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# ***SL1100***

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## ***Desktop Suite Manual***



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# CHAPTER 1      *Introduction to Desktop Applications*

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## **SECTION 1      INTRODUCTION**

This document describes the operation and functionality of the SL1100 Desktop Applications.

## **SECTION 2      OVERVIEW**

The SL1100 Desktop Applications is a new suite of software that allows users to control their SL1100 terminal from their PC (Deskset Mode) or the PC itself can become their SL1100 terminal (SL Softphone Mode). Through licensing control and user selection, the application can be tailored to meet the needs of a variety of end users. The SL1100 Desktop Suite is a graphical user interface between the end user and the SL1100 and can be operated in two modes:

- Deskset
- Softphone

The following utilities are provided as a part of the SL1100 Desktop Suite to support additional features to be utilized with the Desktop Applications:

- Configuration Wizard – Steps the user through the process of providing the settings that are required to start the desktop application.
- Outlook Add-In – allows the user to dial out, transfer, conference and end call through the Contacts folder within Microsoft Outlook.

## TCP/UDP Port and Windows Process Firewall Exceptions

When a firewall is involved in the network between the SL1100 and the Desktop Client or Shared Servers. Refer to [Table 1-1 Exceptions to Firewall for Ports](#) for exceptions to be made in the firewall for ports and [Table 1-2 Exceptions to Windows Process](#) for windows processes.

**Table 1-1 Exceptions to Firewall for Ports**

Desktop Component	TCP and/or UDP	Port Numbers	Related Program
SIP	UDP	5070~5197	
Audio RTP	UDP	60000~60254	
Outlook Integration/Highlight Dial/CallToTag/XML API	TCP	20864~20865	
1st-Party Call Control	TCP	8282	10-20-1 Device 0 – 1st-Party CTI

**Table 1-2 Exceptions to Windows Process**

Windows Process Firewall Exceptions
NECSLPhone.exe

## SECTION 3      **INSTALLATION CONSIDERATIONS**

The Desktop Applications can only be installed in standalone mode since Shared Services are not available with this version of the Desktop Suite.

### **3.1 Standalone Configuration**

In the standalone configuration, each PC with the Desktop Applications has its own connection to the SL1100. The Desktop Applications communicates to the SL1100 via the LAN on the TCP port defined for the 1st-Party CTI connection in Program 10-20-01, although a 1st-Party CTI license is not required for the Desktop Applications. The 1st-Party CTI connection is device 9 in 10-20-01 and the recommended port is 8282.

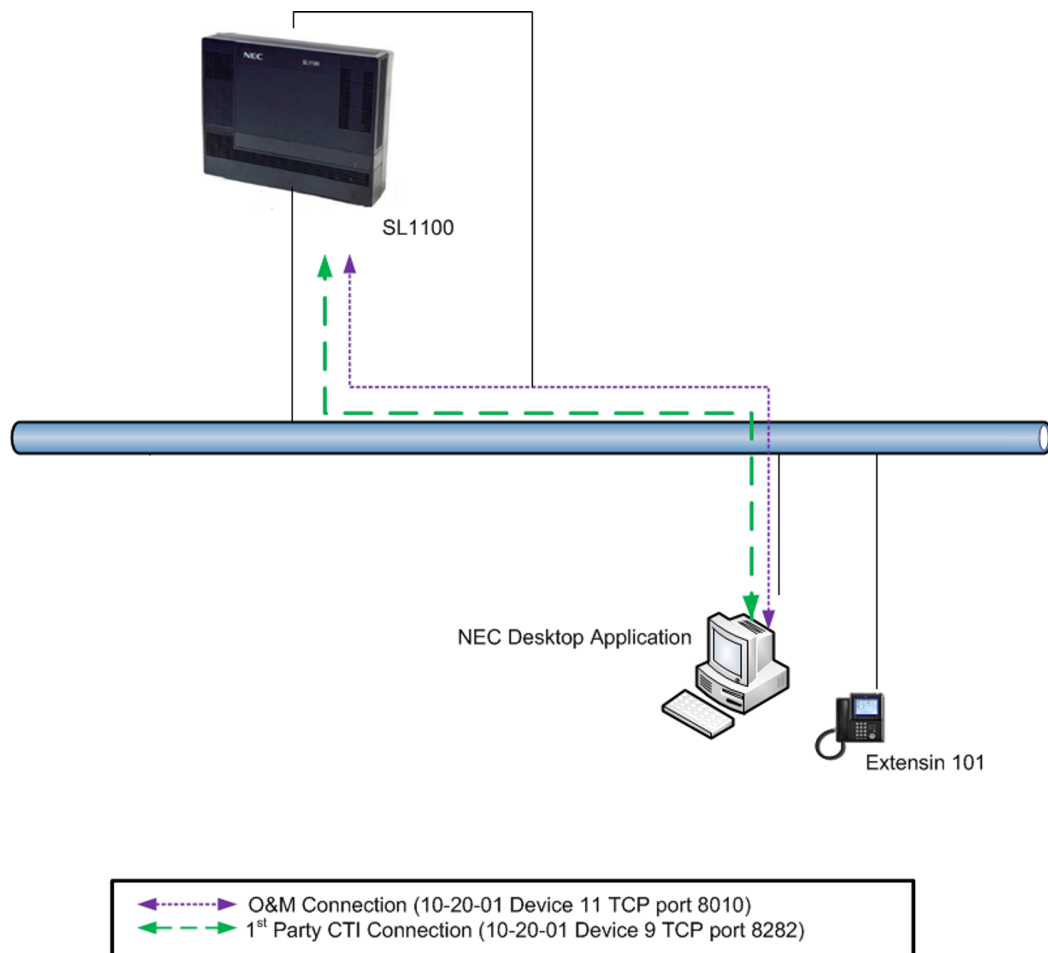
### **3.2 O&M (Operation and Maintenance)**

The Desktop Application can have a second connection to the SL1100 for O&M (Operation and Maintenance). O&M allows the Desktop Application to synchronize with the SL1100 when new buttons are added to the extension the Desktop is controlling, and synchronize feature access codes when they have been changed in the SL1100. The Desktop Application communicates to the SL1100 for O&M information on the TCP port defined for O&M in Program 10-20-01. The O&M connection is device 11 in 10-20-01 and the recommended port is 8010.

Refer to [Figure 1-1 Desktop Connections on page 1-4](#) for a diagram of the connections for the standalone and O&M configurations.

### **3.3 Remote Connections**

In the first release of the SL1100, Network Address Translation (NAT) is not supported. Because of this, any Desktop Applications must appear to be on the same network as the SL1100 VoIP Interface (VOIPDB). For remote Desktop Applications, such as the Softphone, this can be achieved using a VPN connection to the network where SL1100 resides.



**Figure 1-1 Desktop Connections**

## SECTION 4 SYSTEM REQUIREMENTS

The minimum recommended PC requirements and the supported operation systems are described in this section.

### 4.1 Minimum PC Requirements

The minimum recommended PC requirements for running the desktop application are as follows:

- PC Class: Pentium 3
- Processor Speed: 1GHz
- RAM: 512MB Minimum, 1GB Recommended
- Display: Super VGA (800 x 600) or higher



- Available Disk Space: 50MB
- CD-ROM Drive
- Network Adapter
- Sound Card
- Microphone/Headset/USB Handset (optional)
- Speakers (optional)

## 4.2 Supported Operating Systems

The desktop application is supported on the following operation systems:

- Windows 7 Professional, 32- and 64-Bit
- Windows 8, 32- and 64-Bit
- Windows 8.1, 32- and 64-Bit
- Windows 10, 32- and 64-Bit (SL Desktop Suite 2.5 and higher)

## 4.3 Licensing

The licensing options for the SL1100 Desktop Suite includes support for Soft Phone and Deskset modes. The following table shows the license codes that will be used with different Desktop Suite operational modes.

**Table 1-3 SL1100 Licensing Codes**

Part Number	Name	Description	License Code in 10-50-01 PCPro License Description	
			5501 Softphone	5505 Deskset
1100087	SL-DT Desktop Suite 1-LIC	Desktop Suite License - 1	1	1
<b>SL-DT-CRM Integration-LIC part number 1100095</b> is required (License code 5510).				

The SL Desktop Suite will allow the user to run in trial mode for a period of 90 days from initial start-up. During the trial period, the SL Desktop Suite will not retrieve the required licenses from the telephone system.

#### **4.4 SL1100 Hardware Requirements**

At a minimum, the SL1100 requires the following hardware:

- CPU – Processor
- MEMDB – Memory Daughter Board
- VoIPDB – VoIP Daughter Board

## CHAPTER 2      *Installation*

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The installation of the SL1100 Desktop Applications includes prerequisite software, if the installation determines these do not already exist on the PC.

The following prerequisite software is installed:

- Microsoft .NET Framework
- Microsoft Visual C++ Redistributable

After the prerequisite software is installed, the NECDesktop.msi installs. This installation includes the following applications:

- SL1100 Desktop Application
- Microsoft Outlook Add-In

The Desktop Applications are installed in the following directory:

- C:\Program Files\NEC\NEC SL Desktop Suite

Application logs are in the following directory:

- C:\Documents and Settings\All Users\Application Data\SL1100 Application Suite\PC Phone\Log Files

After installation is complete, the following application environment is available, depending on what installation options were chosen:

- Program group named "NEC"
- Within NEC group are the following:
  - NEC SL Desktop Suite
  - NEC SL Desktop Suite Configuration
- A shortcut for Desktop Applications installs on the Windows desktop.

## **SECTION 1      INSTALLATION STEPS**

Installation of NEC's SL1100 Desktop Suite will not be accomplished through a simple installation process that is targeted towards the end user. The decision points within the installation process will be clearly explained to eliminate the need for any support calls.

### **1.1      Distribution Format**

The installation of the SL1100 Desktop Suite will be designed for distribution by CD or DVD. The folder structure for the CD/DVD will be defined by NEC in a separate document. Red Phoenix will provide NEC with a self-extracting setup file for inclusion on the distribution media.

### **1.2      Installation Procedure**

The following sections describe the installation process for NEC's SL Desktop Suite.

#### **1.2.1      Prerequisite Installations**

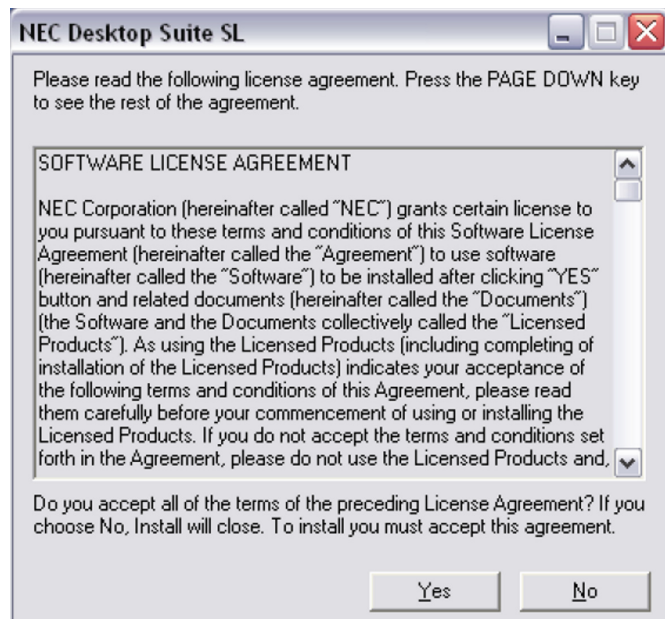
The installation process will start by examining the host machine to determine if the required prerequisite utilities are already installed. The prerequisite software for this application may include:

- .NET Framework
- Visual C++ Redistributable

If any of the required prerequisites are not installed on the host machine, the installation procedure will initiate the setup program for the required utilities.

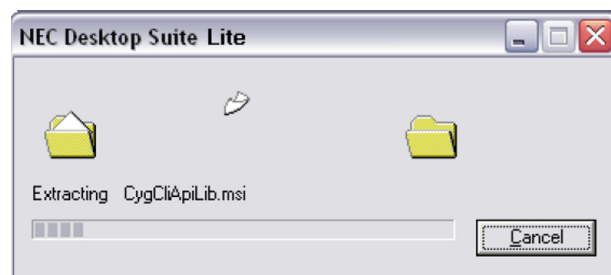
## 1.2.2 Application Installation

After the required prerequisites are verified, installation of the SL Desktop Suite application begins. The first screen displays the Software License Agreement, which the user must accept for the installation to continue.



**Figure 2-1 Software License Agreement**

If the user clicks on the **No** button, the installation process terminates. After acceptance of the SLA, the installation process will continue by extracting compressed files from the installation image. The installation window shows the progress as the files are being extracted.



**Figure 2-2 Extracting Progress Screen**

Once file extraction completes, the installation process continues and the Welcome screen for the setup wizard is displayed.

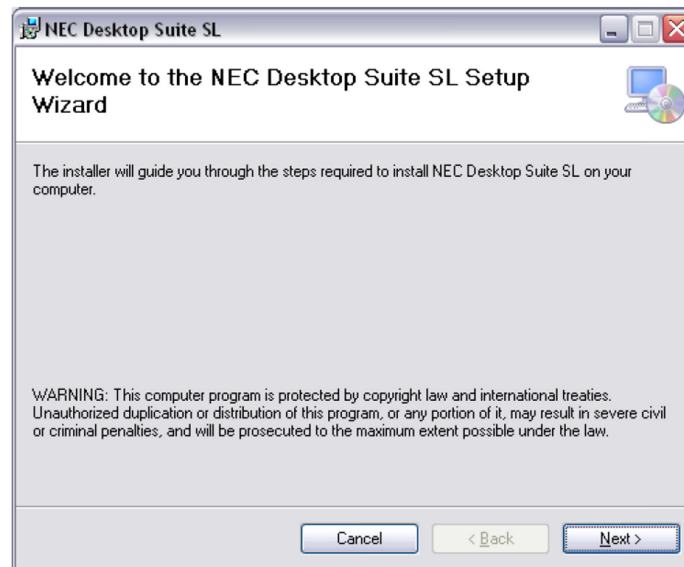


Figure 2-3 NEC Welcome Wizard

Clicking on the **Next** button continues the installation wizard. The next screen asks the user to specify the destination folder for the application.

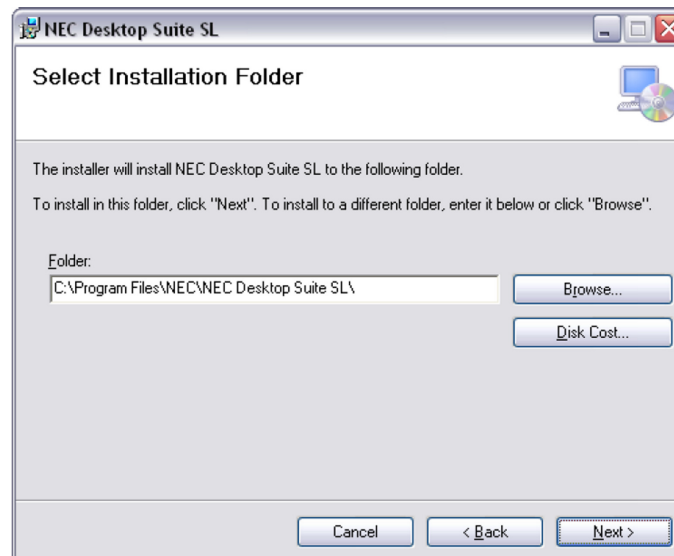


Figure 2-4 Select Installation Folder

By default, the application is installed at C:\Program Files\NEC\NEC Desktop Suite SL.

The user can click on the **Browse** button to open a folder navigation window.

Clicking on the **Disk Cost** button opens a window that displays available and required space on each available drive.

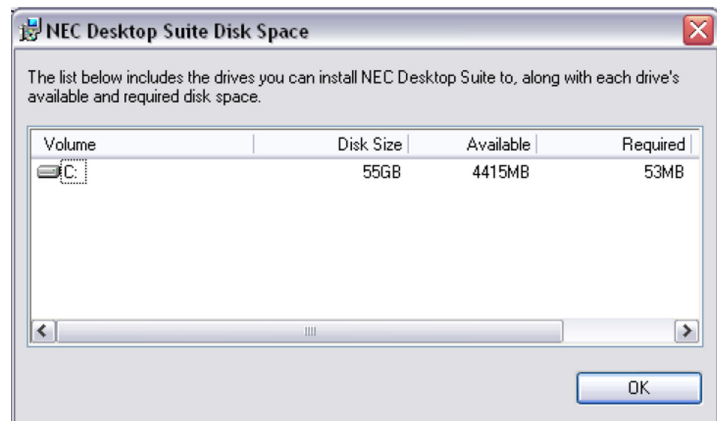


Figure 2-5 Disk Space Screen

After the destination folder has been specified, a confirmation screen displays allowing the user to start installation of the application.

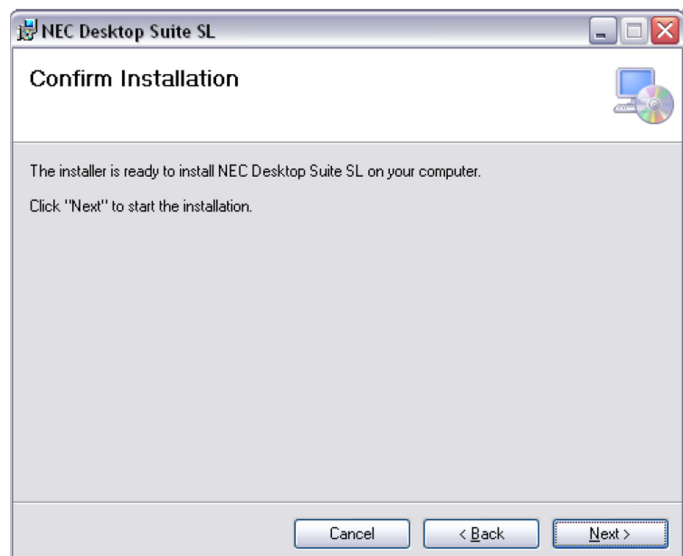
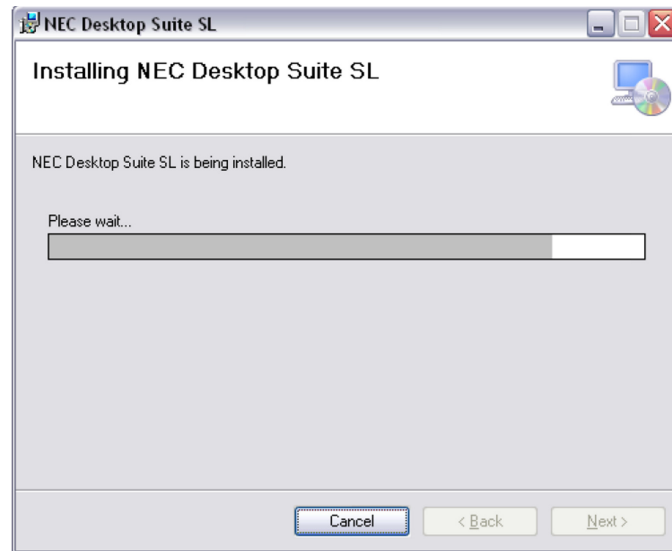


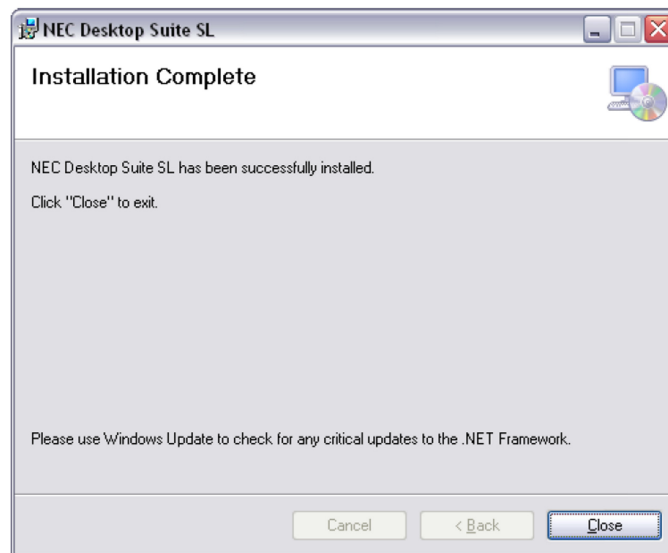
Figure 2-6 Confirmation Screen

Clicking on the **Next** button starts the installation of the application. As the installation proceeds, an installation window displays the overall progress, as shown below.



**Figure 2-7 Installing NEC Desktop Screen**

When the installation completes, the following is displayed.



**Figure 2-8 Installation Complete Screen**

Click on **Close** button to complete the installation process.



### 1.3 Program Access

As part of the installation process, the following program access points are established:

- A program shortcut is added to the Windows Desktop to launch the SL Desktop Suite application.



**Figure 2-9 Desktop Suite Icon**

- A new program group labeled NEC is added to the Programs list.
- The NEC program group includes entries for **Desktop Suite SL** and **Desktop Suite SL Configure** to launch the application and the configuration wizards, respectively.


## SECTION 2 SL1100 DESKTOP SUITE SYSTEM PROGRAMMING

The following table lists the SL1100 System programming related to the Desktop Suite.

**Table 2-1 SL1100 Desktop Suite System Programming**

Program	Description	Input Data
10-12-03 CPU Network - Default Gateway	Define the default gateway to be used by the VOIPDB interface.	0.0.0.0 ~ 126.255.255.254 128.0.0.1 ~ 191.254.255.254 192.0.0.1 ~ 223.255.255.254  Default = 0.0.0.0
10-12-09 CPU Network Setup - IP Address	Define the IP Address for the VOIPDB interface.	0.0.0.0 ~ 126.255.255.254 128.0.0.1 ~ 191.254.255.254 192.0.0.1 ~ 223.255.255.254  Default = Slot 1 = 172.16.0.10 Slot 4 = 172.16.0.13
10-12-10 CPU Network Setup - Subnet Mask	Define the Subnet Mask for the VOIPDB interface.	128.0.0.0 240.0.0.0 254.0.0.0 255.192.0.0 255.248.0.0 255.255.0.0 255.255.224.0 255.255.252.0 255.255.255.128 255.255.255.240 255.255.255.254  192.0.0.0 248.0.0.0 255.0.0.0 255.224.0.0 255.252.0.0 255.255.128.0 255.255.240.0 255.255.254.0 255.255.255.192 255.255.255.248 255.255.255.255  224.0.0.0 252.0.0.0 255.128.0.0 255.240.0.0 255.254.0.0 255.255.192.0 255.255.248.0 255.255.255.0 255.255.255.224 255.255.255.252  Default = 255.255.0.0

Table 2-1 SL1100 Desktop Suite System Programming (Continued)

Program	Description	Input Data
10-20-01 LAN Setup for External Equipment - TCP Port	Define the TCP port for the LAN CTI and O&M communication between the CPU and the Desktop Suite.	0 ~ 65535 Device 1 (CTI Server) = 0 (Port 8181 recommended).  Default = Device 9 (1st Party CTI) = 0 (Port 8282 recommended) Device 11 (O&M Server) = 8010
10-46-01 DR700 Server Information Setup - Register Mode	Define the way the Desktop Application Softphone will register with the system. Desktop configuration must be set to match this setting or it will not launch.  Refer to <a href="#">Chapter 5 Desktop Registration and Softphone Override</a> for more information about registration mode.	0 = Plug and Play 1 = Auto 2 = Manual  Default = 0  0 = Plug and Play When the softphone launches, it will report the extension assigned in the Desktop Configuration or choose the next available extension in the system. No password required.  1 = Auto If set to auto then the SIP user name and password must be entered in the Desktop Configuration. These settings must match 84-22/15-05-27 or the Softphone will not come online.  2 = Manual: When the Desktop Application launches, it will prompt user to enter a user id and password before logging in. It checks this user id/password against 84-22/ 15-05-27. If there is no match, the Softphone will not come online.
15-05-27 IP Telephone Terminal Basic Data Setup - Personal ID Index	Used when the softphone or SIP multiline terminal is using manual or auto registration. Assign each phone a unique personal index. Then go to command 84-22 to assign the user name and password.	0 ~ 512  Default = 0
15-05-28 IP Telephone Terminal Basic Data Setup - Additional Information Setup	Talking Party Off Set to 0 for Desktop Application softphone.	0 = Disable 1 = Enable  Default = 0
15-07-01 Programmable Function Keys	Assign function keys such as DSS/One Touch Trunk Appearance keys to the Desktop Application station.   <i>To retrieve an internal call on hold, the station needs an ICM key (*00).</i>	00 ~ 99, *00 ~ *99  Default = Keys 1~6 assigned *01 for the first six trunks in the system
30-01-01 DSS Console Operating Mode	Set the mode for the system DSS consoles.	0 = Business Mode 1 = Hotel Mode  Default = 0

**Table 2-1 SL1100 Desktop Suite System Programming (Continued)**

<b>Program</b>	<b>Description</b>	<b>Input Data</b>
30-02-01 DSS Console Extension Assignment	Assign which extensions have one of the 12 DSS consoles associated with them.	The extension number for the multiline terminal connected with the DSS console (up to eight digits).
30-03-01 DSS Console Key Assignment	Assign the key assignments for 60-button DSS Consoles. A DSS Console key can have any function with up to four digits (example: DSS/One Touch or Trunk key).	00 ~ 99, *00 ~ *99 DSS keys 01~60 of all DSS Consoles = DSS/One-Touch Key 101~160. DSS Keys 61~114 of all DSS Consoles = None
84-20-02 SIP Extension Basic Information Setup - Session Timer Value	Set to 0 for Desktop Application softphone.	0 ~ 65535 Default = 180
84-20-03 SIP Extension Basic Information Setup - Minimum Session Timer Value	Set to 0 for Desktop Application softphone.	0 ~ 65535 Default = 180
84-22-01 DR700 Multiline Logon Information Setup - User ID	Input the User ID for each Personal ID Index (1-84) when using auto or manual registration in 10-46-01.	Up to 32 characters Default not assigned
84-22-02 DR700 Multiline Logon Information Setup - Password	Input the Password for each Personal ID Index (1-84) when using auto or manual registration in 10-46-01.	Up to 16 characters Default not assigned
84-22-04 DR700 Multiline Logon Information Setup - Log Off	Enable or Disable the ability for each SIP multiline or softphone to log off and to be overridden by another SIP multiline or softphone.	1 = On (Enable) 0 = Off (Disable) Default = 1
84-26-01 VOIPDB Basic Setup (DSP) - IP Address	Assign IP addresses to the DSP resources on the VOIPDB.	0.0.0.0 ~ 126.255.255.254 128.0.0.1 ~ 191.254.255.254 192.0.0.1 ~ 223.255.255.254  Default = Slot 1 = 172.16.0.20 Slot 4 = 172.16.0.44

## SECTION 3 CONFIGURATION WIZARD

The Configuration Wizard steps the user through the settings that the application requires to connect to the SL1100 Telephone System and to initialize the appropriate application type.

### 3.1 Configuration Startup

The initial configuration settings will be requested through a simple configuration wizard that will run when the application is started for the first time. The text and field labels are targeted toward the end user and utilize as many confirmation checks as possible.

The Configuration Wizard can be started manually at Start/All Programs/NEC/NEC SL Desktop Suite Configure.

### 3.2 Configuration Wizard, Welcome Screen

The first screen of the configuration wizard is a welcome screen that introduces the steps required to navigate through the setup.

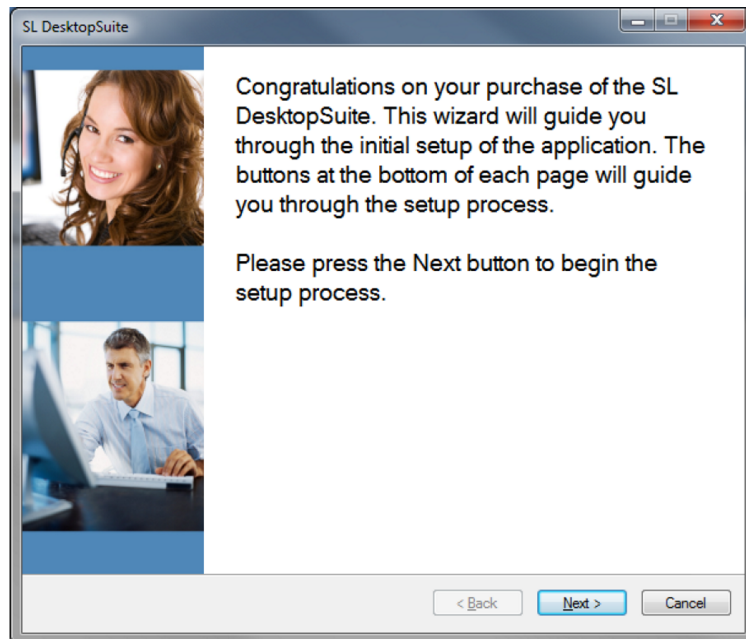
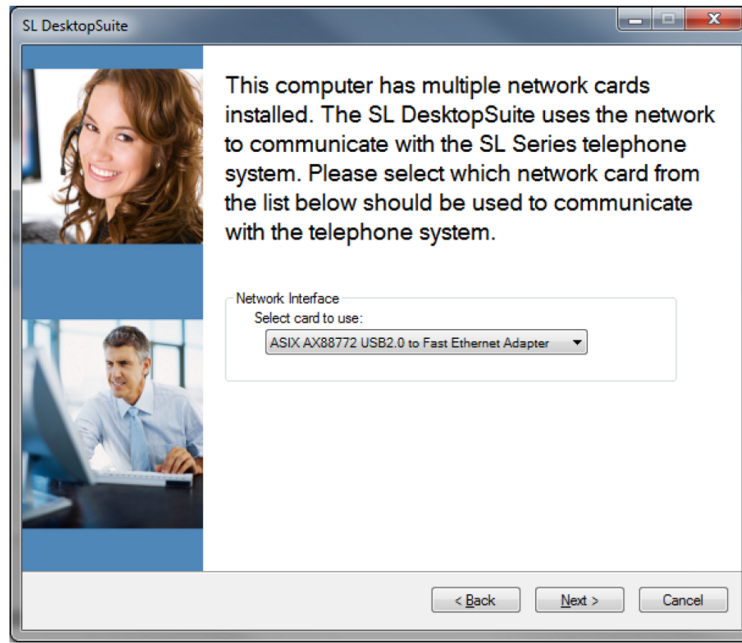


Figure 2-10 Configuration Wizard – Welcome Screen

### 3.3 Configuration Wizard, Network Interface

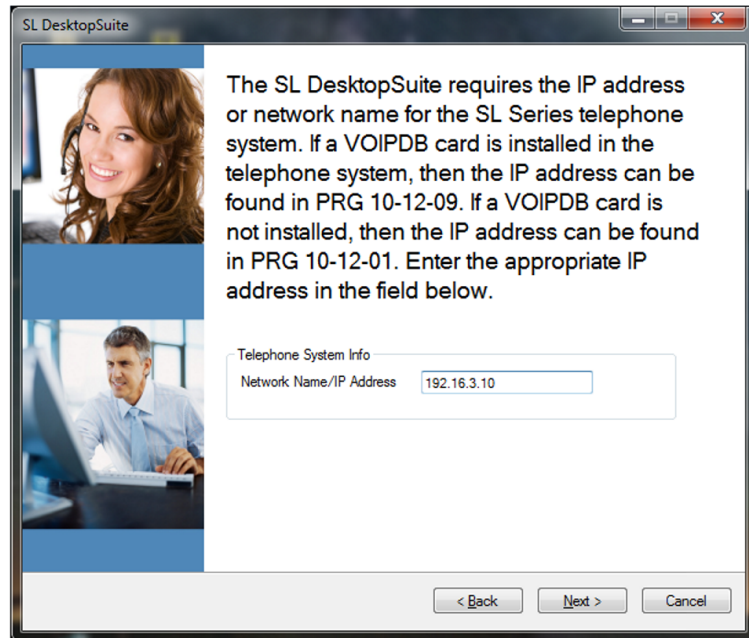
If the application detects multiple NIC cards in the host computer, then the next setup screen will be displayed. If there is only one NIC card in the system, then the following screen will not be displayed.



**Figure 2-11 Configuration Wizard – Network Interface**

### 3.4 Configuration Wizard, IP Address

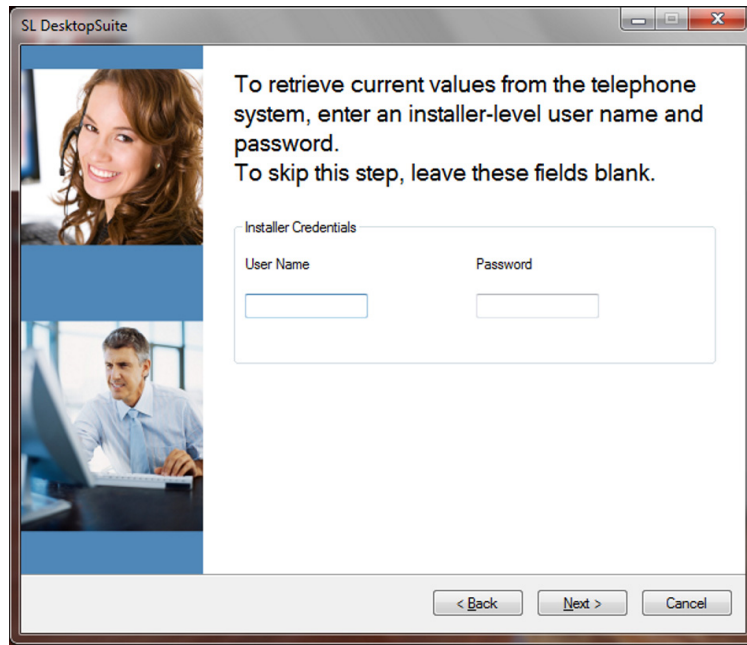
The next screen prompts the user to enter the IP Address or Network Name of the SL1100 telephone system.



**Figure 2-12 Configuration Wizard – IP Address**

### 3.5 Configuration Wizard, Installer Credentials

If desired, enter the **Installer Level** login credentials from Program 90-02-02 (i.e. User Name: sltech, Password: 12345678). This allows the Wizard to retrieve current configuration settings from the telephone system. To skip this step, leave these fields blank.



The screenshot shows a window titled "SL DesktopSuite" with a standard Windows-style title bar. On the left side, there is a vertical strip containing two images: the top one is a woman with a headset, and the bottom one is a man in a light blue shirt working at a computer. The main content area of the window contains the following text:

To retrieve current values from the telephone system, enter an installer-level user name and password.  
To skip this step, leave these fields blank.

Below this text is a section titled "Installer Credentials" which contains two input fields: "User Name" and "Password". Both fields are currently empty. At the bottom right of the window, there are three buttons: "< Back", "Next >", and "Cancel".

**Figure 2-13 Configuration Wizard – Installer Credentials**



### 3.6 Configuration Wizard, Ports

When the user has entered the IP Address and presses Next, the configuration wizard will ask the user to enter the port numbers required by the application.

The SL DesktopSuite uses several ports on the SL Series telephone system for communication. Next to each field below is the PRG area within the telephone system where the required port number is defined. Please enter the value set within the telephone system for each of the following ports.

Telephone System Info		
CTI Port Number	<input type="text" value="8282"/>	PRG 10-20-01 Device 9
SIP Port Number	<input type="text" value="5080"/>	PRG 10-46-06
License Port Number	<input type="text" value="6080"/>	PRG 10-47-01

< Back    Next >    Cancel

Figure 2-14 Configuration Wizard – Ports

### 3.7 Configuration Wizard, O&M

After the user has entered the required port numbers and presses the Next button, the configuration wizard will prompt the user to enter the O&M settings.



**Figure 2-15 Configuration Wizard – O&M**

### 3.8 Configuration Wizard, Operational Mode

After the O&M settings have been entered and the Next button is pressed, the configuration wizard will ask the user to select the operational mode for the application.



**Figure 2-16 Configuration Wizard – Operational Mode**

### 3.9 Configuration Wizard, Extension

After selecting the operational mode enter the desired extension number.

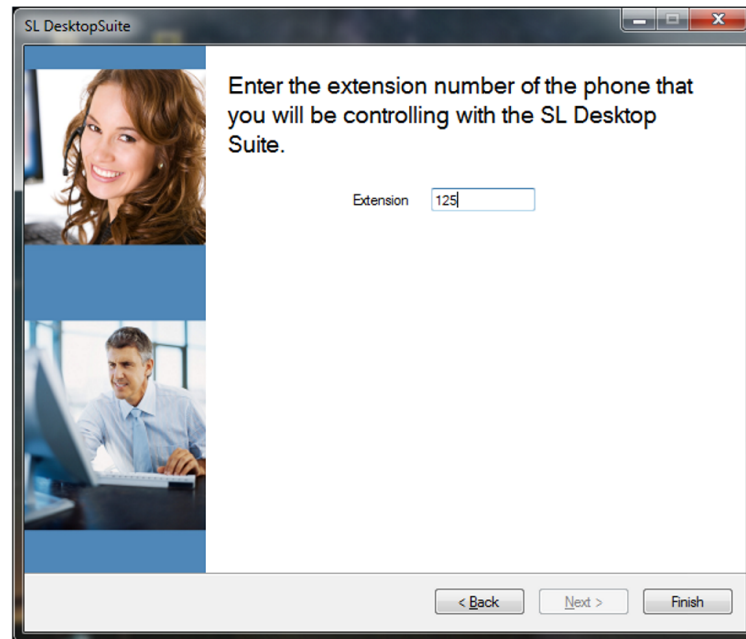
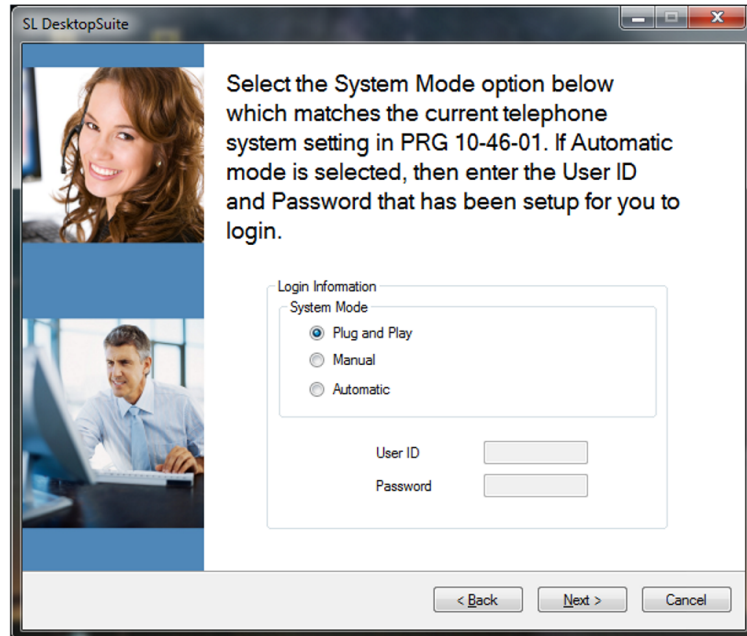


Figure 2-17 Configuration Wizard – Extension

### 3.10 Configuration Wizard, System Mode

If the user has selected to run the application in Softphone mode, the following sequence of screens are displayed.



**Figure 2-18 Configuration Wizard – System Mode**

### 3.11 Configuration Wizard, Audio Device

After the user has specified the current Login information, they are prompted to select the Audio Device.

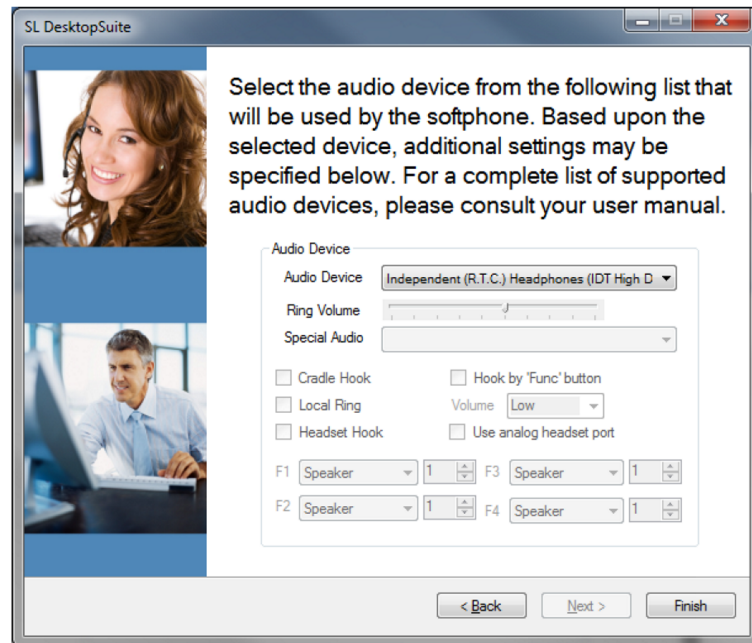


Figure 2-19 Configuration Wizard – Audio Device

- The **Audio Device** lists all of the audio devices that are installed on the Host PC.
- The selected **Audio Device** is used to control the microphone and speaker functionality of the IP Softphone.
- The **Ring Volume** slider controls the level of ringing for incoming calls to the IP Softphone.
- The **Special Audio** lists the additional devices that are available for use, such as USB handsets or headsets.
- The **Cradle Hook** option when selected enables the hook function by lifting the handset up/down from the cradle.
- The **Local Ring** option when selected enables notification of an incoming call through the USB device.
- The **Volume** control sets the level of the ring tone, when Local Ring is enabled.
- The **Headset Hook** when selected enables the hook function by lifting the headset up/down from the cradle.

- The **Use analog headset port** option when selected enables the use of the headset port for an analog headset connected to the USB device.
- The **F1-F4** fields set the function key assignments for each of the four function keys on the USB Handset.
- The **Back** button returns to the previous Configuration Wizard menu.
- The **Finish** button completes the Configuration Wizard and closes the menu.

## SECTION 4 CONFIGURING DIALING RULES

When making calls to outside numbers using the SL Desktop Suite or Outlook Add-In, current dialing rules are followed. Use the following to configure individual dialing requirements.

1. From the **Control Panel** select **Phone and Modem**. Under the **Dialing Rules** tab click on **Edit**.

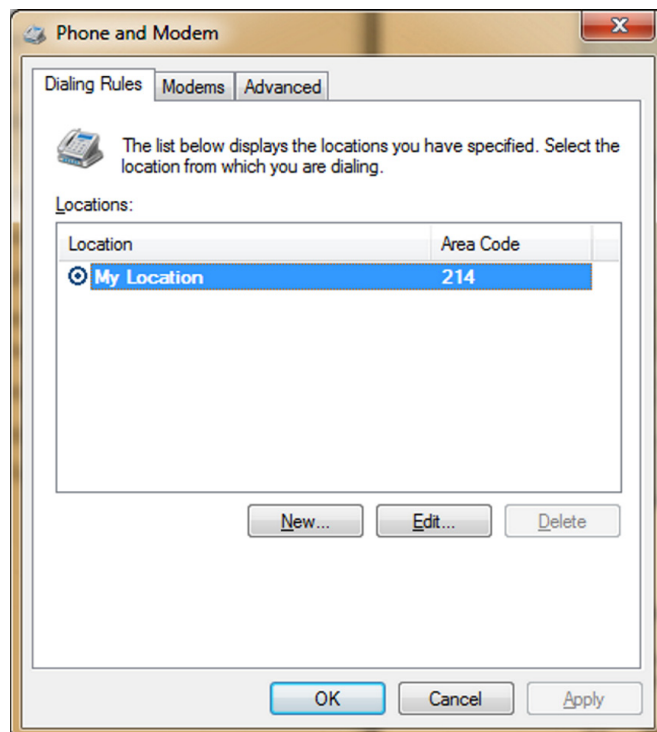
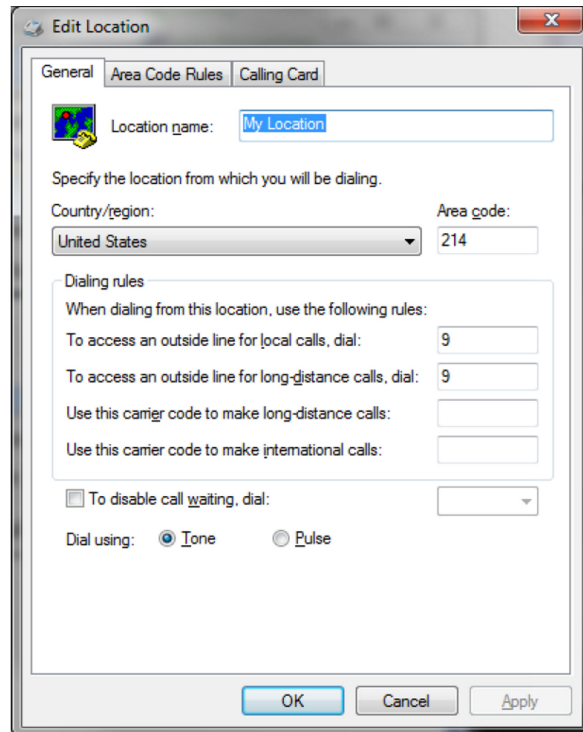


Figure 2-20 Phone and Modem – Dialing Rules Tab


2. Under the **General** tab enter the trunk access codes.

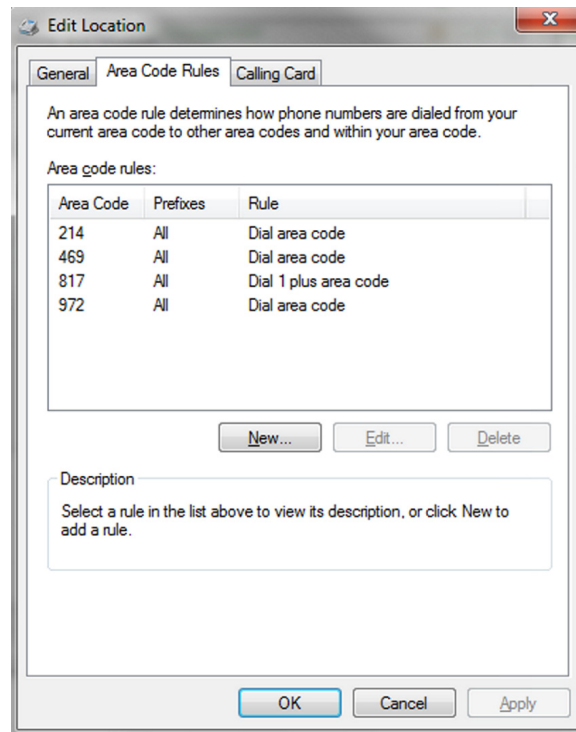


**Figure 2-21 Edit Location – General Tab**



3. Select the **Area Code Rules** tab and enter the local **Area Code** information.

 *In ten digit dialing areas, each area code may need to be defined within the site's location setup.*



**Figure 2-22 Edit Location – Area Code Rules Tab**

4. Click on **OK** to apply changes.

## SECTION 5 CHANGING AUDIO SETTINGS IN WINDOWS 7

### (Only applies when using Windows 7 or Windows Vista)

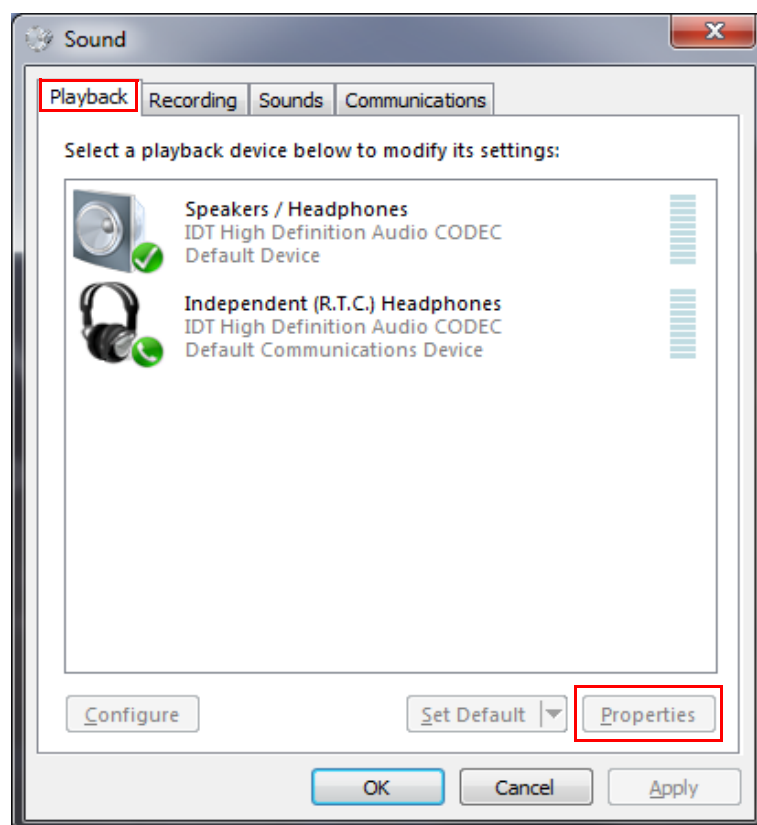
Successful operation of the softphone within Windows 7 requires that the audio properties be set to a supported format. The default settings for the audio device must be set within the range of values shown in the following table.

**Table 2-2 Default Audio Settings**

Sampling frequency (Hz)	8000 / 16000 / 32000 / 48000
Quantization bit	16 bit
Channel	all values supported

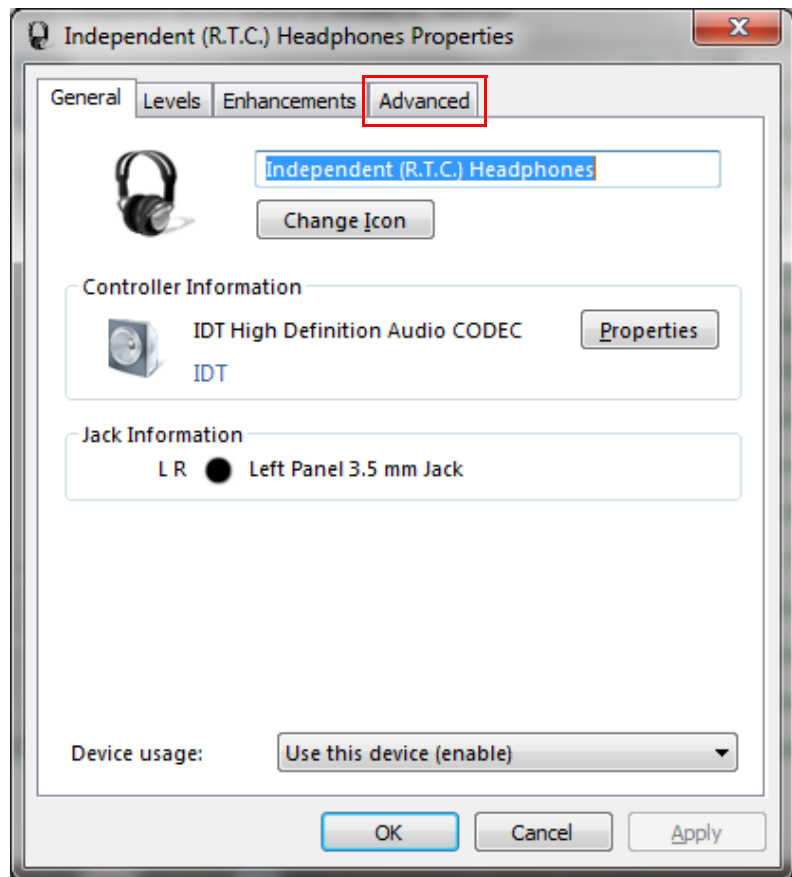
#### 5.1 To change the Audio Properties for the Playback device:

1. On the Windows **Control Panel**, select the **Sound** option.
2. On the **Playback** tab, select the device to be changed and press the **Properties** button.

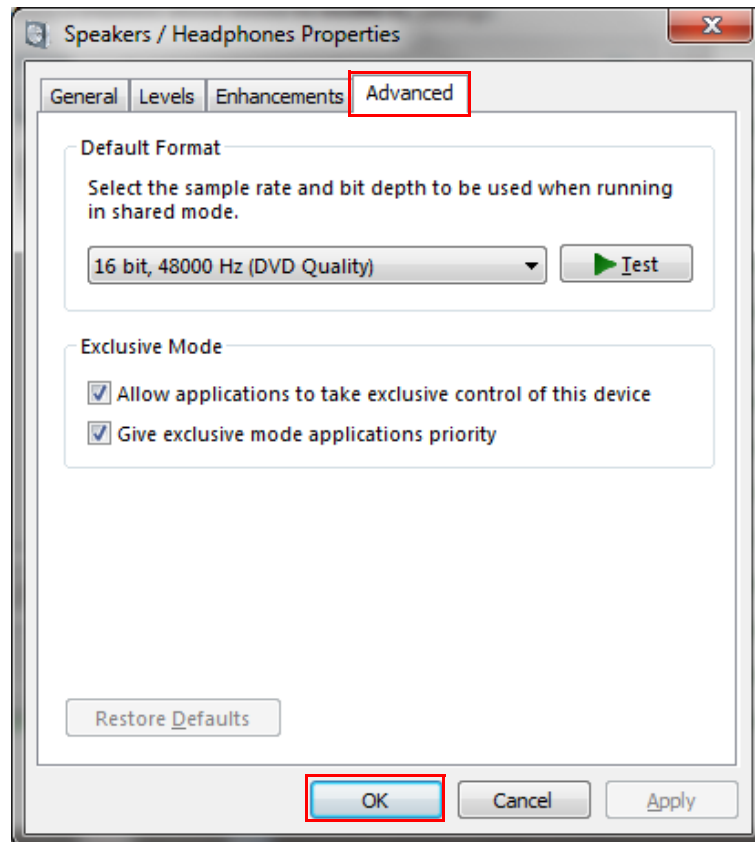


**Figure 2-23 Setting Playback Properties**

3. Select the **Advanced** tab and set the **Default Format** to a supported setting, as shown in [Figure 2-25 Advanced Playback Settings](#) on page 2-26.



**Figure 2-24 General Playback Settings**



**Figure 2-25 Advanced Playback Settings**

4. Select **OK** to save the settings.

## **5.2 To change the Audio Properties for the Recording device:**

1. On the Windows **Control Panel**, select the **Sound** option.
2. On the **Recording** tab, select the device to be changed and press the **Properties** button.

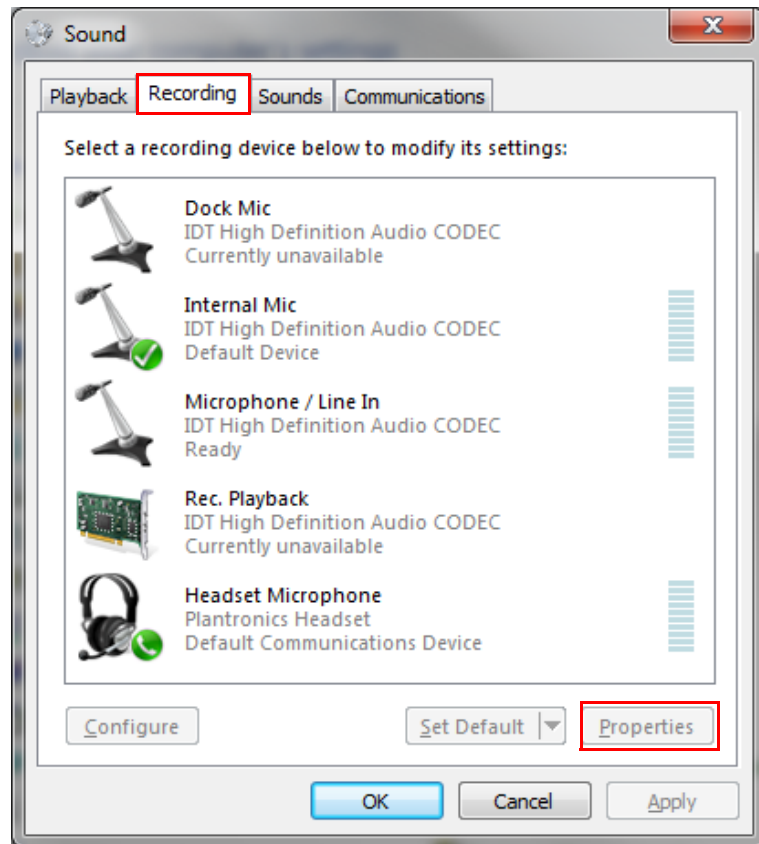


Figure 2-26 Recording Properties Screen

3. Select the **Advanced** tab and set the **Default Format** to a supported setting. Refer to [Figure 2-28 Advanced Recording Settings](#) on page 2-29.

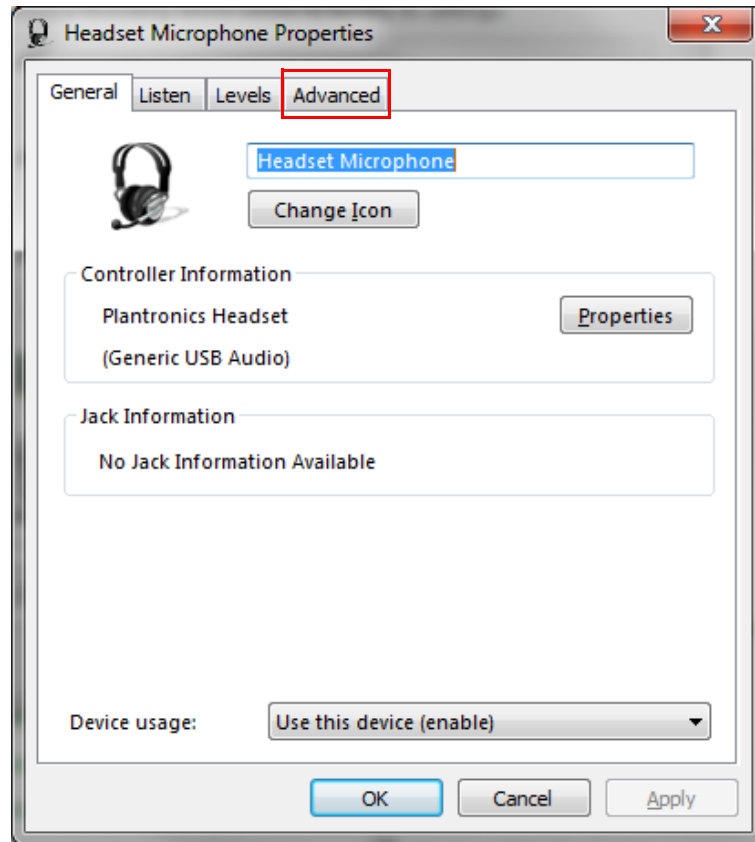
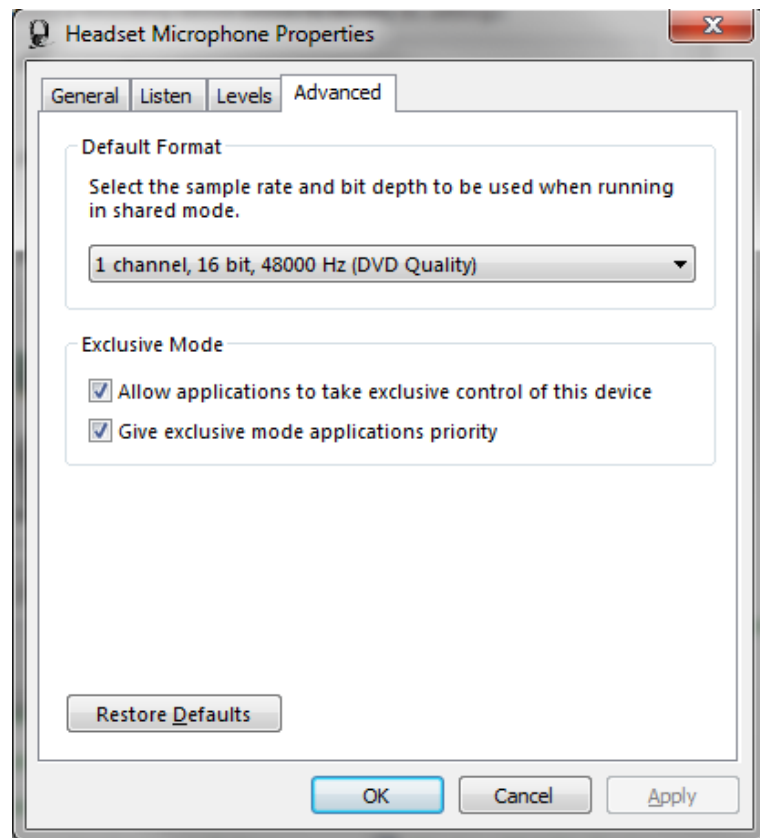


Figure 2-27 Recording Settings



**Figure 2-28 Advanced Recording Settings**

4. Select **OK** to save the settings.

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## CHAPTER 3 *Toolbar Functions*

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### SECTION 1 TOOLBAR FUNCTIONS

The function buttons which appear in the toolbar on the Full Window provide access to the operations that are most frequently used by the phone user. The set of function buttons which are displayed can be customized by the user, as well as the size, order, and hotkey associated with the function. Configuration of the toolbar button layout is described in [Chapter 7 Application Level Configuration](#).

Each button changes from active to inactive depending on the state of the calls managed by the application. The following table shows the set of functions that are active for different phone states.

**Table 3-1 Set of Functions – Telephone States**

Phone State	Call Active	Idle or Idle with Held Calls	Idle Ringing	Call Active+Ringing
<b>Feature Set</b>	Hold	Dial	Answer	Hold
	Transfer	Page	Redirect	Transfer
	Hang Up	Unpark		Hang Up
	Conference	Barge In		Conference
	Park	Directed Call Pickup		Redirect
		Group Call Pickup		Park
		Pickup Other Group		
		Last Number Redial		
		Call Forward		
		Do Not Disturb		

Each of the feature keys available in the function toolbar and their associated actions are described in the following sections.

## 1.1 Answer

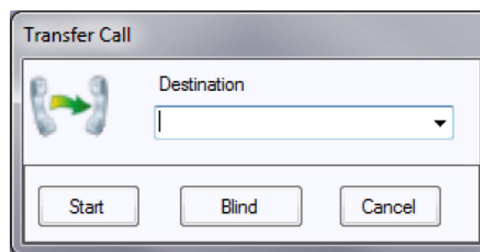
- The Answer button allows the user to pick up a ringing line.
- If only one line is ringing, then the Answer button connects the user to the ringing line and this becomes the active call.
- If multiple calls are ringing, then the Answer key selects the oldest call.
- If another trunk call is Active when the call is answered, then the original call is automatically placed on hold. If another internal call is Active when the call is answered, the original call is disconnected.
- When a call is answered, the Active Call area is updated with an entry for the new call.

## 1.2 Hold

- The Hold function places the current active call on hold.
- The Active Call entry changes from indicating Active to Held.
- After the Hold function is selected, the current Active Call area is empty.

## 1.3 Transfer

The Transfer button initiates a transfer of the active call. When Transfer is initiated, the Transfer dialog is displayed ([Figure 3-1 Transfer Call Screen](#)).



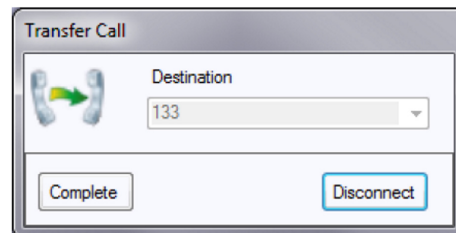
**Figure 3-1 Transfer Call Screen**

- The user can manually enter the number to be dialed in the Destination field using the number keys in the main area of the keyboard or the number keys on the keyboard's keypad.
- Alternately, the user can select an entry from the Destination drop down list.
- The Destination drop down list includes a list of the most recent transfer destinations entered in this dialog box.

The actions associated with each of the dialog buttons are described in the following sections.

### 1.3.1 Transfer Call – Start

When the Start button is selected, the software will initiate a supervised transfer of (blind transfer may be selected from the Shortcuts tab in Preferences) the call. The Transfer dialog will be updated (refer to [Figure 3-2 Transfer Call – Start](#)).



**Figure 3-2 Transfer Call – Start**

- Selecting the Complete button will connect the original caller to the destination and disconnect the user.
- Selecting the Disconnect button will hang up from the call to the Destination, and reconnect to the original caller.

### 1.3.2 Transfer Call – Blind

- When the Blind button is selected, the application will initiate an unsupervised transfer to the specified destination.
- Once the transfer is complete, the active call will be removed from the active call area.

### 1.3.3 Transfer Call – Cancel

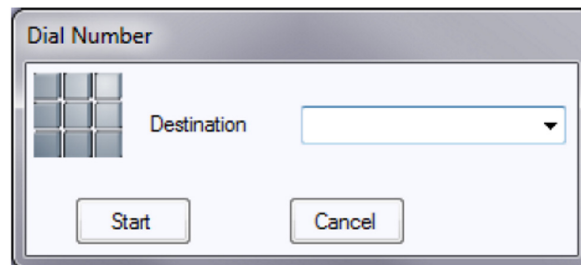
- When the Cancel button is selected, the transfer operation will be cancelled and the Transfer dialog will be closed.
- Pressing the Esc key will also initiate the Cancel operation.

## 1.4 Hang Up

- The Hang Up button will disconnect the user from the active call.
- When the active call is disconnected, the associated entry in the Active Call list will be removed.

## 1.5 Dial

The Dial button allows the user to initiate an outbound call. When Dial is selected, the Dial following dialog will be displayed (refer to [Figure 3-3 Dial Screen](#)).



**Figure 3-3 Dial Screen**

- The user can manually enter the number to be dialed in the Destination field using the number keys within the main area of the keyboard or the number keys on the keyboard keypad.
- Alternately, the user may select an entry from the Destination drop down list.
- The Destination drop down list includes a list of the most recent dial destinations entered within this dialog box.

The actions associated with each of the dialog buttons are described in the following sections.

### 1.5.1 Dial – Start

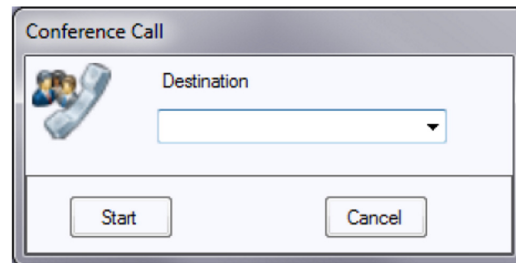
- When the Start Call button is selected, the software will initiate an outbound call to the specified destination.
- The Active Call list will be updated to include an entry for the dialed call.

### 1.5.2 Dial – Cancel

- When the Cancel button is pressed, the Dial dialog will be closed.
- The user may also initiate the Cancel operation by pressing the Esc key on the keyboard.

## 1.6 Conference

The Conference button will initiate a conference that adds a third party to the active call. When the Conference function is selected, the following menu will be displayed (refer to [Figure 3-4 Conference Call – Start](#)).



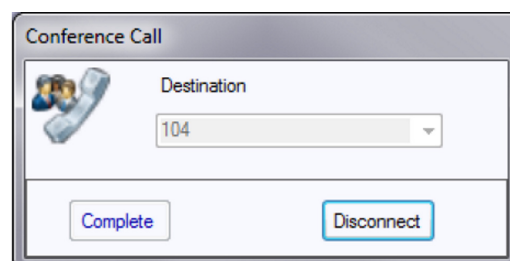
**Figure 3-4 Conference Call – Start**

- The user can manually enter the number to be dialed in the Destination field using the number keys within the main area of the keyboard or the number keys on the keyboard keypad.
- Alternately, the user may select an entry from the Destination drop down list.
- The Destination drop down list includes a list of the most recent conference destinations entered within this dialog box.

The actions associated with each of the dialog buttons are described in the following sections.

### 1.6.1 Conference Call – Start

When the Start button is selected, the application will place the original call on hold and initiate a consultation call to the specified destination (refer to [Figure 3-5 Conference Call – Complete](#)).



**Figure 3-5 Conference Call – Complete**

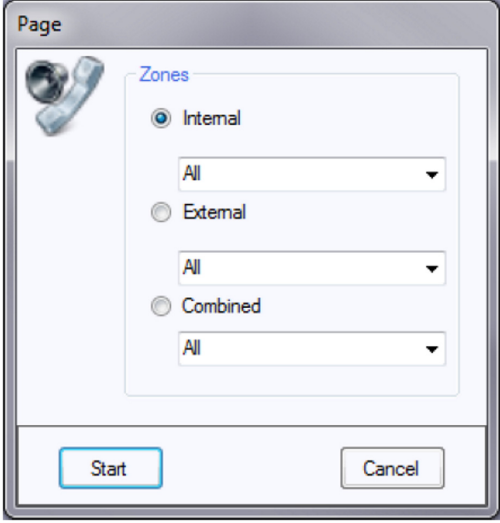
- Selecting the Complete button adds the consultation call to the original call, completing the conference setup.
- Selecting the Disconnect button hangs up the consultation call and reconnects to the original caller.

### 1.6.2 Conference Call – Cancel

- When the Cancel button is selected, the conference operation is cancelled and the Conference dialog is closed.
- Pressing the Esc key initiates the Cancel operation.

## 1.7 Page

The Page button allows the user to access the internal and external paging functions. When the Page function is selected, the following form will be displayed (refer to [Figure 3-6 Page Screen](#)).

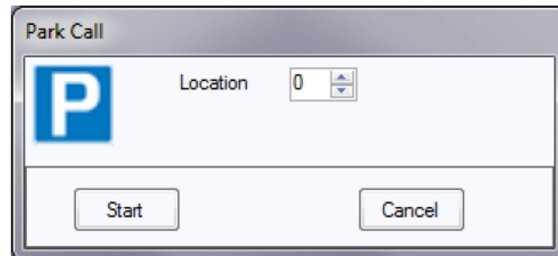


**Figure 3-6 Page Screen**

- The user specifies the Page zone category by selecting Internal, External, or Combined.
- Within each Zone category, the combo box includes all of the available paging zones.
- Selecting Start will initiate a Page to the designated paging zone.
- Selecting Cancel will close the Page dialog without generating a Page.

## 1.8 Park

The Park button will transfer the active call to a specific park orbit. When this function is selected, the following dialog will be displayed (refer to [Figure 3-7 Park Call Screen](#)).

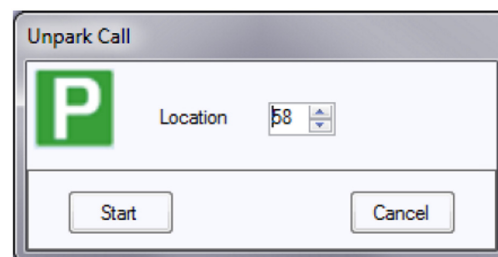


**Figure 3-7 Park Call Screen**

- The spinner control allows the user to select the destination Park orbit.
  - ✎ *With Desktop Applications users can park calls in the next available park orbit by choosing orbit 0 when program 20-11-27 is set to 1 (on).*
- Selecting the Start button will place the active call in the selected Park orbit.
  - ✎ *The Parked Call shows up in the active call list as a blue Parked Call.*
- Selecting the Cancel button will close the Park Call dialog without initiating a call park operation.
- If the Park operation fails because the selected Park orbit is not available, an error message will be displayed.

## 1.9 Unpark

The Unpark button will retrieve a call from a specific park orbit. When this function is selected, the following dialog in [Figure 3-8 Unpark Call Screen](#), will be displayed.

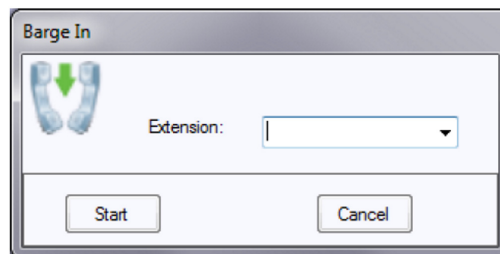


**Figure 3-8 Unpark Call Screen**

- The spinner control allows the user to select the destination Park orbit.
- Selecting the Start button will attempt to retrieve a call from the specified Park orbit.
- Selecting the Cancel button will close the Unpark Call dialog without initiating a unpark operation.
- If the Unpark operation fails because the selected Park orbit is not occupied, an error message will be displayed.

### 1.10 Barge In

The Barge In button allows the user to enter another extension's established call. When this function is selected, the following dialog will be displayed (refer to [Figure 3-9 Barge In Screen](#)).



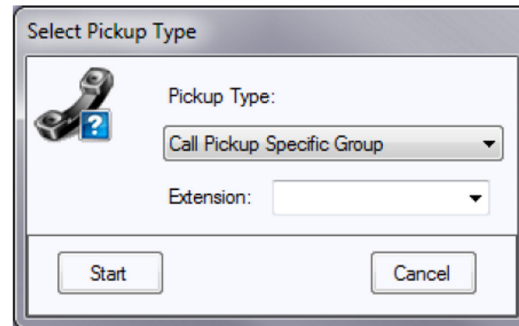
**Figure 3-9 Barge In Screen**

- The Number field allows the user to enter the extension to Barge In.
- The Number field pull down list includes the most recent entries for this field.
- When the Start button is selected, the Barge In feature will be applied to the selected extension.
- When the Cancel button is selected, the Barge In dialog will close.
- If the Barge In operation fails, an error message will be displayed.
- The Barge In operation will fail if the specified extension does not have an established call.
- The Barge In operation will fail if the user does not have the appropriate Class of Service permissions to execute Barge In.



### 1.11 Directed Call Pickup

The Directed Call Pickup function allows the user to pickup a ringing call from a specified extension. When the Directed Call Pickup function is selected, the following dialog will be displayed (refer to [Figure 3-10 Directed Call Pickup Screen](#)).



**Figure 3-10 Directed Call Pickup Screen**

- The Pickup Type field is automatically set to Directed Call Pickup.
- The Number field allows the user to specify the extension to be picked up by either manually entering a number or selecting a number from the pull down list.
- The Number field is a pull down menu that stores the most recent text entered in this field.
- Pressing the Start button initiates the Call Pickup for the specified extension.
- Pressing the Cancel button closes the Call Pickup dialog without executing the call pickup operation.
- The Pickup Type field allows the user to initiate other call pickup features, including Group Call Pickup, Pickup Other Group, and Call Pickup Specific Group.

### 1.12 Group Call Pickup

The Group Call Pickup function allows the user to pickup a ringing call from within their call pickup group. When the Group Call Pickup function is selected, the phone will initiate the group call pickup.

### 1.13 Pickup Other Group

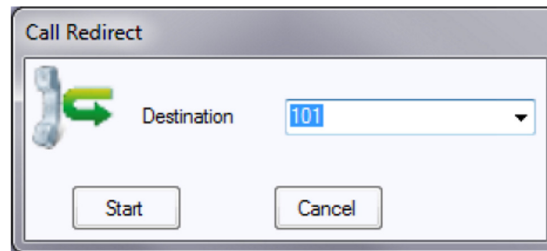
The Pickup Other Group function allows the user to pickup a ringing call from within another call pickup group. When the Pickup Other Group function is selected, the phone will initiate the other group pickup function.

### 1.14 Last Number Redial

The Last Number Redial function allows the user to easily initiate a call to a previously dialed number.

### 1.15 Call Redirect

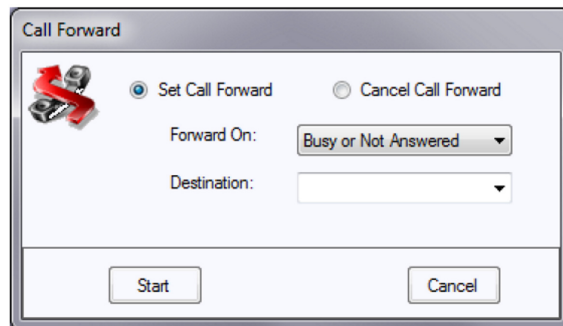
The Call Redirect function allows the user to send a call that is ringing on their extension to a different destination. The Call Redirect function is enabled when an external call is ringing into the user's phone. Selecting the Call Redirect function will transfer the ringing call to the pre-defined redirect location (refer to [Figure 3-11 Call Redirect Screen](#)).



**Figure 3-11 Call Redirect Screen**

## 1.16 Call Forward

The Call Forward function allows the user to set their phone to automatically redirect incoming calls. When the Call Forward function is selected, the following dialog will be displayed (refer to [Figure 3-12 Call Forward Screen](#)).

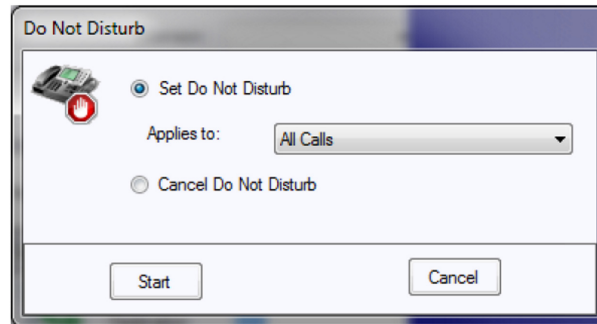


**Figure 3-12 Call Forward Screen**

- This function can be used to either activate Call Forwarding or to Cancel Call Forward settings.
- The Forward On field determines the conditions for Call Forwarding. Available options are:
  - Busy or Not Answered
  - Immediate
  - Not Answered
  - Both Ring
  - Busy
- The Destination field specifies the phone number to receive the forwarded calls.
- The Destination field includes a drop down list which saves the previously specified forward destination.
- Pressing the Start button will initiate the Call Forward operation.
- Pressing the Cancel function will close the Call Forward dialog without changing the settings.

### 1.17 Do Not Disturb (DND)

The Do Not Disturb function allows the user to set their phone to block incoming calls. When the Do Not Disturb function is selected, the following dialog will be displayed (refer to [Figure 3-13 Do Not Disturb Screen](#)).



**Figure 3-13 Do Not Disturb Screen**

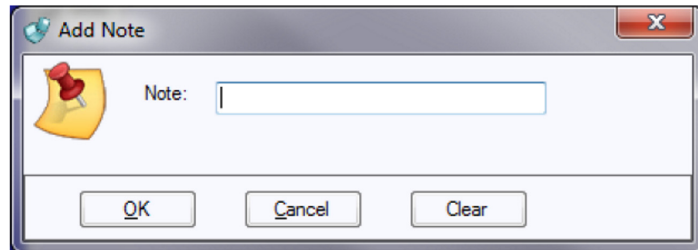
- The Do Not Disturb dialog allows the user to either set DND or clear a previous DND setting.
- When “Set Do Not Disturb” is selected, the user can specify the DND condition using the “Applies to:” field.
- The available DND options presented in the “Applies to” field are:
  - All Calls
  - Outside Calls
  - Paging/Intercom/Forwards/Transfers
  - Call Forwards
- The “Cancel Do Not Disturb” is selected to remove a previous DND setting.
- Selecting the Start button will initiate the requested DND operation.
- Selecting the Cancel button will close the Do Not Disturb dialog without processing the DND request.

### 1.18 Auto Handset/Auto Headset

- The Auto Handset/Auto Headset button is a toggle button that switches between using the Handset or Headset for making outgoing calls and answering incoming calls. A \*Headset button must be programmed on the phone (15-07-01).
- The Auto Handset/Auto Headset button is only available when the phone is in an idle state. Toggling between Handset and Headset is not supported during an active call.

### 1.19 Add Note

The Add Note function can be used to annotate the active call. When the Add Note function is selected, the following dialog will be displayed (refer to [Figure 3-14 Add Note Screen](#)).



**Figure 3-14 Add Note Screen**

- The Note field allows the user to enter a text message that will be saved with the call record.
- Selecting the OK button will close the Add Note dialog and attach the note to the call record.
- Selecting the Cancel button will close the Add Note dialog without changing the note field.
- The Clear function will erase the contents from the Note field on the Add Note form.
- If a note is attached to a call record, selecting the Add Note function will allow the user to edit the existing note.
- When a Note is attached to a call record, the Note will be shown within the active call entry.
- When a Note is attached to a call record, the Note will be shown in the Call Log entry for that call.

## SECTION 2 DIRECTORY VIEW

An online company directory, contact list, and personal list are provided to assist the user in handling call activity. The Directory provides the user with quick access to contact information and an easy method to send calls to other extensions on their phone system. The Contact List serves as an on-line phone/address book for frequently dialed external numbers. The Personal List is a private version of an online phone/address book. The Directory, Contact List, and Personal List are displayed in a separate window from the call control application to provide additional flexibility in the management of call activity.

### 2.1 Opening the Directory View

- To open the Directory View from Full Window mode, select Window → Directory from the main menu.

Figure 3-15 Directory View Screen shows an example of the Directory View.

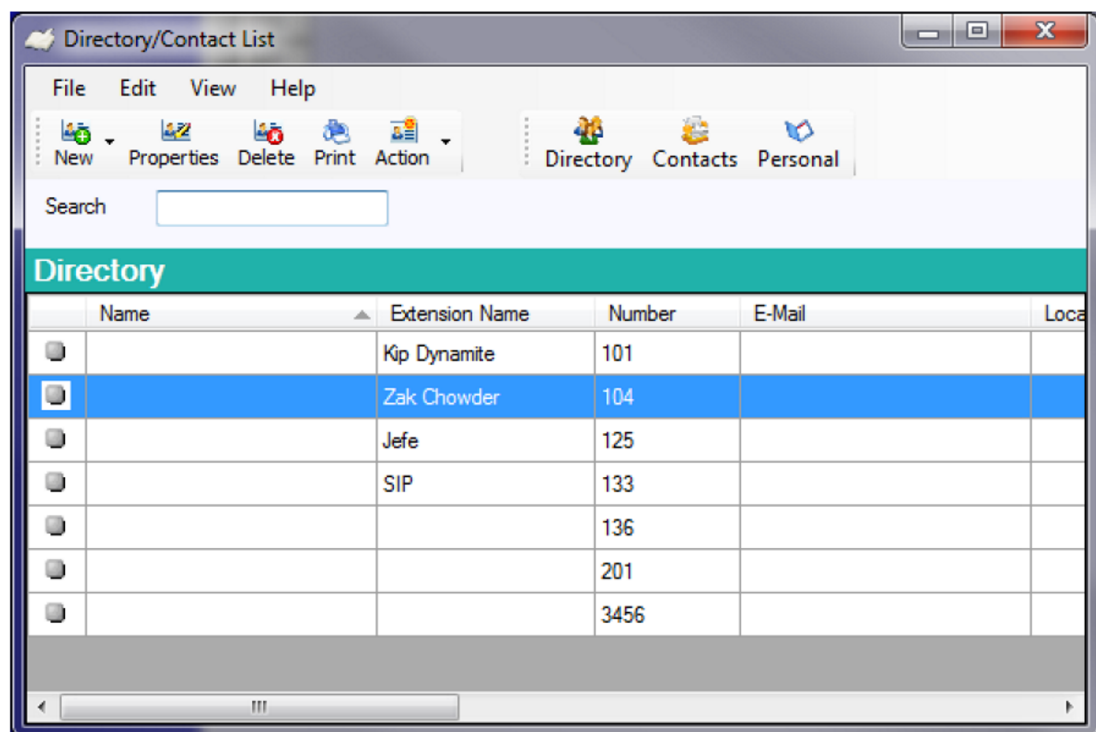


Figure 3-15 Directory View Screen

The Directory consists of the following areas:

<b>Title Bar and Main Menu</b>	Provides the standard windows controls and access to standard operations and utilities through the pull down menus.
<b>Function Toolbar</b>	Provides quick access to functions that maintain the directories and change the database view.
<b>Search Area</b>	Allows the user to quickly locate an entry in the table by name.
<b>Table Viewer</b>	Presents the database contents in a tabular format with each column showing a different data item for the listed entries.

### 2.1.1 Title Bar and Main Menu

The **Title Bar** and **Main Menu** provide the standard windows controls and access to basic operations and utilities through pull down menus.

The standard Windows controls on the **Title Bar** are as follows:

<b>Minimize</b>	Hide the Directory View and include an entry to restore the form in the Windows task bar.
<b>Maximize/Restore</b>	Change the size of the Directory View. <b>Maximize</b> increases the size of the window to fill the entire display. The <b>Restore</b> function reduces the size of the window to the previous dimensions.
<b>Close</b>	Exit the Directory View.

The **Main Menu** provides a drop down menu, which lists all of the functions available within a selected category. The functions available from the **Main Menu** are as follows:

#### **File**

<b>New Entry</b>	Add a new entry to the current database.
<b>Departments/Companies</b>	Setup a new Department or Company within the database.
<b>Properties</b>	Edit the current settings for the selected database entry.
<b>Delete</b>	Remove the selected entry from the database.
<b>Print</b>	Print the contents of the database. Available print options are: Print All, Print Selected, Page Setup, and Print Preview.
<b>Exit</b>	Close the Directory View.

## **Edit**

<b>Select All</b>	Select all entries in the database.
<b>Search</b>	Use the Search function to locate an entry by Name.

## **View**

<b>Hidden Entries</b>	Hide/Unhide entries that have their visibility attribute set to "Hide".
<b>Set Visible Actions</b>	Hide/Unhide the list of actions that appear in the pop-up menu.
<b>Set Visible Columns</b>	Hide/Unhide the columns that appear in the Table Viewer.

## **Help**

<b>Contents and Index</b>	Access the on-line help system by topic.
<b>About</b>	View the copyright notice and current revision of the desktop application.

### 2.1.2 Function Toolbar

The **Function Toolbar** provides access to the functions that are used to maintain the database and change the layout of the Directory View. A function on the toolbar can be selected by using the mouse to click on the desired function button.

The functions available on the Function Toolbar are as follows:

#### **NEW**

- New Entry**
- New Department**

#### **PROPERTIES**

#### **DELETE**



## **PRINT**

**Print All**

**Print Selected**

**Properties**

## **ACTION**

**Dial Extension**

**Properties**

**Delete**

**Add to Speed Dial**

## **DIRECTORY**

### **CONTACTS**

### **PERSONAL**

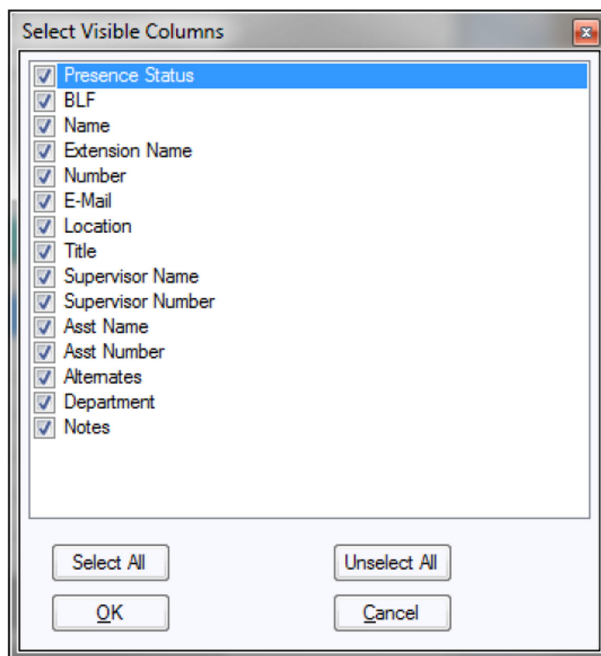
#### 2.1.3 Search Area

The Search Area allows the user to quickly locate an entry in the database by Name field. The following rules apply to using the search area:

- To access the Search capability click inside the Search field on the Directory window.
- To search for entries that match the first name, enter the full or partial search string in the Search field. Example: Entering "John" will list all entries with first names of John and Johnny.
- To search for entries that match a full or partial first and last name enter the first name, followed by a space, followed by the last name. Example: Entering "John Stevens" will list John Stevens and Johnny Stevenson. Example: Entering "S T" will list all entries whose first name starts with S and last name starts with T.
- To search for entries that match only the last name enter a space as the first character in the Search field, followed by the full or partial last name. Example: Entering " T" will list all entries whose last name starts with T.
- To Clear the Search results delete all the characters in the Search field or press the Esc key on the keyboard while the cursor is in the Search field.

### 2.1.4 Table Viewer

- The **Table Viewer** displays the contents of the selected database in tabular format.
- Each column represents a field within the database structure.
- Each row represents an entry within the selected database.
- The column widths can be adjusted by “dragging” one edge of the column in the header row to a new position.
- The column order can be changed by dragging the column header to a new position.
- The visible columns can be modified by using the View → Set Visible Columns function on the main menu under **View**.



**Figure 3-16 Select Visible Columns Screen**

- A right mouse click on a row will open a pop-up menu that displays all of the available functions for that entry.

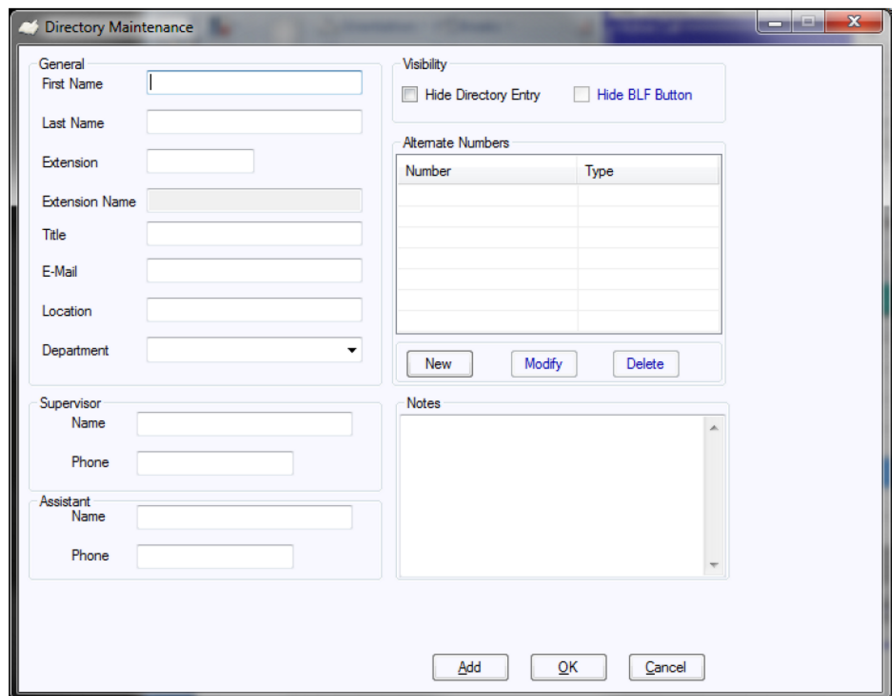
## 2.2 Company Directory

The Company Directory database maintains a list of extensions on the user's phone system.

Upon startup the application creates a directory entry for every extension that is programmed on the user's phone as a one-touch key. Additional entries can be manually created using the Add Entry function. Operations that can be performed using the Company Directory are described in the following sections.

### 2.2.1 Adding a New Entry to the Directory

On the **File** menu, selecting **New Entry** opens the following form to create a new directory entry (refer to [Figure 3-17 Directory Maintenance Screen](#)).



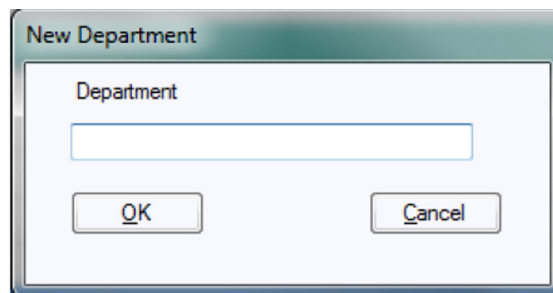
The screenshot shows a window titled "Directory Maintenance" with a form for adding a new entry. The form is divided into several sections:

- General:** Fields for First Name, Last Name, Extension, Extension Name, Title, E-Mail, Location, and Department (a dropdown menu).
- Visibility:** Two checkboxes: "Hide Directory Entry" and "Hide BLF Button".
- Alternate Numbers:** A table with two columns: "Number" and "Type".
- Supervisor:** Fields for Name and Phone.
- Assistant:** Fields for Name and Phone.
- Notes:** A large text area for entering notes.

At the bottom of the form are three buttons: "Add", "OK", and "Cancel".

Figure 3-17 Directory Maintenance Screen

- The following fields are configured for text entry:
  - First Name
  - Last Name
  - Extension
  - Title
  - E-Mail
  - Location
  - Supervisor Name
  - Supervisor Phone
  - Assistant Name
  - Assistant Phone
  - Notes
- The Department field is a drop down list of all of the Departments that have been defined.
- The Hide Directory Entry option will hide this entry from being visible in the Table Viewer.
- The Hide BLF button applies to extensions that have associated BLF buttons within the Full Window mode. Selecting this option will hide the associated BLF.
- To enter an alternate number, select **New** in the **Alternate Number** area, and enter the telephone number and type.
- Selecting **Save** will add the new entry to the Directory and exit the **Directory Maintenance** menu.
- Selecting **Add** will save the new entry and clear the form for a new entry.
- To add a new Department to the Directory, from the **New** button within the Directory window, select **New Department**.



The image shows a standard Windows-style dialog box titled "New Department". It contains a single text input field with the label "Department" above it. At the bottom of the dialog, there are two buttons: "OK" on the left and "Cancel" on the right. The dialog box has a light blue border and a white background.

**Figure 3-18 Departments Screen**

### 2.2.2 Modifying an Entry in the Directory

- Highlighting a directory entry and from the **File** menu, selecting **Properties** will open the Directory Maintenance form for the selected entry.
- To modify an Alternate Number, select an Alternate Number and then click the Modify button to view and edit the current number and type fields.
- Clicking on **Save** will apply the changes to the Directory.
- Clicking on **Cancel** will discard the changes to the Directory.

### 2.2.3 Deleting an Entry from the Directory

- Selecting the directory entry with a *right* mouse click and selecting the **Delete** option on the pop-up menu will remove the selected entry from the Directory.
- Highlighting the directory entry and from the **File** menu selecting the **Delete** option will remove the selected entry from the Directory.
- Highlighting multiple entries and applying the Delete command will delete all of the entries in the selected range.

### 2.2.4 Printing the Directory

- From the File menu, selecting the Print option, followed by Print All will cause the entire directory to be sent to the default printer.
- Highlighting a set of entries to be printed and selecting File → Print → Print Selected from the main will cause the selected directory entries to be sent to the default printer.

## 2.3 Contacts/Personal Lists

The Contacts and Personal databases are used to maintain a list of business contacts and personal contacts.

Contacts and Personal Contacts can be imported into the directory from a .csv file. From the File menu, Import and Export options are available to create and maintain the Contacts and Personal Contacts database via a .csv file.

Operations that can be performed using the Contacts/Personal databases are described in the following sections.

### 2.3.1 Adding a New Entry to the Contacts/Personal List

On the **File** menu selecting **New Entry** will open the following form to create a new entry (refer to [Figure 3-19 Contacts/Personal List](#)).

The screenshot shows a 'Contact Maintenance' window with the following fields and sections:

- General:** First Name, Last Name, Telephone, Title, E-Mail (all text input fields).
- Company:** Name (dropdown menu), Address, City, State/Prov, Zip/Postal, Country (all text input fields).
- Alternate Numbers:** A table with columns 'Number' and 'Type'. Below the table are 'New', 'Modify', and 'Delete' buttons.
- Notes:** A large text area for entering notes.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

**Figure 3-19 Contacts/Personal List**

- The following fields are configured for text entry:
  - First Name
  - Last Name
  - Telephone
  - Title
  - E-Mail
  - Address
  - City
  - State/Prov
  - Zip/Postal
  - Country
  - Notes
- The Company Name field is a drop down list of all of the Companies that have been defined.
- To enter an alternate number, select **New** in the **Alternate Number** area, and enter the telephone number and type.

- Selecting **Save** will add the new entry to the Directory and exit the **Directory Maintenance** menu.
- Selecting **Add** will save the new entry and clear the form for a new entry.
- To add a new Company to the Directory, from the **New** button within the Directory window, select **New Company**, enter the name of the company and click **OK**.

### 2.3.2 Modifying an Entry in the Contacts/Personal List

- Highlighting an entry and from the **File** menu, selecting **Properties** will open the database form for the selected entry.
- To modify an Alternate Number, select an Alternate Number and then click the Modify button to view and edit the current number and type fields.
- Clicking on **Save** will apply the changes to the Contacts/Personal list.
- Clicking on **Cancel** will discard the changes to the Contacts/Personal.

### 2.3.3 Deleting an Entry from the Contacts/Personal List

- Selecting the entry with a *right* mouse click and selecting the **Delete** option on the pop-up menu will remove the selected entry from the database.
- Highlighting the entry and from the **File** menu selecting the **Delete** option will remove the selected entry from the database.
- Highlighting multiple entries and applying the Delete command will delete all of the entries in the selected range.

### 2.3.4 Printing the Directory

- From the File menu, selecting the Print option, followed by Print All will cause the entire database to be sent to the default printer.
- Highlighting a set of entries to be printed and selecting File → Print → Print Selected from the main menu will cause the selected database entries to be sent to the default printer.

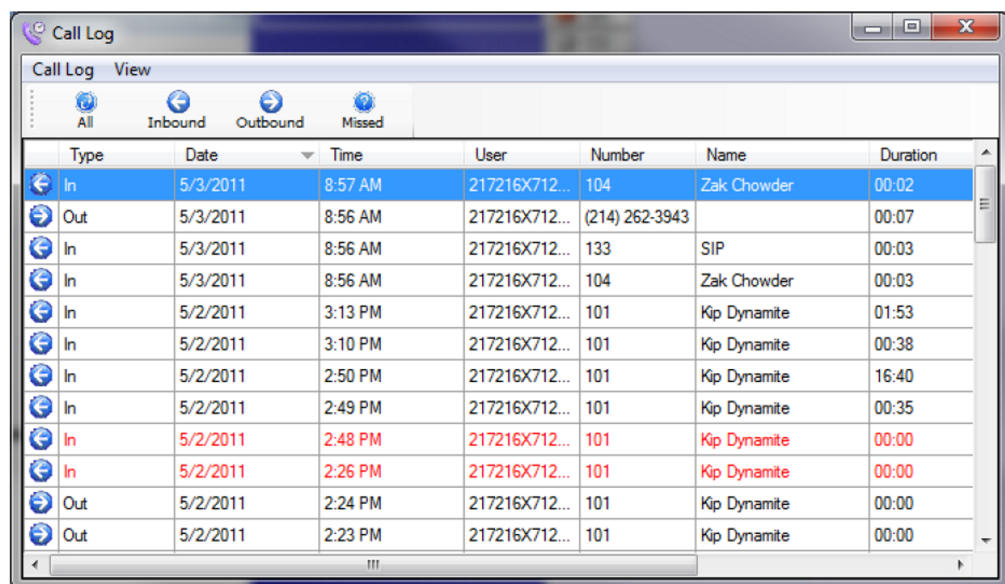
## SECTION 3 CALL LOG VIEW

The desktop application maintains a Call Log, which provides a historical trace of the user's call activity. Each inbound and outbound call generates a record in the call log. This information can be used to retrieve details about specific calls and perform functions such as re-dialing a previous call.

### 3.1 Opening the Call Log

- To open the Call Log from Full Window mode, select Window → Call Log from the main menu.

Figure 3-20 Call Log Screen shows an example of the Call Log View.



The screenshot shows a window titled 'Call Log' with a toolbar containing 'All', 'Inbound', 'Outbound', and 'Missed' filters. Below the toolbar is a table with the following data:

Type	Date	Time	User	Number	Name	Duration
In	5/3/2011	8:57 AM	217216X712...	104	Zak Chowder	00:02
Out	5/3/2011	8:56 AM	217216X712...	(214) 262-3943		00:07
In	5/3/2011	8:56 AM	217216X712...	133	SIP	00:03
In	5/3/2011	8:56 AM	217216X712...	104	Zak Chowder	00:03
In	5/2/2011	3:13 PM	217216X712...	101	Kip Dynamite	01:53
In	5/2/2011	3:10 PM	217216X712...	101	Kip Dynamite	00:38
In	5/2/2011	2:50 PM	217216X712...	101	Kip Dynamite	16:40
In	5/2/2011	2:49 PM	217216X712...	101	Kip Dynamite	00:35
In	5/2/2011	2:48 PM	217216X712...	101	Kip Dynamite	00:00
In	5/2/2011	2:26 PM	217216X712...	101	Kip Dynamite	00:00
Out	5/2/2011	2:24 PM	217216X712...	101	Kip Dynamite	00:00
Out	5/2/2011	2:23 PM	217216X712...	101	Kip Dynamite	00:00

Figure 3-20 Call Log Screen

The Directory consists of the following areas:

- The Title Bar and Main Menu provides the standard windows controls and access to standard operations and utilities through the pull down menus.
- The Filter Toolbar allows the user to apply filters to the visible call records.
- The Record Viewer presents the call log records in a tabular format with each column showing a different attribute of the call record.



Each of these screen regions is further described in the following sections.

### 3.1.1 Title Bar and Main Menu

The standard Windows controls on the Title Bar are as follows:

- Minimize – Hide the Call Log View and include an entry to restore the form in the Windows task bar.
- Maximize/Restore – Change the size of the Call Log View. Maximize increases the size of the window to fill the entire display, The Restore function reduces the size of the window to the previous dimensions.
- Close – Exit the Call Log View.

The Main Menu provides a drop down menu, which lists all of the functions available within a selected category. The functions available from the Main Menu are as follows:

- Call Log
  - Delete – Delete a call record from the Call Log.
  - Print – Print the contents of the call log. Available print options are Print All, Print Selected, Page Setup, and Print Preview.
  - Archive – Save the call history to an external file.
- View
  - Set Visible Columns – Hide/Unhide the columns that appear in the Call Log.

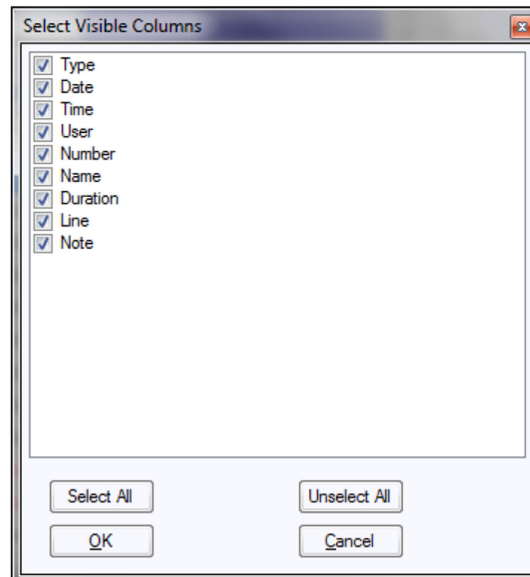
### 3.1.2 Filter Toolbar

The Filter Toolbar allows the user to select the set of call records that will be displayed in the Call Log view, as follows:

- Selecting Inbound will only display the call records for incoming calls.
- Selecting Outbound will only display the call records for outgoing calls.
- Selecting Missed will only display the incoming calls that were not answered.
- Selecting All will display the entire list of call records.

### 3.1.3 Record Viewer

- The **Record Viewer** displays the list of call records as indicated by the selected filter.
- Each column represents an attribute of the call record.
- Each row represents a call record.
- A disk icon in the Type column indicates that a recording is attached to the call record.
- The column widths can be adjusted by “dragging” one edge of the column in the header row to a new position.
- The column order can be changed by dragging the column header to a new position.
- The visible columns can be modified by using the View → Set Visible Columns function on the main menu.



**Figure 3-21 Visible Columns Menu**

- A right mouse click on a row will open a pop-up menu that displays all of the available functions for that record.
- A double click on an entry when the phone is idle will initiate a redial to the selected entry.

### 3.2 Deleting a Record from the Call Log

- Selecting a record with a *right* mouse click and selecting the **Delete** option on the pop-up menu removes the selected record from the Call Log.
- Highlighting a record and from the **Call Log** menu and selecting the **Delete** option removes the selected record from the Call Log.
- Highlighting multiple records and applying the Delete command deletes all of the records in the selected range.

### 3.3 Printing the Call Log

- From the Call Log menu, selecting the Print option, followed by Print All causes the entire call history to be sent to the default printer.
- Highlighting a set of records to be printed and selecting Call Log → Print → Print Selected from the main menu causes the selected call log entries to be sent to the default printer.

### 3.4 Archiving the Call Log

Archiving the Call Log is beneficial for reducing the number of call records displayed within the application, and therefore, improving access when searching for individual records. The archival process also provides a method of backing up the call history and storing the records off-line for future access.

- From the Call Log menu, selecting the Archive option opens the Call Log Archive menu (refer to [Figure 3-22 Call Log Archive Screen](#)).

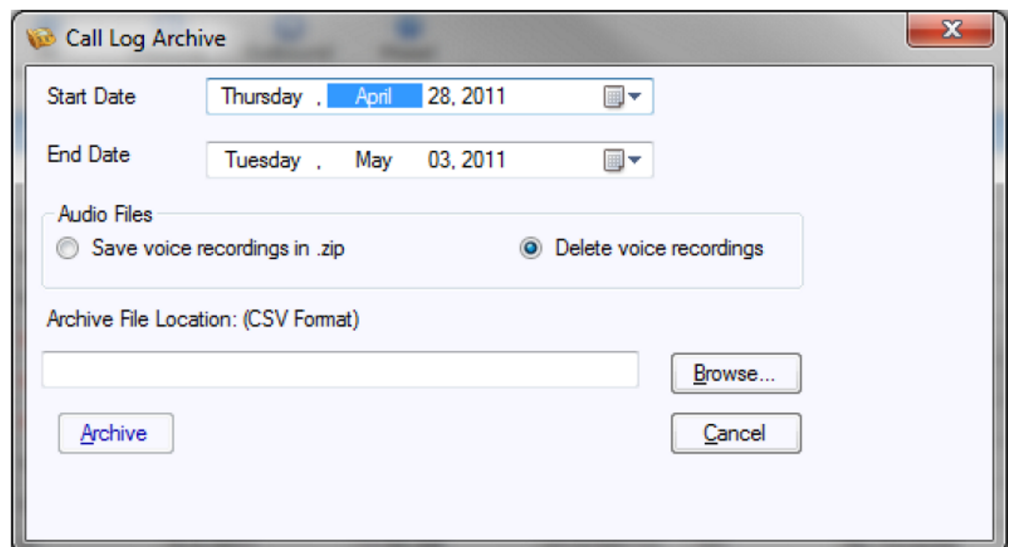


Figure 3-22 Call Log Archive Screen

- Selecting the Start Date and End Date for the archive specifies the range of records to be archived.
- The Archive File Location field specifies the name of the file that will be created to hold the archive.
- Selecting Archive will create the specified archive file in CSV (Comma Separated Values) format.
- After the archive file is created, all of the selected archive records will be removed from the call log.
- Selecting Cancel will close the Call Log Archive dialog without creating an archive file.

## CHAPTER 4      *Outlook Add-In*

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### SECTION 1      **OUTLOOK ADD-IN**

The Outlook Add-In allows users to make calls, End Call, Conference, Transfer, and perform screen pops through the Contacts folder within MS Outlook using the NEC Desktop application. The Outlook Add-In is installed during installation of the Desktop Application. The Desktop Application must be running for the Outlook Add-In to function.

#### 1.1      **Configuration**

There are two pieces needed when configuring the Outlook Add-In. The first uses the Desktop Configuration Wizard to define the SL1100 information, License information, and extension information just like configuring the Desktop Application. Like the Desktop Application, the CPU must have a Softphone license for each user that will use the Outlook Add-In. Refer to [Chapter 2 Installation](#) for programming and detailed information about the Desktop Configuration Wizard.

The second uses Outlook Add-In within MS Outlook. First choose **NEC Desktop Telephony Settings** from the Tools Menu within Outlook.

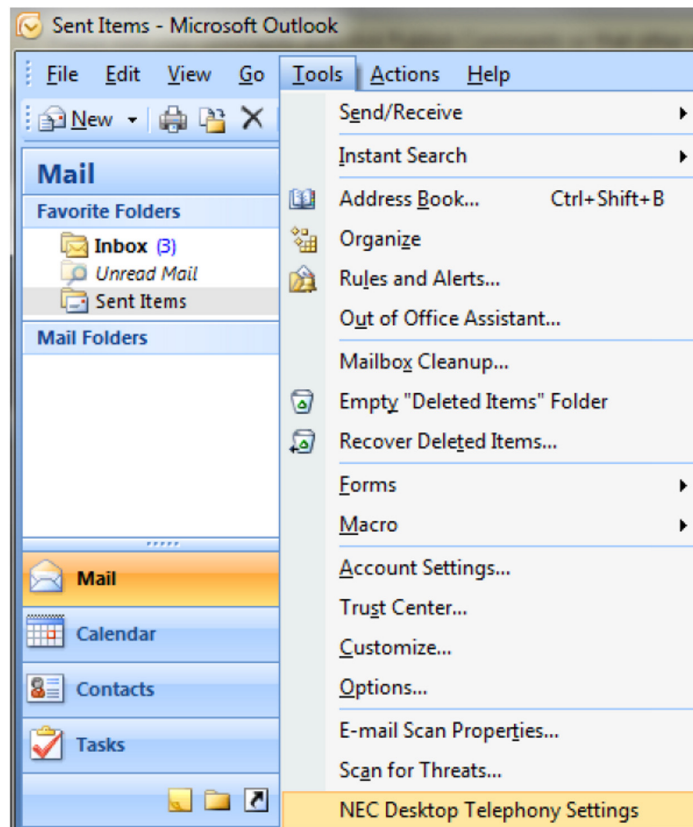
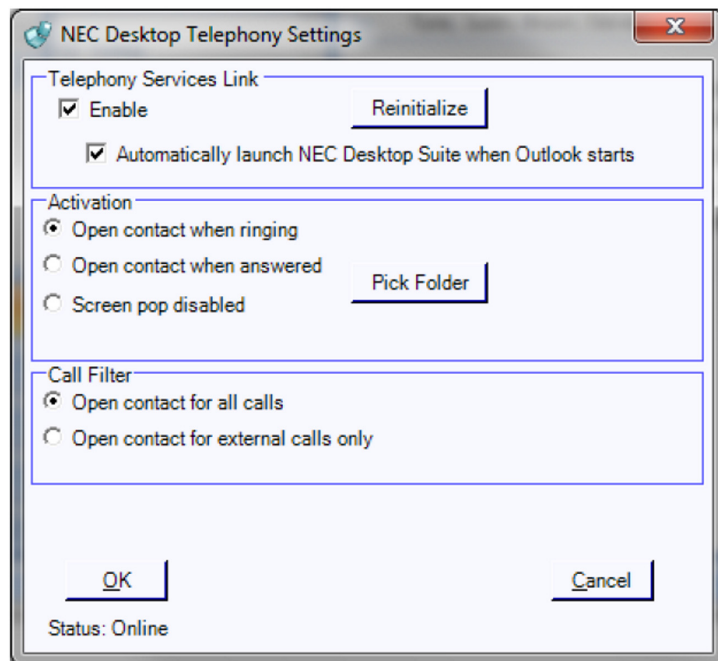


Figure 4-1 Outlook Configuration

The NEC Desktop Screen Pop Settings window will open.



**Figure 4-2 NEC Desktop Telephony Settings**

- Check the **Enable** box to enable the Outlook Add-In.
- Check the **Automatically launch NEC Desktop Suite when Outlook starts** if this is desired.
  - 📎 *Desktop must be running for the Outlook Add-in to function.*
- Click on the **Reinitialize** button to start the connection to the SL1100.
- The **Activation** option determines at what point the contact will be located and displayed.
- Click on the **Pick Folder** button to specify an Outlook folder other than the default Contacts folder.
- The **Call Filter** option determines which types of calls initiate a screen pop (all calls or external calls only).

## 1.2 Making a Call

When the Outlook Contacts folder is the active window, there are two different ways the user can make a call to any of the numbers associated with a contact. The first way is from the NEC Desktop Dial button on the Outlook toolbar.

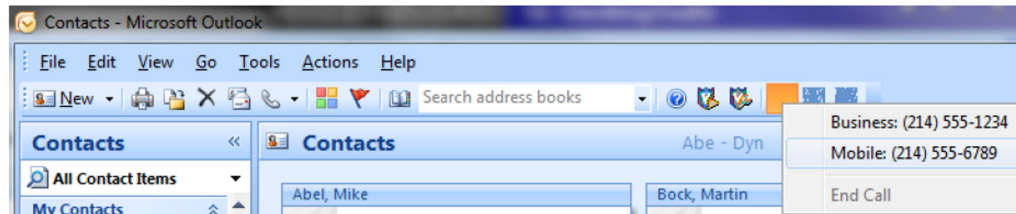


Figure 4-3 NEC Dial Button

- A **single click** on the button will drop down all numbers associated with the highlighted contact.
- A **second click** will dial the number selected.

The second way to dial the contact is by right clicking the contact and choosing **NEC Call** from NEC Desktop.

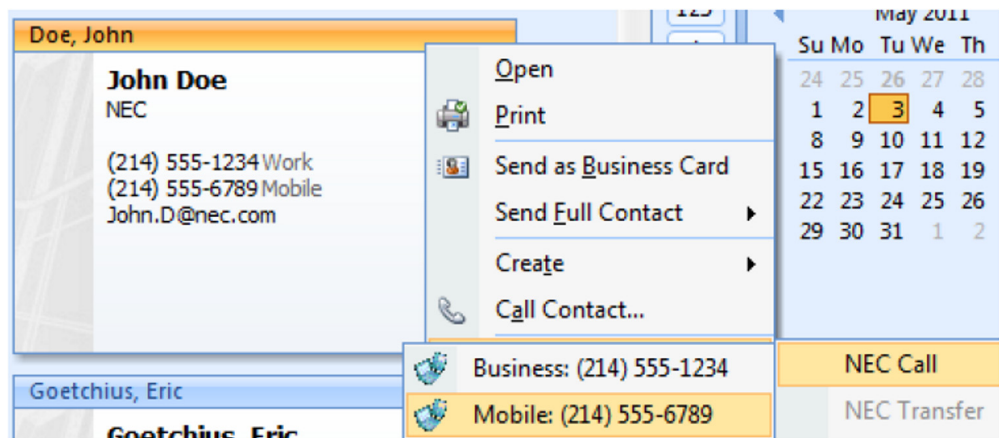


Figure 4-4 Right Click for NEC Call

- A submenu will open off of the NEC Call with all numbers associated with the highlighted contact.
- Highlight one of the numbers and click to dial the number.



### 1.3 Conference

When the extension the Outlook Add-In is associated with is on an active call, there are two different ways the user can make a Conference Call with a contact and the active call. The first way is from the NEC Conference button on the Outlook toolbar.

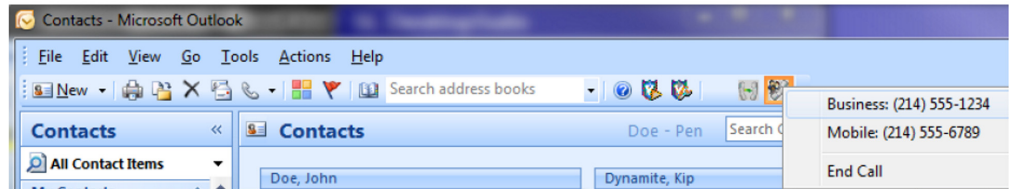


Figure 4-5 NEC Conference Button

- A **single click** on the button will drop down all numbers associated with the highlighted contact.
- A **second click** will initiate a Conference to the number selected.

The Conference Call window will appear.

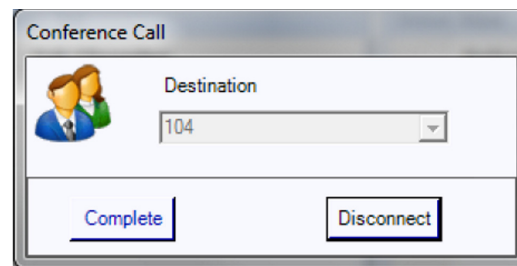
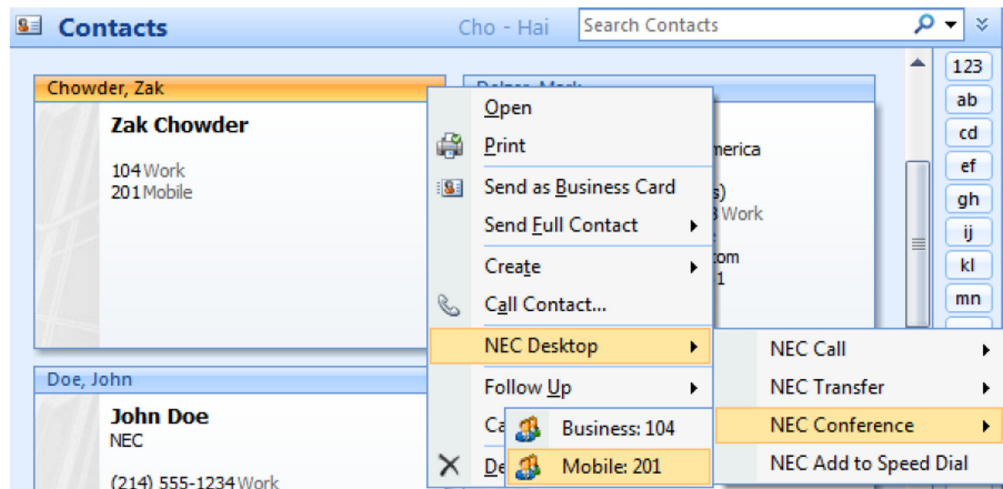


Figure 4-6 Conference Call Window

- Once the destination party answers, click the **Complete** button to complete the Conference.
- Either before the destination party answers or after they answer, click the **Disconnect** button to disconnect with the destination party and be reconnected to the original caller.

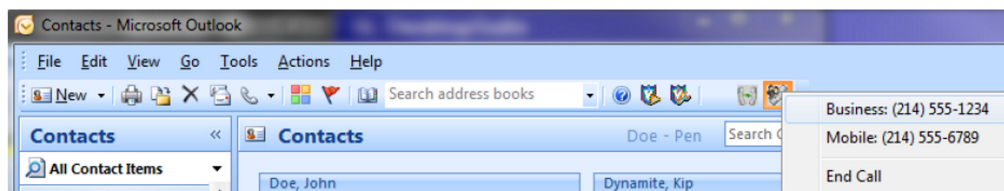
The second way to Conference in a contact is by right clicking the contact and choosing **NEC Conference**.



**Figure 4-7 Right Click for NEC Conference**

- A submenu will open off of the NEC Conference with all numbers associated with the highlighted contact.
- Highlight one of the numbers and click to conference the number with an active call.

The Conference Call window will appear.



**Figure 4-8 Conference Call Window**

- Once the destination party answers, click the **Complete** button to complete the Conference.
- Either before the destination party answers or after they answer, click the **Disconnect** button to disconnect with the destination party and be reconnected to the original caller.

## 1.4 Transfer

When the extension the Outlook Add-In is associated with is on an active call, there are two different ways the user can transfer the call to a contact. The first way is from the NEC Transfer button on the Outlook toolbar.

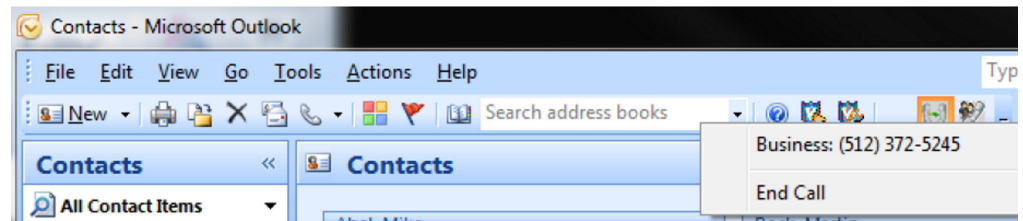


Figure 4-9 NEC Transfer Button

- A **single click** on the button will drop down all numbers associated with the highlighted contact.
- A **second click** will initiate a Transfer to the number selected.

The Transfer Call window will appear.

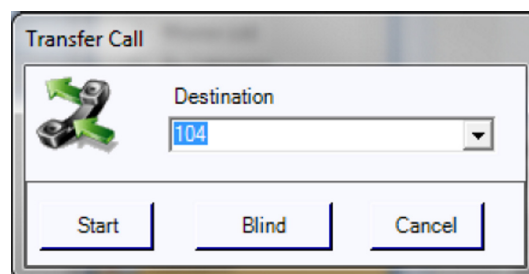
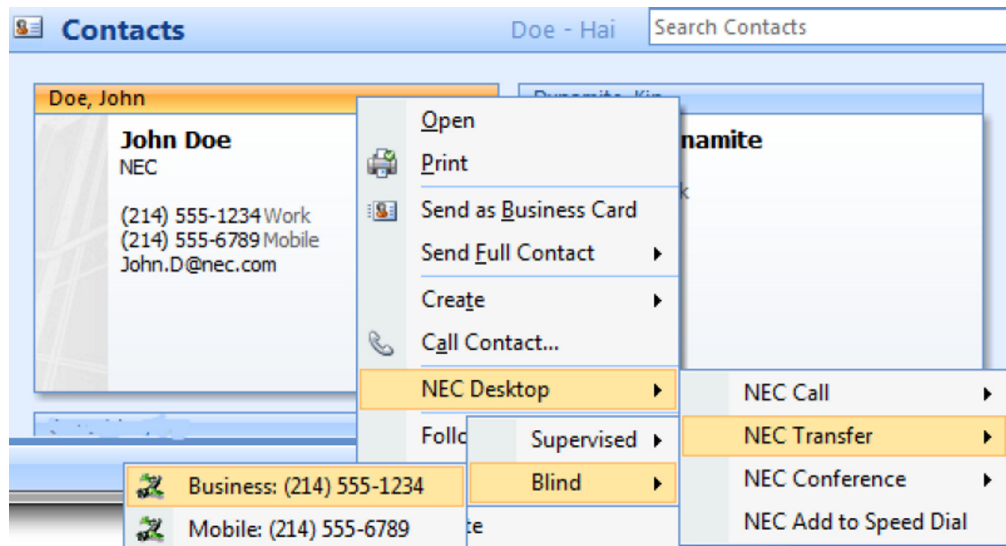


Figure 4-10 Transfer Call Window

- Click the **Start** button to begin a supervised Transfer.
- Click the **Blind** button to make a blind or unsupervised Transfer to the number selected.
- Click the **Cancel** button to cancel the Transfer.
- Click the **Complete** button to complete the Transfer.
- Either before the destination party answers or after they answer, click the **Disconnect** button to disconnect with the destination party and be reconnected to the original caller.

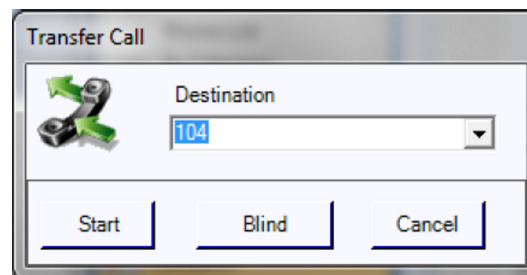
The second way to Transfer a call to a contact is by right clicking the contact and choosing **NEC Transfer**.



**Figure 4-11 NEC Transfer Right Click**

- A submenu will open off of the NEC Transfer with all numbers associated with the highlighted contact.
- Highlight one of the numbers and click to transfer the active call to the number selected.

The Transfer Call window will appear.



**Figure 4-12 Transfer Call Window**

- Click the **Start** button to begin a supervised Transfer.
- Click the **Blind** button to make a blind or unsupervised Transfer to the number selected.
- Click the **Cancel** button to cancel the Transfer.
- Click the **Complete** button to complete the Transfer.

- Either before the destination party answers or after they answer, click the **Disconnect** button to disconnect with the destination party and be reconnected to the original caller.

## 1.5 End Call

When the extension the Outlook Add-In is associated with is on an active call, the user can end the call by clicking any of the three buttons, **NEC Desktop Dial**, **NEC Transfer**, or **NEC Conference**, and choosing **End Call**.



Figure 4-13 End Call

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The Desktop Application registers with the SL1100 system as an IP (SIP) Station when a non-Deskset Only license level is chosen in the Configuration Wizard. This is the case for all non-Deskset Only modes [i.e., Softphone, PC Assistant controlling a Softphone, PC Assistant Controlling a Deskset (physical phone)]. This means that a Desktop Application that is run as a PC Assistant controlling a deskset (physical phone) uses an additional port from the system capacity when a non-Deskset Only license level is chosen in the configuration. In this scenario, two ports are in use, one for the physical extension and one for the Desktop Application connection. If the Desktop Application is run as just a Softphone, or as a PC Assistant controlling a Softphone, only port the Softphone registers with is used. If the Desktop application is run for a deskset (physical phone) and a Deskset Only license level is chosen, no additional port is taken by the Desktop.

**SECTION 1      REGISTRATION TYPES**

When the desktop is run for a Softphone or a non-Deskset Only license level, the Desktop application registers as an IP station. There are three types of registration; Plug and Play, Automatic, and Manual. Plug and Play requires no user name and password. Automatic requires a user name and password and it can be entered into the configuration so the user never has to enter it. Manual requires a user name and password and the user is prompted to enter them.

Manual registration is required if the Softphone is to override an IP multiline phone and use the same extension number. When this is done, the IP multiline phone goes into a Log Off state and the Softphone comes up as the extension the IP phone used to be. This allows a user to use the same extension whether in the office or on the road.

If automatic or manual mode is used, the user must enter a user name and password. If the Desktop Application is run in deskset mode (controlling a physical phone) and the deskset phone used is an IP phone, the user name and password used for the Desktop Application is different than that of the actual IP phone. Below outlines examples of a SL1100 system set for Automatic or Manual registration. The example assumes the system has 32 digital stations using ports 1~32 and eight IP stations using ports 33~40. The number plan has extensions 101~199 assigned to ports 1~99.

❑ **Example 1**

IP station extension 150 is using port 33 and logs in with the user name and password assigned to extension 150. If a user wants to run a Desktop Application for extension 150, a new user name and password must be defined. This username and password must be assigned to an unused port. In this example, it can be ports 41~99 and the example will use port 41 (ext 141). In Automatic registration, the user name and password assigned to extension 141 is entered in the Desktop Configuration. In Manual registration, when the Desktop application is launched, the user will be prompted for a user name and password. The user would enter the user name and password assigned to extension 141. At this point, port 41 will no longer be available in the system because it is registered to the PC running the Desktop Application for extension 150. The key point in this example is that the Desktop Application running in deskset mode for an IP phone cannot use the same user name and password assigned to the IP phone because the Desktop Application connection uses a different port.

❑ **Example 2**

Digital station extension 101 is using port 1. If a user wants to run a Desktop Application for extension 101, a user name and password must be assigned to a port the Desktop Application will use to register with the system. In this example, port 42 (ext 142) will be used. In Automatic registration, the user name and password assigned to extension 142 is entered in the Desktop Configuration. In Manual registration, when the Desktop Application is launched, the user will be prompted for a user name and password. The user would enter the user name and password assigned to extension 142. At this point, port 42 will no longer be available in the system because it is registered to the PC running the Desktop Applications for extension 101.



- ❑ **Example 3**

IP station extension 151 is using port 34 and logs in with the user name and password assigned to extension 151. The person that sits at extension 151 in the office goes out of the office and wishes to run the Desktop Application as a Softphone for extension 151. This is only possible if the registration mode is manual. When the Desktop Application is launched, the user will be prompted for a user name and password. The user would enter the user name and password assigned to extension 151. The IP station that was 151 in the office will show Log Off in the display, and the Desktop Application Softphone will come up as extension 151. When the user is back in the office, they would press the exit soft key and the phone will reset and prompt for a login. They would enter the user name and password assigned to extension 151, and the IP phone will come back up as extension 151.
- ❑ **Example 4**

A user wishes to have a Softphone that is a different extension than the one they use in the office. A user name and password can be assigned to extension 143. In Automatic registration, the user name and password assigned to extension 143 is entered in the Desktop Configuration. In Manual registration, when the user launches the Desktop Application, the user will be prompted for a password. The user would enter the user name and password assigned to extension 143, and the Softphone extension will be 143. At this point, port 43 will no longer be available in the system because it is registered to the PC running the Desktop Application for Softphone extension 143.

## SECTION 2 SERVICE CONDITIONS

The following service conditions apply:

- ❑ When running Desktop Applications in deskset mode for an IP phone when the registration mode is set to automatic or manual, the user name and password must be different than that of the IP phone.
- ❑ A Softphone that is assigned a DSS console cannot override another IP phone.
- ❑ A Softphone cannot override an IP phone that is assigned a DSS console.
- ❑ Once a Softphone with a DSS console is logged in, it cannot log in with a different user name and password.
- ❑ Once a desktop is launched on one PC using a User ID and Password in deskset or Softphone mode, the same User ID and Password cannot be used on a different PC in a different mode.
- ❑ In the first release of SL1100, Network Address Translation (NAT) is not supported. Because of this, any IP multiline terminal or Desktop Applications must appear to be on the same network as the SL1100 VoIP Interface (VOIPDB). For remote Desktop Applications, such as the Softphone, this can be achieved by using a VPN connection to the network where the SL1100 resides.

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## CHAPTER 6 *Desktop Application Startup*

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The Desktop Application can be started in any of the following ways:

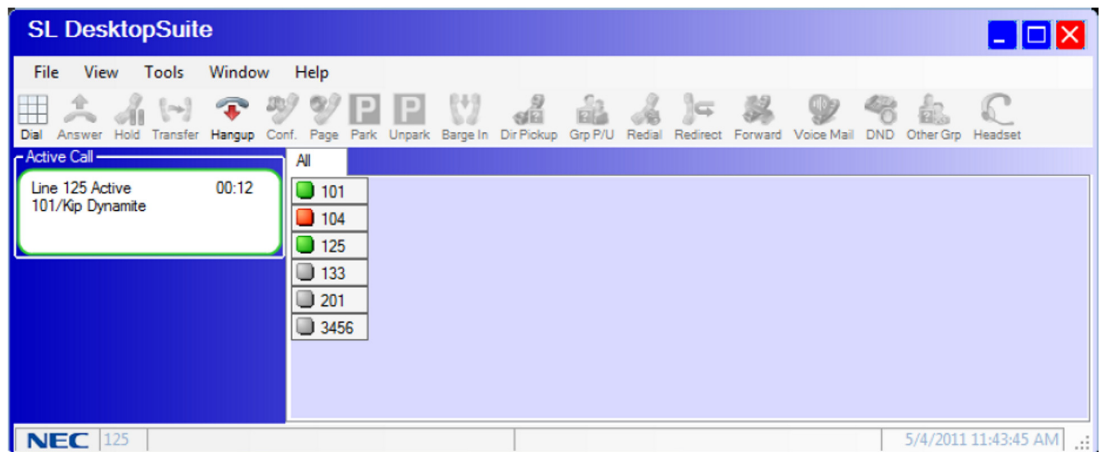
- Double-clicking on the desktop application icon within the Windows desktop area.
- Selecting Start/All Programs/NEC/NEC Desktop Suite

During startup, the following actions are performed:

- The first time the application is started after installation, the Configuration Wizard automatically runs.

### SECTION 1 **FULL WINDOW MODE**

This User Interface mode presents valuable information about the current call activity and provides easy access to the basic operations required by the user. Using either the mouse or keyboard, the user can quickly move between the different areas of the screen to search the company directory, and view the BLF status of the individual lines configured via DSS/One Touch keys. An example of the Full Window Mode is shown in [Figure 6-1 Full Window Mode Screen](#).



**Figure 6-1 Full Window Mode Screen**

The main screen consists of the following areas:

<b>Title Bar and Main Menu</b>	Provides the standard windows controls and access to standard operations and utilities through the pull down menus.
<b>Function Toolbar</b>	Provides quick access to the most commonly used call processing functions.
<b>Active Call List</b>	Displays information about the current call, a list of all calls currently active on the console.
<b>BLF/DSS Area</b>	Provides the Busy Lamp field and Direct Station Select functionality, comparable to a DSS module.

### 1.1 Title Bar and Main Menu

The **Title Bar** and **Main Menu** provide the standard windows controls and access to basic operations and utilities through pull down menus.

The standard Windows controls on the Title Bar are as follows:

<b>Minimize</b>	Hide the application's main window and include an entry to restore the application in the Windows task bar.
<b>Maximize/Restore</b>	Change the size of the application main window. <b>Maximize</b> increases the size of the window to fill the entire display. The <b>Restore</b> function reduces the size of the main window to the previous dimensions.
<b>Close</b>	Exit the desktop application.

The **Main Menu** provides a drop down menu, which lists all of the functions available within a selected category. The functions available from the **Main Menu** are as follows:

#### File

<b>Exit</b>	Close the Desktop Application.
-------------	--------------------------------

#### View

<b>Sort BLF By</b>	Change the sort order of the BLF buttons. Sort options are Extension and Name.
--------------------	--

## Tools

<b>Preferences</b>	Customize operational settings for the desktop application.
<b>Configuration Wizard</b>	Launch to configuration wizard to modify application settings.

## Window

<b>Call Log</b>	Open a separate window to view the call history.
<b>Directory</b>	Open a separate window to view the Directory/Contact List.

## Help

<b>Contents and Index</b>	Access the on-line help system by topic.
<b>About</b>	View the copyright notice and current revision of the desktop application.

## 1.2 **F**unction **T**oolbar

The **Function Toolbar** provides quick access to the most commonly used call processing functions. A function on the toolbar can be selected by using the mouse to click on the desired function button or by pressing the associated hotkey sequence on the keyboard. If additional information is required to complete the operation, then a supporting menu is displayed requesting additional input from the user.

Individual buttons on the **Function Toolbar** become disabled if the function is not allowed for the current state of the telephone. For example, the **Answer** button is only enabled when a call is ringing on the telephone.

Available functions are:

Answer	Hang Up
Auto Handset/Auto Headset	Hold
Barge In	Last Number Redial
Call Redirect	Page
Conference	Park
Dial	Pickup Other Group
Directed Call Pickup	Transfer

Do Not Disturb	Unpark
Forward Calls	Voice Mail
Group Call Pickup	

The operation of each of these functions is further described in [Section 1 Toolbar Functions on page 3-1](#).

### 1.3 Active Call List

The Active Call List displays all of the calls that are currently being handled by the application. The list includes calls that are in the following states:

- Ringing
- Connected
- Held

#### 1.3.1 Active Call List Format

The active call entry that is displayed on the top of the list is always the connected (active) call.

Each entry in the active call list includes the following information, based upon the current state of the call:

- Line/Trunk Identifier
- Connection Status
- Timer displaying time in current state
- Calling Party/Called Party Identification
- User-defined notes
- DNIS information when provided.

The color of the frame for each entry in the active call list also indicates the state of the call. The following table shows the colors that represent each call state.

**Table 6-1 Call State Colors**

State	Frame Color
Active/Connected	Green
Ringing	Red
Held	Yellow

Calls are automatically removed from the active call list when they are disconnected.

### 1.3.2 Active Call List Operations

The following operations are valid within the Active Call List:

- Clicking on a ringing call automatically answers that call.
- A right mouse click on a ringing call gives the option to Redirect or Show Contact.

## 1.4 BLF/DSS Area

The Busy Lamp Field (**BLF**)/Direct Station Select (**DSS**) **Area** provides for monitoring and quickly accessing different phone system resources.

### 1.4.1 BLF/DSS Tabs

Each key on the **BLF/DSS Tab** is used to monitor another station on the telephone system and provides one-touch access to that station. The **BLF/DSS Tab** also provides the Presence Status for the user associated with the station selected. In addition to the basic add-on module functionality, the **BLF/DSS Tab** also provides access to other telephony functions.

#### 1.4.1.1 BLF/DSS Programming

- By default the BLF/DSS view includes an entry for the user local extension.
- Additional BLF buttons are created for each extension that is programmed as a one-touch key on the user's phone. (MB 15-07-01 and 30-03-01).
- One-Touch keys must be programmed on buttons that physically appear on the phone or a console connected to the phone for DSS/BLF status.
- The desktop application acquires the list of programmed one-touch keys at startup.
- Any changes to the phone programming that occur while the application is running are reflected in the application only after the application is restarted.
- Alternately, the Tools → Preferences → BLF/DSS tab includes a Synchronize function that reads the current phone programming.

#### 1.4.1.2 BLF Button Design

- Each BLF button includes an LED image, followed by an identifier.
- The LED image changes color to indicate the current state of the extension.
- The supported colors/states are as follows: Gray (Idle), Green (Busy), Red (Call Forward Immediate/DND All).

- The label can show the extension number, directory name associated with this extension, or both, as determined by the user settings.

#### 1.4.1.3 BLF/DSS Layout

The Preferences → BLF/DSS tab specifies the layout of the BLF/DSS area. Through this dialog the user can set the following:

- Define BLF Groups (tabs).
- Set Visible BLF Groups (tabs).
- Specify members of each BLF Group.
- Define label format for the BLF buttons.
- Specify the name order used on the BLF and Directory views.

The Preferences dialog is further defined in the Preferences section of this document.

The user can also change the sort order of the BLF buttons using the View → Sort BLF By options on the Main Menu. The available sort options are by Extension, by First Name, or by Last Name.

#### 1.4.1.4 BLF/DSS Operations

The BLF/DSS buttons provide one-touch access as follows:

- When the local phone is idle, selecting an idle BLF button initiates a call to that extension.
- When the local phone has an active call, selecting an idle BLF button initiates a transfer to that extension.
- Performing a right mouse click on a BLF button provides access to the following functions:
  - Dial
  - E-Mail

Each of these functions is further described in the Functions section of this document.



#### 1.4.1.5 Speed Dial Tab

- A special tab labeled Speed Dial is included in the BLF/DSS area. When selected, this tab displays a set of buttons that the user has designated as speed dials.
- Clicking on an entry in the Speed Dial list immediately generates a call to the selected number.
- Entries are added to the Speed Dial list through the Directory/Contact List/Personal windows. Then either right click on the contact entry or click on the action tab and select Add Speed Dial.
- A right-mouse click on a Speed Dial entry opens a menu that allows the user to Dial the selected entry or Delete the entry from the Speed Dial list.

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# CHAPTER 7      *Application Level Configuration*

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## **SECTION 1      INTRODUCTION**

The Preferences function allows the user to customize the desktop application user interface and operation.

- From the Full Window mode, the Preferences settings can be accessed by selecting Tools → Preferences on the main menu.

## **SECTION 2      PREFERENCES MENU**

When the Preferences function is selected, the Preferences Menu ([Figure 7-1 Preferences – General Menu on page 7-2](#)) is displayed.

The tabs available from the Preferences menu, which are listed below, are described in this chapter.

- General
- BLF/DSS
- Tool Buttons
- Shortcuts
- Dialing Rules
- Voice Mail
- Notification Settings

## 2.1 Preferences – General

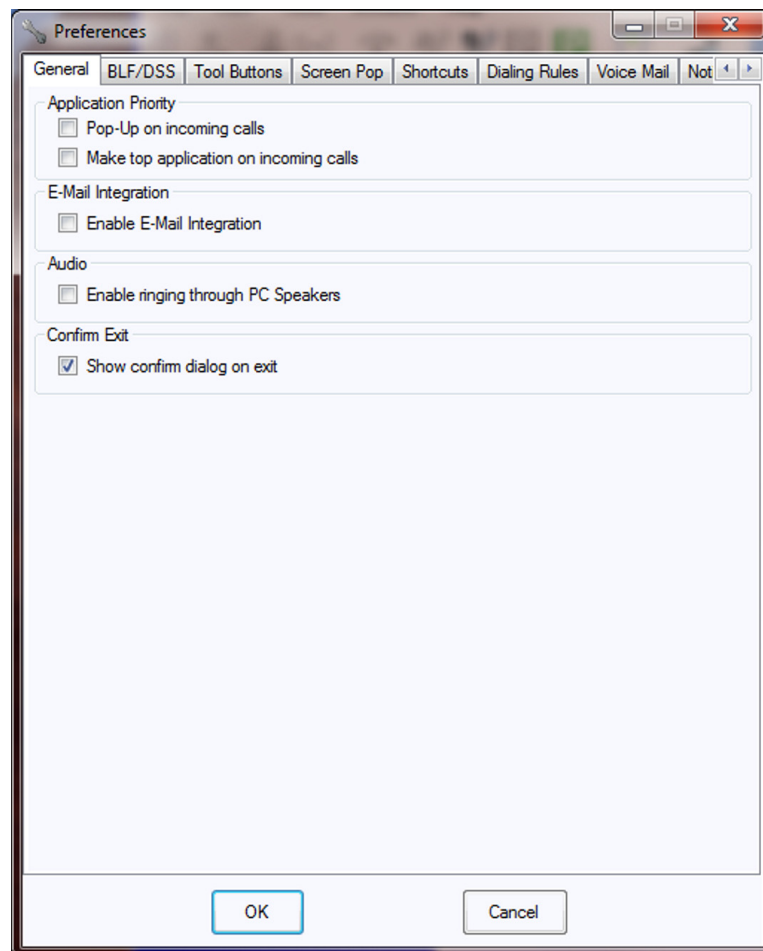


Figure 7-1 Preferences – General Menu

- The **Pop-Up on incoming calls** option applies when the application in Full Window mode is minimized. If this option is selected, the application will be restored from a minimized state when an incoming call is received.
- The **Make top application on incoming calls** applies to the Full Window mode. When selected, this option causes the application window to become the top active application when an incoming call is received.
- The **Enable E-Mail integration** option can be selected to utilize a MAPI-compatible e-mail client in conjunction with the desktop application. E-mail functions are provided within the call log and for directory/contact list entries that have designated e-mail addresses.

- The **Enable ringing through PC speakers** option controls whether a ringing tone is played through the default sound device for each incoming call.
  - ✎ *If headphones are plugged in then the ringing will be played across the headphones and not the speakers.*
- The **Show confirm dialog on exit** controls if a confirmation dialog is presented each time the user closes the application.

## 2.2 Preferences – BLF/DSS

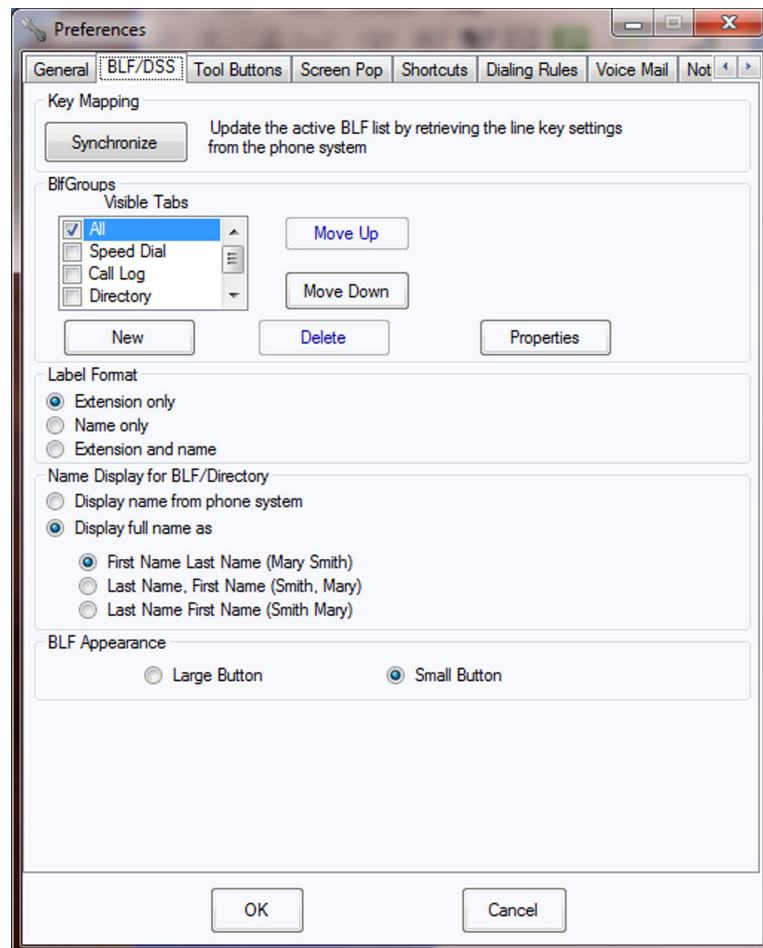


Figure 7-2 Preferences – BLF/DSS Menu

- The **Synchronize** button retrieves the current line key settings from the phone system and updates the layout of the BLF panel accordingly. The O&M information must be defined in Desktop Configuration for this to be available.

- The **Visible Tabs** list controls the tabs that are visible and hidden on the BLF panel. Only the tabs that are checked are shown on the BLF panel.
- The **Move Up** and **Move Down** buttons allow the user to re-arrange the order of the BLF tabs. Selecting an entry and then pressing one of these buttons moves the entry in the desired direction.
- The **New** button can be used to define a new BLF tab entry.
- The **Delete** button removes the selected BLF tab from the list.
- The **Properties** button opens up the definition window for the selected BLF tab.
- The **Label Format** option allows the user to specify which values are shown on each BLF button (*Extension only, Name only, or both Extension and name*).
- The **Name Display** option allows the user to select the format used in the BLF and Directory for displaying *First Name* and *Last Name*.
- **BLF Appearance** can be used to set the preferred size of the BLF buttons.

## 2.3 Preferences – Tool Buttons

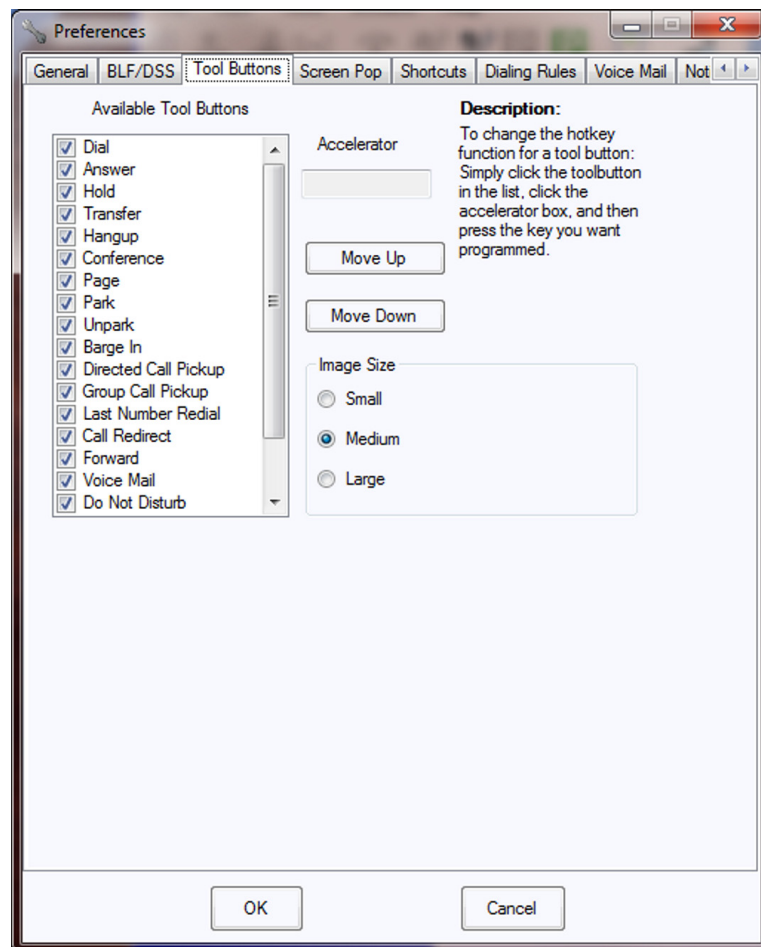

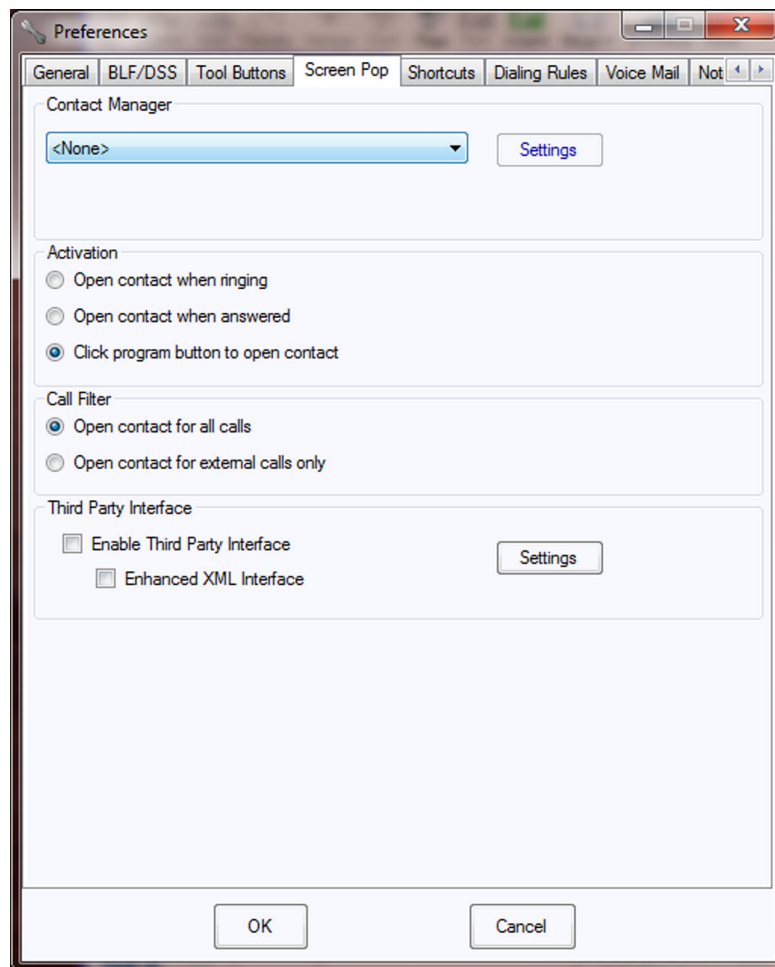


Figure 7-3 Preferences – Tool Buttons Menu

- The **Available Tool Buttons** lists all of the function buttons that are available within the application.
  -  *Only the entries that are checked are shown on the function toolbar.*
- The **Move Up** and **Move Down** buttons are used to re-arrange the order of the function buttons.
- The **Accelerator** field is used to specify a hotkey to associate with a function. The Description text explains how to set a hotkey for a function.
- The **Image Size** option allows the user to select the size of the buttons on the toolbar (Small, Medium, Large).

## 2.4 Preferences – Screen Pop



**Figure 7-4 Preferences – Screen Pop Menu**

- The **Contact Manager** option selects which application to utilize to pop a contact entry.
  - ✎ *Supported applications are ACT! 2005 and higher; Goldmine 6.7 and higher; Time Matters, Tiger Paw and Browser-based CRMs.*
- **SL-DT-CRM Integration-LIC part number 1100095** is required (License code 5510).
- ACT! 2001, 2012, and 2013 are supported with the following conditions:
  - In **Act>Tools>Preferences>Communications>Dialer Preferences** choose **NEC Single Line Device** as modem or line and uncheck **Hide dialer after dialing**.
  - Configure Windows Phone and Modem properties for local dialing.



With ACT! 2012 and 2013, either use the **Hang up** button in the ACT! dialer window to disconnect the call, or toggle the handset if you hang up the phone and close the ACT! dialer window. Failure to do either would hold the dialer open in ACT!.

With ACT! 2013, a reboot is required after setting the integration up.

- The **Settings** button allows the user to designate specific information about the selected contact application.
  - ✍ *To pass Caller ID to a Browser-based CRM use %ID where the caller ID should be placed in the URL. (For example, www.doyoulikewebsites.com/%ID.)*
- The **Activation** option determines at what point the contact is located and displayed.
- The **Call Filter** option determines which types of calls initiate a screen pop (all calls or external calls only).
- The **Enable Third Party Interface** and **Enhanced XML Interface** are used when integrating third party applications via XML.

## 2.5 Preferences – Shortcuts

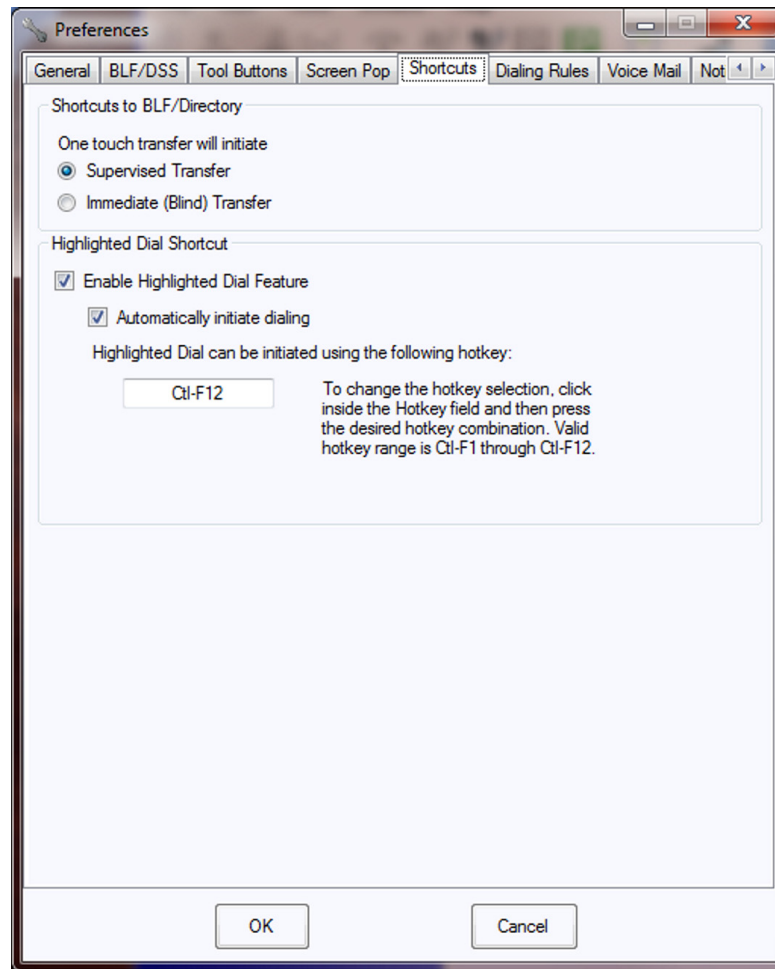


Figure 7-5 Preferences – Shortcuts Menu

- The **One touch transfer will initiate** option specifies which action type of transfer (Supervised or Immediate) is initiated when the user clicks on an idle BLF button with an active call.
- The **Enable Highlighted Dial Feature** option turns on the ability to Highlight a number in any program and have the Desktop Automatically call that number when the number is copied.

## 2.6 Preferences – Dialing Rules

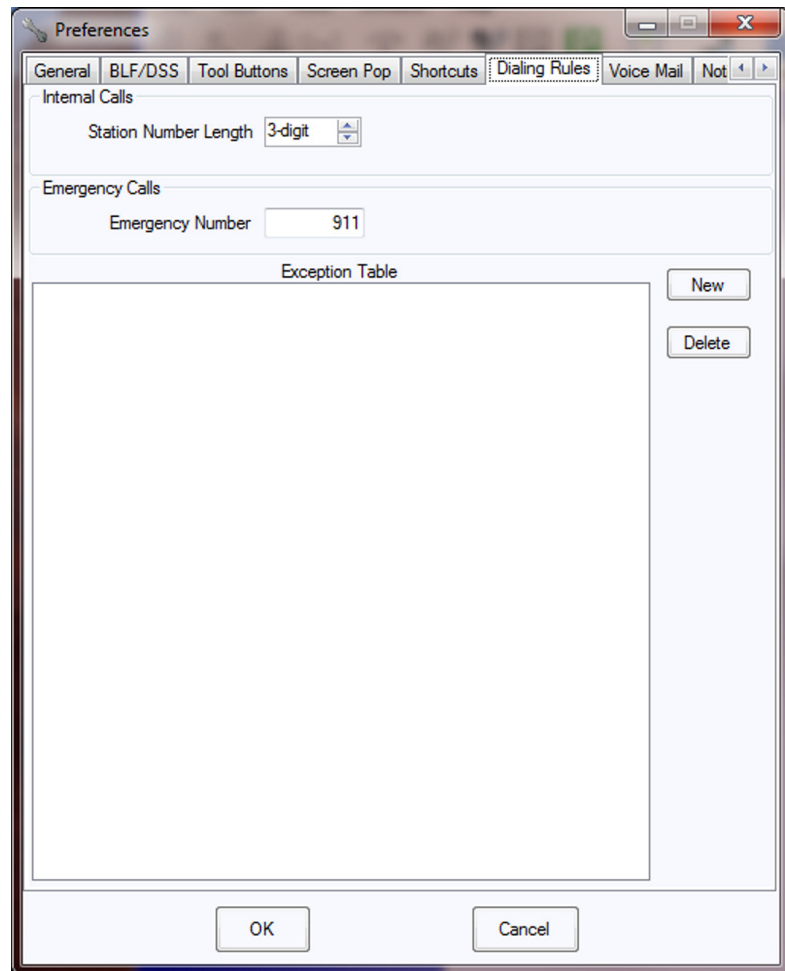
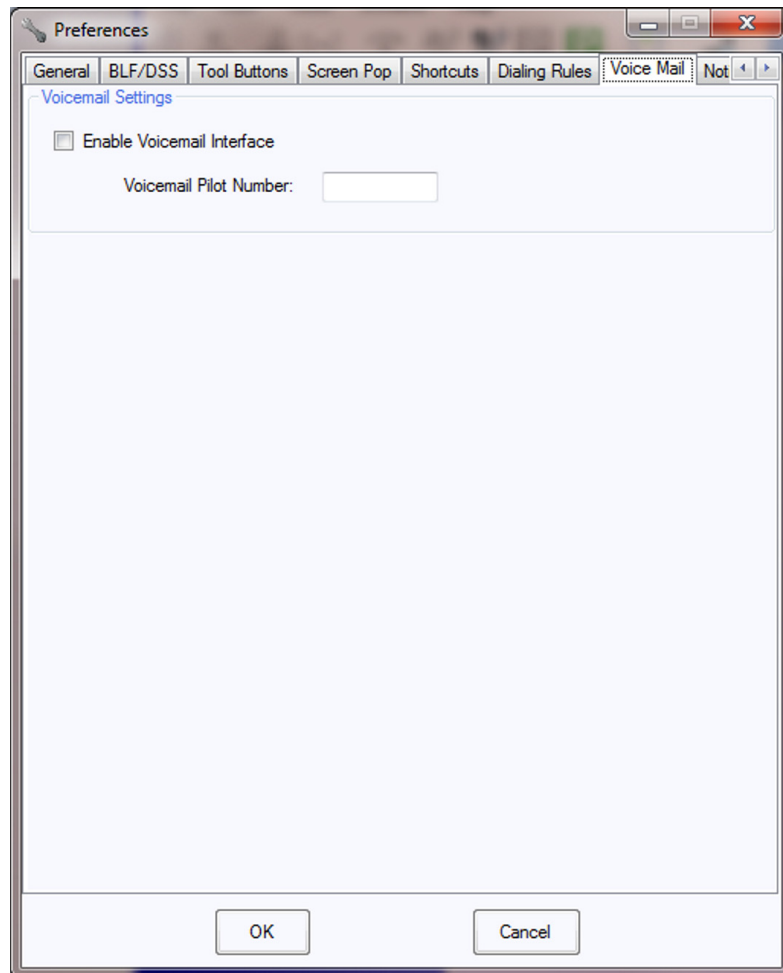


Figure 7-6 Preferences – Dialing Rules Menu

- The **Station Number Length** field specifies how many digits internal station numbers are. Additional digits will be ignored.
- The **Emergency Number** field specifies the number dialed for emergency calls.
- The **Exception Table** is used to define dial strings that are not internal calls. When numbers in this table are dialed, the call will access a trunk.
- The **New** button is used to add a new number to the Exception Table.
- The **Delete** button is used to delete the selected number from the Exception Table.

## 2.7 Preferences – Voice Mail



**Figure 7-7 Preferences – Voice Mail Menu**

- The **Enable Voicemail Interface** option controls if the voice mail functions within the application are enabled.
- The **Voicemail Pilot Number** is specified if transfers to voice mail require the pilot number to be utilized instead of the quick transfer to voice mail service code. The Voicemail Pilot Number should also be entered for Voicemail to be an option when setting forwarding based on Presence settings.

## 2.8 Preferences – Notification Settings

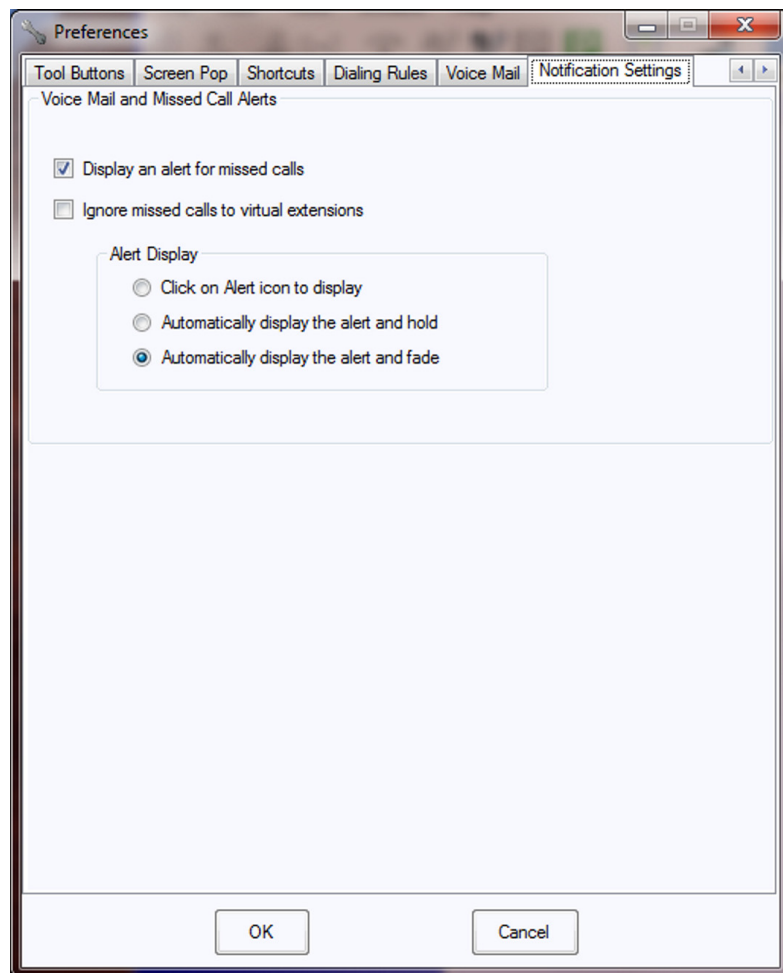


Figure 7-8 Preferences – Notification Settings Menu

- Check the **Display an alert for missed calls** check box to receive a notification in the system tray when an incoming call is missed.
- Check the **Ignore missed calls to virtual extensions** check box to avoid receiving a notification in the system tray when a call to a virtual extension has been missed.
- The **Alert Display** section specifies how the alert will display. The alert can be displayed by clicking the system tray icon, it can be displayed automatically and held until dismissed, or it can be displayed and fade slowly.


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## CHAPTER 8 *Salesforce Integration*

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This chapter describes the setup and operation that allows the NEC Desktop Suite to integrate with Salesforce.com®. This integration allows users to initiate calls to contacts from within Salesforce.com and to search for contacts automatically when an incoming call is received.

 *SL-DT-CRM Integration-LIC part number 1100095 is required (License code 5510).*

### SECTION 1 **OVERVIEW**

The Salesforce.com integration module requires a Salesforce.com Professional, Enterprise, or Unlimited Edition account. The integration module is compatible with the following browsers: Internet Explorer 7, 8, 9 and Firefox 3.6. Firefox 4 is not currently supported.

When integrated with the NEC Desktop Suite, this module provides access to the following operations through the Salesforce.com interface:

- Call contact phone number
- Dial phone number directly
- Answer incoming call
- End active call
- Hold active call
- Retrieve a Held call
- Transfer active call
- Pop contact on incoming call that matches phone number


 *The Salesforce Adapter v4.0 is required for screen pops to be available when using the Professional edition.*

Figure 8-1 Salesforce Screen shows an example of the phone interface within Salesforce.com.

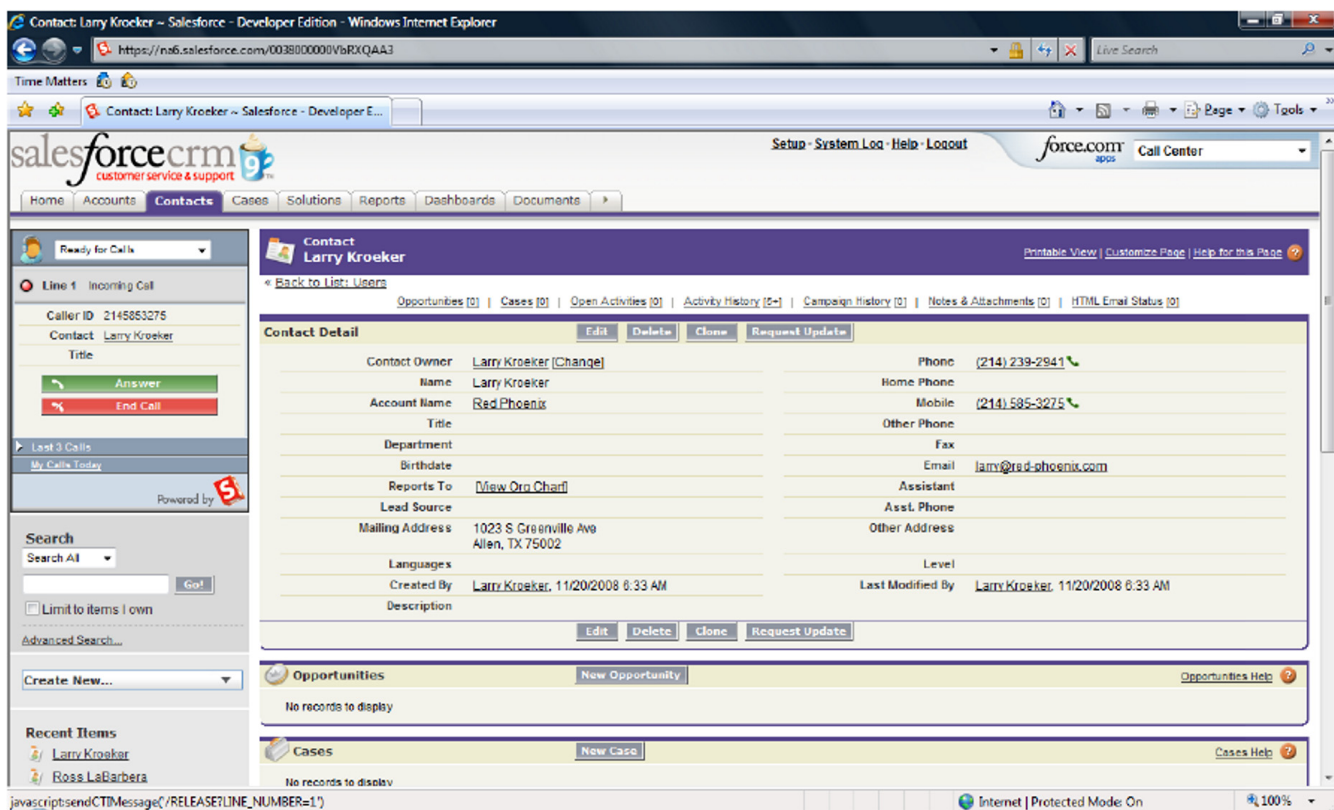


Figure 8-1 Salesforce Screen

## SECTION 2 INSTALLATION

### 2.1 Installation Procedure

The following steps can be used to install the required components to integrate Salesforce.com with the NEC Desktop Suite. This procedure requires the installation of **SL Desktop v2.0 or higher** on the target PC and its operation has been verified.

1. Unzip the NECAdapter.zip file into a temporary location.
2. From the temporary location, run Setup.exe as a Windows administrator user.
  - Default file location: c:\Program Files\NEC\NEC CTI Adapter
  - Programs menu location: NEC → NEC SalesforceCTI



## 2.2 Upgrade Procedure

The following steps can be used to upgrade the Salesforce components from an earlier version. This procedure requires the installation of **SL Desktop v2.0 or higher** on the target PC and its operation has been verified.

1. Stop the Salesforce.com Call Center Adapter by issuing a right mouse click on the Salesforce icon in the notification area. Select the Exit function to close the application.
2. Unzip the NECAdapter.zip file into a temporary location.
3. From the temporary location, run SetupSF.exe as a Windows administrator user. The installation procedure will indicate that an earlier version of the application is being removed.
  - Default file location: c:\Program Files\NEC\NEC Salesforce Adapter
  - Programs menu location: NEC →NEC SalesforceCTI

## SECTION 3 SALESFORCE.COM CONFIGURATION

The following sequence should be performed to configure Salesforce.com for use with the NEC Desktop Suite.

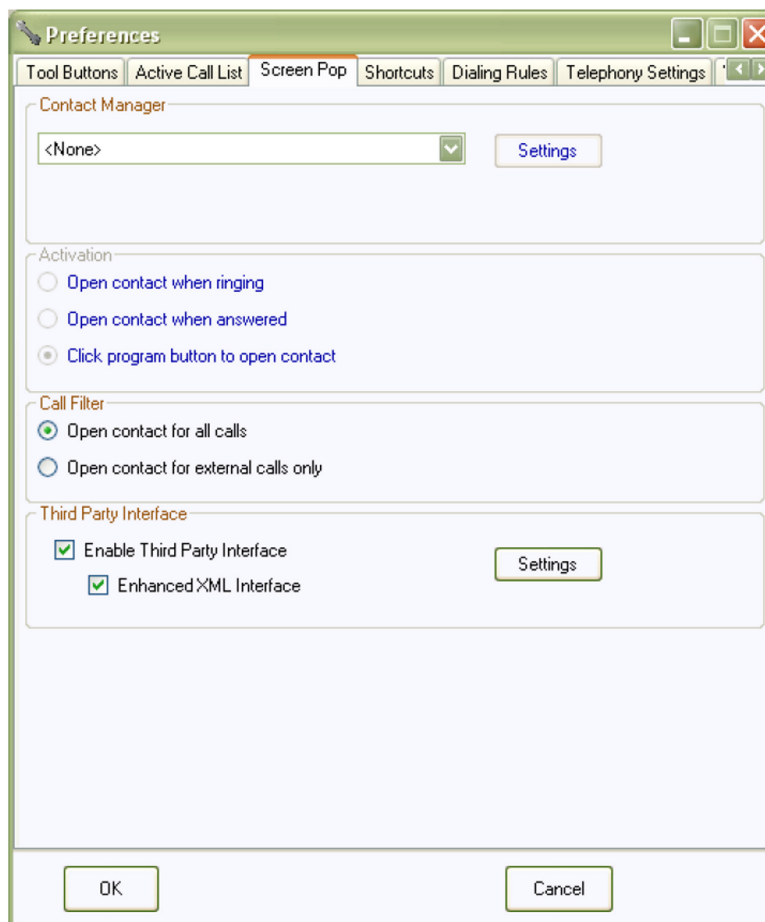
1. Log in to Salesforce as an administrator user.
2. Click **Setup** → **Customize** (*under App Setup*) → **Call Center** → **Call Centers**.
3. Click **Import**.
4. Click **Browse** and navigate to the call center definition file in your NEC Adapter program file directory. In default installations, this file is located at:  
c:\Program Files\NEC\NEC CTI Adapter\ NecAdapter.xml
5. Click **Import**.
6. Click **Manage Call Center Users**.
7. Click **Add More Users**.
8. Enter search criteria to find a Salesforce user who will be a NEC Call Center user. Click **Find**.
9. Select the checkbox next to the name of one or more users who should have access to the NEC Call Center adapter. Click **Add to Call Center**.

## SECTION 4 DESKTOP SUITE CONFIGURATION

The following sequence should be performed to configure the NEC Desktop Suite to use the Salesforce.com integration module.

1. Launch **NEC Desktop Suite**. Make sure the NEC Desktop Suite application is running whenever you wish to use Salesforce.
2. Configure the **NEC Desktop Suite**.
  - Select menu item **Tools** → **Preferences**
  - Select the **Screen Pop** tab
  - In the Third Party Interface section, check the **Enable Third Party Interface** check box and check the **Enhanced XML Interface** check box and click the **OK** button.

 *These options cannot be enabled unless the Enhanced CRM license is available in the SL1100.*




**Figure 8-2 Preferences Screen**

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## SECTION 5 OPERATION

The following procedure can be used to initiate a call from within Salesforce.com.

1. Launch the NEC Desktop Application.
2. Launch the NEC SalesforceCTI application under **Start** → **All Programs** → **NEC** → **NEC SalesforceCTI**. Make sure this application is running whenever you wish to use Salesforce.
3. Log in to Salesforce as a NEC Call Center user. You should notice a new Call Center section below the tabs at the top in the left column. This section will display information about calls being made and received.
4. To dial a phone number:
  - Select a phone number for a Contact, Account, or any other item that has a phone number. Click the phone icon next to the phone number you wish to dial.
  - To end the call, click the red End Call button in the Call Center section.
5. When an incoming call is received, information about the call will be displayed in the Call Center section. If the call is from one of your Contacts or Accounts, the name of the contact will appear in the Call Center section.

 *You will have to answer the call using the NEC Desktop Suite or your phone.*
6. Phone Call Notes – you can log notes about the phone call while you are in the call or after the call.
7. Configure Wrapup After Call.
  - Right-click on the Salesforce system tray icon in the lower right corner of your computer screen.
  - Select **Go To Wrapup After Call** if you want to view wrap-up reasons after ending a call.

## SECTION 6 SERVICE CONDITIONS

If analog Caller ID trunks are being used, Program 14-02-23 must be set to **Wait Caller ID** for Salesforce to receive the caller ID for screen pops.

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## CHAPTER 9 *Tigerpaw*

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### SECTION 1 INTRODUCTION

This chapter describes the setup and operation that allows the NEC Desktop Suite to integrate with Tigerpaw<sup>®</sup> software. Tigerpaw software offers a comprehensive contact management system that includes account management, scheduling, customer history, notes, management of tasks and synchronization with Outlook. The integration with Desktop Suite allows users to initiate calls to contacts from within Tigerpaw and to open contacts automatically when an incoming call is received.

### SECTION 2 OVERVIEW

The Tigerpaw integration is supported in **SL Desktop v2.0 or higher**.

Desktop Suite has been tested with Tigerpaw versions 9, 10.7.6, and 11.0.244.

The SL1100 CPU must include the **LK-DT CRM INTEGRATION-LIC (5310)** license to enable the Tigerpaw integration. If this license is not installed, the Desktop Suite will not display the option to enable Tigerpaw integration.

When the Tigerpaw integration is enabled within the NEC Desktop Suite, the following operations are available:

- Pop contact on incoming call that matches phone number.
- Call contact phone number.

### SECTION 3 NEC DESKTOP SUITE CONFIGURATION

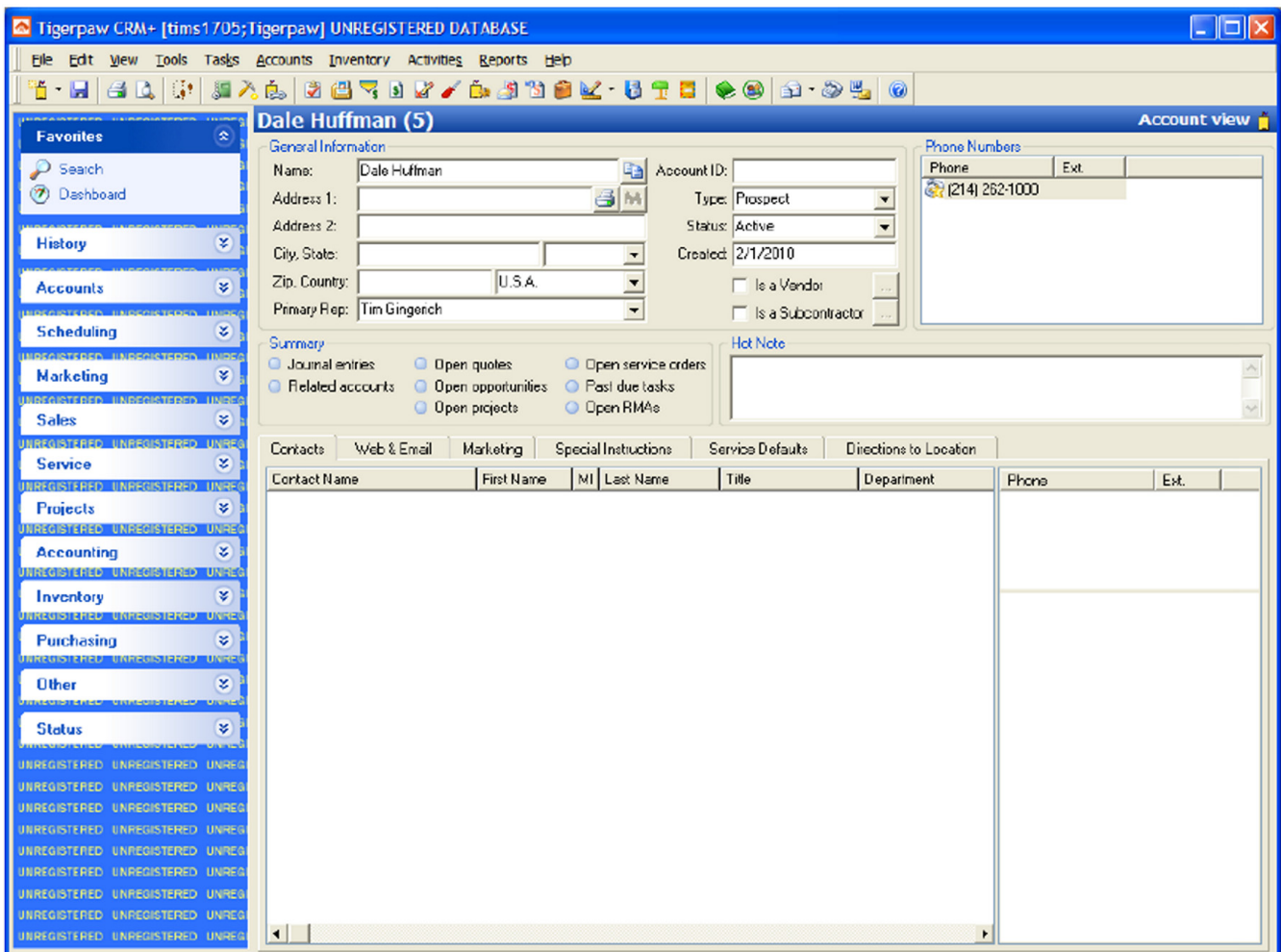
To configure the NEC Desktop Suite to use the Tigerpaw CRM integration for screen pops complete the following:

1. **Launch NEC Desktop Suite.** Ensure the NEC Desktop Suite application is running whenever you wish to use Tigerpaw.


## 2. Configure NEC Desktop Suite:

- Select menu item **Tools>Preferences**.
- Select the **Screen Pop** tab.
- Select **Tigerpaw** within the Contact Manager section and click the **OK** button.
- Set the Activation and Call Filter settings to determine when to initiate the screen pop and which type of calls should cause the screen pop.

3. When an incoming call arrives, the Desktop Suite uses the calling line number to search the Tigerpaw database for a match. If a match is found, the associated contact is displayed, refer to [Figure 9-1 Tigerpaw CRM Screen](#).



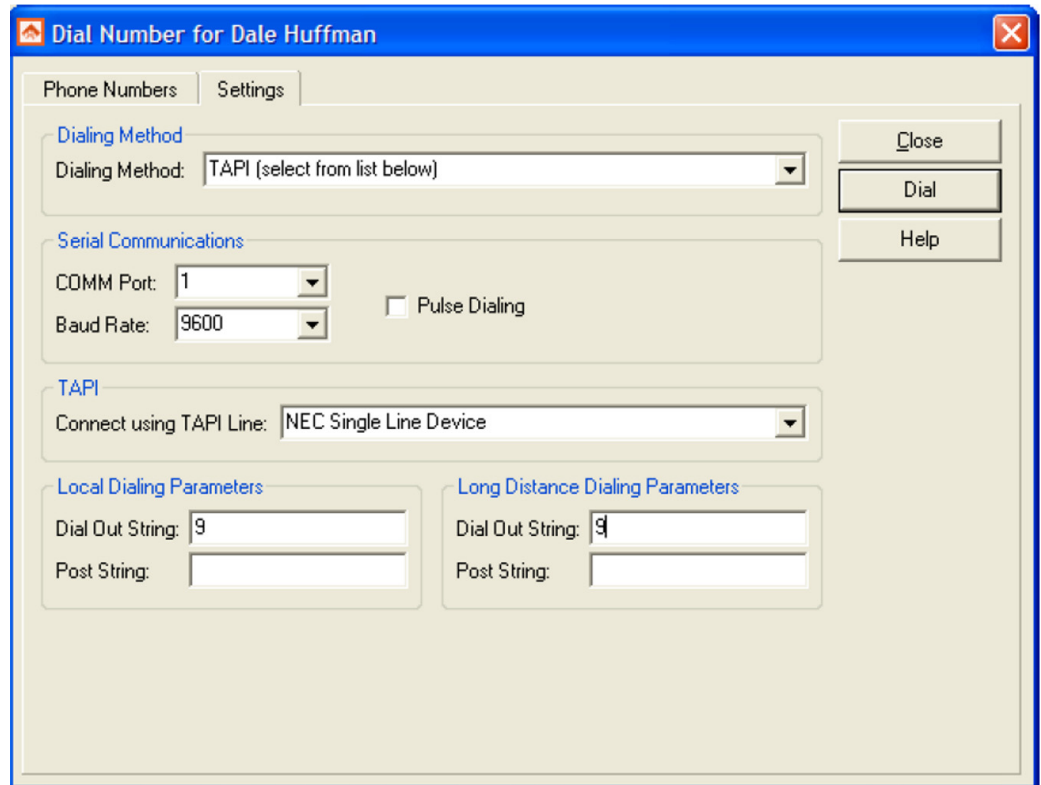
**Figure 9-1 Tigerpaw CRM Screen**

 The contact screen may differ based upon the version of Tigerpaw in use and individual configuration settings.

## SECTION 4 OPERATION

The following can be used to initiate a call from within Tigerpaw:

1. Select the contact to be dialed and open the dialing control, refer to [Figure 9-2 Example of Dial Number Screen](#).



**Figure 9-2 Example of Dial Number Screen**

*The dialing screen may differ based upon the version of Tigerpaw in use.*

2. In the TAPI section, select **NEC Single Line Device**, refer to [Figure 9-2 Example of Dial Number Screen](#).
3. Select the **Dial** button to initiate the call.
4. The Desktop Suite interface will update to show the status of the call.
5. Further operations can be initiated on the active call through the Desktop Suite, such as Transfer, Conference, Hold, and HangUp.

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## CHAPTER 10     *Integration Toolkit*

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### SECTION 1     INTRODUCTION

The Desktop Suite has the ability to support integration with a variety of popular third-party CRM applications. These integrations typically allow the third-party software to dial numbers stored within the application and screen pop entries based upon Caller ID recognition. However, many companies use CRM (Customer Resource Management) packages that are industry-specific or, in some cases, internally developed.

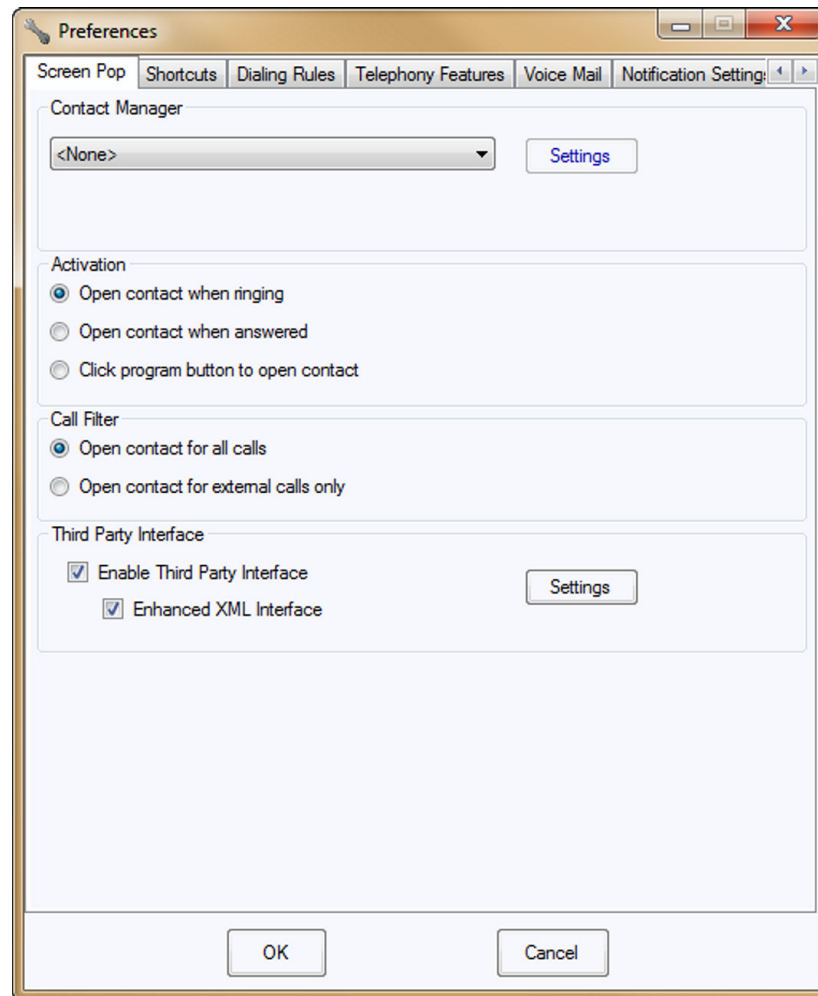
In order to provide another means to integrate with third-party applications, with UC Desktop Suite **SL Desktop v2.0 or higher**, the Integration Developer's Toolkit allows users to develop their own interface to the Desktop Suite.

 *Part number 670940 – LK-DT CRM Integration-LIC license (license code 5310 in Program 10-50-01) and SL1100 system software Version 4000 are required for the Integration Toolkit.*

The Desktop Suite developer's toolkit consists of a .Net/ActiveX connector module and basic documentation that will help a developer get started with the integration. The connector module is automatically installed as part of the Desktop Suite client. To utilize the connector, the user must have the Enhanced CRM license enabled within their SL1100 system.

### SECTION 2     TOOLKIT ACTIVATION

The user can enable the Connector integration by choosing the **Enhanced XML** option on the Screen Pop tab of the Preferences dialog (refer to [Figure 10-1 Preferences – Screen Pop Tab on page 10-2](#)). The Desktop Suite is a TCP server (listener) for the connector. The default port for the TCP server is 20864. The user can change this port by selecting the Settings button on the Screen Pop tab.



**Figure 10-1 Preferences – Screen Pop Tab**

The Connector is a .NET ActiveX DLL. There is a COM class for the Plug-in named CrmPlugin.DSApi. A second class, CallEventArgs, is used as a convenience class to pass data related to telephony events received from the Desktop Suite. To access the DSApi class the integrator must add a reference to the CrmPlugin Typelib.

The class has a single property:

- IsConnected** – Returns true if the connection to Desktop Suite is active.

The class has the following methods:

- AnswerCall** – Answer the call specified by the call handle parameter.
- ConferenceCall** – Initiate a three way conference with the current call and the specified destination.

- DialDigits** – Send a Dial request to the Desktop Suite. The digits to dial are passed as a parameter.
- DropCall** – Hangup the call specified by the call handle parameter.
- HoldCall** – Place the specified call on hold.
- MakeCall** – Send a make call request to the Desktop Suite. The number to dial is passed as a parameter.
- RetrieveCall** – Retrieve the specified on hold call.
- Shutdown** – Close the connection to Desktop Suite.
- Startup** – Open a connection to Desktop Suite. Returns true if the connection is successful.
- TransferCall** – Perform an immediate transfer of the current call to the requested destination number.
- TransferCallToVoicemail** – Perform an immediate transfer of the current call to the destination mail box.

The class raises two events:

- OnConnectionStateChanged** – This event is raised when the state of the connection to Desktop Suite changes. The `ConnectionStateArgs` parameter has two fields. The `IsConnected` field indicates whether the connection is active.
- OnCallEvent** – This event is raised when a call event is received from Desktop Suite. The event has a single parameter of type `CallEventArgs`.

The class has several properties describing attributes of the event. The same class is used both for incoming call status events and dial out status events. The `IsOutbound` property may be used to determine the direction of the call. The following properties are supported:

- CalledID** – The called number or DNIS as identified by the telephone system.
- CallerID** – The caller ID for an inbound call or the called ID for an outbound call.
- CallerName** – This field is not populated in the current TAPI implementation.
- CallHandle** – This field represents an internal ID associated with the call that generated the event.
- ChangeTime** – The time when the event occurred.
- IsOutbound** – A Boolean indicating the direction of the call.
- State** – The state of the call as defined in the `CallStates` enumeration. Valid States are: `Busy`, `Conferenced`, `Connected`, `Dialing`, `Dialtone`, `Disconnected`, `Idle`, `Offering`, `OnHold`, `Proceeding`, `Ringback`, and `Unknown`.

- Status** – A string representing the status of the call out status messages.
- TrunkNumber** – The trunk number of the current call event. A trunk number of 0 represents an internal call.

## APPENDIX A *Features by License Level*

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The following table shows the licenses available for the SL Desktop Suite and their codes.

Operational Mode	License Code	Description
Softphone	5501	Softphone Client
Deskset	5505	Desktop Client

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# **SL1100**

## **Desktop Suite Manual**

NEC Corporation

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