



Avaya Solution & Interoperability Test Lab

Application Notes for Avaya Contact Center Manager Server 7.0 with SYMON SES 10.2 using Real-Time Statistics Multicast – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for SYMON SES 10.2 to interoperate with Avaya Contact Center Manager Server (CCMS) 7.0, using Real-Time Statistics Multicast (RSM). SES 10.2 collects Realtime statistics from Contact Center Manager Server 7.0 and publishes this data to clients.

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

1. Introduction

These Application Notes describe the configuration steps required for SYMON SES 10.2 to interoperate with Avaya Contact Center Manager Server 7.0. SES 10.2 collects Realtime statistics from CCMS 7.0 through the RSM API and publishes this data to clients.

1.1. Interoperability Compliance Testing

The interoperability compliance testing focused on verifying SYMON SES for the following:

1. Selecting all available real-time statistics for a predefined group from one of the four categories.
2. Publishing all the selected real-time and selected application for community statistics.
3. Monitoring the published statistics.
4. Making test calls to invoke changes in the values of the published statistics.
5. Comparing the values of the real-time selected application for community statistics published by SES to the same statistics monitored by another monitoring tool (e.g.: Avaya Client).
6. Recording of results for each individual statistic, and the final result for the test case.

1.2. Support

Technical support on SYMON SES can be obtained by contacting SYMON directly at:

SYMON Communications, Inc.

500 North Central Expressway, Suite 175
Plano, TX 75074

Main Web Site: <http://www.symon.com>

Support Web Site: <http://support.symon.com>

Sales E-mail: sales@symon.com

North American Customers

Phone: (972) 578-8484

Fax: (972) 422-1680

Support E-mail: support@symon.com

International Customers

Phone: +44 208 663 1810

Fax: +44 208 663 1979

Support E-mail: support@symon.co.uk

2. Reference Configuration

SYMON SES utilizes the Real-Time Statistics Multicast (RSM) API on Contact Center Manager Server to obtain Realtime information from the Contact Center Manager Server. This is then published to the clients.

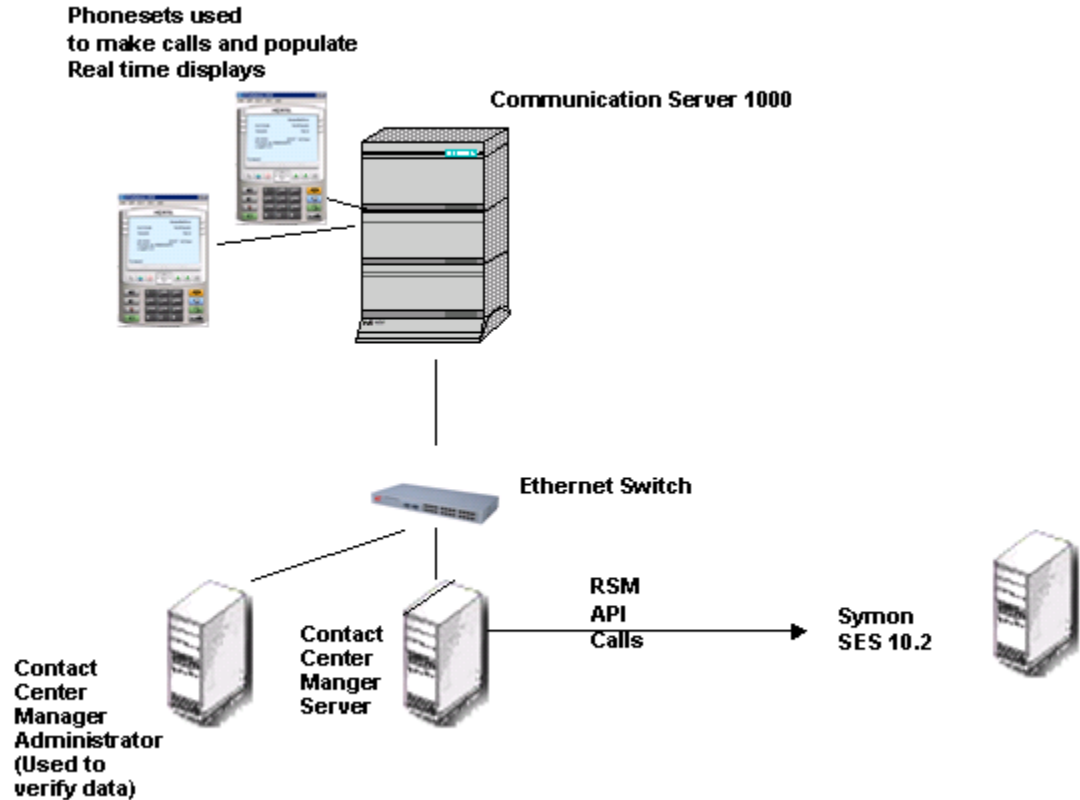


Figure 1: Reference Configuration

3. Equipment and Software Validated

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

Equipment	Software version
Contact Center Manager Server running on Windows 2003 Server	7.0 (with Server Utility – SU_02/SUS_0201)
Contact Center Manager Administrator running on Windows 2003 Server	7.0 (SU_02/SUS_0201)
Communication Server 1000	Release 6.0
i2050 IP Softphones	2.0
SYMON SES running on Windows 2003 Server	10.2

4. Configure Avaya Communication Server

No special configuration is required on Communication Server 1000.

Any phones currently supported by Contact Center Manager Server can be used to collect reports. For the purpose of this compliance testing, i2050 IP Softphones were used.

5. Configure Contact Center Manager Server

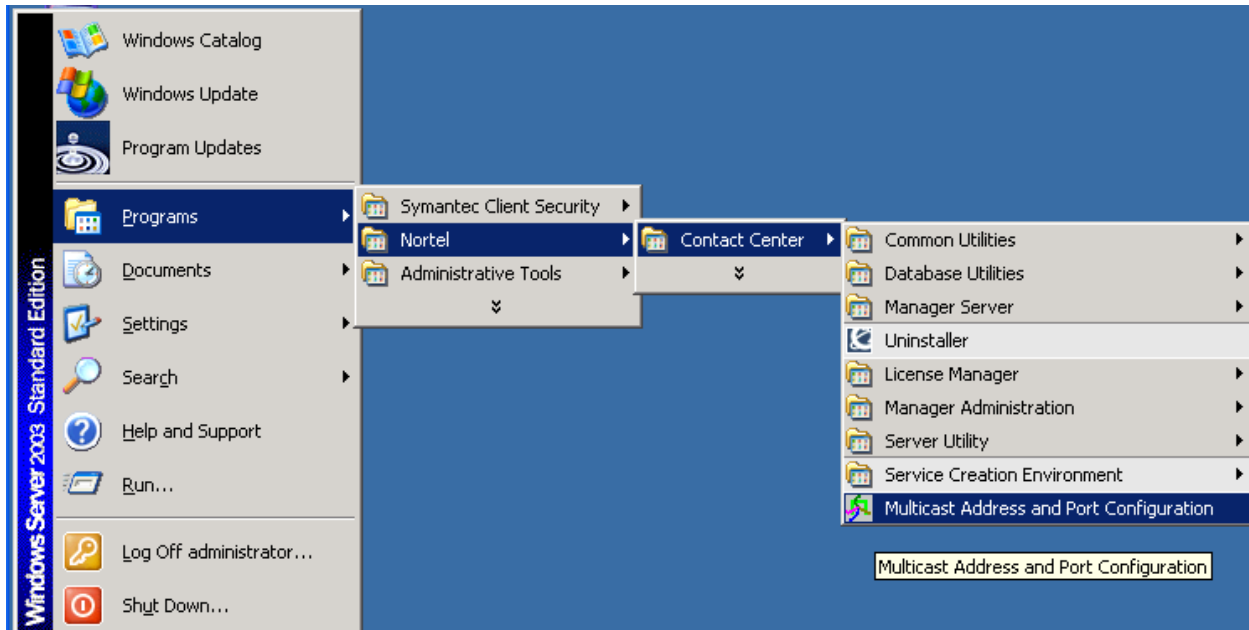
The compliance test environment consisted of a Contact Center Manager Server with real-time calls to agents being manually generated.

This section describes a procedure for configuring:

- The Multicast Address and Ports for Realtime Data propagation
- A new Access Class on Contact Center Server Utility
- A new user in Contact Center Manager

5.1. Multicast Address and Port Configuration

To configure the Multicasting address and ports on Contact Center Manager Server navigate to →Programs → Nortel → Multicast Address and Port Configuration.



The Configuration window with the values used for this testing is shown below. The Multicast IP group was configured as per the guidelines in the Contact Center documentation. The IP Ports and Multicast rate should be left at default values. The Multicast IP group will need to match the configuration of the SYMON RSM collector as detailed in **Section 6.1**

The image shows the 'RTD Multicast Configuration' dialog box. It contains the following settings:

- Multicast IP group:** 230 . 0 . 0 . 1
- Multicast time to live (TTL):** 2 sec
- Interval To Date:**

	IP Port:	Multicast Rate:	
Agent:	6060	5000	ms
Application:	6020	5000	ms
Skillset:	6040	5000	ms
Nodal:	6080	5000	ms
IVR:	6100	8888	ms
Route:	6120	5000	ms
- Moving Window:**

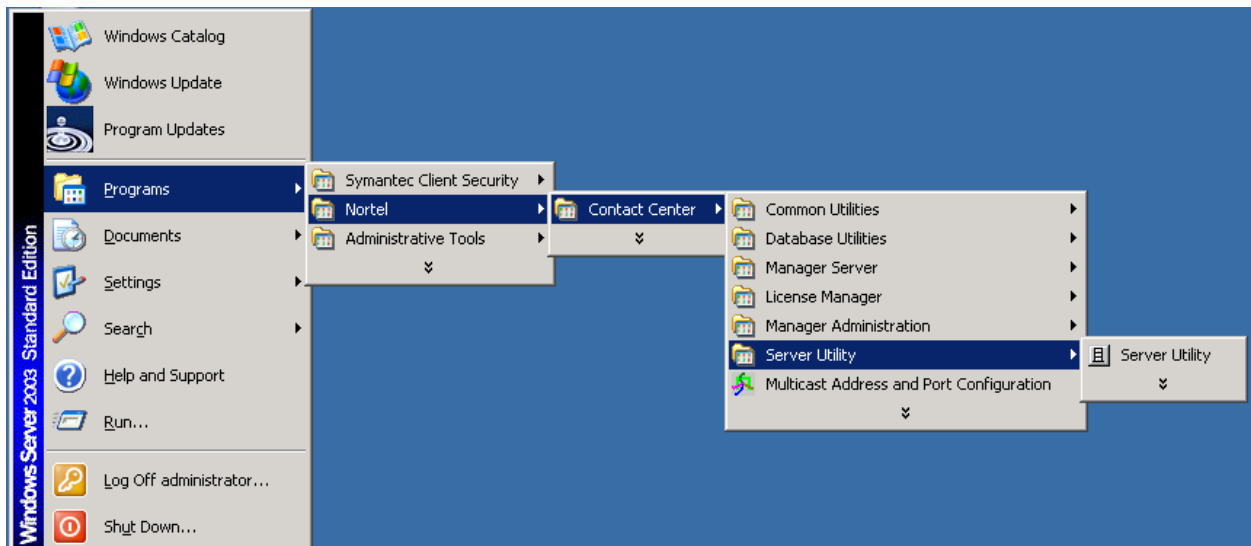
	IP Port:	Multicast Rate:	
Agent:	6070	5000	ms
Application:	6030	5000	ms
Skillset:	6050	5000	ms
Nodal:	6090	5000	ms
IVR:	6110	5000	ms
Route:	6130	5000	ms

Buttons at the bottom: Registry Value, Default Value, OK, Cancel, Apply.

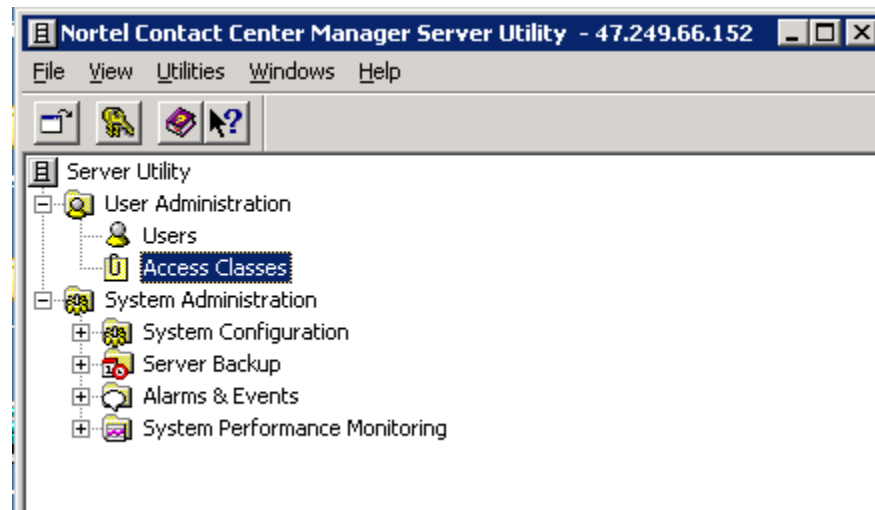
5.2. Creating a New Access Class

A new Access Class (for example named Developer RTDRSM) was created on the Contact Center Server Utility.

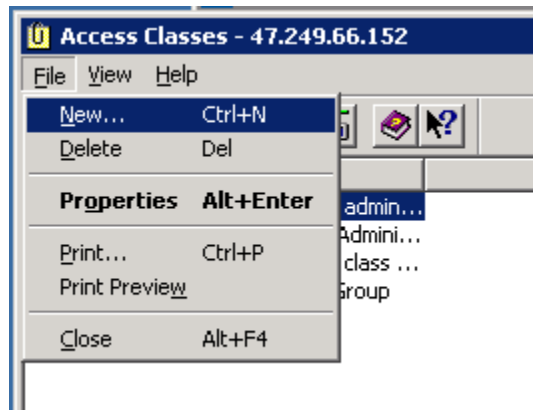
To create the access class, on the Contact Center Manager Server navigate to Programs → Nortel → Contact Center → Server Utility → Server Utility.



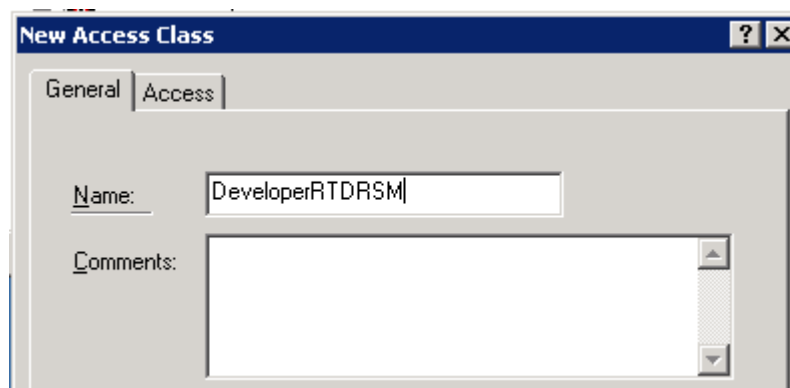
In Contact Center Manager Server Utility, go to Access Classes by double clicking on “Access Classes”:



To create new Access Class, select NEW from File Menu:



In the General tab, enter a descriptive name. For the sample configuration DeveloperRTDRSM was entered.



In the Access tab, select the appropriate access levels for the following reports:

Item in system window	Level of Access
Real-Time Displays	View all agents – create displays
Reports – Agent Performance	Create and run any report
Reports – Call-by-Call	Create and run any report
Reports – Others	Create and run any report

The two screens below show how to grant the Level of Access for each report.

New Access Class [?] [X]

General Access

Members have access to the following items in the system window:

Item in system window	Level of Access
Script Variables	None
CDNs	None
Voice Ports	None
IVR ACD-DNs	None
Historical Statistics	None
Real-Time Statistics	None
Routes	None
Real-Time Displays	View all agents - create displays
Formulas	None
Agent Threshold Classes	None
Application Threshold Classes	None

Selected item:
Real-Time Displays

Level of Access: View all agents - create displays

Save Cancel Help

New Access Class [?] [X]

General Access

Members have access to the following items in the system window:

Item in system window	Level of Access
Application Threshold Classes	None
Nodal Threshold Classes	None
IVR ACD-DN Threshold Classes	None
Route Threshold Classes	None
Skillset Threshold Classes	None
Reports	Create and run any report
Network Communication Param...	None
Reports - Agent Performance	Create and run any report
Reports - Call-by-Call	Create and run any report
Reports - Other	Create and run any report
Emergency Help	None

Selected item:
Reports - Other

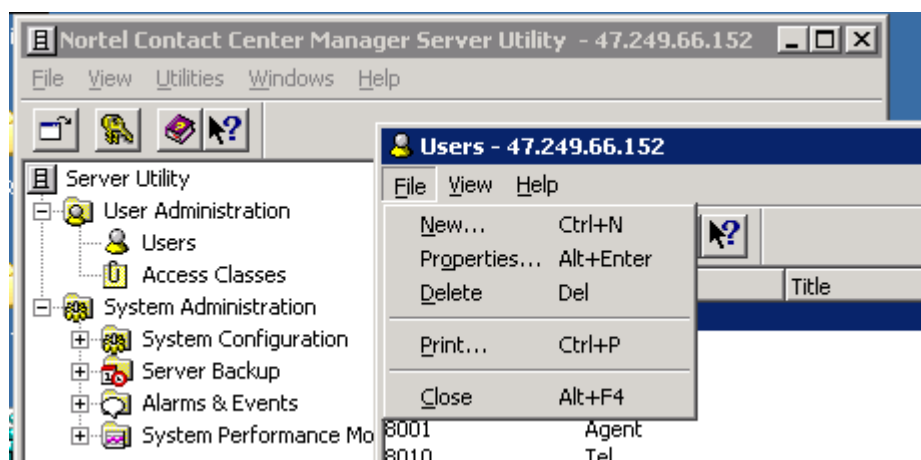
Level of Access: Create and run any report

Save Cancel Help

5.3. New User

To create a new user, on the Contact Center Manager Server, navigate to Programs → Nortel → Contact Center → Server Utility → Server Utility.

To create a new user on the Contact Center Server Utility, choose “Users” from Server Utility, then File → New on Users menu:



In the general tab, enter user information:

The 'New User' dialog box is shown with the 'General' tab selected. It contains the following fields:

- First name:** symon
- Last name:** (empty)
- Comments:** certification testing
- Title:** (empty)
- Department:** (empty)
- Language:** English (dropdown menu)

At the bottom are 'Save', 'Cancel', and 'Help' buttons.

In Desktop tab, enter a user ID for the new user and select the Access Class created in **Section 5.2**.

The screenshot shows a 'New User' dialog box with two tabs: 'General' and 'Desktop'. The 'Desktop' tab is selected. The dialog contains the following fields and controls:

- User ID:** A text input field.
- Set Password:** A button.
- Password retry count:** A numeric input field with the value '0'.
- Password Expires:** A checked checkbox.
- User desktop status:** A text input field with the value 'OK'.
- Lock Out:** A button.
- Access Class:** A dropdown menu with the following options: '<none = no access rights>', 'adminGroup', 'Call Centre Admin', 'DeveloperRTDRSM' (which is highlighted), and 'Supervisor'.
- Buttons:** 'Save', 'Cancel', and 'Help' are located at the bottom of the dialog.

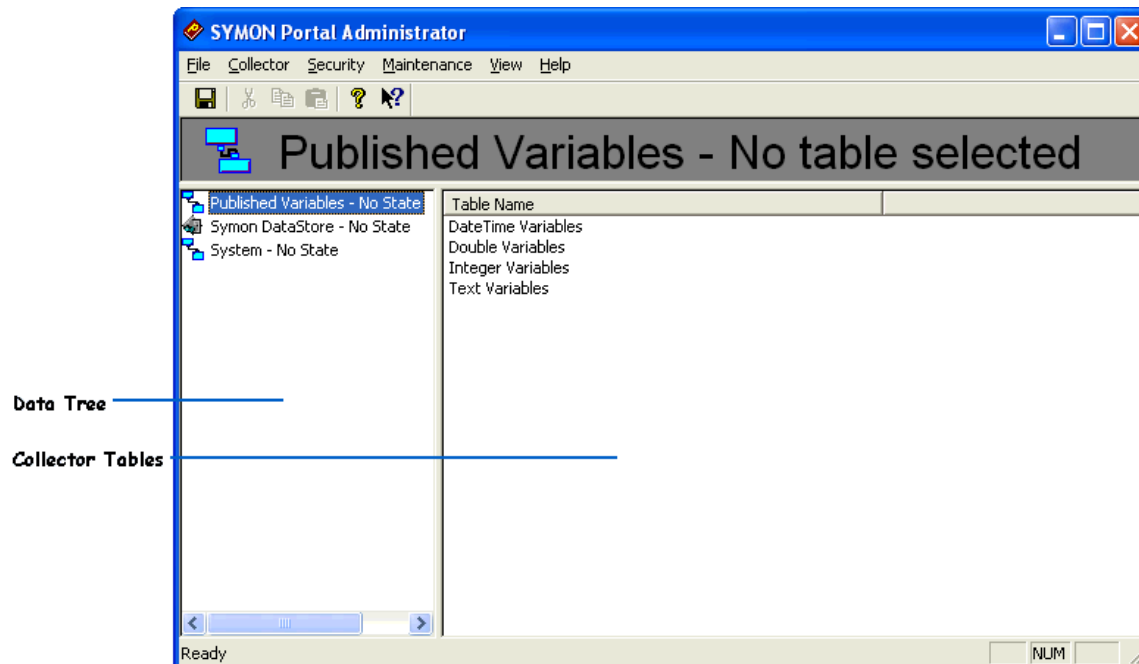
Click “Save” to save the new user.

6. Configure SYMON SES 10.2

6.1. RSM Data Collector Configuration on Portal Administrator

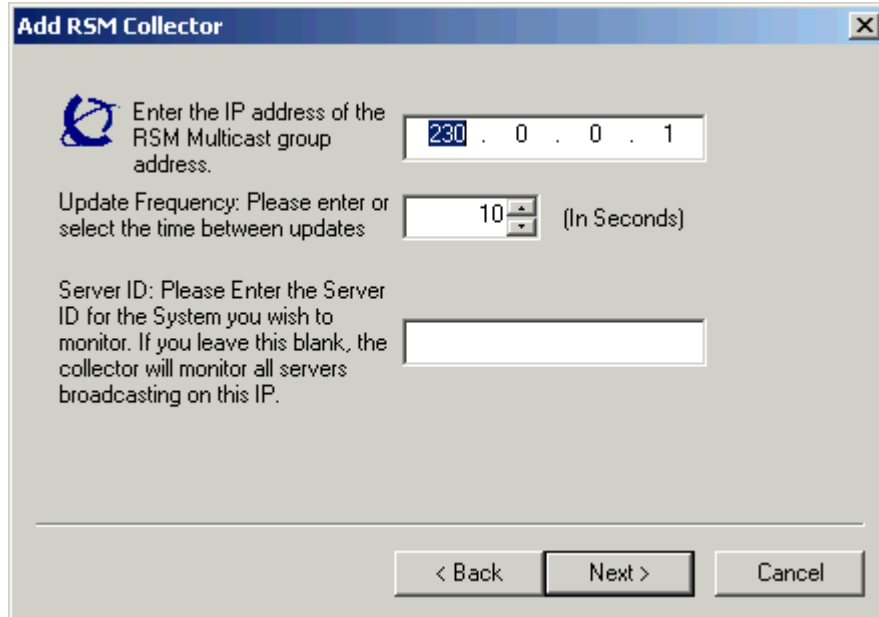
From the Windows Start menu, navigate to Programs → SYMON Enterprise Software → Portal Admin.

At the SYMON Logon window, login with appropriate credentials. The SYMON Portal Administrator main window will appear, as shown below.



From the Collector Menu choose RSM. Enter username and password as configured in **Section 5.3**. Note: the login name shown in the screenshot below is different from what was configured in Section 5.3 since these screenshots were taken from the SYMON user guide.

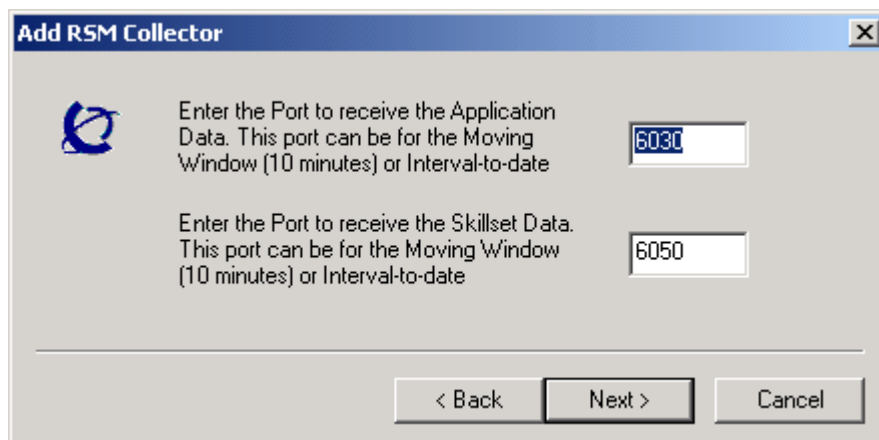
Click Next. Enter the IP address as configured in **Section 5.1**



The 'Add RSM Collector' dialog box contains the following fields and controls:

- IP Address:** A text field with the value '230 . 0 . 0 . 1'. The text 'Enter the IP address of the RSM Multicast group address.' is to its left.
- Update Frequency:** A spin box with the value '10' and the label '(In Seconds)'. The text 'Update Frequency: Please enter or select the time between updates' is to its left.
- Server ID:** An empty text field. The text 'Server ID: Please Enter the Server ID for the System you wish to monitor. If you leave this blank, the collector will monitor all servers broadcasting on this IP.' is to its left.
- Navigation:** Three buttons at the bottom: '< Back', 'Next >', and 'Cancel'.

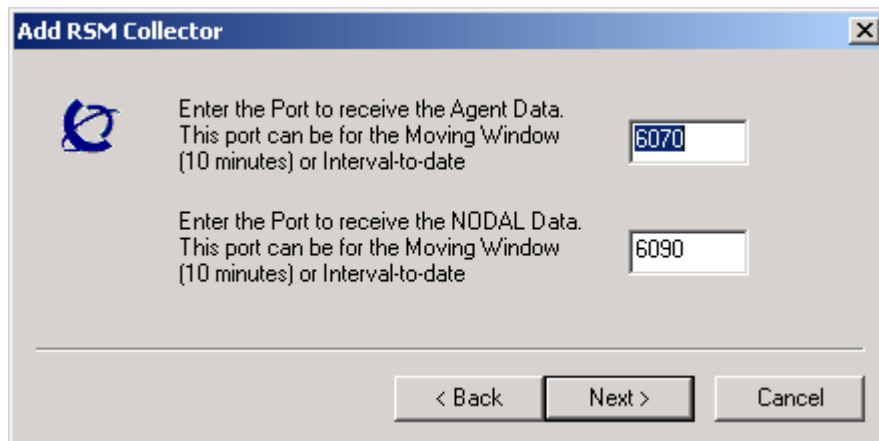
Click Next. Enter the port information as configured on the CCMS server for Application and Skillset Data in **Section 5.1**.



The 'Add RSM Collector' dialog box contains the following fields and controls:

- Application Port:** A text field with the value '6030'. The text 'Enter the Port to receive the Application Data. This port can be for the Moving Window (10 minutes) or Interval-to-date' is to its left.
- Skillset Port:** A text field with the value '6050'. The text 'Enter the Port to receive the Skillset Data. This port can be for the Moving Window (10 minutes) or Interval-to-date' is to its left.
- Navigation:** Three buttons at the bottom: '< Back', 'Next >', and 'Cancel'.

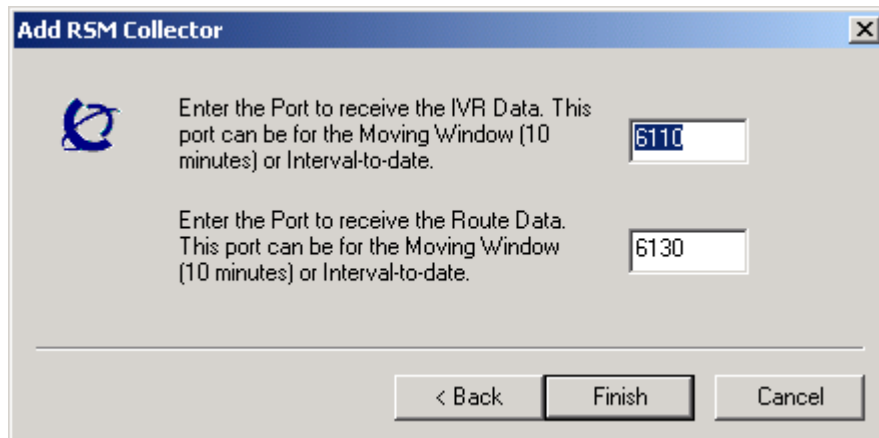
Click Next. Enter the port information as configured on the CCMS server for Agent and NODAL Data in **Section 5.1**.



The 'Add RSM Collector' dialog box contains two input fields. The first field is for 'Agent Data' with the value '6070'. The second field is for 'NODAL Data' with the value '6090'. Navigation buttons at the bottom include '< Back', 'Next >', and 'Cancel'.

Field	Value
Enter the Port to receive the Agent Data. This port can be for the Moving Window (10 minutes) or Interval-to-date	6070
Enter the Port to receive the NODAL Data. This port can be for the Moving Window (10 minutes) or Interval-to-date	6090

Click Next. Enter the port information as configured on the CCMS server for IVR and Route data in **Section 5.1**. Click Finish.



The 'Add RSM Collector' dialog box contains two input fields. The first field is for 'IVR Data' with the value '6110'. The second field is for 'Route Data' with the value '6130'. Navigation buttons at the bottom include '< Back', 'Finish', and 'Cancel'.

Field	Value
Enter the Port to receive the IVR Data. This port can be for the Moving Window (10 minutes) or Interval-to-date.	6110
Enter the Port to receive the Route Data. This port can be for the Moving Window (10 minutes) or Interval-to-date.	6130

7. General Test Approach and Test Results

Voice skillset based routing calls were sent to the Contact Center test bed. As calls were progressing, the Real-time Displays on Contact Center Manager Administrator were observed to confirm data seen on the SYMON displays were accurate. All testing was successful.

8. Verification Steps

Real-time Displays were launched on Contact Center Manager Administrator to monitor real-time activity of calls being placed into the system. This was used to verify the data observed on the SYMON displays.

9. Conclusion

These Application Notes describe the configuration steps required for SYMON SES to retrieve real-time data from Avaya Contact Center Manager Server. All functional test cases were completed successfully

10. Additional References

Avaya product documentation for Contact Center Manager Server can be found at <http://support.nortel.com/>

The following documentation was provided by SYMON:

[1] RSM 7 Data Collector Version 11.0 A Guide to Configuring and Publishing Data with the RSM 7 Data Collector

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