



IP Desktop Softphone for Alcatel-Lucent OmniPCX Enterprise and OmniPCX Office RCE Communication Servers

Release - 11.x

Installation Guide

Table of Contents

1.	LEGAL NOTICE	5
2.	DOCUMENT HISTORY	6
3.	TERMINOLOGY	6
4.	SCOPE.....	7
5.	OVERVIEW	7
6.	INTRODUCTION	7
6.1	Purpose of this guide	7
6.2	Application scope	7
6.3	OXO compatibility.....	7
6.4	Customer Support.....	7
7.	WINDOWS ENVIRONMENT	8
7.1	Requirements for installation	8
7.1.1	Hardware.....	8
7.1.2	Operating System.....	8
7.1.3	Networking	8
7.1.4	VPN.....	12
7.1.5	.NET Framework and Windows Installer	13
7.1.6	Pimphony.....	13
7.1.7	UDP used ports (OXE context).....	14
7.1.8	UDP used ports (OXO context)	14
7.1.9	USB Headset	14
7.2	Installation Procedures	17
7.2.1	OXE or OXO Pre Requisites.....	17
7.2.2	Installation Modes	17
7.2.3	Installation Options	18
7.2.4	Installation using IPDesktopSoftphone_11.x.exe.....	19
7.3	Launching the Application	47
7.3.1	Registration in OXE context	47
7.3.2	Registration in OXO context	50
7.4	Configuration of Application.....	51
7.4.1	Configuration in OXE context.....	51
7.4.2	Configuration in OXO context	54
7.4.3	Network configuration.....	57
7.4.4	Audio Wizard	58
7.4.5	Volume Level	63
7.5	Uninstalling.....	65

7.5.1	Pre-uninstall Procedure: Close the Application	65
7.5.2	Uninstall File	65
7.5.3	Uninstalling Using Windows Shortcut	65
7.5.4	Uninstalling Using: .msi File from command prompt	71
7.5.5	Uninstalling log files	72
7.6	Trace Activation	73
8.	MAC OS ENVIRONMENT	74
8.1	Requirements for Installation	74
8.1.1	Hardware	74
8.1.2	Operating system	74
8.1.3	Networking	74
8.1.4	VPN	74
8.1.5	UDP used ports (OXE context)	74
8.1.6	UDP used ports (OXO context)	75
8.2	Installation Procedures	76
8.2.1	OXE or OXO Pre Requisites	76
8.2.2	Installation using: IPdesktopSoftphone_11_x.pkg	76
8.3	Launching the Application	84
8.3.1	Registration in OXE context	84
8.3.2	Registration in OXO context	84
8.4	Configuration of Application in OXE context	84
8.4.1	General	89
8.4.2	Sound	90
8.4.3	Network	91
8.5	Configuration of Application in OXO context	95
8.5.1	General	99
8.5.2	Sound	99
8.5.3	Network	100
8.6	Uninstalling	104
9.	IOS ENVIRONMENT	105
9.1	Requirements for installation	105
9.1.1	Hardware and Operating system supported	105
9.1.2	VPN	105
9.2	Installation Procedure	105
9.2.1	OXE Pre Requisites	105
9.2.2	Installation using “App Store“	105
10.	ANDROID ENVIRONMENT	106
10.1	Requirements for installation	106
10.1.1	Hardware and Operating system supported	106
10.1.2	VPN	106
10.2	Installation Procedure	106
10.2.1	OXE Pre Requisites	106
10.2.2	Installation using “Play Store“	106

IP Desktop Softphone for Alcatel-Lucent OmniPCX Enterprise and OmniPCX Office RCE Communication Servers

Installation Guide - ALESVC52662 Ed 2.0

ALE International proprietary and confidential

Page 3 of 117

11. OXE CONFIGURATION	107
11.1 User configuration	107
11.2 User AOM configuration.....	108
11.3 Licensing	108
12. OXO CONFIGURATION.....	109
12.1 User configuration	109
12.2 User Add-On configuration.....	111
12.3 Licensing	111
13. TROUBLE SHOOTING	112
14. APPENDIXES	113
14.1 IP desktop Softphone in different environments	113
14.2 Qos Management	116
14.2.1 OXE Context	116
14.2.2 OXO Context.....	117

1. Legal notice

Alcatel-Lucent and the Alcatel-Lucent Enterprise logo are trademarks of Alcatel-Lucent. To view other trademarks used by affiliated companies of ALE Holding, visit: enterprise.alcatel-lucent.com/trademarks. All other trademarks are the property of their respective owners. The information presented is subject to change without notice. Neither ALE Holding nor any of its affiliates assumes any responsibility for inaccuracies contained herein.

2. Document History

Edition	Date	Changes / Comments / Details
1.0	2014-2-11	Creation - Merge all installation guides
2.0	2015-5-19	OXO Compliance for Windows and Mac OS environment

3. Terminology

Acronym	Signification
OXE	OmniPCX Enterprise
OXO	OmniPCX Office
IPDSP	IP Desktop Softphone
TFTP	Trivial File Transfer Protocol
UDP	User Datagram Protocol
RTP	Real Time Protocol
RTCP	Real Time Control Protocol
UA	Universal Alcatel
GD	Gateway Driver
GA	Gateway Appliance
VPN	Virtual Private Networking

4. Scope

This guide covers the installation and administration of the IP Desktop Softphone for Windows, MAC OS, iOS and Android.

5. Overview

Thanks to the IP Desktop Softphone application, the user benefits from a fully-integrated telephony solution on his Windows computer desktop, MAC OS computer desktop, iOS or Android platform, this completely replaces his physical phone in the OmniPCX Communication Server network. This application makes it transparent for remote workers to phone or to be called as long as they are connected to their company network using a VPN over the Internet.

6. Introduction

6.1 Purpose of this guide

This guide explains:

- The required hardware and software environment for the installation of the application
- The installation of the application
- The application basic configuration

This guide is targeted at the System Administrator, in charge of the company network configuration.

6.2 Application scope

This guide applies to the installation and administration of the IP Desktop Softphone (Windows, MAC OS, iOS and Android) Release 11.x only.

6.3 OXO compatibility

To be noticed that only Windows and Mac OS version from version 11.0.20 are compatible with OXO.

6.4 Customer Support

Please contact your system administrator or your Alcatel-Lucent Business Partner for support.

7. Windows Environment

This part of the document describes the Windows installations procedures.

7.1 Requirements for installation

Below given are minimum requirements, without which, this application will not function properly. So, before installing this application, please ensure these minimum requirements are met.

7.1.1 Hardware

Processor	2 GHz Minimum
RAM	2 GB for Windows
Disk Space	100 MB free space
Sound card	Integrated sound card or USB headset

Note:
The above table lists the minimum hardware requirement. With additional hardware, you can establish many types of connections, some of them are illustrated in paragraph IP desktop Softphone in different environments.

7.1.2 Operating System

Operating System	Editions
Windows 7	Windows 7 Pro SP1 - 32 bit
Windows 7	Windows 7 Pro SP1 - 64 bit (32 bit process running under 64 bit environment)
Windows 8	Windows 8 Enterprise- 32 bit
Windows 8	Windows 8 Enterprise- 64 bit (32 bit process running under 64 bit environment)
Windows 8.1	Windows 8.1 Pro SP1 - 32 bit
Windows 8.1	Windows 8.1 Pro SP1 - 64 bit (32 bit process running under 64 bit environment)

7.1.3 Networking

Network Interface card	Ethernet card 10/100 or Gigabit Ethernet or Wireless LAN Card
------------------------	---

Note: IP Desktop Softphone *does not support 802.1Q. It supports only TOS*

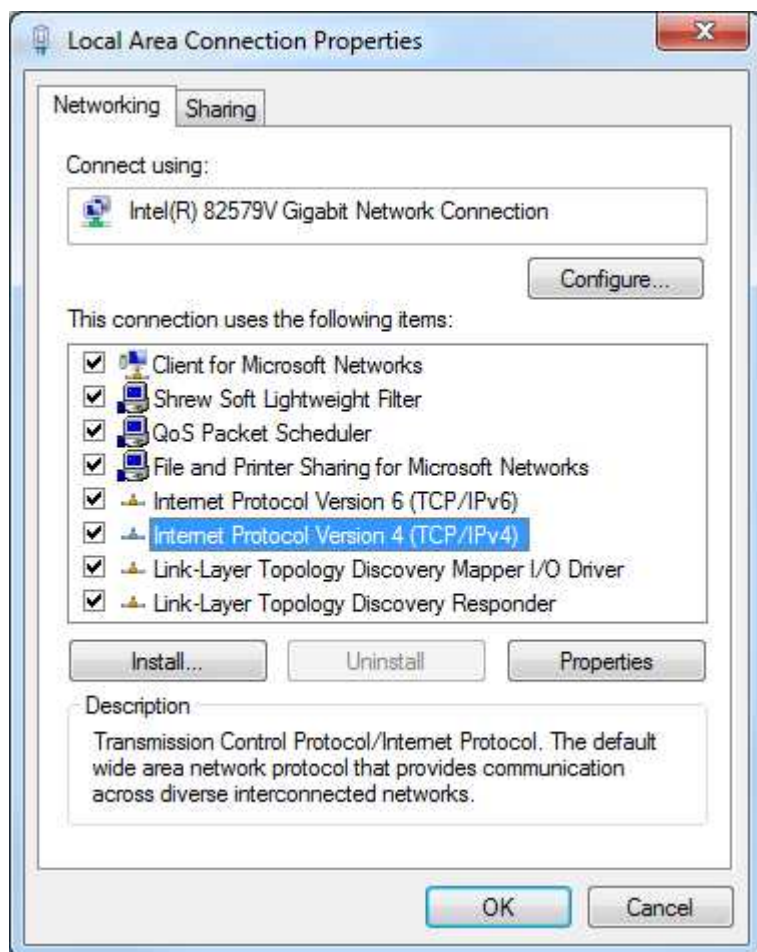
Case of two network interface cards:

If there are multiple physical adapters presents in the network, **Windows** will always look at and compare the indices of gateway metric among the physical adapters and then pick the one with the lowest index to use. In order to override the default settings, you need to adjust the index of gateway metric for each physical adapter. The adapter assigned which are available in your network.

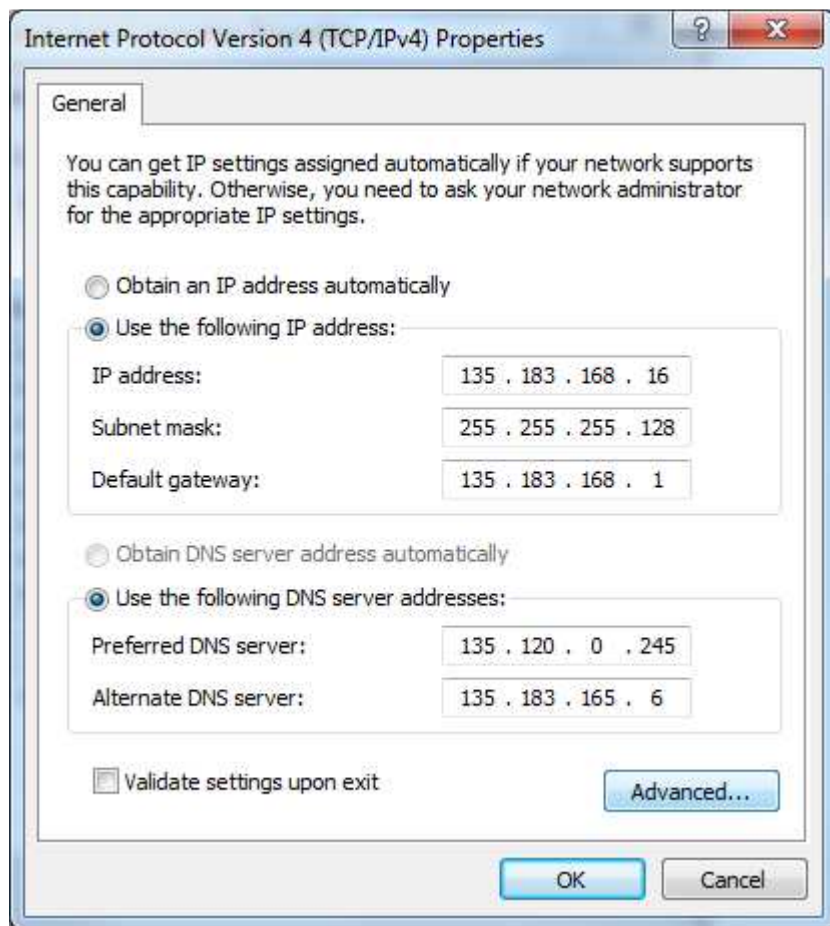
You need to assign the lower gateway metric index to your LAN card so that the lowest index will always take precedence and will be used by Windows automatically.

For instance, if you want to use the wired connection when both wired and wireless are available you can ensure that your favorite adapter will be used by Windows whenever it is available. An easy way to adjust gateway metric index is:

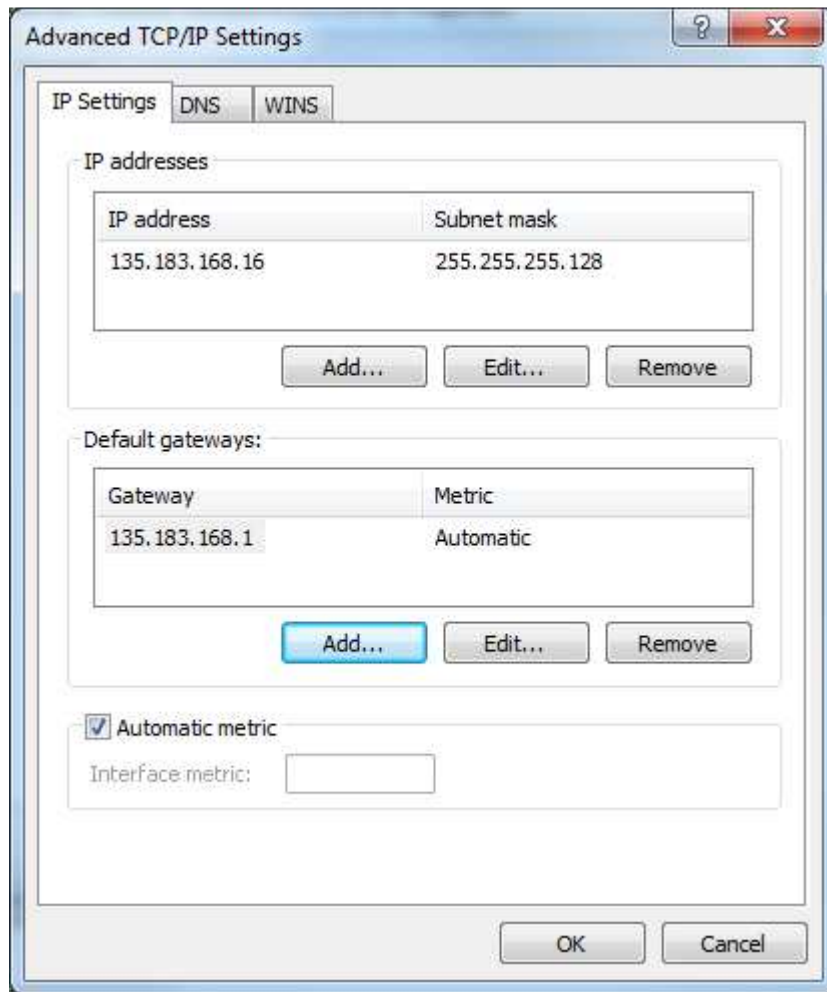
- Open Network Connection from Network and Sharing Center. Or type ncpa.cpl in the search box at your Windows Explorer or Start menu.
- Select your favorite connection, e.g., Local Area Connection and then right click to select Properties.
- In the Networking tab, select the Internet protocol version, e.g., Internet Protocol Version 4 (TCP/IPv4).
- And then click Properties button.



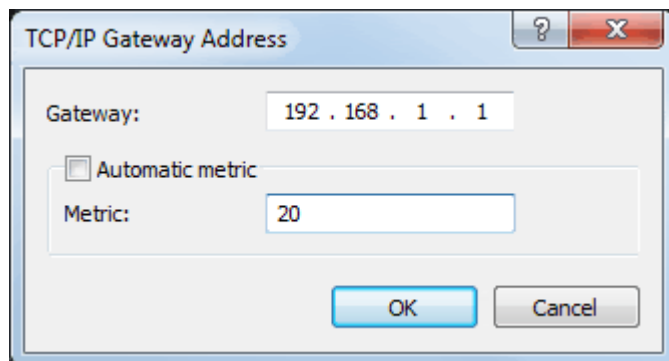
- In protocol Properties dialog box, click Advanced....



- Inside the Advanced TCP/IP Settings, at the IP Settings tab, click Add... of the Default gateways.



- Uncheck the Automatic metric checkbox, and then enter your router IP (e.g. 192.168.1.1) and assign your metric index. Click Add to insert the entry.



- Click all OK's to exit.

The changes will immediately take effect. If you check your route table after changes (using `route print` command), you'll find a new entry in the **Persistent Routes**.

=====

Persistent Routes:

Network Address	Netmask	Gateway Address	Metric
0.0.0.0	0.0.0.0	192.168.1.1	20

Regardless of the IP address obtained automatically or statically, changing gateway metric can be done via either ***route change*** command or network connection GUI (***ncpa.cpl***).

When you use the command ***route print*** to verify your settings, the metric indices usually will double the number you enter.

To show the configuration you can use the command

netsh int ip

This command shows configuration and will display the exact settings you will find in the network connection properties.

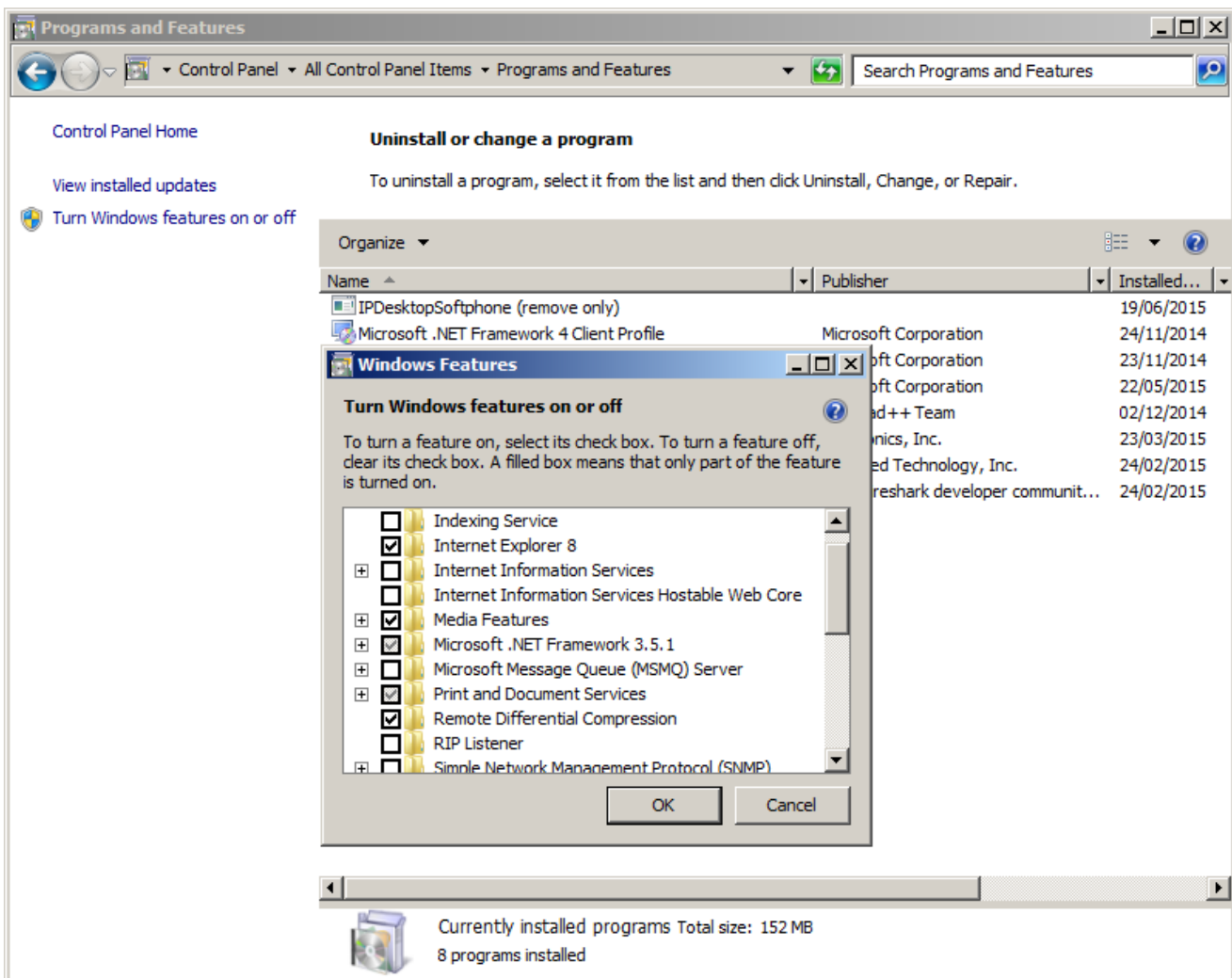
7.1.4 VPN

The IP Desktop Softphone requires a direct IP connection to the Communication Server, therefore if used from outside the company LAN, a VPN connection may need to be setup.

7.1.5 .NET Framework and Windows Installer

The IP Desktop Softphone requires Microsoft .NET Framework v3.5 and Windows installer 3.1.

For Windows 7 and earlier, .NET Framework 3.5 with SP1 is shipped with it as one of OS component. This means, you have the .NET Framework 2.0 SP2, 3.0 SP2 and 3.5 SP1 plus a few post 3.5 SP1 bug fixes on Windows 7. They are OS components. .NET 3.0 SP2 and 3.5 SP1 can be added or removed via the Programs and Features control panel.



Thus, we don't need to manually install them.

For more information, please check:

<http://blogs.msdn.com/astebner/archive/2007/03/14/mailbag-what-version-of-the-net-framework-is-included-in-what-version-of-the-os.aspx>.

7.1.6 Pimphony

When the IP Desktop Softphone is used on a PC, it is forbidden to install and use a PIMphony IP Multimedia. To install an IP Desktop Softphone on a PC, PIMphony IP Multimedia, if present on this PC, must be uninstalled first.

7.1.7 UDP used ports (OXE context)

The table below lists the ports that this application uses:

Purpose	Protocol	Device 1	Device 1 port	Device 2	Device 2 port
Phone configuration (file download for configuration information)	TFTP	Softphone	1024 to 4999/udp (managed by Windows)	TFTP Server	69/udp 10000 to 10499/udp
Outgoing flow	RTP	Softphone	32514/udp	GD, GA, INT_IP A+B	Dyn_Voice (*)/udp
Outgoing flow	RTCP	Softphone	32515/udp	GD, GA, INT_IP A+B	Dyn_Voice (*)/udp
Incoming flow	RTP	GD, GA, INT_IP A+B	Dyn_Voice (*)/udp	Softphone	32514(BP**+2)/udp
Incoming flow	RTCP	GD, GA, INT_IP A+B	Dyn_Voice (*)/udp	Softphone	32515(BP**+9)/udp
Signaling flow	UA	Softphone	32512(BP**)/udp	GD, GA, INT_IP A+B	32640(BP**+128)/udp

Note:

- (*) This port range is only used to transport voice using RTP protocol and fax using T.98 protocol.
- The lower bound range is 32000 for OXE <= R5.0Lx and 32512 for OXE >= R5.1.
- The upper bound range is 32255 for OXE <= R5.0Lx and 32767 for OXE >= R5.1.
- (**) The Basic Port is retrieved from the OmniPCX at TFTP initialization step.

7.1.8 UDP used ports (OXO context)

Purpose	Protocol	Device 1	Device 1 port	Device 2	Device 2 port
Phone configuration (file download for configuration information)	TFTP	Softphone	1024 to 4999/udp (managed by Windows)	TFTP Server	69/udp 10000 to 10499/udp
Outgoing flow	RTP	Softphone	32000:32256/udp	GD, GA, INT_IP A+B	32000:32256/udp
Signaling flow	UA	Softphone	5000/udp	GD, GA, INT_IP A+B	7775/udp

7.1.9 USB Headset

USB (preferably USB2) Headset or a USB hands-free is an optional enhancement. By default, the application uses the default PC media devices (PC default microphone and PC speakers). When a USB headset is connected to the user PC with a sound card, IP Desktop Softphone can use it instead of the default media devices. The headsets can be used for picking up an incoming call, and then hang up once the conversation is over.

When using the headset, the General tab of the Options menu allows the user to select a sound card for ringing and another one for voice. A USB headset connection can make the best out of this facility. You can set the options to send the ringing to the default media device, and voice to USB headset.

You can only use the headsets that are compatible with IP Desktop Softphone. The following headsets are compatible with IP Desktop Softphone:

Note: Only the off hook/on hook feature is supported with the USB2 headset buttons

Brand	Model
AUDIBIT	All combines "Vid_06e6"
GN Netcom-Jabra	LINK 280 USB adapter LINK 350 USB Bluetooth adapter BIZ 2400 USB GN 2000 USB BIZ 1900 USB BIZ 620 USB SPEAK 410 UC VOICE 150 UC VOICE 250 UC VOICE 550 PRO 9470 PRO 9465 DUO PRO 9460, 9460 DUO GO 6430 GO 6470 GO 660 GN 9350e
Eutectics	IPP200 "Vid_0e7d&Pid_0001"
Plantronics	DA45 USB adapter Savi D100 DECT USB adapter BUA-100/BUA-200 USB Bluetooth adapter Blackwire C210 Blackwire C420 CS50/60 USB Voyager 510 USB Voyager Pro B230 Savi Office WO440 Savi Office WO740 Savi Office WO300/A Savi Office WO350/A
Tiptel	Tiptel 115 : "Vid_6993&Pid_b700" Tiptel 117 : "Vid_6993&Pid_b001" Tiptel 217 pid: "Vid_6993&Pid_b001" Tiptel 218 without webcam pid: "Vid_6993&Pid_b001"

Notes:

- *Jabra headset GN 9330 is removed from the list and is no more supported due to malfunctioning in case of transfer calls.*
- It is recommended to plug the headset before launching the IP Desktop Softphone and to launch manually one time the Audio Wizard after the installation. After that, the connection and disconnection of the headset is automatically detected. When a headset is connected, the audio is sent in this device.

7.2 Installation Procedures

7.2.1 OXE or OXO Pre Requisites

After installation of software you will need to configure the application in order to associate a phone from OXE or OXO to the application. To do this you need to perform the OXE or OXO configuration as described on section OXE Configuration or on section OXO Configuration according to the context.

7.2.2 Installation Modes

To be noticed that in OXO context you need to use the default mode values during installation.

You can install this application on 2 different modes which are:

- Business
- Pro ACD. (This mode is not supported on OXO context don't select it)

Before starting installation process, Administrator will have to decide, on which mode you intend to install the Softphone. This will enable you to select the mode when you are presented with the choices during installation process. Once installed, you cannot switch modes. To change the existing mode, you will have to reinstall the application.

Following are the licensing and other differences between using the Softphone as Business or as Pro ACD. You can decide on the mode, based on these.

Business	Pro ACD
They can have their own IP Desktop Softphone	They can use the same IP Desktop Softphone without buying additional licenses
Choosing Business mode will link the Softphone ID to the user (One ID per user account enabled)	Choosing Pro-ACD mode will link the Softphone ID to the PC (One ID only per PC)
ID & Config data stored in USER Account	ID & Config data stored in ALL USERS
One phone number per user = One License per user	One phone number per pc = One License per pc

Limitations:

1. It will not be possible to run 2 instances of the IP Desktop Softphone on the same PC at the same time.
2. If you are using Softphone in Pro-acd mode, business users will not be able to have their own phone
3. It is not possible to switch from Pro-acd to business mode (and vice versa) dynamically: it is necessary to restart installation

7.2.3 Installation Options

To install this application, you can use either of the following 2 files:

1. IpDesktopSoftPhoneInst_v11.0.1.0.exe OR
2. IPdesktopSoftPhone_v11.0.1.0.msi

7.2.3.1 *IpDesktopSoftPhoneInst_v11.0.1.0.exe*

If you use this file, the installation is complete, and it does not give you any choices for custom installation. During the process of installation, you are required to input server and other specific details. Thanks to these inputs, you can start using the application immediately after installation.

7.2.3.2 *IPdesktopSoftPhone_v11.0.1.0.msi*

If you use this file for installation, then you get the option for selecting either:

- Typical
- Custom or
- Complete

Installation of the application, you can select the modules for installation, in different ways. Besides, during the process of installation, it provides a view of different partitions in your hard disk. There, it provides details of their sizes and space availability in each, for installation.

But by the time you complete installation, you would not have fed in server details and your choice of Business/ProACD. You will have to configure them manually, post installation. To overcome this, you can invoke this installation file from Command Prompt, where you can provide Server address, language and ProACD/Business option as parameters. This way, when installation completes, all the required information would have been fed in. This enables you to start using the application, immediately.

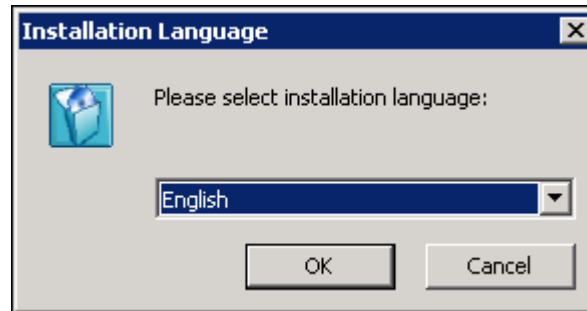
In subsequent pages, you can find details of installing the application, using all these methods.

7.2.4 Installation using IPDesktopSoftphone_11.x.exe

The following steps detail the installation process, using the file: IpDesktopSoftPhoneInst_v11.x.exe

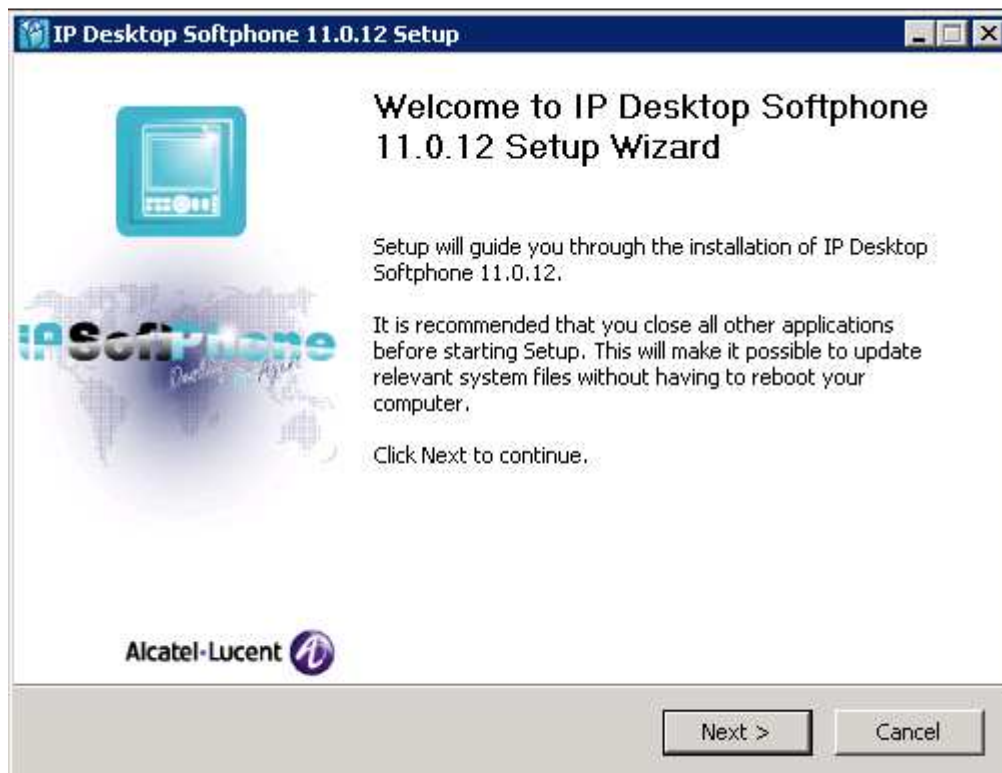
1. Ensure that hardware, software and networking requirements are in place, as prescribed.
2. Close all running applications
3. Run the file: IpDesktopSoftPhoneInst_v11.0.1.0.exe
4. This displays the following screen. In it, select the language in which you intend to install this application

Select Language

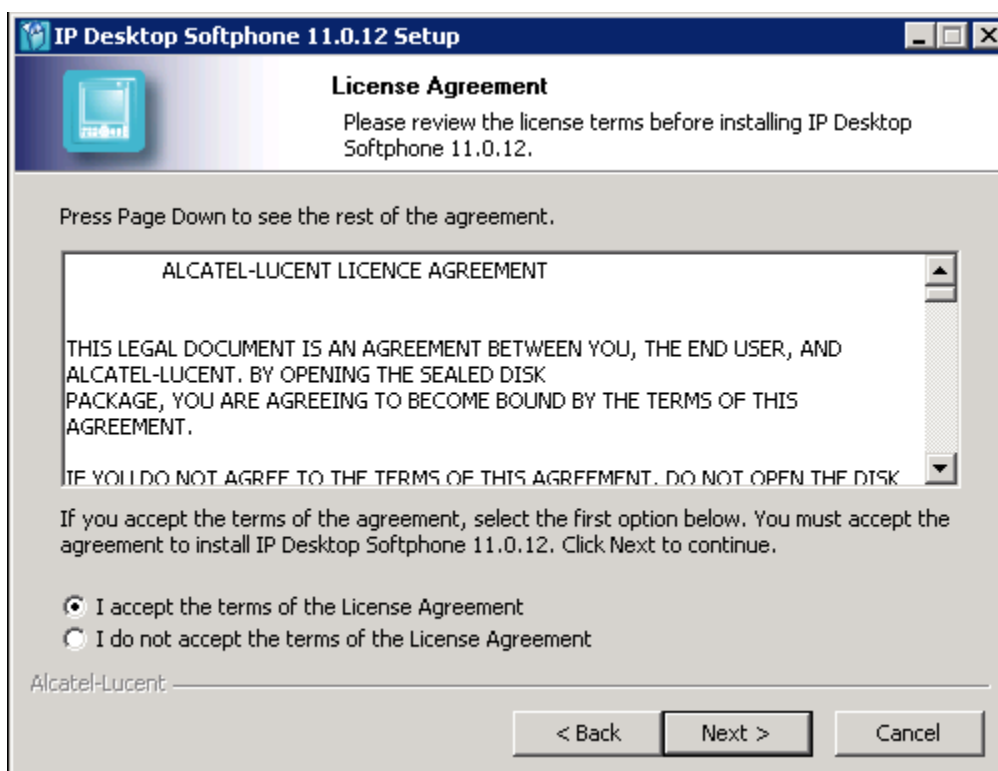


5. Click OK.

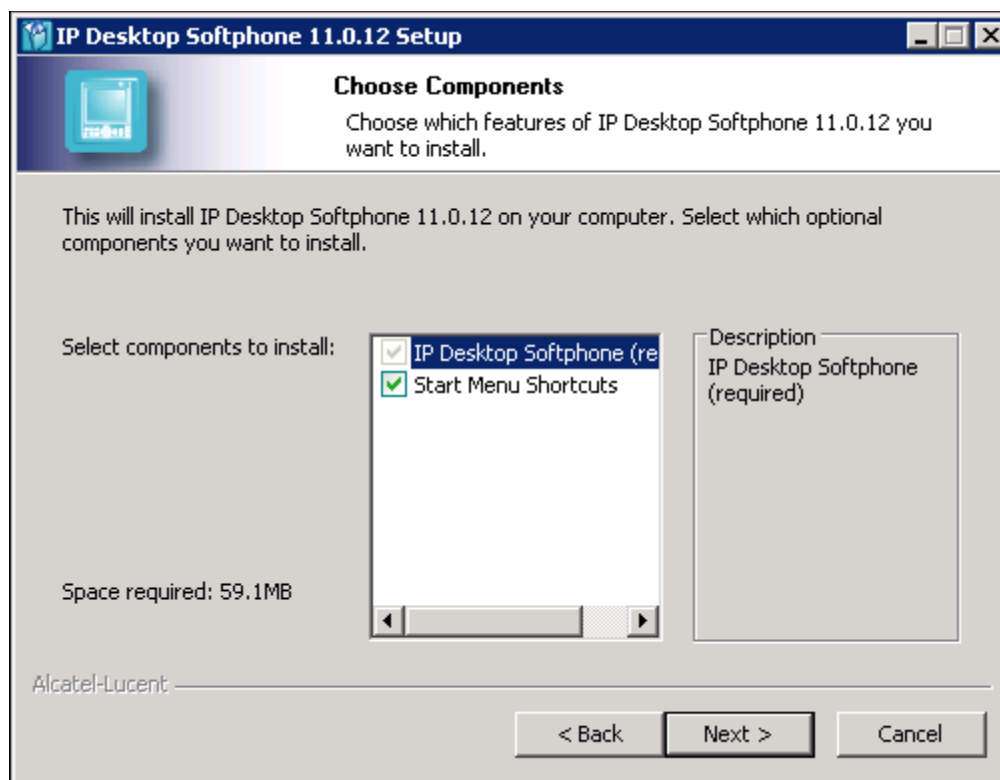
Commencement of Installation



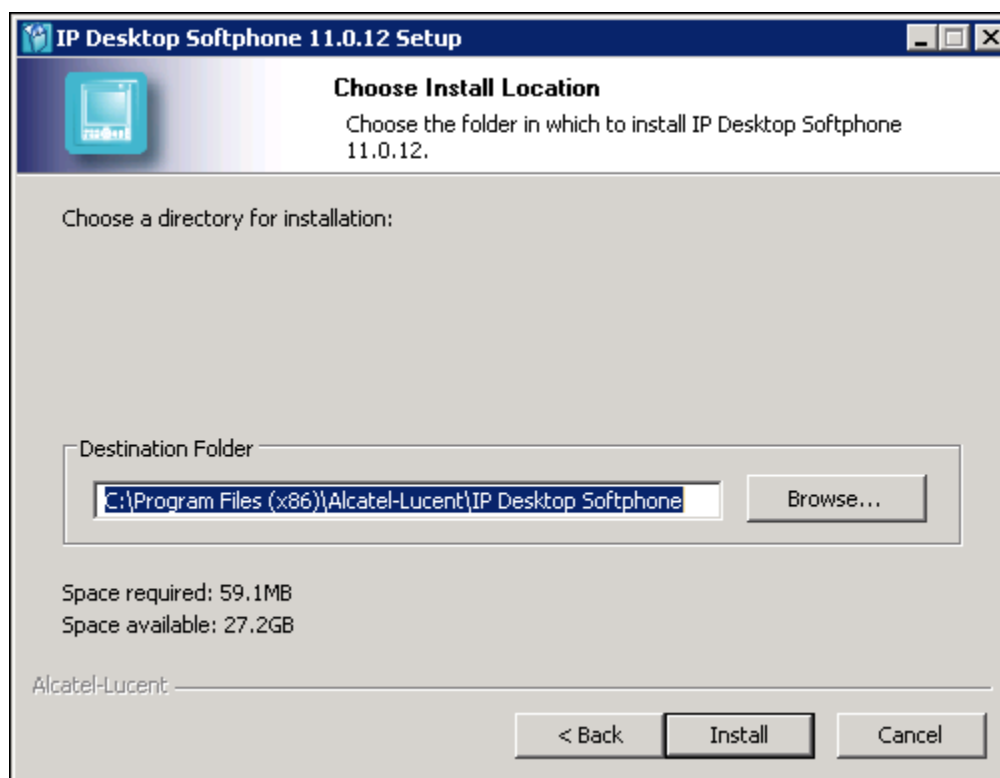
- This screen is for your information only.
6. Click Next.



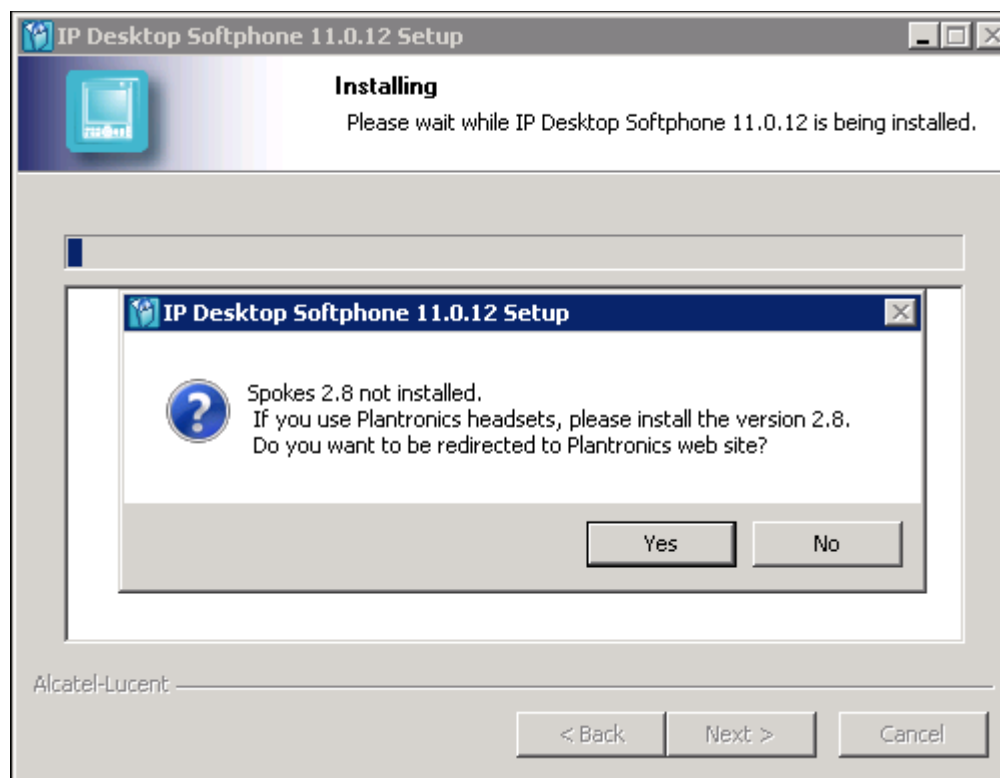
- This page displays the Alcatel-Lucent License Agreement.
 - Read through the agreement, and if it is acceptable to you, click on the 1st radio button against: I accept the terms in the License Agreement
 - If you click on the other radio button, then the installation process will abort, when you click “Next”. This cancellation happens after getting your confirmation.
7. Click Next.



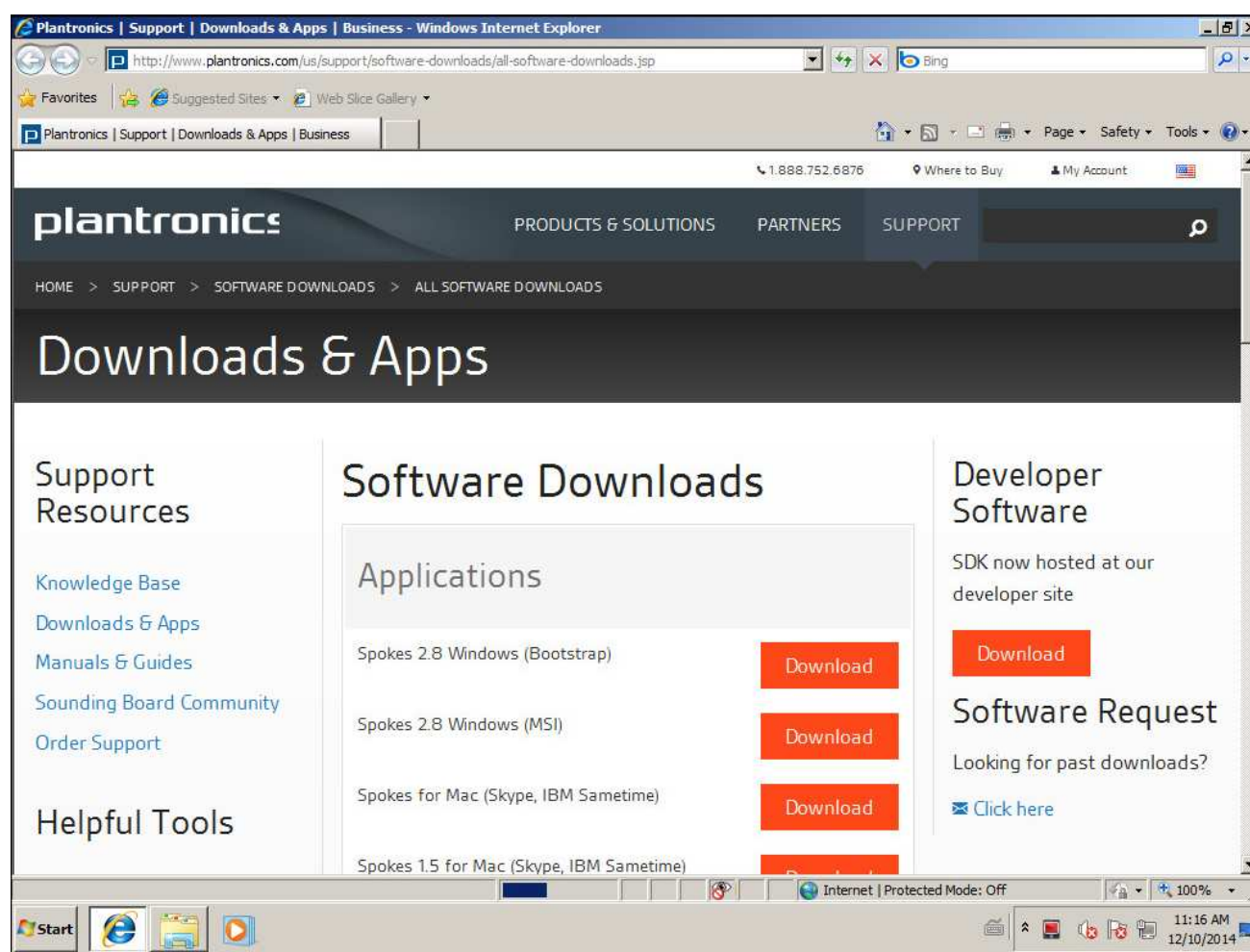
- This screen lets you to select components to install.
- IP Desktop Softphone is a mandatory installation and so you do not have choice there - you cannot undo the selection.
- 8. By default, all components are selected. If any of those components are already installed in your system, you can undo their selection.
- 9. Click Next.



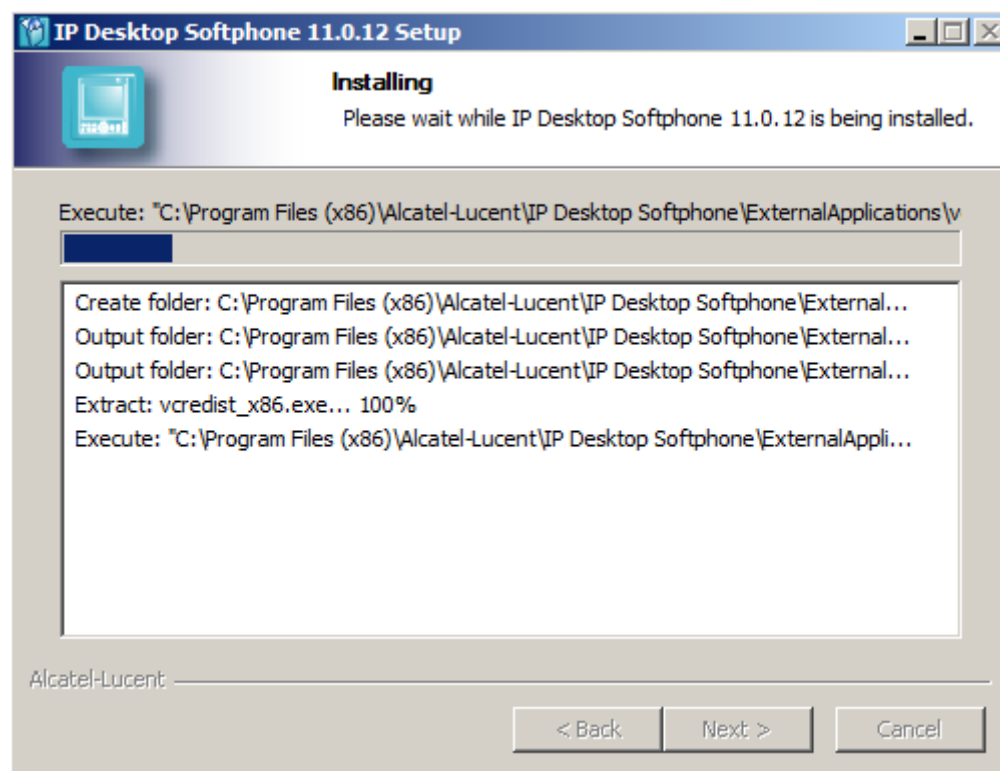
10. This screen displays the folder where it will install the files by default. If needed, you can change this folder, by using the Browse button nearby.
11. At bottom left, you can see the status of space availability for installation. If the space available is short of required space, then delete files to make room for installation.
12. Click Install



13. If Spokes 2.8 driver is not installed, its installation is proposed. If you click on Yes, you will be redirected to Plantronics download web site, as shown below.

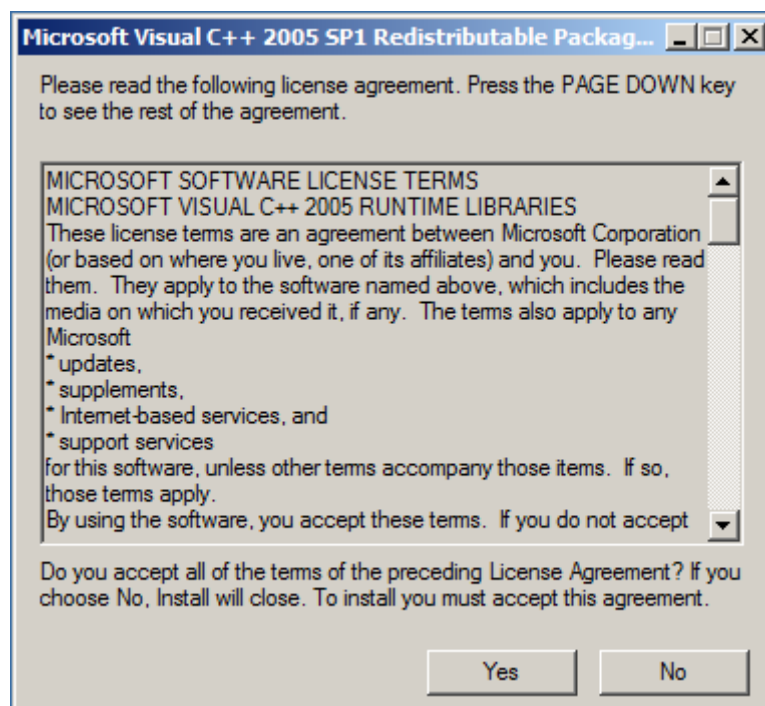


14. On this site, you can download Spokes 2.8 Windows installer, and execute it to install Spokes 2.8 driver on your host.



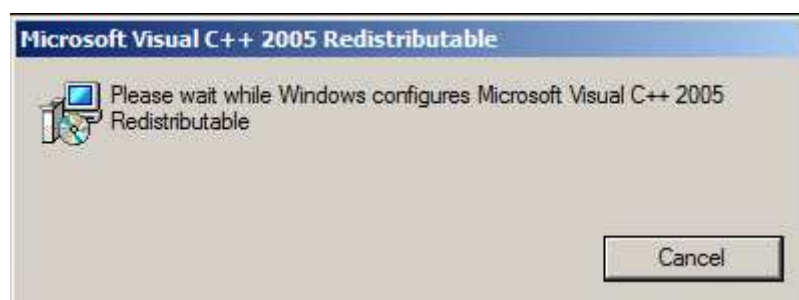
- Now the installation is in progress. This screen shows the progress bar at the top. It displays the files actually installed, in the box below. This is for your information only.
15. This triggers installation of Microsoft Visual C++ 2005 SP1. Its opening screen is given below. If Visual C++ 2005 SP1 already exists in your system, click “No”. This aborts this installation and hence you will not see the 2 screens shown below.

16. This triggers installation of: Microsoft Visual C++ 2005 SP1. Its opening screen is given below. If Visual C++ 2005 SP1 already exists in your system, click “No”. This aborts this installation and hence you will not see the 2 screens shown below.

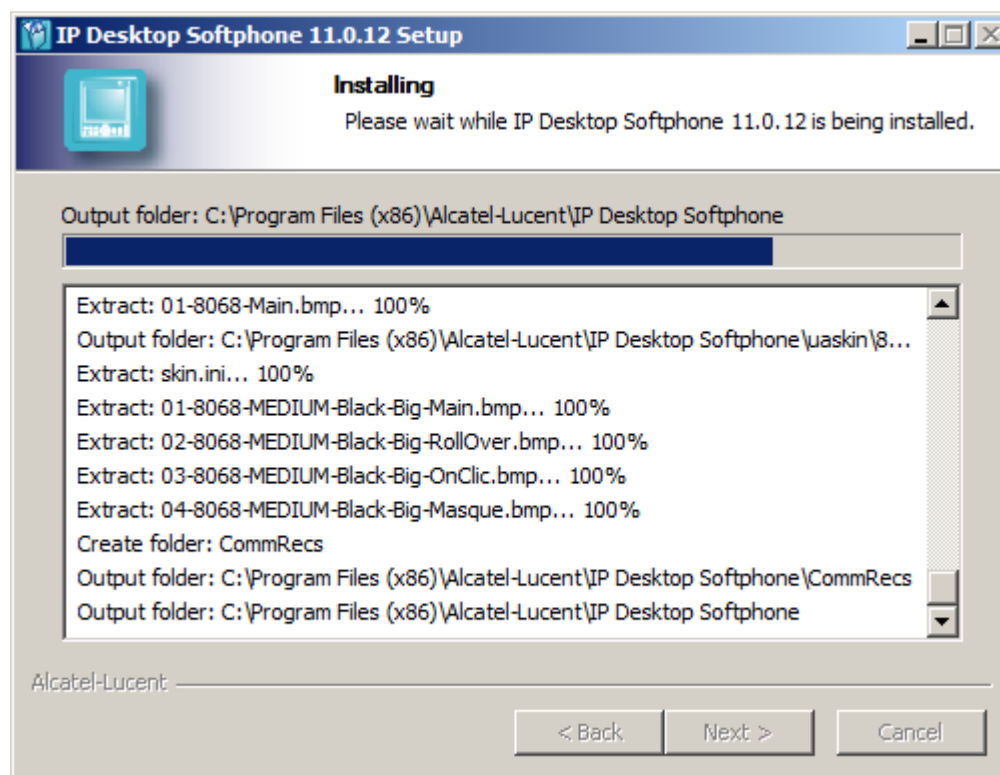


17. This is License agreement screen. Click “Yes” to install.

Visual C++ 2005 SP1 Redistributable Installation in progress

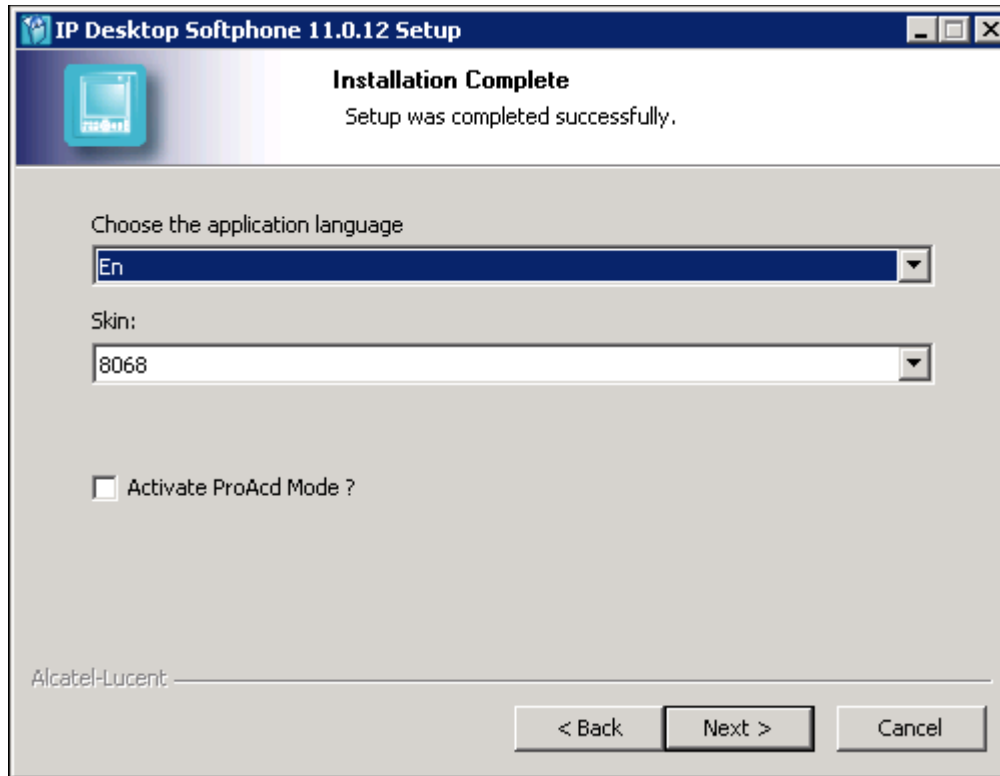


- The above screen shows up automatically. This shows the progress of installing Visual C++ 2005 SP1.



- Once Visual C++ 2005 SP1 installed, the IPDesktopSoftphone setup process will continue as in the above screen.

- Installation of software is complete. In the above screen you need to give connectivity information.
- 18. In the 1st entry box, give the IP address of your Call Server (ROLE MAIN Address). This is mandatory
- 19. In the 2nd entry box, enter the IP address of the backup server for the main Call Server. You can give it if you have such a backup server. If you have Call server Duplication configured, then here you have to enter the Role MAIN address of the Standby Call Server. This is optional
- At this point, the application will not connect to the Server. So, it will not give any error messages for wrong entries. So, take care to make the correct entries.
- 20. At your option, you can tick the check box against Activate FlexOffice. Only when you tick this check box, the other check boxes at right will have effect.
- 21. In the entry boxes at right, you can see the entries that display by default. You can change them as needed, and fill the empty boxes with entries applicable to your environment.
- 22. Against the entry: Web Service URL, replace the localhost with the actual name of your server, and the number 8080 with the actual number of the port.
- 23. Once done, click Next.



24. First entry box is for selecting the language for this application. Here, the languages are listed in abbreviated form. Those abbreviations and their expansions are tabulated below:

Abbreviation	Expansion
En	English
Fr	French
Ge	German
It	Italian
Es	Spanish
Pt	Portuguese
No	Norwegian
Ko	Korean
NL	Dutch
Ch	Chinese
Ru	Russian
Fi	Finnish

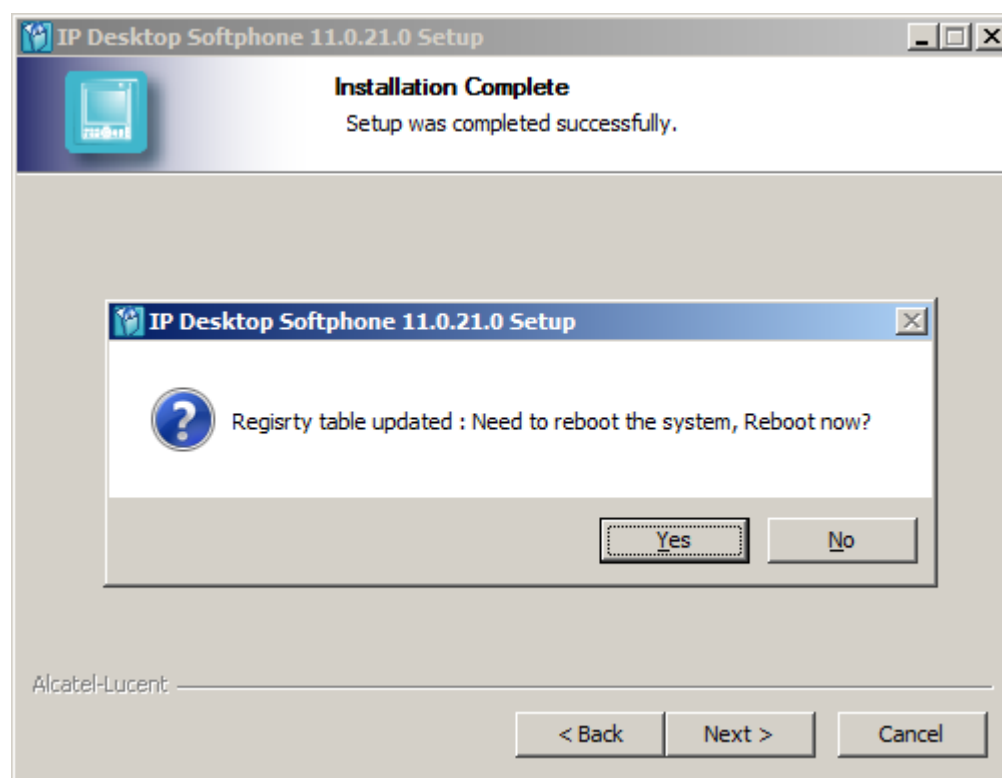
25. Select your desired language.
 26. The second entry box is for skin specification. It has only one option - 8068. Select it.

27. Select required mode - Business or Pro-ACD (**Pro-ACD must not be selected with OXO**), according to the given guidance. If you select Business, different users of this application are given different MAC IDs. If you select Pro-ACD, then despite the number of users, the MAC ID remains same.
28. Click Next.

Setup complete



- The above screen informs of the completion of setup process successfully.
29. To run this application immediately, tick the checkbox in this screen.
 30. Click Finish to close this screen.
 31. In case of the first installation, the system must be rebooted to update the registry table.



To be noticed that this screen only appears on first installation of IPDSP.

Installation using IPDesktopSoftphone_11.x.msi file

The following steps detail the installation process, using the file IPDestopSoftphone_11.x.msi

1. Close all running applications
2. To start the installation,
3. Open command prompt screen. You can do this by clicking on: Start → Run. In the screen that displays, key in: cmd. This opens the command prompt screen.
4. Move to the directory, where the file: IPdesktopSoftPhone_v11.0.1.0.msi is located.
5. There, key in the following. Below is the template. In the place of those given in blue fonts enclosed within "<>", give the actual values as applicable to you.

```
msiexec /i IPdesktopSoftphone_11.0.12.msi PBXADDR=<server address> BACKUPPBXADDR=<backup server address> MODEPROACD=<number> LANGUAGE=<number>
```

Below is a sample, where actual values are given in the place of variables given in the template above:

```
msiexec /i IPdesktopSoftPhone_v11.0.1.0.msi PBXADDR=155.192.215.150  
BACKUPPBXADDR=155.192.215.146 MODEPROACD=0 LANGUAGE=4
```

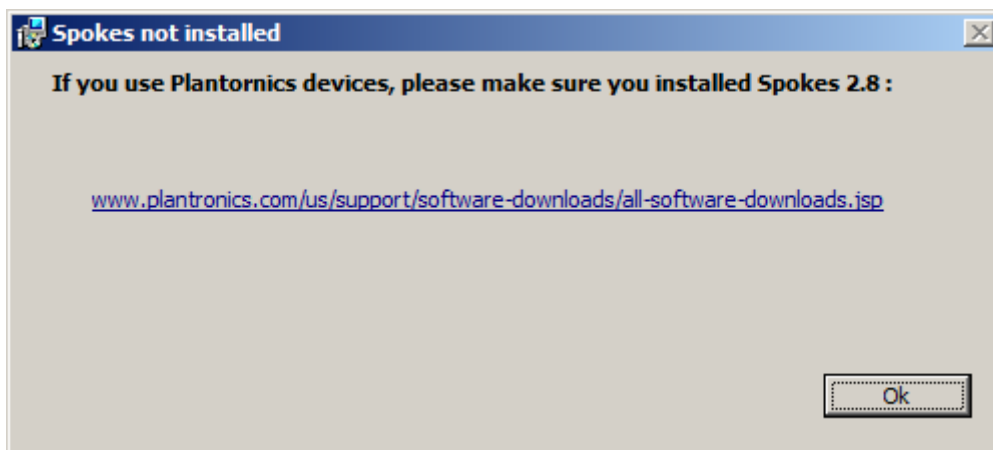
Below table explains the different components that constitute this command:

Component	Description
msiexec	Microsoft command to execute file with 'msi' extension
/i	Optional parameter for Status Messages. For more of such options, you can key in the following at command prompt: msiexec /i
IPdesktopSoftPhone_v11.0.1.0.msi	Name of file that is to be executed.
PBXADDR=	Command that indicates that the information that follows this command is the address of PBX server
<server address>	IP address or hostname of PBX server
BACKUPPBXADDR=	Command that indicates that the information that follows this command is the address of backup PBX server
<backup server address>	IP address or hostname of backup PBX server
MODEPROACD=	Command that indicates that the information that follows this command is the chosen mode (business or ProACD)
<number>	Here, key in: 0 for Business option 1 for ProACD option Default - 0
Language=	Command that indicates that the information that follows this command refers to the interactive language to be used during installation.
<number>	Give any of the following integers here. The numbers and their related languages are listed below: 4 - Generic Alcatel English

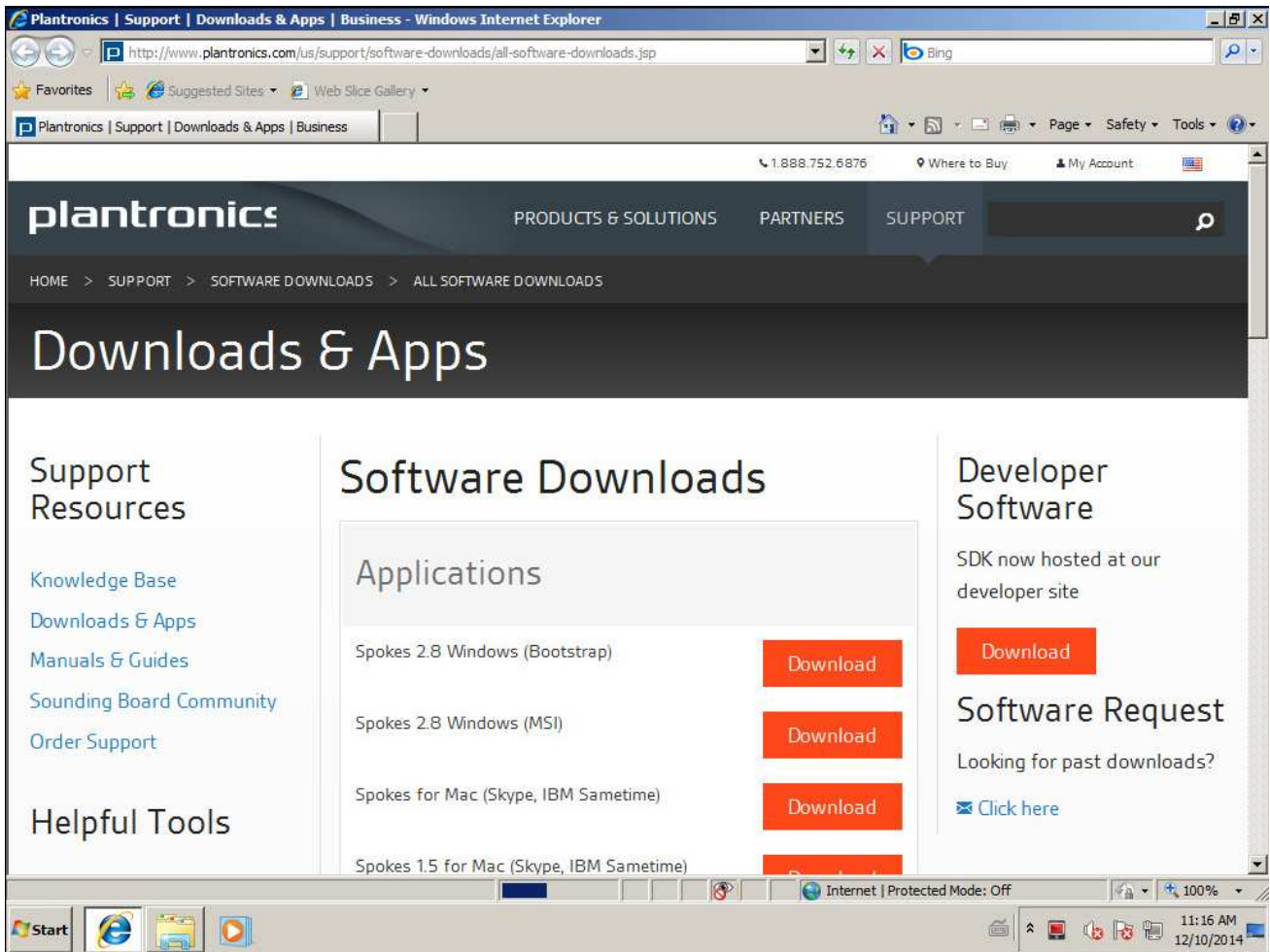
Component	Description
	5 - French
	6 - Italian
	11 - German
	12 - Portuguese
	15 - Spanish
	18 - Norwegian
	22 - Finnish
	29 - Dutch
	24 - Russian
	40 - Chinese
	42 - Korean
	Default - 4: Generic Alcatel English

6. But you need not necessarily key in the full command given. That command displays all the options available. PBXADDR is the only mandatory parameter. Other parameters are optional.
7. After keying the command, the installation process would commence and the application will open the following screen.

Plantronics Spokes 2.8 download



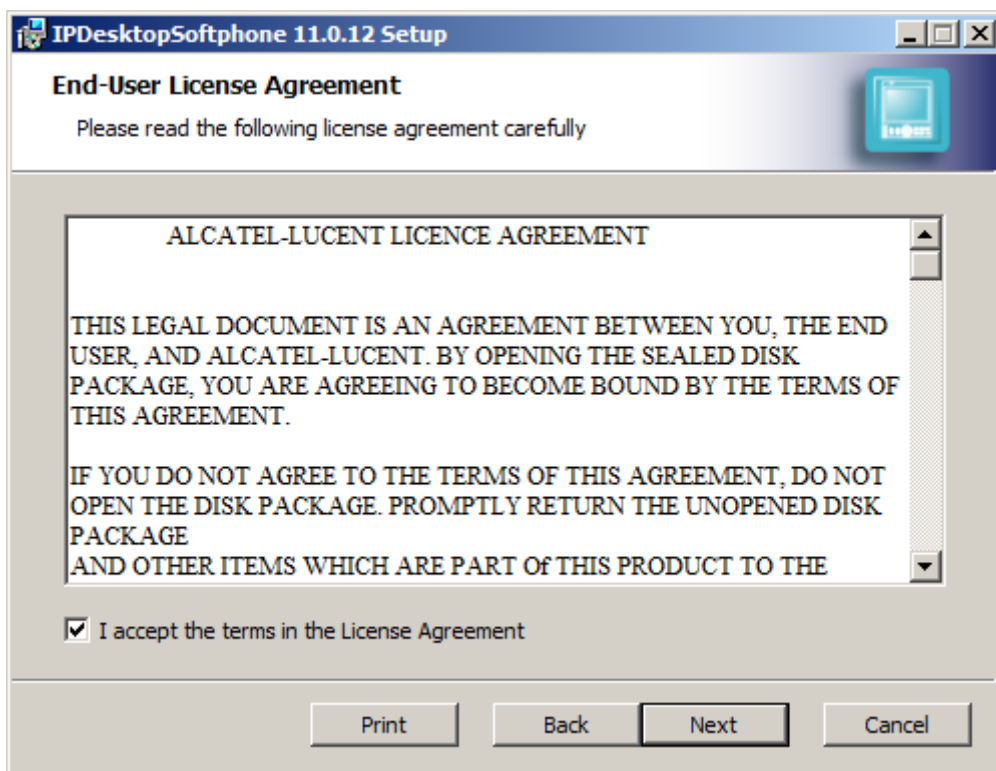
8. If you use Plantronics headset, click on link load Plantronics download web site in your browser, as shown below. Click on Ok button otherwise, and go directly to



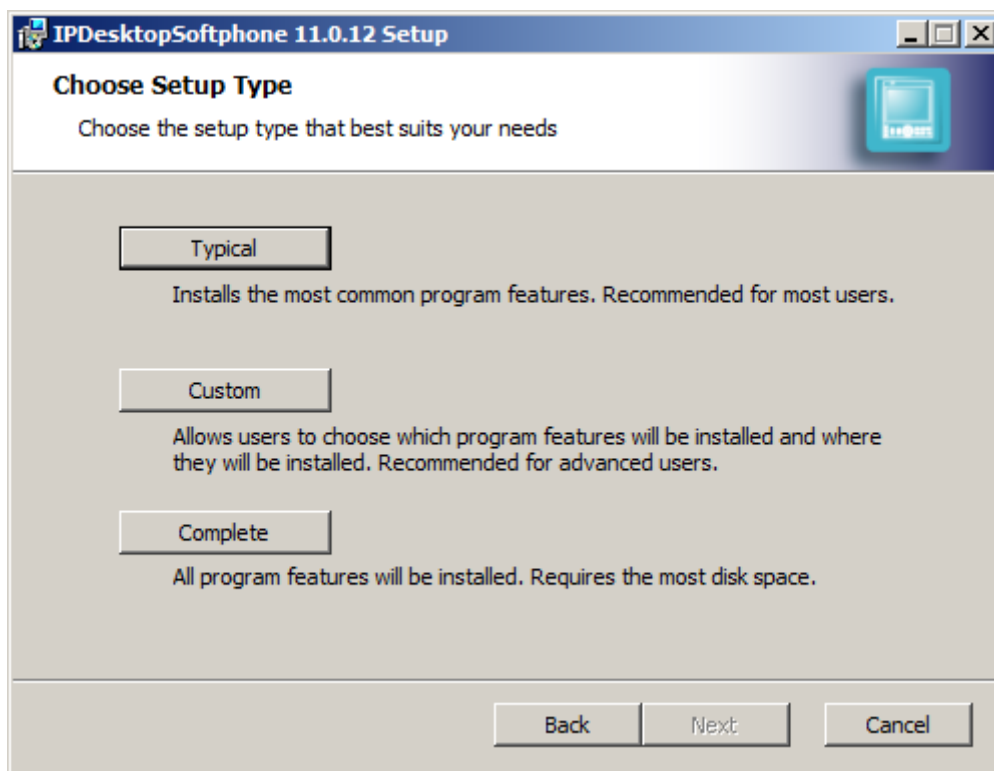
9. On this site, you can download Spokes 2.8 Windows installer, and execute it to install Spokes 2.8 driver on your host.
-



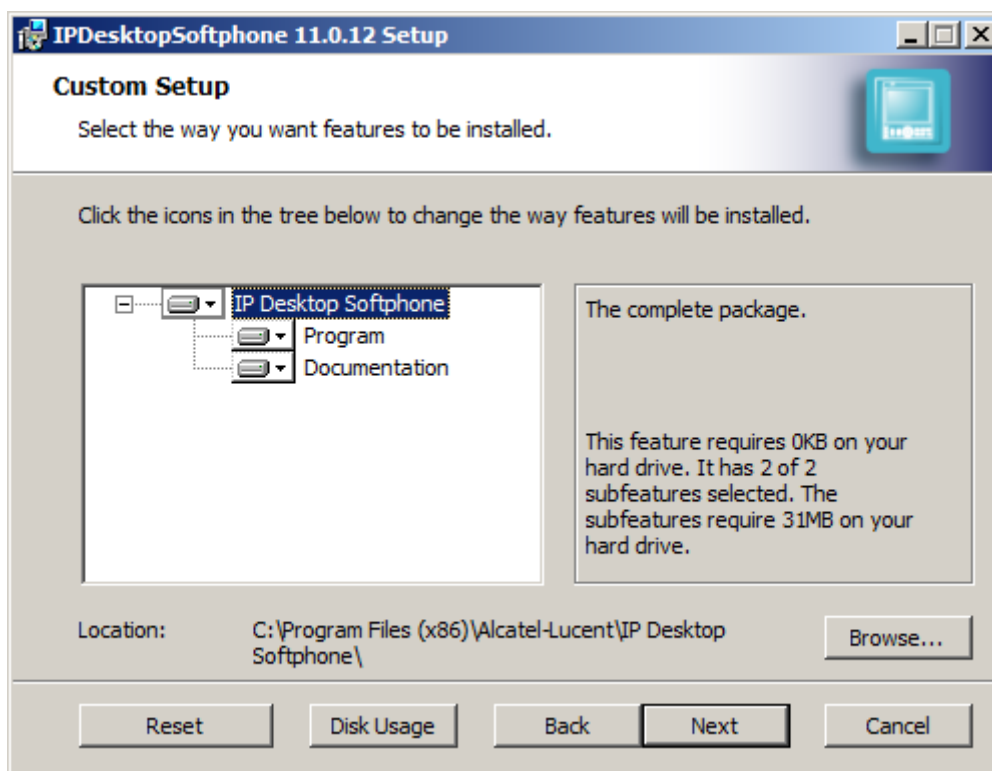
10. This is Welcome screen. Click Next to move to next screen.



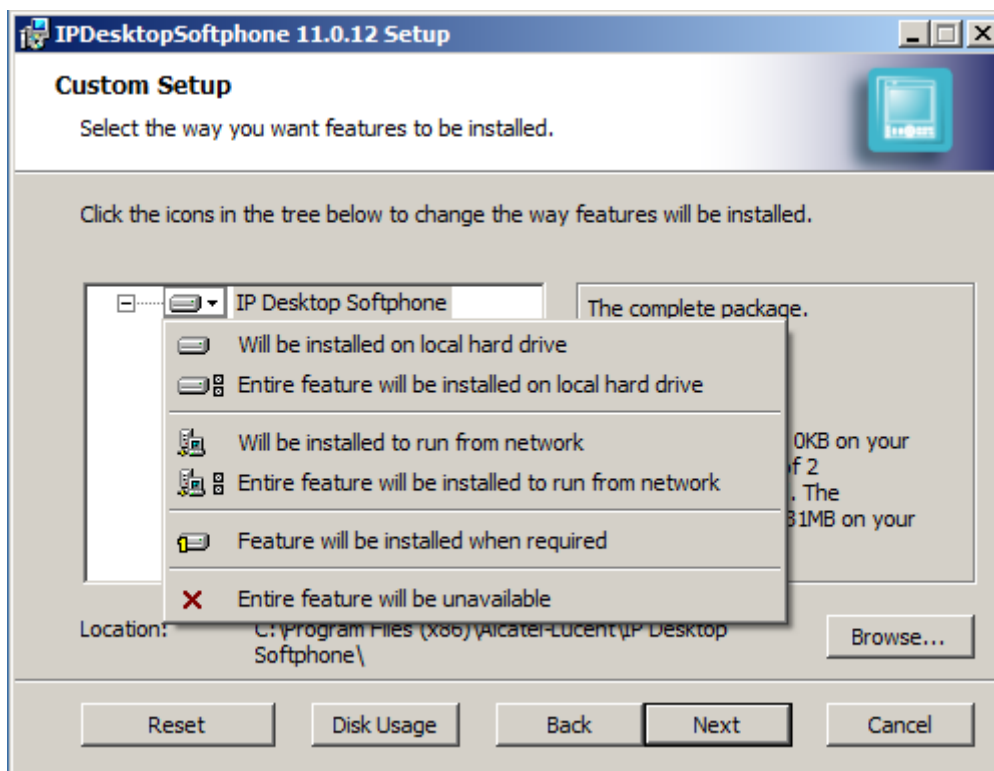
11. This is License agreement. You can use the scroll bar to read it fully. Check the box below the agreement text box to agree to this License. Then click "Next".



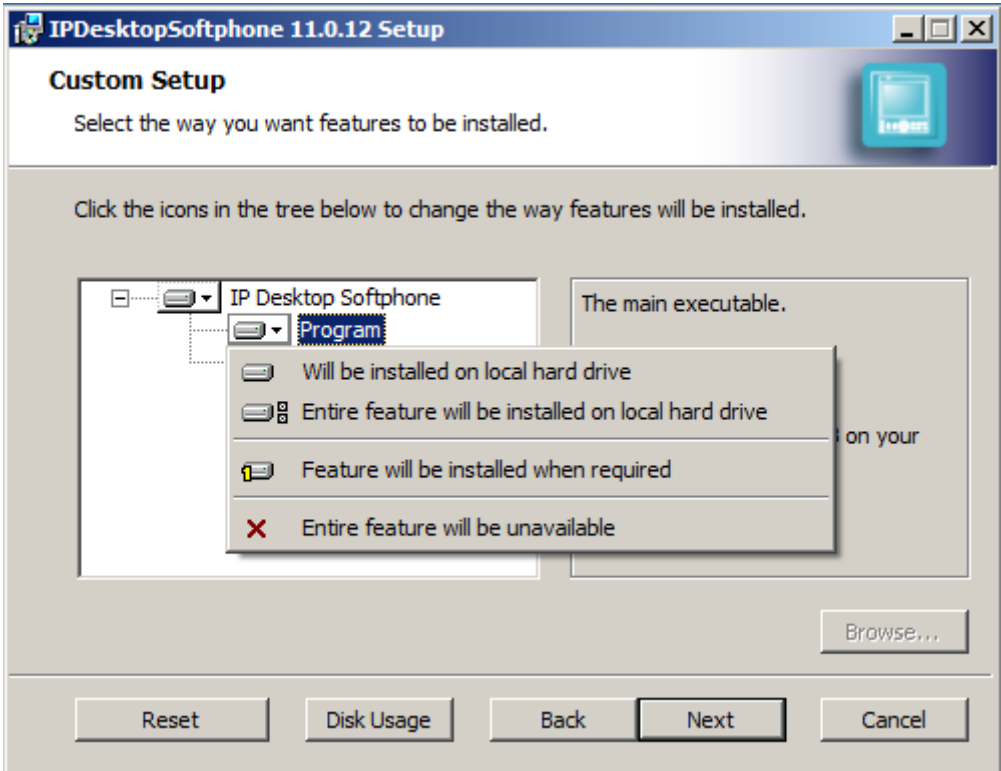
12. In this page, you can select the type of installation: Custom
 - Now that you have selected this type, you can select the portions that should be installed. You can use this option, in the following manner:
 - a) Click on the button: Custom. This opens the following screen:



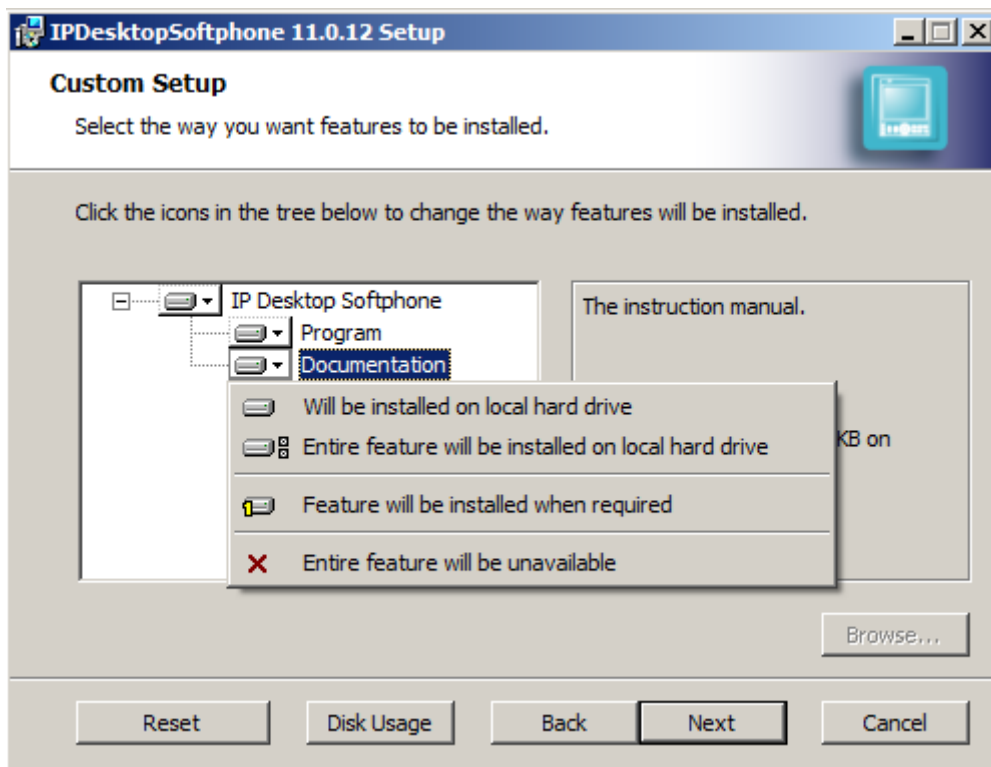
- b) Here, IPDesktopSoftphone is expanded. You can click on any of these, to customize them.
- c) When you click on: IPDesktopSoftphone, the following sub-option list displays, for you to select from:



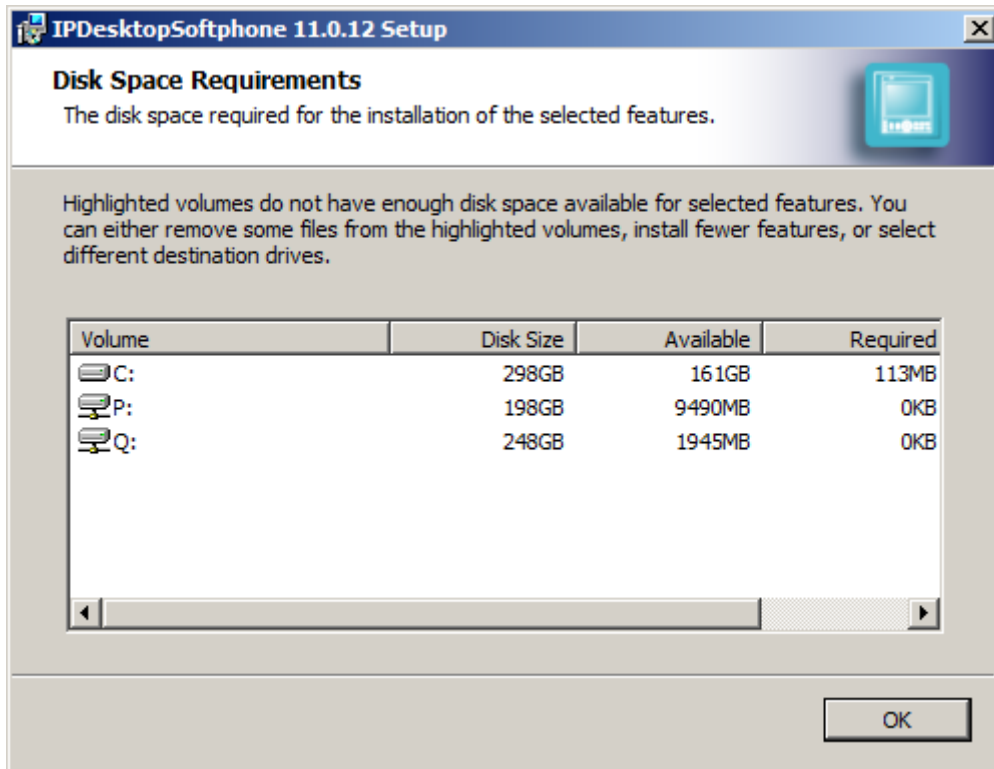
- d) From the sub-option that displays, you can make your choice.
- e) You get the following display, when you click on: Program. You can make your choice likewise.



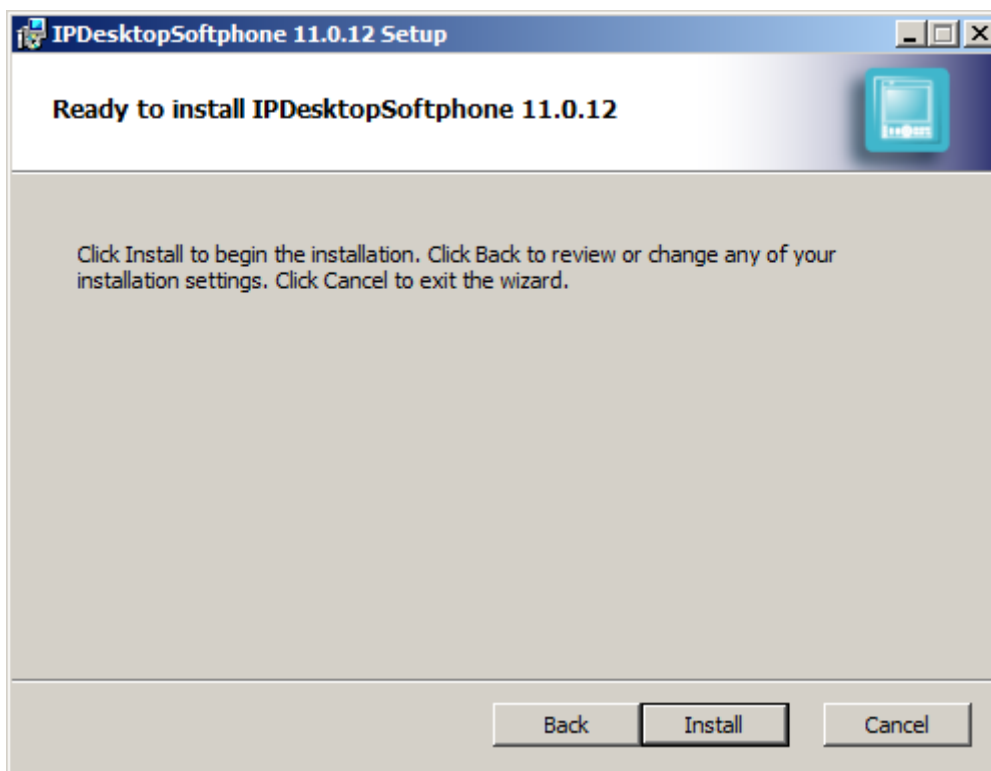
f) Below are the choices for Documentation.



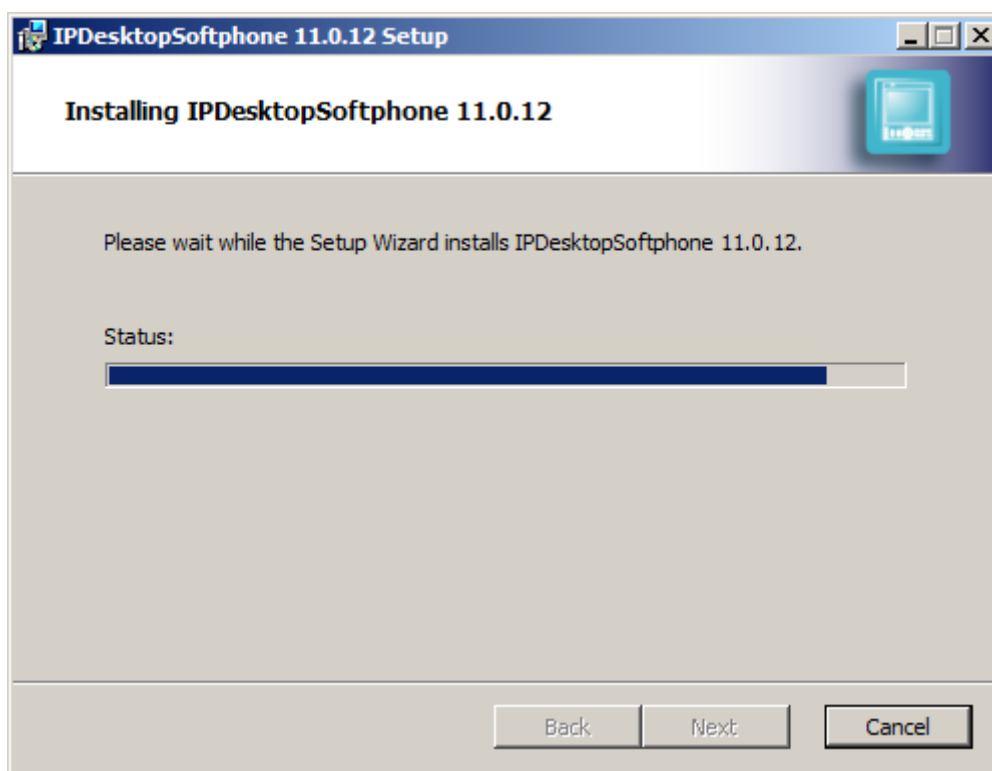
- g) The button: Disk Usage displays hard disk details. Based on that information, you can decide on the hard disk or its partition, to install the application. Its display is below:



- h) Click OK to close this screen.
- i) Once done, click next to move on.



- Whatever choice you make among Typical or Complete, the above screen displays. If you select: Custom, then also, after making your selections, you reach this page.
13. In this screen, click on Install button to move to next page.
- This triggers the installation process. The screen that follows, shows its progress:

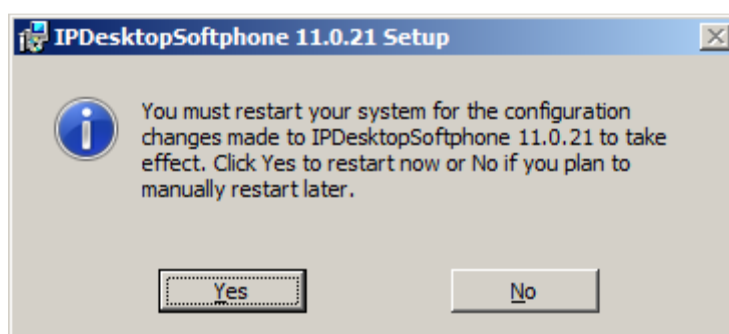


14. Wait until the process completes.



15. The installation process is now complete. Click on the Finish button to close this screen.
16. In case of the first installation, the system must be rebooted to update the registry table.

Reboot the system (1st installation)



To be noticed that this screen only appears on first installation of IPDSP.

7.3 Launching the Application

7.3.1 Registration in OXE context

Before you could start using the Softphone, you will have to create a directory number for this Softphone on the OXE. The minimum requirement of OXE version is: Release 8.x or above.

Description of OXE user creation and configuration is described on paragraph OXE Configuration

1. Click on the following icon that the application had placed during the process of installing this application.



Alternatively, from the task bar, you can activate the application using following path:

Start → All Programs → Alcatel-Lucent → IP Desktop Softphone → IPDesktopSoftphone

2. When you launch the application for the first time, it displays the image of the IP Touch phone, overlapped by the Audio Tuning Wizard window as given below. This need to be completed during the first launch of the application. Here, you can view the various audio devices and configure them as needed. You can find details of these under point Audio Wizard in this manual.

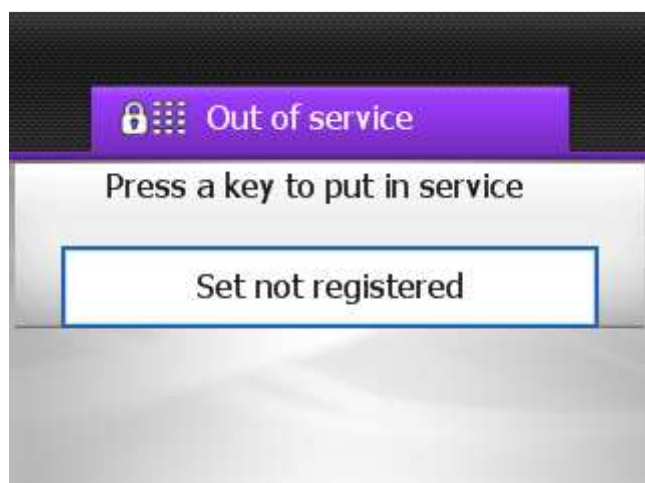
To configure this, it is mandatory to connect your system with an audio device. Otherwise, you will not be able to complete this process. Unless you complete this process, you cannot run this application

Display on first launch



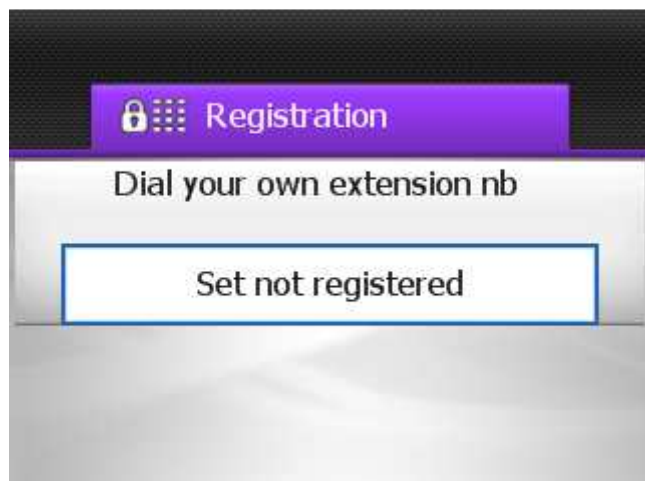
3. Once you have completed the settings of the Audio Tuning Wizard, close the screen. Now you will have to deal with the display screen of IP Touch phone.
4. Initially, there will be only connectivity with OXE. But your extension (directory number) will be lacking registration with it. So, you get the following display:

Extension not yet registered with OXE



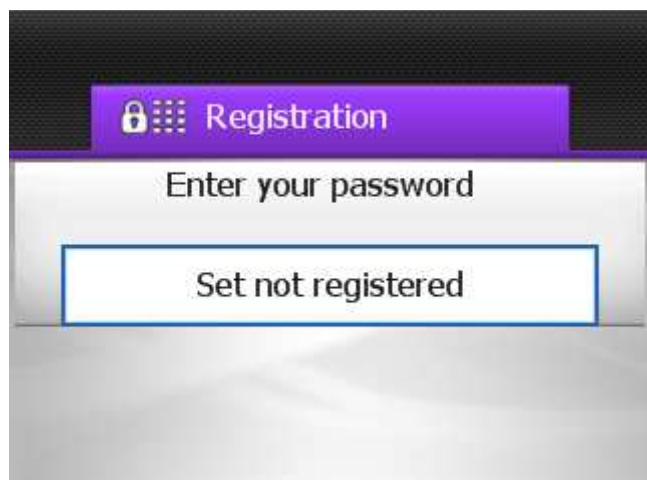
5. Press any key. This changes the display as:

Commencement of Registration process



6. For this display, key in your extension number. Once you have entered the configured number it automatically moves to next screen. The next screen prompts for the related password. The default password is: "0000". This screen looks like this:

Enter Password



7. Once you have keyed in the password, it moves to next screen. No need to press Enter key.
8. It verifies your credentials, and once this process is over, you can see the following display:

Connected and ready for use



9. Now the application is ready to use by the user.

7.3.2 Registration in OXO context

The minimum requirement of OXO version is Release 10.1 or above. In OXO context, the configuration of the phone is automatically done.

After the network configuration on the device described on paragraph , the connection to the OXO server is done and the IP Desktop Softphone starts and a phone number is automatically assigned.

See “Configuration of Application” paragraph to configure the network parameters.

1. Once this process is over, you can see the following display:

Connected and ready for use



2. Now the application is ready to use by the user.

7.4 Configuration of Application

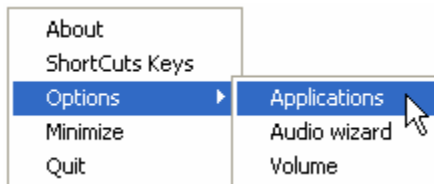
In the system administration level, you can customize the application to suit your existing environment. You can do this customization, only after installing the application. To embark on this task, you will have to right-click on the phone image. Then you can customize under following heads:

- Applications
- Audio Wizard
- Volume Level

7.4.1 Configuration in OXE context

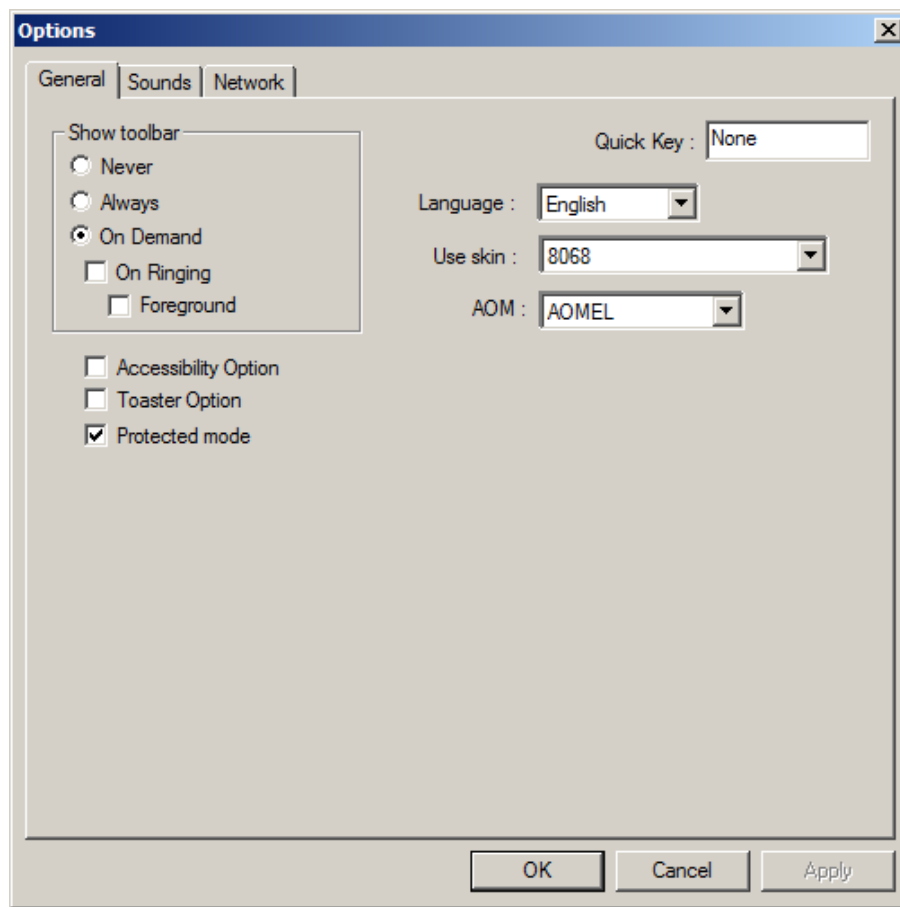
Steps to customize Applications are given below:

1. Right-click on the phone image.
2. In the list box that displays, select: Options → Applications, as given below:



3. This displays options screen with 3 tabs as given below:

General Tab



Note: Current version of IP Desktop Softphone does not support **Encryption** and **VLAN**. The **Protected Mode** in the above screenshot is relevant only where encryption is already in existence.

4. By default, the General tab opens.

Button for extending AOM key pad

Illustration, below is the phone image:



In the phone image, when you click on the button that the arrow points to, then a pad extends. It contains AOM (Add-on Module) buttons:

- AOMEL (Add-on Module Electronic 14 keys) - Extending pad with 14 buttons.

OXE Configuration of AOM is described on paragraph User AOM configuration



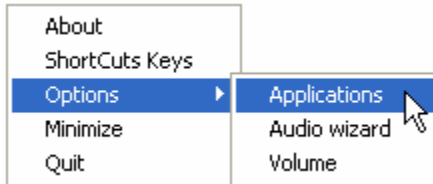
In the General tab, in the field: AOM, the user can only opt for the AOMEL, based on your programming only.

5. Based on your programming in OXE server, make your selection
6. The tab: Sounds is relevant to users only. You can skip this tab, and click on the tab: Network. This opens the following page:

7.4.2 Configuration in OXO context

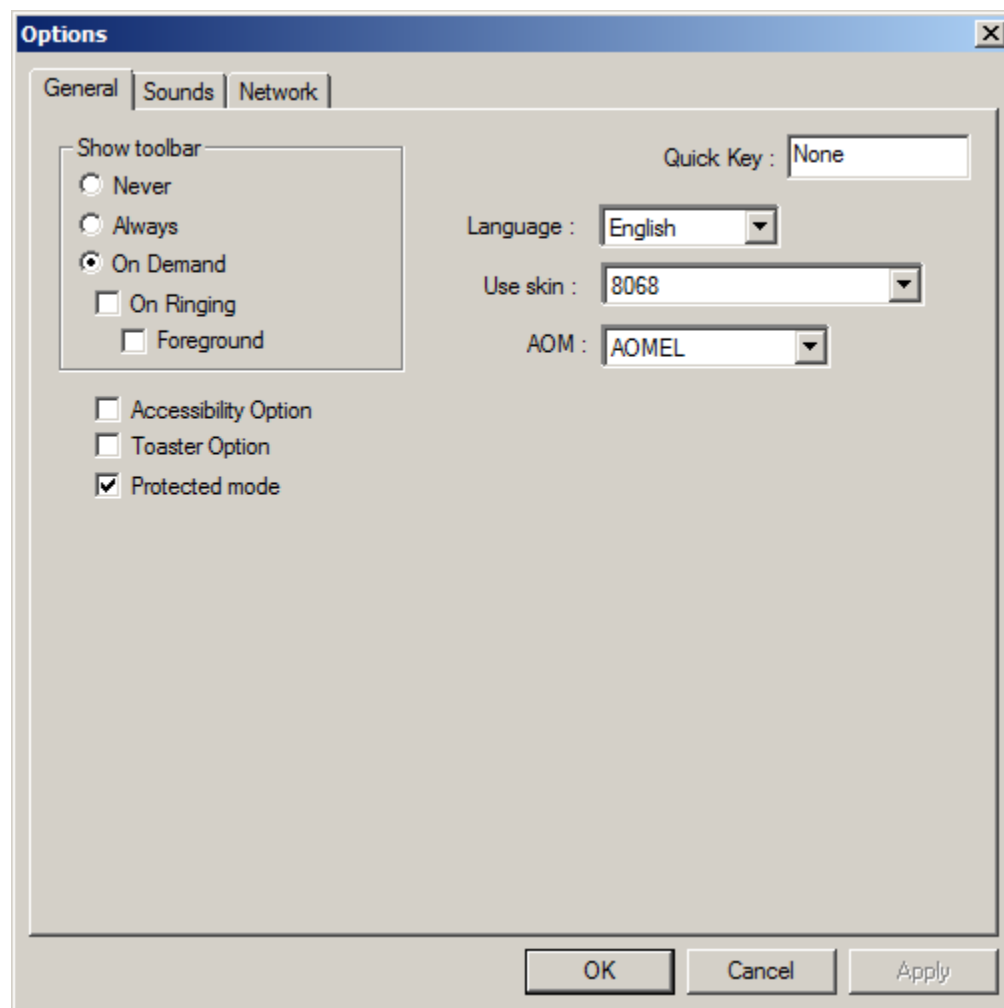
Steps to customize Applications are given below:

7. Right-click on the phone image.
8. In the list box that displays, select: Options → Applications, as given below:



9. This displays options screen with 3 tabs as given below:

General Tab



Note: Current version of IP Desktop Softphone does not support **Encryption** and **VLAN**. The **Protected Mode** in the above screenshot is relevant only where encryption is already in existence.

10. By default, the General tab opens.

The Add-On Module AOMEL is the Smart Display Module in OXO manager tool, this module is available to the phone.

Button for extending AOM key pad

Illustration, below is the phone image:



In the phone image, when you click on the button that the arrow points to, then a pad extends. It contains AOM (Add-on Module) buttons:

- AOMEL: Smart Display (Add-on Module 14 keys) - Extending pad with 14 buttons.



In the General tab, in the field: AOM, the user can only opt for the Smart Display, based on your programming only.

7.4.3 Network configuration

1. The tab: Sounds is relevant to users only. You can skip this tab, and click on the tab: Network. This opens the following page:

Network configuration

The screenshot shows a Windows-style dialog box titled "Options". It has three tabs: "General", "Sounds", and "Network". The "Network" tab is selected. Inside the "Network" tab, there are two main sections. The first section is "Network adaptor", which contains a "Description" dropdown menu showing "Intel(R) 82579LM Gigabit Network Connection" and a "Name" label. The second section is "Tftp", which contains four text input fields: "Tftp Server (main) :" with the value "172.25.171.25", "Tftp Server(Backup) :", "PCS :" with the value "255.255.255.255", and "Phone Identifier" with the value "f0:d3:04:f4:68:90". Below these fields is a checked checkbox labeled "Use same phone identifier (when ethernet adapter changes)?". At the bottom of the dialog box are three buttons: "OK", "Cancel", and "Apply".

2. In the entry boxes in this tab, you can see the values you had entered during the installation process. Now, you can change these default entries as you require.

The following table explains these entries:

Field Name	Description
Network Adaptor:	
Description	This refers to the Ethernet card. The application automatically detects existing cards in the system, and lists them here. You can select the card you prefer.
Name	This automatically displays. This is for your information. You cannot change it.

Tftp:	
Tftp Server (Main)	This refers to the IP address of your call server. The entry you see here is the one you had keyed in during the installation process. You can change if required. Any error in the entry would deprive connectivity. This is a mandatory entry.
Tftp Server (Backup)	Optional. This is the IP address of the 2 nd CPU. Enter the 2 nd Role MAIN IP address here if spatial redundancy is managed.
PCS	If there is a Passive call server configured, The IP address of the Passive call server is displayed here. This value is automatically provided by the NOE protocol and cannot be modified manually.
Phone Identifier	This is the MAC ID for your terminal, which is automatically generated by the application. You cannot change it.

- Once you have completed making changes, click on Apply to save your entries. If you click OK, it saves the entries and closes this screen.
- Now the application is operational. You can change the settings whenever you require, following these steps.

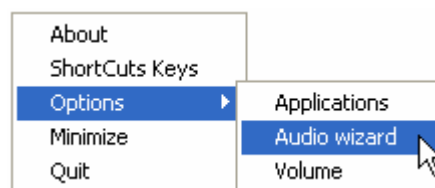
7.4.4 Audio Wizard

This section is dedicated for configuring different types of audio devices for the application. Whenever you add/change audio devices, you will have to run this wizard again and select your preferences. Otherwise, the changes in audio hardware will not have any effect.

Remark: The IPDSP can work properly only if there is at least one microphone and one speaker installed in the PC.

Follow the steps below to customize:

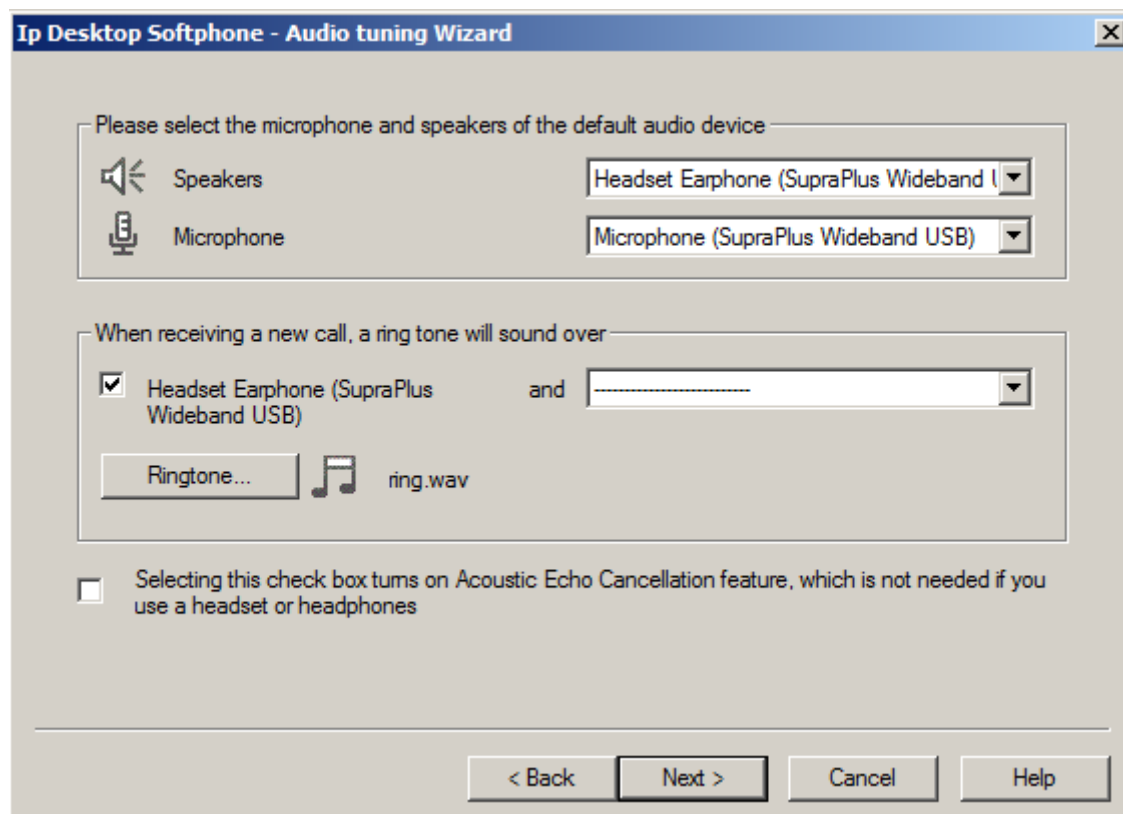
- Right-click on the phone image.
- In the list box that displays, select: Options → AudioWizard, as given below:



- This opens the starting page for customizing. As given in that page, close all running programs that deal with audio playing or recording.



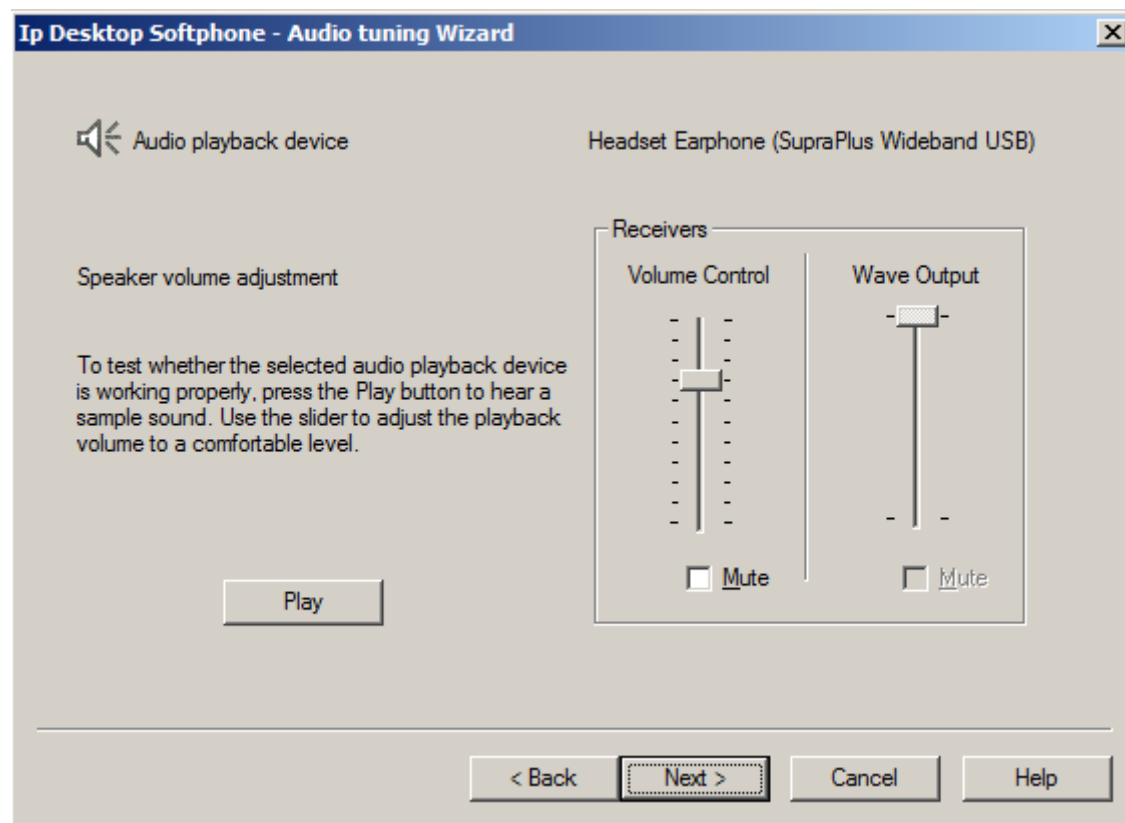
4. Click Next to open the following page:



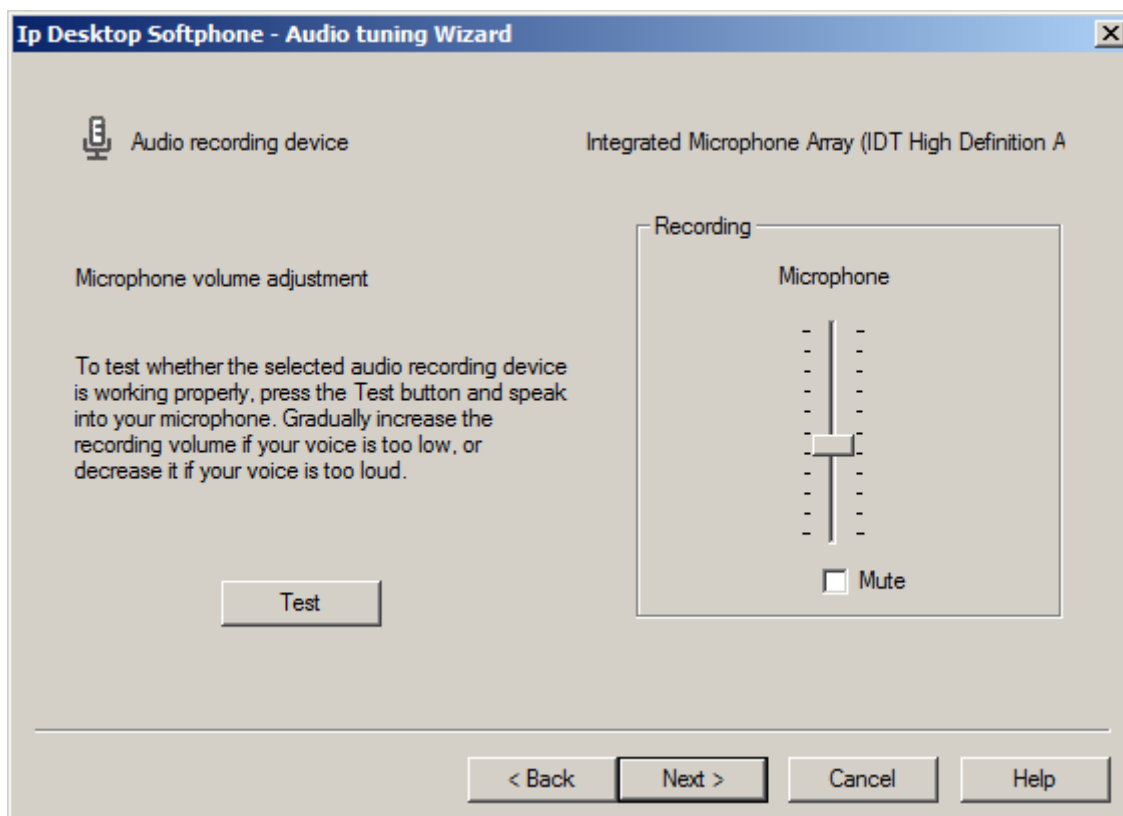
- In the above screen, the installed audio devices are listed in the dropdown boxes. You can select different or same device for the different tasks listed. The following table explains the fields in this page:

Field Name/Icon	Description
	In this dropdown box, the audio device that you select will be utilized for phone's output, and is heard through speakers.
	The audio device you select here picks up your speech and inputs into the phone.
Checkbox	Once you check it, you can see the phone's output device you had chosen, replicated here. This is default. If you do not want to use this, then uncheck the checkbox. When uncheck this box, the nearby display will vanish.
Ring - 2	This is second ringing device for you to select
Ringtone	When you click on this button, it opens Explorer window. From there, select a .wav file. The phone uses this file while testing the audio properties. The file you have selected, displays above this button.
Checkbox (last)	This refers to the audibility of what you speak, in your earpiece. When you tick this box, this echo is done away with.

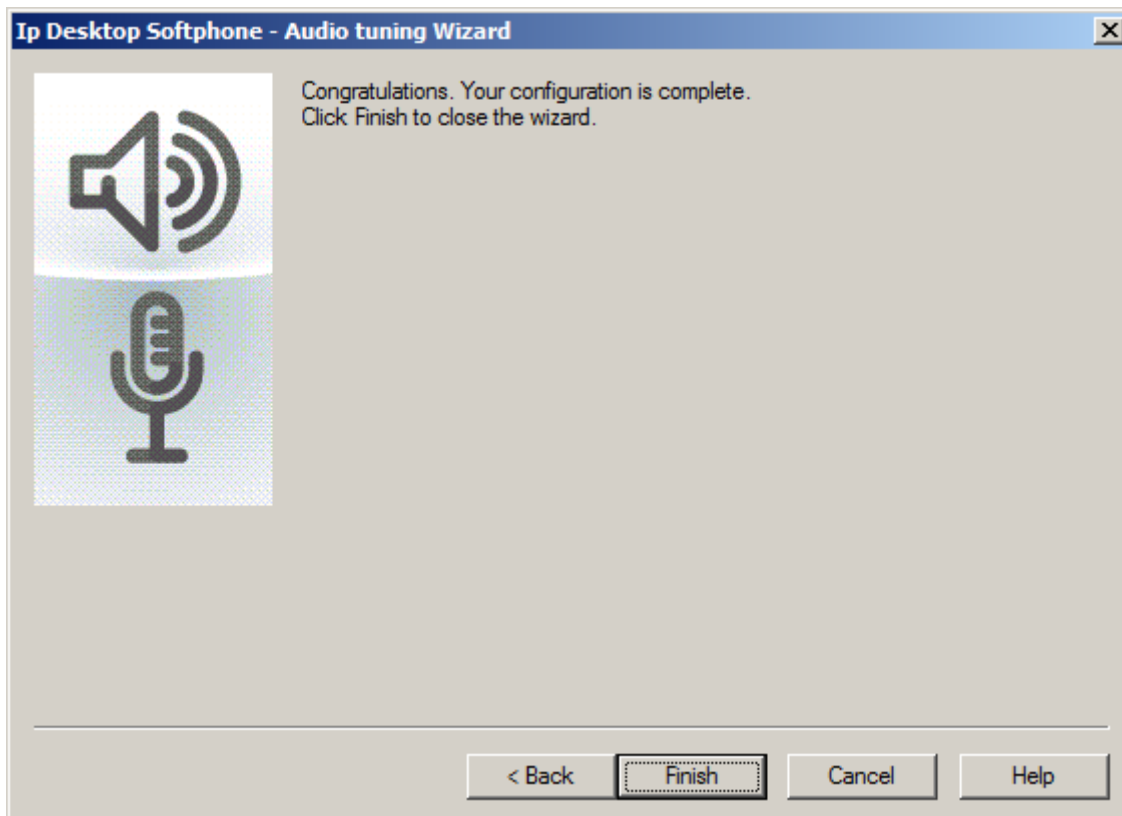
5. Once done with this page, click "Next". The following screen opens:



- This page is for setting the volume level of phone speakers. The device that this setting impacts, is given at the top of this page. Once you have set the levels, you can get a sample of this volume, by clicking on the Play button at left. When you do so, it plays the file selected for Ringing in the previous step.
6. Once done with this page, click "Next". The following screen opens:



- This page is for setting the volume level of phone speaker that uses another device. The device that this setting impacts, is given at the top of this page. Once you have set the level, you can get a sample of this volume, by clicking on the Test button at left. When you do so, it plays the file selected for Ringing in the previous step.
7. After completing this page, click "Next". The following screen opens:



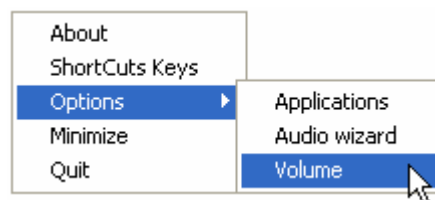
8. Now you have completed configuration in this section. Click Finish to close this screen.
9. The volume set with the Audio Wizard will be the volume level and sensitivity level for the Speakers and microphone respectively. The volume changes during the conversation period can be done with the volume level option which is mentioned below.

7.4.5 Volume Level

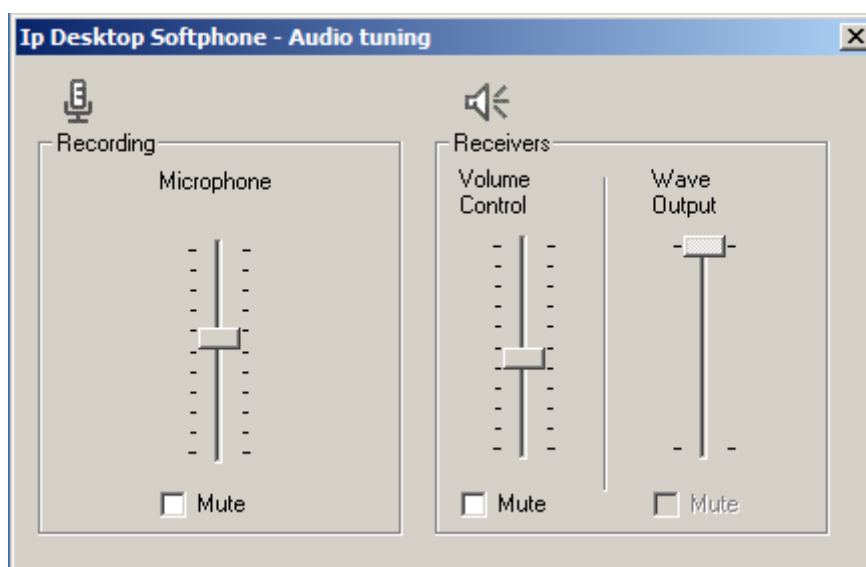
By default, the volume you had set using Audio Tuning Wizard will be active. But if you want to temporarily change the volume during conversation, then you can use this facility. Once the call is over, this setting will not be in effect

Under this link, you have only one page. To access this page:

1. Right-click on the phone image.
2. In the list box that displays, select: Options → Volume, as given below:



3. This opens the following page:



4. In this page, you can set the volume by moving the handle up and down.
5. Once done, click on the x given at top right to close this window.

7.5 Uninstalling

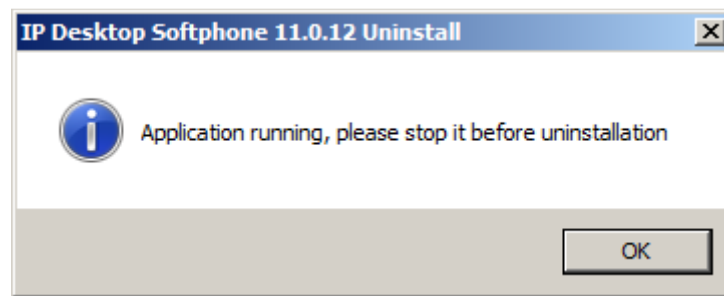
This application comes to you with inbuilt uninstalling facility. This process uninstalls this application only. It does not uninstall supporting software that it installed during its installation process.

7.5.1 Pre-uninstall Procedure: Close the Application

Before attempting to uninstall the application, close it. To do so, right click on the body of the Softphone, and select Quit.

If you try to uninstall the application before closing it, it will display the following error message:

Warning - to close IP DESKTOP SOFTPHONE



After closing the application, you can commence uninstalling.

7.5.2 Uninstall File

To uninstall, you will have to use the same type of file that was used for installing. There are two types of files for installing:

- IpDesktopSoftPhoneInst_v11.0.1.0.exe
- IPdesktopSoftPhone_v11.0.1.0.msi

When you uninstall this application, the extension - .exe or .msi - should be identical with the file used for installing.

7.5.3 Uninstalling Using Windows Shortcut

When you uninstall from Windows using the following path, follow the below given steps, then it takes care of this issue automatically:

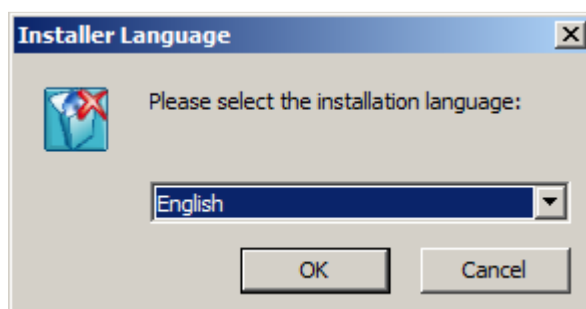
1. From the taskbar, launch the uninstalling file using the following path:
Start → All Programs → Alcatel-Lucent → IP Desktop Softphone → Uninstall

When you invoke the above command, it looks like below:

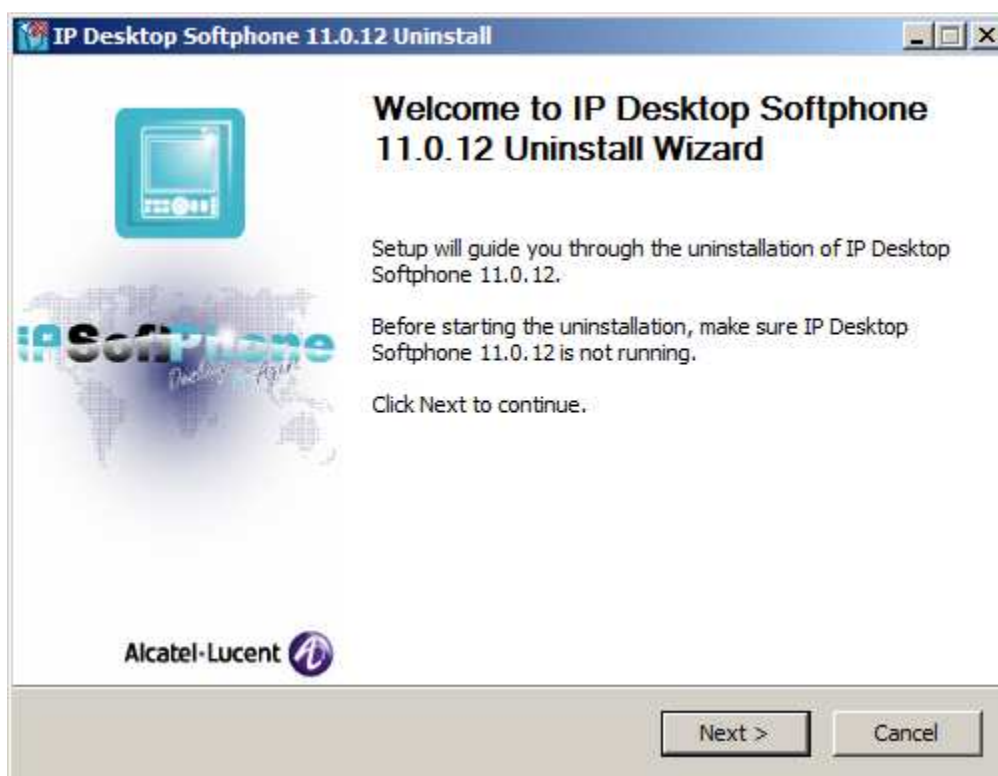


When you are uninstalling from command prompt, you will have to use different commands, as explained later here.

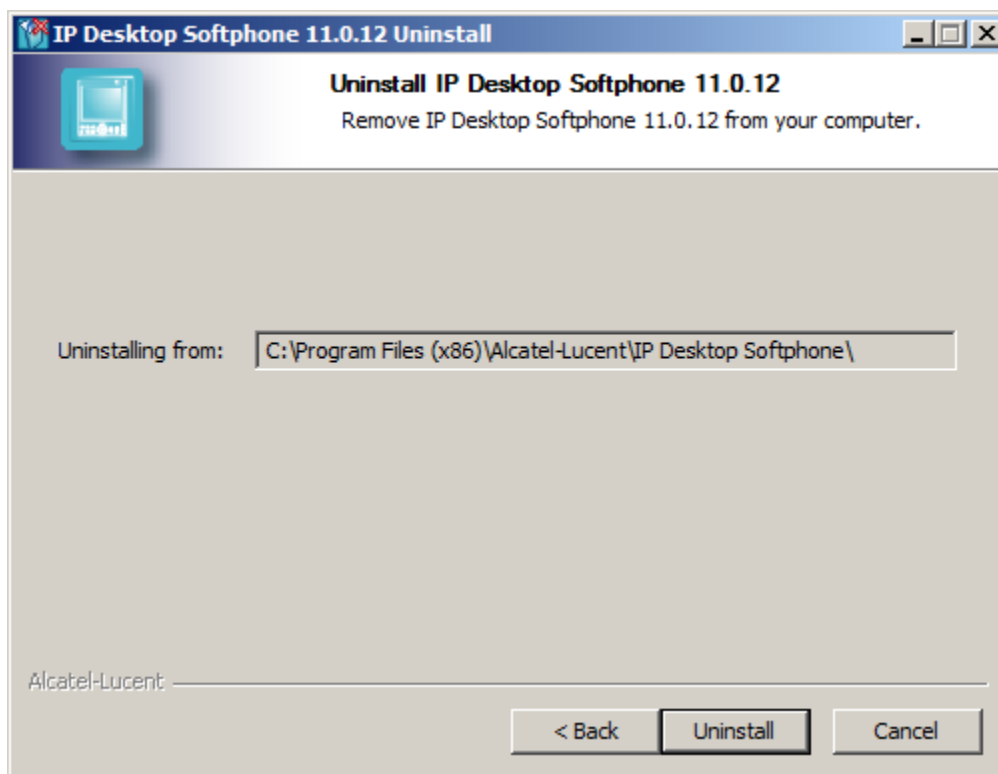
Language Selection



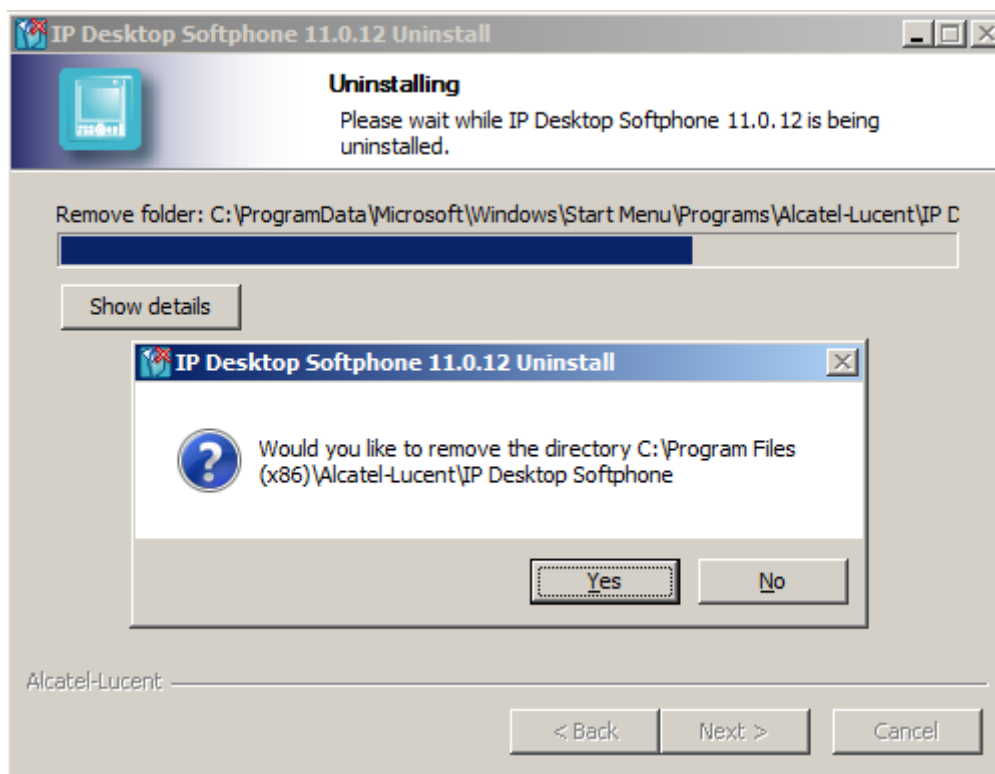
2. This displays the above screen. Select the Language to your preference. Available choices are: English & French.
3. Click OK.



4. This page is for your information only. Click Next



5. This page is also for your information only. This tells you from which folder, it is uninstalling the application. Click Uninstall.



- This page shows the progress bar that shows the progress of uninstalling process.
6. During the progress of this uninstalling, one screen shows up. This is to get your confirmation for deleting the directory that the installation process had created. Click Yes. Clicking No retains this directory

Uninstalling complete



7. Now, the uninstalling process is over. Click Finish to close this screen.

7.5.4 Uninstalling Using: .msi File from command prompt

To start the uninstalling, follow the steps below:

1. Open command prompt screen. You can do this by clicking on: Start → Run. In the screen that displays, key in: cmd. This opens the command prompt screen.
2. Move to the directory, where the file: IPdesktopSoftPhone_v11.0.1.0.msi is located.
3. There, key in the following:

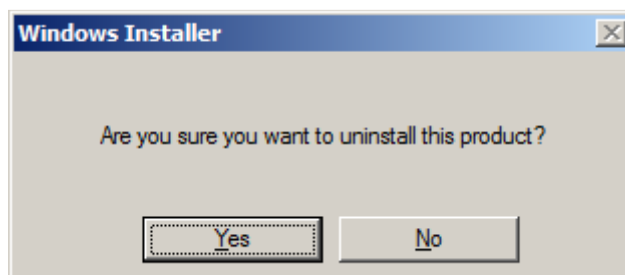
```
msiexec /x IPDesktopSoftphone_11.0.12.msi PBXADDR=<server address> MODEPROACD=<number>  
Language=<Number>
```

Below table explains the different components that constitute this command:

Component	Description
msiexec	Microsoft command to execute file with 'msi' extension
/x	Parameter indicating: Uninstall
IPdesktopSoftPhone_v11.0.1.0.msi	Name of the file that is to be executed.
PBXADDR=	Command that indicates that the information that follows this command is the address of PBX server
<server address>	Address of PBX server
MODEPROACD=	Command that indicates that the information that follows this command is the chosen mode (business or ProACD)
<number>	Here, key in: 0 for Business option 1 for ProACD option
Language=	Command that indicates that the information that follows this command refers to the interactive language to be used during uninstalling.
<number>	Give any of the following integers here. The numbers and their related languages are listed below: 4 - Generic Alcatel English 5 - French 6 - Italian 11 - German 12 - Portuguese 15 - Spanish 18 - Norwegian 22 - Finnish 29 - Dutch 24 - Russian 40 - Chinese 42 - Korean

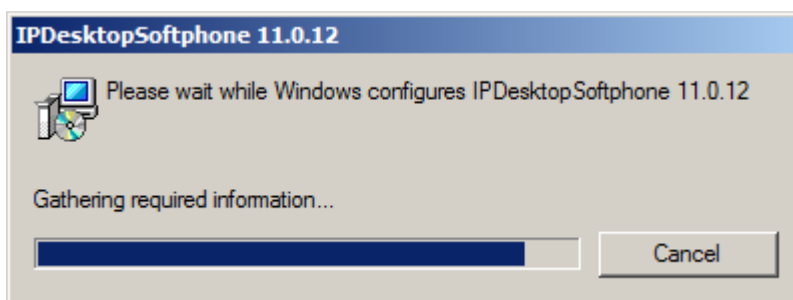
4. After keying the command, the uninstalling process would commence and the application will open the following screen.

Uninstalling - Confirmation screen



5. Above screen is for confirmation. Click on Yes. This commences the uninstalling process.

Uninstalling - progress bar



6. The above screen displays the progress of uninstalling. It would take a while. Wait until it completes
7. Once uninstalling is over, this screen closes all by itself. This indicates that the uninstalling is complete.

7.5.5 Uninstalling log files

To be note that logs files are not deleted after the uninstalling of the software.

7.6 Trace Activation

To activate traces, please follow the following procedure:

1. Edit the file *log4cxx.xml* under installation directory, :
2. Locate the line (Normally line 84 to 90)
 - o `<level value="OFF" class="org.apache.log4j.xml.Level" />`
3. By default, level value is set to "OFF", replace the value "OFF" by "INFO"
 - o `<level value="INFO" class="org.apache.log4j.xml.Level" />`
4. Save the file
5. The IP Desktop Softphone must be restarted to take changes into account.

Log files are located under directory:

C:\Users\<username>\AppData\Local\Temp\Alcatel-Lucent\IpDesktopSoftPhone\Logs

Where <username> is the current Windows user name

8. Mac OS Environment

8.1 Requirements for Installation

Below given are minimum requirements, without which, this application will not function properly. So, before installing this application, please ensure these minimum requirements are met.

8.1.1 Hardware

Processor	Intel 1.6 GHz Minimum 3AK27014AB
RAM	512 MB Minimum 3AK27015AB
Disk Space	10 MB free space 3AK27016AB
Sound card	Integrated sound card or USB headset 48 KHZ sample rate compliant

Note: The above table lists the minimum hardware requirements.

8.1.2 Operating system

IP Desktop Softphone requires Mac OS Snow Leopard (10.6) or higher.

8.1.3 Networking

Network Interface card	10/100 Mbps Ethernet card or Wireless LAN Card 54 Mbps
------------------------	--

8.1.4 VPN

The IP Desktop Softphone requires a direct IP connection to the OmniPCX Enterprise, therefore if used from outside the company LAN, a VPN connection may need to be setup.

8.1.5 UDP used ports (OXE context)

The table below lists the ports that this application uses:

Purpose	Protocol	Device 1	Device 1 port	Device 2	Device 2 port
Phone configuration (file download for configuration information)	TFTP	Softphone	1024 to 4999/udp (managed by OS)	TFTP Server	69/udp 10000 to 10499/udp
Outgoing flow	RTP	Softphone	32514/udp	GD, GA, INT_IP A+B	Dyn_Voice (*)/udp
Outgoing flow	RTCP	Softphone	32515/udp	GD, GA, INT_IP A+B	Dyn_Voice (*)/udp
Incoming flow	RTP	GD, GA, INT_IP A+B	Dyn_Voice (*)/udp	Softphone	32514(BP**+2)/udp
Incoming flow	RTCP	GD, GA, INT_IP A+B	Dyn_Voice	Softphone	32515(BP**+9)/udp

			(*)/udp		
Signaling flow	UA	Softphone	32512(BP**)/udp	GD, GA, INT_IP A+B	32640(BP**+128)/udp

Note:

- (*) This port range is only used to transport voice using RTP protocol and fax using T.98 protocol.
- The lower bound range is 32000 for OXE <= R5.0Lx and 32512 for OXE >= R5.1.
- The upper bound range is 32255 for OXE <= R5.0Lx and 32767 for OXE >= R5.1.
- (**) The Basic Port is retrieved from the OmniPCX at TFTP initialization step.

8.1.6 UDP used ports (OXO context)

Purpose	Protocol	Device 1	Device 1 port	Device 2	Device 2 port
Phone configuration (file download for configuration information)	TFTP	Softphone	1024 to 4999/udp (managed by Windows)	TFTP Server	69/udp 10000 to 10499/udp
Outgoing flow	RTP	Softphone	32000:32256/udp	GD, GA, INT_IP A+B	32000:32256/udp
Signaling flow	UA	Softphone	5000/udp	GD, GA, INT_IP A+B	7775/udp

8.2 Installation Procedures

Installation of IPDSP for Mac OS involves installing IpDesktopSoftPhone_11.x.pkg. In the pages following, you can find the details of installing these files, with screenshots.

8.2.1 OXE or OXO Pre Requisites

After installation of software you will need to configure the application in order to associate a phone from OXE or OXO to the application. To do this you need to perform the OXE or OXO configuration as described on section OXE Configuration or on section OXO Configuration according to the context.

8.2.2 Installation using: IPdesktopSoftphone_11_x.pkg

Now your task is to install the IP Desktop Softphone package. This is the actual application. What you had installed earlier is the prerequisite to installing this application.

Follow the steps below to install this package:

1. Login to the system using Administrator's Username and Password, if you have not done already.
2. Run the file IPdesktopSoftphone_11_x.pkg.

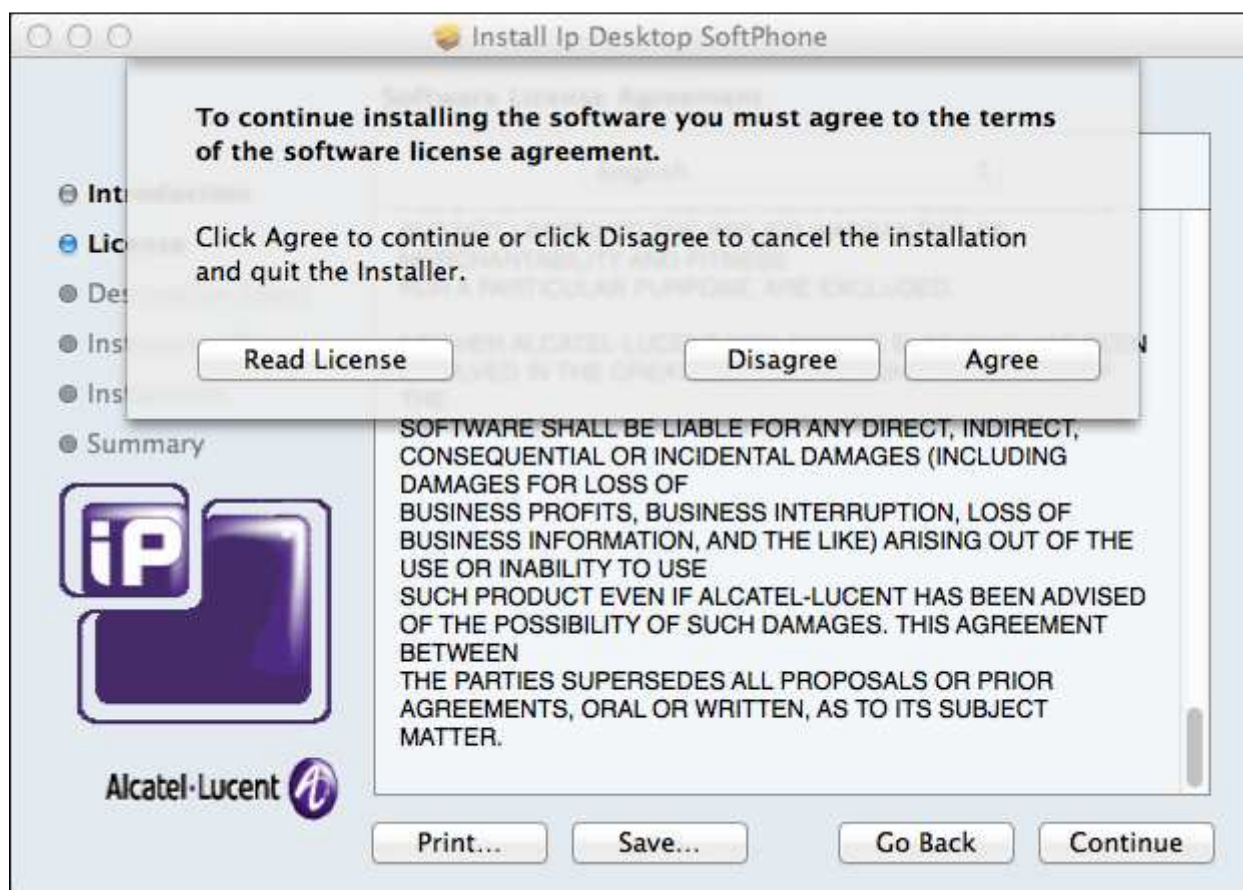
Introduction Screen



3. This is the Welcome screen. You do not have anything to do here. Click Continue to move on.



4. This is the License Agreement. Use the scroll bar to read it fully. If needed, you can save this page using the Save button. You are not indicating your acceptance to the agreement in this page. You will be required to do so in the next page. Click Continue.



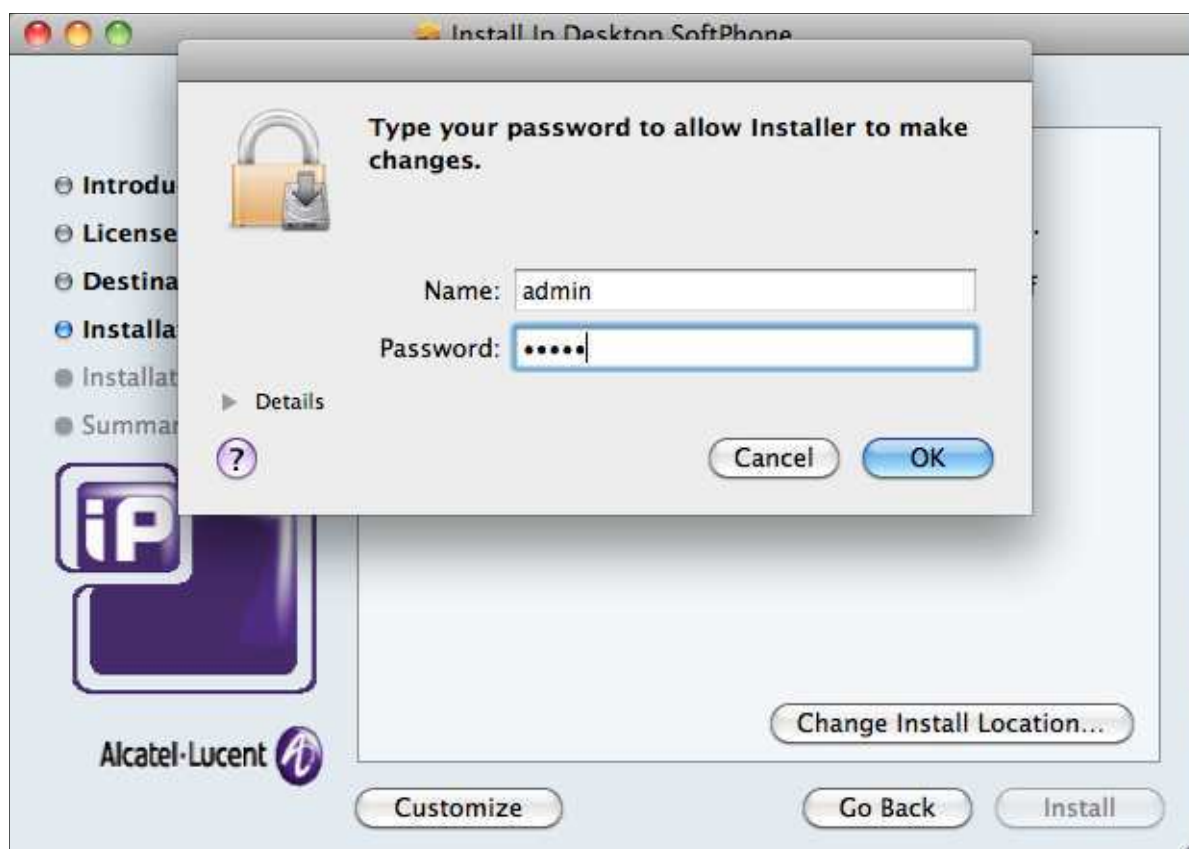
5. If you want to read the License Agreement again, click on Read License button.
6. Once done, click on the button: Agree. You cannot proceed without agreeing to the License terms.
7. This opens the following screen:



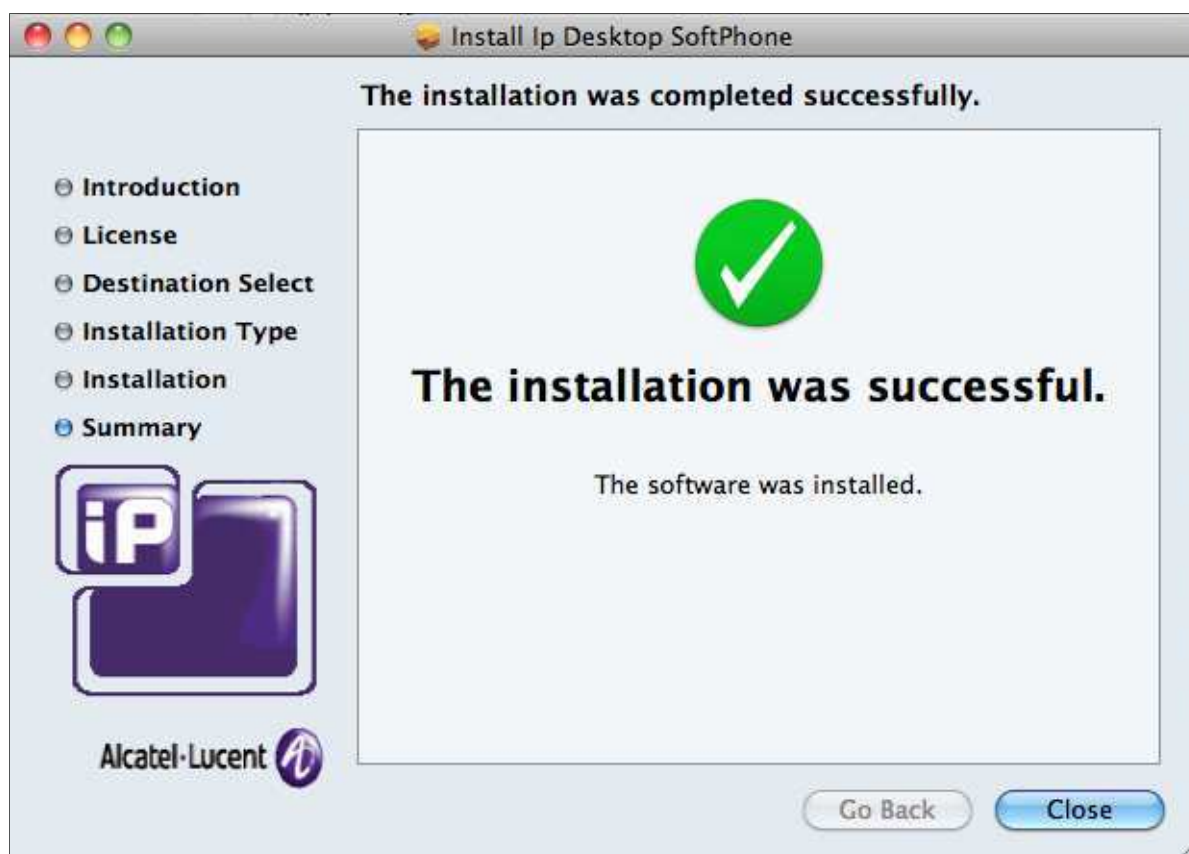
8. All available disks are displayed in this screen to allow you to choose the disk to install the application. In this instance, only one disk is available. So, click **Continue**.



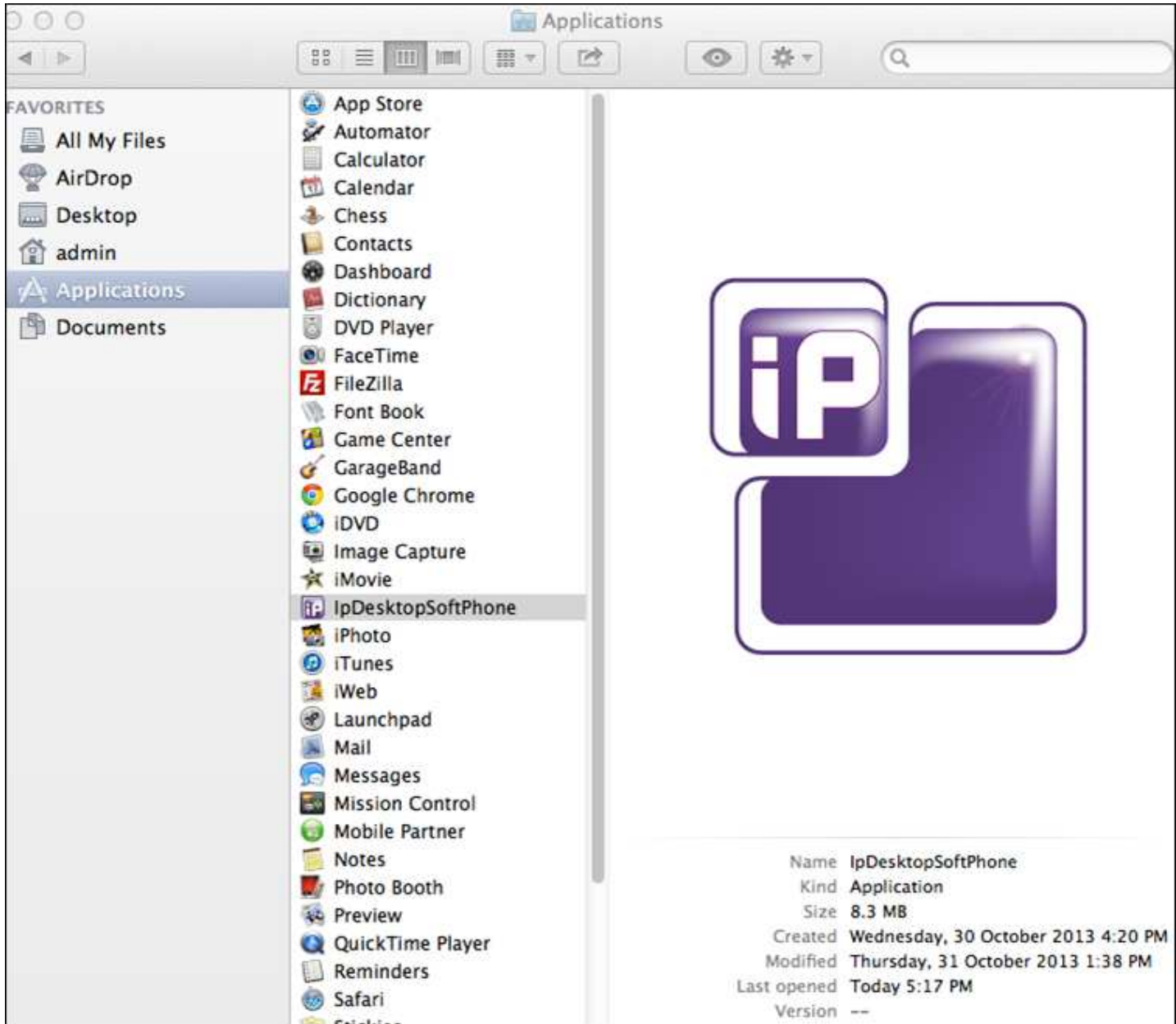
9. In this page, you can change install location if needed, by clicking on the Change Install Location button.
10. Once done, click Install.



11. Before commencing installation, into this box, you will have to key in the Username and Password used for PC.
12. Once done click OK.
13. This would trigger the installation process. You will see an installation progress bar.



14. The above screen indicates that the installation is completed successfully.
15. Click Close to close this screen.
16. Open the Applications page. It looks like below. There, you can find the IP Desktop Softphone installed. This can be seen in the list of applications installed. When it is selected, its icon, and other details display at right, as can be seen in the screenshot below.



8.3 Launching the Application

8.3.1 Registration in OXE context

Before you could start using the Softphone, you will have to create a directory number for this Softphone on the OXE. The minimum requirement of OXE version is: Release 8.x or above.

Description of OXE user creation and configuration is described on paragraph OXE Configuration

8.3.2 Registration in OXO context

In OXO context, the configuration of the phone is automatically done. After the configuration on the device, the connection to the OXO server is done and the IP Desktop Softphone starts. A phone number is assigned.

See Configuration of Application in OXO context paragraph to configure the network parameters.

8.4 Configuration of Application in OXE context

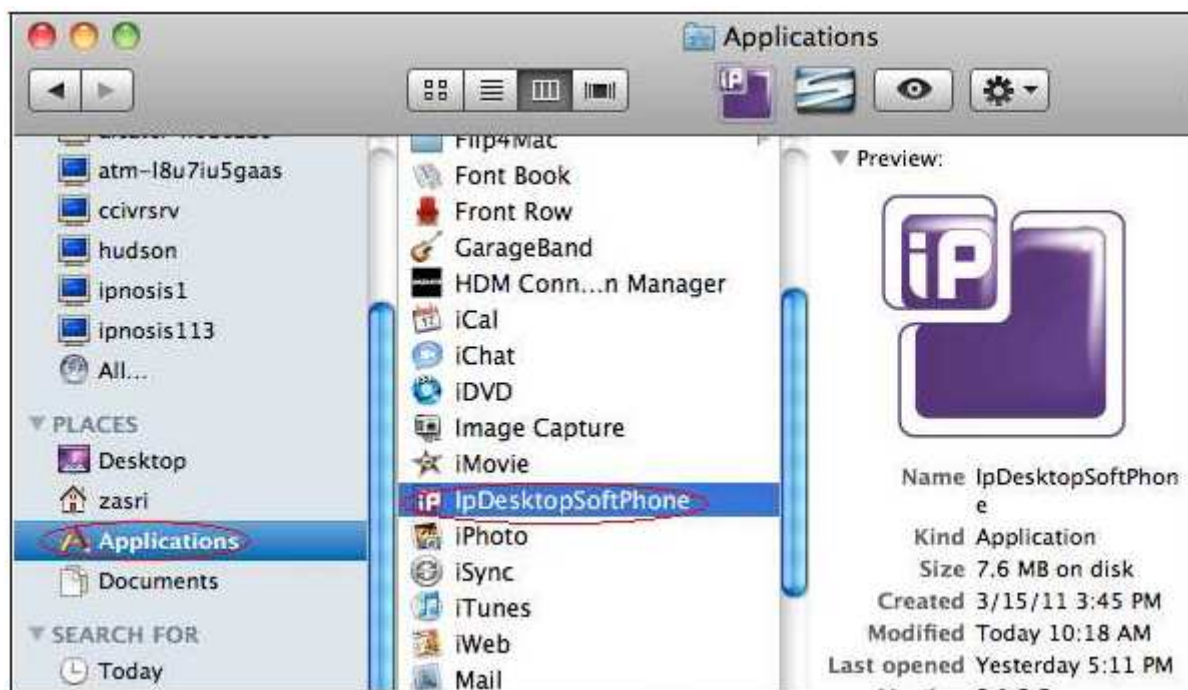
To configure the application you will have to launch it by following the steps below:

1. launch the application using the following the path:

Finder — Applications — IP Desktop Softphone — Open

This is illustrated below:

Path to launching link



IP Desktop Softphone for Alcatel-Lucent OmniPCX Enterprise and OmniPCX Office RCE Communication Servers

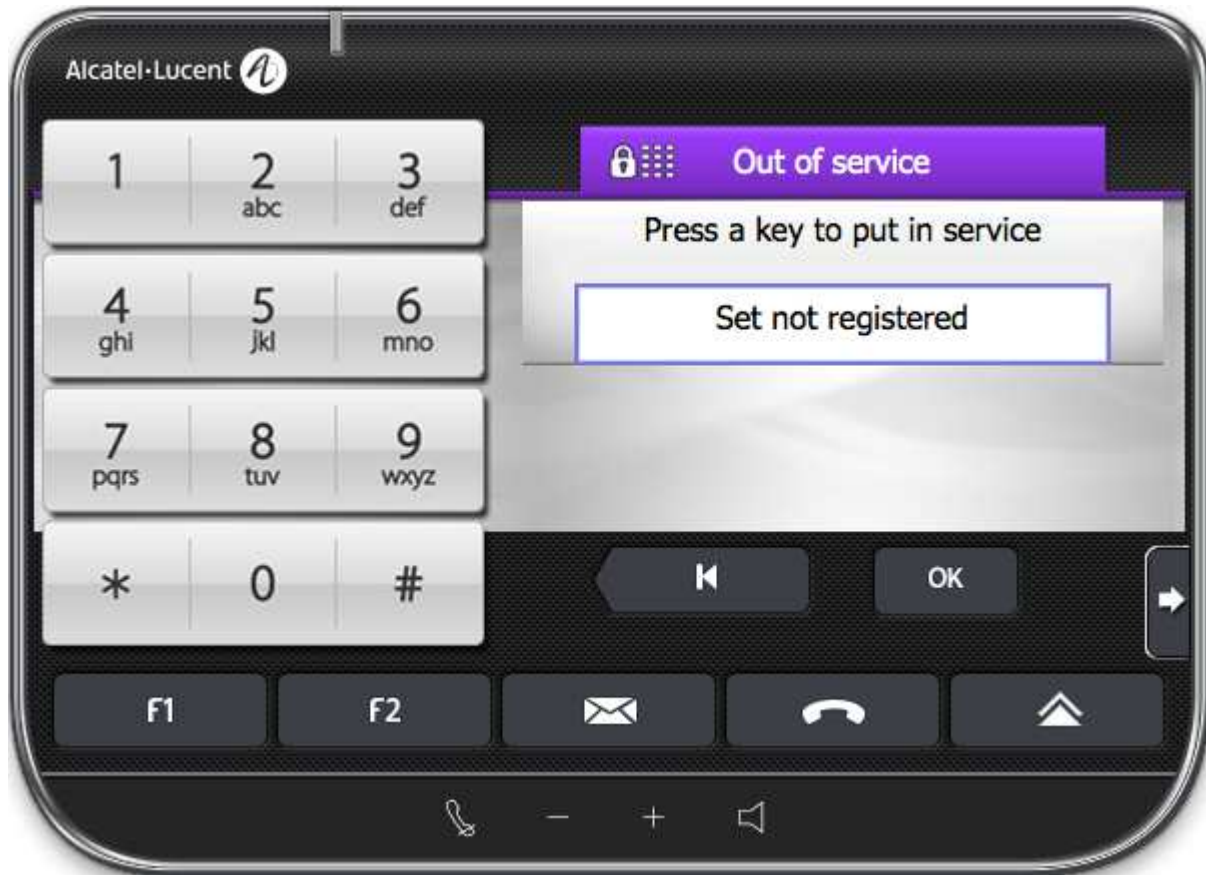
Installation Guide - ALESVC52662 Ed 2.0

ALE International proprietary and confidential

Page 84 of 117

2. Once you run the application as given above, the following image displays in your screen:

Phone Display



3. As you can make out, this phone is not yet ready to use. You need to do some configurations. To embark on the configuration process, you will have to click on any key, as indicated in the display. This would prompt you to enter the password, as in the screenshot below:



4. The default password is: "0000". Key it in.
5. This registers your set, and you get the following display:



6. Now you will have to commence customizing. For that, right click on the phone, outside the display panel. Then, follow the path given below:

Ip Desktop SoftPhone → Preferences

The following screenshot illustrates it:



7. In the menu that displays, select: IP Desktop Softphone → Preferences. This takes you to the Configuration window as below.



8. This window lists the following three tabs:
 - General
 - Sound
 - Network
9. You can select the one you need and configure the settings there. These are explained below, under respective headers:

8.4.1 General

1. The first tab General Opens by default - see screenshot above. In the entry boxes in this tab, you can see the values entered during the installation process. Now, you can change these entries, as you require. The following table explains these entries:

Field Name	Description
Skin	This refers to the appearance of phone image. By default, it displays: • 8068 This is the only skin available. You do not have any choice here. So leave it at that.

Emulation Type	This refers to the Emulation Type of the Phone. By default, it displays: • 8068 You do not have any choice here. So leave it at that.
----------------	---

2. Once you have completed making changes, click on OK to save your entries and close this screen.

8.4.2 Sound

Tab - Sounds.



This link is dedicated for customizing audio devices. You can configure the audio devices of your choice, separately for ringing, speakers and microphone. This application supports use of Bluetooth Headset to make conversations using this phone. This saves you the hassles of wire connectivity. However, before you configure, these audio devices should have been connected and installed in your system. The dropdown boxes display only those instruments or software that is installed in your system.

Later, if you add/change audio devices, you will have to configure again and select your preferences. Otherwise, the changes in audio hardware will not have any effect.

8.4.3 Network

Tab - Network.



In the first field, you will have to give the address of TFTP Server. This is mandatory and this is the information that enables connectivity to the phone. If you omit this entry or the entry is wrong, you will not get connected and would get the error message: CONNECTION LOST.

The second field is optional. You can give the address if you have a secondary TFTP Server.

Mac Address is displayed by default, and greyed. This means that the application deduces the Mac Address of your system and displays it. You cannot change it.

Once done, click OK to close this screen. Now you have completed the configuration. So, now the phone would display as below:



To check the version number, right click on the phone image outside display panel, and select:

Ip Desktop Softphone → About Ip Desktop Softphone.

This displays the version number as below:



To quit the application, select the same path, but select “Quit Ip Desktop Softphone” as below. This closes the phone image.



8.5 Configuration of Application in OXO context

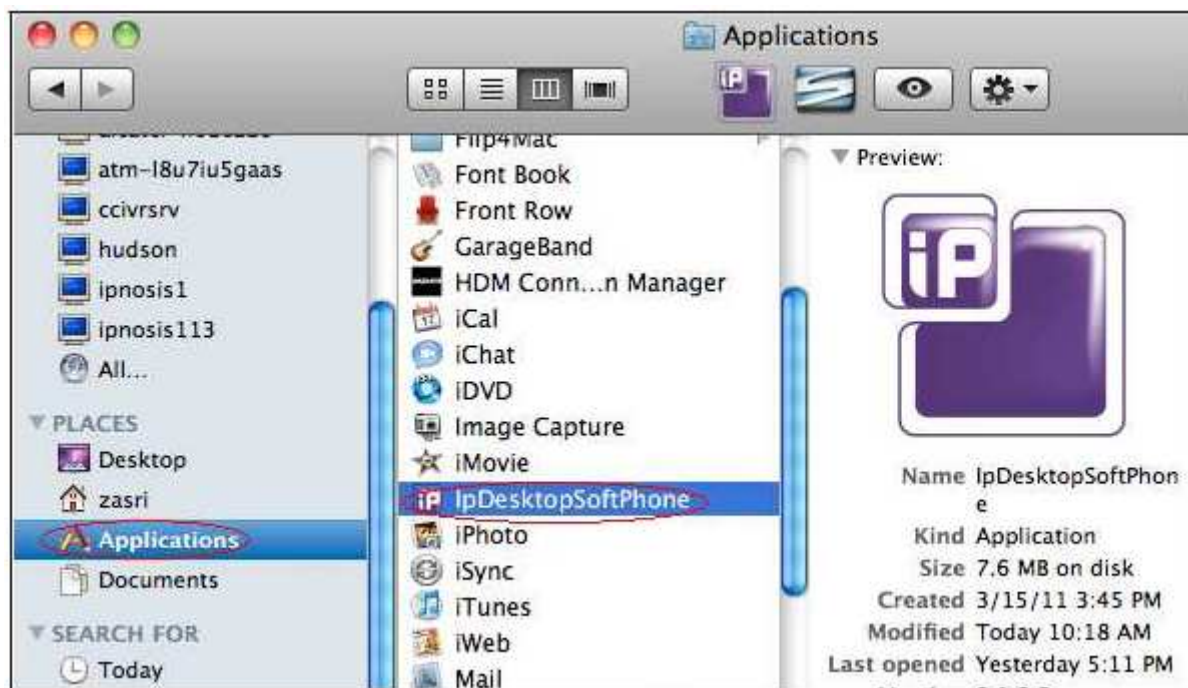
To configure the application you will have to launch it by following the steps below:

- 1 launch the application using the following the path:

Finder — Applications — IP Desktop Softphone — Open

This is illustrated below:

Path to launching link



- 2 Once you run the application as given above, the following image displays in your screen:



- 3 As you can make out, this phone is not yet ready to use. You need to do some configurations.
- 4 Now you will have to commence customizing. For that, click on Ip Desktop Softphone menu at the top of the screen. Then, follow the path given below:

Ip Desktop SoftPhone → Preferences

The following screenshot illustrates it:



- 5 In the menu that displays, select: OP Desktop Softphone → Preferences. This takes you to the Configuration window as below.

General Tab



- 6 This window lists the following three tabs:
- General
 - Sound
 - Network
- 7 You can select the one you need and configure the settings there. These are explained below, under respective headers:

8.5.1 General

- 8 The first tab General Opens by default - see screenshot above. In the entry boxes in this tab, you can see the values entered during the installation process. Now, you can change these entries, as you require. The following table explains these entries:

Field Name	Description
Skin	This refers to the appearance of phone image. By default, it displays: • 8068 This is the only skin available. You do not have any choice here. So leave it at that.
Emulation Type	This refers to the Emulation Type of the Phone. By default, it displays: • 8068 You do not have any choice here. So leave it at that.

- 9 Once you have completed making changes, click on OK to save your entries and close this screen.

8.5.2 Sound

Tab - Sounds.



This link is dedicated for customizing audio devices. You can configure the audio devices of your choice, separately for ringing, speakers and microphone. This application supports use of Bluetooth Headset to make conversations using this phone. This saves you the hassles of wire connectivity. However, before you configure, these audio devices should have been connected and installed in your system. The dropdown boxes display only those instruments or software that is installed in your system.

Later, if you add/change audio devices, you will have to configure again and select your preferences. Otherwise, the changes in audio hardware will not have any effect.

8.5.3 Network

Tab - Network.



In the first field, you will have to give the address of TFTP Server. This is mandatory and this is the information that enables connectivity to the phone. If you omit this entry or the entry is wrong, you will not get connected and would get the error message: CONNECTION LOST.

The second field is optional. You can give the address if you have a secondary TFTP Server.

Mac Address is displayed by default, and greyed. This means that the application deduces the Mac Address of your system and displays it. You cannot change it.

Once done, click OK to close this screen. Now you have completed the configuration. So, now the phone would display as below:

Phone display after configuration



To check the version number, right click on the phone image outside display panel, and select:

Ip Desktop Softphone → About Ip Desktop Softphone.

This displays the version number as below:



To quit the application, select the same path, but select “Quit Ip Desktop Softphone” as below. This closes the phone image.

To quit Ip Desktop Softphone

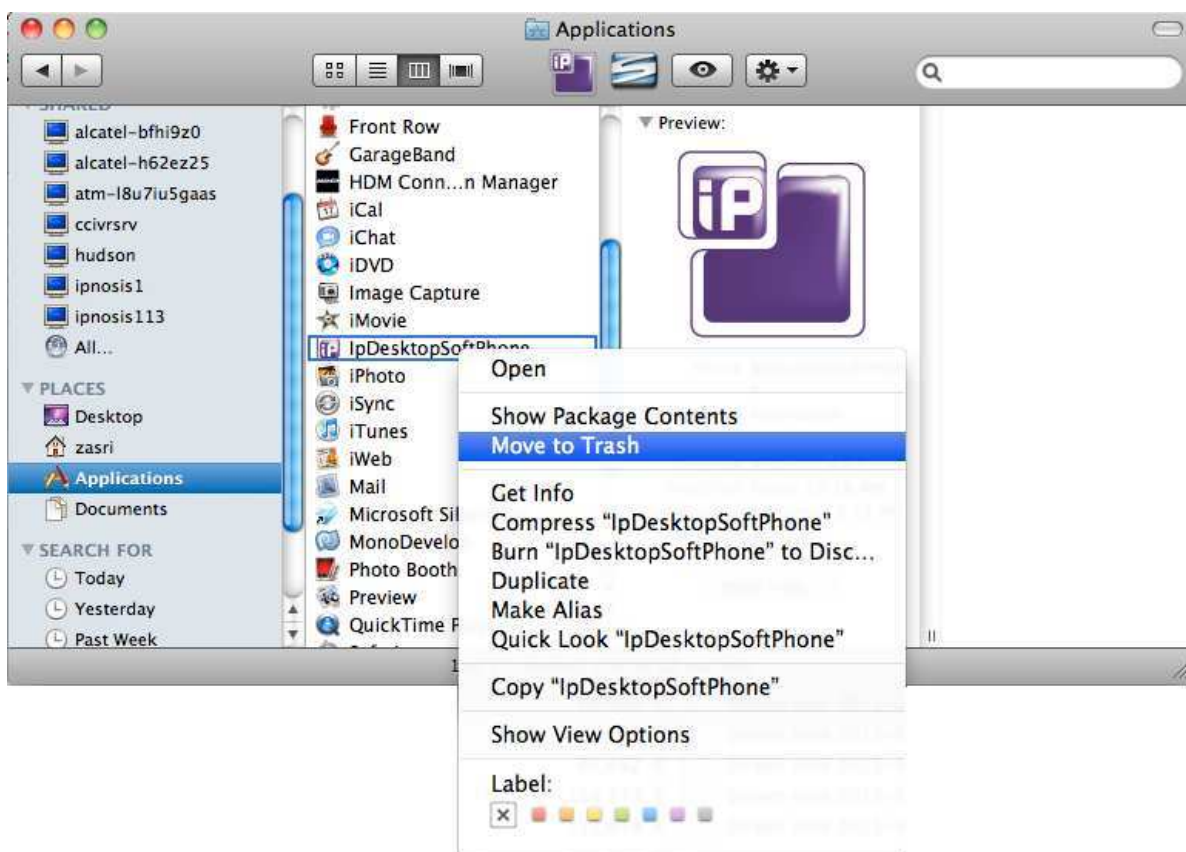


8.6 Uninstalling

To uninstall the IP Desktop Softphone application follows the steps below:

1. Open the Finder
2. Click on Applications folder
3. At right, you can find: IPDesktopSoftPhone.
4. Right Click on it. You get a menu.
5. Click on: Move to Trash.
6. This will uninstall the IPDesktopSoftPhone
7. When you do these, the screen will look like this:

Uninstalling IP Desktop Softphone



9. iOS Environment

This part of the document describes the iOS installation procedure.

9.1 Requirements for installation

Below given are minimum requirements, without which, this application will not function properly. So, before installing this application, please ensure these minimum requirements are met.

9.1.1 Hardware and Operating system supported

iPhone, iPod Touch and iPad are supported for installation of Ip Desktop Softphone application.

Minimum version of supported hardware and software are described on “[Core and Off-the-Shelf applications compatibility matrix](https://businessportal2.alcatel-lucent.com/home)” document available on Business Portal (<https://businessportal2.alcatel-lucent.com/home> with a search on “Core and Off-the-Shelf applications compatibility matrix”).

9.1.2 VPN

The IP Desktop Softphone requires a direct IP connection to the OmniPCX Enterprise, therefore if used from outside the company LAN, a VPN connection may need to be setup.

9.2 Installation Procedure

9.2.1 OXE Pre Requisites

After installation of software you will need to configure the application in order to associate a phone from OXE to the application. To do this you need to perform the OXE configuration as described on section OXE Configuration.

9.2.2 Installation using “App Store”

As the installation of application is performed by the end user from the “App Store”, installation is described on user manual document.

10. Android Environment

This part of the document describes the Android installation procedure.

10.1 Requirements for installation

Below given are minimum requirements, without which, this application will not function properly. So, before installing this application, please ensure these minimum requirements are met.

10.1.1 Hardware and Operating system supported

Minimum version of supported hardware and software are described on “[Core and Off-the-Shelf applications compatibility matrix](https://businessportal2.alcatel-lucent.com/home)” document available on Business Portal (<https://businessportal2.alcatel-lucent.com/home>) with a search on “Core and Off-the-Shelf applications compatibility matrix”).

10.1.2 VPN

The IP Desktop Softphone requires a direct IP connection to the OmniPCX Enterprise, therefore if used from outside the company LAN, a VPN connection may need to be setup.

10.2 Installation Procedure

10.2.1 OXE Pre Requisites

After installation of software you will need to configure the application in order to associate a phone from OXE to the application. To do this you need to perform the OXE configuration as described on section OXE Configuration

10.2.2 Installation using “Play Store”

As the installation of application is performed by the end user directly from the “Play Store”, installation is described on user manual document.

11. OXE Configuration

This part of the document describes the OXE configuration.

Configuration is independent of the IP Desktop Softphone installation environment.

11.1 User configuration

1. In the call server, create a user. Sample text for this process is given below:

User creation in OXE

```
Create: Users

Node Number (reserved) : 1
Directory Number : 3000

Directory name : IP PHONE
Directory First Name : DESKTOP
Shelf Address : 255
Board Address : 255
Equipment Address : 255
Set Type + IPtouch 4068
Entity Number : 1
Set Function + Default
Profile Name : -----
Key Profiles + None
Domain Identifier : 0
Language ID : 1

Secret Code : ****
Confirm : ****
```

2. TSC IP Emulation should be set to Yes as shown in the following illustration:

TSC IP Emulation → Yes

```
Review/Modify: TSC IP User

Node Number (reserved) : 1
Directory Number : 3000
Directory Number : 3000

Set Type + IPtouch 4068
Voice Coding Algorithm + Default
Terminal Ethernet Address : 00:00:00:00:00:00
IP Address : Unused
IP Domain Number : 0
Use of volume in system + YES
Reset For Update Authorized + YES
IP-Sofiphone Emulation + YES
```

11.2 User AOM configuration

3. AOM: To provide for 14-key extending pad, in the OXE server, you will have to key in as given below:

Review/Modify: Users

```

      NOMADIC + False
TAPI premium server + NO
  Conference group : -1
  Announcement group : -1
  Call Restriction COS : 0
  Applicable Restriction COS : 0

      Implicit Priority

  Activation mode : 0
  Priority Level : 0

      Explicit Priority

  Activation mode : 0
  Priority Level : 0

  Pre-emptable Primary Inc. Line + NO
  Pre-emptable Secondary Inc. Line + NO
    Priority Presentation + NO
      Ith Service type + Not Valid
      CUG List Number : -1
      Preferential CUG : -1
      CUG Outgoing Access + False
      CUG Incoming Access + False
  Automatic reconfiguration + CTQ Forbidden - Connection TO
    Associated RSI : -----
      Add On Module 1 + Electronic 14 Keys
      Add On Module 2 + None
      Add On Module 3 + None
  Internal Alphanum.Keyboard + English
  Called Associated DECT set : -----
  Dial by name and text msg. + NO
    Text msg number : 8

      Multi-Line Properties

```

In the above sample, note the portion enclosed within red box. This is the place where you will have to make the change. Once you do this, then the phone display will have the option of extending pad with 14 buttons.

11.3 Licensing

The use of the application requires an IP Desktop Softphone license and an IP license per user on the OmniPCX Enterprise Communication Server.

IP Desktop Softphone for Alcatel-Lucent OmniPCX Enterprise and OmniPCX Office RCE Communication Servers

Installation Guide - ALESVC52662 Ed 2.0

ALE International proprietary and confidential

Page 108 of 117

12. OXO Configuration

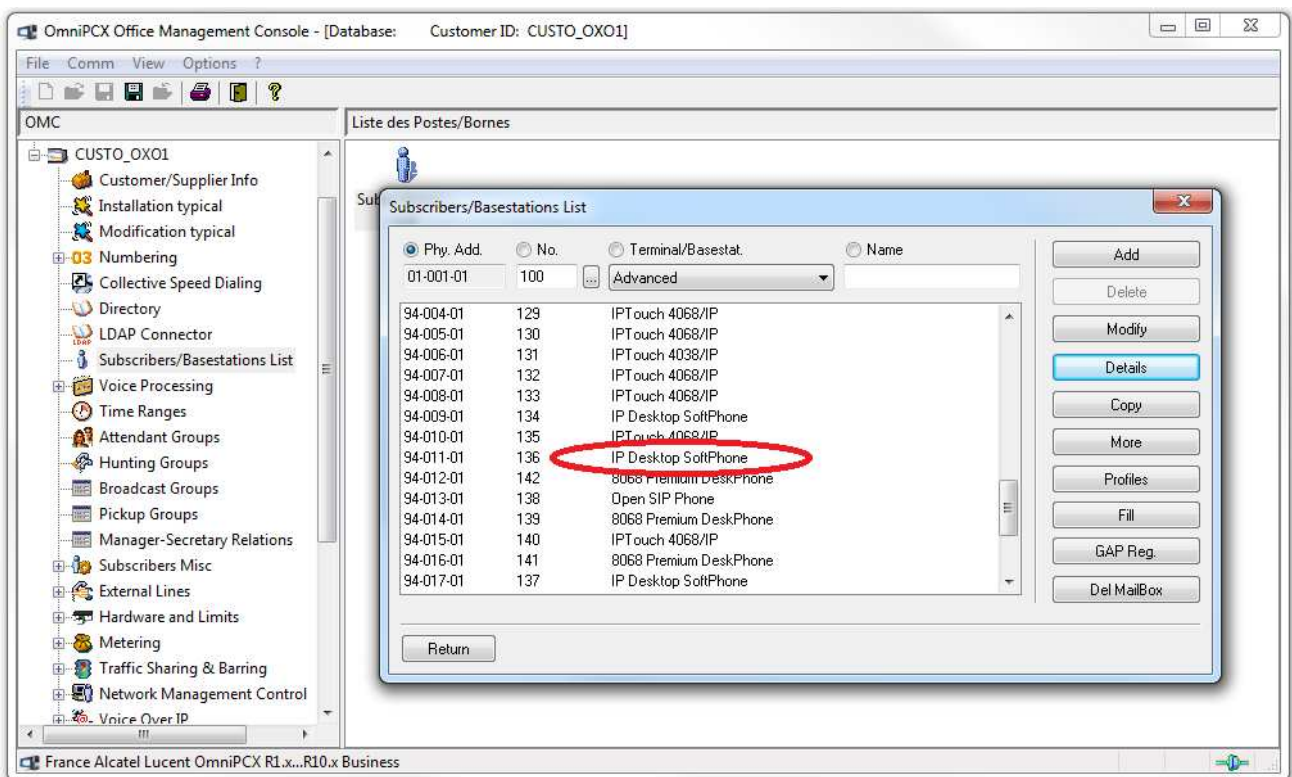
In OXO context, the configuration of the phone is automatically done. After the configuration on the device, the connection to the OXO server is done and the IP Desktop Softphone starts. A phone number is assigned.

Configuration is independent of the IP Desktop Softphone installation environment.

12.1 User configuration

1. In the call server, the user is created with the “IP Desktop Softphone” device type.

User creation in OXO



2. To consult or modify the user configuration, you can click on “Details” button as shown in the following illustration:

Subscriber

Phy. Add. 94-011-01

Name

Dir. Numbers

Int. No. i 136 More

Secondary sets ...

Associated set

Terminal

Original Type IP Desktop SoftPhone

Temporary Type

Mode PCX-Mode

Language English

Software Version 11.00.15

BootLoader Version 255.255.255

Data Version 11.00.15

Hardware Number

Serial Number Windows 7 x64

Localization Version

Customization Version

Virtual terminal ☐ Media

Entity Entity1

Keys V 24

Features Password

Metering ISDN

Pers. SPD. Services

Spd Dial Misc.

Barring Diversion

Dyn. Rout. Sel.Divers

DECT/PWT Hotel

IP/SIP Appoint.

Cent.Serv Mailbox

Mobility Reset

Physical in service

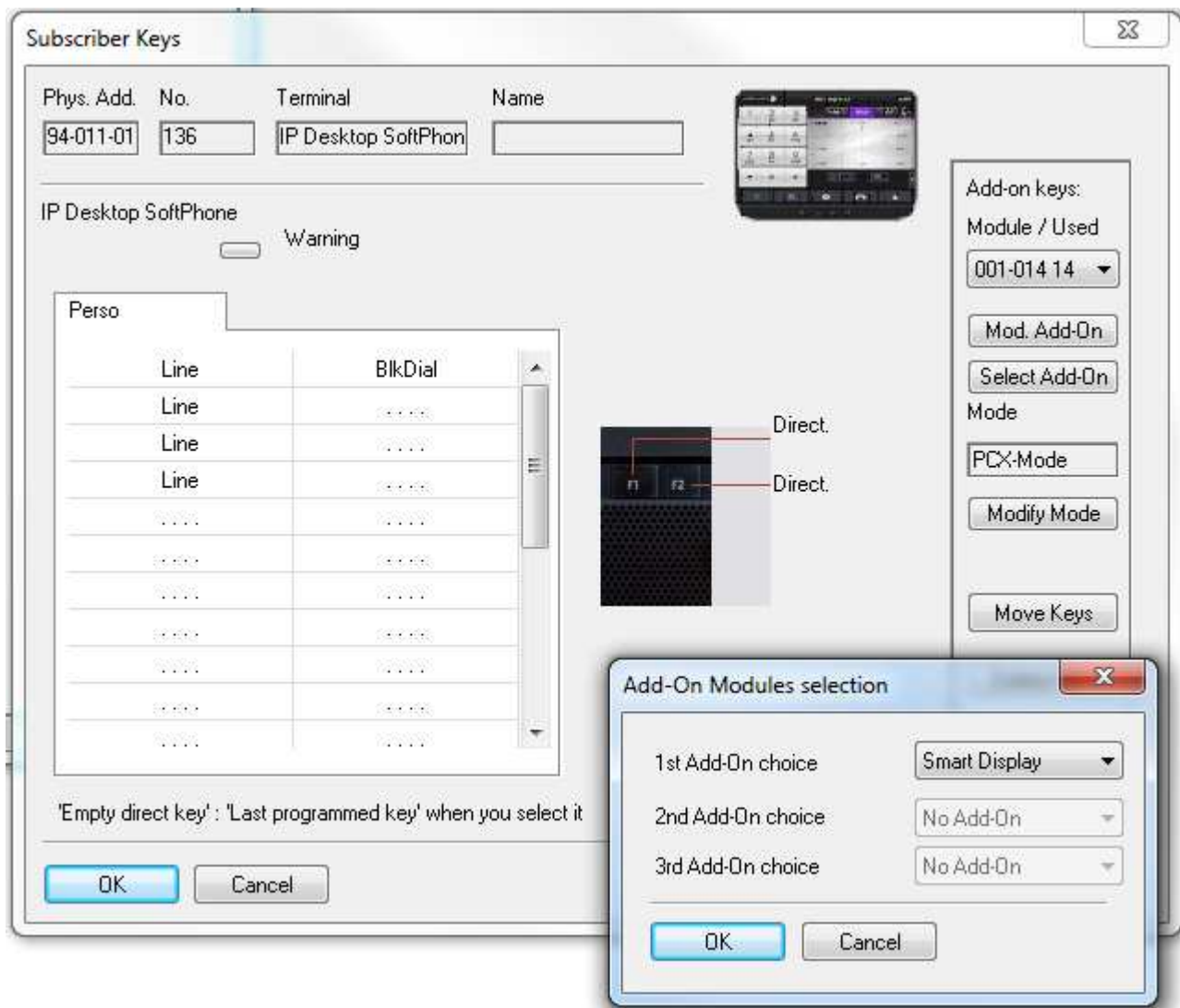
☐ Out of Service (logically)

OK Cancel

3. The IPSDP version is displayed in Software Version field.
4. The OS version of the installation environment is displayed in Serial Number field.

12.2 User Add-On configuration

5. AOM: The 14-key extending pad is automatically created; you can see “Smart Display” when you click on “Select Add-On” button. You can modify parameters of



12.3 Licensing

The use of the application requires an IP Desktop Softphone license and an IP license per user on the OmniPCX Office Communication Server.

13. Trouble Shooting

The table below lists some of the problems you could face, along with their remedial measures:

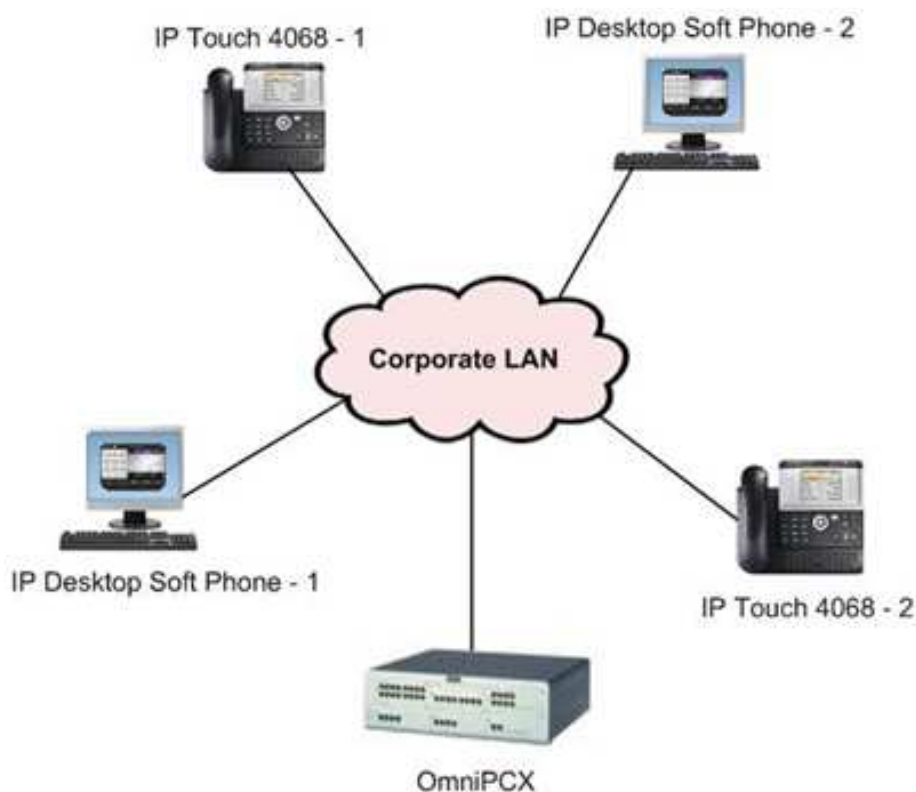
#	Problem	Remedy
1.	Connection establishment fails	- o Check if your network connection is enabled. - o Check that tftp address is correct and make sure you reach it by a "ping" - o You may be using the wrong network adapter: check in "Network" tab using Options → Application menu
2.	"Set is out of service" message is shown on IP Desktop Softphone screen	If you get this during the Installation, then one of the reason could be when the "IP-SoftPhone Emulation" is not activated in the PABX: Ask your administrator to activate it in <i>mgr → Users → Descend Hierarchy → TSC IP Users → Review and Modify → Directory Number (Enter the number of the terminal) → Ctrl+V → Select parameter IP SoftPhone Emulation → press Enter to change the parameter from NO to YES at PABX side</i>
3.	When the agent is logged-in, if the Softphone program is closed, or if the IP connection of the PC is lost, the Softphone set does not work. Instead, when it is opened, it gives the following message on the Softphone's screen: "Set not registered." To overcome this situation, we need to force log-off the agent, and re-open the Softphone program.	This is a normal behavior. However, to solve this problem, set the following parameters: <i>mgr → Users → Descend Hierarchy → TSC IP Users → Review and Modify → Directory Number (Enter the number of the terminal) → Ctrl+V >Select parameter IP SoftPhone Emulation → press Enter to change the parameter from NO to YES</i>
4.	When logged in as IP Softphone agent, Softphone frequently disconnects with a message: "Set not registered."	In the Descend Hierarchy of Users, set IP Softphone Emulation to "No." To do this, login to the OXE (call server). Follow the path: Users → Descend Hierarchy → TSC IP Users → Review and Modify → Directory Number (Enter the number of the terminal) → press Ctrl+V. In the list that displays, for Reset for update authorized, change the setting from "True" to "False."
5.	VPN UAIP user is unable to communicate with another UAIP user on LAN environment.	13.1.1 Check the Firewall or the Access lists. Ensure that the ports used by the Softphone are OPEN (refer the Section: 7.1.6 Pimphony) When the IP Desktop Softphone is used on a PC, it is forbidden to install and use a PIMphony IP Multimedia. To install an IP Desktop Softphone on a PC, PIMphony IP Multimedia, if present on this PC, must be uninstalled first. UDP used ports for more details)
6.	Noise during conversation	Management to be performed at PBX end: <i>System → Down Hierarchy → Other system param → Down Hierarchy → Compression Param → Review Modify → Voice Activity Detection: False.</i>

#	Problem	Remedy
7.	The application does not initialize in laptops connected to LAN through VPN	This is due to problem in the LAN. Please contact your Administrator in this respect. May be due to network settings (firewall etc)
8.	The application does not start with the system boot	Copy either the .exe file of the application, or its shortcut and paste it in the following directory: C:\Documents and Settings\user\Start Menu\Programs\Startup

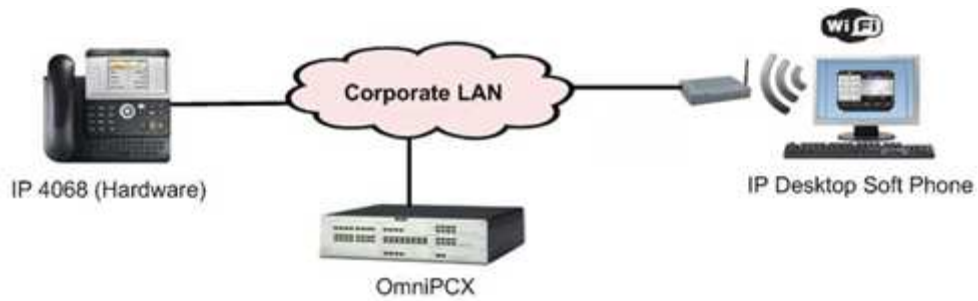
14. Appendixes

14.1 IP desktop Softphone in different environments

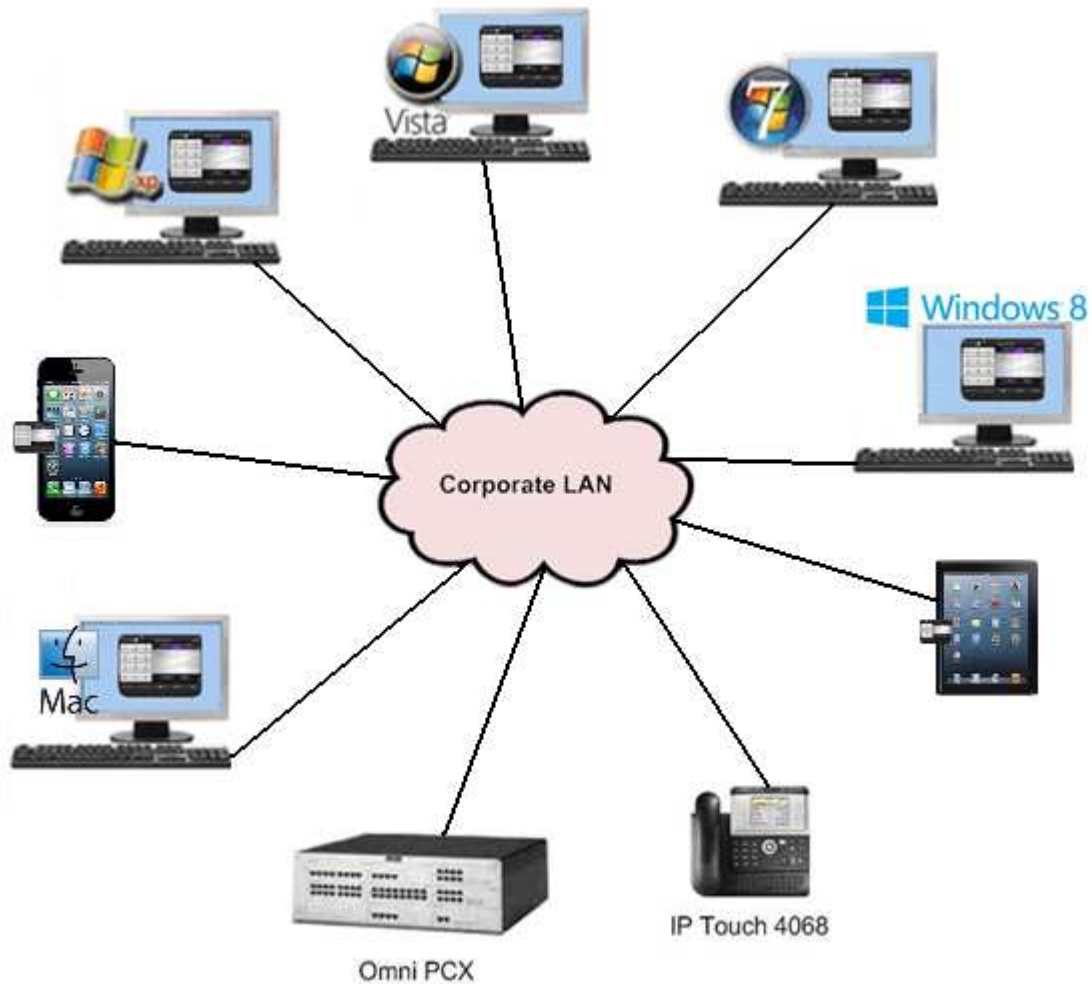
IP desktop Softphone in basic LAN Environment:



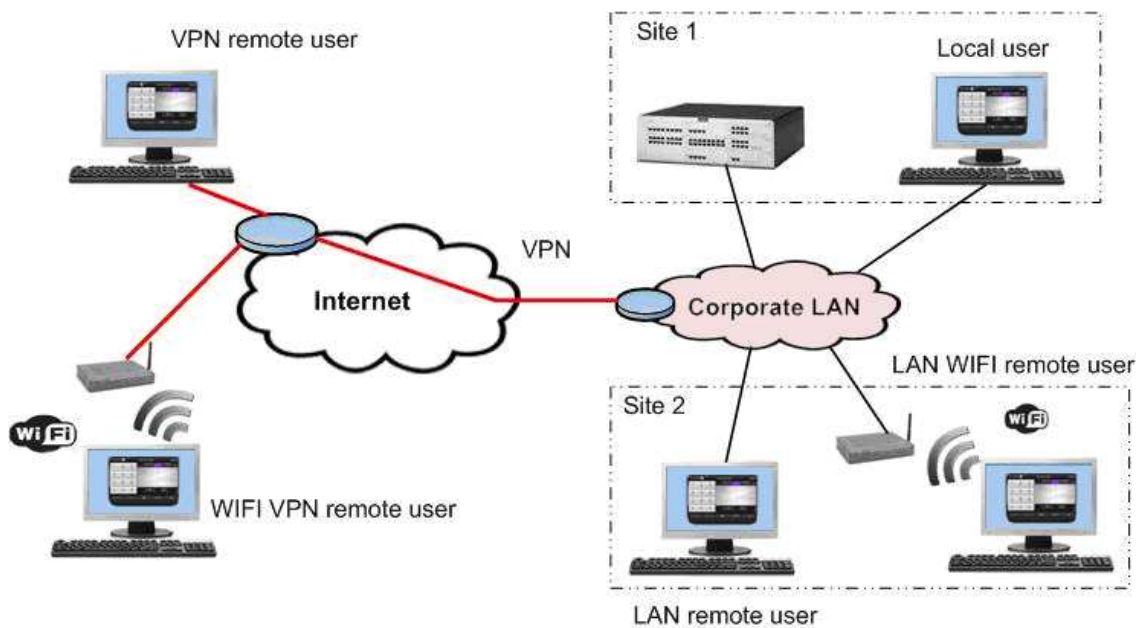
IP desktop Softphone in a Wi-Fi Environment:



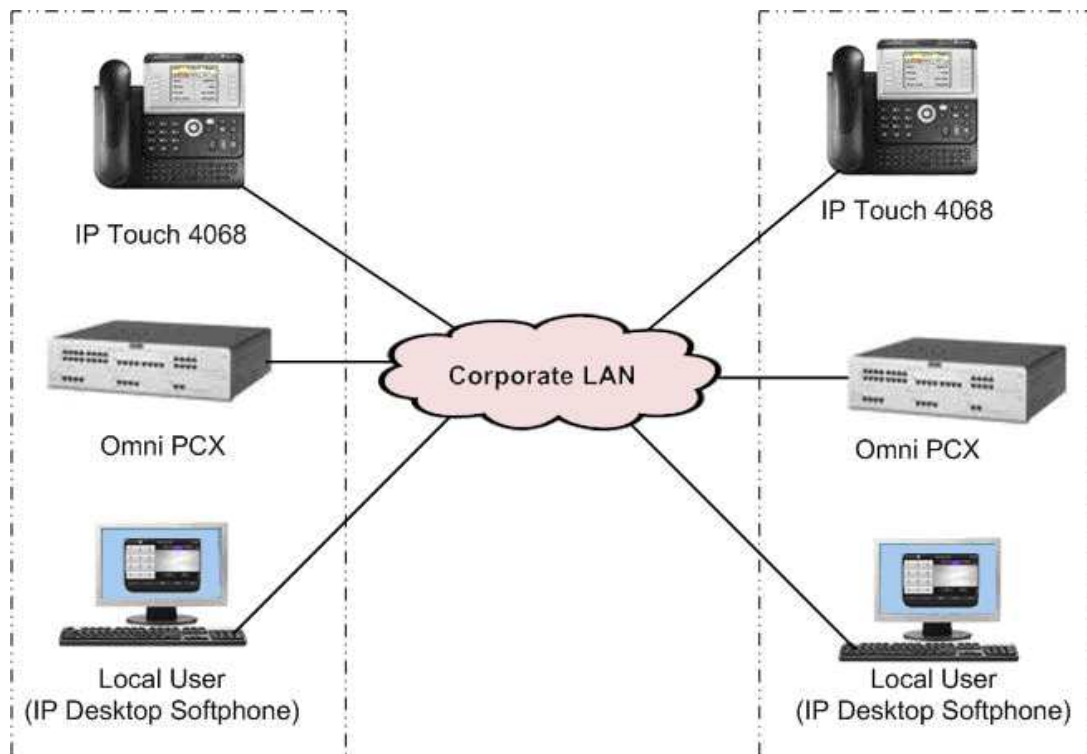
IP desktop Softphone in various Operating Systems:



IP desktop Softphone in a VPN Environment:



IP desktop Softphone in a Dual Call Server environment:



14.2 Qos Management

The ToS field could specify a datagram's priority and request a route for low-delay, high-throughput, or highly-reliable service.

Based on these ToS values, a packet would be placed in a prioritized outgoing queue, or take a route with appropriate latency, throughput, or reliability. IP Desktop Softphone can specify the value of this field either in UA messages or RTP flow.

For UA signalization the value of this field is sent from PBX in the connect message: field 06H :

QOS_IP_TOS, or in the message : SET_PARAM_REQ field : 00h: QOS_IP_TOS

for RTP flow, the value of the TOS/diffserv is sent from PBX in the Start_RTP message : field 03h: TOS (Type Of Service/Diffserv)

The value of this field must be configured in PBX.

14.2.1 OXE Context

For OmniPcx Enterprise, the TOS/Diffserv is managed in MGR in the path, Mgr -> IP -> Descend hierarchy -> IP Quality of Service COS -> Review/modify

TOS/DiffServ configuration in OXE

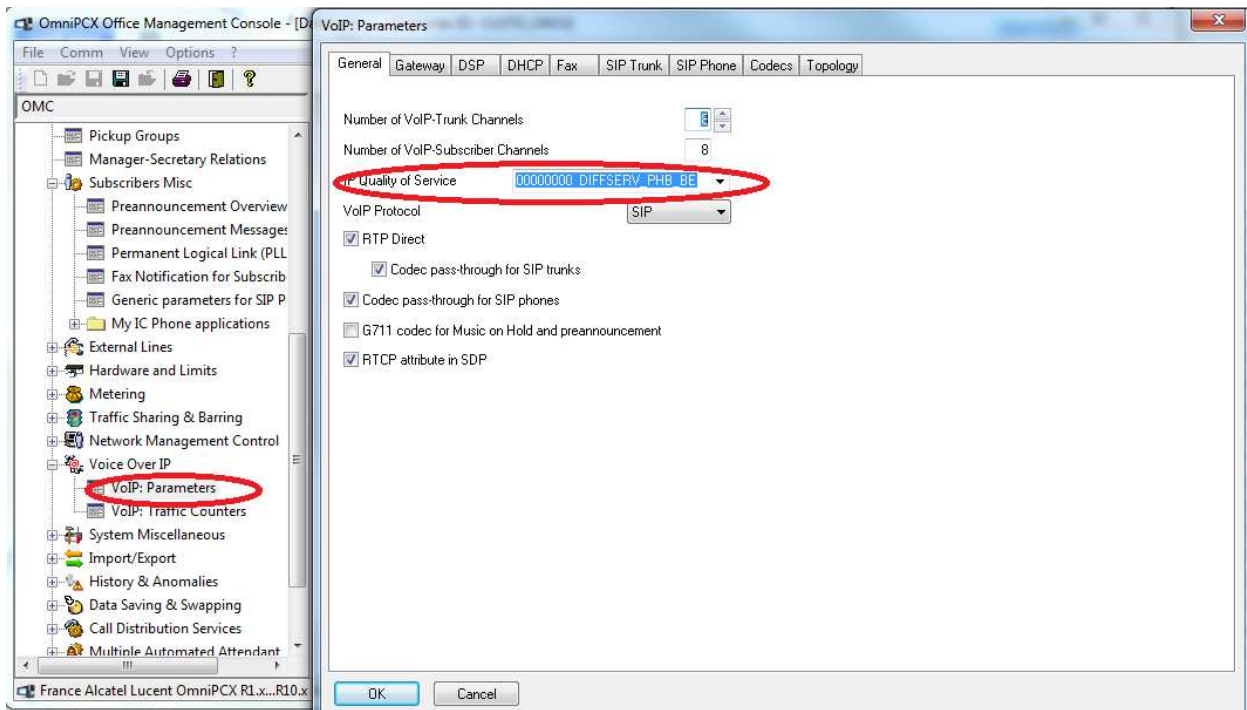
```
Review/Modify: IP Quality Of Service COS
Node Number <reserved> : 101
Instance <reserved> : 1
IP QoS COS : 0

Quality of Service Category Name : -----
      8021Q Used + False
=> 8021p Priority : 5
      VLAN ID : 0
=> TOS/diffServ : 46
      UDP Lost : 7
      UDP Lost Reinit : 7
      UDP Keep-alive : 15
      SIP Diff. Service : 40
      SIP Lost : 5
      SIP Keep Alive : 30
```

14.2.2 OXO Context

For the OmniPCx Office: launch the OMC, go to menu: VoIP: Parameters -> Quality of Service.

TOS/DiffServ configuration in OXO



END OF DOCUMENT