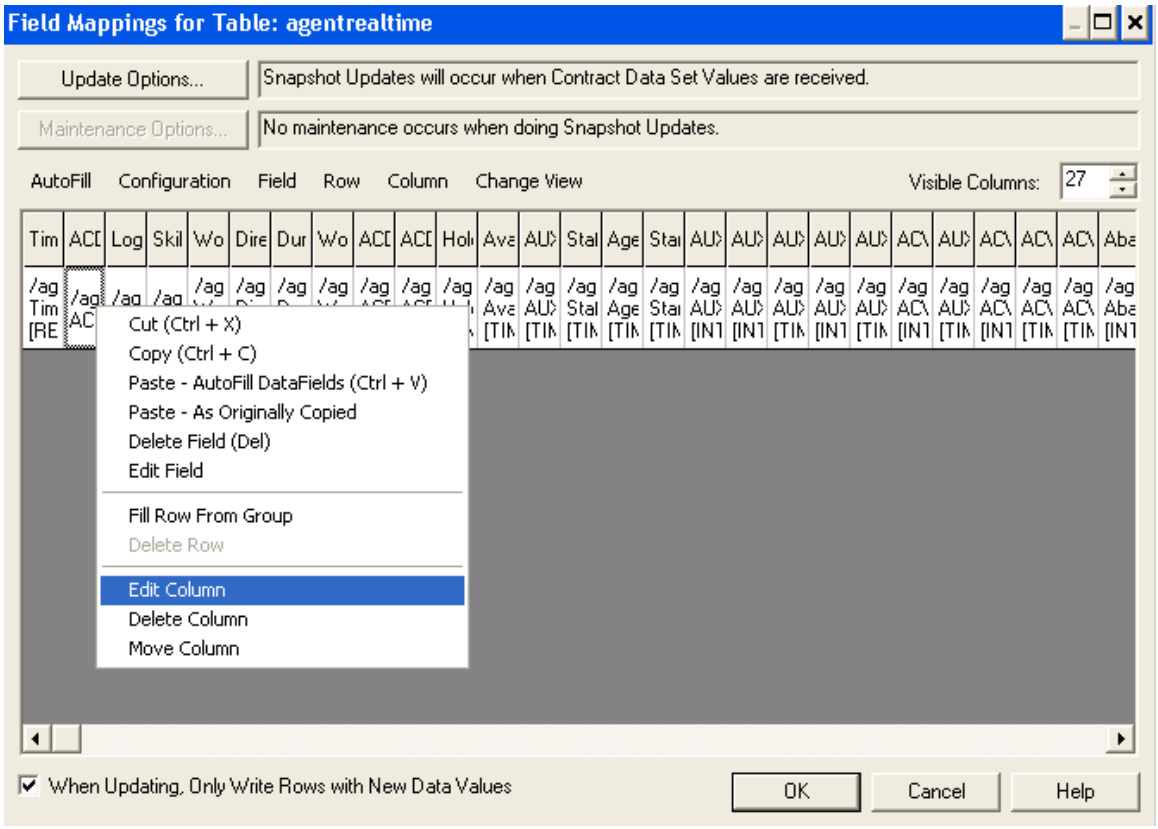
The **Create Columns from Group** screen is displayed next. Expand **Contract Data Sets** and select "/agentrealtime" as shown below. Click **OK**.



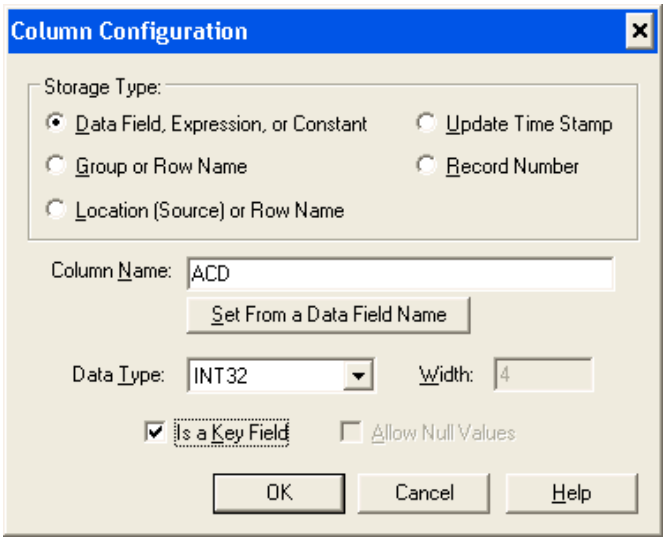
Click **OK** in the **Automated Column Creation** screen.



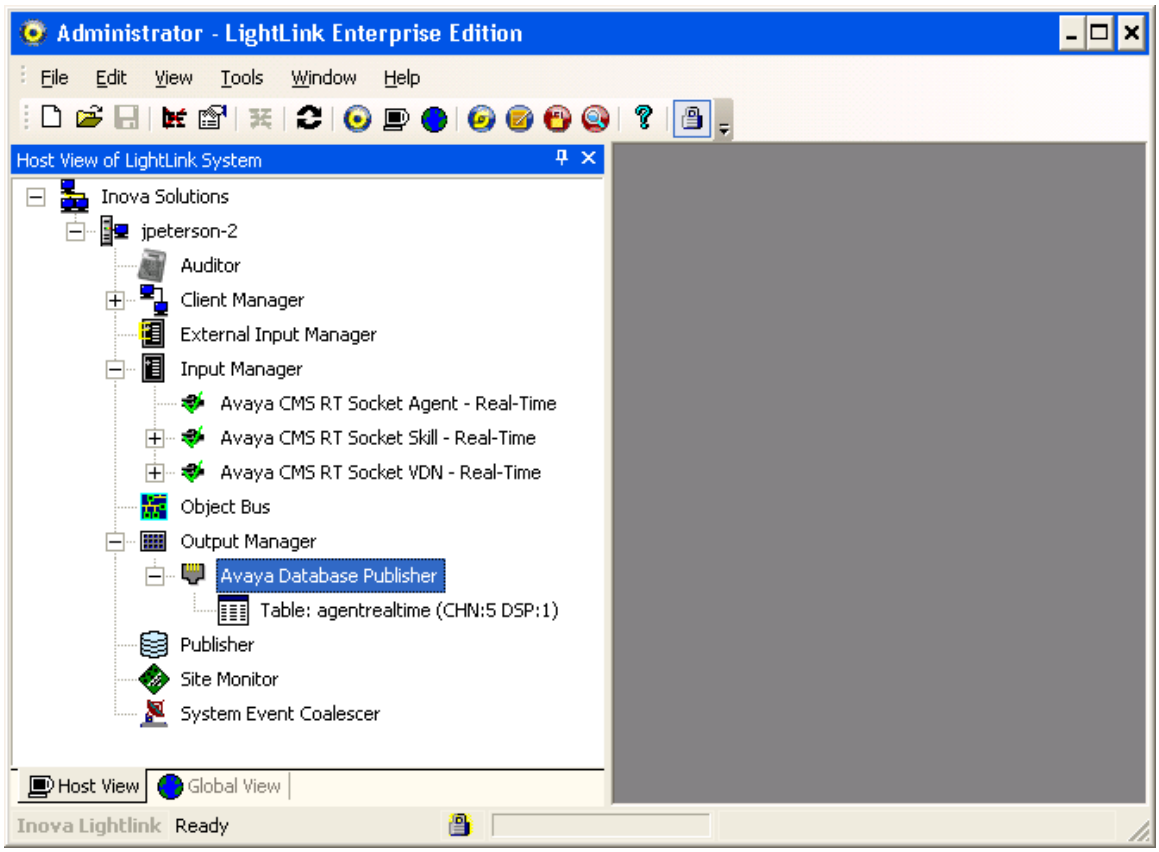
The **Field Mappings for Table** screen is updated with the columns for the database as shown below. Select the ACD column and right-click to select **Edit Column** from the pop-up menu.



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 **LogID** and **Skill** fields. Together, the ACD, LogID, and Split_ID fields comprise the key for each database row.



The **Administrator** screen will now display the "agentrealtime" table in the left pane. In addition, a green checkmark will be displayed by the Agent data source under **Input Manager** in the **Administrator** screen once the connection to Avaya CMS is established.



8. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Communication Manager, Avaya Call Management System, and Inova LightLink.

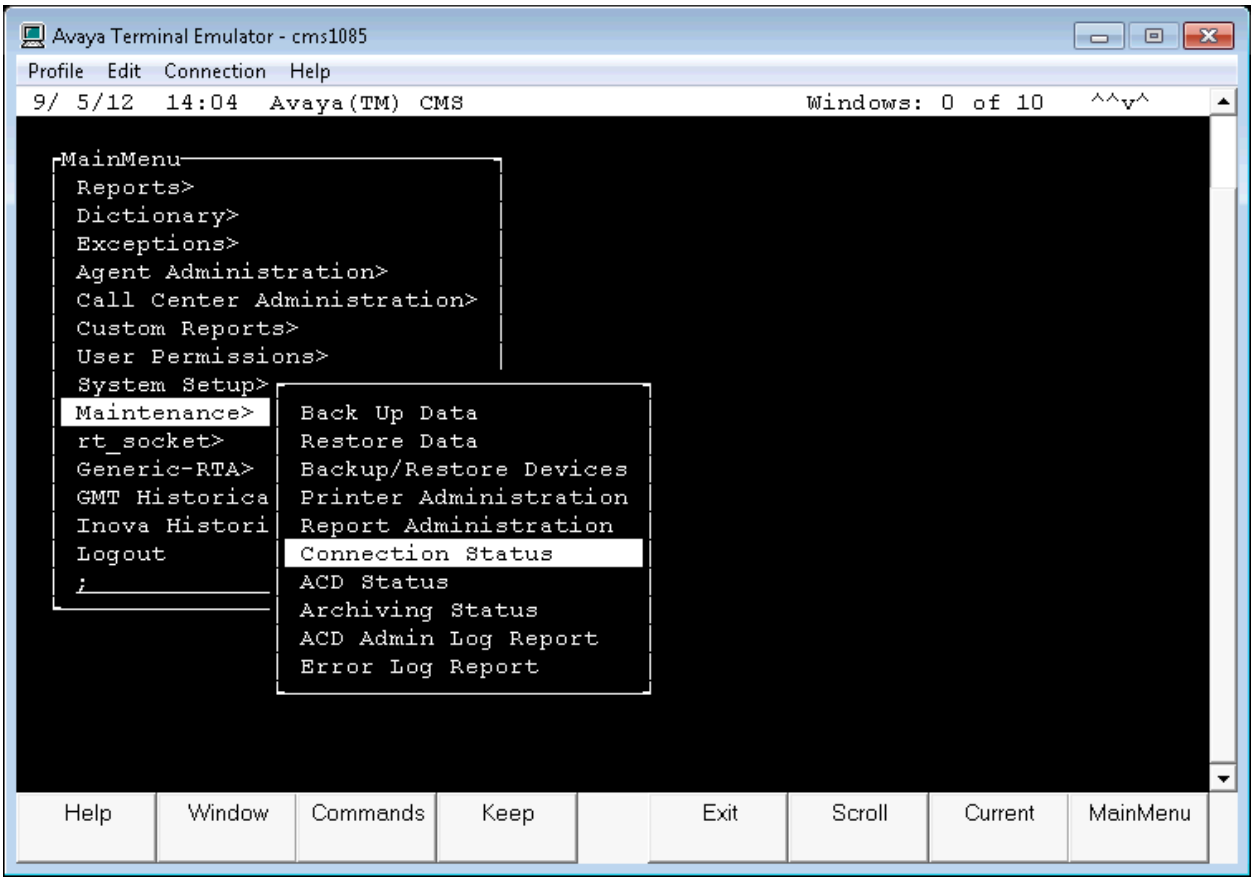
8.1. Verify Avaya Aura® Communication Manager

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.

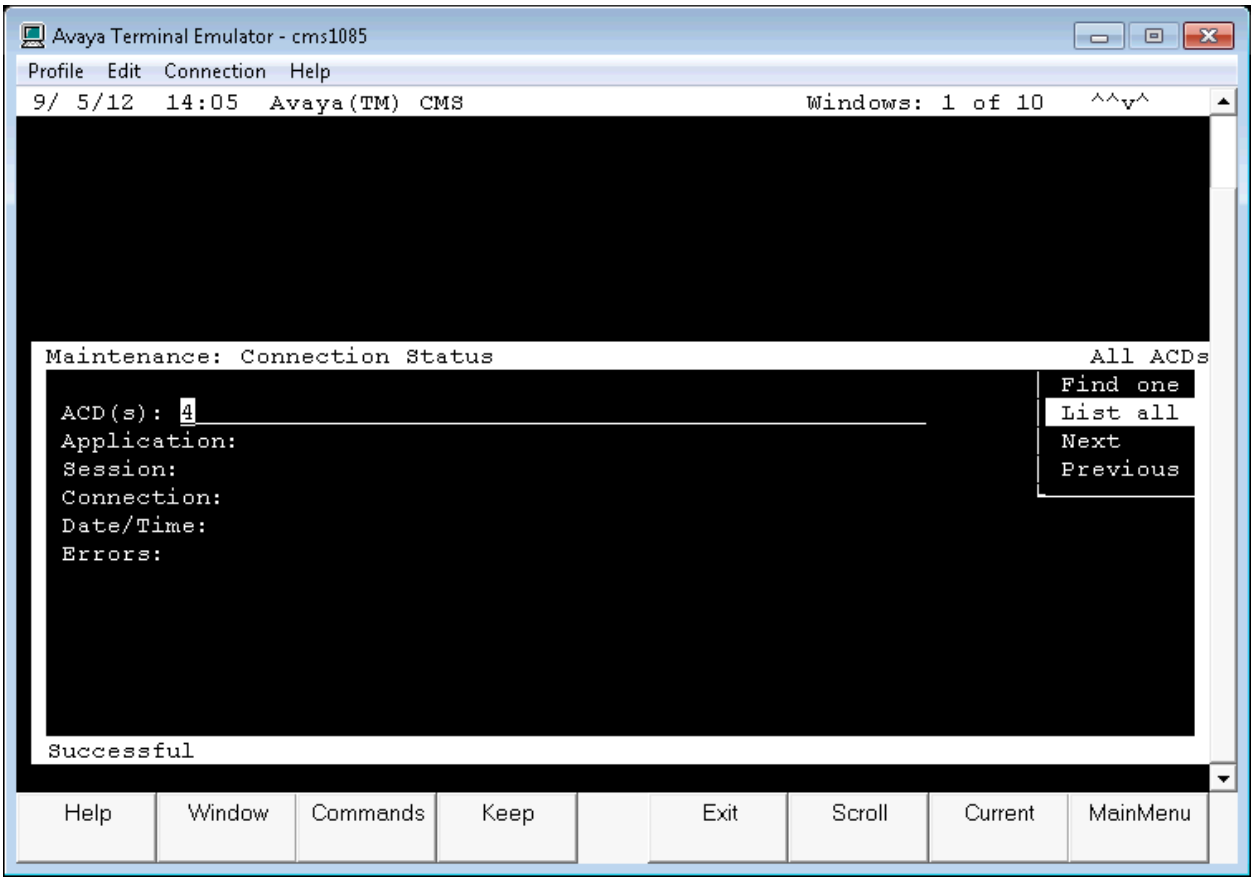
```
status processor-channels 2
                        PROCESSOR-CHANNEL STATUS

          Channel Number: 2
    Session Layer Status: In Service
           Socket Status: TCP connected
             Link Number: pv4
               Link Type: processor ethernet
   Message Buffer Number: 0

            Last Failure: Far end failed to acknowledge
                      At: 08/20/12 14:44
```

8.2. Verify Avaya Call Management System

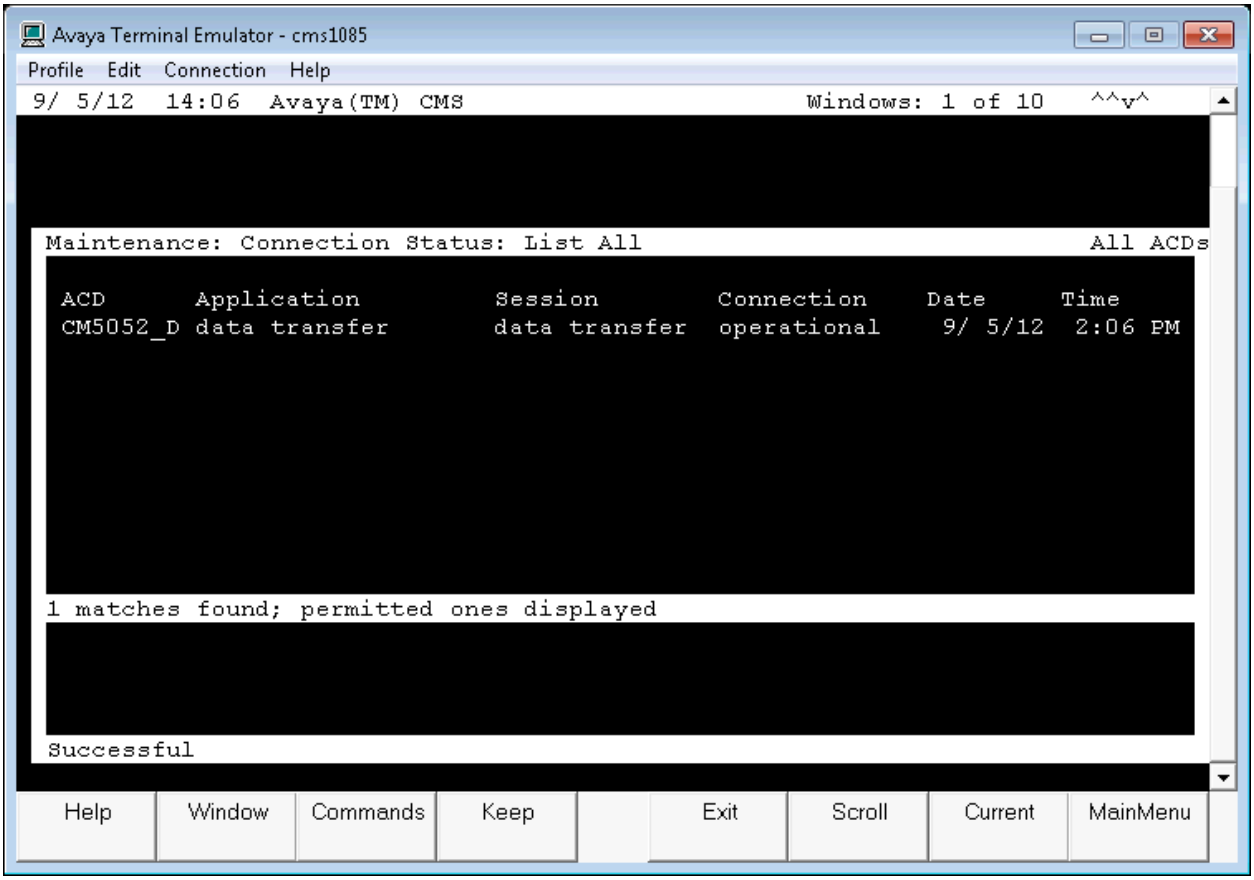
From the **MainMenu**, verify the status of the connection to Communication Manager by selecting **Maintenance → Connection Status**, as shown below.



Enter the corresponding **ACD(s)** number, which is provided by Avaya CSI. For the compliance testing, the corresponding switch connection is ACD system "3". Tab over to **Find one** and press **Enter**.

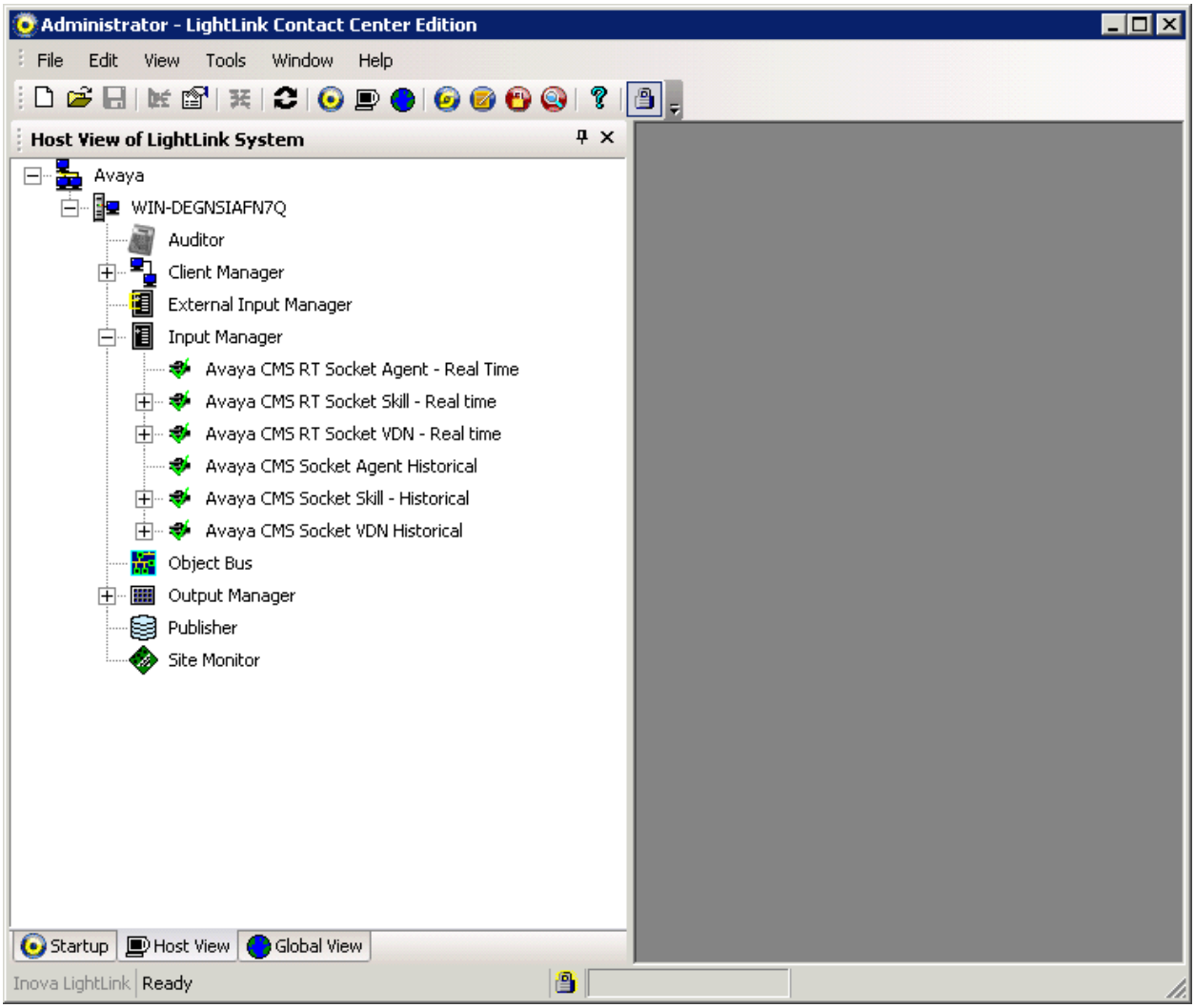


The switch connection status is displayed. Check the status in the **Session** and **Connection** fields, as shown below.



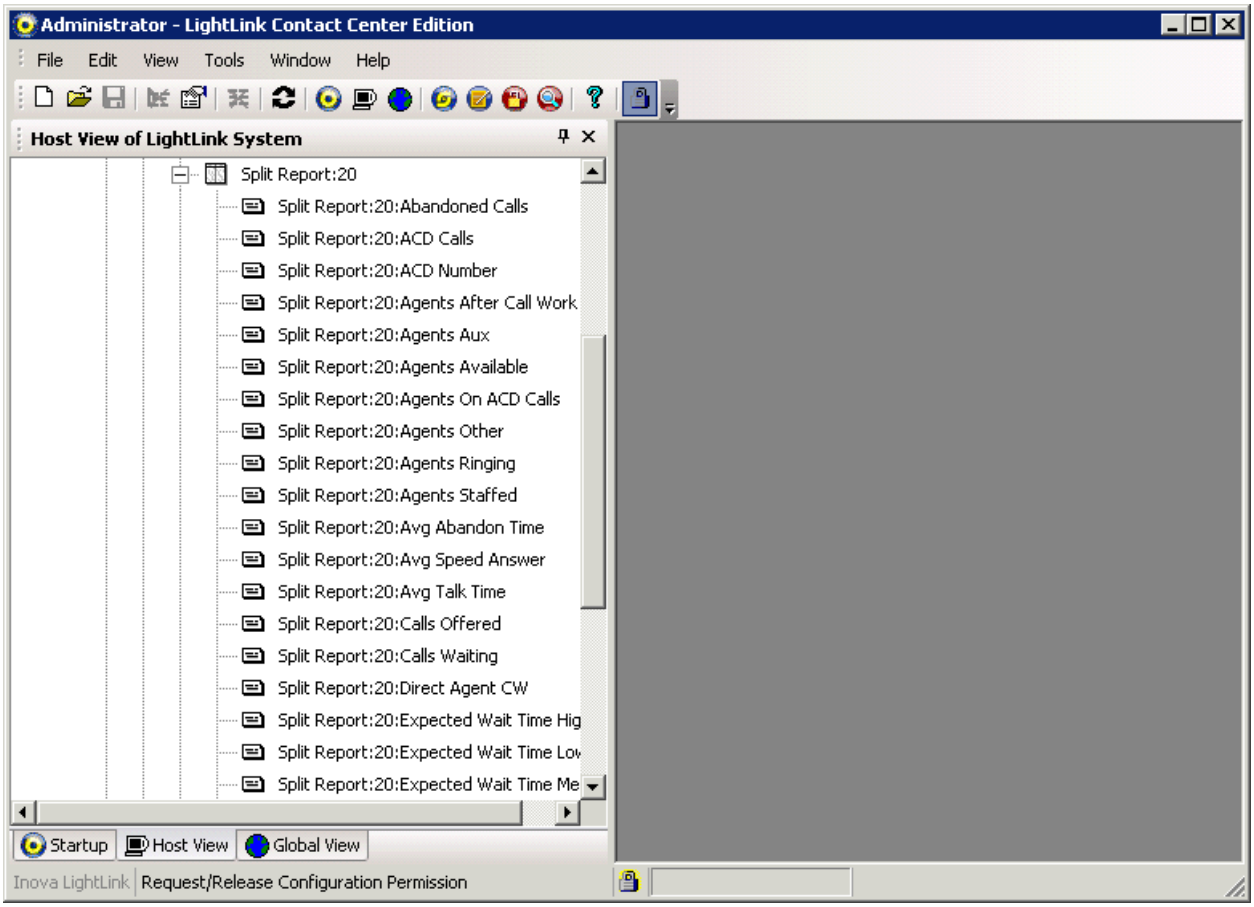
8.3. Verify Inova LightLink

From the **Administrator** screen, verify that **Avaya CMS RT Socket Agent – Real-Time, Avaya CMS RT Socket Skill – Real-Time**, and **Avaya CMS RT Socket VDN – Real-Time** 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.

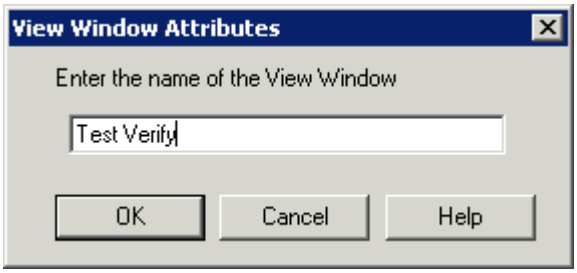


8.3.1. Verify RT_Socket Skill Data

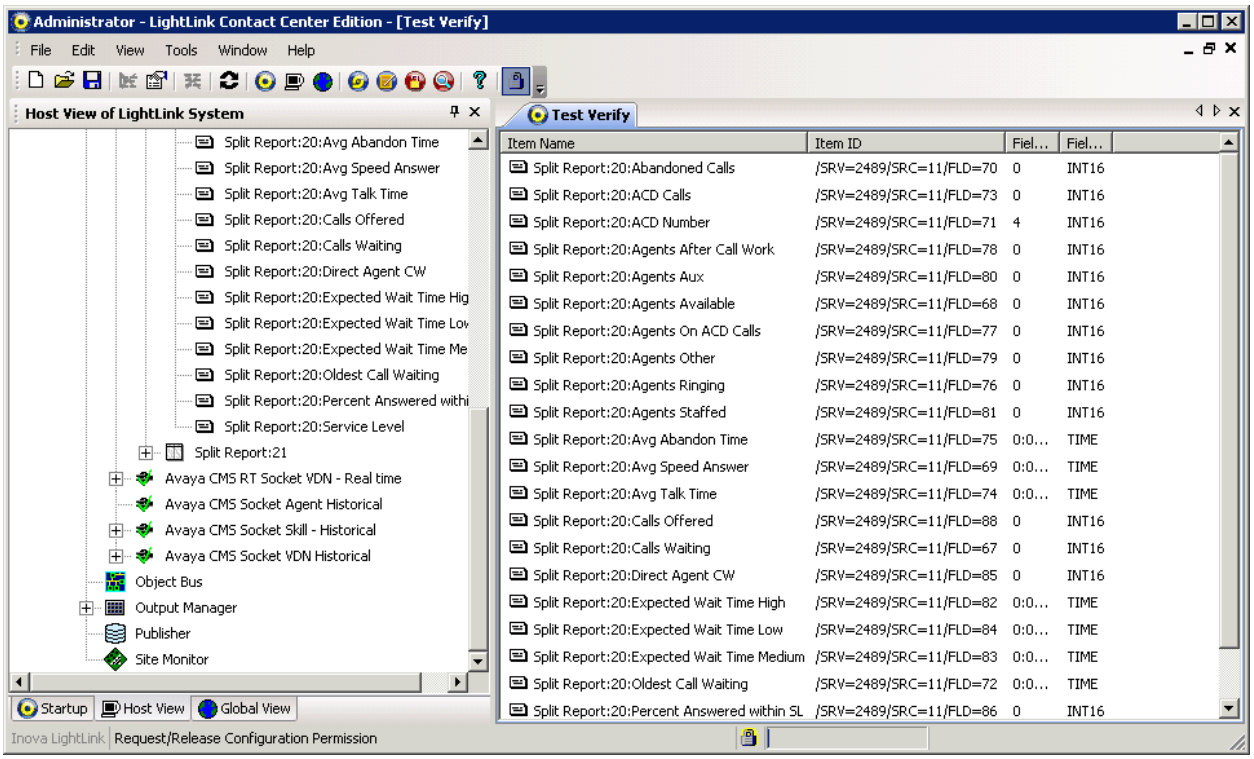
From the **Administrator** screen, expand on **Avaya CMS RT Socket Skill – Real-Time** under **Input Manager**. A list of fields that can be viewed from the Skill data streams is displayed in the left pane. Initially, the right pane will be empty (not shown). Click on **File** from the top left of the 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 – Real-Time** 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.

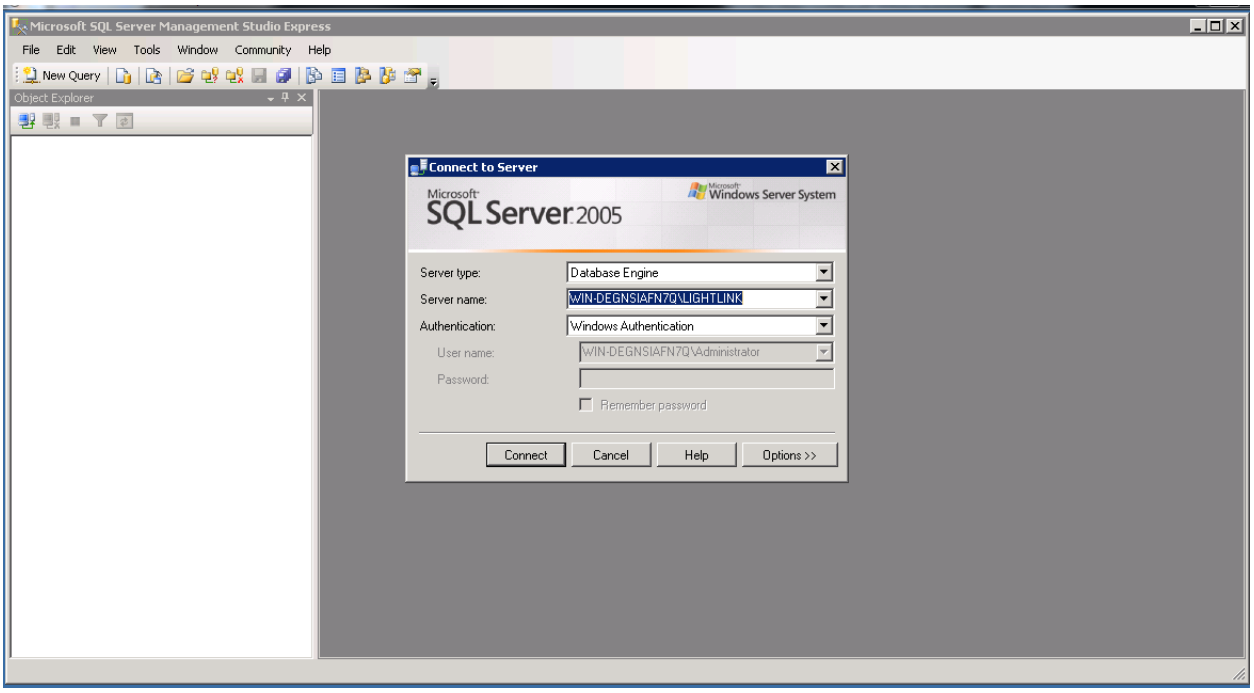


8.3.2. Verify RT_Socket VDN Data

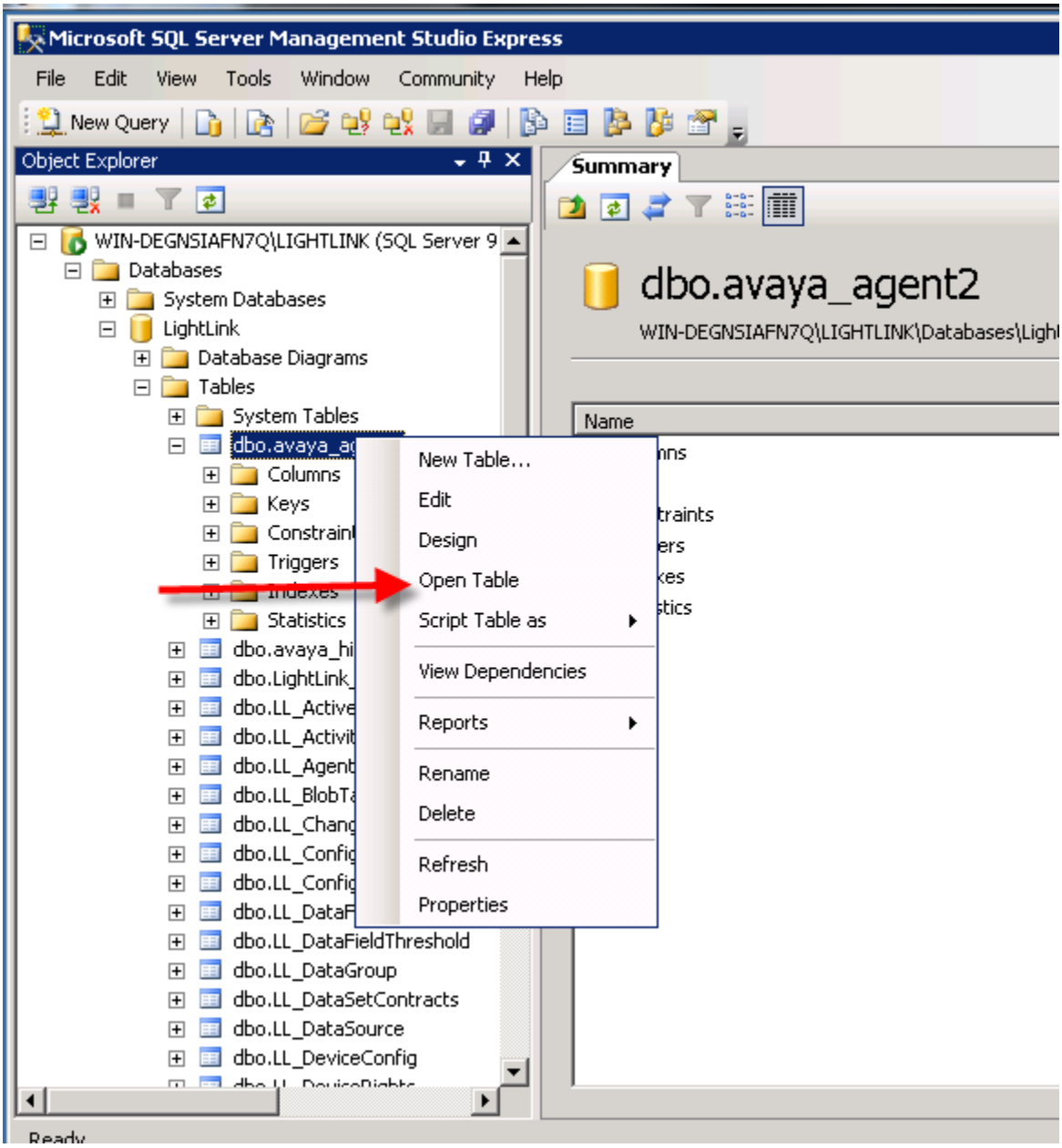
Follow the procedures in **Section 7.3.1**, to expand **Avaya CMS RT Socket VDN – Real-Time** and create a new window for viewing the selected VDN data.

8.3.3. Verify RT_Socket Agent Data

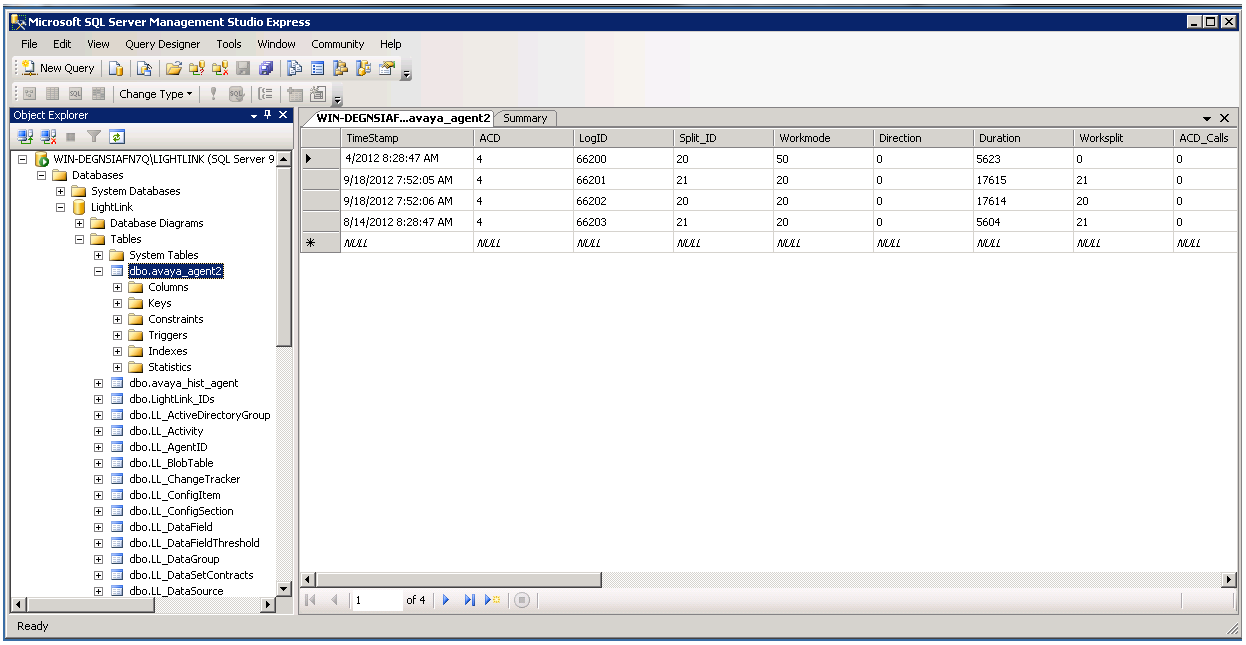
From the LightLink server, navigate to the database table used for storing the Agent data in Microsoft SQL using SQL Server Management Studio. Connect to the Database for Agent Data.



Open the Database for Agent Data. In this case we are using the LightLink DB. Open the list of tables and right-click on dbo.avaya_agent2. Click on **Open Table**.



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 "dbo.avaya_agent2" table.



9. Conclusion

These Application Notes describe the configuration steps required for Inova LightLink to successfully interoperate with Avaya Aura® Communication Manager using the Real-Time Socket 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.

[1] *Administering* Avaya Aura® Communication Manager, July 2012, Document Number 03-300509, Issue 7.0.

[2] *Avaya Call Management System Administration*, December 2011, Release 16.3.

[3] *Inova LightLink Middleware Installation Instructions*, available at support.inovasolutions.com or by contacting a support technician at support@inovasolutions.com

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at devconnect@avaya.com.