

# NEC

The logo for the brand 'Aspire' is displayed in a blue, italicized, sans-serif font. A vertical black line is positioned to the left of the logo.

*Aspire*

**PC Attendant  
Installation Manual**

0.2.0

Technical Support Web Site:  
<http://ws1.necii.com> (registration is required)

This manual has been developed by NEC Unified Solutions, Inc. It is intended for the use of its customers and service personnel, and should be read in its entirety before attempting to install or program the system. Any comments or suggestions for improving this manual would be appreciated. Forward your remarks to:

**NEC Unified Solutions, Inc.**  
4 Forest Parkway  
Shelton, CT 06484  
**necunifiedsolutions.com**

Nothing contained in this manual shall be deemed to be, and this manual does not constitute, a warranty of, or representation with respect to, any of the equipment covered. This manual is subject to change without notice and NEC Unified Solutions, Inc. has no obligation to provide any updates or corrections to this manual. Further, NEC Unified Solutions, Inc. also reserves the right, without prior notice, to make changes in equipment design or components as it deems appropriate. No representation is made that this manual is complete or accurate in all respects and NEC Unified Solutions, Inc. shall not be liable for any errors or omissions. In no event shall NEC Unified Solutions, Inc. be liable for any incidental or consequential damages in connection with the use of this manual. This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied or reproduced without prior written consent of NEC Unified Solutions, Inc.

©2006 by NEC Unified Solutions, Inc. All Rights Reserved.  
Printed in U.S.A.

## Table of Contents

---

<b>Introduction</b> .....	<b>1</b>
Major Features of the PC Attendant .....	3
Product Features .....	4
Aspire Feature Matrix .....	5
<b>Requirements</b> .....	<b>11</b>
<b>Installation Steps</b> .....	<b>13</b>
Installation Steps .....	13
System Limitations and Installation Tips .....	14
<b>Installation and Configuration - CTU Adapter</b> .....	<b>15</b>
PC Specifications .....	17
Installing the CTU Driver .....	18
Telephony Service Provider (TSP) .....	25
<b>Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver</b> .....	<b>35</b>
NEC Aspire TSP .....	35
Aspire Programming .....	35
Installing the NEC Aspire TAPI TSP .....	36
Configuring the NEC Aspire TAPI TSP .....	39
Testing NEC Aspire TAPI .....	42
Enabling TAPI Server and User Administration .....	43
Enabling TAPI Server .....	44
User Administration .....	49
Enabling TAPI Clients - Windows 2000/XP .....	52
Uninstalling the Aspire TSP .....	53
<b>Installation and Configuration - PC Attendant</b> .....	<b>55</b>
Installation .....	55
Telephony Administrator Setup .....	57
Uninstalling the PC Attendant Console .....	59
<b>Installation and Configuration - Quick Message</b> .....	<b>61</b>
Installation .....	61
<b>Aspire Programming</b> .....	<b>63</b>
<b>Opening PC Attendant</b> .....	<b>65</b>
Operation Conditions .....	65
Opening PC Attendant .....	65
<b>User Profiles</b> .....	<b>66</b>

## Table of Contents

---

<b>Main Screen</b> .....	<b>67</b>
Resizing the Main Window .....	67
Title Bar .....	68
Menu Bar .....	68
Function Toolbar .....	69
Call Control Panel .....	72
BLF Panel .....	73
Status Bar .....	74
<b>Automatic Voice Greetings</b> .....	<b>75</b>
Playing a Personal Greeting .....	75
<b>Call Forwarding</b> .....	<b>76</b>
Forwarding the Attendant Console .....	76
<b>Call Log</b> .....	<b>78</b>
<b>Call Recording</b> .....	<b>82</b>
Recording the Active Call .....	82
<b>Camp On</b> .....	<b>83</b>
Using Camp On for a Busy Extension .....	83
<b>Central Office Calls, Answering</b> .....	<b>84</b>
Answering Incoming Calls .....	84
Disconnecting a Call .....	84
<b>Central Office Calls, Placing</b> .....	<b>85</b>
Placing an Outbound Call .....	85
Disconnecting a Call .....	85
<b>Conference</b> .....	<b>86</b>
Setting Up a Conference Call .....	86
<b>Directory / Contact List</b> .....	<b>87</b>
<b>Do Not Disturb</b> .....	<b>89</b>
Placing the Attendant Console in Do Not Disturb .....	89
<b>EMail</b> .....	<b>90</b>
EMail: Send an EMail Using a BLF/DSS Key .....	90
<b>Hold</b> .....	<b>91</b>
Placing a Call On Hold .....	91
Retrieving a Call on Hold .....	91
<b>Night Service</b> .....	<b>92</b>
Setting the Telephone System in Night Mode .....	92

## Table of Contents

---

<b>Paging</b> .....	<b>93</b>
Displaying Internal Page Zones 1-64 .....	93
Accessing the Paging System .....	94
<b>Park</b> .....	<b>95</b>
Parking/Unparking a Call .....	95
<b>Quick Message Utility</b> .....	<b>96</b>
Accessing the Quick Message Utility .....	96
Composing a Quick Message .....	97
Receiving a Response to a Quick Message .....	98
Clearing a Quick Message from the Active Call List .....	99
<b>Transfer</b> .....	<b>100</b>
Transferring a Call .....	100
<b>Voice Mail</b> .....	<b>102</b>
Voice Mail: Leave a Message .....	102
<b>Voice Over</b> .....	<b>103</b>
Using Voice Over to a Busy Extension .....	103
<b>Troubleshooting the CTU/TAPI Connection</b> .....	<b>105</b>
General .....	105
CTU .....	106
TAPI 2.x/CTI .....	109
Quick Message .....	114
<b>System Specifications</b> .....	<b>115</b>

# ***Table of Contents***

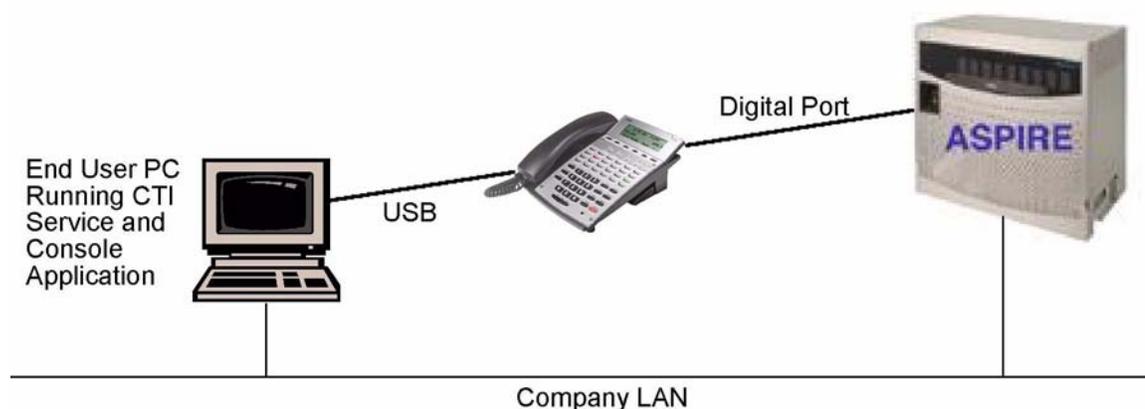
---

The PC Attendant Console is a software product that provides access to the most common functions required by an operator or receptionist. By using this application in conjunction with an Aspire S, M, L, or XL system, the attendant can easily manage their call handling tasks without having to switch their attention between the telephone and the PC. A company directory, recording capability, and PC-to-PC messaging, provide additional features to further enhance the operation. (The attendant telephone requires a CTU Adapter (P/N 0890059) installed with connection directly to the end-user PC for the Call Recording and Personal Greeting voice functions.)

The PC Attendant application uses a CTI (Computer Telephony Integration) service that is provided with the product in order to integrate with the Aspire telephone systems. Through the CTI service, an ethernet connection over the company LAN, and an Aspire keyset for audio, the PC Attendant application is able to monitor all extensions on the phone system and control the actions of the attendant's phone, including placing calls.

The CTI service on the PC communicates with the Aspire system through the CTI port on the telephone system. An administration utility (Telephony Administrator) is provided which allows the system administrator to configure the global settings for the console application.

The following diagram shows the system configuration for a single console installation.



The PC Attendant application can also be installed on multiple PCs for installations that need to support more than one attendant position (each attendant PC would require a licensed version of the PC Attendant installed). **Up to 8 PC Attendant positions can be installed.**

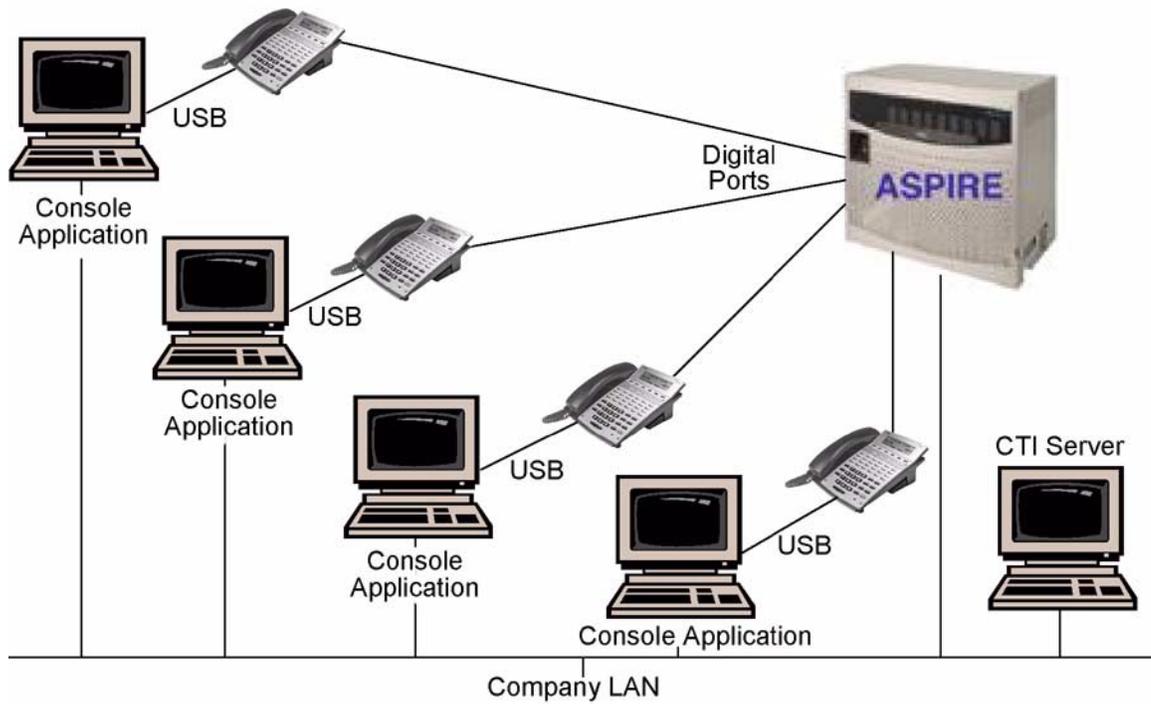
The PC Attendant application also includes a supporting application, call Quick Message. By installing the Quick Message client on individual PCs, the attendant is able to quickly send short messages to other employees, who can respond with a single keystroke.

The host PC to be used as the CTI Server requires Windows XP or Windows 2000 and an interface to the Aspire system through the 3rd-party CTI link to monitor and control the telephone activity. When installing the PC Attendant Console on multiple PCs for more than one attendant position, the PC requires Windows XP or Windows 2000. (Note that if the client PC is to be used for other TAPI 2 applications (ex: Microsoft Outlook dialing), you would need to use Windows 2000 - Windows XP will not support all TAPI 2 applications.)

## Introduction

---

The following diagram shows an example of a system configuration for a multi-console installation. A maximum of eight attendant consoles can be connected to a single CTI Server.



## Major Features of the PC Attendant

### **Company Directory**

The PC Attendant provides an online company directory to assist the attendant with the call handling activity. Each employee in an organization can be entered into the directory to provide the attendant with quick access to contact information. A directory entry can contain information such as the employee name, extension number, EMail address, location, and alternate telephone numbers (i.e. cellular, pager, home). The directory also provides an easy method to transfer calls or send messages to an individual.

### **Multiline Functionality**

The PC Attendant can handle multiple incoming and outgoing calls and display the status of each active call.

### **Caller ID Support**

The PC Attendant displays the Caller ID number information on all incoming calls if the keyset is configured to support Caller ID.

### **Attendant Functions**

The PC Attendant provides easy access to the basic call handling functions required by the attendant position. These basic functions include answering calls, placing calls on hold, transfer, conference, dial, page, and park. Additionally, the attendant has access to more specialized functions such as setting/clearing Night Mode, setting/clearing call forward, and call recording.

### **BLF/DSS Keys**

The PC Attendant can be configured to display Busy Lamp Field (BLF)/Direct Station Select (DSS) keys within the application. The BLF/DSS keys provide functionality similar to a DSS console, which allows the attendant to monitor other stations on the telephone system. The BLF/DSS keys also provide one-touch access to the monitored station. This functionality allows the attendant to quickly determine if an employee is on a call and easily transfer an incoming call to the desired station.

### **Quick Messaging**

When installed on an employee's PC, the Quick Message utility allows the attendant to send a short text message to another employee. Unlike an EMail message, a Quick Message is delivered immediately to the destination and automatically displayed on the user's PC screen. The recipient can then quickly send a reply back to the attendant by selecting from a set of predefined responses. This tool is invaluable for delivering a message to someone who is on the phone or when the attendant needs an immediate response.

### **Call History**

The PC Attendant provides a call log that provides a historical trace of the attendant's call activity. Each inbound and outbound call generates a record in the Call Log.

### **Call Recording**

The PC Attendant provides the ability to record the active call and save the recording as a file on the PC. This file can then be played back within the application or EMail as a WAV file to another user.



***Recording telephone conversations may be illegal under certain circumstances and laws; consult a legal advisor before recording a telephone conversation. Some federal and state laws require the party recording a telephone conversation to use an alert tone to notify all parties to the telephone conversation. Some of these laws provide strict penalties for illegal recording of telephone conversations.***

### **Personal Greeting**

The PC Attendant can be setup to automatically play a personal greeting to the caller on every incoming call. The greeting can be heard by both the caller and attendant and is only played for external calls. This feature can be used to present a professional appearance to customers by delivering an accurate and consistent greeting with each call.

---

## Product Features

Item	Description
Telephony Control	Control through CTI Service.
Maximum BLF Keys	The number of extensions that can be monitored is not limited.
BLF States	In addition to Idle, Busy, and DND, the PC Attendant will also show Ringing. A timer field is also displayed that indicates the Busy or Ringing Time for the active call.
BLF Groups	Multiple groups of extensions can be defined and accessed as different tabs on the BLF panel.
BLF Key Notes	A note can be associated with an extension to indicate the person is out of the office, wants calls re-directed, etc.
Multi-User Support	Multiple users can share BLF groups and directories. Also, Quick Message clients can receive messages from multiple attendants.
Parked Calls	Monitoring of calls parked by attendant.
Active Call Notes	Notes can be added to an active call to help the attendant with call handling.
Product Licensing	Licenses are controlled through a USB key installed on each PC Attendant PC.
Call Pick-Up	The attendant can pick up a call ringing on an extension by clicking on the associated BLF key.
Directory View	The external directory will be displayed in a separate window.
Directory Search	The directory can be searched by First Name, Last Name, or Company Name.
Directory Notes	A notes field will be added to a directory entry. The notes will be displayed when a call is received from that external number.
Call History View	The Call Log will be displayed in a separate window.
Call History Fields	The Call Log will include a column that indicates the name of the attendant.
Function Keys	The user can select the default set of function keys that are shown on the main window.
Extended Functions	Additional phone features available include: <ul style="list-style-type: none"><li>• Barge In</li><li>• Call FWD Override</li><li>• DND Override</li><li>• Callback</li><li>• Directed Call Pickup</li><li>• Activate Door Box</li><li>• Group Call Pickup</li><li>• Last Number Redial</li><li>• Personal Greeting Activation</li><li>• Voice Over</li></ul>

**Aspire Feature Matrix**

<b>Aspire Features</b>	<b>Available with PC Attendant Software Only (without using keyset) ?</b>	<b>Comments</b>
Abbreviated Dialing	<b>No</b>	Use the Contact List provided by the PC Attendant.
Account Codes	<b>No</b>	
Alarm	<b>No</b>	
Alphanumeric Display	<b>No</b>	
Analog Communications Interface (ACI)	<b>No</b>	
Attendant Call Queuing	<b>Yes</b>	
Automatic Call Distribution (ACD)	<b>No</b>	
Automatic Route Selection	<b>Yes</b>	
Background Music	<b>No</b>	
Barge In	<b>Yes</b>	
Call Coverage	<b>No</b>	The PC Attendant can display and call these extensions, but it cannot have a Multiple Directory Number/ Call Coverage key itself.
Call Duration Timer	<b>Yes</b>	Call Timer is provided by the PC Attendant and is not determined by Aspire programming.
Call Forwarding	<b>Yes</b>	
Call Forwarding, Fixed	<b>Yes</b>	
Call Forwarding, Off-Premise	<b>No</b>	
Call Forwarding with Follow Me	<b>No</b>	
Call Forwarding/Do Not Disturb Override	<b>No</b>	
Call Pickup Group	<b>Yes</b>	
Call Redirect	<b>Yes</b>	
Call Waiting / Camp On	<b>No</b>	
Callback	<b>No</b>	
Caller ID	<b>Yes - Only Number</b>	No Caller ID name is displayed.
Central Office Calls, Answering	<b>Yes</b>	
Central Office Calls, Placing	<b>Yes</b>	
Class of Service	<b>Yes</b>	
Computer Telephony Integration (CTI) Applications	<b>Yes</b>	

## Introduction

Aspire Features	Available with PC Attendant Software Only (without using keyset) ?	Comments
Conference	<b>Yes</b>	The feature is performed using the PC Attendant Conference icon and not the CONF key as with a keyset.
Conference, Voice Call/Privacy Release	<b>No</b>	
Continued Dialing	<b>No</b>	
Department Calling	<b>Yes</b>	
Department Step Calling	<b>No</b>	
Dial Number Preview	<b>Yes</b>	Dial Number Preview is provided by the PC Attendant and is not displayed on the Aspire keyset.
Dial Pad Confirmation Tone	<b>No</b>	
Dial Tone Detection	<b>Yes</b>	
Direct Inward Dialing (DID)	<b>Yes</b>	
Direct Inward Line (DIL)	<b>Yes</b>	
Direct Inward System Access (DISA)	<b>No</b>	
Direct Station Selection (DSS) Console	<b>No</b>	
Directed Call Pickup	<b>Yes</b>	
Directory Dialing	<b>No</b>	Use the Directory List provided by the PC Attendant.
Distinctive Ringing, Tones and Flash Patterns	<b>No</b>	
Do Not Disturb	<b>Yes</b>	
Door Box	<b>Yes</b>	The Telephony Administrator must be set for a 4- or 5-digit Intercom number.
Dual Line Appearance	<b>No</b>	
E911 Compatibility	<b>Yes</b>	
External Alarm Sensors	<b>No</b>	
Flash	<b>No</b>	
Flexible System Numbering	<b>Yes</b>	
Forced Trunk Disconnect	<b>No</b>	
Group Call Pickup	<b>Yes</b>	
Group Listen	<b>No</b>	
Handsfree and Monitor	<b>Yes</b>	
Handsfree Answerback/Forced Intercom Ringing	<b>No</b>	
Headset Operation	<b>Yes</b>	
Hold	<b>Yes</b>	
Hotline	<b>Yes</b>	Use the Directory Dialing feature provided by the PC Attendant.

# Introduction

## Introduction

Aspire Features	Available with PC Attendant Software Only (without using keyset) ?	Comments
inDepth and inDepth+	<b>Yes</b>	
Intercom	<b>Yes</b>	
Intercom Abandoned Call Display	<b>No</b>	
ISDN Compatibility	<b>Yes</b>	
Last Number Redial	<b>No</b>	
Line Preference	<b>No</b>	
Long Conversation Cutoff	<b>Yes</b>	Though the trunk will disconnect, the keyset must be used to hang up.
Loop Keys	<b>Yes</b>	
Meet Me Conference	<b>No</b>	Though the PC Attendant can be used to initiate the Meet Me Conference, the CONF key on the keyset must be used to complete the Conference.
Meet Me Paging	<b>Yes</b>	
Meet Me Paging Transfer	<b>No</b>	
Memo Dial	<b>No</b>	
Message Waiting	<b>No</b>	
Microphone Cutoff	<b>No</b>	
Multiple Directory Numbers / Call Coverage	<b>No</b>	The PC Attendant can display and call these extensions, but it cannot have a Multiple Directory Number/ Call Coverage key itself.
Music on Hold	<b>Yes</b>	
Name Storing	<b>No</b>	
Networking	<b>No</b>	The PC Attendant can call networked extensions and those extensions can call the PC Attendant, however, the BLF display does not indicate the networked extensions in the BLF list.
Night Service	<b>Yes</b>	
Off Hook Signaling	<b>Yes - Automatic Signaling No - Manual Signaling</b>	
One-Touch Calling	<b>No</b>	
Operator	<b>Yes</b>	
OPX (Off Premise Extension)	<b>Yes</b>	
Paging, External	<b>Yes</b>	
Paging, Internal	<b>Yes</b>	
Paging, Privacy Release	<b>No</b>	
Park	<b>Yes</b>	

# Introduction

## *Introduction*

<b>Aspire Features</b>	<b>Available with PC Attendant Software Only (without using keyset) ?</b>	<b>Comments</b>
PBX Compatibility	<b>Yes</b>	
Prime Line Selection	<b>Yes</b>	
Privacy Release	<b>No</b>	
Private Line	<b>No</b>	
Programmable Function Keys	<b>No</b>	
Pulse to Tone Conversion	<b>No</b>	
Repeat Redial	<b>No</b>	
Reverse Voice Over	<b>No</b>	
Ring Groups	<b>Yes</b>	
Ring Tones, Selectable	<b>No</b>	
Ringdown Extension, Internal/External	<b>Yes - Destination No - Initiating Extension</b>	
Room Monitor	<b>No</b>	
Save Number Dialed	<b>No</b>	
Secretary Call (Buzzer)	<b>No</b>	
Secretary Call Pickup	<b>No</b>	
Selectable Display Messaging	<b>No</b>	
Selectable Ring Tones	<b>No</b>	
Serial Call	<b>No</b>	
Soft Keys	<b>No</b>	
Station Message Detail Recording	<b>Yes</b>	Keyset extension is included in reports.
T1 Trunking (with ANI/DNIS Compatibility)	<b>Yes</b>	
Tandem Ringing	<b>No</b>	
Tandem Trunking (Unsupervised Conference)	<b>Yes</b>	
TAPI Compatibility	<b>Yes</b>	
Tie Lines	<b>Yes</b>	
Time and Date	<b>Yes</b>	As provided by the PC using the PC Attendant.
Toll Restriction	<b>Yes</b>	
Toll Restriction, Dial Block	<b>No</b>	
Toll Restriction Override	<b>No</b>	
Traffic Reports	<b>No</b>	Keyset extension is included in reports.
Transfer	<b>Yes</b>	
Trunk Group Routing	<b>Yes</b>	

# Introduction

## *Introduction*

---

<b>Aspire Features</b>	<b>Available with PC Attendant Software Only (without using keyset) ?</b>	<b>Comments</b>
Trunk Groups	<b>Yes</b>	
Trunk Queuing/Camp On	<b>No</b>	
Universal Answer	<b>No</b>	
Voice Mail	<b>Yes</b>	
Voice Over	<b>Yes</b>	
Voice Response System (VRS)	<b>No</b>	Though a few recording/listening operations are available, the ability is very limited due to the PC Attendant operation.
VoIP	<b>Yes</b>	
Volume Controls	<b>No</b>	
Warning Tone For Long Conversation	<b>Yes</b>	

# Introduction

## *Introduction*

---

- For Your Notes -

## Requirements for PC Attendant

This section describes the requirements for the PC Attendant Console.

### **Telephone System**

The PC Attendant Console will work with digital keysets for all Aspire systems (Aspire S, Aspire M, Aspire L, or Aspire XL). *The TAPI 2 function is required for the PC Attendant.* This means that with the *Aspire M, a Feature Upgrade PAL chip is required. The Aspire L/XL systems use the enhanced NTCPU* which provides the TAPI function.

A keyset is required for the attendant to provide audio for the call. The operator can use the handset or connect a headset for easier operation.

### **Operating System Support**

The PC Attendant application can be used with Windows 2000 and Windows XP.

### **PC Requirements**

The PC requirements for running the CTI Server can vary depending on the number of stations that will be monitored and the number of Console applications that will be used. However, the following guidelines are the recommended PC components.

#### CTI Server / Stand-Alone PC:

A dedicated PC is recommended for the Aspire CTI Server.

<b>Processor:</b>	Pentium III, 800 MHz
<b>Memory:</b>	512M RAM
<b>Available Hard Disk Space:</b>	<ul style="list-style-type: none"><li>● 10M for installation</li><li>● 75M for .NET framework (if not already installed)</li><li>● 5M for directory and configuration files</li></ul>
<b>Media:</b>	CD-ROM
<b>Communications:</b>	Ethernet Port
<b>USB Port:</b>	Required for license key

#### PC with Console Application:

<b>Processor:</b>	Pentium III, 500 MHz
<b>Memory:</b>	256M RAM
<b>Available Hard Disk Space:</b>	<ul style="list-style-type: none"><li>● 10M for installation</li><li>● 75M for .NET framework (if not already installed)</li><li>● 2M+ for call log, based upon call volume and call recording</li></ul>
<b>Media:</b>	CD-ROM
<b>Communications:</b>	Ethernet Port
<b>USB Port:</b>	Required for license key A second USB port, if recording or personal greeting required

# Introduction

## *Requirements*

---

- For Your Notes -

---

### Installation Steps

1. In the Aspire system, for any extension to be used as a PC Attendant, set the extension's Class of Service option in **Program 20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling** to "1". This setting is required to ensure the proper operation for Voice Mail, Camp-On and Voice Over.
2. If a CTU Adapter (P/N 0890059) is to be installed on any keyset which will be assigned to the PC Attendant as an operator, **the CTU driver must be installed on the PC prior to the TAPI 2 driver**. Refer to page 15 and page 17 for step-by-step installation instructions.

*If the TAPI 2 has been installed prior to the CTU driver, the TAPI 2 must be removed from the system (using **Start-Setting-Control Panel-Add or Remove Programs-AspireTSP**), then install the CTU driver, followed by reinstalling the TAPI 2 driver. (The PC Attendant program would not need to be removed in this case.)*

*If the CTU driver and TAPI drivers is not installed first, there could be unexpected interactions with the PC Attendant application. If you wish, you can install the CTU driver prior to any installation, whether a CTU will be used or not - it will not affect an installation. This would prevent you from having to uninstall all the PC Attendant applications and reinstalling should it be determined later that a CTU is required.*
3. Install the third-party CTI (TAPI 2) driver on the PC which will be used to run the CTI Service (this is the host PC to which any other client PCs will be connected when multiple operators are used). **This must be installed prior to installing the PC Attendant application**. Refer to page 35 for step-by-step installation instructions.
4. Install the PC Attendant software on the host PC. Refer to page 55 for step-by-step installation instructions.
5. Install the PC Attendant software on any client PCs to be used for multiple operator positions. **A maximum of 8 operator positions are possible with the PC Attendant**.
6. Install the Quick Message client on any PC to which the operator should be able to send a message. Refer to page 61 for step-by-step installation instructions.

# Installation

## *Installation Steps*

---

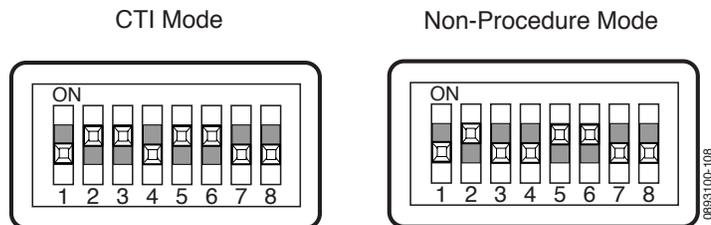
---

### System Limitations and Installation Tips

- **Universal Serial Bus Support :** To enable voice recording or personal greeting, each PC that requires this functionality must have a USB adapter installed in the associated digital telephone and connected to the user's PC.
- **Busy Lamp Field :** Using the 3rd party CTI interface, any extension on the system can be monitored to show the current status with the BLF capability.
- **Attendant to PC Messaging :** The PC Attendant Console is able to send short text messages to other employees using the company's Local Area Network (LAN). This functionality could be used, for example, to alert an employee of an important incoming call if they are already on the telephone. In order to be able to receive and respond to these messages, a small client application, Quick Message, needs to be installed on the employee PC (Quick Message is part of the Attendant Console application). The client software can be configured to "pop-up" on the employee's PC screen when a message is received from the attendant. The employee can then respond to the attendant by selecting from a set of preprogrammed responses. This feature is not intended to emulate or replace a general-purpose "chat" application. It is intended to provide basic communication between an operator and employees within a building on a local area network.
- Multiple user profiles can be defined on a single PC. This allows different individuals to use the same attendant workstation and maintain their own configuration settings.
- The Clock used on display is from the PC, not from the Aspire system.
- Check the feature access codes defined in the Telephony Administration configuration to ensure that they match what is programmed in the Aspire system. Refer to *Telephony Administrator Setup* on page 57.
- In order to use service codes which require 1 or 2 additional digits (such as calling Door Box [802 + door box number] or dialing using a trunk group [804 + trunk group number]), internal calls must be set to 5-digits in the Special Dialing tab of the Telephony Administration configuration. Any additional dialed digits over "5", the PC Attendant will determine you are placing an outside call and will seize a line.
- Any new extensions installed after the CTI server has started will not be displayed in the PC Attendant until the CTI Server is restarted.

### Installing the CTU Adapter

1. Unplug the line cord from the keyset.
2. If the keyset on which the CTU adapter is to be connected was previously installed, undefine the circuit type in Program 10-03-01 for the extension (enter 0 as the circuit type).
3. If only one adapter is to be installed on the phone, the adapter should be installed on the right-hand side of the phone (beneath the handset). Using a flat-head screwdriver, remove the plastic punch-out piece covering the connector.
4. Set the dip switches on the CTU adapter to the required position.
  - The DSW settings are
    - For CTI connection: 2, 3, 5, 6 = on / 1, 4, 7, 8 = off (default factory setting) - this is the setting required for the Call Recording feature.
    - For non-procedure (SMDR) mode: 2, 5, 6 = on / 1, 3, 4, 7, 8 = off.



5. Install the CTU Adapter driver. Refer to **CTU Driver Setup** (page 17) for details.  
*The CTU Adapter driver can be downloaded from the NEC Technical Support web site: <http://ws1.necii.com>.*
6. Attach ferrite beads to the AC-R power cable and USB cables. These should be installed on the ends of the cables closest to the adapter.  
*The USB cable is a USB Type B Male (to adapter) to Type A Male Cable (to USB device).*



# Installation

## Installation and Configuration - CTU Adapter

---

7. Position the adapter with the connector positioned as shown below.  
*You may wish to remove the wall-mount bracket to allow for easier adapter installation.*



8. Hook the two plastic prongs into the bottom of the phone.
9. Push the connector into place. The top latch on the top of the adapter should lock into place when it is properly positioned.
10. Plug the AC-R AC/DC adapter into the AC jack on the side of the adapter and to an AC outlet.
11. Plug the line cord back into the keyset.
12. Install the CTU driver as detailed on page 17. This should be done before connecting the USB cable from the adapter to the USB device to be connected.

*To avoid any hardware problems, when removing the adapter, first unplug the line cord, then the power cord, then any other adapter cables.*

*To print from the CTU to a printer, you must connect the CTU to a PC, with the printer then connected to the PC (you can not have a direct CTU-to-printer connection).*

13. Confirm in Program 10-03-04 that the CTU adapter is recognized for the keyset's port.
14. You can now confirm the port assignment using the Windows Device Manager (click **Start - Settings - Control Panel - System - Hardware - Device Manager**). Under the **Ports (COM & LPT)** section should be displayed **NEC-I CTU Communications Port (Com x)**. Use the port number displayed here when connecting via your communications program (such as HyperTerminal). Note that the baud rate in HyperTerminal does not matter when connecting via USB.

## CTU Driver Setup

**! IMPORTANT !**

- A driver is required for the CTU adapter. This driver can be downloaded from the NEC Technical Support web site (ws1.necii.com).
- **Check the USB port on the PC.**  
This product is connected to the PC via a USB interface. Check that the USB interface on the PC is operating normally before installing the CTU driver. Despite the PC containing a USB port, the driver cannot be used unless the BIOS has been setup appropriately.
- **Multiple CTU adapters cannot be used simultaneously.**  
If a CTA adapter has been used previously, the CTA driver must first be uninstalled before installing the CTU driver. Correct operation will not be possible if the CTU driver is installed without first removing the previous CTA driver.

Select START - PROGRAMS - ASPIRE TELEPHONY DRIVER (RS) and click UNINSTALL ASPIRE DRIVER.

- **Do not connect the USB cable to the PC and CTU adapter until instructed to do so.**  
Preparations for installation (copying files) are required before connecting the USB cable between the PC and the CTU adapter. Correct operation will not be possible if the CTU adapter and the PC are connected before the necessary files are copied.

If the USB cable is connected before the CTU driver is installed, then unplug the USB cable, install the CTU driver (but don't connected the USB cable when instructed), uninstall the CTU driver, reboot the PC, install the CTU driver, plug in USB cable when instructed.

---

## PC Specifications

### ***Recommended Hardware***

#### **Windows 2000 / XP**

- CPU : Intel Pentium 300MHz or higher compatible processor
- RAM : minimum 128MB
- HD : minimum 50MB
- An available USB port

### ***Operating System Software***

- Microsoft® Windows® 2000 Professional Service Pack 3 or Later
- Microsoft® Windows® 2000 Server Service Pack 3 or Later
- Microsoft® Windows® XP Home Edition
- Microsoft® Windows® XP Professional

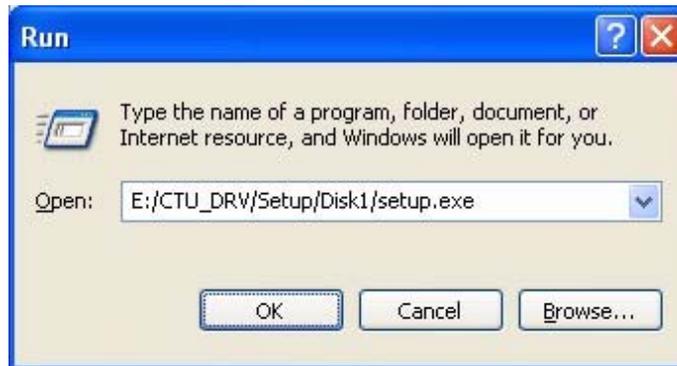
# Installation

## Installation and Configuration - CTU Adapter

---

### Installing the CTU Driver

1. Start or restart Windows and login as 'Administrator'.
2. Download the CTU driver from the NEC Technical Support web site (ws1.necii.com).
3. Unzip the downloaded file using WinZip (can be obtained from www.winzip.com).
4. Click START - RUN to display the RUN dialog box and select the SETUP.EXE from the unzipped files. Click OK.



5. The SERVICE SOFTWARE dialog box appears. When installing the driver for CTI (TAPI) select the CTI CONNECTION option. If you install the driver for SMDR or other system reports, select OTHER (non-control sequence) mode.



6. Click NEXT.

# Installation

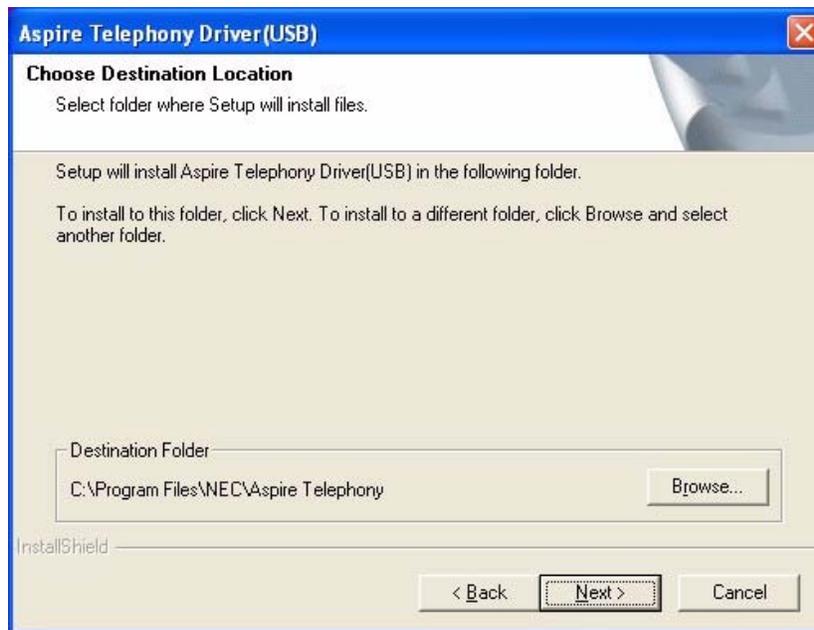
## *Installation and Configuration - CTU Adapter*

---

7. The WELCOME TO THE ASPIRE TELEPHONE DRIVER (USB) SETUP PROGRAM dialog box appears. Verify the details and click NEXT.



8. The CHOOSE DESTINATION LOCATION dialog box appears.  
If the destination folder remains unchanged: Click NEXT.  
If the destination folder is changed: Click BROWSE, select the destination folder in the CHOOSE FOLDER dialog box, and click OK. Return to the CHOOSE DESTINATION LOCATION dialog box and click NEXT.



# Installation

## Installation and Configuration - CTU Adapter

---

- The SETUP COMPLETE dialog box appears. Click FINISH to display the CONNECTING USB CABLE dialog box appears. **Connect the USB cable to the PC only after clicking OK.**



- Connect the USB cable from the CTU adapter to the PC. Insert the USB cable Series A connector (flat connector) in the  socket on the PC. *The CTU adapter must be installed in order for all the TSP menu options to be recognized during the installation process.*

<b>! Important !</b>
Insert the USB cable firmly in the socket.
Ensure that the USB cable is firmly inserted and removed.
Rapid insertion or removal, or partial insertion, of the USB cable will interfere with correct reading of signals, which in turn may prevent recognition of the device. If this problem occurs, remove the USB cable from the connector, wait, and then firmly insert the cable again.

- For Windows XP installations, refer to page 21.  
For Windows 2000 installations, refer to page 24.

# Installation

## *Installation and Configuration - CTU Adapter*

---

### Windows XP Installations Only

1. When the USB cable is connected to the PC the FOUND NEW HARDWARE WIZARD dialog box appears and automatic installation of the driver begins.
2. Windows will ask to connect to Windows Update to search for software. Click “No, not this time” and click NEXT.



3. Select INSTALL SOFTWARE AUTOMATICALLY (RECOMMENDED) and click NEXT.



# Installation

## Installation and Configuration - CTU Adapter

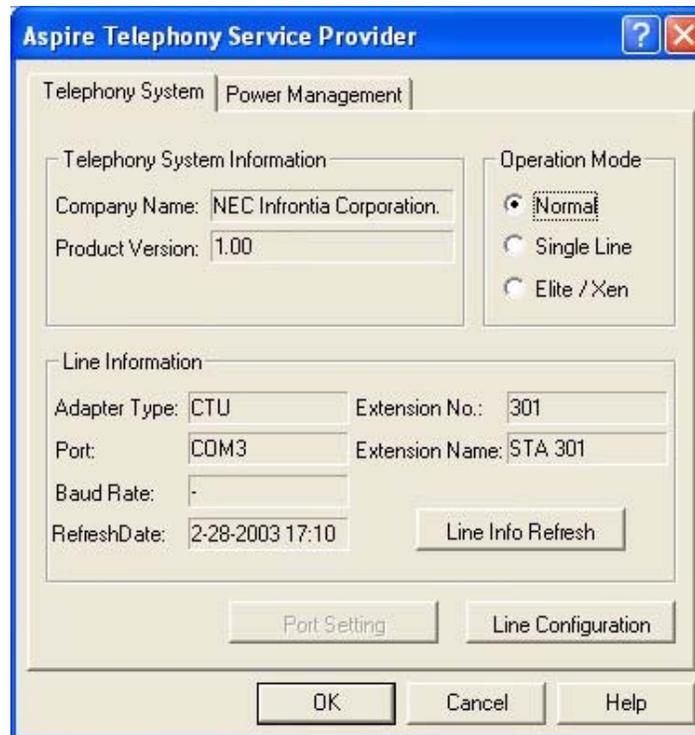
4. A message indicating the software has not passed Windows Logo testing appears. Click CONTINUE ANYWAY.



5. While the necessary driver is being installed, the PLEASE WAIT ... dialog box appears. Once installed, the setup required for the operation of the CTI application proceeds automatically.
6. The ASPIRE TELEPHONY SERVICE PROVIDER dialog box appears.

*This window can be accessed after the installation process by clicking START - SETTINGS - CONTROL PANEL - PHONE AND MODEM OPTIONS then click the ADVANCED tab to display the following screen.*

*The TSP Setup must match the Aspire system data to ensure that this product operates correctly.*



7. Continue the installation process with *TSP Basic Setup – Telephony System* on page 27 when installing the driver for TAPI applications.

# Installation

## *Installation and Configuration - CTU Adapter*

---

8. After the TSP settings have made, the SYSTEM SETTING CHANGE dialog box appears. In order to confirm a new setup, it is necessary to reboot a computer. Click OK.

*Unless the computer reboots, any application which uses the CTU adapter may not operate correctly.*



9. The CTU driver is now installed.

# Installation

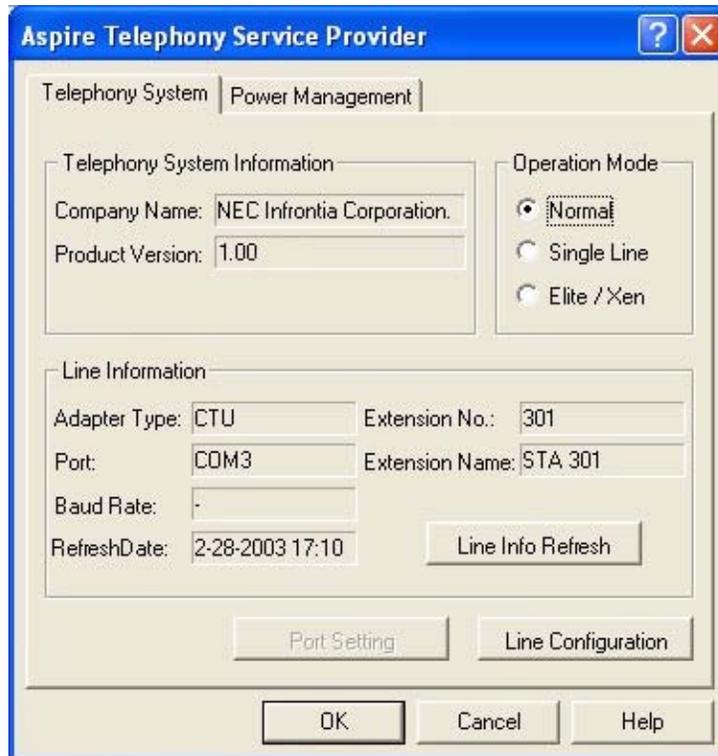
## Installation and Configuration - CTU Adapter

### Windows 2000 Installations Only

1. When the USB cable is connected to the PC the FOUND NEW HARDWARE WIZARD dialog box appears and automatic installation of the driver begins. Select INSTALL SOFTWARE AUTOMATICALLY (RECOMMENDED) and click NEXT.



2. The ASPIRE TELEPHONY SERVICE PROVIDER dialog box appears.  
*This window can be accessed after the installation process by clicking START - SETTINGS - CONTROL PANEL - PHONE AND MODEM OPTIONS then click the ADVANCED tab to display the following screen.*  
*The TSP Setup must match the Aspire system data to ensure that this product operates correctly.*



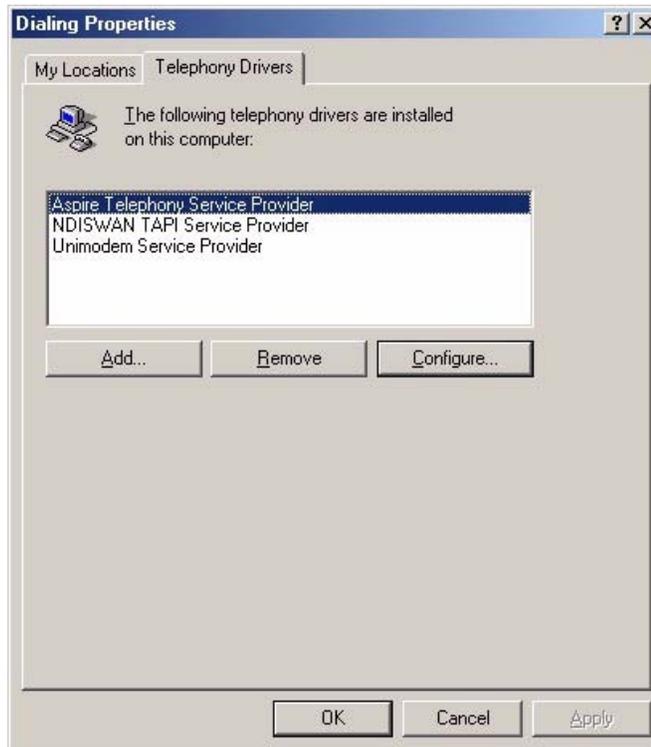
3. Continue the installation process with *TSP Basic Setup – Telephony System* on page 27 when installing the driver for TAPI applications.

### Telephony Service Provider (TSP)

#### ***Starting the TSP Setup Dialog Box***

The TSP Setup dialog box may be started in a number of ways. For example, this section describes starting it from the Control Panel. (The TSP Setup screen may be started with other methods depending on the application in use.)

1. Select Windows START - SETTINGS - CONTROL PANEL - TELEPHONY or PHONE AND MODEM OPTIONS.
2. The DIALING PROPERTIES dialog box is displayed. Click the TELEPHONY DRIVERS or ADVANCED tab to display the following screen.



3. Select ASPIRE TELEPHONY SERVICE PROVIDER on the screen above and click CONFIGURE to display the TSP setup screen.

# Installation

## *Installation and Configuration - CTU Adapter*

---

### ***TSP Setup***

This section describes the various TSP (Telephony Service Provider) settings and method of setup necessary for correct operation of this product. The setup must match the office communication gateway Aspire system data setup.

There are three TSP setup dialog boxes - one for basic settings of the TSP, one for line configuration, and one for port settings. The first and second dialog boxes are each associated with a setup screen (tab). TSP setup consists of the following seven screens.

The TSP Basic Setup dialog box has the following tabs:

- <1> Telephony System
- <2> Power Management

The Line Configuration dialog box has the following tabs:

- <3> Call Setting
- <4> Monitor Setting
- <5> Basic Setting
- <6> Media Setting

The Port Setup dialog box contains no additional tabs.

- <7> Port Setup (Not Used)

The TSP setup dialog box (screen <1>) appears when the TSP setup screen is started. Click LINE CONFIGURATION on screen <1> to display the Line Configuration dialog box (screen <3>).

### **TSP Basic Setup – Telephony System**

This is the first screen displayed when the TSP setup screen is started. It displays the Aspire Telephony Service Provider and general line information. Click **LINE CONFIGURATION** to move to the Line Configuration screen.

The screenshot shows the 'Aspire Telephony Service Provider' window. It has a title bar with a question mark and a close button. The window is divided into two tabs: 'Telephony System' and 'Power Management'. The 'Telephony System' tab is active. It contains three main sections: 'Telephony System Information' with fields for 'Company Name' (NEC Infrontia Corporation) and 'Product Version' (1.00); 'Operation Mode' with radio buttons for 'Normal' (selected), 'Single Line', and 'Elite / Xen'; and 'Line Information' with fields for 'Adapter Type' (CTU), 'Extension No.' (301), 'Port' (COM3), 'Extension Name' (STA 301), 'Baud Rate' (-), and 'RefreshDate' (2-28-2003 17:10). There is a 'Line Info Refresh' button next to the RefreshDate field. At the bottom are buttons for 'Port Setting', 'Line Configuration', 'OK', 'Cancel', and 'Help'.

The fields on the screen are as described below. Read thoroughly, and enter settings appropriate for the system environment.

#### **Operation Mode**

Select to suit the application used.

- Select **NORMAL** if using a CTI application compatible with the Aspire system.
- Select **SINGLE LINE** if using a CTI application compatible with the i-Series system.
- Select **ELITE/XEN** if using a CTI application compatible with the Elite / Xen system.

#### **Line Info Refresh**

Click **LINE INFO REFRESH** if the system data for the telephone has been changed. Clicking **LINE INFO REFRESH** acquires the new line information and displays the date and time at which the information was acquired in the **REFRESH DATE** field.

# Installation

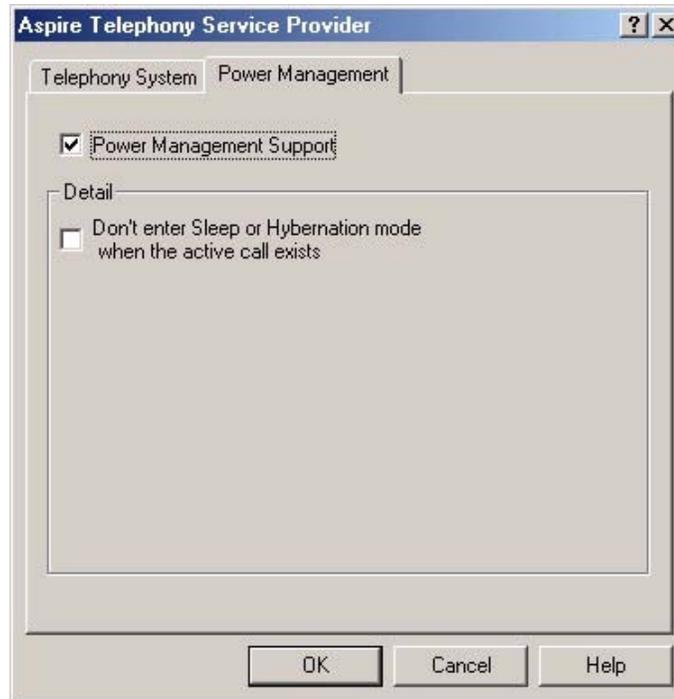
## Installation and Configuration - CTU Adapter

---

### ***TSP Basic Setup – Power Management***

This is the TSP power management setup screen. Click the POWER MANAGEMENT tab in the TSP basic setup dialog box to display the screen.

A PC is normally set up to ensure that it does not enter the Sleep or Hibernation mode during an active call. These modes may be enabled by changing the relevant setting on this screen, and conversely, they may be completely disabled while TAPI applications are running. Note that the power management function cannot be used with Windows NT 4.0. Under Windows NT 4.0, the PC is unable to enter the sleep or hibernation modes while a TAPI application is running.



The fields on the screen are as described below. Read thoroughly, and enter settings appropriate for the system environment.

#### **Power Management Support**

- Place a check in this field to allow the PC to enter the Sleep or Hibernation mode. Note that DON'T ENTER SLEEP OR HIBERNATION MODE WHEN THE ACTIVE CALL EXISTS has priority if checked.
- Remove the check to prevent the PC entering the Sleep or Hibernation mode while TAPI applications are running.

#### **Don't enter Sleep or Hibernation mode during an active call.**

- This setting is only valid when a check has been placed in the POWER MANAGEMENT SUPPORT field.
- Place a check in this field to prevent the PC entering the Sleep or Hibernation mode during an active call between the PC and the phone.
- Remove the check to allow the PC to enter the Sleep or Hibernation mode at any time (including during an active call).

*When returning to the original status after the PC has entered the Sleep or Hibernation mode (i.e. with Resume), in many cases the call status of the TAPI application currently running will not reflect the current call status.*

# Installation

## Installation and Configuration - CTU Adapter

---

### **Line Configuration – Call Setting**

This is the line Call Setting screen. Click LINE CONFIGURATION on the TSP Telephony System screen (screen <1>) to display the screen.



The screenshot shows a dialog box titled "Line Configuration" with three tabs: "Call Setting", "Monitor Setting", and "Media". The "Call Setting" tab is active. It contains two text input fields: "Line Name" with the value "EXTENSION 301 Keypad" and "Device ID" with the value "0". Below these is a "Call mode" section with three radio button options: "Auto Speaker Mode" (selected), "Auto Headset Mode", and "PC". At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

The fields on the screen are as described below. Read thoroughly, and enter settings appropriate for the system environment.

#### **Call Mode**

- Select AUTO SPEAKER MODE to emit a tone from the phone speaker when a line is acquired.
- Select AUTO HEADSET MODE to emit a tone from the headset connected to the phone when a line is acquired.  
*The headset button must be registered with a function key when Auto Headset Mode is used.*
- Select PC to emit a tone from the PC speaker when a line is acquired.

# Installation

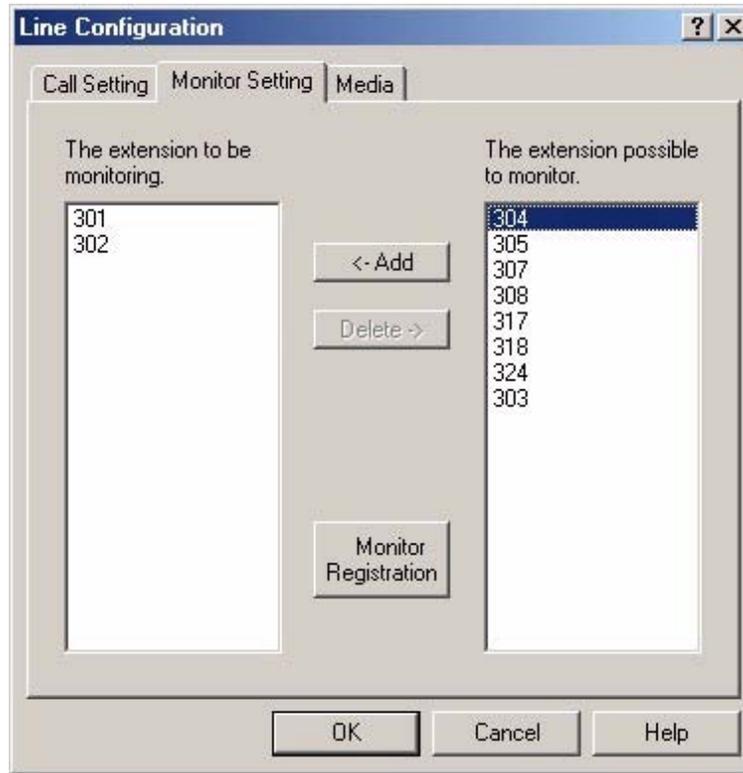
## Installation and Configuration - CTU Adapter

---

### ***Line Configuration – Monitor Setting***

This is the line Monitor Setting screen. Click the MONITOR SETTING tab on the LINE CONFIGURATION dialog box to display the screen.

*The MONITOR SETTING tab is displayed when NORMAL or ELITE/XEN is selected on the TSP Telephony System screen (screen <1>).*



Usage of other extensions may be monitored by adding extensions in THE EXTENSION POSSIBLE TO MONITOR list to THE EXTENSION TO BE MONITORING list.

#### **Adding to THE EXTENSION TO BE MONITORING List:**

- Select an extension from THE EXTENSION POSSIBLE TO MONITOR list and click <-ADD to add it to THE EXTENSION TO BE MONITORING list. The selected extension is moved from THE EXTENSION POSSIBLE TO MONITOR list to THE EXTENSION TO BE MONITORING list. Next, click MONITOR REGISTRATION. The REGISTRATION COMPLETE dialog box appears. Click OK.

#### **Deleting from THE EXTENSION TO BE MONITORING List:**

- Select the extension to be deleted from THE EXTENSION TO BE MONITORING list and click DELETE->. The selected extension is moved from THE EXTENSION TO BE MONITORING list to THE EXTENSION POSSIBLE TO MONITOR list. Next, click MONITOR REGISTRATION. The REGISTRATION COMPLETE dialog box appears. Click OK.

*Monitoring usage of other extensions must be supported by the application in use.*

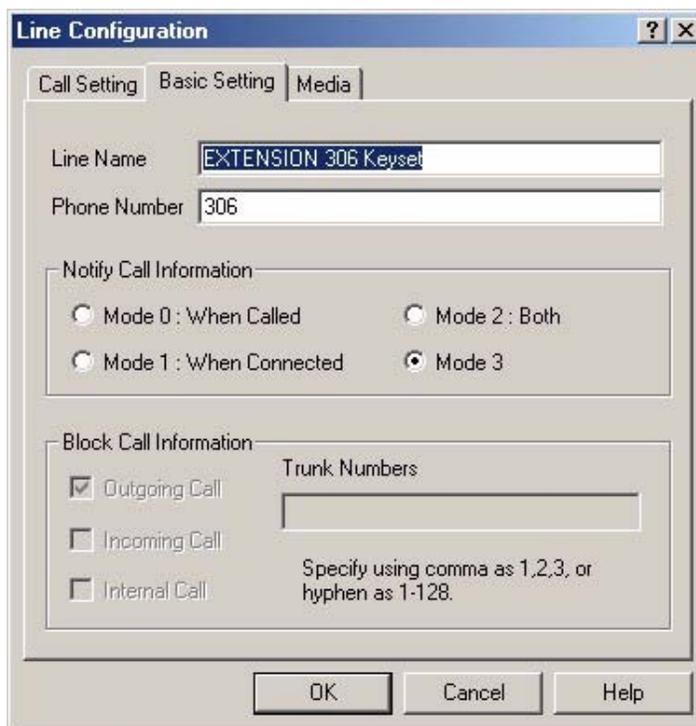
# Installation

## Installation and Configuration - CTU Adapter

### Line Configuration – Basic Setting

This is the line Basic Setting screen. Click the BASIC SETTING tab on the LINE CONFIGURATION dialog box to display the screen.

*The BASIC SETTING tab is displayed when SINGLE LINE is selected on the TSP Telephony System screen (screen <1>).*



The screenshot shows a dialog box titled "Line Configuration" with three tabs: "Call Setting", "Basic Setting", and "Media". The "Basic Setting" tab is active. It contains the following fields and options:

- Line Name:** A text box containing "EXTENSION 306 Keypad".
- Phone Number:** A text box containing "306".
- Notify Call Information:** A group box containing four radio buttons:
  - Mode 0 : When Called (unselected)
  - Mode 1 : When Connected (unselected)
  - Mode 2 : Both (unselected)
  - Mode 3 (selected)
- Block Call Information:** A group box containing three checkboxes:
  - Outgoing Call (checked)
  - Incoming Call (unchecked)
  - Internal Call (unchecked)
- Trunk Numbers:** A text box with the instruction "Specify using comma as 1,2,3, or hyphen as 1-128." below it.
- Buttons:** "OK", "Cancel", and "Help" buttons at the bottom.

The fields on the screen are as described below. Read thoroughly, and enter settings appropriate for the system environment.

#### **Line Name:**

- Enter EXTENSION xxx KEYSET ('xxx' is the extension number of the phone connected to the PC).

#### **Phone Number:**

- Enter the extension number of the phone connected to the PC.

#### **Notify Call Information:**

- MODE 0: WHEN CALLED selected:  
Notify call information for an incoming call on a phone set for sound.
- MODE 1: WHEN CONNECTED selected:  
Call information displayed with phone operation, such as a response involving pressing the station line button on a phone receiving a call and not set for sound, and for an incoming call from an application.
- MODE 2: BOTH selected:  
Notify call information for an incoming call on a phone set for sound, and at connection with a phone not set for sound.
- MODE 3: NORMAL MODE selected:  
Normally selected, this option enables acquisition of the caller number, as well as information such as the trunk number, origin, and reason at connection.

# Installation

## *Installation and Configuration - CTU Adapter*

---

### **Block Call Information:**

- OUTGOING CALL checked/not checked.  
Checked : Don't notify for outgoing trunk call.  
Not checked : Notify for outgoing trunk call.
- INCOMING CALL checked/not checked  
Checked : Don't notify for incoming trunk call.  
Not checked : Notify for incoming trunk call.
- INTERNAL CALL checked/not checked  
Checked : Don't notify for outgoing/incoming call on extension.  
Not checked : Notify for outgoing/incoming call on extension.
- Trunk number entered in TRUNK NUMBERS  
Outgoing/incoming information not notified for the set trunk.

Different block call information may be set/not set depending upon the mode selected with NOTIFY CALL INFORMATION (O : May be set, X : Cannot be set).

Notify Call	Block Call			
	Outgoing Call	Incoming Call	Internal Call	Trunk Number
Mode 0	X	O	O	O
Mode 1	O	O	O	O
Mode 2	O	O	O	O
Mode 3	X	X	X	X

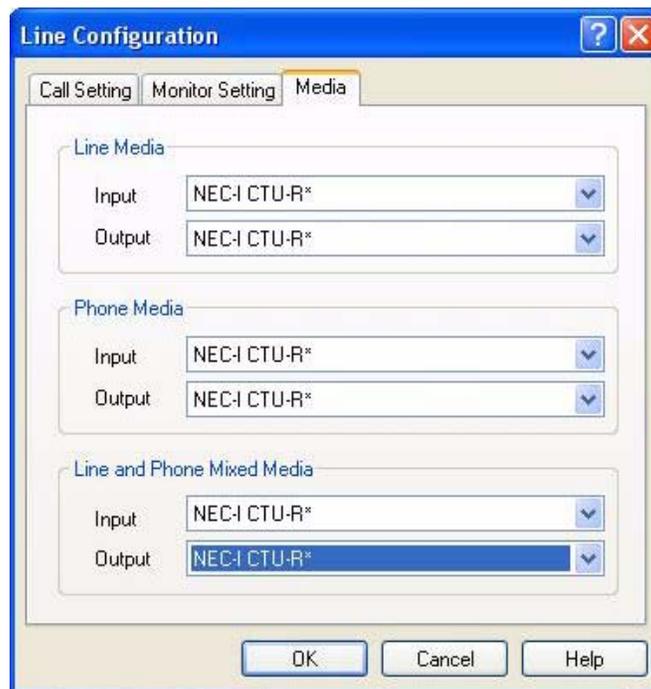
# Installation

## Installation and Configuration - CTU Adapter

### Line Configuration – Media Setting

This is the audio media setup screen used by the TSP. Click the MEDIA tab on the LINE CONFIGURATION dialog box to display the screen. *As the appropriate media is incorporated when the CTU driver is installed, these settings are normally left unchanged.* However, if you experience audio problems with the CTU, you can change these settings after the initial CTU installation, but it must be done before the Aspire TAPI driver installation (otherwise, this window disappears and the TAPI driver must be uninstalled). Go to START - CONTROL PANEL - PHONE AND MODEM OPTIONS. Select the ADVANCED tab and highlight the Aspire Telephony Service Provider. Click CONFIGURE - LINE CONFIGURATION - MEDIA. Select the NEC-I CTU-R\* device for each input item. Selecting the CTU for the output will play the output through the keyset's speaker.

*During the initial install of the CTU driver, this option is not listed and is only available once the installation is complete.*



Used to specify the audio device used for sound recording at the specified line and phone.

- Line Media  
*Input* : Specifies the audio device to which the sound from the line (caller) is input as the recording source.  
*Output* : Specifies the audio device used for playback of sound to the line (caller).
- Phone Media  
*Input* : Specifies the audio device to which the sound from the phone (self) is input as the recording source.  
*Output* : Specifies the audio device used for playback of sound to the phone (self).
- Line and Phone Mixed Media  
*Input* : Specifies the audio device to which the mixed line (caller) and phone (self) sound is input as the recording source.  
*Output* : Specifies the audio device used for playback of sound to both the line (caller) and phone (receiver).

# Installation

## Installation and Configuration - CTU Adapter

---

### Uninstalling the CTU Driver

This section describes the removal of the CTU driver from the PC when the CTU adapter is no longer required. **Note that if the CTU driver is to be installed, the CTA driver must be removed first from the PC!**

**! Always uninstall the CTU driver with this procedure !**

- Removing CTU driver-related files with Explorer etc. will not uninstall the driver. In the worst case, it may no longer be possible to start the PC and the operating system may need to be reinstalled.

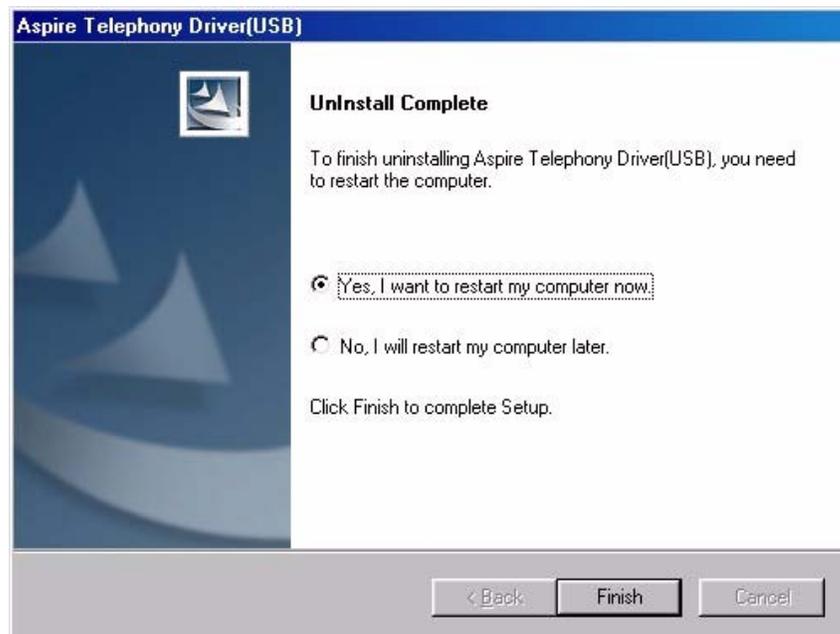
1. Remove the USB cable from the PC. If not, the following error message will appear.



2. Close all applications before beginning this procedure.
3. Select START - PROGRAMS - ASPIRE TELEPHONY DRIVER (USB) and click UNINSTALL ASPIRE DRIVER.
4. The CONFIRM UNINSTALL screen appears. Click OK.



5. The UNINSTALL COMPLETE dialog box appears. Click FINISH to complete the uninstall process. The PC must be restarted in order to complete the process.



### 3rd Party CTI/Aspire TAPI 2 Driver Setup

---

#### NEC Aspire TSP

TAPI is required in order to interface the Aspire/Aspire S system with the PC Attendant. Install the NEC Aspire TAPI on:

- PCs that will run the CTI server - TAPI is installed as the server
- When the CTI server is installed on a different PC, those computers that will run the PC Attendant software - TAPI is installed as the client

*The server must be a member on a domain or a client server on a domain. All clients must be in the domain.*

***With the Aspire M/L/XL systems, the TAPI 2 function requires a Feature Upgrade PAL chip or enhanced NTCPU.***

If a CTU Adapter (P/N 0890059) is to be installed on any keyset which will be assigned to the PC Attendant as an operator, ***the CTU driver must be installed on the PC before the TAPI 2 driver.*** Refer to page 15 and page 17 for step-by-step installation instructions.

*If the TAPI 2 has been installed prior to the CTU driver, the TAPI 2 must be removed from the system (refer to Uninstalling the Aspire TSP on page 53), then install the CTU driver, followed by reinstalling the TAPI 2 driver. (The PC Attendant application does not need to be removed in this case.)*

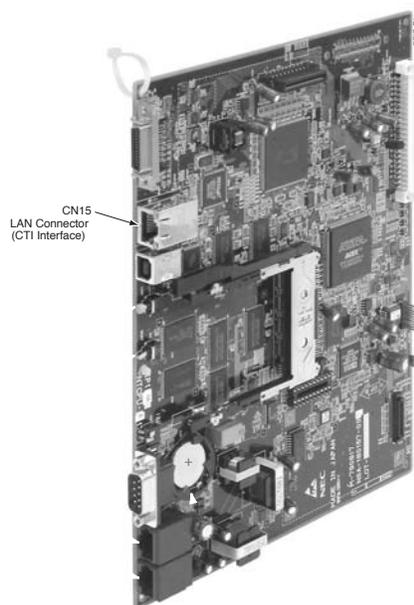
*If the CTU driver is not installed first, there could be unexpected interactions with the PC Attendant application.*

---

#### Aspire Programming

##### Requirements

The ethernet interface is located on the Aspire M/L/XL NTCPU or the Aspire S ENTU. This is a 10/100MB RJ45 ethernet connection.



# Installation

## Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver

---

The following basic commands must be set in the Aspire.

➤ **Program 10-12 : NTCPU Network Settings**

Assign a TCP/IP Address, Subnet Mask and Default Gateway to the NTCPU.

<b>10-12-01 IP Address</b>	Aspire IP Address = 0-255.0-255.0-255.0-255
<b>10-12-02 Subnet Mask</b>	Aspire Subnet Mask = 0-255.0-255.0-255.0-255
<b>10-12-03 Default Gateway</b>	Aspire Default Gateway = 0-255.0-255.0-255.0-255

➤ **Program 10-20 : External Equipment LAN Settings**

Assign the TCP port and keep alive timer.

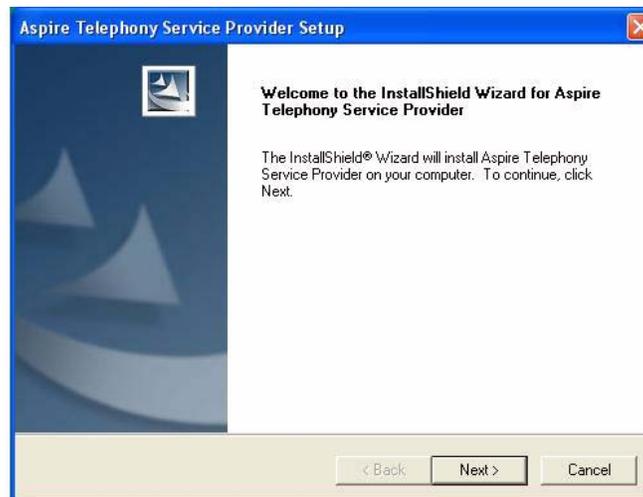
<b>TCP Port No</b>	0-65535 (8181 Recommended)
<b>Keep Alive Timer</b>	0-255 seconds (Default 30 Seconds)

---

## Installing the NEC Aspire TAPI TSP

The NEC Aspire TAPI 2 should be installed on the CTI server and client application machines (PCs which will have the PC Attendant software).

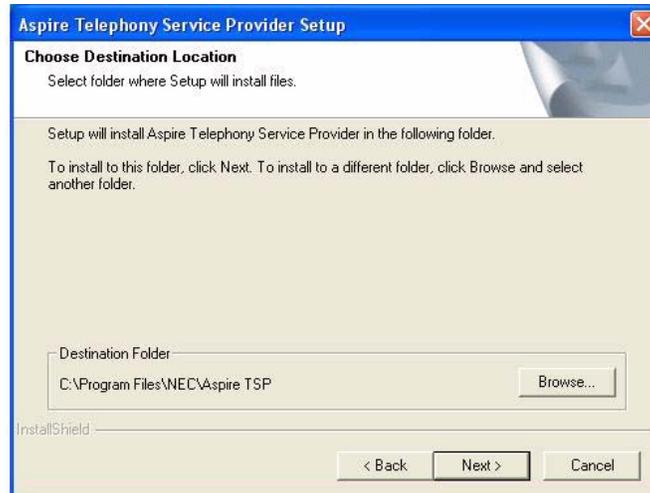
1. Insert the CD into the CD-ROM, or browse to the directory in which the TAPI files are saved. Double-click on the setup.exe file.
2. The first window appears displaying a welcome note and instructions on installing. Click **Next**.



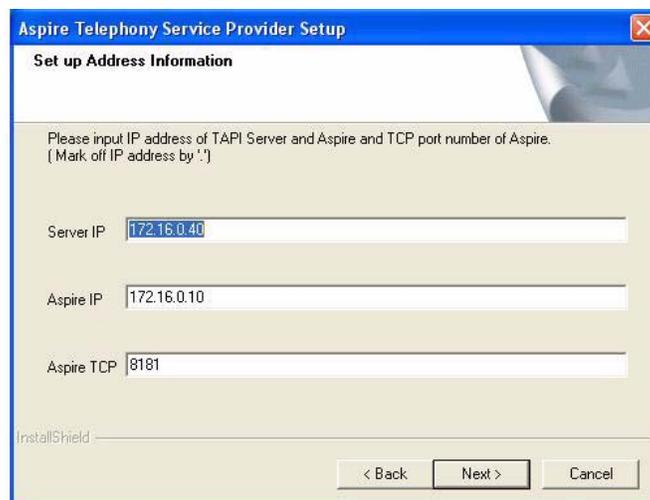
## Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver

---

3. Choose Destination Location screen appears allowing you to choose the destination folder where you install the TAPI driver. Click **Next** to accept the default target folder. If necessary, click **Browse** to choose a different drive or folder.



4. The Setup Address screen appears. Enter the IP address of the computer, the IP address for the Aspire NTCPU, and the Aspire port number. Use **dot "."** between numbers. The network administrator should give these addresses to you. **The IP addresses and port number must match the entry within the telephone system programming** (Programs 10-12-01 and 10-20-01, device 1). The server address can be viewed by entering "IPCONFIG /ALL" at a DOS prompt from the PC. When you enter the information, click **Next**.

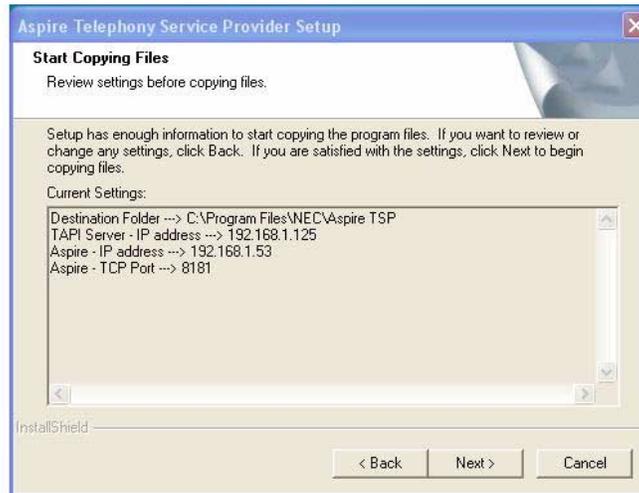


# Installation

## Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver

---

5. Check the installation settings before clicking **Next** to complete installation.



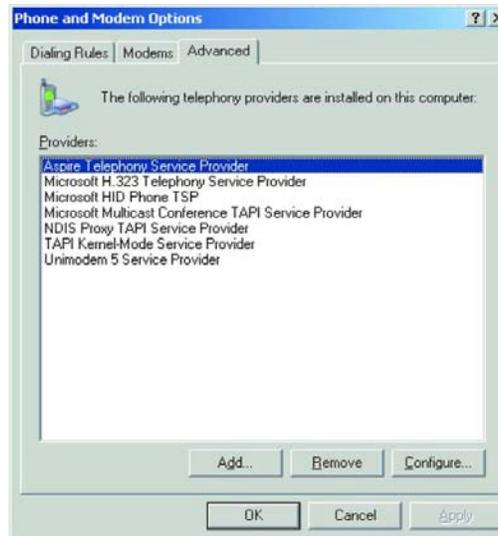
6. When the process of copying the files is complete, the following Setup Complete screen appears. Select **Yes, I will restart my computer**. Select **Finish**.

*When restarting the computer, the installation process will complete, causing a small delay while the computer initiates the TAPI settings.*



### Configuring the NEC Aspire TAPI TSP

1. To verify that the Aspire TSP is installed correctly and is using the proper settings, double-click the **PHONE AND MODEMS** icon from within the Control Panel (**START**  **SETTINGS**  **CONTROL PANEL**).
2. Click on the **ADVANCED** tab to see that the Aspire TSP is installed.



3. Click on the **Aspire TSP** and select the **CONFIGURE** button to see the configuration of the Aspire TSP. On the **CONFIGURATION** tab, you can see the Server/PBX IP addresses, TCP port number and Display Call Status Dialog option set during installation. If necessary, change the data.

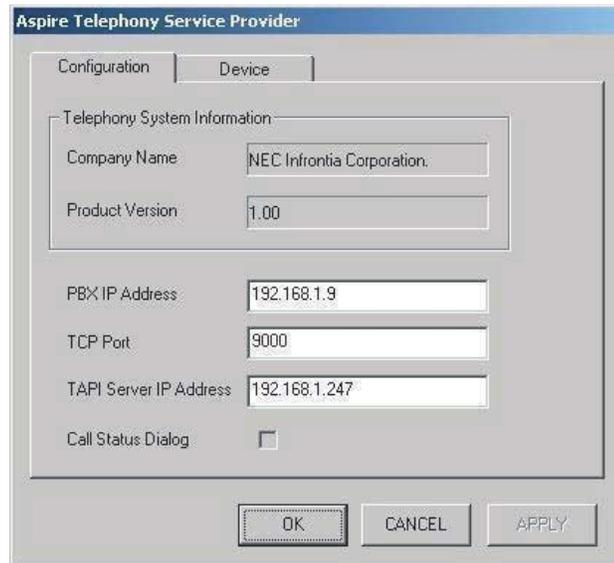
*If the connection to the Aspire system is not made by the TAPI driver, the PC will appear to be locked up. However, it is trying to connect to the Aspire system. It will try for approximately 10 minutes, then stop. The Configuration window will appear to allow you to make changes to any incorrect entries.*

*To help determine which side has the connection problem, you can click **Start - Run** then enter the telnet command followed by the Aspire IP address and port number:  
`telnet xxx.xxx.xxx.xxx yyyy`. If a connection to the Aspire is established, the screen shows garbled text and "KA" every 30 seconds. The connection problem would then be with the server. If the garbled text and "KA" does not display, the connection problem is with the Aspire system. (Note: This check can not be performed if a connection has been made and the TAPI service is running.)*

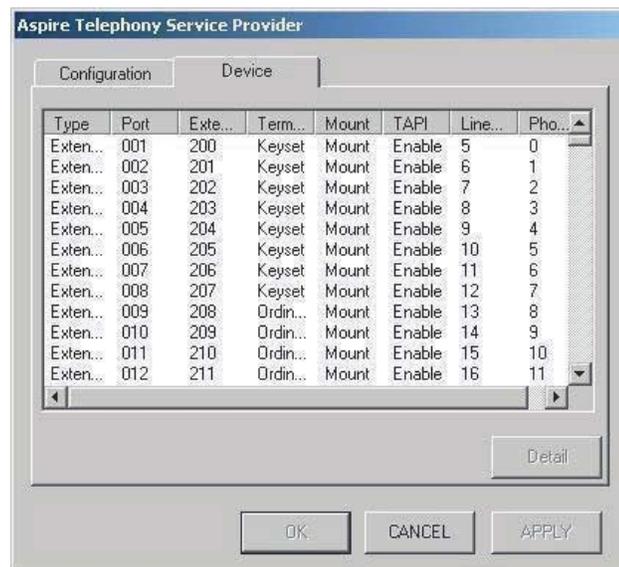
# Installation

## Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver

---



4. Click on the **DEVICE** tab to confirm the system extension ports' status. You cannot change any data on this screen.



- By selecting a device and clicking **DETAIL**, the Call Mode can be set.

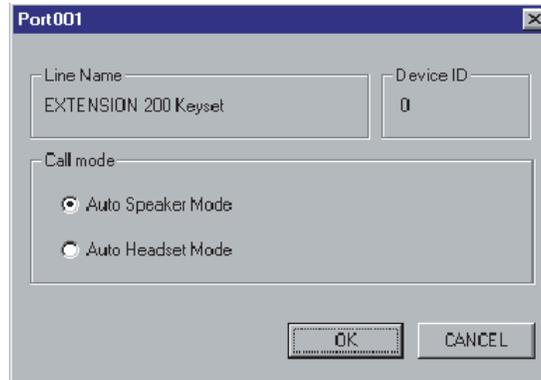
**Auto Speaker Mode (Default)**

If selected, Answer call requests to the selected device via TAPI will be answered using the speaker.

**Auto Headset Mode**

If selected, Answer call requests to the selected device via TAPI will be answered using a headset (if connected).

*If the device is in use, this option can not be changed.*



- To exit, click **CANCEL** then click **OK** until you have exited to the Control Panel. Double-click in the upper left hand corner of the Control Panel to close the window.

# Installation

## Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver

---

### Testing NEC Aspire TAPI

1. From the CTI Server PC, select *Start > Run* and type **Dialer**.
2. Select *Edit > Options*. The following screen will appear:

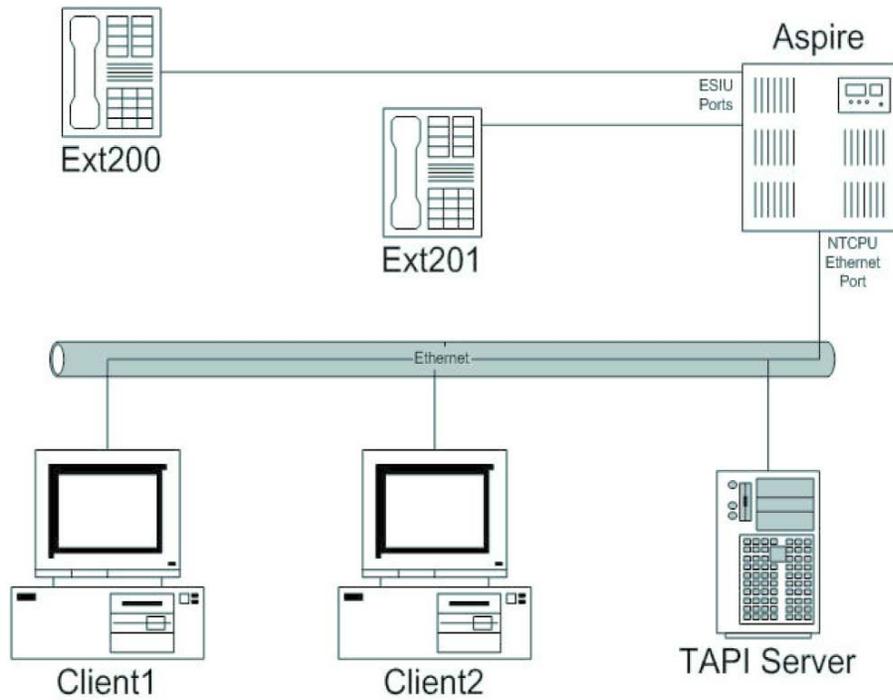


3. Select the local phone extension from the Phone Calls section. If there are no numbers in the line select box, then the TAPI configuration must be rechecked.
4. Select **Dial** to call another extension. If a call can be made and completed, the connection is working. Otherwise, recheck the TAPI configuration.

### Enabling TAPI Server and User Administration

Windows 2000 Server includes a Telephony Server which enables Distributed Access to shared telephony devices.

An example of this is where users wish to connect to the telephony devices handled by the Aspire system. By enabling the Telephony Server, it allows Clients to connect to the Aspire telephony devices. TAPI-based requests are sent from the Client PC to the Aspire system via the Telephony Server.



# Installation

## Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver

---

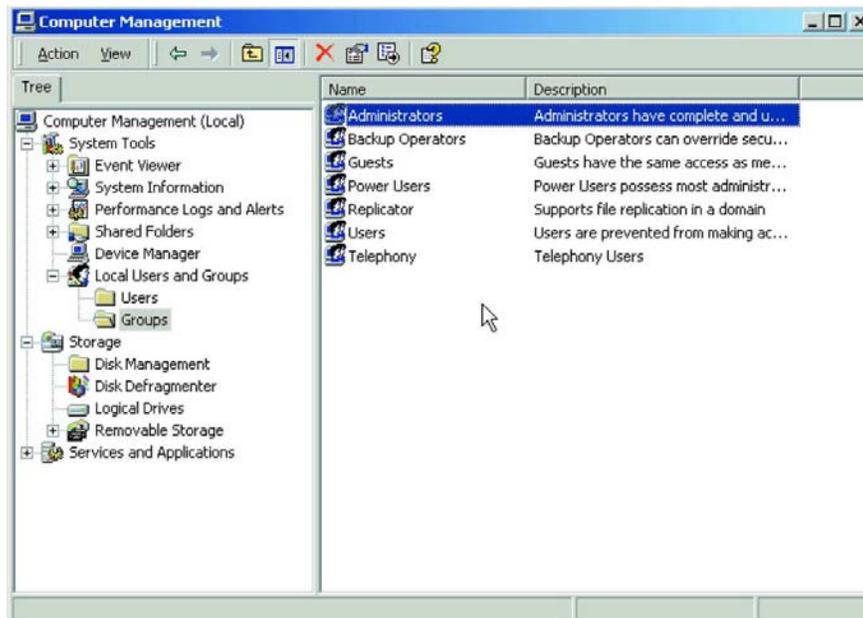
### Enabling TAPI Server

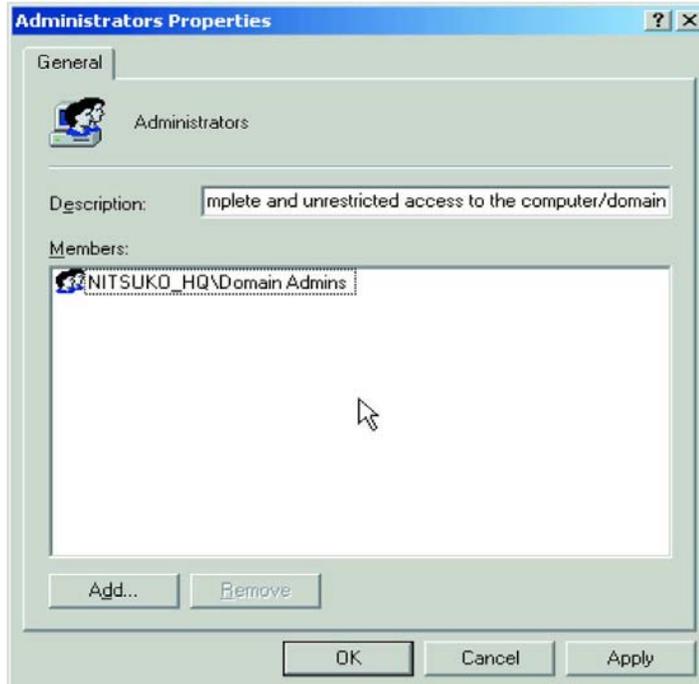
To allow other Domain users to use the TAPI Services, the TAPI server must be enabled. This is performed by using the Windows Computer Management Tool.

**Note:** Enabling the TAPI Server requires you to specify a Domain User account which exists in the same Domain to which the TAPI Server is a member. This account must also be a member of the TAPI Server's Local Administrator group.

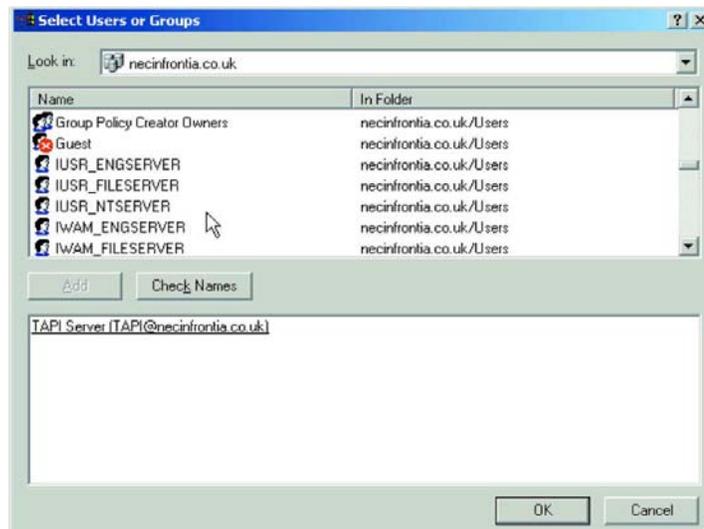
We strongly recommend using a Domain User account created specifically for use with the Telephony Service, which contains a password which is unchangeable and does not expire.

1. Click **START** **SETTINGS** **CONTROL PANEL** **ADMINSTRATIVE TOOLS** **COMPUTER MANAGEMENT**.
2. Go to **SYSTEM TOOLS** **LOCAL USERS AND GROUPS** **GROUPS**, double-click the **ADMINISTRATORS** group.





3. Select **ADD** and specify the appropriate Domain in the **LOOK IN** drop-down list.
4. Specify the appropriate Domain User account and click **ADD**. Click **OK** to accept the account.

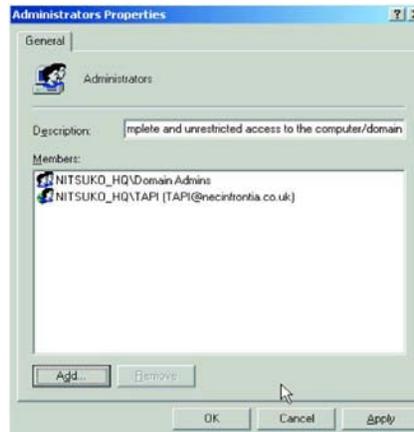


# Installation

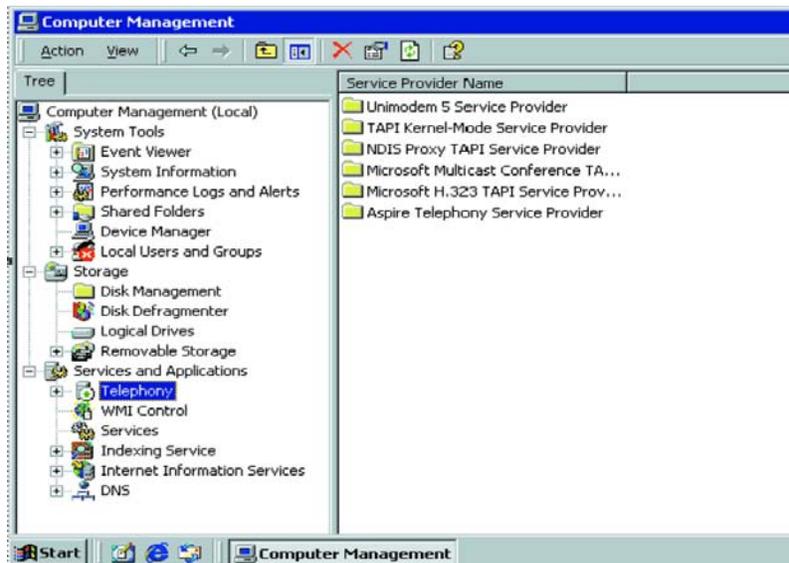
## Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver

---

5. Click **APPLY** and then **OK** to accept the selected account into the TAPI Server Local Administrator Group. You are returned to the Computer Management Tool.



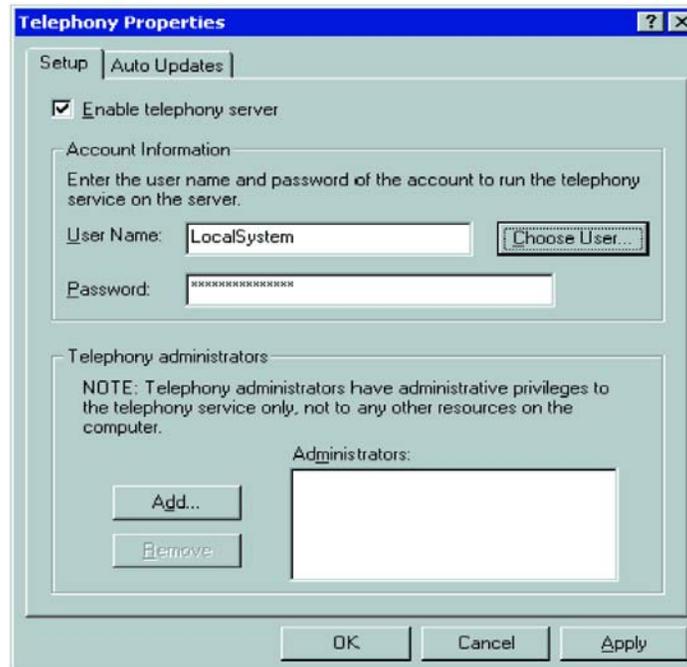
6. Go to **SERVICES AND APPLICATIONS** > **TELEPHONY**, right-click the **TELEPHONY** icon and go to **PROPERTIES**.



## Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver

---

7. In the **TELEPHONY** properties, tick the box which says **ENABLE TELEPHONY SERVER**. Below in the user name field, click the **CHOOSE USER** button.



8. The **SELECT USER** window will appear. From this list, select the account used in **Step 4**.
9. Enter the password associated with the selected user account. The following example installs the Server using the **TAPI** account within the **necinfrontia** domain.



# Installation

## *Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver*

---

10. Click **APPLY** and the following message is displayed. Select **OK** to confirm.



11. The following message appears, confirming that the Telephony Service must be restarted. Click **NO**.

**Note:** Restarting the Telephony Service will drop any existing connection to the Aspire system.



12. The Server must now be shut down and restarted before proceeding.

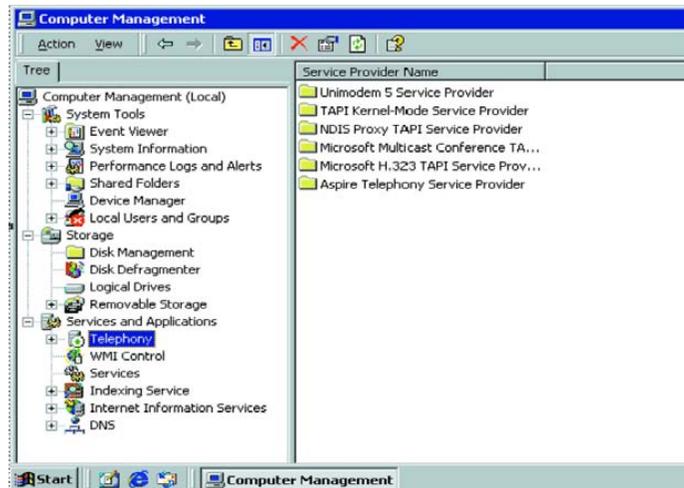
### User Administration

By default, the Client computers will not be able to access any extensions. By enabling the TAPI Server, you are able to permit Domain users to access their telephone extension(s). Extensions available to the TAPI Server are authenticated using Windows 2000 access permissions.

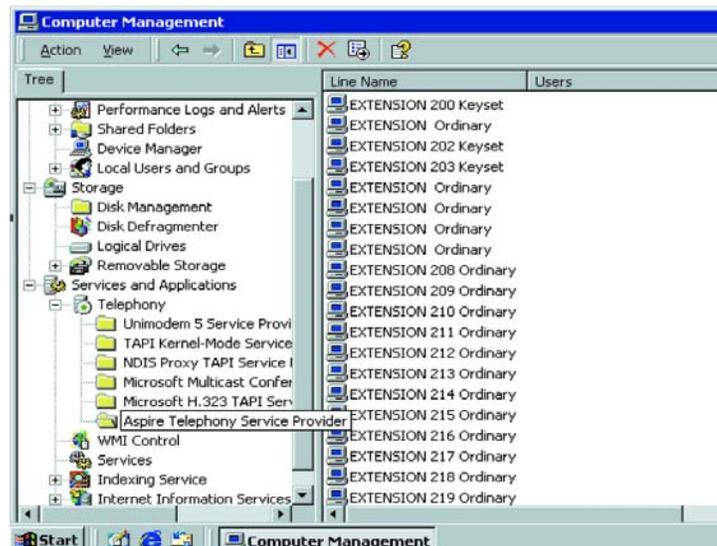
Client computers will be allocated telephone extensions based on their Domain Logon account. The only exception to this is where by a Client computer is logged on using a Domain Administrator account, which has permission to access all telephone extension(s).

Access permissions are configured using the Telephony snap-in within Windows *Computer Management*. This allows the Telephony administrator to assign telephone extension(s) to domain users.

1. Click **START** **SETTINGS** **CONTROL PANEL** **ADMINSTRATIVE TOOLS** **COMPUTER MANAGEMENT**.



2. Go to **SERVICES AND APPLICATIONS** **TELEPHONY** **ASPIRE TELEPHONY SERVICE PROVIDER**. You should see a list of all connected Aspire telephone extensions.



# Installation

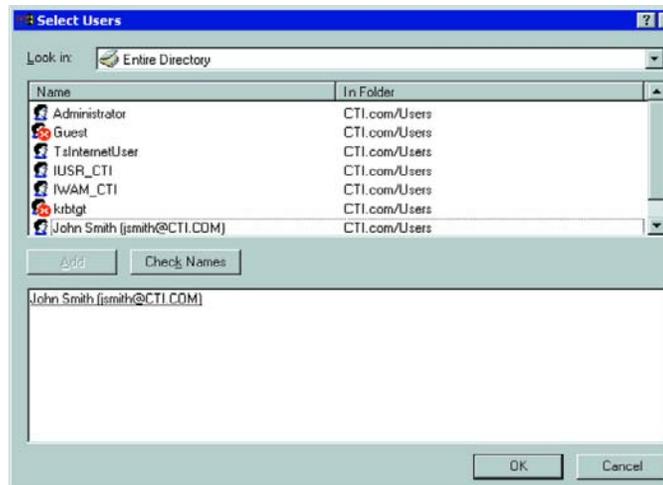
## Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver

---

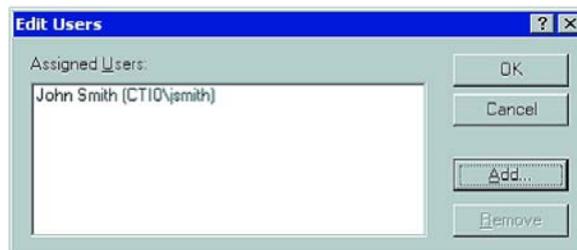
3. Double-click on an available extension. The *Edit Users* screen appears. Click **ADD**.



4. Click **ADD** - the *Edit Users* screen appears. Specify the appropriate domain user account and click **OK** to accept.



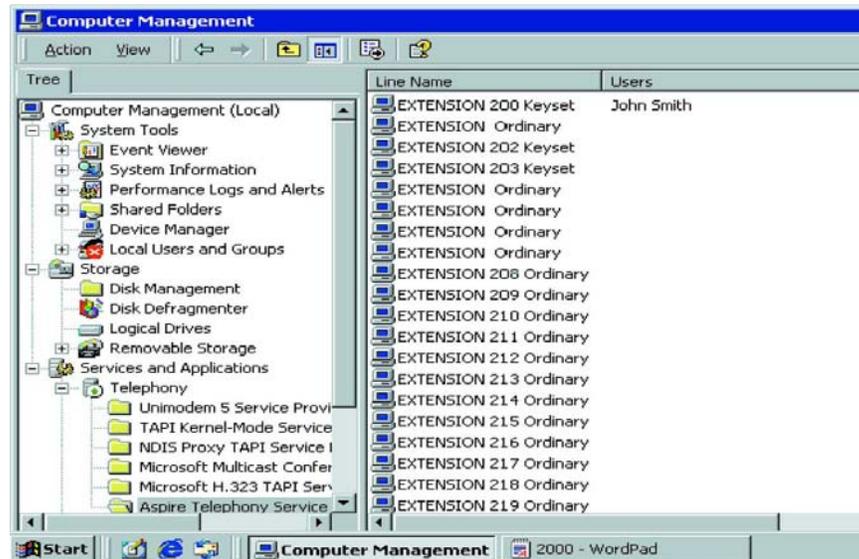
5. The *Edit Users* screen reappears with confirmation of selected users. Click **OK** to accept.



## Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver

---

- The selected user should now be associated with the extension you assigned.



- Repeat this process to add/change domain user(s) access permissions.
- On completion, close the **Computer Management** window.

# Installation

## *Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver*

---

### **Enabling TAPI Clients - Windows 2000/XP**

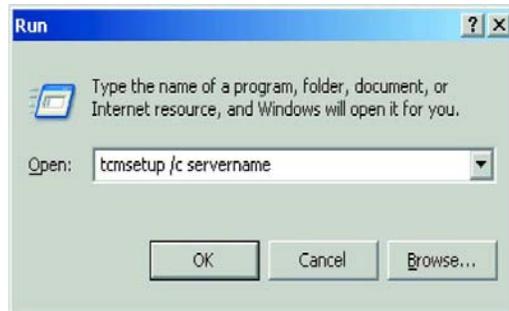
The conditions for installing the TAPI 2.1 Client on Windows 2000/XP are as follows:

- The Client PC should be connected to the network via TCP/IP and all associated services (i.e. DNS/WINS) should be configured.
- The Client PC must log on to the same Windows Domain as the TAPI Server.

To issue the TCMSETUP command, you must be logged on as a Local Administrator.

1. Enter the following command in the **RUN** command line.

**TCMSETUP /C SERVERNAME** (where **SERVERNAME** is the name of your TAPI Server)

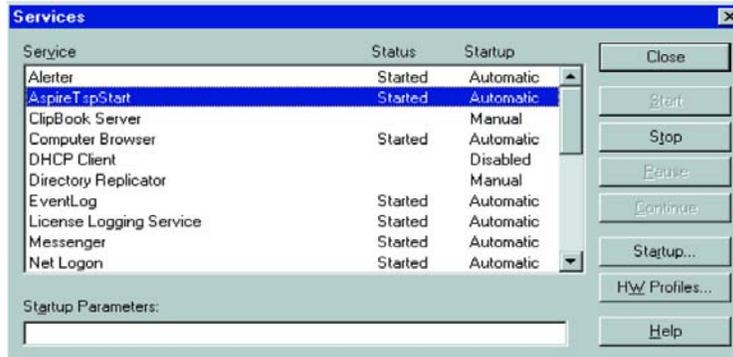


2. After executing the command, the following window should be received.

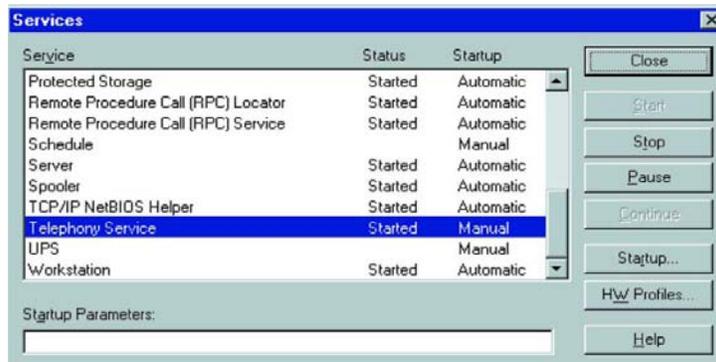


### Uninstalling the Aspire TSP

1. Go to the Windows **Control Panel**  $\gg$  **Administrative Tools**  $\gg$  **Services**.
2. Locate the **AspireTspStart** service, and select **STOP**.



3. Locate the **Telephony** service, and select **STOP**.

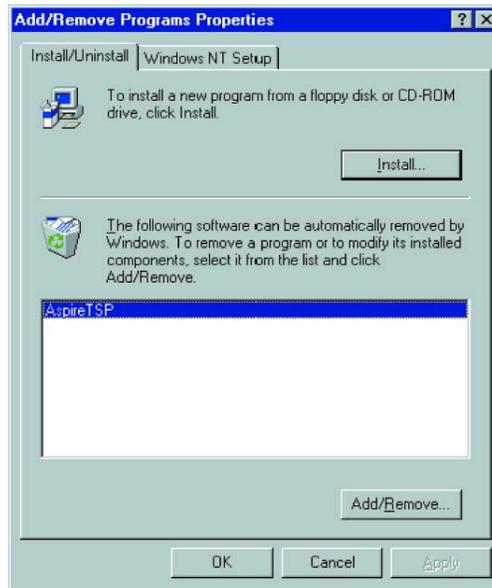


# Installation

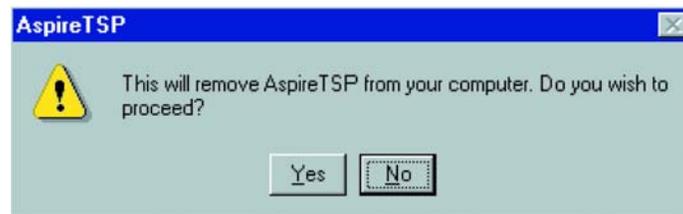
## *Installation and Configuration - 3rd Party CTI/Aspire TAPI 2 Driver*

---

- When the Telephony Service stops, double-click the **ADD/REMOVE PROGRAMS** icon from the Control Panel. Select **AspireTSP** from the **INSTALL/UNINSTALL** tab, then click **ADD/REMOVE**.



- The verification message follows, click the **YES** button to proceed with the uninstall.



- Click the **OK** button at the end of the uninstall program. The uninstall of the Aspire TSP is complete.

## PC Attendant Setup

---

### Installation

The PC Attendant CD has three components - PC Attendant Console, Administrator, and Quick Message. All three components can be installed at once, or you can select a particular application to install.

1. Insert the PC Attendant dongle with the software key into an available USB port on the PC to be used.

*If this step is not performed until later in the installation process, a message may appear asking for the hardware driver location. You can simply close this window and the PC Attendant will function correctly as the driver is installed as part of the installation process.*

*Without the dongle installed, when the Telephony Administrator, PC Attendant programs are opened, an error message will be displayed.*



2. Insert the CD into the CD-ROM. If the PC Attendant Setup window does not automatically appear, double-click on the setup.exe file.
3. If Microsoft .NET Framework is not installed on the PC, a window appears to proceed with the install. This is required for the PC Attendant Console.
4. The first window appears displaying the options which can be installed. Click the check box next to type of installation desired.

*Single Attendant System: Used in a stand-alone setup where the PC is acting as the CTI server. The RP CTI driver, Telephony Administrator, and PC Attendant Console are installed. The Aspire CTI/TAPI 2 driver must be installed separately on this PC.*

*RP CTI Server Installation: Used when one PC is the administrator (defining the PC Attendant settings for others using the Telephony Administrator) and one or more other PCs are using the PC Attendant program. The RP CTI driver and Telephony Administrator are installed. The Aspire CTI/TAPI 2 driver must be installed separately on this PC.*

*Attendant Client Installation: Used to install the PC Attendant application on client PCs which are directed back to the CTI server PC through programming. The Aspire CTI/TAPI 2 driver must be installed separately on this PC.*

*Quick Message Client: Used to install the Quick Message application on client PCs which are directed back to the CTI server PC through Quick Messaging setup programming. The Aspire CTI/TAPI 2 driver must be installed separately on this PC.*

# Installation

## Installation and Configuration - PC Attendant

---

5. Click **Next**.



6. As the installation proceeds, a window appears allowing you to cancel a particular program's install if needed.

*The Sentinel System Driver installation is required for the PC Attendant dongle and will be installed prior to the other applications.*
7. Follow the on-screen instructions to complete the installation(s).
8. Once the applications have been installed, click **Exit**.
9. Restart the host PC in order to start the CTI service.
10. Repeat the installation process for any other PCs which will serve as operators (selecting the *Attendant Client Installation* option to install only the PC Attendant program). In addition, the Quick Message application needs to be installed at any extension which should be able to receive Quick Messages from the operator.

*A maximum of 8 PC Attendant consoles can be installed.*
11. Continue with the **Telephony Administrator Setup** (page 57).

### Telephony Administrator Setup

The Telephony Administrator must be set up to match the programming on the Aspire system prior to using the PC Attendant.

1. From the **Start** menu, select **Programs - NEC - Telephony Administrator**, or double-click on the Telephony Administrator icon on the desktop. The following window is displayed:



2. Click on **Telephony Settings**. View the **Feature Codes**, **Voice Mail**, and **Special Dialing** tabs and update any settings to match the programming in the Aspire system.  
*These settings affect feature codes, paging, voice mail, extension number length, and emergency calls.*  
*With the default setting, the voice mail will not function in the PC Attendant. This must be enabled in the Voicemail tab by selecting the “Enable Voicemail Interface” check box and entering in the voice mail pilot number (as defined in Aspire Program 11-07-01).*  
*In order to use service codes which require 1 or 2 additional digits (such as calling Door Box [802 + door box number] or dialing using a trunk group [804 + trunk group number]), internal calls must be set to 5-digits in the Special Dialing tab of the Telephony Administration configuration. Any additional dialed digits over “5”, the PC Attendant will determine you are placing an outside call and will seize a line.*
3. Click the **Network** tab and enter the TCP port number assigned in the Aspire Program 10-20-01, device 1.  
*This entry allows the CTI server to make the connection to the phone system. This same port number must also be entered in the PC Attendant server setup. That setting allows the PC Attendant to connect to the CTI server (this applies even when the CTI server and PC Attendant are installed on the same PC).*
4. Click on **User Profiles**. Define any additional user accounts if required. See *User Profiles* on page 58 for more.  
*This section determines the user ID, password, and editing ability for the Directory and Contact List.*
5. Click on **Directory**. Verify that all defined extensions are shown in the Directory list. Add details to individual directory entries as required.
6. Click on **BLF/DSS**. This section determines the trunk name and whether or not the LED indicates when the line is busy (BLF). You can create additional BLF groups and assign names to the individual trunks as required.
7. Close the **Telephony Administrator** utility by clicking the X in the upper right-hand corner.

# Installation

## *Installation and Configuration - PC Attendant*

---

### User Profiles

The PC Attendant Console will support saving distinct user profiles within a single system. This function is beneficial for companies that have different individuals serving as the attendant during the course of the business day. Each registered user is assigned a User ID to access the system. The profile for each user will include their preferences for screen layout, personal voice prompts (if supported), and configuration settings.

#### **To Add a User Profile:**

1. From the **Start** menu, select **Programs - NEC - Telephony Administrator**, or double-click on the Telephony Administrator icon on the desktop.
2. Click on **User Profiles**.
3. Click **New**.
4. Enter the User ID and Password for the profile.
5. Determine if the user ID should have editing ability for the Directory and Contact List by clicking the appropriate check boxes.

#### **To Delete a User Profile:**

1. From the **Start** menu, select **Programs - NEC - Telephony Administrator**, or double-click on the Telephony Administrator icon on the desktop.
2. Click on **User Profiles**.
3. Click on the profile to be deleted.
4. Click the **Delete** button.

#### **To Edit an Existing User Profile:**

1. From the **Start** menu, select **Programs - NEC - Telephony Administrator**, or double-click on the Telephony Administrator icon on the desktop.
2. Click on **User Profiles**.
3. Click on the profile to be edited.
4. Click the **Properties** button.
5. Change the entries as needed.

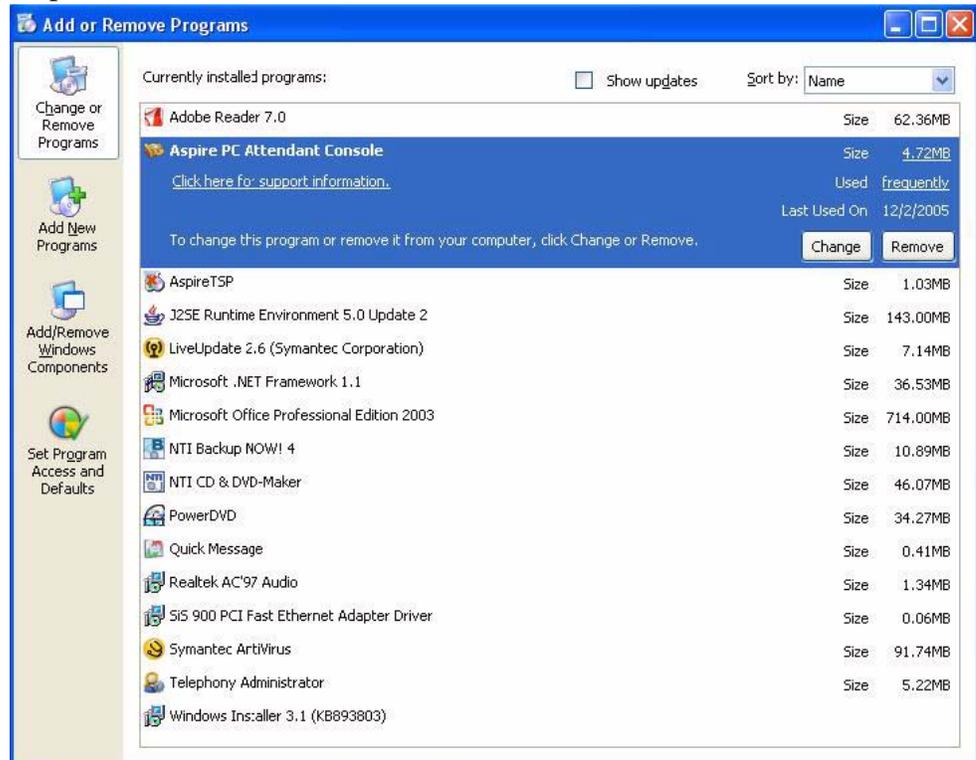
### Uninstalling the PC Attendant Console

Should the PC Attendant application need to be uninstalled from the registered PC, the license registration will remain with that PC.

If the PC Attendant application is then reinstalled on the same PC, the registration process is not required and will be skipped.

#### To remove the PC Attendant application:

1. Double-click the **Add/Remove Programs** icon from the Control Panel. Select **Aspire PC Attendant Console** from the **Install/Uninstall** tab, then click **Add/Remove**.



2. When the verification message appears, click the **Yes** button to proceed with the uninstall.
3. Select **Telephony Administrator** from the **Install/Uninstall** tab, then click **Add/Remove**.
4. Click the **OK** button at the end of the uninstall program.

# Installation

## *Installation and Configuration - PC Attendant*

---

- For Your Notes -

### Quick Message Client Setup

The Quick Message application is used to display short messages from the attendant on an employee's PC. The application must be installed on the PC Attendant PC as well as each PC which should receive the Quick Messages from the attendant.

---

#### Installation

1. Insert the CD into the CD-ROM. If the PC Attendant Setup window does not automatically appear, double-click on the setup.exe file.
2. If Microsoft .NET Framework is not installed on the PC, a window appears to proceed with the install. This is required for the PC Attendant Console.
3. The first window appears displaying the options which can be installed. Click the check box next to **Quick Message Client** and click **Next**.



4. As the installation proceeds, a window appears allowing you to cancel the install, if needed.
5. Follow the on-screen instructions to complete the installation.
6. Once the application has been installed, click **Exit**.
7. From the **Start** menu, select **Programs - NEC - Quick Message**, or double-click on the Quick Message icon on the desktop.

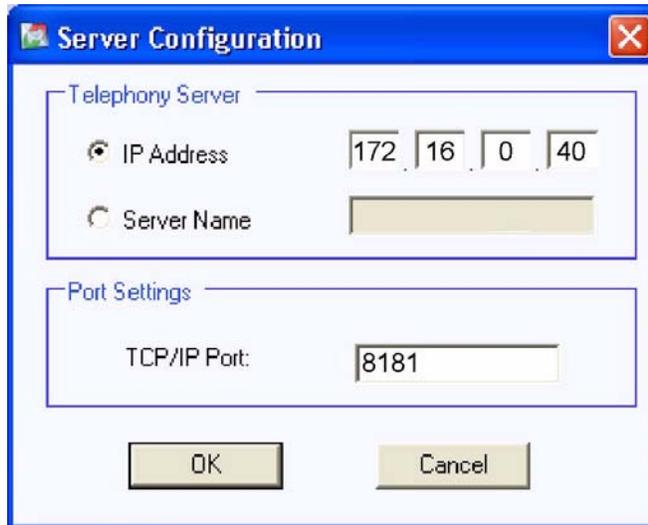
A PC's firewall may restrict the Quick Message application from being able to sign in. If this occurs, refer to *Troubleshooting, page 105* for steps to correct this problem.

# Installation

## Installation and Configuration - Quick Message

---

1. When opening Quick Message for the first time, the **Server Configuration** window appears. Enter the IP Address or Server Name of the server PC and the TCPI/IP port number used.



2. Click **OK**.
3. The login window is displayed which lists all of the extensions which are defined in the Aspire. Select the extension that corresponds to this Quick Message user and click the **Login** button.

*If no extensions are listed, either server or client PC's firewall may be blocking access. If this occurs, refer to Troubleshooting, page 105 for steps to correct this problem.*



4. Once the Quick Message client is started, an icon will be added to the notification area of the Windows task bar. When a new message is received from the attendant, a message window will pop-up that allows the user to quickly send a response.

*To close the Quick Message client, position the cursor on the task bar icon and press the right mouse button. Select **Exit** from the pop-up menu.*

*Additional extensions can also be logged in on the same computer. For each Quick Message sign-on, the Quick Message icon will appear in the task bar.*

5. Repeat the installation process for any other required PCs.

## Aspire Programming

The following program must be set in the Aspire system in order to ensure the proper operation for Voice Mail, Camp-On and Voice Over.

1. In the Aspire system, for any extension to be used as a PC Attendant, set the extension's Class of Service option in **Program 20-13-06 : Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling** to "1".
2. If not done previously in the TAPI 2 setup, in **Program 10-12 : NTCPU Network Settings**, assign a TCP/IP Address, Subnet Mask and Default Gateway to the NTCPU.

<b>10-12-01 IP Address</b>	Aspire IP Address = 0-255.0-255.0-255.0-255
<b>10-12-02 Subnet Mask</b>	Aspire Subnet Mask = 0-255.0-255.0-255.0-255
<b>10-12-03 Default Gateway</b>	Aspire Default Gateway = 0-255.0-255.0-255.0-255

3. In **Program 10-20-01 : External Equipment LAN Settings, External Equipment 1**, select the TCP port number to be used by the PC Attendant (8181 is recommended).  
*This entry must match the TCP port entry in the Telephony Administrator's Network tab as well as the Server Configuration in the PC Attendant. The Server Configuration can be changed after the initial install by clicking on the **Change Server Settings** on the PC Attendant's login screen.*

In addition to the above programming, define the programming options as required for the system features. Refer to the Aspire Software Manual (P/N 0893200) for programming details.

# Programming

## *Aspire Programming*

---

- For Your Notes -

## Opening PC Attendant

When an incoming call is received, the PC Attendant displays it on the PC and provides several features which allow the user to handle the call quickly using the keyboard or mouse. The attendant speaks to the caller through the telephone handset, headset, or speakerphone.

When there is no activity, the PC Attendant application can be minimized to run in the background and pop to the front when call activity occurs.

---

### Operation Conditions

#### Headset

During the installation of the TAPI 2 driver, if the Auto Headset Mode is not enabled, the PC Attendant Console application will not be able to support the use of a headset for answering calls. Refer to **Configuring the NEC Aspire TAPI TSP** (page 39) for details on changing this option.

#### Internal Call on Hold and Active External Call

When the attendant has an internal call on hold and an active external call: If the attendant selects the Hang Up function, the external call will be disconnected and the internal call will automatically be reconnected. This will not occur if the attendant uses the telephone keys to disconnect the active call.

#### Line Keys and the Telephone's Hold Button

With an external call on a line key (and not a loop key), if the telephone's HOLD button is pressed, the call can no longer be retrieved by the PC Attendant application. This operation will not occur if the outside call is on a loop key instead.

---

### Opening PC Attendant

1. From the **Start** menu, select **Programs - NEC - Aspire PC Attendant Console**, or double-click on the Aspire PC Attendant Console icon on the desktop. The following window is displayed:



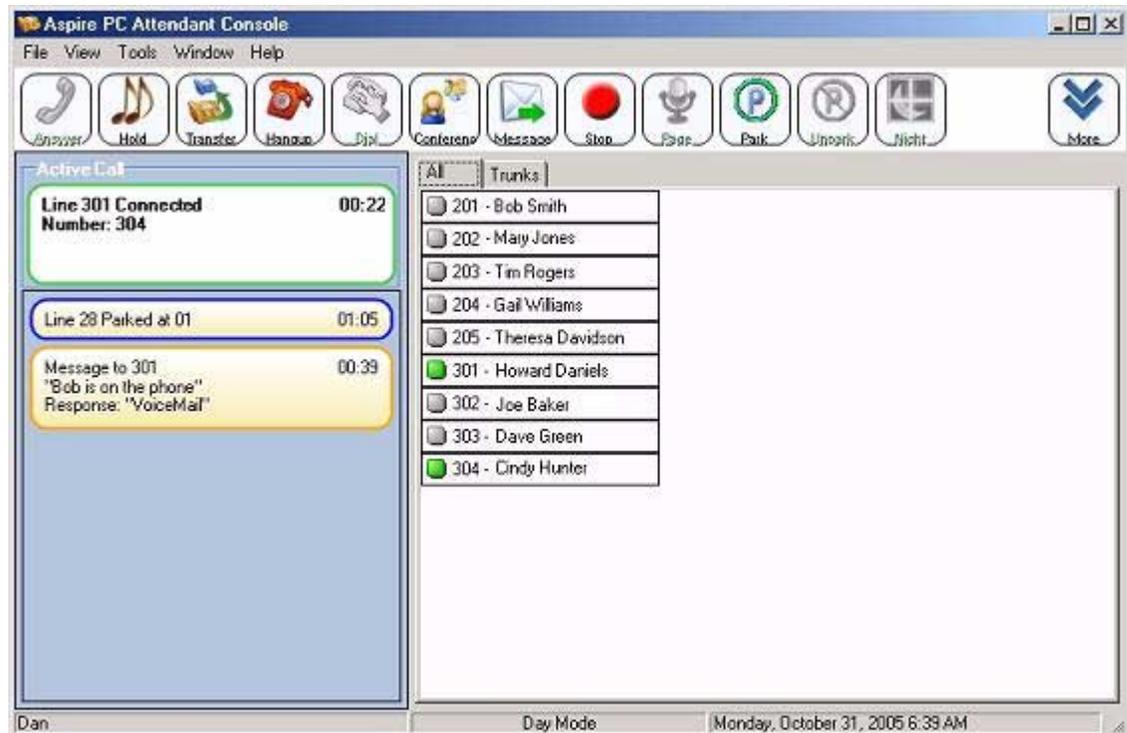
2. Enter a Login ID and Password that were set up in the User Profile in the Telephony Administration utility. Select the extension that will be used as the associated operator's phone and click **Login**.

### User Profiles

The PC Attendant Console will support saving distinct user profiles within a single system. This function is beneficial for companies that have different individuals serving as the attendant at the same PC during the course of the business day. Each registered user is assigned a User ID to access the system. The profile for each user will include their preferences for screen layout, personal voice prompts (if supported), and configuration settings. Refer to *User Profiles* on page 58 for details on defining the profiles.

## Main Screen

After the user has been authenticated, the application's main screen will be displayed. The main screen of the PC Attendant presents valuable information about the current call activity and provides easy access to the basic operations required by the attendant. Using either the mouse or keyboard, the user can quickly move between the different areas of the screen to dispatch callers, search the company directory, and view the status of the individual lines. An example of the main screen is shown below.



The main application screen consists of the following major sections: title bar, main menu bar, function toolbar, call control panel, BLF tabs, and status bar. Each of these elements is further described in the following sections.

## Resizing the Main Window

The PC Attendant Console main window can be resized using the standard Windows resizing controls. Some of the common resizing techniques are:

1. Position the mouse cursor on the left or right edge of the menu frame, hold down the left mouse button, and drag the border to change the width of the menu.
2. Position the mouse cursor on the top or bottom edge of the menu frame, hold down the left mouse button, and drag the border to change the height of the menu.
3. Position the mouse cursor on a corner of the menu frame, hold down the left mouse button, and drag the corner to change the dimensions of the menu.
4. Press the **Restore/Maximize** icon in the menu title bar to change the size of the frame.

# Operation

## Main Screen

---

---

### Title Bar

The title bar provides the standard window controls and access to basic operations and utilities through pull-down menus.

The standard window controls are displayed as icons on the right side of the title bar. These include the options to *Minimize*, *Maximize/Restore*, or *Close* the main window.

---

### Menu Bar

The menu bar displays the function categories that are accessible from the main menu.

File View Tools Window Help

Each of the selections on the main menu opens a drop-down list of all the operations that are available within the selected category. These operations include setting configuration options, viewing/editing the directory, and viewing/maintaining the call log.

#### File

- Exit - Close the PC Attendant application.

#### View

- Customize Toolbar - Change the visible functions and button order on the function toolbar.
- Sort BLF By Extension/First Name/Last Name - Change the sort order of the BLF buttons.

#### Tools

- Preferences - Customize operational settings for the PC Attendant.

#### Window

##### Call Log

*Open a separate window to view the call history.*

- Dial - Redial a number within a call log record.
- Play - Replay a recording from within a call log record.
- Delete - Erase a record from the call log.
- E-Mail - Send a call log record using the default EMail client.
- Print - Print all or part of the call log.
- Archive - Save all or part of the call log to a designated file.

##### Directory

*Open a separate window to view the Directory/Contact List.*

- New Entry - Add a new record in the company directory.
- Edit Entry - Modify the fields within a directory entry.
- Delete Entry - Erase a record from the company directory.
- Search - Access the search function for the company directory.
- Print - Print all or part of the company directory.

#### Help

- Contents and Index - Access the on-line help system by topic.
- About - View the copyright notice and current revision of the software.

## Function Toolbar

The function buttons, which appear below the Menu Bar, provide access to the operations that are most frequently used by the attendant. The attendant can configure the set of functions and their assigned Hotkey (a Hotkey is a preprogrammed key for performing the same function as the icon. Go to **View - Customize Toolbar** for the default Hotkey assignments for each function). The icons to be displayed are selected in this menu option. If more icons are selected than there is room to display, the icons on the right which will not fit will not be displayed unless other icons are removed from the view.



A function on the toolbar can be selected by using the mouse to click on the desired function button or pressing the associated Function Key (F1 - F12) on the keyboard. Individual buttons on the Function Toolbar become disabled if the function is not allowed for the current state of the attendant console. For example, the Answer button is only enabled when a call is ringing into the attendant position. If additional information is required to complete the operation, then the Data Entry Area will become active and request further input from the attendant. For example, the Night Mode button would open a dialog that would allow the attendant to select the type of Night mode that is being initiated.

The last button on the right provides access to additional functions that are not displayed on the toolbar. When this button is selected, a drop down list is shown that provides access to the remaining call control functions.

The functions available on the Function Toolbar are described as follows.



Answer an incoming call.



Place the current active call on hold.



Transfer the current active call.



Disconnect the current active call.



Initiate an outbound call from the console.



Initiate a conference call, which includes the active call.

# Operation

## Main Screen

---



Send a Quick Message to another user's PC.



Start/stop recording of the current call.



Redirect a ringing call to another destination.



Retrieve a call ringing a group using Group Call Pickup.



Redial one of the last numbers called.



Initiate a page using the telephone's paging system.



Transfer the active call to a park location.



Retrieve a call from a designated park location.



Select the night mode to be activated.



Barge in on an extension who is active on a call.



Perform a call pickup at a ringing extension (Directed Call Pickup, Call Pickup, Other Group Call Pickup, or Specified Group Pickup).



Voice over to an extension who is active on a call.



Set/cancel the Call Forward or DND for the PC Attendant.



Leave a message or transfer a call to an extension's Voice Mail.



Use this button to view any additional options which are not displayed in the toolbar.

# Operation

## Main Screen

---

### Call Control Panel

The call control panel shows all of the active calls and messages that are currently being handled by the attendant. The list includes the active call, held calls, and ringing calls. The Active Call List also provides information about Quick Messages that have been sent by the attendant and their responses.

The top entry within the Active Call List shows the call that is currently connected to the console (active).

The screenshot displays a vertical list of call and message entries under the heading "Active Call". Each entry is contained within a colored rounded rectangle and includes the following information: line number, status, number, name, and call timer.

Line	Status	Number	Name	Timer
Line 1	Connected	2142392939	John Wilson	00:13
Line 2	Ringing	9728851209	Bob Hunter	00:05
DID Ln 09	Held	Unknown	Jim Smith holding for Customer Service	01:22
DID Ln 10	Parked at 13	8174430092	Mary Taylor Parked for Inside Sales	02:17
	Message to Sarah Adams		"Call Holding for You"	01:03
	Message to Paul Davis		"Late for a Meeting"	00:35
			Response: "OK"	

The text box for each call contains the call information includes the calling party information, line being used, and call timer. When the telephone is idle (no active call), the display is empty.

Below the Active Call are listed all of the call activity and text messages that are currently being managed by the attendant. This list includes held calls, ringing calls, calls placed in a park orbit by the attendant, and Quick Messages. Each entry displays enough information to identify the call or text message. The attendant is able to retrieve Held and Parked calls by clicking on the associated entry. Clicking on the Call List entry or selecting the Answer button answers a ringing call. If multiple calls are ringing, the Answer button automatically picks up the oldest call.

Call entries within the Active Call list are automatically removed when the call is disconnected or answered.

Message entries within the Active Call list are automatically removed based upon default timers that the user sets. Message entries can also be deleted manually by performing a right mouse click on the entry and selecting the Delete option from the pop-up menu.

## BLF Panel

The BLF panel provides the Busy Lamp Field/Direct Station Select functionality for internal lines and extensions monitored by the attendant. Each key in the BLF/DSS window provides one-touch access to that line or extension. In addition, the BLF/DSS also provides access to EMail and Quick Message.



This area of the screen has a button defined for every extension that the user is monitoring. The attendant can define Extension Groups that include a specific set of extensions. The tabs at the top of the BLF Panel represent all of the defined Extension Groups. Selecting a different tab allows the attendant to view only the extensions that are included in that group.

### ***BLF Identification***

Each button includes an LED indicator, and a text label that can include the name and extension of the monitored line. Use the options under the **Tools - Preferences** menu to determine how the information is displayed. The configuration option allows these buttons to be displayed in either alphabetical order based upon the text label or numeric order by extension. The user can also control which items are included in the text label: first name, last name, and extension. Based upon the length of the text label, the BLF entries will be resized so that the maximum number of entries can be displayed in the designated area. If more extensions are defined than can fit in the BLF panel, then a horizontal scroll bar will be visible at the bottom of the BLF area.

The LED colors represent IDLE (gray), BUSY (green), RINGING (green flash), DND (red) and FORWARD (blue).

### ***BLF Call Control***

The call control functions interact with the DSS/BLF keys, based upon the status of the active call window. When a call is active, clicking on a DSS/BLF button that is gray will transfer the call to that extension. When no call is active, clicking on a gray DSS/BLF will dial that extension.

A configuration option allows the user to define the default action to be applied when the attendant clicks on a busy BLF with an active call. The available options are:

- Send active call to voice mail for the selected extension
- Put caller on hold and initiate voice over
- Camp caller on second line of selected extension

Performing a right mouse click on the destination BLF will provide access to options other than the default action.

# Operation

## Main Screen

---

### Trunk BLF's

A configuration setting is available which enables a Trunks tab within the BLF area. When this tab is selected, the BLF area displays an indicator for each monitored trunk. The LED indicator will track the current state of the trunk, including Idle, Ringing, Busy, and Held. This window is for viewing only and no action on the trunk can be initiated from this window.

### Changing the Visible BLF Groups

The system administrator can set up BLF Groups, which can be used to organize the extension list into groups of buttons. Each BLF Group is shown as a tab on the top of the BLF area on the main console screen. By selecting different tabs, the attendant is able to see the BLF's that are assigned to that group. Each console user has the ability to select which BLF groups are visible on the console.

#### To specify the visible BLF Groups:

1. On the **Tools** menu, select the **Preferences** option.
2. Click on the **BLF/DSS** tab within the **Preferences** menu.
3. Select the checkbox for all BLF Groups that are to be visible.
4. Selecting a Group and using the **Move Up** and **Move Down** buttons will change the position of the tab for the selected group.
5. Click on **OK** to save the BLF/DSS configuration.

### Changing the BLF/DSS Button Appearance

#### To change the format of the BLF/DSS labels:

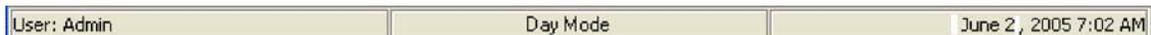
1. On the **Tools** menu, select the **Preferences** option:
2. Select the **BLF/DSS** tab on the **Preferences** menu.
3. Set the **Label Format** field to the type of information to be displayed on the BLF/DSS key.  
Valid formats are:
  - Extension Only
  - Name Only
  - Extension followed by Name (Extension+Name)
4. Click **OK** to save your settings.

---

## Status Bar

The Status Bar appears at the bottom of the main screen and provides relevant information about the current state of the application.

In the sample screen below, the status bar shows the name of the currently logged in attendant, the Day/Night mode setting, and the current date and time.



## Automatic Voice Greetings

The PC Attendant Console is capable of playing a personalized greeting for every call received by the attendant. The greetings are from a pre-recorded file, created in the attendant's own voice. When an incoming external call is answered, the PC Attendant Console will automatically play the voice file - both the caller and attendant can hear the greeting. This option is configurable per user, so that each attendant can use their own recorded file or disable the playback option. This feature can be used to present a professional appearance to customers by delivering an accurate and consistent greeting with each call.

**The ability to play a personal greeting requires that a CTI device (CTU Adapter, P/N 0890059) be installed on the attendant's keyset telephone. The Personal Greeting features will not be enabled if this device and the associated device drivers are not installed on the host PC.**

---

### Playing a Personal Greeting

#### To setup a personal greeting:

1. Record a greeting using a utility such as the **Windows Sound Recorder** and save the file on the attendant PC.
2. On the **Tools** menu, select the **Preferences** option.
3. Select the **Personal Greeting** tab on the **Preferences** menu.
4. Select the option **Enable Voice Greeting** on the top of the **Personal Greeting** menu.
5. Specify the file name of the recording to be used or press the **Browse** button to select a file.
6. Press **OK** to save the settings.

### Call Forwarding

Call Forwarding permits an extension user to redirect their calls to another extension. Call Forwarding ensures that the user's calls are covered when they are away from their work area. The types of Call Forwarding are:

- **Call Forwarding When Busy or Not Answered**  
Calls to the extension forward when busy or not answered.
- **Call Forwarding Immediate**  
All calls forward immediately to the destination, and only the destination rings.
- **Call Forwarding When Not Answered**  
Calls forward only if they are unanswered (Ring No Answer).
- **Call Forwarding Immediate with Ringing**  
All calls forward immediately to the destination, and both the destination and the PC Attendant extension rings.

Call Forwarding will reroute calls ringing an extension, including calls transferred from another extension. The extension user must enable Call Forwarding from their phone.

---

### Forwarding the Attendant Console

To forward the attendant console:

1. On the **Function Toolbar**, select **Call Forward**.

**Call Forward**

Call Forward

Set Call Forward

Forward On:

Destination:

Applies to:

Cancel Call Forward

Do Not Disturb

Set Do Not Disturb

Applies to:

Cancel Do Not Disturb

2. On the **Call Forward** menu, select the **Call Forward** option.
3. Select the conditions and destination for forwarding calls.
4. Select **Start** to initiate the call forward setting.

**To cancel the forward on the attendant console:**

1. On the **Function Toolbar**, select **Call Forward**.
2. In the **Call Forward** window, select **Cancel Call Forward**.
3. Select **Start** to initiate clearing of the call forward setting.

### Call Log

The Call Log provides a table view of the calls that have been processed by the attendant console. Each call record includes the attendant ID, call type (inbound/outbound), call date and time, caller identification, call duration, and line appearance. From this table, the user can sort the entire list based upon any individual column. The user also has the ability to delete or archive the call log, as well as print the contents. The call log also identifies any calls that were recorded using the application's RECORD function. Playback of recorded calls is also allowed from within the call log window. The attendant also has the ability to re-dial a number that is associated with a call log record.

The columns within the Call Log tab can be resized and rearranged. To resize a column, place the mouse cursor within the header row, on the right hand edge of the column to be resized. Hold down the left mouse button and drag the edge of the column to the new size. To rearrange the order of the columns, place the mouse cursor within the header row of the column to be moved. Hold down the left mouse button and drag the column into the new position.

#### **To access the Call Log:**

1. From the PC Attendant Console's main menu, select the **Windows** option, then click **Call Log**.

#### **Re-dialing a Number from the Call Log**

1. Press the **right** mouse button to select the Call Log record to be redialed.
2. Select **Dial** from the pop up menu.

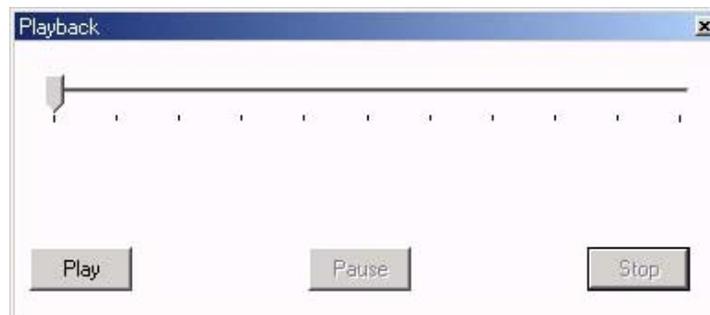
#### **Playing Back a Recorded Telephone Conversation**

The Record function is used to capture a telephone conversation from the attendant console and save the recording on the PC. The recording is attached to the Call Log record and indicated by the recording icon

(  ) within the Type field.

#### **To playback a recording:**

1. Press the **right** mouse button to select the Call Log record that contains the recording.
2. Select **Play** from the pop up menu. The Playback window will open and the recording will automatically start playing.



The Playback window provides the following controls:

	Slider bar - advances as the playback progresses. Dragging the slider will change the current playback position within the recording.
<b>Play</b>	Start/resume playback of the recording.
<b>Pause</b>	Suspend playback at the current position.
<b>Stop</b>	Suspend playback and set the current position to the beginning of the recording.

## **Deleting Records from the Call Log**

### **To delete a single Call Log record:**

1. Press the **right** mouse button to select the Call Log record that is to be deleted and select the **Delete** option.

**-OR-**

1. Highlight the Call Log record to be deleted and from the **Call Log** menu, select the **Delete** option.

### **To delete a block of Call Log records:**

1. Highlight the records to be deleted.
2. Press the **right** mouse button within the highlighted block. From the pop up menu, select the **Delete** option.

**-OR-**

2. From the Call Log record, select the **Delete** option.

## **Sending a Call Log Record or Recording Using EMail**

### **To send a call log record or recording using EMAIL:**

1. Press the **right** mouse button to select the Call Log record to be sent.
2. From the pop up menu, select the EMail option. This will create a new mail message using your default EMail client, with the call log detail included in the body of the message. If a recording is associated with the call log record, then the sound file for the recording will be attached to the message.

## **Printing the Call Log**

The PC Attendant provides the capability to print all or part of the call history.

### **To print the entire Call Log:**

1. From the **Call Log** menu, select the **Print** option, followed by **Print All**. This will send the entire call log to the default printer.

### **To print selected records from the Call Log:**

1. Highlight the records to be printed.
2. From the **Call History** menu, select the **Print** option, followed by **Print Selected**. This will cause the selected call log records to be sent to the default printer.

# Operation

## Call Log

---

### **Changing the Call Log Layout**

The PC Attendant Console provides several options to change the layout of the Call Log. The size and location of each column can be modified and the entire Call Log can be sorted based upon any individual column.

#### **To change the visible columns within the Call Log tab:**

1. On the **View** menu within the **Call Log** window, select the **Set Visible Columns** option.
2. Check each column that will be visible on the Call Log.
3. Press **OK** to save the settings.

#### **To change the order of the columns in the Call Log:**

1. Position the mouse cursor within the heading of the column to be moved.
2. Hold down the *left* mouse button and drag the column to the new position.

#### **To change the width of a column in the Call Log:**

1. Position the mouse cursor within the heading and on the right edge of the column to be resized. When the mouse is in the proper position, the mouse cursor will change to a double-headed arrow.
2. Hold down the *left* mouse button and drag the border of the column to the new width.

#### **To sort the contents of the Call Log:**

1. Position the mouse cursor within the heading of the column to use for sorting.
2. Press the *left* mouse button to sort the Call Log in ascending order based upon the contents of the selected column.
3. Pressing the *left* mouse button a second time will sort the Call Log in descending order.

## **Archiving the Call Log**

Regular maintenance of the PC Attendant Console should include archiving of the Call Log. This operation 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.

The archive operation saves the call history to a file using Comma Separated Values (CSV) format. This format can be viewed using a standard text editor or easily imported into a database or spreadsheet program. During the archive operation, the user can specify if the recorded files are to be saved or deleted. If the recorded files are saved, they will be compressed into a zip file, with the same file name as the archived call records.

### **To archive the Call Log:**

1. From the Call Log menu, select the **Archive** option. This will open the **Call Log Archive** menu.



2. Select the **Start Date** and **End Date** for the archive. All call log records within this range of dates will be included in the archive and removed from the **Call Log** tab.
3. Select either **Save in corresponding.zip** to keep the recordings or **Delete Recordings** to erase the recordings. If a zip file is selected, the name of the zip file will be the same as the archive file name selected in the next step with a .ZIP extension.  
*For example, if ARCHIVE\_OCT.CSV is selected for the archive file, the zip file will be ARCHIVE\_OCT.ZIP.*
4. Enter the name of the archive file to be created or use the **Browse** button to select the file.
5. Press **Save** to create the archive file.

## Call Recording

Attendants occasionally have a need to record telephone conversations. The PC Attendant Console provides the ability to record active calls and save the recordings as standard sound files on the PC hard drive. Each recorded file is associated with a record in the call log, providing easy access for retrieval of the recordings. From within the application, the user can choose to playback the call recordings, archive to another file/disk, or EMail to another user. The attendant has the option to configure the software to automatically record every call, or manually start/stop recording for individual calls.

The user must have the CTU TAPI adapter installed in their phone and properly configured for this function to operate successfully.

---

### Recording the Active Call

The PC Attendant Console provides the ability to record the active call on the attendant console and save the recording as a file on the PC. This file can then be played back within the application or EMail as a WAV file to another user. Recordings are associated with individual entries in the Call Log and can be accessed within the Call Log tab.

*The ability to record calls requires that a CTI device be installed in the attendant telephone. The Recording features will not be enabled if this device and the associated device drivers are not installed on the host PC.*

#### To start recording a call:

1. Use the mouse to select **Record** on the **Function Toolbar**.

**-OR-**

1. Press the **F8** key on the keyboard.

*When a call is being recorded, the label on the **Record** button will change to **Stop** on the **Function Toolbar**.*

#### To stop a recording:

1. Use the mouse to select **Stop** on the **Function Toolbar**.

**-OR-**

1. Press the **F8** key on the keyboard.

*If recording is stopped and restarted on the same call, the individually recorded sessions will be combined into a single file.*

*If a call that is being recorded is placed on hold, the recording will automatically be restarted when the call is retrieved from hold.*

#### To automatically record all calls:

1. On the **Tools** menu, select the **Preferences** option.
2. Select the **Recording** tab on the **Preferences** menu.
3. Select the **Record All Calls** option.
4. Select **OK** to save the new setting.

## Camp On

With Camp On, an extension user may call a busy extension and wait in line without hanging up. When the user Camps On, the system signals the busy extension with two beeps indicating the waiting call. The call goes through when the busy extension becomes free. Camp On helps busy extension users know when they have additional waiting calls. It also lets callers wait in line for a busy extension without being forgotten.

---

### Using Camp On for a Busy Extension

**To initiate a Camp On shortcut using a BLF/DSS key:**

1. With an active call on the attendant phone, double-click on a busy BLF/DSS key to camp the current call on to the selected extension.

*For this shortcut to be enabled, the **Tools@Preferences BLF/DSS** menu must have the **Camp** option selected as the current double-click action.*

## Central Office Calls, Answering

The system provides flexible routing of incoming CO (trunks) calls to meet the exact site requirements. This lets trunk calls ring and be answered at any combination of system extensions.

---

### Answering Incoming Calls

When a call arrives at the attendant position, the PC Attendant generates a notification tone and adds a new Ringing entry to the Active Call List.

**The attendant can answer the call using any of the following methods:**

1. Use the mouse to select the **Answer** function on the Function Toolbar.

**-OR-**

1. Press the **F1** key on the keyboard.

**-OR-**

1. Use the mouse to select the **Ringing** call entry within the **Active Call List**.

When an inbound call is answered, the state of the call will change from Ringing to Active on the Active Call List. If the attendant has another call ringing in at the same time an active call is already in progress, answering the ringing call will automatically place the active call on hold.

---

### Disconnecting a Call

**To disconnect from the active call:**

1. Use the mouse to select **Hang Up** from the **Function Toolbar**.

**-OR-**

1. Press the **F4** key on the keyboard.

When an active call is disconnected, the call entry will be removed from the Active Call List.

## Central Office Calls, Placing

---

### Placing an Outbound Call

When the attendant console is idle (no active call), the user can initiate an outbound call. The PC Attendant provides the Dial function to initiate a call to an internal or external number and special dialing features for the BLF/DSS tab and Directory tab.

#### Placing a call using the Dial function

1. Use the mouse to select **Dial** on the **Function Toolbar**.
- OR-**
1. Press the **F5** key on the keyboard.
  2. Enter the number to be dialed in the **Destination** field within the **Data Entry** area.
  3. Select the **Start** option within the **Data Entry** area to place the call.

#### Dial an extension using a BLF/DSS key

1. With the attendant set idle (no active call), click on a BLF/DSS key to dial that extension.

#### Placing a call using the Directory

1. Within the **Directory**, double-click on the directory entry to be call or press the *right* mouse button and select **Dial Extension** from the menu.
- OR-**
1. Within the **Directory**, press the *right* mouse button on the desired entry and select **Dial Extension** from the menu

---

### Disconnecting a Call

#### To disconnect from the active call:

1. Use the mouse to select **Hang Up** from the **Function Toolbar**.
- OR-**
1. Press the **F4** key on the keyboard.

When an active call is disconnected, the call entry will be removed from the Active Call List.

## Conference

Conference lets an extension user add additional inside and outside callers to their conversation. With Conference, a user may set up a multiple-party telephone meeting without leaving the office. The Aspire system allows an extension user to Conference up to 31 internal and/or external parties together (the originator would be the 32nd party reaching the maximum of 32).

With an active call on the attendant console, the PC Attendant Console can establish a conference using either the Conference function or the Directory menu.

---

### Setting Up a Conference Call

#### To initiate a conference using the Conference function:

1. Use the mouse to select the **Conference** function on the **Function Toolbar**.
- OR-**
1. Press the **F6** key on the keyboard.
  2. Enter the telephone number of the conference party into the **Destination** field within the **Conference** menu.
  3. Select the **Start** option within the **Conference** menu to initiate the conference.
  4. When the destination answers, announce the conference and then select **Complete** to create the three-way conference call. If the destination does not answer or does not want to participate in the conference, select the **Disconnect** option.
  5. To add additional parties, repeat the above steps.

*As long as there is one other internal party connected in the Conference, the PC Attendant can click **Hangup** to exit the Conference and the other parties can continue to talk.*

#### To initiate a conference using the Directory tab:

1. Use the **right** mouse button to select the directory entry to be added to the Conference.
2. On the pop up menu, select the **Conference** option to initiate the Conference.
3. When the destination answers, announce the conference and then select **Complete** to create the three-way conference call. If the destination does not answer or does not want to participate in the conference, select the **Disconnect** option.
4. To add additional parties, repeat the above steps.

*As long as there is one other internal party connected in the Conference, the PC Attendant can click **Hangup** to exit the Conference and the other parties can continue to talk.*

## Directory / Contact List

The PC Attendant maintains different directories for internal (Directory) and external (Contacts) numbers. The internal directory serves as the company directory and includes all employees' names, extensions, EMail, department, and alternate numbers. The external directory serves as an on-line phone/address book for frequently dialed external numbers.

The user views the directory by using functions within the Directory option on the Main Menu. The directory/contact list is opened in a separate window - select either the Directory or Contacts icon on the left of the window to view the listing. Each listing provides a search box for quickly searching for a name. The convenient search capability can be used to find individuals by first name, last name, or partial name. Entering alphabetic characters in the Search field will filter the displayed entries using the name fields. If the attendant enters 'B', then all of the directory listings that have the first name starting with B will be displayed. Entering 'B D' will further filter those entries to only show the listings with a first name starting with B and a last name starting with D. Filtering by last names only can be accomplished by entering a space followed by the characters in the last name.

The Directory can also be used to initiate a call by selecting any of the telephone number fields associated with a directory or contact list entry.

Each entry in the Directory database can contain the following fields:

- First Name
- Last Name
- Extension
- Title
- EMail address
- Location
- Department
- Supervisor Name
- Supervisor Telephone Number
- Assistant Name
- Assistant Telephone Number
- Alternate Contact Numbers
- Notes
- Ability to Hide the Directory Entry or Hide the BLF Button

Each entry in the Contact database can contain the following fields:

- First Name
- Last Name
- Telephone
- Title
- EMail address
- Company Name
- Company Dress
- Alternate Contact Numbers
- Notes

# Operation

## *Directory / Contact List*

---

Operations that can be performed on the Directory/Contact List include the following:

- Adding a new entry to the Directory/Contact List
- Modifying an entry in the Directory/Contact List
- Deleting an entry from the Directory/Contact List
- Searching the Directory/Contact List
- Printing the Directory/Contact List
- Changing the Directory/Contact List Tab Layout
- Call Handling within the Directory/Contact List
- Sending a message from the Directory/Contact List

The columns within the Directory and Contacts list can be resized and rearranged. To resize a column, place the mouse cursor within the header row, on the right hand edge of the column to be resized. Hold down the left mouse button and drag the edge of the column to the new size. To rearrange the order of the columns, place the mouse cursor within the header row of the column to be moved. Hold down the left mouse button for a second or two until the cursor changes from an arrow to an arrow with a square, then drag the column into the new position.

The data can be sorted by name, number, or department name. Simply click in the header row of the column which should be used for the sort process.

An import utility is provided with the Contacts listing that allows databases from third-party applications to be inserted into the console directory. The import utility requires that the import file be a CSV (comma-separated values) file. The attendant maps the fields within the CSV file to the corresponding fields within the console directory. The data from the PC Attendant's Contacts listing can be exported to a CSV format as well.

## Do Not Disturb

Do Not Disturb blocks incoming calls and Paging announcements. DND permits an extension user to work by the phone undisturbed by incoming calls and announcements. The user can activate DND only while their phone is idle. Once activated, incoming trunk calls still flash the line keys. The user may use the phone in the normal manner for placing and processing calls.

There are four Do Not Disturb options available:

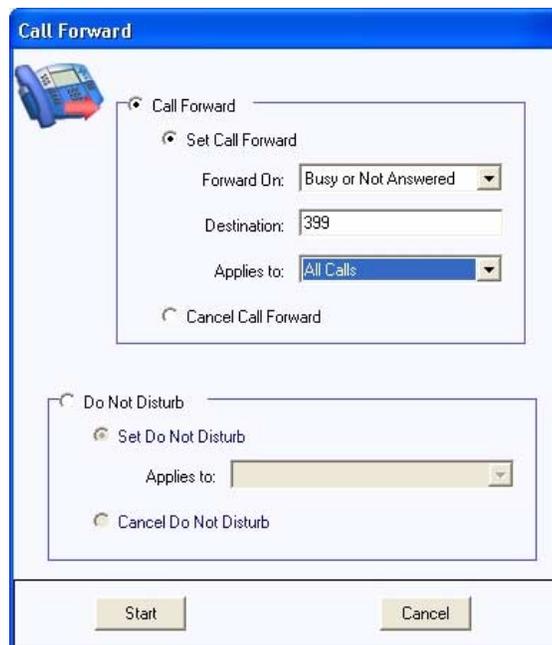
- All Calls
- Outside Calls
- Paging/Intercom/Call Forwards/Transfers
- Call Forwards

---

## Placing the Attendant Console in Do Not Disturb

To activate DND for the attendant console:

1. On the **Function Toolbar**, select **Call Forward**.



2. On the **Call Forward** menu, select the **Do Not Disturb** option.
3. Select the condition for allowing calls to ring the PC Attendant.
4. Select **Start** to initiate the Do Not Disturb setting.

To cancel DND on the attendant console:

1. On the **Function Toolbar**, select **Call Forward**.
2. In the **Do Not Disturb** window, select **Cancel Do Not Disturb**.
3. Select **Start** to initiate clearing the DND setting.

## EMail

The BLF/DSS buttons provide the ability to generate an EMail to individuals assigned to BLF/DSS keys.

---

### **EMail: Send an EMail Using a BLF/DSS Key**

#### **To send an EMail using a BLF/DSS key:**

1. Press the *right* mouse button to select the BLF/DSS key.
2. From the pop up menu, select the **EMail** option. This will create a new mail message using your default EMail client, with the destination set to the EMail address of the selected BLF/DSS key.

*The EMail address field within the Directory entry for this extension must be filled in for this function to be enabled.*

## Hold

Hold lets an extension user put a call in a temporary waiting state. The caller on Hold hears silence or Music on Hold, not conversation in the extension user's work area. While the call waits on Hold, the extension user may process calls or use a system feature. Calls left on Hold too long recall the PC Attendant.

---

### Placing a Call On Hold

#### To place the active call on hold:

1. Use the mouse to select **Hold** on the **Function Toolbar**.

**-OR-**

1. Press the **F2** key on the keyboard.

*Intercom calls will actually be placed on hold.*

*Outside calls will be placed into the first available Park. This is required due to the TAPI 2 commands and implementation.*

When a call is placed on hold, the status of the call in the Active Call List will change from Active to On Hold for intercom calls or placed in Park for outside calls.

---

### Retrieving a Call on Hold

#### To retrieve a call that was previously placed on hold:

1. Use the mouse to select the **Held** call within the **Active Call List**.

When a held call is retrieved, the status of the call in the Active Call List will change from On Hold to Active. If another call is active on the attendant console when a held call is retrieved, the active call will automatically be placed on hold.

## Night Service

Night Service lets system users activate one of the Night Service modes. Night Service redirects calls to their night mode destination, as determined by Assigned and Universal Night Answer programming. The system allows Night Service to be enabled for each Night Service group, allowing each group to determine when their calls should switch modes. A user typically activates Night Service after normal working hours, when most employees are unavailable to answer calls.

There are eight Night Service modes:

- Day 1 / Day 2 Modes - for normal working hours
- Night 1 / Night 2 Modes - after hours (usually evening)
- Midnight 1 / Midnight 2 Modes - late at night to early in the morning
- Rest 1 / Rest 2 Modes - interval usually used for lunch

---

## Setting the Telephone System in Night Mode

To set the system in Night Mode:

1. Press the **Night** button on the **Function Toolbar**, when the attendant phone is idle.



2. Select the **Night Mode** option from the **Mode** list.
3. Skip the **Password** field as this is not used with the Aspire system.
4. Select **Start** to begin the Night Mode operation.

## Paging

Paging allows a user to locate another employee or make an announcement without calling each extension individually.

### Internal Paging

Internal Paging lets extension users broadcast announcements to other keyset users. When a user makes a Zone Paging announcement, the announcement broadcasts to all idle extensions in the zone dialed. With All Call Paging, the announcement broadcasts to all idle extensions programmed to receive All Call Paging. An extension can be a member of only one Internal Paging Zone.

By default, the PC Attendant will only display Internal Page Zones 1-9. This can be changed in the Telephony Administrator to display zones 1-64.

### External Paging

With External Paging, a user can broadcast announcements over paging equipment connected to external Paging zones. When a user pages on of these external zones, the system broadcasts the announcement over the speakers.

The Aspire S system allows up to eight External Paging zones. The Aspire system allows up to nine External Paging zones, with the additional zone (#9) provided on the NTCPU. All other zones (#1-8) requires a port on a 2PGDAD module. In addition, each external zone has an associated relay contact. When a user pages to a zone, the corresponding contact activates (closes). This provides for Paging amplifier control. Refer to the Aspire S or Aspire system hardware manual for additional details.

### Combined Paging

Use Combined Paging when you want to simultaneously Page into an internal and corresponding external zone. For example, you can Page your company's warehouse and outside loading dock at the same time. Combined Paging is available for Paging zones 1-8 and All Call. Optionally, you can change the Combined Paging assignments. For example, in the Aspire system programming, you can associate External Paging Zone 1 with Internal Paging Zone 4. When an All Call Combined Page is made, it will include both the external zones and the assigned internal zone(s). If the internal page zone is busy or there are no extensions in a page group, the announcement will be made on the external zones only.

---

## Displaying Internal Page Zones 1-64

### To change the displayed Internal Page Zones:

1. From the **Start** menu, select **Programs - NEC - Telephony Administrator**, or double-click on the Telephony Administrator icon on the desktop.
2. Click on **Telephony Settings**. Under the **Feature Codes** tab, select **00-64** in the Internal Paging Zones section.
3. Close the **Telephony Administrator** utility by clicking the X in the upper right-hand corner.

# Operation

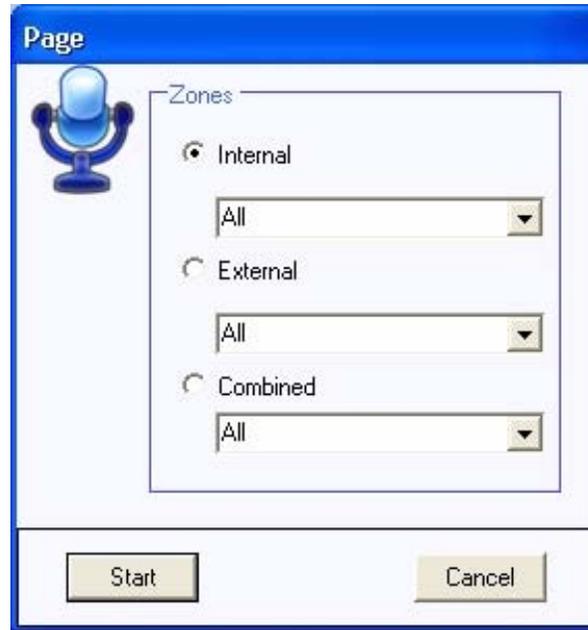
## Paging

---

### Accessing the Paging System

**To send a Page:**

1. Use the mouse to select **Page** on the **Function Toolbar**.
- OR-**
1. Press the **F9** key on the keyboard.



2. Select the type of page to be generated: Internal, External, or Combined.
3. Select the paging zone within the selected category.
4. Select the **Start** button to initiate the page.
5. Announce the page.
6. Select the **Hang Up** option to disconnect from the paging system.

## Park

Park places a call in a waiting state (called a Park Orbit) so that an extension user may pick it up. The PC Attendant uses the System Park option when you want to have the call wait in a system orbit. After parking a call in orbit, the attendant can Page the person receiving the call and hang up. The paged party dials a code or presses a programmed Park key to pick up the call. With Park, it is not necessary to locate a person to handle their calls. A call parked for too long will recall the extension that initially parked it, however the call remains in the park orbit until it's answered. There are 64 Park Orbits (1-64) available for use.

The PC Attendant Console also provides an Unpark function in order to retrieve a call from a park orbit.

---

### Parking/Unparking a Call

#### To Park the active call:

1. Use the mouse to select the **Park** function on the **Function Toolbar**.

**-OR-**

1. Press the **F10** key on the keyboard.
2. Select the park orbit (1 through 64) within the **Park** menu.
3. Select **Start** to transfer the active call to the park orbit. The **Active Call List** is updated with the information for the parked call.
4. If the park orbit is currently occupied, a warning message will be displayed. The attendant will then be reconnected to the caller and allowed to select a different park orbit.

#### To retrieve a call using the Unpark function:

1. With the attendant console idle (no active call), use the mouse to select the **Unpark** function on the **Function Toolbar**.

**-OR-**

1. Press the **F11** key on the keyboard.
2. Select the park orbit (1 through 64) within the **Unpark** menu.
3. Select **Start** to retrieve the call from the park orbit.
4. If the park location is currently empty, a warning message will be displayed.

#### To retrieve a parked call from the Active Call List:

1. With the attendant console idle (no active call), select the desired entry in the **Active Calls List**. The call will be recalled from the Park orbit and become the current Active Call.

# Operation

## Quick Message Utility

---

### Quick Message Utility

The Quick Message utility allows the attendant to send a short text message to another employee. Unlike an EMail message, a Quick Message is delivered immediately to the destination and automatically displayed on the user's PC screen. The recipient can then quickly send a reply back to the attendant by selecting from a set of predefined responses. This tool is invaluable for delivering a message to someone who is on the phone or when the attendant needs an immediate response. Each user which should be able to receive Quick Messages would need to have the Quick Message application installed and the user must be logged in.

The attendant can easily select the text of the Quick Message from a pre-defined list of standard messages, or compose a short message from scratch. When the message is delivered to the recipient, the message text and standard responses are shown on the user's PC screen.



When the user selects a response, the reply is sent immediately back to the attendant. To assist the attendant in keeping track of Quick Messages, an entry is added to the Active Call List for each Quick Message and Response.

---

### Accessing the Quick Message Utility

The Quick Message utility can be accessed through the Function Toolbar, BLF/DSS button, or Directory entry.

#### To send a Quick Message using the Function Toolbar:

1. Use the mouse to select the **Message** function on the **Function Toolbar**.

**-OR-**

1. Press the **F7** key on the keyboard.
2. Specify the desired **Destination**, **Message** and **Responses** within the **Quick Message** menu.
3. Select **Send** on the **Quick Message** window to deliver the message.

#### To send a Quick Message using a BLF/DSS button:

1. Press the **right** mouse button to select the BLF/DSS key.
2. From the pop up menu, select the **Quick Message** option.  
*The selected user must have the Quick Message utility currently running on their PC for the Quick Message option to be enabled.*
3. Specify the desired **Message** and **Responses** within the **Quick Message** menu.
4. Select **Send** on the **Quick Message** window to deliver the message.

## To send a Quick Message from a Directory entry:

1. Press the **right** mouse button to select the directory entry to receive the Quick Message.
2. From the pop up menu, select the **Quick Message** option.  
*The Quick Message option will only be enabled for users that are currently running the Quick Message Client utility.*
3. Specify the desired **Message** and **Responses** within the **Quick Message** menu.
4. Select **Send** on the **Quick Message** window to deliver the message.

## Composing a Quick Message

When the attendant initiates the Quick Message utility, the Quick Message menu displayed.



## To compose a Quick Message:

1. If the Quick Message utility was initiated from either the **BLF/DSS** tab or the **Directory** tab, then the **Destination** field will already be set to the specified recipient. Otherwise, select a destination to receive the message from the **To:** pull-down list.  
*Only users who are currently running the Quick Message Client are listed.*



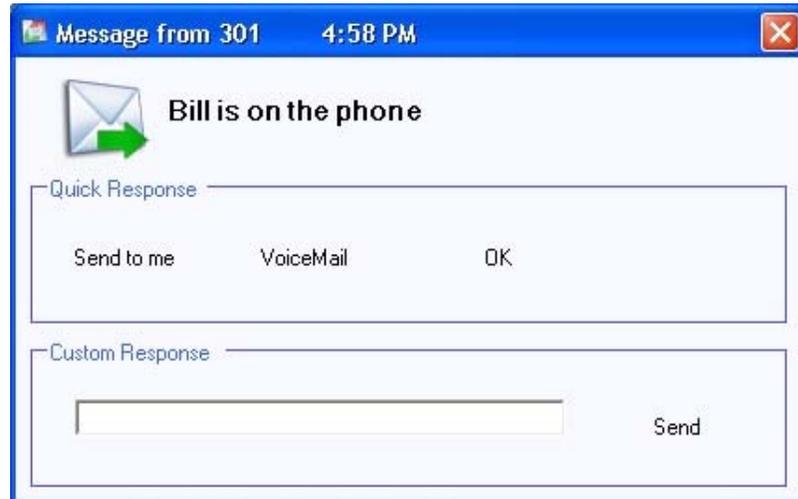
2. Select the text of the message to be sent from the **Message:** pull down list.

# Operation

## Quick Message Utility

---

3. If necessary, modify the selected message by typing any updates or additional information in the **Message** field.
4. If required, update any of the four **Responses** shown at the bottom of the menu. Each individual response can be edited by clicking within the text box and entering alternate text.
5. Select **Send** to deliver the Quick Message.
6. The recipient sees a message similar to the following:



### Tracking a Quick Message in the Active Call List:

1. When a Quick Message has been sent, an associated entry is displayed in the **Active Call List**.
2. The **Time** field displays a timer that indicates the elapsed time since the message was delivered.
3. When a response is received, the response text will be written within the **Quick Message** entry in the active call list.

---

## Receiving a Response to a Quick Message

### Tracking a Response to a Quick Message:

1. When a Quick Message client selects a message response, the reply is displayed within the **Active Call List**.
2. The **Response** field shows the reply that was selected by the message recipient.
3. The **Time** field for the message displays a timer that indicates the elapsed time since the attendant received the response.

---

### Clearing a Quick Message from the Active Call List

The Quick Message and Response appear as an entry in the **Active Call List**. Quick Messages can be deleted from the **Active Call List** either manually or automatically after a user-defined time period.

#### To manually delete a Quick Message Entry from the Active Call List:

1. Use the *right* mouse button to select the **Quick Message** entry to be deleted.
2. Select **Delete** from the pop-up menu.

#### To set the time period for automatically removing Quick Message Entries from the Active Call List:

1. Select the **Tools®Preferences** option on the console main menu.
2. Select the **Active Call List** tab on the **Preferences** menu.
3. Select the appropriate checkboxes and enter the time period for automatic removal of Quick Messages.
4. Press **OK** to save the changes.

## Transfer

Transfer permits an extension user to send (i.e., extend) an active Intercom or outside call to any other extension in the system. With Transfer, any extension user can quickly send a call to the desired co-worker. A call a user transfers automatically recalls if not picked up at the destination extension. This assures that users do not lose or inadvertently abandon their transfers. While a transferred call is ringing an extension the system can optionally play ringback tone or Music on Hold to the caller, based on the Aspire system programming.

The PC Attendant provides several different methods to initiate a transfer on an active call. The Transfer function can be used to initiate a transfer to an external or internal number, while the BLF/DSS tab and Directory tab provide special features to initiate a transfer to an internal extension. The PC Attendant also provides the option to perform either a supervised transfer or unsupervised (blind) transfer.

---

### Transferring a Call

#### Redirecting a call with the Transfer function:

1. Use the mouse to select **Transfer** on the **Function Toolbar**.

**-OR-**

1. Press the **F3** key on the keyboard.
2. Enter the number to be dialed in the **Destination** field within the **Data Entry** area.
3. [**Supervised Transfer**] Select the **Start** option within the **Data Entry** area to initiate a supervised transfer. When the destination party answers, announce the transfer and then select **Complete** from the **Data Entry** area. If the destination does not answer or does not want to take the call, select **Disconnect** from the **Data Entry** area to reconnect to the original caller. If the destination is busy or does not answer, select **VoiceMail** to send the call to the destination voice mail box.

**-OR-**

3. [**Unsupervised Transfer**] Select the **Blind** option within the **Data Entry** area to initiate an unsupervised (blind) transfer. The call will be immediately routed to the specified destination.

#### Using a BLF/DSS key to redirect a call with the Transfer function:

##### To initiate a supervised transfer using a BLF/DSS key:

1. Press the *right* mouse button to select the BLF/DSS station to receive the call.
2. From the pop up menu, select the **Transfer - Supervised** option.
3. When the party answers, announce the transfer, and then press the **Complete** button on the **Transfer** menu.
4. If the destination does not answer or does not want to receive the transfer, press the **Disconnect** button in the **Transfer** menu to reconnect to the original caller.

##### To initiate an unsupervised (blind) transfer using a BLF/DSS key:

1. Press the *right* mouse button to select the BLF/DSS station to receive the call.
2. From the pop up menu, select the **Transfer - Immediate** option.

## One touch transfers using a BLF/DSS key:

1. Within the **BLF/DSS tab**, use the mouse to select the station to receive the call. The transfer will either be an immediate or supervised transfer, based upon the current setting in the **Tools@Preferences BLF/DSS** menu. When the one-touch transfer initiates a supervised transfer, the **Data Entry** area will become enabled. Select **Complete** within the **Data Entry** area to complete the transfer or **Disconnect** to reconnect to the original caller.

**-OR-**

1. Within the **BLF/DSS tab**, use the right mouse button to select the station to receive the call.
2. From the pop up menu, select either **Transfer - Supervised** or **Transfer - Immediate** to redirect the call.
3. If **Transfer - Supervised** is selected, the **Transfer** menu will be displayed. Select **Complete** to complete the transfer or **Disconnect** to reconnect to the original caller.

**Note:** The one-touch transfer initiated with a BLF/DSS key can be either supervised or unsupervised (blind). The type of transfer is determined by a setting in the BLF/DSS configuration screen. To change this setting, on the **Tools** menu, select **Preferences**. Then select the **BLF/DSS** tab and change the setting for One Touch Transfer.

## Transferring a call to a directory entry:

1. Within the **Directory tab** press the *right* mouse button to select the directory entry to receive the call.
2. From the pop-up menu, select either **Transfer - Immediate** or **Transfer - Supervised** to redirect the call.
3. If **Transfer - Supervised** is selected, the **Data Entry** area will become enabled. Select **Complete** within the **Data Entry** area to complete the transfer, **VoiceMail** to send the caller to the voice mail box, or **Disconnect** to reconnect to the original caller.

## Transferring a call to Voice Mail:

Frequently the attendant will need to transfer a caller directly into the Voice Mailbox of a specific employee. The PC Attendant Console provides access to the Voice Mail system through the BLF/DSS keys and the Directory menu.

### To transfer to Voice Mail from the BLF/DSS area:

1. With an active call on the attendant phone, double-click on a busy (green) BLF/DSS key to transfer to that extension's voice mail. The active call will automatically be transferred to the selected user's mailbox.

*For this shortcut to be enabled, the **Tools@Preferences BLF/DSS** menu must have the voice mail option selected as the current double-click action.*

**-OR-**

1. Select the destination BLF using the *right* mouse button. On the pop-up menu, select the Voice Mail option to transfer the caller to the selected user's mailbox.

### To transfer to Voice Mail from the Directory menu:

1. Press the *right* mouse button to select the desired directory entry.
2. On the pop up menu, select the **Voice Mail** option to send the active call to the selected user's mailbox.

## Voice Mail

Voice Mail ends the frustration and cost of missed calls, inaccurate written messages and telephone tag. This frees a company's busy receptionists and secretaries for more productive work.

---

### Voice Mail: Leave a Message

#### To leave a message in a Voice Mailbox:

1. Press the *right* mouse button to select the BLF/DSS key.
2. From the pop up menu, select the **Voice Mail** option.

**-OR-**

1. After calling the extension, click the **Voice Mail** icon in the function tool bar or the **More** icon then click the **Voice Mail** option.

#### Transferring a call to Voice Mail:

Frequently the attendant will need to transfer a caller directly into the Voice Mailbox of a specific employee. The PC Attendant Console provides access to the Voice Mail system through the BLF/DSS keys and the Directory menu.

#### To transfer to Voice Mail from the BLF/DSS area:

1. With an active call on the attendant phone, double-click on a busy (green) BLF/DSS key to transfer to that extension's voice mail. The active call will automatically be transferred to the selected user's mailbox.

*For this shortcut to be enabled, the **Tools@Preferences BLF/DSS** menu must have the voice mail option selected as the current double-click action.*

**-OR-**

1. Select the destination BLF using the *right* mouse button. On the pop-up menu, select the Voice Mail option to transfer the caller to the selected user's mailbox.

#### To transfer to Voice Mail from the Directory menu:

1. Press the *right* mouse button to select the desired directory entry.
2. On the pop up menu, select the **Voice Mail** option to send the active call to the selected user's mailbox.

## Voice Over

**- Important -**  
Do not use Voice Over to a user on speakerphone as the conversation may be heard by the outside party.

Voice Over lets a user interrupt a keyset extension user busy on another call. With Voice Over, the busy keyset extension user hears an alert tone followed by the voice of the interrupting party. The keyset extension user can respond to the interrupting party without being heard by the original caller. If desired, the keyset extension user can easily switch between their original caller and the interrupting co-worker. The original caller and the interrupting party can never hear each other's conversation.

Voice Over could help a lawyer, for example, waiting for an urgent call. While on a call with another client, the lawyer's paralegal could announce the urgent call as soon as it comes in. The lawyer could then give the paralegal instructions how to handle the situation - all without the original client hearing the conversation.

Either a keyset or 500/2500 set user can initiate a Voice Over, but only a keyset user can receive a Voice Over.

---

## Using Voice Over to a Busy Extension

### To initiate a Voice Over shortcut using a BLF/DSS key:

1. With an active call on the attendant phone, double-click on a busy BLF/DSS key to place the current call on hold and initiate a voice over call to the selected keyset extension.

*For this shortcut to be enabled, the **Tools@Preferences BLF/DSS** menu must have the **Voice Over** option selected as the current double-click action.*

# Operation

## *Voice Over*

---

- For Your Notes -

### Troubleshooting CTU/TAPI Operation

This section describes the causes and solutions to problems which may occur during use of the CTU adapter and CTI application.

---

#### General

- The product (CTA adapter, CTU adapter, or CD-ROM) is defective.

Cause	Solution
<ul style="list-style-type: none"><li>• Problems during manufacture.</li></ul>	<ul style="list-style-type: none"><li>• Contact your distributor/dealer.</li></ul>
<ul style="list-style-type: none"><li>• Damage during use.</li></ul>	<ul style="list-style-type: none"><li>• Contact your distributor/dealer.</li></ul>

- Cannot run setup program.

Cause	Solution
<ul style="list-style-type: none"><li>• MS-DOS or another Windows application is still running.</li></ul>	<ul style="list-style-type: none"><li>• Close all MS-DOS and Windows applications (except the program manager), and run the setup program again.</li></ul>
<ul style="list-style-type: none"><li>• Defective CD-ROM.</li></ul>	<ul style="list-style-type: none"><li>• Contact your distributor/dealer.</li></ul>

- An error occurs while loading from the installation disk.

Cause	Solution
<ul style="list-style-type: none"><li>• Defective CD-ROM.</li></ul>	<ul style="list-style-type: none"><li>• Contact your distributor/dealer.</li></ul>

# Troubleshooting

## Troubleshooting the CTU/TAPI Connection

---

### CTU

- USB cable has been connected before the CTU driver is installed.

Cause	Solution
<ul style="list-style-type: none"> <li>● CTU driver has to be installed first in order to correctly install the driver of CTU adapter. Otherwise, it is recognized as unknown device.</li> </ul>	<ul style="list-style-type: none"> <li>● Follow the procedure as below.               <ol style="list-style-type: none"> <li>1. Unplug the USB cable.</li> <li>2. To install the CTU driver, refer to <i>Installation and Configuration - CTU Adapter, page 15</i>. After the installation is complete, the display requires to connect the USB cable, BUT, do not connect the USB cable at this step.</li> <li>3. Uninstall the CTU driver. Refer to <i>Uninstalling the CTU Driver, page 34</i> to uninstall. After uninstall operation is complete, then boot the PC again.</li> <li>4. Install the CTU Driver.</li> <li>5. After the installation is complete, plug the USB cable in.</li> </ol> </li> </ul>

- Cannot send or receive calls using the CTU adapter.

Cause	Solution
<ul style="list-style-type: none"> <li>● The USB cable is not connected correctly.</li> </ul>	<ul style="list-style-type: none"> <li>● Check that the PC and the CTU adapter are connected correctly with the USB cable (to make sure, remove the cable, wait five seconds, and insert it again firmly).</li> </ul>
<ul style="list-style-type: none"> <li>● The AC adapter is not connected correctly.</li> </ul>	<ul style="list-style-type: none"> <li>● Ensure that the AC adapter is connected to the CTU adapter and that the AC adapter is plugged into a power outlet.</li> </ul>
<ul style="list-style-type: none"> <li>● The PC is in the power saving mode.</li> </ul>	<ul style="list-style-type: none"> <li>● Clear the power saving mode on the PC (refer to the PC manual for details).</li> </ul>

# Troubleshooting

## *Troubleshooting the CTU/TAPI Connection*

---

- Using the CTU adapter, cannot record audio in an application.

Cause	Solution
<ul style="list-style-type: none"> <li>• The audio input device is used by other software.</li> </ul>	<ul style="list-style-type: none"> <li>• Halt or disable the audio function of the other software.</li> </ul>
<ul style="list-style-type: none"> <li>• The audio device has not been installed correctly.</li> </ul>	<ul style="list-style-type: none"> <li>• Open SYSTEM on the control panel, double-click the DEVICE MANAGER tab, select VIEW DEVICES BY TYPE, and check that 'DTR-8/16/32KH-1D' is included under SOUND, VIDEO AND GAME CONTROLLERS and that it operates correctly.</li> </ul>
<ul style="list-style-type: none"> <li>• Another USB device is in use at the limits of the usable band.</li> </ul>	<ul style="list-style-type: none"> <li>• Change the settings to reduce the usable band for other USB device.</li> <li>• Remove the other USB device.</li> </ul>
<ul style="list-style-type: none"> <li>• The TSP media setting is incorrect.</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to '&lt;6&gt; Detailed Settings by Line – Media Setting' and specify the correct device.</li> </ul>

- Using the CTU adapter, cannot playback audio in an application.

Cause	Solution
<ul style="list-style-type: none"> <li>• The audio output device is used by other software.</li> </ul>	<ul style="list-style-type: none"> <li>• Halt or disable the audio function of the other software.</li> </ul>
<ul style="list-style-type: none"> <li>• The audio device has not been installed correctly.</li> </ul>	<ul style="list-style-type: none"> <li>• Open SYSTEM on the control panel, double-click the DEVICE MANAGER tab, select VIEW DEVICES BY TYPE, and check that 'DTR-8/16/32KH-1D' is included under SOUND, VIDEO AND GAME CONTROLLERS and that it operates correctly.</li> </ul>
<ul style="list-style-type: none"> <li>• Another USB device is in use at the limits of the usable band.</li> </ul>	<ul style="list-style-type: none"> <li>• Change the settings to reduce the usable band for other USB device.</li> <li>• Remove the other USB device.</li> </ul>
<ul style="list-style-type: none"> <li>• The TSP media setting is incorrect.</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to '&lt;6&gt; Line Configuration – Media Setting' and specify the correct device.</li> </ul>

# Troubleshooting

## Troubleshooting the CTU/TAPI Connection

---

- Using the CTU adapter, sound is intermittent during recording playback of an audio in an application.

Cause	Solution
<ul style="list-style-type: none"><li>• Performance of the PC is insufficient.</li></ul>	<ul style="list-style-type: none"><li>• Use a PC with the recommended minimum performance or greater.</li></ul>
<ul style="list-style-type: none"><li>• Another application which uses considerable processing power is running simultaneously.</li></ul>	<ul style="list-style-type: none"><li>• Do not use other applications during recording or playback.</li><li>• Use a PC with enough processing power to allow other applications to be run simultaneously.</li></ul>

- The sound from the computer and applications is played back from the phone connected to the CTU adapter.

Cause	Solution
<ul style="list-style-type: none"><li>• The CTU adapter 'NEC-I CTU-R' has been selected as the preferred device for sound playback.</li></ul>	<ul style="list-style-type: none"><li>• Double-click MULTIMEDIA (SOUNDS AND MULTIMEDIA with Windows 2000) on the Control Panel, set the preferred device for sound playback to a device other than 'NEC-I CTU-R', and place a check in USE ONLY PREFERRED DEVICES.</li></ul>

# Troubleshooting

## Troubleshooting the CTU/TAPI Connection

---

### TAPI 2.x/CTI

The majority of problems encountered with CTI operation are related to general networking troubleshooting. In addition to networking, CTI relies on a working domain, due to the fact the operation is based on Microsoft TAPI 2 setup.

#### Problems:

- Server unable to see Aspire devices within Aspire TSP
- Server unable to see Aspire devices under Phone.exe
- Server Phone and Modem Options fails to Open
- Server Telephony Service is not responding

These problems normally indicate that there is a communication problem between the Aspire and CTI Server.

Please follow the steps below to check communication between the CTI Server and Aspire.

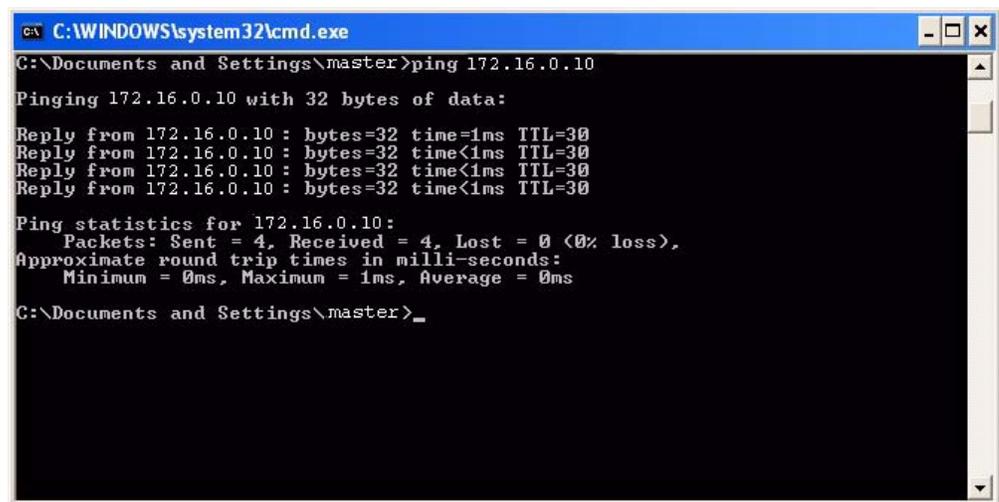
1. Use the Ping command line tool from the CTI Server to ensure you can ping the Aspire IP address. The Aspire IP address is found in **Program 10-12-01**.

Click **START - RUN**

Type **CMD** and press **ENTER**

Type **PING xxx.xxx.xxx.xxx**

(xxx.xxx.xxx.xxx = Aspire NTCPU IP address. By default this address is: 172.16.0.10)



```
C:\WINDOWS\system32\cmd.exe
C:\Documents and Settings\master>ping 172.16.0.10
Pinging 172.16.0.10 with 32 bytes of data:
Reply from 172.16.0.10 : bytes=32 time=1ms TTL=30
Reply from 172.16.0.10 : bytes=32 time<1ms TTL=30
Reply from 172.16.0.10 : bytes=32 time<1ms TTL=30
Reply from 172.16.0.10 : bytes=32 time<1ms TTL=30
Ping statistics for 172.16.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\Documents and Settings\master>
```

You should ensure that, as above, there is 0% Packet Loss displayed in the Ping statistics.

If you are unable to Ping the Aspire NTCPU, verify the Aspire NTCPU IP address (**10-12-01**). Next, verify that the PC you are using is connected to the LAN, and attempt to Ping other Hosts on the LAN (the Default Gateway for example). A useful way of eliminating the LAN is to Ping the Aspire NTCPU using a cross-over cable from your PC to the Aspire. If you are unable to ping, check the firewall settings in the PC - it may be blocking the connection.

Alternatively, consult the Local IT Administrator for any specific configuration requirements on the LAN.

# Troubleshooting

## Troubleshooting the CTU/TAPI Connection

---

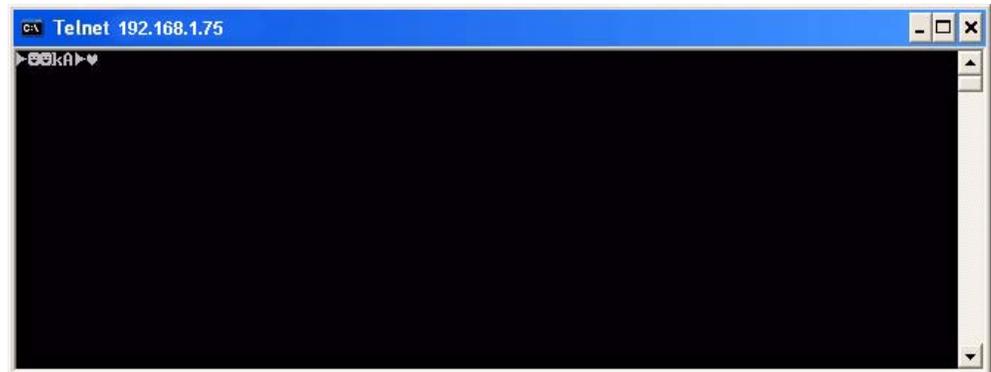
- Using Telnet ensures that the CTI port is available by establishing a session from a network host. The Aspire CTI port is found in **Program 10-20-01**.

Click **START - RUN**

Type **CMD** and press **ENTER**

Type **TELNET xxx.xxx.xxx.xxx 8181**

- **xxx.xxx.xxx.xxx** = Aspire NTCPU IP address.  
By default this address is: 172.16.0.10
- **8181** is the recommended CTI port and is defined in Program 10-20-01.



You should ensure that a Telnet session is established, and verify that the Keep Alive Timer symbol appears within the Telnet session after 30 seconds (defined in **10-20-01**).

**Note:** You should ensure that the following Services are disabled on the CTI Server before proceeding:

- AspireTSP
- Telephony

If you are unable to establish a Telnet session to the CTI port, verify the CTI port has been defined in **10-20-01** (8181 recommended).

- Verify the AspireTSP is installed and configured using the correct parameters. It is possible to verify the configuration using the Registry.

Click **START - RUN**

Type **REGEDIT** and press **ENTER**

Go to the following registry key:

```
HKEY_LOCAL_MACHINE\SOFTWARE\NEC\N2IPCTI\N2IPTSP\3rdParty  
pbxipaddress 'REG STRING VALUE'  
pbxport 'REG STRING VALUE'
```

You should verify that the PBX IP address matches the IP address configured in the Aspire (**10-12-01**). You should also verify that the PBX Port matches that used in the Aspire configuration (**10-20-01**).

# Troubleshooting

## Troubleshooting the CTU/TAPI Connection

---

### Problem:

- TAPI 2 remote clients using Microsoft Windows XP Pro Service Pack 2 causes Microsoft's TAPI Remote Service Provider connection to the Telephony Server to run slow.

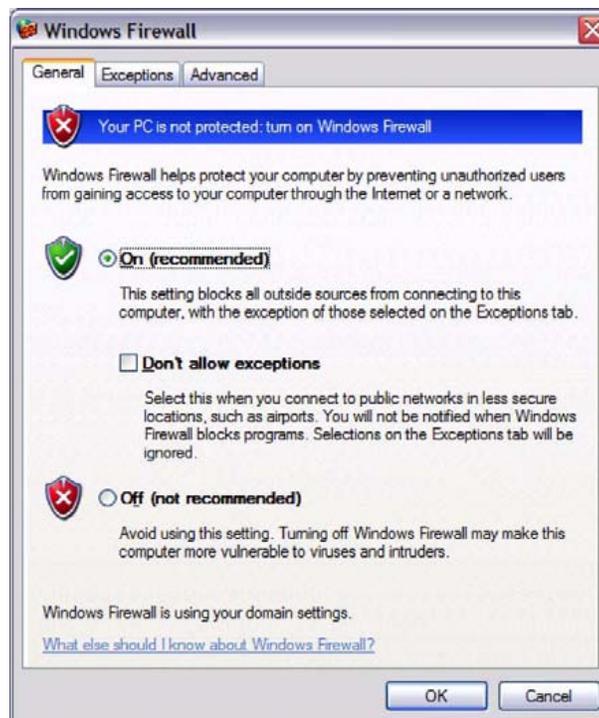
A problem with TAPI 2 remote clients using Microsoft Windows XP Pro Service Pack 2 exists due to Firewall settings in Windows.

The built-in firewall (added with Service Pack) is set to the most restrictive mode. This causes Microsoft's TAPI Remote Service Provider connection to the Telephony Server to run slow. One client with the firewall in the default mode connecting to a TAPI server will cause every TAPI user on site to run extremely slow.

The firewall settings should be changed for all potential TAPI users to allow a speedy connection. The recommended change is to enable file and printer sharing in the exception list of the firewall.

This can be performed as follows:

1. Click **Start - Settings - Control Panel**, open the **Security Center**.
2. Open **Windows Firewall**
3. Select the **General** tab
4. Ensure “**Don't allow exceptions**” is *not* selected:



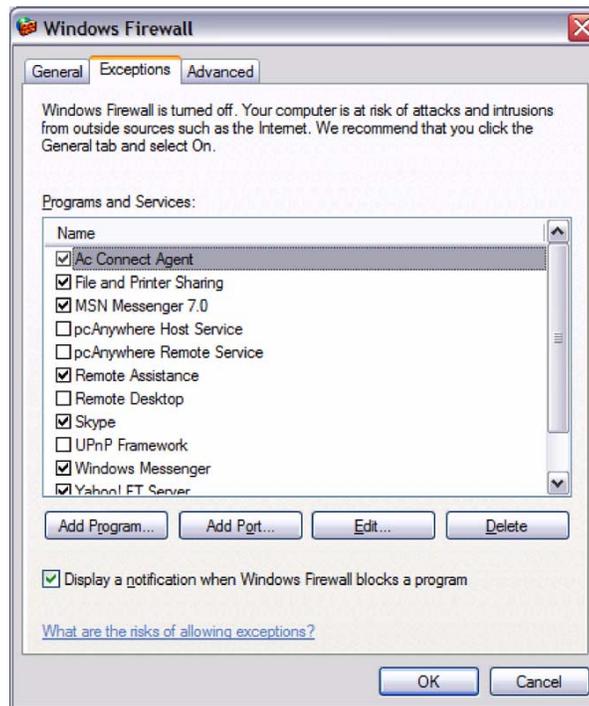
5. Select the **Exceptions** tab.

# Troubleshooting

## Troubleshooting the CTU/TAPI Connection

---

6. Ensure **File and Printer Sharing** is selected (by default this is not selected).



7. Click **OK**.

# Troubleshooting

## Troubleshooting the CTU/TAPI Connection

---

**Problem:**

- The TAPI devices are displayed in the Phone and Modem Control Panel but PC Attendant does not work.
- RPCTI error message displayed when opening the PC Attendant.

The TAPI devices are displayed when clicking:

**Start - Control Panel - Phone and Modem Options - Advanced** and selecting the **Aspire Telephony Service Provide - Configure - OK - Device**.

However, opening the PC Attendant results in an RPCTI error message.

The PC Attendant installation includes an RPCTI service. This service provides a connection from the Aspire TAPI driver to the PC Attendant application. This service must be running in order for the PC Attendant to see the TAPI devices. This service is automatically started each time the PC is powered up, however, it may need to be restarted in some circumstances. This can be done by clicking:

**Start - Control Panel - Administrative Tools - Services**

Find the RPCTI service in the list and click once on it to highlight it. Click the “**Restart the service**” link in the upper left-hand corner. Close the window and open the PC Attendant application.

# Troubleshooting

## Troubleshooting the CTU/TAPI Connection

---

### Quick Message

- Client Shows No Extensions When Logging In

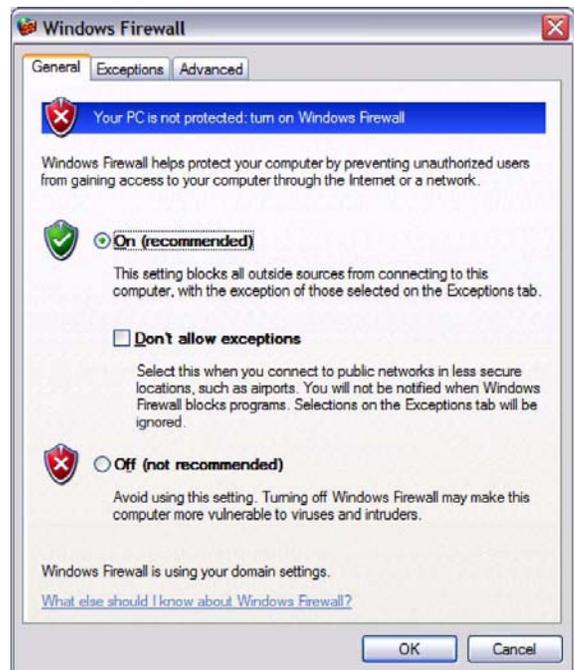
Cause	Solution
<ul style="list-style-type: none"><li>● The firewall could be preventing the connection.</li></ul>	<ul style="list-style-type: none"><li>● Add the Quick Message port to the Windows Firewall Exception list. See steps below.</li></ul>

Changing the Windows Firewall Settings:

1. On the CTI Server PC, click **Start - Settings - Control Panel**, open the **Security Center**.
2. Open **Windows Firewall**.
3. Select the **General** tab.
4. Ensure “**Don't allow exceptions**” is *not* selected:
5. Select the **Exceptions** tab.
6. Make sure the 3 PC Attendant applications are included in the Exceptions list.

*The PC Attendant applications may not have a name displayed - they may be entered as a blank line with the check box selected. You can confirm which program the entry is for by highlighting it and clicking the EDIT button. The path displayed will indicate the application excluded.*

7. Click the **Add Port** button.
8. Enter a name for the port application (such as Aspire PC Attendant), enter the port number used in the setup (Aspire Program 10-20--01, device 1). For example, 8181. This is also the same port number defined with the Quick Message setup.
9. Make sure the **TCP** radio button is selected.
10. Click **OK** to exit the Exceptions list.
11. Click **OK** to exit the Windows Firewall window.
12. If connection still cannot be made, perform these same steps on the client PC.



## SYSTEM SPECIFICATIONS

<b>CTI Server PC Requirements</b>
Pentium III, 800 MHz
512MB RAM
10MB Hard Drive - 75MB for .NET framework (if not already installed) - 5MB for directory and configuration files
CD-ROM
Network Card with Ethernet Port with Static IP Address
SVGA (1024x768) display card with correct drivers
Windows XP and Windows 2000
17" Monitor highly recommended
<ul style="list-style-type: none"> <li>• The Server should be connected to the network via the TCP/IP protocol.</li> <li>• The PC Attendant will require the appropriate Operating System Licenses.</li> <li>• The PC Attendant Console will work with digital keysets for all Aspire systems (Aspire S, Aspire M, Aspire L, or Aspire XL). <i>With the Aspire M/L/XL systems, the TAPI 2 function requires a Feature Upgrade PAL chip or enhanced NTCPU.</i> (The TAPI 2 function is required for the PC Attendant.)</li> <li>• The CTI Server software is compatible with Windows XP and Windows 2000.</li> </ul>

<b>PC Attendant Client PC Requirements</b>
Pentium III 500 MHz
256 MB RAM
10MB Hard Drive - 75MB for .NET framework (if not already installed) - 2MB for call log, based upon call volume and call recording
Network Card with Ethernet Port
USB port, if recording or personal greeting required
Sound card and speakers
Connected to Network via TCP/IP
SVGA (1024x768) display card with correct drivers
Windows 2000 and Windows XP
17" Monitor highly recommended
<ul style="list-style-type: none"> <li>• Note: Please keep in mind that other applications running in the background will affect the above requirements.</li> <li>• The PC Attendant application can be used with Windows 2000 and Windows XP.</li> </ul>

# Specifications

## *System Specifications*

---

### **Environmental Requirements**

Meeting established environmental standards maximizes the life of the system. Refer to the Standard Practices Manual for further information. Be sure that the site is not:

1. In direct sunlight or in hot, cold or humid places.
2. In dusty areas or in areas where sulfuric gases are produced.
3. In places where shocks or vibrations are frequent or strong.
4. In places where water or other fluids comes in contact with the main equipment.
5. In areas near high-frequency machines or electric welders.
6. Near computers, telexes, microwaves, air conditioners, etc.
7. Near radio antennas (including shortwave).

### **Power Requirements**

A dedicated 110 VAC 60 Hz circuit located within seven feet of the PC and telephone system is required. You should install a separate dedicated outlet for each system.

**Numerics**

- 2PGDAD Module . . .93
- 3rd Party CTI Driver Setup . . .35

**A**

- Access the Call Log . . .78
- Accessing the Quick Message Utility . . .96
- Answering Incoming Calls . . .84
- Archiving the Call Log . . .81
- Aspire Feature Matrix . . .5
- Aspire Programming . . .63
- Aspire Programming, TAPI 2 . . .35
- Aspire TAPI TSP, Configuring . . .39
- Aspire TAPI TSP, Installing . . .36
- Aspire TSP . . .35
- Aspire TSP, Uninstalling . . .53
- Attendant Functions . . .3
- Automatic Voice Greetings . . .75

**B**

- BLF Call Control . . .73
- BLF Identification . . .73
- BLF Panel . . .73
- BLF/DSS Keys . . .3
- Busy/Not Answered Call Forwarding . . .76

**C**

- Call Control Panel . . .72
- Call Forwarding . . .76
  - Immediate . . .76
  - Unanswered . . .76
- Call Forwarding when Busy or Not Answered . . .76
- Call Forwarding when Unanswered . . .76
- Call History . . .3
- Call Log . . .78
  - Access . . .78
  - Archiving . . .81
  - Changing the Call Log Layout . . .80
  - Deleting Records . . .79
  - Printing . . .79
  - Recorded Telephone Conversation . . .78
  - Re-dialing Number . . .78
  - Sending a Call Log Record or Recording Using Email . . .79
- Call Recording . . .3, . . .82
  - Recording . . .82
- Caller ID Support . . .3

- Camp On . . .83
  - Using . . .83
- Central Office Calls, Answering . . .84
- Central Office Calls, Placing . . .85
- Changing the Call Log Layout . . .80
- Changing the Visible BLF Groups . . .74
- Clearing a Quick Message . . .99
- Clock . . .14
- Combined Paging . . .93
- Company Directory . . .3
- Composing a Quick Message . . .97
- Conference . . .86
- Configuring the NEC Aspire TAPI TSP . . .39
- Contact List / Directory . . .87
- CTI Server PC Requirements . . .115
- CTU Adapter, Installation and Configuration . . .15
- CTU Driver
  - Installing . . .18
- CTU Driver Setup . . .17
- CTU Driver, Uninstalling . . .34

**D**

- Deleting Records from the Call Log . . .79
- Directory / Contact List . . .87
- Disconnecting a Call . . .84
- Do Not Disturb . . .89
- Driver Setup, 3rd Party CTI Driver . . .35
- Driver Setup, CTU . . .17
- Driver Setup, TAPI 2 . . .35
- DSS/BLF Keys . . .3

**E**

- Email . . .90
  - Send an EMail Using a BLF/DSS Key . . .90
  - Sending a Call Log Record or Recording . . .79
- Environmental Requirements . . .116
- External Paging . . .93

**F**

- Features, Major . . .3
- Features, Product . . .4
- Forwarding the Attendant Console . . .76
- Function Toolbar . . .69

**G**

- Greetings . . .3, . . .75

# Index

---

## H

- Headset . . .65
- History . . .3
- Hold . . .91
  - Placing a Call On Hold . . .91
  - Retrieving a Call on Hold . . .91

## I

- Immediate Call Forwarding . . .76
- Installation . . .13
  - PC Attendant . . .55
  - Telephony Administrator Setup . . .57
  - User Profiles . . .58
- Installation and Configuration - CTU Adapter . . .15
- Installation and Configuration - PC Attendant . . .55
- Installation and Configuration - Quick Message . . .61
- Installation Steps . . .13
- Installation Tips . . .14
- Installing the CTU Driver . . .18
- Installing the NEC Aspire TAPI TSP . . .36
- Internal Paging . . .93
- Introduction . . .1

## L

- Limitations . . .14
- Line Configuration – Basic Setting . . .31
- Line Configuration – Call Setting . . .29
- Line Configuration – Media Setting . . .33
- Line Configuration – Monitor Setting . . .30

## M

- Main Screen . . .67
- Major Features . . .3
- Menu Bar . . .68
- Multiline Functionality . . .3
- Multiple User Profiles . . .14

## N

- Night Mode
  - Setting . . .92
- Night Service . . .92
- Not Answered/Busy Call Forwarding . . .76

## O

- Opening PC Attendant . . .65
- Operating System . . .11

## Operation . . .65

- Access Call Log . . .78
- Answering Incoming Calls . . .84
- Archiving the Call Log . . .81
- Automatic Voice Greetings . . .75
- BLF Panel . . .73
- Call Control Panel . . .72
- Call Forwarding . . .76
- Call Log . . .78
- Call Recording . . .82
- Camp On . . .83
- Central Office Calls, Answering . . .84
- Central Office Calls, Placing . . .85
- Changing the Call Log Layout . . .80
- Conference . . .86
- Deleting Records from the Call Log . . .79
- Directory / Contact List . . .87
- Disconnecting a Call . . .84
- Do Not Disturb . . .89
- E-Mail . . .90
- Function Toolbar . . .69
- Hold . . .91
- Main Screen . . .67
- Menu Bar . . .68
- Night Service . . .92
- Paging . . .93
- Park . . .95
- Parking/Unparking a Call . . .95
- Playing a Personal Greeting . . .75
- Printing the Call Log . . .79
- Quick Message Utility . . .96
- Recorded Telephone Conversation . . .78
- Re-dialing Number from Call Log . . .78
- Resizing the Main Window . . .67
- Sending a Call Log Record or Recording Using E-Mail . . .79
- Status Bar . . .74
- Title Bar . . .68
- Transfer . . .100
- Voice Mail . . .102
- Voice Over . . .103

## Operation Conditions . . .65

## P

- Paging . . .93
  - Accessing the Paging System . . .94
  - Displaying Internal Page Zones 1-64 . . .93
- Paging, Internal
  - Combined Paging . . .93
- Park . . .95
- Parking/Unparking a Call . . .95

PC Attendant  
     Opening . . .65  
 PC Attendant Client PC Requirements . . .115  
 PC Attendant Console  
     Uninstalling . . .59  
 PC Attendant Installation . . .55  
 PC Attendant Setup . . .55  
 PC Requirements . . .11  
     Client PC . . .115  
     CTI Server . . .115  
 PC Specifications, CTU . . .17  
 Personal Greeting . . .3, . . .14  
     Playing . . .75  
 PGDAD Module . . .93  
 Placing a Call On Hold . . .91  
 Placing the Attendant Console in Do Not Disturb . . .89  
 Playing a Personal Greeting . . .75  
 Power Requirements . . .116  
 Printing the Call Log . . .79  
 Product Features . . .4  
 Programming . . .63

**Q**

Quick Message Client  
     Installation and Configuration . . .61  
 Quick Message Client Setup . . .61  
 Quick Message Utility . . .96  
     Accessing . . .96  
     Clearing . . .99  
     Composing . . .97  
     Receiving a Response . . .98  
 Quick Messaging . . .3

**R**

Receiving a Response to a Quick Message . . .98  
 Recorded Telephone Conversation . . .78  
 Recording . . .3  
 Recording the Active Call . . .82  
 Re-dialing a Number from the Call Log . . .78  
 Requirements  
     Environmental . . .116  
     Power . . .116  
 Requirements for PC Attendant . . .11  
 Resizing the Main Window . . .67  
 Retrieving a Call on Hold . . .91

**S**

Sending a Call Log Record or Recording Using EMail . . .79  
 Setting the Telephone System in Night Mode . . .92  
 Setting Up a Conference Call . . .86  
 Setup a Personal Greeting . . .75  
 Specifications . . .115  
 Status Bar . . .74  
 System Limitations . . .14  
 System Specifications . . .115

**T**

TAPI 2 Driver Setup . . .35  
 TAPI 2, Uninstalling . . .53  
 TAPI, Testing . . .42  
 Telephone System Requirements . . .11  
 Telephony Administrator Setup . . .57  
 Telephony Service Provider (TSP) . . .25  
 Testing NEC Aspire TAPI . . .42  
 Tips . . .14  
 Title Bar . . .68  
 Transfer . . .100  
 Transferring a Call . . .100  
 Troubleshooting . . .105  
     CTU . . .106  
     CTU/TAPI Operation . . .105  
     General . . .105  
     Quick Message . . .114  
     TAPI 2.x/CTI . . .109  
 Trunk BLF's . . .74  
 TSP Basic Setup – Power Management . . .28  
 TSP Basic Setup – Telephony System . . .27  
 TSP Setup . . .26  
 TSP Setup Dialog Box . . .25

**U**

Unanswered Call Forwarding . . .76  
 Uninstalling the Aspire TSP . . .53  
 Uninstalling the CTU Driver . . .34  
 Uninstalling the PC Attendant Console . . .59  
 Unpark . . .95  
 User Profiles . . .58, . . .66  
     Add a User Profile . . .58  
     Delete a User Profile . . .58  
     Edit an Existing User Profile . . .58  
 Using Camp On . . .83  
 Using Voice Over . . .103

# ***Index***

---

## **V**

- Voice Greetings . . .75
- Voice Mail . . .102
  - Leave a Message . . .102
- Voice Over . . .103
  - Using . . .103
- Voice Recording . . .14

## **Z**

- Zone Paging, Combined . . .93

# NEC

NEC Unified Solutions, Inc.  
4 Forest Parkway, Shelton, CT 06484  
Tel: 800-365-1928 Fax: 203-926-5458  
[www.necunifiedsolutions.com](http://www.necunifiedsolutions.com)

## Other Important Telephone Numbers

Sales: .....203-926-5450  
Customer Service: .....203-926-5444  
Customer Service FAX: .....203-926-5454  
Technical Service: .....203-925-8801  
Discontinued Product Service: .....900-990-2541  
Technical Training: .....203-926-5430  
Emergency Technical Service (After Hours) .....203-929-7920  
(Excludes discontinued products)

# NEC

NEC Unified Solutions, Inc.  
4 Forest Parkway, Shelton, CT 06484  
TEL: 800-365-1928 FAX: 203-926-5458  
[www.necunifiedsolutions.com](http://www.necunifiedsolutions.com)



February 16, 2006  
Printed in U.S.A.