Avaya Solution & Interoperability Test Lab

Application Notes for Convergys Voice Portal with Avaya Communication Control Toolkit Release 7.0 using Lineside T1 Interface – Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Convergys Voice Portal with Avaya (formerly Nortel) Communication Control Toolkit (CCT) 7.0 using Line-Side T1 Interface.

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.

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

1 of 48
Convergys_CCT7

1. Introduction

The purpose of the compliance test was to verify Computer Telephone Integration (CTI) testing with the Convergys Intelligent Voice Portal and the Avaya NES Communication Control Toolkit CTI server. The test used Lineside T1 24-channel interface card, which is designed for voice mail and interactive voice response systems, channel banks containing FXS cards etc; to connect the CS 1000 switch to the Convergys server.

2. General Test Approach and Test Results

A test plan developed by Convergys was used. All test cases in the test plan and features listed in **Section 2.1** were exercised.

2.1. Interoperability Compliance Testing

The interoperability compliance test was to verify Convergys Voice Portal integration with Communication Control Toolkit CTI server to control IVR agent phones with features listed below.

- Login and logout analog agent phone.
- Detect ringing at its ports and can answer and transfer calls.
- Get call information.
- Blind transfer with adding user data
- Consultative transfer with adding user data.
- Serviceability

2.2. Test Results

The compliance testing was successful and all objectives were verified and met. All test cases were executed and they all passed.

Observation: The combination code "LILO"+ "PosID"+"#" is only applicable for real analog agent phone, since Convergys IVR uses T1 Lineside card as simulated analog agent, it can use any string to log T1 line agent in.

2.3. Support

Technical support for Convergys Intelligent Voice Portal product can be obtained through the following:
- Phone: +1 (800) 284-9900
- Website: www.convergys.com

3. Reference Configuration

Figure 1 illustrates the network configuration used during the compliance testing between the Avaya Communication Control Toolkit Server and Convergys Voice Portal system.
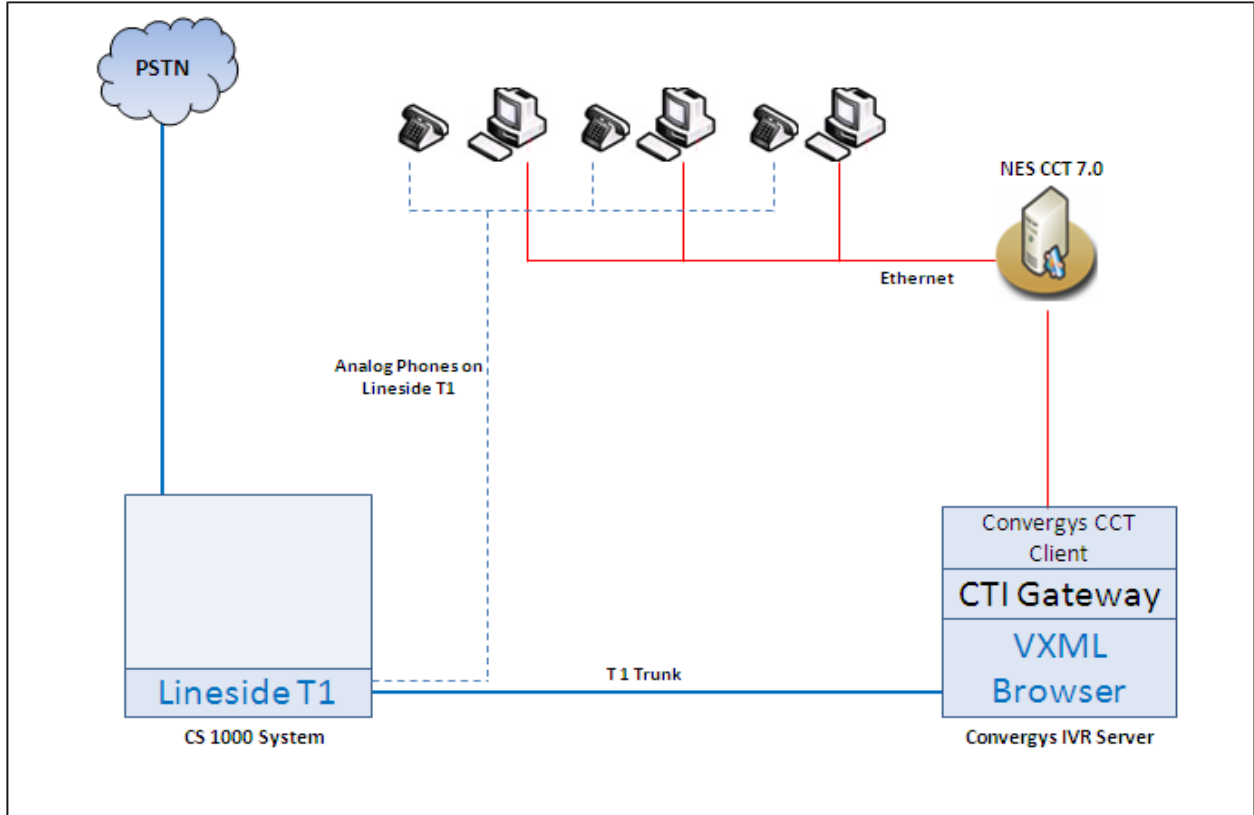

Figure 1: Network Configuration

4. Equipment and Software Validated

The following equipment and software were used during the lab testing:

System	Software Version
Avaya Communication Server 1000E	Call Server (CPPM): 7.50 Q Signaling Server (CPPM): 7.50 Q
Avaya NES Communication Control Toolkit	Release 7.0 with Service patches: SU_03, SUS_0301, CCT_DP_030101, 030102, 030103, 030104, and CCT_DP_030105
Avaya NES Contact Center Manager Server	Release 7.0 with Service patches: SU_03 and SUS 0301, 0302, 0303, and 0304
Avaya IP 2050 PC Soft Phone	4.3
Avaya IP 1140E	0625C8A
Avaya IP 2004P2	0692D93
Convergys Voice Portal Software	6.7
Convergys Server OS	Windows 64-bit 2008 R2

5. Configure Avaya Communication Server 1000

This document assumes that the Avaya Communication Sever 1000 system was properly installed and configured as per the product documents. The following procedures were limited to provision Automatic Call Distribution (ACD) number and analog agent phones configuration to what was necessary for CCT integration with the Communication Server. For more information on how to install, configure and administer the Communication Server 1000, please refer to **Section 10[1]**.

5.1. Configure Lineside T1 Interface Card

In the compliance test, the Lineside T1 24-channel digital line interface card that was used to connect the CS 1000 switch to T1-compatible terminal equipment, Convergys Voice Portal server, on the lineside. The Lineside T1 card differs from trunk T1 cards in that it supports terminal equipment features such as hookflash, transfer, hold, and conference.

This card occupies two card slots in the main or expansion cabinets. The Lineside T1 card can be installed in the system's main cabinet or one of the expansion cabinets (there are no limitations on the number of cards that can be installed in the Cabinet system). The Lineside T1 card emulates an analog line card to the system software; therefore, each channel is independently configurable by software control in LD 10.

The Lineside T1 card - line interface unit electrical characteristics on table below provides specifications for the 24 T1 channels. Each characteristic is set by dip switches. The compliance test used framing ESF and coding B8ZS. For more information on how to use T1 Lineside card and configure the dip switch settings, please refer to **Section 10[1]**.

Characteristics	Description
Framing	ESF or D4
Coding	AMI or B8ZS
Signaling	Loop or ground start A/B robbed-bit
Distance to Customer Premise Equipment (CPE) or Channel Service Unit	0-199.6 meters (0–655 feet)

5.2. Configure Automatic Call Distribution (ACD)

To configure automatic call distribution (ACD), log in to the Call Server as administrator and use overlay LD 23 to provision an ACD directory number. Bold items in red below are required:

```
>ld 23
ACD000
MEM AVAIL: (U/P): 36469263    USED U P: 8287724 122882    TOT: 44879869
DISK SPACE NEEDED: 93 KBYTES
ACD DNS           AVAIL: 23993    USED:     7    TOT: 24000
REQ  new      ==> request new to create a new ACD DN
TYPE acd      ==> type is Automatic Calls Distribution
CUST 0        ==> Customer ID which ACD DN belongs to
ACDN 54443    ==> ACD Directory number
MWC
DSAC
MAXP 24       ==> maximum agents, since T1 lineside card has 24-channel line
SDNB
BSCW
ISAP
CRQS
CCBA
SIPQ
IVR  yes      ==> enable Interactive Voice Response
TRDN
ALOG no       ==> no provide automatic login for agents
OBSC
OBPT
CWNT
```

Figure 2: Sample of configuring ACD IVR

5.3. Configure Analog Agent Phones on the Lineside T1

To configure analog agent phone, log in to the Call Server and use the overlay LD 10 to provision new agent phone. This overlay is also used to print agent phone configuration. The bold fields in red below are mandatory for the analog agent as shown in **Figure 3** and **4** below.

```
>ld 10
REQ: prt
TYPE: 500

TN  4 0 3 0
DATE
PAGE
DES

DES  IVR1
TN  004 0 03 00  VIRTUAL  ==> Terminal number on the Lineside T1 Card
TYPE 500     ==> type of analog set
CDEN 4D
CUST 0       ==> customer ID
MRT
ERL 00000
WRLS NO
DN  54020 0    MARP   ==> second DN for agent calls out
AST  YES
IAPG 1
HUNT
TGAR 1
LDN  NO
```

Figure 3: Sample of analog agent phone configuration

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

6 of 48
Convergys_CCT7

```
NCOS 0
SGRP 0
RNPG 0
XLST
SCI 0
SCPW
SFLT NO
CAC_MFC 0
CLS  CTD DIP FBD XFA WTA THFD FND HTD ONS ==> Transfer allowed
     LPR XRA AGRD CWD SWD MWD RMMD SMWD LPD XHD SLKD CCSD LND TVD
     CFTD SFD MRD C6D CNID CLBD AUTU
     ICDD CDMD LLCN EHTD MCTD
     GPUD DPUD CFXA ARHD OVDD AGTA CLTD LDTA ASCD SDND ==>agent class of service
     MBXD CPFA CPTA UDI RCC HBTD IRGD IAMD DDGA NAMA MIND
     NRWD NRCD NROD SPKD CRD PRSD MCRD
     EXR0 SHL SMSD ABDD CFHD DNDY DNO3
     CWND USMD USRD CCBD BNRD RTDD RBDD RBHD FAXD CNUD CNAD PGND FTTC
     FDSD NOVD CDMR PRED MCDD T87D SBMD PKCH MPTD ELCD
PLEV 02
PUID
UPWD
SPID NONE
PRI 01
AACD YES  ==> Required if set is controlled by MLS or other CTI App
AACS YES
ACQ  AS: TN,AST-DN,AST-POSID
ASID 16
SFNB 1 2 3 4 5 6 7 8 11 12 13 18 22 24 25 26 28 29 31 33 34 35 36 37 38 39
SFRB 32 33 34 35 36 37 38 39
USFB 1 2 3 4 5 6 7 9 10 11 12 13 14 15
CALB 0 1 3 4 5 6 8 9 10 11 12
FCTB
MLWU_LANG 0
FTR  ACD 54443 54030 ==> ACD queue (54443) and Position ID (54030)
      AGN
DATE 25 AUG 2011
```

Figure 4: Sample of analog agent phone configuration (cont)

- Terminal number is identified as "TN 4 0 03 0" above. This information will be needed to configure a Terminal in **Section 6.1.1** and **6.2.2**.
- FTR ACD (Automatic Call Distribution) field configured on the analog agent phone set. "54030" is the Position ID assigned to the analog agent phone. This will be needed to configure an address in **Section 6.2.3**.
- DN 54020 above is the personal DN (Directory Number) key configured on the agent phone set. This will be needed to configure an Address in **Section 6.2.3**.

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

7 of 48
Convergys_CCT7

5.4. Configure end-of-dialing string

To configure end-of-dialing string, log in to the Call Server as administrator, use overlay LD 15 to configure end-of-dialing string in Flexible Feature Codes (FFC). This end-of-dialing string is used for logging in and out analog agent phone.

```
>ld 15
CDB000
MEM AVAIL: (U/P): 36469266    USED U P: 8287724 122879    TOT: 44879869
DISK SPACE NEEDED: 94 KBYTES
REQ: chg
TYPE: FFC  ==> Flexible Feature Codes

TYPE FFC_DATA
CUST 0   ==> customer ID which FFC belongs to
CCRS
SCPL
SBUP
FFCS yes ==> Change Flexible Feature Code end-of-dialing indicator
  STRL 1   ==> String Length of end-of-dial indicator
  STRG #   ==> String to indicate end-of-dialing (Enterable characters are digits 0-9, *,and #)
MOBX_FFCS
ADLD
DFLT_SCPW
MFAC
MXSI
```

Figure 5: Configure end-of-dialing string

5.5. Configure Specific Prefix Number (SPRE)

To configure the Special Prefix Number in the CS 1000, log in to the Call Server as administrator and use overlay LD 15 to define a SPRE number. Bold items in red below are required.

```
>ld 15
CDB000
MEM AVAIL: (U/P): 36469248    USED U P: 8287724 122897    TOT: 44879869
DISK SPACE NEEDED: 93 KBYTES
REQ: chg
TYPE: FTR

TYPE FTR_DATA
CUST 0
OPT
DGRP
IRNG
PKND
DNDL
SPRE 410  ==> define 410 as special prefix number (1-4 digits)
PREO
BPSS
SRCD
EEST
EESD
TTBL
```

Figure 6: Configure the Special Prefix Number

Note: The SPRE number is like any extension or dialing plan numbers in the CS1000 system. Therefore it must follow dialing plan rule to avoid conflicts with another number.

5.6. Configure Log in- Log out (LILO) code

To configure the login-logout code for analog 500/2500 ACD phone set, log in the Call Server as administrator and use overlay LD 57 to define a LILO code. Bold items in red below are required:

```
>ld 57
FFC000
MEM AVAIL: (U/P): 36469248    USED U P: 8287724 122897    TOT: 44879869
DISK SPACE NEEDED: 93 KBYTES
REQ  chg    ==> request change
TYPE FFC    ==> type flexbile feature codes
CUST 0      ==> customer ID
FFCT yes    ==> enable Flexible Feature Confirmation Tone
CODE LILO   ==> define code for login-logout
LILO 5611   ==> define 5611 as Login-Logout code (1-4 digits)
CODE
```

Figure 7: Configure Log in-Log out code

Note: The LILO code also has to follow dialing plan rule to avoid conflicts with another extension and dialing plan.

KP; Reviewed;
SPOC 1/18/2012
Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.
10 of 48
Convergys_CCT7

6. Configure Avaya NES Contact Center

In the compliance test environment, the NES Contact Center was a co-resident server which consisted of Contact Center Manager Server, Contact Center Manager Administrator and Communication Control Toolkit installed on the same server. No special configuration was necessary on the Contact Center Manager Server for testing the Convergys Voice Portal. For more information on how to install, configure, and administer Avaya NES Contact Center, please refer to **Section 10[2]**.

6.1. Configure Contact Center Manager

This section of the document shows how to configure agent voice port, ACD IVR and script in Contact Center Manager (CCM).

6.1.1. Configure Analog Agent phones as Agent Voice Ports in the Contact Center Manager

To configure analog agent phones as IVR agent voice ports, log in the Contact Center Manager webpage as an administrator as shown in **Figure 8**.
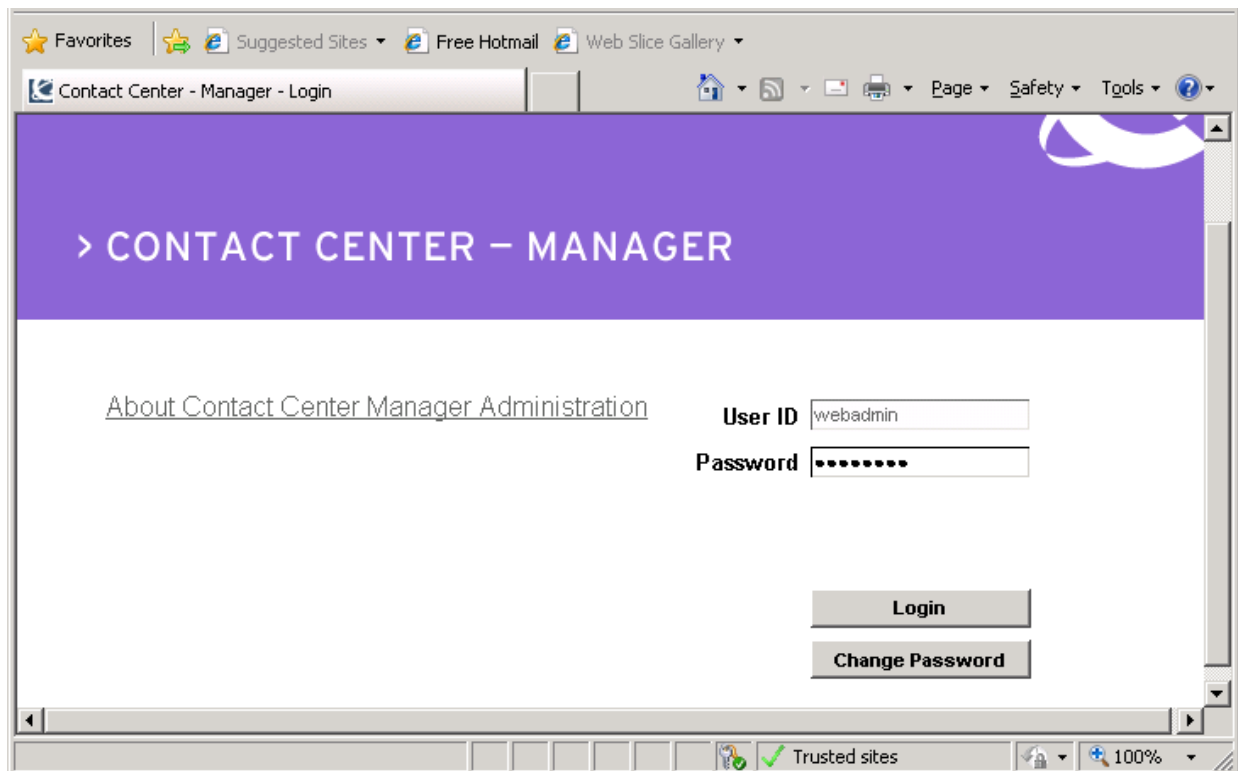
Figure 8: Login page of Contact Center Manager

KP; Reviewed;
SPOC 1/18/2012
Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.
11 of 48
Convergys_CCT7

Figure 9 below shows the homepage of CCM.
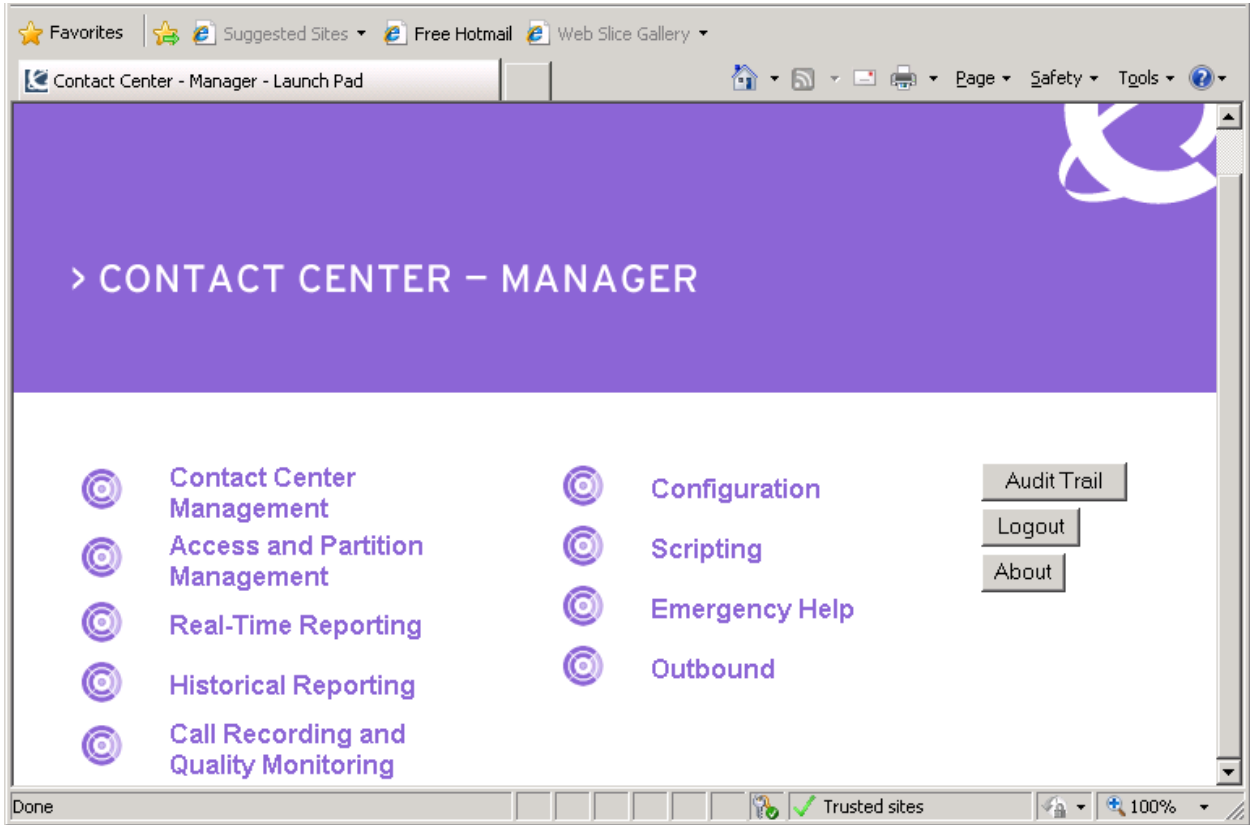
Figure 9: Homepage of Contact Center Manager

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

12 of 48
Convergys_CCT7

Click on **Configuration** link, and on the left-hand side of **Configuration** page, expand the name of contact center server, in this example, **nescc70**.
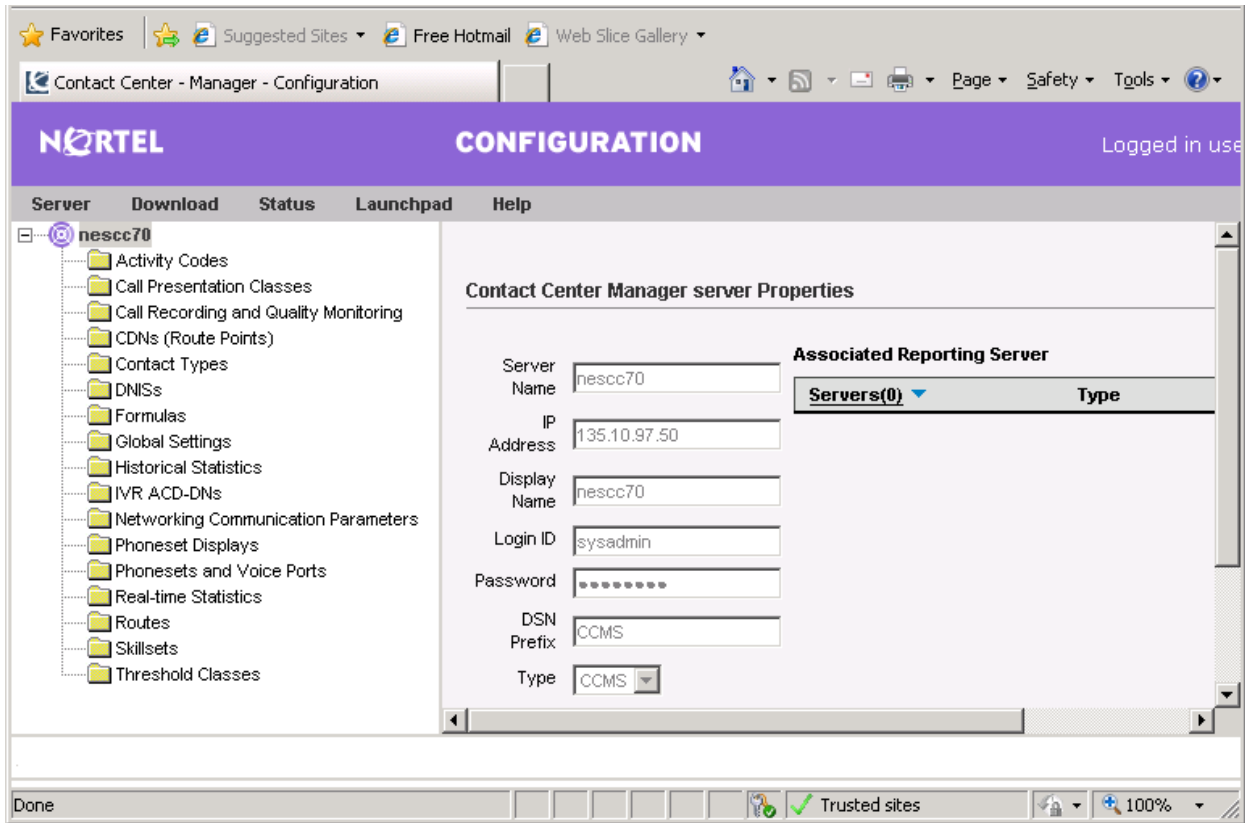
Figure 10: Configuration Page of Contact Center Manager

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

13 of 48
Convergys_CCT7

Select **Phoneset and Voice Ports** folder in tree-menu, the **Phonesets/VoicePorts** section appears in the right-hand side of **Configuration** page, enter **VP0** name in **Name** column, select **Voice Port** in the **Type** column, enter TN number **4-0-3-0** of analog agent phone as configured in **Section 5.2** in the **Address** column and then check on checkbox in **Acquired** column.

Repeat the same procedures above to add more voice ports for terminal line **4-0-3-1** and line **4-0-3-2**.
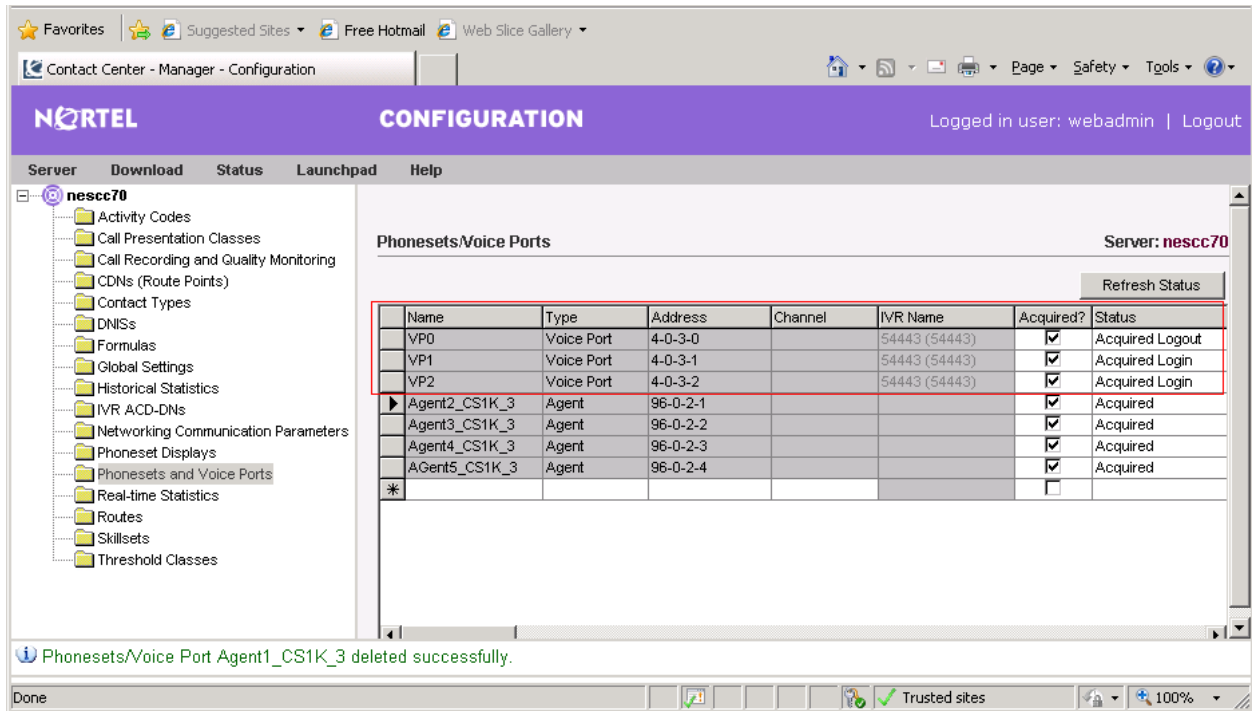
Figure 11: Add new voice port

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

14 of 48
Convergys_CCT7

6.1.2. Configure IVR ACD in the Contact Center Manager

To configure IVR ACD in the CCM, click on **IVR ACD-DNs** folder on the left-hand side of **Configuration** page and the **IVR ACD-DNs** section appears in right-hand side of **Configuration** page. Enter ACD **54443** as configure in **Section 5.2** and then check on checkbox of **Acquired** column as shown in **Figure 12**.
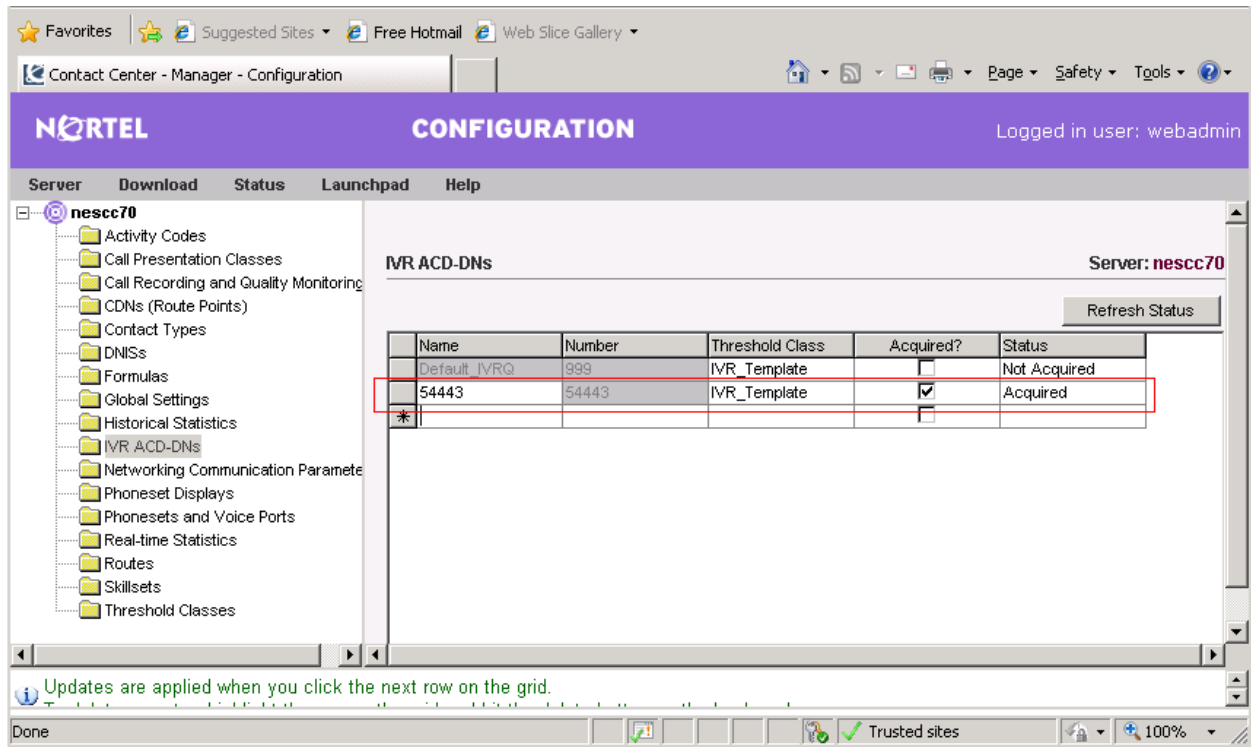
Figure 12: Configure and acquire ACD IVR

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

15 of 48
Convergys_CCT7

6.1.3. Configure Scripting

To configure scripting in the CCM, navigate to menu **Launchpad > Scripting**, the **Scripting** page appears as shown in **Figure 13**.
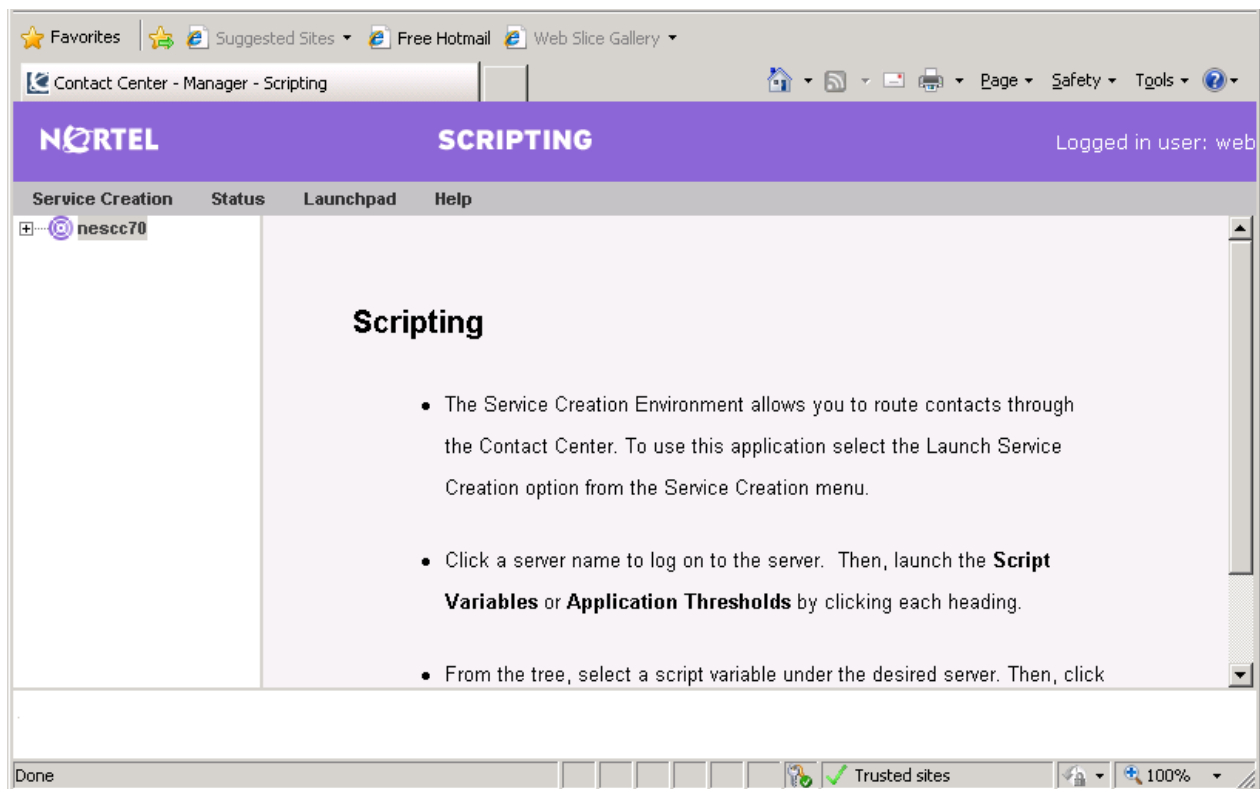
Figure 13: Scripting page

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

16 of 48
Convergys_CCT7

In the **Scripting** page, navigate to menu **Service Creation** and select **Launch Service Creation.** The **Service Creation Environment** (SCE) application was executed and opened as shown in **Figure 14**.

Note: If the Service Creation Environment has not been installed a new popup window appears to ask for installing the Service Creation Environment application. Install the application and try to run it again by selecting **Launch Service Creation** from menu **Service Creation**.
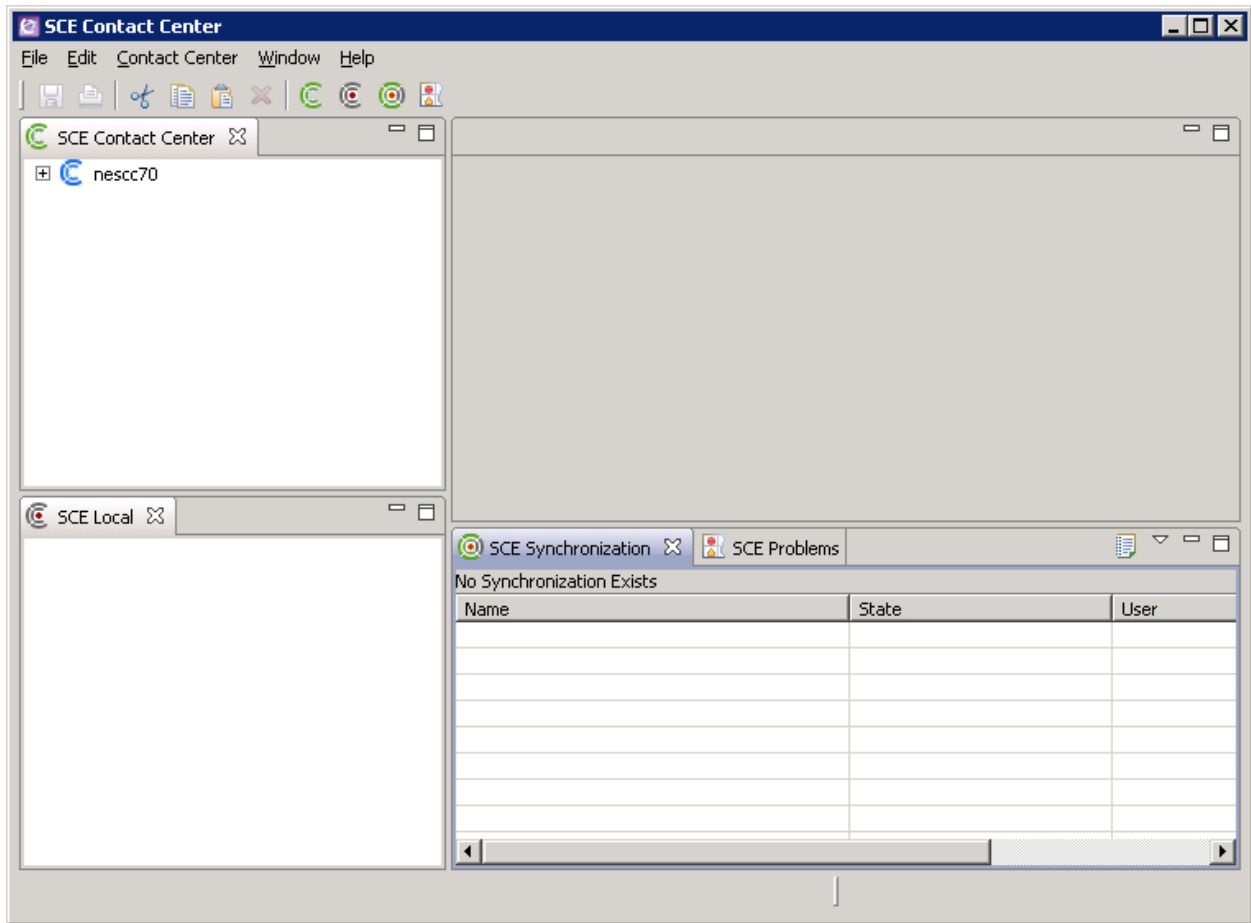
Figure 14: Service Creation Environment window

In the left-hand side of **Service Creation Environment** window, navigate to **nescc70 > nescc70 > Applications > Master_Script** and the content of Master_Script displays in the right-hand side of the SCE window. This was the sample script used for the compliance test.
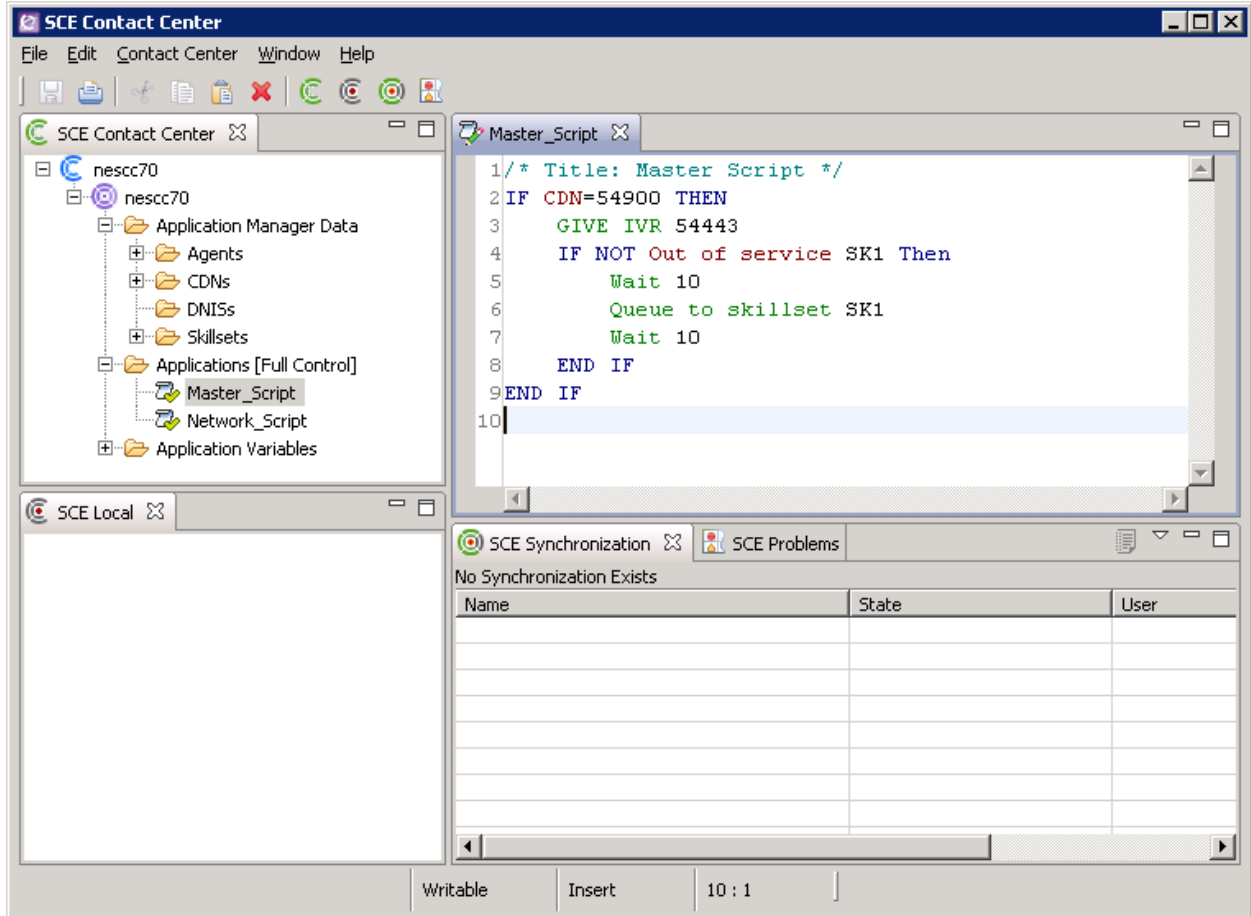
Figure 15: Sample of Master Script

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

18 of 48
Convergys_CCT7

6.2. Configure Communication Control Toolkit

This section of the document shows necessary configurations in CCT server to work with Convergys Voice Portal system.

6.2.1. Configure Windows user in the CCT Server

In this compliance test, the Windows users were created in the CCT server. To create Windows user, navigate to menu **Start > Administrator > Computer Management** and the **Computer Management** window appears as shown in **Figure 16**.
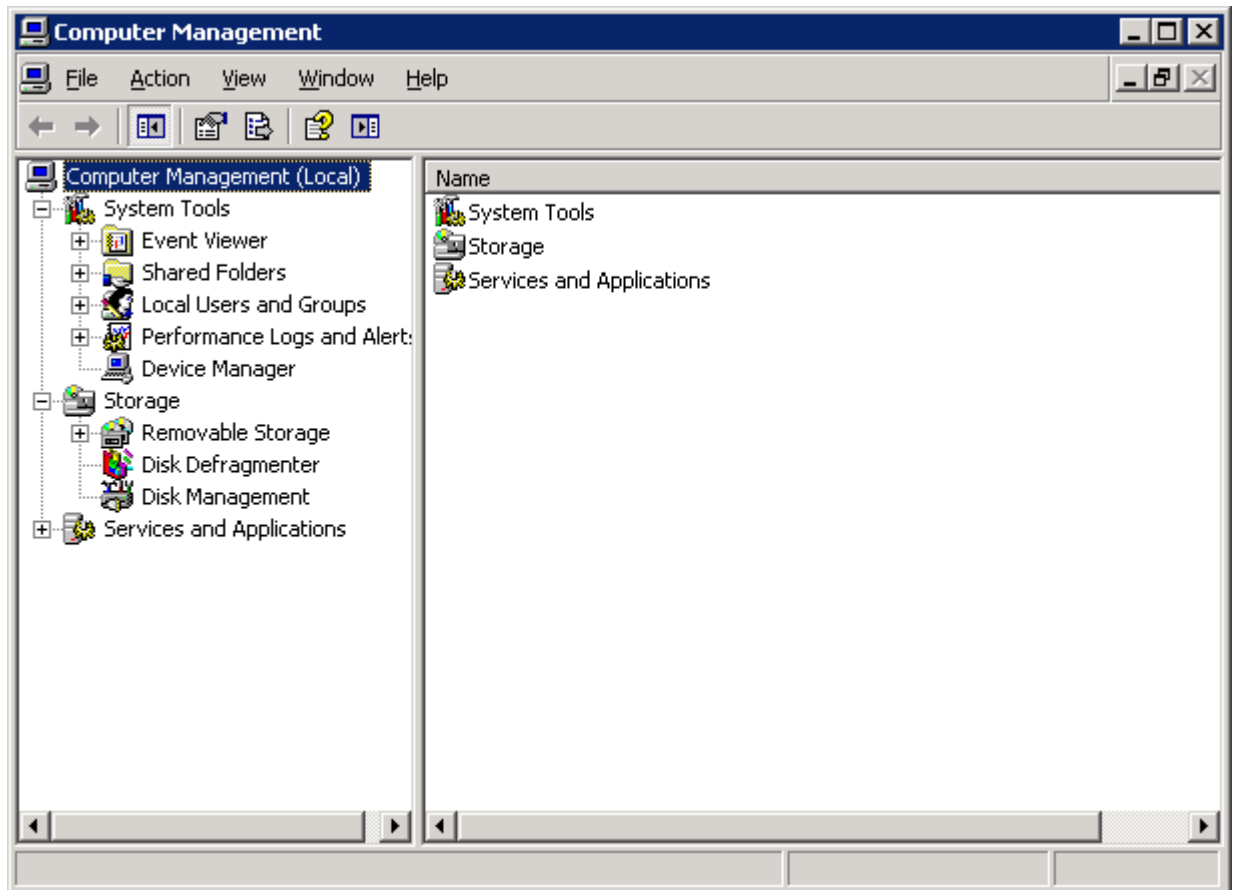
Figure 16: Computer Management window

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

19 of 48
Convergys_CCT7

In the left-hand side panel expand **Local Users and Groups** and right-click mouse on **Users** as shown in **Figure 17** below.
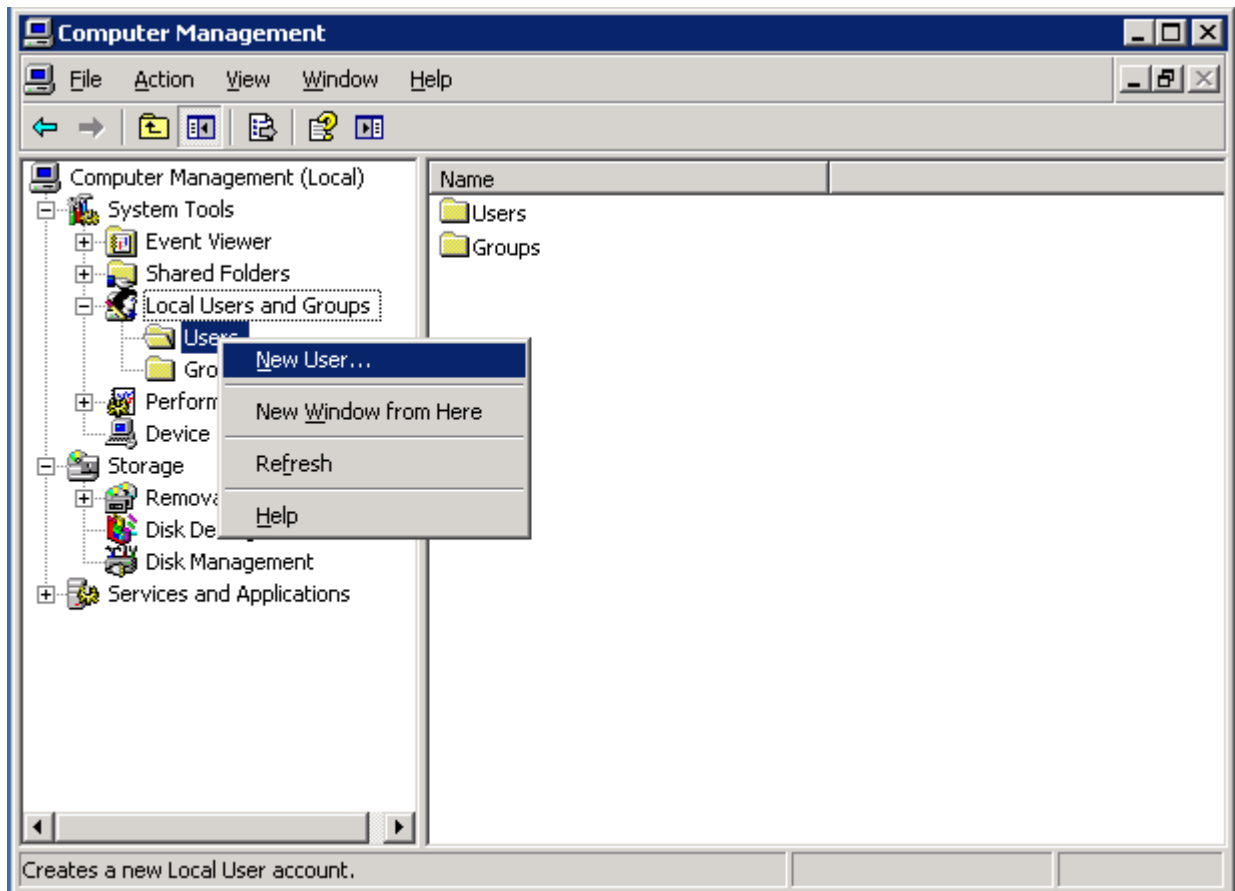
Figure 17: The New User of Computer Management Window

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

20 of 48
Convergys_CCT7

The **New User** window appears and input the information as shown in **Figure 18**. Click on **Create** button to complete creating the new Windows user.

Figure 18: The New User

6.2.2. Configure Terminal Line for Agent Phone

To configure a terminal in CCT, navigate to menu **Start > All Programs > Nortel > Contact Center > Communication Control Toolkit > CCT Console** as shown in **Figure 19**.
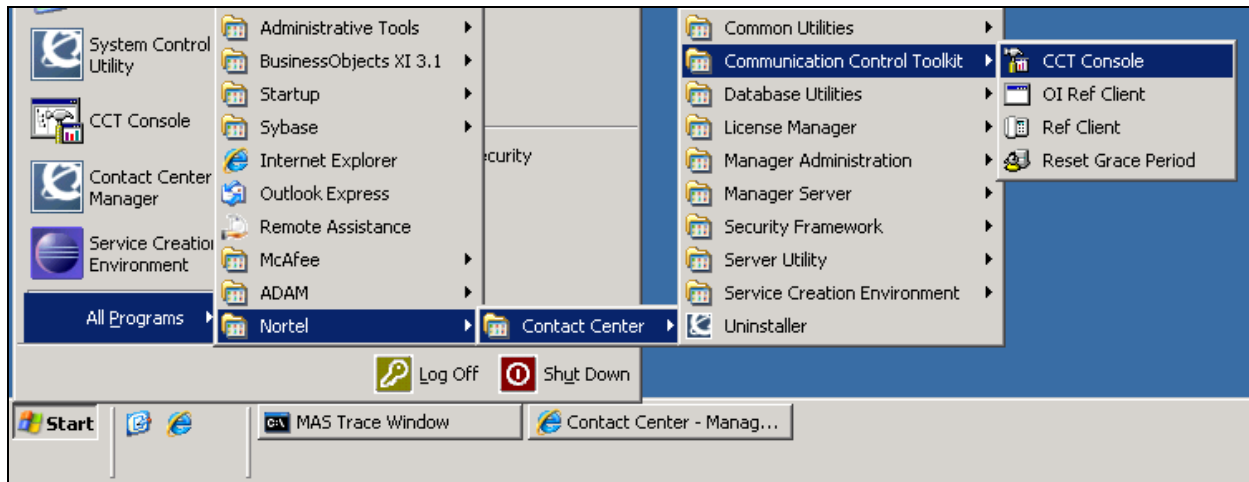
Figure 19: Full path to CCT Console

Figure 20 below shows the CCT Console window.

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

22 of 48
Convergys_CCT7
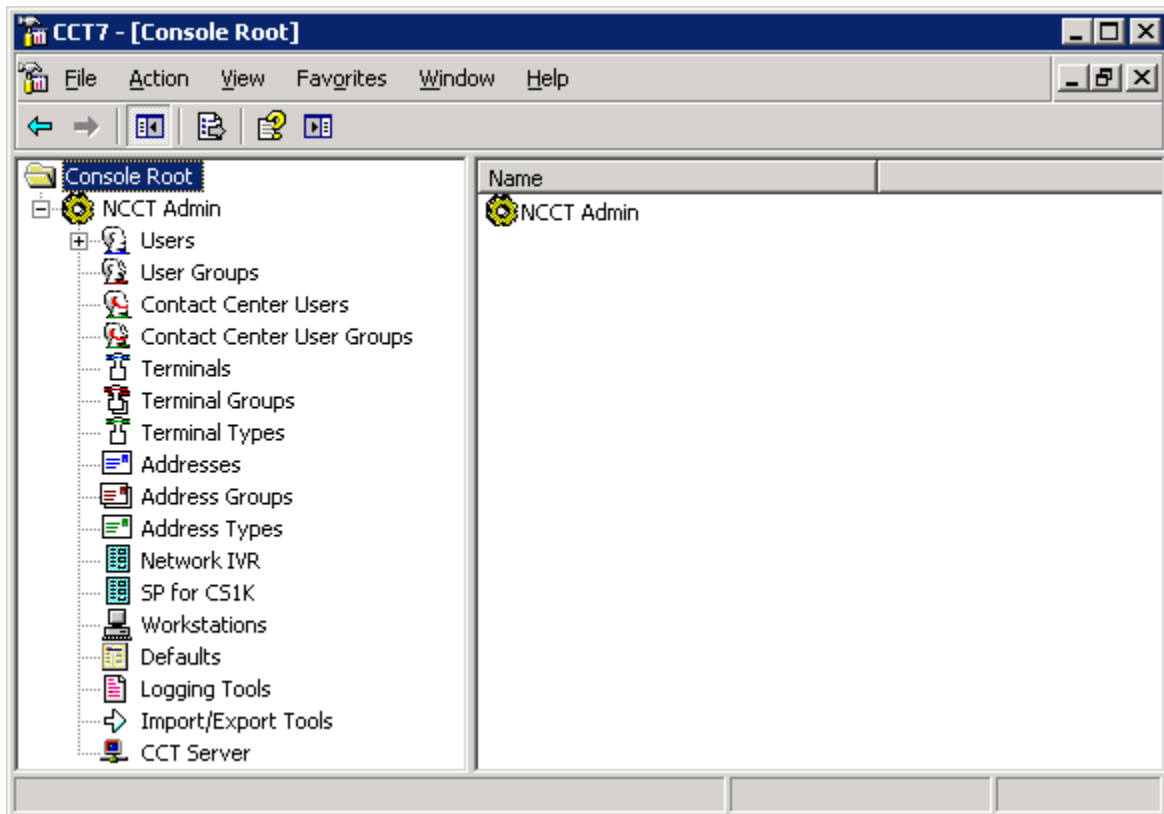
Figure 20: The CCT Console Window

Right-click on **Terminals** and navigate to **New > New Terminal** as shown in **Figure 21** below**.**
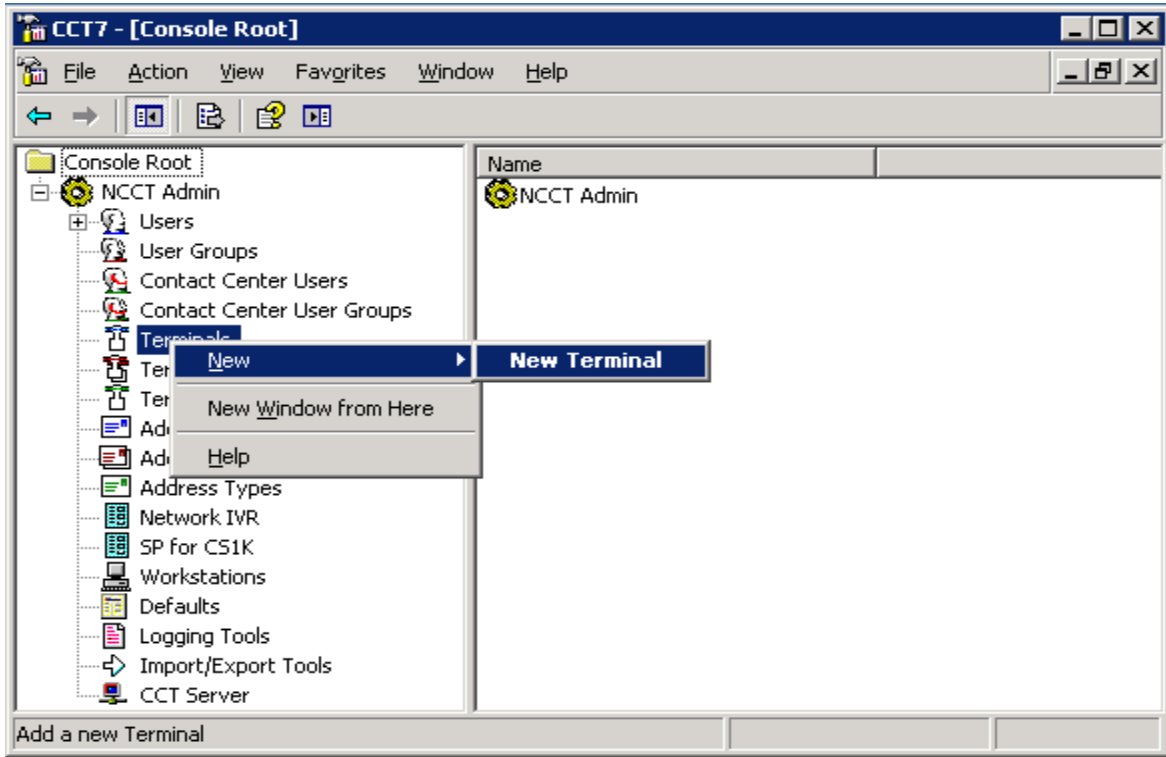
Figure 21: Terminals in the CCT Console

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

23 of 48
Convergys_CCT7

In the **Terminal Details** tab, enter the phone set information. Note the **Terminal Name** field must include the word "Line" in the beginning with the terminal name as configured for agent phone in **Section 5.2**. All checkboxes should also be enabled. **Phone Type** should be chosen as appropriate. For this compliance test, the M500 analog phone was used.

Click **Apply** and **OK** button to close the window.
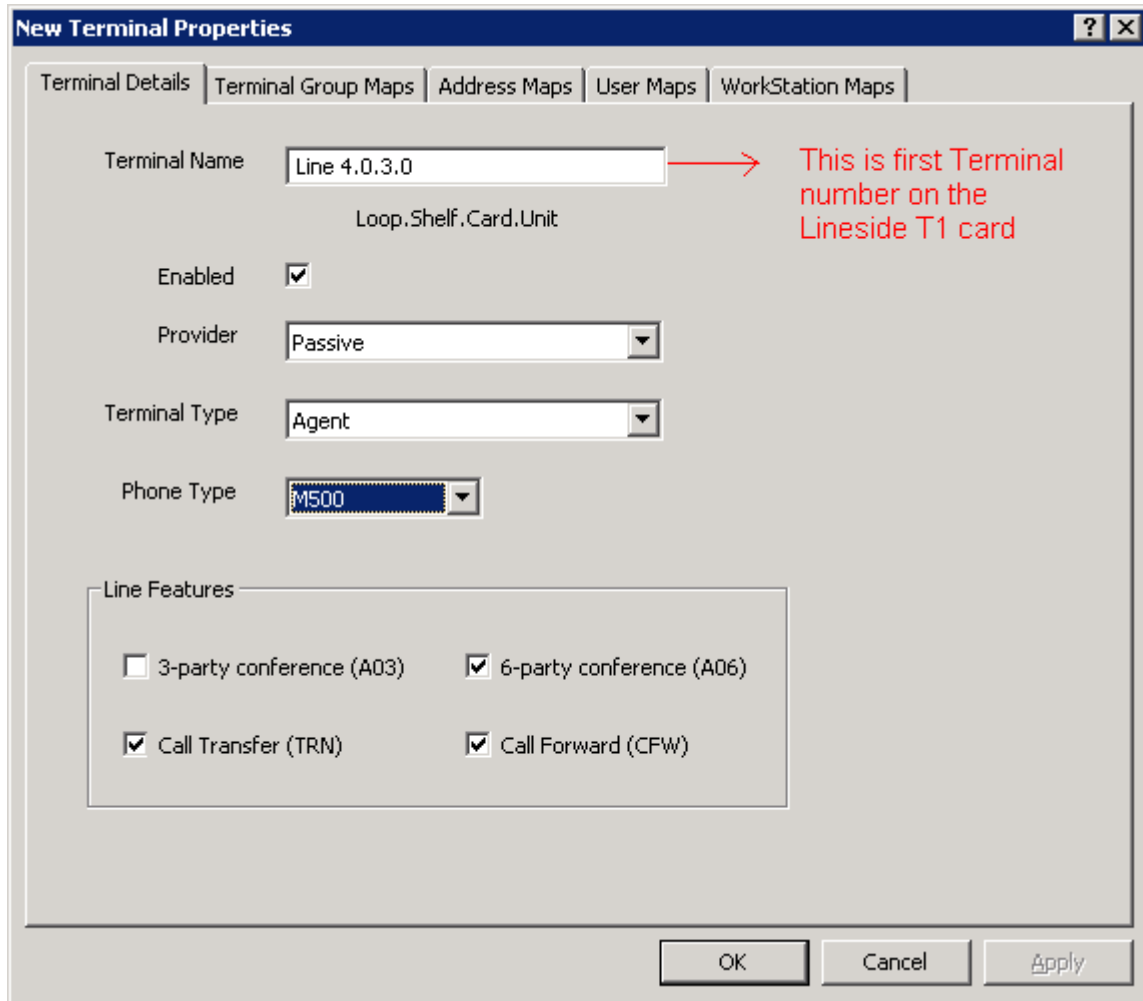
Figure 22: New Terminal Properties Window

Repeat the same procedures above to add more terminal lines for **Line 4.0.3.1** and **Line 4.0.3.2**.

Note: Multiple terminal Lines can be imported from the CS 1000 system to CCT by using the **Import Addresses & Terminals** of **Import/Export Terminal Tool**.

KP; Reviewed;
SPOC 1/18/2012
Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.
24 of 48
Convergys_CCT7

6.2.3. Configure Position ID and Personal DN Addresses for Agent Phone

To configure address for each terminal line of analog agent phone, on the CCT Console, right-click on **Addresses** and navigate to **New > New Address.**
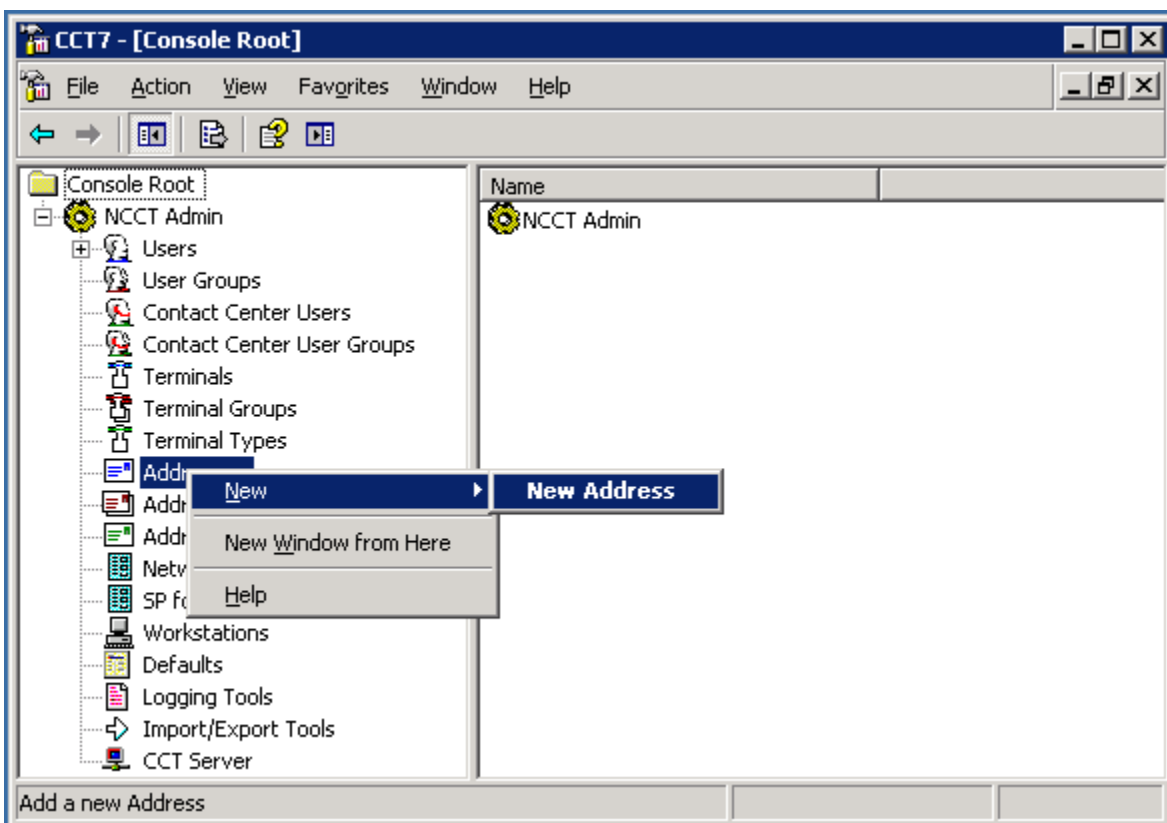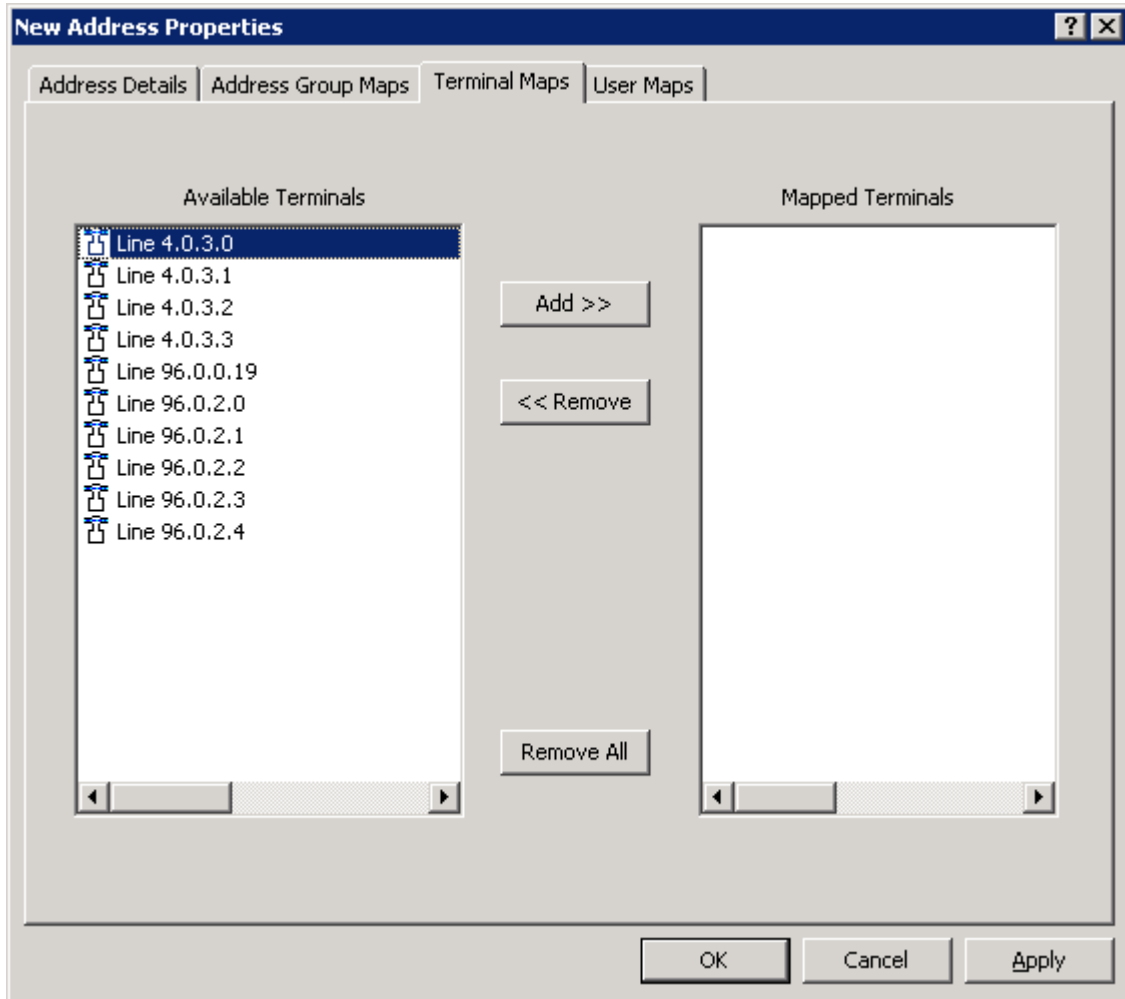

Figure 23: New Address in the CCT Console

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

25 of 48
Convergys_CCT7

In **Address Details** tab, enter the Position ID **54030** of analog agent phone as configured in **Section 5.2** in the **Name** field. Select **Type** as "Agent". All other fields can be left as default.

Figure 24: New Address Properties

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

26 of 48
Convergys_CCT7

In **Terminal Maps** tab, map the newly created Position ID **54030** address to the terminal **Line 4.0.3.0** created in **Section 6.2**. Select the terminal **Line 4.0.3.0** in **Available Terminals** box and click on "**Add>>**" to complete the mapping as shown in **Figure 25** and **26**. Click **Apply** to save the changes and **OK** to close window:

Figure 25: New Address Properties (cont)

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

27 of 48
Convergys_CCT7
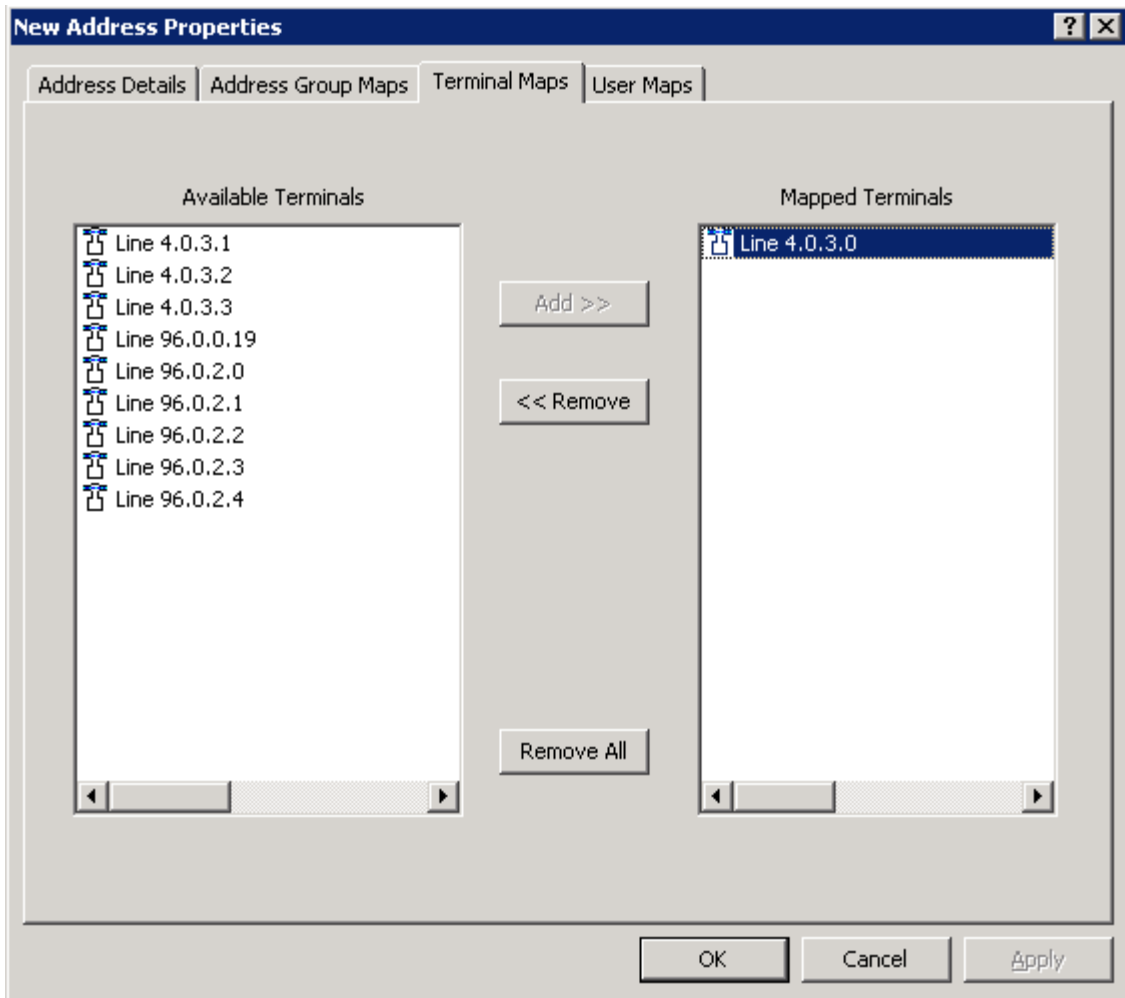
Figure 26: New Address Properties (cont)

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

28 of 48
Convergys_CCT7

To configure an address for Personal DN, do right-click mouse on the **Addresses** on the CCT Console and navigate to **New > New Address**. In **Address Details** tab enter the Personal DN **54020** in the **Name** field as configured for the agent phone in **Section 5.2**. All other fields can be left as default.
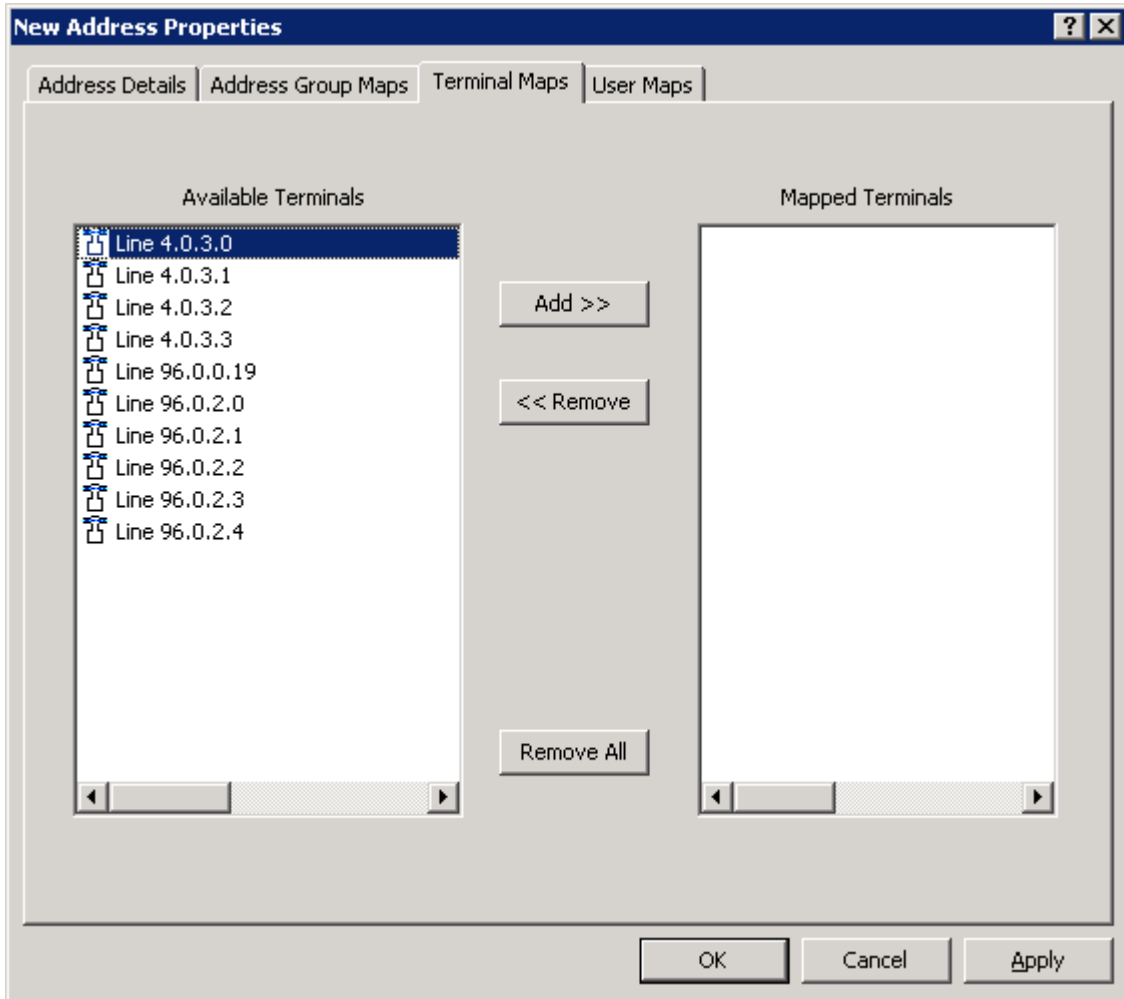

Figure 27: New Address Properties window for Personal DN 54020

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

29 of 48
Convergys_CCT7

In **Terminal Maps** tab, map the newly created address to the terminal **Line 4.0.3.0** created in
Section 6.2. Select the terminal **Line 4.0.3.0** in **Available Terminals** box and click on "**Add>>**"
button to complete the mapping as shown in **Figure 28** and **29**. Click **Apply** to apply the changes
and **OK** to close window.

Figure 28: New Address Properties window for Personal DN 54020

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

30 of 48
Convergys_CCT7
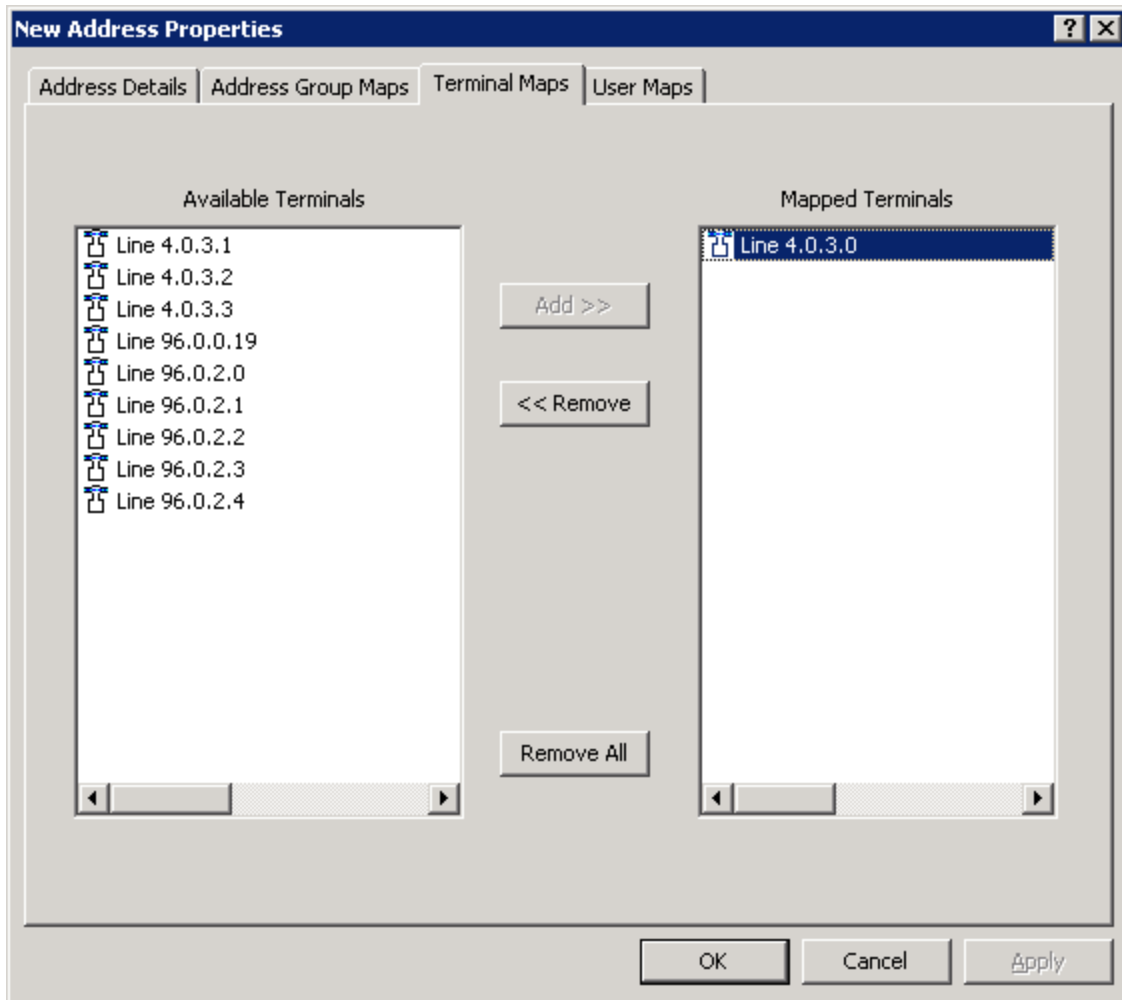
Figure 29: New Address Properties window for Personal DN 54020 (cont)

Repeat the same procedures above to add Position ID **54031**, **54032** and personal DN **54021, 54022** addresses for terminal **Line 4.0.3.1** and **Line 4.0.3.2**.

Note: Similar to terminal lines, addresses of agent phone or monitored phone sets can be imported from the CS 1000 system to the CCT by using the **Import Addresses & Terminals** of **Import/Export Tools** in the CCT Console.

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

31 of 48
Convergys_CCT7

6.2.4. Import Window Users from CCT Domain and map to Terminal

This section describes the steps required to import Windows users from the server to the Communication Control Toolkit administration tool using the **Import Windows Users** tool. CCT services should be stopped before importing new users:

1. Log on to the Communication Control Toolkit server.
2. Navigate to **Administrator Tools > Services**.
3. Stop the **NCCT SMON** service to stop all of the services on the Communication Control Toolkit server.
4. Start the **NCCT Data Access Layer** service.
5. Close the **Services** window.

To import window users, in the left-hand side panel of the CCT Console, click on the **Import/Export Tools**. The list of **Importing Tools** window appears in the right-hand side of CCT Console window as shown in **Figure 30**.
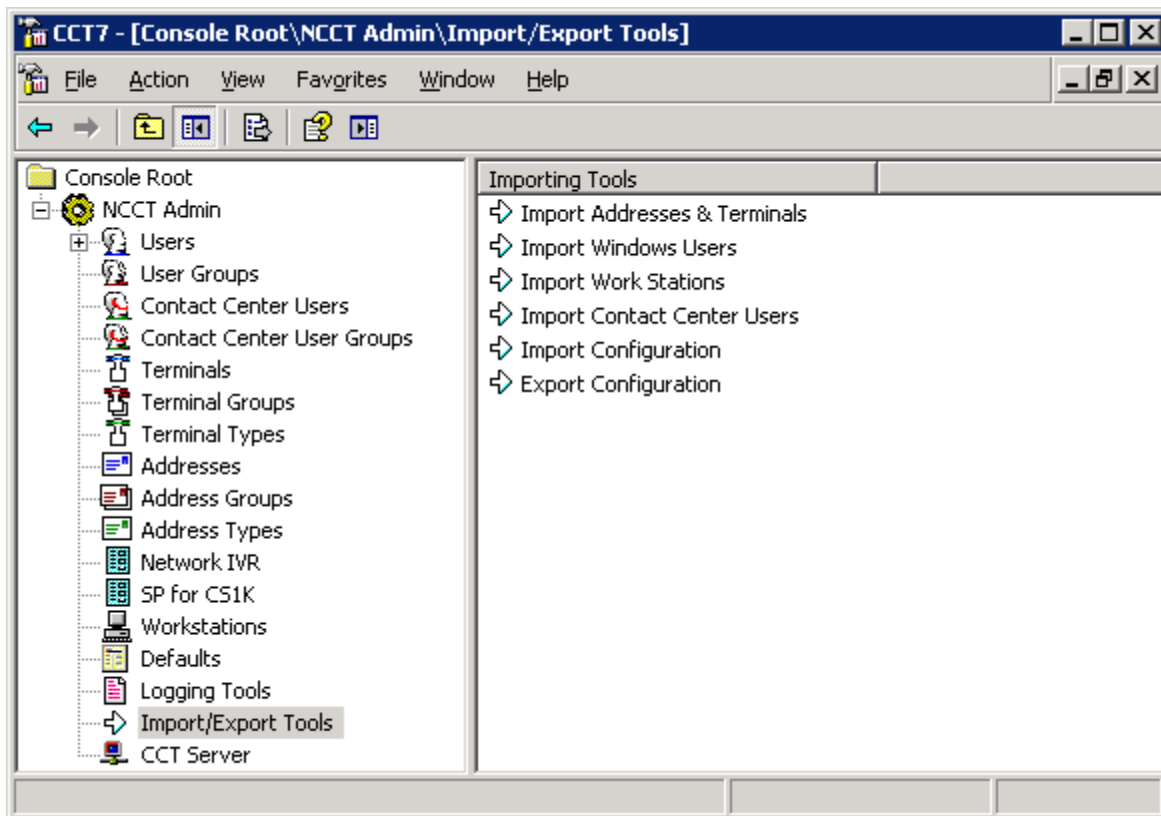
Figure 30: Import/Export Tools

Double-click on **Import Windows Users**, the **Import Windows Users properties** appears as shown in **Figure 31** below.

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.
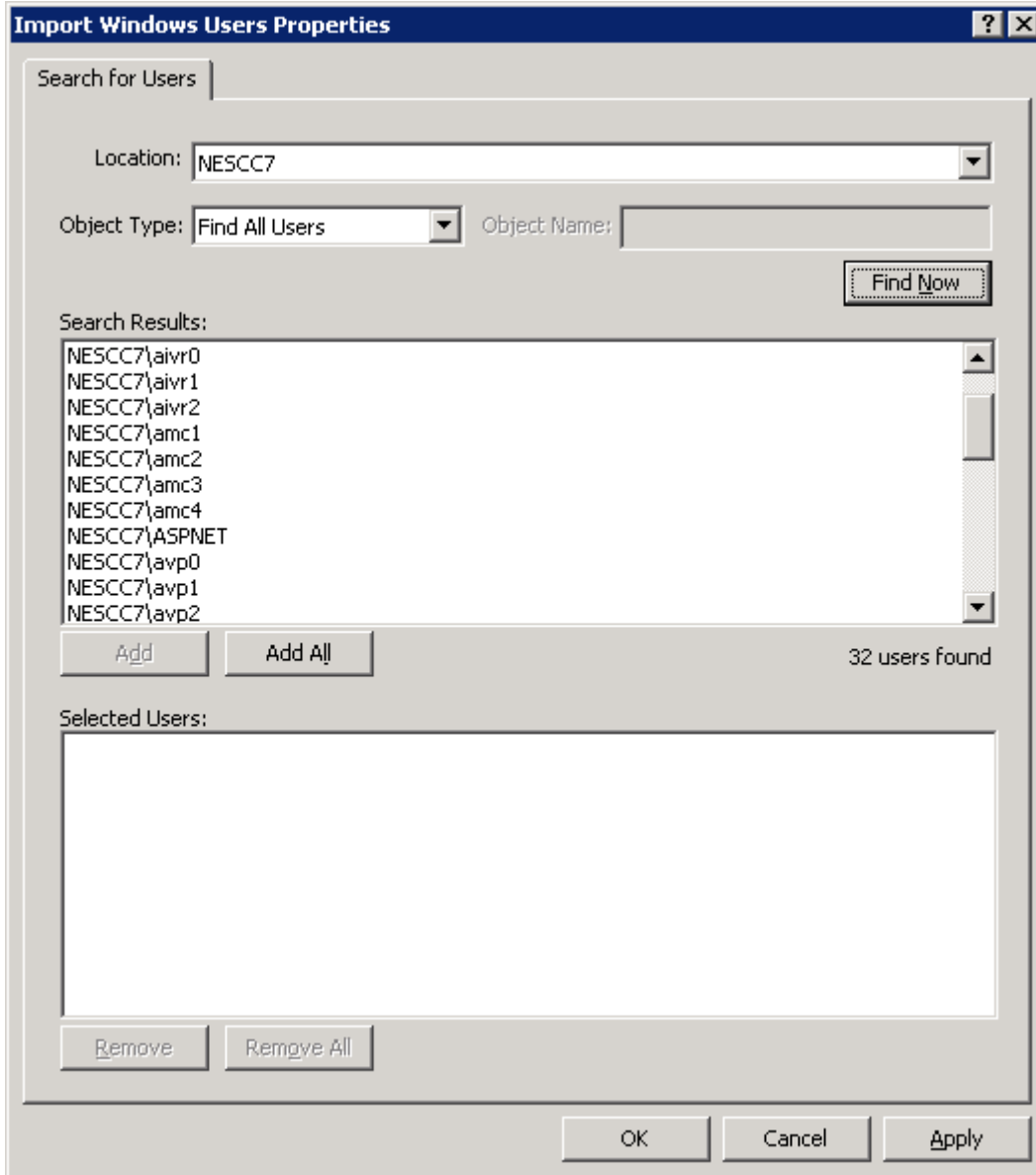
32 of 48
Convergys_CCT7

In the **Location** box, select the domain or server from which to search for Windows users. In the **Object Type** box, select the group of users to display. In the **Object Name** box, type the text to use in a search for Windows Users (the **Object Name** becomes unavailable if the **Object Name** box specified as "Find All Users").
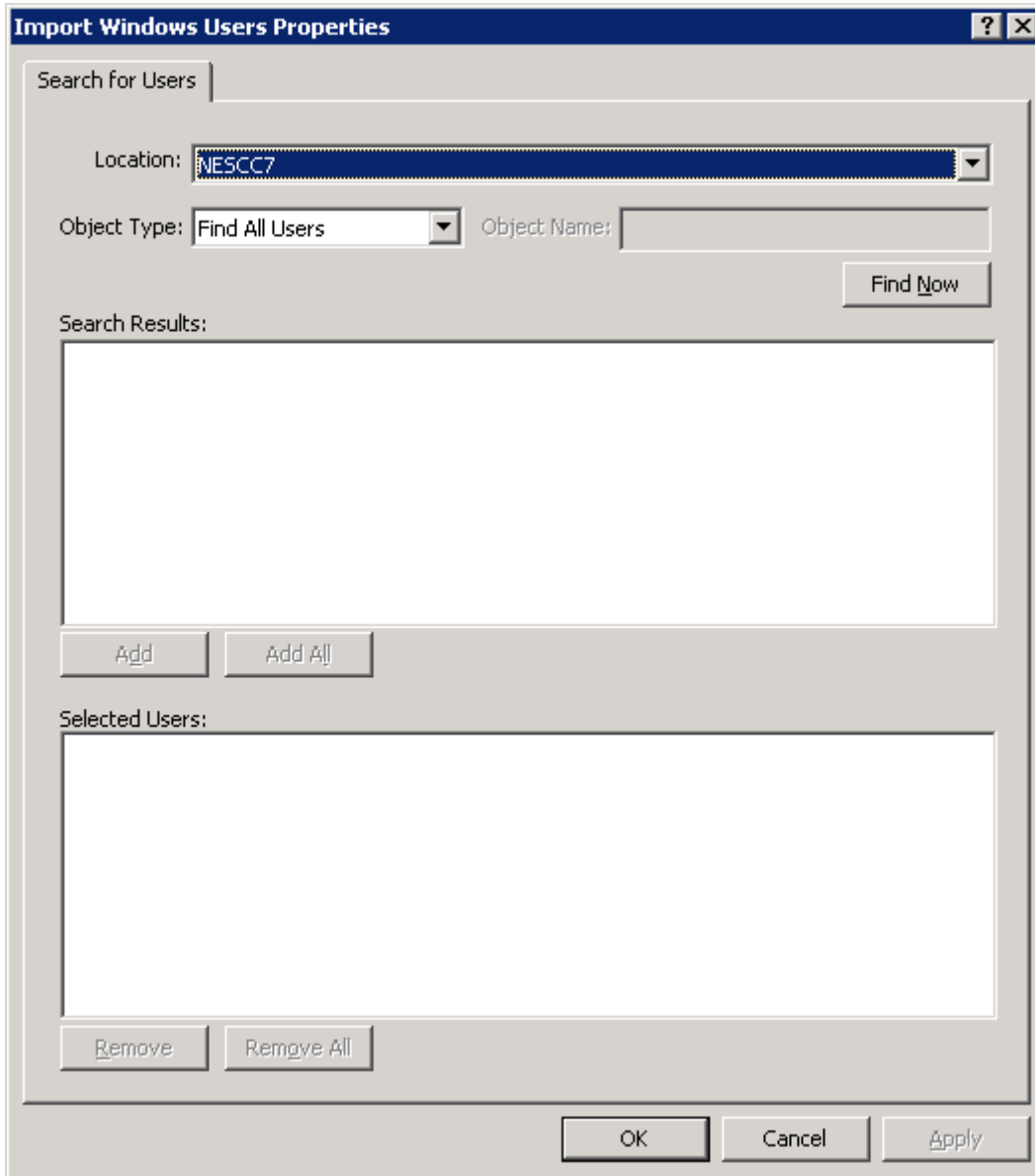
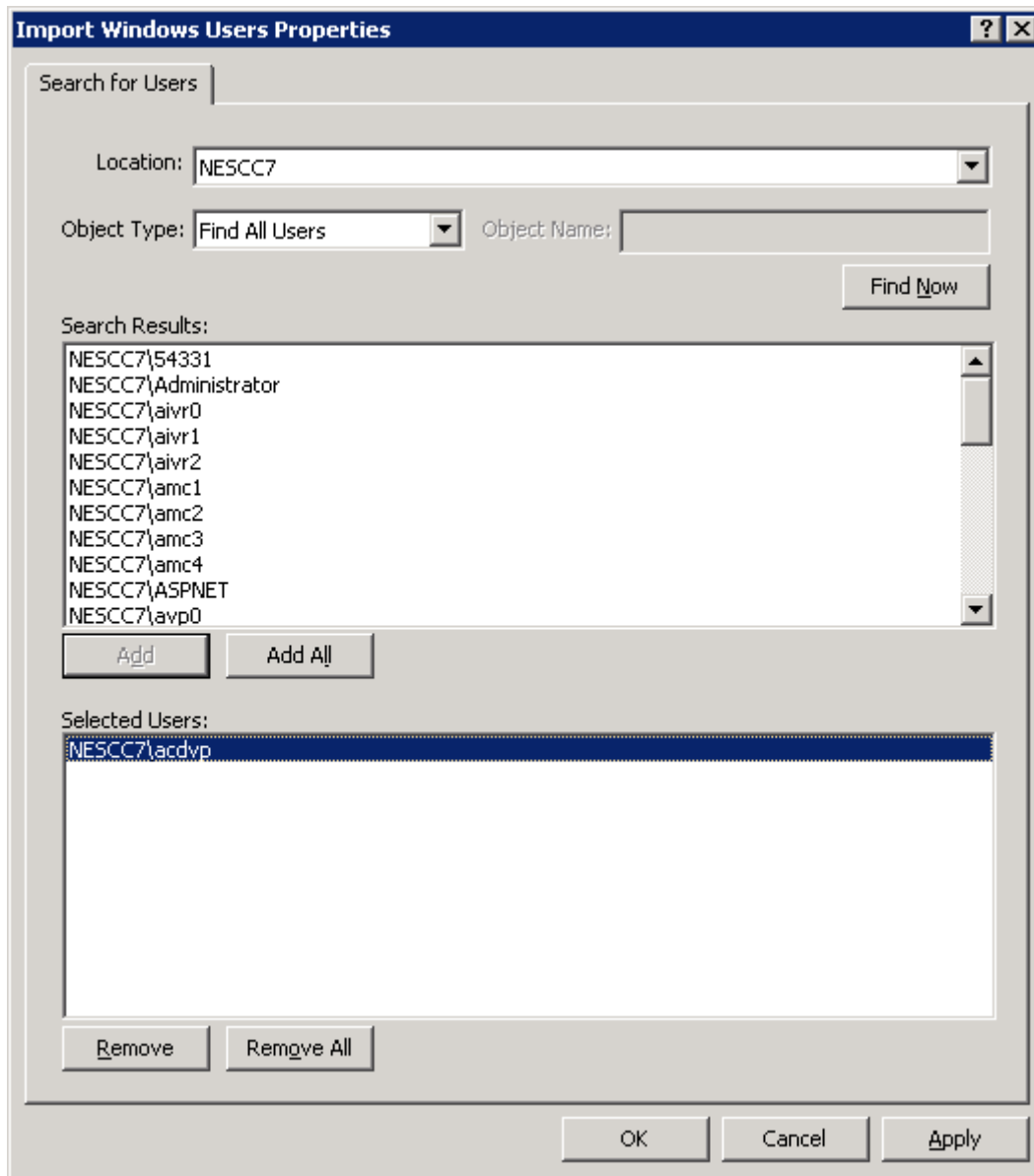**Figure 31: Import Windows Users Properties window**

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

33 of 48
Convergys_CCT7

Click **Find Now** button to start searching Windows Users, the list of Windows user appears in **Search Results** section of **Import Windows User properties** window as shown in the **Figure 32**.

Figure 32: Import Windows Users Properties window (cont)

KP; Reviewed;
SPOC 1/18/2012
Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.
34 of 48
Convergys_CCT7

In the **Search Results** box, select the Windows users to import. To select multiple users, press the **Ctrl** key while selecting each user. To select all Windows users, click **Add All**. For the purpose of this compliance test, user **acdvp** were imported as shown in **Figure 33**.

Click **Add** button to add these users into **Selected Users** box, and click **Apply** button to apply the changes and click **OK** button to close the window.

Figure 33: Import Windows Users Properties window

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

35 of 48
Convergys_CCT7

Go back to the **Administrator > Services**, to start the **NCCT SMON** service to start all of the Communication Control Toolkit services

The procedure to map user to terminal is as follows.
In the **CCT Console** window, select **Users**. The **Users** window appears in the right-hand side of CCT Console as shown in **Figure 34**.
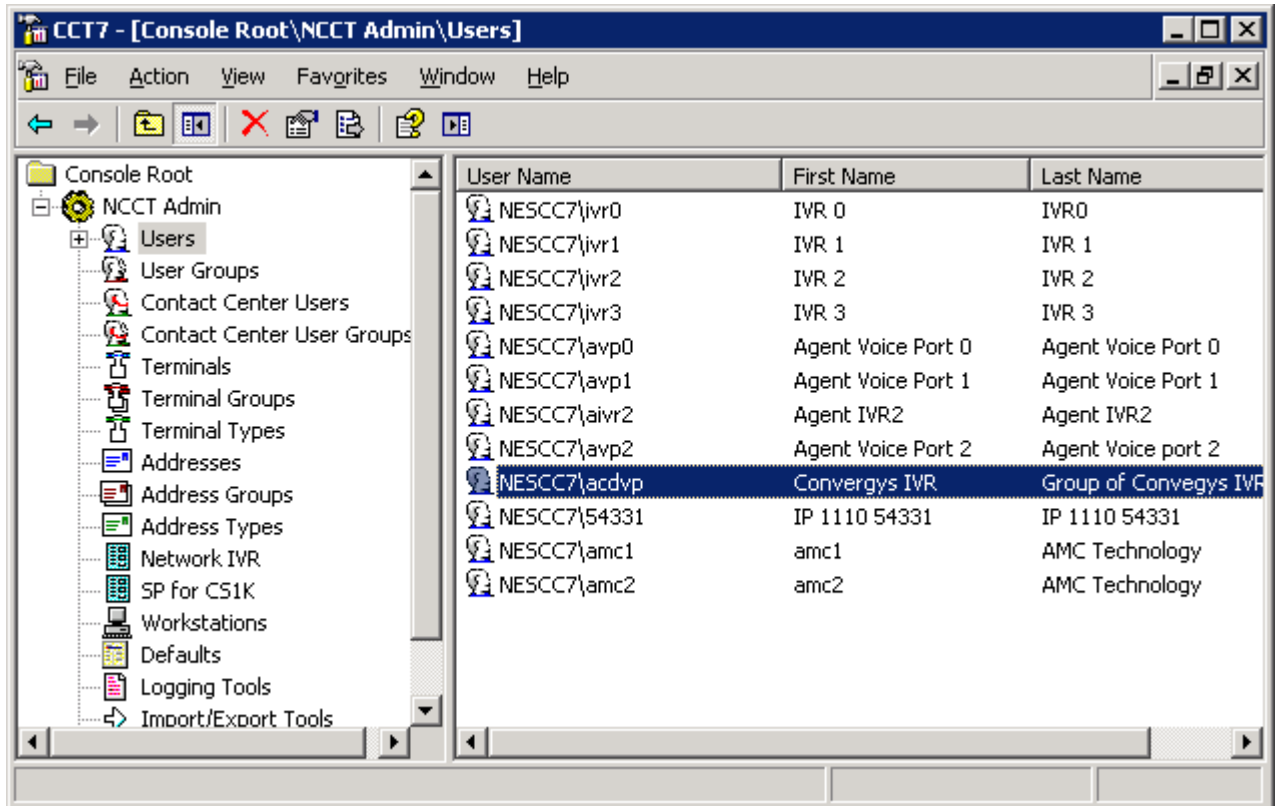

Figure 34: User window of CCT Console

KP; Reviewed;
SPOC 1/18/2012
Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.
36 of 48
Convergys_CCT7

Right-click on the user **acdvp** that has been imported above and select **Properties** as shown in **Figure 35**.
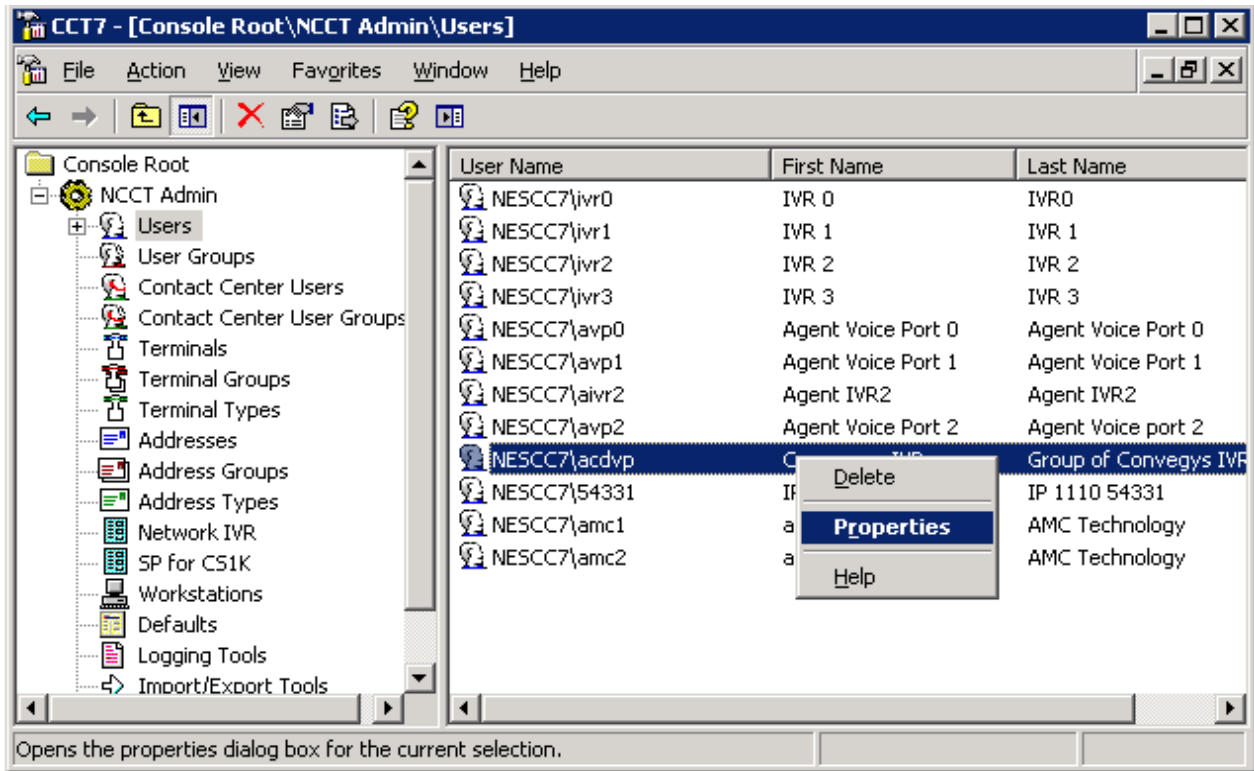
Figure 35: User window of CCT Console (cont)

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

37 of 48
Convergys_CCT7

The **Figure 36** and **37** below shows the **Terminal Maps** tab of **NESCC7\acdvp Properties** window; from **Available Terminals and Terminals Groups** box select the **Line 4.0.3.0, Line 4.0.3.1** and **Line 4.0.3.2** created in **Section 6.2** and click on "**Add >>**" button to add this Line to **Mapped Terminals and Terminal Groups** box.

Click **Apply** button to save the change and click **OK** button to complete and close the window.
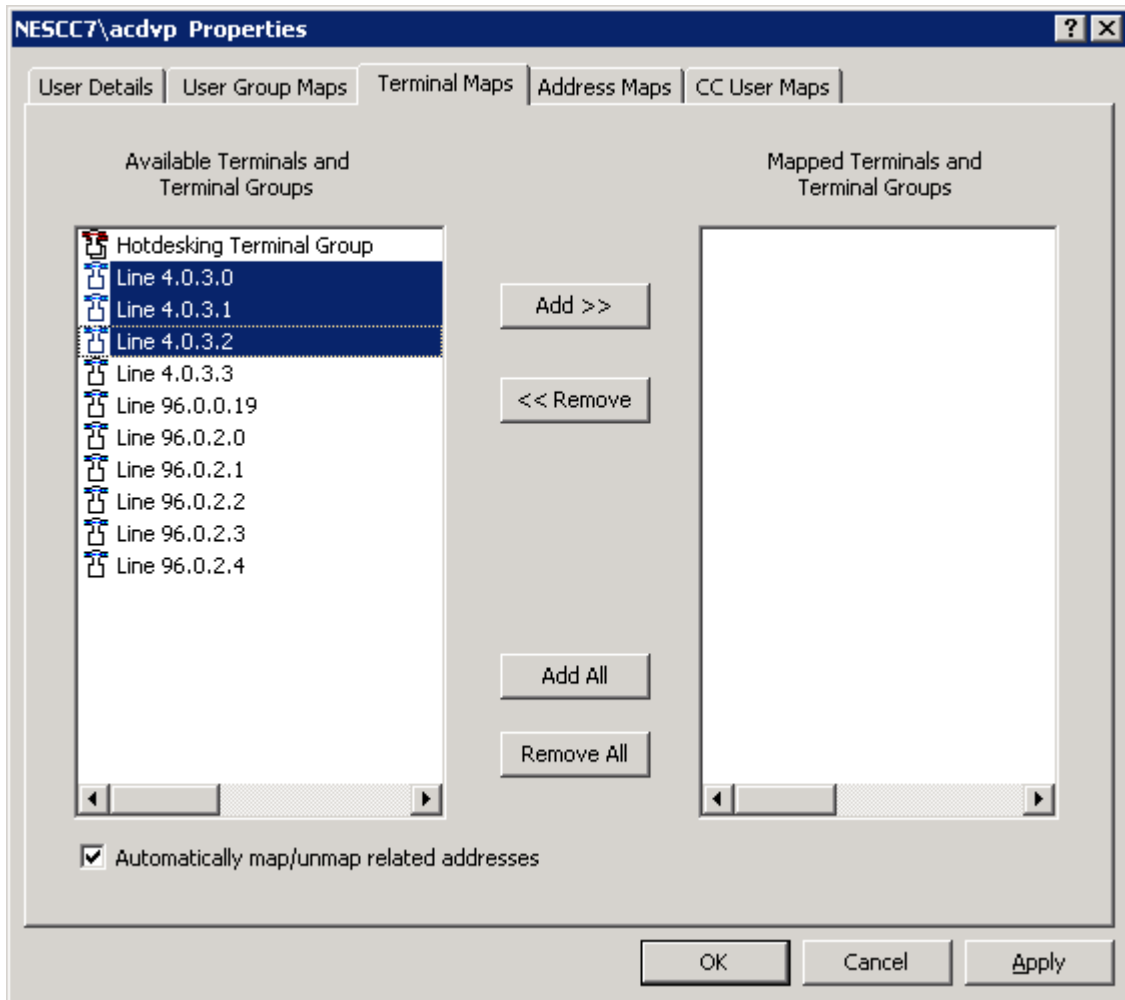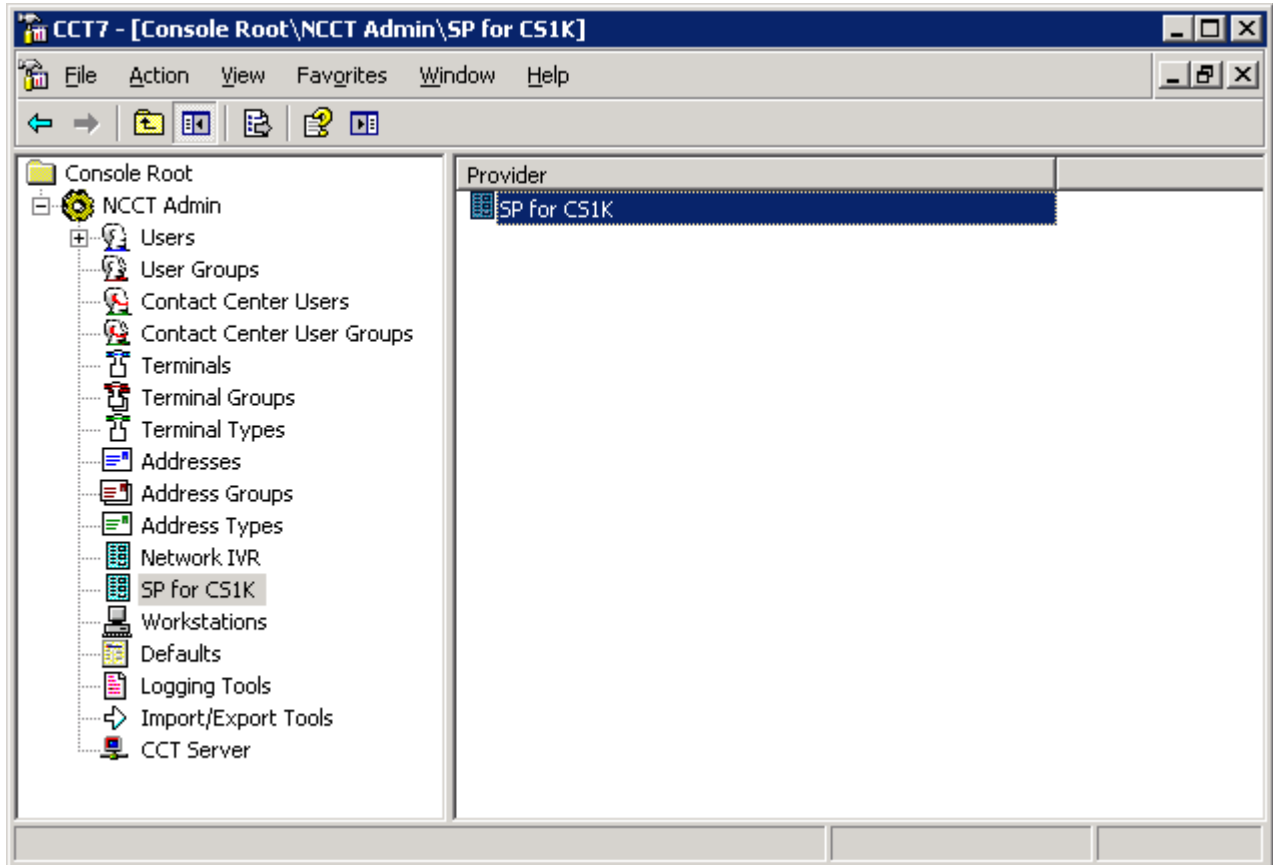

Figure 36: NESCC7\acdvp Properties window
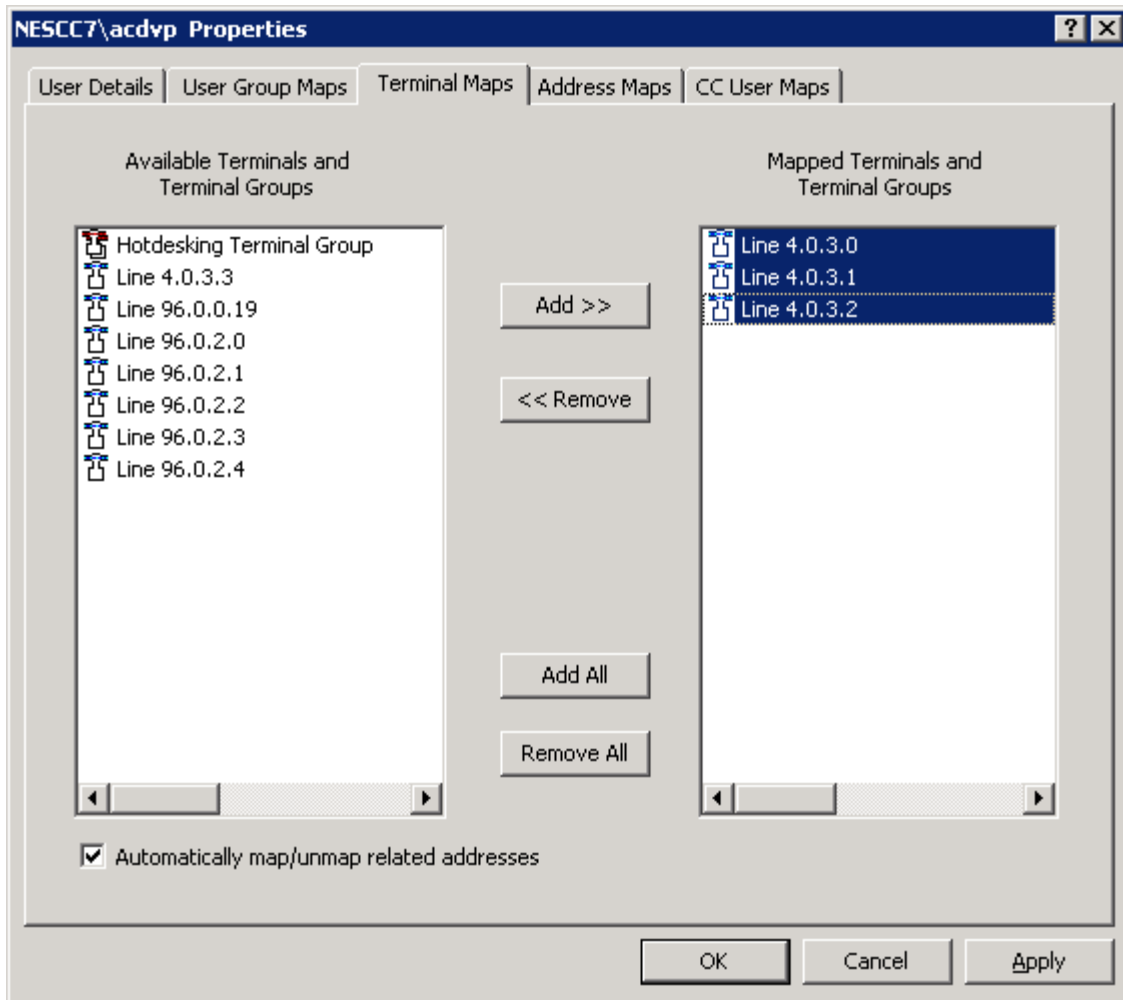
Figure 37: NESCC7\acdvo Properties window

Note: Six addresses that consist of 3 Position IDs **54030**, **54031**, **54032** and 3 Personal DNs **54020**, **54021**, and **54022** are automatically added into the **Address Maps** tab when its terminal line mapped. There is no need to manually map the address to Windows user.

6.2.5. Configure CS 1000 Service Provider for CCT

To configure the Avaya Communication Server 1000 service provider details to enable connection to the CS 1000 switch, in the CCT console select **SP for CS1K**, the **SP for CS1K** provider icon displays in right-hand side of CCT console as shown in **Figure 38**.

Figure 38: Configure SP for CS1K in Communication Control Toolkit console

Double-click on the **SP for CS1K** icon, **SP for CS1K Properties** window displays and enter values for these fields in **Service Provider for CS1K** tab as shown in **Figure 39**.

Figure 39: Configure SP for CS1K in Communication Control Toolkit console (cont)

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

Continue selecting on **CS1K Host** tab of the window, the **CS1K Host** tab displays with values configured as shown in **Figure 40**.

NOTE: Make sure that the ***Disable copy of call data to consultative call*** checkbox is NOT checked, or the user data attached to a call by the Convergys Voice Portal will not be available when the call is answered by an agent.

Figure 40: Configure SP for CS1K in Communication Control Toolkit console (cont)

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
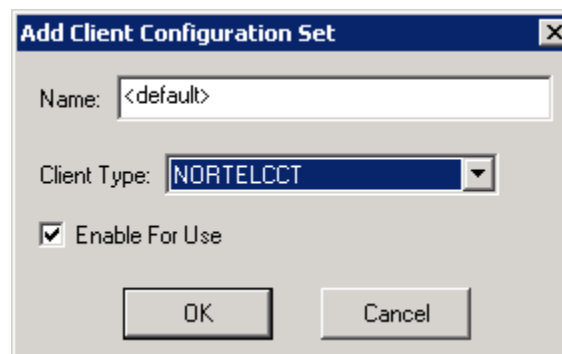©2012 Avaya Inc. All Rights Reserved.

42 of 48
Convergys_CCT7

7. Configure Convergys Voice Portal

This document assumes that the Convergys T1 Lines and Convergys Voice Portal server were properly installed and configured by a Convergys Engineer. This section provides the steps of how to configure the Convergys Voice Portal integrating with Communication Control Toolkit.

7.1.1. Create the Nortel CCT client configuration

The Convergys Voice Portal CTI Gateway module is configured using a Microsoft Management Console (MMC) plugin. To run it, navigate the menu **Start > Run** and enter MMC /32 to run the 32-bit version. Use the **File** menu to open ctigw.msc in the ..\CTI Gateway\sys directory.

Expand the localhost item and the right-click on Client Configuration Sets and select **Add** from the pop-up menu. Select **NORTELCCT** from the drop-down **Client Type** list and click on the **Enable For Use** checkbox. See **Figure 41**.
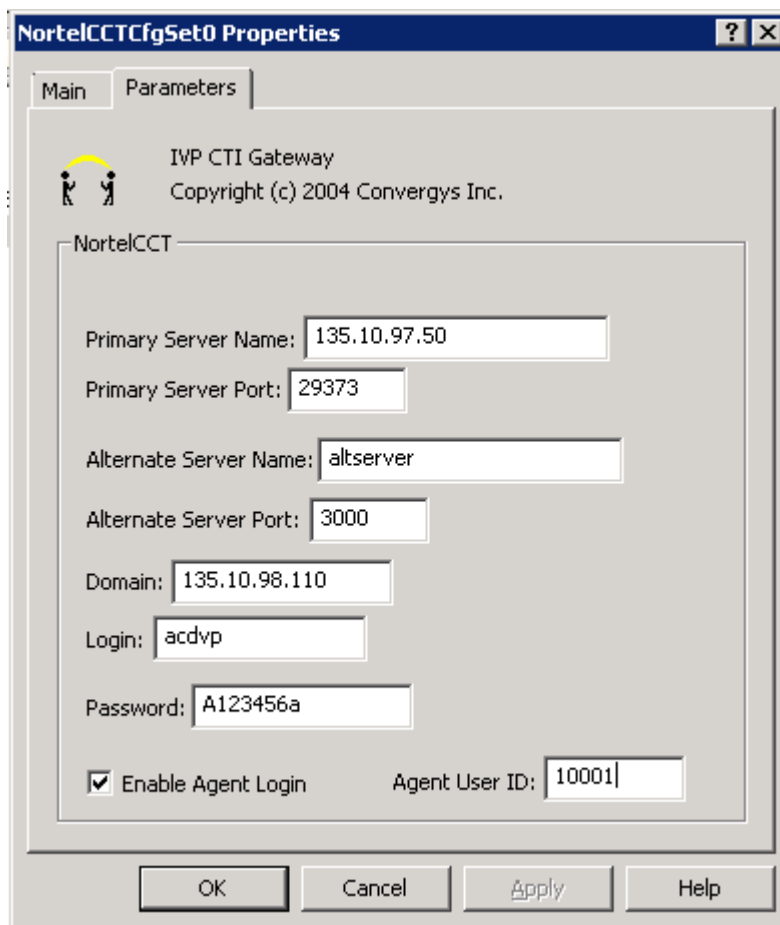

Figure 41: Add Client Configuration Set

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

43 of 48
Convergys_CCT7

7.1.2. Configure CCT Client Parameters

Right-click on the NortelCctConfigSet0 item and select the **Parameters** tab. Enter the Primary Server name (or IP address) and Port number. Configuring an alternate server is optional.

Enter the Domain and user name and password the client will use to log in establish a session with the CCT server. If a lineside T1 is used then check the **Enable Agent Login** option and enter an **Agent User ID** that will be used to login all of the IVR lines. See **Figure 42**.

Figure 42: NortelCCTCSetP Propterties window

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

44 of 48
Convergys_CCT7

## 7.1.3. Configuring Ports for the CCT Client

Expand the NortelCctCfgSet0 item and right-click on the **Ports** item. Select **Add Port…** from the pop-up menu. See **Figure 43**.
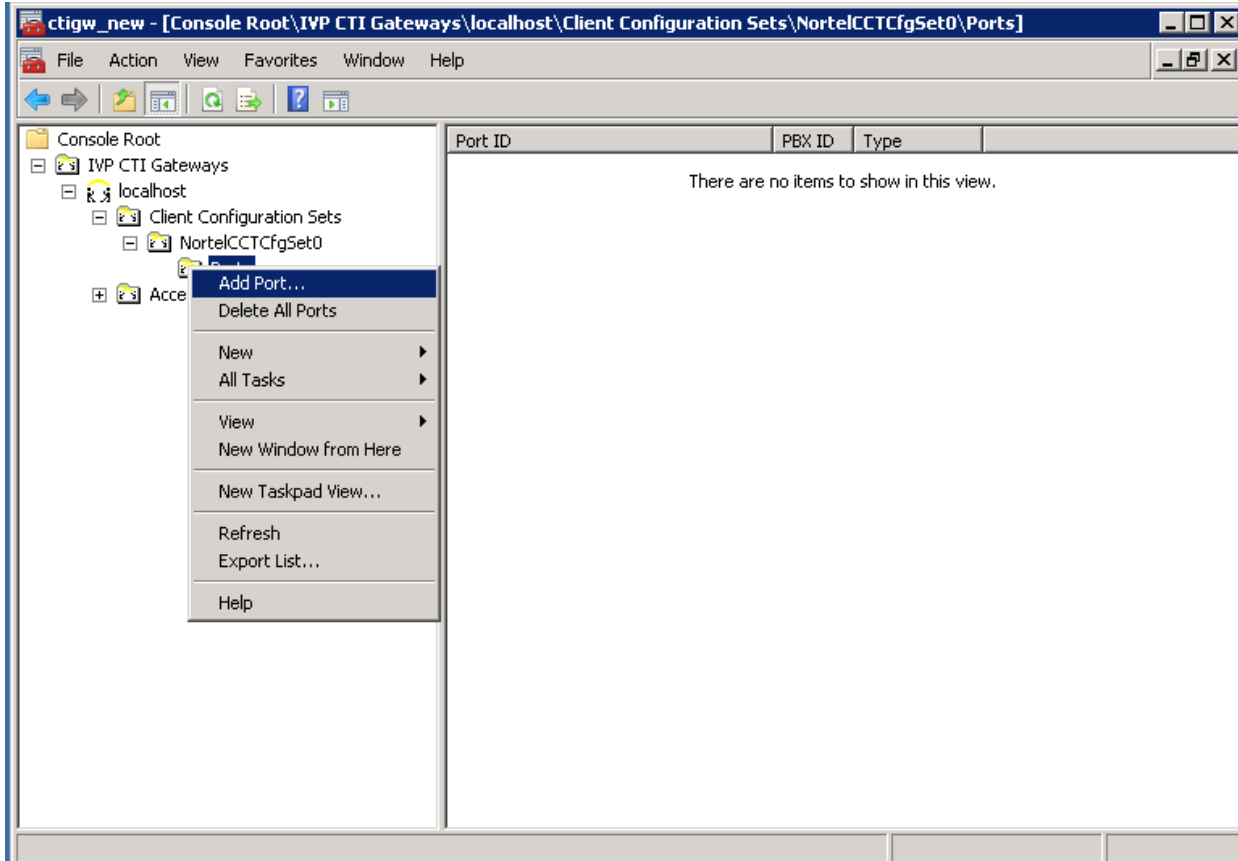
Figure 43: CTI Gateway Window

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

45 of 48
Convergys_CCT7

The IVR Host Name used for this testing was the default changemenow. Board and Span were 0 and 1 respectively. Seven ports were configured for the testing, although only ports 2 and 3 (DNs 54031 and 54032, respectively) were used in the test. See **Figure 44**.
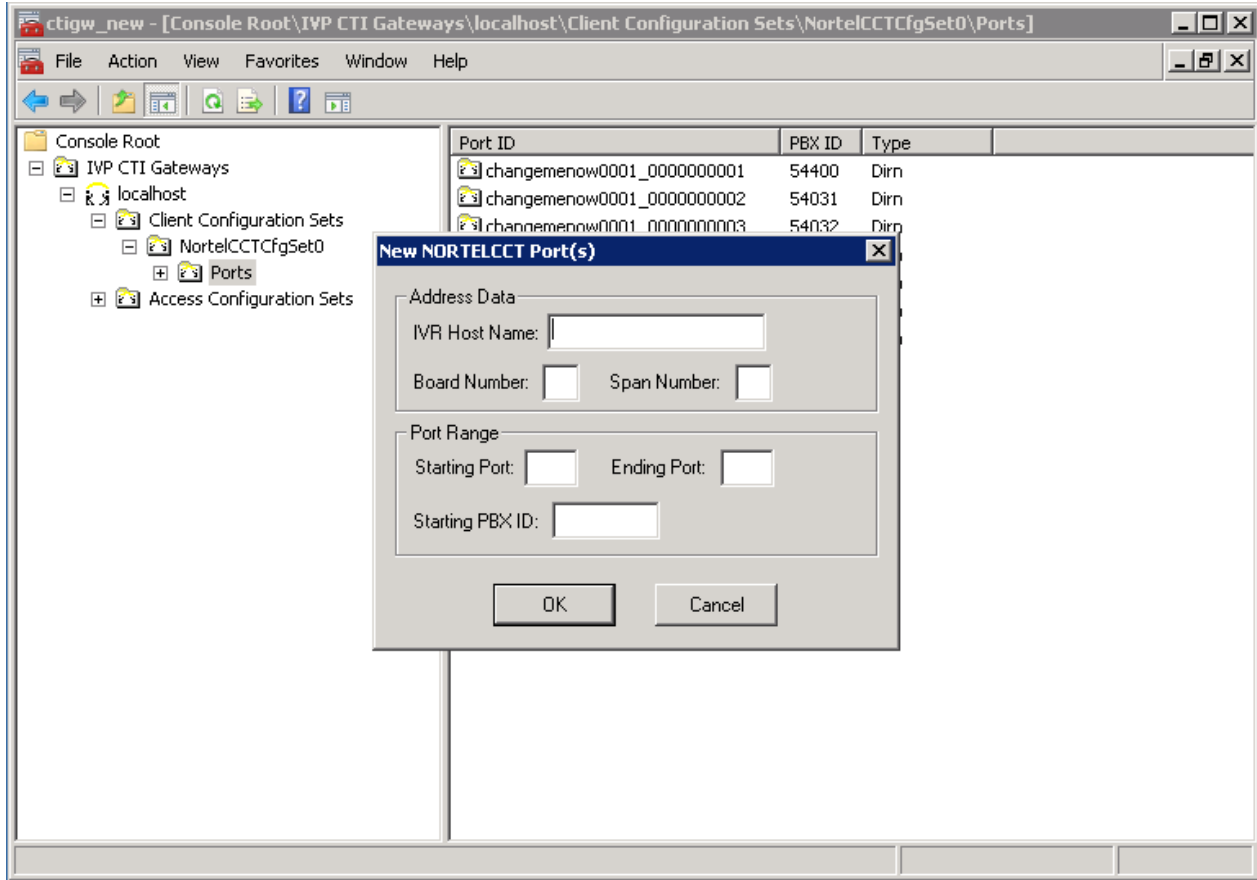
Figure 44: CTI Gateway Window (cont)

7.1.4. Running CTI Gateway

The CTI Gateway process starts automatically whenever the Convergys Voice Portal is restarted. The configured NortelCCT client immediately establishes a session with the CCT server, and logs in the configured ports if necessary.

KP; Reviewed;
SPOC 1/18/2012

Solution & Interoperability Test Lab Application Notes
©2012 Avaya Inc. All Rights Reserved.

46 of 48
Convergys_CCT7

8. Verification Steps

The following are typical steps to verify the Convergys Voice Portal was able to integrate with Communication Control Toolkit CTI server.

- From CCT client in the Convergys server, use CCT user name and password configured in **Section 6.2.4** to log in this user and then log IVR T1 line Agents in by sending a request to CCT.
- When analog agent phones were successfully logged in, place call to Control directory number (CDN) from another extension and the call is now processed by script of Contact Center. The call then came to ACD IVR which had some of analog IVR agents being logged in and ready to accept call.
- When the call came to analog IVR agent, the Convergys CCT client took over from here. It can do basic telephony feature like accept, hold/retrieve, add user data and transfer call to another extension.

9. Conclusions

These Application Notes describe the configuration steps required for Convergys Voice Portal system with Communication Control Toolkit Release 7 using Line-Side T1 Interface to successfully control its IVR agent ports. The Convergys Voice Portal is considered compliant with the Avaya NES Communication Control Toolkit Server Release 7.0.

10. Additional References

Product documentation for Avaya products may be found at:
   https://support.avaya.com/css/Products/

Product documentation for Convergys products may be found at:
   http://www.convergys.com

[1] Avaya Communication Server 1000 Documents:
   Avaya Communication Installation and Commissioning, Doc# NN43041-310, Issue 05.04, Date May 2011.
   Avaya Communication Server 1000 Unified Communications Management Common Services Fundamentals, Doc # NN43001-116, Issue 05.11, Date June 2011.
   Avaya Communication Server 1000 Co-resident Call Server and Signaling Server Fundamentals, Doc # NN43001-509, Issue 03.02, Date June 2011.
   Avaya Communication Server 1000 Element Manager System Reference - Administration, Doc# NN43001-632, Issue 05.09, Date July 2011.
   Avaya Communication Server 1000 Circuit Card Reference Release 7.5, Doc# NN43001-311, Issue 05.03, Date May 2011.

[2] Avaya NES Contact Center Documents:
   Avaya Contact Center Installation (NN44400-311)
   Avaya Contact Center Commissioning (NN44400-312)
   Avaya Contact Center Configuration – CS 1000 Integration (NN44400-512)

©2012 Avaya Inc. All Rights Reserved.
Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

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.