Avaya Solution & Interoperability Test Lab

Application Notes for Bristol Capital SourceBook with Avaya Aura® Communication Manager – Issue 1.0

Abstract

These Application Notes describe the steps required for Bristol Capital SourceBook to successfully interoperate with Avaya Aura® Communication Manager 6.0.1.

Bristol Capital SourceBook is a PBX management service. In the compliance testing, Bristol Capital SourceBook used the System Administrator Terminal interface to obtain configuration related data and provide report on the detailed configurations of Avaya Aura® Communication Manager.

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 steps required for Bristol Capital SourceBook to successfully interoperate with Avaya Aura® Communication Manager 6.0.1.

Bristol Capital SourceBook is a PBX management service. In the compliance testing, Bristol Capital SourceBook used the System Administrator Terminal (SAT) interface to obtain configuration related data and provide report on the detailed configurations of Avaya Aura® Communication Manager.

The Bristol Capital SourceBook service consists of a server and a central database. The Bristol Capital SourceBook server connects remotely to Avaya Aura® Communication Manager via the SAT interface, and uses a subset of the SAT commands to collect configuration related data. The collected data are passed to the central database for analysis and reporting.

The remote connectivity between Bristol Capital SourceBook and Avaya Aura® Communication Manager can be accomplished using either modem dial-up to the Avaya Server Availability Management Processor (SAMP) interface, VPN tunneling, or direct access from the public network. In the compliance testing, the direct access method from the public network was used.

In the direct access via the public network method used in the compliance testing, a spare and existing C-LAN circuit pack from Avaya Aura® Communication Manager was connected to the public network, and with the corporate firewall configured to allow traffic from the public IP address of the Bristol Capital SourceBook server. The public IP address of the C-LAN circuit pack and the SAT login credentials were passed on to Bristol Capital prior to test.

Note that the corporate firewall configuration and the configuration of the Bristol Capital SourceBook service are outside the scope of these Application Notes, and will not be described.

2. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Configuration related data were manually configured on Avaya Aura® Communication Manager, and automatically collected by Bristol Capital SourceBook.

The report produced by Bristol Capital SourceBook was reviewed manually and compared with the data on Avaya Aura® Communication Manager for proper representation.

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

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the proper collection and reporting of configuration data by Bristol Capital SourceBook. The collected configuration data included extension types, configurations, data modules, attendants, announcements, trunk groups, DS1, system, cabinets, capacities, customer options, offer options, alias stations, media gateways, remote offices, survivable processors, system parameters, enterprise survivable servers, audio groups, signaling groups, abbreviated dialing lists, class of services, class of restrictions, tenants, coverage answer groups, coverage paths, coverage remote groups, hunt groups, intercom groups, pickup groups, paging, route patterns, tolls, partitioned groups and tables, agent login IDs, ARS analysis, AAR analysis, signaling groups, codec set, port network, IP services, IP network region, IP network map, IP interfaces, IP server interface, software versions and serial numbers.

The serviceability testing focused on verifying the ability of Bristol Capital SourceBook to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet cable from the Bristol Capital SourceBook server.

2.2. Test Results

All test cases were executed and verified. The following were the observations from the compliance testing.

- The reporting of trunk groups to IP network regions is based on the network region associated with the near end node name.

- The IP Directory section only includes registered IP devices.

2.3. Support

Technical support on Bristol SourceBook can be obtained through the following:

- **Phone:** (201) 476-0600
- **Email:** support@infoplusonline.com

3. Reference Configuration

The configuration used for the compliance testing is shown below.

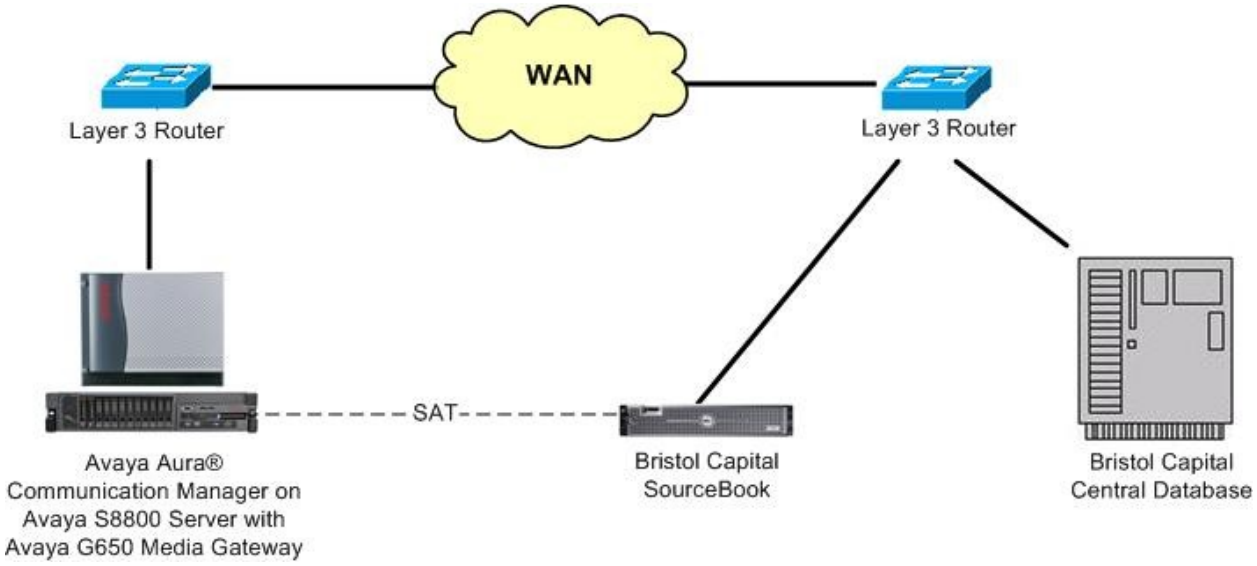


Figure 1: Configuration Diagram

4. Equipment and Software Validated

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

Equipment	Software
Avaya Aura® Communication Manager on Avaya S8800 Server	6.0.1 SP5.01 (R016x.00.1.510.1-19303)
Avaya G650 Media Gateway • TN799DP C-LAN Circuit Pack	 HW01 FW040
Bristol Capital SourceBook	Build 10515

5. Configure Avaya Aura® Communication Manager

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

- Obtain node names
- Administer node names
- Administer IP services

5.1. Obtain Node Names

Log in to the SAT with proper credentials. Use the "display ip-interface x" command, where "x" is the location of an existing C-LAN circuit pack that will be used to connect to the public network. Note the values in the **Node Name** and **Gateway Node Name** fields.

```
display ip-interface 1a05                                    Page   1 of   3
                                IP INTERFACES


                 Type: C-LAN
                 Slot: 01A05        Target socket load and Warning level: 400
          Code/Suffix: TN799  D           Receive Buffer TCP Window Size: 8320
      Enable Interface? y                          Allow H.323 Endpoints? y
                 VLAN: n                            Allow H.248 Gateways? y
       Network Region: 2                             Gatekeeper Priority: 5



                               IPV4 PARAMETERS
            Node Name: Clan-2
          Subnet Mask: /24
     Gateway Node Name: Gateway002

         Ethernet Link: 2
         Network uses 1's for Broadcast Addresses? Y
```

5.2. Administer Node Names

Use the "change node-names ip" command to modify the IP address of the C-LAN circuit pack from **Section 5.1**, and the IP address of the associated gateway. In this case, the C-LAN node name is "Clan-2", and the associated gateway node name is "Gateway002". Enter the appropriate public IP addresses for these two entries to match the network configuration. The public IP addresses for the entries are masked in the screen below for privacy.

```
change node-names ip                                          Page   1 of   2
                                  IP NODE NAMES
    Name                  IP Address
Annc-1                  10.32.32.14
CDR-PC20                20.32.39.20
CDR-ReliaTel            20.32.39.110
Clan-1                  10.32.32.12
Clan-2                  xxx.xxx.xxx.xxx
Gateway001              10.32.32.1
Gateway002              yyy.yyy.yyy.yyy
IPO500                  10.32.33.10
Prowler-1               10.32.32.13
Prowler-2               12.184.9.168
```

5.3. Administer IP Services

Use the "change ip-services" command to add an entry to allow SAT access via the public facing C-LAN circuit pack. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Service Type:** "SAT"
- **Enabled:** "y"
- **Local Node:** Node name of the public facing C-LAN circuit pack from **Section 5.2**.
- **Local Port:** "5023"
- **Remote Node:** "any"
- **Remote Port:** "0"

```
change ip-services                                            Page   1 of   4

                                  IP SERVICES
 Service     Enabled     Local       Local       Remote      Remote
  Type                   Node        Port        Node        Port
CDR1                  Clan-1          0       CDR-ReliaTe     9002
CDR2                  Clan-1          0       CDR-PC20        9000
AESVCS          y     Clan-1          8765
SAT             y     Clan-1          5023    any             0
SAT             y     Clan-2          5023    any             0
```

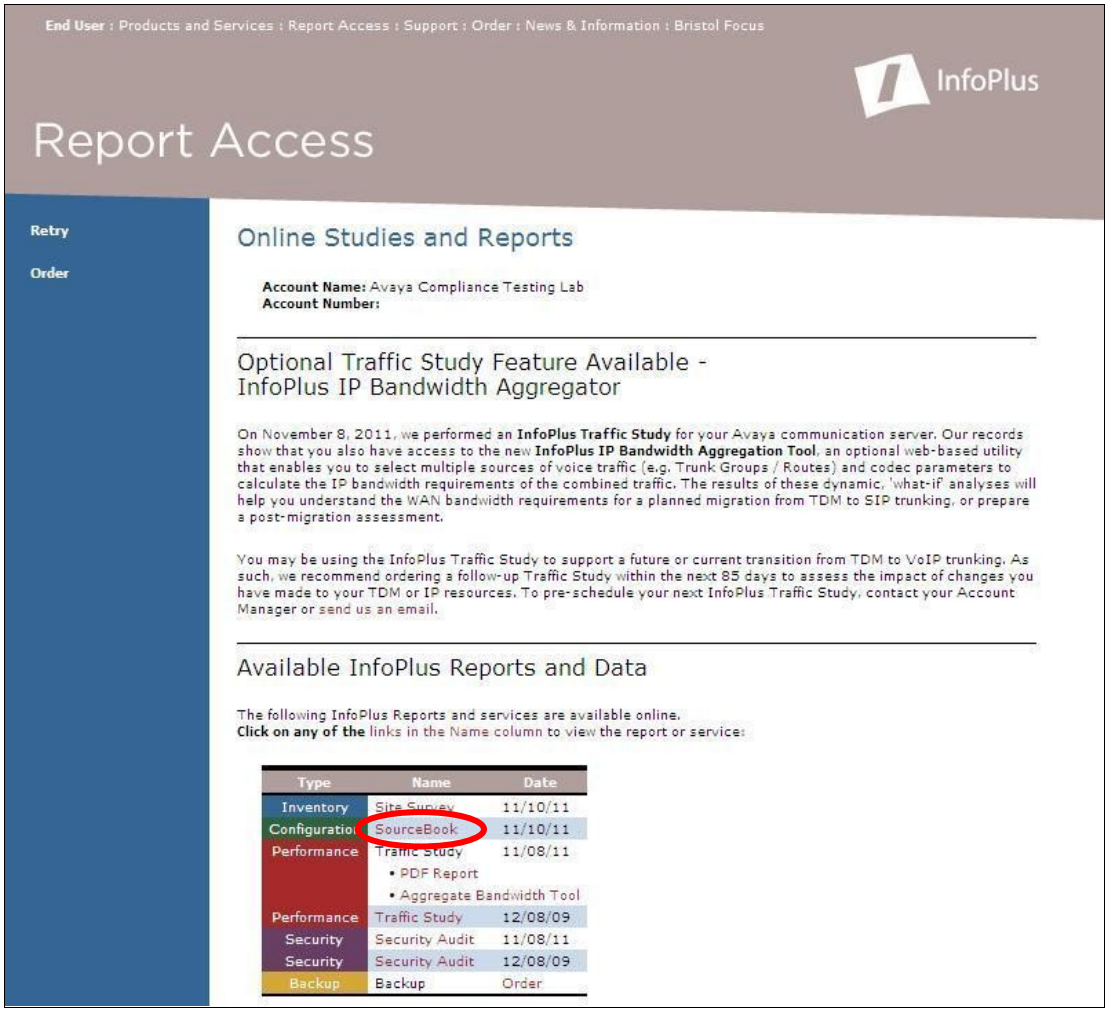
6. Navigate Bristol Capital SourceBook Report

This section provides the procedures for navigating the Bristol Capital SourceBook report. The procedures include the following areas:

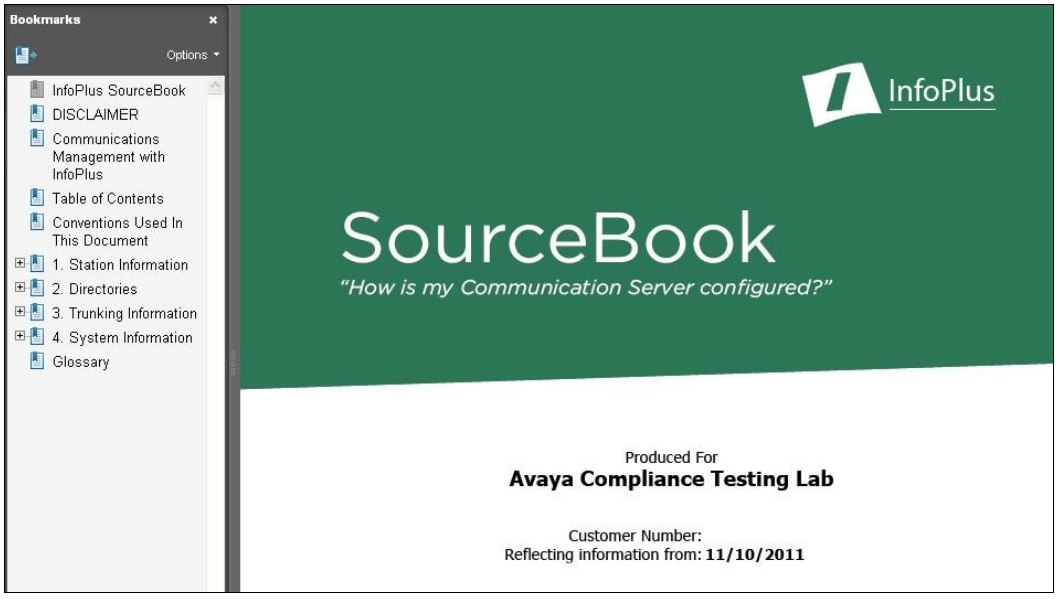
- Access report
- Review station information
- Review directories
- Review trunking information
- Review system information

6.1. Access Report

At the conclusion of the configuration data collection and analysis, Bristol Capital SourceBook will send an automatic email notification to the customer, including a URL to access the online report. From an Internet browser window, enter the URL from the email notification to display the **Report Access** screen below. Select **SourceBook**.

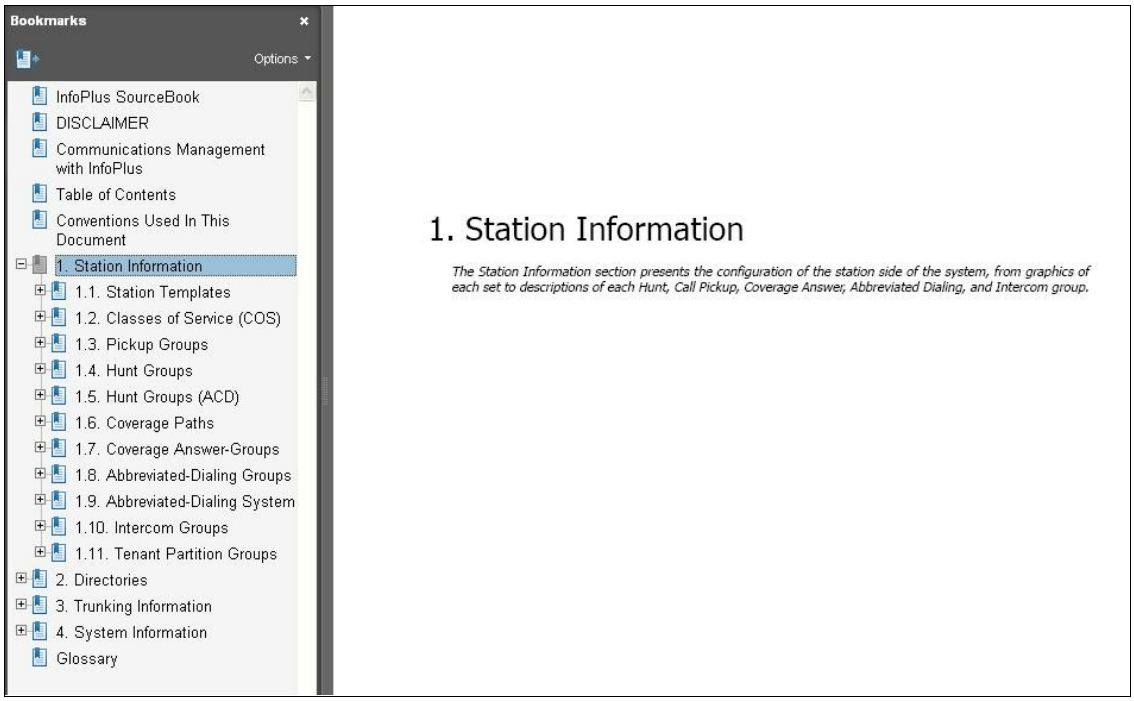


The **SourceBook** report is displayed in a new browser window. Select **Station Information** from the left pane.



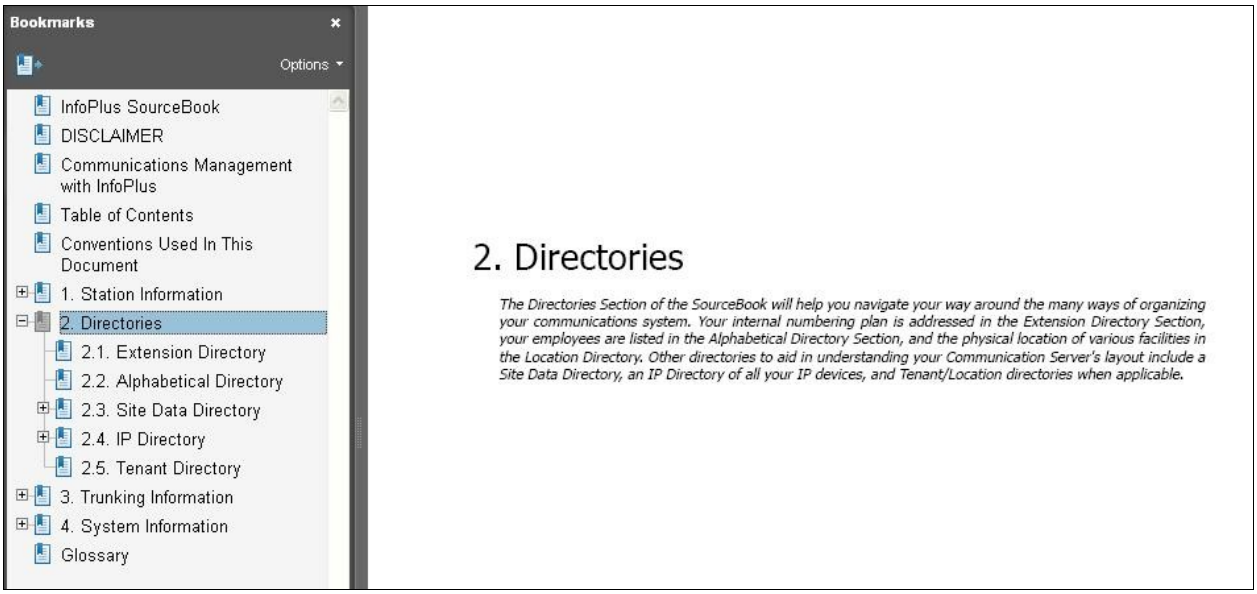
6.2. Review Station Information

The **Station Information** section is displayed. This section provides information on the station configuration, from graphics of each station set to descriptions of each class of service, pickup group, hunt group, coverage path, coverage answer group, abbreviated dialing list, intercom group, and tenant partition group.



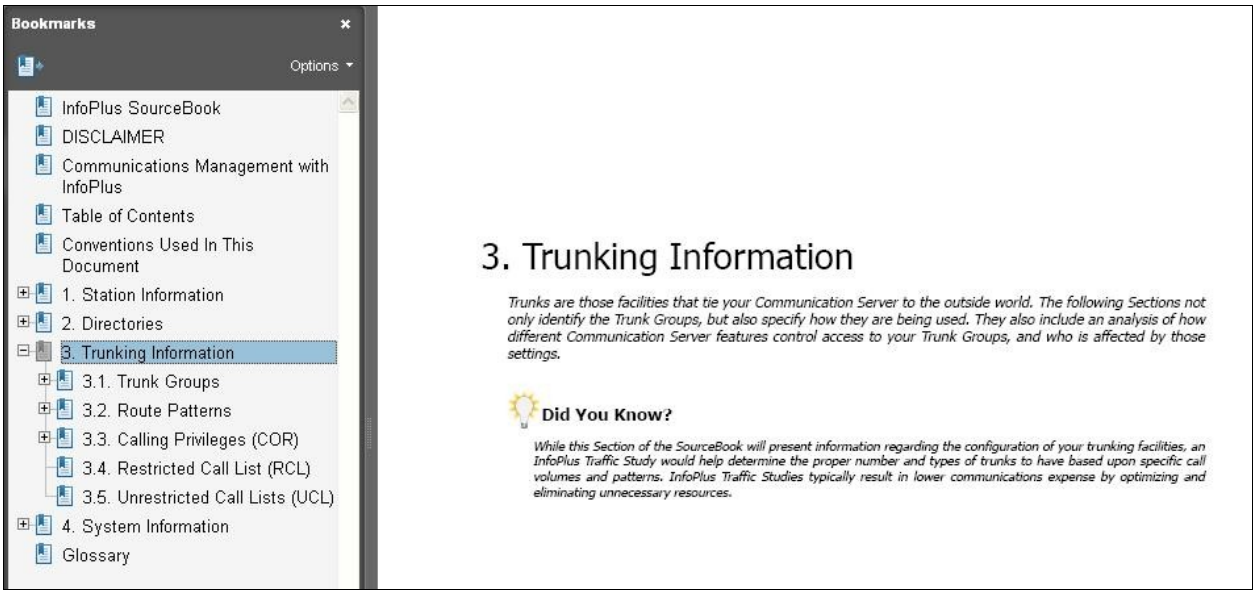
6.3. Review Directories

Select **Directories** from the left pane, to display the **Directories** section. This section provides five different directory listings – extension based, name based, site based, IP registration based, and tenant based.



6.4. Review Trunking Information

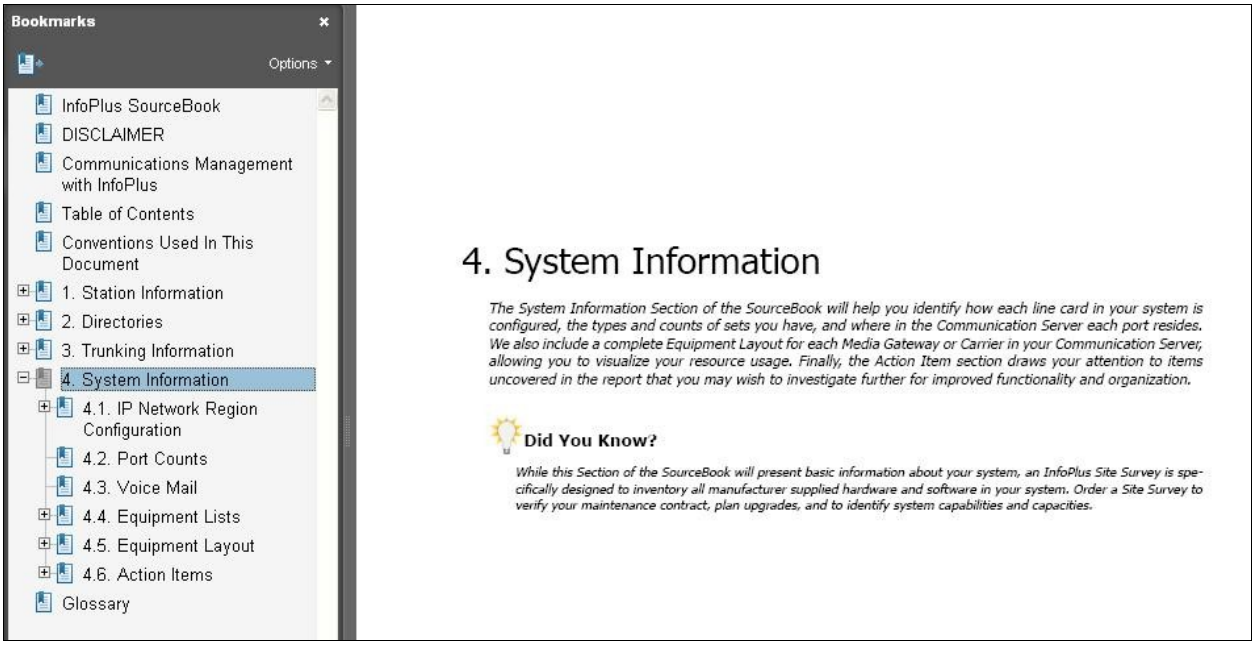
Select **Trunking Information** from the left pane, to display the **Trunking Information** section. This section provides details on the trunk groups, along with information on the associated route patterns, class of restrictions, restricted and unrestricted call lists.



6.5. **Review System Information**

Select **System Information** from the left pane, to display the **System Information** section. This section provides detailed IP network region configuration, port types and counts, voicemail ports, equipment lists, equipment layout, and list of recommended action items.

The **Action Items** sub-section includes potential anomalies found in the system programming, such as unused coverage paths, empty hunt groups, etc.



7. Verification Steps

This section provides tests that can be performed to verify proper configuration of Communication Manager and SourceBook.

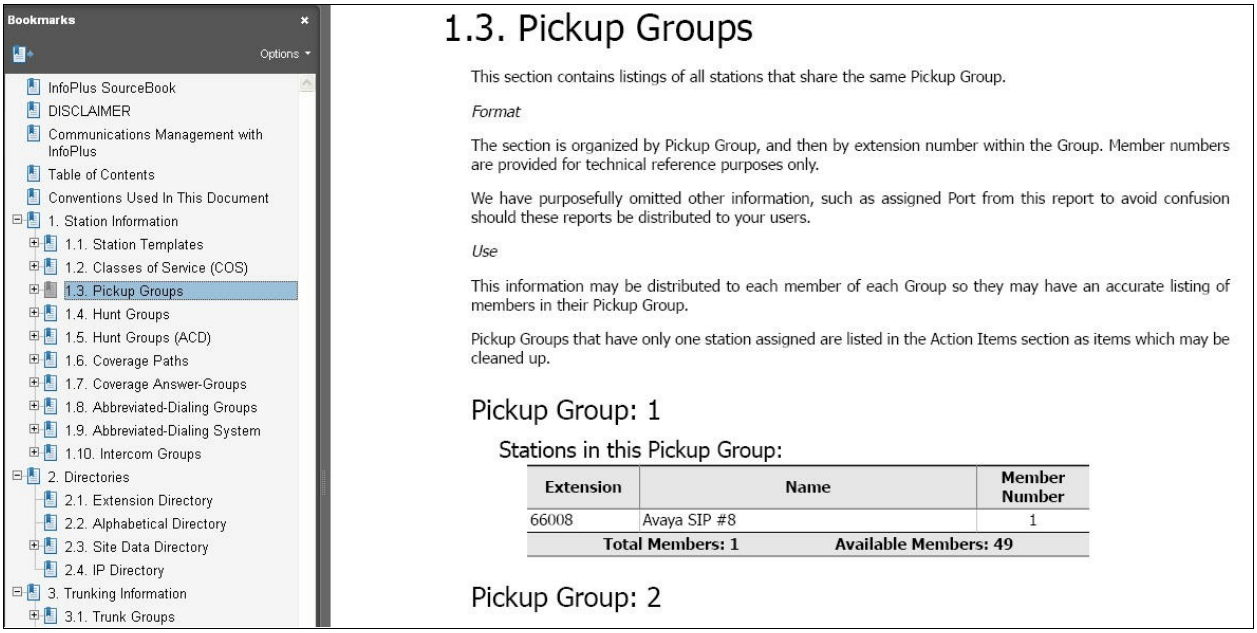
From the Communication Manager SAT, make some changes to data that will be polled by SourceBook, such as adding a pickup group with members shown below.

```
add pickup-group 1                                          Page   1 of   4
                              PICKUP GROUP

           Group Number: 1
             Group Name: Pickup Group 1
GROUP MEMBER ASSIGNMENTS

    Extension       Name
 1: 66008           Avaya SIP #8
 2:
 3
```

From the SourceBook report, select **Station Information > Pickup Groups** to display the pickup groups. Verify that the new group appears in the report with proper data, as shown below.



8. Conclusion

These Application Notes describe the configuration steps required for Bristol Capital SourceBook to successfully interoperate with Avaya Aura® Communication Manager 6.0.1 using the SAT interface. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

9. Additional References

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

1. *Administering Avaya Aura*™ *Communication Manager*, Document 03-300509, Issue 6.0, Release 6.0, June 2010, available at http://support.avaya.com.

2. *Avaya SourceBook Demo*, available at http://www.infoplusonline.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.