

**Visual Call Manager (VCM)
for Norstar
Installation & User Guide**

Version 3.3 b1.3x



CONVERTec Inc.

By ConverTec Inc.
www.convertecinc.com



Visual Call Manager is a Nortel Networks Compatible Product. VCM underwent extensive testing in Nortel Networks laboratory ensuring integration to the Norstar phone system is flawless.

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Chapter 1: Introduction

Product Overview:

Thank you for purchasing Visual Call Manager.

There is no question that the modern business environment is extremely competitive. In order to grow or maintain business, companies must deliver a higher level of personalized service than ever before to their customers. The question is, how do you deliver the higher service level?

By integrating the intelligence in your computer with the power and flexibility of your telephone, you'll communicate more effectively and provide better customer service to win even more business.

The integration of computers and telephones is called Computer Telephony Integration (CTI). CTI, was at one time, very expensive and available only for very large systems, however today ConverTec has developed a suite of powerful CTI solutions that are targeted to small and medium size business's.

Visual Call Manager (VCM) allows companies to provide the power of Computer Telephony Integration (CTI) beyond the receptionist and Call Center Agents, by extending CTI functionality to every computer desktop throughout an organization. The result is an improvement in overall communications throughout an organization using a familiar and easy-to-use Graphical User Interface (GUI).

Designed specifically to integrate with Nortel Networks Norstar and Business Communications Manager (BCM) Telephone Systems, Visual Call Manager comes equipped with an impressive line-up of call handling and inter-office communication features.

Visual Call Manager provides all the functionality of ConverTec's CALL Link™ product (screen-pop, outbound dialing) and adds visual call control, text messaging, message notification, and unlimited system wide speed dials, all via a user-friendly desktop interface. Instead of using the telephone, employees will perform all their call-handling functions through their PCs and not wasting time switching back and forth between computers and phones, allowing them to stay focused and improve their productivity.

VCM integrates to many popular contact managers providing screen pop's to incoming calls. Having this information readily available will allow your employees to service calls more efficiently, resulting in greater caller satisfaction.

With VCM, calls are answered by a simple mouse click. Caller ID functions are displayed on-screen, along with the status of all extensions allowing for more rapid and accurate call handling. Other call controls such as placing calls on hold, parking, camping and paging is as simple as a click of a mouse. Transferring calls is easily performed by dragging and dropping the call to the desired extension or by pointing and clicking the transfer button and the desired extension button.

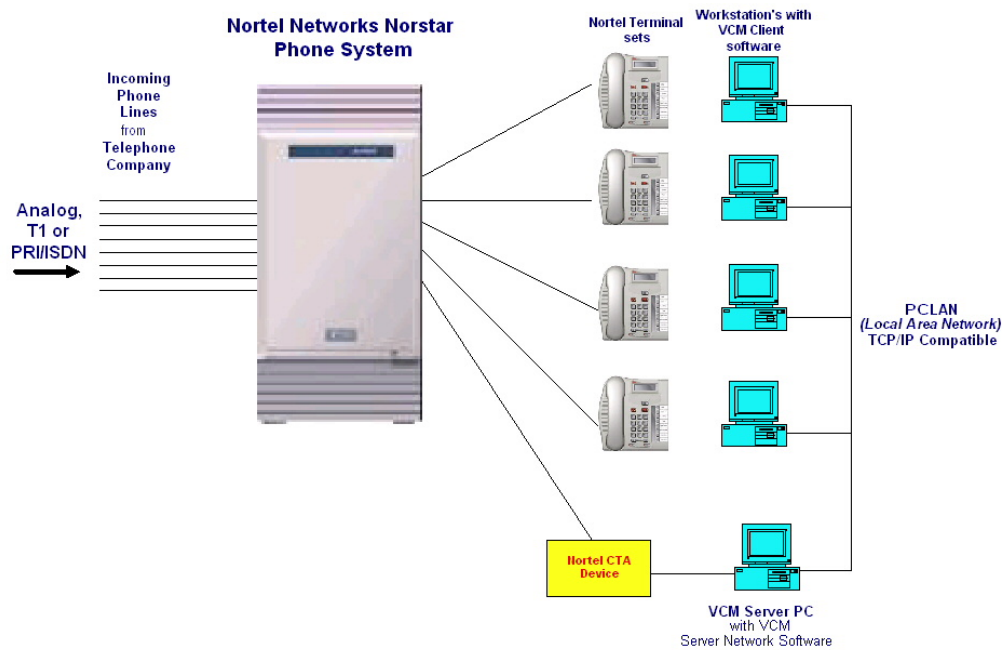
Visual Call Manager's powerful functions open up a wide range of communications possibilities for your company. Increase the efficiency of your employees by allowing them to handle calls quickly, easily, and with less disruption to their daily tasks. Improve the communications between your employees by expanding the palette of tools available, helping improve your company's bottom line.

With Visual Call Manager, messaging is handled quickly and efficiently through the "Text Message" screen, which allows the receptionist/users to enter messages electronically on screen and broadcast to one or more users. This powerful feature ensures that your messages are delivered on time, accelerating the movement of vital information.

Message Notification allows employees to enter up-to date status information about themselves. This message will automatically appear on all VCM user interfaces allowing your receptionist and all VCM users to be better informed and make more effective decisions. For example, a sales representative who is attending a trade show could have "Attending trade show, returning 1st Dec." displayed on his or her extension button informing all VCM users of their status.

For frequently dialed numbers, the Visual Call Manager allows all employees to access virtually an unlimited number of speed dials from their PC, saving time and ensuring the accuracy of call attempts.

There is no learning curve to Visual Call Manager as it mimics the basic functionality of the Norstar terminal. The VCM user interface can be easily customized and updated by an administrator with respect to departments, extensions and speed dials which are immediately broadcast to all users drastically reducing the amount of administration time.



Visual Call Manager (VCM) for Norstar

The diagram above illustrates how the VCM Server is connected to the Norstar phone system via a CTA device along with how VCM Clients are connected through the Local Area Network to the VCM Server. A major advantage Visual Call Manager provides is that only **one** Computer Telephone Adapter (CTA) is required for the entire Local Area Network. This means that up to the maximum number of Norstar telephones, currently 192, can be using VCM with only one CTA device.

VCM Minimum Requirements

VCM Server Hardware / Software Requirements:

- Pentium III 500 MHz CPU
- 128 MB RAM
- 10 GB available on Hard Drive
- SVGA Monitor with 800x600 Resolution or higher (16-bit high colour minimum required)
- CD-ROM Drive – preferred method to install application
- Operating system – NT 4.0 SP6, 2000 Prof. SP3, ME, XP, XPprof SP1/SP2
- One NIC (Network Interface Card) (Not compatible with more than 1 network card on PC designated as server)
- (Norstar Only) Serial Port required for connection of Nortel CTA100
- Printer – allows CALL Auditor reports to be printed – **OPTIONAL**
- Dedicated computer recommended
- Limited Access to the computer for security purposes

NOTES: Although it may be possible to get VCM to operate on Terminal Server or Win 2003 server, it is not recommended or supported by ConverTec. VCM does not run as a service and must be installed under a single user administrator account to work properly. Any OS Firewalls must be disabled or all application components must be bypassed in order for VCM to operate with any clients. The following components are related to VCM server: Norserv, ServSB, CallBR, MailSrv

VCM Client Hardware / Software Requirements:

- Pentium II 233 MHz
- 64 MB of RAM
- 50 MB available on Hard Drive
- SVGA Monitor with 800x600 Resolution or higher
- CD-ROM Drive – preferred method to install (optionally use shared CD ROM via LAN)
- Operating System – Windows 98 SE, NT 4.0 SP6, 2000 Prof. SP3, ME, XP Prof SP1,SP2
- NIC (Network Interface Card) TCP/IP Protocol. Access to LAN required.

NOTES: Win XpSp2 Firewall must be disabled or all application components must be bypassed in order for VCM clients to operate properly. The following components are related to VCM clients:
CLMNG

Nortel Networks Phone System Requirements:

- (Norstar Only) MICS(XC) DR1.1 or greater or CICS DR 1.0 or greater. Norstar telephone system
- (Norstar Only) Norstar Analog Caller ID Line Card(s) or PRI/BRI Digital card (required for screen-pop)
- (Norstar Only) One CTA 100 hardware interface (CTA 100 requires serial port on server PC)
- (Norstar Only) Norstar phone jack required for CTA100 at server location (can be used in series with existing telephone)
- (BCM Only) Software release BCM50, 3.5, 3.6 or 3.7
- (BCM Only) One LAN CTE Client License

Local Area Network Requirements:

- TCP/IP and UDP protocol must be unblocked from Server to Client PC's on the LAN

NOTES: This application cannot run through a VPN

Telephone Subscription Services:

- Caller ID Name and Number service from your local telephone company
(This service is required for inbound screen pops to occur.)

Custom Database Integration:

Custom Database Integration requires Call Link client(s). Your application developer can easily integrate Call Link to your database using our Active X control.

Chapter 2: Norstar Computer Telephony Adapter Installation

Chapter 2: Norstar Computer Telephony Adapter Installation

Norstar CTA Installation:

NOTE: Refer to Appendix F for CTA Windows Operating Systems compatibility

Installing the CTA device involves two steps:

1. Hardware installation (connecting the Computer Telephony Adapter to the VCM server and a live Norstar TCM port (extension jack).
2. Software installation (installing the supplied CTA driver software)

Note: All Norstar CTA devices do not require a dedicated Norstar jack but can share an existing jack used by a Norstar phone. If you have a Norstar phone in close proximity to the VCM server, the CTA can use this same Norstar jack as the Norstar phone while maintaining the use of the phone.

CTA 100/200 Installation using serial cable:

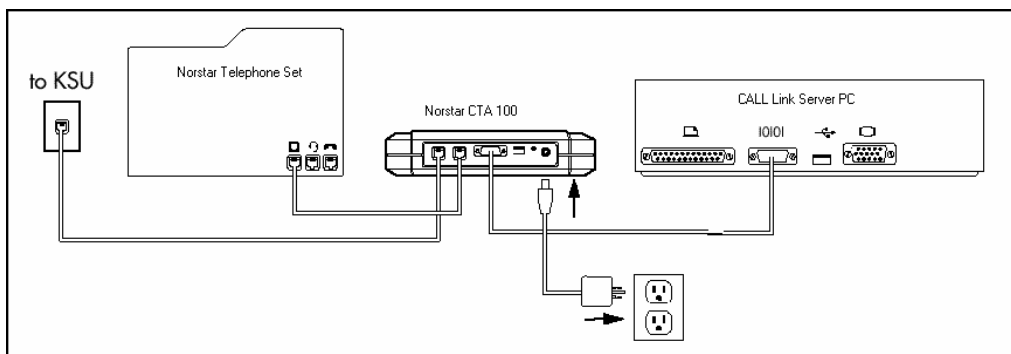
- Connect the supplied serial cable (supplied with CTA from Nortel) to the serial port on the CTA device and a free serial port on the VCM server.
- Connect one end of a telephone cable to a live Norstar jack and the other end to the jack labeled "Line" on the CTA.
- If the jack you plugged the CTA into originally had a Norstar phone plugged into it, the Norstar phone can now be plugged into the jack labeled "Phone" on the CTA.

Note: You can confirm a Norstar jack is live by plugging a Norstar phone directly into the jack you intend to use for the CTA. The display on the Norstar phone will briefly blink and may take up to a minute before the time and date appears on the Norstar display.

- Plug the CTA power supply into a 115 VAC receptacle and the output to the appropriate connector on the CTA.
- Insert the VCM CD-ROM into the VCM server CD-ROM drive. The VCM software will self-launch and provide a menu to the user, however, some PC's prevent this. If the CD fails to self-launch, go to

Start | Run | <CD drive letter> d:\ Demo32

- Click on **Install**.
- Select **Norstar CTA Drivers**
- Select the **CTA 100** or the **CTA 200**.
- Follow the Install Shield instructions.



CTA 100/200 Serial Port Connection Diagram

Chapter 2: Norstar Computer Telephony Adapter Installation

CTA 200 Installation using the USB cable:

NOTE: *The CTA 200 in the USB mode is compatible with Windows 98 and Millennium only. Refer to Appendix F for more information.*

- In order to take full advantage of the Plug and Play capability of the CTA 200 and the USB port, **install the software first**, and then install the CTA 200.
- Insert the VCM CD-ROM into the VCM server CD-ROM drive. The VCM software will self-launch and provide a menu to the user, however, some PC's prevent this. If the CD fails to self-launch, go to
Start | Run | <CD drive letter> d:\ Demo32
- From the menu, click on **Install**.
- Click on **Norstar CTA Drivers**.
- Select the **CTA 200** from the menu
- Follow the Install Shield instructions to complete the software installation.
- Shut down the VCM server
- Install the USB cable from the VCM server USB connector to the CTA 200 connector.
- Power on the VCM server.

CTA 150i / 160i Installation:

- Remove the power cord from the VCM Server PC
- Remove the cover from the VCM Server PC and locate a free ISA expansion slot for the CTA 150i or a free PCI slot for the CTA 160i.
- Remove the cover of the selected expansion slot and save the retaining screw.
- The CTA 150i comes with 5 I/O port address switches. The default setting is 300H. If this address is in use in the VCM PC then the switches will need to be set to an alternate address. See the Nortel "CTA 150i Installation Guide" for a listing of all possible switch combinations to acquire a free address.
- Install the CTA and ensure it is seated in the slot properly and secure the CTA to the PC's chassis with the retaining screw.
- Reinstall the cover of the PC and plug in the power cord.
- Connect one end of a telephone cable to a live Norstar wall jack and the other end to the jack marked "Line" on the CTA.
- If the jack you plugged the CTA into originally had a Norstar phone plugged into it, the Norstar phone can now be plugged into the jack labeled "Phone" on the CTA.

Note: *You can confirm a Norstar jack is live by plugging a Norstar phone directly into the jack you intend to use for the CTA. The display on the Norstar phone will briefly blink and may take up to a minute before the time and date appears on the Norstar display.*

- Insert the VCM CD-ROM into the VCM server CD-ROM drive. The VCM software will self-launch and provide a menu to the user, however, some PC's prevent this. If the CD fails to self-launch, go to
Start | Run | <CD drive letter> d:\ Demo32
- From the menu, click on **Install**.
- Click on **Norstar CTA Drivers**.
- Select **CTA 150i or CTA 160i** from the menu.
- Follow the Install Shield instructions to complete the software installation.
- Once the installation process is complete, reboot the VCM server.

Chapter 3: VCM Server Installation & Configuration

VCM Server Installation & Configuration

Physical Location:

It is recommended that the VCM Server be located in a secure, controlled environment. If the CALL Auditor is to be enabled, the CALL Auditor records should be considered confidential and the VCM Server treated with the same security as a Network File Server.

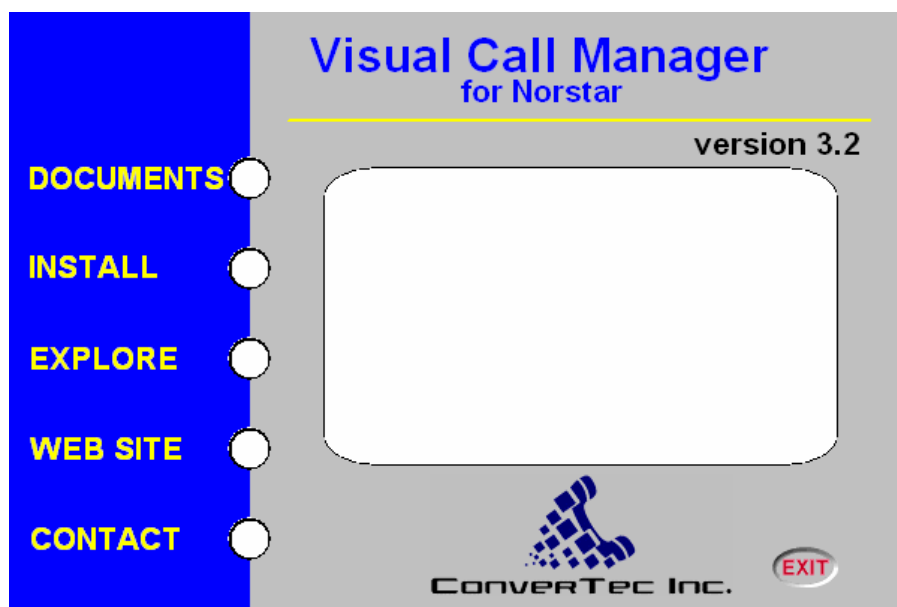
NOTES:

- *VCM Server software should be installed on a dedicated PC.*
- *The PC that the VCM Server software is installed on, must have one and only one Network Interface Card (NIC) installed.*
- *The VCM Server must be restarted if the Norstar switch is turned off.*

Software Installation:

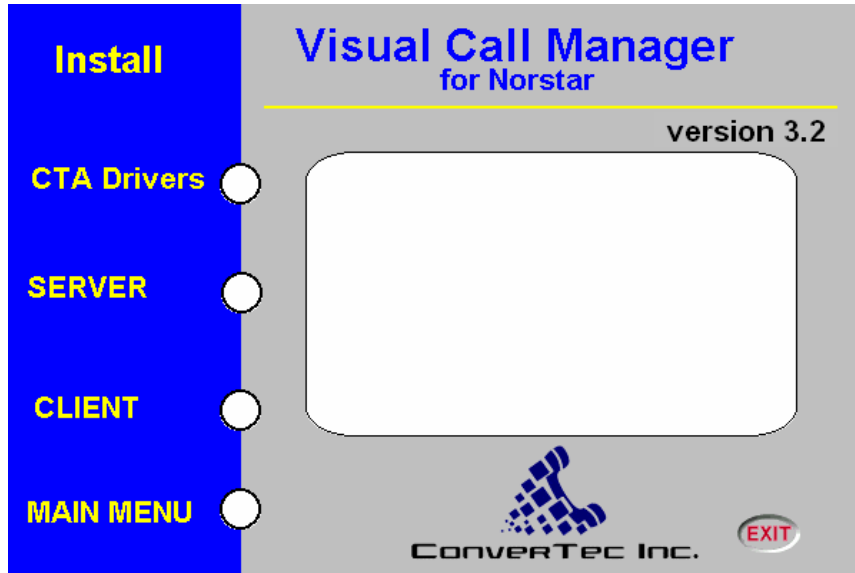
NOTE: *Installation of the Norstar CTA and driver software must be performed prior to installing the VCM Server software.*

- Insert the VCM CD-ROM into the VCM server CD-ROM drive.

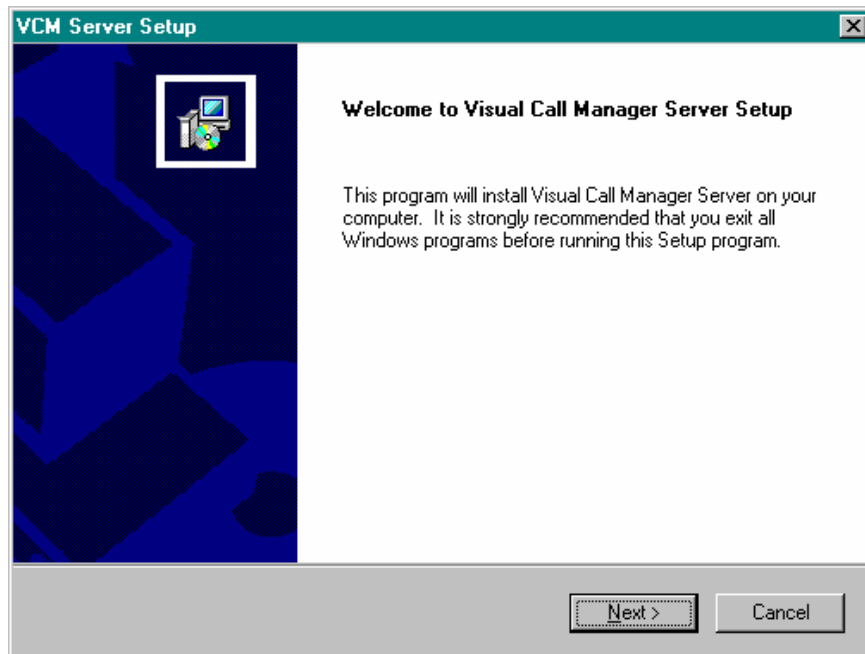


- The CD-ROM will self-launch displaying the menu above.
- Click on **INSTALL**.

NOTE: *If the CD fails to self-launch, go to
Start | Run | <CD drive letter> d:\Demo32*

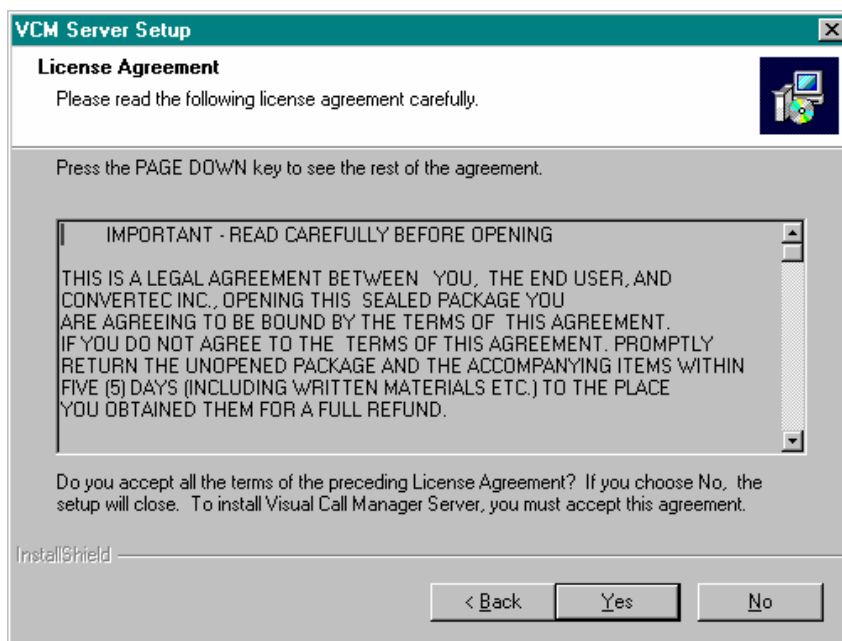


- Click on **SERVER**

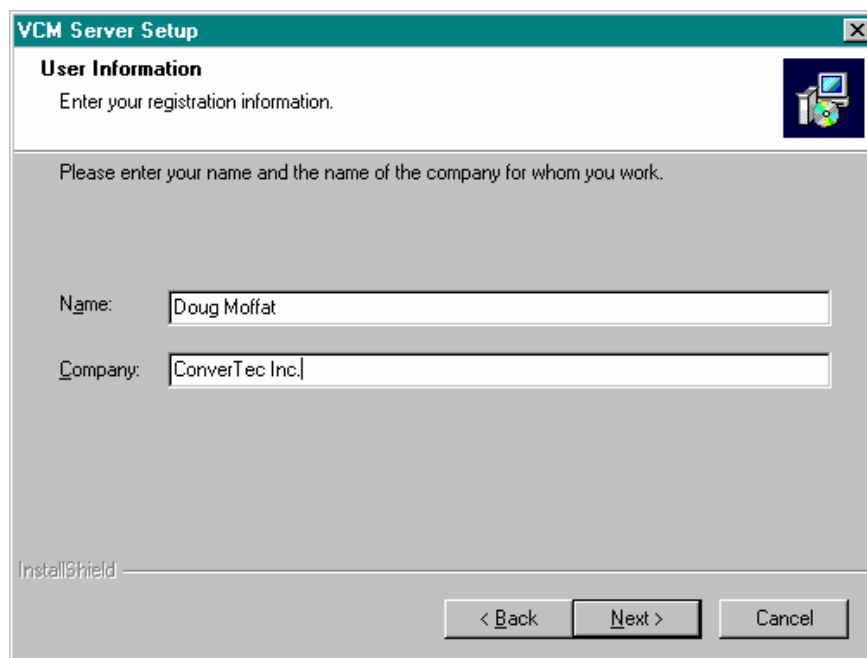


The Welcome Screen comes up first, reminding you to exit from all other open programs you might be running on your computer. Check the lower right-hand corner of the menu bar (Windows System Tray) for programs activated on startup of the computer, and close these as well. Click on **NEXT** to continue.

Chapter 3: VCM Server Installation & Configuration

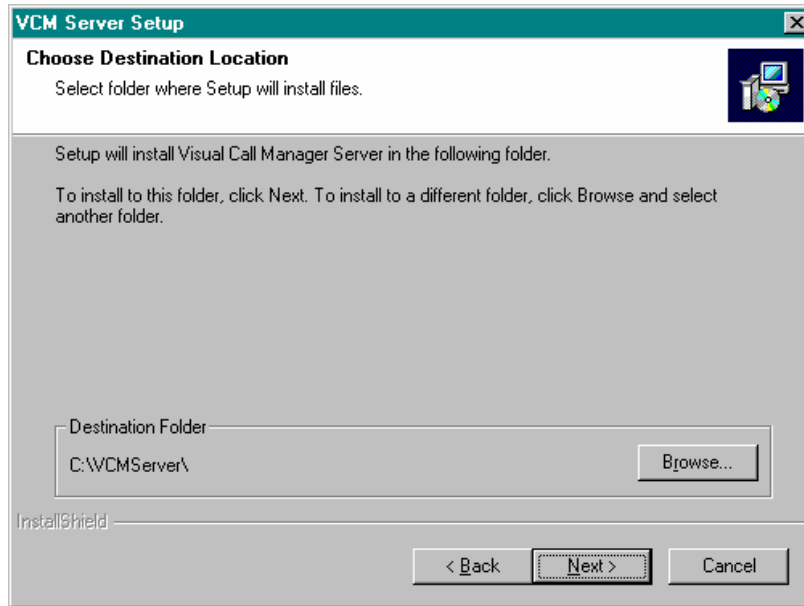


Next you will see the ConverTec Inc. license agreement screen. Please review and click on **YES** if you consent to the terms. Click on **NO** to exit the installation and return the VCM CD-ROM to your Authorized VCM Dealer.

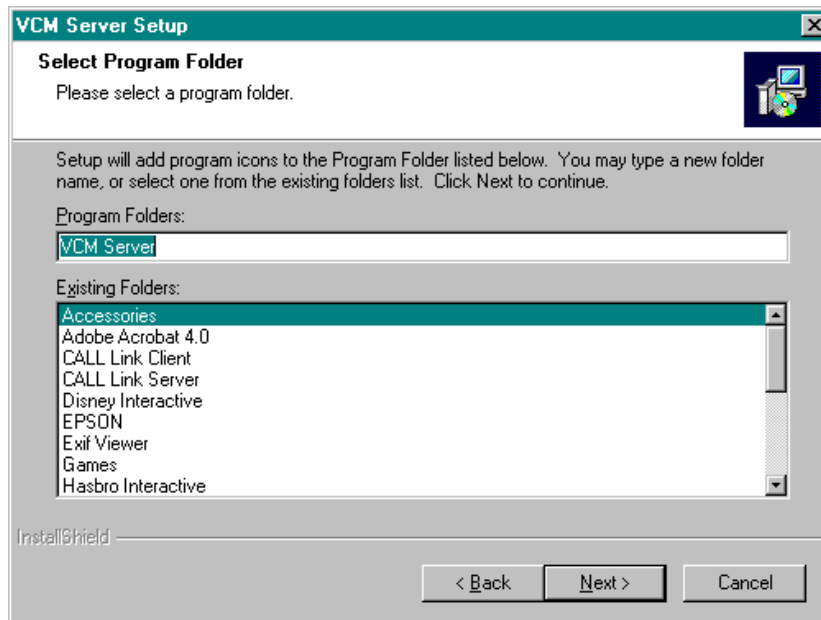


This screen asks for User Information. Enter your name, or main contact name and the company name in the appropriate places and click on **NEXT** to continue.

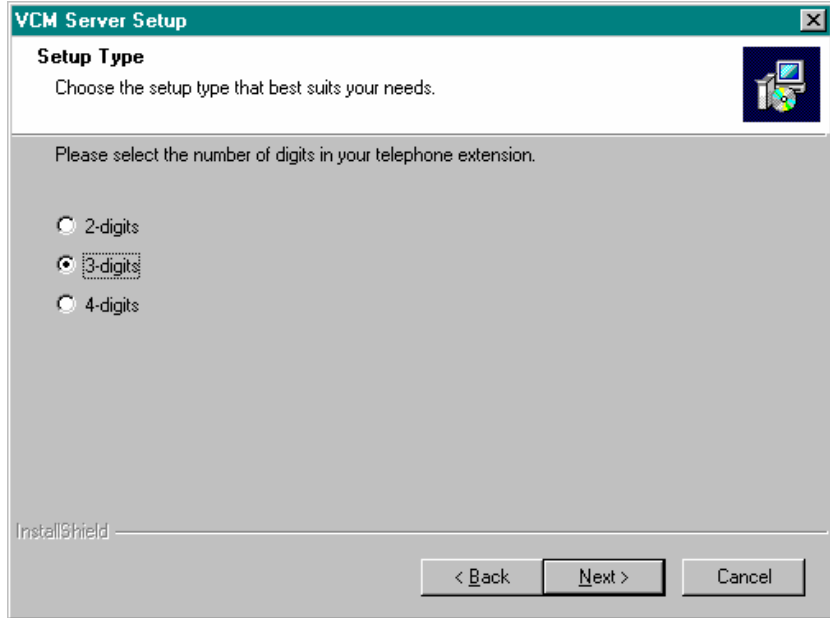
Chapter 3: VCM Server Installation & Configuration



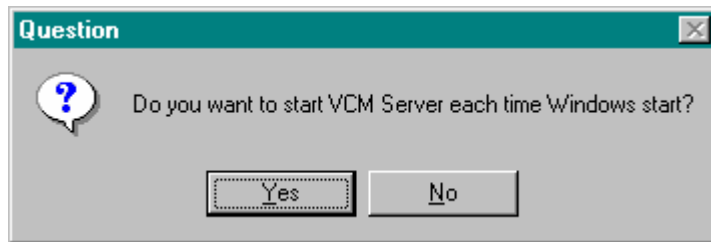
The VCM destination folder selection allows you to install into a directory or folder of your choice. It is recommended you use the default setting. Click on **NEXT** to continue.



The Program Folder Screen is the next you will see. By default, the InstallShield© Wizard will put the VCM folder in the first level of Programs. If you wish to place it elsewhere chose from the Existing Folders listed. Click on **NEXT** to continue.



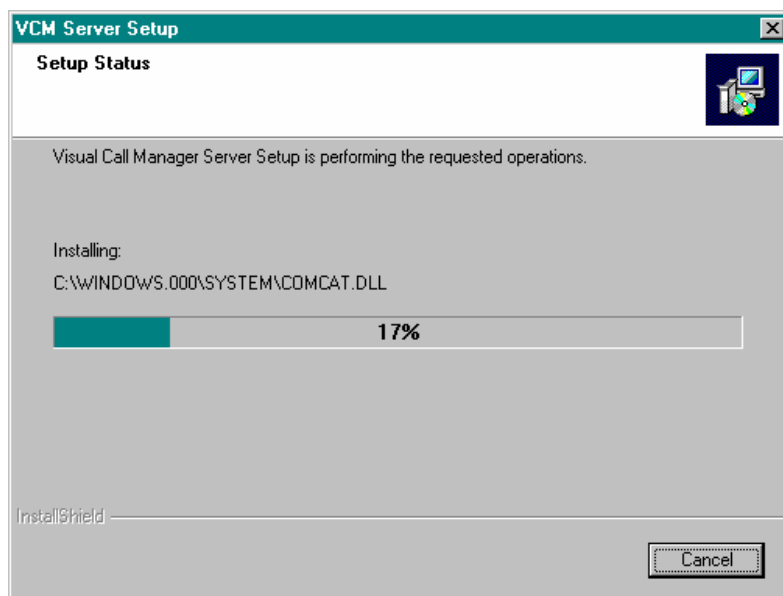
Select the number of digits that your Norstar telephone extension has.



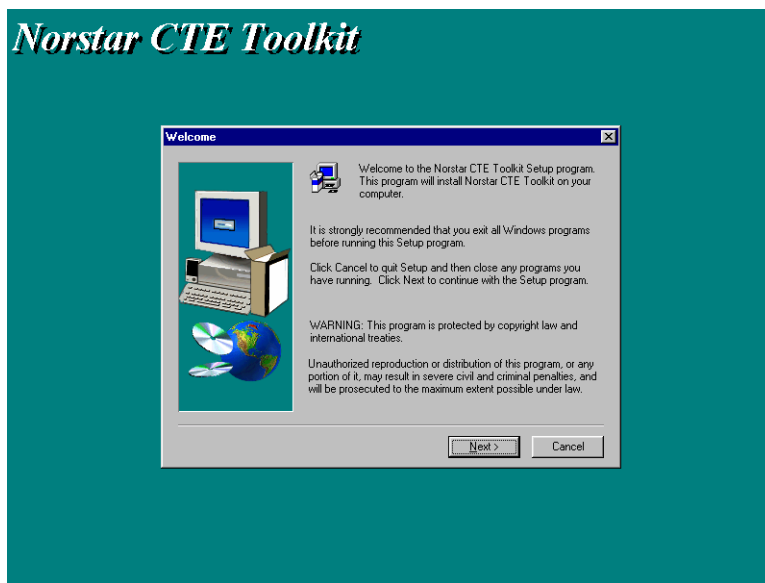
Next you will be asked, “Do you wish the VCM Server to start each time Windows starts?” Select **YES** if you wish VCM to start automatically.

Note: *It is highly recommended to answer YES to this question in order for the VCM Server to be automatically started each time Windows is started.*

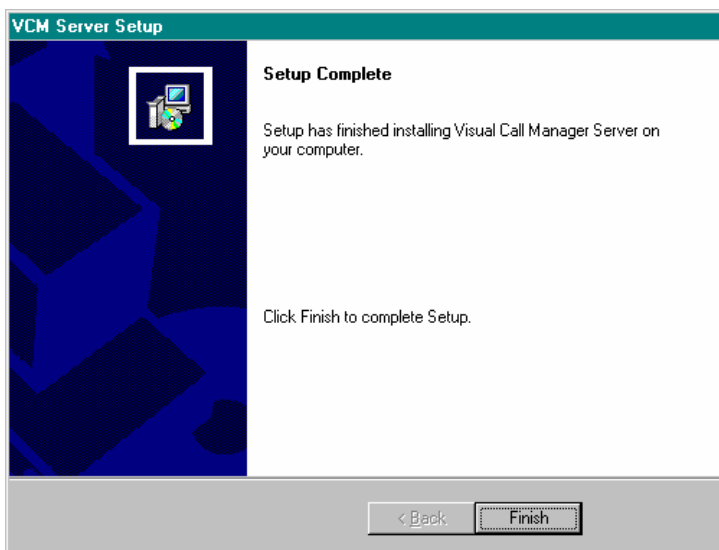
Chapter 3: VCM Server Installation & Configuration



The InstallShield® progress Screen is now presented. The thermometer bar will show the progress of the VCM Server installation.



The Norstar Computer Telephony Engine Toolkit is what VCM uses to communicate with the Norstar phone switch. Click on **NEXT** to continue.



Finally, the Setup Complete Screen will appear. Click on **FINISH** to complete. There is no need to restart the PC.

Configuration:

You can now start VCM by going to:


Start | Programs | VCM Server | VCM Server

Note: *If you have chosen a different Destination Location or Program Folder from the default choices, follow the appropriate path to find and activate Visual Call Manager.*

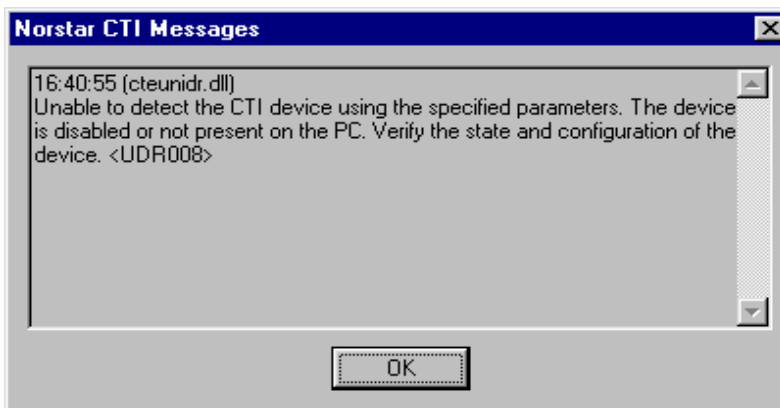


VCM Server startup window

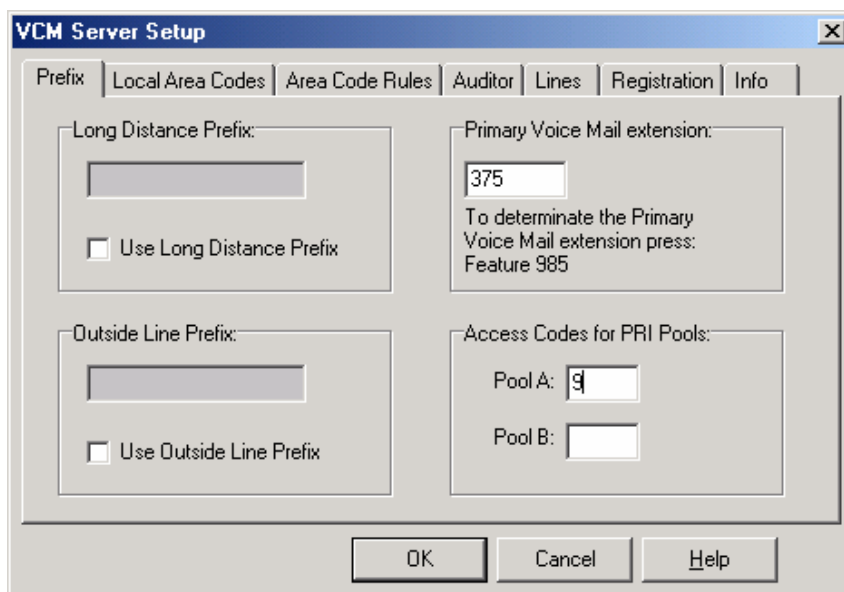
Chapter 3: VCM Server Installation & Configuration


When the VCM Server starts, the VCM Server icon  is added to the Windows system tray, which is located at the lower right hand corner of the Windows desktop. When the VCM Server is operating properly, a red lamp blinks on and off on the VCM Server. This red lamp is referred to as a “heartbeat indicator”. If the red lamp is either steady on or steady off, the VCM Server is **not** functioning properly and appropriate action is necessary. See Appendix B for troubleshooting tips.

If a problem with the Norstar CTA device is encountered upon starting the VCM Server, a message like the one below is presented.



See Appendix B for possible causes of this message and solutions to rectify the problem.



Right clicking on the VCM Server icon  in the system tray accesses the VCM Server Setup. Scroll up to **Setup**. Left click on **Setup**. The VCM Setup window is presented.

Chapter 3: VCM Server Installation & Configuration

Prefix:

- Long Distance Prefix: This parameter is used if you subscribe to a long distance service, which requires a special access number be dialed prior to the actual requested phone number. Check the “Use Long Distance Prefix” box and enter the appropriate number. If a pause is required, use the letter P for a 1.5 second pause.

Note: All toll free area codes are exempt from this parameter. Toll free numbers will use the “Outside Line Prefix” parameter to access an outside line.

- Outside Line Prefix: If you subscribe to Centrex lines or your Norstar switch is behind a PBX switch and requires a number(s) to access outside lines, then check the “Use Outside Line Prefix” box and enter the appropriate number.
- Access Pools for PRI Pools: PRI & BRI line pools are available on the Compact and Modular ICS systems only. Primary Rate Interface (PRI) is only available on the Modular ICS (MICS) system. PRI hardware and software is required in order to utilize this digital technology. Currently, the Norstar MICS system can support a maximum of three PRI-ISDN trunk cards (MICS 6). VCM can access all of PRI channel pools.

If using PRI on a Modular ICS phone system, enter the access code(s) for the appropriate pool(s).

- Primary Voice Mail Extension: Using a Nortel phone, press “Feature 985” and enter this number. If you do not have voice mail, leave this field blank.

Local Area Codes:

The screenshot shows the 'VCM Server Setup' dialog box with the 'Local Area Codes' tab selected. The dialog has several tabs: Prefix, Local Area Codes, Area Code Rules, Auditor, Lines, Registration, and Info. The 'Local Area Codes' section contains four input fields for Area Code 1, 2, 3, and 4. Area Code 1 is set to 905, Area Code 2 to 416, and Area Code 3 to 289. Area Code 4 is empty. To the right of these fields is a checkbox for '"Pad" CallerID' which is unchecked. Below the checkbox is a note: 'Note: Area Code 1 will be used to "pad" the incoming Caller ID information if only 7 digits are received.' Below the area code fields is a 'Toll Free Codes' section with a list box containing 800, 888, 877, and 866. There are 'New...' and 'Remove...' buttons next to the list box. At the bottom of the dialog are 'OK', 'Cancel', and 'Help' buttons.

- Enter all area codes that are local to your area along with those area codes that encompass both local and long distant exchanges. Consult your phone book for a complete listing of local exchanges.
- Along with providing an area to enter a local area code, Area Code 1 provides a secondary function. Area Code 1 is also used to “pad” any local Caller ID information which is received as a 7 digit number as apposed to the 10 digit phone number required by all Contact Managers. Always enter your local area code in Area Code 1.
- Enter all Toll Free Area Codes. All toll free calls will utilize the “Outside Line Prefix” rather than the “Long Distance Prefix” rule. By default, 800, 888, 877 and 866 are loaded during the installation process

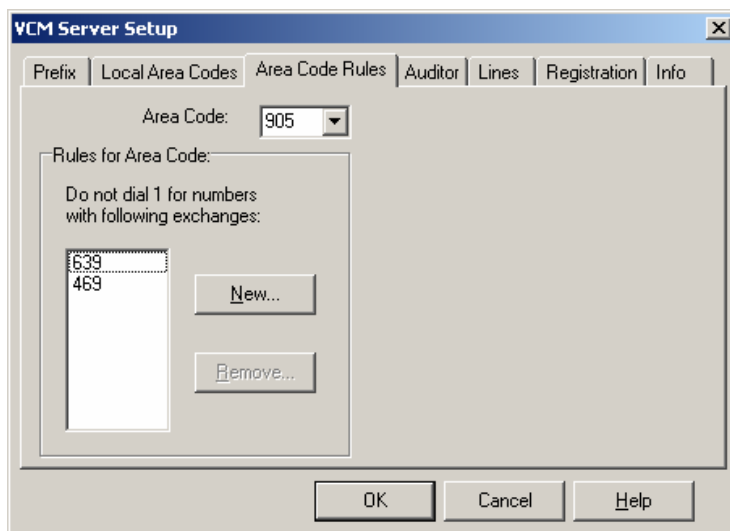
Chapter 3: VCM Server Installation & Configuration

CALL Auditor:

- To enable the CALL Auditor, click on the “Enable Call Auditor” box and enter the minimum call time that an outbound call is recorded. The CALL Auditor report generator is a separate application that is started from **START | PROGRAMS | VCM Server | CALL Auditor**. For more details about the CALL Auditor, see Chapter 6.

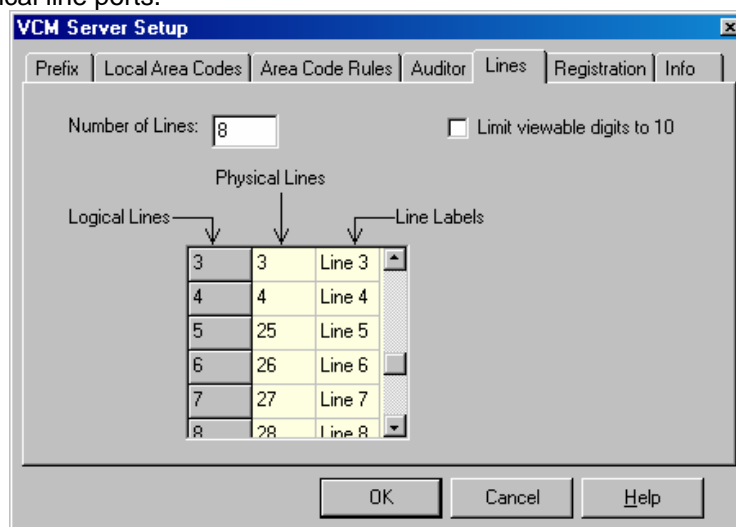
Area Code Rules:

- Enter all area codes that incorporate both local and long distance exchanges. Enter all local exchanges within the specific area code by clicking on **New** and adding the exchange. Consult your phone book for a complete listing of local exchanges.



Lines:

- When a Norstar Modular ICS is being used in conjunction with analog Central Office lines (Norstar LS/DS line card(s)), the logical lines should be mapped to the Norstar's physical line ports.



- In the screen shot above is an example of a typical Modular ICS (MICS) line-renumbering configuration with two CII Line cards installed in the main MICS cabinet, which supports four analog lines each for a total of eight lines. The second CII Line

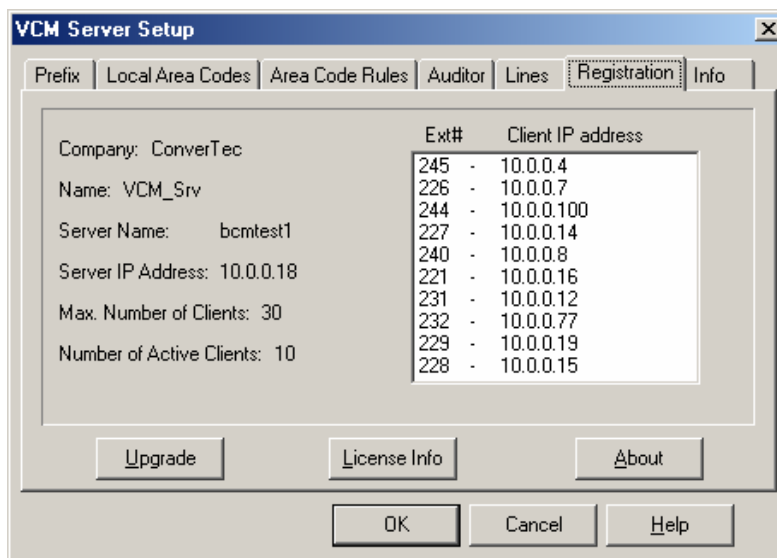
Chapter 3: VCM Server Installation & Configuration

card supports physical lines 25-28, however VCM allows you to logically assign lines 5-8 so they appear numerically synchronous on the CALL Auditor.

- **Number of Lines** should be set to the maximum number of physical CO ports or telephone phone lines the Norstar switch currently has installed.
- **Line labels** is used to assign how the lines are displayed on the VCM user interface. This is a convenient method to distinguish differences between lines on a phone system that are being shared between two or more companies.
- **Limit viewable digits to 10** will restrict the digits displayed on the VCM user interface to 10. This is a security feature which will eliminate digits used for banking and various passwords from being displayed.

Registration:

- This section provides information pertaining to the VCM Server configuration, software license information as well as providing the ability to upgrade the current software level and maximum number of concurrent VCM Clients that can be attached to the server.



- The registered **Company** and **Name** is displayed which was entered upon installing the VCM server software.
- The **Server Name** is the Computer name of the VCM Server PC found in the Identification section in Network Neighborhood.
- The **Product Number** is a unique number, which is used when upgrading to a different level or adding additional Client licenses.
- **Max. Number of Clients** displays the maximum number of VCM Clients that the VCM Server is currently registered for.
- **Number of Active Clients** displays the number of current VCM Clients connected to the VCM Server.
- **Level** indicates the current VCM software level. There are currently three levels, **Demo**, **Full Product** and **Full Product with Reports**. Under the Demo level, the VCM Server will operate for up to 100 calls (inbound or outbound) before shutting down. You must restart the VCM Server for it to operate for an additional 100 calls or call your local ConverTec dealer for a key code.
- Indicates VCM Clients currently connected to the VCM Server displaying their IP address and their associated extension numbers.

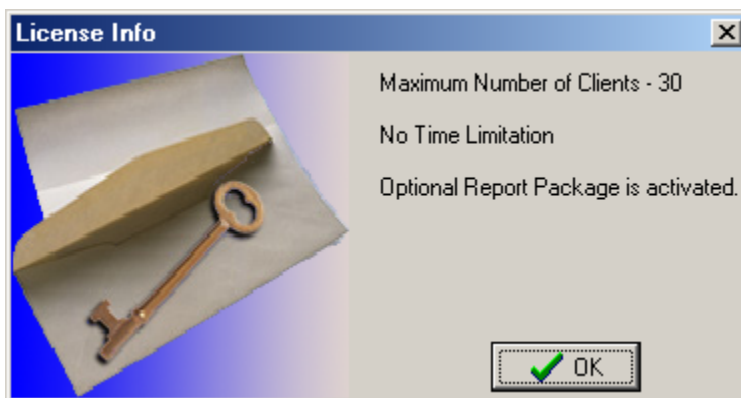
Chapter 3: VCM Server Installation & Configuration

Upgrade:

- Click on the **Upgrade** button to enter an upgrade key code to add additional VCM client licenses and to enable the Optional Report Package. Call your local ConverTec dealer or call ConverTec at 1-877-937-8228.

License Info:

- Indicates the status of the current software license.
- In **Demo mode**, the VCM Server will operate for 30 days from the day of installation before shutting down. 5 client licenses and the Optional Report Package are enabled in demo mode.

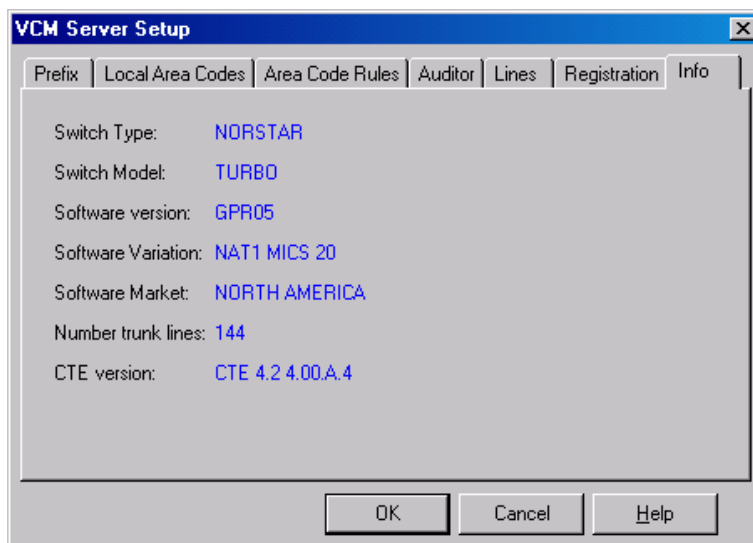


About:

- Click on the **About** button to display the current version of the VCM Server.

Info:

- Displays information about the Norstar hardware and software being used. This is primarily for troubleshooting purposes.

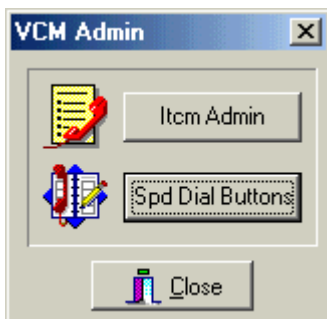


Chapter 3: VCM Server Installation & Configuration

VCM Administrator:

The VCM Administrator is a dual purpose utility located on the VCM Server. The VCM Administrator is used to facilitate additions and changes to the Extension Buttons and System Speed Dials. Any changes made via the VCM Administrator will automatically update all VCM user Interfaces. To access the VCM Administrator, go to:

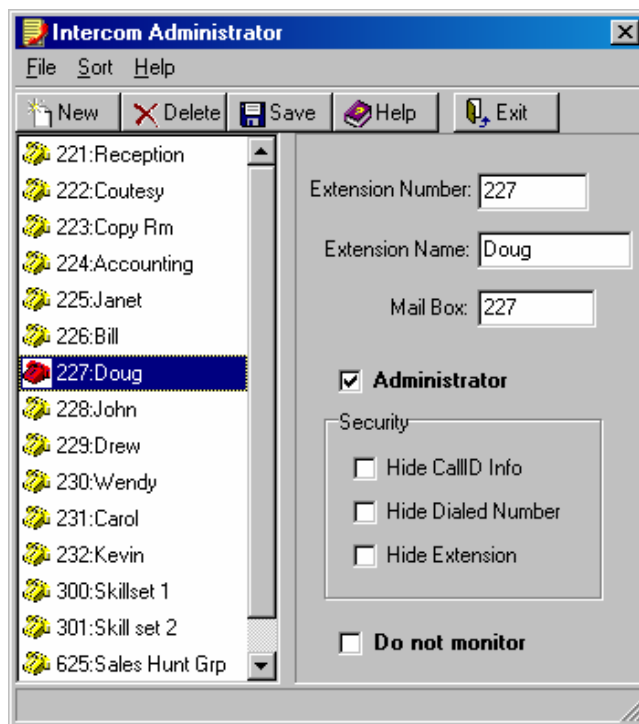
Start | Programs | VCM Server | VCM Administrator



VCM Administrator Main Menu

Intercom Administrator:

The Intercom Administrator is used to add, delete or modify individual extensions, enable Administrative rights, change the Security settings of specific extensions, add ACD group Transfer extension(s) and modify mailbox settings.



Chapter 3: VCM Server Installation & Configuration

- **Extension Number** – Upon installation, a default extension list is created for the first 20 extensions. You must edit this list to reflect your extension list. Devices you can include are; Hunt Group extensions, ATA's, Door phones, ACD Transfer DN's and Voice Mail extensions.
- **Extension Name** – Upon installation, the default value of this field is the extension number. This field should be changed to reflect the name of the telephone user, ACD Group (i.e. Sales Dept), Hunt Group pilot extensions and Voice Mail extensions.
- **Mail Box** – Upon installation, the default value of this field is the extension number. Remove any mailbox entries that do not have mailboxes and change any mailbox that is different than the phone extension. i.e. the reception phone usually has the General Delivery mailbox associated to that extension.
- **Administrator** – Select this box to allow this extension to;
 - add or change the Message Notification for any VCM extension. For example, you may want to give the receptionist administrative rights so that he or she may change the Message Notification for those people who are out of the office. See page 62 for more information regarding Message Notification.
 - view call information of those extensions that have been blocked. For example, the boss may allow specific VCM user(s) the right to view who they are talking to while blocking those that are not deemed an administrator. See “Hide Call ID Info” and “Hide Dialed Number” below for more information.
- **Security**
 - **Hide Call ID Info** – Select this box to prevent other VCM users from viewing inbound Caller ID information for this extension. The words “Active Call” will replace the Caller ID information.
 - **Hide Dialed Number** – Select this box to prevent other VCM users from viewing the number dialed for this extension. The words “Active Call” will replace the dialed number.



- **Hide Extension** – Select this when you do not wish the VCM users to see a particular extension(s). An example of extensions that you may want to enable this feature could be the voice mail extensions or Hunt Group extensions. Although you may not wish VCM users to view particular extensions, it is important that they are included in the Intercom list to ensure proper VCM operation.

Chapter 3: VCM Server Installation & Configuration

- **Do Not Monitor** – When the VCM Server starts, it attempts to monitor both Lines and Extensions. If an extension is unable to be monitored, it will appear on the VCM Client with a dark grey colour indicating an “out of service” extension

NOTES:

- *All telephones, ATA's, ACD Transfer DN's, Hunt Groups must be added manually after the VCM Server's initial startup.*
- *If changes are made using the VCM Administrator while the VCM Server is running, the VCM Server must be shut-down and restarted in order for these changes to take effect. Once the VCM Server has restarted, all VCM user interfaces will reflect all changes made.*

Chapter 4: VCM Client Installation & Configuration

VCM Client Software Installation:

NOTE Windows NT/2000 & XP Users Only

VCM Client requires the installer to have the ability to read and write to the Windows system registry. In order to comply with this requirement, administrator rights are required for VCM Client installation only. VCM users do not require Administrative rights.

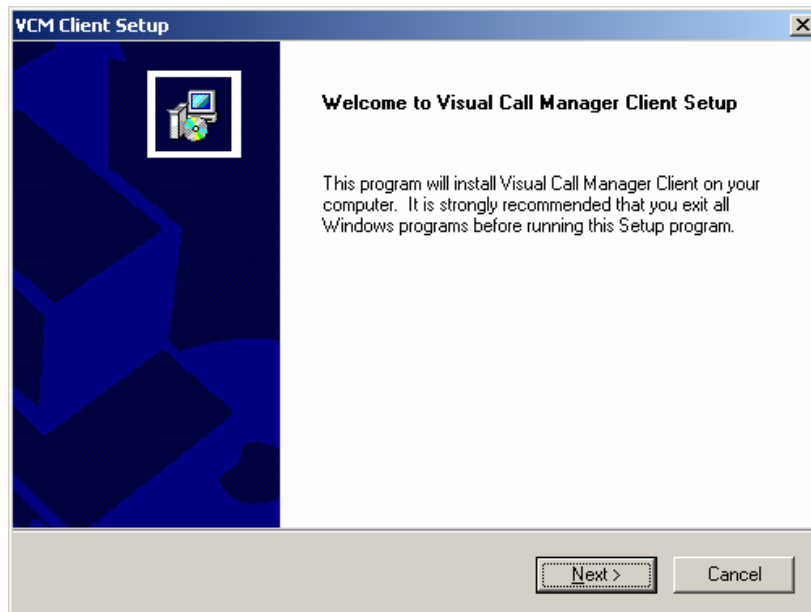
The VCM Server must not be running during the VCM Client Installation if being installed on the same PC.

- Insert the VCM CD-ROM into the VCM server CD-ROM drive
- The CD-ROM will self-launch displaying the menu above.

NOTE: If the CD fails to self-launch, go to

Start | Run | <CD drive letter> d:\ Demo32

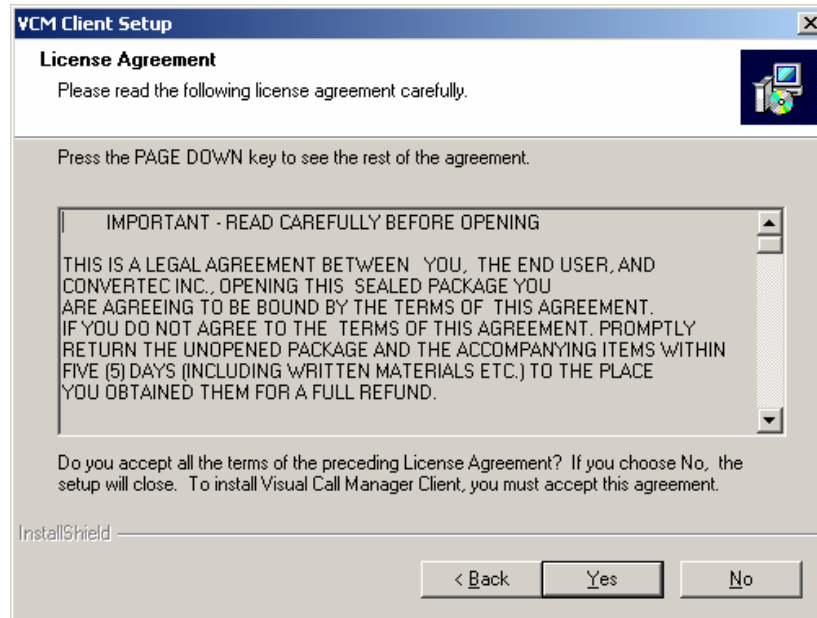
- Click on **INSTALL**.
- Click on **VCM Client**.



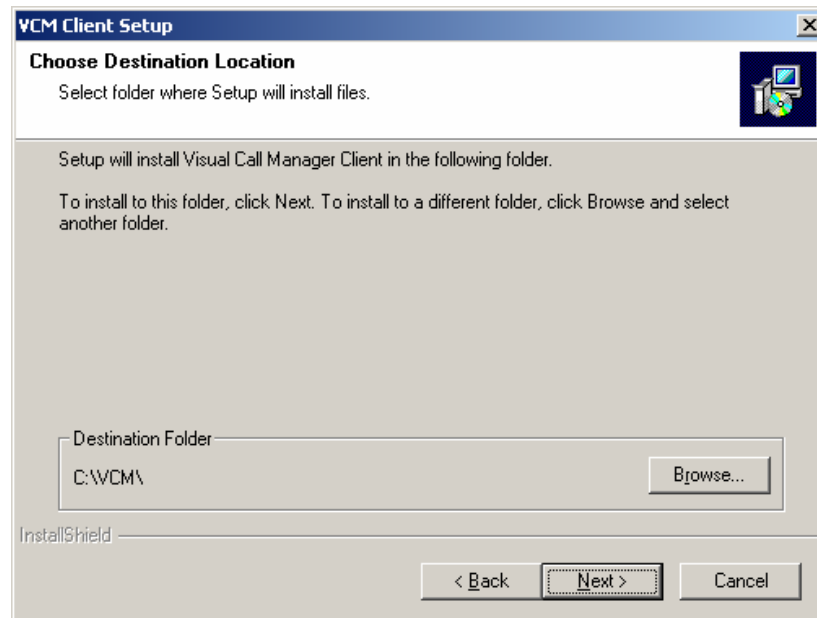
VCM will automatically activate the **InstallShield © Wizard**, which will lead you through the installation process.

The Welcome Screen is presented, reminding you to exit from all other open programs you might be running on your computer. Check the right-hand side of the menu bar (Windows System Tray) for programs activated on startup of the computer, and close these as well. Click on **NEXT** to continue.

Chapter 4: VCM Client Installation & Configuration

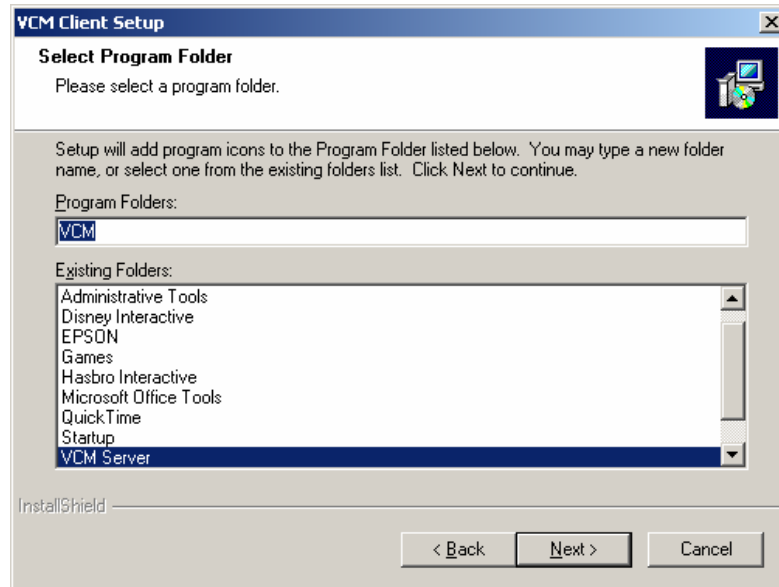


Next, is the ConverTec Inc. license agreement screen. Please review and click on **YES** if you consent to the terms. Click on **NO** to exit the installation and return the VCM CD-ROM to your Authorized ConverTec Dealer.

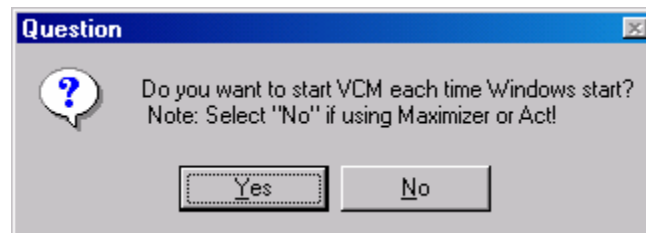


By default, the InstallShield© Wizard will create the VCM folder in the route directory of drive C. If you wish to create it elsewhere, select browse. Click on **NEXT** to continue.

Chapter 4: VCM Client Installation & Configuration

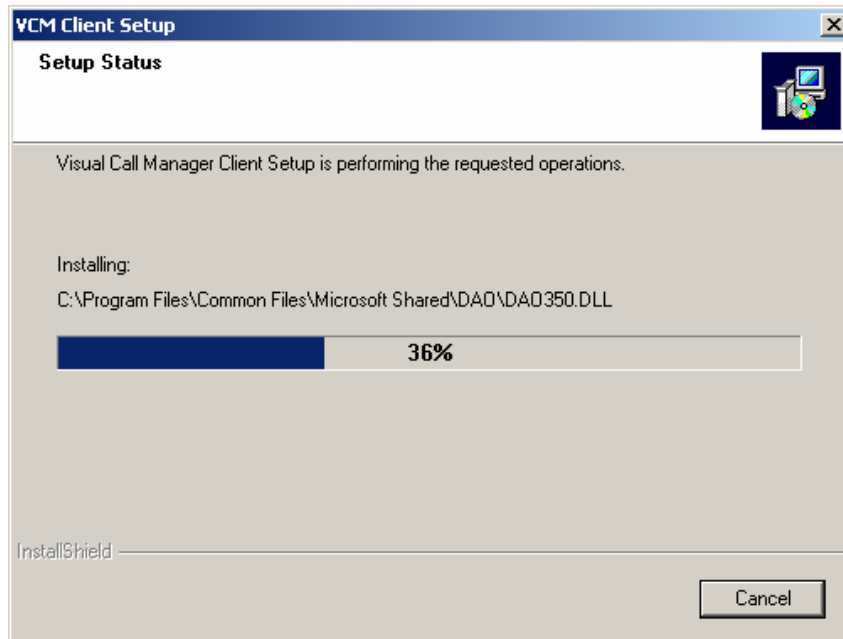


By default, the InstallShield© Wizard will create a folder called VCM. Click on **NEXT** to continue or select an existing folder or enter a new folder name to create.

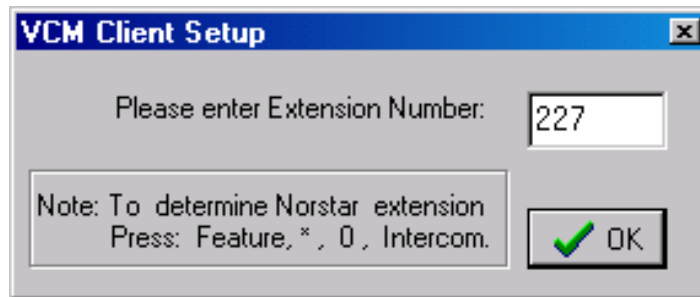


Next you will be asked, "Do you want to start VCM each time Windows is started?"

NOTE: If using Maximizer or ACT!, select "No" when asked if you want VCM Client to automatically start when starting Windows. Both Maximizer and ACT! must be started prior to VCM Client.

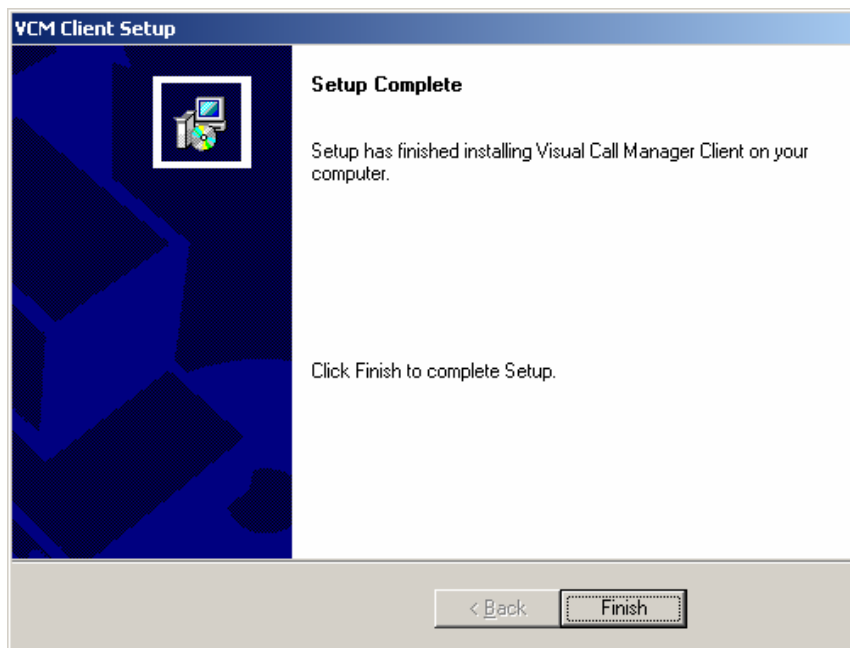


The InstallShield© Status Screen is now presented. The thermometer bar will show the progress of VCM's installation.



Enter the extension of your Norstar phone and click on **OK**.

Note: *If the extension number of the Norstar phone is unknown, press, the “Feature”, “ * ”, “0”, and Intercom buttons, on the Norstar phone. On the Norstar telephone display will be the extension number and name of that phone.*





Click on **FINISH** to complete the installation. There is no need to restart the computer.

VCM Client Setup:

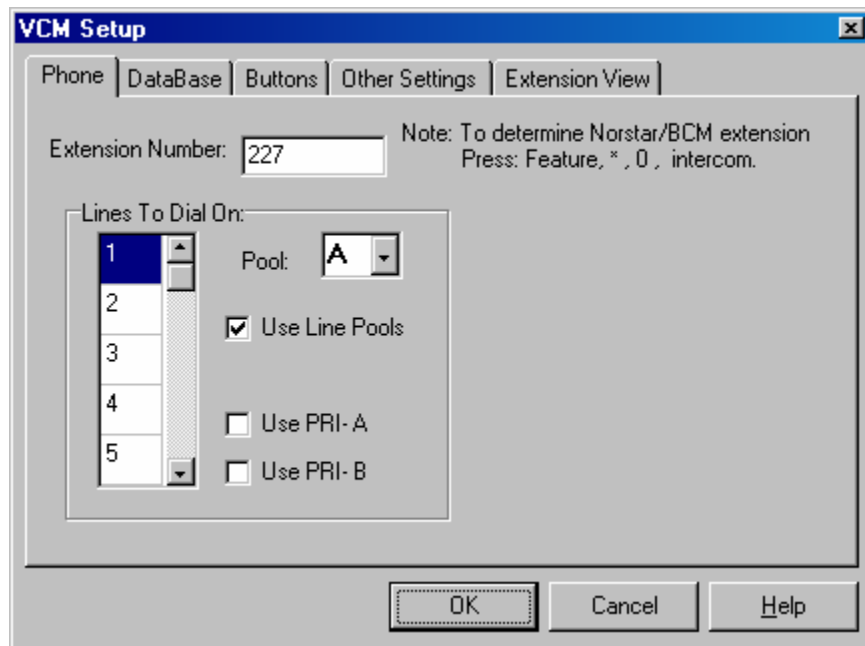
You can now start VCM by going to:

Start | Programs | VCM | VCM Client

Note: *If you have chosen a different Destination Location or Program Folder from the default choices, follow the appropriate path to find and activate Visual Call Manager.*

Once VCM Client has been started, the VCM icon  will appear in the Windows system tray. If the VCM Client is not communicating with the VCM Server, the VCM Client icon changes to .

If the VCM Client is not connected to the Local Area Network (LAN), does not have the TCP/IP protocol configured properly or if the VCM Server is not operating, the message "Connecting to Server" will be displayed on the bottom left corner of the VCM user Interface.



VCM Phone Setup Window

Right click on the VCM icon and scroll up to **SETUP**. Left click on **SETUP** and the setup Window will be presented.

Phone:

- **Extension Number** is the extension of your Norstar phone. Confirm the extension of your Norstar phone and enter it here.

Note: *If the extension number of the Norstar phone is unknown, press, the “Feature”, “ * ”, “0”, and Intercom buttons, on the Norstar phone. On the Norstar telephone display will be the extension number and name of that phone.*

Lines to Dial On:

- “Lines to Dial On” allows a user to select lines to dial out on, if the lines appear on the Norstar phone, or that extension has access to a specific line pool. If lines appear on the Norstar phone (there is a physical button on the Norstar phone), then the sequence that VCM will use these lines can be configured. VCM uses the lines in the sequence they are listed, from the top down. In the example on the previous page, VCM will start with line 1 to initiate a call and if busy will attempt to use line 2 and so on in the sequence listed. To change the outbound sequence, highlight the line number you’d like to change and enter the line number you want in it’s place.

Use Line Pools:

- When this box is checked, it instructs VCM to use an analog line pool. A specific line pool must then be selected from the pull down list box. Unless you are familiar with Norstar programming, to determine what specific line pool a Norstar phone extension has access to, simply use the trial and error method. Start with Pool A, if you can access a line and can dial from VCM, then you can move on to the next step in the VCM configuration. If VCM is unable to access a line, try Pool B and so on.
- Line Pools are used primarily when a company has more lines than there are buttons on the phone. There is typically a button on the phone programmed to access a specific line pool. When the line pool button is pressed, the first free line in the pool, from the bottom up, is seized by the Norstar phone system. If you are not sure if your Norstar phone has line pool access, try dialing by pressing Intercom + 9, or Intercom + 8, or Intercom + 7. If you get access to a line with any of these, you have Line Pool access. This does not indicate however, if the line pool is analog or digital.

Line Pools can be made up of analog or digital lines. Nortel’s Compact ICS and Modular ICS are capable of both analog and digital trunking.

- PRI & BRI line pools are available on the Compact and Modular ICS systems only. Primary Rate Interface (PRI) is only available on the Modular ICS (MICS) system. PRI hardware and software is required in order to utilize this digital technology. Currently, the Norstar MICS system can support a maximum of three PRI-ISDN trunk cards (MICS 6). VCM can access all of PRI channel pools.

Use PRI-A:

Check this box to access the digital lines from this pool.

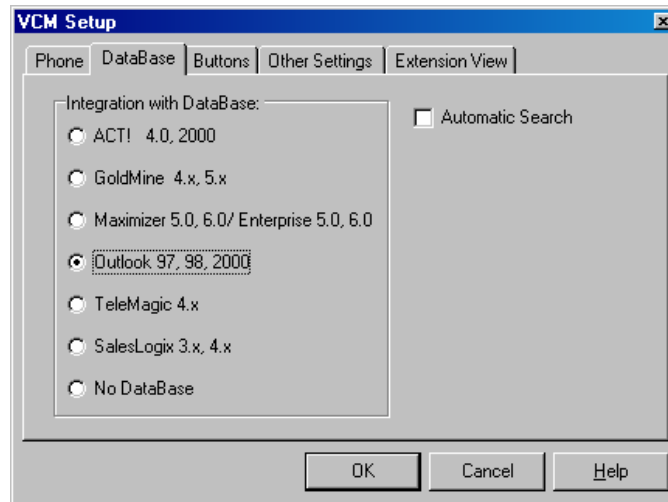
Use PRI-B:

Check this box to access the digital lines from this pool.

DataBase:

Basic Look-up:

If you use one of the Contact Managers listed in the Database window and wish to use the screen pop/database search feature, click on the appropriate radio button. This will activate the Basic Look-up/Search feature.



Note: *Caller ID data on an analog C.O. line is received between the first and second ring. If an incoming call is answered too quickly, or before the second ring, no Caller ID data will be available and therefore no screen pop will occur. Caller ID data on a digital trunk (PRI-ISDN) is available before the first ring. If the Caller ID phone number is not received by the VCM Server (i.e. Private number), no database look-up is attempted if manually or automatically invoked.*

- The Basic Look-up feature utilizes the Caller ID data that accompanies an incoming call and performs a search on the main telephone field of a database upon a user going off-hook on their Norstar phone or when the Search button is selected.
- When **Automatic Search** is selected, the database search will commence when the Norstar phone goes off-hook, or answers the incoming call without having to click on the Search button.

NOTE: *If an inbound call is answered by a Norstar phone and is subsequently, TRANSFERRED, put on HOLD, or PARKED, all subsequent Norstar phones that receive that call also have the ability for a screen pop to occur. This will occur upon each TRANSFER, HOLD or PARK condition until the call is terminated.*

- To configure the Basic Look-up feature, locate the database that you want to integrate to and click on the corresponding radio button. This will enable the Active X control that will allow for inbound screen pops and outbound dialing from that database.

Note: *TeleMagic users must refer to Appendix C for special configuration notes.*

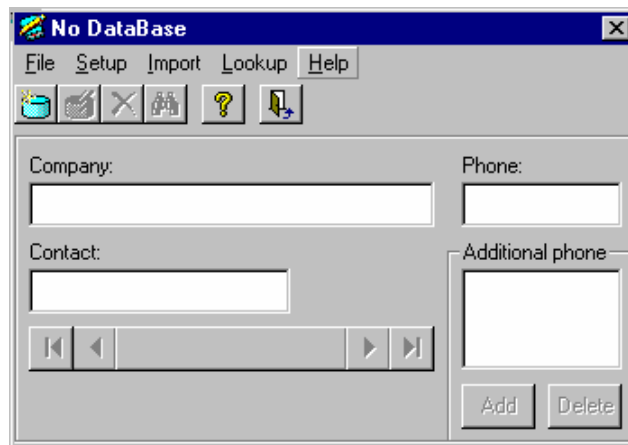
Maximizer users must disable the "Tips" option. Go to:

**File / Preferences / Security / System Options /
Uncheck "Show Tips of day at Program Startup"**

Smart Look-up:

- Smart Look-up is an advanced database look-up feature that allows an unlimited number of phone numbers to be associated to one number. The smart look-up method can associate multiple business numbers, residential, cell phone numbers etc. to a main phone number so that a screen pop can occur regardless of where a contact is calling from!
- “Smart Look-up” requires a “VCM Map” be created. The VCM MAP is created and administered using a utility called DB Viewer. To access the DB Viewer go to:

Start | Programs | VCM | DB Viewer



- Select **Setup** from the menu bar.
- Select **Database**.

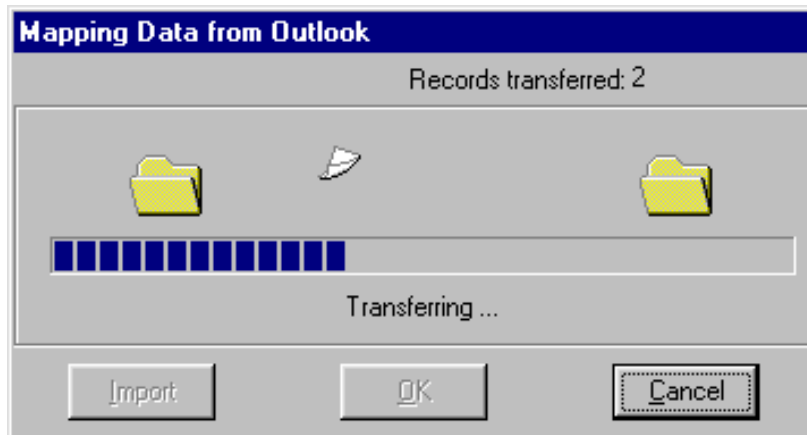
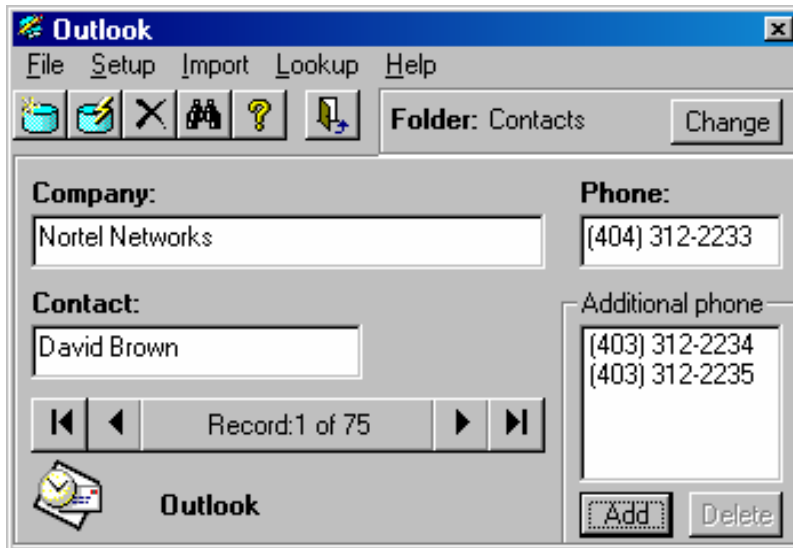


- Select the database from the list provided by clicking on the corresponding radio button. Click on **OK** to continue.
- The various fields in the DB Viewer will now be populated with data from the selected database.
- Click on the **Import** button on the DB Viewer menu. Click on **Import** on the Import screen. This will begin the import process.

Chapter 4: VCM Client Installation & Configuration

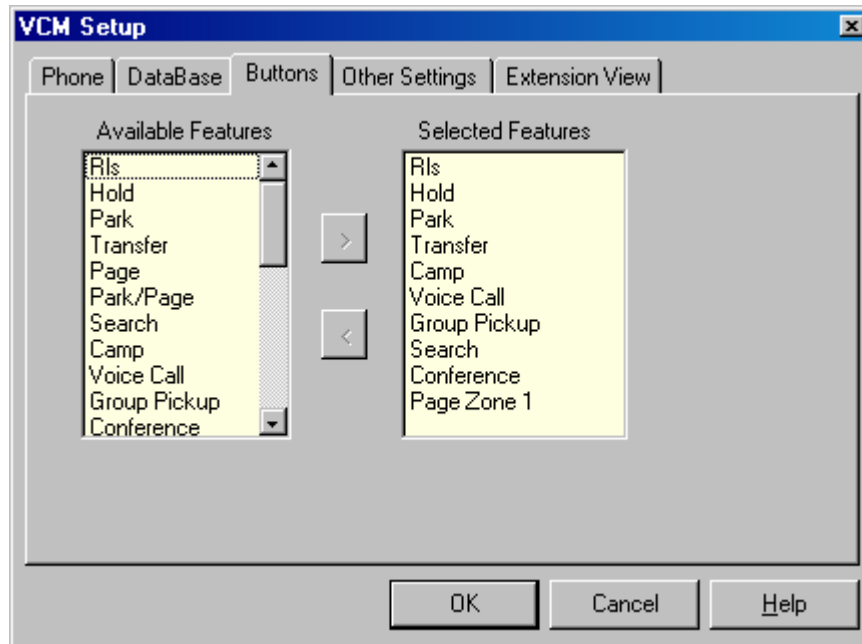
- After the import is complete, select **File** from the menu bar and click on **Exit** to close the DB Viewer. The Smart Look-up is now configured.

NOTE: See Appendix E for use of MS Outlook with a Public Folder.



Buttons:

- Customize the VCM button bar by displaying only those Norstar features you use. Add or remove specific buttons by highlighting the feature and clicking on the directional arrows to either add or remove that feature. By default, when the VCM Client software is installed, RIs, Hold, Park and Page are added to the VCM user interface.
- Drag & drop the buttons in the right hand column in the order you would like to have them appear on the VCM interface toolbar.

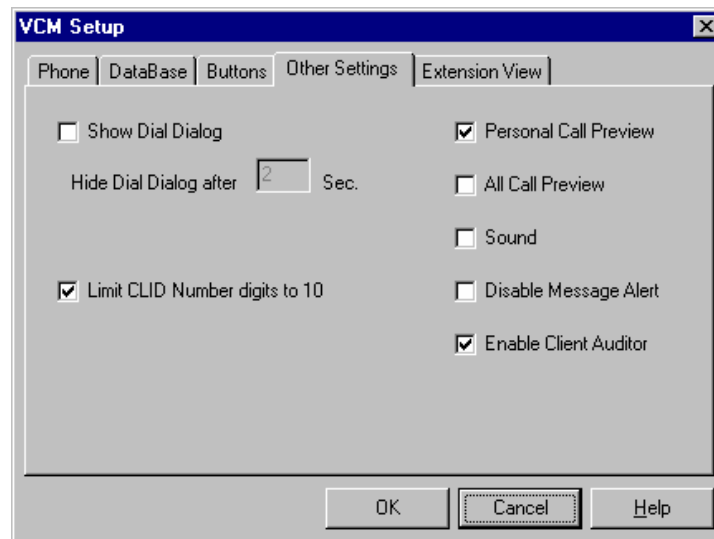


- Click **OK** when finished.

Other Settings:

Show Dial Dialog:

- When making outbound calls, the VCM dialer can be utilized to assist in terminating a call. The VCM Dial Dialog is typically used in conjunction with Contact Managers or Databases that do not support call termination within their own application.
- To enable the Dial Dialog, click on the **Show Dial Dialog** check box.
- The amount of time the Dialer window is displayed is configurable in seconds.



Personal Call Preview:

- The **Personal Call Preview** check box enables the VCM user interface to pop-up whenever the user's Norstar telephone rings. Both internal (Intercom) and external calls will pop the VCM user interface. This allows a user to see who's calling prior to answering. Utilizing the "Search" button, a user can perform a database search both prior or after answering an external call.

All Call Preview:

- **All Call Preview** will pop-up the VCM user interface with all inbound calls ringing into the Norstar system along with personal intercom calls. This setting would typically be used in a receptionist position.

Sound:

- By enabling the **Sound** check box, the users PC speakers will provide a ringing sound in conjunction with the setting of the **Personal Call Preview** check box or **All Call Preview** check box.

Disable Message Alert:

- Click on the **Disable Message Alert** to prevent the VCM message alert window from popping onto the desktop upon receiving a new VCM text message. See page 60 for more information regarding VCM text messaging.

Enable Client Auditor:

- Click on the check box **Enable Client Auditor** to enable the Client Auditor. The Client Auditor allows a VCM user to log all personal external calls to and from their telephone. See page 54 for more information.

Chapter 4: VCM Client Installation & Configuration

Extension Views:

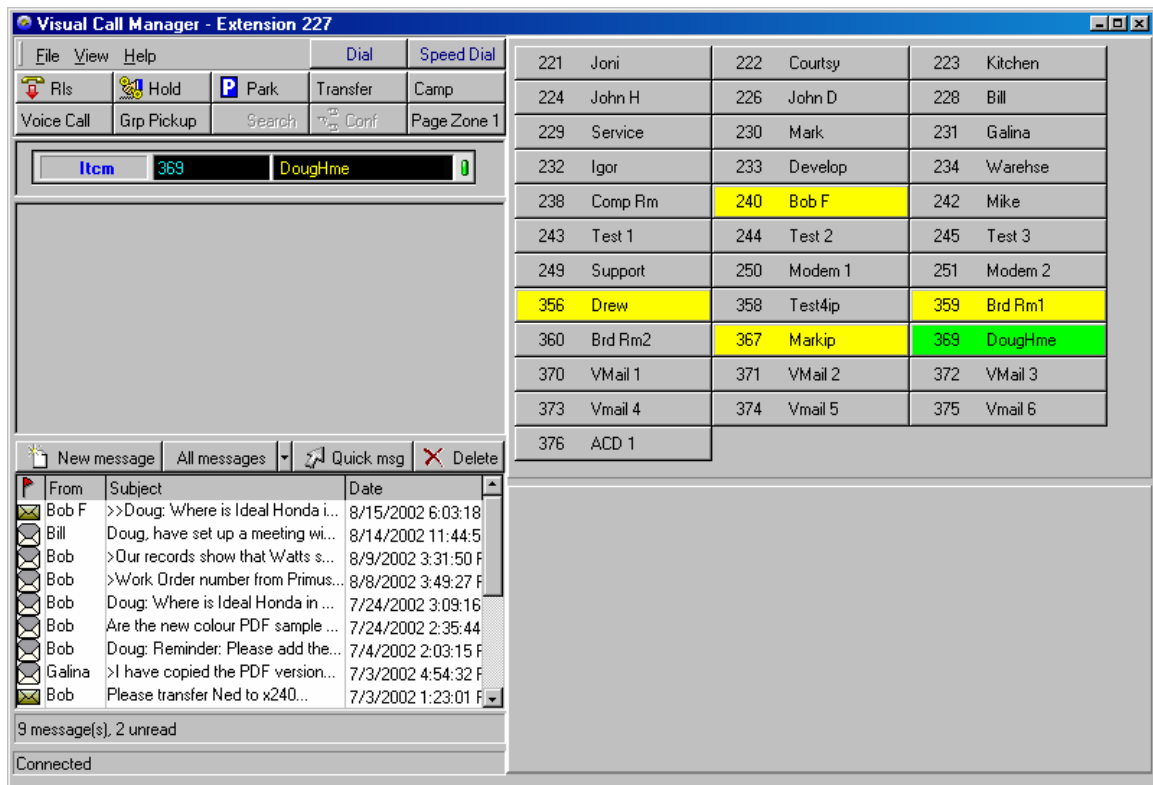
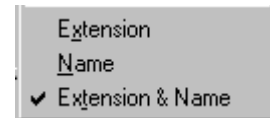
VCM allows each user to define how they want to view extensions. By changing the way extensions are viewed, each user may customize VCM to provide more or less information to be better informed of colleague's status.

Compact Extension Buttons:

By default, when VCM is first started, all extensions are displayed in the **Extension & Name** format. The other available formats are; **Extension** only and **Name** only. When set to the **Extension** only format, up 160 extensions may be viewed without scrolling.

To change the Compact Extension view;

- click **View** on the VCM task bar
- select **Extension**, **Name** or **Extension & Name**
- The Extension View will change automatically and will be maintained the next time you start VCM.



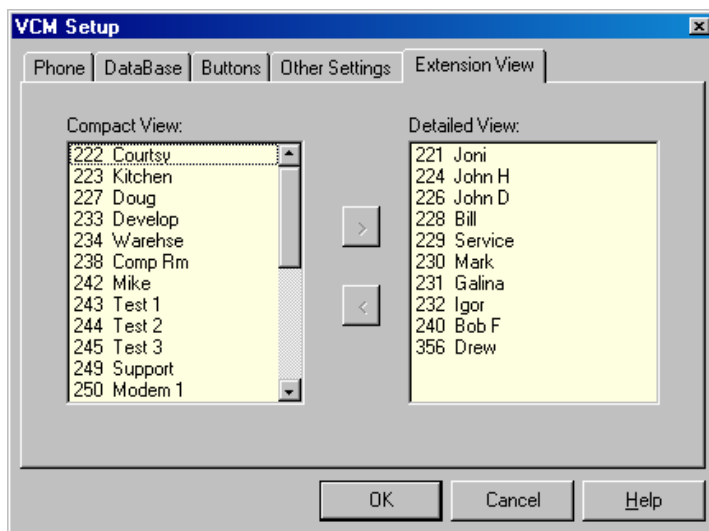
Default VCM Interface with the Compact Extension view set to **Extension & Name** with no Detailed extensions

Chapter 4: VCM Client Installation & Configuration

Detailed Extension Buttons:

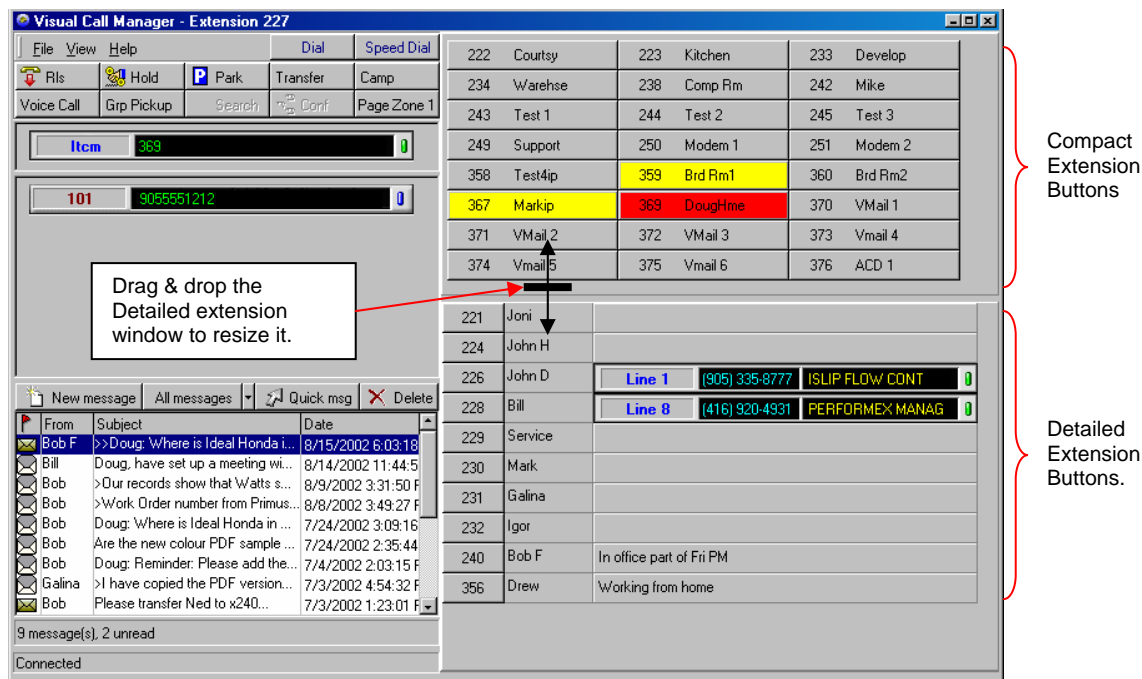
Individual users wishing to display call detail information of specific extensions may add those extensions to the detailed list by going to;

FILE | SETUP | EXTENSION VIEW



Adding extensions to the Detailed View list

- Select an extension from the list in the Compact View by clicking on it.
- Click on the > button
- Select additional extensions if desired
- Click on **OK**.



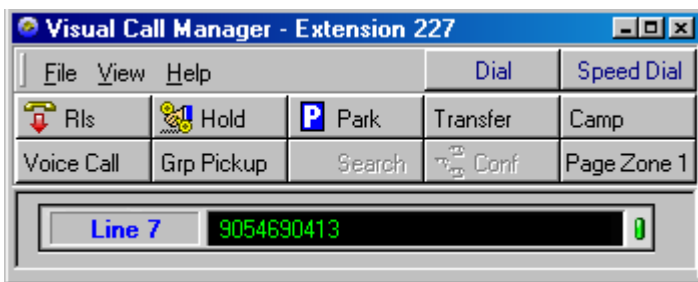
A user may add as many extensions to the scrollable Detailed View as they wish

Chapter 4: VCM Client Installation & Configuration

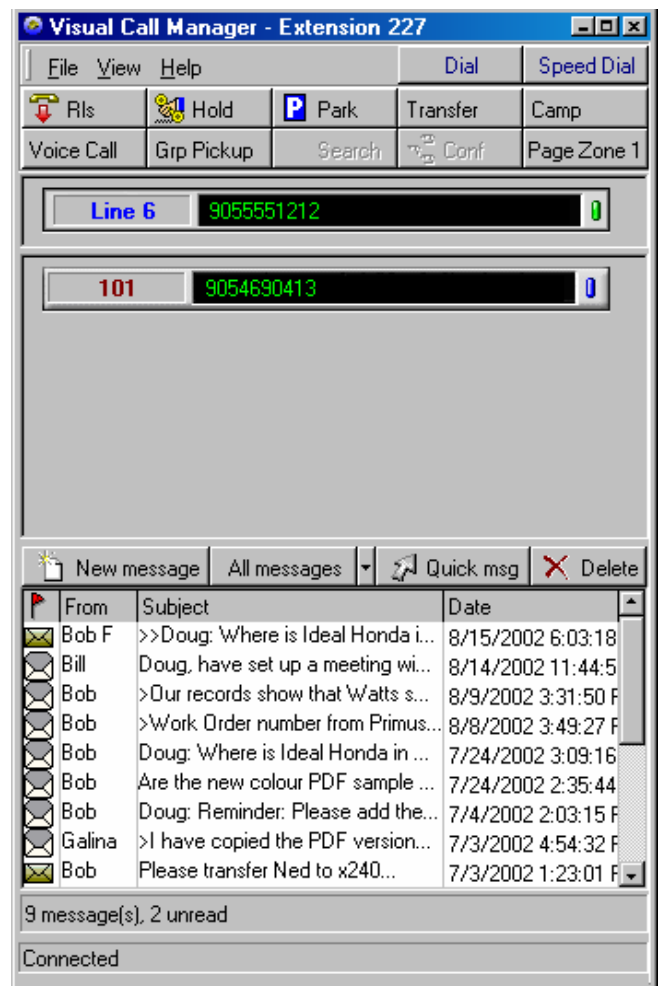
VCM Client Views:

Three different views are available to display as little or as much information as desired. To change the view, click on the View button and select from **Extended**, **Medium** and **Small**.

- Small View; displays information pertinent to your telephone only.
- Medium View; displays both the Personal Call Window and Public Call Window. Clicking on a corner and dragging it the desired size can resize the VCM user window.
- Extended View; the entire VCM User Interface is displayed including Speed Dial Buttons and Extension Buttons.



VCM Interface Small View with an outbound call



VCM Interface Medium View with a parked call in the Public Call Window and an outbound call in the Personal Call Window

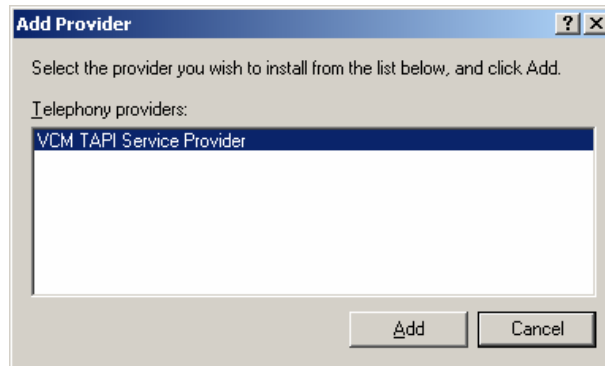
NOTE: When in using the Small or Medium view and the Speed Dial Button is clicked, the view will automatically switch to Extended.

Chapter 4: VCM Client Installation & Configuration

VCM Telephony Application Program Interface (TAPI) Service Provider (SP):

- VCM provides a TAPI SP that enables any TAPI compatible application to access the Norstar switch resources and place an outbound call through a user's Norstar telephone.
- The VCM's TAPI SP is automatically installed upon installation of the VCM Client software, however it needs to be added in the Telephony section of the Control panel before it can be used.
- Click on:

PROGRAMS | SETTINGS | CONTROL PANEL | TELEPHONY | TELEPHONY DRIVERS |

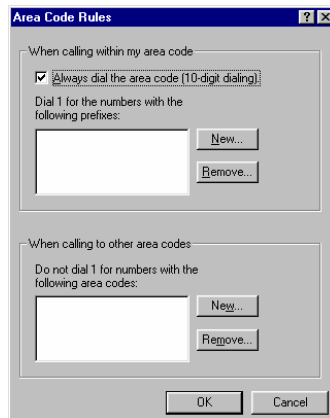


- Highlight “VCM TAPI Service Provider”.
- Click on **ADD**.
- Click on **OK**.

Windows 95/98/NT 4.0 Telephony Setup:

- The VCM Server applies the rules that control how outbound calls are made. The VCM Server requires a 10-digit phone number be sent from the Contact Manager. To facilitate this in Windows 95/98/NT4.0 go to:

START | SETTINGS | CONTROL PANEL | TELEPHONY | AREA CODE RULES



Windows Telephony “Area Code Rules” Window

- Click on the “Always dial the area code (10-digit dialing)”
- Click on **OK**.

Chapter 4: VCM Client Installation & Configuration

Windows NT 4.0 Telephony Service Setup:

- In order to provide the ability to terminate a call from the desktop on a Windows NT 4.0 PC, go to:

Start | Settings | Control Panel | Services

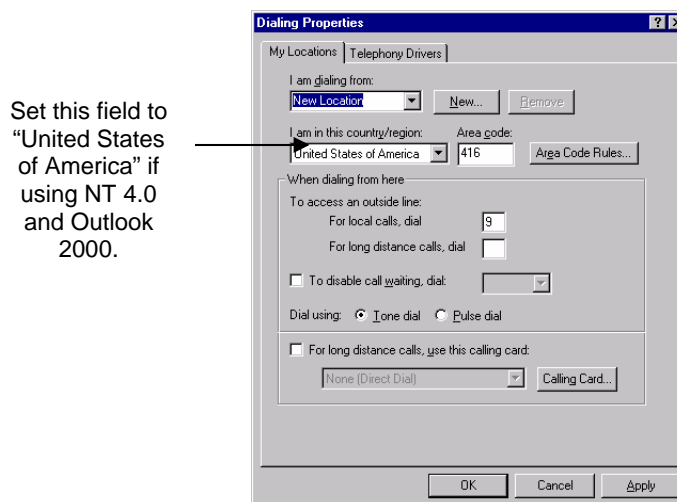
- Use the Scroll Bar and scroll down to Telephony Services.
- Double click on “Telephony Service”.



Windows NT 4.0 Telephony Service Setup window

- Click the “Allow Service to Interact with Desktop” box.
- Click on **OK**.
- Click on **Close**.

NOTE: If Windows NT 4.0 and Microsoft Outlook 2000 are being used, the field “I am dialing from” must be set to “United States of America” in order to perform outbound dialing properly.



Windows NT 4.0 “Dialing Properties”

Chapter 5: Using VCM Client

To start the VCM Client, go to:

Start | Programs | VCM | VCM

Note: If you have chosen a different Destination Location or Program Folder from the default choices, follow the appropriate path to find and activate Visual Call Manager.

Use of a headset is highly recommended allowing for a more efficient, hands free operation.

Once the VCM Client has been started, the VCM icon  will appear in the Windows system tray.

Customizable button selection for telephone control

Dynamic Personal Call Window

Public Call Window for Held, Parked or Ringing calls

Quickly send messages to others using Text Messaging

User defined Compact extension view.
Select extension number, extension name or both.

Hover your mouse over coloured extension buttons for detailed information

Dark grey extensions indicate "not in service". Once connected to the BCM, the colour will change to light grey indicating "in service"

User Defined Detailed Extension Buttons. Select specific people you need to monitor with full-time detail information

Inform others of your status using Message Notification

Colour coded extension status indicator.
 Green = active call
 Yellow = msg. notification
 Red = ringing extension
 Red Outline = do not disturb
 Dark Gray = Out of Service

223	Kitchen	224	Account	226	John
229	Ned	230	Bud	231	Galina
232	Igor	233	Develop	234	Warehse
235	Lab 1	236	Adam T	237	Spare
238	CompRm	239	Lab 2	240	Bob
242	Ron	243	Spare	245	Mike Ma
248	Spare	252	Shiping	356	Drew
358	Lab 1	359	Brd Rm1	367	Markip
369	DougHme	371	Vmail 5	372	Vmail 4
373	Vmail 3	374	Vmail 2	375	Vmail 1
376	ACD	400	Test HG	401	HG02
560	Ned 1	653	Rons ip	655	Vmail 7

Line 1 (905) 335-8777 ISLIP FLOW CONT
 Line 8 (416) 920-4931 PERFORMEX MANAG

VCM Graphical User Interface

VCM Graphical User Interface:

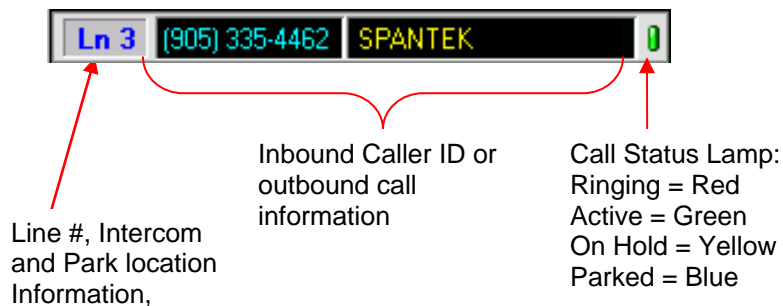
General Description:

The VCM interface allows for an enhanced method to communicate within an office. The VCM user interface has been designed for all telephone users in an office, not just reception or Call Centre positions. Features that VCM provides are;

- User defined *Compact* and *Detailed* extension views.
- Visual status of all Norstar telephones including their extension number and name, outbound dialed number, inbound caller ID and line name. To view the status of a compact extension button, hover the mouse over the extension. Detail status information will appear.
- Visual status of Held, Parked and Ringing calls. Each type of call is colour coded for quick identification. Parked calls indicate the Norstar Parked location.
- Call Control; Answer, Hold, Park, Voice Call, Camp plus more are Norstar features that are available to a user. Transferring calls is as simple as dragging and dropping onto another Extension Button.
- Unlimited System Wide Speed Dials; centrally administered, these speed dials are available for all VCM users along with a powerful speed dial search feature.
- Three different views are offered to allow a user to see only the information he or she requires.
- Integration to Contact Managers or databases via a user selectable automatic or a manual "on demand" database search/screen pop.

Call Control:

- Answering Calls: A ringing call, either external or internal call can be answered by clicking anywhere on the ringing Call Button. The call can be identified as a ringing call by the red status lamp on the right side of the button.

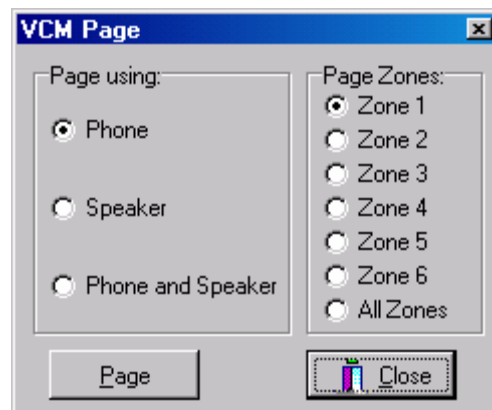


VCM Call Button

- Putting Calls on Hold: While on an active call, click on the Hold button. The status lamp will change to yellow.
- Transferring Calls: While on a call, drag and drop the call to an intercom button or click on the Transfer button and then select an intercom button.
- Making Intercom Calls: Click on the VCM Intercom button or click on the VCM **Dial** Button, enter the extension number and click on **Dial**.

- **Camping Calls:** While on a call, click on the Camp button and then select an intercom button. The extension that the call is Camped to will see the call holding in his/her Personal Call window along with intermittent audio beeps coming from the Norstar phone.
- **Parking Calls:** While on a call, click on the Park button. The call button will move from the Personal Call window to the Public Call window. The Norstar Park location will be displayed on the left of the Call Button.

NOTE: If a call is Parked by using the Park button on the Norstar phone, the parked location will not be displayed on the VCM Call Button, rather the line # will be displayed.
- **Parking & Paging:** To reduce the number of steps required to Park a call and then Page, the Park & Page feature will facilitate both features with one click. Once activated, the call will move to the Public Call window with the Parked location displayed and the Paging system activated.
- **Paging:** Click on the Page button to activate the paging system. The extension or Intercom making the page will have the word "Page" displayed in the left portion of their Extension Button. Multiple Page buttons may be added to the button tool bar via the VCM Client setup. For example, if you page separately to an external amplifier to a warehouse as well as to zone 1 of the Norstar telephones, you may want to add one page button for each type of page in order to facilitate paging to each area easier.



General Page Menu

NOTE: Whenever the Speaker option is selected, you must press the RLS button on the Norstar phone in order to release the page. This is a limitation of the Norstar Computer Telephony Engine (CTE) and not VCM.

- **Conference Calls:**

VCM follows the restrictions of the Norstar phone system. A total of 3 people can be involved in a conference call. The possible combinations are 2 external – 1 internal or 2 internal – 1 external.

To establish a conference call, make the first call and click the Hold button. Make a second call. Once connected, click the Conference button. To end the conference, click the RIs button.

To put a conference on hold, click on the Hold button. The other two callers can still talk to each other.

To split a conference, click on the Call Button that you would like to consult with privately. To re-establish the conference, click on the Conference button.

To disconnect one party, click on the Call Button that you would like to disconnect, and then click on RIs. Click on the remaining caller to resume your conversation.
- **Voice Mail Transfer:**

To transfer a call directly to a persons voice mail box, click on VM Transfer and the extension button of the person you wish to transfer the call to.
- **Voice Call:**

Voice Call allows a caller to make a voice announcement, or begin a conversation through the speaker of another Norstar telephone without making it ring. Click on Voice Call and then click on the Extension Button.
- **Group Pickup:**

To answer a call that is ringing at another telephone in your pickup group, click on the Group Pickup button. The external call that has been ringing the longest will be answered first.
- **Directed Pickup:**

To answer any ringing telephone, click on the Extension Button that is ringing.
- **Database Search**

To perform a search on a Contact Manager or Database, click on the Search button. (See page 35 for Integration configuration)

Database Look-up:

VCM provides two methods of data base look-ups. One method is called "Basic Look-up". "Basic Look-up" provides the user an "out of the box" functionality that will search the main telephone field of a database for a match with the Caller ID number.

The limitation with the Basic Look-up method is that if a caller calls from a telephone number other than the one listed in the main phone number field of the Contact Manager or database, the record will not be found.

ConverTec Inc. solution to the limitation of the basic look-up is "Smart Look-up". "Smart Look-up" requires a "VCM Map" be created which allows an unlimited number of phone numbers be associated with a company or contact. The smart lookup method can associate multiple business numbers, residential, cell phone numbers etc. to a main phone number so that a screen pop can occur regardless of where a contact is calling from!

Basic Look-up:

Basic Look-up is the default method VCM uses to search a database for a record. If a problem occurs with the Smart Look-up, VCM will automatically switch to the Basic look-up.

The simplest way to determine which Look-up method is being utilized is to answer an incoming call.

Note: If no Caller ID number is available for VCM to perform a look-up (i.e. Private Number), VCM will remain idle and not attempt a look-up for this call only.

Note: After VCM Client has been started, the first database search will take 3-4 times longer than subsequent Look-ups. This is normal. VCM loads data into the computers cache memory during the first search process.



VCM Basic Look-up Window with Microsoft Outlook

Shown above is the type of display offered when a record is not found, by using the Basic Look-up method. Two choices are offered, to add a **New Record** and to **Cancel**. If the user knows the caller is not in the database, then the **New Record** button should be selected. VCM will automatically populate the Company and Main Telephone fields of the Contact Manager. To cancel the Look-up, click on **Cancel**.

Smart Look-up:

If you have not created a VCM MAP, go to page 36. Smart Look-up requires a VCM MAP be created in order to operate.

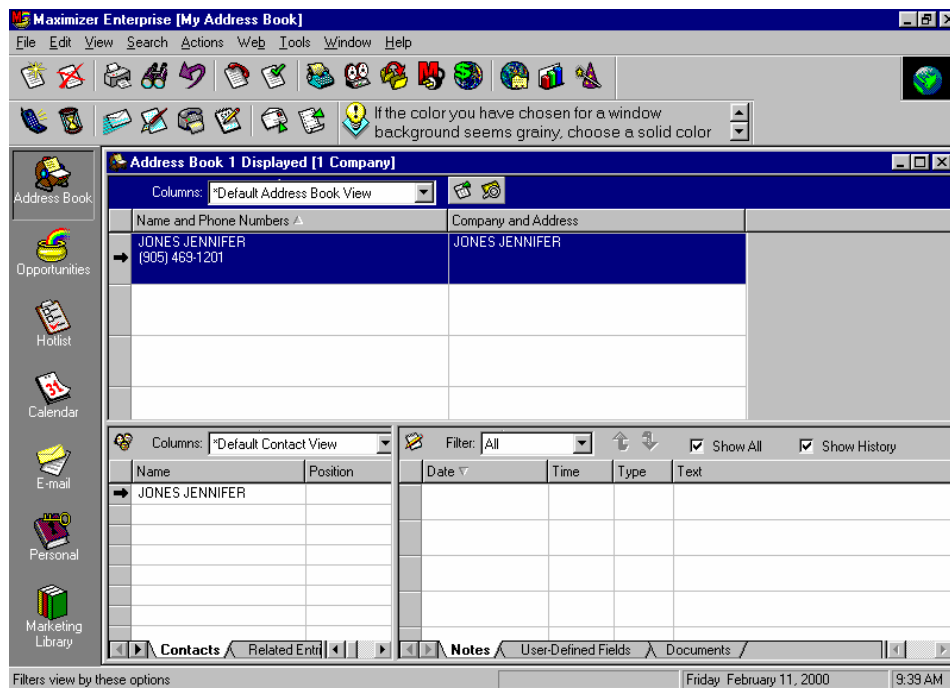
When an inbound call is answered using Smart Look-up, a different menu from the Basic Look-up is presented.



Smart Look-up Window with Maximizer offering the Association option

An additional option is now offered allowing a user to **Associate** the current caller to an existing record in the database.

If **New record** is selected, the Caller ID information (Name and Number) is entered into the company name and main phone field.



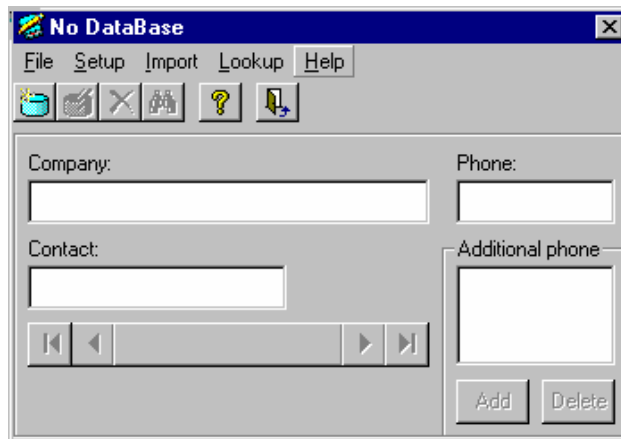
Above is an example of the Caller ID information being entered by VCM into a new Maximizer record.

Using the DB Viewer:

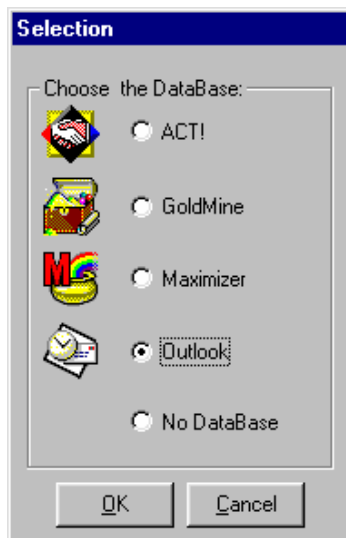
Note: If a VCM MAP has not been created, go to page 36 and create a MAP prior to continuing with this chapter.

Start the VCM DB Viewer:

Start | Programs | VCM | VCM DB Viewer

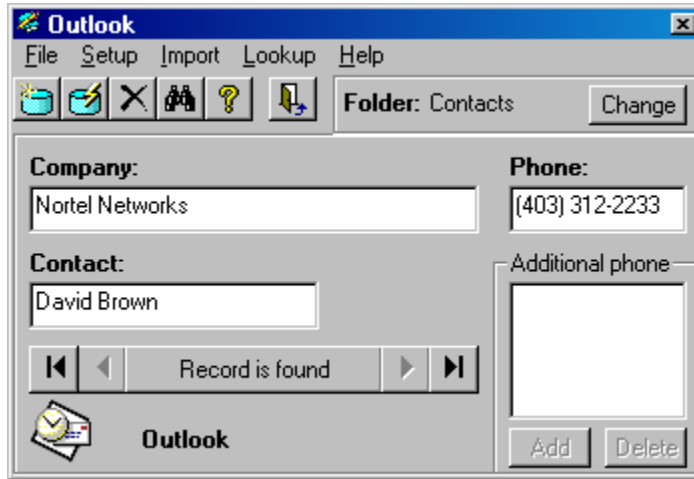


- Click on **Database**.
- Select the database from the list provided by clicking on the corresponding radio button. Click on **OK** to continue.



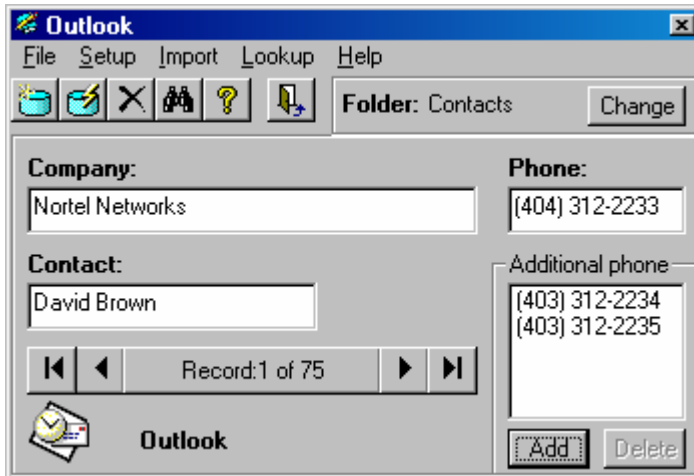
DB Viewer Contact Manager Selection

- The VCM MAP, which was created in previously in this chapter, is now displayed in the top portion of the DB Viewer window. Data has also populated the various fields in the DB Viewer.



The DB Viewer allows a user the ability to add or delete additional phone numbers associated to a company or contact. An unlimited amount of associated phone numbers can be added to allow a screen pop to occur, regardless of whether that phone number a person is calling from is from that company location or where a contact with the company is calling from another location (i.e. cell phone, residence).

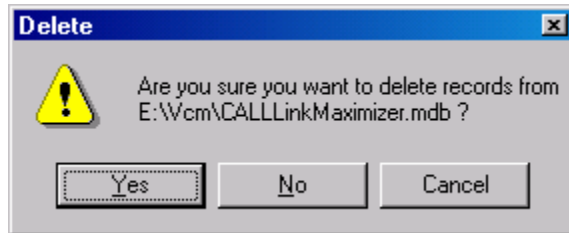
- To add additional known phone numbers of a company or contact, click on **Add**, enter the phone number and click on **OK**.
- To delete phone numbers in the **Additional phone** box, highlight the phone number and click on **Delete**.



DB Viewer displaying Associated Phone Numbers

To Delete a VCM MAP:

- Select the appropriate Contact Manager database
- Click on **Clear Database** button on the DB Viewer button bar.
- A confirmation window will open confirming you want to delete this MAP.

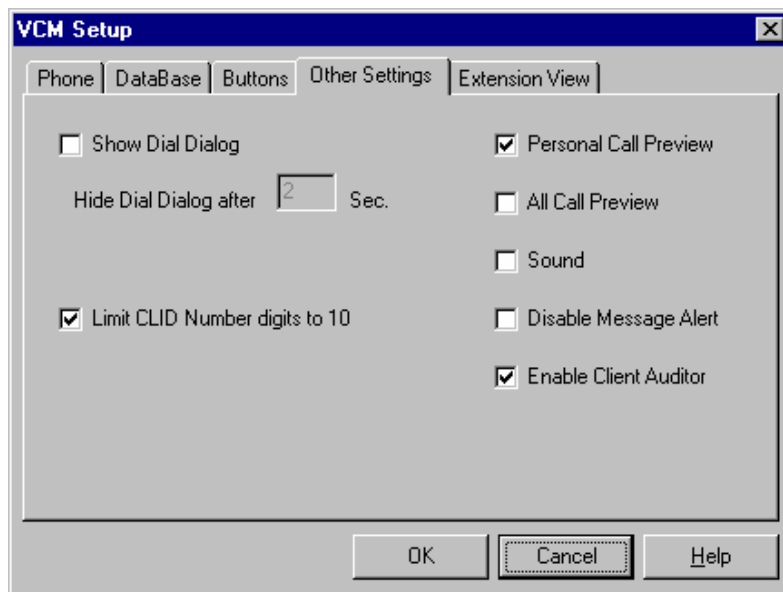


- Click on **Yes**


Note: If no MAP exists for a particular Contact Manager, VCM will default back to the Basic Look-up method upon answering the next external phone call.

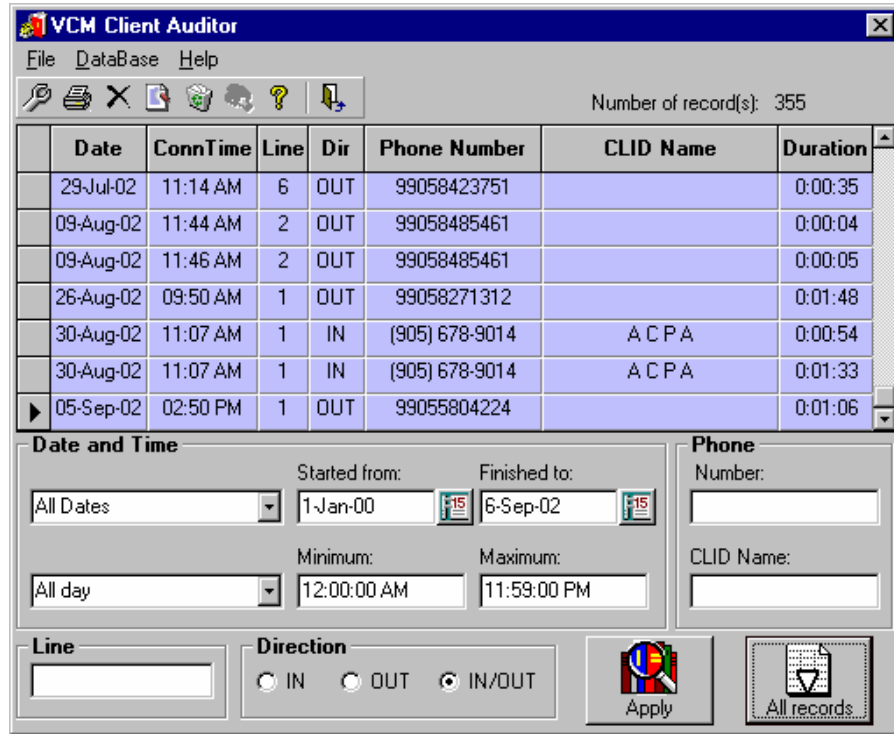
VCM Client Auditor:

- All VCM Clients have the ability to log all inbound and outbound calls made by their telephone. This log is used by the CALL Auditor to apply a filter or a number of filters in order to view only specific calls.
- To enable the CALL Auditor, right click on the VCM Client icon.
- Left click on **Setup**.



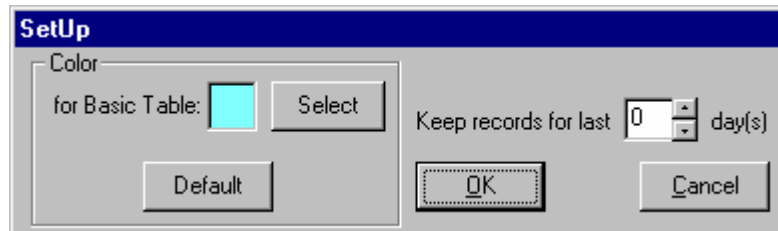
- Click on **Other Settings**.
- Click on the check box **Enable Client Auditor**.

- The VCM Client Auditor icon  will appear in the Windows system tray.
- Click on the VCM Client Auditor icon. This will open the VCM Client Auditor window.



Setup: The setup window allows different colours to be assigned to the data window if the VCM Server's video card cannot display the default minimum colours required (16 bit High Colour).

The number of days to retain call data is also defined here.



VCM Client Auditor Setup Window

Note: Call data is not cleared even if it exceeds the "Keep records for last ___ days" parameter. The "CLEARED" button must be clicked in order to clear call data after the defined number of days.

Delete: Clicking this button will prompt the user to delete the current record the cursor is at.

Clear: This button deletes all records beyond the parameter “Keep records for ___ days” in the setup section.

Field Descriptions:


- **Date:** The date the call was made or received.
- **Direction:** Indicates whether the call was inbound or outbound.
- **Line:** Indicates which Logical Line on the Norstar switch was used.
- **Phone number:** Indicates the number dialed or the inbound caller ID number.
- **CLID Name:** Indicates the inbound caller ID name from the Telephone company.
- **Connect Time:** The time that a Norstar extension answers an incoming call.
- **Duration:** The length of time a particular extension spent on a call.

Filters:

Below is a list of filters and their description. These filters can be applied singly, or applied in multiples. After selecting the filter(s), click on **Apply** to activate the filters. To remove a filter, uncheck the associated box, or to remove all filters, click on **All records**. The top right corner of the CALL Audit screen indicates the number of records (calls) associated with the selected filter(s).

- **By Phone Number:** Check this box and enter a phone number or partial number. i.e. to filter on all long distance calls, enter a 1 in this box. This box can also be used in conjunction with “Direction IN” and filter on a specific incoming CLID phone number. i.e. Enter 905 to filter all inbound calls from that area code.
- **By CLID Name:** Check this box and enter the name or partial name of the incoming caller ID name.
- **By Line:** Check this box and enter a single line or a range. i.e. 1-10
- **Date and Time:** Use the pull-down box’s to select from preformatted lists or individually select the **Starting from** and **Finished to** dates along with Minimum and Maximum times.
- **Direction:**
 - **Out:** Displays outbound calls.
 - **In:** Displays inbound calls.
 - **In/Out:** Displays both inbound and outbound calls.

Outbound Dialing – Replying to calls:

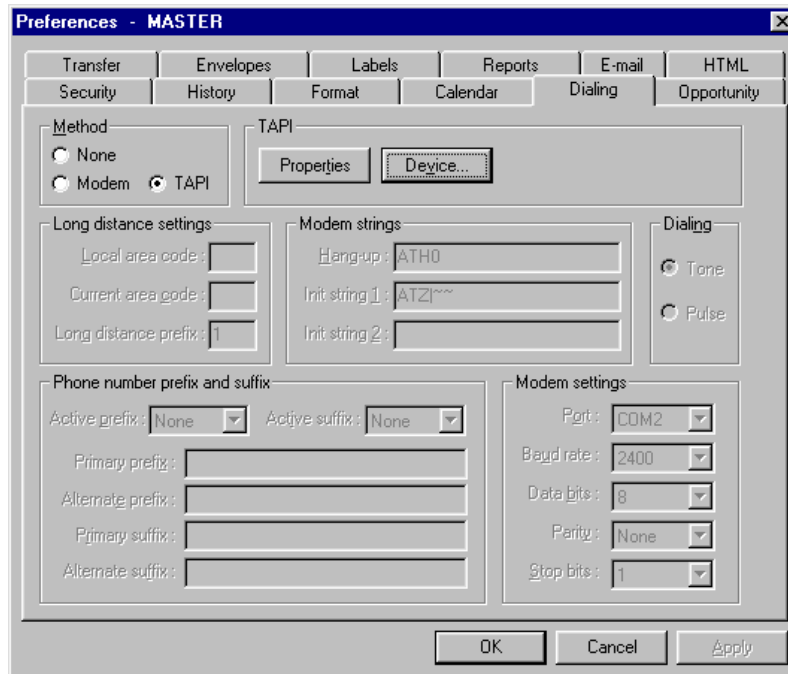
Outbound calls may be made directly from the Client Auditor interface by clicking on a phone number, then clicking on the “Dial Number” icon  in the tool bar.

Dialing with Database Integration:

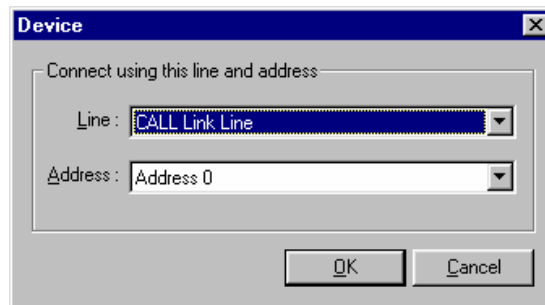
- In order that the supported Contact Managers and all other TAPI compatible applications utilize the Norstar telephone to make an outbound call, the VCM TAPI SP must be selected in the Contact Manager or TAPI compatible application.

Note: Refer to chapter 4 to ensure that the Windows Telephony section has been configured.

Below is an example of Maximizer 4.0 Preferences/Dialing setup screen. Note that the **TAPI** radio button has been selected.

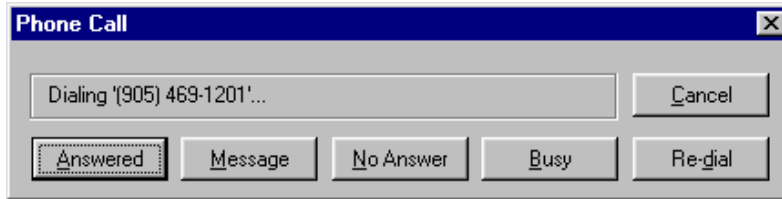


- Next, the Device button is clicked in order that the VCM TAPI SP can be selected as the TAPI device to use.

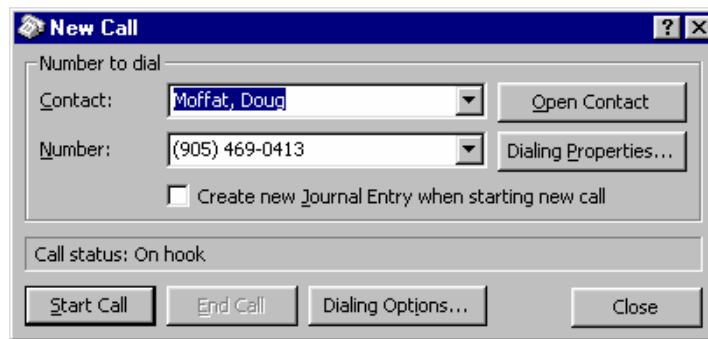


- Once VCM has been defined in the Dialing section of the Contact Manager or TAPI compatible application, try a test call to ensure outbound calls are being processed properly.

- Click on the phone icon of the Contact Manager. Depending upon the Contact Manger used, varying options may be offered.



Maximizer Dialing Window



Microsoft Outlook Dialing Window

- To terminate a call from the desktop, click on the appropriate button for that particular Contact Manger.

VCM Dialer:

You can manually dial a telephone number by utilizing the VCM Dialer. To open the VCM Dialer window, click on **Dial** button located at the top of the button bar.

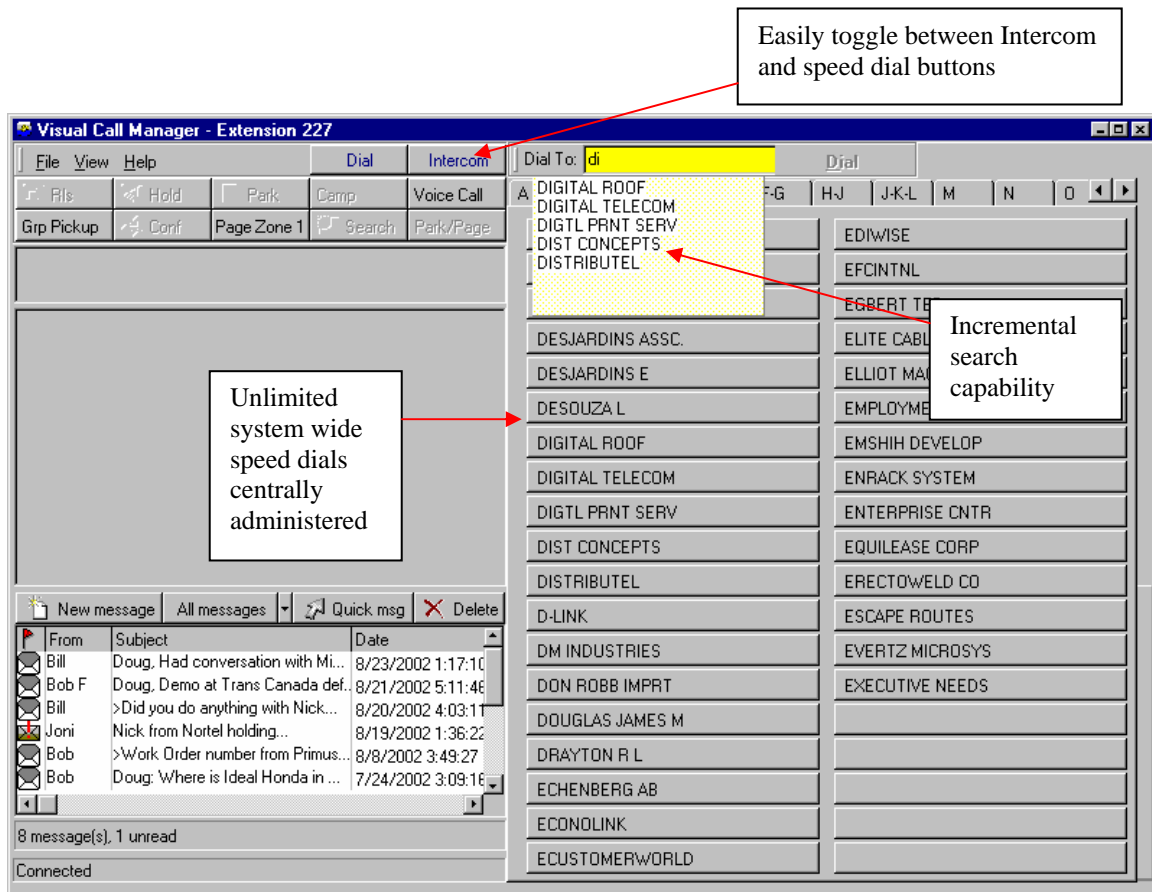


Enter the number you would like to call and click on Dial. Click on the **Leave open after dialing** if you would like to continue using the dialer to navigate through a voice mail auto-attendant, IVR banking or any other self service touch tone application.

Speed Dials:

An unlimited number of system wide speed dials may be implemented allowing all VCM users access to a speed dial directory. Dialing is performed by clicking on the speed dial button. A powerful search tool is available to quickly find and dial a specific number. The VCM Administrator sets up and maintains the speed dial list. Any change made by the VCM Administrator is broadcast to all VCM users updating their speed dial list automatically.

For Speed Dial Administration, see page 26.



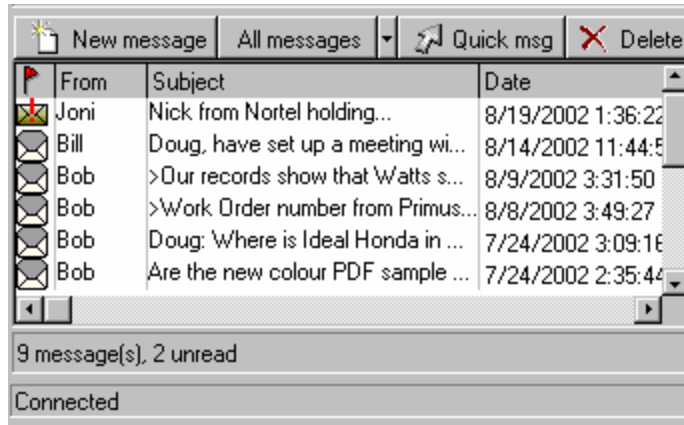
VCM User Interface displaying System Speed Dial's

Using System Speed Dials:

- Click on the Speed Dial button to switch from the Intercom view to the Speed Dial view.
- If multiple tabs are used, select a particular tab
- Click on a Speed Dial Button to initiate a call.
- To utilize the search feature, click into the yellow search box and begin entering the Speed Dial name. The search will begin displaying matches.
- Once the desired Speed Dial is displayed, click on it.
- Click on the Dial button to initiate the dialing process.

Text Messaging;

Text Messaging is a communications tool allowing all VCM users the ability to send messages quickly and easily to each other. The VCM Text Messaging function was not developed to replace email, rather it is meant to enhance inter-office communication by providing a quick method to alert other VCM users of important events. For example, a receptionist may send a VCM text message to a sales representative, currently busy with a phone call, alerting him or her of an important customer holding on a specific line or park location.



VCM Text Messaging Window

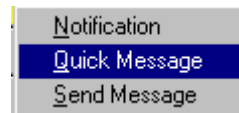
Two types of messages are available;

- **New Message:** Allows a new message to be entered and sent to a specified user , multiple users or an entire department.
- **Quick msg:** A number of pre-defined messages can be created allowing for repetitive messages to be sent quickly without having to retype the message each time. By default, VCM provides 6 pre-defined messages that can be added to, deleted or modified.

Two methods are available to send a new Message or Quick Message;

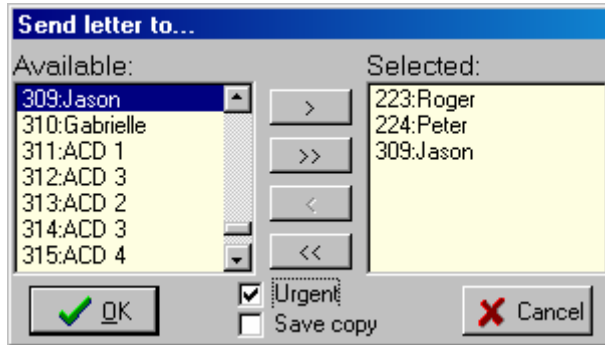
1. Using Extension Button Access;

- Right click on the extension you want to send the message to
- Select either **Send Message** or **Quick Message**



- Enter your message or select from the pre-defined list if using **Quick Message**.
- Click **Send**.

2. Using the Text Messaging interface;
 - From the Text Messaging interface, click on **New Message** or **Quick msg**



- Select one or more extensions.
- When sending a message, to keep a copy for yourself, click on **Save copy**
- To mark the message urgent, click on **Urgent**.
- Click on **OK** to send the message.



By default, when a new VCM message is received, a VCM Message Alert window will pop to the desktop's for-front. The user is given the choice to open the VCM interface and read the new message or close the VCM Message Alert window and return to the previous application.

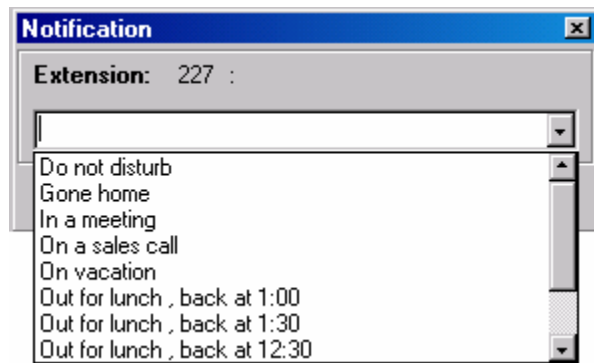
NOTE: *The VCM Message Alert may be disabled on an individual VCM user basis. See page 39 in the "VCM Client Installation and Setup" section for more information.*

Message Notification:

Utilizing VCM's message Notification feature, all VCM users can be notified of the status of other VCM users.

There are three methods to set a message notification;

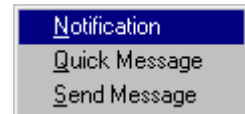
1. Right click on your Personal Call Window. Enter a message or click on the pull-down arrow and select one of the pre-defined messages. Click on OK. The message is instantly
2. Click on, **File | Notification**. Enter a message or click on the pull-down arrow and select one of the pre-defined messages. Click on **OK**. The message is instantly broadcast to all VCM Users.



Message Notification pre-defined message list

3. Users with administrative rights have the ability to set the Message Notification for any VCM user. This is particularly useful for sales rep's operating on the road or employees calling in sick, to allow the receptionist to change their message notification for them.

For users with administrative rights, to set a Message Notification for another extension, right click on the extension button and select **Notification**.



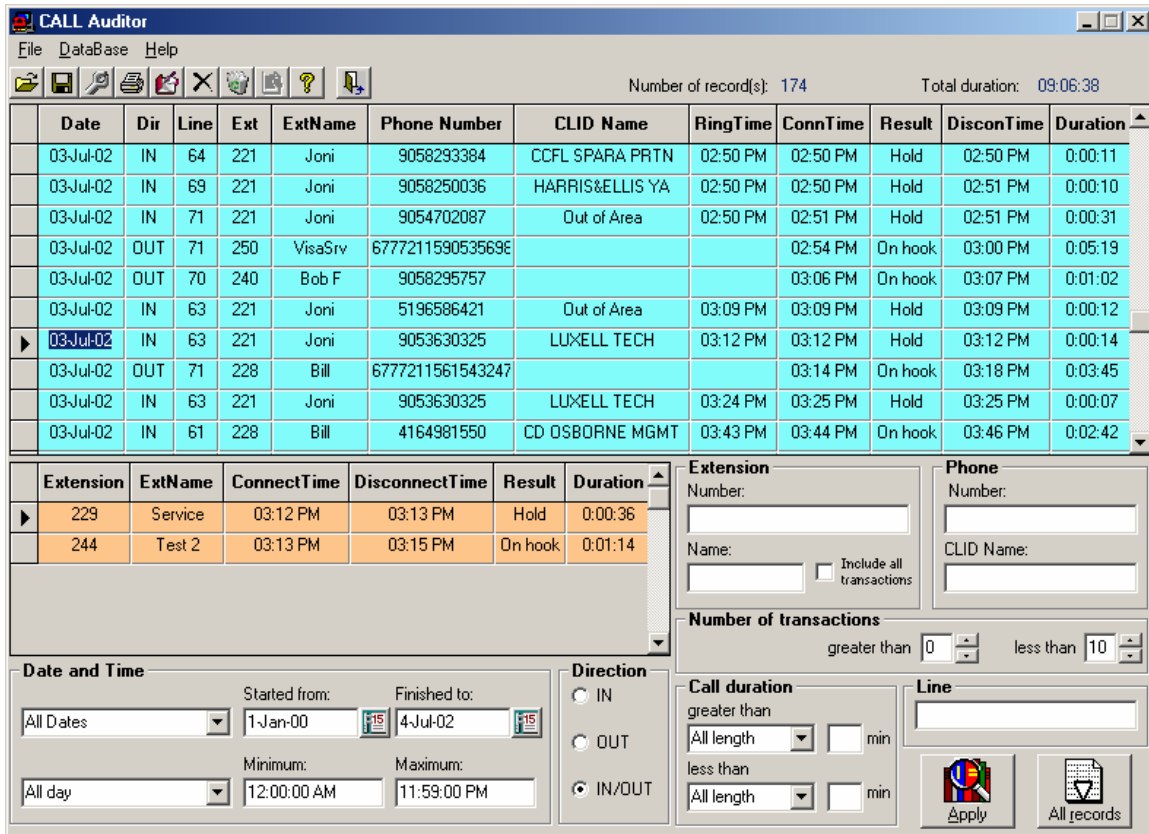
For more information on configuring administrative rights, see page 25.

Chapter 6: CALL Auditor

CALL Auditor

Introduction:

CALL Auditor receives call data (both inbound and outbound) from the VCM Server and stores the data in a Microsoft Access database format. By applying filters, a multitude of reports can be generated. A unique feature of CALL Auditor is the ability to track a call each time it gets transferred, parked or put on hold, which is termed a “transaction”. Each time a transaction occurs, data such as the extension, duration, result, and more is recorded and displayed in the **Transactions** window.



CALL Auditor User Interface with “All records” applied

Note: CALL Auditor must be enabled before it can begin gathering call data. See chapter 3, “Enabling CALL Auditor”.

- To start the CALL Auditor, go to:

START | Programs | VCM Server | CALL Auditor

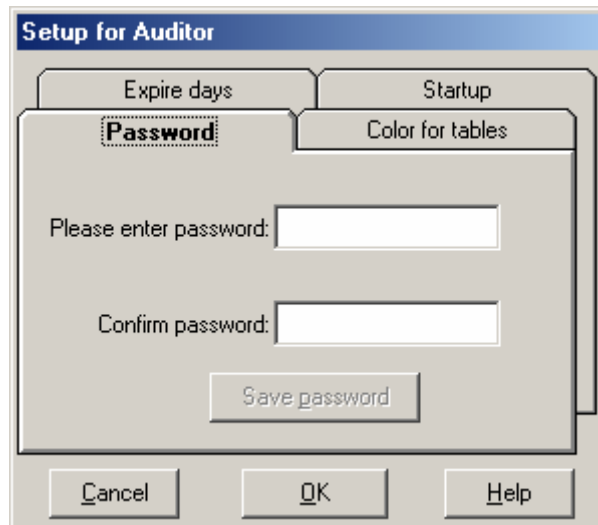
Startup:

By default, upon start-up CALL Auditor uses call data from the previous week. This allows for a quicker start-up by minimizing the amount of call data having to be accessed. To change the start-up date range, click on the pull-down arrow and select from the list provided.



Password:

This section allows you to add a password in order to restrict access to the CALL Auditor. The password you enter is confirmed by re-entering it in the “Confirm Password” field. Note that the password you enter is **not** case sensitive.

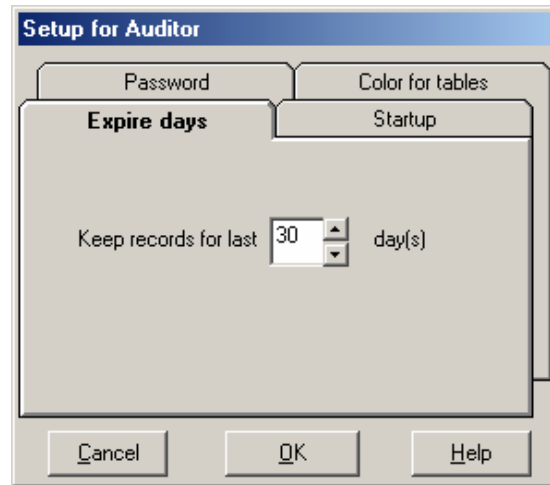


Color for tables:

The setup window allows different colours to be assigned to the two data windows if the VCM Server’s video card cannot display the default minimum colours required (16-bit High Colour).

Expire days:

The number of days to retain call data is defined here.



Note: Call data is only deleted when call data exceeds the “Keep records for last ___ days” parameter and the “Delete old records” button is clicked.

Deleting Records:

- Click on the **Delete current record** icon to delete the highlighted record.
- Click on the **Delete old records** to delete all records beyond the parameter “Keep records for ___ days” defined in CALL Auditor setup.
- Click on the **Delete selected records** icon to delete all records in the applied filter(s).

Field Descriptions:

- **Date:** The date the call was made or received.
- **Direction:** Indicates whether the call was inbound or outbound.
- **Line:** Indicates which Logical Line on the Norstar switch was used.
- **Extension:** Indicates the Norstar extension that initiated an outbound call or was the first extension to answer a call.
- **Extension Name:** Indicates the name of the Norstar extension.
- **Phone number:** Indicates the number dialed or the inbound caller ID number.
- **CLID Name:** Indicates the inbound caller ID name from the Telephone company.
- **Ring Time:** The time that the Norstar switch receives the first ring.
- **Connect Time:** The time that a Norstar extension answers an incoming call.
- **Result:** The different results are hold/transfer, park, no answer and on hook.
- **Disconnect Time:** The time a Norstar extension terminates a call. The disconnect can be the result of a hold/transfer, park or on-hook state.
- **Duration:** The length of time a particular extension spent on a call.

Direction:

- **Out:** Displays outbound calls.
- **In:** Displays inbound calls.
- **In/Out:** Displays both inbound and outbound calls.

Filters: Below is a list of filters and their description. These filters can be applied singly, or applied in multiples. After selecting the filter(s), click on **Apply** to activate the filters. To remove a filter, uncheck the associated box, or to remove all filters, click on **All records**. The top right corner of the CALL Auditor screen indicates the number of records (calls) associated with the selected filter(s).

- Extension Name: Enter the name of a Norstar extension.
- Extension Number: Enter the Norstar extension(s) using the format; 221 or 221,227,229 or 221,227-260
- Include all Transactions; Check this box to include transaction details of the selected extension or extensions.
- Phone Number: Enter a phone number or partial number.
i.e. to filter on all long distance calls, enter a 1 in this box.
This box can also be used in conjunction with "Direction IN" and filter on a specific incoming CLID phone number. i.e. Enter 905 to filter all inbound calls from that area code.
CLID Name: Enter the name or partial name of the incoming caller ID name.
- CLID Name: Enter the name or partial name of the incoming caller ID name.
- Number of Transactions; Enter the minimum and maximum number of transactions or "hops" a call had. Each time a call is parked, put on hold or transferred, a transaction is created.
- Line: Enter a single line, multiple lines and/or a range using the format; 1 or 1,2,5 or 1,2,5-25
- Date and Time: Use the pull-down box's to select from preformatted lists or individually select the **Starting from** and **Finished to** dates along with Minimum and Maximum times.
- Call Duration: Use the pull-down box's to select from the lists for the **greater than** and/or **less than** call duration or enter the call duration period in 1 minute increments.

The screenshot shows the CALL Auditor application window. At the top, it displays 'Number of record(s): 400' and 'Total duration: 16:24:29'. Below this is a table of call records with columns: Date, Dir, Line, Ext, ExtName, Phone Number, CLID Name, RingTime, ConnTime, Result, DisconTime, and Duration. The records are filtered to show only outbound calls (Dir: OUT) by extensions 224-235. Below the table are several filter panels: 'Extension' (Number: 224-235), 'Phone' (Number, Name, CLID Name), 'Number of transactions' (greater than 0, less than 10), 'Date and Time' (Started from: 1-Jan-00, Finished to: 2-Jul-02), 'Direction' (radio buttons for IN, OUT, IN/OUT), and 'Call duration' (greater than, less than, All length). An 'Apply' button and an 'All records' button are at the bottom right.

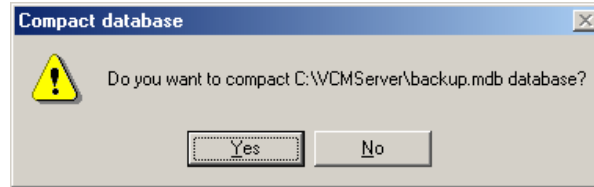
Date	Dir	Line	Ext	ExtName	Phone Number	CLID Name	RingTime	ConnTime	Result	DisconTime	Duration
28-Jun-02	OUT	61	228	Bill	918004652460			09:28 PM	On hook	09:30 PM	0:02:49
28-Jun-02	OUT	71	224	John H	180026207846559*			09:42 PM	On hook	09:45 PM	0:02:30
28-Jun-02	OUT	70	224	John H	57772115PP905474			09:51 PM	On hook	09:52 PM	0:00:42
28-Jun-02	OUT	71	224	John H	99058665995			09:57 PM	On hook	09:57 PM	0:00:11
28-Jun-02	OUT	62	227	Doug	99056254292			09:58 PM	On hook	09:58 PM	0:00:11
28-Jun-02	OUT	71	224	John H	8865995H2805286:			09:57 PM	On hook	10:00 PM	0:02:58
28-Jun-02	OUT	72	227	Doug	99053630325			09:59 PM	On hook	10:02 PM	0:03:10
28-Jun-02	OUT	71	224	John H	57772115PP90588E			10:02 PM	On hook	10:04 PM	0:01:18
28-Jun-02	OUT	71	224	John H	7772115PP90588E			10:04 PM	On hook	10:06 PM	0:02:02
28-Jun-02	OUT	70	224	John H	94163857982			11:01 PM	On hook	11:02 PM	0:00:19

CALL Auditor utilizing filters to display outbound calls by extensions 224-235.

Archiving CALL Auditor data:

CALL Auditor data may be archived for future use. To archive the current data base;

- Click on the **Save Database As** icon and select the file name and folder to save to.



- Next, you will be prompted to compact the data base. If you would like to minimize the file size, click on **Yes**.
- The word **COPY** will now appear on the CALL Auditor interface. Filters and reports may be utilized with the copied database.
- To open the default database, either;
 - Close and re-open CALL Auditor
 - Click on the **Open Database** icon and select **CallLog.mdb**

NOTE: CALL Auditor maintains call tracking while working with a copied database.

Date	Dir	Line	Ext	ExtName	Phone Number	CLID Name	RingTime	ConnTime	Result	DisconTime	Duration
03-Jul-02	OUT	64	374	374	90530124835240			02:51 PM	On hook	02:52 PM	0:00:31
03-Jul-02	OUT	70	240	Bob F	90582713153			02:50 PM	On hook	02:52 PM	0:02:05
03-Jul-02	OUT	70	240	Bob F	90582713153			02:54 PM	On hook	02:55 PM	0:01:25
03-Jul-02	OUT	70	240	Bob F	9058250036			02:56 PM	On hook	02:58 PM	0:01:51
03-Jul-02	OUT	69	228	Bill	9055075042			02:58 PM	On hook	02:58 PM	0:00:25
03-Jul-02	OUT	71	250	VisaSrv	677721159053569E			02:54 PM	On hook	03:00 PM	0:05:19
03-Jul-02	OUT	71	229	Service	6777211590535619			03:02 PM	On hook	03:06 PM	0:04:51
03-Jul-02	OUT	70	240	Bob F	9058295757			03:06 PM	On hook	03:07 PM	0:01:02
03-Jul-02	IN	63	221	Joni	5196586421	Out of Area	03:09 PM	03:09 PM	Hold	03:09 PM	0:00:12
03-Jul-02	IN	63	221	Joni	9053630325	LUXELL TECH	03:11 PM	03:12 PM	On hook	03:12 PM	0:00:12

CALL Auditor data:

CALL Auditor data is stored in a Microsoft Database format. This file can be imported into another application in order to produce customized reports. The CALL Auditor data file is located on the VCM Server in the VCM Server directory.

i.e. C:\WCMServer\CallLog.mdb

Transactions:

The transaction area (orange/brown area) lists all the secondary or subsequent extensions that participated in a call. CALL Auditor tracks a call regardless of the number of times it is transferred, parked or put on hold.

The call highlighted in the example below indicates an inbound call answered by Joni at extension 221 on July 2nd. Joni placed the call on Hold where Doug at extension 227 picked up the call, spoke for 19 seconds before hanging up.

The screenshot shows the CALL Auditor application window. At the top, it displays 'File Database Help' and a toolbar. Below the toolbar, it shows 'Number of record(s): 53' and 'Total duration: 65:38:38'. The main area contains a table of call transactions. The table has columns for Date, Dir, Line, Ext, ExtName, Phone Number, CLID Name, RingTime, ConnTime, Result, DisconTime, and Duration. The transaction for 02-Jul-02 at 11:21 AM is highlighted in orange/brown, indicating it is the selected record. Below the table, there is a detailed view of the selected transaction, showing fields for Extension (227), ExtName (Doug), ConnectTime (11:22 AM), DisconnectTime (11:23 AM), Result (On hook), and Duration (0:01:19). There are also sections for Date and Time filters, Direction (IN, OUT, IN/OUT), Call duration filters, and Phone Number/CLID Name fields.

Date	Dir	Line	Ext	ExtName	Phone Number	CLID Name	RingTime	ConnTime	Result	DisconTime	Duration
27-Jun-02	IN	63	224	John H	4165345520	EUROPA CATERING	11:21 PM	11:21 PM	Hold	11:23 PM	0:01:26
27-Jun-02	IN	63	228	Bill	4165345520	EUROPA CATERING	11:42 PM	11:43 PM	Hold	11:43 PM	0:00:20
28-Jun-02	IN	61	221	Joni	9056878440	Out of Area	04:14 PM	04:14 PM	Hold	04:15 PM	0:00:32
28-Jun-02	IN	63	227	Doug	9058428400	OAKVILLE TOYOTA	04:22 PM	04:22 PM	Hold	04:23 PM	0:01:01
28-Jun-02	IN	64	221	Joni	4163857982	PARKER C	04:23 PM	04:23 PM	Hold	04:24 PM	0:00:31
28-Jun-02	IN	61	221	Joni	4163641552	EXECUTIVE NEEDS	04:54 PM	04:54 PM	Hold	04:54 PM	0:00:10
28-Jun-02	IN	63	227	Doug	9053630325	LUXELL TECH	08:49 PM	08:49 PM	On hook	08:50 PM	0:01:02
28-Jun-02	IN	63	227	Doug	9053336440	S S I EQUIPMENT	11:04 PM	11:04 PM	On hook	11:13 PM	0:09:24
02-Jul-02	IN	63	221	Joni	3609560223	Out of Area	11:20 AM	11:20 AM	On hook	11:20 AM	0:00:09
02-Jul-02	IN	61	221	Joni	5147450000	Out of Area	11:21 AM	11:21 AM	Hold	11:21 AM	0:00:11

CALL Auditor displaying inbound calls answered or subsequently transferred to, or picked up by extension 227

Printing CALL Auditor Reports:

- After selecting the appropriate filter(s), click on the **Print** button located on the CALL Auditor tool bar.
- The CALL Auditor Print window opens providing options to preview the report prior to printing along with selecting the printer to print to.
- The lower portion of the report displays the filters that were applied to this report.

Total number of records Date the report was printed Page number of report

Total Talk time

The screenshot shows a 'Print Preview' window for 'VCM Auditor'. At the top, it displays summary statistics: 'Number of record(s): 104', 'Total duration: 03:35:07', 'Printed on: 13 Sep 2001', and 'Page 1'. Below this is a table of call records with columns for Date, Dir, Line, Phone Number, CLID Name, Ring Time, Ext, Name, Conn. Time, Discon. Time, Result, and Duration. The table contains 25 rows of call data. At the bottom of the report area, it states 'Filter(s) applied: Date: 6-Jun-01, Direction = IN/OUT'. The window's status bar at the bottom left shows '0% Page 1 of 3'. Arrows from the text above point to these specific elements in the screenshot.

Date	Dir	Line	Phone Number	CLID Name	Ring Time	Ext	Name	Conn. Time	Discon. Time	Result	Duration
6-Jun-01	OUT	10	4162135779			246		12:12:03 PM	12:12:10 PM	On hook	0:00:06
6-Jun-01	IN	4	9058781317	WENDOVER A	12:13:05 PM	270		12:13:13 PM	12:13:22 PM	Transfer	0:00:09
						234	DEBBIE	12:13:25 PM	12:16:20 PM	On hook	0:02:54
6-Jun-01	OUT	6	19055696587			230	PAULA	12:13:19 PM	12:13:26 PM	On hook	0:00:06
6-Jun-01	OUT	10	19058573171			246		12:13:15 PM	12:13:31 PM	On hook	0:00:15
6-Jun-01	OUT	6	9055696587			230	PAULA	12:13:26 PM	12:13:59 PM	On hook	0:00:32
6-Jun-01	OUT	6	14162430532			230	PAULA	12:14:00 PM	12:14:11 PM	On hook	0:00:10
6-Jun-01	OUT	6	4162430532			230	PAULA	12:14:12 PM	12:15:21 PM	On hook	0:01:08
6-Jun-01	OUT	10	19058573171			246	BARRY	12:14:16 PM	12:15:47 PM	On hook	0:01:31
6-Jun-01	IN	1	Private Call	Out of Area	12:17:43 PM	222		12:17:46 PM	12:17:57 PM	Transfer	0:00:10
						225	EILEEN	12:18:05 PM	12:21:59 PM	Hold	0:03:53
						225	EILEEN	12:22:06 PM	12:24:24 PM	On hook	0:02:18
6-Jun-01	OUT	6	19058237041			234	DEBBIE	12:18:34 PM	12:21:09 PM	On hook	0:02:35
6-Jun-01	IN	2	9058762537	MCCALLUM EDWINA	12:23:31 PM	222	JO ANNE	12:23:37 PM	12:23:50 PM	On hook	0:00:13
6-Jun-01	OUT	4	18006689979			237		12:20:05 PM	12:25:36 PM	On hook	0:05:30
6-Jun-01	OUT	10	4166303963			246	BARRY	12:26:28 PM	12:27:28 PM	On hook	0:01:00
6-Jun-01	IN	1	9058764701	JOHNSON DAVID P	12:27:49 PM	222	JO ANNE	12:27:52 PM	12:28:10 PM	On hook	0:00:17
6-Jun-01	OUT	10	19054752249			246	BARRY	12:27:29 PM	12:29:17 PM	On hook	0:01:47
6-Jun-01	OUT	4	15198221750236			256	MIKE	12:29:50 PM	12:31:38 PM	On hook	0:01:48
6-Jun-01	OUT	10	9056718333			246	BARRY	12:30:06 PM	12:35:36 PM	On hook	0:05:30
6-Jun-01	IN	1	15195857822	THRUSH J & G	12:36:06 PM	221	VICKI	12:36:11 PM	12:36:22 PM	Transfer	0:00:11
						270		12:36:41 PM	12:37:47 PM	On hook	0:01:05
6-Jun-01	IN	1	19055020543	PHARMA PLUS DRU	12:38:20 PM	222	JO ANNE	12:38:22 PM	12:38:53 PM	On hook	0:00:30

Filter(s) applied: Date: 6-Jun-01, Direction = IN/OUT

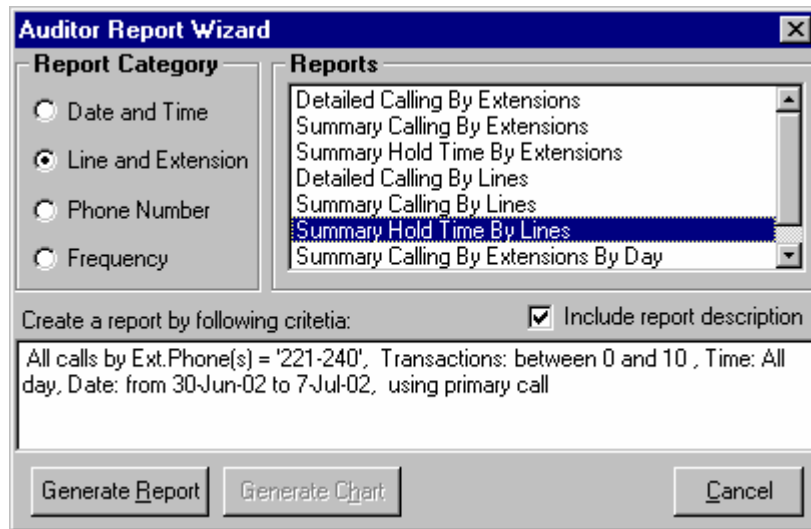
0% Page 1 of 3

Optional Report Package:

The Optional Report Package extends the reporting capabilities of VCM's CALL Auditor. Advanced reports, charts and graphs can be produced easily and quickly.

The Optional Report Package is enabled by a key-code on the VCM Server Registration page.

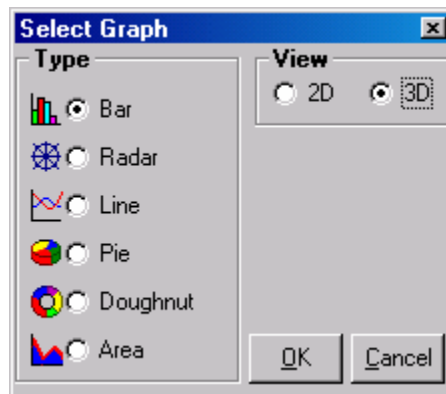
To access the Optional Report Package, click on the Optional Report Package icon on the CALL Auditor toolbar.



Optional Report Package "Report Wizard"

Begin by selecting the **Report Category**. Each category has a number of reports in both detail and summary formats. The summary reports include the ability to produce a graph by clicking on the **Generate Chart** button.

Include report description provides a description of the report at the bottom of the last page of the selected report. By default, this feature is turned on. Uncheck this box to disable this feature.



Six Graph types are available

Below are sample reports and graphs produced by the Optional Report Package.

Detailed Calling By Day

Filter(s) applied: All calls by Ext.Phone(s) = '222', Time: All day, Date: from 6/4/2001 to 6/6/2001.

Printed on: 07-Mar-2002

Dir	Line	Extension	ExtName	Phone Number	CLID Name	RingTime	Conn.Time	Result	Discon.Time	Duration
Date: 6/6/2001										
IN	1	222	JO ANNE	4162349111	MITCHELL BARDYN	2:17:18 pm	2:17:23 pm	Hold	2:17:31 pm	0:00:07
		222	JO ANNE				2:17:43 pm	Hold	2:18:03 pm	0:00:19
		222	JO ANNE				2:18:23 pm	Transfer	2:18:31 pm	0:00:08
		270					2:18:54 pm	On hook	2:19:36 pm	0:00:41
IN	1	222	JO ANNE	4167418568	YORK VOLKSWGN	1:01:48 pm	1:01:55 pm	Transfer	1:02:02 pm	0:00:07
		256	MIKE				1:02:11 pm	On hook	1:03:43 pm	0:01:31
IN	1	222		Private Call	Out of Area	12:17:43 pm	12:17:46 pm	Transfer	12:17:57 pm	0:00:10
		225	EILEEN				12:18:05 pm	Hold	12:21:59 pm	0:03:53
		225	EILEEN				12:22:06 pm	On hook	12:24:24 pm	0:02:18

Total Calls By Day: 3 Total Duration by Day: 0 hrs. 10 mins. 38 secs

Date: 6/5/2001										
IN	2	222	JO ANNE	Out of Area	Out of Area	2:01:21 pm	2:01:25 pm	Transfer	2:01:38 pm	0:00:13
		388					2:01:56 pm	On hook	2:02:16 pm	0:00:20
IN	1	222	JO ANNE	4162255183	PRIVATE NAME	12:45:21 pm	12:45:24 pm	On hook	12:46:00 pm	0:00:35
IN	1	222	JO ANNE	Out of Area	Out of Area	11:38:38 am	11:38:44 am	Hold	11:38:51 am	0:00:07
		222	JO ANNE				11:39:00 am	Hold	11:39:09 am	0:00:08
		222	JO ANNE				11:39:14 am	Transfer	11:39:15 am	0:00:00
		270					11:39:34 am	On hook	11:40:38 am	0:01:04

Total Calls By Day: 3 Total Duration by Day: 0 hrs. 3 mins. 20 secs

Date: 6/4/2001										
IN	1	222	JO ANNE	4163679492	KEMPFN	3:30:06 pm	3:30:12 pm	Transfer	3:30:20 pm	0:00:07
		268					3:30:51 pm	On hook	3:31:31 pm	0:00:39
IN	2	222	JO ANNE	4162323000	Out of Area	1:56:48 pm	1:56:54 pm	Transfer	1:56:59 pm	0:00:05
		236	MARY JO				1:57:12 pm	On hook	2:07:52 pm	0:10:40
IN	1	222	JO ANNE	Private Call	Out of Area	1:44:24 pm	1:44:29 pm	Parked	1:44:42 pm	0:00:13
		222	JO ANNE				1:46:45 pm	On hook	1:46:54 pm	0:00:09
IN	1	222	JO ANNE	Private Call	INDEP EMKT OPR	1:08:30 pm	1:08:33 pm	Transfer	1:08:40 pm	0:00:06
		268					1:08:59 pm	On hook	1:09:59 pm	0:00:59
IN	2	222	JO ANNE	Private Call	Out of Area	12:35:36 pm	12:35:40 pm	Transfer	12:35:53 pm	0:00:13
		237	DEB				12:36:00 pm	On hook	12:36:51 pm	0:00:50
IN	3	222	JO ANNE	4162323000	Out of Area	10:41:45 am	10:41:49 am	Transfer	10:42:09 am	0:00:19
		268					10:42:27 am	On hook	10:43:01 am	0:00:34
IN	3	222	JO ANNE	Private Call	Out of Area	10:41:09 am	10:41:17 am	On hook	10:41:41 am	0:00:24

Total Calls By Day: 7 Total Duration by Day: 0 hrs. 18 mins. 52 secs

Number of record(s): 13

Total Duration: 0 hrs. 32 mins. 50 secs

“Detailed Calling by Day” provides a breakdown of calls by a particular extension on a given day and includes the complete path each call took including transfer, held and parked occurrences. Using the **Criteria** selection, you can apply filters to drill down and display only the information you want.

Summary Calling By Extensions

Filter(s) applied: All calls by Ext.Phone(s) = '221-248', Time: All day, Date: from 1/1/2000 to 3/7/2002.

Printed on: 07-Mar-2002

Extension	ExtName	Inbound Calls	Outbound Calls	Total Calls	Duration	Avg. Call Duration	Calls (% of Total)	Duration (% of Total)
221	VICKI	130	96	226	9 hrs. 12 mins. 23 secs.	0 hrs. 2 mins. 26 secs.	31.48	33.87
222	JO ANNE	69	2	71	3 hrs. 43 mins. 48 secs.	0 hrs. 3 mins. 9 secs.	9.89	13.72
223	LAURA	1	34	35	0 hrs. 44 mins. 55 secs.	0 hrs. 1 mins. 17 secs.	4.87	2.75
224	SHERRI	1	17	18	0 hrs. 18 mins. 35 secs.	0 hrs. 1 mins. 1 secs.	2.51	1.14
225	EILEEN	1	56	57	1 hrs. 25 mins. 55 secs.	0 hrs. 1 mins. 30 secs.	7.94	5.27
226	GORD	0	31	31	1 hrs. 4 mins. 7 secs.	0 hrs. 2 mins. 4 secs.	4.32	3.93
227	DON	0	32	32	4 hrs. 33 mins. 10 secs.	0 hrs. 8 mins. 32 secs.	4.46	16.75
228	CYNTHIA	0	20	20	0 hrs. 22 mins. 0 secs.	0 hrs. 1 mins. 6 secs.	2.79	1.35
230	PAULA	0	21	21	0 hrs. 24 mins. 41 secs.	0 hrs. 1 mins. 10 secs.	2.92	1.51
231	ALYSON	0	1	1	0 hrs. 0 mins. 12 secs.	0 hrs. 0 mins. 12 secs.	0.14	0.01
233	LAURIE	1	13	14	0 hrs. 9 mins. 14 secs.	0 hrs. 0 mins. 39 secs.	1.95	0.57
234	DEBBIE	0	30	30	0 hrs. 40 mins. 13 secs.	0 hrs. 1 mins. 20 secs.	4.18	2.47
235	RUTH	0	1	1	0 hrs. 0 mins. 49 secs.	0 hrs. 0 mins. 49 secs.	0.14	0.05
236	MARY JO	1	32	33	0 hrs. 48 mins. 55 secs.	0 hrs. 1 mins. 28 secs.	4.60	3.00
237	DEB	0	10	10	0 hrs. 3 mins. 35 secs.	0 hrs. 0 mins. 21 secs.	1.39	0.22
240	RICHARD	0	26	26	0 hrs. 24 mins. 9 secs.	0 hrs. 0 mins. 55 secs.	3.62	1.48
241	BILL	0	4	4	0 hrs. 3 mins. 48 secs.	0 hrs. 0 mins. 57 secs.	0.56	0.23
242	MEETING	0	9	9	0 hrs. 5 mins. 20 secs.	0 hrs. 0 mins. 35 secs.	1.25	0.33
243	RON	0	30	30	2 hrs. 0 mins. 12 secs.	0 hrs. 4 mins. 0 secs.	4.18	7.37
244	C D R M	0	1	1	0 hrs. 0 mins. 3 secs.	0 hrs. 0 mins. 3 secs.	0.14	0.00
245	PHIL	1	17	18	0 hrs. 29 mins. 44 secs.	0 hrs. 1 mins. 39 secs.	2.51	1.82
246	BARRY	0	13	13	0 hrs. 9 mins. 22 secs.	0 hrs. 0 mins. 43 secs.	1.81	0.57
247	DRAZEN	0	1	1	0 hrs. 0 mins. 0 secs.	0 hrs. 0 mins. 0 secs.	0.14	0.00
248	TARA	1	15	16	0 hrs. 25 mins. 35 secs.	0 hrs. 1 mins. 35 secs.	2.23	1.57
Total:		206	512	718	27 hrs. 10 mins. 45 secs.	0 hrs. 2 mins. 16 secs.		

“Summary Calling By Extensions” provides a method to analyze the volume of calls and the average talk time on a per extension basis. By utilizing the Criteria selection, add filters to drill down to incorporate specific extensions and lines, call direction, long distance calls and much more.

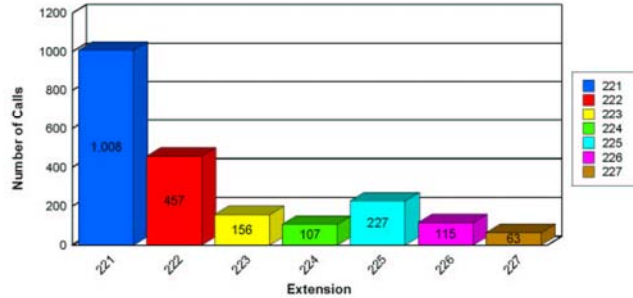
Summary Calling By Extensions

Filter(s) applied: All calls by Ext.Phone(s) = 221-227; Time: All day; Date: from 1/1/2000 to 3/30/2002.

Printed on: 30-Mar-2002

Number of record(s): 2,133

Number of Calls/ Extension



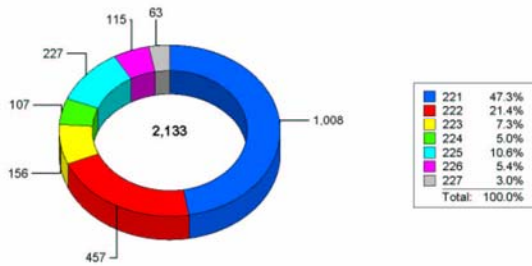
Summary Calling By Extensions

Filter(s) applied: All calls by Ext.Phone(s) = 221-227; Time: All day; Date: from 1/1/2000 to 3/30/2002.

Printed on: 30-Mar-2002

Number of record(s): 2,133

Number of Calls/ Extension



Above are two different views of the same call data. The data could represent the volume of calls handled by a help desk or sales department.

Chapter 7: Appendices

Appendix A “Contact Manager/Database Notes & Compatibility Chart:

Contact Manager/Database Compatibility Chart

<i>Database/Contact Manager</i>	<i>Version</i>	<i>Outbound Dialing</i>	<i>Inbound Screen</i>	<i>Pop</i>
		<i>(VCM TAPI SP)</i>	<i>Basic Look-up</i>	<i>Smart Look-up</i>
ACT!	4.0 / 2000	Yes	Yes	Yes
Goldmine	4.0 / 5.x	Yes	Yes	Yes
SalesLogix	3.0 / 4.0	Yes	Yes	No
Maximizer	5.0 / 6.0	Yes	Yes	Yes
Maximizer Enterprise	5.0 / 6.0	Yes	Yes	Yes
Microsoft Outlook	97,98,2000, XP	Yes	Yes	Yes
TeleMagic Enterprise	4.x / 5.x	Yes	No	No

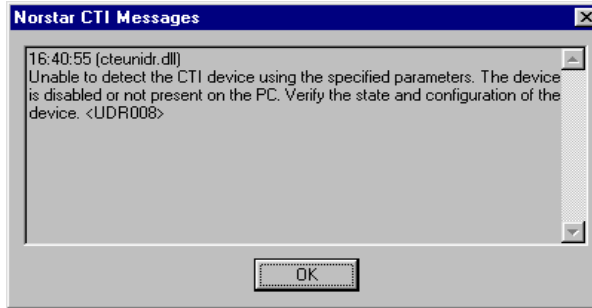
Integration Differences between Contact Managers/Databases:

There are differences between the level of integration and operational differences between the different contact managers that need to be understood. ConverTec Inc. has made every effort to produce the highest quality integration possible to each contact manager system, however, the Contact Manager itself dictates how well a third party application like VCM can integrate with it.

Outbound dialing can be accomplished from all Contact Managers along with the ability to terminate a call by clicking on a Terminate or Hang-up button on the desktop. All Contact Managers allow for notes to be entered during a call, however, this is a function of the Contact Manager, not VCM.

Appendix B “Troubleshooting”

1. If the following error message is displayed upon starting the VCM server.



- Possible causes for this error message are;
 - No power to the CTA
 - No live TDM (Norstar extension) port
 - Serial cable not connected
 - Serial port on VCM server not functioning properly
- Confirm the above are checked and reboot the VCM server until there is no error message appearing.

2. VCM Clients do not connect to the VCM Server.

- Confirm there is a network connection for both the VCM Server and Client PC's by using the Windows “Ping” utility. At a command prompt, ping the VCM Server from a VCM Client PC.

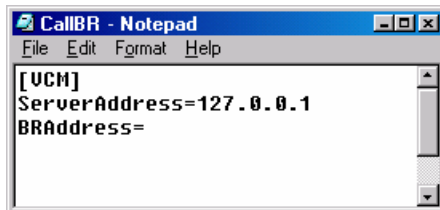
i.e. C:\>ping <IP address of VCM Server>.

The IP address of the VCM Server can be found on the **Registration** tab of the VCM Server setup. If the client PC is unable to ping the VCM Server, contact your network administrator.

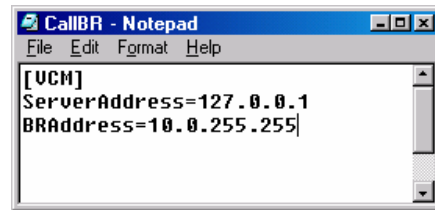
- The VCM Server uses a network broadcast scheme to communicate to the VCM Clients. By default, the VCM Server is configured for a Class C address format. i.e. Subnet Mask is 255.255.255.0. If your network address scheme uses a different format i.e. Class B with a Subnet Mask of 255.255.0.0, do the following;

Edit **Callbr.ini** found in the VCM Server folder to include the line xxx.xxx.255.255 where **the first six x's represent the network prefix used in your network.**

NOTE: The VCM Server must be restarted for change to take effect



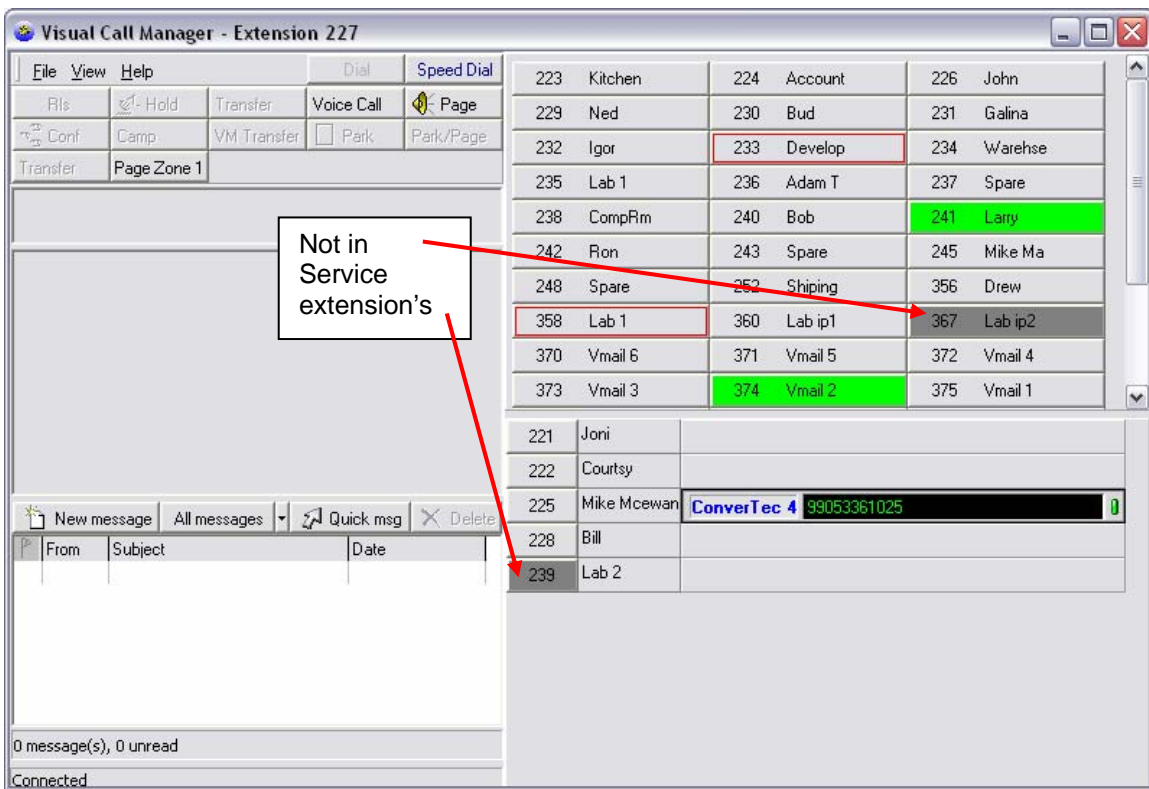
Callbr.ini with default Cass C setting



Callbr.ini with Class B setting

3. The VCM Client toggles back and forth from “Connected” to “Connecting to Server”. There are two possibilities for this problem;
 - There are more VCM Clients running than there are licenses available. To correct this, shut down any VCM Clients over the maximum licensed or purchase additional VCM client licenses.
 - There are two or more VCM Clients with the same extension. Confirm the extension number of all VCM Clients and remove any duplication.

4. “Not in Service” extension(s) appear on the VCM Client;



- To correct the “Not in Service” condition for a telephone;
- Confirm the device or telephone is not in service by dialing the extension from a working telephone. The message “Not in Service” will appear on the display of the phone you are calling from.
 - Re-connect the phone if unplugged. The VCM display will automatically update the status of phone.
 - If the extension has been permanently removed from the Norstar switch, you must remove it from the VCM Server intercom list as well. See VCM Administrator in Chapter 3

5. Error 001;21 appears on my desktop when starting VCM Client.

There is a conflict in the port used by VCM with another application. You will need to change the port on both the VCM Server and on all VCM Client PC's. Follow the steps below to perform this. Note that you can use Notepad to edit the files listed.

- Stop the VCM Server and all VCM Clients
- On the VCM Server, edit the file C:\Program Files\ConverTec\VCM Server**CallBR.ini** to include the line **Port=40370**
- On all VCM Client PC's edit the file C:\<Windows root directory>**CallMNG.txt** to include the line **Port=40370**.
- Start the VCM Server and all VCM Clients.
- All VCM Clients should now connect to the VCM Server as indicated in the bottom left corner of the VCM Client interface

6. Appendix C “TeleMagic 4.x/5.x Integration”

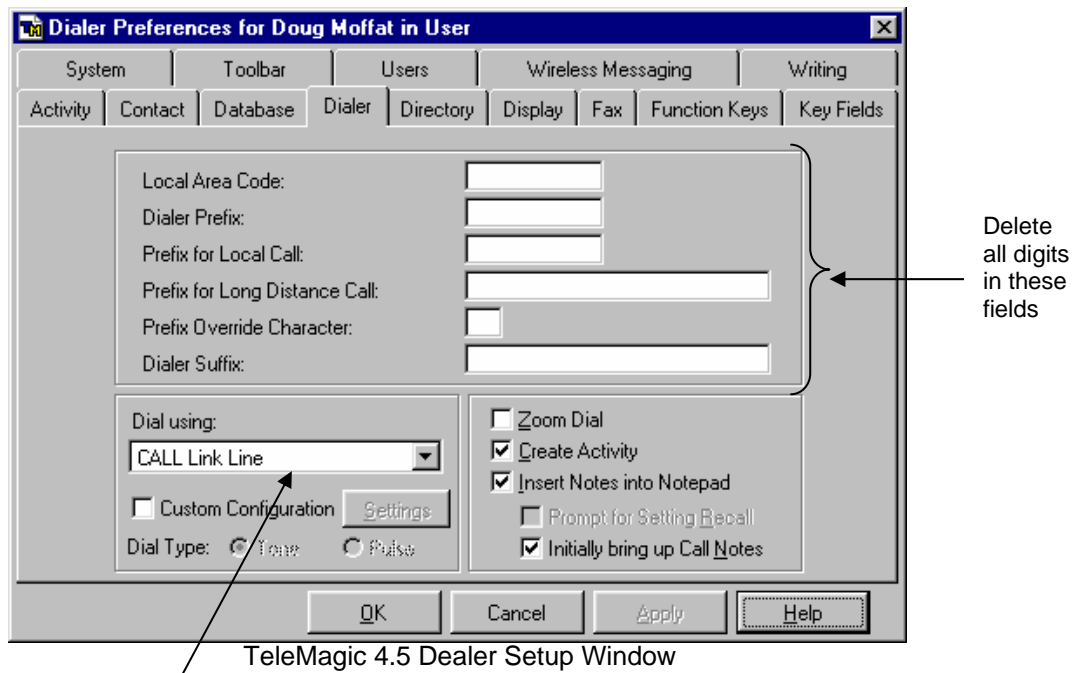
NOTE: VCM supports outbound dialing only for TeleMagic, inbound screen pop is currently not supported.

Outbound Dialing Setup:

- Ensure the VCM TAPI SP has been added. (See chapter 4)
- Ensure that the Windows Telephony section has been completed. (See chapter 4)
- If using Windows NT 4.0, ensure Windows NT 4.0 Telephony Service Setup has been completed (see chapter 4)
- In TeleMagic 4.x, go to:

Options | Preferences | Dialer

- Remove any entries in these fields. The VCM Server handles all call rules, which include any local/long distant area codes, long distance prefix, and local prefix numbers.



Appendix D “SalesLogix Integration”

SalesLogix Inbound Screen Pop Setup

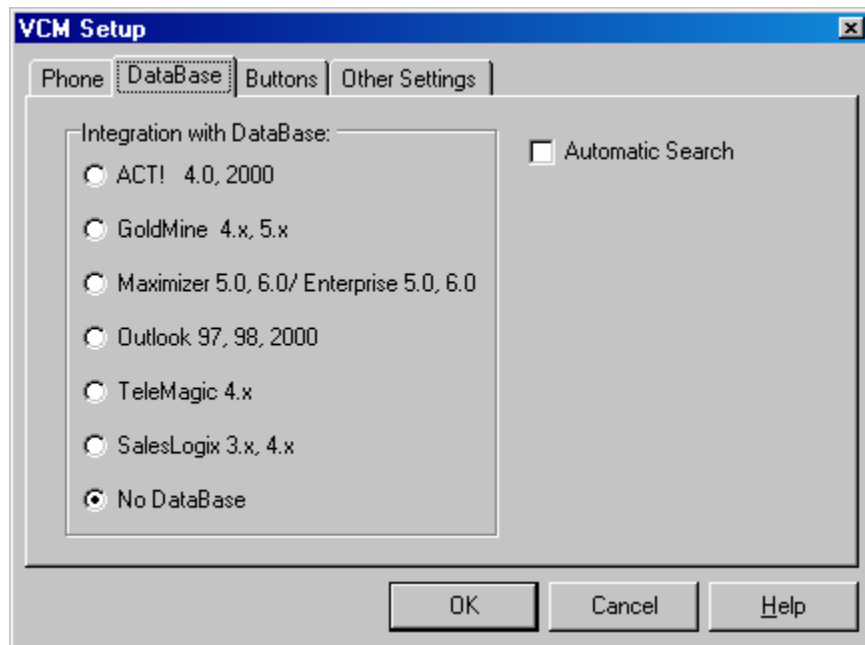
Download the self-extracting “SalesLogix Integration” file from www.convertecinc.com or obtain the CD-ROM version from your VCM Dealer. The SalesLogix Integration file contains all the necessary files to integrate both SalesLogix versions 3.x and 4.x.

SalesLogix Inbound Screen Pop requires installation of a **CALLLink.cxb** bundle in SalesLogix Workgroup Administrator.

To install a bundle:

1. Open **Bundle Manager**.
2. Click **Install**.
3. Navigate to the **CALLLink.cxb** bundle and click the bundle.
4. Click **Open**.
5. Choose the **Bundle Actions** to install, and click **OK**. The default is **All Actions**.
6. Click **Yes**, **No**, **All** (to replace all), or **No to All** as appropriate if the bundle contains components that will replace existing database components.
7. Click **Yes** or **No** as appropriate to release plug-ins in the bundle.
8. If necessary, select the teams to which the plug-ins will be released and click **OK**. The default is **Everyone**.

In VCM Client Setup on the Database window, click on the SalesLogix radio button:



VCM is capable of searching all four fields of telephone numbers in SalesLogix.

A search will commence, and if the record is found, the screen will switch to that record. If the record is not found, the user is presented with a SalesLogix Add Record dialog box prompting the user to add a new record, or to cancel.

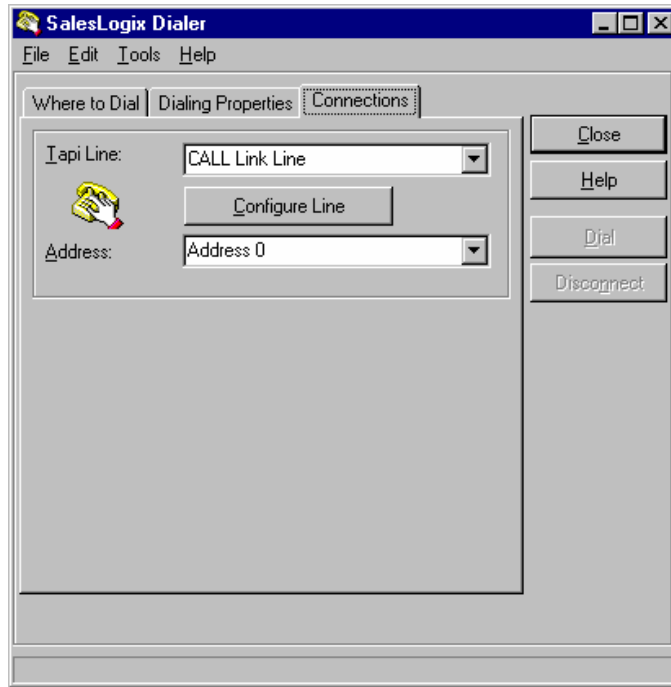


SalesLogix Outbound Dialing Setup

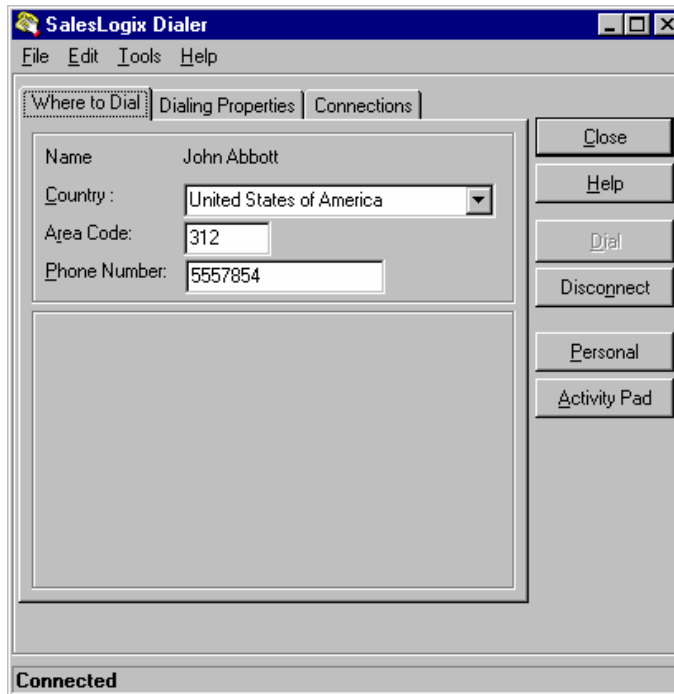
- Ensure that the VCM TAPI SP has been added. (see chapter 4)
- Ensure that the Windows Telephony section has been completed. (see chapter 4)
- If using Windows NT 4.0, ensure that Windows NT 4.0 Telephony Service Setup has been completed. (see chapter 4)
- In SalesLogix (versions 3.x and 4.x), go to:

Tools > Dial Phone > SalesLogix Dialer > Connection

The VCM TAPI SP can be selected as a TAPI device by selecting it from the Connections pull-down window.



- Once VCM has been defined in the Dialing, try a test call to ensure outbound calls are being processed properly by clicking on the Dial button.



- To terminate a call from the desktop, click on the Disconnect button.

Appendix E “Microsoft Outlook Integration to Public Folders”

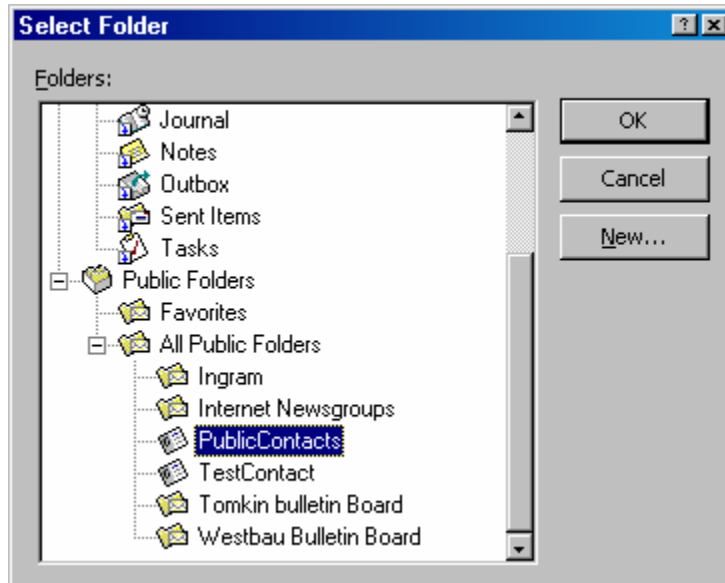
- Using the VCM Database Viewer, you may select which MS Outlook Contacts Folder to use. To select a Contacts folder, go to:

Start > Programs > VCM Client > VCM DB Viewer

- After you select “**Outlook**” the local “**Contacts**” database folder is presented as a default location.

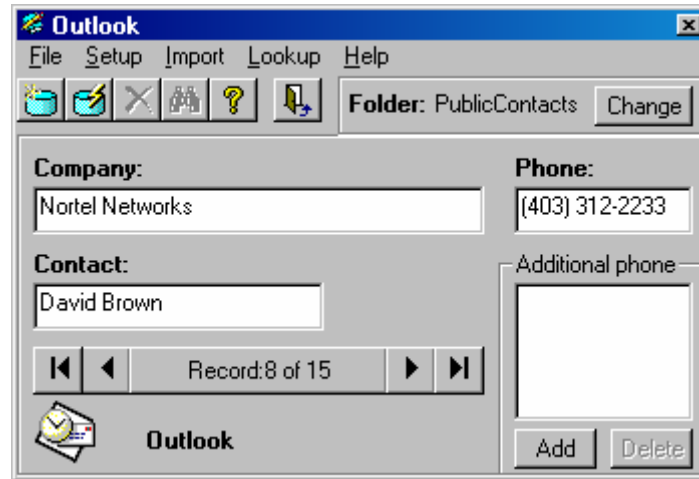


- To change to a different folder, click the “**Change**” button.
- Browse and select the folder. Click **OK**.



NOTE: Once the Contact folder has been selected, VCM must be stopped and restarted to save the changes made.

- The selected folder will be displayed in the “Folder” window.



NOTE:

1. See chapter 5 to complete the “**Smart Lookup**” feature.
2. See chapter 5 to complete the “**Dialing with Database Integration**”.

Appendix F “CTA Compatibility Chart”

CTA Device compatibility with Windows XP

Device – OS Compatibility

OS / CTA Device	CTA 100	CTA 200 (Serial)**	CTA 200 (USB)	CTA 160i
Windows 95	✓	✓	-	✓
Windows 98	✓	✓	✓	✓
Windows NT	✓	✓	-	✓
Windows 2000	✓	✓	☆	☆
Windows ME	✓	✓	✓	✓
Windows XP	✓	✓	☆	☆

Note: ✓ Denotes that the device is supported on corresponding OS.
 ** CTA 100 drivers are mandatory for proper operation of CTA 200 with serial port.
 - Denotes that OS does not support this type of connectivity to the device
 ☆ Denotes that its being evaluated

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Appendix G “Warranty/Software Support”

VCM comes with a 60-day warranty period commencing from the time of license registration.

ConverTec warrants Visual Call Manager to perform as per specifications in the Installation User Guide provided all pre-installation requirements listed in the guide have been met.

An optional 12 month software Assurance Plan is available from your ConverTec dealer. This package provides unlimited telephone support, via a toll free support phone number, along with free product upgrades.

See your dealer for pricing or call ConverTec Inc. at 1-877-937-8228.