Avaya IP Agent

Version 3

Installation and User Guide

585-215-718
Issue 1.2
August 2002

Notice

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

Preventing Toll Fraud

"Toll fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or working on your company's behalf). Be aware that there may be a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

Avaya Fraud Intervention

If you *suspect that you are being victimized* by toll fraud and you need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1 800 643 2353 for the United States and Canada. For additional support telephone numbers, see the Avaya web site:

http://www.avaya.com

Click on **Support**, then click on **Escalation Lists US and International**. This web site includes telephone numbers for escalation within the United States. For escalation telephone numbers outside the United States, click on **Global Escalation List**.

Providing Telecommunications Security

Telecommunications security (of voice, data, and/or video communications) is the prevention of any type of intrusion to (that is, either unauthorized or malicious access to or use of) your company's telecommunications equipment by some party.

Your company's "telecommunications equipment" includes both this Avaya product and any other voice/data/video equipment that could be accessed via this Avaya product (that is, "networked equipment").

An "outside party" is anyone who is not a corporate employee, agent, subcontractor, or working on your company's behalf. Whereas, a "malicious party" is anyone (including someone who may be otherwise authorized) who accesses your telecommunications equipment with either malicious or mischievous intent.

Such intrusions may be either to/through synchronous (time-multiplexed and/or circuit-based) or asynchronous (character-, message-, or packet-based) equipment or interfaces for reasons of:

- Utilization (of capabilities special to the accessed equipment)
- Theft (such as, of intellectual property, financial assets, or toll-facility access)
- Eavesdropping (privacy invasions to humans)
- Mischief (troubling, but apparently innocuous, tampering)
- Harm (such as harmful tampering, data loss or alteration, regardless of motive or intent)

Be aware that there may be a risk of unauthorized intrusions associated with your system and/or its networked equipment. Also realize that, if such an intrusion should occur, it could result in a variety of losses to your company (including but not limited to, human/data privacy, intellectual property, material assets, financial resources, labor costs, and/or legal costs).

Your Responsibility for Your Company's Telecommunications Security

The final responsibility for securing both this system and its networked equipment rests with you - an Avaya customer's system administrator, your telecommunications peers, and your managers. Base the fulfillment of your responsibility on acquired knowledge and resources from a variety of sources including but not limited to:

- Installation documents
- System administration documents
- Security documents
- Hardware-/software-based security tools
- Shared information between you and your peers
- Telecommunications security experts

To prevent intrusions to your telecommunications equipment, you and your peers should carefully program and configure:

- your Avaya-provided telecommunications systems and their interfaces
- your Avaya-provided software applications, as well as their underlying hardware/software platforms and interfaces
- any other equipment networked to your Avaya products.

Trademarks

IP Agent, CMS, CMS Supervisor, CMS Forecast, Business Advocate, CONVERSANT, DEFINITY, Visual Vectors, and MultiVantage are trademarks or registered trademarks of Avaya Inc.

INTEL and Pentium are registered trademarks of Intel Corporation

Microsoft, MS, MS-DOS, Windows, Windows 95, Windows 98, Windows Millennium Edition (ME), Windows XP Professional, Windows XP Home, Windows NT, Windows NT Server, Windows 2000 Server, Windows 2000 Datacenter Server, Windows 2000 Advanced Server, and Windows 2000 Professional are registered trademarks of Microsoft Corporation

Ordering Information

Call: Avaya Publications Center
Voice +1 800 457 1235
Fax +1 800 457 1764
International Voice +1 410 568 3680
International Fax+1 410 891 0207

Write: Globalware Solutions
200 Ward Hill Avenue
Haverhill, MA 01835 USA
Attention: Avaya Account Manager

E-mail:totalware@gwsmail.com

Order: Document No. 585-215-718, Issue 1.2
August 2002

Avaya Support

Avaya provides a telephone number for you to use to report problems or to ask questions about your contact center. The support telephone number is 1-800-242-2121 in the United States and Canada. For additional support telephone numbers, see the Avaya web site:

http://www.avaya.com/support

Click on **Support**, then click on **Escalation Lists US and International**. This web site includes telephone numbers for escalation within the United States. For escalation telephone numbers outside the United States, click on **Global Escalation List**.

Acknowledgment

This document was written by the CRM Development group.

About this information product

The *Avaya IP Agent Installation and User Guide*, Version 3 includes information that you need to know in order to install and use Avaya IP Agent. It also provides information on features, basic operation, and administrative tasks.

Reason for reissue

This is issue 1.2 of this document.

Safety labels

Safety labels are not applicable to this guide.

Intended audience

This guide is intended for anyone who is installing or using Avaya IP Agent software and performing station administration on the DEFINITY system (Enterprise Communications Server). It assumes that you are familiar with:

- The computer on which Avaya IP Agent will be installed and run
- *Windows 95*, *Windows 98*, *Windows Millennium Edition*, *Windows 2000*, *Windows NT 4.0*, and/or *Windows XP*
- Standard *Windows* conventions and terminology
- Call center configurations and operations

Conventions used

The following conventions are used in this document:

Convention	Description
Initial capital letters	Names of windows, dialog boxes, and keyboard keys; for example, the **Name** field is in the **Properties** dialog box.
Key + Key	Key combinations for which you must press and hold down one key and then press another key at the same time; for example, Ctrl+F4 means that you press the Ctrl key and the F4 key at the same time.
Italic text	Indicates references to other documents, products, trademarks, and also used for emphasis.

Related documentation

The following is a list of the documents that can help you configure and use Avaya IP Agent:

- *DEFINITY Enterprise Communications System Administrator's Guide*
- *DEFINITY Enterprise Communications System Automatic Call Distribution (ACD) Supervisor Instructions*
- *DEFINITY Enterprise Communications System Automatic Call Distribution (ACD) Agent Instructions*

Ordering documentation

To order documents by telephone, contact:

Globalware Solutions
Voice: 1-800-457-1235 or international voice: 410-568-3680
Fax: 1-800-457-1764 or international fax: 410-891-0207

To order documents by mail, write to:

Globalware Solutions
200 Ward Hill Avenue
Haverhill, MA 01835
USA

Attention: Avaya Account Management

Avaya IP Agent
Version 3
Installation and User Guide

Contents

Chapter 1: Introduction

This chapter provides introductory and basic information about Avaya IP Agent.

This chapter includes the following sections:

What is Avaya IP Agent?

Avaya IP Agent is a software application that provides advanced telephony features for agents in a contact center. It also allows agents to work on-site at the contact center, off-site using Voice over Internet Protocol (VoIP), or off-site using analog connections over a Public Switched Telephone Network (PSTN). The advanced telephony features are controlled by Avaya IP Agent through its direct communication with a *DEFINITY*® R10 system.

Features

Main features of Avaya IP Agent are:

- Support of DEFINITY systems R10 or later.
- Agents who are not located at the contact center can connect to the DEFINITY system in the contact center and receive calls as if they were present at their contact center workstation. For example, if an agent cannot travel to the contact center because of transportation problems or weather conditions, they can still take calls by using Avaya IP Agent to connect to the DEFINITY system.
- Agents using an analog telephone can still use the advanced call features provided by the DEFINITY system. For example, an agent working from home can still use such features as call transfer, placing a call on hold, and changing their agent state through their own telephone.
- “Screen Pops” can be initiated when a call is received or placed. Avaya IP Agent provides agents with the ability to display webpages, start applications, or retrieve and display customer information from a database. Screen pops are created using the **Screen Pops Wizard** which guides you through their creation. A screen pop can consist of any process or application that can be initiated through one of the commands in the following list:

  - Windows® “Open” command
  - Dynamic Data Exchange (DDE) “Execute” or “Poke” commands

- Road Warrior configuration (Voice over IP) – Agents can connect to the DEFINITY system using their PC and an IP network connection. In this configuration, a telephone set is not necessary because all audio is performed through the sound card of the PC.
- Avaya CALLMASTER VI compatibility – Avaya IP Agent supports use of Avaya CALLMASTER VI telephones. Sections of this document address configuration and use of Avaya CALLMASTER VI telephones as needed.
- Agent greetings – Agents can record and configure multiple agent greetings based on such variables as login status, agent state, agent ID, prompted digits, Automatic Number Identification (ANI), or Vector Directory Number (VDN). This feature is available only for Avaya CALLMASTER VI and Road Warrior (VoIP) configurations.
- Feature deactivation – Administrators can deactivate Avaya IP Agent features that should not be configured or used by agents. The features that can be deactivated include screen pops, screen pop administration, phone directory, public search directory, call history, phone features configuration, personal phone features, program options, and agent greeting selection.
- VuStats support – Avaya IP Agent can display multiple lines of VuStats information in the a dialog box. VuStats information helps to provide complete monitoring of the contact center.
- Speed dialer – Agents can assign telephone numbers to function keys (F2 through F8).
- Avaya IP Agent provides a complete call history of incoming and outgoing calls even for those missed calls where the caller does not leave a voice message.
- Avaya IP Agent provides a customizable telephone directory that lists addresses, multiple telephone numbers, speed-dial numbers, e-mail, and notes for each contact.
- Avaya IP Agent provides the ability to search through public or company information using the Lightweight Directory Access Protocol (LDAP).
- Clipboard dialing – Avaya IP Agent can dial any number copied to the clipboard or, in most PC applications Avaya IP Agent can dial a number that is highlighted.
- Configurable database location – Avaya IP Agent allows you to change the location where the Avaya IP Agent database is stored. This database contains the telephone directory and the call history information.
- Enhanced telephone features – Telephone features now support adding, renaming, and deleting of folders.
- Enhanced system tray icon – An enhanced “Answer” icon in the Microsoft Windows system tray provides release, drop, hold, transfer, and conference functions.
- Drag-and-drop functions – An agent can use the drag-and-drop functionality to handle transfer and conference functions.

- Automatic login – An agent can automatically log in to the ACD when Avaya IP Agent is started. Avaya IP Agent uses the login information from the previous login to accomplish automatic login.
- Avaya IP Agent provides a compact, but instinctive, graphical user interface.

New features for Avaya IP Agent, Version 3

The following list provides the new features for Avaya IP Agent:

- Single-connect protocol for Road Warrior (VoIP) configurations – Previous to Avaya IP Agent V3, Road Warrior (VoIP) configurations required two station Right-to-Use (RTU) pathways in order to support the data and voice channels. Now, by using Avaya IP Agent V3 and DEFINITY R10 or later systems, both of these channels can be used over a single connection which allows more efficient use of RTUs.
- Emergency Call Handling Service (E911) – This feature allows IP Endpoints to use numbers that connect to emergency services, such as 911 in the United States. When used, this feature only reaches the emergency service in the Public Safety Answering Point area where the DEFINITY system is located. Agents or extensions in remote locations should not use this feature for emergencies.
- Redesigned iClarity login component with updated login to DEFINITY systems and IP audio settings – The iClarity IP Audio component has been redesigned to incorporate the login/registration with DEFINITY systems that was previously found in the **DEFINITY Login** application. This redesigned component also provides support for the new features found in DEFINITY R10 systems.
- Support for Virtual Private Networks (VPNs) – New functionality has been added to the iClarity IP Audio component that supports use of “SHIM-based” IPSec client addresses by substituting for the local IP address within H.323 signaling messages.
- Alternate Gatekeeper – When an IP Endpoint registers with a DEFINITY system, a C-LAN circuit pack IP address is sent to the IP Endpoint. If registration is successful, the DEFINITY system sends back the IP addresses of all the C-LAN circuit packs in the network region. These addresses can be used should call signaling on the original C-LAN circuit pack fails.
- Support for server load balancing across gatekeepers – This DEFINITY system feature allows registration and usage of IP Endpoints to be distributed across multiple C-LAN circuit packs within a network region which increases performance and reliability.
- Support for dynamic Quality of Service (QoS) – If the QoS parameters have not been configured on a Microsoft Windows 2000 IP Endpoint, the QoS parameters configured on the DEFINITY system are downloaded to the IP Endpoint and implemented. In order to use QoS, you must install the QoS Packet Scheduler. See the Chapter 3: Administering DEFINITY for Avaya IP Agent section or the documentation for your DEFINITY system for more information on QoS.
- Setup wizard for iClarity registration/login — This wizard helps guide you through entering the required information for login/registration to a DEFINITY system.

Avaya IP Agent configurations

Avaya IP Agent supports three different configurations:

- Road Warrior configuration (Voice over IP) on page 14
- Telecommuter on page 14
- CALLMASTER VI (DCP connection) on page 15

Road Warrior configuration (Voice over IP)

This configuration is used in situations where a PC can make a dial-up or network connection to a DEFINITY system. A telephone is not used in this configuration, which is valuable when a telephone is not available. All of the features of the DEFINITY system are available to the agent through this type of connection. The single network connection between the PC running Avaya IP Agent and the DEFINITY system carries two channels, one for signaling (data) and one for voice. Avaya IP Agent controls the data flow while the DEFINITY iClarity IP Audio (an H.323 V2–compliant audio application) handles the voice communications. This type of configuration provides the best IP audio quality that is possible with your connection speeds and network setup. The agent places and receives calls through the Avaya IP Agent interface using a headset connected to the PC.

What you need to know

The following are Road Warrior configuration requirements and capabilities:

- Connection – One dial-up or network connection from the PC with Avaya IP Agent to the DEFINITY system
- PC hardware – Sound card (full-duplex recommended) and modem or network interface card for connectivity to the DEFINITY system
- Telephone – Not supported in this configuration
- Voice quality – Dependent on the performance of the PC hardware and the amount of bandwidth available in the network connection
- Agent greetings – Stored on the PC
- Right-To-Use (RTU) DEFINITY connections – One station RTU

Telecommuter

This configuration is used in situations where a PC can make a dial-up or network connection to a DEFINITY system for the signaling (data) path and a voice path to a telephone sent through a Public Switched Telephone Network (PSTN) connection. The telephone can be an analog telephone, a cellular telephone, or an extension on a local or remote switch. This configuration provides toll-quality audio and full telephony functionality through Avaya IP Agent. Calls are placed and received through the Avaya IP Agent

interface and the voice path is sent to the telephone. Agent greetings cannot be supported in this configuration because the greetings reside on the PC and cannot connect to the voice path.

What you need to know

The following are Telecommuter configuration requirements and capabilities:

- Connection — One dial-up or network connection from the PC installed with Avaya IP Agent to the DEFINITY system and a telephone capable of receiving calls through the DEFINITY system
- PC hardware — Modem or Network Interface Card (NIC) for connection to the DEFINITY system
- Telephone set — Any telephone capable of receiving calls from the DEFINITY system
- Voice Quality — High
- Agent Greetings — Not supported in this configuration
- Right-To-Use DEFINITY connections — One station RTU for signaling connection and one of the following:
  - For off-site use, one trunk RTU
  - For on-site use, one station RTU

CALLMASTER VI (DCP connection)

The Avaya CALLMASTER VI is a small telephone with eight buttons, two headset jacks, and DCP connectivity. It is connected to a PC through a serial (RS-232) connection. This configuration is intended for use at the desk of an agent in the contact center. Functionality is provided through a DCP connection to the DEFINITY system and does not require a TCP/IP network connection.

What you need to know

The following are Avaya CALLMASTER VI configuration requirements and capabilities:

- Connection – DCP connection for the Avaya CALLMASTER VI telephone set and a serial (RS-232) connection between the Avaya CALLMASTER VI and the PC
- PC hardware — Serial (RS-232) port
- Telephone — Avaya CALLMASTER VI
- Voice quality — High
- Agent greetings — Stored on the Avaya CALLMASTER VI telephone set
- Right-To-Use DEFINITY connections — One station RTU

Compatible telephone types for Avaya IP Agent V3

Supported telephone types

The following list provides the telephone types that can be set on the DEFINITY system and that Avaya supports for use with Avaya IP Agent:

- CALLMASTER — 602A*, 602D*
- CALLMASTER II — 603A1*, 603D1*
- CALLMASTER III — 603E1*
- CALLMASTER IV—603F1*
- CALLMASTER V—607A1
- CALLMASTER VI—606A1*
- 4606
- 4612
- 4624
- 6408D and 6408D+
- 6416D+ #
- 6424D+ #
- 8405D and 8405D+
- 8410D
- 8411D (For this telephone set, you must disable the data port, which is true for all softphones.)
- 8434D* #

* This telephone type is capable of displaying 80 characters.

This telephone type can also use an expansion module.

Recommended telephone types

While all of the telephone types listed in the previous table work with Avaya IP Agent, the following types provide the most buttons, features, and the largest area of display:

- 606A1
- 8434D

Because of the larger number of characters used for display, these telephone types are better suited to handle VuStats or Prompted Digits information.

Other considerations

Network compatibility

Avaya IP Agent provides support for several H.323–compatible firewalls and Virtual Private Networks (VPNs). For “shim-based” VPNs, you must use the **Advanced** button in the iClarity IP Audio dialogs used for login to set an IPSec IP address, assigned by the VPN gateway, that is visible to the PC client application. For more information, contact your Avaya representative.

The VPN solution provided by iClarity IP Audio only supports VPNs that use one-to-one IP address substitution. VPNs that use many-to-one IP address substitution cannot be used with Avaya IP Agent.

Chapter 2: Installing and uninstalling Avaya IP Agent

This section contains procedures and important information for installing and uninstalling Avaya IP Agent.

This section includes the following topics:

Avaya IP Agent software CD-ROM contents

The Avaya IP Agent CD-ROM contains the following:

- Avaya IP Agent installation program
- Avaya IP Agent program files
- Documentation in PDF format — Adobe *Acrobat*® Reader 3.0 or later is required to view documents that are in PDF format.
- A *readme.txt* file that contains last minute information

Prerequisites

This section provides information on the necessary hardware and software for successful installation and use of Avaya IP Agent.

This section contains the minimum or recommended requirements for the following:

DEFINITY system

The following DEFINITY systems can be used for the listed configurations:

- DEFINITY Enterprise Communication System (ECS) R10 or later
- DEFINITY IP 600 R10 or later
- DEFINITY ONE R10 or later
- DEFINITY Business Communications System (BCS) R10 or later (Road Warrior (VoIP) and Telecommuter configurations only)
- DEFINITY Guestworks R10 or later (Road Warrior (VoIP) and Telecommuter configurations only)

Depending on the endpoint configuration being used, Avaya IP Agent requires the following additional DEFINITY components:

- Telecommuter – A Control LAN Circuit Pack (C-LAN) circuit pack (TN799B or greater)
- Road Warrior (VoIP) – A Control LAN Circuit Pack (C-LAN) circuit pack (TN799B or greater) and an IP Media Processor (TN2302AP) circuit pack
- Avaya CALLMASTER VI – No DEFINITY components required.

Personal computer hardware

Minimum PC hardware requirements for Avaya IP Agent are:

Processor

An x86 processor at 200 MHz or faster is required. For Road Warrior (VoIP) configurations, a minimum of a 300 MHz processor is required.

Hard disk space

Avaya IP Agent requires a minimum of 30 MB. Avaya IP Agent could require more hard disk space, depending on the amount of data stored for the phone directory, call history, and screen pops.

RAM

Road Warrior (VoIP) configurations:

- Windows 2000, Windows NT 4.0, and Windows XP – 128 MB
- Windows 98 and Windows Millennium Edition – 64 MB
- Windows 95 – Unsupported

Telecommuter configurations:

- Windows 2000, Windows NT 4.0, and Windows XP – 64 MB
- Windows 98 and Windows Millennium Edition – 32 MB
- Windows 95 – Unsupported

Avaya CALLMASTER VI configurations:

- Windows 2000, Windows NT 4.0, and Windows XP – 64 MB
- Windows 98 and Windows Millennium Edition – 32 MB
- Windows 95 – 32 MB

Audio

Road Warrior (VoIP) configurations require a sound card and a headset or speakers/microphone. It is recommended that you use a sound card that supports full-duplex operation for maximum voice quality. Use of a headset provides higher voice quality than that of speakers and a microphone connected to your PC.

For a list of the soundcards and headsets supported by Avaya IP Agent, use the **Search** feature on the Avaya support website at http://support.avaya.com

Important:
Only the Road Warrior (VoIP) configuration supports the use of a microphone through the PC.

Important:
Most USB headsets do not work with Windows 95, Windows NT 4.0, and Windows 98 First Edition. The compatibility information between the USB headset and the operating system should be checked in the USB headset specifications supplied by the manufacturer.

Avaya IP Agent supports the use of USB headsets. However, it is possible on certain PCs using USB headsets, that the gain of the USB headset is not adjusted appropriately when changed through the Avaya IP Agent user interface. If this occurs, the microphone gain of the USB headset should be changed from the Audio application located in the Windows **Control Panel**.

Networking

The following list provides the network requirements for each configuration type:

- Road Warrior (VoIP) configurations – a single network connection between the PC and the DEFINITY system
- Telecommuter configurations – one network connection and one telephone connection
- Avaya CALLMASTER VI configurations – a Digital Communications Protocol (DCP) connection to the DEFINITY ECS and a serial (RS-232) connection between the PC and the Avaya CALLMASTER VI telephone

Important:
Information regarding minimum network requirements can be found in the Avaya IP Voice Quality Networks Requirements White Paper located on the Avaya support website at http://support.avaya.com.

Peripherals

The following peripherals are required for installation and use of Avaya IP Agent:

- CD-ROM drive for installation
- Mouse or compatible pointing device

Personal computer software

Avaya IP Agent requires the following software:

- One of the following Microsoft Windows operating systems:

- Windows 95 (supports only the Avaya CALLMASTER VI configuration)
- Windows 98
- Windows Millennium Edition
- Windows NT 4.0 Workstation and Server with Service Pack 4 (SP4) or later
- Windows 2000 Professional and Server
- Windows XP Home and Professional

- Microsoft Internet Explorer 5.0 or later

Important:
Microsoft Windows 2000 Advanced Server and Windows 2000 Datacenter Server are not supported.

Important:
Avaya IP Agent does not support use through Terminal Services on Windows 2000 Server or Windows NT Terminal Server.

Voice-over-IP considerations

Voice communication through Internet Protocol requires consistent, non-restrictive network bandwidth as well as the PC hardware sufficient to support not only the communications of the agent but also other tasks. If you experience problems with Avaya™ IP Agent Voice-over-IP telephony, you should ensure that network and PC resources are adequate for the tasks being performed.

Voice-over-IP uses real-time processing on your PC to transmit voice communication. Nearly all other processes on a PC use sequential processing meaning that requests for system resources are processed as they become available. If resources are not available to process Voice-over-IP actions, the quality of the communication degrades.

Network bandwidth availability can also have an impact on Voice-over-IP communications. The codecs used for Voice-over-IP encoding can vary from using small packets for dial-up connections with reduced voice quality to using larger packets providing higher voice quality over broadband and high-speed connections.

The PC software and hardware requirements for Avaya IP Agent are the absolute minimum needed for operation. If you experience problems with Voice-over-IP beyond those of configuration, most can be solved by upgrading system or using one with higher specifications.

Troubleshooting

The speed of a processor is a consideration when you are troubleshooting Voice-over-IP difficulties. However, architecture must also be considered. Both Intel® and AMD® have produced economical processors for small business and home users that, while rated at

comparable speeds to the higher-priced models, have reduced on-chip memory (L1/L2 cache). This affects real-time processing which, in turn, affects Voice-over-IP communications. Additionally, some chip sets have been created which include specialized instruction sets that optimize specific types of applications and processes. These include speech processing.

If you are experiencing problems with Voice-over-IP communications with IP Agent, using a system with higher specifications for the items listed below is recommended.

- Processor speed
- On-chip memory (L1/L2 cache)
- System Bus speed

Note:

Avaya IP Agent does not officially support Cyrix™ processors.

Systems

The following system descriptions are meant as a guideline for determining if higher system requirements are necessary for Voice-over-IP communications. If your system more closely resembles the *moderate*- or *high-demand* systems, an upgrade is recommended.

Specific requirements for each type of system cannot be given because RAM, processor speed, system bus speed, on-chip memory, sound cards, network bandwidth, and applications in use are all variables that can range greatly in their impact.

High-demand – A high-demand system is a PC that uses processor-intensive applications.

The following list presents some examples of activities and applications that are used in a high-demand system:

- Multiple, CPU-intensive applications running simultaneously
- Database queries/hosting
- Multimedia applications
- Computer-Assisted Drafting (CAD) applications
- Compilers
- Streaming media

Moderate-demand – A moderate-demand system is a PC that sometimes uses applications normally found in an office environment.

The following list presents some examples of activities and applications that are used in a moderate-demand system:

- Word processors

- Spreadsheets
- Web browsing
- Data entry
- General e-mail

Low-demand – A low-demand system is a PC that rarely uses any applications apart from Avaya IP Agent.

The following list presents some examples of activities and applications that are used in a low-demand system:

- Text e-mail
- Simple web browsing (no streaming media)
- Minimal data entry

Installing Avaya IP Agent

This section provides the procedure for installing Avaya IP Agent and using the **Configuration Wizard** to enter DEFINITY registration information on a personal computer.

This section includes the following topics:

Performing the installation

Before you begin

Ensure that you have done the following before you attempt to install Avaya IP Agent:

- Closed all applications.
- Inserted the Avaya IP Agent CD-ROM in the CD-ROM drive.
- Read the `readme.txt` file in the root directory of the Avaya IP Agent CD-ROM.

Distributed installation

If you want to install Avaya IP Agent on PCs that are not equipped with a CD-ROM drive, you can copy the contents of the CD-ROM to a network location. Running the install program from the network does not alter the installation program.

Unsupported installation methods

Avaya IP Agent does not provide a silent installation nor does it support installation through network management software such as *Microsoft System Management Server* (SMS) or *Hewlett-Packard OpenView*.

Steps

To install Avaya IP Agent:

1. If the Avaya IP Agent installation program did not begin after the CD-ROM was inserted, run the SETUP.EXE file in the root directory of the CD-ROM.

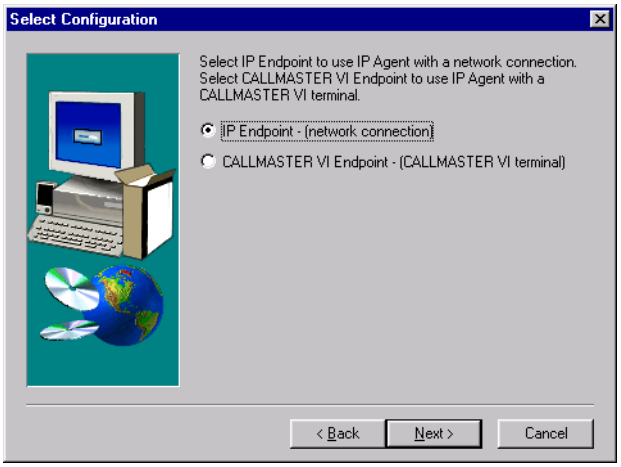
   The installation program displays the **Welcome** window.

2. Select the **Next** button.

   The installation program displays the **Software License Agreement** window.

3. Read the Software License Agreement completely and select the **Yes** button if you understand and agree to the terms. Selecting **No** will cause the installation program to exit.

   The installation program displays the **Select Configuration** window.



4. Select one of the following options:

   - **IP Endpoint** – Use this option for LAN and dial-up connections. This option is not supported on Windows 95.
   - **CALLMASTER VI Endpoint** – Use this option for PCs connected through a serial connection to a Avaya CALLMASTER VI terminal.

     This option is valid only for those contact centers using Avaya CALLMASTER VI terminals with the 606A1 telephone type on the DEFINITY ECS which requires that the PC Application Software Translation Exchange (PASTE) customer option is enabled.

   Important:

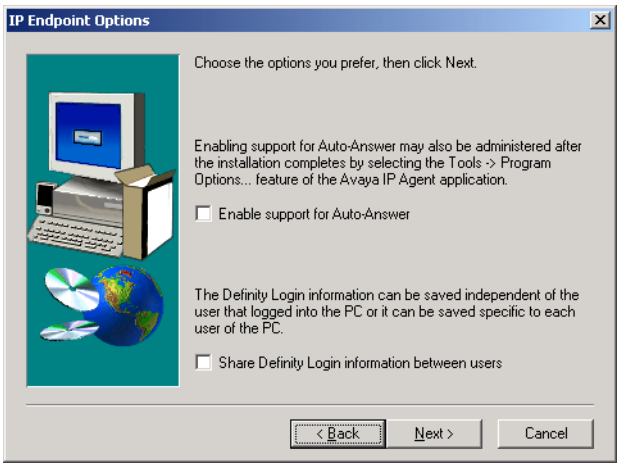
   If you are reinstalling Avaya IP Agent, the Endpoint previously configured on the PC will be selected by default. To change Endpoint type, you must remove the currently installed Avaya IP Agent. The install program can remove the previous version of Avaya IP Agent. If you choose the type of Endpoint that is not currently used, the install program displays a message box asking if the current version should be removed. Select **Yes** to remove the current version, and the installation continues.

5. Select the **Next** button.

6. If you selected **IP Endpoint** in the previous step, Avaya IP Agent displays the **IP Endpoint Options** dialog box. If you are performing a Avaya CALLMASTER VI installation, skip to Step 8.

   Place a check mark in the following options if you want to utilize them:

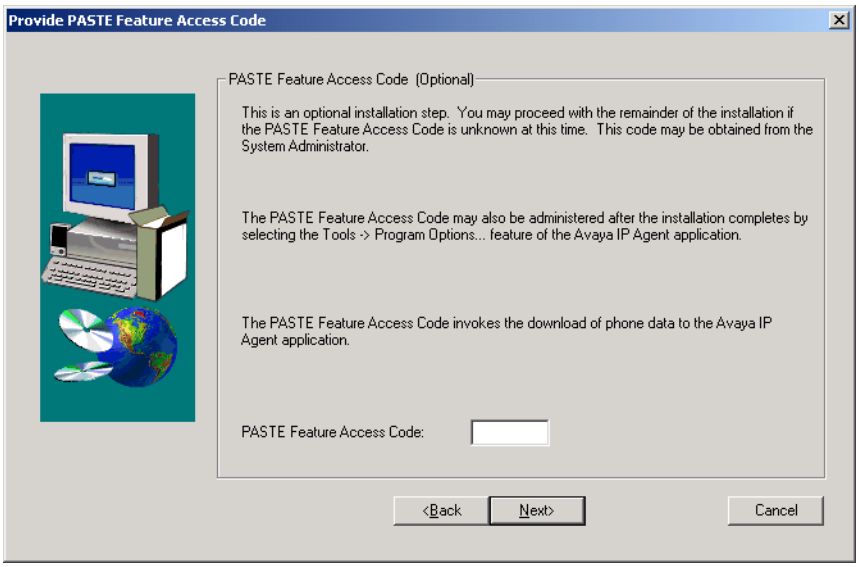
- **Enable support for Auto-Answer** – Selecting this option allows Avaya IP Agent to automatically answer calls received at a station or extension. The **Auto-Answer** feature requires that DEFINITY system configuration for this station is also set for auto-answer. Failure to have this option set in both Avaya IP Agent and the DEFINITY system can result in problems during agent login or when answering incoming calls. The agent does not have to interact with a telephone set or Avaya IP Agent in order to talk to the other party on a newly received call.
- **Share Definity Login information between users** – Selecting this option will use the same DEFINITY registration information, such as extension number and password, regardless of the user IDs used to log on to this PC. Leaving this check box blank requires each user of this PC to enter DEFINITY registration information.



7. Select the **Next** button.
8. If you selected the **CALLMASTER VI Endpoint** configuration, the install program displays the **Provide PASTE Feature Access Code** window. The PC Application Software Translation Exchange (PASTE) is a DEFINITY ECS feature that uses the

Avaya CALLMASTER VI terminal to pass software translation information to Avaya IP Agent.

Enter the PASTE Feature Access Code in the provided field. If you do not know the PASTE Feature Access Code, leave this field blank. You can enter this code at a later time through the **Program Options** dialog.



You can find the PASTE Feature Access Code in the Feature Access Code (FAC) form on the DEFINITY ECS. For more information on the PASTE Feature Access Code, see the *DEFINITY Enterprise Communications Server Administrator's Guide* for your specific DEFINITY ECS.

9. Select the **Next** button.

   The installation program displays the **Choose Destination Location** window.

10. If you want to install Avaya IP Agent in a folder other than the default, click the **Browse** button in the **Destination Folder** dialog box.

11. When you are satisfied with the folder in which Avaya IP Agent will be installed, select the **Next** button.

    The installation program displays the **Setup Type** window.

12. In the **Setup Type** window, select one of the following options and then select the **Next** button:

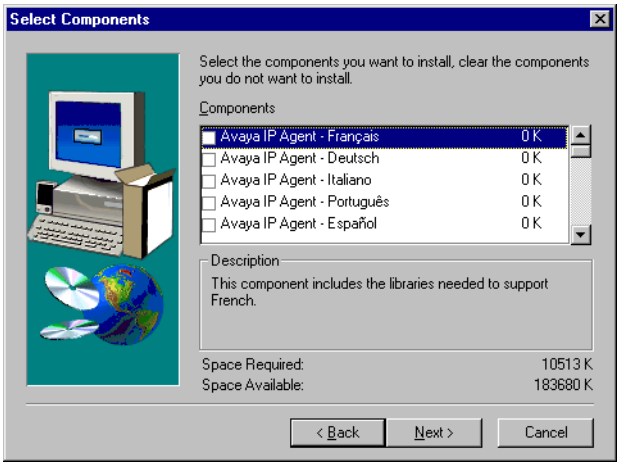
    - **Typical** – This option installs the basic options in English as well as in the language of your Microsoft Windows operating system.

- **Custom** – This option installs the basic options in English as well as in any language you choose.

If you selected the **Custom** option, you will be presented with the **Select Language Components** window that allows you to specify the software language components to install. Proceed with the next step.

If you selected the **Typical** option, go to step 17.

13. Indicate the language components to install by selecting the check box next to the option.



When selecting the language components to install, ensure that the **Space Required** does not exceed the **Space Available** that is indicated at the bottom of the window.

14. Select the **Next** button.

The installation program displays the **Select Program Folder** window.

15. The **Select Program Folder** window allows you to choose one of the following methods to specify the folder name that will appear in the Start Menu:

- You can accept the default Avaya IP Agent folder name that appears in the **Program Folders:** field.
- You can enter a different folder name in the **Program Folders:** field.
- You can select an existing folder in the **Existing Folders:** field in which to install the Avaya IP Agent shortcuts.

16. Select the **Next** button.

The installation program displays the **Select Program Shortcuts** window.

17. Select the check box for the shortcut options you want to be performed.

Note:

If you select a shortcut location but do not select any language, the install program displays a warning that you need to select at least one or more languages.

18. If you selected one of the check boxes on the upper portion this dialog box, you must highlight the languages in the **Select the languages you would like to have added** field for the shortcuts to be created in those languages.
19. If you want Avaya IP Agent to run automatically when Microsoft Windows is started, select the check box for **Automatically start the following version of Avaya IP Agent when Windows is started:** and then select the language from the drop-down list.

    Important:

    You must establish a connection to your corporate network before logging in to the DEFINITY system with Avaya IP Agent. If you are using a dial-up modem with a dynamically assigned IP address, do not select this option.

20. Select the **Next** button.

    The installation program displays the **Start Copying Files** window.

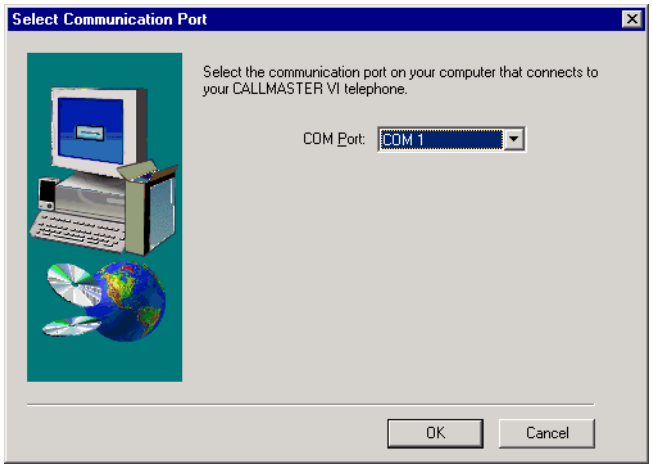
    This window displays the options that you selected. If you need to make any changes to the selections you made, select the **Back** button until you reach the necessary window.

21. When you are satisfied with the specified options, select the **Next** button.

    The install program begins copying files. When this process is complete, the install program displays the **Avaya IP Agent Completion Status** window, which displays the progress of Avaya IP Agent installation and configuration.

Note:

If you are installing a Avaya CALLMASTER VI, the install program displays the **Select Communication Port** window. If the installation type is **IP Endpoint**, this dialog box is not displayed.



22. For Avaya CALLMASTER VI installations, select the communications (COM) port that is used to connect to the Avaya CALLMASTER VI.

    When the configuration of Avaya IP Agent is complete, the install program displays the **View the Release Information File** window.

23. Select the check box provided in the **View the Release Information File** window to view the release information for Avaya IP Agent.

24. Select the **Next** button.

    The installation program displays the `readme.txt` file.

25. When you have read the `readme.txt` file, close the application displaying it.

    The installation program displays the **Setup Complete** window.

26. In the **Setup Complete** window, select one of the following options:

    - **Yes** – This option automatically closes all currently running applications and restarts the computer.
    - **No** – This option allows you to continue working without restarting your computer.

    Important:
    You must restart your computer before running Avaya IP Agent.

27. Select the **Finish** button.

    The installation program completes and performs a restart of the computer if you selected that option.

Running the Configuration Wizard

This section provides the procedure for running the **Configuration Wizard** and entering the necessary information to register this station with a DEFINITY system.

If you have performed a fresh installation of Avaya IP Agent, the **Configuration Wizard** will appear when you first start Avaya IP Agent. The **Configuration Wizard** guides you through entering the configuration information necessary in order to register with a DEFINITY system.

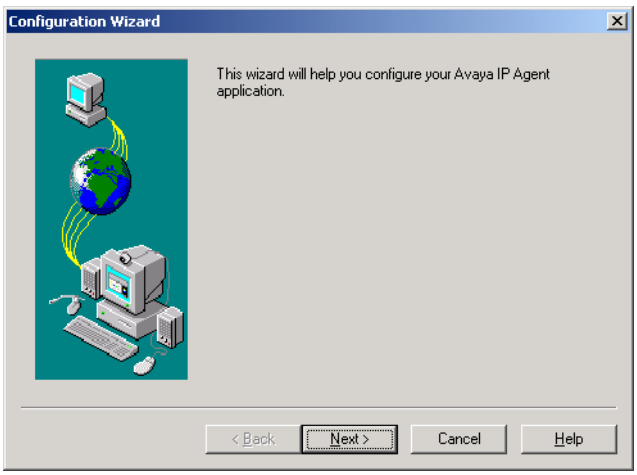
This procedure only applies to Road Warrior (VoIP) and Telecommuter configurations.

Steps

To configure your installation of Avaya IP Agent to register with a DEFINITY system:

1. Start Avaya IP Agent.

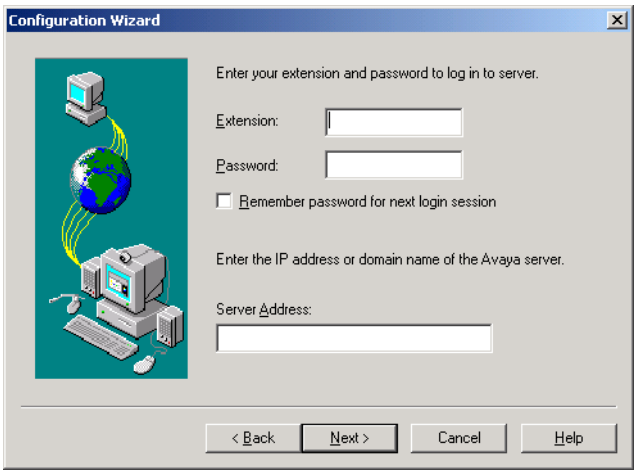
   The **Configuration Wizard** is started automatically.



   If you chose the installation option, **Automatically start the following version of Avaya IP Agent when Windows is started**, the **Configuration Wizard** will appear automatically.

2. Select the **Next** button.

   Avaya IP Agent displays the second screen of the **Configuration Wizard**.

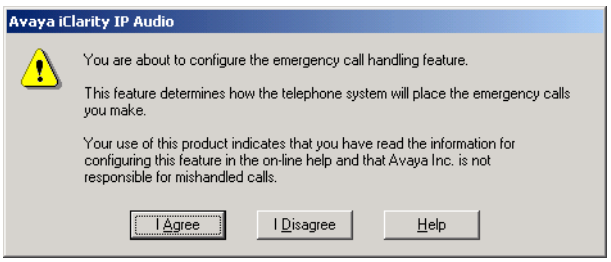


3. Enter the necessary information in the following fields:

   - **Extension** – The extension number of the station that will be used in conjunction with Avaya IP Agent.
   - **Password** – The numeric password associated with the specified extension.
   - **Remember password for next login session** – Place a check mark in this option if you do not want to enter your password each time you register with the DEFINITY system. If you are concerned with the possibility of unauthorized persons assuming this identity, leave this check box blank.
   - **Server Address** – The IP Address or name of the DEFINITY system with which to register.

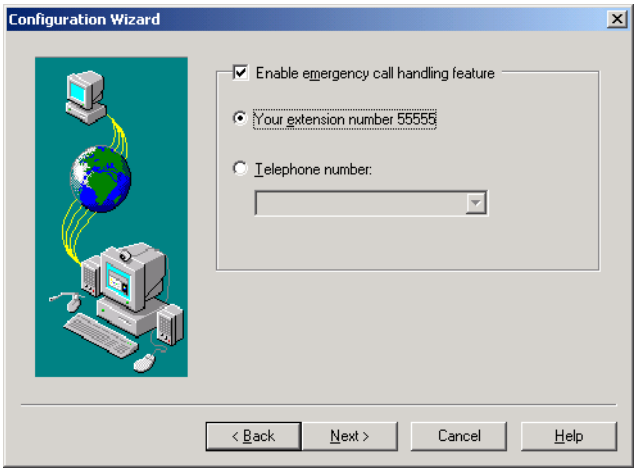
4. Select the **Next** button.

   Avaya IP Agent displays a warning message regarding the Emergency Call Handling feature.



5. Read the text of this warning completely and select the **I Agree** button if you understand this message.

   Avaya IP Agent displays the third screen of the **Configuration Wizard**.



   If you select the **I Disagree** button, the **Configuration Wizard** will exit.

6. If you wish to use the Emergency Call Handling feature for this extension or station, place a check mark in the **Enable emergency call handling feature** check box.

7. If you enabled the Emergency Call Handling feature, select the location that will be sent through the DEFINITY system for calls placed to emergency services:

   - **Your extension number XXXXXXX** – Select this option button if you want your extension number to be sent to emergency personnel. This selection is best used for those stations within the contact center.
   - **Telephone number** – Select this option button if you want a telephone number other than your extension sent to emergency services. Specify the telephone number to send in the provided field.

   This selection must be compatible with the configuration of the station on the DEFINITY system in the **IP Emergency Calls** field. Failure to use the same setting as on the DEFINITY system can cause errors in transmission of the desired number.

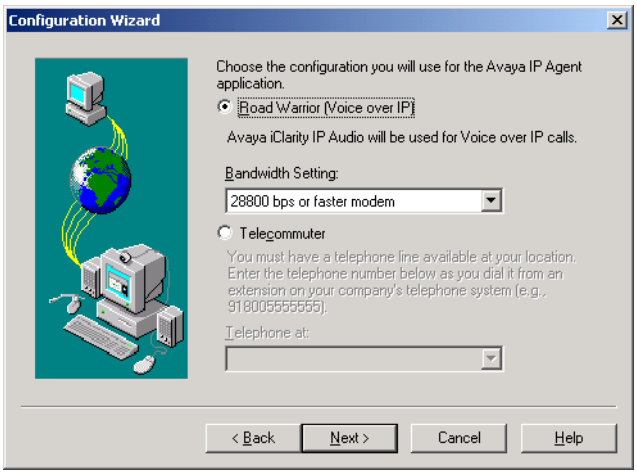
   Important:

   Because IP Endpoints do not dial to and connect with local emergency services when dialing from remote locations, **agents or extensions in remote locations should not use this feature for emergencies**.

   Avaya Inc. is not responsible or liable for any damages resulting from misplaced emergency calls made from an Avaya endpoint. Your use of this product indicates that you have read this advisory and agree to use an alternative telephone to dial all emergency calls from remote locations.

8. Select the **Next** button.

   Avaya IP Agent displays the fourth screen of the **Configuration Wizard**.



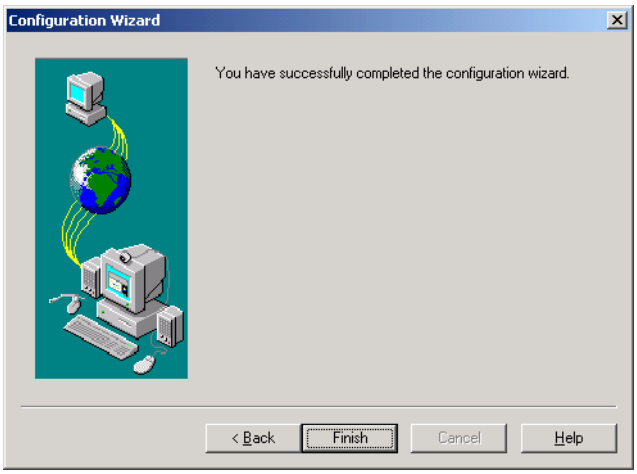
9. Select the type of IP Endpoint configuration that will be used for this installation of Avaya IP Agent.

   If you select the **Road Warrior (Voice over IP)** option, you will also need to specify the throughput available in the **Bandwidth Setting** field.

   If you select the **Telecommuter** option, you will need to specify the telephone or extension number that will be used with Avaya IP Agent.

10. Select the **Next** button.

    Avaya IP Agent displays the last screen in the **Configuration Wizard**.



11. If you selected the Road Warrior configuration, the **Configuration Wizard** will start the **Audio Tuning Wizard** so that your microphone and speakers can be properly adjusted. Follow the instructions in the **Audio Tuning Wizard**.
12. Select the **Finish** button.

Upgrades and reinstallation

This section provides information for installing Avaya IP Agent over a previous version of IP Agent, such as V1, V1.1, and V2, or CentreVu Agent.

This section contains the following topics:

Upgrading CentreVu IP Agent V1.X to Avaya IP Agent V3

This section provides information on upgrading CentreVu IP AgentV1.X to Avaya IP Agent V3.

The installation procedure for upgrading to Avaya IP Agent is the same as listed in the Performing the installation on page 28 section except for the following:

- You cannot change the installation directory for Avaya IP Agent.
- If you select to not store information for multiple users during installation and multiple users were used previously, Avaya IP Agent will only migrate the application data for the user performing the update.

Data migration

The following list describes how customizable data is effected when upgrading Avaya IP Agent:

- Call history – The call history is completely migrated during an upgrade.
- Phone directory – The phone directory is completely migrated during an upgrade.
- Program options – The settings you have configured for previous versions are completely migrated during an upgrade.
- Public search directory – LDAP servers and the associated settings are completely migrated during an upgrade.
- Screen pops – Screen pops are not migrated automatically during an upgrade. You must recreate your screen pops manually in Avaya IP Agent. However, once you have recreated the screen pops on one PC, you can export this information using the **File** > **Export** option from the menu bar and then import it into the remaining Avaya IP Agent PCs.
- Personalized phone labels – If you changed the name of a feature listed in the **Phone Features** or **Personal Phone Features**, these names cannot be saved during an upgrade. You will need to rename these features in Avaya IP Agent.
- Personal phone features – Any features copied to the **Personalized Phone Features** window are not saved during an upgrade. These entries must be manually copied to this window.

For Avaya CALLMASTER VI configurations, Avaya IP Agent V3 does not import the previous PASTE information. Avaya IP Agent V3 will download the PASTE information from the DEFINITY system when it is run for the first time.

Upgrading CentreVu IP Agent V2 to Avaya IP Agent V3

This section provides information on upgrading CentreVu IP AgentV2 to Avaya IP Agent V3.

Data migration

The installation procedure for upgrading to Avaya IP Agent is the same as listed in the Performing the installation on page 28 section except for the following:

- All data and settings used in CentreVu IP Agent V2 are migrated to Avaya IP Agent V3.
- The installation directory for CentreVu IP Agent is changed to Avaya IP Agent.
- If you select to not store information for multiple users during installation and multiple users were used previously, Avaya IP Agent will only migrate the application data for the user performing the update.

Upgrading CentreVu Agent to Avaya IP Agent V3

Data migration

The installation procedure for upgrading to Avaya IP Agent is the same as listed in the Performing the installation on page 28 section except for the following:

- No data or settings are migrated from CentreVu Agent to Avaya IP Agent.
- CentreVu Agent must be uninstalled before Avaya IP Agent can be installed. This uninstall will be initiated during the installation of Avaya IP Agent and will be carried out upon your confirmation.

Reinstalling Avaya IP Agent V3

This section provides information for reinstalling or upgrading to a later release of Avaya IP Agent V3.

When you are reinstalling Avaya IP Agent, the current endpoint configuration of the previous version is automatically selected. Other than this difference, the installation procedure is the same as listed in the Performing the installation on page 28 section.

Important:

During a reinstall, the install program prompts you to remove the current version of Avaya IP Agent. If you cancel the installation and uninstall Avaya IP Agent manually, you will lose most of your current information, including call history, phone directory, and screen pops. To preserve your current Avaya IP Agent information, continue the installation when the first warning appears. Another prompt appears during installation, which asks if the install program should automatically remove the previous version. Allowing the install program to remove the previous version preserves your data.

Data migration

The following information is migrated during a reinstall of Avaya IP Agent:

- Call history – The call history is completely migrated during a reinstall.
- Phone directory – The phone directory is completely migrated during a reinstall.
- Program options – The settings you have configured for previous versions are completely migrated during a reinstall.
- Public search directory – LDAP servers and the associated settings are completely migrated during a reinstall.
- Screen pops – Screen pops are not migrated automatically during a reinstall.
- Personalized phone labels – If you changed the name of a feature listed in the **Phone Features** or **Personal Phone Features**, these names are saved during an upgrade. You will need to rename these features in Avaya IP Agent.
- Personal phone features – Any features copied to the **Personalized Phone Features** window are saved during an upgrade.
- Custom lists – Folders and items within the folders that you have created for your **Phone Features** are saved during an upgrade.

Uninstalling Avaya IP Agent V3

This section explains how to uninstall Avaya IP Agent. The uninstall program removes all files and directories that were created during the installation of Avaya IP Agent.

Introduction

You can easily uninstall Avaya IP Agent using the Windows **Add/Remove Programs** feature. Read-only folders that are shared with other applications are not removed. Files created in the Avaya IP Agent program directory after installation are not removed.

The uninstall program removes:

- All installed Avaya IP Agent files, including all language versions
- Folders associated with Avaya IP Agent
- The DEFINITY iClarity IP Audio component

Steps

To uninstall the Avaya IP Agent application:

1. Close Avaya IP Agent if it is currently running.
2. From the **Control Panel**, double-click the **Add/Remove Programs** icon.

   Windows displays the **Add/Remove Programs Properties** dialog box.
3. On the **Install/Uninstall** tab, find and highlight **Avaya IP Agent** in the list box.
4. Select the **Add/Remove...** button.

   Windows displays the **Confirm File Deletion** message box.
5. Select **Yes**.

   The unInstallShield wizard begins and the **Remove Programs From Your Computer** dialog box is displayed. The uninstall program enters a check next to each component after it is removed.
6. When the uninstall program encounters a shared file that is no longer shared by other programs, it asks if the shared file should be removed. If you are unsure if a shared file is needed, it is recommended that you do not delete the shared file.

   Select one of the following options:

- **Yes** – This option deletes the shared file.
- **Yes To All** – This option deletes this and all other remaining shared files.
- **No** – This option does not delete the shared file.
- **No to All** – This option does not delete this or any other shared files.

When the uninstall is complete, the message, “Uninstall successfully completed”, appears at the bottom of the **Remove Programs From Your Computer** dialog box.

7. Select **OK**.

   Windows closes the **Remove Program From Your Computer** dialog box.

Chapter 3: Administering DEFINITY for Avaya IP Agent

This section provides procedures and information on how to configure the following DEFINITY systems for use with Avaya IP Agent:

- DEFINITY Enterprise Communication Server (ECS)
- DEFINITY Business Communications Server (BCS) and Guestworks

Before agents can receive calls with Avaya IP Agent, the DEFINITY system must be configured to support such things as extension assignments, IP connectivity, and phone types.

Before you begin

You should be familiar with administrating your DEFINITY system before attempting any of the procedures in this section.

Contents

This section includes the following topics:

Configuring the DEFINITY system

This section provides the procedure on how to configure a DEFINITY system for use with Avaya IP Agent.

This section contains the following topics:

The screens shown in this section are from a DEFINITY system with the Expert Agent Selection (EAS) feature. They may differ slightly form the screens you are actually using if your DEFINITY system does not have EAS. To accommodate for this, each step in the procedure identifies when there is a distinction between an EAS and non-EAS system.

Ensuring Telecommuter and Road Warrior compatibility

This section provides the procedure for ensuring that your DEFINITY system is configured to support Avaya IP Agent in the Telecommuter and Road Warrior (VoIP) configurations.

Before you begin

The settings for IP connections can be enabled only if your DEFINITY system supports use of Internet Protocol (IP) for calls.

Screens presented in this section may differ in appearance from those on your DEFINITY system. All options on the specified forms mentioned in this procedure are available, but may not be on the page noted.

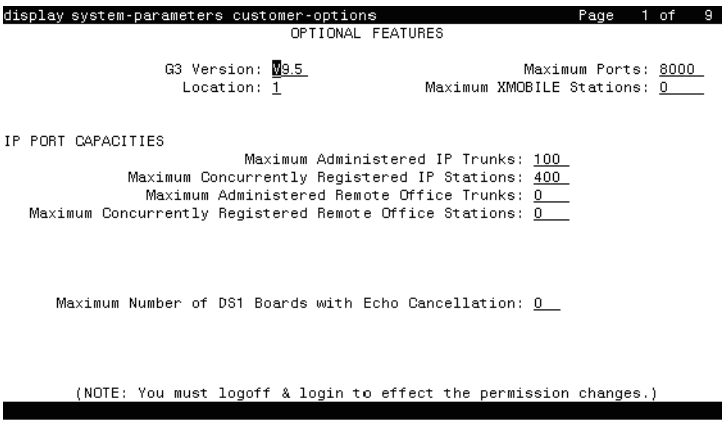
Important:
If any settings of your DEFINITY system do not conform with the steps in this procedure, you must contact Avaya to purchase the appropriate options or configuration before you can use Avaya IP Agent.

Steps

To ensure that your DEFINITY system supports the Telecommuter and Road Warrior configurations:

1. Log in to the Station Administration Terminal (SAT) on the DEFINITY system.
2. Enter **`display system-parameters customer-options`**.

   The SAT displays `Page 1` of the `system-parameters customer-options` form.



3. Ensure that the **Maximum Concurrently Registered IP Stations?** option is set to a number greater than zero. This number represents the total number of IP stations that can be connected to the DEFINITY system at one time. IP stations can consist of Avaya IP Agent, Avaya IP SoftPhone, and IP telephone sets.
4. Navigate to `Page 3` of the `customer-options` form.

```
display system-parameters customer-options                      Page   3 of   9
                                OPTIONAL FEATURES

   Emergency Access to Attendant? y                      ISDN-BRI Trunks? y
          Extended Cvg/Fwd Admin? n                             ISDN-PRI? y
     External Device Alarm Admin? n                  Malicious Call Trace? y
                 Flexible Billing? n      Mode Code for Centralized Voice Mail? n
   Forced Entry of Account Codes? y
      Global Call Classification? y                 Multifrequency Signaling? n
             Hospitality (Basic)? y Multimedia Appl. Server Interface (MASI)? n
Hospitality (G3V3 Enhancements)? y          Multimedia Call Handling (Basic)? n
                  H.323 Trunks? y       Multimedia Call Handling (Enhanced)? n
                                                      Multiple Locations? y
                     IP Stations? y             Personal Station Access (PSA)? y
               ISDN Feature Plus? n
   ISDN Network Call Redirection? y


                (NOTE: You must logoff & login to effect the permission changes.)
```

5. Ensure that the **IP Stations?** feature is set to y.
6. Ensure that the **Personal Station Access (PSA)** feature is set to y.
7. Navigate to `Page 9` of the `customer-options` form.

```
display system-parameters customer-options                      Page   9 of   9
                    MAXIMUM IP REGISTRATIONS BY PRODUCT ID

Product ID  Rel. Limit       Product ID  Rel. Limit       Product ID  Rel. Limit
IP_Agent    __ : 400         __________  __ : 0           __________  __ : 0
IP_Phone    __ : 10          __________  __ : 0           __________  __ : 0
IP_ROMax    __ : 10          __________  __ : 0           __________  __ : 0
IP_Soft     __ : 10          __________  __ : 0           __________  __ : 0
__________  __ : 0           __________  __ : 0           __________  __ : 0
__________  __ : 0           __________  __ : 0           __________  __ : 0
__________  __ : 0           __________  __ : 0           __________  __ : 0
__________  __ : 0           __________  __ : 0           __________  __ : 0
__________  __ : 0           __________  __ : 0           __________  __ : 0
__________  __ : 0           __________  __ : 0           __________  __ : 0

                (NOTE: You must logoff & login to effect the permission changes.)
```

8. Ensure that the **Limit:** field for the `IP_Agent Rel. 3` Product ID is set to the number of licenses you purchased for Avaya IP Agent V3.

Ensuring CALLMASTER VI compatibility

This section provides the procedure for ensuring that your DEFINITY system is configured to support Avaya IP Agent in the Avaya CALLMASTER VI configuration.

Before you begin

Read and understand the following items before administering your DEFINITY system:

- Screens presented in this section may differ in appearance from those on your DEFINITY system. All options on the specified forms mentioned in this procedure are available, but may not be on the page noted.
- A DEFINITY BCS/Guestworks system does not currently support Avaya CALLMASTER VI configurations.

Important:
If any DEFINITY system settings do not conform with the steps in this procedure, you must contact Avaya to purchase the appropriate options or configuration before you can use Avaya IP Agent.

Steps

To ensure that your DEFINITY system supports Avaya IP Agent:

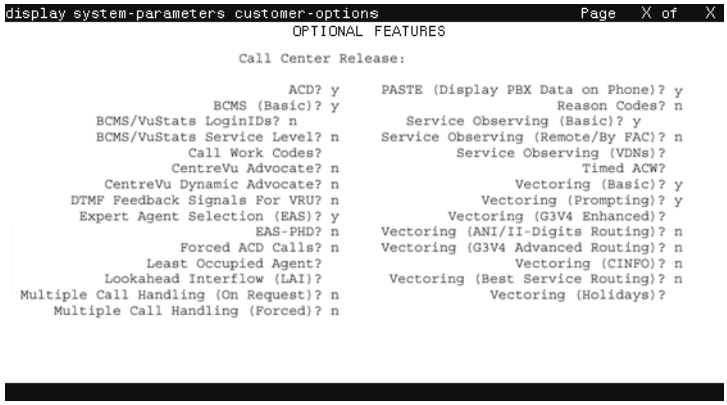
1. Log in to the Station Administration Terminal (SAT) on the DEFINITY system.
2. Enter **`display system-parameters customer-options`**.

   The SAT displays `Page 1` of the `system-parameters customer-options` form.

```
display system-parameters customer-options                  Page   1 of   9
                              OPTIONAL FEATURES

                 G3 Version: V9.5                      Maximum Ports: 8000
                   Location: 1                 Maximum XMOBILE Stations: 0

IP PORT CAPACITIES
                                Maximum Administered IP Trunks: 100
                    Maximum Concurrently Registered IP Stations: 400
                      Maximum Administered Remote Office Trunks: 0
        Maximum Concurrently Registered Remote Office Stations: 0


          Maximum Number of DS1 Boards with Echo Cancellation: 0


            (NOTE: You must logoff & login to effect the permission changes.)
```

3. If you are using Avaya CALLMASTER VI telephone sets with the 606A1 phone type, you must ensure that the PC Application Software Translation Exchange (PASTE)

feature is enabled. Locate the **PASTE (Display PBX Data on Phone)?** option and ensure that it is set to y.



Validating Feature Access Codes

This section provides the procedure for administering the Feature Access Codes on a DEFINITY system. Feature Access Codes are used by Avaya IP Agent to provide agents with the ability to perform the following actions:

- Change their current work state
- Log in
- Log out
- Adjust the method with which they receive their next call (Auto-In, Manual-In)
- Request supervisor assistance

Before you begin

Before changing Feature Access Codes on the DEFINITY system, you should have completed the Ensuring Telecommuter and Road Warrior compatibility on page 50 or the Ensuring CALLMASTER VI compatibility on page 52 procedure to verify that your DEFINITY system supports Avaya IP Agent.

Feature Access Codes (FACs) cannot be entered unless the **fac** capability is assigned in the dialplan.

To change settings on the DEFINITY system, you must have a DEFINITY system user ID with the proper administrative permissions.

Important:
Screens presented in this section may differ in appearance from those of your DEFINITY system. All options on the specified forms mentioned in this procedure are available, but may not be on the page noted.

Steps

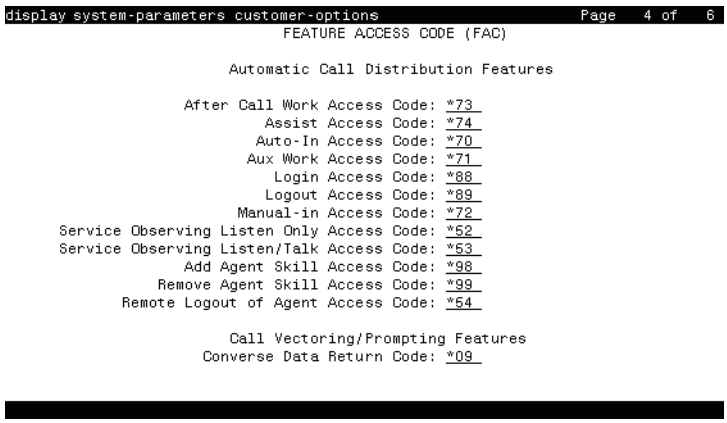
To validate Feature Access Codes:

1. Log in to the Station Administration Terminal (SAT) on the DEFINITY system.
2. Enter **`display dialplan`** to access the dialplan form and then ensure that the **fac** option is assigned in the dialplan.

   If the `fac` option is not assigned in the dialplan, your dialplan does not currently support Feature Access Codes. For more information on configuring your dialplan for Feature Access Codes, see the *Administrator's Guide* for your DEFINITY system.
3. Enter **`display feature-access-codes`** to view the **feature-access-codes** form.

4. Navigate to the `call center` portion of the **feature-access-codes** form.

   Non-EAS DEFINITY system will only display a subset of the access code fields seen in the following graphic.



   The Feature Access Codes seen in this graphic are only an example and do not need to be configured as such on your DEFINITY system. You are free to determine your own Feature Access Codes.

5. Administer the Feature Access Codes for Login and Logout as well as any other FACs that you want available for your agents.

   For Avaya CALLMASTER VI configurations, you must also administer the PASTE feature access code which is located on a different page of this form.

   If Feature Access Codes are not assigned, see the *Administrator's Guide* for your DEFINITY system to find instructions on adding Feature Access Codes.

Changing station settings for Road Warrior and Telecommuter configurations

This section provides the procedure for changing station settings to support the Road Warrior and Telecommuter configurations.

Before you begin

Before changing station settings on the DEFINITY system, you should have completed the Ensuring Telecommuter and Road Warrior compatibility on page 50 and the Validating Feature Access Codes on page 54 procedures to verify that your DEFINITY system supports Avaya IP Agent and Feature Access Codes.

To change settings on the DEFINITY system, you must have a DEFINITY system user ID with the proper administrative permissions.

Steps

To change station settings to support the Road Warrior and Telecommuter configuration:

1. Log in to the Station Administration Terminal (SAT) on the DEFINITY system.
2. Enter **`change station XXXXX`** where XXXXX is the number of the station to be used with Avaya IP Agent.

   The DEFINITY system displays the **change station** form for the specified station.

```
change station 44444                                  Page   1 of   5
                                    STATION

Extension: 44444                       Lock Messages? n          BCC: 0
     Type: 8434D                     Security Code: 1234         TN: 1
     Port: X                     Coverage Path 1:               COR: 1
     Name: IP Agent Station 44444    Coverage Path 2:           COS: 1
                                     Hunt-to Station:

STATION OPTIONS
             Loss Group: 2                  Personalized Ringing Pattern: 1
           Data Module? n                            Message Lamp Ext: 44444
        Speakerphone: 2-way                  Mute Button Enabled? y
     Display Language: english                  Expansion Module? n

                                              Media Complex Ext:
                                                   IP SoftPhone? y
```

3. In the **Phone Type:** field, enter the type of telephone that Avaya IP Agent will emulate.

   Avaya recommends using one of the following phone types because of the number of features available and the ability to display the most characters for contact center or call information:

- 8434D
- 606A1

Avaya IP Agent can take over the administration and functionality of a real DCP telephone. The physical telephone must be one of those listed in Compatible telephone types for Avaya IP Agent V3 on page 16. The physical telephone is unusable while Avaya IP Agent is registered with its extension. The telephone will become usable again when the Avaya IP Agent session is disconnected from the DEFINITY system.

If you selected the **8434D** phone type, and more feature buttons are needed for the station, enter y in the **Expansion Module?** field.

4. Enter one of the following options in the **Port:** field:
   - X – This option specifies that station administration is done without hardware.
   - `port` – This option is used when a remote agent takes direct control of a real extension that has a Digital Communications Protocol (DCP) connection to the DEFINITY system. Enter the port number of the actual telephone assigned to this extension. When a remote agent logs in to this extension using Avaya IP Agent, the actual telephone that is locally connected to the DEFINITY port is disabled and cannot be used.
5. Enter a number in the **Security Code:** field that will be used as a password during the extension login to the DEFINITY system.

   If a security code is not entered, this station cannot log in to the DEFINITY system.
6. Set the **IP Softphone?** field to y.
7. Navigate to `Page 2` of the **change station** form.

```
change station 44444                                    Page  2 of  5
                                    STATION
FEATURE OPTIONS
           LWC Reception: spe____          Auto Select Any Idle Appearance? n
         LWC Activation? y                       Coverage Msg Retrieval? y
  LWC Log External Calls? n                                 Auto Answer: none
            CDR Privacy? n                               Data Restriction? n
   Redirect Notification? y                   Idle Appearance Preference? n
 Per Button Ring Control? n
   Bridged Call Alerting? n                     Restrict Last Appearance? y
  Active Station Ringing: single_______

        H.320 Conversion? n          Per Station CPN - Send Calling Number? _
      Service Link Mode: as-needed
       Multimedia Mode: enhanced
   MWI Served User Type: ________              Display Client Redirection? n
             AUDIX Name: _______             Select Last Used Appearance? n
  Messaging Server Name: _______               Coverage After Forwarding? s
                                                 Multimedia Early Answer? n
                                       Direct IP-IP Audio Connections? y
                                                 IP Audio Hairpinning? y
```

8. Set the **Multimedia Mode:** field to `enhanced`.
9. Set the **Service Link Mode:** field to one of the following options:
   - `as-needed` – Use this setting if the station has low call traffic or a toll is charged for calls.

- `permanent` – Use this setting if the station has high call traffic or if it is set as an auto-answer station.

10. Ensure that the **IP Emergency Calls** field is set to the appropriate setting for your contact center.
11. If the **Auto Answer:** field is set to `All` or `ACD` on the station or agent form, you must enable the **Enable support for auto answer** feature in the Avaya IP Agent **Program Options** and then reboot. You can find this option under **Tools** > **Program Options** in the Avaya IP Agent main window.
12. Navigate to `Page 3` of the **change station** form.

```
change station 44444                                    Page  3 of  5
                                  STATION
SITE DATA
      Room: _________                              Headset? n
      Jack: _____                                  Speaker? n
     Cable: _____                                 Mounting: d
     Floor: _________                         Cord Length: 0
  Building: _________                           Set Color: _____


ABBREVIATED DIALING
     List1: _______          List2: _______          List3: _______

BUTTON ASSIGNMENTS
 1: call-appr                          6: manual-in         Grp: ___
 2: call-appr                          7: after-call        Grp: ___
 3: call-appr                          8: assist            Grp: ___
 4: _________                          9: aux-work    RC: _ Grp: ___
 5: auto-in          Grp: ___         10: aux-work    RC: 0 Grp: ___
```

13. On pages 3, 4, and 5 of the station administration forms, assign functions to each button that you want to appear in your Avaya IP Agent **Phone Features** window.

    The following functions are mandatory must be assigned to buttons:

    - `auto-in` – This function makes agents available for new calls immediately after they finish with the current call.
    - `manual-in` – This function makes the agent available to take a call and then places the agent in the After Call Work (ACW) state when the call has been completed.
    - `after-call` – This function places agents in the After Call Work (ACW) state.
    - `aux-work` – This function places agents in the Auxiliary Work (AUX) state.

    WARNING:

    The first button assigned as `aux-work` on an EAS station with reason codes must have a reason code of `0` or be left blank. Failure to do so can result in Avaya IP Agent not properly indicating that an agent has logged in. If the reason code is blank, the system prompts the user to enter a reason code when the associated AUX button is selected.

    - `release` – This function terminates the current call and line appearance.
    - `callr-info` – This function is only required with the *Call Prompting* feature so that agents are allowed to display information collected from the originator. The *Call*

Prompting feature obtains information from a caller through a `collect-digits` vector step.

Important:

The 4600, 6400, and 607A1 telephone types do not possess a physical *Drop* button; therefore, you must assign a `drop` function for each station to ensure proper operation of the Avaya IP Agent *Drop* feature.

When this station is connected to the DEFINITY system, the assigned button functions are displayed in the Avaya IP Agent **Phone Features** window.

You can find information on all available button functions in the *Administrator's Guide* for your DEFINITY system.

Changing station settings for CALLMASTER VI configurations

This section provides the procedure for changing station settings to support the Avaya CALLMASTER VI configurations for Avaya IP Agent.

Before you begin

Before changing station settings on the DEFINITY system, you should have completed Ensuring CALLMASTER VI compatibility on page 52 and Validating Feature Access Codes on page 54 procedures to verify that your DEFINITY system supports Avaya IP Agent and Feature Access Codes.

To use Avaya CALLMASTER VI telephones, you must have the PASTE feature enabled on your DEFINITY system.

To change settings on the DEFINITY system, you must have a DEFINITY system user ID with the proper administrative permissions.

Steps

To change station settings to support Avaya CALLMASTER VI configurations:

1. Log in to the Station Administration Terminal (SAT) on the DEFINITY system.
2. Enter `change station` *XXXXX* where *XXXXX* is the number of the station to be used with Avaya IP Agent.

   The DEFINITY system displays the **change station** form for the specified extension.
3. In the **Type:** field, enter **`606A1`**.
4. In the **Port:** field, enter the number of the port providing the connection for the Avaya CALLMASTER VI telephone.
5. Navigate to `Page 3` of the **change station** form.
6. On pages 3, 4, 5, and 6 of the station administration forms, assign functions to each button you want to appear in your Avaya IP Agent **Phone Features** window.

   The following functions are mandatory and must be assigned to buttons:

   - `auto-in` – This function makes agents available for new calls immediately after they finish with the current call.
   - `manual-in` – This function makes the agent available to take a call and then places the agent in the After Call Work (ACW) state when the call has been completed.
   - `after-call` – This function places agents in the After Call Work (ACW) state.

- `aux-work` – This function places agents in the Auxiliary Work (AUX) state.

  WARNING:

  The first button assigned as `aux-work` on an EAS station with reason codes must have a reason code of `0` or be left blank. Failure to do so can result in Avaya IP Agent not properly indicating that an agent has logged in. If the reason code is blank, the system prompts the user to enter a reason code when the associated AUX button is selected.

- `release` – This function terminates the current call and line appearance.
- `callr-info` – This function is only required with the *Call Prompting* feature so that agents are allowed to display information collected from the originator. The *Call Prompting* feature obtains information from a caller through a `collect-digits` vector step.

When this station is connected to the DEFINITY system, the assigned button functions are displayed in the Avaya IP Agent **Phone Features** window.

You can find information on all available button functions in the *Administrator's Guide* for your DEFINITY system.

7. After you create a station and assign or modify buttons, you must perform a download for the Avaya CALLMASTER VI. Go to the PC connected to the Avaya CALLMASTER VI station and select **Settings** > **Phone Configuration** from the Avaya IP Agent menu bar.

   Avaya IP Agent displays a confirmation dialog box.

8. Select **OK**.

Enhanced configuration

This section provides information and procedures for configuring advanced features in your contact center that uses Avaya IP Agent.

This section contains the following topics:

Configuring stations on DEFINITY systems for the Emergency Call Handling Service

The *Emergency Call Handling Service* (E911) allows IP Endpoints to use numbers that connect to emergency services, such as 911 in the United States. When used, this feature only reaches the emergency service in the Public Safety Answering Point area where the DEFINITY system is located.

Important:

Because IP Endpoints do not dial to and connect with local emergency services when dialing from remote locations, **agents or extensions in remote locations should not use this feature for emergencies.**

Avaya Inc. is not responsible or liable for any damages resulting from misplaced emergency calls made from an Avaya endpoint. Your use of this product indicates that you have read this advisory and agree to use an alternative telephone to dial all emergency calls from remote locations.

Configuration

See your DEFINITY documentation for information on configuring a DEFINITY R10 system for Emergency Call Handling.

Configuring Avaya IP Agent for the Emergency Call Handling Service

This section provides the procedure for configuring Avaya IP Agent to use the Emergency Call Handling Service.

Before you begin

The DEFINITY system to which you are connecting must have this extension properly configured for the Emergency Call Handling Service prior to using through Avaya IP Agent.

Steps

To configure the Emergency Call Handling Service:

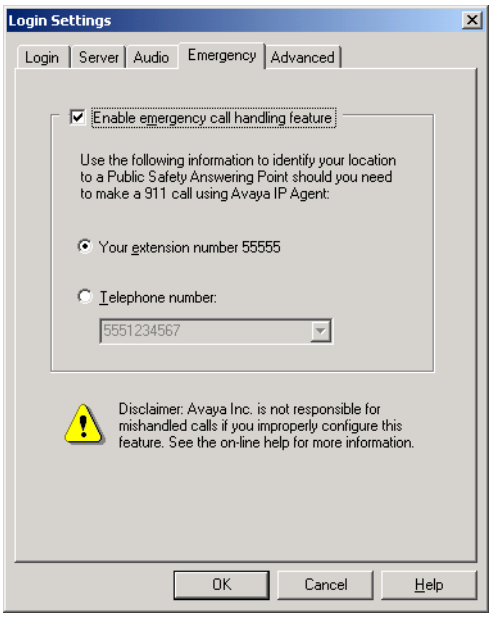
1. Start Avaya IP Agent.

   Windows displays Avaya IP Agent and the **Login** window.

2. In the **Login** window, select the **Settings** button.

   Avaya IP Agent displays the **Settings** dialog.

3. Select the **Emergency** tab.



4. Place a check mark in the **Enable emergency call handling feature** check box.

5. Select the location that will be sent through the DEFINITY system for calls placed to emergency services:
   - **Your extension number XXXXXXX** – Select this option button if you want your extension number to be sent to emergency personnel. This selection is best used for those stations within the contact center.
   - **Telephone number** – Select this option button if you want a telephone number other than your extension sent to emergency services. Specify the telephone number to send in the provided field. For example, enter a number corresponding to a DCP phone in your vicinity that has a fixed known location so that emergency personnel know where to respond. If you are unsure of a number to enter, see your system administrator.
6. Select the **OK** button.
7. In the **Login** dialog box, select the **Login** button.

   Any calls to emergency services will show the selected telephone number.

Installing the Quality of Service Packet Scheduler

Quality of Service (QoS) can help improve voice transmission on your network and PC. However, before you can use Quality of Service, you must install the QoS Packet Scheduler.

Important:
The QoS Packet Scheduler is only available with Microsoft Windows 2000 SP1 or later and Windows XP.

Before you begin

The following items should be read and understood before installing the Quality of Service Packet Scheduler:

- Some VPN client applications have conflicts with the Packet Scheduler. If your VPN exhibits problems, remove the Packet Scheduler from your PC.
- If you are using QoS in conjunction with a firewall, the range of ports for QoS set up on the DEFINITY system must overlap the range of firewall ports specified in Avaya IP Agent by 100 ports. If these ranges do not overlap by 100 ports, QoS is not used by iClarity IP Audio and transmissions are done within the range of firewall ports.

Steps for Windows 2000

To install the QoS Packet Scheduler for Windows 2000, perform the following steps:

1. Log in to the Microsoft Windows 2000 PC as a user with Administrator privileges.
2. From the Start menu, select **Settings** > **Network and Dial-up Connections**.
3. Select the local area connection on which you want to install QoS Packet Scheduler.
4. From the **File** menu, select **Properties**.

   Windows displays the **Local Area Connection** dialog box.
5. Select the **Install** button.

   Windows displays the **Select Network Component Type** dialog box.
6. Select **Service** and then click the **Add** button.

   Windows displays the **Select Network Service** dialog box.
7. Select **QoS Packet Scheduler**. Then, select the **OK** button.
8. Select the **Close** button in the **Local Area Connection Properties** dialog box.
9. Close the **Network and Dial-up Connections** window.

Steps for Windows XP

To install the QoS Packet Scheduler for Windows XP, perform the following steps:

1. Open the Windows **Network Connections** folder.
2. Highlight the Local Area Connection for which the QoS Packet Scheduler is to be installed.
3. Select **File** > **Properties** from the menu bar.

   If QoS Packet Scheduler appears in the **Components checked are used by this connection** list box, it is already installed for this connection. Otherwise, continue to the next step.
4. Select **Install**.
5. Select **Service**.
6. Select **Add**.
7. Select **QoS Packet Scheduler**. Then, select **OK**.

Configuring Alternate Gatekeeper on DEFINITY systems

The *Alternate Gatekeeper* feature is used when an IP Endpoint registers with a DEFINITY system. When Avaya IP Agent registers with a DEFINITY system, a C-LAN circuit pack IP address is sent to the IP Endpoint. If registration is successful, the DEFINITY system sends back the IP addresses of all C-LAN circuit packs defined in the same network region. Avaya IP Agent can use these addresses as alternatives should call signaling on the original C-LAN circuit pack fail.

Configuration

For information on defining Alternate Gatekeeper addresses, refer to your DEFINITY documentation.

Configuring server load balancing across gatekeepers

Load balancing for a DEFINITY R10 or later system refers to the ability of distributing IP Endpoint traffic across all C-LAN circuit packs that are defined within the same network region.

Configuration

Load balancing is achieved by defining all of the IP addresses of the C-LAN circuit packs to be part of a network region on a DEFINITY system. After this has been completed, IP Endpoints registering with the DEFINITY system will be automatically assigned to the different C-LAN circuit packs in sequential order. This method helps distribute IP Endpoints evenly amongst the C-LAN circuit packs.

For more information on defining C-LAN circuit packs within a network region, refer to the documentation for your DEFINITY system.

Required DEFINITY circuit packs

This section provides information on the circuit packs required for your DEFINITY system to support the Telecommuter and Road Warrior configurations with Avaya IP Agent.

This section contains Circuit pack descriptions and associated documentation on page 72.

Circuit pack descriptions and associated documentation

This section provides descriptions and lists documentation resources for the circuit packs required on a DEFINITY system for use with Avaya IP Agent.

The following two circuit packs are used for remote agent connections over TCP/IP with Avaya IP Agent:

- Control LAN Circuit Pack (C-LAN) (TN799B or later)
- IP Media Processor (TN2302AP)

C-LAN circuit pack

C-LAN is a packet port circuit pack for DEFINITY™ systems that provides TCP/IP connectivity to adjuncts for applications. It has one 10baseT Ethernet connection and up to 16 DS0 physical interfaces for PPP connections. Two integrated modems provide remote PPP connectivity over analog facilities. Multiple C-LAN circuit packs can be added to a system to increase TCP/IP capacity.

This circuit pack provides data signaling over TCP/IP for Avaya IP Agent. It is used for the Telecommuter and Road Warrior configurations where a data connection is made to the DEFINITY system. The voice path does not use this circuit pack.

It is recommended that the TN799C V4 or later C-LAN circuit pack is used for its increased ability in handling maximum capacities. Previous versions could encounter difficulties when the maximum number of active endpoints is reached.

IP Media Processor

The IP Media Processor provides the transmission of voice data over an IP network. This enables support of applications that comply with the H.323-v2 protocols. It also reduces per-port costs and improves quality through its dynamic jitter buffers. Additionally, it performs echo cancellation, silence suppression, Dual Tone Multi-Frequency (DTMF) detection, and conferencing.

This circuit pack provides Voice over Internet Protocol (VoIP) for Avaya IP Agent. It is used for the Road Warrior configuration where a VoIP connection is made to the DEFINITY system.

Documentation

For installation procedures and configuration information for the C-LAN circuit pack, see the *DEFINITY Administration for Network Connectivity* document for your DEFINITY system.

The *DEFINITY Installation, Upgrades and Additions for Compact Modular Cabinets* document for your DEFINITY system provides installation and configuration information for the IP Media Processor circuit pack. It also provides helpful information on setup and configuration with a C-LAN circuit pack.

Chapter 4: Running Avaya IP Agent

This chapter explains how to begin using Avaya IP Agent. It contains the following sections:

Before you begin

Before you can use Avaya IP Agent, you must first register with the DEFINITY system and register your extension through the **Login** window.

Once you are registered with the DEFINITY system, you can make yourself available for ACD calls by performing an agent login.

Avaya CALLMASTER VI configurations are not required to register with the DEFINITY system through the **Login** window. This functionality is automatically completed through the Avaya CALLMASTER VI telephone.

Starting Avaya IP Agent

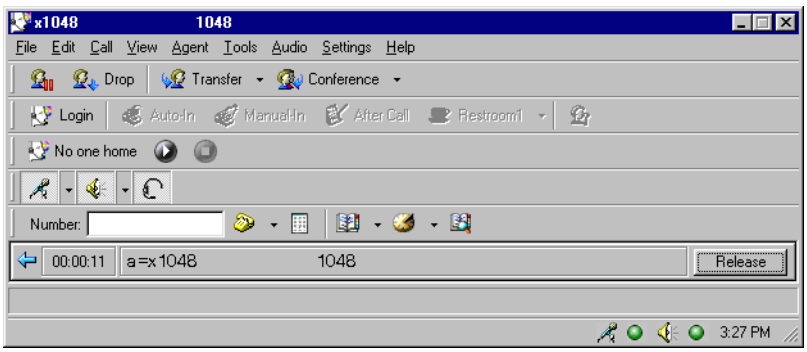
This section provide the procedure for starting the Avaya IP Agent application.

Steps

To start Avaya IP Agent:

1. Select the **Start** button from the Windows taskbar.
2. Select **Programs** > **Avaya**.
3. Select **Avaya IP Agent** in the language of your choice.

   The DEFINITY Login application displays the **Login** and Avaya IP Agent windows.



   Although Avaya IP Agent is now running, you are not yet registered with the DEFINITY system.

   Note:

   The **Login** window is not displayed for Avaya CALLMASTER VI configurations.

4. Go to Registering with the DEFINITY system on page 77.

Registering with the DEFINITY system

This section provides the procedure for registering with a DEFINITY system. This must be done so that you can use Avaya IP Agent for placing and answering calls.

Before you begin

If you attempt to log in to a DEFINITY system that is not R10 or later, Avaya IP Agent displays an error message for an *Invalid Station Type*. You must use a DEFINITY system of R10 or later with Avaya IP Agent.

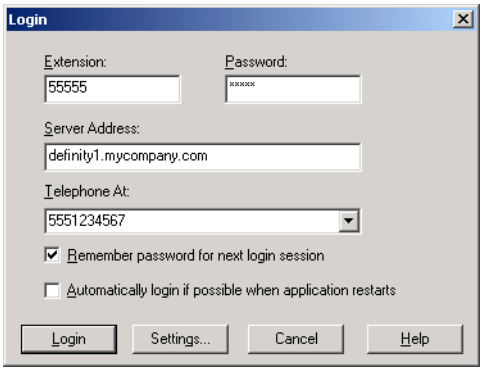
Important:
Avaya CALLMASTER VI configurations are not required to register through the **Login** window. This functionality is automatically completed through the Avaya CALLMASTER VI telephone. If you are using a Avaya CALLMASTER VI configuration, proceed to the section, Logging in to Avaya IP Agent (EAS) on page 80.

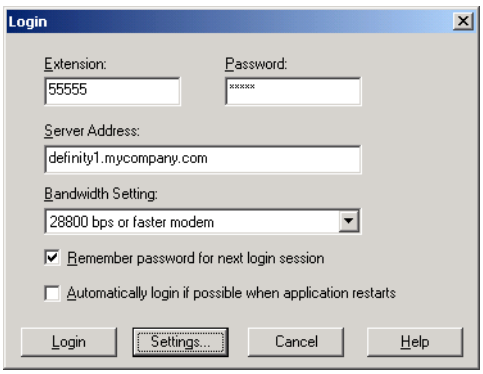
Steps

To register with the DEFINITY™ system:

1. When you start Avaya IP Agent, the **Login** window appears. If this window does not appear, select **File** > **Login** from the Avaya IP Agent main window.

   Avaya IP Agent displays the **Login** window for your IP Endpoint configuration.





2. In the **Extension** field, enter your extension that is administered on the DEFINITY system.
3. In the **Password** field, enter your numeric password for the extension specified.
4. In the **Server Address** field, enter the IP Address or domain name of the DEFINITY system.
5. Depending on the type of IP Endpoint configuration you are using, ensure that the correct information is specified in the appropriate field:
   - **Telephone At** (Telecommuter) – The telephone or extension number that will receive calls. This number cannot be the same as the one entered in the **Extension** field. Your DEFINITY administrator will have created a new extension to support voice communication.
   - **Bandwidth Setting** (Road Warrior) – Select the bandwidth available through the network connection for this personal computer.

6. Place a check mark in the **Remember password for next login session** check box if you do not want to enter your password each time you register with the DEFINITY system. If you are concerned with the possibility of unauthorized persons assuming this identity, leave this check box blank.
7. If you want to register with the DEFINITY system automatically the next time you start Avaya IP Agent, enable the **Automatically login if possible when application restarts** check box. You must have logged into the ACD at least once in the past before you can use this option.
8. Select the **Login** button. When you successfully register with the DEFINITY system, the system displays the **Login Status** dialog box and the controls for the Avaya IP Agent main window are enabled.

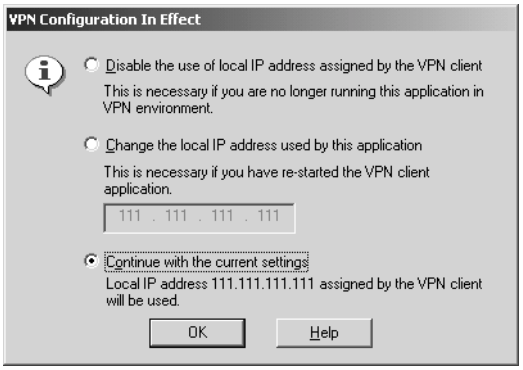
   Important:

   If you are using the Telecommuter configuration, Avaya IP Agent displays the **Verify Telephone Number** dialog box upon successful registration with the DEFINITY system. It is very important that you make some test calls to verify that you have set up your connection properly.

   If you are using Microsoft Windows 2000 and the *Dial-Up Networking* feature, you may see some delay in the closing of the **Login** window. Given enough time, this window will exit properly.

Using a VPN

If you are using a VPN and cannot register with the DEFINITY system, Avaya IP Agent displays the following dialog:



If your VPN settings are not properly configured, this dialog offers you the opportunity to change the VPN settings.

Additional information

The **Settings** button can be used to configure more advanced features used with Avaya IP Agent and the DEFINITY system. For more information on these settings, see Chapter 6: Dialog Reference.

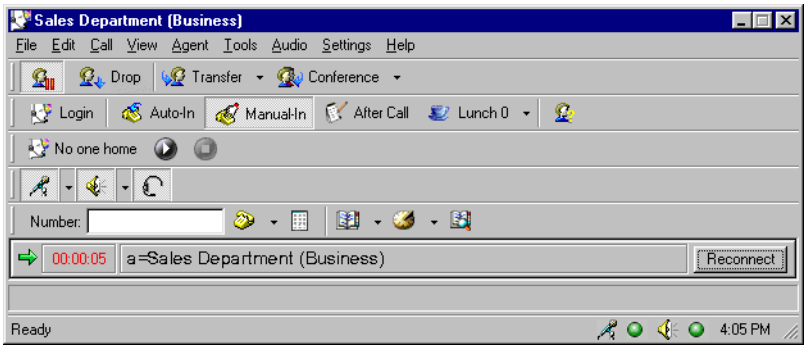
Logging in to Avaya IP Agent (EAS)

After registering with the DEFINITY system, you will need to log into Avaya IP Agent in order to receive ACD (Automatic Call Distribution) calls. This section provides the procedure for logging in to Avaya IP Agent as an agent. This procedure is for logging in to DEFINITY systems with the Expert Agent Selection (EAS) feature.

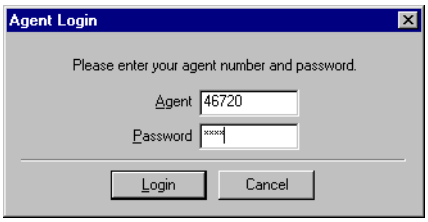
Steps

To log in to Avaya IP Agent:

1. In the Avaya IP Agent window, select the **Login** button.



Avaya IP Agent displays the **Agent Login** dialog box.



2. In the **Agent Login** dialog box, enter your agent number and password in the appropriate fields.
3. Select the **Login** button.

   If you are in Telecommuter mode, the extension specified in the **Login** window will ring. For Road Warrior (VoIP) and Avaya CALLMASTER VI configurations, a line appearance will be created.

   If you do not answer your telephone immediately or if you entered the wrong number for the voice connection, Avaya IP Agent displays an error message. Acknowledge the error message by selecting the **OK** button and then repeat the login procedure.

4. Answer the telephone.

   You will hear a confirmation tone, the buttons on the agent toolbar are enabled, and the agent will be automatically put in the AUX work mode.

5. To get out of AUX work mode, click either the **Auto-In** or **Manual-In** button.

   For more information about *Auto-In* and *Manual-In* work modes, see Selecting your work mode on page 89.

   You are now ready to begin receiving and making calls.

Logging in to Avaya IP Agent (non-EAS)

After registering with the DEFINITY system, you will need to log into Avaya IP Agent in order to receive ACD (Automatic Call Distribution) calls. This section provides the procedure for logging in to DEFINITY splits through Avaya IP Agent. This procedure is for logging in to DEFINITY systems without the Expert Agent Selection (EAS) feature.

Before you begin

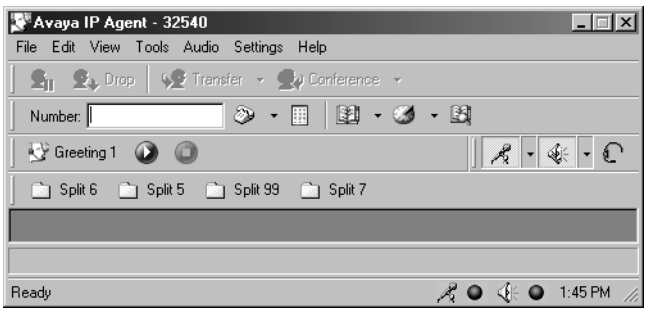
In order for an agent to be able to log in to a split, Avaya IP Agent must be configured to support a non-EAS DEFINITY system. To change the Avaya IP Agent configuration:

1. Select **Tools** > **Program Options**.
2. From the **Program Options** window, select the **ACD Agent** item.
3. Clear the check mark from the **Configure program for EAS agent support** check box.
4. Select the **OK** button.
5. Close Avaya IP Agent by selecting **File** > **Exit** from the main window.
6. Restart Avaya IP Agent.

Steps

To log in to Avaya IP Agent:

1. In the Avaya IP Agent window, locate the Agent toolbar. This toolbar lists the splits assigned to this station.



   If this toolbar is not visible, select **View** > **Toolbars** > **Agent**.

2. On the Agent toolbar, select the split you want to log into.

   Avaya IP Agent displays a menu with a **Login** option.

3. Select the **Login** option.

   Avaya IP Agent displays the **Agent Login** dialog box.

4. If necessary, enter the password for this split.

   If you are logging in to a split that only consists of one or two digits, you may be required to place one or more leading 0characters. This is dependent on the configuration of your DEFINITY system. See your system administrator for more information.

5. Select the **Login** button.
6. Select the split from the Agent toolbar again and select the appropriate work state from the resulting menu.
7. For each split you want to log into, repeat this procedure.

   An agent can log in to a total of four splits.

Logging out of Avaya IP Agent

This section provides the procedure for logging out of Avaya IP Agent as an agent.

Steps

To log out of Avaya IP Agent:

1. Select the **Logout** button on the agent toolbar.

   If the DEFINITY system has been configured to require logout reason codes, Avaya IP Agent displays a prompt in the status bar for entry of the reason code.

2. Enter your logout reason code through the keyboard or the **DialPad**.

Exiting Avaya IP Agent

This section provides the procedure for exiting the Avaya IP Agent application.

Steps

To exit Avaya IP Agent and log out of the DEFINITY system:

1. After you have logged out as an agent, select **File** > **Exit** from the main window.

   The Avaya IP Agent main window is closed and your extension is logged out of the DEFINITY system.

Chapter 5: Avaya IP Agent basics

This chapter contains information on the basic operations of Avaya IP Agent.

This chapter includes the following sections:

Handling incoming calls

This section describes those functions that you will be using every day when you receive an incoming call at your station, including answering a call, holding a call, releasing a call, and transferring a call.

This section contains the following topics:

Selecting your work mode

You can elect to set your incoming calls for Auto-In mode or Manual-In mode by selecting the mode in the Agent toolbar. If you are in Auto-In mode and complete a call, you are automatically available to receive another call, or you may be placed in After Call Work (ACW) mode for an administered length of time. When the timed ACW interval expires, you are automatically returned to the Auto-In mode. If you try to change agent modes while active on a call, the change is not made until you disconnect from the call.

If you are in Manual-In mode and complete a call, you are automatically placed in After Call Work (ACW) mode. In order to become available to receive another ACD call, you must manually enter the Auto-In or Manual-In mode. If you try to change agent modes while not active on a call, the change takes place immediately.

Answering a call

Answering a call depends on how the DEFINITY system and network are administered. Each contact center environment is different, which can affect the way you answer calls. It is suggested that each contact center evaluate its configuration and instruct the agent on the best way to answer the Avaya IP Agent phone. There are too many possible Avaya IP Agent configurations for Avaya to support all of them. The following are some suggested procedures on answering calls for different configurations.

Telecommuter

Agent administration for auto-answer is set to station or none. Station Administration for auto-answer is set to none. Station Administration has service link set to “as-needed.” Each time a call is received, the analog phone set that provides the voice path will ring, as will the computer, depending upon the Avaya IP Agent option settings.

To answer a call for this configuration:

1. Wait for the analog phone to ring and then answer it. Answering the analog phone will automatically be detected through Avaya IP Agent.

   If there is another call ringing on the screen, do not hang up the analog phone. Instead, select the answer button on the Avaya IP Agent screen and you will be connected to this call. If you do not release the previous call, it will be automatically placed on hold.

2. After the calling party disconnects from the call or you select **Release** for that call, hang up the analog phone if no more calls are ringing on the Avaya IP Agent screen.

3. If there is another call ringing on the screen, do not hang up the analog phone. Select the **Answer** button on the Avaya IP Agent screen and you are now connected to this call. The previous call is placed on hold.

Telecommuter (auto-answer)

Agent administration for auto-answer is set to *station*, *ACD*, or *all*. Station Administration for auto-answer is set to *ACD* or *all*. Station Administration has the service link set to *permanent*. During the event of agent login, your analog phone will ring to deliver the login confirmation tone.

To answer a call for this configuration:

1. You should answer the phone and not hang it up for the remainder of your agent shift.

2. If the phone accidentally gets cut off or hung up, the DEFINITY system will ring the analog phone when it has a call to deliver. You will then need to answer the analog phone.

3. As with any auto-answer phone, the DEFINITY system will provide a zip tone (a beep) signaling that a new call has arrived.

Road Warrior and CALLMASTER VI

In this configuration, the auto-answer feature is not activated.

To answer a call for this configuration:

1. A person places a call to your contact center and is routed to your extension.

   A call appearance is displayed in a *Call Information Panel* (CIP) in the Avaya IP Agent main window.

2. Select the **Answer** button on the CIP.

   The call is connected and you can begin conversing with the calling party.

Road Warrior and CALLMASTER VI (auto-answer)

In this configuration, the auto-answer feature is enabled.

To answer a call for this configuration:

1. A person places a call to your contact center and is routed to your extension.

   A call appearance is displayed in a *Call Information Panel* (CIP) in the Avaya IP Agent main window.

2. Avaya IP Agent automatically answers the call without any action from the agent who can now begin conversing with the other party.

Holding a call

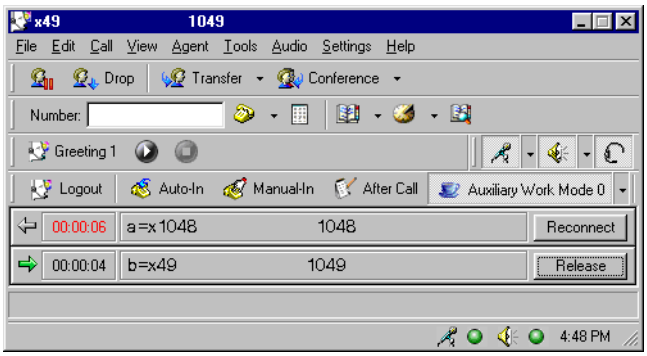
You can put a call on hold by using either the *Auto Hold* or *Manual Hold* feature.

Steps

To place a call on hold:

1. To manually put a call on hold, select the **Hold** button on the Phone Button toolbar.

   The button on your *Call Information Panel* (CIP) changes to **Reconnect**.



2. You can manually answer a second call while on an active call without having to put the first call on hold. The first call will automatically be put on hold when you answer the second call regardless of whether the *Auto Hold* or *Manual Hold* feature is administered for your station.

Releasing a call

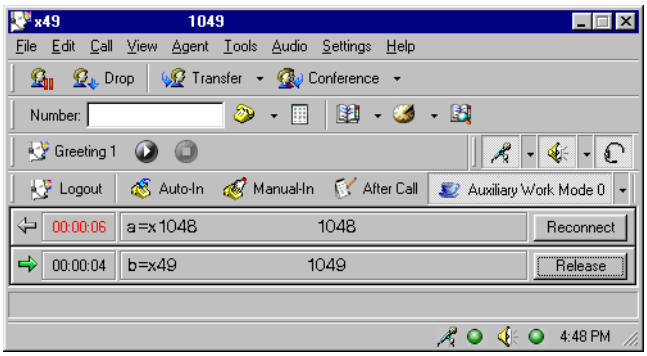
There are three methods you can use to release a call. These methods will work only if the *release* feature has been administered for your station.

Steps

To release a call:

1. Perform one of the following actions:
   - While on an active call, select the **Release** button located on the *Call Information Panel* (CIP). You will not hear a dial tone after you press **Release**.
   - Select the **Release** button located on the Phone Button toolbar.
   - Press the space bar on your keyboard.
   - If you are using an Avaya CALLMASTER VI, press the **Release** button on the telephone.
   - If you are using Telecommuter mode, you may choose to hang up the handset.
2. If you have a call on hold, you must first reconnect it before you can release the call.

   In the example below, you would have to reconnect extension 1048 before you could release it.



Dropping a call

Use the Drop feature when you want to disconnect from a normal call or drop the last party added to a conference call.

Steps

To drop a call:

1. Select the **Drop** button located on the Phone Button toolbar.

   You are disconnected from the call and hear a dial tone.

Transferring a call

This section describes the following methods of transferring calls:

- Basic call transfer on page 96
- Unsupervised call transfer on page 97
- Enhanced call transfer on page 98
- Other methods of transferring calls on page 100

Note:

The **Transfer** button on the Phone Buttons toolbar can be configured for *basic*, *unsupervised*, or *enhanced* transfer in the **Program Options** dialog box in the **Call Handling** area. You can also choose a type of transfer different than that configured by selecting **Call** > **Transfer** from the menu bar.

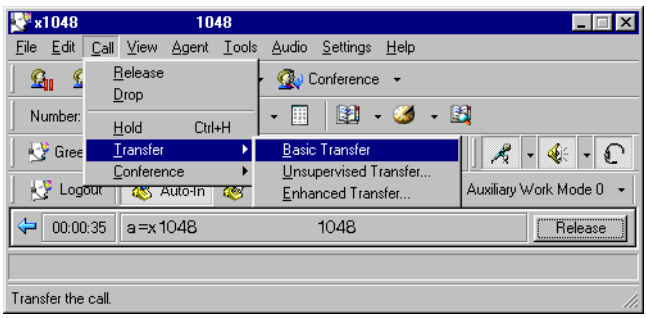
Basic call transfer

The basic mode of the call transfer feature allows you to send an active call to another extension or telephone number by entering a number through the keyboard and then announcing the call to the receiving party.

Steps

To transfer a call using basic transfer:

1. While you are active on a call, select **Call** > **Transfer** > **Basic Transfer** from the menu bar.



   The current call will automatically be put on hold and a new *Call Information Panel* (CIP) will appear with dial tone.

2. Enter the number of the party you want to transfer the call to. The numbers are entered using the keyboard or **Dial Pad**.
3. When the second call is answered, you can privately talk to the party; then select **Basic Transfer** again to complete the transfer.

   Both CIPs disappear from your main callbar indicating that the transfer was successful.

   You may complete the transfer at anytime after the number is entered, during the ringing state, or after the second party answers.

   You may change the call transfer into a conference by selecting **Basic Conference** instead of **Basic Transfer**.
4. If there is no answer, the line is busy, or you decide the transfer is not needed, do the following to cancel the transfer:
   - Select the **Release** button for the party that was going to receive the transfer which terminates the call.
   - Return to the held call by selecting the **Reconnect** button on the CIP for that call.

Unsupervised call transfer

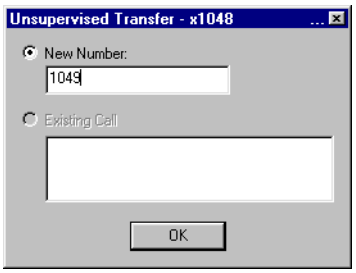
The unsupervised mode of the call transfer feature allows you to transfer an active call to another extension or telephone number by entering the number of the receiving party into a dialog box. Announcement of the call to the receiving party is not available in this mode.

Steps

To transfer a call using unsupervised transfer:

1. While you are active on a call, select **Call** > **Transfer** > **Unsupervised Transfer**.

   Avaya IP Agent displays the **Unsupervised Transfer** dialog box.



2. In the **New Number** field, enter the number to receive the current call.
3. Select **OK** to transfer the call. Unlike the Basic Transfer, you do not have to select the **Transfer** button a second time to complete the transfer.

   The *Call Information Panel* (CIP) will disappear from your main callbar, indicating that the transfer was successful.

Enhanced call transfer

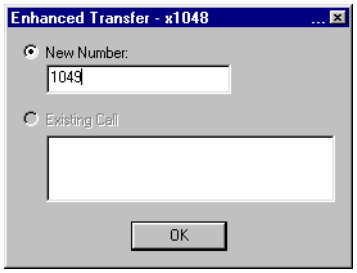
The enhanced mode of the call transfer feature allows you to transfer an active call to another extension or telephone number by entering the number of receiving party into a dialog box. With this mode, you have the ability to transfer the call directly without announcing it to the receiving party or waiting to announce the call and then decide whether to transfer the call.

Steps

To transfer a call using enhanced transfer:

1. While you are active on a call, select **Call** > **Transfer** > **Enhanced Transfer**.

   Avaya IP Agent displays the **Enhanced Transfer** dialog box.



2. In the **New Number** field, enter the number to receive the current call.
3. Select **OK**.

   The caller will automatically be put on hold, a new *Call Information Panel* (CIP) will appear with dial tone, and Avaya IP Agent displays a confirmation dialog.

4. Remain on the line and wait for an answer.

5. Perform one of the following actions:

If...	Then...
The number dialed is answered	Announce the call and select the **Yes** button in the confirmation dialog. Both CIPs disappear from your main callbar indicating that the transfer was successful.
The number dialed is not answered or is busy	Select the **No** button in the confirmation dialog and select the **Reconnect** button to return to the held call.

Other methods of transferring calls

While the previous sections discussed the basic methods for transferring calls, you can also use the drag-and-drop method between *Call Information Panels* (CIP) in the main window or from the **Phone Directory** window. This section provides the procedures for transferring calls using these methods.

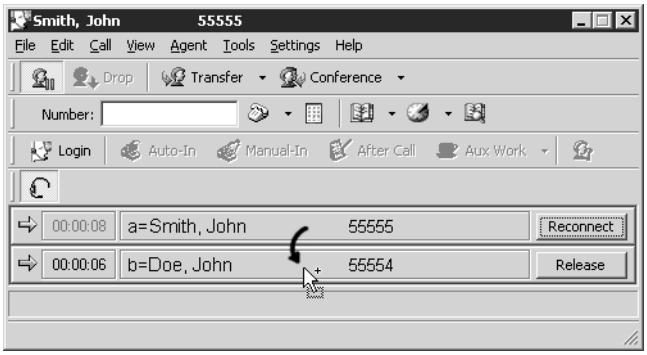
Transferring between call appearances

To transfer a call to another call in the main window:

1. Two or more different calls are made to this agent and are displayed in the main window.
2. Use the drag-and-drop method to move the top-most CIP to the call that will receive the transfer.

   Avaya IP Agent displays a pop-up menu listing the transfer and conference types.

Example:



3. Select a **transfer** option from the pop-up menu.

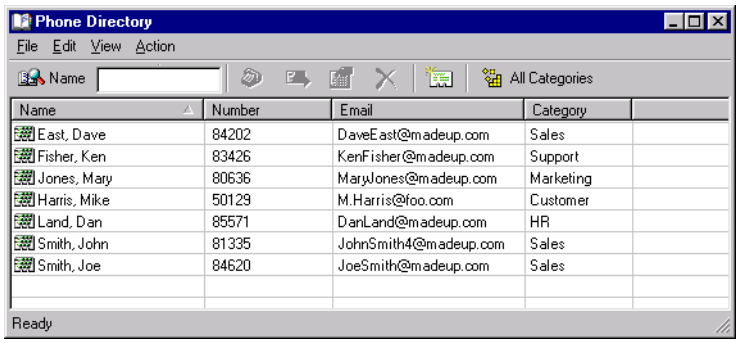
   The selected call is transferred to the other call in the main window.

Transferring to an entry in the Phone Directory window

To transfer a call to an entry in the **Phone Directory** window:

1. While on an active call, select **Tools** > **Phone Directory**.

   Avaya IP Agent displays the **Phone Directory** window.



2. Use the drag-and-drop method to move the entry in the **Phone Directory** window onto the Call Information Panel that you want to have transferred.

   Avaya IP Agent displays a pop-up menu listing transfer and conference options.

3. Select a **transfer** option from the pop-up menu.

   The call is transferred to the entry in the **Phone Directory**.

Conferencing calls

This section provides information and procedures related to conferencing multiple calls together so that all parties can communicate simultaneously.

This section contains the following topics:

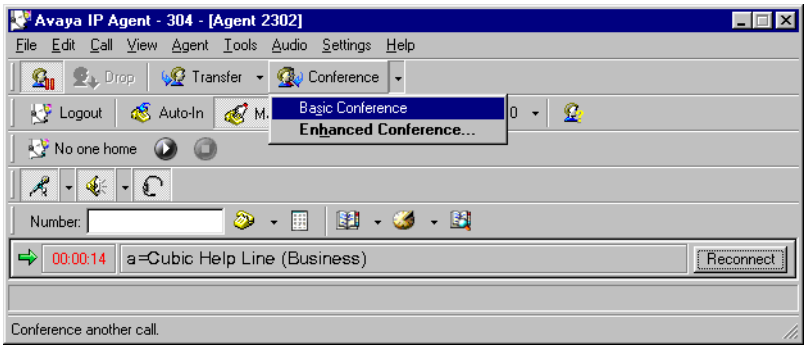
Basic conference

The basic mode of the call conference feature allows you to connect multiple calls together by entering the extensions or telephone numbers of the parties you want to connect by using the keyboard or **DialPad** and adding them to an active call.

Steps

To conference a call using basic conference:

1. While you are active on the call to be conferenced, select **Call** > **Conference** > **Basic Conference**.

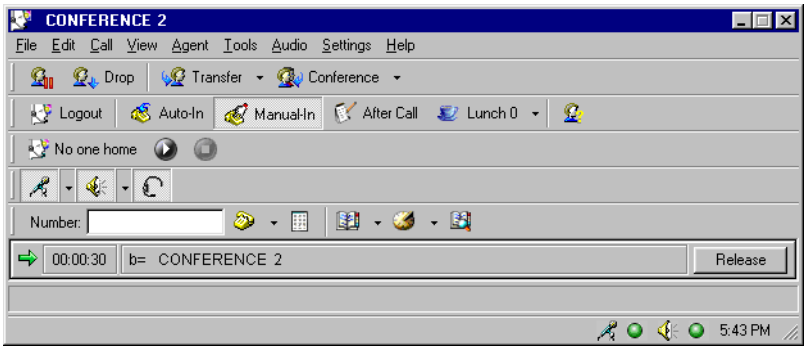


   The caller will automatically be put on hold and a new *Call Information Panel* (CIP) will appear with dial tone.

2. Enter the number of the party you want to add to the call conference. The numbers are entered using the keyboard or the **Dial Pad.**

3. When the second call is answered, you can privately talk to the party and then select **Basic Conference** again to initiate the conference call.

   One CIP appears on your main callbar displaying **CONFERENCE 2** which indicates an active conference.



   You may initiate the conference at any time after the number is entered, during the ringing state, or after the second party answers.

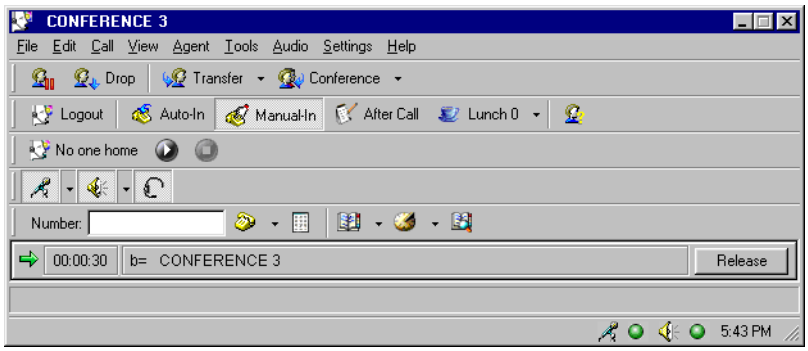
   You may change the call conference into a transfer by selecting Basic Transfer instead of Basic Conference in Step 3.

4. Repeat the previous steps until you have conferenced all parties.

   The single CIP will display **CONFERENCE** *X*, where *X* equals the number of parties you added to the call.

Example:

If you added three parties to the call, the CIP displays **CONFERENCE 3**.



5. If there is no answer, the line is busy, or you decide the conference is not needed:

   - Select the **Release** button for the party that was going to be added to the conference.
   - Return to the held call by selecting the call state **Reconnect** button for that held call.

Enhanced conference

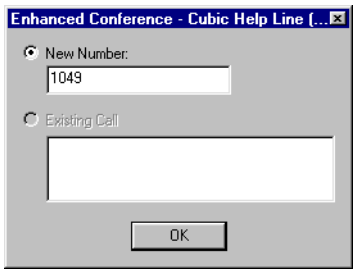
The enhanced mode of the call conference feature allows you to connect multiple calls together by entering the extensions or telephone numbers of the parties you want to connect through a dialog box and then adding them to an active call.

Steps

To add another person to a call, or conference a call, follow these steps:

1. While you are on an active call, select **Call** > **Conference** > **Enhanced Conference**.

   Avaya IP Agent displays the **Enhanced Conference** dialog box.



2. In the **New Number** field, enter the extension or telephone number of the party you want to add to the active call.
3. Select **OK**.

   The current call will automatically be placed on hold and a new CIP will appear with dial tone. Avaya IP Agent displays a confirmation dialog.

4. Remain on the line and wait for an answer.

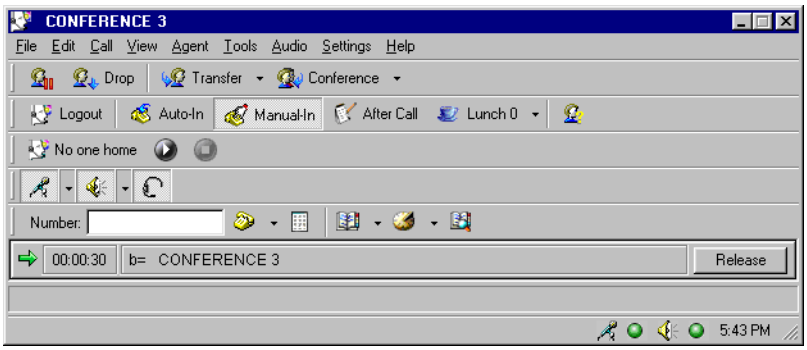
If...	Then...
The number dialed is answered	You can privately talk to the party and then select the **Yes** button in the confirmation dialog to add the party to the call. One CIP appears on your main callbar displaying **CONFERENCE 2** which indicates an active conference.
The number dialed is not answered or is busy	Select the **No** button in the confirmation dialog and then select the **Reconnect** button to return to the original call.

5. Repeat the previous steps until you have conferenced all parties.

   The single CIP will display **CONFERENCE** *X*, where *X* equals the number of parties you added to the call.

Example:

If you added three parties to the call, the CIP displays **CONFERENCE 3**.



Any person on the conference call can hang up at any time.

6. To disconnect the last person added to the conference call, select the **Drop** button.
7. When the conference call is over, select the **Release** button.

   The CIP disappears from the main callbar.

Other methods of conferencing calls

While the previous sections discussed the basic methods for conferencing calls, you can also use the drag-and-drop method between *Call Information Panels* (CIP) in the main window or from the **Phone Directory** window. This section provides the procedures for conferencing calls using these methods.

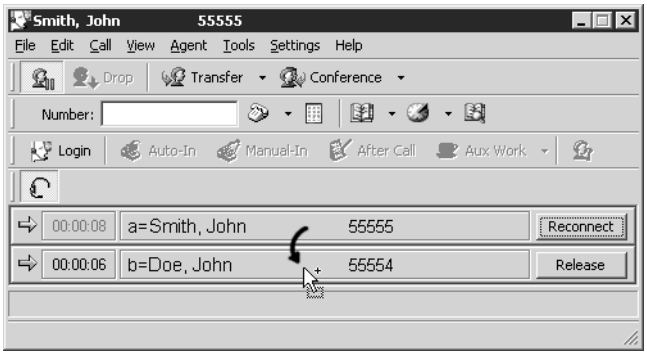
Conferencing call appearances

To conference a call with another call in the main window:

1. Two or more different calls are made to this agent and are displayed in the main window.
2. Use the drag-and-drop method to move the top-most Call Information Panel to the call that will be connected to the conference.

   Avaya IP Agent displays a pop-up menu listing the transfer and conference types.

Example:



3. Select a **conference** option from the pop-up menu.

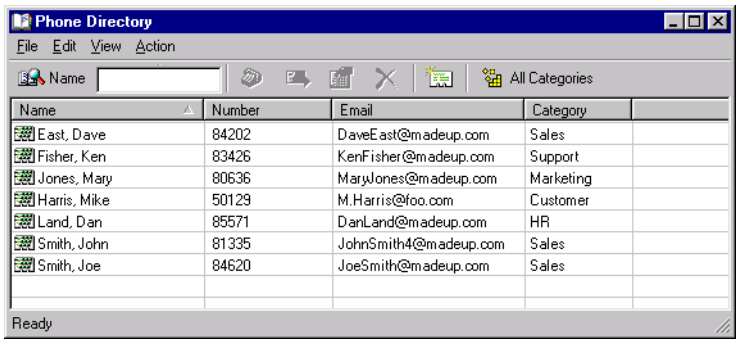
   The selected call is conferenced with the other call in the main window.

Conferencing with an entry in the Phone Directory window

To conference a call to an entry in the **Phone Directory** window:

1. While on an active call, select **Tools** > **Phone Directory**.

   Avaya IP Agent displays the **Phone Directory** window.



2. Use the drag-and-drop to move the entry in the **Phone Directory** window you want to conference onto the *Call Information Panel* (CIP).

   Avaya IP Agent displays a pop-up menu listing transfer and conference options.

3. Select a **conference** option from the pop-up menu.

   The entry in the **Phone Directory** is conferenced with the agent and the selected call.

Handling outgoing calls

There are several ways you can make the handling of outgoing calls more efficient. You can use a Recent Calls list, a Speed Dial number, or an abbreviated dial button.

Note:

In the Phone Directory, customers may notice that all telephone numbers are prefixed with a "+1". All external telephone numbers are displayed in the Phone Directory in canonical format. This format is universally constant and allows this number to be dialed from anywhere in the world. This number is only dialed if deemed necessary through the Dialing Properties of your PC.

For example, a user with a laptop may have two or more sets of Dialing Properties configured. In the office, one set of Dialing Properties cause a number to be dialed in order to access an external line. Alternatively, the same laptop could have a Dialing Properties set which does not use an external line number for when the user is at home or traveling. The format of telephone numbers in the Phone Directory ensures that all of these configurations will work without having to change the format.

This section contains the following topics:

Recent Calls list

You can quickly dial or redial recent incoming or outgoing calls by using a recent calls list. Phone numbers are not duplicated in the list, so if the last ten calls are to the same number, the number will only be displayed in the list once. Calls are only added to the list if they contain a valid phone number.

Before you begin

The following items should be read and understood regarding the Recent Calls list:

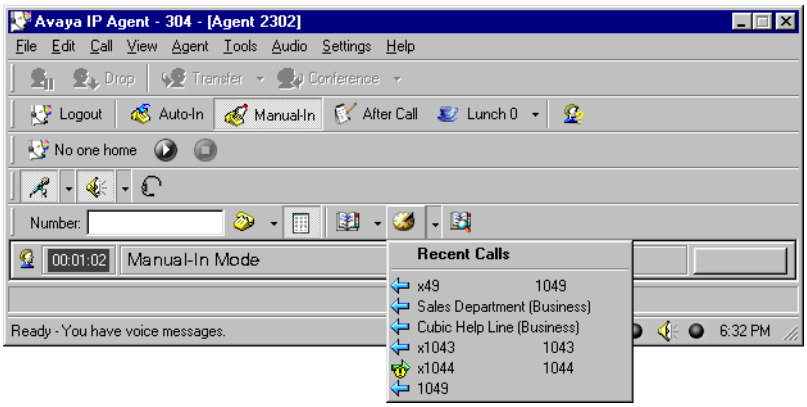
- You or your system administrator can control the number of recent call numbers displayed by setting the number in the **Program Options** dialog box.
- The list may show the last 25 unique numbers recorded in the **Call History** log. Numbers from other sources. Abbreviated dial buttons or numbers dialed on active calls (pin numbers) are not included in the list.
- Letters dialed; for example, 1800GOAVAYA, will appear in the recent calls list as entered, and not as the number translation.

Steps

To make a call using the Recent Calls list:

1. Select the down arrow next to the **Call History** button.

   Avaya IP Agent displays a list of previously dialed and received numbers.



2. Select the number you want to dial.

   A call appearance is created and the selected telephone number is dialed.

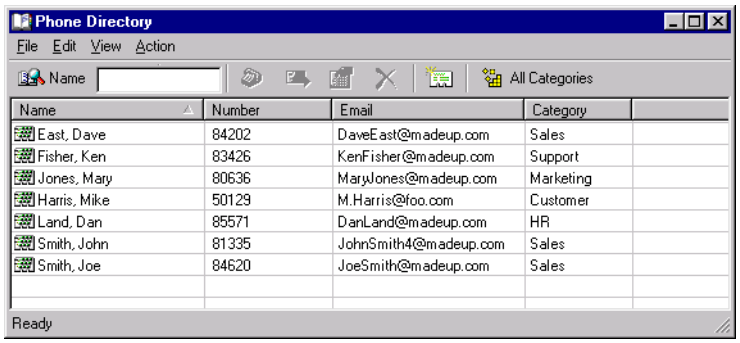
Using the Phone Directory

The Phone Directory feature stores contact information and makes it possible for you to access this information quickly as well as contacting those persons defined through telephone and e-mail messages.

The Phone Directory allows you to store different types of information as seen in the following list:

- Name
- Address
- Email
- Category
- Telephone numbers
- Notes

The Phone Directory window



Menu bar

The following list provides the menu bar items available for the **Phone Directory** window:

- **File**
  - — **New** – This item displays the **Properties** dialog and allows entry of a new contact.
  - — **Import**
    - **Text File (Comma Separated Values)** – This item allows you to import a .CSV file containing contacts and their associated information.
    - **IP Softphone R1 Phonebook** – This item imports the Phonebook file from *DEFINITY IP Softphone R1*. Note that IP Softphone and IP Agent cannot be co-resident on the same workstation.

— **Export** – This item exports the Phone Directory to a comma-separated value file (.CSV)

Note:

The entries for the comma-separated values are listed below in the order that they appear:

- Name
- Address
- Email
- Business
- Business Fax
- Home
- Home Fax
- Mobile
- Assistant
- Car
- Company
- Pager

Each item must be enclosed within quotation marks.

— **Search Public Directory** – This item opens the Search Public Directory window which allows searching for contact information through an Lightweight Directory Access Protocol (LDAP) service. Entries can be added to the Phone Directory through the Search Public Directory window. For more information on this feature, see Using a Public Directory with Avaya IP Agent on page 181.

— **Close** – Selecting this item closes the **Phone Directory** window.

- **Edit** – Use this menu to perform the following tasks:
  — Edit the displayed information for the selected contact (**Name**, **Number**, **Email**, **Category**).
  — Delete the selected contact (**Delete**).
  — View all information for the selected contact (**Properties**).
  — Add, delete, or modify the categories defined in the Phone Directory (**Categories**).
- **View** – Use this menu to determine how the entries appear in the **Phone Directory** window. These items are similar to those used in *Windows Explorer*: **Large Icons**, **Small Icons**, **List**, and **Details** (default).

- **Action**
  - **Call:** (*name*) – Select this menu item to initiate a telephone call to the highlighted contact.
  - **Send Email** – Select this menu item to initiate an e-mail message to the highlighted contact.

Toolbar

The toolbar of the **Phone Directory** window contains the following controls:

- **Name/Number** – This field allows the dynamic filtering of the entries in the Phone Directory. When the label of this field is **Name**, each character entered causes only those entries matching the filter to remain visible. For example, entering the letter, *S*, will cause all entries that do not begin with that letter to be hidden.
  This field can also be set to filter by telephone number. Clicking the label of this field displays a drop-down list allowing you to select the **Number** option. When this option is enabled, any numbers entered in this field are used to filter the entries. Unlike the **Name** option, the filtering is not sequential; any entries containing the string of numbers entered will remain visible. Additionally, any punctuation existing in the entry is ignored. For example, entering the numbers, 123, would match against the following entries:
  - (555) 555-1234
  - (800) 123-5555
  - 1 (230) 555-5555
  - 512-3555
- **Dial Number** – Select this button to dial the telephone number of the highlighted entry.
- **Send Email** – Select this button to open an e-mail message to the highlighted entry.
- **Properties** – Select this button to display a dialog containing the details of the highlighted entry that also allows modification of this information.
- **Delete** – Select this button to delete the highlighted entry.
- **New entry** – Select this button to display the **Properties** dialog and enter the information for a new contact.
- **Categories** – Select this button to display a list of all categories defined in the Phone Directory and to filter the existing contacts. Selecting one of the categories in this list results in only those contacts assigned to that category remaining visible.

Main window usage

Within the main window, you can perform the following actions on a selected contact:

- With the mouse, right-click on an entry to display a popup menu containing the following items:

  - — **Call** (*contact*) – Initiates a call to the selected contact.
  - — **Edit** (**Name**, **Number**, **Email**, **Category**) – Allows you to directly edit the information for the selected contact in the main window.
  - — **Delete** – Removes the selected contact from the Phone Directory.
  - — **Properties** – Displays a dialog listing all information for the selected contact and allows editing of that information.
- Press the **Enter** key or double-click the mouse to initiate a call to the selected contact.
- Press **Alt** + **Enter** to display all information for the selected contact.
- Press the **Delete** key to remove the selected contact from the Phone Directory.

You may also sort the entries in the Phone Directory by left-clicking the title of any column. The sorting will be done based on the column selected and will alternate between ascending to descending order with subsequent clicks.

More information

The following topics provide additional information on the use of the **Phone Directory** window:

- Transferring to an entry in the Phone Directory window on page 101
- Conferencing with an entry in the Phone Directory window on page 109
- Administering and using Speed Dial on page 117
- Searching a Public Directory on page 184

Administering and using Speed Dial

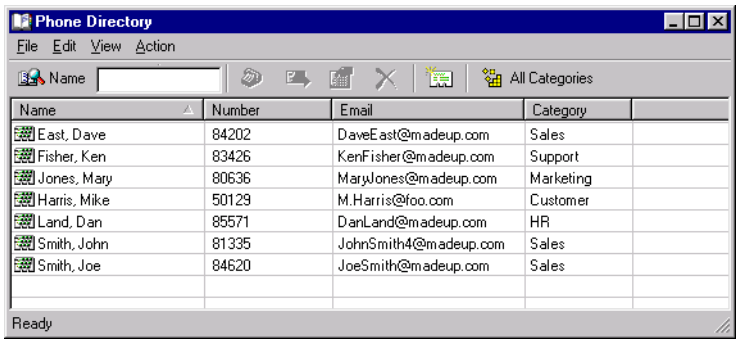
Avaya IP Agent lets you determine Speed Dial numbers in the **Phone Directory Properties** dialog box. A Speed Dial number can be any number in the **Phone Directory** and can contain up to a maximum of 25 telephone numbers.

Steps

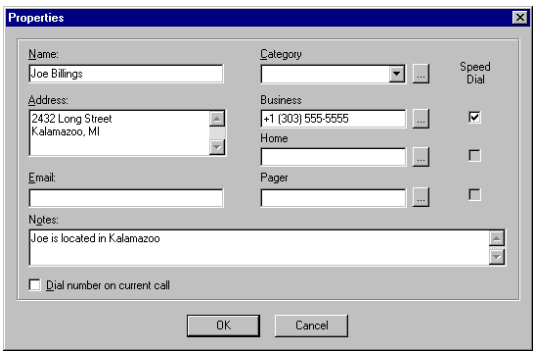
To use Speed Dial:

1. In the Avaya IP Agent main window, select **Tools** > **Phone Directory**.

   Avaya IP Agent displays the **Phone Directory** dialog box.

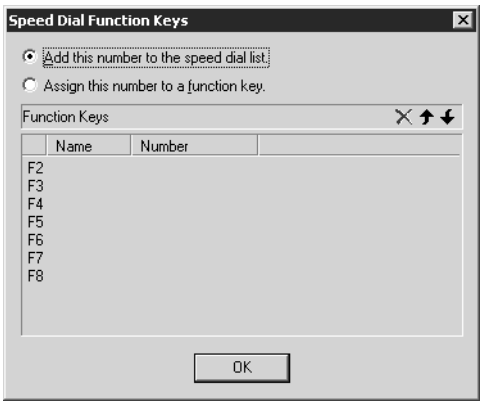


2.

If...	Then...
You are creating a new entry	Select **File** > **New Entry** from the menu bar.
You are editing an entry	Highlight the entry and select **View** > **Properties** from the menu bar. Avaya IP Agent displays the **Properties** dialog box. 

3. Enter or edit the appropriate information in the **Properties** dialog box.
4. Place a check mark in the **Speed Dial** check box next to the telephone number that you want to use as a Speed Dial number.

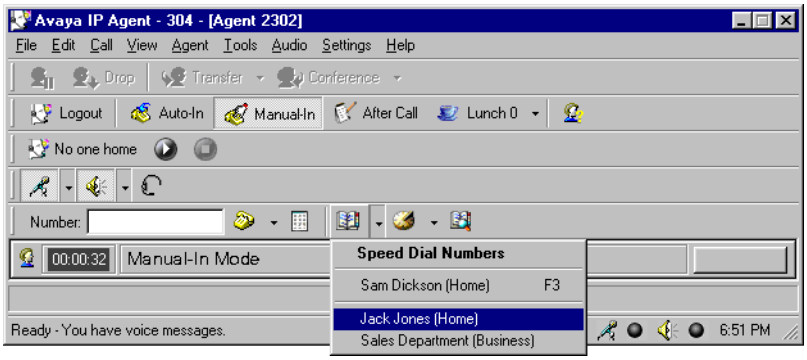
   Avaya IP Agent displays the **Speed Dial Function Keys** dialog.



5. If you want to have the telephone number for this **Phone Directory** entry available when a function key such as F2, F3, ..., F8 is pressed, select the **Assign this number to a function key** option.

   The **Phone Directory** entry appears in the **F2** row.
6. If you want to assign this new entry to another function key, highlight it and use the up and down arrow icons in the dialog to move the entry in the list.
7. When you are satisfied with the function key that this number has been assigned to, press the **OK** button.
8. To use a Speed Dial number, select the down arrow next to the **Phone Directory** button in the Avaya IP Agent main window.

   Avaya IP Agent displays the Speed Dial list.



   If you have assigned a **Phone Directory** entry to a function key, simply press that key for that telephone number to be dialed.

9. Select the party you want to call.

   A call appearance is created and the telephone number is dialed.

Abbreviated Dial button

If the Abbreviated Dial feature has been administered for the DEFINITY system for your physical station terminal, you can store selected telephone numbers in the **Phone Features** dialog box for quick and easy dialing. Each number can be a complete or partial telephone number, an extension number, a trunk, or feature code.

Steps

To make a call using an Abbreviated Dial button:

1. Select **Tools** > **Phone Features**.

   Avaya IP Agent displays the **Phone Features** dialog.

2. In the **Phone Features** dialog, select the Abbreviated Dial button associated with the number you want to dial.

   A call appearance is created and the selected telephone number is dialed.

   The button label for an abbreviated dial is a number; for example, 51008, and the button label for an auto dial button is autodial plus the number; for example, autodial 51008.

Chapter 6: Dialog Reference

This section provides descriptions of the graphical interfaces used in Avaya IP Agent and their basic functionality. Only those interfaces not described through other sections in this document appear here.

This section contains the following topics:

Main window and menus

This section describes the menus and panels in the Avaya IP Agent main window.

This section includes the following topics:

Menu bar

The Avaya IP Agent main window provides full-function, multi-line telephony support on your PC. This window is also used to access all the features found in Avaya IP Agent.

This section defines all of the items available in the Avaya IP Agent menus. Some menu items only appear when they are valid for your current configuration. For example, the **Call** menu item is not available in an *IP Endpoint* configuration when a call is not currently active. Other menu items and buttons on the interface will be disabled when their functionality cannot be initiated at that time because of configuration, call instance, or agent state.

This section contains the following topics:

File menu

The following items are available on the **File** menu item:

- **Login**, **Logout**, **DEFINITY Login**, or **DEFINITY Logout** – These items appear as the first item in this menu and are used for logging the station or agent in and out of the DEFINITY system.

Note:

These items to do not appear for Avaya CALLMASTER VI configurations.

- **Import Settings** – This menu item gives you the ability to open a file containing settings from another Avaya IP Agent installation and apply those settings to this installation.
- **Export Settings** — This menu item will save the settings from this installation of Avaya IP Agent and save them to a file. This file can then be re-imported to this PC or to another PC with Avaya IP Agent.
- **Exit** – Performs the necessary logouts for the agent and the DEFINITY system and closes Avaya IP Agent.

Imported and exported settings

Imported and exported files include all of the following settings:

- All settings available in the **Program Options** window
- Screen pops
- Lightweight Directory Access Protocol (LDAP) servers and settings
- Personal Phone features
- Phone features
- Abbreviated Dialing settings
- Call Center features
- Telephone button labels
- Audio settings
- Speed-dial settings

Edit menu

The following items are available on the **Edit** menu:

- **Cut** – Removes any highlighted text in the **Number:** field and places it on the Windows clipboard.

- **Copy** – Copies any highlighted text in the **Number:** field and places it on the Windows clipboard.
- **Paste** – Retrieves the last item placed on the Windows clipboard and places it in the **Number:** field.

Call menu

The **Call** menu is only visible when a call is made or received.

The following items are available on the **Call** menu:

- **Release** – Terminates an active call.
- **Drop** – Disconnects from a call without requiring you to hang up the handset, turn off the speakerphone, or press the switchhook.
- **Hold** – Places a call on hold until you can return to it. While the call is on hold, you can place another call, activate a feature, or answer another call.
- **Transfer** – Sends a call from your extension to another extension or outside number. Use this feature when the other party on the call needs to speak with someone else. There are three different types of transfers available. See Transfer types on page 126 in this section for more information.
- **Conference** – Allows you to add other parties to a call There are two different types of transfers available. See Conference types on page 127 in this section for more information.

Important:
6400 series telephones must have a `drop` button administered on the DEFINITY system in order for the *Drop* feature in the Avaya IP Agent window or menus to function properly.

Transfer types

The following types of call transfers are available with Avaya IP Agent:

- **Basic Transfer** – Select **Transfer**, dial the number, announce the call, and select **Transfer** again.

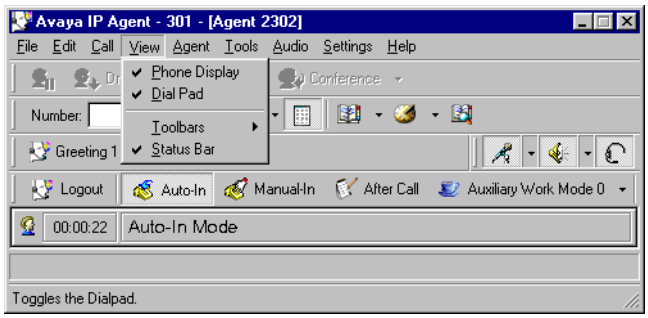
- **Unsupervised Transfer** – Select **Transfer**, enter the number to be called in the displayed dialog, and select **OK** to transfer the call. You are not able to talk to the party receiving the transferred call with this type of transfer.
- **Enhanced Transfer** – Select **Transfer**, enter the number to be called in the displayed dialog, and select **OK**. You can announce the call and then, in the displayed message box, select **Yes** to complete the transfer or **No** to cancel the transfer.

Conference types

The following types of call conferencing are available with Avaya IP Agent:

- **Basic Conference** — Select **Conference** which displays another call appearance. Dial the number of the party to add to the conference, announce the conference to the new party, and select **Conference** again to add the new party.
- **Enhanced Conference** — Select **Conference** which displays a dialog box, enter the number to call in the appropriate field, and select **OK**. After announcing the conference to the new party, select **Yes** from the displayed message box to add the new party.

View menu



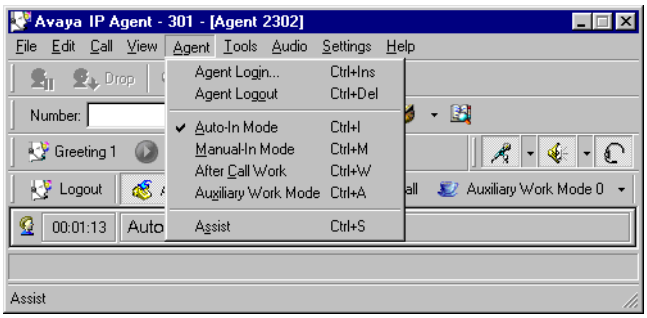
The following items are available on the **View** menu:

- **Phone Display** – Enabling this item displays a panel above the status bar. This panel can display information from sources such as VuStats or call-prompting digits.
- **Dial Pad** – Enabling this item displays a **DialPad** window which contains a series of numbers and symbols arranged like those on a telephone keypad. You can use your mouse to dial numbers on the **Dial Pad**.

- **Toolbars** > **Show Labels** – Enabling this item displays labels for the buttons on the Phone Buttons toolbar and the Agent toolbar.

- **Toolbars** > **Phone Buttons** – Enabling this item displays the Phone Buttons toolbar which contains buttons for the Drop, Transfer, Conference, and Hold functions.
- **Toolbars** > **Dial Number** – Enabling this item displays the Dial Number toolbar which provides a field for entering digits as well as the buttons used to access the call history, the phone directory, the **DialPad**, and the public directory search feature.
- **Toolbars** > **Audio Control** – Enabling this item displays the Audio toolbar which allows the user to enable or disable audio transmission, audio receiving, and the headset. This toolbar is only available for Road Warrior (VoIP) configurations.
- **Toolbars** > **Agent** – Enabling this item displays the Agent toolbar which an agent can use to change their work states as well as a Login/Logout button.
- **Toolbars** > **Agent Greetings** – Enabling this item displays the Agent Greetings toolbar which is used to select, play, and stop agent greetings that have been previously recorded. This toolbar is only available for the Road Warrior (VoIP) and Avaya CALLMASTER VI configurations.
- **Headset** – Enabling this item displays the Headset toolbar which contains a button for answering a call or creating a new call appearance when a call is not currently active.
- **Status Bar** – Enabling this item displays the Status Bar at the bottom of the Avaya IP Agent main window. The Status Bar is used to display different types of information such as current activity, notification of voice messages, the state of Avaya IP Agent, tooltips, and others.

Agent menu



The following items are available on the **Agent** menu:

- **Agent Login** – This item displays the **Agent Login** dialog box for entering your EAS Agent login ID number and password.
- **Agent Logout** – This item enables you to log out so that calls are not routed to this extension.
- **Auto-In Mode** – This is an Automatic Call Distribution (ACD) work mode. Agents in the *Auto-In* mode are available to receive new calls as soon as their current call is released.
- **Manual-In Mode** – This is an ACD work mode where agents must use the Manual-In feature to re-enter the *Available* work state from the *AUX* or *ACW* work states.

- **After Call Work (ACW)** – This is an ACD work mode indicating that an agent is performing tasks related to their last call.
- **Auxiliary Work Mode (AUX)** – This is an ACD work mode indicated that an agent is not available to receive an ACD call. Depending on how the ACD is administered, the *AUX* work state can require that agents provide a reason code before the state can be assigned.
- **Assist** – This item causes a request for assistance from a skill supervisor.

Tools menu

The following items are available on the **Tools** menu:

- **Phone Features** – Selecting this item displays the **Phone Features** window which lists all feature buttons that have been assigned to this station.
- **Personal Phone Features** – Selecting this item displays the **Personal Phone Features** window which is used to create a smaller list of phone features that are used often or for ease of access.
- **Call History** – Selecting this item displays the **Call History** window which shows the history of all calls received by this station including calling party name, calling party number, date, time, duration, and call notes.
- **Phone Directory** – Selecting this item displays the **Phone Directory** window which is used to store names, addresses, phone numbers, and other information.
- **Search Public Directory** – Selecting this item displays the **Search Public Directory** window which allows the searching of LDAP servers by name, telephone number, or e-mail address.
- **Screen Pops** – Selecting this item displays the **Screen Pops** window which lists all of the screen pops that exist on this PC.
- **Agent Greetings** – Selecting this item displays the **Agent Greetings** window which lists all of the agent greetings that exist on this PC. This item is only available for the Road Warrior (VoIP) and Avaya CALLMASTER VI configurations.
- **VuStats Monitor** – Selecting this item displays the **VuStats Monitor** window. This window is used to view the VuStats information being sent to this station.

- **Program Options** – Selecting this item displays the **Program Options** dialog for Avaya IP Agent.

Audio menu

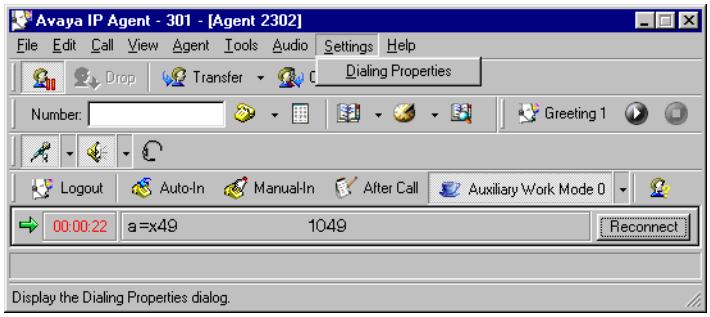
Important:

The **Audio** menu is only available for Road Warrior (VoIP) configurations.

The following items are available on the **Audio** menu:

- **Audio Monitor** – Selecting this item displays the **Audio Meters** window which displays the audio levels currently used for your microphone and speakers.
- **Volume Setting** – Selecting this item displays the **Audio Settings** window which allows you to verify that your headset is operating properly and to adjust the volume of the headset and microphone.
- **Audio Status** – Selecting this item displays the **Audio Status** window which allows you to verify that your microphone and speakers are operating properly.
- **Audio Options** – Selecting this item displays the **Audio Options** window which allows you to adjust the settings for IP audio such as bandwidth, full- or half-duplex, and gain levels.
- **Tuning Wizard** – Selecting this item runs the **Tuning Wizard** which queries the PC for the optimal settings for Voice over IP.

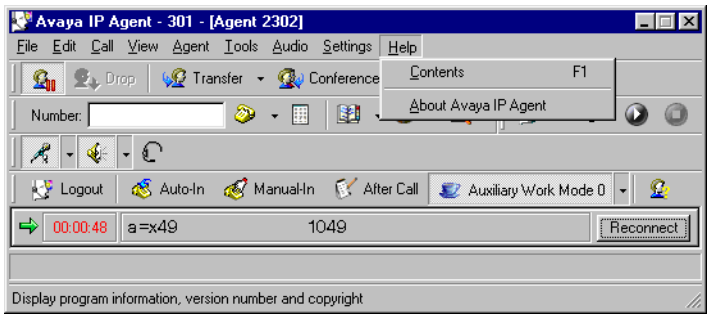
Settings Menu



The following items are available on the **Settings** menu:

- **Dialing Properties** – Selecting this item displays the Windows **Dialing Properties** dialog box. This dialog box is used to configure number formats, telephony drivers, and special dialing requirements.
- **Phone Configuration** – This menu item appears only for Avaya CALLMASTER VI configurations. Selecting this item downloads the PASTE code from the DEFINITY system to the Avaya CALLMASTER VI unit.

Help menu



The following items are available on the **Help** menu:

- **Contents** – Selecting this item displays the table of contents for Avaya IP Agent online help.
- **About Avaya IP Agent** – Selecting this item displays the **About** dialog box which provides product information for Avaya IP Agent.

Toolbars

This section provides descriptions and additional information on the toolbars of the Avaya IP Agent window. Toolbars contain buttons that provide quick access to specific commands and tools. Toolbars can be added or removed from the main window by selecting each one in the View menu on page 127.

This section contains the following topics:

Toolbar locations

Each toolbar can be moved to any location in the main window.

To move a toolbar:

1. Move the mouse pointer on the far-left side of the toolbar until the mouse pointer changes its appearance to the resizing icon.
2. Click and hold the left mouse button.
3. Drag the toolbar to the necessary location. The toolbar will change positions as you move it over different areas of the main window.
4. When the toolbar is correctly positioned in its new location, release the left mouse button.

Phone Buttons toolbar

The *Phone Button toolbar* provides quick access to the basic phone buttons: Hold, Drop, Transfer, and Conference.

The **Transfer** and **Conference** buttons provide drop-down lists allowing the agent to select the type of transfer or conference to make.

Dial Number toolbar

The *Dial Number toolbar* provides a **Number:** field for entering telephone numbers to dial.

Additionally, this field can be used to enter the first characters of a name from **the Phone Directory**. If the first character of the string entered in this field is a letter, the title of the field will be changed from **Number** to **Directory**. When you enter a partial name in this field and then press the Enter key or click the telephone button on the right side of the field, a pop-up menu is displayed with a list of all entries in the **Phone Directory** that match the string of characters. For example, entering `Sm` in the field and pressing the Enter key could display a pop-up menu with `Small, Jim`, `Smith, John`, `Smothers, Thomas`, and so forth. This field will only look for entries in the **Phone Directory** and cannot be used to search a public directory (LDAP).

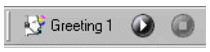
This toolbar also provides single-click for the following features:

- DialPad window
- Phone Directory window
- Speed-dial drop-down list
- Call History window
- Recent call drop-down list
- Search Public Directory window

Agent toolbar

The *Agent toolbar* provides buttons for agent login and logout as well as agent states for DEFINITY systems with Expert Agent Selection (EAS).

Agent Greetings toolbar



The *Agent Greetings toolbar* lets you select, play, and stop greetings. This toolbar is only available for Road Warrior (VoIP) and Avaya CALLMASTER VI configurations.

Audio toolbar

The *Audio toolbar* allows control of the following areas:

- microphone status and volume
- speaker status and volume
- headset status

This toolbar is only available for Road Warrior (VoIP) and Avaya CALLMASTER® VI configurations.

Headset toolbar

The *Headset toolbar* contains a button used to toggle the headset or handset on or off hook.

Important:
If this station has been set as a 606A1 phone type on the DEFINITY system, this button may not function properly in the Telecommuter configuration.

Information panels

This section contains descriptions and information on the areas of the main window that display information to the user.

There are three different types of panels in Avaya IP Agent:

Call Information Panel

Avaya IP Agent displays the *Call Information Panel* (CIP) only during incoming and outgoing calls. It provides information about the call, such as call status, call display, call duration, and an **Answer**/ **Release**/ **Reconnect** button.

If a call is currently active and it is listed in the **Phone Directory**, the name for that contact in the **Phone Directory** will be listed in the CIP instead of the information passed from the ACD.

The call status; *incoming*, *outgoing*, or *on-hold*, is displayed in the first section. Click the right mouse button on the CIP to display a popup menu containing available options for this call, such as hold, transfer, and conference.

Agent Information Panel

Avaya IP Agent displays the *Agent Information Panel* when there are no calls and agent status information is available. If you are logged in, the status information also includes the agent mode state.

Phone Display Panel

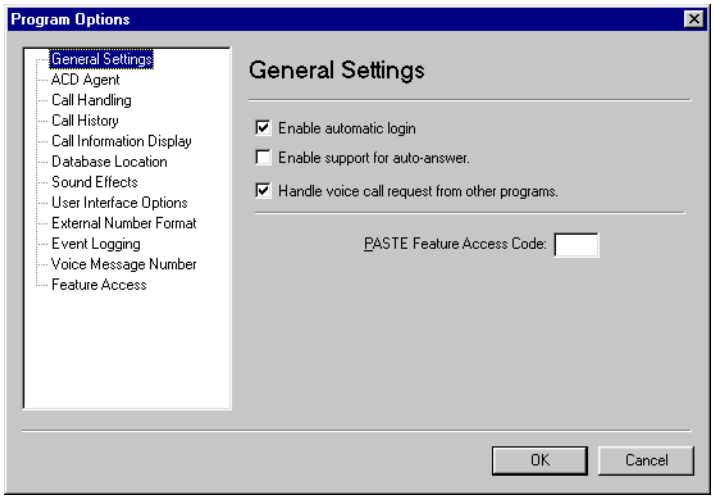
The *Phone Display panel* is a 40-character display that is located above the Status Bar. This display area is updated automatically with information from the DEFINITY system including call and non-call related information, such as call-prompting digits, VuStats data, and the local date and time display from the ACD.

Avaya IP Agent option dialogs

Use the **Program Options** dialog to configure the many feature areas of Avaya IP Agent. Select **Tools** > **Program Options...** to display this dialog.

This section contains descriptions for the following Avaya IP Agent dialogs:

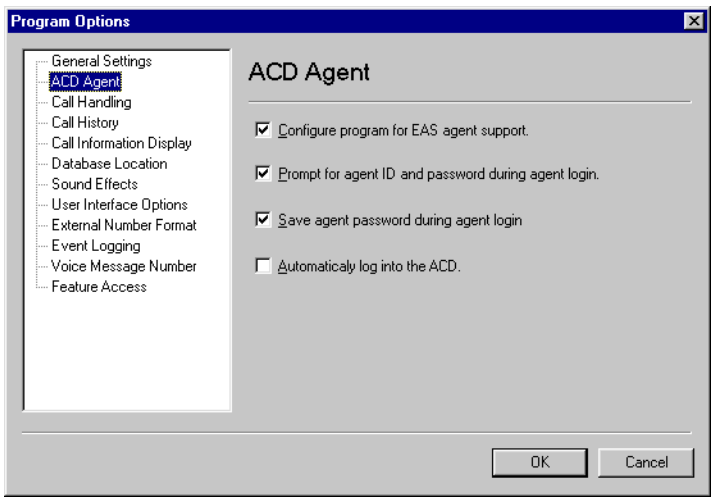
General Settings



The **General Settings** dialog contains the following items:

- **Enable automatic login** – This feature is only available for Road Warrior (VoIP) and Telecommuter configurations. When this check box is enabled, Avaya IP Agent will attempt to register with the DEFINITY system when it is started. It will use the information that was last used for a successful registration with the DEFINITY system.
- **Enable support for auto-answer** – When this check box is enabled, Avaya IP Agent will attempt to automatically connect an incoming call without requiring that the agent pick up the handset or click the **Answer** or headset buttons on the main window. For this feature to function, the station must be configured for auto-answer on the DEFINITY system.
- **Handle voice call request from other programs** – When this check box is enabled, Avaya IP Agent intercepts requests from other applications on the PC to begin a call and functions as if the call was started through Avaya IP Agent.
- **PASTE Feature Access Code:** – This feature is only available for Avaya CALLMASTER VI configurations. This field is used to re-enter the PC Application Software Translation Exchange (PASTE) code for a Avaya CALLMASTER VI unit. This code, which is found on the DEFINITY system, allows the Avaya CALLMASTER VI unit to translate information sent from the DEFINITY server to Avaya IP Agent. This option is only available for CALLMASTER configurations.

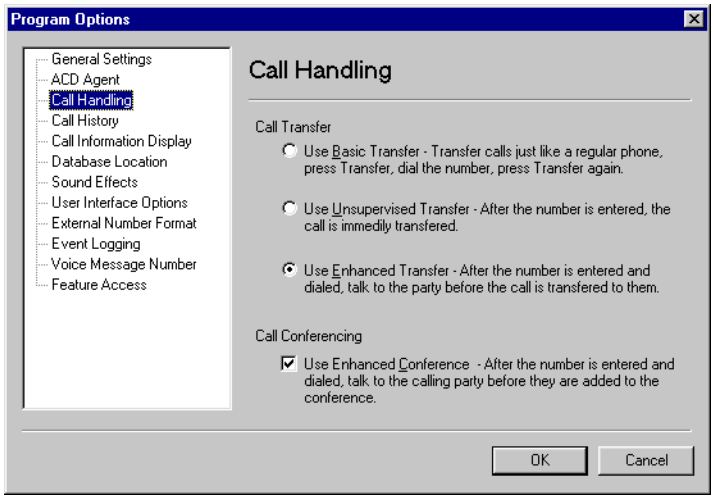
ACD Agent



The **ACD Agent** dialog contains the following items:

- **Configure program for EAS agent support** – Enabling this check box causes Avaya IP Agent to support the Expert Agent Selection (EAS) feature for DEFINITY systems. Otherwise, Avaya IP Agent will support a non-EAS environment.
- **Prompt for agent ID and password during agent login** – Enabling this check box causes a dialog to be displayed when an agent requests a login to the DEFINITY system. The dialog prompts agents for their agent ID and their password.
- **Save agent password during agent login** – Enabling this check box causes Avaya IP Agent to save the password of an agent after a successful login.
- **Automatically log into the ACD** – Enabling this check box will cause Avaya IP Agent to attempt to automatically log in the agent to the DEFINITY system after the station has successfully registered with the DEFINITY system.

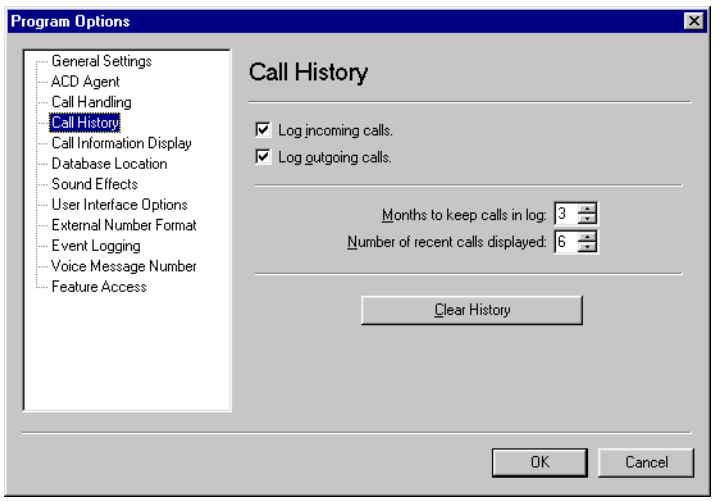
Call Handling



The **Call Handling** dialog contains the following items:

- **Call Transfer - Use Basic Transfer** – Selecting this option sets the default transfer mode to the basic style.
- **Call Transfer - Use Unsupervised Transfer** – Selecting this option sets the default transfer mode to the unsupervised style.
- **Call Transfer - Use Enhanced Transfer** – Selecting this option sets the default transfer mode to the enhanced style.
- **Call Conferencing - Use Enhanced Conference** – Enabling this check box sets the default conferencing mode to the enhanced style. Otherwise, Avaya IP Agent uses the basic conferencing mode.

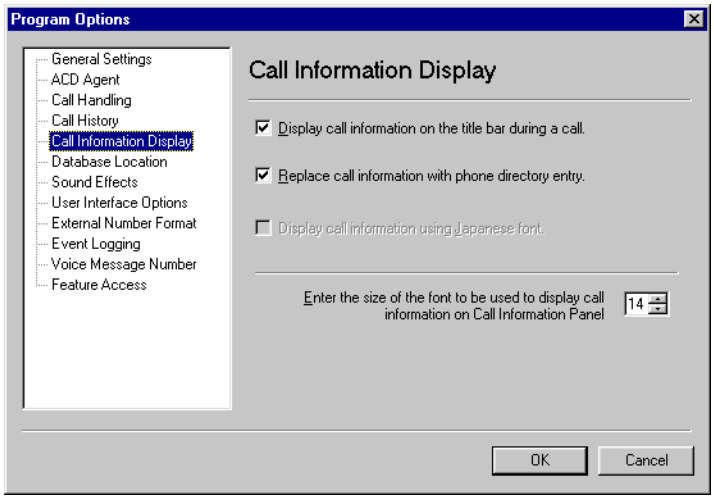
Call History



The **Call History** dialog contains the following items:

- **Log incoming calls** – Enabling this check box causes Avaya IP Agent to make a record of all calls received at this station in the **Call History** log.
- **Log outgoing calls** – Enabling this check box causes Avaya IP Agent to make a record of all calls made from this station in the **Call History** log.
- **Months to keep calls in log:** – Use this field to specify the length in months that call records are stored in the **Call History** log.
- **Number of recent calls displayed:** – Use this field to specify the number of the last incoming and outgoing calls that are displayed when you click the Call History quick list on the *Number toolbar* of the main window.
- **Clear history** – Selecting this button will clear all call records from the *Call History* log.

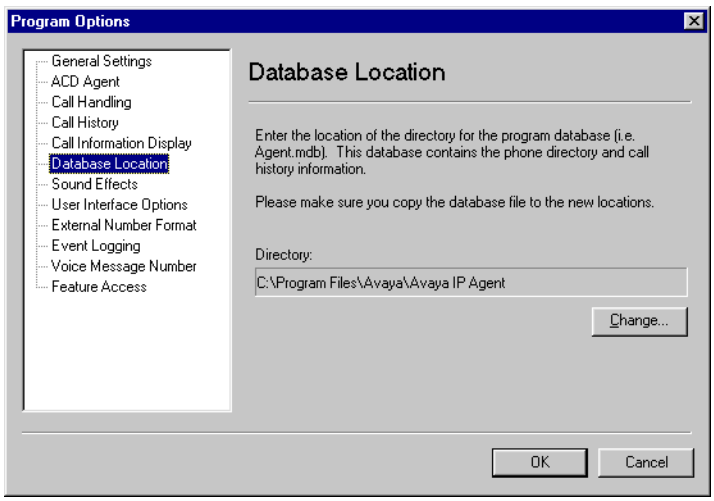
Call Information Display



The **Call Information Display** dialog contains the following items:

- **Display call information on the title bar during a call** – Enabling this check box causes Avaya IP Agent to display information about the active call in the title bar of the main window.
- **Replace call information with phone directory information** – Enabling this check box causes Avaya IP Agent to use information from the **Phone Directory** if the telephone number for the active call is found. If the telephone number for the active call is not found, the call information is sent by the DEFINITY system.
- **Display call information using Japanese font** – Enabling this check box will cause Avaya IP Agent to display all information in Japanese. This feature is only available if the Japanese version of Avaya IP Agent was installed.
- **Enter the size of the font to be used to display call information on Call Information Panel** – Use this field to select the point size of the font that Avaya IP Agent uses to display call information in the *Call Information Panel* on the main window.

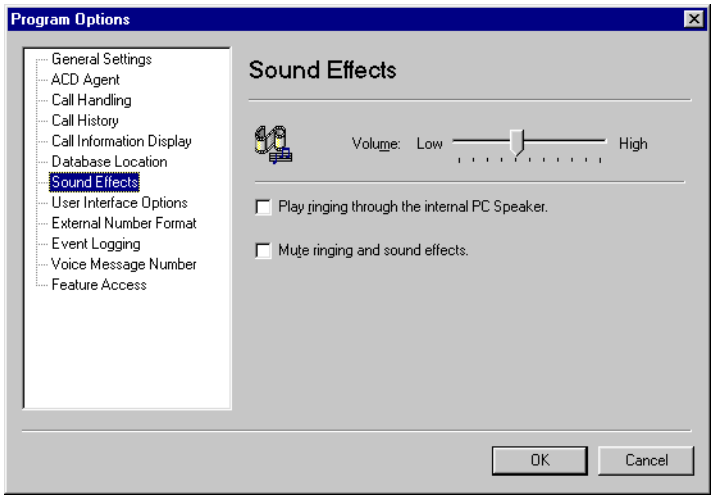
Database Location



The **Database Location** dialog contains the following items:

- **Directory:** – This field displays the current location of the database (`Agent.mdb`) that Avaya IP Agent uses to store Call History and the Phone Directory.
- **Change...** – Select this button to specify a different location for the Avaya IP Agent database (`Agent.mdb`).

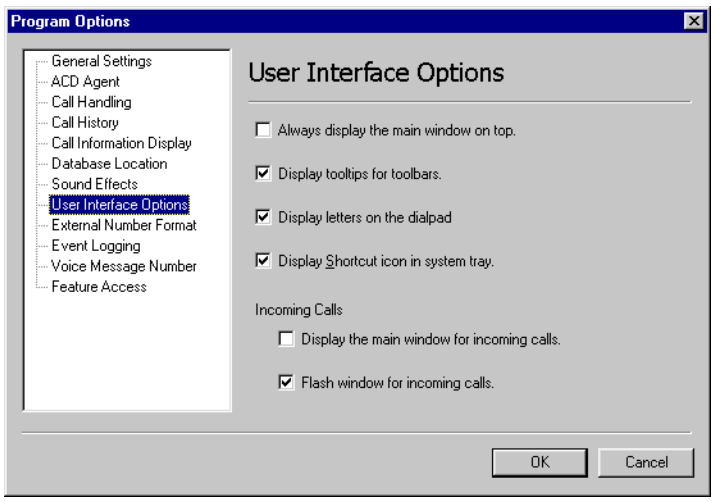
Sound Effects



The **Sound Effects** dialog contains the following items:

- **Volume:** – Use this slider control to adjust the volume at which the sound effects are played.
- **Play ringing through internal PC speaker** – Enabling this check box causes Avaya IP Agent to play the ringing for an incoming call through the internal speaker on the PC instead of playing it through the speakers attached to the sound card.
- **Mute ringing and sound effects** – Enabling this check box disables the playing of sounds generated by Avaya IP Agent.

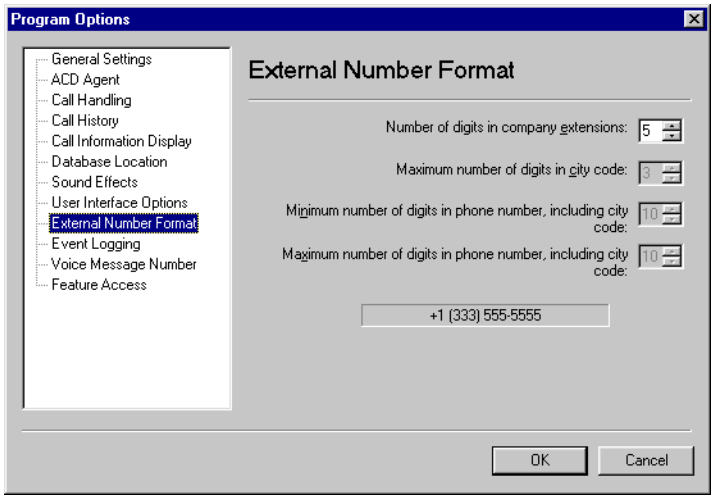
User Interface Options



The **User Interface Options** dialog contains the following items:

- **Always display the main window on top** – Enabling this check box will keep the Avaya IP Agent in front of all other windows.
- **Display tooltips for toolbars** – Enabling this check box causes tooltips to appear when the mouse cursor is placed over buttons on the toolbars of the main window.
- **Display letters on the dialpad** – Enabling this check box displays the letters that correspond to the numbers on the number pad of a telephone.
- **Display the Shortcut icon in the system tray** – Enabling this check box displays the Avaya IP Agent icon in the System Tray on the Windows Taskbar.
- **Incoming Calls - Display the main window for incoming calls** – Enabling this check box causes the main window to appear in front of any other application windows that are currently open when a call is incoming.
- **Incoming Calls - Flash window for incoming calls** – Enabling this check box causes the title bar of the main window to flash when a call is incoming. This resembles selection and deselection of the window.

External Number Format



The **External Number Format** dialog contains the following items:

- **Number of digits in company extensions:** – Enter the number of digits that are dialed for station extension numbers on your DEFINITY system.

  Important:

  MultiVantage R11 and later systems support extension numbers of up to seven digits. When the **Number of digits in company extensions** field is set to 7, IP Agent treats a dialed number consisting of seven digits as an internal extension. To place external calls, use a ten-digit format or prefix the seven-digit number with a 9.

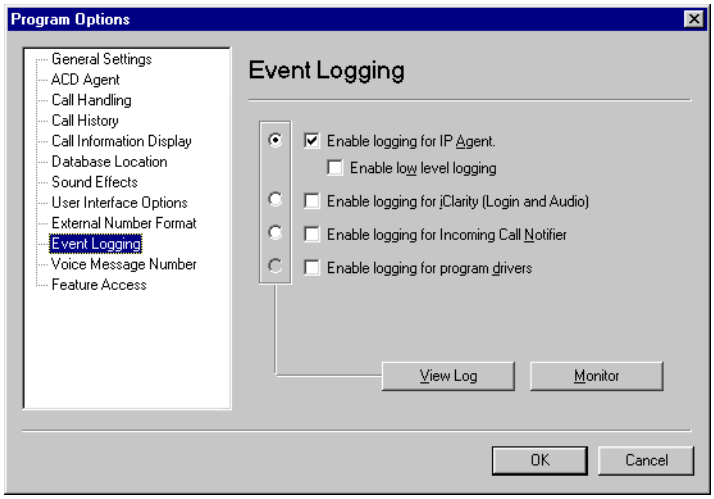
  If you do not set the **Number of digits in company extensions** field to 7, IP Agent treats an entry of seven digits as an external call.

- **Maximum number of digits in city code:** – Enter the number of digits that are dialed for telephone numbers that use a code to identify a city. This field may be disabled depending on the Windows dialing format currently specified.
- **Minimum number of digits in phone number, including city code:** – Enter the fewest number of digits that can be used to dial an outgoing call. This number should also include the code used to identify a city. This field may be disabled depending on the Windows dialing format currently specified.
- **Maximum number of digits in phone number, including city code:** – Enter the largest number of digits that can be used to dial an outgoing call. This number should also include the code used to identify a city. This field may be disabled depending on the Windows dialog format currently specified.

Note:

When you adjust any of the last three fields, the telephone number displayed in the text box at the bottom of the dialog reflects these changes.

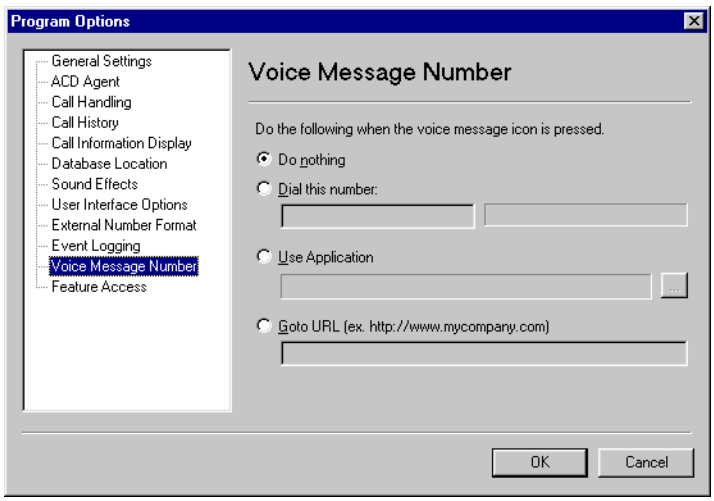
Event Logging



The **Event Logging** dialog contains the following items:

- **Enable logging for IP Agent** – Enabling this check box causes Avaya IP Agent to record all activity.
- **Enable low level logging** – Enabling this check box will also log activity related to the program files and their functionality.
- **Enable logging for iClarity (Login and Audio)** – Enabling this check box will cause the **Login** process and audio operations to create logs of activity. If you are not using a Road Warrior (VoIP) configuration, no audio entries will be present.
- **Enable logging for Incoming Call Notifier** – This feature is only available for Road Warrior (VoIP) and Telecommuter configurations. Enabling this check box creates a log file that records activity for the Avaya IP Agent process that signals Avaya IP Agent that a call is incoming.
- **Enable logging for program drivers** – Enabling this check box will create a log file containing recorded activity of the drivers for Avaya IP Agent.
- **View Log** – This button works for all log files. Selecting this button will display the log associated with the specific area designated by the options on the left side of each check box.
- **Monitor** – Selecting this options displays the **Events Monitor** window. This window displays all Avaya IP Agent events for the *Enable logging for IP Agent* feature as they occur. This window will only display information if the **Enable low level logging** option is enabled.

Voice Message Number

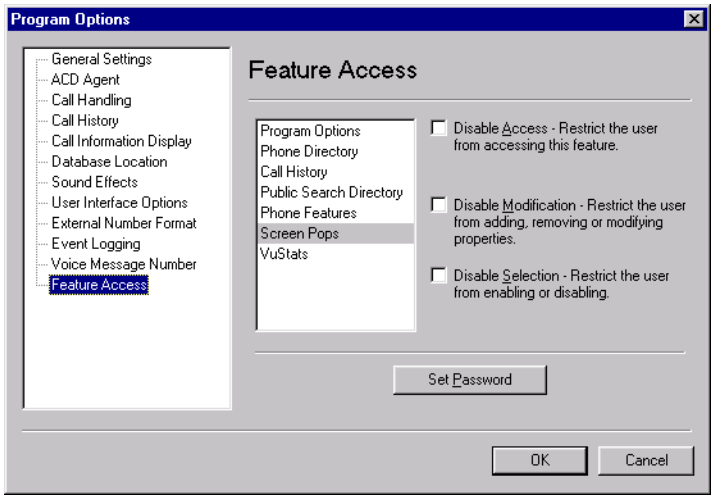


When you have voice messages waiting for you, the System Tray displays an icon. The options on this dialog determine what action to take when this icon is double-clicked.

The **Voice Message Number** dialog contains the following items:

- **Do nothing** – Avaya IP Agent will not initiate any action when the icon in the System Tray is double-clicked.
- **Dial this number:** – When you select this option, you must provide a telephone number or extension to dial in the associated field. When you double-click the icon in the System Tray, Avaya IP Agent dials the number in this field.
- **Use Application** – When you select this option, you must provide the path and filename of an executable to run when you double-click the icon in the System Tray.
- **Goto URL** – When you select this option, you must provide a Uniform Resource Locator (URL) address that will be displayed or run when you double-click the icon in the System Tray.

Feature Access



Important:

In order for the **Disable Modification** feature to function properly, an administrative password must be set through the **Set Password** button. Without setting a password, the **Disable Modification** check box can have a check mark placed in it, but it cannot restrict users from modifying any options because a password must be provided.

Use the **Feature Access** dialog to restrict users from administering or making changes to the various features of Avaya IP Agent. When any changes are made to the features, you must restart Avaya IP Agent for these restrictions to take effect.

The **Feature Access** dialog contains the following items:

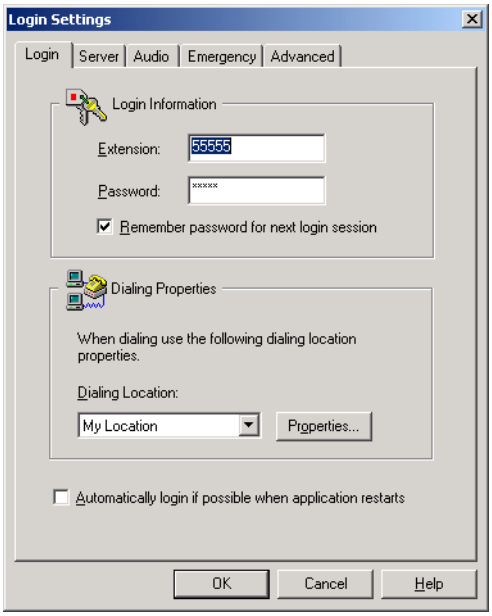
- **Feature List** – Each of the Avaya IP Agent areas listed in this box can be protected from modifications. To select a feature area, click on the feature in this list.
- **Disable Access** – Enabling this check box restricts the user from accessing this feature. This option is not available for the **Program Options** feature. When access is disabled for a feature, the feature will not appear in the menus on the menu bar.
- **Disable Modification** – Enabling this check box restricts the user from altering the feature.
- **Disable Selection** – Enabling this check box restricts the user from activating a screen pop by double-clicking it in the **Screen Pops** window.
- **Set Password/Enter Password** – Selecting this button displays the **Change Password...** dialog. When you enter a password, the options for the **Feature Access** dialog cannot be changed until the proper password is entered.

iClarity Settings dialogs

The iClarity settings dialogs are used to specify the settings for Telecommuter and Road Warrior (VoIP) configurations. These dialogs are accessed by pressing the **Settings** button on the **Login** window used to register with a DEFINITY system.

This section contains the following topics:

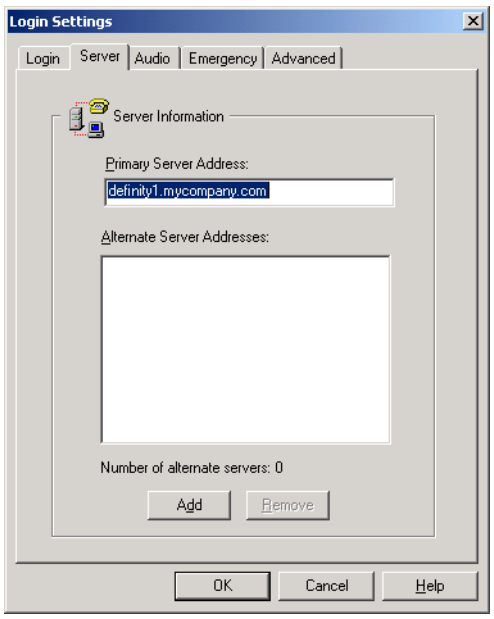
Login tab



The **Login** tab of the **Login Settings** dialog contains the following controls:

- **Extension** – The extension number of the station that will be used in conjunction with Avaya IP Agent.
- **Password** – The numeric password that is associated with the specified extension.
- **Remember password for next login session** – Place a check mark in this option if you do not want to enter your password each time you register with the DEFINITY system. If you are concerned with the possibility of unauthorized persons assuming this identity, leave this check box blank.
- **Dialing Location** – The dialing configuration Windows should use when placing telephone calls. For example, an agent using a laptop computer may have one configuration that dials a '9' for an outside line when in the office and a separate configuration that does not use the '9' prefix when the laptop computer is used in other locations.
- **Properties** – The setting for the dialing configuration used for the location displayed in **Dialing Location** list.
- **Automatically login if possible when application restarts** – Placing a check mark in this check box causes automatic registration with the DEFINITY system when Avaya IP Agent is started.

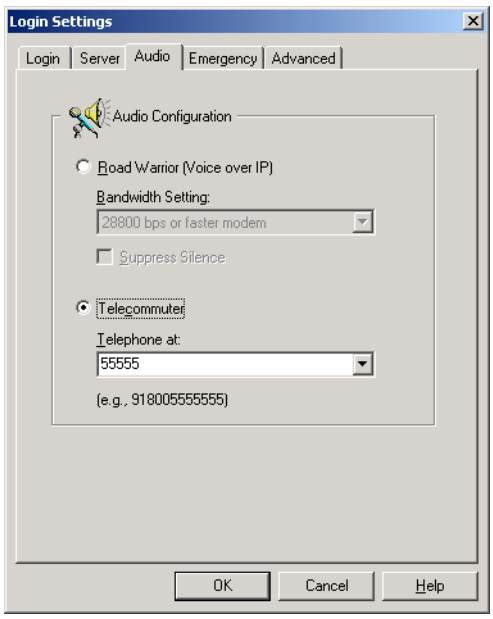
Server tab



The **Server** tab of the **Login Settings** dialog contains the following controls:

- **Primary Server Address** – The domain name or IP address of the DEFINITY system that this extension will connect to.
- **Alternate Server Addresses** – This list box is automatically populated after registration of the DEFINITY system specified in the **Primary Server Address** field completes successfully. Should communication with the primary DEFINITY system fail after successful registration, Avaya IP Agent will attempt to use the other DEFINITY systems in this field.
- **Number of alternate servers** – Displays the number of servers displayed in the **Alternate Server Addresses** field.
- **Add** – This button allows a manual addition of a DEFINITY system to the list of alternate DEFINITY systems.
- **Remove** – After you highlight an address in the Alternate Server Addresses field, selecting this button removes that entry from the list. Removing a DEFINITY system from the list in this manner only affects the current Avaya IP Agent session. If you log out of the DEFINITY system or shut down Avaya IP Agent and then reconnect, this list of alternate server addresses is again refreshed from the list kept on the DEFINITY system.

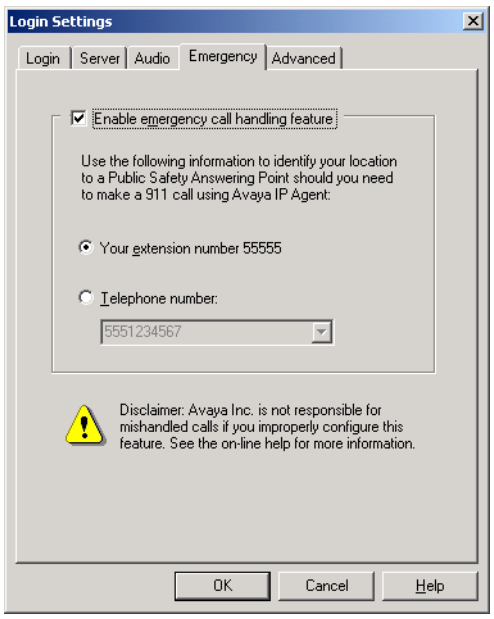
Audio tab



The **Audio** tab of the **Login Settings** dialog contains the following controls:

- **Road Warrior (Voice over IP)** – This option specifies that both the data and voice channels are both routed through the PC using IP.
- **Bandwidth Setting** – This list is used to select the rate at which data is transmitted and received.
- **Suppress Silence** – Enabling this option causes periods of silence not to be transmitted as voice signals. Otherwise, if this option is not enabled, the voice stream is constantly transmitted whether you are speaking or not.
- **Telecommuter** – This option specifies that the data channel is routed through the PC using IP. Voice communications are done through a normal telephone.
- **Telephone at** – This list is used to select the telephone number through which voice communications are to be conducted.

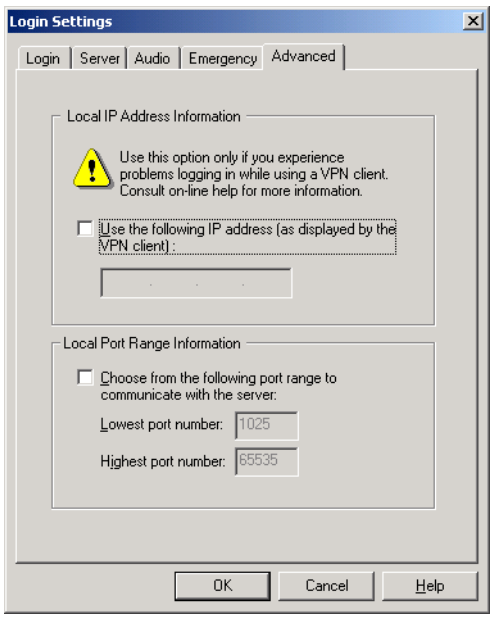
Emergency tab



The **Emergency** tab of the **Login Settings** dialog contains the following controls:

- **Enable emergency call handling feature** – Placing a check mark in this option indicates to the DEFINITY system that this endpoint supports this feature and that emergency calls placed from this endpoint should transmit the telephone or extension number specified to emergency services.
- **Your extension number** – Select this option if you want your extension number transmitted to emergency services personnel when an emergency call is made.
- **Telephone number** – Select this option if you want a specific telephone number transmitted to emergency services personnel when an emergency call is made. See Configuring stations on DEFINITY systems for the Emergency Call Handling Service on page 64 for more information regarding this feature.

Advanced tab



The **Advanced** tab of the **Login Settings** dialog contains the following controls:

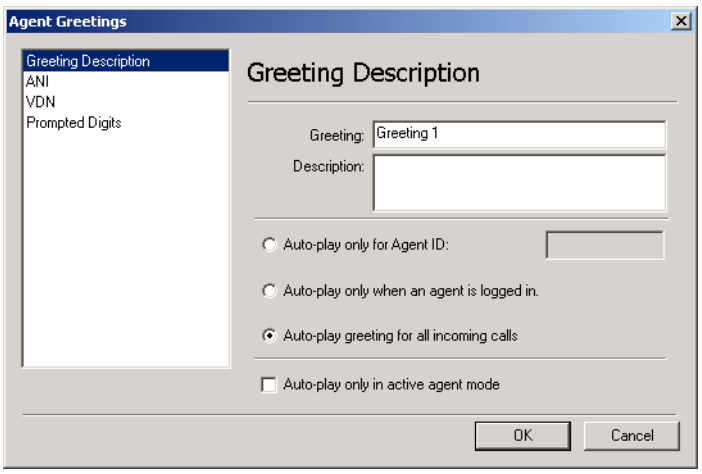
- **Use the following IP address (as displayed by the VPN client)** – Select this option if you need to replace the IP address of this PC with a different IP address so that transmissions from this PC are recognized by the VPN. The IP address specified cannot be `0.0.0.0`. The VPN information must be provided before registering with the DEFINITY system. For more information on using VPNs with Avaya IP Agent, see the `README.TXT` file in your Avaya IP Agent installation directory.
- **Choose from the following port range to communicate with the server** – This feature is used to restrict the iClarity IP Audio to a select range of ports with which to communicate through a network firewall. The range specified must contain at least 100 ports.
- **Lowest port number** – Use this field to specify the lowest port that the iClarity IP Audio will use. The minimum for this field is 1025.
- **Highest port number** – Use this field to specify the highest port that the iClarity IP Audio will use. The maximum for this field is 65535.

Agent Greetings settings dialogs

The Agent Greetings setting dialogs are used to configure a single Agent Greeting. Through these settings, you can configure the instances when this Agent Greeting will be played.

This section contains the following topics:

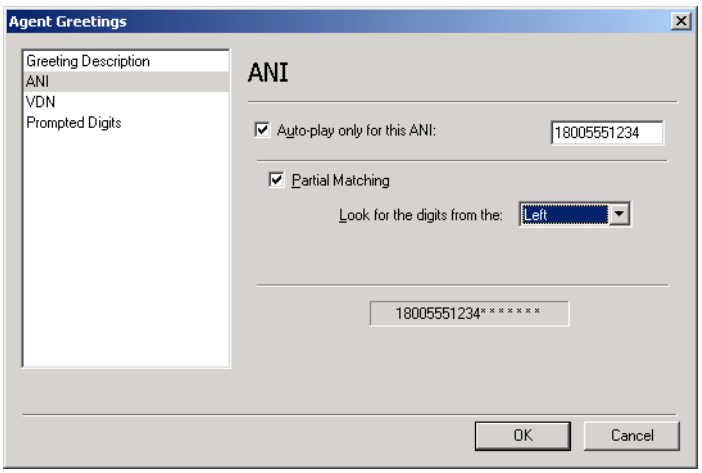
Greeting Description settings



The **Greeting Description** dialog contains the following controls:

- **Greeting** – This field is used to display or change the title of this Agent Greeting.
- **Description** – This field is used to enter a small amount of text describing this Agent Greeting.
- **Auto-play only for Agent ID** – If this option is selected, this Agent Greeting will only be played for incoming calls if the currently logged in agent ID matches the ID entered in the accompanying field.
- **Auto-play only when an agent is logged in** – If this option is selected, this Agent Greeting will only be played for incoming calls if the agent is logged in to the ACD.
- **Auto-play greeting for all incoming calls** – If this option is selected, this Agent Greeting will be played for all incoming calls even if the agent is not currently logged in to the ACD.
- **Auto-play only in active agent mode** – If this check box is enabled, this Agent Greeting will only play if the agent is in the *Auto-In* or *Manual-In* work state.

ANI settings

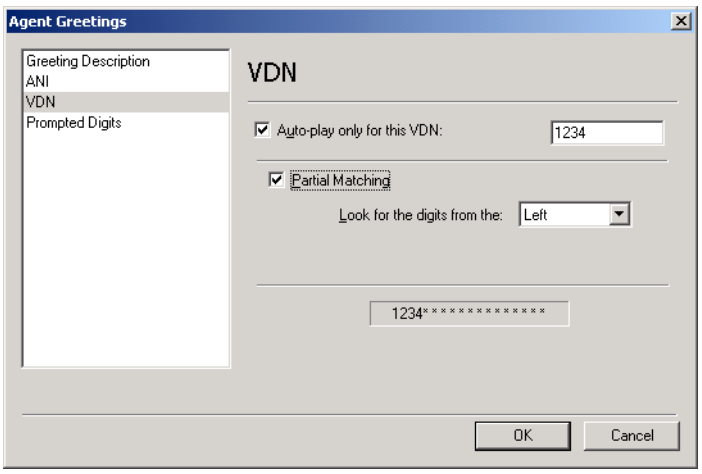


The **ANI** (Automatic Number Identification) dialog contains the following controls:

- **Auto-play only for this ANI** – This Agent Greeting will only be played if the ANI string contains the digits in the accompanying field.
- **Partial Matching** – Enabling this check box causes this Agent Greeting to be played if the digits in the previous field appear anywhere within the ANI string.
- **Look for the digits from the** — If you enable the **Partial Matching** option, you need to select the location in the ANI string where the digits are to be found. For example, if you select the **Left** option, the digits specified in this dialog must be the first digits in the ANI string.
- **Starting at** – This field only appears if the **Look for the digits from the** field is set to **Middle**. Use this field to specify how many digits from the left side of the string should be ignored before attempting to match the digits specified in this dialog.

The field at the bottom of this dialog displays the current settings of this dialog and how they are applied in searching an ANI string.

VDN settings

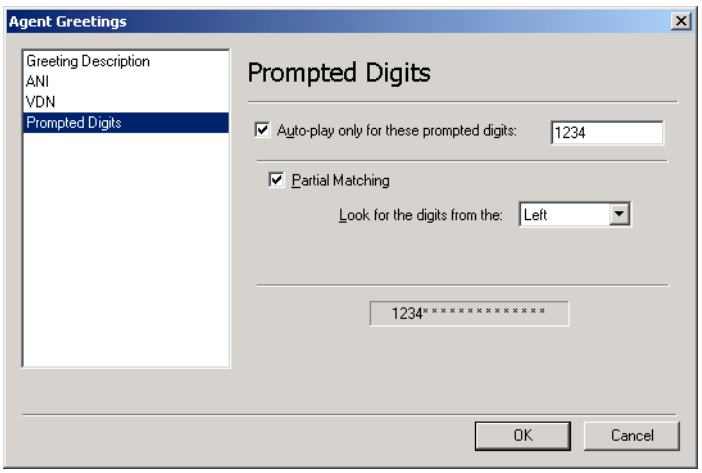


The **VDN** dialog contains the following controls:

- **Auto-play only for this VDN** – Enabling this feature causes this Agent Greeting to be played if the VDN on which the call is received matches the numeric string in the accompanying field.
- **Partial Matching** – Enabling this check box causes this Agent Greeting to be played if the digits in the previous field appear anywhere within the VDN string.
- **Look for the digits from the** – If you enable the **Partial Matching** option, you need to select the location in the VDN string where the digits are to appear. For example, if you select the **Right** option, the digits specified in this dialog must be the final digits in the VDN string.
- **Starting at** – This field only appears if the **Look for the digits from the** field is set to **Middle**. Use this field to specify how many digits from the left side of the string should be ignored before attempting to match the digits specified in this dialog.

The field at the bottom of this dialog displays the current settings of this dialog and how they are applied in searching a VDN string.

Prompted Digits settings



The **Prompted Digits** dialog contains the following controls:

- **Auto-play for these prompted digits** – Enabling this feature causes this Agent Greeting to be played if the digits entered by the caller during vector processing match the digits in the accompanying field.
- **Partial Matching** – Enabling this check box causes this Agent Greeting to be played if the digits in the previous field appear anywhere within the string of prompted digits.
- **Look for the digits from the** – If you enable the **Partial Matching** option, you need to select the location in the prompted digits string where the digits are to appear. For example, if you select the **Middle** option, the digits specified in this dialog must be within the string started from the position specified in the **Starting at** field.
- **Starting at** – This field only appears if the **Look for the digits from the** field is set to **Middle**. Use this field to specify how many digits from the left side of the string should be ignored before attempting to match the digits specified in this dialog.

The field at the bottom of this dialog displays the current settings of this dialog and how they are applied in searching the string of prompted digits.

Audio settings

This section provides descriptions of the **Audio Options** and **Audio Tuning Wizard** dialogs. These dialogs and the menu items for accessing them are only available for Road Warrior (VoIP) configurations.

This section contains the following topics:

Audio Options dialog

The **Audio Options** dialog contains the following items:

- **Using Headset or Handset (Full Duplex)** – Select this option button if you are using a headphone or a handset to speak to and hear the other party on a call. This option button is disabled if the **Audio Tuning Wizard** identified a half-duplex sound card in your PC.
- **Using PC Microphone and PC Speakers (Half Duplex)** – Select this option button if you are using a microphone and PC speakers to speak to and hear the other party on a call.
- **Automatic acoustic echo cancellation (Full Duplex)** – Select this option button if you are using a microphone and PC speakers to speak to and hear the other party on a call. This option uses the automatic acoustic echo cancellation feature, which automatically attempts to "filter out" echo. This option button is disabled if the **Audio Tuning Wizard** identified a half-duplex sound card in your PC or you are using Microsoft Windows NT 4.0.
- **Half-Duplex Sound Card** – Select this option button if you have a half-duplex sound card in your PC. This option button is disabled if the **Audio Tuning Wizard** identified a full-duplex sound card in your PC. If you are using Avaya IP Agent in the Road Warrior (VoIP) configuration, it is highly recommended that you use a full-duplex sound card for maximum quality.
- **Bandwidth Setting** – Select how your PC connects to the DEFINITY system. Avaya IP Agent uses the bandwidth setting to determine which codec to use with the DEFINITY system. The DEFINITY system supports the following codecs:
  - — *G.729a* – This codec may be used for 28800 bps or better modem connection; Cable, xDSL, or ISDN connection; and Local Area Network connection. (This codec is used for low-speed connections.)
  - — *G.723* – This codec may be used for 28800 bps or better modem connection; Cable, xDSL, or ISDN connection; and Local Area Network connection. (This codec is used for low-speed connections.)
  - — *G.711 u-law (CCITT u-law)* – This codec may be used for Cable, xDSL, or ISDN connection and Local Area Network connection. (This codec is used for high-speed connections.)
  - — *G.711 A-law (CCITT A-law)* – This codec may be used for Cable, xDSL, or ISDN connection and Local Area Network connection. (This codec is used for high-speed connections.)

  When you connect to the DEFINITY system, Avaya IP Agent checks the bandwidth setting you specified, and then determines the actual speed of the connection between your PC and the DEFINITY system. Avaya IP Agent then selects the appropriate codec.

Note:

The actual speed of the connection between your PC and the DEFINITY system determines which codec Avaya IP Agent uses.

- **Jitter Buffer** – Displays the size of the jitter buffer, which stores packets to ensure a consistent delivery of voice to your speakers or headset so the voice stream you hear does not contain gaps. The larger the jitter buffer, the longer the delay receiving audio from the other party.
- **Receive Gain** – Sets the gain for incoming sound during a call. It is recommended that this setting be between `0.1 – 100.0`.
- **Transmit Gain** – Set the gain for outgoing sound during a call. It is recommended that this setting be between `0.1 – 10.0`.
- **Audio Receive Clarity** – Adjusts the clarity for incoming sound during a call.
- **Suppress Silence** – Sets whether silence packets are transmitted when there is silence.
- **Comfort Noise** – Sets whether you want Avaya iClarity IP Audio to generate noise for you when the other party is not speaking. This noise indicates to you that the call is still active.

Audio Tuning Wizard

The *Audio Tuning Wizard* is a program that will detect the hardware and settings for your PC. It will also have you test the levels for your microphone and speakers for optimum performance. Each dialog of the *Audio Tuning Wizard* provides complete instructions on the tasks to be performed and, for that reason, are not described in this document.

Chapter 7: Agent Greetings

This section provides information and procedures regarding the creation and use of Agent Greetings through Avaya IP Agent.

The Agent Greeting feature frees you from having to repeatedly say the same greeting at the beginning of each call. When a call is answered, your microphone is muted and the selected greeting is played. After the greeting is complete, your microphone is unmuted and you are able to talk to the calling party.

Additionally, it is possible to configure Agent Greetings only to play for specific telephone numbers or VDNs from which calls originate.

This chapter includes the following sections:

Before you begin

The following items should be read and understood before you work with the Agent Greetings feature:

- Avaya IP Agent supports agent greetings for Avaya CALLMASTER VI endpoints and IP endpoints using the Road Warrior configuration. The Telecommuter configuration does not support agent greetings.
- In the Road Warrior configuration, you can store the agent greetings on your computer. The Road Warrior configuration will support up to 30 greetings of 15 seconds each; however, the number of greetings you can store on your computer is based on the disk space available.
- For viewing and configuring the optional settings for Agent Greetings, see Agent Greetings settings dialogs on page 157.
- Agent Greetings for Avaya CALLMASTER VI configurations are stored on the unit itself and not on the PC.

Creating Agent Greetings

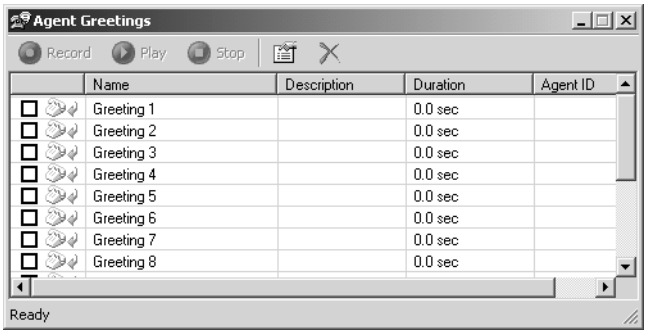
This section provides the procedure for recording an Agent Greeting.

Steps

To record an Agent Greeting:

1. Switch to an inactive mode to prevent interruptions from incoming calls when recording your greeting.
2. From the Avaya IP Agent main window menu bar, select **Tools** > **Agent Greetings**.

   Avaya IP Agent displays the **Agent Greeting** window.



3. Highlight an Agent Greeting in the list.

   Avaya IP Agent enables and updates the selected greeting.
4. Select the **Record** button.
5. By using the microphone on your headset or attached to the PC, say your greeting.
6. When you are finished recording your greeting, select the **Stop** button.

   Avaya IP Agent enables and updates the selected greeting.

Setting the active Agent Greeting

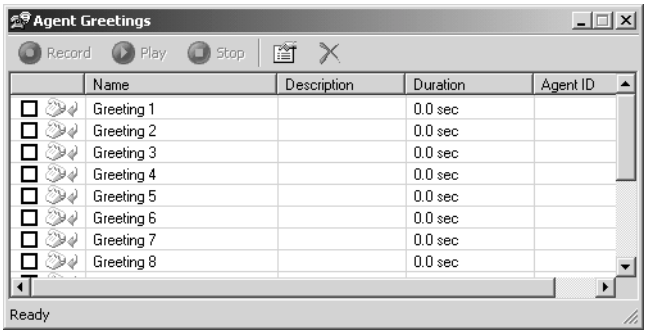
This section provides the procedure for setting an Agent Greeting as the one that will play for incoming calls.

Steps

To activate an Agent Greeting:

1. From the Avaya IP Agent main window menu bar, select **Tools** > **Agent Greetings**.

   Avaya IP Agent displays the **Agent Greeting** window.



2. Place a check mark next to the Agent Greeting that will be used for all incoming calls.

   There are some circumstances where it is possible to have more than one Agent Greeting active at a time. For example, if you set more than one Agent Greeting to play only if a call is received through different VDNs, these Agent Greetings can both be set active. This is the same for Agent Greetings that play for specific ANI or Prompted Digits as well, but not in combination.

3. Close the **Agent Greetings** window.

   Avaya IP Agent updates the Agent Greeting toolbar to display which greeting is currently active and will use this greeting for all incoming calls.

Alternate method

If you have the Agent Greetings toolbar displayed in the Avaya IP Agent main window, you can use the mouse to click the Agent Greetings button and, from the resulting menu, select a new Agent Greeting. This action makes the selected Agent Greeting active.

Deleting Agent Greetings

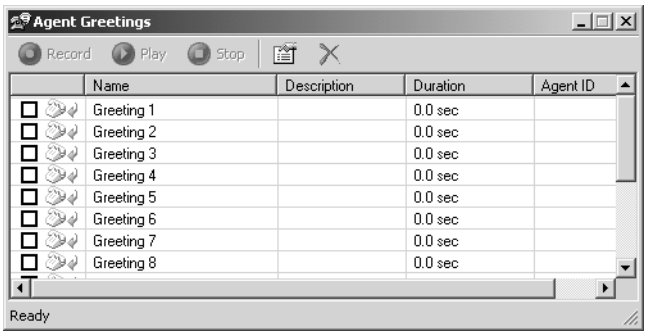
This section provides the procedure for deleting an existing Agent Greeting.

Steps

To delete an existing Agent Greeting:

1. From the Avaya IP Agent main window menu bar, select **Tools** > **Agent Greetings**.

   Avaya IP Agent displays the **Agent Greeting** window.



2. Highlight an Agent Greeting in the list.
3. Select the Delete button.

   Avaya IP Agent deletes the selected Agent Greeting.

   Note:

   The Delete button appears as the X in the **Agent Greetings** window.

Chapter 8: Using VuStats

The VuStats feature is used to pass contact center information from the DEFINITY system to a display on a station or extension. This feature allows the monitoring of contact center activity and statistics.

When VuStats buttons are added to the VuStats window, Avaya IP Agent will automatically display and update the VuStats information. Using Avaya IP Agent, the user will be able to specify how long the program monitors each transmission of VuStats information before it moves to the next one.

This section includes the following topics:

Configuring a station for VuStats through the DEFINITY system

In order for an Avaya IP Agent station to display VuStats information, the following configurations on the DEFINITY system must be made:

- The station must be assigned as a telephone type that has a display. Avaya recommends the 8434D or 606A1 telephone types.
- The station must have one or more buttons assigned with the `vu-display` feature. Different streams of VuStats information are available by specifying the `format` and `ID` parameters of the `vu-display` feature.
- For different views and formats for the VuStats feature, multiple VuStats configurations can be assigned to the buttons for this station.

Configuration

For information on configuring stations for the VuStats feature through your DEFINITY system, see the “VuStats (Category A)” section of the *DEFINITY Guide to ACD Call Centers*.

Definitions and reference material regarding the different VuStats fields on the forms of the DEFINITY system can be found in the *Administrator’s Guide* for your DEFINITY system.

Viewing a single set of VuStats information in Avaya IP Agent

This section provides the procedure for displaying a single set of VuStats information in the **Phone Display** toolbar of the Avaya IP Agent main window.

While a single set of VuStats information can be displayed in the VuStats Monitor as shown in the procedure, Running multiple VuStats in the VuStats Monitor on page 175, the method in this procedure saves viewable space on your Windows desktop.

Before you begin

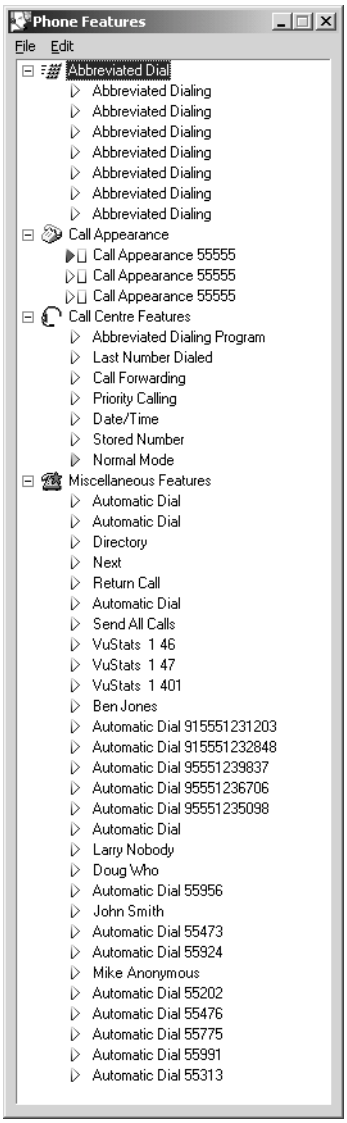
To view VuStats information in the main window, you must ensure that the **Phone Display** toolbar is visible. Select the **View** menu from the toolbar and verify that a check mark is present next to the **Phone Display** menu item. If a check mark is not present, select the item to enable it.

Steps

To display VuStats in the Avaya IP Agent main window:

1. From the Avaya IP Agent main window menu bar, select **Tools** > **Phone Features**.

   Avaya IP Agent displays the **Phone Features** window.



2. Select the VuStats information to view by double-clicking the associated entry in the **Phone Features** window.

   Avaya IP Agent displays the selected VuStats information in the **Phone Display** toolbar of the main window.

Running multiple VuStats in the VuStats Monitor

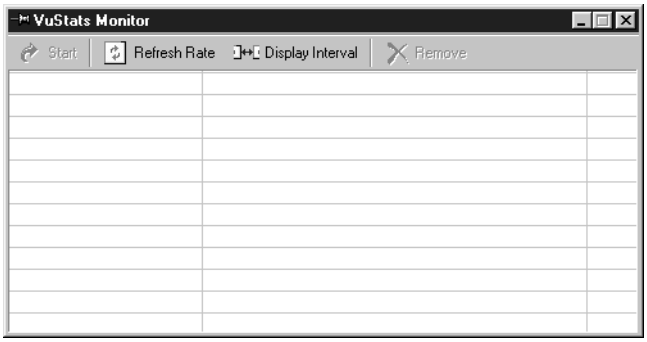
This section provides the procedure for displaying multiple lines of VuStats information on your PC through Avaya IP Agent.

Steps

To display multiple lines of VuStats information through Avaya IP Agent:

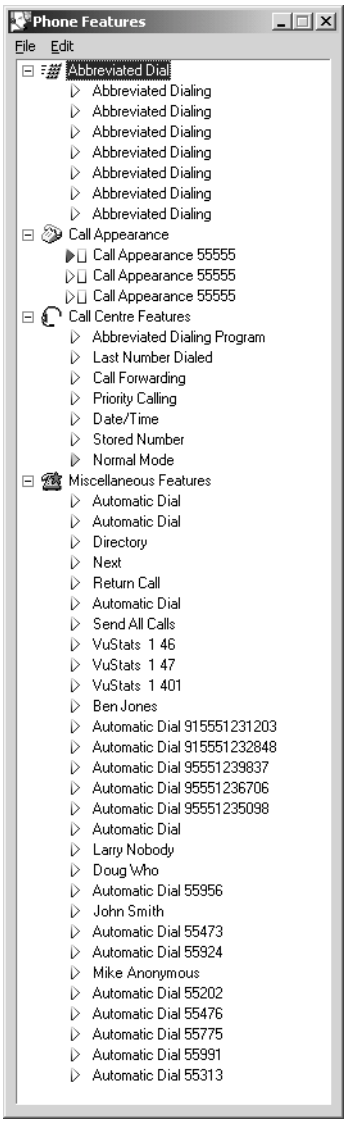
1. From the Avaya IP Agent main window menu bar, select **Tools** > **VuStats Monitor**.

   Avaya IP Agent displays the **VuStats Monitor** window.



   This window should be left open as you continue the following steps.

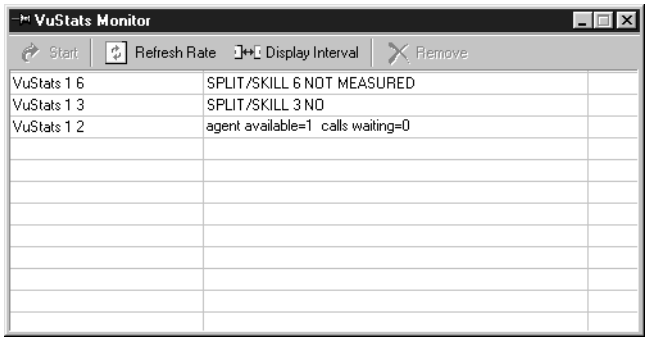
2. From the Avaya IP Agent main window menu bar, select **Tools** > **Phone Features**. Avaya IP Agent displays the **Phone Features** window.



3. Locate the VuStats information you wish to view and perform a right-click on it. Avaya IP Agent displays a pop-up menu for that item.

4. Select **Monitor VuStats** from the pop-up menu.

   Avaya IP Agent displays the information selected VuStats information in the **VuStats Monitor** window.



5. Repeat step 3 and step 4 for each available transmission of VuStats information that you want to view.
6. Click the **Start** button.

   Avaya IP Agent queries the statistics for the first VuStats item and continues through the list.

Adjusting intervals for monitoring VuStats

When VuStats are being displayed through the **VuStats Monitor**, you can configure the following time-related items:

- **Refresh Rate** – The period of time that passes before focus is changed from the last line of display in the list to the first line.
- **Display Interval** – The period of time that passes before the **VuStats Monitor** switches focus from one VuStats line of display to the next one in the list.

Before you begin

You should ensure that you set the **VuStats Monitor** time intervals so that each line of display can be updated before the **Refresh Rate** changes focus to the top of the list. For example, if you have six VuStats lines of display in the **VuStats Monitor** and the **Display Interval** is set for 10 seconds, your **Refresh Rate** should be 60 seconds or greater.

If a VuStats line of display is not being completed before the next VuStats item begins to update, increase the **Display Interval** delay to a larger value.

Steps

To change the periods of time used in the **VuStats Monitor** window:

1. Display VuStats information in the **VuStats Monitor** as shown in the procedure, Running multiple VuStats in the VuStats Monitor on page 175.
2. Click the **Refresh Rate** button on the toolbar of the **VuStats Monitor** window.

   Avaya IP Agent displays a menu with the following time intervals:

   - 10 seconds
   - 20 seconds
   - 30 seconds
   - 60 seconds
   - 120 seconds
3. Select the interval that should pass before focus is switched from the last line of display to the first line.
4. Click the **Display Interval** button on the toolbar of the **VuStats Monitor** window.

   Avaya IP Agent displays a menu with the following time intervals:

   - 1 second

- 3 seconds
- 5 seconds
- 10 seconds

5. Select the interval that should pass before focus is changed from one line of display to the next line.

   When focus moves to a line of display, the VuStats data for that line is updated.

6. After setting one or both time intervals, click the **Start** button on the toolbar.

   The **VuStats Monitor** window begins displaying VuStats information according to the time intervals specified.

Chapter 9: Using a Public Directory with Avaya IP Agent

This section provides information and procedures regarding the *Search Public Directory* feature of Avaya IP Agent.

This feature provides access to corporate or public directory services allowing you to query by any field defined within that service.

This feature is also called *Search LDAP* (Lightweight Directory Access Protocol).

This section includes the following topics:

Defining a Public Directory service

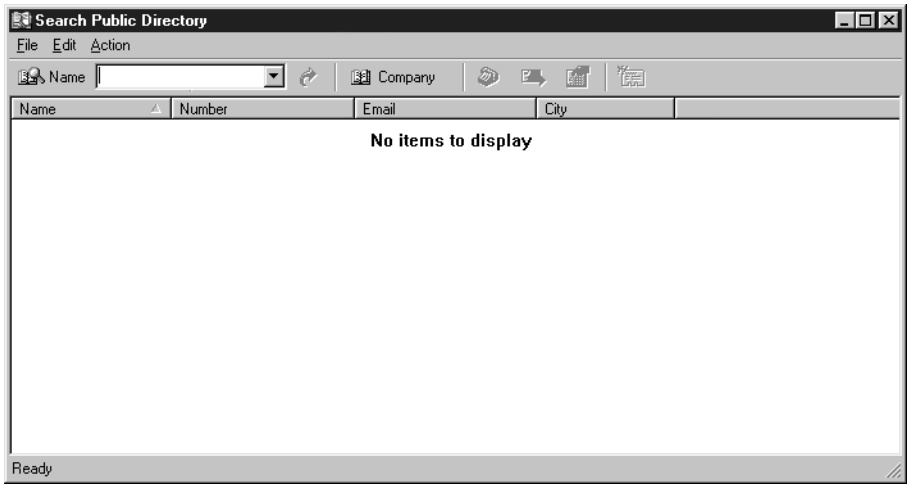
In order to search for information on a Public Directory (LDAP) server by using Avaya IP Agent, a definition of the service must first be created and configured.

Steps

To set up access to a Public Directory service for Avaya IP Agent:

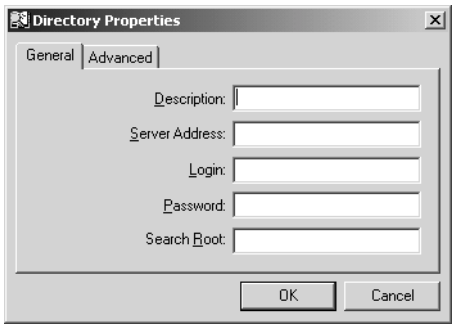
1. From the Avaya IP Agent menu bar, select **Tools** > **Search Public Directory**.

   Avaya IP Agent displays the **Search Public Directory** window.



2. From menu bar of the **Search Public Directory** window, select **File** > **Add Public Directory**.

   Avaya IP Agent displays the **Directory Properties** window.



3. In the following fields, enter the necessary information:

   - **Description** – Enter a name by which you will identify this Public Directory server. This field is required.

- **Server Address** – Enter the network domain or IP address of the Public Directory server. This field is required.
- **Login** – If authorization is required by the Public Directory server, enter a valid username in this field.
- **Password** – Enter the password for the username specified in the previous field.
- **Search Root** – Enter an LDAP format string representing the type of information being sought. For example, `ou=people, o=mycompany.com` specifies that information under the organization unit of “people” within the organization of “mycompany.com” is used for the search. Refer to the documentation for your LDAP system and company database configuration for more information on *Base DN* or *Search Root* strings.

If you an unsure of the settings for your Public Directory server, contact the administrator of that system.

4. Select the **Advanced** tab if changes to the following defaults are required:
   - Port: `389`
   - Search timeout: `200` (secs)
   - Maximum number of entries returned per search: `200`
5. After entering all necessary information, select the **OK** button.

   Avaya IP Agent adds this Public Directory to the list of available services and closes the **Directory Properties** dialog box.

Searching a Public Directory

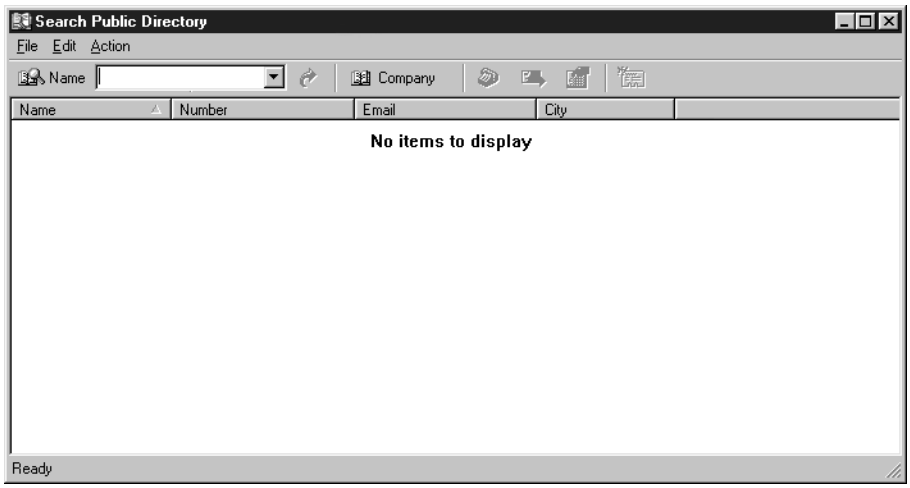
After a Public Directory service has been defined, a search against that database can now be performed. If a Public Directory service has not been defined, see Defining a Public Directory service on page 182.

Steps

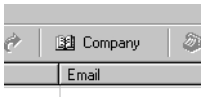
To search a Public Directory service:

1. In the Avaya IP Agent menu bar, select **Tools** > **Search Public Directory**.

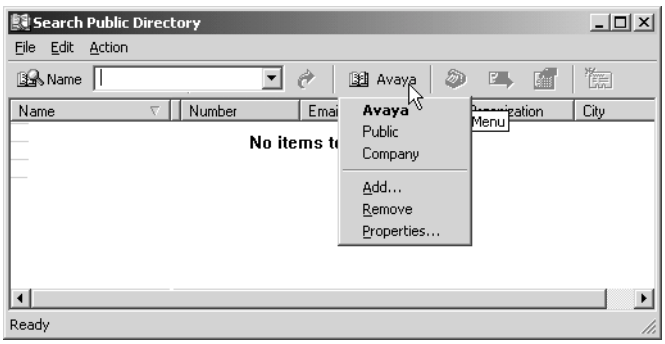
   Avaya IP Agent displays the **Search Public Directory** dialog box.



2. To select the Public Directory service to use, start by clicking the Directory Menu button.



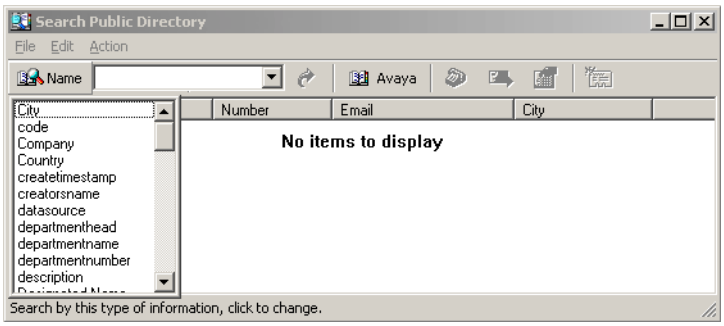
Avaya IP Agent displays a menu listing all defined Public Directory services.



3. Select the Public Directory service from the resulting menu.

   The selected item from the menu is set as the active Public Directory service and the Directory Menu button displays its name.

4. Click the **Name:** field to view a list of available fields defined in this Public Directory service.



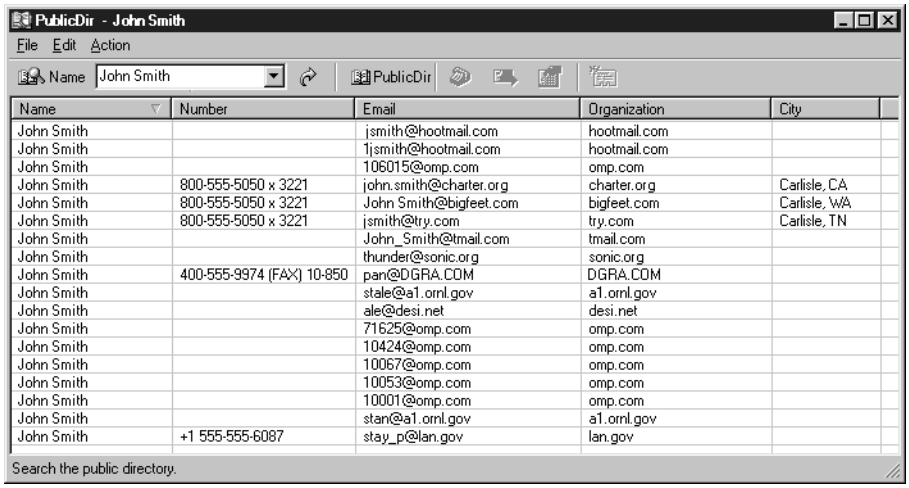
5. Select the field through which you want to conduct your search. The data field that you select appears as the label.

Note:

If you have not connected previously to the Public Directory service, you must run a query with the default settings to retrieve the list of defined fields of that service.

6. In the available field, enter a string to search for within the selected data field and press the Enter key.

   Avaya IP Agent sends the query to the Public Directory service, receives the data, and displays it in the **Search Public Directory** window.

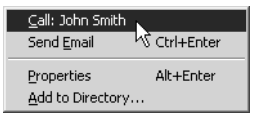


Name	Number	Email	Organization	City
John Smith		jsmith@hootmail.com	hootmail.com	
John Smith		1jsmith@hootmail.com	hootmail.com	
John Smith		106015@omp.com	omp.com	
John Smith	800-555-5050 x 3221	john.smith@charter.org	charter.org	Carlisle, CA
John Smith	800-555-5050 x 3221	John Smith@bigfeet.com	bigfeet.com	Carlisle, WA
John Smith	800-555-5050 x 3221	jsmith@try.com	try.com	Carlisle, TN
John Smith		John_Smith@tmail.com	tmail.com	
John Smith		thunder@sonic.org	sonic.org	
John Smith	400-555-9974 (FAX) 10-850	pan@DGRA.COM	DGRA.COM	
John Smith		stale@a1.ornl.gov	a1.ornl.gov	
John Smith		ale@desi.net	desi.net	
John Smith		71625@omp.com	omp.com	
John Smith		10424@omp.com	omp.com	
John Smith		10067@omp.com	omp.com	
John Smith		10053@omp.com	omp.com	
John Smith		10001@omp.com	omp.com	
John Smith		stan@a1.ornl.gov	a1.ornl.gov	
John Smith	+1 555-555-6087	stay_p@lan.gov	lan.gov	

   For example, after setting the data type to **Name**, enter `Smith` in the field and press the Enter key.

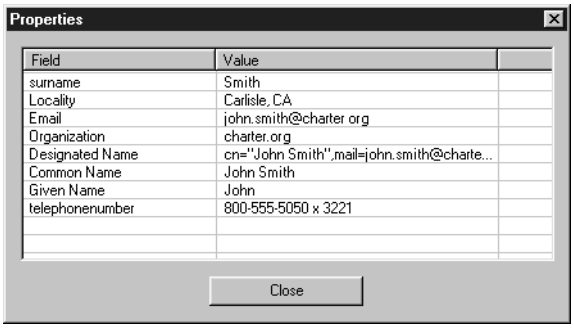
7. Right-click on an entry in the set of resulting data.

   Avaya IP Agent displays a popup menu for the entry.



8. Select an action from the following table:

If...	Then...
You want Avaya IP Agent to dial the number listed for the selected entry.	Select **Call:** *Name*. If you have configured IP Agent to have multiple telephone numbers for each entry, another popup menu is displayed with this list of numbers. From this second list, select the number you want to call.
You want to compose an e-mail to the address listed for the selected entry.	Select **Send Email**.

If...	Then...
You want to view all available data for the selected entry.	Select **Properties**. Avaya IP Agent displays the **Properties** dialog box. 
You want to add this entry to your Avaya IP Agent **Phone Directory**.	Select **Add to Directory**. Avaya IP Agent adds the name, telephone number, and email for this selection in the **Phone Directory**.

Selecting the fields to display and the order

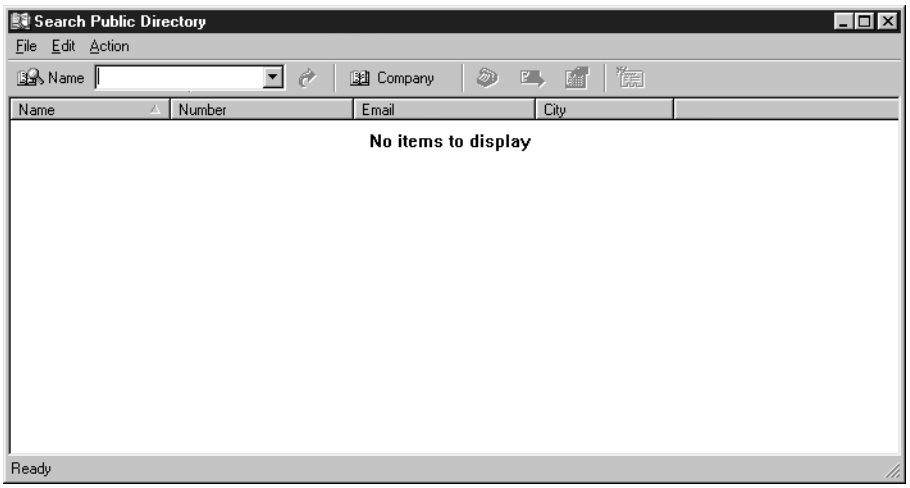
Avaya IP Agent allows you to select which fields and corresponding information from the Public Directory service will be displayed in the **Search Public Directory** window.

Steps

To configure which Public Directory fields appear in the **Search Public Directory** window after a query and in which order, perform the following steps:

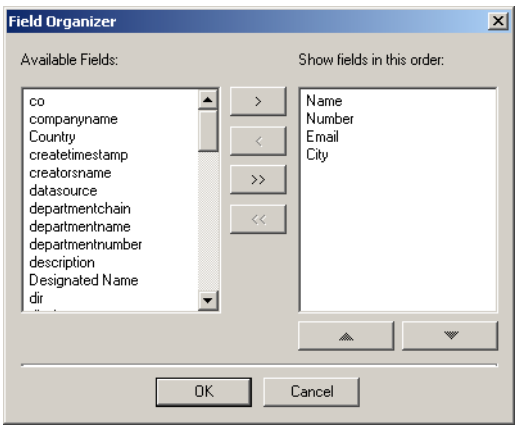
1. From the main window menu bar, select **Tools** > **Search Public Directory**.

   Avaya IP Agent displays the **Search Public Directory** window.



2. From the menu bar of the **Search Public Directory** window, select **Edit** > **Field Organizer...**.

   Avaya IP Agent displays the **Field Organizer** window.



Note:

If the **Field Organizer** window does not contain any fields, you may need to first run a query of the Public Directory service with the default settings.

3. In the **Available Fields:** list box, highlight the field you want to add to the **Search Public Directory** window.

   You can highlight multiple fields in this list box by holding down the Ctrl key and clicking the cursor on each field.

4. After the necessary fields have been highlighted, select the **>** (right arrow) button to move the selected fields to the **Show fields in this order:** list box.

   The **<** (left arrow) button will remove the highlighted field from the **Show fields in this order:** list box.

   The **<<** and **>>** (double arrow) buttons will move *all* fields from one list box to the other.

5. To change the order of the fields in the **Show fields in this order:** list box, highlight the field to move by clicking on it.

6. Use the up and down buttons at the bottom of the list box to move the position of the highlighted field.

7. Repeat steps 5 and 6 for the necessary fields to set the desired order.

8. Select the **OK** button.

Note:

The fields selected and the associated order will not be displayed until a new query is run.

Listing multiple telephone numbers

Avaya IP Agent allows you to select multiple fields to be considered as telephone numbers. For example, the Public Directory service could have several numbers assigned to an individual such as pager, fax, voice mail, mobile telephone, home telephone, and so on.

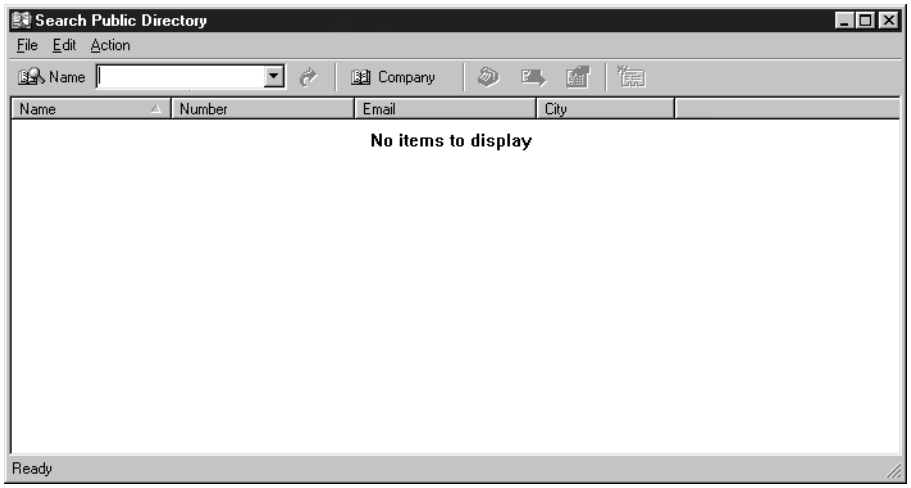
When multiple telephone numbers are identified in Avaya IP Agent, the *Call* feature of the **Search Public Directory** window will ask you to select which of these numbers you want to call.

Steps

To select multiple telephone numbers to be available for the *Call* feature, perform the following steps:

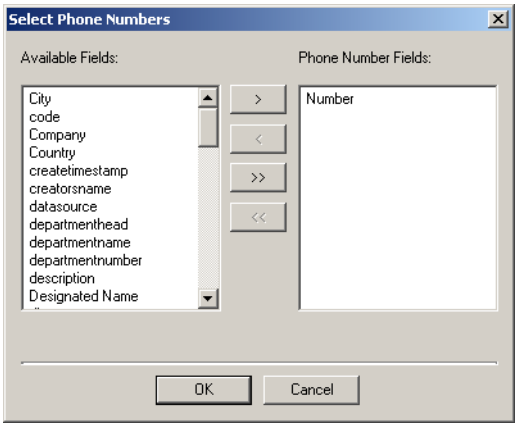
1. From the main window menu bar, select **Tools** > **Search Public Directory**.

   Avaya IP Agent displays the **Search Public Directory** window.



2. From the **Search Public Directory** window menu bar, select **Edit** > **Select Phone Numbers...**.

   Avaya IP Agent displays the **Select Phone Numbers** window.



3. In the **Available Fields:** list box, highlight the field you want to add as another telephone number for the contact.

   You can highlight multiple fields in this list box by holding down the Ctrl key and clicking the cursor on each field.

4. After the necessary fields have been highlighted, select the **>** (right arrow) button to move the selected fields to the **Phone Number Fields:** list box.

5. Select the **OK** button.

Deleting a Public Directory service

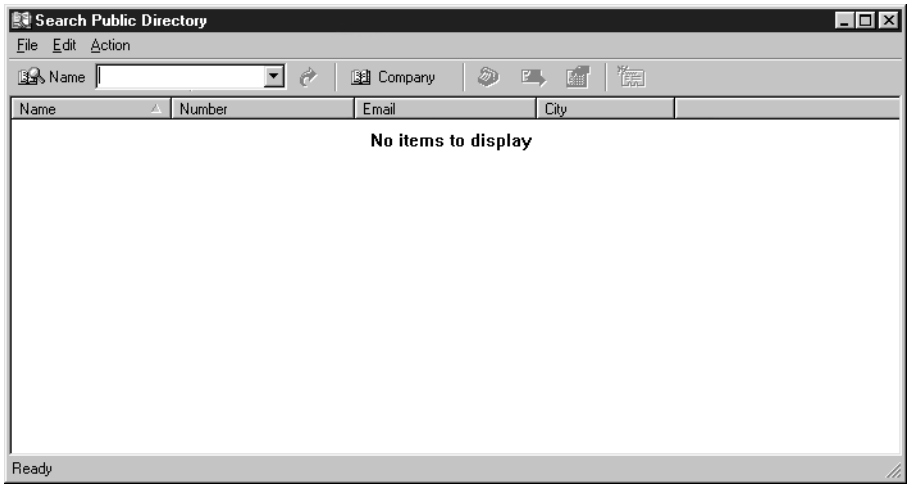
This section provides the procedure for deleting a Public Directory service from Avaya IP Agent.

Steps

To delete a Public Directory service, perform the following steps:

1. From the main window menu bar, select **Tools** > **Search Public Directory**.

   Avaya IP Agent displays the **Search Public Directory** window.



2. To select the Public Directory service to delete, start by clicking the **Directory Menu** button.

   Avaya IP Agent displays a menu listing all defined Public Directory services.

3. Select the Public Directory service from the **Directory Menu**.

   The selected item from the menu is set as the active Public Directory service and the **Directory Menu** button displays its name.

4. Once again, click the **Directory Menu** button.

   Avaya IP Agent displays **Directory Menu**.

5. From the **Directory Menu**, select **Remove**.

   Avaya IP Agent deletes the active Public Directory service from Avaya IP Agent and makes active the first service in the list.

Chapter 10: Screen Pops

Screen Pops are used to start an application or interface when an incoming call is received by Avaya IP Agent or when an outgoing call is placed.

Screen Pops are most useful for:

- Starting an application that allows the agent to enter customer or critical information regarding the call
- Viewing data based on information transmitted with the call such as customer information, the area from which they are calling, the selections a customer made while being processed through a vector, or other information

There are two types of Screen Pops:

- *Windows application* – This type of Screen Pop starts a Windows application such as an HTML browser, a database interface, a trouble ticket program, or a custom application, just as a few examples. This type of Screen Pop also is capable of passing parameters as part of an HTML string when it is initialized.
- *Dynamic Data Exchange (DDE)* – This type of Screen Pop retrieves information you specify from a call and passes it to a DDE server. The DDE server can then send information from its database to an interface displayed on the PC.

This section includes the following topics:

Before you begin

The following items should be read and understood before working with Screen Pops:

- Many DDE services have distinct features between them. It is for this reason that complete syntax for a DDE query cannot be specified in this document. For information regarding your DDE service, refer to the documentation supplied with that product.

Creating a Windows application Screen Pop

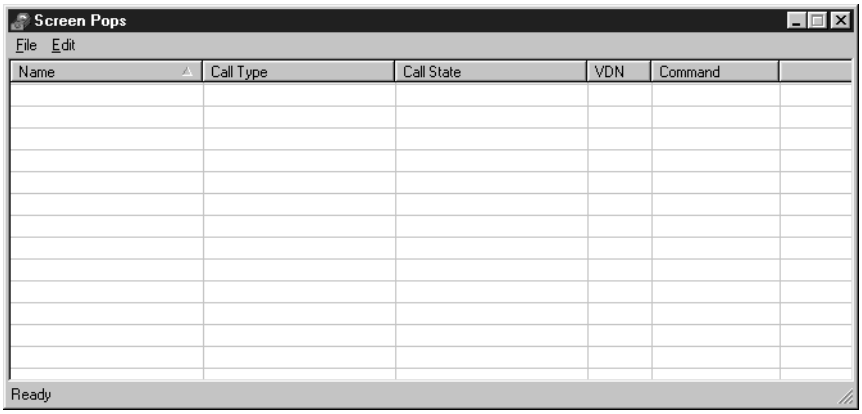
This section provides the procedure for starting a Windows application when Avaya IP Agent receives an incoming call or an outgoing call is made.

Steps

To create a Windows Screen Pop:

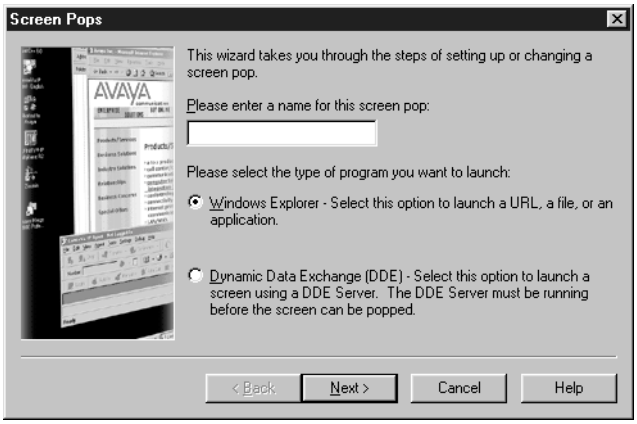
1. From the menu bar of the Avaya IP Agent window, select **Tools** > **Screen Pops**.

   Avaya IP Agent displays the **Screen Pops** window.



2. Select **File** > **New**.

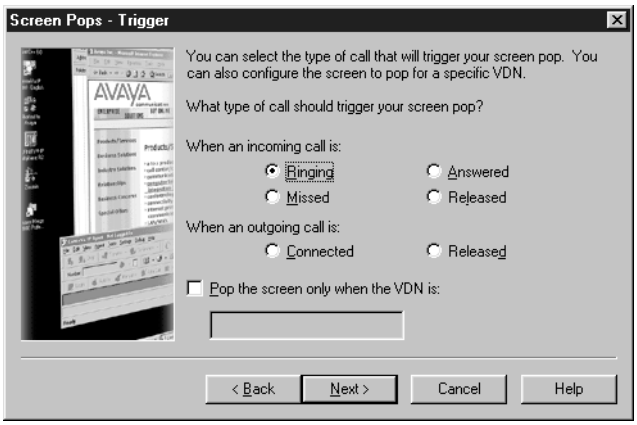
   Avaya IP Agent displays the **Screen Pops Wizard**.



3. Enter a name for this Screen Pop in the text box.
4. Ensure that the **Window Explorer** option button is selected.

5. Select the **Next** button.

   Avaya IP Agent displays the **Screen Pops - Trigger** window.



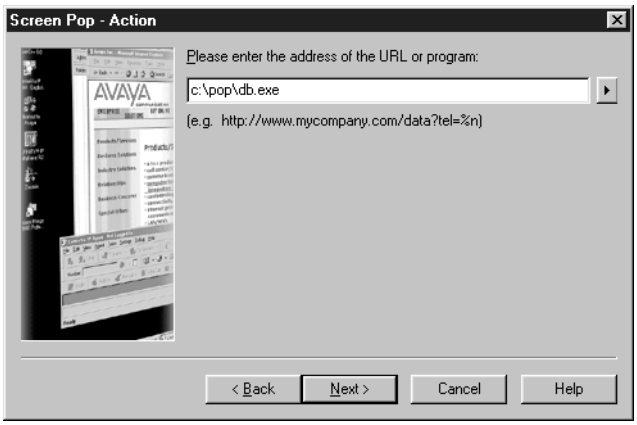
6.

If...	Then...
This Screen Pop should be run for incoming calls	Select one of the following options to indicate when it should start: • **Ringing** – The Screen Pop starts when Avaya IP Agent receives an incoming call. • **Answered** – The Screen Pop starts when an incoming call has been answered through the Avaya IP Agent interface or by picking up the handset in Telecommuter mode. • **Missed** – The Screen Pop starts when the call appearance from an incoming call disappears after not being answered. This can be caused by the caller hanging up or if the call was routed to a voice mail system after a specific number of rings. • **Released** – The Screen Pop start when the **Release** button is pressed on a Call Information Panel (CIP) or by hanging up the telephone in Telecommuter mode.
This Screen Pop should be run for outgoing calls	Select one of the following options to indicate when it should start: • **Connected** – The Screen Pop starts when the party being called answers the telephone. • **Released** – The Screen Pop starts when the **Release** button is pressed on a CIP or by hanging up the telephone in Telecommuter mode.

7. If you want the Screen Pop to start when an incoming call appears on a specific VDN:
   a. Place a check mark in the **Pop the screen only when the VDN is** check box.
   b. In the associated field, enter the VDN name (up to 15 characters) that will cause this Screen Pop to run.

8. Select the **Next** button.

   Avaya IP Agent displays the **Screen Pop - Action** window.



9. In the field provided, enter one of the following:

   - *A Uniform Resource Locator (URL) address* – This refers to a webpage. This could also include CGI scripts, java scripts, or many other web-enabled tools.
   - *A filename* – This can be any filename with an extension specified in the Windows Registry as having an associated application that is used to open it,.for example,.HTM, .DOC, and .TXT. If a filename is specified which does not have a valid application association in the Registry, Windows will display an error message.

10. Information from the call can be made part of an URL address string specified in the field. To do so, select the arrow to the right of the field to display the **Insert Call Data** menu.

    The information that may be available for retrieval from a call are:

    - **Caller Name (%n)** – Passes the name of the other party on the call, if available
    - **Caller Number (%m)** – Passes the telephone number of the other party on the call, if available
    - **Prompted Digits (%p)** – Passes the digits the caller selected while being processed through a vector, if available.
    - **VDN (%v)** – Passes the VDN name through which the call was connected
    - **Start Time (%s)** – Passes the time when the telephone call was received by Avaya IP Agent
    - **Date (%d)** – Passes the current date when the telephone call is received by Avaya IP Agent

    Important:

    These parameters cannot be used for passing arguments to an executable program.

    You may also specify these parameters manually within the URL address string.

11. After entering the URL address or filename, select the **Next** button.
12. If you specified any parameters to be used in the **Action** dialog box, you will be presented with the **Format Call Information** dialog box for each parameter where you can specify the number of characters or digits used for that parameter in the Screen Pop.

    If you wish to limit the number of characters presented for each parameter, enable the check box on the specific parameter screen and then use the **Number of characters to include** and **Location** fields to adjust the boundaries of the string accordingly. After you have specified the boundaries of the parameter string, select the **Next** button.

    If more than one parameter was specified in the **Action** dialog box earlier, the **Format Call Information** for the next parameter is presented.

    If there are no more parameters, Avaya IP Agent displays the **Testing** dialog box.
13. Select the **Test** button to verify that the configuration of this Screen Pop works as intended.

    If you are using parameters in your Screen Pop, you will be presented with another dialog box that allows you to enter **Caller Name**, **Caller Number**, **Prompted Digits**, and **VDN** as test information. Select the **Continue** button when all necessary test information has been entered in these fields.

    Avaya IP Agent launches the Screen Pop.
14. After you have confirmed that the test of the Screen Pop was successful, close the Screen Pop and select the **Next** button on the **Testing** dialog box.

    Avaya IP Agent displays the **Setup Completed** dialog box.
15. Select the **Finish** button.

    Avaya IP Agent saves this Screen Pop and displays it in the **Screen Pops** window.

Creating a DDE Screen Pop

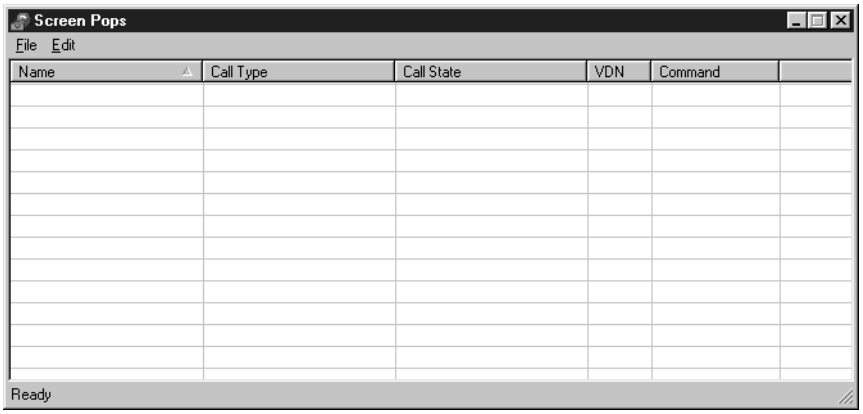
This section provides the procedure for starting a DDE Screen Pop when Avaya IP Agent receives an incoming call or an outgoing call is made.

Steps

To create a DDE Screen Pop:

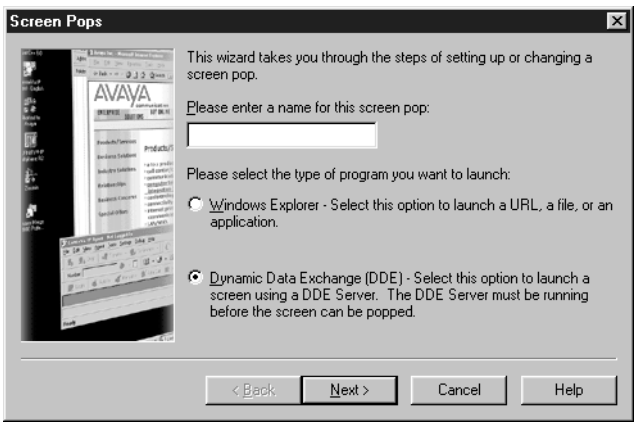
1. From the menu bar of the Avaya IP Agent window, select **Tools** > **Screen Pops**.

   Avaya IP Agent displays the **Screen Pops** window.



2. Select **File** > **New**.

   Avaya IP Agent displays the **Screen Pops Wizard**.



3. Select the **Dynamic Data Exchange (DDE)** option button.
4. Select the **Next** button.

   Avaya IP Agent displays the **Screen Pops - Trigger** window.

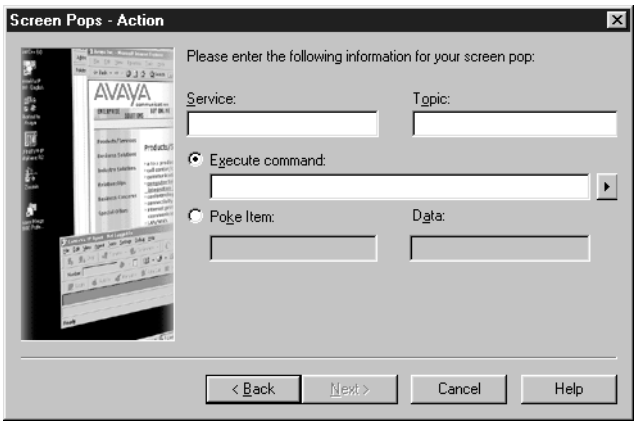
5.

If...	Then...
This Screen Pop should be run for incoming calls	Select one of the following options to indicate when it should start: • **Ringing** – The Screen Pop starts when Avaya IP Agent receives an incoming call. • **Answered** – The Screen Pop starts when an incoming call has been answered through the Avaya IP Agent interface or by picking up the handset in Telecommuter mode. • **Missed** – The Screen Pop starts when the call appearance from an incoming call disappears after not being answered. This can be caused by the caller hanging up or if the call was routed to a voice mail system after a specific number of rings. • **Released** – The Screen Pop start when the **Release** button is pressed on a Call Information Panel (CIP) or by hanging up the telephone in Telecommuter mode.
This Screen Pop should be run for outgoing calls	Select one of the following options to indicate when it should start: • **Connected** – The Screen Pop starts when the party being called answers the telephone. • **Released** – The Screen Pop starts when the **Release** button is pressed on a CIP or by hanging up the telephone in Telecommuter mode.

6. If you want the Screen Pop to start when an incoming calls appears on a specific VDN:
   a. Place a check mark in the **Pop the screen only when the VDN is** check box.
   b. In the associated field, enter the VDN name (up to 15 characters) that will cause this Screen Pop to run.

7. Select the **Next** button.

   Avaya IP Agent displays the **Action** dialog box.



8. In the **Action** dialog box, enter the necessary DDE information for the following fields:

   - **Service** – A string expression identifying an application or DDE server that can participate in a DDE conversation. Usually, the application argument is the file name of a program for a Windows-based application. Do not specify the .EXE extension of the program
   - **Topic** – A string expression that is the name of a topic recognized by the application argument. This will be the second parameter of the DDEInitiate() function.

   Important:

   Many DDE services have distinct features between them. It is for this reason that complete syntax for a DDE query cannot be specified in this document. For information regarding your DDE service, refer to the documentation supplied with that product.

9. Select which option will be used for the DDE conversation from the following list:

   - **Execute command** – A string expression specifying a command recognized by the server application. The string will only be changed to input caller information. The syntax must match the syntax required by the DDE program. For example, if embedded quotes are necessary, such as `“name=””Smith”””`, then the string must be entered in that manner.
   - **Poke Item** – A string expression that is the name of a data item recognized by the topic specified by the DDE Initiate() function.

     Data – A string containing the data to be supplied to the other application.

10. Enter the appropriate information in the fields for the selected option. Use the arrow button to the right of the **Execute command** or **Data** fields to specify information to retrieve from the telephone call to pass onto the DDE conversation.

    The information that may be available for retrieval from a call are:

    - **Caller Name (%n)** – Passes the name of the other party on the call, if available

- **Caller Number (%m)** – Passes the telephone number of the other party on the call, if available
- **Prompted Digits (%p)** – Passes the digits the caller selected while being processed through a vector, if available.
- **VDN (%v)** – Passes the VDN name through which the call was connected
- **Start Time (%s)** – Passes the time when the telephone call was received by Avaya IP Agent
- **Date (%d)** – Passes the current date when the telephone call is received by Avaya IP Agent

You may also specify these parameters manually within the string.

11. If you specified any parameters to be used in the **Action** dialog box, you will be presented with the **Format Call Information** dialog box for each parameter where you can specify the number of characters or digits used for that parameter in the Screen Pop.

    If you wish to limit the number of characters presented for each parameter, enable the check box on the specific parameter screen and then use the **Number of characters to include** and **Location** fields to adjust the boundaries of the string accordingly. After you have specified the boundaries of the parameter string, select the **Next** button.

    If more than one parameter was specified in the **Action** dialog box earlier, the **Format Call Information** for the next parameter is presented.

    If there are no more parameters, Avaya IP Agent displays the **Testing** dialog box.

12. Select the **Test** button to verify that the configuration of this Screen Pop works as intended.

    If you are using parameters in your Screen Pop, you will be presented with another dialog box that allows you to enter **Caller Name**, **Caller Number**, **Prompted Digits**, and **VDN** as test information. Select the **Continue** button when all necessary test information has been entered in these fields.

    Avaya IP Agent launches the Screen Pop.

13. After you have confirmed that the test of the Screen Pop was successful, close the Screen Pop and select the **Next** button on the **Testing** dialog box.

    Avaya IP Agent displays the **Setup Completed** dialog box.

14. Select the **Finish** button.

    Avaya IP Agent saves this Screen Pop and displays it in the **Screen Pops** window.

Setting the active Screen Pop

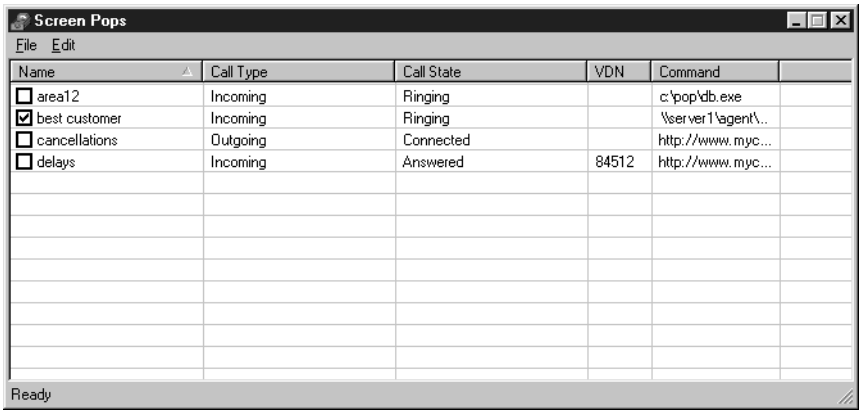
This section provides the procedure for specifying which Screen Pop will be set as the one used for the incoming or outgoing call.

Steps

To set the active Screen Pop:

1. From the Avaya IP Agent main window menu bar, select **Tools** > **Screen Pops**.

   Avaya IP Agent displays the **Screen Pops** window.



2. In the **Name** column, place a check mark next to the Screen Pops to use for all subsequent telephone calls.

   It is possible to set multiple Screen Pops as being active if those Screen Pops do not conflict in their selection criteria. For example, if two or more Screen Pops are set to activate during a **Ringing** call, but are set for different VDNs, all of these can be active at the same time.

3. Close the **Screen Pops** window.

   Avaya IP Agent saves this selection and uses this Screen Pop for any subsequent call, if applicable.

Modifying a Screen Pop

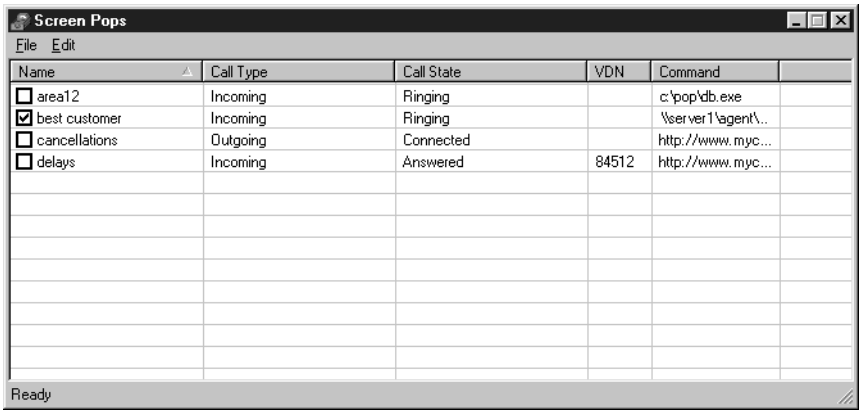
This section provides the procedure for modifying a Screen Pop that has already been created.

Steps

To modify a Screen Pop:

1. From the Avaya IP Agent main window menu bar, select **Tools** > **Screen Pops**.

   Avaya IP Agent displays the **Screen Pops** window.



2. Choose the Screen Pop that you want to modify and double-click it.

   Avaya IP Agent opens the **Screen Pop Wizard** and populates it with the data configured for this Screen Pop.

3. For each dialog, change the necessary configuration as needed and select the **Next** button to continue for each one.

   See Creating a Windows application Screen Pop on page 194 or Creating a DDE Screen Pop on page 199 for specific information on each dialog of the **Screen Pop Wizard**.

4. When you reach the **Setup Completed** dialog box, select the **Finish** button.

   Avaya IP Agent saves the changes made to the Screen Pop and closes the **Screen Pop Wizard**.

5. Close the **Screen Pops** window.

Deleting a Screen Pop

This section provides the procedure for deleting a Screen Pop from Avaya IP Agent.

Before you begin

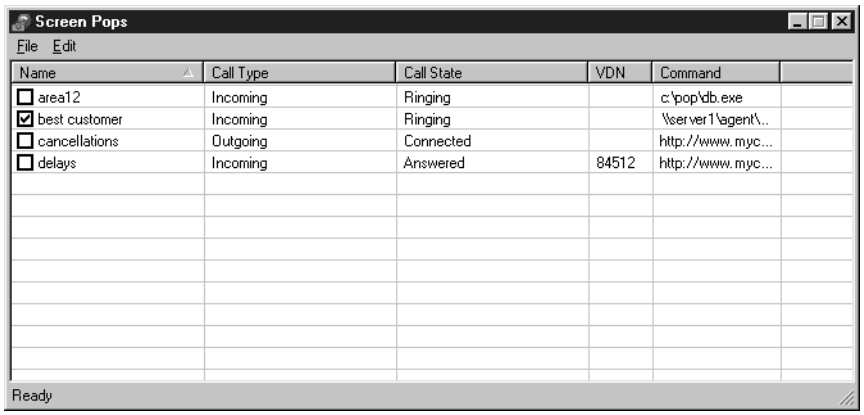
Deletion of a Screen Pop cannot be undone.

Steps

To delete a Screen Pop:

1. From the Avaya IP Agent main window menu bar, select **Tools** > **Screen Pops**.

   Avaya IP Agent displays the **Screen Pops** window.



2. Highlight the Screen Pop to be deleted by clicking on it.
3. From the menu bar, select **Edit** > **Delete**.

   The selected Screen Pop is deleted.
4. Close the **Screen Pops** window.

Appendix A: Quick Reference – Shortcut keys

This appendix contains quick reference information for shortcut keys.

Shortcut keys refer to key combinations that you can use to invoke a particular command. For example, to place a call on hold, you can press Ctrl + H. Some of the most commonly used shortcut keys are discussed in this section. In order for shortcut keys to work as documented, the Avaya IP Agent window must have focus as the current application.

Shortcut keys

Call features

The following table provides the shortcut keys for call features:

To...	Press...
Place a call on hold	Ctrl + H
Transfer a call	Ctrl + T to dial the number and then again to transfer the call
Conference another party	Ctrl + F to dial the number and then again to conference the call.

Agent features

The following table provides the shortcut keys for the Avaya IP Agent window:

To...	Press...
Log in	Ctrl + Ins
Log out	Ctrl + Del
Change to After Call Work (ACW) state	Ctrl + W
Change to Auxiliary (AUX) state	Ctrl + A
Change Available state assignment to automatic (Auto-In)	Ctrl + I

To...	Press...
Change Available state assignment to manual (Manual-In)	Ctrl + M
Request supervisor assistance (Assist)	Ctrl + S

Avaya IP Agent features

The following table provides the shortcut keys for the Avaya IP Agent window:

To...	Press...
Display the **Call menu** for an incoming call	Alt + C
Display the **Call History** window	Alt + H
Display the **Phone Directory** window	Alt + D
Release the current call	Spacebar
Display online help	F1
Exit Avaya IP Agent or close the current active window	Alt + F4
View the Properties of the selected item in the **Search Public Directory**, **Screen Pops**, or **Phone Directory** windows.	Alt + Enter

Windows features

The following table provides the shortcut keys for the Avaya IP Agent window:

To...	Press...
Switch between running applications	Alt + Tab
Cut selected text to the clipboard	Ctrl + X
Copy the selected text to the clipboard	Ctrl + C
Paste clipboard contents to the selected area	Ctrl + V

Appendix B: Quick Reference – Language Support

This appendix contains quick reference information for supported languages.

Supported languages for Avaya IP Agent

Avaya IP Agent languages table

This table shows the versions of Avaya IP Agent that are supported with the specific language versions of the Microsoft Windows operating systems. The symbol X indicates that the operating system is supported.

***Windows* Operating System**		***Avaya* IP Agent Languages**								
		English	Italian	French	German	Portuguese (Brazilian)	Spanish (Columbian)	Japanese (Proper)	Korean	Chinese
English	Windows 95	X	X	X	X	X	X			
	Windows 98	X	X	X	X	X	X			
	Windows 2000	X	X	X	X	X	X			
	Windows NT	X	X	X	X	X	X			
	Windows Me/XP	X	X	X	X	X	X			
Italian	Windows 95	X	X							
	Windows 98	X	X							
	Windows 2000	X	X							
	Windows NT	X	X							
	Windows Me/XP	X	X							
French	Windows 95	X		X						
	Windows 98	X		X						
	Windows 2000	X		X						
	Windows NT	X		X						
	Windows Me/XP	X		X						
German	Windows 95	X			X					
	Windows 98	X			X					
	Windows 2000	X			X					
	Windows NT	X			X					
	Windows Me/XP	X			X					
Portuguese	Windows 95	X				X				
	Windows 98	X				X				
	Windows 2000	X				X				
	Windows NT	X				X				
	Windows Me/XP	X				X				
Spanish	Windows 95	X					X			
	Windows 98	X					X			
	Windows 2000	X					X			
	Windows NT	X					X			
	Windows Me/XP	X					X			
Japanese	Windows 95	X						X		
	Windows 98	X						X		
	Windows 2000	X						X		
	Windows NT	X						X		
	Windows Me/XP	X						X		
Korean	Windows 95	X							X	
	Windows 98	X							X	
	Windows 2000	X							X	
	Windows NT	X							X	
	Windows Me/XP	X							X	
Chinese	Windows 95	X								X
	Windows 98	X								X
	Windows 2000	X								X
	Windows NT	X								X
	Windows Me/XP	X								X

US English only Avaya IP Agent components

The following Avaya IP Agent components are provided only in English:

- Installation
- **About** screen
- Event log
- Avaya IP Agent internal files
- Shortcut keys for secondary callbars
- `readme.txt` file
- Uninstall program

Appendix C: Quick Reference – Troubleshooting

This appendix contains information for troubleshooting problems with Avaya IP Agent.

Troubleshooting

Problem	What to do
Cannot register with the DEFINITY system.	Check for a valid configuration: • Avaya IP Agent has limited support for firewalls and Virtual Private Networks (VPN). See Advanced tab on page 156 for more information on configuring Avaya IP Agent for use with VPNs. • A DEFINITY system prior to Release 10 cannot be used for Avaya IP Agent. • Ensure that the network connection from the PC is operating normally.
The **Login** window is not closing.	If you are using Microsoft Windows 2000 with Dial-Up Networking, simply wait and the window will eventually close.

Problem	What to do
Agents cannot log in to EAS.	Ensure that the following administration items have been addressed: • Feature Access Codes are administered. • If you are using a Road Warrior (VoIP) configuration, ensure that an IP Media Processor has been properly configured so that Road Warrior (VoIP) configurations can operate properly. • If the DEFINITY system has the station set for Auto-answer, ensure that Avaya IP Agent has the **Enable support for auto answer** option enabled. • Ensure that the station is configured for an AUX button. Without this button, agents cannot log in correctly if the DEFINITY system is configured so that they enter AUX work mode when they log in to EAS.
Agents are logged off repeatedly from EAS or the DEFINITY system.	• Ensure that the network is not having stability problems or failures in service. • On the DEFINITY system, ensure that the **Auto-In** field for the agent is set to `station` and not `aux`. Also, ensure that the **Enable automatic login** option in the **Program Options** dialog for Avaya IP Agent is activated. • If you are using Avaya CALLMASTER VI stations or emulation, a PASTE code is required on the DEFINITY system.
Agents cannot place calls.	• Ensure that the agent is logged in. • Check the Windows Dialing Properties to rule out improper number formatting. Dialing rules must conform to the dialing rules of the country in which the DEFINITY system resides. • Ensure that calling cards are not being used.

Problem	What to do
Agent cannot be heard by other party.	• Ensure that a defective sound card or microphone is not being used. • Ensure that the sound card is configured properly through Windows. • Ensure that excessive background or PC noises are not preventing voice transmission. • Adjust the gain levels when using full-duplex mode in a noisy environment. • Ensure that the mic or headset is not muted.
Excessive bandwidth usage in Road Warrior (VoIP) configurations when not actively on calls.	Change the `Service Link Mode:` from `permanent` to `as-needed`.
Agents cannot establish calls.	• Ensure that an improper codec is not in use. • Ensure that the network can support the bandwidth required for Voice over IP.

Problem	What to do
The voice quality of the agent is poor when using Voice over IP.	• Check to see if the iClarity Status screen displays a high number of dropped packets and a low number of discarded packets. This indicates an inadequate sound card in the PC. • Check to see if the iClarity Status screen displays an equal number of dropped and discarded packets. This indicates problems with network bandwidth. • If the iClarity Status screen displays the correct information, run the **Tuning Wizard** again. The **Tuning Wizard** cannot be run while the transmit and receive channels are active. To deactivate the transmit and receive channels, you can either log the station out of the DEFINITY system or change the station settings from the DEFINITY system to use the `as-needed` option for the `Service Link Mode:` field instead of `permanent`. • Ensure that your PC has enough system resources to handle VoIP communications in addition to the applications being used. See Voice-over-IP considerations on page 24.
The voice quality of the other party is poor when using Voice over IP.	• Lower the gain setting on the microphone. • Set the **Jitter Buffer** in the **Audio Options** dialog to *Automatic*. • Ensure that your PC has enough system resources to handle VoIP communications in addition to the applications being used. See Voice-over-IP considerations on page 24.

Problem	What to do
Receiving and transmitting audio is delayed.	Perform one of the following actions: • Ensure that your DEFINITY system is optimized to handle “shuffling” and “hairpinning” for Voice over IP. Consult your DEFINITY documentation for more information. • Lower the **Jitter Buffer** in the **Audio Options** dialog. • If you are using QoS in conjunction with a firewall, the range of ports for QoS set up on the DEFINITY system must overlap the range of firewall ports specified in Avaya IP Agent by 100 ports. If these ranges do not overlap by 100 ports, QoS is not used by iClarity IP Audio and transmissions are done within the range of firewall ports. • Ensure that your PC has enough system resources to handle VoIP communications in addition to the applications being used. See Voice-over-IP considerations on page 24.
Receiving echo and poor voice quality while using Voice over IP.	• If you are using speakers and a microphone instead of a headset, change to *half-duplex* in the **Audio Options** window. Using separate speakers and a microphone can cause feedback situations. • Ensure that your PC has enough system resources to handle VoIP communications in addition to the applications being used. See Voice-over-IP considerations on page 24.

Problem	What to do
In Telecommuter mode, the Avaya IP Agent main window does not display that a call is incoming until the second or third ring. The main window is very slow in displaying the Call Information Panel for an incoming call.	This problem can be attributed to one or more of the following problems: • The processor of the PC is being used too heavily. To resolve this problem, close one or more applications to decrease the load on the processor. • A virus scanning program is monitoring and validating the activity of the executable files for Avaya IP Agent and any log files. To resolve this problem, configure the virus scanning application to not scan the directory where Avaya IP Agent was installed. By default, this location is `C:\Program Files\Avaya\Avaya IP Agent`. • Alternatively, you can configure your virus scan program to only scan instances where program files are written to instead of all file types. This will decrease the necessity of your virus program to scan the log files that are modified in Avaya IP Agent when a call is received.
Collected digit information is not displayed.	• You must have a `callr-info` button assigned for non-CALLMASTER telephones so that collected digit information is displayed. Buttons are configured for stations through the `change station` command on the DEFINITY system. • Ensure that VuStats is deactivated. This can be done by double-clicking on the **Normal Mode** button in the **Phone Features** window.

Problem	What to do
In Telecommuter mode, picking up the handset does not automatically answer the incoming call displayed in the Avaya IP Agent window.	Ensure that the `Service Link Mode:` for the station is set to `as-needed`. Ensure that the **Enable support for auto-answer** option is disabled. This option is found in the **Program Options** in Avaya IP Agent. If this option is enabled, disable it and then reboot your PC. Ensure that the `Multimedia Call Handling (Enhanced)` option on the DEFINITY system is set to `y`. This option can be found on the `system-parameters customer-options` form. If this option is not set to `y`, contact Avaya technical support or your Avaya representative for assistance.
The call information panel is not displaying any data.	This can occur if you are emulating a phone type that is normally configured to display 40 characters of information and it is currently in use because of VuStats, Q-call, or it is already busy with information from another incoming call. You can either change the phone type emulation to one that displays 80 characters of information or disable VuStats so that the call information panel is not committed to displaying this information. See Compatible telephone types for Avaya IP Agent V3 on page 16 for telephone sets that support 80 character displays.
In Telecommuter mode, touchtones are not sent when the agent presses the buttons of the number pad on the telephone set.	This situation occurs because the data portion of the Telecommuter configuration is sent through Avaya IP Agent on the PC and not the telephone set. Use the DialPad or the PC keyboard to enter numbers where Dual Tone Multi-Frequency (DTMF) signals are needed.
You changed your login extension but the DEFINITY system does not recognize your login.	Reboot your PC and attempt the login procedure again.

Problem	What to do
The settings for one Avaya IP Agent installation were exported, but the import did not seem to work on another workstation.	Ensure that you are not trying to use exported settings from a Avaya IP Agent installation on another operating system. Setting exports from an operating system such as Microsoft Windows NT 4.0 cannot be imported on a different operating system such as Microsoft Windows 98. Also, if one Avaya IP Agent installation is configured for Avaya CALLMASTER VI, those settings cannot be imported to a Avaya IP Agent installation with an IP Endpoint configuration.
The button feature assignments were changed for this station, but the assignments do not display in Avaya IP Agent or fail to work.	Perform the first item in the following list. If the first item does not correct the problem, use the subsequent items appropriate for your configuration. • Select **Tools** > **Phone Features** from the main window and then select **Rebuild All** from the menu bar on the **Phone Features** window. • Refresh the phone features for your Avaya CALLMASTER VI by selecting **Settings** > **Phone Configuration** from the menu bar. • For IP Endpoint configurations, exit and restart Avaya IP Agent.
Phone Feature buttons do not work or are performing a different function.	If you are logging in as a different extension than the one that was just logged out from Avaya IP Agent, you must reboot the PC and log in again to regain these functionalities.
The phone download for the Avaya CALLMASTER VI failed.	Enter the PASTE code again for the Avaya CALLMASTER VI so that the DEFINITY system sends the updates to the station. Select **Tools** > **Program Options** and enter the number in the **PASTE Feature Access Code:** field.

Problem	What to do
The agent does not seem to be logged in because all of the icons are still disabled.	Verify the following configuration items: • On the DEFINITY system, verify that the station has the following features assigned to buttons: Auto-in, Manual-in, After Call Work (ACW), and Auxiliary Work (AUX). If these buttons are not assigned to the station, Avaya IP Agent cannot enable the Agent toolbar. • On the DEFINITY system, verify that the first AUX work button assigned to the station has a blank reason code or a reason code of `0`.
Agent logs in but is immediately logged out.	If the station or agent is administered on the DEFINITY system as *auto answer*, **Enable support for auto answer** in the **Program Options** must be enabled in Avaya IP Agent. After changing this setting in Avaya IP Agent, you must reboot the PC for the change to take effect.
The agent is unable to record greetings.	Attempt the action appropriate for your configuration: • For Avaya CALLMASTER VI configurations, check to see if the headset button in the **Greetings** window is activated. If so, click on the button to deactivate it and try to record the greeting again. The headset can also be deactivated through the headset button on the Avaya CALLMASTER VI unit. • For Road Warrior (VoIP) configurations, the recording of agent greetings can only be done when the transmit and receive audio connections are inactive. You can logoff and restart Avaya IP Agent to record agent greetings, but the first call instance that occurs will once again disable the ability to record agent greetings. • For telecommuter configurations, agent greetings are not supported.

Problem	What to do
I do not know how to stop the transmit and receive audio traffic.	Read the following items for the solution for your configuration: • If the `Service Link Mode:` for this station is set to `permanent`, the transmission and receipt of audio over the network is only inactive when the agent first logs in. The first call that occurs on this station will cause the audio traffic to begin and remain active until the station is logged off of the DEFINITY system. • If the `Service Link Mode:` for this station is set to `as-needed`, the audio link will become inactive 10 seconds after release of a call.
The folders in the **Phone Features** window are in another language.	This problem occurs when multiple languages are installed for Avaya IP Agent. When first opened, the **Phone Features** window will display the names of the folders in the language version of Avaya IP Agent that is currently running. However, if you switch to a different language version, the folders in this window will retain the language when the window was first opened while the features are properly displayed in the correct language. To reset the folders to the current language, select **File** > **Rebuild** All from the menu bar on the **Phone Features** window. This action will reset all folders and features. Any customization you may have made to feature names will be lost.

Problem	What to do
The **Audio Tuning Wizard** does not run when I attempt to start it.	The Audio Tuning Wizard cannot be run while the audio transmit and receive channels are active. If you are on an active call, wait until the call has been completed, log out of Avaya IP Agent and log out of the DEFINITY system. You must then reconnect to the DEFINITY system, run the Audio Tuning Wizard, and then log in as an agent through Avaya IP Agent.
Fatal errors occurring when the **Call History** window is opened.	This could be a sign that the IP Agent database is corrupt. To resolve this problem, uninstall IP Agent and reinstall. Any data stored in the database previous to this action is lost.

Index

D

E

F

G

H

I

S

T

U

V