



VTGO

2.3

Administration Guide

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Revision History

Version	Author	Date	Comments
1.00	dms	10/06/2007	Document Created
1.01	dms	10/13/2007	Added formatting
1.02	dms	10/19/2007	Added Content
1.03	dms	12/03/2007	Merged Content from other Projects
2.2	dms	02/04/2009	Updated content to include VTGO 2.2 capabilities.
2.3	dms	08/24/2010	Updated content to include VTGO 2.3 capabilities.

Legal Stuff

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How to Get Support

Support Policy

The extent of support provided by IP blue differs by product and by support plan; and is limited to documented features and supported system environments unless specifically noted. Support plans can be purchased at <http://www.ipblue.com/store.asp> or by calling IP blue Sales at +1.212.485.1225. Support Plans typically do include access to software updates but do not provide major version updates as part of the plan.

Supported Products and Versions

Product	Version	Status	Released
VTGO	1.n	Discontinued	2002
VTGO	2.0	Discontinued	2004
VTGO	2.1	Discontinued	2005
VTGO	2.2	Active	2006
VTGO	2.3	Active	2010
VTGO-PC	1.0 - 2.9	Discontinued	2002-2006
VTGO-PC	2.10	Supported	2007
VTGO-PC	2.11	Active	2008

Support Availability

IP blue offers product support Monday through Friday from 09:00 (9:00 AM) to 18:00 (6:00 PM) , North American Eastern Time Zone. IP blue support is typically closed on weekends and major US holidays.

US Holiday Schedule

Holiday	Dates 2010	Dates 2011	Dates 2012
New Years Day	Jan 1 Fri	Jan 1 Sat	Jan 1 Sun
Martin Luther King	Jan 18 Mon	Jan 17 Mon	Jan 18 Mon
Presidents Day	Feb 15 Mon	Feb 21 Mon	Feb 15 Mon
Saint Patrick's Day	Mar 17 Wed	Mar 17 Thu	Mar 17 Sat
Memorial Day	May 31 Mon	May 30 Mon	May 28 Mon
Independence Day	Jul 4 Mon	Jul 4 Mon	Jul 4 Wed
Labor Day	Sep 6 Mon	Sep 5 Mon	Sep 3 Mon
Columbus Day	Oct 11 Mon	Oct 10 Mon	Oct 8 Mon
Veterans Day	Nov 11 Thu	Nov 11 Fri	Nov 11 Sun
Thanksgiving	Nov 25-26 Thu-Fri	Nov 24-25 Thu-Fri	Nov 22-23 Thu-Fri
Christmas	Dec 24-27 Fri-Mon	Dec 23-26 Fri-Mon	Dec 24-26 Mon-Wed

Support Requests

Support is requested via telephone by calling +1.212.485.1399, E-mail by sending a support request to support@ipblue.com or by completing a web form at http://www.ipblue.com/support_request.asp

Support Responses

Support responses will be provided via Telephone, E-mail or Remote Assistance with Citrix Go-To-Assist or Webex depending on the nature of the request. IP blue will try to reply to support requests within 24 hours during normal business days. IP blue uses an automated Issue tracking database system. Support requests that come via email and web form will automatically be assigned case numbers and email responses will be sent to the originators email address.

Introduction

VTGO is a softphone application that brings the functions of a Cisco IP phone to Windows Mobile devices. The softphone is certified for use on Cisco Unified Communications Manager platforms versions 3 through 8 and will register as a Cisco Phone type (7902, 7905, 7910, 7912, 7920, 7921, 7925, 7940, 7941, 7960, 7961, IPC types) using the Skinny protocol.

The application has been optimized for use in WiFi environments with RSSI signal level monitoring warning, WMM/QOS to ensure high quality low latency voice transmission between devices.

VTGO has been optimized to run on many devices from Motorola/Symbol, Intermec, Psion, Datalogics, Opticon, LXE, HP, HTC, etc and provides inter-operability between these devices.

Main Features of VTGO 2.3:

Feature	Description
Line Appearances	Single line, Dual Line, Octo Line support on CME
Dialing Options	Keypad dialing, Local Directory Dialing, Contacts
<ul style="list-style-type: none"> • Call Log Dialing 	Locate and dial from call history log.
<ul style="list-style-type: none"> • Speed Dial 	10 speed dials buttons that can be programmed with dialing macros.
<ul style="list-style-type: none"> • On hook dialing 	User can enter digits and format number then press the send key dial.
<ul style="list-style-type: none"> • Off hook dialing 	User can press the send key and get dial-tone then enter digits.
Call Forward All Calls	User can forward calls to a alternate number.
Auto Answer	Automatically Answer inbound calls after a flexible defined number of Ring cycles.
Hold/ Resume	Place call on hold and resume.
Transfer	Transfer a call to another number.
Conference	Add-on 1 to 7 additional parties to and established call.
Remove Last Conferee	Drops last conference member add to conference call.
Call Waiting	Second Call Notification. Place first call on hold answer.
Call Park	Allows users to park (temporarily store) a call and then retrieve th call by using another phone in the Cisco Unified Communications Manager.
Call Pickup	Pick up Ringing Line in own Group
Group Pickup	Pick up Ringing Line in another Group by dialing Group Pickup Number
Other Pickup	Pick up Ringing Line in own or other associated Group
Flash Key	Sends a timed Hook switch Flash signal to the attached PBX in Centrex Key-switch Mode.
Last Number Redial	Pressing the Send key will redial last number.
Redial-Last 10 Number	Press the Redial Menu Button to displays screen with last 10

Feature	Description
	numbers dialed.
Message Waiting Indication	Display shows message waiting indication that flashes to notify the user that a voicemail or other message type is waiting.
Shared Line	Multiple appearance directory (Shared number) will display status on phone. Start a call on your Deskphone place on Hold and return from Shared line on VTGO.
Codecs	G.711, G.729a
Jitter Buffer	Dynamic 20-2000ms, min-max parameters are adjustable in registry.
QOS	DSCP packet tagging for Signaling and Audio RTP
WiFi RSSI Signal monitoring	WiFi signal awareness with low RSSI Notification
Programmable Hotkeys	Flexible assignment of Hardware buttons to phone functions.
Extension Mobility	Allows user to Assign DN based on UserID and PIN
Dialing Rules	User can create dialing rules that will modify dialing from Contacts Example: Insert 91 to a 10 digit number to access outside trunks.
Directories integration	(Corporate, Local Directory, LDAP, Local Contacts); dialing from Pocket Outlook Contacts
Localization	International support (English, Spanish, French, Norwegian, Italian Russian)
Key Switch Mode	Supports behind PBX operations with Flash key function. User interface Hides CME based Transfer, Conference and replaces the with Flash, Speed Dial, and Call Log Buttons.
Third party integration support	API for 3rd party applications integration

Device Requirements

VTGO will run on most Windows Mobile devices that meet the following minimum requirements:

Hardware Device:	Windows Mobile device with touchscreen, microphone, speaker
Processors:	Intel xScale, Marvel, StrongARM, ARM, OMAP, Qualcomm 300 Mhz or faster
Memory:	64 MB RAM or greater 64 MB ROM or greater
Storage Space:	Compressed Cab File: 727KB Program Store Installed: 2022KB
Operating Systems:	Windows Mobile 2003SE-6.5 Classic, Professional
Screen resolutions:	240 x 320 QVGA Portrait 320 x 240 QVGA Landscape 480 x 640 VGA Portrait 640 x 480 VGA Landscape
Network Interface:	Wireless LAN: IEEE 802.11 a, b/g Wireless WAN: A&T 3G Phone cannot run over Active Sync because Active Aync blocks UDP/RTP voice packets.

Network Requirements

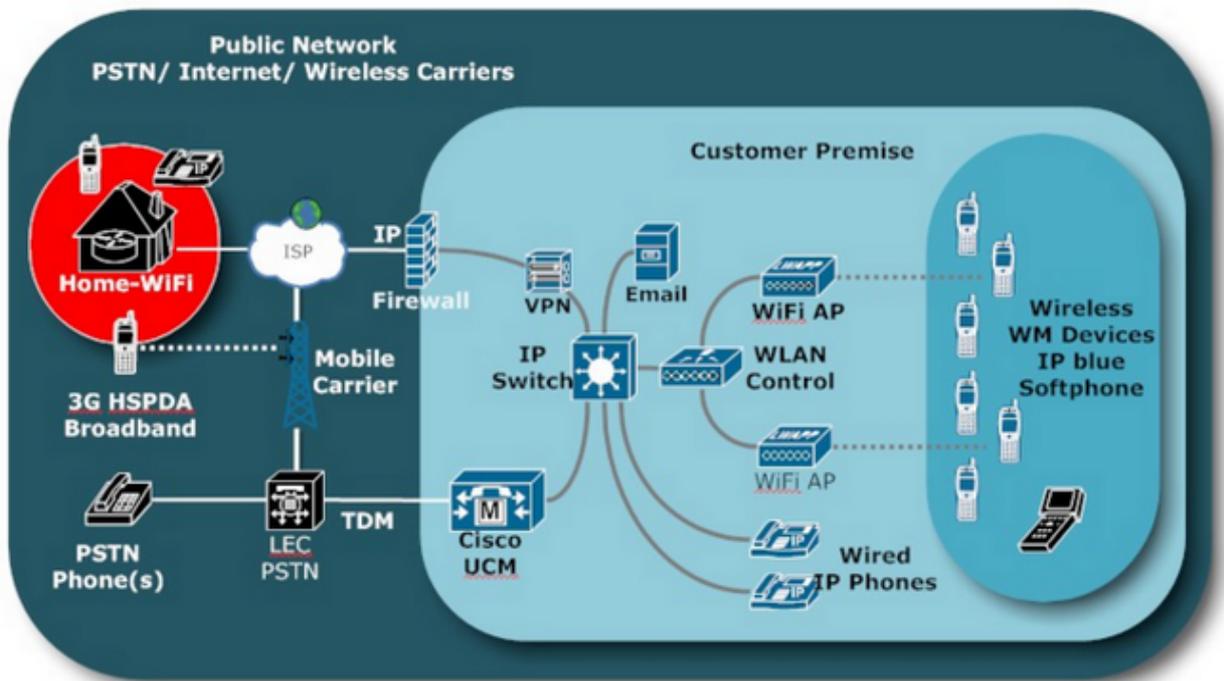
VTGO-SP will successfully operate as a Cisco Unified IP Phone endpoint when the network is in place and is functioning properly:

Voice over Wireless LAN

Access Points	Access Points (APs) configured to support Voice over WLAN (VoWLAN)
Quality of Service	QOS Policy Enabled Map DSCP 48 to Class Selector-6 COS Voice <10MS Latency
Wireless Multimedia Extensions	WMM is based on the IEEE 802.11e standard provides basic Quality of service (QoS) features to IEEE 802.11 networks. WMM prioritizes traffic according to four Access Categories (AC) - voice, video, best effort, and background. WMM Enabled
Call Admissions Control	CAC Disabled
Controllers Switches	Controllers and switches configured to support VoWLAN
Security	Security implemented for authenticating wireless voice devices and users

VoIP Network

Switches	Switches configured for VoIP
Routers	Routers configured for VoIP
Gateways	Gateways configured for VoIP
DHCP	DHCP Option 150 defined in DHCP scope for Wireless subnet. DHCP should be defined as an IP address or Array of IP addresses containing the primary and secondary TFTP server addresses for the phone configuration files.
DNS	Host names should be defined that contain the name and IP addresses of the TFTP servers for the phone configuration files.
Call Control Server (Cisco Unified Communications Server)	One of these call-control products installed and configured: <ul style="list-style-type: none"> -Cisco Unified Communications Manager Server 4 or later. -Cisco Unified Communications Manager Express 4 or later. -Broadsoft M6 Platform. -Asterisk with Chan-SCCP installed.
IPv4 network	Configured to support DHCP or manual assignment of IP address, Gateway, DNS, and Subnet Mask.



Ports and Protocols

The following table represents the ports and associated protocols used byVTGO.

Local Port	Remote Port	Protocol or Service	Direction	Usage
TCP dynamic	2000	SCCP	Both	Control Signaling
UDP Dynamic 16384-32768	UDP Dynamic	UDP/RTP	Both	Media Streaming
TCP dynamic	389	LDAP	Both	LDAP Directory
UDP dynamic	69	TFTP	Out	Get TFTP Files
TCP 80	80	HTTP	Both	HTTP Directory
UDP 67	68	DHCP	Both	Used for DHCP Scope Requests
UDP dynamic	53	DNS	Both	Used for DNS Lookup Requests
UDP	4301	iNAT Server	Both	Public IP address discovery

Quality of Service

VTGO will mark Voice Packets with a DSCP value of 48 and Signaling Packets with a DSCP value 46.

The DSCP Values can be set in the registry using the following values.

HKEY_LOCAL_MACHINE\SOFTWARE\IPBLUE\VTGO

Value Name	Type	Default Data	Description
DSCPEnabled	String	1	Enable DSCP packet Tagging 0=disabled 1=Enabled
DSCPRTTP	String	6	DSCP Value for RTP 6=DSCPAudio 48 5=DSCPVideo 46
DSCPSignaling	String	5	DSCP Value for Signalling 6=DSCPAudio 48 5=DSCPVideo 46

VTGO installer will set HKEY_LOCAL_MACHINE\Comm\Tcpip\DSCPIPMappings

DSCPAudio=48

DSCPVideo=46

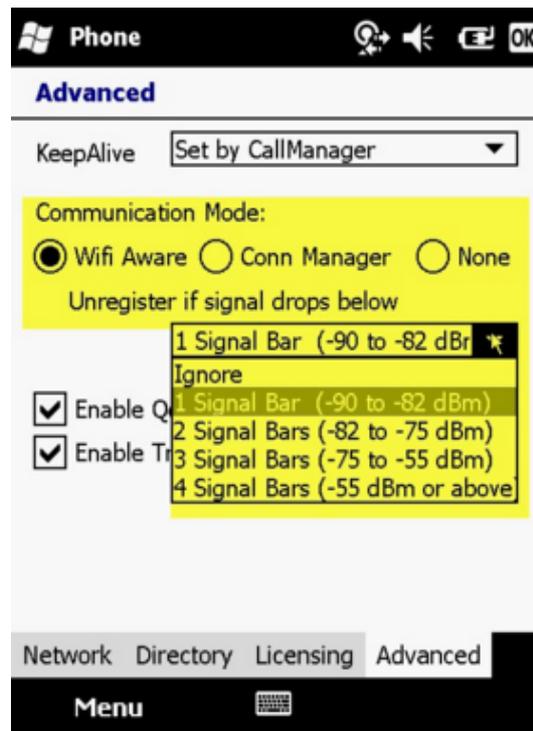
WiFi Signal Level

VTGO will monitor the RSSI level and use the value to determine if the Signal level is high enough to operate properly.

WiFi Signal Aware does not work with Intermec CK3 unless Microsoft Zero Configuration is enabled.

VTGO can be set under [Menu > Settings > Configuration > Advanced Tab](#) to unregister from CUCM if signal drops below the level selected. The signal levels are indexed as:

- 1 Signal Bar (-90 to -82dBm)
- 2 Signal Bar (-82 to -75dBm)
- 3 Signal Bar (-75 to -55dBm)
- 4 Signal Bar (-55 to above)



Installation and Removal

Installation

The VTGO softphone application can be installed by downloading the installation package to a Windows PC then to the Windows Mobile device via Active Sync or installed directly to the device using the device's browser to download the installation cab file from the IP blue Website.

Removal

To completely uninstall VTGO, go to Settings > System > Remove programs to remove it.

Note: Cisco Unified Communication Manager (CUCM) or Cisco Unified Communications Manager Express (CUCMe) must have a phone predefined or be operating in auto-registration mode before VTGO will register and become operational. See section on configuring a phone in CUCM or CUCME.

Softphone Installation Using ActiveSync:

Step 1. Download the installation files using your PC's browser from <http://www.ipblue.com/download/products/ppc/vtgosetup.exe>

Step 2. Connect your Windows Mobile device to your PC and establish an Active Sync connection.

Step 3. Install the downloaded vtgosetup.exe on your PC.

Step 4. Active Sync will transfer vtgo.cab file to device and prompt you to complete the installation.

Step 5. VTGO is designed to work with DHCP, TFTP and Auto registration to self configure. If these components are in place at your facility the softphone will register with CUCM server and be assigned a telephone number.

Step 6. [Configure softphone](#) using steps in the configuration section of this document.

Softphone Installation with Cab File:

Step 1. Download the installation files using your PC's browser from <http://www.ipblue.com/download/products/ppc/vtgo.cab>

Step 2. Connect your Windows Mobile device to your PC and establish an Active Sync connection.

Step 3. Copy VTGO.cab to the device's \Application folder.

Step 4. Locate the file on the Device and Tap to install .

Step 5. VTGO is designed to work with DHCP, TFTP and Auto registration to self configure. If these components are in place at your facility the softphone will register with CUCM server and be assigned a telephone number.

Step 6. [Configure softphone](#) using steps in the configuration section of this document.

Softphone Installation from Web Site:

Step 1. Open Internet Explorer (on the WM device) and enter the address <http://www.ipblue.com/download/products/ppc/vtgo.cab> into the address bar and click GO.

Step 2. The WM Device browser will prompt you to download VTGO.cab to the \My Documents Folder in Main Memory.

Step 3. Tap Change and Save the VTGO.cab file to a non-volatile storage location such as \Application or \Storage Card.

Step 4. The VTGO.cab file will download to in about 30 seconds and then prompt you to run it.

Step 5. Click OK to install the softphone.

Step 6. VTGO is designed to work with DHCP, TFTP and Auto registration to self configure. If these components are in place at your facility the softphone will Auto register with Call Manager and be granted a telephone number.

Step 7. [Configure softphone](#) using steps in the configuration section of this document.

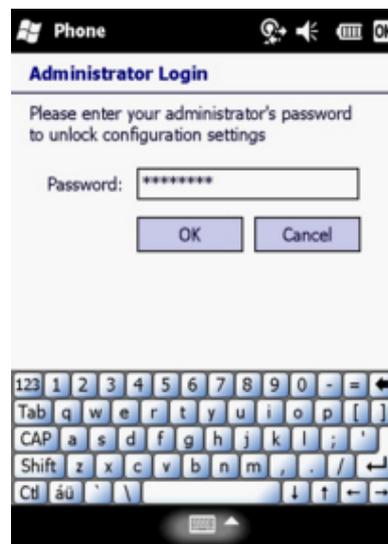
Configuration

VTGO is designed to work with DHCP, TFTP and CUCM auto-registration to self configure. If these services are configured and enabled at your facility the softphone will automatically discover the CUCM TFTP server address via DHCP option 150, download the default configuration XML file, register with CUCM and be assigned a telephone number when run the first time. If these services are not defined follow the configuration steps below to configure the softphone:

- Step 1** If DHCP option 150 is not defined the first time the softphone is run you will be informed of the failure and prompted to manually enter the TFTP server's manually.

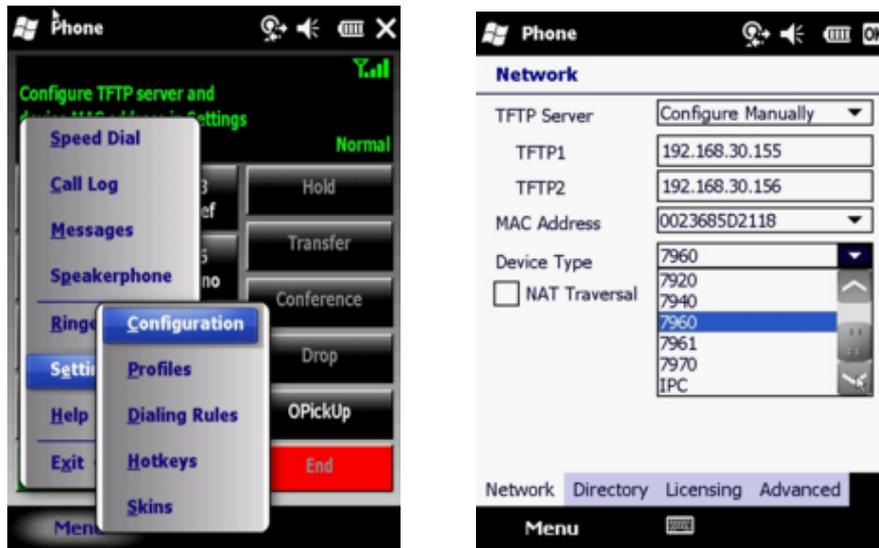


- Step 2** If the admin password is set you need to enter the admin password under **Menu > Help > Support** before you can access the configuration. The default password is admin123 then Tap Ok.



- Step 3** Open **Menu > Settings > Configuration** Network Tab Select Configure Manually and enter the TFTP1 and TFTP2 server addresses, select or enter a MAC address that is

used to create a Device Name and select the Device type to register as. Tap Ok.



Step 4 The softphone should now download the configuration file SEP[MAC].cnf.xml from the defined TFTP server, register with the UCM or UCME server and show the assigned Directory Number.



Menu Lock Down Options

VTGO supports a lock down mode that can disable and hide certain menu items from the user when the Administrative Password is set in the registry Key **[HKCU\SOFTWARE\IPBLUE\VTGO:sAdminPassword]**.

When the lock-down mode is enabled the items under **Menu > Settings** and the **Exit** item will be disabled but visible on the main Menu.



To unlock the Settings and exit items Tap **Menu > Help > Support** and enter the Administrative Password. The default password is admin123.

Disable and Hide Menu Items/Features

The following menu items can be disabled and hidden by defining and setting **HKCU\Software\IPBLUE\VTGO:Value** as defined below:

Value	Type	Data	Menu Item
DisableMenuUserLogin	String	1	User Login
DisableMenuSpeeddial	String	1	Speed Dial
DisableMenuDirectory	String	1	Directory
DisableMenuCallLog	String	1	Call Log
DisableMenuMessages	String	1	Messages
DisableMenuSpeakerPhone	String	1	Speakerphone
DisableMenuRingerVolume	String	1	Ringer Volume
DisableMenuSettings	String	1	Settings Item
DisableMenuExit	String	1	Exit Item
DisableToolbar	String	1	Menu Bar

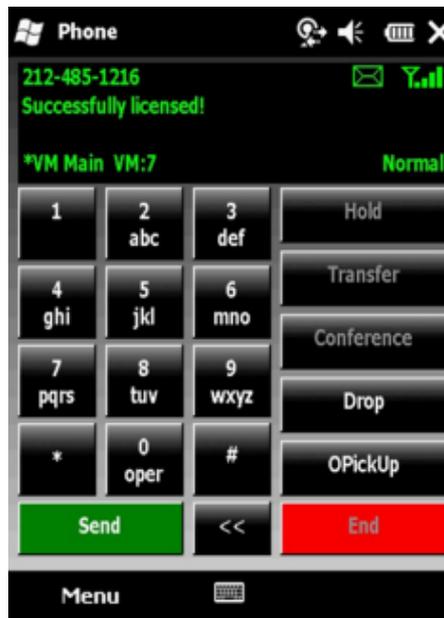
License Control

VTGO is licensed software and requires a valid license key in order to function without the DEMO mode time restrictions of twenty minute runtime sessions and two minute phone calls. The license activation process will require one time access to the IP BLUE license server via the internet.

Demo mode warning screen will pop up after 20 minutes of use.

Need Demo Screens

To enter the license provided by IP blue **Open Menu > Configuration > License** and enter the license key, including the dashes, in the Serial Number space provided and Tap OK.



Off Line License Control

VTGO supports offline licensing as an option. In this mode the softphone will download a file stored on the TFTP server to satisfy the license at runtime. If the software is taken off site where the file can not be accessed the softphone will run in demo mode.

To enable off line licensing

Step	Action
1	Contact IP blue Sales and indicate the need for offline licensing. IP blue will produce a special version of VTGO that will support the feature for your site. IP blue will send you a vtgoppc.xml file that must be installed on all TFTP servers for UCM or UCME.
2	Upload the vtgoppc.xml file to your TFTP server. See procedure to upload section.

Sample content of license file.

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
<VTGOConfig>
  <!--You should always increase FileVersion number everytime you make changes to this file.-->
  <!--Local or Remote -->
  <FileVersion>1</FileVersion>

  <!--To use the local version of this file, leave ConfigurationURL blank-->
  <!--for TFTP use tftp://TFTPserveraddress/vtgo.cfg-->

  <OrganizationID>7D1912316-EBD4-4B46-8AB1-5DB4D5F9E525</OrganizationID>
  <OrganizationName>XYZ CORP</OrganizationName>
  <Location>111 Any Road, Anytown, NY 00000, USA</Location>

  <entries>
    <entry name="bOfflineLicensing" value="1"/>
    <!--HTTP URL of license authority. Starts with http://-->
    <entry name="sLicenseURL" value="http://license.ipblue.com"/>
    <entry name="sLicenseKey" value="0000000-0000-0000-0000-000000000000"/>
    <!--36 characters long serial key-->

  </entries>

</VTGOConfig>
```

Upload VTGOPPC.XML license to CME TFTP Server

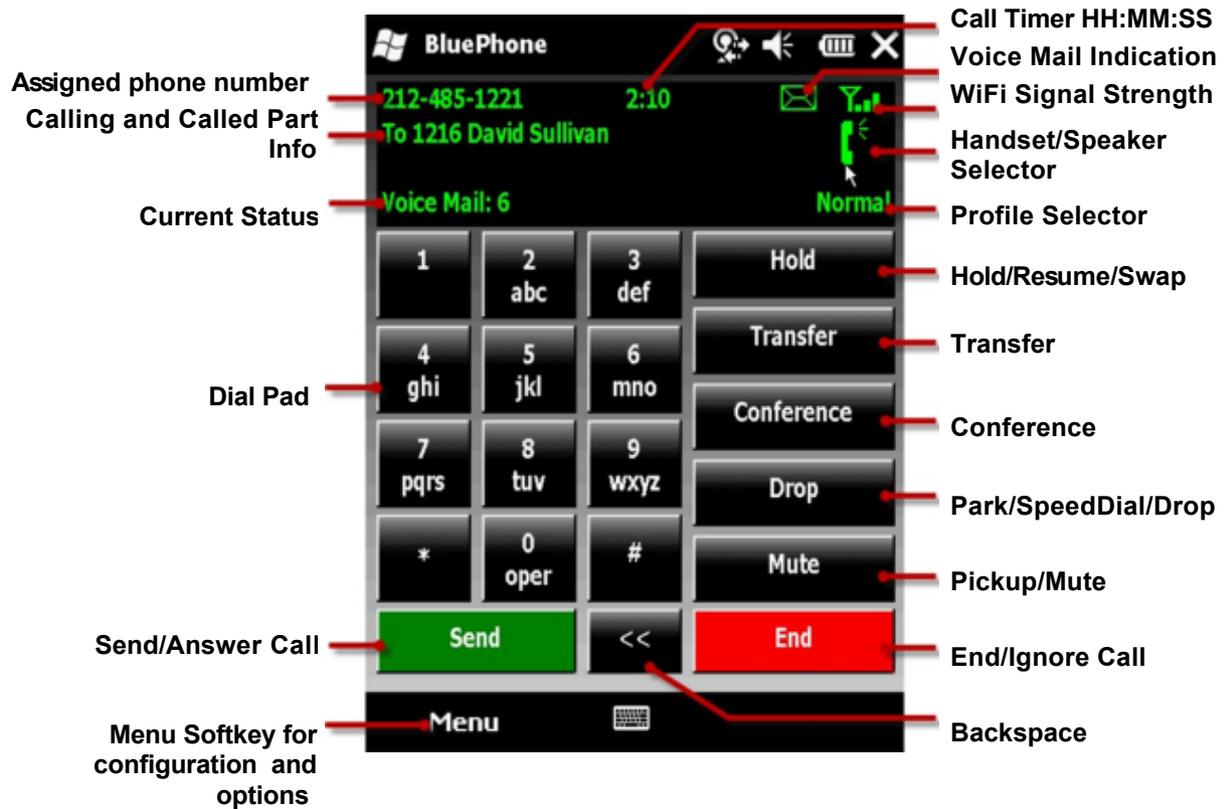
This page details the process of loading the vtgoppc.xml onto a CME router's TFTP server.

Note: You do not directly upload the file to the CME router's TFTP server you must first place the file on a TFTP server and then you download it to the CME router's using the procedure below.

Step	Action
1	Copy the vtgoppc.xml file to a TFTP server directory.
2	Open a command prompt and telnet to the Call Manager Express Router. !--- Start -> Run -> type cmd C:\>telnet 192.168.30.43
3	Login to the CME Router in Privileged Exec mode: User Access Verification Password: CCME7.1>enable Password: CCME7.1#
4	Copy the file from a TFTP server into the routers flash memory: CCME7.1#copy tftp flash !--- This command configures the router to download from a remote TFTP server. Address or name of remote host []? 192.168.30.37 !--- Enter the IP address of the remote TFTP server. Source filename []? vtgoppc.xml !--- Type the name of the file you want to download. Destination filename [vtgoppc.xml]? Press Enter !--- Confirm or rename the file name to be placed in the routers flash. Accessing tftp://192.168.30.37/vtgoppc.xml... Loading vtgoppc.xml from 192.168.30.37 (via FastEthernet0/0): !!!!!!!!!!!!!!! [OK - 872 bytes] 872 bytes copied in 0.484 secs (1802 bytes/sec)
5	Verify the file was uploaded in the routers flash memory: CCME7.1#show flash -#- --length-- -----date/tim e----- path 1 50744348 Oct 15 2009 14:31:26 c2801-adventerprisek9-mz.124-24.T1.bin 2 872 Jan 21 2010 17:22:46 VTGO.xml !--- Output omitted
6	Enable TFTP server to and vtgoppc.xml file for distribution: CCME7.1#configure terminal Enter configuration commands, one per line. End with CNTL/Z. CCME7.1(config)#tftp-server flash:? flash:vtgoppc.xml !--- The vtgoppc.xml configuration file name. Router1(config)#tftp-server flash:vtgoppc.xml !--- This command configures the router as a TFTP server.

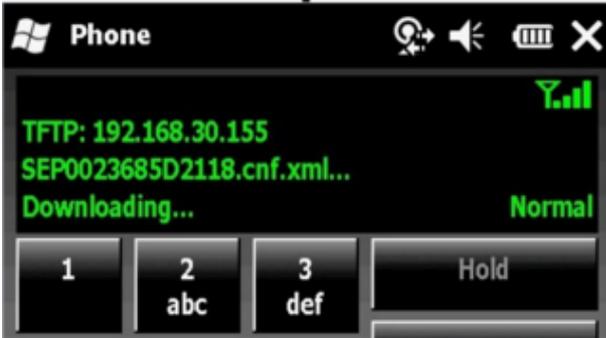
7 | Exit back to Privileged Exec mode and save the router configuration:
CCME7.1(config)#exit
CCME7.1#write memory
Building configuration...
[OK]
CCME7.1#

Main Phone Screen



Registration Sequence DHCP enabled.

Upon Startup VTGO will go through a discovery and registration sequence to the CUCM server. Status Messages will display to inform about the registration process and any errors that may occur. If softphone has successfully registered previously and can not retrieve DHCP option 150 or the TFTP file it will still try to register using information stored in the device registry from the last successful registration.

<p>Step 1</p>	<p>DHCP is used to discover the address of the TFTP server. DHCP inform message asking for option 150 was sent from softphone to DHCP server. If DHCP is not replying an error message will be displayed.</p>  <p style="text-align: center;">DHCP Failed</p>
<p>Step 2</p>	<p>The configuration file for the phone is downloaded from the TFTP server.</p> 
<p>Step 3</p>	<p>The phone registers with the CUCM server listed in the TFTP file and displays the assigned phone number. VTGO can support registration and failover to five servers.</p>  <p style="text-align: center;">Registered and ready for calls.</p>

Error Messages

These errors may be reported during the configuration and registration process.

Error Message	Description	Corrective Action
Network connection failure	Wifi adapter is missing information and is not fully configured. The most common reasons for this message are that an IP address or other basic network parameter is not assigned to adapter.	Verify the Wifi adapter is configured with an IP address, Subnet Mask, Gateway/Router, DNS Address.
Low Wifi signal	Wifi monitoring is enabled and the RSSI is below the minimum threshold set.	Move closer to Wifi Access point to boost signal level above threshold.
DHCP Failed	Could not discover the TFTP server's IP address using DHCP. DHCP option 150 may not be defined for the subnet.	Verify the DHCP options are defined and enabled for the sub net.
TFTP Failed	Could not download the TFTP file associated with the phone.	Verify network connection is of good quality and is not losing packets. TFTP_ERROR_NONE = -1, TFTP_ERROR_UNDEFINED = 0, TFTP_ERROR_FILENOTFOUND, TFTP_ERROR_ACCESSVIOLATION, TFTP_ERROR_DISKFULL, TFTP_ERROR_ILLEGALOPERATION, TFTP_ERROR_UNKNOWNTID, TFTP_ERROR_FILEEXISTS, TFTP_ERROR_NOSUCHUSER, TFTP_ERROR_HOSTERROR, TFTP_ERROR_INVALID_PARAM, TFTP_ERROR_TIMEOUT, TFTP_ERROR_INTERNALERROR, TFTP_ERROR_NETWORK, TFTP_ERROR_NO_SERVER, TFTP_ERROR_FAILED_RESOLVE_SERVER
CUCM Server Connect Failed	CUCM server will not allow TCP connection to SCCP process on port 2000.	Verify Server is online, is reachable and the Call Manager service is running.
Device type mismatch	Phone is defined on the CUCM server but does not match the phone type selected on softphone.	Change the phone type selected on softphone or delete and recreate phone on CUCM server.

Error Message	Description	Corrective Action
Invalid MAC	Phone is not defined in the CUCM server.	Define the phone or enable auto registration.

Special Features

Key Switch Mode

Keyswitch mode is supported on Cisco CME platforms and is used to directly link PSTN FXS/FXO lines to Line buttons (DN) on the Phones. This mode is used when the CME system is behind another PBX or Centrex system. In this mode an FXS/FXO line will be programmed to ring a specific DN on inbound Calls. When the user goes off Hook on the DN it will draw dialtone directly from the linked trunk port. Hook Flash on the trunk port is needed to transfer or conference a call.

Key switch mode is enabled on the VTGO softphone by setting the Registry Key:
HKEY_CURRENT_USER\Software\IPblue\VTGO:KeySwitchMode=1

Once Set the softphone will hide the Transfer and Conference buttons and replace them with Flash, Speed Dial, and Call Log Buttons.

Related Topic: Speed Dial

Extension Login

VTGO supports plugin Applets that can extend features. One example Developed for Walmart, is the ability to Log in and register a DN without using Extension Mobility.

Adjust Ringer Volume

To Adjust Ringer Volume Tap **Menu > Ringer Volume** and select High, Medium, Low or Silent. This will adjust the ringer volume for the active profile without having access to the profile.



Profile Selector

Profiles allow you to define preset configurations for the phone that can be applied with two taps. To activate a profile Tap the **Profile Select Area** of the screen to produce a pop up profile list. Several are predefined. Tap the profile you want to activate. When you tap a profile it will be applied and the menu will close.



Edit Profile

To edit an existing profile or to add a new one open **Menu> Settings> Profiles** and select an existing profile from the Name Selector or Tap add to create a new one. Select the options you wish to assign to a profile then click ok to save.

Forward all calls to: Check this check box and enter the destination number including AccessCodes.

Auto-answer after (n) rings: This option can be selected if you want the phone to answer incoming calls automatically after a set number of rings.

Notification Balloon: Check this box if you want to pop up a Notification Balloon with Caller ID and Answer or Ignore Buttons when the phone rings.

Vibration: Check this box if you want the phone to Vibrate when it Rings. (Not all Windows Mobile devices have a vibrate capability).

Distinctive Ring Tone: Select the ring tone you want played when a new call arrives. The ring tone will be played as you select it.

Microphone Volume: Move the slider to control the microphone gain.

Speaker Volume: Move the slider to control the in call speaker volume.

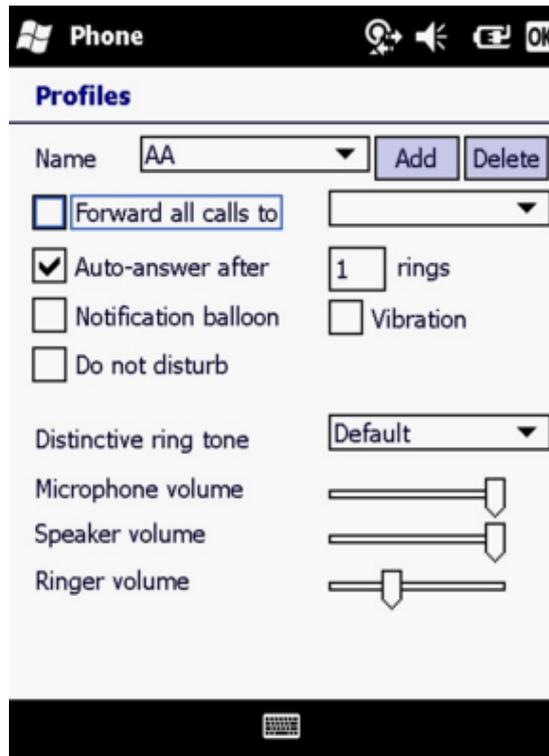
Ringer Volume: Move the slider to control the ring volume.



Note: Access to profiles can be restricted by setting the admin password. The Ringer volume can also be adjusted on the Main Menu Ringer Volume item.

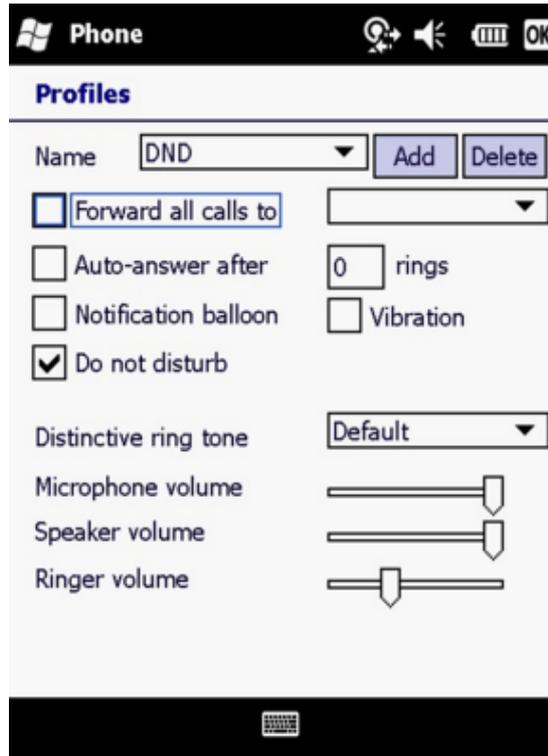
Auto Answer Profile

Auto Answer Profile can be configured and enabled to answer incoming calls automatically after a set number of rings. To enable Auto Answer create a profile and check the Auto Answer check box then set the number of rings before answer.



Do Not Disturb Profile

Do Not Disturb Profile will silence inbound calls from causing interruption or distractions. When this profile is active the phone will not ring or vibrate. To activate DND, Tap Profiles area of the screen , select the DND profile from the Popup menu. To deactivate select the normal profile again



Call Forward All Calls

Call Forward Profile will forward any calls to your primary number to the destination number defined in the profile. Check the Forward all calls check box and enter the forward to destination number. Include trunk access codes like 9 or 91 if required, to activate Call Forwarding of the primary number on the device.



Note 1: The profile becomes immediately active when selected on the main screen.

Note 2: More than one Call Forwarding Profile can be created. So if you want to quickly forward your calls to Ext 1250 for example, create a CFW-1250 profile. If you want to forward your calls to your cell phone create a second profile CFW-Cell.

Phone Features

Make A Call

To make a call dial the phone number using the touchscreen keypad or hardware dial pad and press the Send button to start a call. Calls can also be initiated from the Call Log, Directories and Speed Dial screens.

To Make a Second Call, Put first call on Hold, dial digits and press Send key.

Answering Call

To answer an inbound call Tap the flashing Answer button on the touch screen or press the Green button on the hardware keyboard.

Answer Second Call

Answering a second call Tap the flashing Answer key. The first call is automatically placed on hold and you are connected to the second call. Press the Swap Key to reconnect with the first call and put the second call on hold.

Call Log

The phone keeps a history of all calls you make and receive, including the caller ID, time, and date of the call. Tap **Menu > Call Log** to open the Call history Window. With the Call Log window Open you can select to view all calls or only Inbound, or Outbound or Missed calls.

Call Park

Press the Call Park Button to Park the active call on a system Park Directory Number. Make note of the Park number. The Call can be retrieved by dialing this number from another phone. The Parked call will timeout and return to the originating station after a 1 minute delay.

Call Pickup

Press the oPickup to answer a call ringing on a phone in your pickup group. The call will be pulled to your extension and answered.

Call Transfer

During an active call, Tap the Transfer button to put the first call on hold. Dial the other party's number and wait for answer. Tap the Transfer button again to complete the Transfer. The transfer button is labeled Transfer or Finish TX, depending upon whether the currently selected call has a transfer initiated.

Call Waiting

Optionally, based on system configuration, a second call will be presented when your primary number is dialed. To answer the second call press the answer button or the hotkey assigned for answer. The original call will be placed on hold.

Conference Calls

During an active call, Tap Conference. The first caller is placed on hold. Dial tone is heard. Dial the number of the other party you want to conference. After the third party answers, Tap Conference again to connect all three parties. You can continue to add more callers until the conference limit is reached up to 7 callers.

Directories

Tap the Directory icon or **Menu > Directory** item to open the Directories Window. Select the directory from the pull down list. Search for an entry by entering the a few letters of the contact's name. Tap the name to dial the number.

Ending Call

To end a call Tap the End Button on the touch screen or press the Red key on the hardware keyboard.

Flash Key

Use the Flash key to send a timed hook-switch-flash on the active phone call. This will put the current call on hold and provide secondary dialtone for transferring, conferencing or activating other features.

Hold and Resume

During a conversation you can press the hold button on the screen to resume the conversation, to resume press the resume button on the screen.

You can also map a hard button such as the green (send, answer) key for hold and resume. Then to hold or resume a call press the Green hard button.

Note: After each minute the party holds, your phone rings to remind you that the party is holding. You hear two quick rings . The person who puts the phone on hold is the only one who can take it off.

Join Calls

To join two calls press the conference button twice.

Redial

To Redial the Last Number press the Send button twice. The First press will display the previous number, the second press will dial it.

Speakerphone

To active Speaker Phone mode Press on the Handset Icon in the call status Window or Select Speakerphone from the Menu. When the Speaker Phone is active the icon will change to a speaker.

Voicemail MWI Message Waiting

The Message Waiting Envelope is displayed on the top row of the display when you have messages in your mailbox.

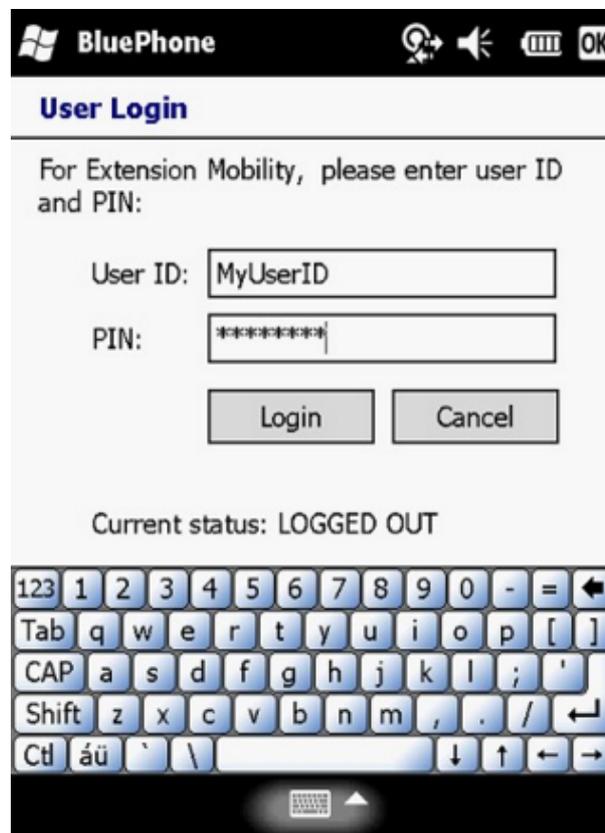
Broadsoft M6 Users: Display status line will show how many Voice Mails are in your inbox.

Menu

All program Configuration and features are configured under this menu item.

Extension Mobility Logon

VTGO Supports Extension Mobility for use with Call Managers 3,4,5,6,7 and 8. When this menu is opened, **VTGO** will check the login status of the phone and provide status. To login enter your Call Manager User ID and PIN from the soft keyboard, then click the Login button. If successful the softphone will reset display the Directory Number associated with your UserID. To Log out , open [Tools > User Login](#) Info from the Menu bar and click the logout button. The phone will reset with the default profile. Press the Cancel button to continue with existing device ID

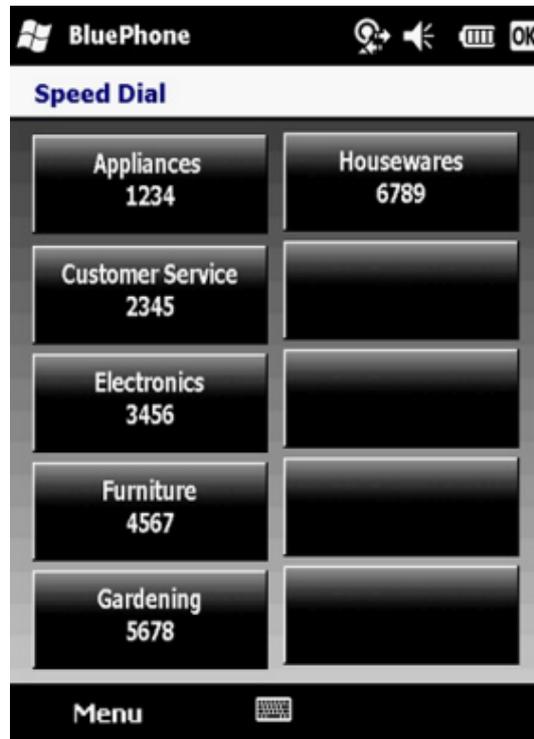


Speed Dial

VTGO supports ten speed dial buttons that can be defined locally or from the CUCM or CUCMe Server. If the Speed Dial buttons are configured on the CUCM or CUCMe servers they will be downloaded during registration with the server and will push locally defined buttons downward on the list.

To use Speed Dial open the Speed Dial Window from the Menu or Menu bar and Tap on any of the defined buttons to start a call to the speed dial number.

[Related Topic: Speed Dial Edit](#)



Edit Speed Dial

To Edit a Speed Dial button:

1. Open **Menu>SpeedDial** to display the Speed Dial screen.
2. Open **Menu> Edit** to display the Edit Screen
3. Tap the entry in the list and enter the name to be displayed and the phone number to be dialed in the spaces provided.

Speed dial numbers can be configured with special characters:

- Exclamation sign (!) works as Hook Flash token
- Comma (,) as 1 sec delay

Example: if a speed dial number is entered as "!,,1250", the software will send a timed Hook Flash Message , wait 2 sec, then dial 1250. This is useful when the softphone is operating on Call Manager Express in Keyswitch mode behind another PBX and the PBX needs to see a hook flash to transfer a call.



Settings

Configuration - Network Settings

By selecting [Menu](#) > [Settings](#) > [Configuration](#) you are presented with four tabs of information that can be configured to personalize VTGO.

This tab is used to define IP network information.

TFTP Server: Select how to locate the TFTP server Auto-Discover via DHCP option 150 or Manual definition.

TFTP1: If auto-discovery is enabled this value is read only. If [Configure Manually](#) is selected then enter the IP address of the Primary TFTP server the from which softphone will download configuration files.

TFTP2: If auto-discovery is enabled this value is read only. If [Configure Manually](#) is selected then enter the IP address of the Primary TFTP server the from which softphone will download configuration files.

MAC Address: select or enter a MAC address that is used to create a unique Device Name for registration.

Device Type: select the phone type that matches the phone defined for the device profile on the CUCM server.

NAT traversal: when enabled will help softphone discover the public routable IP address that the softphone is NATed to. This address will be use during call setup so RTP can be routed to the publicly routable address rather than the private inside address that would be unreachable from the Internet.

Network	
TFTP Server	Configure Manually
TFTP1	64.242.250.21
TFTP2	64.242.250.21
MAC Address	0023685D2118
Device Type	7960
<input type="checkbox"/> NAT Traversal	not NATed

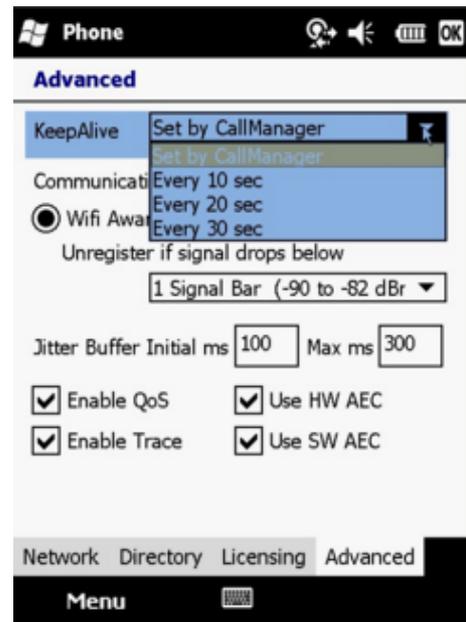
Network Directory Licensing Advanced

Menu

Advanced Tab

Keep Alive

The keep alive interval setting allows the CUCM server to determine if a softphone is online or not based on the replies received on the messages. The shorter the interval the faster CUCM will recognize the softphone is no longer connected if the user walks out of range before the phone can execute a SCCP unregistration request.



Communication Mode

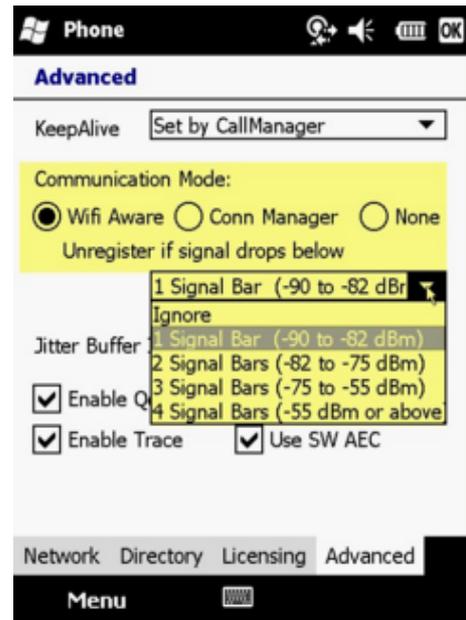
WiFi Aware: enables RSSI signal monitoring and the ability to unregister the phone if the RSSI signal goes below the selected level.

Unregister if signal drops below:

- 1 Signal Bar (-90 to -82dBm)
- 2 Signal Bar (-82 to -75dBm)
- 3 Signal Bar (-75 to -55dBm)
- 4 Signal Bar (-55 to above)

Conn Manager: enables connection manager to establish a connection over 3G networks.

None: will verify that there is a valid network connection but offers no special connection management.



Jitter Buffer Settings

Jitter Buffer Initial and Max allows you to set the initial JB length and the Maximum length. The default values are 100ms Initial and 1000 MS max. Range is from 0 to 2000. If you wanted to make a static buffer 500ms in length set the initial and max buffer lengths to 500.

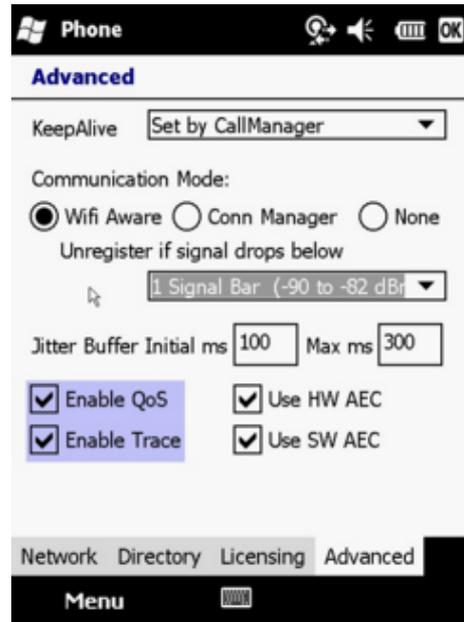
Enable Trace

Will create diagnostic traces files for troubleshooting purposes. The files will be stored in the Softphone's installation directory.

Enable QOS

Will enable DSCP packet tagging for Signaling and Audio (RTP). The value of the DSCP sent for signaling and RTP can be set in the registry.

```
[HKEY_CURRENT_USER\Software\IPblue\VTGO]
DSCPEnabled=1
DSCPRTTP=6
DSCPSignaling=5
```



Acoustical Echo Cancellation

Use HW AEC enables or disables the HW AEC on devices so equipped.

Use SW AEC enables or disables the softphone's software AEC. Additional fine tuning of the software AEC can be made in the registry. See the Registry section of this document for details.



NAT Traversal Note

VTGO supports NAT traversal, when located behind a NAT tap the Menu |Configuration item **Use IP Address:** Check this box to enable automatic discovery of the Globally Routable NATed IP Address and Port Mappings that may occur through the NAT device. The discovered IP address will replace the local IP address when registering with Call Manager. When this option is set the the softphone will periodically rediscover the IP address and Port mappings.

The RTP ports used for sending and receiving are calculated by taking the real IP address of the device multiplying time 2 and adding 16000. This will allow multiple VTGO softphone to operate from behind the same NAT without port conflicts.

IP blue hosts STUN Server at Stun1.ipblue.com and a back up at Stun2.ipblue.com is used to provide public IP address information and RTP/UDP port information to the softphone client located behind a NAT device. The IP blue softphone will try to reach the iNat server using UDP port 4301.

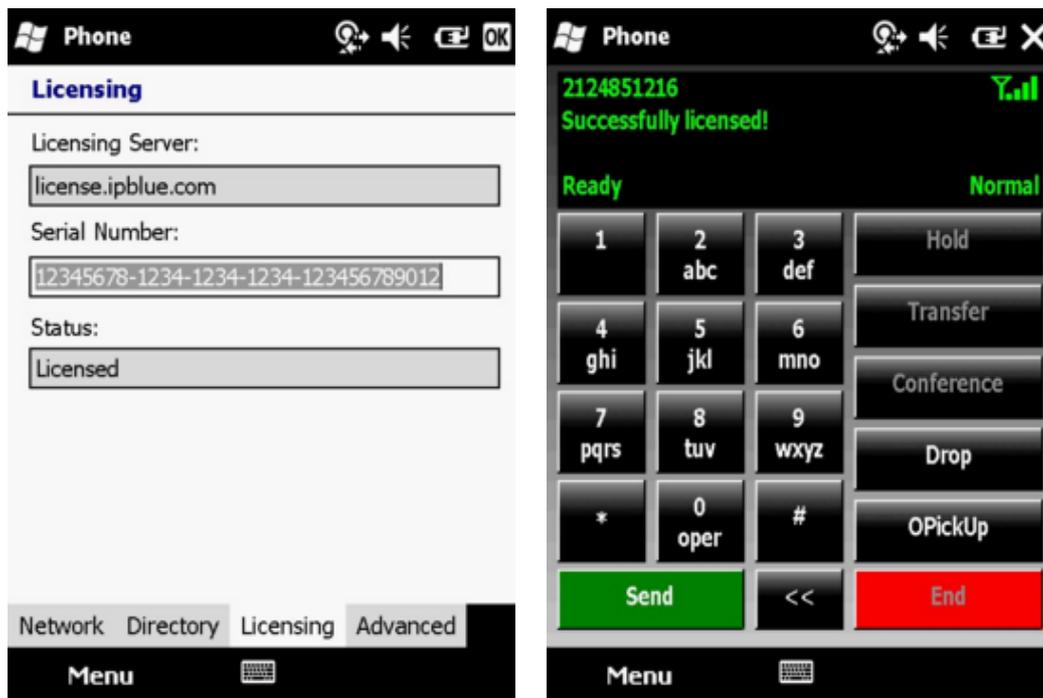
Licensing Tab

Licensing Tab is used to enter license settings. Once the License is entered an HTTP post will be sent to the License server defined . If the license is valid the License server will reply with a license activation approval message that will be displayed on the phone.

License server: This is the URL to the license server. The standard URL format and name is: license.ipblue.com (HTTP:// is not required)

Serial number: Put the serial number provided from IP blue Sales here, including the dashes.

Status: Will display the current status of the softphone on the device.



Directory Tab

The Directory Tab allows you to configure LDAP directory access. The LDAP Directory will be listed under the Directory Icon.

Address:Port: Enter the IP address and port of the LDAP server .

Base DN: Enter the Base DN Information for the LDAP Server usually the company name and domain.

User DN: Enter your user DN

Password: Enter your password (mypassword)

Filter: Enter any additional filtering for the LDAP lookup.

Valid search Filters include:

(cn=jane doe)
 (! (cn=Tim Howes))
 (&(objectClass=Person) (!(sn=Jensen)
 (cn=Babs J*)))
 (o=univ*of*mich)

[] Show Last Name First.

Check this box search on and show the last name first.

Note 1: The directory lookup delay is fixed at 1 second, this will allow a user to enter several characters before firing a lookup sequence to the server.

Note 2: The User Login Info values for userID and PIN will be used as User DN: cn=userID, and Password.

Make the PIN and Password the same to simplify Directory Access.

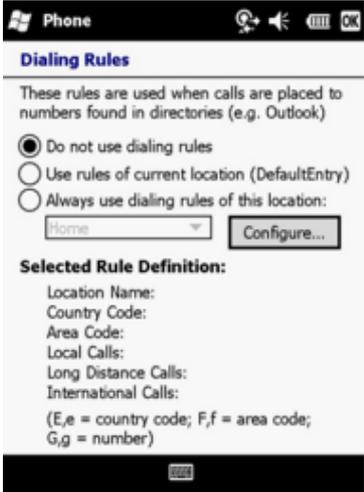
Note 3: Search Filter details can be found at the following URL:
<http://www.faqs.org/rfcs/rfc2254.html>

Dialing Rules

Dialing rules conditionally modify telephone numbers stored in directories and Outlook contacts so that they can be dialed without modifying them in the directory itself. For example, most phone systems (in North America) require the user to dial 9 to access outside phone lines to call local or long distance numbers and 9-011- to reach international destinations. VTGO uses the Windows Mobile device level dialing rules defined under Start > Settings> Connections Tab , Connections Icon, Advanced Tab, Dialing Rules button. You can access this area using the path described above or directly from the VTGO [Menu > Settings > Dialing Rules](#) menu item.

Note: Dialing rules are only applied when dialing on-hook or from one of the Directories in the phone. Dialing rules will not be applied when dialing off-hook.

How to Access and assign Dialing Rules to VTGO

<p>Step 1</p>	<p>The Dialing Rules configuration screen is accessed from Menu > Settings > Dialing rules.</p>	 <p>The screenshot shows the 'Phone' application interface. A menu is open over the dial pad, listing options: Speed Dial, Call Log, Messages, Speakerphone, Ringtone, Settings (highlighted), Help, Exit, and Skins. A sub-menu is open over 'Settings', listing: Configuration, Profiles, Dialing Rules (highlighted), Hotkeys, and Skins.</p>
<p>Step 2</p>	<p>Dialing Rules can be enabled and disabled from this screen by tapping:</p> <p>Do not use dialing rules</p> <p>Dialing rules can be assigned to follow the location applied to the device from Windows Mobile Connections by tapping:</p> <p>Use rules of current location</p> <p>Dialing Rules can be locked to a specific location's dialing rules regardless of the location settings selected under Windows Mobile Connections by tapping:</p> <p>Always use dialing rules of this location</p>	 <p>The screenshot shows the 'Dialing Rules' configuration screen. It includes a title bar, a description: 'These rules are used when calls are placed to numbers found in directories (e.g. Outlook)'. There are three radio button options: 'Do not use dialing rules' (selected), 'Use rules of current location (DefaultEntry)', and 'Always use dialing rules of this location:'. Below the third option is a dropdown menu showing 'Home' and a 'Configure...' button. A section titled 'Selected Rule Definition:' lists fields for Location Name, Country Code, Area Code, Local Calls, Long Distance Calls, and International Calls, with a note: '(E,e = country code; F,f = area code; G,g = number)'. A 'Done' button is at the bottom.</p>

Hot Keys

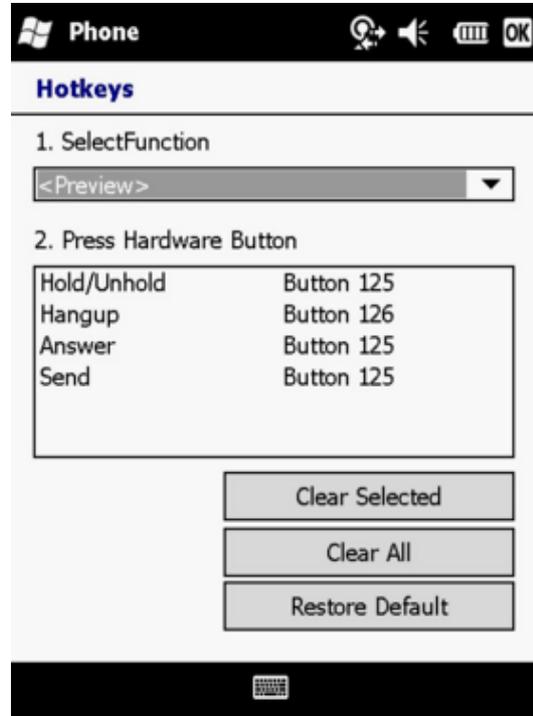
VTGO can map hardware buttons to softphone functions.

To map a button, first select the Function from the pick list, then touch the Hardware Button. The same button can be used for more than one phone function. VTGO will re-register the buttons when focused, this allows other programs to take the buttons when they are focused. VTGO will unregister the buttons when exited.

Functions that can be mapped are :

- Hold/Resume
- Hang-up
- Answer
- Send
- Transfer/Finish Transfer
- Conference
- Speaker Phone

Note: You can assign a hard-button to run VTGO when pressed from the Start>Settings>Buttons Icon.



Skins

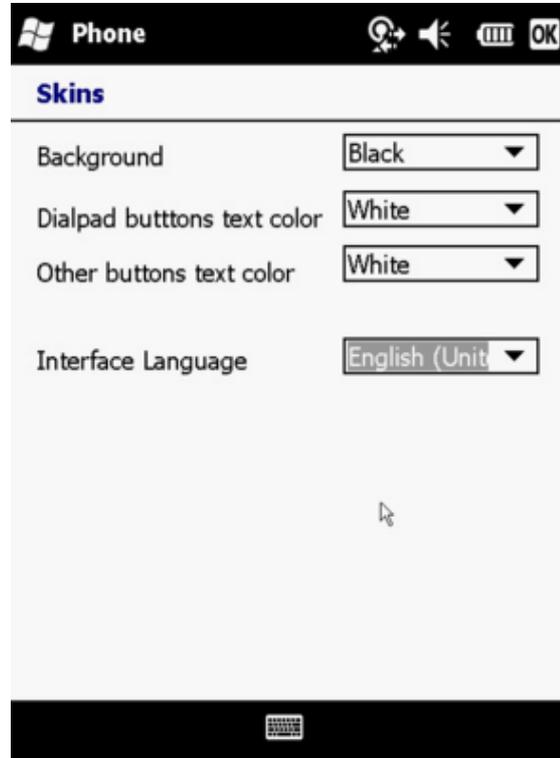
The **Skins Panel** is used to customize the background and text colors:

Background: Choose a background scheme for VTGO and its buttons.

Dialpad buttons' text color: Choose a color for the dialpad button text.

Other buttons' text color: Choose a color for the functional button text.

Interface Language: select localization settings from the list. This will change the text displayed on the interface and will localize the tone files.





Black

Blue

Gold

Two Tone

Help

Help Topics

Tap on Help Topics to open the softphones help file.

Statistics

The Call Statistics Screen is useful in diagnosing problems and will show current device registration and call session RTP information. Statistics include:

Device

IP address: The local IP address used to register with Call Manager

MAC address: The MAC address used to register with call manger

Call Manager: The DNS name or IP address and port of the Call Manager Server.

Phone Type: The Phone type used for registration.

Audio

Sending to: The IP address and port of the far end.

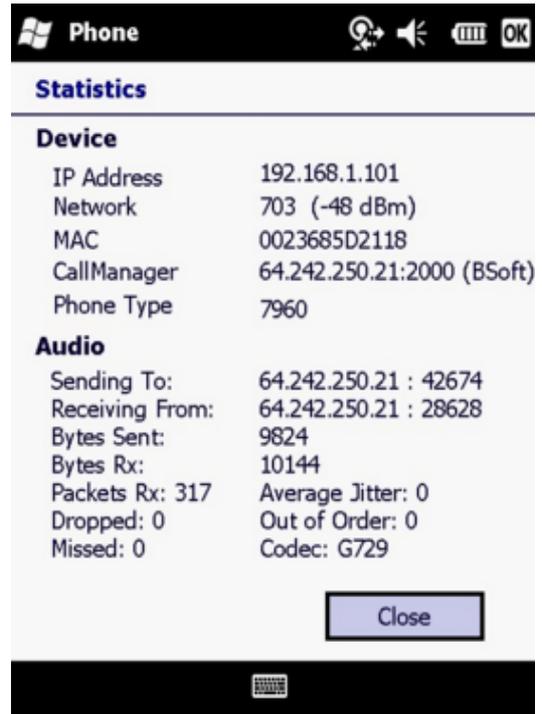
Receiving From: The IP address and port of the far end.

Send Port: The local RTP sending port.

Receive Port: The local RTP receive port.

Bytes Sent: Number of bytes sent, should be incrementing during a call.

Bytes Received: Number of bytes received, should be incrementing during a call



The screenshot shows a mobile phone interface with a black header bar containing a Windows logo, the word "Phone", and icons for signal strength, speaker, and a battery/OK indicator. Below the header, the word "Statistics" is displayed in blue. The main content area is divided into two sections: "Device" and "Audio".

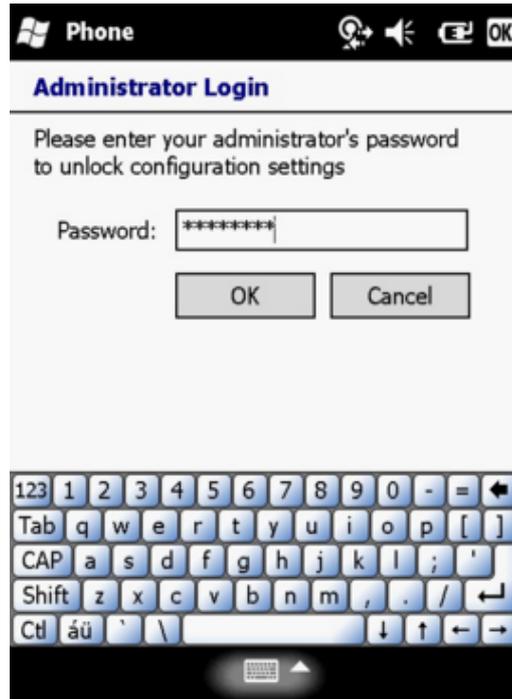
Device	
IP Address	192.168.1.101
Network	703 (-48 dBm)
MAC	0023685D2118
CallManager	64.242.250.21:2000 (BSoft)
Phone Type	7960

Audio	
Sending To:	64.242.250.21 : 42674
Receiving From:	64.242.250.21 : 28628
Bytes Sent:	9824
Bytes Rx:	10144
Packets Rx: 317	Average Jitter: 0
Dropped: 0	Out of Order: 0
Missed: 0	Codec: G729

At the bottom right of the statistics area, there is a "Close" button. At the very bottom of the screen, there is a small logo for "SPEAKERPHONE".

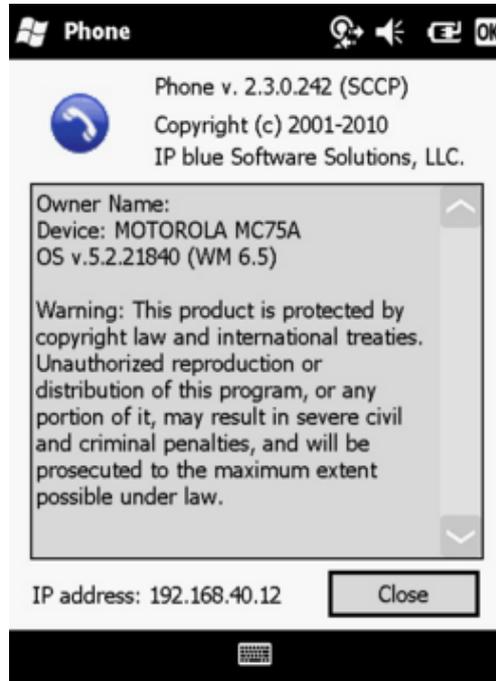
Support

This is used by the administrator to unlock the configuration options of the softphone. enter the admin password and tap ok.



About VTGO

The about VTGO/Phone screen will display version and copyright information.



Exit

To exit the program, Tap **Menu > Exit** . This will send an unregister request to the CUCM server and the server will unregister the phone from the system. The Exit Menu item will be disabled if the administrative password is set.

Tested Windows Mobile Devices

Manufacturer	Model	OS	Notes
Motorola Symbol	<p style="text-align: center;">MC50</p> 	WM-2003 SE WM 5 Upgrade	Dedicated PTT Button Hardware Keyboard=Yes Green Key Red Key Vibration Mode Front Speaker RearSpeaker Builtin AEC=Available
Motorola	<p style="text-align: center;">MC55</p> 	WM 6.1	Dedicated PTT Button Hardware Keyboard Green Key Red Key Vibration Mode Front Speaker RearSpeaker Builtin AEC
Motorola Symbol	<p style="text-align: center;">MC70</p> 	WM5 and WM6.1	Dedicated PTT Hardware Keyboard Green Key Red Key Vibration Mode Front Speaker RearSpeaker Builtin AEC
Motorola	<p style="text-align: center;">MC75A</p> 	WM6.1 WM 6.5	Dedicated PTT Hardware Keyboard Green Key Red Key Vibration Mode Front Speaker RearSpeaker Builtin AEC
Motorola Symbol	<p style="text-align: center;">MC9090</p> 	WM5	Dedicated PTT Button Rear Speaker Only

Manufacturer	Model	OS	Notes
Motorola Symbol	MC9590 	WM 6.1	Dedicated PTT Button Hardware Keyboard Green Key Red Key Vibration Mode Front Speaker RearSpeaker Buitlin AEC
Motorola	ES400 Future 	WM 6.5	Dedicated PTT Button Hardware Keyboard Green Key Red Key Vibration Mode Front Speaker RearSpeaker Software AEC
Motorola	EWP 2100 EWP 3100	WM 6.1 Standard	
HP iPaq Models	2200	2003	
	3100	2003	
	5400 5500	2002	
	4700	2003	
	6300	2003	
	6900	2005	
	110 	WM 6.1 Classic	
	210	WM 6.1 Classic	
	510	WM 6.1	
	600	WM 6.1	
	910	WM 6.1	
Fujitsu Siemens	Loox720	2003	
Toshiba	e805	2003	
Dell	Axim 30	2003	

Manufacturer	Model	OS	Notes
Intermec	751A	2003	
Intermec	CN3 	WM 5.0 WM 6.1	Front Speaker Rear Speaker
Intermec	CK3 	WM 6.1	Dedicated PTT Speaker Mode Only Handset Profile Will reduce Audio Output
Intermec	CN50 	WM 6.1	Half Duplex Only Not Good for Softphone Seabright PTT Client Tested Well
Intermec	CK61		
Psion	Ikon 	WM 6.1	SpeakerPhone Handset Mode Software AEC Red Key Green Key
Psion	Neo 	WM 6.1	Handset Mode Only Beep Ringer Keyboard Mapped to Dialer F3 Mapped to Answer F3 Mapped to Send F3 Mapped to Hold/ Resume F4 Mapped to End

Manufacturer	Model	OS	Notes
Datalogics	<p data-bbox="448 233 537 260">Memor</p> 	WM 6.1	Speaker Phone Handset Mode Built-in AEC Red Key Green Key Small form factor.
Opticon	<p data-bbox="459 476 526 504">H19A</p> 	WM 6.1	Speakerphone Handset Mode Red Key Green Key DialPad

Notes:

- Not All Features are supported on All Pocket PC models.
- The Vibrate function will not work if there is no vibrator.
- Hardware Echo cancellation is only available on select units.
- Handset Mode refers to the ability to use the Pocket PC as a handset, with the speaker at your ear and the microphone near your mouth.

Registry Keys

This Topic details the Registry Key Values and data.

Echo Cancellation

These values need to be tuned for each device.

[HKEY_LOCAL_MACHINE\Software\IPblue\VTGO]

Value Name	Type	Default Data	Description
AEC_HANDSET_FIXEDDTD	String	0.45	Double Talk Detection
AEC_HANDSET_INPUTGAIN	String	-3.0	set the gain or loss in DB
AEC_HANDSET_PNKATTEN	String	-70	level in Db that pink masking noise is sent to cover residual echo after cancellation.
AEC_HANDSET_TAIL	String	16	Handset tail length in milliseconds
AEC_SPEAKER_FARENDBIAS	String	1.5	Weight given to far end to cut voice through in speakerphone mode
AEC_SPEAKER_INPUTGAIN	String	-3.0	set the gain or loss in DB
AEC_SPEAKER_TAIL	String	16	Set the length tail in milliseconds
AEC_USE_HW	Dword	0	Enable Hardware AEC if provided on the device
AEC_USE_SW	Dword	0	Enable software AEC

Network

[HKEY_LOCAL_MACHINE\Software\IPblue\VTGO]

Value Name	Type	Default Data	Description
DSCPEnabled	String	1	Enable DSCP packet Tagging 0=Disabled 1=Enabled
DSCPRTTP	String	6	DSCP Value for RTP 6=DSCPAudio 48 WMM Voice
DSCPSignaling	String	5	DSCP Value for Signalling 5=DSCPVideo 46 EF
CommunicationMode	String	2	0=None 1=Communications Manager 2=WiFi Aware
PresenceOverMulticast	String		not used
PresenceMulticastIP	String	239.4.5.6:5070	not used
PresenceDisplayName	String		not used
WifiEndCallRSSI	String	0	Drop call if signal is too low
WifiUnregisterRSSI	String	-90	Unregister from SCCP server if RSSI is below signal level defined.
WifiAware	String	0	Enable RSSI monitoring 0=no 1=yes
PacketSize	String	0	VTGO will send RTP packets with payload size in milliseconds that is equal to the defined data. The default value of 0 will send packets sizes as defined in the call setup control messages for the SCCP Server
KeepAlive	String	0	Keep Alive interval reported to SCCP server 0=set by SCCP server 1= 2= 3=
sSipMode	String	Peer to Peer	
sDeviceType	String	7960	Phone type used when registering with SCCP server 7902 7905 7960
sInetAddress	String	stun1.ipblue.com	Primary STUN Server IP address
sInetPort	String	4301	STUN port

Value Name	Type	Default Data	Description
slnetAddress2	String	stun2.ipblue.com	Secondary STUN server IP address
slnetPort2	String	4301	Stun port
MACaddress	String		MAC address used to identify device when registering with SCCP server.
ExcludeAdapter	String	RNDISFN1, SS1VNDIS1	MAC address of the adapter will not be displayed in combo box or used to register a device with the SCCP Server.
ExcludeMAC	String		Specified MAC address will not be used to register a device with the SCCP Server.
Line1 Line2 Line3 Line4 Line5 Line6	String		DN of lines assigned from SCCP server.
TFTPUseDHCP	String	1	Enable use of DHCP to get TFTP server addresses. 0=no 1=yes
TFTPServer	String		Manual entry of TFTP server
TFTPServer2	String		Manual entry of TFTP server
TFTPServerDHCP1	String		TFTP Server Address returned from DHCP option 150
TFTPServerDHCP2	String		TFTP Server address return from DHCP option 150
TFTPFilename	String	vtgoppc.xml	vtgoppc.xml to support Offline licensing option.
IPaddress	String		IP address on Primary SCCP Server
Port	String	2000	Port on to connect to on SCCP Server
IPaddress2	String		IP address of Secondary SCCP Server
Port2	String	2000	Port on to connect to on SCCP Server
iLocalIP	String		IP address used when registering with SCCP Server. This is the local IP address assigned to the Network adapter. This is the address RTP will be sent to when a call is setup.

Value Name	Type	Default Data	Description
bVpn	String	0	?? Use VPN IP address instead of iLocalIP address.
sVpnAddress	String	notNated	Alternate IP address used when registering with SCCP Server. This IP address is provided by STUN discovery or from an active VPN connection. This is the address RTP will be sent to when a call is setup.

Phone Options

[HKEY_LOCAL_MACHINE\Software\IPBLUE\VTGO]

Value	Type	Default Data	Description
sAdminPassword	String	admin123	Admin Password, If any data is defined for this value the configuration and settings will be locked.
DisableMenuDirectory	String	0	Disable and hide the Directory item from the menu
DisableMenuMessages	String	0	Disable and hide the Messages item from the menu
DisableMenuSettings	String	0	Disable and hide the Settings item from the menu
DisableMenuSpeeddial	String	0	Disable and hide the Speed Dial item from the menu
DisableMenuUserLogin	String	0	Disable and hide the User Login item from the menu
DisableToolbar	String	0	Disable and hide the toolbar
sUserID	String		Extension Mobility
sPassword	String		Extension
sLanguage	String		Locale Interface text and tones. English_United_States
KeySwitchMode	String	0	Enable Key Switch Mode for CME going off hook will draw dial tone from line from attached centrex system Flash key will show on Main Screen
Trace	String	0	Enable Trace to log files,0=off,1=on
ParkButtonReplacement	String	(space)	Replace the default Call Park button function with one of the functions below: (space) or blank or null will show Park label and will initiate Park when pressed. or SpeedDial will pop up SpeedDial screen Directory will pop up Directory screen Calllog will pop up Call Log screen Messages will call voice mail DN.
PickupType			Defines the type of Call Pickup for the Pickup Button options are: Other, Group, Direct
IgnoreSK	String	0	Softkey Code to send when Ignore is pressed during inbound call event. 0= Local DND 31= IDivert 22= DND (CME)

SpeakerphoneDefault	String	0	Use Speakerphone mode as default when answering or initiating a call. As compared to handset Mode. This was added to support devices that did not support a front speaker. CK3, Amrel
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LDAP Directory Settings

[HKEY_LOCAL_MACHINE\Software\IPblue\VTGO]

Value Name	Type	Default Data	Description
bLNFirst	String	0	Search and show based on Last name. 0=no 1=yes
sLdapFilter	String		Any valid filter that will be passed with LDAP query Filter that returns only entries with telephone numbers is already applied.
sLdapPasswd	String	12345	UserDN Password
sLdapUserDN	String	Directory Viewer	DN of User
sLdapBaseDN	String	DC=ipblue, DC=internal	Starting point in LDAP directory to look for Entries. Searches will start at this and go up through the directory.
sLdapIpAddress	String	localhost:389	IP address and port of LDAP Server.
sLdapName	String	Company Directory	Name of Directory shown on VTGO
DirIndex	String	0	Index value of Directory that will be viewed when Directory screen is opened. 0=Outlook Contacts 1=LDAP 2=CME directory
sDelimiter	String	" "	Delimiter between last and first name used in directory look up. Space character is default

Speed Dials

[HKEY_LOCAL_MACHINE\Software\IPblue\VTGO]

Value Name	Type	Default Data	Description
SpeedName1	String	Speed 1	Speed Dial Name shown on the button.
SpeedPhone1	String		Speed Dial number to be dialed when pressed.
SpeedName2	String	Speed 2	Speed Dial Name shown on the button.
SpeedPhone2	String		Speed Dial number to be dialed when pressed.
SpeedName3	String	Speed 3	Speed Dial Name shown on the button.
SpeedPhone3	String		Speed Dial number to be dialed when pressed.
SpeedName4	String	Speed 4	Speed Dial Name shown on the button.
SpeedPhone4	String		Speed Dial number to be dialed when pressed.
SpeedName5	String	Speed 5	Speed Dial Name shown on the button.
SpeedPhone5	String		Speed Dial number to be dialed when pressed.
SpeedName6	String	Speed 6	Speed Dial Name shown on the button.
SpeedPhone6	String		Speed Dial number to be dialed when pressed.
SpeedName7	String	Speed 7	Speed Dial Name shown on the button.
SpeedPhone7	String		Speed Dial number to be dialed when pressed.
SpeedName8	String	Speed 8	Speed Dial Name shown on the button.
SpeedPhone8	String		Speed Dial number to be dialed when pressed.
SpeedName9	String	Speed 9	Speed Dial Name shown on the button.
SpeedPhone9	String		Speed Dial number to be dialed when pressed.
SpeedName0	String	Speed 10	Speed Dial Name shown on the button.
SpeedPhone0	String		Speed Dial number to be dialed when pressed.

License

[HKEY_LOCAL_MACHINE\Software\IPblue\VTGO]

Value Name	Type	Default Data	Description
sSerialNumber	String	Demo	License key
sNLServerURL	String	license.ipblue.com	Primary License Server URL
sNLServerURL2	String		Secondary License Server URL
bOfflineLicensing	String	0	Enable off net license control

Profiles

The Active Profiles values are transferred to these registry keys

[HKEY_LOCAL_MACHINE\Software\IPblue\VTGO]

Value Name	Type	Default Data	Description
bAutoAnswer	String	0	Enable auto answer on Primary Line 0=no 1=yes
nAutoAnswerRings	String	1	Number of Ring Cycle before answer. Ring cycle is 6 Seconds. 0=answer immediately 1= 6 seconds 2=12 seconds 3=18 seconds 4=24 seconds 5=30 seconds
bDoNotDisturb	String	0	Enable DND mode 0=no 1=yes
bForwardAll	String	0	Enable Call Forward All Calls 0=no 1=yes
sForwardAllTo	String		Forward to DN target no default data
bNotificationBalloon	String	1	Show Notification message 0=no 1=yes
bNotificationVibration	String	1	Vibrate during ring 0=no 1=yes
bUseSpeaker	String	0	Routes audio to the rear speaker and enable Echo cancellation if the device supports AEC.
nVolumeMicrophone	String	50	Microphone Volume using PCM Volume Scaling
nVolumeRinger	String	1	Volume Ringer setting master volume
nVolumeSpeaker	String	90	Volume of Speaker for Call audio using PCM scaling
sRingTone	String	None	Ring tone to play

Hotkeys

These registry keys are used to set the hotkey/hardkey mapping to phone functions

[HKEY_LOCAL_MACHINE\Software\IPblue\VTGO]

Value Name	Type	Default Data	Description
HotKey_MappingUserDefined	String	1	Enable or Disable the registration for Hotkeys on the device. 0=no 1=yes
HotKey_Transfer/Finish TX	String	0	
HotKey_Speaker Phone	String	72	Hot key to activate speaker Phone
HotKey_Send	String	72	Hot key to Send (Green Key)
HotKey_Push To Talk	String	5	Hot Key for PTT
HotKey_Hold/Unhold	String	0	Hotkey to Hold or Resume a call
HotKey_Hangup	String	73	Hot Key to End Call (Red Key)
HotKey_Flash	String	0	Hot key to Flash the line if Flash feature is enabled (Cisco CME)
HotKey_Conference	String	0	Hot key to start and complete a conference
HotKey_Answer		72	Hot key to Answer calls

Skins

[HKEY_LOCAL_MACHINE\Software\IPblue\VTGO]

Value Name	Type	Default Data	Description
sSkin	String		Default Skin
sFnColor	String		Text Color
sDpColor	String		Text Color
sDisplay	String		Display Background Color

Misc

These Registry keys are used by the API

[HKEY_LOCAL_MACHINE\Software\IPblue\VTGO]

Value	Type	Default Data	Description
ExePath	String	\Program Files\IPblue\VTGO	Path the Program is running from generated at runtime.
sStateAPI	String		How API reports phone state to API client updated in realtime by VTGO. 0 = 1 = 2 = 3 = 4 =

VoIP

[HKEY_LOCAL_MACHINE\Software\IPBLUE\Voip\Params\Phone]

Value	Type	Default Data	Description
EnableVAD	dword	0	Enable VAD 0=disabled 1=enabled
MicAttenuation	dword	100	
SpeakerAttenuation	dword	100	
MicThreadPriority	dword	200	
SpkThreadPriority	dword	200	
MTU	dword	2304	

[HKEY_LOCAL_MACHINE\Software\IPBLUE\Voip\Params\Phone\Jitter]

Value	Type	Default Data	Description
InitialBufferTime	dword	40	Initial JB length in MS
MaxBufferTime	dword	240	Maximum JB length in MS

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