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Avaya Solution & Interoperability Test Lab

Application Notes for Noetica Synthesys Customer Interaction Management with Avaya Communication Manager and Avaya Application Enablement Services - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Noetica Synthesys Customer Interaction Management to successfully interoperate with Avaya Communication Manager and Avaya Application Enablement Services. The objective of the test was to evaluate interoperability of the above-mentioned products in a contact center, handling predictive outbound and inbound calling campaigns, as well as agent blending.

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

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1 Introduction

These Application Notes describe the configuration steps required for Noetica Synthesys Customer Interaction Management (CIM) to interoperate with Avaya Communication Manager and Avaya Application Enablement Services (AES). Noetica Synthesys is a multi-channel customer interaction management software framework providing the following features:

- Customer relationship management (CRM) and workflow functionality.
- Campaign and team management.
- Computer telephony integration (CTI).
- Predictive dialing and call blending.
- Reporting and automated contact import/export utility.

The integration with Avaya Communication Manager is achieved via the Avaya AES using a Telephony Server Application Programming Interface (TSAPI) CTI link for call control, device monitoring and adjunct routing. This CTI link terminates at the Synthesys CIM server which passes the CTI information to the agent PCs running the Synthesys Workstation application. Agents must log in manually to their phone before logging into Synthesys Workstation to allow correct monitoring of agent states. **Figure 1** shows the compliance test configuration.
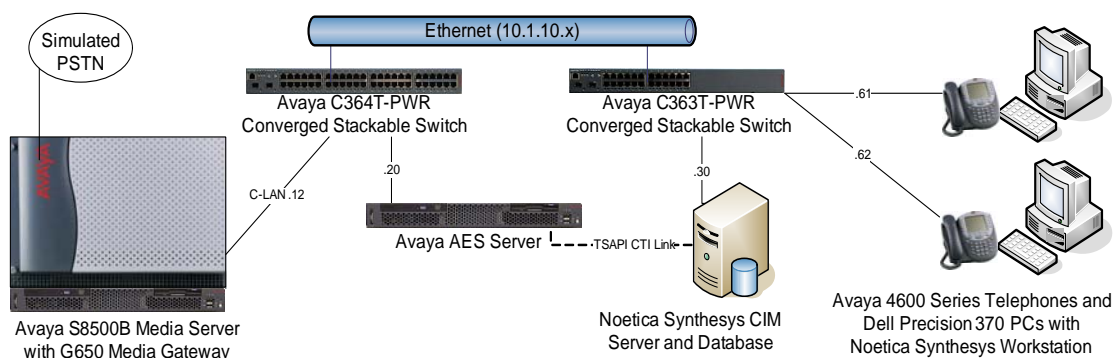

Figure 1: Noetica Synthesys CIM with Avaya Communication Manager

For inbound campaigns, Avaya Communication Manager routes the calls using call center features, Synthesys CIM monitors the agent phones allowing the agent to answer and control calls using the Synthesys Workstation application. Synthesys CIM routes outbound contacts to the Synthesys Workstation application using three outbound pacing modes as follows:

- **Preview Dial:** The contact is routed to the agent and has to be accepted before the application dials the contact's number.
- **Power Dial:** The application starts dialing the contacts' number as soon as the contact is routed to the agent.
- **Predictive Dial:** The application predicts future agent availability and makes outbound calls accordingly. Avaya Communication Manager routes the calls back into the application, which passes them to available agents.

2 Equipment and Software Validated

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

Equipment	Software
Avaya S8500B Media Server	Avaya Communication Manager 3.01.2.632.1
Avaya AES Server	AES 3.1.2
Avaya 4620SW IP Telephones (H.323)	2.4
Avaya 4625SW IP Telephones (H.323)	2.5
Noetica Synthesys CIM running on HP Compaq NX6125 PC	3.2.2007-01-23 Windows Server 2003, Service Pack 1
Noetica Synthesys Workstation running on Dell Precision 370 PCs	3.2.2007.117 Windows XP Professional, Service Pack 2

3 Configure Avaya Communication Manager

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

- Administer C-LAN for AES connectivity.
- Administer IP service for AES connectivity.
- Administer CTI-link for the TSAPI service.
- Administer call vector for adjunct routing.
- Administer feature access code for ARS.

3.1 Administer C-LAN for AES Connectivity

Use the "display system-parameters customer-options" command, and verify that the **ASAI Link Core Capabilities** customer option is set to "y" on **Page 3** as shown in **Figure 2**. If the **ASAI Link Core Capabilities** is not set to "y", then contact the Avaya sales team or business partner and request a new license file.

Also verify that the **ASAI Link Plus Capabilities** customer option is set to "y", for installations requiring predictive dialing.

```
display system-parameters customer-options                      Page   3 of  11
                             OPTIONAL FEATURES

    Abbreviated Dialing Enhanced List? y          Audible Message Waiting? n
        Access Security Gateway (ASG)? n              Authorization Codes? y
        Analog Trunk Incoming Call ID? n Backup Cluster Automatic Takeover? n
 A/D Grp/Sys List Dialing Start at 01? n                         CAS Branch? n
Answer Supervision by Call Classifier? n                           CAS Main? n
                                  ARS? y              Change COR by FAC? n
               ARS/AAR Partitioning? y  Computer Telephony Adjunct Links? y
         ARS/AAR Dialing without FAC? y  Cvg Of Calls Redirected Off-net? y
        ASAI Link Core Capabilities? y                        DCS (Basic)? y
        ASAI Link Plus Capabilities? y                   DCS Call Coverage? y
       Async. Transfer Mode (ATM) PNC? n                 DCS with Rerouting? y
   Async. Transfer Mode (ATM) Trunking? n
            ATM WAN Spare Processor? n    Digital Loss Plan Modification? n
                                 ATMS? n                           DS1 MSP? y
                 Attendant Vectoring? n        DS1 Echo Cancellation? n




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

Figure 2: System-Parameters Customer-Options Form

The C-LAN administration procedure will involve adding an IP node, an IP interface, and a data module.

First, add an entry for the C-LAN in the node-names form. Use the "change node-names ip" command, as shown in **Figure 3**. In this case, "clan1a_DC1" and "10.1.10.12" are entered as the **Name** and **IP Address** for the C-LAN that will be used for connectivity to the AES server. The actual node name and IP address may vary. Submit these changes.

```
change node-names ip
                              IP NODE NAMES
    Name              IP Address          Name              IP Address
S8500_Val1         10 .1  .10 .14
clan1a_DC1         10 .1  .10 .12
default            0  .0  .0  .0
medpro1a_DC1       10 .1  .10 .13
procr              10 .1  .10 .10
```

Figure 3: IP Node Names Form

Next, add the C-LAN to the system configuration using the "add ip-interface x" command, were x is an available slot number. Note that the actual slot number may vary. In this case, "01A10" is used as the slot number, as shown in **Figure 4** below. Enter the node name assigned from **Figure 3** above, and the **IP Address** field will then be populated automatically. Set the **Enable Ethernet Port** field to "y".

The values to be entered for the **Subnet Mask** and **Gateway Address** fields will be determined by the network administrator. Submit these changes.

```
add ip-interface 01a10                                 Page   1 of   1
                           IP INTERFACES


                Type: C-LAN
                Slot: 01A10
         Code/Suffix: TN799  D
           Node Name: clan1a_DC1
          IP Address: 10 .1  .10 .12
         Subnet Mask: 255.255.255.0                      Link: 1
     Gateway Address: 10 .1  .10 .1
  Enable Ethernet Port? y                  Allow H.323 Endpoints? y
       Network Region: 1                   Allow H.248 Gateways? y
                 VLAN: n                    Gatekeeper Priority: 5

 Target socket load and Warning level: 400
       Receive Buffer TCP Window Size: 8320
                           ETHERNET OPTIONS
                Auto? y
```

Figure 4: IP Interface Form

Next, add a new data module using the "add data-module x" command, where "x" is an available extension. Enter the following values as shown in **Figure 5**.

- **Name:** A descriptive name.
- **Type:** "ethernet"
- **Port:** Same slot number from **Figure 4** and port "17".
- **Link:** A link number not previously assigned on this switch.

```
add data-module 19112                                        Page   1 of   1
                              DATA MODULE

  Data Extension: 19112            Name: clan1a_DC1 datalink 12
            Type: ethernet
            Port: 01A1017
            Link: 12




Network uses 1's for Broadcast Addresses? Y
```

Figure 5: Data Module Form

3.2 Administer IP Service for AES Connectivity

Administer the IP Service for Avaya AES with the "change ip-services" command. Add an entry with the following values for fields on **Page 1** as shown in **Figure 6.**

- **Service Type:** "AESVCS"
- **Enabled:** "y"
- **Local Node:** The same node name assigned in **Figure 3**.
- **Local Port:** Leave at the default value of "8765".

```
change ip-services                                           Page   1 of   4

                              IP SERVICES
 Service      Enabled     Local       Local       Remote      Remote
  Type                    Node        Port        Node        Port
SAT           y           clan1a_DC1  5023        any         0
AESVCS        y           clan1a_DC1  8765
CDR1                      clan1a_DC1  0           CDR_Server  9000
```

Figure 6: IP Services Form Page 1

Go to **Page 4** of the IP Services form, and enter these values as shown in **Figure 7**.

- **AE Services Server:** The hostname of the AES. In this case, "AEServer".
- **Password:** Same password to be administered on the AES.
- **Enabled:** "y"

Note that the name and password entered for the **AE Services Server** and **Password** fields must match the name and password on the AES. The administered name can be obtained from the AES server by typing "uname –n" at the Linux command prompt, and the password is set on the AES server under **Administration > Switch Connections > Edit Connection > Set Password**.

```
change ip-services                                          Page   4 of   4
                        AE Services Administration

   Server ID    AE Services        Password        Enabled    Status
                  Server
      1:        AEServer           *******           y
```

Figure 7: IP-Services Form Page 3

3.3 Administer CTI Link for the TSAPI Service

Add a CTI link and set the values as shown in **Figure 8** below using the "add cti-link x" command, where "x" is an available CTI link number. Enter an available extension number in the **Extension** field. Note that the CTI link number and extension number may vary. Enter "ADJ-IP" in the **Type** field, and a descriptive name in the **Name** field. The rest of the values may be left at the defaults. Submit these changes.

```
add cti-link 3                                              Page   1 of   2
                               CTI LINK
 CTI Link: 3
Extension: 13300
     Type: ADJ-IP
                                                            COR: 1
     Name: TSAPI CTI Link 3
```

Figure 8: CTI-Link Form

3.4 Administer Call Vector for Adjunct Routing

This configuration step is needed for configurations where outbound calls are placed in predictive mode. Use the "change vector x" command, where "x" is an available vector number, modify a vector to send adjunct route requests to the CTI link defined previously in **Figure 8**. Note that the vector in **Figure 9** below is a sample vector only and can be modified as needed for different call treatments.

```
change vector 50                                           Page   1 of   3
                             CALL VECTOR

   Number: 50                 Name: Noetica Adj Rte
                                        Meet-me Conf? n          Lock? n
     Basic? y   EAS? y   G3V4 Enhanced? n   ANI/II-Digits? n   ASAI Routing? y
 Prompting? y   LAI? n  G3V4 Adv Route? n   CINFO? n   BSR? n   Holidays? n
 Variables? n   3.0 Enhanced? n
01 adjunct       routing link 3
02 wait-time     60   secs hearing ringback
03 disconnect    after announcement none
04 stop
```

Figure 9: Vector for Adjunct Routing

Use the "add vdn x" command, where "x" is an available Vector Directory Number (VDN) number. Add a VDN as shown in **Figure 10** below. Enter a descriptive name in the **Name** field and enter the vector number assigned in **Figure 9** in the **Vector Number** field, the other fields may be left at defaults.

```
add vdn 17050                                              Page   1 of   2
                        VECTOR DIRECTORY NUMBER

                          Extension: 17050
                              Name*: Noetica Adj Rte
                      Vector Number: 50

                  Meet-me Conferencing? n
                   Allow VDN Override? n
                                COR: 1
                                TN*: 1
                           Measured: none




                           1st Skill*:
                           2nd Skill*:
                           3rd Skill*:



* Follows VDN Override Rules
```

Figure 10: VDN Form

3.5 Administer Feature Access Code for ARS

Use the "change feature-access-codes" command, and enter a value in the **Automatic Route Selection (ARS) – Access Code 1** field on **Page 1**, as shown in **Figure 11**. Note that this value may vary. In this case "9" is used for the ARS feature access code.

```
change feature-access-codes                                 Page   1 of   5
                           FEATURE ACCESS CODE (FAC)
         Abbreviated Dialing List1 Access Code: *01
         Abbreviated Dialing List2 Access Code: *02
         Abbreviated Dialing List3 Access Code: *03
Abbreviated Dial - Prgm Group List Access Code: *04
                  Announcement Access Code: *05
                  Answer Back Access Code: *06
                    Attendant Access Code:
     Auto Alternate Routing (AAR) Access Code: 888
    Auto Route Selection (ARS) - Access Code 1: 9       Access Code 2:
              Automatic Callback Activation: *10      Deactivation: #10
Call Forwarding Activation Busy/DA: *11    All: *12   Deactivation: #12
                     Call Park Access Code: *13
                   Call Pickup Access Code: *14
CAS Remote Hold/Answer Hold-Unhold Access Code: *15
            CDR Account Code Access Code: *16
                  Change COR Access Code:
            Change Coverage Access Code: *18
         Contact Closure   Open Code: *19       Close Code: #19
         Contact Closure  Pulse Code: *20
```

Figure 11: Feature Access Codes form
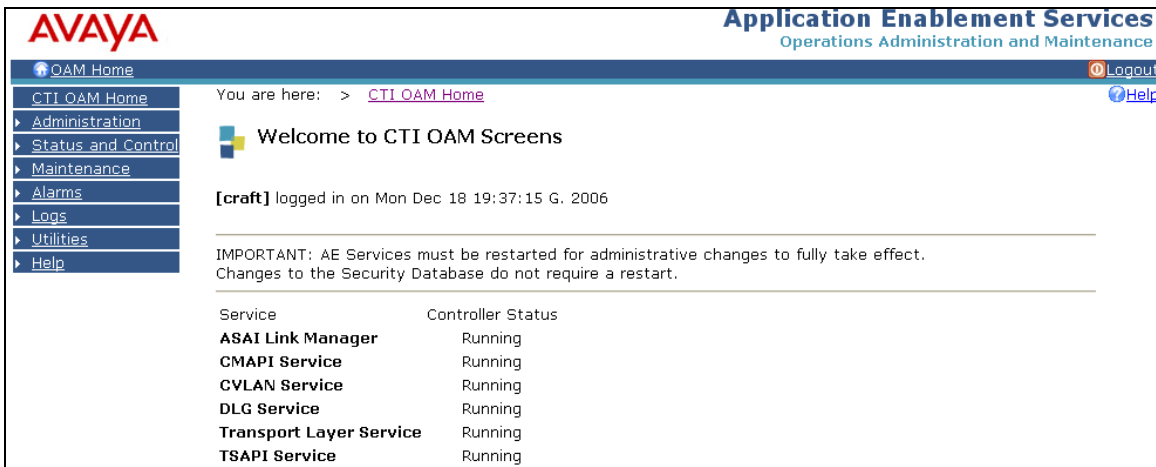
4 Configure Avaya Application Enablement Services

This section provides the procedures for configuring Avaya Application Enablement Services. The procedures include the following areas:

- Administer local IP.
- Administer switch connections.
- Administer TSAPI link.
- Add CTI User.

4.1 Administer Local IP

Prior to any administration, verify that the TSAPI service has been licensed properly. Log into the AES OAM web interface and select **CTI OAM Admin** (not shown) to bring up the **CTI OAM Home** menu. Verify the TSAPI service is licensed as shown in **Figure 12** below. If the TSAPI service is not licensed, then contact the Avaya sales team or business partner for the correct license file.

Figure 12: OAM Home License

From the **CTI OAM Home** menu, select **Administration > Local IP**, as shown in **Figure 13**. In the **Client Connectivity** field, select the local IP address that the Synthesys system will use to connect to the AES server. In the **Switch Connectivity** field, select the local IP address the AES will use to connect to Avaya Communication Manager. The **Media Connectivity** field is not used in this configuration and can be left as the default. Click on **Apply Changes**.

Figure 13: Local IP

4.2 Administer Switch Connections

From the **CTI OAM Home** menu, select **Administration > Switch Connections**, as shown in **Figure 14**. Enter a descriptive name for the switch connection and click on **Add Connection**. In this case, "S8500aDC1" is used, and the actual switch connection name may vary.

Figure 14: Switch Connections

Next, the **Set Password** screen will be displayed by OAM, as shown in **Figure 15**. Enter the same password that was administered on Avaya Communication Manager on the IP Services form in **Figure 7**. Re-enter the same password in the **Confirm Switch Password** field. Note that the **SSL** field can be left at the default. Click on **Apply**.

Figure 15: Set Password

From the **Switch Connections** screen, shown in **Figure 16,** select the newly added switch connection name and click on **Edit CLAN IPs**.

Figure 16: Switch Connections

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On the **Edit CLAN IPs** screen, enter the host name or IP address of the C-LAN used for AES connectivity as shown in **Figure 17**. In this case, "10.1.10.12" is used, which corresponds to the C-LAN administered on Avaya Communication Manager in **Figure 3**. Click on **Add Name or IP**.

Figure 17: Edit CLAN IPs

4.3 Administer TSAPI Link

To administer a TSAPI link on AES, select **Administration > CTI Link Admin > TSAPI Links** from the **CTI OAM Home** menu as shown in **Figure 18** below. Click on **Add Link**.

Figure 18: TSAPI Links

In the **Add/Edit TSAPI Links** screen, enter the following values as shown in **Figure 19**.

- **Switch Connection:** Administered switch connection configured in **Figure 14.**
- **Switch CTI Link Number:** Corresponding CTI link number configured in **Figure 8.**

Note that the actual values for both fields may vary. Click on **Apply Changes**.

Figure 19: Add/Edit TSAPI Links

4.4 Add CTI User

A username and password is required for the Synthesys system to communicate with the AES. This is setup via the User Management main menu which is accessed by clicking on **OAM Home** in the top left corner of any AES screen, then by clicking on **User Management** (not shown). From the **User Management** menu select **Add User** and configure the following fields, as shown in **Figure 20**.

- **User Id:** Enter a login name to be used by Synthesys CIM to access the AES.
- **Common Name:** A descriptive name.
- **Surname:** A descriptive name.
- **User Password:** Enter a password to be used by Synthesys CIM to access the AES.
- **Confirm Password:** Re-enter the password.
- **Avaya Role:** Use the default value of "None".
- **CT User:** Select "Yes" from the drop down list.

Figure 20: Add CTI User

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5 Configure Noetica Synthesys CIM

This section provides the procedures for configuring Noetica Synthesys CIM. The procedures include the following areas:

- Configure Synthesys server
- Configure call flows and campaigns
- Configure agents and teams

5.1 Configuring Synthesys Server

Open the "synthesys.inf" file, which is found in \Synthesys\etc from the directory that Synthesys CIM was installed in, in this case C:\Synthesys\etc, and configure the following settings:

Scroll to the **System Services** section and add the line "TSAPIService.exe, Noetica TSAPI Service, TSAPI Interface for Avaya CM, 30", as in **Figure 21.**

Figure 21: Synthesys.inf File – System Services

Scroll to the **Interfaces** section and add the line "INTERFACE1=CTIClient.exe, CTIClient, KILL", as in **Figure 22**.
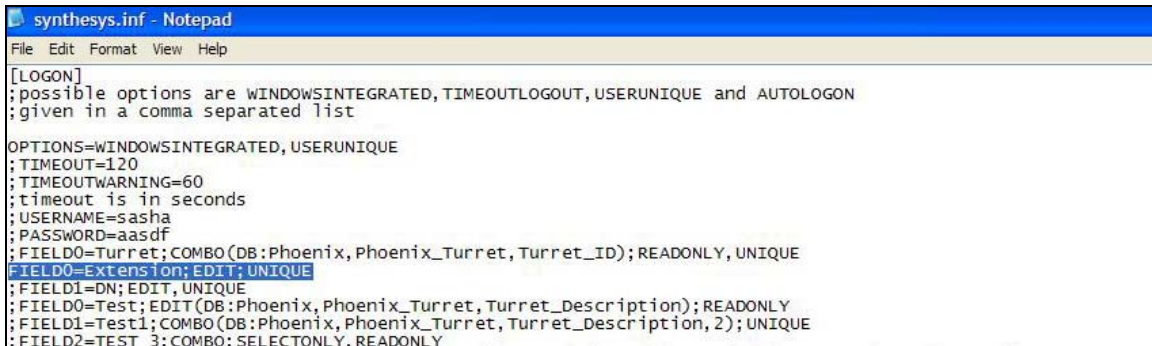

Figure 22: Synthesys.inf File – Interfaces

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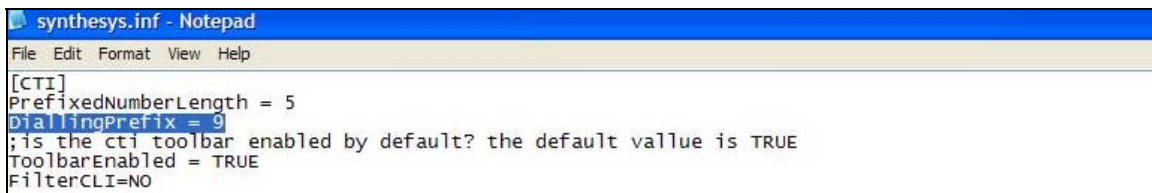16 of 33
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Scroll to the **LOGON** section and edit the **FIELD0** line to "FIELD0=Extension;EDIT;
UNIQUE", as shown in **Figure 23**. This adds a field to the agent login dialog box, allowing the
agent to specify their extension.

Figure 23: Synthesys.inf File – LOGON

Scroll to the **CTI** section and edit the **DiallingPrefix** line to include the Avaya Communication
Manager ARS feature access code configured in **Figure 11.** An example is shown in **Figure 24**.

Figure 24: Synthesys.inf File – CTI

Once configuration is completed, save and close the file.

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Next, maximize the Synthesys Control Program, which opens when the server is booted. Right-click on the **Noetica TSAPI Service** line and select **Start**. This opens the **TSAPI Service Login** dialog box. Select the appropriate Tlink from the **TSAPI Service** drop down list, this will be the Tlink that has the switch connection name from **Figure 14** between the first and second pound signs and the hostname of the AES Server from **Figure 7** after the third pound sign. Enter the login details created in **Figure 20,** check the **Enable PD** check box and enter the VDN created in **Figure 10** in the **VDN** box. **Figure 25** shows a sample **TSAPI Service Login** dialog box.
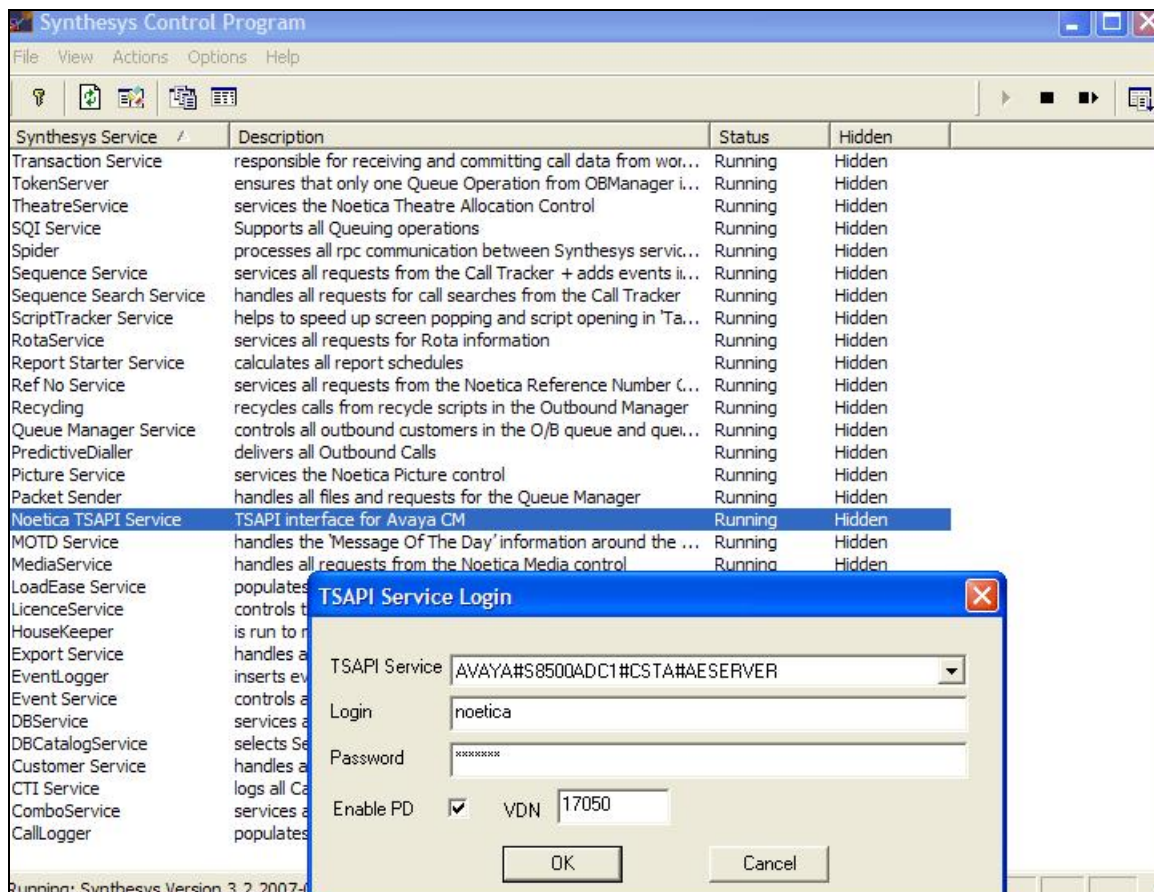
Figure 25: Configuring the TSAPI Service

5.2 Configure Call Flows and Campaigns

Open the Workstation application by clicking on the desktop shortcut and log in using an administrator level login. Open the Callflow Editor application by clicking on **Callflow Editor**, as shown in **Figure 26**.

Figure 26: Workstation Main Menu

In the **Select a Callflow** dialog box, click on the **New Callflow** button as shown in **Figure 27**.

Figure 27: Select a Callflow

In the **New Callflow** dialog box, click on the **New Account** button (not shown). In the **New Account** dialog box, enter a descriptive name in the **Account Name** field and a descriptive prefix in the **Prefix** field. The rest of the fields can be left at defaults. Once the configuration is completed, click on **OK,** as shown in **Figure 28**.
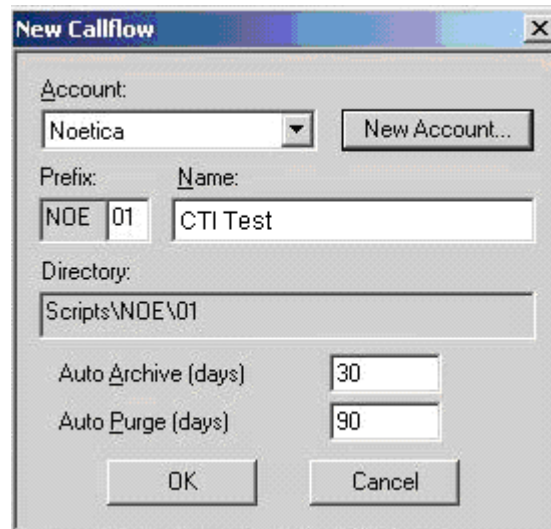
Figure 28: New Account

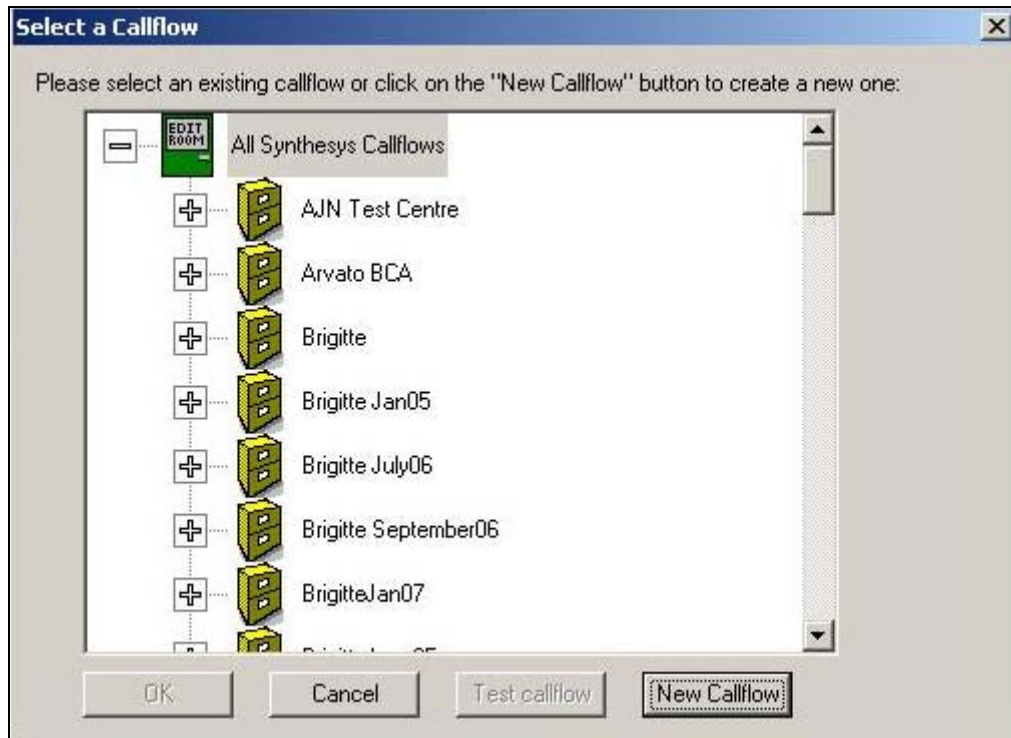In the **New Callflow** dialog box, select the account name that was just created in **Figure 28** from the **Account** drop down box, and enter a descriptive name for the call flow in the **Name** field. Once the configuration is completed, click on **OK,** as shown in **Figure 29**.

Figure 29: New Callflow

The call flow will then open for editing. The call flow can be left at the defaults or be configured for different treatments.

Only the outbound campaigns are configured using Synthesys as the inbound campaigns are routed to agents using the Avaya Communication Manager call center features. Campaigns are configured through the Outbound Manager application accessed from the Workstation main menu (see **Figure 26**).

In the left pane of Outbound Manager, expand the account created in **Figure 28**. Right-click on the call flow created in **Figure 29**. Click on **Add Outbound Campaign** for preview or power dialing, or **Add Predictive Outbound Campaign** for predictive dialing, as shown in **Figure 30**.
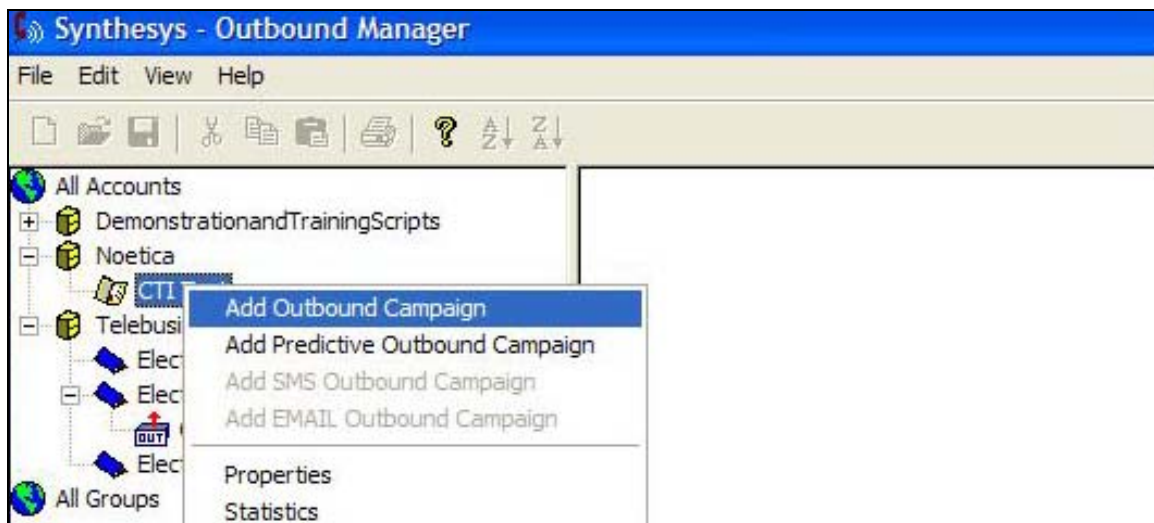
Figure 30: Outbound Manager - Adding the Campaign

In the **Outbound Campaign Properties** dialog box, enter the campaign name in the **Name** field and click on the **Active Times** button. In the **Active Times** dialog box, click on the **Set Office Hours** button then click **OK.** Click **OK** in the **Outbound Campaign Properties** dialog box. **Figure 31** shows this process.
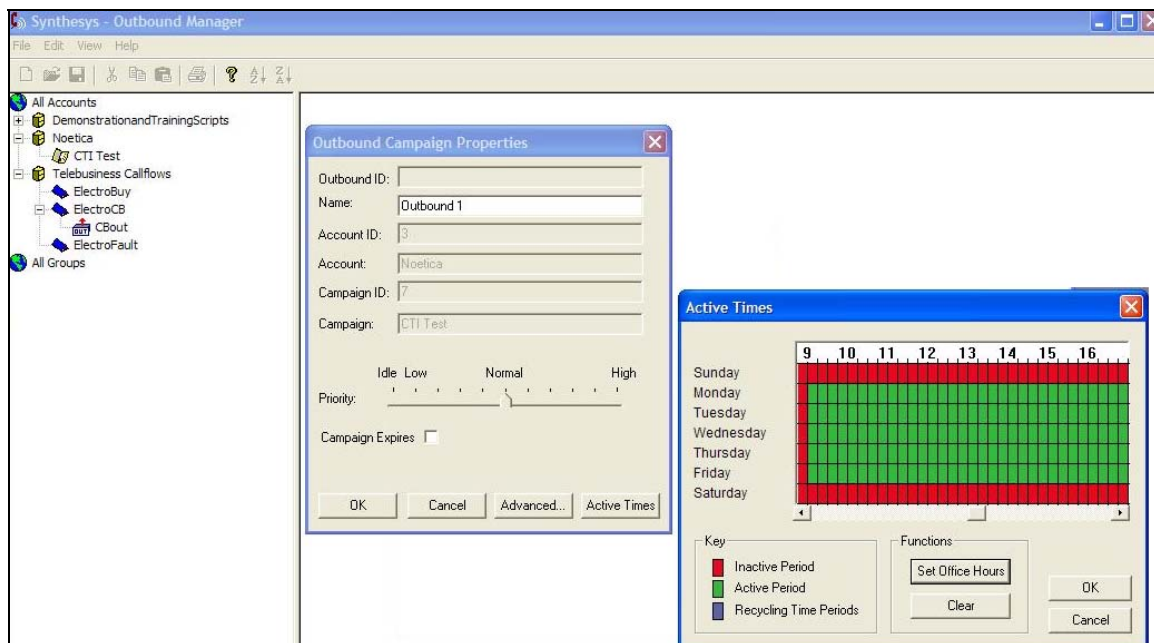
Figure 31: Outbound Manager - Configuring Campaign Properties

5.3 Configure Agents and Teams

Agents are configured through the Synthesys Personnel application accessed from the Workstation main menu (see **Figure 26**). Once the Synthesys Personnel application is open, go to the left pane and expand **Users**. Click the **New Person** button in the task bar, as shown in **Figure 32**.
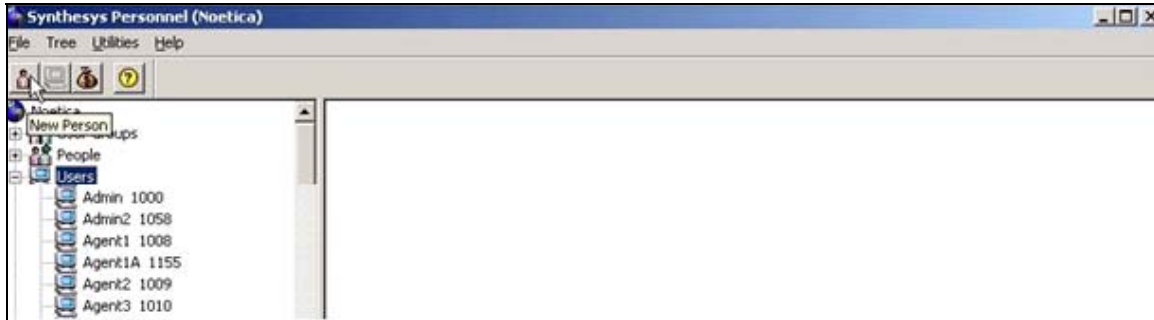
Figure 32: Synthesys Personnel – Add New Person

In the **New Person** dialog box enter the appropriate agent details and select **OK** as shown in **Figure 33**.

Figure 33: Synthesys Personnel – New Person

In the **New User** dialog box enter the agent login name in the **Name** field and password in the **Password** field, the **ID** field can be left at the default. In the drop down lists, ensure that **Agent** is selected under **Group** and that **Global** is selected under **Team**. Sample data for these fields is shown in **Figure 34**.
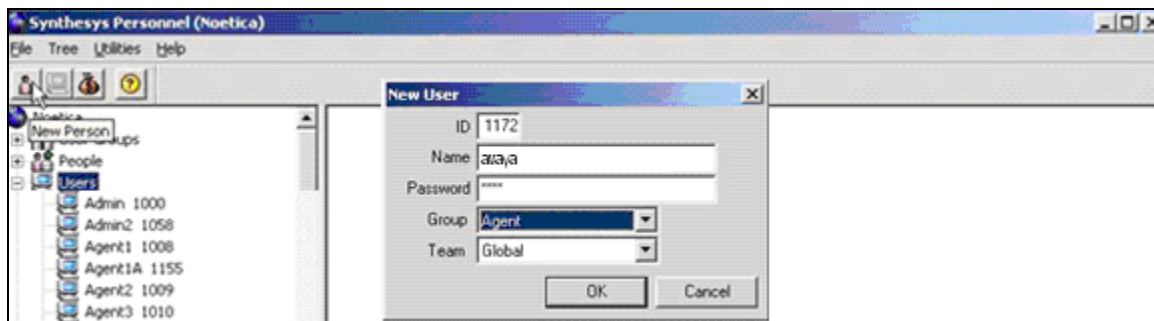
Figure 34: Synthesys Personnel – New User

Please note that the screenshots in **Figures 32**, **33** and **34** were taken from a different installation of Synthesys CIM server to the one used for the compliance testing.

Teams are configured through the Team Manager application accessed from the Workstation main menu (see **Figure 26**). Once the Team Manager application is open, go to the left pane and right-click on **<Global>**. Select **New Team,** as shown in **Figure 35**.
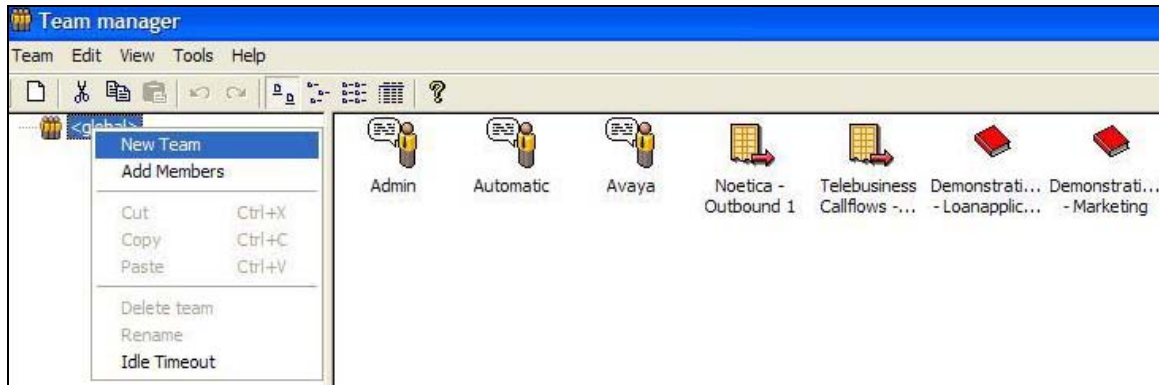
Figure 35: Team Manager – New Team

In the **New Team** dialog box, enter a name for the team in the **Name** field and a description in the **Description** field. Click **OK**, as shown in **Figure 36**.
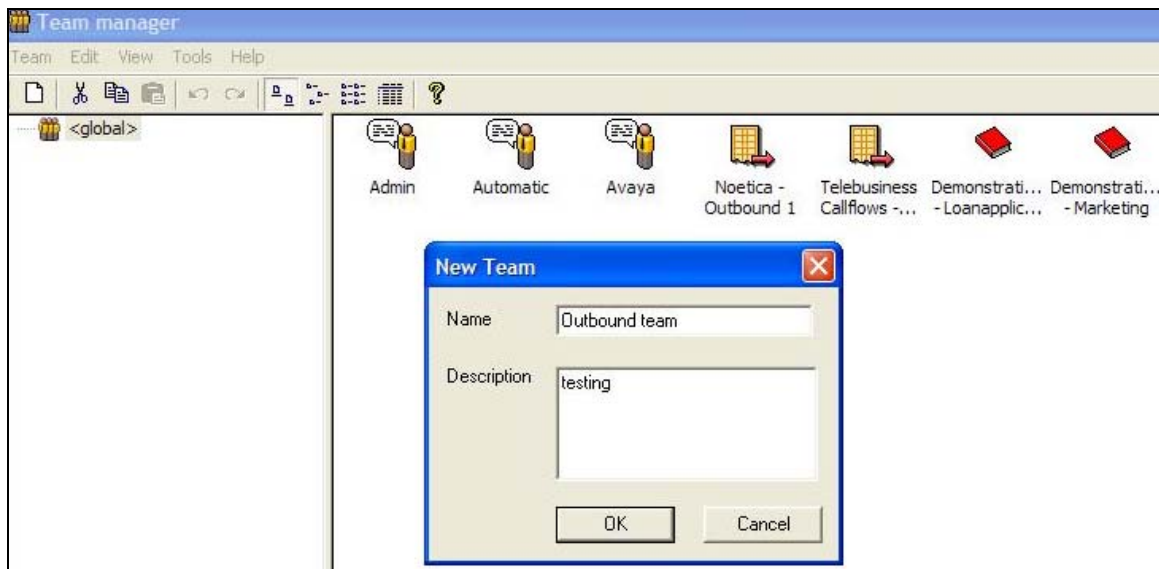
Figure 36: Team Manager – Configure Team

Next, click on **<Global>** from the left pane, which contains all administered agents, campaigns and call flows. Hold down the **Ctrl** key, and click on the campaign and call flow created in the previous sections, and also on the agents required for the campaign. Click on the **Edit** menu and select **Copy**. Now click on the team that was just created. Click on the **Edit** menu and select **Paste** to paste the agents, campaign and call flow into the newly created team, see **Figure 37**.
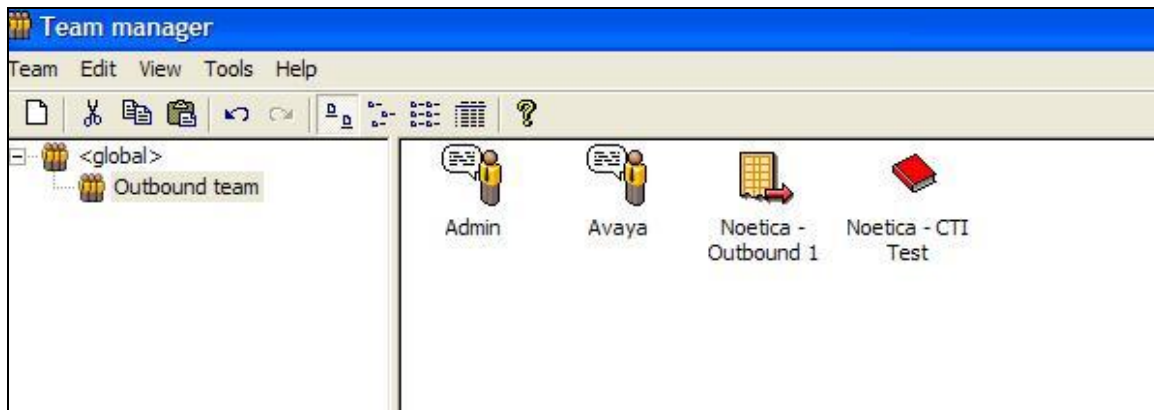
Figure 37: Team Manager – Paste Items into a Team

6 Configure Noetica Synthesys Workstation

So far the agents have not had extensions configured for them. The agent must enter the extension when they log in. To do this, log in manually to the telephone, then open the Workstation application. In the **Synthesys Workstation Logon** dialog box enter the user name and password from **Figure 34**. Enter the agent's physical extension number in the **Extension** field. It is assumed that the extension has been previously created in Avaya Communication Manager. Once the agent login details have been entered, click on the **Logon** button. **Figure 38** shows an example of the **Synthesys Workstation Logon** dialog box.
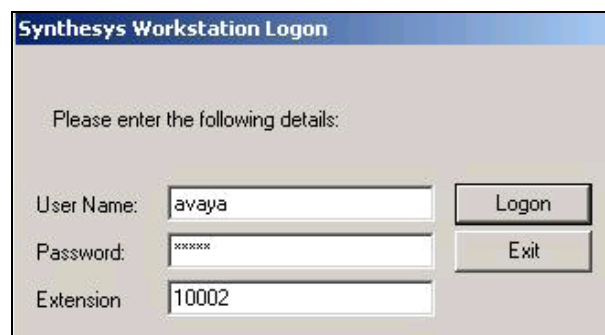
Figure 38: Synthesys Workstation Logon

Once logged into the Workstation, select **Take Calls** from the main menu (see **Figure 26**) to open the agent interface and log into the campaign.

7 Interoperability Compliance Testing

The Interoperability compliance test included both feature and serviceability testing.

The feature testing focused on verifying Noetica Synthesys CIM's handling of TSAPI messages to request and respond to Avaya Communication Manager features. The features tested included using the Workstation application for initiating, receiving and controlling calls and handling inbound, outbound and blended campaigns. Test cases were performed manually by making calls into the inbound VDN and loading call lists for the outbound campaigns. The Synthesys Workstation application was operated manually to test the application's handling of the contacts

The serviceability testing focused on verifying Noetica Synthesys CIM's ability to recover from an outage condition, such as busying out the CTI link and disconnecting the Ethernet cable for the CTI link.

7.1 General Test Approach

All feature and serviceability test cases were performed manually. The verification included checking the states at the telephone sets, and viewing TSAPI message traces on Noetica Synthesys CIM.

7.2 Test Results

All feature test cases passed successfully. These tests included:

- Initiate, receive, hold and transfer of both internal and external calls.
- Using the agent application to handle inbound, outbound and blended campaigns.
- Handling of the different outbound pacing modes (see **Section 1** for details).

All serviceability test cases were completed, with two minor observations.

The first observation is when the CTI link is disconnected at Avaya Communication Manager or Avaya AES, a pop-up alert is sent from the Synthesys CIM server to the Synthesys Workstation application telling the agent to log out and back in to Synthesys Workstation manually to allow the Synthesys CIM server to re-initialize the TSAPI monitoring of the physical station.

The second observation is when an agent remains on a call for the duration of a CTI link loss at the Synthesys server, the Synthesys Workstation application will lose CTI control of the call at the telephone set. There is no error message sent in this scenario so agents will only know this has happened when they are unable to hang-up the call via the Synthesys Workstation application. The agent will need to hang-up the call manually via the telephone set and log out of and back into Synthesys Workstation manually to allow the Synthesys CIM server to re-initialize the TSAPI monitoring of the physical station.

8 Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya Communication Manager, Avaya Application Enablement Services, and Noetica Synthesys CIM.

8.1 Verify Avaya Communication Manager

Verify the status of the administered CTI link by using the "status aesvcs cti-link" command as shown in **Figure 39**. The **Service State** should show "established".

```
status aesvcs cti-link

                      AE SERVICES CTI LINK STATUS

CTI     Version  Mnt   AE Services     Service       Msgs     Msgs
Link             Busy  Server          State         Sent     Rcvd

1       4        no    AEServer        established    15       15
2                no                    down           0        0
3       4        no    AEServer        established    216      210
```

Figure 39: Status Aesvcs CTI-link

8.2 Verify Avaya Application Enablement Services

From the **AES OAM Admin** menu, verify the status of the administered CTI link by selecting **Status and Control > Switch Conn Summary**, as shown in **Figure 40**. The **Conn State** should show "Talking".

Figure 40: Switch Connections Summary

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8.3 Verify Noetica Synthesys

Verify the status of the CTI connection by opening the C:\Sythesys\Server\TSAPI.log file. On successful connection, this file will include the line starting with "Connected to service" followed by the TLink, as shown in **Figure 41**.

```
2007-01-22 11:00:04.859 : Initialising CTSAPIPCI
2007-01-22 11:00:11.218 : Initialising CTIServer
2007-01-22 11:00:11.406 : Getting switch login info
2007-01-22 11:04:15.937 : TsapiInitialize
2007-01-22 11:04:15.937 : Connecting to TServer ...
2007-01-22 11:04:16.093 : Initialize done
2007-01-22 11:04:16.171 : acsGetEventPoll returned 0 with 0 events.
2007-01-22 11:04:16.171 : Private Data Received from acsGetEventPoll (ECS, 3)
2007-01-22 11:04:16.171 : TSAPI Event class: 2 - ACSCONFIRMATION. Event type: 2.
2007-01-22 11:04:16.171 : Connected to service AVAYA#S8500ADC1#CSTA#AESERVER API Version ST2 (2). Private Data version: '6'
2007-01-22 11:04:16.171 : Route registration request for VDN 17050.
2007-01-22 11:04:16.187 : acsGetEventPoll returned 0 with 0 events.
2007-01-22 11:04:16.187 : TSAPI Event class: 5 - CSTACONFIRMATION. Event type: 79.
2007-01-22 11:04:16.187 : Route registration confirmation for VDN 17050. Route request ID: 1
```

Figure 41: Synthesys TSAPI log

Verify the CTI link through the agent PCs by routing inbound and outbound contacts and ensuring the agent can answer the call and receive the correct screen pop.

Figure 42 shows the Workstation application receiving an inbound contact (the customer details are popped up and **Inbound Call** is displayed in the status bar).
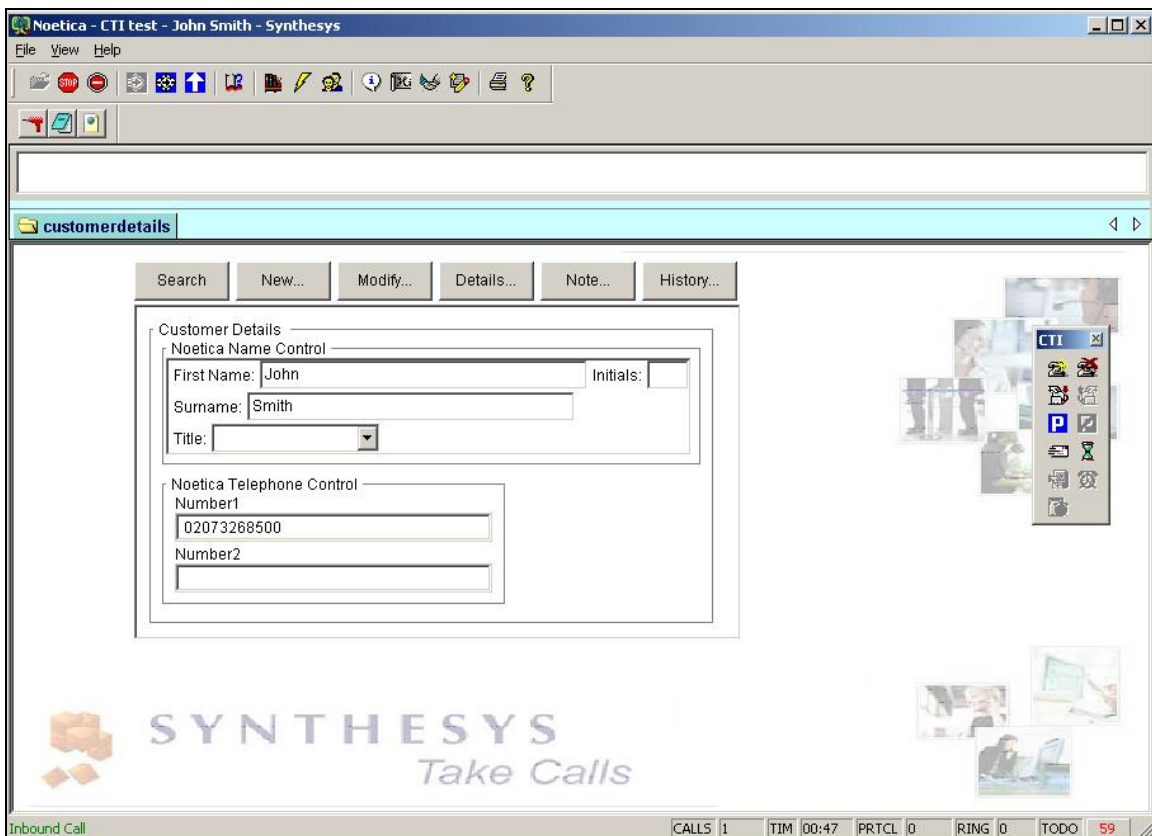

Figure 42: Inbound Contact

Figure 43 shows the Workstation application receiving an outbound contact (the customer information is popped up and **CTI: Dialing** is shown on the status bar).
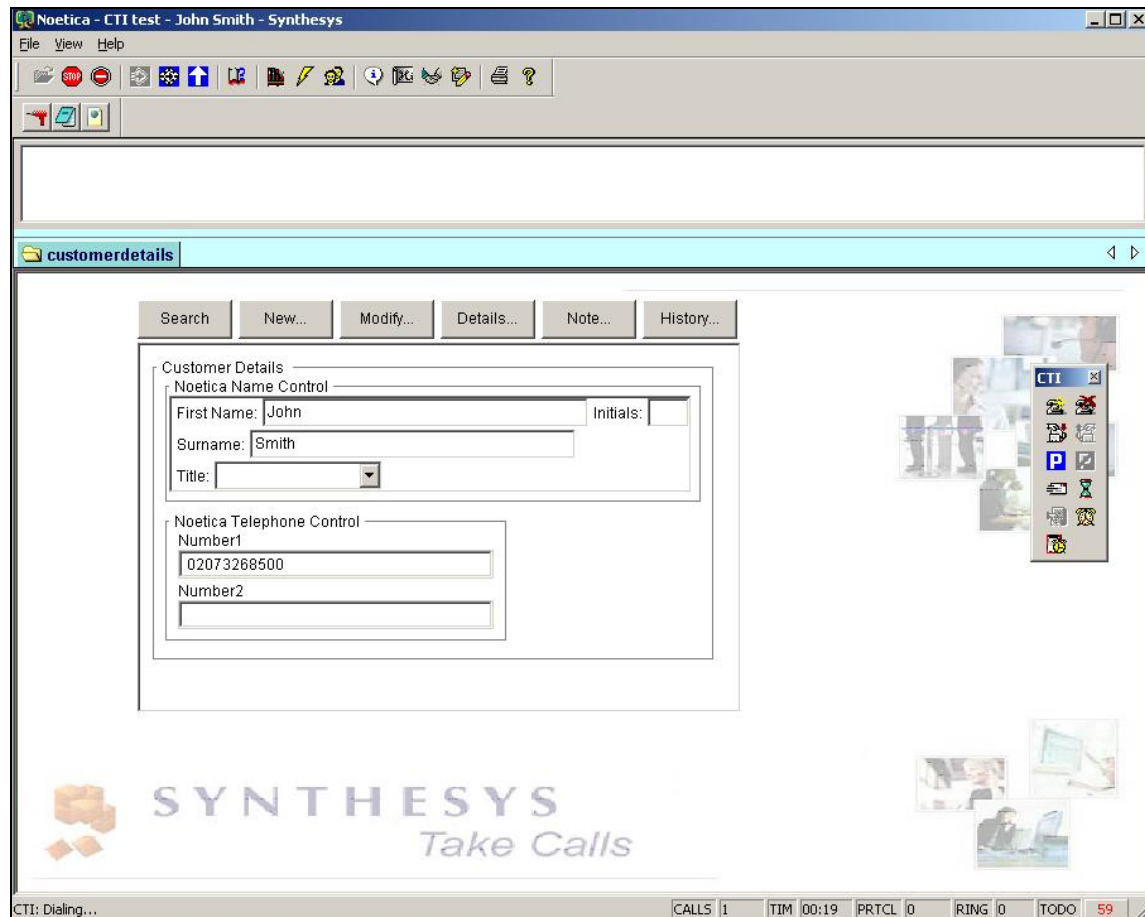

Figure 43: Outbound Contact

9 Support

For technical support on Synthesys, contact the Noetica Helpdesk on +44 (0) 207 326 8508. Technical support emails can be sent to helpdesk@noetica.com.

10 Conclusion

These Application Notes describe the configuration steps required for the successful interoperability of Noetica Synthesys with Avaya Communication Manager and Avaya AES. All application functionality and serviceability test cases were completed. Two minor observations were made in the failure and recovery testing, see section 6.2 for details.

11 Additional References

This section references the product documentations that are relevant to these Application Notes.

- *Avaya Application Enablement Services 3.1.2 Administration and Maintenance Guide*, Document ID 02-300357, Issue 4, September 2006, available at: http://support.avaya.com.

- *Documentation for Avaya Communication Manager(3.1.2), Media Gateways and Servers,* Document ID 03-300151, Issue 5, February 2006, available at: http://support.avaya.com.

- *Noetica Synthesys CIM Online Manual and Training Material*, available at: http://www.noetica.com/access/train/train_main.htm.

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