



Avaya IP Agent

Release 7.0

Installation and User Guide for Citrix

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Preface

This section contains the following topics:

- [Purpose](#) on page 9
- [Audience](#) on page 9
- [Reasons for reissue](#) on page 9
- [Related documents](#) on page 10

Purpose

This document, *Avaya IP Agent Installation and User Guide for Citrix*, includes information that you need to know in order to install and use Avaya IP Agent for Citrix Release 7 (IP Agent R7). It also provides information on IP Agent for Citrix R7 features, basic operation, and administrative tasks.

Audience

This guide is intended primarily for anyone who is installing or using IP Agent R7 and performing station administration on an Avaya MultiVantage system or Avaya Media Server using Avaya Communication Manager. It assumes that you are familiar with the following items:

- The personal computer on which Avaya IP Agent R7 will be installed and run
- *Windows XP Professional*
- Standard *Windows* conventions and terminology
- Contact center configurations and operations

Reasons for reissue

This is the first release of *Avaya IP Agent Installation and User Guide for Citrix*. This document was previously released as an integral part of the *Avaya IP Agent Installation and User Guide*.

Related documents

The following documents can help you configure your Avaya communication server for use with Avaya IP Agent R7:

- *Administrator's Guide for Avaya MultiVantage Software*
- *Administrator Guide for Avaya Communication Manager*

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 for Citrix?](#) on page 11
- [Telecommuter configuration](#) on page 14
- [Compatible telephone types for Avaya IP Agent](#) on page 14
- [Network compatibility](#) on page 16

What is Avaya IP Agent for Citrix?

Avaya IP Agent is a software application with advanced telephony features for agents in a contact center. Agents can use it to work in the following methods

- On-site at the contact center
- Off-site using analog connections over a Public Switched Telephone Network (PSTN)
- Through Windows Terminal Services.

The advanced telephony features are controlled by Avaya IP Agent through its direct communication with an Avaya communication server.

Agents who are not located at the call center can connect to the Avaya communication server 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, the agent can still take calls by using Avaya IP Agent to connect to the Avaya communication server.

Avaya IP Agent features for Citrix

The following is a list of the features for Avaya IP Agent on Citrix:

- Windows Terminal Services compatibility - Those call centers that use Windows Terminal Services can now use a special edition of Avaya IP Agent to facilitate usage of the Telecommuter configuration in that environment.

- User-to-user information (UUI) screen pop enhancement - Using external applications, unique identifiers can be added to incoming calls. If your Avaya communication server has the correct features and configuration, these identifiers can be passed to Avaya IP Agent and used in screen pops for agents.

Available configuration and supported communication servers

- Support of Avaya DEFINITY R10, MultiVantage, and Communication Manager systems.
- Telecommuter configuration - Agents using an analog or Digital Communication Protocol (DCP) telephone can use the advanced call features provided by the Avaya communication server. For example, an agent working from home can use Avaya IP Agent and their home telephone to transfer calls, place calls on hold, change agent work mode, and do other call center activities.

Call and contact center features

- VuStats support - Avaya IP Agent can display multiple lines of VuStats information in the **VuStats** dialog box. You can use VuStats information to assist in complete monitoring of the contact center.
- Emergency Call Handling Service (E911) - With this feature, agents using IP Endpoints can use numbers that connect to emergency services, such as 911 in the United States. Only those emergency services in the Public Safety Answering Point area where the Avaya communication server is located can be reached. Agents or extensions in remote locations should not use this feature for emergencies.
- External Number Formatting - For international users, Avaya IP Agent allows you to define how many digits are present in telephone numbers outside the contact center.

Contact management features

- Call history - Avaya IP Agent records a complete call history of incoming and outgoing calls, even for those calls that were missed because where the caller does not leave a voice message.
- Telephone directory - Avaya IP Agent provides a customizable telephone directory that lists physical addresses, multiple telephone numbers, speed-dial numbers, e-mail addresses, and notes for each contact.
- Search Public Directory - With this feature, agents have the ability to search through public or company information using the Lightweight Directory Access Protocol (LDAP).
- Screen Pops - Screen Pops can be initiated when a call is received or placed. Avaya IP Agent provides agents with the ability to display Web pages, start applications, or retrieve and display caller 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 executable or registered file type activation

- Dynamic Data Exchange (DDE) "Execute" or "Poke" commands

Usability features

- Clipboard dialing - Avaya IP Agent can be used to dial any number copied to the clipboard or, in most personal computer applications, used to dial a number that an agent highlights by right-clicking on the Avaya IP Agent icon in the System Tray.
- Enhanced Phone features - The **Phone Features** window includes adding, renaming, and deleting of folders.
- Enhanced System Tray icon - The Avaya IP Agent icon in the System Tray contains release, drop, hold, transfer, conference, and agent work mode functions.
- Automatic login - An agent can automatically log in to the Avaya communication server when Avaya IP Agent is started. Avaya IP Agent uses the login information from the previous login.
- Speed dialer - Agents can assign telephone numbers to function keys (F2 through F8).
- Voice message icon - When voice messages are present for the extension currently in use, an icon is displayed in the System Tray. When it has been configured, you can click on this icon to connect to your voice mail system.
- Alternate user interfaces - These interfaces can be used in place of the standard interface. These alternate interfaces use much less space on your desktop, and then can eliminate the problem of the previous Avaya IP Agent interface being hidden behind other applications or requiring too much space on the desktop.

Security and management features

- 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, and Program Options selection.
- Alternate Gatekeeper - When an agent registers an IP Endpoint with an Avaya communication server, a C-LAN circuit pack IP address is sent by the server to the IP Endpoint. If registration is successful, the Avaya communication server sends back the IP addresses of all the C-LAN circuit packs in the network region. These addresses can be used if call signaling on the original C-LAN circuit pack fails.
- Support for server load balancing across gatekeepers - Registration and usage of Avaya communication servers can be distributed across multiple C-LAN circuit packs within a network region. This increases performance and reliability for all IP Endpoints.

Telecommuter configuration

Use the Telecommuter configuration in situations where a personal computer can make a dial-up or network connection to an Avaya communication server 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. Agents make and receive calls through the Avaya IP Agent interface, and the voice path is sent to the specified telephone.

What you need to know about the Telecommuter configuration

The following is a list of the Telecommuter configuration requirements and capabilities:

- Connection - One dial-up or network connection from the personal computer running Avaya IP Agent to the Avaya communication server and a telephone capable of receiving calls from the Avaya communication server
- Personal computer hardware - Modem or Network Interface Card (NIC) for connection to the Avaya communication server
- Telephone set - Any telephone capable of receiving calls from the Avaya communication server
- Voice Quality - High
- Avaya communication server connections - One user connection for signaling connection and one of the following:
 - For off-site use, one trunk connection
 - For on-site use, an additional user connection

Compatible telephone types for Avaya IP Agent

This section contains the following topics:

- [Supported telephone types](#) on page 15
- [Recommended telephone types](#) on page 16

Supported telephone types

Note:

When you change telephone types for a station, you must restart Avaya IP Agent for the change to take effect.

The following table provides the telephone types that are available on the Avaya communication server and officially supported for use with Avaya IP Agent:

Telephone model	Communication platform	Additional features
Callmaster (602A1)	DCP	<ul style="list-style-type: none"> 80-character (2x40) display
Callmaster II (603D1)	DCP	<ul style="list-style-type: none"> 80-character (2x40) display
Callmaster III (603E1)	DCP	<ul style="list-style-type: none"> 80-character (2x40) display
Callmaster IV (603F1)	DCP	<ul style="list-style-type: none"> 80-character (2x40) display
Callmaster V (607A1)	DCP	<ul style="list-style-type: none"> 48-character display
2402	DCP	<ul style="list-style-type: none"> 48-character display Supported with Avaya Communication Manager 2.1 or later
2420	DCP	<ul style="list-style-type: none"> 203-character display Expansion module available
4606	IP	<ul style="list-style-type: none"> 32-character display
4610	IP	<ul style="list-style-type: none"> 168x80 pixel display Supported only on Avaya Communication Manager 2.1 or later
4612	IP	<ul style="list-style-type: none"> 48-character display
4620	IP	<ul style="list-style-type: none"> 168x132 pixel display Expansion module available
4624	IP	<ul style="list-style-type: none"> 48-character display
4630	IP	<ul style="list-style-type: none"> 320x240 pixel display
6402D	DCP	<ul style="list-style-type: none"> 32-character (2x16) display
6408D / 6408D+	DCP	<ul style="list-style-type: none"> 48-character display

Telephone model	Communication platform	Additional features
6416D+	DCP	<ul style="list-style-type: none"> ● 48-character display ● Expansion module available
6424D+	DCP	<ul style="list-style-type: none"> ● 48-character display ● Expansion module available
8403B	DCP	<ul style="list-style-type: none"> ● 48-character display
8405D / 8405D+	DCP	<ul style="list-style-type: none"> ● 48-character display
8410D	DCP	<ul style="list-style-type: none"> ● 48-character display
8411D	DCP	<ul style="list-style-type: none"> ● 48-character display ● For this telephone set, you must disable the data port, which is true for all softphones
8434D	DCP	<ul style="list-style-type: none"> ● 80-character (2x40) display ● Expansion module available

Recommended telephone types

While Avaya IP Agent supports all of the telephone types listed in the previous table for the Telecommuter configurations, the following types provide the most buttons and features, and an 80-character display:

- 606A1
- 8434D

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

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** tab in the Avaya iClarity IP Audio dialog boxes used for login to set an IPSec IP address, that is assigned by the VPN gateway and that is visible to the application on the personal computer. If you need assistance, contact Avaya technical support.

The VPN solution provided by Avaya 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: Configuring the Avaya communication server

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

- Avaya communication servers with Communication Manager software
- Avaya communication servers with MultiVantage Software
- DEFINITY Enterprise Communication Server (ECS) R10
- DEFINITY Business Communications Server (BCS) and Guestworks R10

Before agents can receive calls with Avaya IP Agent, the Avaya communication server must be configured to support extension assignments, IP connectivity, telephone types, and other settings.



Important:

You should be familiar with administering your Avaya communication server before attempting any of the procedures in this section. If you are unfamiliar with the fields or settings described in this section, consult your Avaya communication server documentation for assistance.

This section includes the following topics:

- [Required Avaya communication server circuit packs](#) on page 19
- [Validating Feature Access Codes](#) on page 21
- [Telecommuter configurations](#) on page 22

Note:

The screens shown in this section are from an Avaya communication server with the Expert Agent Selection (EAS) feature. If you do not have the EAS or some other features on your Avaya communication server, these interfaces may differ slightly from the screens shown. Because of this, each step in the procedure identifies when there is a distinction between an EAS and non-EAS system.

Required Avaya communication server circuit packs

This section provides information and documentation resources for the circuit packs required by your Avaya communication server to support 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

This section contains the following topics:

- [C-LAN circuit pack](#) on page 20
- [IP Media Processor](#) on page 20
- [Documentation](#) on page 21

C-LAN circuit pack

C-LAN is a packet port circuit pack for Avaya communication servers that provides TCP/IP connectivity to adjuncts for applications. It has one 10BaseT or 100BaseT 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 configurations where a data connection is made to the Avaya communication server. The voice path does not use this circuit pack.

Note:

Avaya recommends that the TN799C V4 or later C-LAN circuit pack is used for its increased ability to handle 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 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) that is used where a VoIP connection is made to the Avaya communication server.

Documentation

For installation procedures and configuration information for the C-LAN and IP Media Processor circuit packs, see *Administration for Network Connectivity* for your Communication Manager, MultiVantage, or DEFINITY system.

Validating Feature Access Codes

This section provides the procedure for administering the Feature Access Codes (FACs) on an Avaya communication server. Feature Access Codes are used by Avaya IP Agent to give agents the ability to perform the following actions:

- Change the current work mode
- Log in
- Log out
- Adjust the method with which an agent receives the next call (Auto-In, Manual-In)
- Request supervisor assistance

Before you begin

Feature Access Codes cannot be entered unless the **fac** capability is assigned in the dial plan.

To change settings on the Avaya communication server, you must have a user ID with the proper administrative permissions.

**Important:**

Screens presented in this section might differ in appearance from those of your Avaya communication server. All options on the specified forms mentioned in this procedure are available, but might not be on the page noted.

Steps for validating Feature Access Codes

To validate Feature Access Codes:

1. Log in to the Station Administration Terminal (SAT) on the Avaya communication server.

2. Enter `display dialplan` to access the dial plan form and then ensure that the **fac** option is assigned in the dial plan.

If the **fac** option is not assigned in the dial plan, your dial plan does not currently support Feature Access Codes. For more information on configuring your dial plan for Feature Access Codes, see the documentation for your Avaya communication server.

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 Avaya communication servers will display only a subset of the access code fields shown in the following figure.

```
FEATURE ACCESS CODE (FAC)
Automatic Call Distribution Features
After Call Work Access Code: *73
Assist Access Code: *74
Auto-In Access Code: *70
Aux Work Access Code: *71
Login Access Code: *88
Logout Access Code: *89
Manual-in Access Code: *72
Service Observing Listen Only Access Code: *62
Service Observing Listen/Talk Access Code: *63
Add Agent Skill Access Code: *98
Remove Agent Skill Access Code: *99
Remote Logout of Agent Access Code: *64

Call Vectoring/Prompting Features
Converse Data Return Code: *09
```

Note:

The Feature Access Codes shown in the graphic are only an example and do not need to be configured as such on your Avaya communication server. 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.

If Feature Access Codes are not assigned, see the documentation for your Avaya communication server to find instructions on adding Feature Access Codes.

Telecommuter configurations

If you will be using any telephone as your extension, this section provides the procedures and information for proper administration of your Avaya communication server.

This section contains the following topics:

- [Ensuring compatibility](#) on page 23
- [Configuring station settings](#) on page 24

Ensuring compatibility

In this procedure, you set features on your Avaya communication server so that Avaya IP Agent can be used in your call center.

Before you begin

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



Important:

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

If you need to configure a specific range of ports to use with IP communications because of firewalls or for some other reason, you must assign the range through both the Avaya communication server and Avaya iClarity IP Audio. See [Advanced tab](#) on page 138 for information on configuring port ranges on both systems.

Steps for ensuring Telecommuter station settings

To ensure that your Avaya communication server supports the Telecommuter configuration:

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

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

```

                                OPTIONAL FEATURES
                                -----
G3 Version: 09.5                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.)

Chapter 2: Configuring the Avaya communication server

3. Ensure that the **Maximum Concurrently Registered IP Stations** field is set to a number greater than zero. This number represents the total number of IP stations that can be connected to the Avaya communication server 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.

```
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
IP Stations? y                        Multiple Locations? y
ISDN Feature Plus? n                 Personal Station Access (PSA)? y
ISDN Network Call Redirection? y
```

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

5. Ensure that the **IP Stations** field is set to **y**.
6. Navigate to Page 9 of the **customer-options** form.

```
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_RCMax   ___ : 10    _____ : 0     _____ : 0
IP_Soft    ___ : 10    _____ : 0     _____ : 0
IP_AGENTSC ___ : 10    _____ : 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.)

7. Ensure that the **Limit** field for the **IP_Agent** Product ID is set to the number of licenses you purchased for Avaya IP Agent.

Configuring station settings

This section provides the procedure for configuring station settings to support the Telecommuter configuration.

Before you begin

Before configuring station settings on the Avaya communication server, you should have completed the procedures in [Ensuring compatibility](#) on page 23 to verify that your Avaya communication server supports Avaya IP Agent and Feature Access Codes.

To change settings on the Avaya communication server, you must have a user ID with the proper administrative permissions.

If the station has not yet been created, you must create it using the `add station` command on the Avaya communication server.

Steps for configuring Telecommuter station settings

To change station settings to support the Telecommuter configuration:

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

The Avaya communication server displays the **change station** form for the specified station.

```

                                STATION
Extension: 44444                Lock Messages? n          BCC: 0
Type: 8434D                   Security Code: 1234       TN: 1
Port: X                       Coverage Path 1:          CDR: 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 **Type** field, enter the type of telephone that Avaya IP Agent will emulate.

Avaya recommends using one of the following telephone types because of the number of features available and the ability to display 80 characters for contact center or call information:

- 8434D
- 606A1

Note:

In Telecommuter mode, Avaya IP Agent can take over the administration and functionality of a physical Digital Communication Protocol (DCP) telephone. The physical telephone must be one of those listed in [Compatible telephone types for Avaya IP Agent](#) on page 14. For DCP, 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 Avaya communication server.

If you selected the **8434D** 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 DCP connection to the Avaya communication server. 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 Avaya communication server 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 Avaya communication server.

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

```

                                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 Restrict Last Appearance? y
Bridged Call Alerting? n
Active Station Ringing: single_____
H.320 Conversion? n      Per Station CPN - Send Calling Number? _
Service Link Mode: as-needed
Multimedia Mode: enhanced
MMI 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.

SITE DATA		STATION	
Room: _____		Headset? <u>n</u>	
Jack: _____		Speaker? <u>n</u>	
Cable: _____		Mounting: <u>d</u>	
Floor: _____		Cord Length: <u>0</u>	
Building: _____		Set Color: _____	
ABBREVIATED DIALING			
List1: _____	List2: _____	List3: _____	
BUTTON ASSIGNMENTS			
1: <u>call-appr</u>		6: <u>manual-in</u>	Grp: _____
2: <u>call-appr</u>		7: <u>after-call</u>	Grp: _____
3: <u>call-appr</u>		8: <u>assist</u>	Grp: _____
4: _____		9: <u>aux-work</u>	RC: <u>_</u> Grp: _____
5: <u>auto-in</u>	Grp: _____	10: <u>aux-work</u>	RC: <u>0</u> 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.

You must assign the necessary agent work mode buttons that are used in your contact center:

- **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) mode when the call has been completed.
- **after-call** - This function places agents in the After Call Work (ACW) mode.
- **aux-work** - This function places agents in the Auxiliary Work (AUX) mode. Multiple Auxiliary Work buttons with different reason codes can be assigned to this extension.

Note:

You can configure your Avaya communication server to prompt for reason codes when an agent enters the **aux-work** state.

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

Prompting feature obtains information from a caller through a **collect-digits** vector step on the Avaya communication server.



Important:

The 4600, 6400, and 607A1 telephone types do not have 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 Avaya communication server, 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 documentation for your Avaya communication server.

Chapter 3: Installing Avaya IP Agent

This section contains procedures and important information for installing and uninstalling Avaya IP Agent in a Microsoft Windows Terminal Services environment.

Call centers that use Windows Terminal Services, Citrix MetaFrame XP, or Citrix Presentation Server can implement Avaya IP Agent to provide agents with enhanced call features and a computer telephone interface to their extension. Avaya IP Agent can be used only in the Telecommuter mode in this environment.

This section includes the following topics:

- [Prerequisites](#) on page 29
- [Installing Avaya IP Agent](#) on page 32
- [Reinstalling Avaya IP Agent](#) on page 34
- [Uninstalling Avaya IP Agent](#) on page 34

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:

- [Software download package contents](#) on page 29
- [Avaya communication server](#) on page 30
- [Server hardware](#) on page 30
- [Server software](#) on page 31

Software download package contents

The Avaya IP Agent software download package available from the Avaya Support Web site contains the following:

- Avaya IP Agent installation program
- Avaya IP Agent program files

Chapter 3: Installing Avaya IP Agent

- Documentation in PDF format - Adobe Acrobat® Reader 5.0 or later is required to view.PDF documents.
- A `readme.txt` file containing last minute information

Avaya communication server

The following Avaya communication servers can be used:

- Avaya communication servers with Avaya Communication Manager software
- Avaya communication servers with Avaya MultiVantage software
- DEFINITY Enterprise Communication Server (ECS) R10
- DEFINITY IP 600 R10
- DEFINITY ONE R10
- DEFINITY Business Communications System (BCS) R10
- DEFINITY Guestworks R10

For the Windows Terminal Services implementation of Avaya IP Agent, the Avaya communication server must have one or more of the following component:

- A Control LAN Circuit Pack (C-LAN) circuit pack (TN799B or later)

Server hardware

The following topics present minimum server hardware requirements for Avaya IP Agent:

Processor

The minimum requirements for Windows Terminal Services are sufficient for Avaya IP Agent to run properly.

Hard disk space

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

RAM

The following table provides the minimum memory requirements for the Windows Terminal Services edition of Avaya IP Agent:

Server operating system	Memory
Windows 2000 Server Windows 2000 Advanced Server Windows 2003 Server - Standard Edition Windows 2003 Server - Enterprise Edition	128 MB

Networking

The desktop workstation must have one network (non-dialup) connection and one telephone connection (DCP or analog).

Peripherals

The following peripheral is required for installation and use of Avaya IP Agent:

- Mouse or compatible pointing device

Note:

If you are using the minimum hardware requirements for Windows Terminal Services, you may experience a degradation in performance when several users are simultaneously registered with the server.

Server software

Avaya IP Agent requires the following software:

- One of the following Microsoft Windows operating systems with Windows Terminal Services:
 - Windows 2000 Server
 - Windows 2000 Advanced Server
 - Windows 2003 Server - Standard Edition
 - Windows 2003 Server - Enterprise Edition
- Microsoft Internet Explorer 5.5 or later

Note:

Avaya IP Agent for Windows Terminal Services is compatible with Citrix MetaFrame XP Release 3.2 or later and Citrix Presentation Server 4.0 or later.

Installing Avaya IP Agent

This section provides information and procedures for installing Avaya IP Agent for Windows Terminal Services.

Before you begin

Read and understand the following items before attempting to install Avaya IP Agent for Windows Terminal Services:

- After you install Avaya IP Agent to each server, you must initialize the configuration for each user.
- Read the `readme.txt` file in the Avaya IP Agent software download package for any last-minute information.
- If you are upgrading Avaya IP Agent, ensure that you have obtained new licenses for this version on your DEFINITY, MultiVantage, or Communication Manager system. If you have not done so or are unsure if you have done so, contact your Avaya representative for assistance.
- If you install applications for your users from the server, you should perform these installations during off-hours because the Avaya IP Agent installation might require a restart of the system.

Steps for installing Avaya IP Agent for Windows Terminal Services

To install Avaya IP Agent:

1. Use the Add/Remove program from the Control Panel to install Avaya IP Agent.
2. Run the `Launcher.exe` file in the Avaya IP Agent software download package.
The installation program displays the setup selection window.
3. Next to **IP Agent Terminal Services Setup**, select the **Install** button.
The installation program displays the **Welcome** window.
4. Select the **Next** button.
The installation program displays the **Software License Agreement** window.
5. Read the entire Software License Agreement carefully and select the **Yes** button if you understand and agree to the terms. Selecting **No** will cause the installation program to exit.
6. Select the **Next** button.
The installation program displays the **Choose Destination Location** window.

7. 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 and select a new location.
8. 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.

9. 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. Proceed to Step 13.
 - **Custom** - This option installs the basic options in English as well as in any language you choose. Selecting this option and then the **Next** button will display the **Select Language Components** window where you specify the software language components to install. Proceed to the next step.
10. 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.

11. Select the **Next** button.

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

12. Use the **Select Program Folder** window to specify the folder name that will appear in the **Start** menu through one of the following methods:
 - 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 Start menu shortcuts.

13. Select the **Next** button.

The installation program displays the **Shortcut and Startup Features** window.

14. Select the associated check boxes for the shortcuts you want to be created.

Note:

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

15. If you selected one of the check boxes on the upper portion of this dialog box, you must highlight the languages in the **Select the languages you would like to have added** field for shortcuts to be created in those languages.

Note:

The option **Automatically start the following version of Avaya IP Agent when Windows is started** is not available for Windows Terminal Services.

16. 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.

The install program begins copying files. When this process is complete, the **View the Release Information File** window is displayed.

17. Select the check box provided in the **View the Release Information File** window to view the latest information for Avaya IP Agent that could not be included in this document.

18. Select the **Next** button.

If you selected to view the Release Information, the installation program displays the `readme.txt` file. Otherwise, proceed to Step 20.

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

The installation program displays the final installation window.

20. Select the **Finish** button.

The installation program closes.

Reinstalling Avaya IP Agent

If you reinstall Avaya IP Agent for Windows Terminal Services, the process is exactly as described in [Installing Avaya IP Agent](#) on page 32. Personalized configurations and data are preserved.

Uninstalling Avaya IP Agent

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 uninstall Avaya IP Agent using the Windows **Add/Remove Programs** feature. Read-only folders that are shared with other applications are not removed. If you have added any files or directories to the Avaya IP Agent installation directory, those files will not be removed.

The uninstall program removes:

- All installed Avaya IP Agent files, including all language versions
- Folders created by the Avaya IP Agent installation
- Log files created by Avaya IP Agent

Steps for uninstalling Avaya IP Agent

To uninstall the Avaya IP Agent application from Windows 2000 or Windows XP:

1. Close Avaya IP Agent if it is currently running.
2. In the Windows **Control Panel**, select **Add/Remove Programs**.
Windows displays the **Add/Remove Programs** dialog box.
3. In the **Currently installed programs** list box, highlight **Avaya IP Agent**.
4. Select the **Change/Remove** button.
InstallShield displays a message box asking you to confirm that Avaya IP Agent should be removed.
5. Select the **Yes** button to start the uninstall process.
InstallShield displays a message box asking if you want to preserve user data.
6. Select one of the following buttons regarding preservation of user data:
 - **Yes** - Selecting this option saves all user data and settings so that a reinstallation of Avaya IP Agent retains the same configuration.
 - **No** - Selecting this option removes all Avaya IP Agent user data from the personal computer.When the uninstall process is complete, a window containing a successful message is displayed.
7. Select the **Finish** button to complete the uninstall process.
8. Close the **Add/Remove Programs** dialog box.

Chapter 4: Avaya IP Agent enhanced configuration options

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

This section contains the following topics:

- [Configuring the Emergency Call Handling Service](#) on page 37
- [Configuring Alternate Gatekeeper on Avaya communication servers](#) on page 40
- [Configuring server load balancing across gatekeepers](#) on page 40

Configuring 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 reaches only the emergency service in the Public Safety Answering Point area where the Avaya communication server is located.



WARNING:

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.

This section contains the following topics:

- [Administering the Avaya communication server for Emergency Call Handling](#) on page 38
- [Administering Avaya IP Agent for Emergency Call Handling](#) on page 38

Administering the Avaya communication server for Emergency Call Handling

See the documentation for your Avaya communication server for information on configuring the Emergency Call Handling feature.

Administering Avaya IP Agent for Emergency Call Handling

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

Before you begin

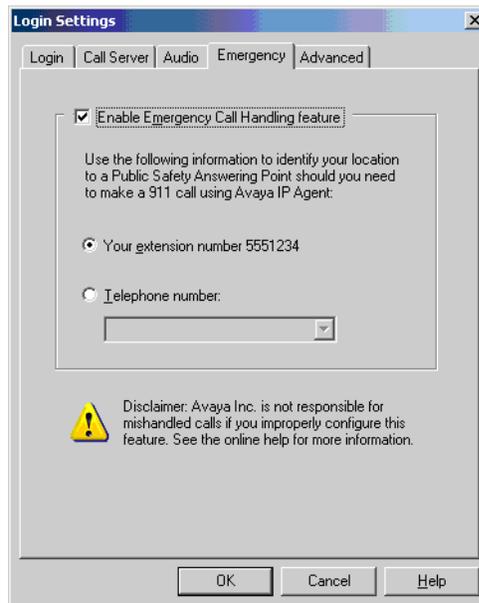
The Avaya communication server to which you are connecting must have each extension properly configured for the Emergency Call Handling Service before this feature can be used through Avaya IP Agent.

Steps

To configure the Emergency Call Handling Service in Avaya IP Agent:

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 box.

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 Avaya communication server for calls placed to emergency services:
 - **Your extension number XXXXXXXX** - 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 Digital Communications Protocol (DCP) telephone 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.

Configuring Alternate Gatekeeper on Avaya communication servers

Use the Alternate Gatekeeper feature when an IP Endpoint registers with an Avaya communication server. When Avaya IP Agent registers with an Avaya communication server, a C-LAN circuit pack IP address is sent to the IP Endpoint. If registration is successful, the Avaya communication server 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 if call signaling on the original C-LAN circuit pack fails.



Tip:

You can better control the usage and workload of C-LAN circuit packs by creating network regions.

Alternate Gatekeeper configuration

For information on defining Alternate Gatekeeper addresses, refer to your Avaya communication server documentation.

Configuring server load balancing across gatekeepers

Load balancing for an Avaya communication server refers to the ability of distributing IP Endpoint traffic across all C-LAN circuit packs that are defined within the same network region.

Load Balancing 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 an Avaya communication server. After this has been completed, IP Endpoints registering with the Avaya communication server will be automatically assigned to the different C-LAN circuit packs in sequential order. This helps distribute IP Endpoints evenly amongst the C-LAN circuit packs.



Important:

It is important that you use the network region feature to control which C-LAN circuit packs are available when one pack loses connectivity. Without proper region assignments for your C-LAN circuit packs, Avaya IP Agent could attempt to connect to a C-LAN circuit pack that has not been properly configured or is not intended for use with Avaya IP Agent.

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

Load Balancing documentation

For installation procedures and configuration information for the C-LAN and IP Media Processor circuit packs, see *Administration for Network Connectivity* for your Communication Manager, MultiVantage, or DEFINITY system.

Chapter 5: Starting and Stopping Avaya IP Agent

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

- [Starting Avaya IP Agent](#) on page 43
- [Initializing IP Endpoint configurations](#) on page 44
- [Registering with the Avaya communication server](#) on page 47
- [Logging in as an agent \(EAS\)](#) on page 49
- [Logging in as an agent \(non-EAS\)](#) on page 50
- [Logging out of Avaya IP Agent](#) on page 51
- [Exiting Avaya IP Agent](#) on page 52
- [Using alternate user interfaces](#) on page 52

Starting Avaya IP Agent

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

Steps for starting Avaya IP Agent

To start Avaya IP Agent:

1. Select the **Start** button from the Windows task bar.
2. Select **Programs > Avaya**.
3. Select **Avaya IP Agent - <language>**.

The Avaya IP Agent window is displayed. Although Avaya IP Agent is now running, your extension is not yet registered with the Avaya communication server.

4. For IP Endpoint configurations, go to [Initializing IP Endpoint configurations](#) on page 44.

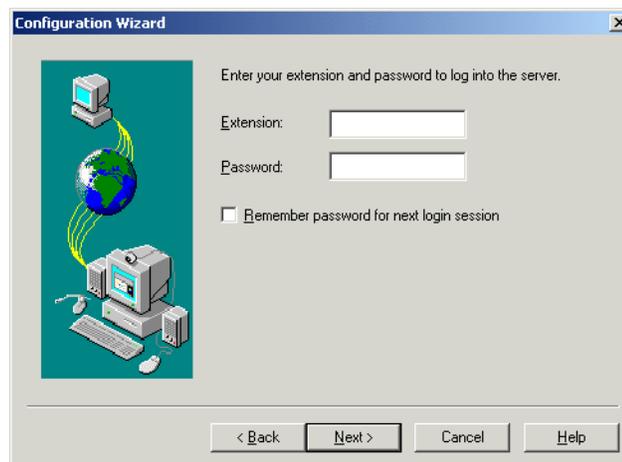
Initializing IP Endpoint configurations

If you have performed a new installation of Avaya IP Agent for an IP Endpoint configuration, the **Configuration Wizard** is displayed when you first start Avaya IP Agent. The **Configuration Wizard** prompts you to enter the necessary configuration information for registering with an Avaya communication server.

Steps

To configure your installation of Avaya IP Agent to register with an Avaya communication server:

1. Start Avaya IP Agent.
Avaya IP Agent starts the **Configuration Wizard** automatically.
2. Select the **Next** button.
Avaya IP Agent displays the next window of the Configuration Wizard.
3. Select the **Log into Avaya call server** option.
4. Select the **Next** button.
Avaya IP Agent displays the next window of the Configuration Wizard.



5. Enter the necessary information in the following fields:
 - **Extension** - The extension number of the station that will be used with Avaya IP Agent.
 - **Password** - The numeric password associated with the specified extension.

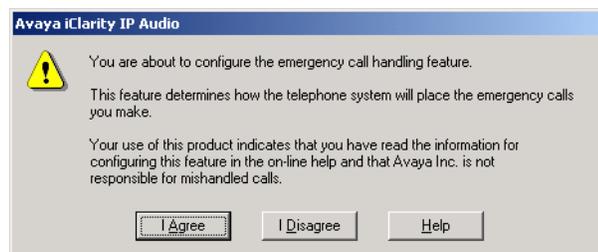
- **Remember password for next login session** - Place a check mark in this check box if you do not want to enter your password each time you register with the Avaya communication server. If you are concerned with the possibility of unauthorized persons assuming this identity, leave this check box blank.
6. Select the **Next** button.
Avaya IP Agent displays the next window of the Configuration Wizard.
 7. In the **Primary Server Address** field, enter the domain name or IP address of the Avaya communication server C-LAN circuit pack that will be used for connections.
 8. In the **Alternative Server Addresses** field, you have the option of defining other C-LAN circuit pack addresses that will be used should the primary address fail. This field is optional.



Tip:

The alternative server addresses should reside in the same network region as the primary server address. For more information on defining network regions, see the documentation for your Avaya communication server.

9. Select the **Next** button.
Avaya IP Agent displays the next window of the Configuration Wizard.
10. Select the pre-defined **Dialing Location** from the drop-down list. This selection will control certain telephony properties such as area code, outside line access, and so forth.
11. Select the **Next** button.
Avaya IP Agent displays a warning message regarding the Emergency Call Handling feature.



12. Read the text of this warning completely and select the **I Agree** button if you understand and agree to the conditions stated in this message.

If you select the **I Disagree** button, the **Configuration Wizard** will exit or, for Windows Terminal Services, return to a previous **Configuration Wizard** window.

After you select **I Agree**, Avaya IP Agent displays the next window of the Configuration Wizard.



13. If you want to enable this feature, place a check mark in the **Enable Emergency Call Handling feature** check box.
14. If you enabled the Emergency Call Handling feature, select the location that will be sent through the Avaya communication server for calls placed to emergency services:

 **WARNING:**

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.

- **Your extension number XXXXXX** - 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. Enter the number of digits that your contact center uses for extensions. For DEFINITY R10 systems, extension numbers can range from one to five digits. For MultiVantage and Communication Manager systems, extension numbers can range from one to seven digits.

- **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 station definition on the Avaya communication server in the **IP Emergency Calls** field. Failure to use the same setting as the Avaya communication server will result in login failure for this extension.

15. Select the **Next** button.

Avaya IP Agent displays the next window of the Configuration Wizard.

16. Specify the telephone or extension number that will be used to make and receive calls with Avaya IP Agent.

17. Select the **Next** button.

Avaya IP Agent displays the next window of the Configuration Wizard.

18. If you do not need to go back and readjust your audio settings, select the **Finish** button to complete the Configuration Wizard.

Registering with the Avaya communication server

Before you can use Avaya IP Agent, you must register Avaya IP Agent with the Avaya communication server and register your extension through the **Login** window. Once you are registered with the Avaya communication server, you can make yourself available for ACD calls by performing an agent login.

This section provides the procedure for registering with an Avaya communication server. This must be done so that you can use Avaya IP Agent for placing and answering calls in an IP Endpoint configuration.

Before you begin

If you attempt to log in to an Avaya communication server that is not a DEFINITY, MultiVantage, or Communication Manager system, Avaya IP Agent displays an **Invalid Station Type** error message. You must use a DEFINITY, MultiVantage, or Communication Manager system with Avaya IP Agent.

Setting default registration information

The **Settings** button on the **Login** window can be used to configure more advanced features that are used with Avaya IP Agent and the Avaya communication server. For more information on these settings, see [Login Settings dialog box](#) on page 133.

Steps for registering with an Avaya communication server

To register with the Avaya communication server:

1. When you start Avaya IP Agent, the **Login** window is displayed. If this window is not displayed, select **File > Station 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, which has been administered for Avaya IP Agent on the Avaya communication server.
3. In the **Password** field, enter the numeric password for the specified extension.
4. In the **Call Server Address** field, enter the IP Address or name of the Avaya communication server.
5. Ensure that the correct information is specified in the appropriate field:
 - **Telephone At** - This is the telephone or extension number that will receive incoming calls. This number cannot be the same as the number entered in the **Extension** field. The Avaya communication server administrator will have created a new extension to support voice communication.
 - **Dialing Location** - Select the entry that contains the appropriate telephony properties for your current location.
6. If you do not want to enter your password each time you register with the Avaya communication server, place a check mark in the **Remember password for next login session** check box. If you are concerned with the possibility of unauthorized persons registering as this extension, leave this check box blank.
7. If you want to automatically register with the Avaya communication server when Avaya IP Agent is started at a later time, enable the **Automatically log in if possible when application restarts** check box. You must have successfully registered with the Avaya communication server at least once in the past to use this option.
8. Select the **Login** button. When you successfully register with the Avaya communication server, the controls in the Avaya IP Agent main window are enabled.
9. Avaya IP Agent displays the **Verify Telephone Number** dialog box upon successful registration with the Avaya communication server. When you first start using Avaya IP Agent, it is important that you make some test calls to verify that you have set up your connection properly.

Logging in as an agent (EAS)

After registering with the Avaya communication server, you can, as an extension, receive calls through Avaya IP Agent. However, to receive calls from a skill, you need to log in as an agent of that skill. This section provides the procedure for logging in to Avaya IP Agent as an agent. This procedure is for logging in to Avaya communication servers that use the Expert Agent Selection (EAS) feature.

Steps for logging in (EAS)

To log in to Avaya IP Agent as a member of an ACD skill:

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.

The extension specified in the **Login** window will ring.

Note:

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 you will be automatically put in the AUX-work mode.

5. To leave the AUX-work mode, select either the **Auto-In** or **Manual-In** button.

For more information about **Auto-In** and **Manual-In** work modes, see [Selecting an agent work mode](#) on page 61.

You are now ready to begin receiving and making calls.

Logging in as an agent (non-EAS)

After registering with the Avaya communication server, you can, as an extension, receive calls through Avaya IP Agent. However, to receive calls from a split, you need to log in as an agent of that split. This section provides the procedure for logging in to splits through Avaya IP Agent. This procedure is for logging in to Avaya communication servers that do not have 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 Avaya communication server. To change the Avaya IP Agent configuration:

1. Select **Tools > Program Options**.
2. From the **Program Options** window, select the **ACD Agent** item from the list box.
3. Remove the check mark from the **Configure program for EAS agent support** check box.
4. Ensure that a check mark is present in the **Prompt for agent ID and password during agent login** check box.

Note:

If this feature is not enabled, you must enter your agent ID and password through the telephone key pad.

5. Select the **OK** button.
 6. Close Avaya IP Agent by selecting **File > Exit** from the main window.
 7. Restart Avaya IP Agent.
-

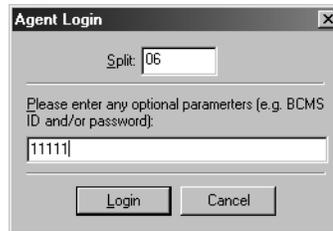
Steps for logging in (non-EAS)

To log in to Avaya IP Agent as a member of an ACD split:

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 your extension requires a password, enter the password for this split.

If you are logging in to a split that consists of only one or two digits, you may be required to place one or more zeros in front of the split number. This is dependent on the configuration of your Avaya communication server. See the documentation for your Avaya communication server.

5. Select the **Login** button.
6. Select the split from the Agent toolbar again.
7. Select the appropriate work mode from the resulting menu.
8. For each split you want to log in to, 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, or select **Agent > Agent Logout** from the menu bar.

If the Avaya communication server 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 **Dial Pad**.

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 Avaya communication server:

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

The Avaya IP Agent main window closes and your extension is logged out of the Avaya communication server.

Using alternate user interfaces

This section provides information and procedures for the alternate user interfaces that are available in Avaya IP Agent.

In many contact center environments, agents use many different applications simultaneously. This can lead to overlapped application windows on the Windows desktop. This can cause difficulties in accessing or using the necessary application windows quickly and efficiently. To help overcome this problem, Avaya IP Agent provides three alternate user interfaces that use much less space on the Windows desktop than the default main window. The following figure compares interface size:

Default main window



Alternate user interface example



Note:

The procedures in this document are written for the default main window. You will not be able to exactly follow these procedures when you are using an alternate user interface. However, the Program Menu button on the right side of the interface allows you to access the most commonly used features in Avaya IP Agent. Also, the shortcut key combinations for Avaya IP Agent do not function while you use an alternate user interface.

AutoAnswer interface



This interface uses the least amount of space, and is intended for agents using the **Auto-In** and **Auto-answer** features. Call-handling buttons, such as **Transfer**, **Hold**, and **Release** are present. Buttons for agent work modes and Avaya IP Agent features are not available in this interface.

Mini interface



This interface is slightly wider than the AutoAnswer interface and is intended for the contact center agent who determines the necessary work mode, such as AUX (Auxiliary Work) and ACW (After-Call Work). In addition to the call-handling buttons, this interface also contains buttons for any agent work modes assigned to this extension.

Titlebar interface



When an agent is on a call, this interface is the largest of the alternate interfaces. It includes call-handling buttons, agent work modes buttons, and buttons used to access other Avaya IP Agent features, such as the **Phone Directory** and **Call History** window.

Selecting an alternate interface

This section provides the steps for selecting one of the three alternate user interfaces available with Avaya IP Agent.

Steps

To select an alternate user interface.

1. From the Avaya IP Agent main window, select **View > Alternate Interfaces**.
2. From the branching menu, select the interface that you want to use:
 - **AutoAnswer**
 - **Mini Interface**
 - **Titlebar**

Avaya IP Agent displays the selected interface.

Accessing features

To access Avaya IP Agent features that are not represented by a button, click the **Program Menu** button on the far right side of the interface. A menu containing login and logout options, work modes, online help items, and features is displayed.



Returning to the main interface

To return to the Avaya IP Agent main window from an alternate user interface, click the Maximize button next to **Program Menu** button on the right side of the interface.



Removing alternate user interfaces

If you do not want these interfaces available for use, remove all files located in the following directory:

`<install-directory>\Avaya\Avaya IP Agent\Skins`

If you want only one interface available to agents, leave that file in the `\Skins` directory and delete the other files.

Note:

Avaya IP Agent cannot recreate these files once they have been deleted.

Renaming alternate user interfaces

If you want to change the name of an alternate user interface, rename the necessary file in the following directory:

`<install-directory>\Avaya\Avaya IP Agent\Skins`

Note:

Because the names of these menu items are derived from actual filenames, these items will appear in English for international versions of Avaya IP Agent. To cause these menu items to appear in a specific language other than English, you must use a language-specific version of Windows and then rename the files as needed.

Chapter 6: Using VuStats

The VuStats feature is used to pass contact center information from the Avaya communication server to a display on a station or extension. Supervisors and agents use this feature to monitor contact center activity and statistics.

The **VuStats** window of Avaya IP Agent displays any VuStats buttons that have been assigned to the extension by the communication server administrator.

Using Avaya IP Agent, you 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 an extension for VuStats through the Avaya communication server](#) on page 57
- [Viewing a single set of VuStats information in Avaya IP Agent](#) on page 58
- [Adjusting intervals for monitoring VuStats](#) on page 59

Configuring an extension for VuStats through the Avaya communication server

For an Avaya IP Agent extension to display VuStats information, the following configurations on the Avaya communication server must be done:

- The extension must be assigned as a telephone type that has a display. Avaya recommends the 8434D or 606A1 telephone types for the Telecommuter configuration.
- The extension 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, multiple VuStats configurations can be assigned to the buttons for this extension.

Configuration

For information on configuring extensions for the VuStats feature through your Avaya communication server, see the "VuStats" section of *Avaya Call Center ACD Guide*.

Definitions and reference material for the VuStats fields on the forms of the Avaya communication server can be found in the Administrator's Guide for your Avaya communication server.

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** panel of the Avaya IP Agent main window.

Before you begin

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

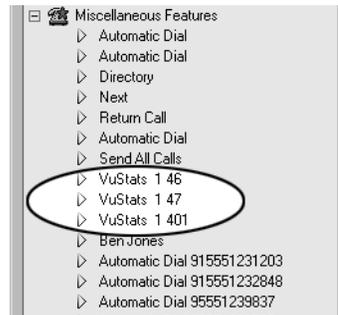
Before performing this procedure, the VuStats feature must have been assigned to one or more buttons for this extension. See [Configuring an extension for VuStats through the Avaya communication server](#) on page 57 for more information.

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.

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** changes 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.



Tip:

If a VuStats line of display has not been updated before the next VuStats item begins to update, increase the **Display Interval** delay.

Steps

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

1. Start the **VuStats Monitor**.
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 changed 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:
 - 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 in the **VuStats Monitor**, 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 7: Avaya IP Agent basic operations

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

This chapter includes the following topics:

- [Selecting an agent work mode](#) on page 61
- [Handling incoming calls](#) on page 63
- [Transferring a call](#) on page 67
- [Conferencing calls](#) on page 70
- [Handling outgoing calls](#) on page 75

Selecting an agent work mode

During the course of placing calls, receiving calls, and performing work associated with those calls, work modes are used to indicate the availability of the agent or the work being performed.

Definitions of agent work modes

Auto-In and Manual-In

The **Auto-In** and **Manual-In** buttons are used to place an agent in the AVAIL (Available) work mode so that the agent can receive calls.

If an agent is in **Auto-In** mode and completes a call, the agent is automatically available to receive another call, or can be placed in After-Call Work (ACW) mode for an administered length of time. When the timed ACW interval expires, the agent is automatically returned to available status. If the agent tries to change agent modes while active on a call, the change is not made until the agent disconnects from the call.

If the agent is in **Manual-In** mode and completes a call, the agent is automatically placed in After-Call Work (ACW) mode. To become available to receive another ACD call, the agent must manually select the **Auto-In** or **Manual-In** mode. If the agent tries to change agent modes while not on an active call, the change takes place immediately.

ACW (After-Call Work)

Agents use this work mode to indicate that tasks related to the previous call are being performed. This button is not usually used in conjunction with the **Auto-In** feature because agents with the **Auto-In** feature are made available for a new call when the current call is completed.

This work mode can be selected while the agent is on an active call. The change will not occur until the current call is finished and released. This work mode may not function correctly if the agent uses it while in **Auto-In** mode.

AUX (Auxiliary Work)

Agents use this work mode to indicate that they cannot receive calls. Usually, this indicates that the agent is not in the proximity of the telephone because of meals, approved periods of inactivity, meetings, training, and so forth.

It is possible for multiple **Auxiliary Work** modes to be assigned to an extension as each can possess a different reason code to indicate the various situations that an agent cannot receive calls.

This work mode can be selected while the agent is on an active call. The change will not occur until the current call is finished and released.

Changing work modes

The agent work modes can be changed through the following methods:

- Using shortcut keys - See [Shortcut keys](#) on page 141.
- Selecting the associated work mode button on the agent toolbar - See [Agent toolbar](#) on page 119.
- Selecting the work mode from the Avaya IP Agent System Tray icon - See [System Tray icon](#) on page 121.
- Selecting the work mode from the **Agent** menu in the main window - See [Agent menu](#) on page 114.

Note:

When a work mode is active, the timer, which is displayed in the Call Information Panel, displays the total time that the agent has been in the selected work mode. To disable this timer, see [How to remove the call timer](#) on page 154.

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 and holding a call.

This section includes the following topics:

- [Answering a call](#) on page 63
- [Holding a call](#) on page 65
- [Releasing a call](#) on page 66
- [Dropping a call](#) on page 67

Answering a call

Answering a call depends on how the Avaya communication server and the network are administered. Each contact center environment is different, which can affect the way agents answer calls. Avaya suggests that each contact center evaluate its configuration and instruct agents on the best way to answer calls with Avaya IP Agent. There are too many possible Avaya IP Agent configurations to list them in this document. The following are some suggested procedures on answering calls for different configurations.

Configuration settings for Telecommuter

The following list provides the options to set for this configuration:

- 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 or DCP telephone that provides the voice path will ring. The personal computer will also emit a ringing sound if you have configured Avaya IP Agent to do so.
- Your Central Office (CO) must have the Answer Supervision feature. Contact your telecommunication provider for more information.

Steps for answering Telecommuter calls

To answer a call for this configuration:

1. The agent should wait for the telephone to ring and then answer it. Answering of the telephone will automatically be detected through Avaya IP Agent.

2. After the call is completed and the calling party disconnects from the call, or after the agent selects **Release** for that call, the agent should hang up the telephone if no more calls are ringing on the Avaya IP Agent screen.
3. If there is another incoming call indicated on the screen, the agent should not hang up the telephone, but select the **Answer** button for the new call appearance on the Avaya IP Agent screen. The agent is then connected to the new call. The previous call is placed on hold.

Note:

If an incoming call is displayed in the Avaya IP Agent main window before the telephone rings, the agent must wait for the telephone set to ring before answering.

Telecommuter (Auto-Answer)

Configuration settings for Telecommuter (Auto-Answer)

The following list provides the options to set for this configuration:

- 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, the telephone will ring to deliver the login confirmation tone.

Steps for answering Telecommuter (Auto-Answer) calls

To answer a call for this configuration:

1. The agent should answer the telephone and do not return it to the on-hook state for the remainder of the shift for that agent.

If the telephone is accidentally cut off or placed on-hook, the Avaya communication server rings the telephone when it has a call to deliver. The agent must answer by picking up the handset.

2. As with any auto-answer telephone, the Avaya communication server will provide a zip tone (a beep) to signal that a new call has arrived.

Holding a call

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

When a call is on hold, the text on the button for the associated Call Information Panel (CIP) changes to **Reconnect**.



Using Manual Hold

To perform a Manual Hold, select the **Hold** button on the Phone Button toolbar. Place a call on hold by pressing the **Hold** button on the telephone, if it is so equipped.

Using Auto Hold

The Auto Hold feature does not require pressing a **Hold** button. If you change to a second call appearance, the first call is automatically placed on hold.

Reconnecting to a call on hold

To reconnect to a call that is currently on hold, select the **Reconnect** button on the appropriate CIP. Alternatively, you may re-select the **Hold** button in the main window.

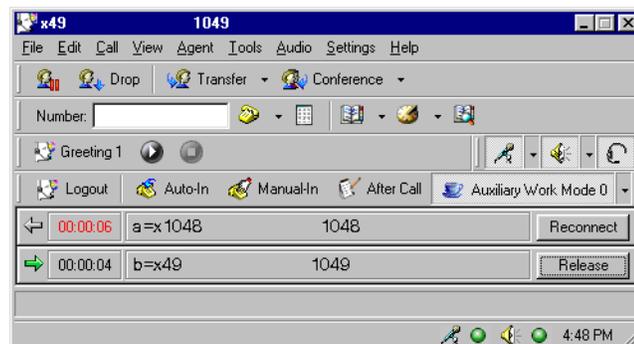
Releasing a call

There are different methods for releasing a call. These methods will work only if the Release feature has been administered for your station.

Steps for releasing a call

To release a call:

1. Do one of the following actions:
 - While on an active call, select the **Release** button that is located on the Call Information Panel (CIP). You will not hear a dial tone after you select the **Release** button.
 - Select the **Release** button that is located on the Phone Button toolbar.
 - Hang up the handset.
 - Select the **Release** item in the **Phone Features** window.
2. If you have a call on hold, you must first reconnect to it before you can release the call.
In the example below, you would have to reconnect to 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.

To drop a call, select the **Drop** button located on the Phone Button toolbar. You are then 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 67
- [Unsupervised call transfer](#) on page 68
- [Enhanced call transfer](#) on page 69

Before you begin

Read and understand the following items before using the procedures described in this topic:

- The **Transfer** button on the Phone Buttons toolbar can be configured for Basic, Unsupervised, or Enhanced transfer. Use the Call Handling screen in the **Program Options** dialog box to set this option. You can also choose a type of transfer that is different from the default, by selecting **Call > Transfer** from the menu bar.
- If all of your call appearances are currently in use, you can transfer a call only to an existing call appearance, not to a new telephone number.
- If you enable the Abort Transfer or Abort Conference feature on your Avaya communication server, Avaya IP Agent cannot transfer or conference between active call appearances.

Basic call transfer

Use the Basic Transfer feature to send an active call to another extension or telephone number. With this type of transfer, you enter the number to receive the transfer through the keyboard and then announce the call to the receiving party.

Steps for a Basic Transfer

To transfer a call using Basic Transfer:

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



The current call is automatically put on hold, a new Call Information Panel (CIP) is displayed, and a dial tone is heard.

2. Using the keyboard or **Dial Pad**, enter the number of the party to receive the transferred call.
3. When the receiving party answers, you can privately talk to the party and then select **Basic Transfer** again to complete the transfer.

Both CIPs are no longer displayed in the main window, indicating that the transfer was successful.

You can complete the transfer at any time after the number is entered, either during the ringing state or after the second party answers.

You can change this 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 steps to cancel the transfer:
 - Select the **Release** button associated with the receiving party. This action terminates the call to the receiving party.
 - Return to the call on hold by selecting the **Reconnect** button on the associated CIP.

Unsupervised call transfer

Use the Unsupervised Transfer feature 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 for an Unsupervised Transfer

To transfer a call using Unsupervised Transfer:

1. While you are on an active call, select **Call > Transfer > Unsupervised Transfer**.
Avaya IP Agent displays the **Unsupervised Transfer** dialog box.



2. In the available 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 **Transfer** a second time to complete the transfer.

The Call Information Panel (CIP) will disappear from the main window which indicates that the transfer was successful.

Enhanced call transfer

Use the Enhanced Transfer feature to transfer the 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 you can wait to announce the call and then decide whether to transfer the call.

Steps for an Enhanced Transfer

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 available field, enter the number of the receiving party.

3. Select the **OK** button.

The caller is automatically put on hold, a new Call Information Panel (CIP) is displayed, a dial tone is heard, and Avaya IP Agent displays a confirmation dialog box.



If you need to enter digits, such as answering prompts, use the number pad on the right side of this dialog box. If you are on hold or are delayed for some reason, you can return to the original call without losing this call by selecting the **Switch to call on hold** button and select this button again to return to the transfer.

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 OK button in the confirmation dialog. Both CIPs are no longer displayed in the main window, indicating that the transfer was successful.
The number dialed is not answered or is busy	Select the Cancel button in the confirmation dialog and select the Reconnect button on the appropriate CIP to return to the held call.

Conferencing calls

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

This section contains the following topics:

- [Basic Conference](#) on page 71
- [Enhanced Conference](#) on page 73

Note:

If all of your call appearances are currently in use, you can conference only with existing call appearances, not new telephone numbers.

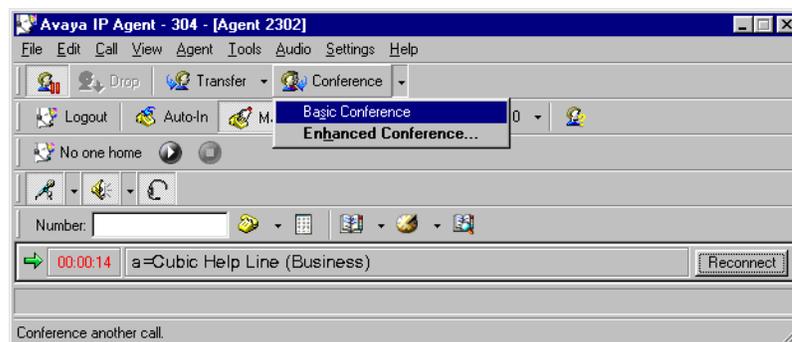
Basic Conference

Use the Basic Conference feature to connect multiple calls together so that all parties can communicate simultaneously. With this method, you use the numbers on the keyboard or the **Dial Pad** to enter the telephone numbers to conference together.

Steps for using Basic Conference

To conference a call using Basic Conference:

1. While you are active on a call, select **Call > Conference > Basic Conference**.



The current call is automatically placed on hold, a new Call Information Panel (CIP) is displayed, and a dial tone is heard.

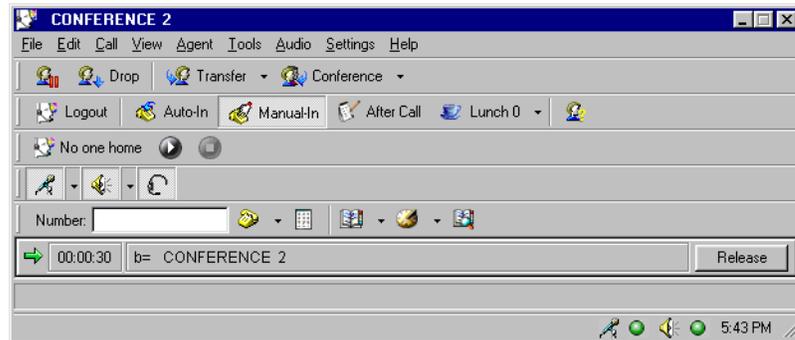
2. Use the keyboard or **Dial Pad** to enter the number of the party you want to add to the conference call.

Chapter 7: Avaya IP Agent basic operations

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

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

One CIP is displayed in the main window, which displays **CONFERENCE 2**, indicating that a conference is active.



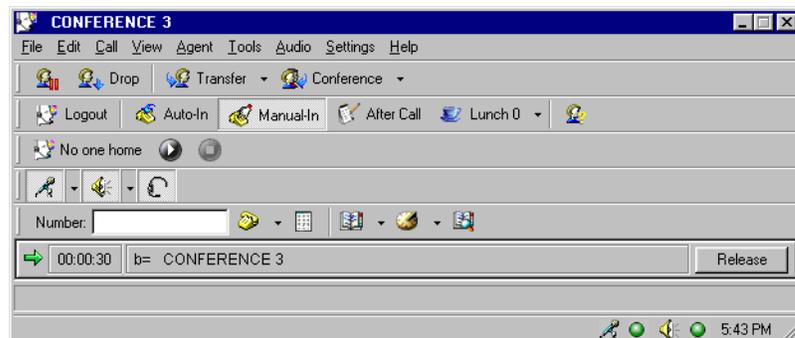
You may change the conference call into a transfer by selecting **Basic Transfer** instead of **Basic Conference** in Step 3.

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

The single CIP displays **CONFERENCE X**, where X equals the number of parties participating in the call.

Example:

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



1. If there is no answer, the line is busy, or you decide the conference is not needed:
 - Select the **Release** button associated with the party that was going to be added to the conference.
 - Return to the held call by selecting the **Reconnect** button on the associated CIP.

Enhanced Conference

Use the Enhanced Conference feature to connect multiple calls together by entering the extensions or telephone numbers through a dialog box and then adding them to an active call.

Steps for using Enhanced Conference

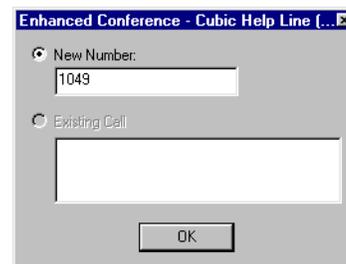
To add a party to a current call, perform the following steps:

1. While you are on an active call, select **Call > Conference > Enhanced Conference**.
Avaya IP Agent displays the **Enhanced Conference** dialog box.

One call appearance



More than one call appearance



Note:

The dialog box you see may be different because it depends on the number of call appearances that are present. If all available call appearances are active, the dialog box does not have a **New Number** field. If only one call appearance is active, the dialog box does not display the **Existing Call** field.

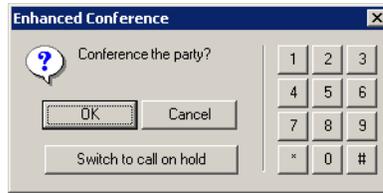
2. In the **New Number** field, enter the extension or telephone number of the party you want to add to the active call.

Note:

If you have only one call appearance, the field in which you provide a telephone number is not labeled.

3. Select the **OK** button.

The current call is automatically placed on hold, a new CIP is displayed, a dial tone is heard, and Avaya IP Agent displays a confirmation dialog box.



If you need to enter digits, such as answering prompts, use the number pad on the right side of this dialog box. If you are on hold or are delayed for some reason, you can return to the original call without losing this call by selecting the **Switch to call on hold** button and select this button again to return to the conference.

4. When you decide to add the call to the conference, select the **OK** button. If there is no answer, the line is busy, or you decide to cancel the conference, select the **Cancel** button.

If you selected the **Cancel** button, select the **Reconnect** button on the CIP associated with the original call.

5. If you selected the **OK** button, wait for an answer.

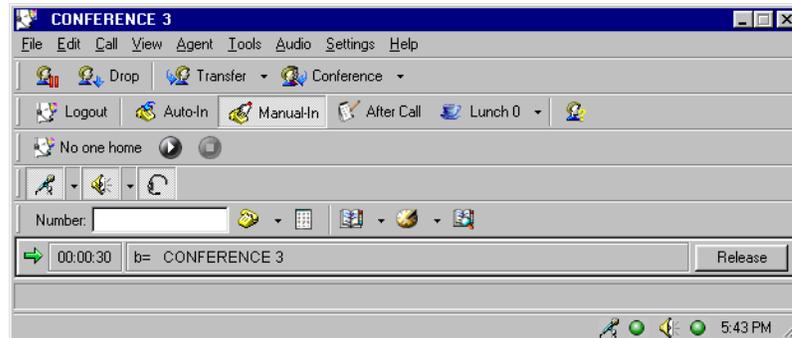
If...	Then...
The number dialed is answered	You can privately talk to the new party and then select the OK button in the confirmation dialog to add the party to the call. One CIP is displayed in your main window, which displays CONFERENCE 2 , indicating that a conference is active.
The number dialed is not answered or is busy	Select the Cancel button in the confirmation dialog and then select the Reconnect button to return to the original call.

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

The single CIP displays **CONFERENCE X**, where X equals the number of parties participating in 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.

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

The CIP is removed from the main window.

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**, you may notice that all telephone numbers are prefixed with a "+1" (in the United States). All external telephone numbers are displayed in the **Phone Directory** in canonical format, as seen in the following example:

+1 (800) 555-1234

This format is universally constant and allows this number to be dialed from anywhere in the world. This number is dialed only if deemed necessary through the **Dialing Properties** of your personal computer.

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, sometimes a "9", to be dialed to access an external line. Alternatively, the same laptop could have a **Dialing Properties** set that 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 includes the following topics:

- [Recent Calls list](#) on page 76
- [Using the Phone Directory](#) on page 77
- [Administering and using Speed Dial](#) on page 80
- [Abbreviated Dial button](#) on page 82

Recent Calls list

You can quickly dial or re-dial recent incoming or outgoing calls by using the Recent Calls list. Telephone numbers are not duplicated in the list, so if the last ten calls are to the same number, the number is displayed only once in the list. Only those calls with valid telephone numbers are added to the list.

Before you begin

Before using the Recent Calls list, read and understand the following items:

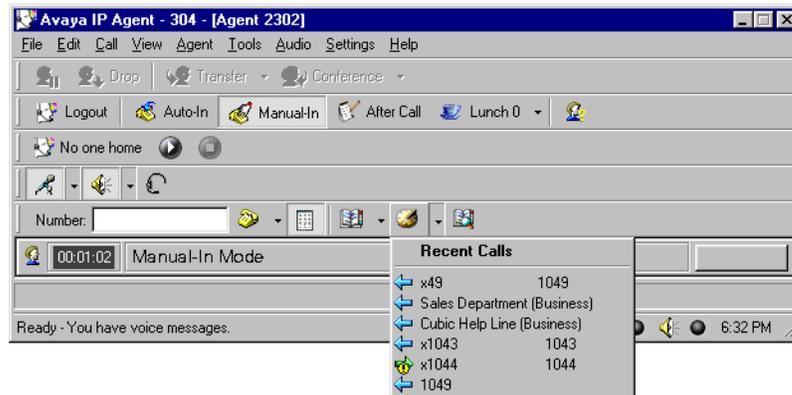
- You or your system administrator can control the number of recent call numbers displayed by setting that number in the **Program Options** dialog box.
- The list can show a maximum of the last 25 unique numbers recorded in the **Call History** log. Abbreviated Dial buttons or numbers dialed on active calls (pin numbers) are not included in the list.
- Letters that are dialed, for example, 1800GOAVAYA, are displayed in the recent calls list as letters, not as the associated numbers.

Steps for using the Recent Calls list

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 Avaya IP Agent 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 that you provide. Through this interface, you can dial telephone numbers and send e-mail messages to those contacts that you have defined.

The **Phone Directory** stores the types of information shown in the following list:

- Name
- Address
- Email
- Category
- Telephone numbers
- Notes
- Pronunciation (Japanese version only)

Menu bar

The following is a list of menus and menu 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.
- **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 are displayed:

- Name
- Address
- Email
- Business
- Business Fax
- Home
- Home Fax
- Mobile
- Assistant
- Car
- Company
- Pager
- Pronunciation (Japanese version only)

Each item must be enclosed within quotation marks.

- **Search Public Directory** - This item opens the **Search Public Directory** window, which can be used to search for contact information through an Lightweight Directory Access Protocol (LDAP) service. Entries can be added to the **Phone Directory** from the **Search Public Directory** window. For more information on this feature, see [Using a Public Directory with Avaya IP Agent on page 85](#).
- **Close** - Selecting this item closes the **Phone Directory** window.

Edit

- **Name, Number, Email, Category** - Edit the displayed information for the selected contact.

- **Delete** - Delete the selected contact.
- **Properties** - View all information for the selected contact.
- **Categories** - Add, delete, or modify the categories defined in the **Phone Directory**.
- **Field Organizer** - Organize the fields displayed in the **Phone Directory**.

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** - This field allows the dynamic filtering of the entries in the **Phone Directory** on any field. Select the name button to display the list of fields available for the **Phone Directory**. After you select the field on which to filter, enter letters or digits in the corresponding field. Each character entered in this field causes only those entries matching the filter to remain visible. For example, entering the letter S causes all entries that do not begin with that letter to be hidden. For numeric fields, any numbers entered in this field are used to filter the entries. The filtering for numeric fields is not sequential. Any entries that contain 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 box containing the details of the highlighted entry. This dialog box 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.

Phone Directory window usage

Within the **Phone Directory** window, you can perform the following actions on a selected contact:

- With the mouse, right-click on an entry to display a pop-up menu containing the following items:
 - **Call** (*contact*) - Initiates a call to the selected contact.
 - **Send Email** - Initiates an e-mail to the selected contact.
 - **Delete** - Removes the selected contact from the **Phone Directory**.
 - **Properties** - Displays a dialog box listing all information for the selected contact. This dialog box also allows editing of that information.
- Press the **Enter** key or double-click the mouse to initiate a call to a 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 can also sort the entries in the **Phone Directory** by clicking the title of any column. The sorting is done based on the column selected and alternates between ascending to descending order with subsequent clicks.

More information

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

- [Administering and using Speed Dial](#) on page 80
- [Searching a Public Directory](#) on page 87

Administering and using Speed Dial

Use the Speed Dial feature to dial frequently-used telephone numbers by selecting entries from the Speed Dial list or by pressing function keys (F2-F8) on the keyboard. Entries in the **Phone Directory** can be assigned as Speed Dial numbers. A maximum of 25 telephone numbers can be assigned to the Speed Dial list.

Steps for assigning a Speed Dial number

To assign a telephone number in the **Phone Directory** to the Speed Dial list:

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

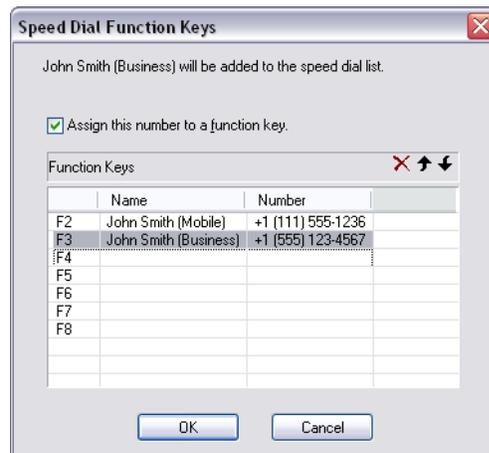
Avaya IP Agent displays the **Phone Directory** dialog box.

- 2.

If...	Then...
You are creating a new entry	Select File > New... from the menu bar.
You are editing an entry	Highlight the entry and select Edit > 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 box.



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.

Note:

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 box to move the entry to a new location in the list.

6. When you are satisfied with the function key that this number has been assigned to, press the **OK** button.
7. In the **Properties** window, select the **OK** button to close it.

Using a Speed Dial number

To select a Speed Dial number:

1. Select the down arrow next to the **Phone Directory** button in the Avaya IP Agent main window.

Avaya IP Agent displays the **Speed Dial Numbers** list.



2. Select the party that you want to call.

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

Note:

If you have assigned a **Phone Directory** entry to a function key, you can simply press that function key to dial the associated telephone number.

Abbreviated Dial button

If the Abbreviated Dial feature has been administered on the Avaya communication server for your extension, you can store telephone numbers in the **Phone Features** window for quick and easy dialing. Each number can be a complete or partial telephone number, an extension number, a trunk, or feature code.

Steps for using Abbreviated Dial

To make a call using an Abbreviated Dial button:

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

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

2. In the **Phone Features** dialog box, 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, whereas the button label for an autodial button is the word *autodial* plus the number. This difference is shown in the following table:

Abbreviated Dial	Autodial
51008	autodial 51008

Chapter 8: Using a Public Directory with Avaya IP Agent

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

This feature provides access to corporate or public directory services which enable you to query those services by any defined field.

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



Important:

Avaya IP Agent does not support the enhancements available in LDAP v3. If you use an LDAP v3 Public Directory service, you must use Avaya IP Agent as an LDAP v2 client.

This section includes the following topics:

- [Defining a Public Directory service](#) on page 85
- [Searching a Public Directory](#) on page 87
- [Selecting the fields to display and the order](#) on page 90
- [Identifying multiple telephone number fields](#) on page 91
- [Deleting a Public Directory service](#) on page 92

Defining a Public Directory service

So that you can 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.

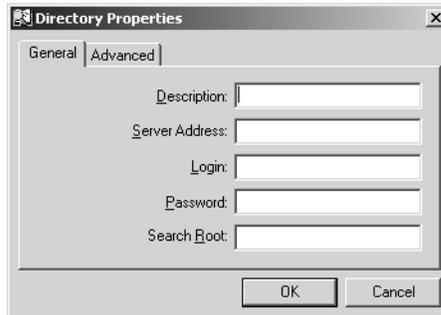
Steps for defining a Public Directory service

To define and configure 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.

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

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



- 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 user name in this field.
 - **Password** - Enter the password for the user name 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 are unsure of the settings for your Public Directory server, contact the administrator of that system.

- 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
- 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.

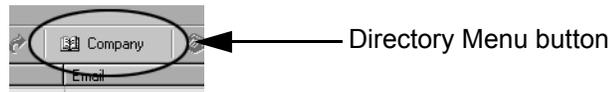
Searching a Public Directory

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 85.

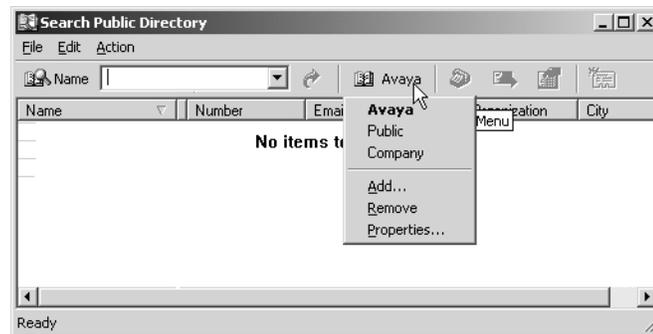
Steps for searching a Public Directory

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.



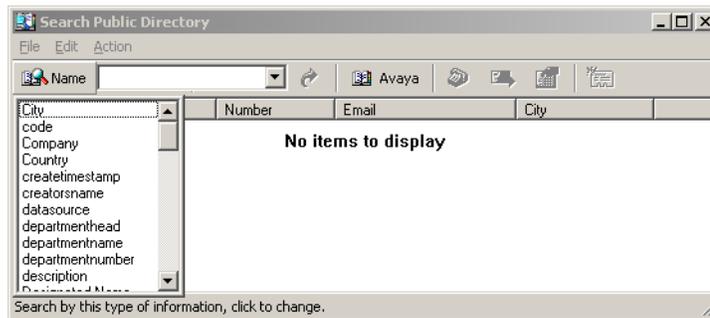
Avaya IP Agent displays a menu listing all defined Public Directory services.



3. From the resulting list, select the Public Directory service that you will use.
The selected item from the menu is set as the active Public Directory service and the Directory Menu button displays its name.

Chapter 8: Using a Public Directory with Avaya IP Agent

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



Note:

If you have not connected previously to the Public Directory service, you must first run a query with the default settings. After this first query, all defined fields of the service will be available.

- Select the field through which you want to conduct your search. The data field that you select appears as the label.
- In the field to the right of the label, 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.

The screenshot shows a window titled "PublicDir - John Smith". The search criteria is "Name" with the value "John Smith". The results are displayed in a table with columns: Name, Number, Email, Organization, and City.

Name	Number	Email	Organization	City
John Smith		jsmith@hootmail.com	hootmail.com	
John Smith		ljsmith@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.



Tip:

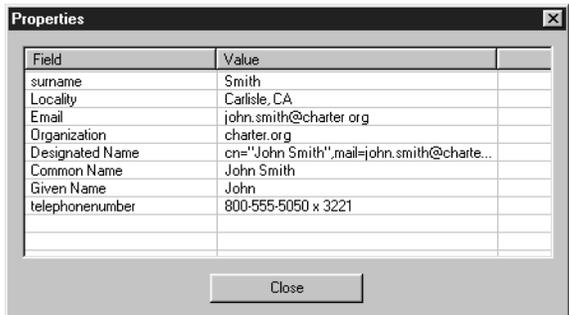
You can use an asterisk as a wildcard for a string. For example, entering the string, j*n, returns all names beginning with a J and ending with an N with one or more characters in between. This could include entries such as J~~o~~hn, but also entries such as J~~o~~seph B~~r~~own.

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

Avaya IP Agent displays a pop-up 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 Avaya IP Agent to have multiple telephone numbers for each entry, another pop-up 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 associated with the selected entry	Select Send Email .
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 e-mail address for this selection in the Phone Directory .

Selecting the fields to display and the order

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

Steps for displaying Public Directory fields

To configure which Public Directory fields will be displayed in the **Search Public Directory** window after a query and in which order they will be displayed:

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 might need to first run a query of the Public Directory service with the default settings so that the list of available fields can be retrieved.

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 name.

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 double arrow buttons (<< and >>) 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 pertinent fields to set the desired order.
8. Select the **OK** button.

Note:

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

Identifying multiple telephone number fields

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 forth.

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 for identifying telephone number fields

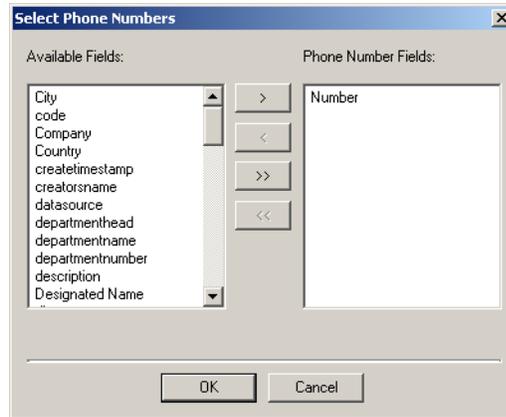
To select multiple telephone numbers to be available for the *Call* feature, perform the following steps:

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 name.
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 for deleting a Public Directory service

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, click 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 sets the first remaining service as active.

Chapter 9: 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 the following actions:

- Starting an application so that the agent can 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, or the selections a customer made while being processed through a vector.

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. This type of screen pop is also 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 or application. The DDE server or application can then send information from its database or a file to an interface displayed on the personal computer.

This section includes the following topics:

- [Creating a Windows application screen pop](#) on page 96
- [Creating a DDE screen pop](#) on page 101
- [Setting the active screen pop](#) on page 105
- [Modifying a screen pop](#) on page 106
- [Deleting a screen pop](#) on page 107

Before you begin

Read and understand the following items before administering screen pops through Avaya IP Agent:

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

- User-to-User Information (UII) is a unique identifier that is added to an incoming call through an external application, such as Avaya ASAI. To pass UII, the Avaya communication server must have the **Display UII Information** feature enabled. Additionally, the UII feature does not support user-defined languages. This feature is only available for *incoming* calls, and it requires that a `uui-info` button is administered for the extension receiving the call.

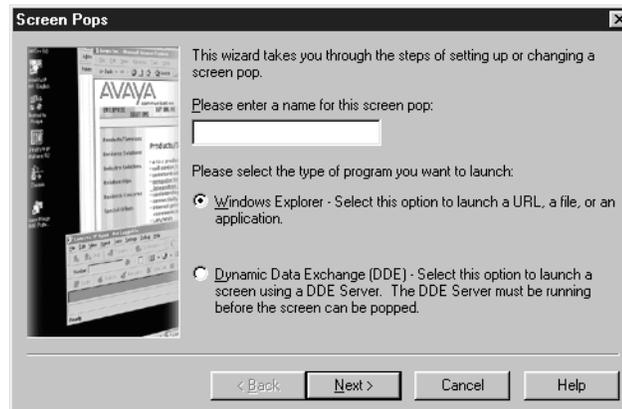
Creating a Windows application screen pop

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 for creating an application screen pop

To create a Windows screen pop:

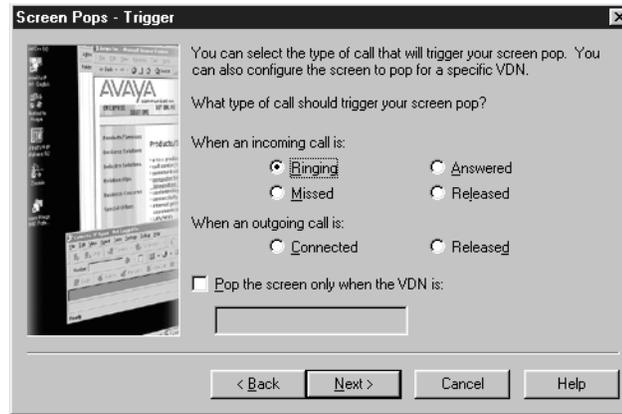
1. From the menu bar of the Avaya IP Agent window, select **Tools > Screen Pops**.
Avaya IP Agent displays the **Screen Pops** window.
2. Select **File > New**.
Avaya IP Agent displays the **Screen Pops** wizard.



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.



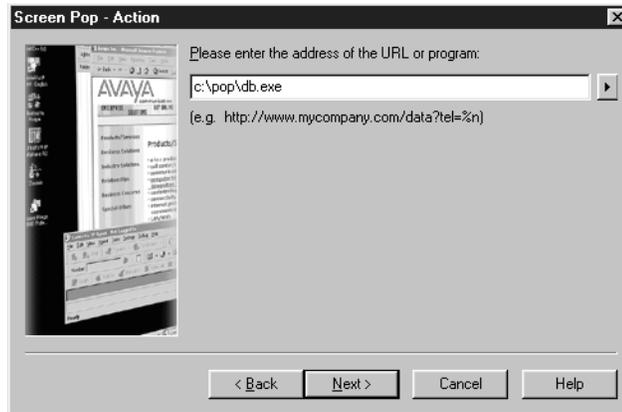
6. Select the appropriate call condition from the following table:

If...	Then...
<p>This screen pop should be run for incoming calls</p>	<p>Select one of the following options to indicate when it should start:</p> <ul style="list-style-type: none"> ● Ring - 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 the Telecommuter configuration. ● 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 starts when the Release button is pressed on a Call Information Panel (CIP) or when the agent hangs up the telephone in the Telecommuter configuration.
<p>This screen pop should be run for outgoing calls</p>	<p>Select one of the following options to indicate when it should start:</p> <ul style="list-style-type: none"> ● 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 when the agents hangs up the telephone in the Telecommuter configuration.

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 items:

- A Uniform Resource Locator (URL) address - This refers to a Web page. 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 that does not have a valid application association in the Registry, Windows will display an error message.

Note:

If you enter a program name in the action field, be certain to enclose the program name in quotation marks. Failure to include the quotes may cause the screen pop to fail. For example:

"C:\Program Files\Avaya\Avaya IP Agent\ipagent.exe"

10. Calls contain information that can also be included in this field as parameters of a URL address string. To include call information parameters with a URL string, 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
- **UUI (%u)** - Passes User-to-User-Information that was collected by the Avaya communication server from a centralized application.

- **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 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** window, you are presented with the **Format Call Information** window for each parameter. In this window, you can specify the number of characters or digits used for that parameter in the screen pop.

If you want to limit the number of characters presented for each parameter, do the following steps:

- a. Enable the check box on the specific parameter screen.
- b. Use the **Number of characters to include** and **Location** fields to adjust the boundaries of the string.
- c. 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. Select the **Next** button when you have finished configuring each parameter.

If there are no more parameters to configure, 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**, **VDN**, and **UII** as test information. Select the **Continue** button when all necessary test information has been entered in these fields.

Avaya IP Agent starts 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** window.

Avaya IP Agent displays the **Setup Completed** window.

15. Select the **Finish** button.

Avaya IP Agent saves this screen pop and displays it in the **Screen Pops** window.

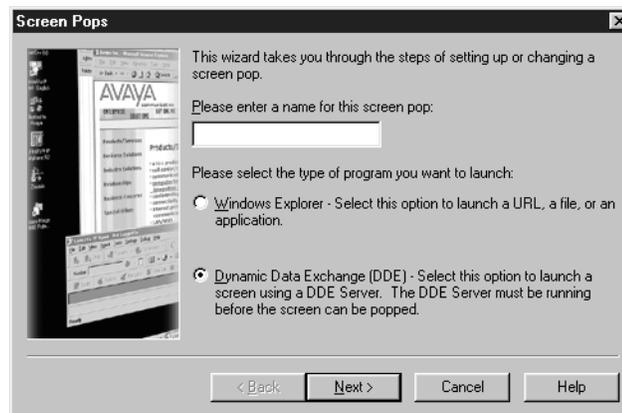
Creating a DDE screen pop

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

Steps for creating a DDE screen pop

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.

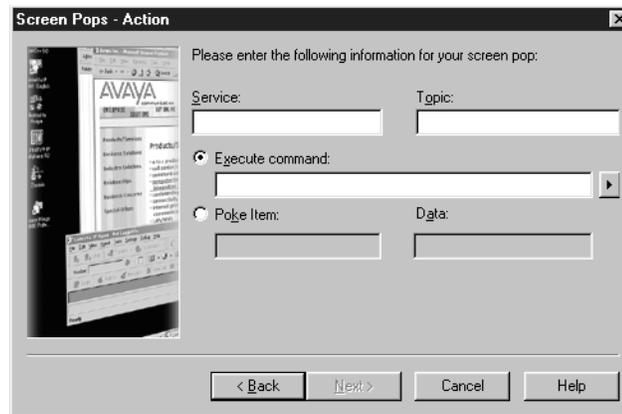
5. Select the appropriate call condition from the following table:

If...	Then...
<p>This screen pop should be run for incoming calls</p>	<p>Select one of the following options to indicate when it should start:</p> <ul style="list-style-type: none"> ● Ring - 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 the Telecommuter configuration. ● 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 when the agent hangs up the telephone in the Telecommuter configuration.
<p>This screen pop should be run for outgoing calls</p>	<p>Select one of the following options to indicate when it should start:</p> <ul style="list-style-type: none"> ● 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 when the agent hangs up the telephone in the Telecommuter configuration.

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** window.



8. In the **Action** window, enter the necessary DDE information for the following fields:

- **Service** - A string expression that identifies 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. For this reason, 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 that specifies 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" " ", you must enter the text string with all required quotation marks.
- **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 for Avaya IP Agent to retrieve from the telephone call and pass to 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
- **UUI (%u)** - Passes User-to-User-Information that was collected by the Avaya communication server from a centralized application.
- **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** window, you are presented with the **Format Call Information** window for each parameter. In this dialog box, you can specify the number of characters or digits used for that parameter in the screen pop.

If you want to limit the number of characters presented for each parameter, do the following steps:

- a. Enable the check box on the specific parameter screen
- b. Use the **Number of characters to include** and **Location** fields to adjust the boundaries of the string.
- c. After you have specified the boundaries of the parameter string, select the **Next** button.

If more than one parameter was specified in the **Action** window earlier, the **Format Call Information** window for the next parameter is presented. Select the **Next** button when you have finished configuring each parameter.

If there are no more parameters, Avaya IP Agent displays the **Testing** window.

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**, **VDN**, and **UUI** as test information. Select the **Continue** button when all necessary test information has been entered in these fields.

Avaya IP Agent starts 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** window.

Avaya IP Agent displays the **Setup Completed** window.

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

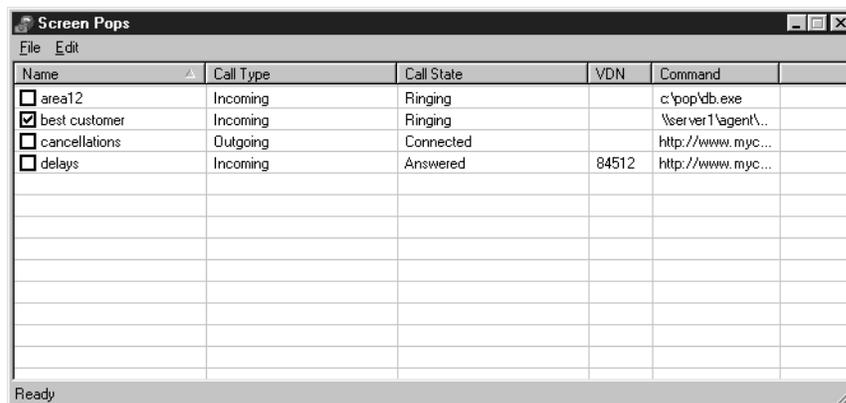
This section provides the procedure for specifying which screen pop will be set as the one used for incoming or outgoing calls.

Steps for setting an active screen pop

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.



Name	Call Type	Call State	VDN	Command
<input type="checkbox"/> area12	Incoming	Ringing		c:\pop\tdb.exe
<input checked="" type="checkbox"/> best customer	Incoming	Ringing		%server1\agent\...
<input type="checkbox"/> cancellations	Outgoing	Connected		http://www.myc...
<input type="checkbox"/> delays	Incoming	Answered	84512	http://www.myc...

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 the selected screen pops for any subsequent call, if applicable.

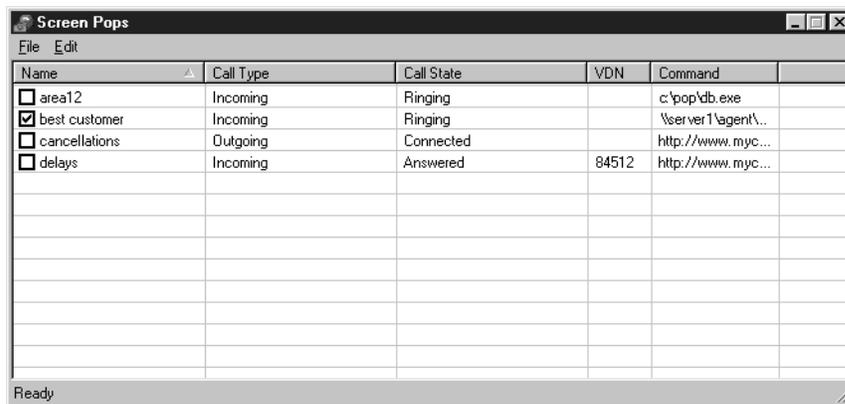
Modifying a screen pop

This section provides the procedure for modifying a screen pop that has already been created.

Steps for modifying a screen pop

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 Pops** 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 96 or [Creating a DDE screen pop](#) on page 101 for specific information on each window of the **Screen Pops** wizard.
4. When you reach the **Setup Completed** window, select the **Finish** button.
Avaya IP Agent saves the changes made to the screen pop and closes the **Screen Pops** wizard.
5. Close the **Screen Pops** window.

Deleting a screen pop

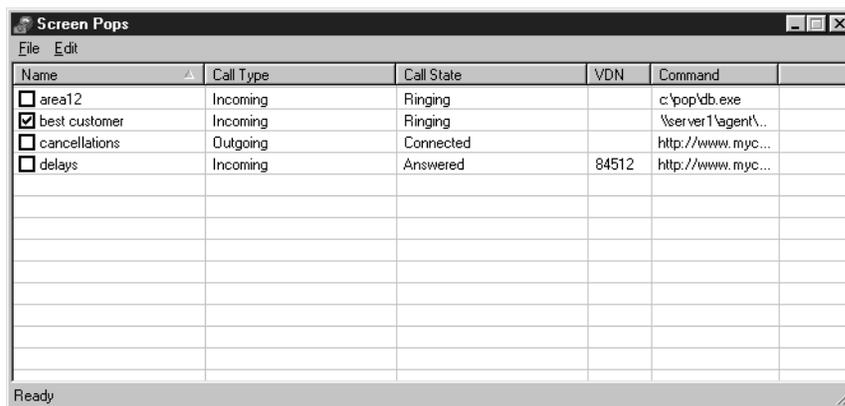
This section provides the procedure for deleting a screen pop from Avaya IP Agent.

Note:
Deletion of a screen pop cannot be undone.

Steps for deleting a screen pop

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.



The screenshot shows a window titled "Screen Pops" with a menu bar containing "File" and "Edit". Below the menu bar is a table with the following columns: Name, Call Type, Call State, VDN, and Command. The table contains four rows of data, with the second row selected. The status bar at the bottom of the window displays "Ready".

Name	Call Type	Call State	VDN	Command
<input type="checkbox"/> area12	Incoming	Ringing		c:\pop\db.exe
<input checked="" type="checkbox"/> best customer	Incoming	Ringing		%server1\agent\...
<input type="checkbox"/> cancellations	Outgoing	Connected		http://www.myc...
<input type="checkbox"/> delays	Incoming	Answered	84512	http://www.myc...

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.

Chapter 10: 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 of this document are described here.

This section contains the following topics:

- [Main window and menus](#) on page 109
- [Avaya IP Agent option dialogs](#) on page 122
- [Login Settings dialog box](#) on page 133
- [Volume and Ringer Settings dialog box](#) on page 140

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](#) on page 109
- [Toolbars](#) on page 117
- [Information panels](#) on page 120
- [System Tray icon](#) on page 121

Menu bar

The Avaya IP Agent main window provides full-function, multi-line telephony support on your Windows session. 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 menus and menu items are available only when they are valid for your current configuration. For example, the **Call** menu is not available when a call is not currently active. Other menus, menu items, and buttons on the interface will be disabled when the associated functionality cannot be used because of configuration, call instance, or agent work mode.

This section contains the following topics:

- [File menu](#) on page 110

Chapter 10: Dialog Reference

- [Edit menu](#) on page 111
- [Call menu](#) on page 112
- [View menu](#) on page 113
- [Agent menu](#) on page 114
- [Tools menu](#) on page 115
- [Audio menu](#) on page 116
- [Help menu](#) on page 117

File menu



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

- **Station Login, Station Logout** - These items appear as the first item in this menu. They are used for logging the station or agent in and out of the Avaya communication server. This menu item varies between these two possibilities depending on your current login state.
- **Import Settings** - Selecting 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** - Selecting this menu item saves the settings from this installation of Avaya IP Agent to a file. This file can then be re-imported to this Server user session or to another Server user session with Avaya IP Agent.

Note:

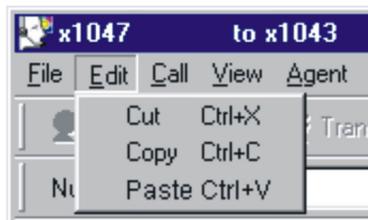
When exporting and importing settings, most name changes to features in the **Phone Features** or **Personal Phone Features** windows are made on a per extension basis. To ensure that name changes are made for all extensions, right-click on the feature and select the **Rename (All Extensions)** item from the resulting menu.

Exported settings are platform-dependent. If you export Avaya IP Agent settings from a Windows XP personal computer, do not import the settings to a personal computer that uses a different operating system.

Imported and exported files include the following settings:

- All settings available in the **Program Options** window
- Screen pops
- Lightweight Directory Access Protocol (LDAP) settings
- Personal Phone features
- Phone features
- Abbreviated Dialing settings
- Call Center features
- Telephone button labels
- Audio settings
- Speed-dial settings
- **Exit** - Selecting this menu item closes Avaya IP Agent after making the necessary logouts for the agent and the extension.

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 into any Windows application such as Notepad or Word.

- **Paste** - Retrieves the last item placed on the Windows clipboard from any Windows application such as Notepad or Word and places it in the **Number** field.

Call menu



The **Call** menu is available only 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 switch hook.

⚠ Important:

6400-series telephones must have a Drop button administered on the Avaya communication server in order for the Drop feature in the Avaya IP Agent window or menus to function properly.

- **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.

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

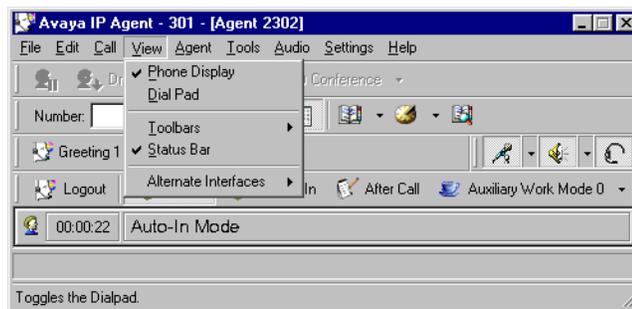
- **Basic Transfer** - Select **Transfer**, dial the number on the keyboard or the **Dial Pad**, announce the call, and select **Transfer** again.
- **Unsupervised Transfer** - Select **Transfer**, enter the number to be called in the displayed dialog box, and select the **OK** button to transfer the 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 **OK** to complete the transfer or **Cancel** to abort the transfer.

- **Conference** - Adds other parties to a call. There are two different types of conferences available.

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 through the keyboard or the **Dial Pad**, 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 the **OK** button. After you announce the conference to the new party, select the **Yes** button in the resulting 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 **Dial Pad** window, which contains a series of numbers and symbols resembling a telephone keypad. 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](#), the [Agent toolbar](#), and the [Phone features 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. It also contains the buttons used to access the Call History feature, the Phone Directory feature, the **Dial Pad**, and the Search Public Directory feature.
- **Toolbars > Audio Control** - This item is not supported for the Windows Terminal Services edition of Avaya IP Agent.
- **Toolbars > Agent** - Enabling this item displays the [Agent toolbar](#), which an agent can use to change their work modes. It also contains a **Login/Logout** button for agents.
- **Toolbars > Phone Features** - Enabling this item displays the [Phone features toolbar](#), which is populated with previously selected folders from the **Phone Features** window. When you select a folder on this toolbar, a list is displayed with all of the available features that are currently assigned to that folder.
- **Toolbars > Feature Buttons** - Enabling this item displays the [Feature button toolbar](#), which is populated with previously selected buttons from the **Phone Features** window. Buttons on this toolbar have an associated lamp that identifies the status of the feature the button represents.
- **Toolbars > 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 displays different types of information, such as current activity, notification of voice messages, the state of Avaya IP Agent, and tooltips.
- **Alternate Interfaces** - This menu item lists all alternate user interfaces that have been installed with Avaya IP Agent. The alternate user interfaces use much less desktop space than the default interface. See [Using alternate user interfaces](#) on page 52 for more information.

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 upon completion of the current call.
- **Manual-In Mode** - This is an ACD work mode. Agents must use the Manual-In feature to re-enter the AVAIL (Available) work mode from the AUX (Auxiliary Work) work or the ACW (After Call Work) work mode.
- **After Call Work (ACW)** - This is an ACD work mode that indicates that an agent is performing tasks related to the last call.
- **Auxiliary Work Mode (AUX)** - This is an ACD work mode that indicates that an agent is not available to receive an ACD call. Depending on how the ACD is administered, the AUX work mode can require that agents provide a reason code before the work mode can be assigned. Multiple Auxiliary Work buttons with different reason codes can be assigned to an extension.
- **Assist** - This item initiates 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 the feature buttons that have been assigned to this extension.
- **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 displays a log of all calls received by this extension. This log includes name, 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. See [Using the Phone Directory](#) on page 77 for more information.

Chapter 10: Dialog Reference

- **Search Public Directory** - Selecting this item displays the **Search Public Directory** window, which allows you to search Lightweight Directory Access Protocol (LDAP) servers by any field defined in the public directory. See [Using a Public Directory with Avaya IP Agent on page 85](#) for more information.
- **Screen Pops** - Selecting this item displays the **Screen Pops** window, which lists all the screen pops that are defined on this personal computer. See [Screen pops](#) on page 95 for more information.
- **VuStats Monitor** - Selecting this item displays the **VuStats Monitor** window, which is used to view the VuStats information being sent to this extension. See [Using VuStats](#) on page 57 for more information.
- **Program Options** - Selecting this item displays the **Program Options** dialog box for Avaya IP Agent. See [Avaya IP Agent option dialogs](#) on page 122 for more information.

Audio menu



Note:

The playing of ring sounds through Windows Terminal Services is supported when the client uses Microsoft Remote Desktop and Citrix ICA software. The client *cannot* access the server through Terminal Services Client software.

The following item is available on the **Audio** menu:

- **Volume and Ringer Settings** - Selecting this item displays the **Volume and Ringer Settings** dialog box. Through this dialog box, you can adjust the volume for your ringer or mute it.

For more information, see [Volume and Ringer Settings dialog box](#) on page 140.

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 113.

This section contains the following topics:

- [Toolbar locations](#) on page 117
- [Phone buttons toolbar](#) on page 118
- [Dial Number toolbar](#) on page 118
- [Agent toolbar](#) on page 119
- [Phone features toolbar](#) on page 119
- [Feature button toolbar](#) on page 119
- [Headset toolbar](#) on page 120

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

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

Dial Number toolbar



The Dial Number toolbar contains the **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 **Name**. When you enter a partial name in this field and press the **Enter** key or click the telephone button on the right side of the field, a list is displayed with 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 the following entries in the **Phone Directory**:



This field will search for entries only in the **Phone Directory**. It cannot be used to search a public directory (LDAP).

This toolbar also contains the following features that you can access with a single click:

- **Dial Pad** 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 work modes for Avaya communication servers with Expert Agent Selection (EAS).

Note:

If multiple Auxiliary Work buttons with differing reason codes are assigned to this extension, an arrow is displayed to the right of the **Aux Work** button. When you select this arrow, a menu that lists all of the Auxiliary Work reason codes is displayed. Select the appropriate reason code from this menu.

Phone features toolbar



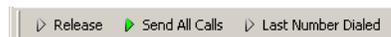
The Phone features toolbar can display one or more folders from the **Phone Features** window. When you click a button in this toolbar, Avaya IP Agent displays a list of the items contained within the associated folder.

To display items on this toolbar, open the **Phone Features** window, right-click on the folder that you want to display, and select **Display on Toolbar**.

Note:

This toolbar can support a maximum of seven buttons.

Feature button toolbar



The Feature button toolbar can display one or more items from the **Phone Features** window.

To display items on this toolbar, open the **Phone Features** window, right-click on a feature that you want to display, and select **Display on Toolbar**.

Note:

This toolbar can support a maximum of seven buttons.

Headset toolbar



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

Note:

If this station has been set as a 606A1 phone type on the Avaya communication server, 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, which are described in the following topics:

- [Call Information Panel](#) on page 120
- [Agent Information Panel](#) on page 121
- [Phone Display Panel](#) on page 121

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. It also displays an **Answer/ Release/ Reconnect** button.

If a call is currently active and the other party is listed in the **Phone Directory**, that name is displayed 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. Right-click the CIP to display a pop-up menu containing available options for this call, such as hold, transfer, and conference.

The timer in this panel displays the amount of time that has elapsed for a call and the work done in a subsequent non-active work mode, such as ACW. When an agent enters Auto-In or Manual-In mode, the timer is reset to 0.

Note:

To disable the call timer, see [How to remove the call timer](#) on page 154.

Agent Information Panel

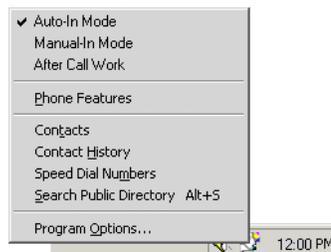
Avaya IP Agent displays the Agent Information Panel when agent status information is available and no calls are currently active. If you are logged in as an agent, the status information also includes the current agent work mode.

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 call-related and non-call-related information from the Avaya communication server, such as call-prompting digits, VuStats data, and the local date and time display from the ACD. Only those telephone types that are capable of displaying 80 characters are compatible with this feature. See [Compatible telephone types for Avaya IP Agent](#) on page 14 for compatible telephone types.

System Tray icon

The Avaya IP Agent System Tray icon is an easy way to access commonly used features and to change your agent work mode.



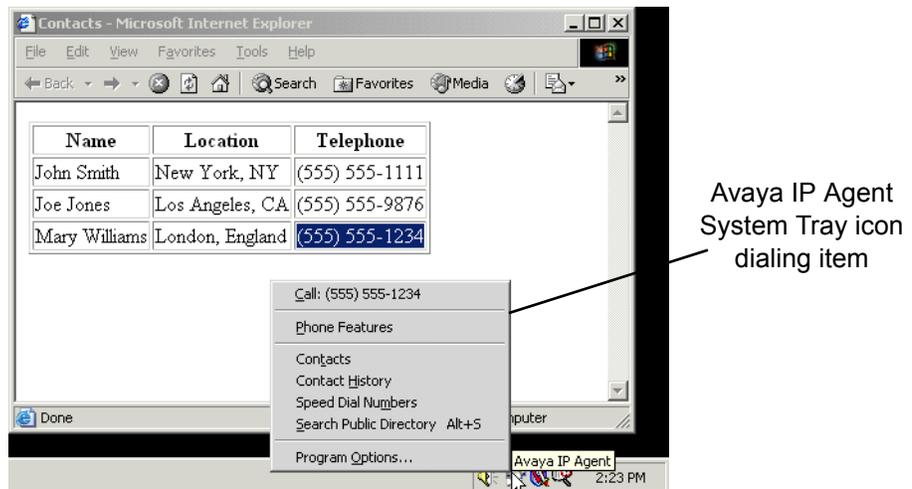
To display the System Tray icon menu, right-click the icon.

If you are not logged in as an agent, the work mode entries in this menu will not be displayed.

Placing calls through the System Tray icon

If you highlight a telephone number, right-click the selection, and select **Copy**, that number is saved to the Windows clipboard. Then, if you right-click the Avaya IP Agent System Tray icon, the top item of the resulting pop-up menu will display the telephone number that you copied to the clipboard.

Allow for calling telephone numbers with letters, such as 1-800-GO-AVAYA.



Call handling with the System Tray icon

The Avaya IP Agent System Tray icon can also be used to access common telephone functionality, such as placing a call on Hold.



To use the capability, you must be on a call when you right-click the System Tray icon.

Avaya IP Agent option dialogs

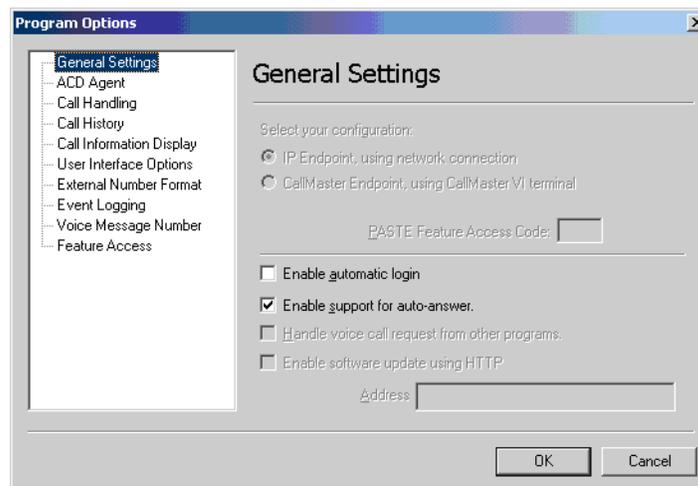
Use the **Program Options** dialog box to configure the many feature areas of Avaya IP Agent. Select **Tools > Program Options...** to display this dialog box.

This section contains descriptions for the following panels of the **Program Options** dialog box:

- [General Settings panel](#) on page 123
- [ACD Agent panel](#) on page 124

- [Call Handling panel](#) on page 125
- [Call History panel](#) on page 126
- [Call Information Display panel](#) on page 127
- [User Interface Options panel](#) on page 128
- [External Number Format panel](#) on page 129
- [Event Logging panel](#) on page 130
- [Voice Message Number panel](#) on page 131
- [Feature Access panel](#) on page 132

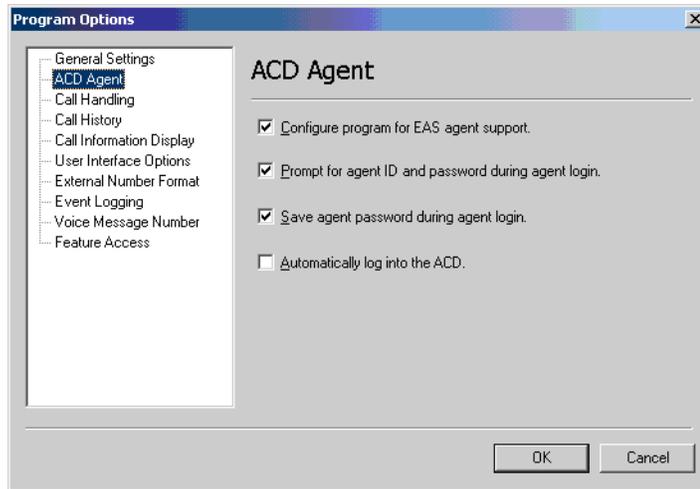
General Settings panel



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

- **Enable automatic login** - When this check box is enabled, Avaya IP Agent attempts to register with the Avaya communication server when started. It will use the information that was last used for a successful registration with the Avaya communication server.
- **Enable support for auto-answer** - When this check box is enabled, Avaya IP Agent automatically connects an incoming call without requiring the agent to pick up the handset or select the **Answer** or headset buttons on the main window. For this functionality, the auto-answer feature on the Avaya communication server must be assigned to this extension. After activating support for auto-answer, you must restart Avaya IP Agent.

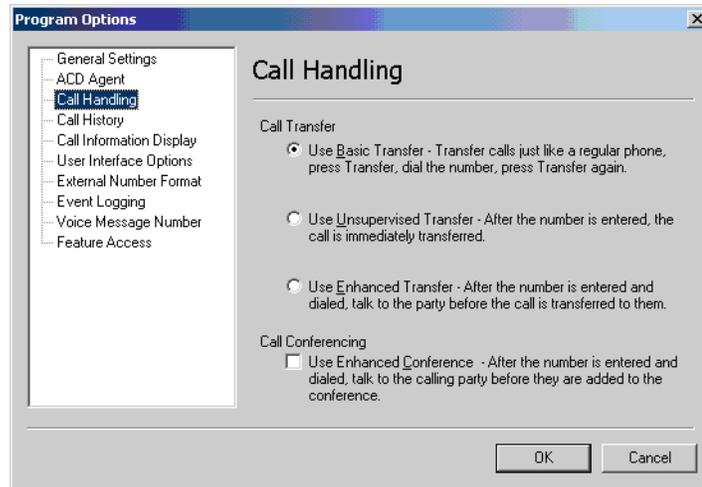
ACD Agent panel



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

- **Configure program for EAS agent support** - When this check box is enabled, Avaya IP Agent supports the Expert Agent Selection (EAS) feature for Avaya communication servers. Otherwise, Avaya IP Agent supports a non-EAS environment. EAS environments use *skills* and non-EAS environments use *splits*.
- **Prompt for agent ID and password during agent login** - When this check box is enabled, Avaya IP Agent displays a dialog box when an agent requests a login to the Avaya communication server. The dialog box prompts the agent for agent ID and password.
- **Save agent password during agent login** - When this check box is enabled, Avaya IP Agent saves the password of an agent after a successful login.
- **Automatically log into the ACD** - When this check box is enabled, Avaya IP Agent attempts to automatically log the agent in to the Avaya communication server after successful extension registration.

Call Handling panel



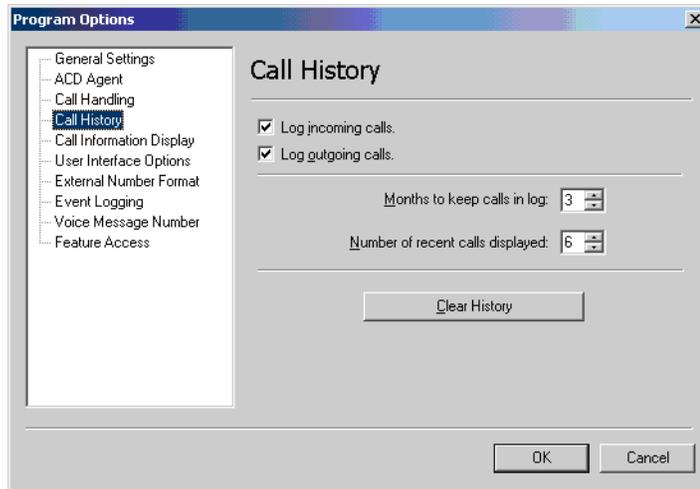
The **Call Handling** panel contains the following items:

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

Note:

The default transfer mode in this panel is changed if you select a different transfer mode from the main window. For example, if you set **Use Basic Transfer** in this panel, but select to use an Enhanced Transfer from the main window, **Use Enhanced Transfer** is now set as the default in this panel.

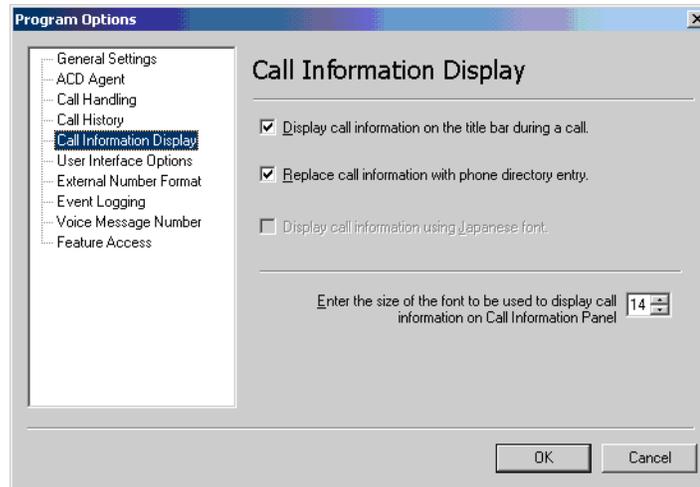
Call History panel



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

- **Log incoming calls** - When this check box is enabled, Avaya IP Agent makes a record of all calls received at this station in the **Call History** log.
- **Log outgoing calls** - When this check box is enabled, Avaya IP Agent makes 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 number of months for which records are stored in the **Call History** log.
- **Number of recent calls displayed** - Use this field to specify the number of records that are displayed when you click the **Call History** quick list on the Dial Number toolbar.
- **Clear history** - Selecting this button clears all records from the **Call History** log.

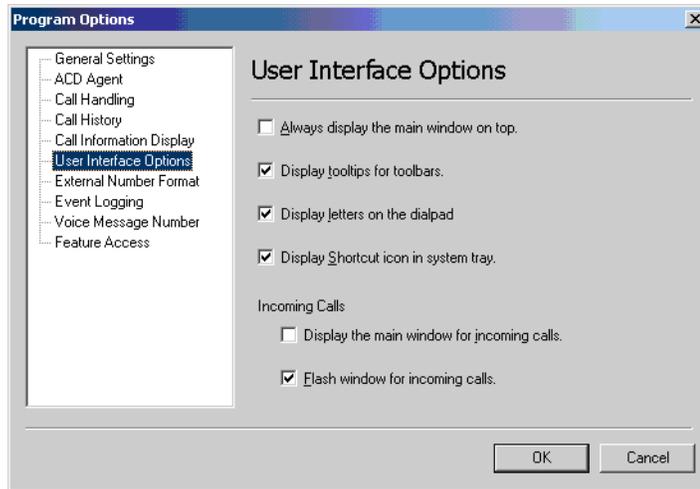
Call Information Display panel



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

- **Display call information on the title bar during a call** - When this check box is enabled, Avaya IP Agent displays information about the active call in the title bar of the main window.
- **Replace call information with phone directory entry** - When this check box is enabled, Avaya IP Agent uses the 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 from the Avaya communication server is displayed.
- **Display call information using Japanese font** - When this check box is enabled, Avaya IP Agent displays all information in Japanese. This feature is available only 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.

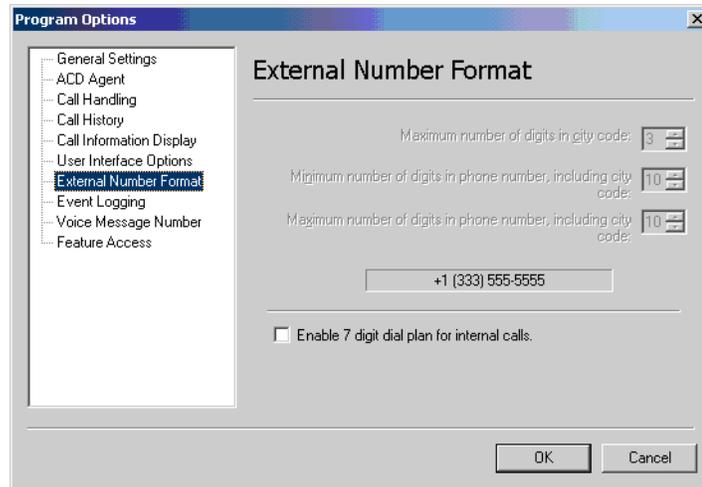
User Interface Options panel



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

- **Always display the main window on top** - When this check box is enabled, Avaya IP Agent always appears in the foreground of your Windows desktop, in front of all other application windows.
- **Display tooltips for toolbars** - When this check box is enabled, tooltips appear when the mouse cursor is placed over buttons on the toolbars of the main window.
- **Display letters on the dialpad** - When this check box is enabled, the **Dial Pad** displays the letters that correspond to the numbers on the number pad of a telephone.
- **Display the Shortcut icon in the system tray** - When this check box is enabled, the Avaya IP Agent icon is displayed in the System Tray on the Windows task bar.
- **Incoming Calls - Display the main window for incoming calls** - When this check box is enabled and a call is received, the main window is displayed in front of any other application windows that are currently open.
- **Incoming Calls - Flash window for incoming calls** - When this check box is enabled, the title of the main window in the task bar flashes when a call is incoming. This behavior resembles selection and de-selection of the window.

External Number Format panel



Note:

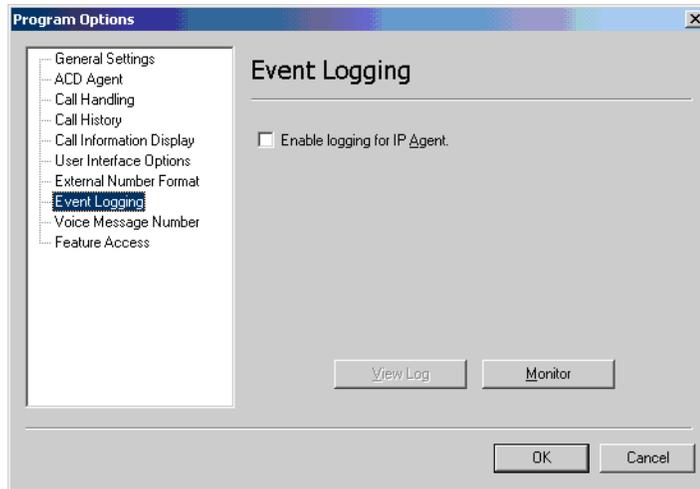
The first three controls in this panel are automatically disabled if you have set your dialing properties for the United States. The controls are only available for those countries outside of the United States.

For countries outside the United States, information must be provided in this panel regarding the format of telephone numbers within the country. Using this panel, you can set the maximum and minimum length of telephone numbers used within the country, including city codes. This information determines when the code for another country should be added to a telephone number so that the number can be stored in the correct format.

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

- **Maximum number of digits in city code** - Specify the number of digits that are dialed for telephone numbers that use a code to identify a city.
- **Minimum number of digits in phone number, including city code** - Specify the fewest number of digits that can be used to dial an external call. This number should also include the code used to identify a city.
- **Maximum number of digits in phone number, including city code** - Specify the largest number of digits that can be used to dial an external call. This number should also include the code used to identify a city.
- **Enable 7 digit dial plan for internal calls** - Enable this check box if your contact center uses a seven-digit dial plan. Dial plans of more than five digits are available only through MultiVantage or Communication Manager systems. When this check box is enabled, Avaya IP Agent treats a dialed number consisting of seven digits as an internal extension.

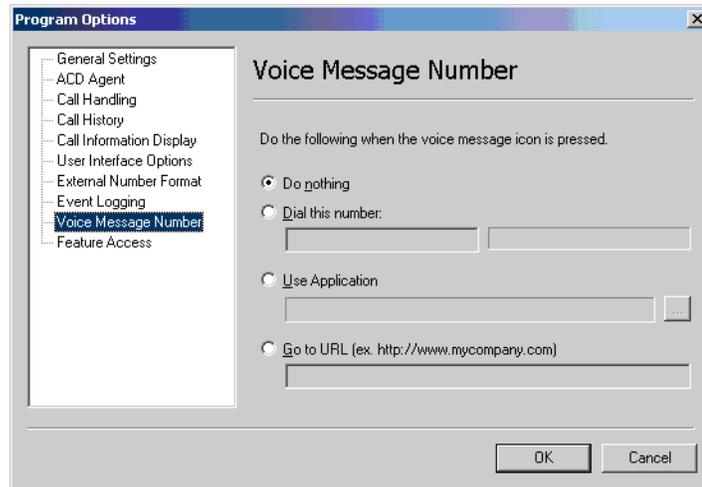
Event Logging panel



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

- **Enable logging for IP Agent** - When this check box is enabled, all associated program activity is recorded. Avaya support personnel use this information to determine the cause of any problems with Avaya IP Agent.
- **View Log** - Select this button to display the Avaya IP Agent log file.
- **Monitor** - Select this button to display the **Events Monitor** window. This window displays all Avaya IP Agent events that are recorded with the logging feature. This window displays information only if the **Enable logging for IP Agent** check box is enabled.

Voice Message Number panel



The options on this dialog determine what action is taken when you click the voice message icon in the System Tray.

Note:

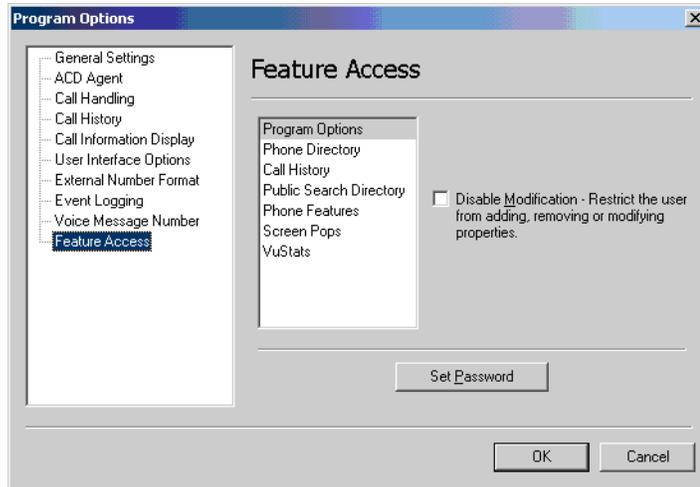
This icon is displayed only when voice messages exist for an extension.



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

- **Do nothing** - Avaya IP Agent does not initiate any action when you click the icon.
- **Dial this number** - Select this option and provide a telephone number or extension to dial in the associated field. When you click the icon, Avaya IP Agent dials the number in this field.
- **Use Application** - Select this option and provide the path and filename of an executable program file for Avaya IP Agent to run when you click the icon.
- **Goto URL** - Select this option and provide a Uniform Resource Locator (URL) address that will be opened when you click the icon.

Feature Access panel



! Important:

In order for the **Disable Modification** feature to function properly, an administrative password must be set through the **Set Password** button. If a password is not set, 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 used for validation.

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

The **Feature Access** panel 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** - When this check box is enabled, users are restricted from accessing the specified feature panel. This option is not available for the **Program Options** feature. When access to a feature is disabled, the feature does not appear in the menus on the menu bar of the main window.
- **Disable Modification** - When this check box is enabled, users cannot alter the feature.
- **Disable Selection** - When this check box is enabled, users cannot activate a screen pop by double-clicking it in the **Screen Pops** window.
- **Set Password/Enter Password** - Select this button to display the **Change Password...** dialog box. When you enter a password, the options for the **Feature Access** dialog box cannot be changed until the proper password is entered.

Note:

The **Event Logging** panel is always available, even if you have restricted access to all features. In this manner, agents can activate logging without administrator intervention. You should need to record event logs only if they are requested by Avaya technical support personnel.

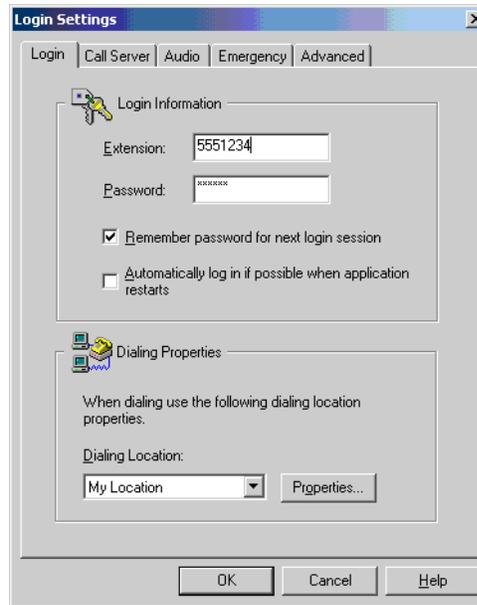
Login Settings dialog box

Use the **Login Settings** dialog box to specify the necessary data for the Telecommuter configuration. This dialog box is accessed by pressing the **Settings** button on the **Login** window that is used to register with an Avaya communication server.

This section contains the following topics:

- [Login tab](#) on page 134
- [Call Server tab](#) on page 135
- [Audio tab](#) on page 136
- [Emergency tab](#) on page 137
- [Advanced tab](#) on page 138

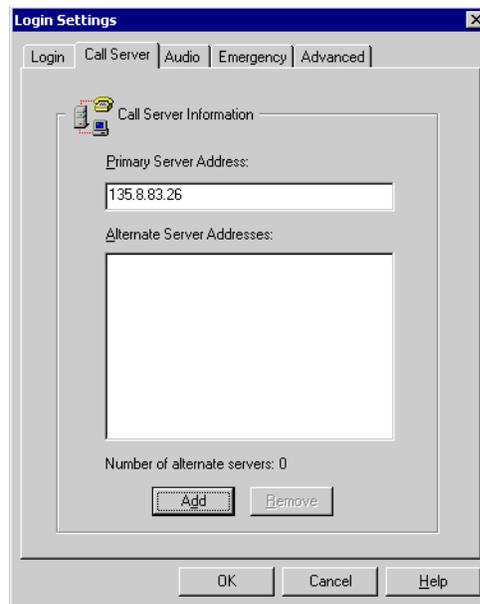
Login tab



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

- **Extension** - The extension number used in conjunction with Avaya IP Agent.
- **Password** - The numeric password associated with the specified extension number.
- **Remember password for next login session** - When this check box is enabled, the Login window retains the password used to register this extension number with the Avaya communication server. If you are concerned about the possibility of unauthorized persons assuming this identity, leave this check box blank.
- **Automatically login if possible when application restarts** - When this check box is enabled, logging in to the Avaya communication server is attempted automatically when Avaya IP Agent is started.
- **Dialing Location** - Specify the dialing configuration that Windows should use when making telephone calls. For example, an agent using a notebook computer may have one configuration that dials 9 for an outside line when in the office, and a separate configuration that does not dial 9 when the notebook computer is used in other locations.
- **Properties** - Select this button to display or modify the configuration specified in **Dialing Location** list.

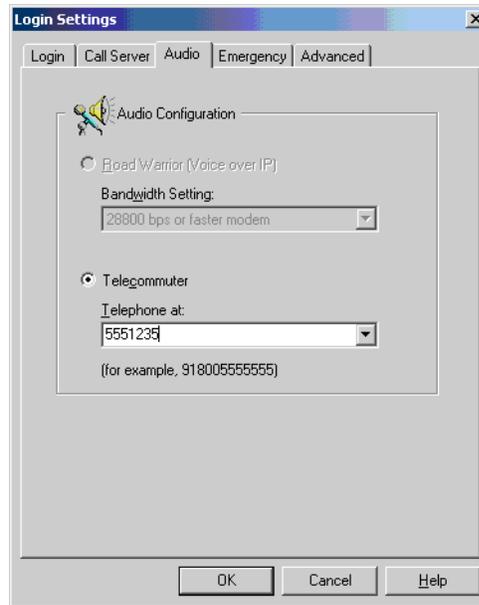
Call Server tab



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

- **Primary Server Address** - This field contains the domain name or IP address of the Avaya communication server that this extension will connect to.
- **Alternate Server Addresses** - This list box is automatically populated after registration of the Avaya communication server, specified in the **Primary Server Address** field, completes successfully. If communication with the primary Avaya communication server fails after Avaya IP Agent successfully registers with it, Avaya IP Agent attempts to use the other Avaya communication servers in this field.
- **Number of alternate servers** - This area displays the number of communication servers that are available in the **Alternate Server Addresses** field.
- **Add** - This button allows manual addition of an Avaya communication server to the list of alternate Avaya communication servers.
- **Remove** - Select this button to remove the currently highlighted communication server in the Alternate Server Addresses list. Removing an Avaya communication server from the list in this manner affects only the current Avaya IP Agent session. If you log off from the Avaya communication server or shut down Avaya IP Agent and then reconnect, this list of alternate server addresses is again refreshed from the list kept on the Avaya communication server.

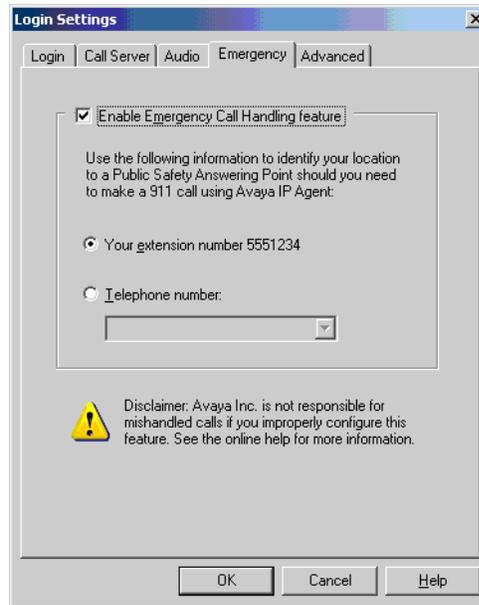
Audio tab



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

- **Road Warrior (Voice over IP)** - This field is not supported for the Windows Terminal Services edition of Avaya IP Agent.
- **Bandwidth Setting** - This field is not supported for the Windows Terminal Services edition of Avaya IP Agent.
- **Telecommuter** - Select this option to specify that the data channel is routed through the personal computer using Internet Protocol and that voice communications are conducted through a telephone. This is the only option available for the Windows Terminal Services edition of Avaya IP Agent.
- **Telephone at** - Enter or select the telephone number through which voice communications are to be conducted.

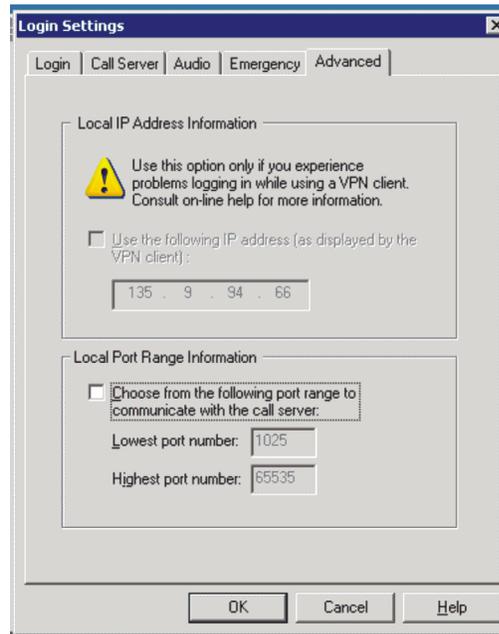
Emergency tab



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

- **Enable Emergency Call Handling feature** - When this check box is enabled, Avaya IP Agent notifies the Avaya communication server that this endpoint supports this feature and that emergency calls placed from this endpoint should transmit the specified telephone or extension number to emergency services.
- **Your extension number** - Select this option if you want your extension number to be transmitted to emergency services personnel when an emergency call is made.
- **Telephone number** - Select this option if you want a specific telephone number to be transmitted to emergency services personnel when an emergency call is made. Enter the telephone number in the associated field. See [Configuring the Emergency Call Handling Service](#) on page 37 for more information regarding this feature.

Advanced tab



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

- **Choose from the following port range to communicate with the server** - When this check box is enabled, Avaya iClarity IP Audio will use the port range that you specify in the associated fields. This feature is used to restrict the Avaya iClarity IP Audio to a limited range of ports with which to communicate through a network firewall. Avaya iClarity IP Audio uses the UDP and TCP/IP protocols in association with this range.

Note:

The range specified must cover a range of at least 100 ports.

- **Lowest port number** - Enter the lowest port that Avaya iClarity IP Audio will use. The minimum for this field is 1025.
- **Highest port number** - Enter the highest port that Avaya iClarity IP Audio will use. The maximum for this field is 65535.

Audio Port Range Administration

On the Avaya communication server, use the **UDP Port Range** fields on the **IP Network Region** administration screen to configure the port selections for an IP endpoint.

Prior to administering the audio port range values, you must set the IP network region with which the endpoint will be associated. See the documentation for your Avaya communication server for information on network regions.

The screenshot shows the 'IP Network Region' configuration dialog box. The 'Region: 1' section has a 'Name' field containing 'region 1'. Under 'Audio Parameters', the 'UDP Port Range' is set with a 'Min' value of 2000 and a 'Max' value of 3005, which are circled in red. Other parameters include 'Direct IP-IP Audio Connections?' (n), 'IP Audio Hairpinning?' (y), 'RTCP Enabled?' (y), 'RTCP Monitor Server Parameters' (n), 'Use Default Server Parameters?' (n), 'Server IP Address' (123.123.123.123), 'Server Port' (5005), 'RTCP Report Period(secs)' (5), and '802.1p/Q Enabled?' (n). Under 'DiffServ/TOS Parameters', 'Call Control PHB Value' is 34, 'VoIP Media PHB Value' is 30, and 'BBE PHB Value' is 43.

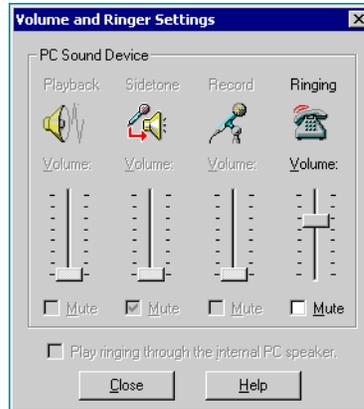
It is important that the intersection of the audio port ranges set for Avaya iClarity IP Audio and for the Avaya communication server overlap by at least 100 ports. In the event that the overlap is less than 100, the range reported by the Avaya communication server is ignored.

For example, if the port range is set to 51000-51100 and the Avaya communication server reports an audio port range of 50950-51005, then the overlap is 5 and Avaya iClarity IP Audio ignores the range reported by the Avaya communication server.

Note:

The Avaya communication server may require that you enable ports 1719 and 1720 on your firewall for proper communication.

Volume and Ringer Settings dialog box



The **Volume and Ringer Settings** dialog box contains the following applicable items:

Ringer

- **Volume** - Use this slider to adjust the volume of the sound that is played through your speakers or headset that occurs when you receive an incoming call.
- **Mute** - Enable this check box to eliminate any sound that indicates an incoming call.

Note:

The unavailable fields you see displayed on this window are not supported for the Windows Terminal Services edition of Avaya IP Agent.

Appendix A: Shortcut keys

This section 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 shown 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 key functions

This section contains the shortcut keys that can be used when the Avaya IP Agent is the currently selected window on your desktop. These shortcut keys are divided into the following categories:

- [Call features](#) on page 141
- [Agent features](#) on page 142
- [Avaya IP Agent features](#) on page 142
- [Windows features](#) on page 143

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

To...	Press...
Log in	Ctrl + Ins
Log out	Ctrl + Del
Change to After Call Work (ACW) mode	Ctrl + W
Change to Auxiliary Work (AUX) mode	Ctrl + A
Change Available mode assignment to automatic (Auto-In)	Ctrl + I
Change Available mode assignment to manual (Manual-In)	Ctrl + M
Request supervisor assistance (Assist)	Ctrl + S
Mark an event log entry	Ctrl + E Use this key combination to place an identifier on a line in the event log. This can be used to indicate when you notice a problem. This feature is only available when the event logging feature is enabled.

Avaya IP Agent features

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
Display the Search Public Directory window	Alt + S
Display online help	F1

To...	Press...
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

To...	Press...
Alternate 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 A: Shortcut keys

Appendix B: Language support

This section contains quick reference information for supported languages.

Untranslated components

The following Avaya IP Agent components are provided only in English:

- Installation
- Event log
- Avaya IP Agent internal files
- Shortcut keys
- `readme.txt` file
- Uninstall program

Supported languages for Avaya IP Agent

The following languages are supported with Avaya IP Agent:

- English (US)
- Italian
- French
- German
- Portuguese (Brazilian)
- Spanish
- Japanese
- Korean
- Chinese (Simplified)

Appendix B: Language support

The English version of Avaya IP Agent can be installed on supported operating systems using the languages specified above. Other language versions of Avaya IP Agent can be installed only on supported operating systems using that language. For example, the German version of Avaya IP Agent can be installed only on supported operating systems using German.

Appendix C: Troubleshooting

This section contains information used for troubleshooting problems with Avaya IP Agent. It is divided into the following topic areas so that it is easy for you to locate the information that you need:

- [Diagnostic log files](#) on page 147
- [Login](#) on page 148
- [Making and receiving calls](#) on page 150
- [Other](#) on page 152
- [Alternative solution possibilities](#) on page 154

Diagnostic log files

In the event an unhandled exception occurs in IP Agent, two log files will be generated in the `<application data>\Log Files` folder. If IP Agent is installed into the default directory, the log files will be found in:

C:\Documents and Settings\<user>\Application Data\Avaya\Avaya IP Agent\Log Files

The following table describes the generated log files:

Filename	Contents
Diagnostic_(mm-dd-yyyyhh.mm.ss).dmp ¹	The captured binary mini-dump file generated when an unhandled exception occurs in ipagent.exe.
Module_List_(mm-dd-yyyy hh.mm.ss).txt	Ascii text file which includes summary information regarding the unhandled exception and a version listing of the modules loaded at application runtime.

1. The mm-dd-yy hh.mm.ss value indicates the local system time when the exception occurred. Use the timestamp to pair the Diagnostic and Module List files together.

Login

This section lists those problems associated with registering with the Avaya communication server and logging in as an agent.

Problem	What to do
<p>Cannot register with the Avaya communication server.</p>	<p>Check for a valid configuration:</p> <ul style="list-style-type: none"> ● Avaya IP Agent has limited support for firewalls and Virtual Private Networks (VPN). See Advanced tab on page 138 for more information on configuring Avaya IP Agent for use with VPNs. ● An Avaya communication server earlier than DEFINITY R10 cannot be used for Avaya IP Agent. MultiVantage and Communication Manager servers are fully supported. ● Ensure that the network connection from the personal computer is operating normally. ● Ensure that the integrated firewall feature of Windows XP is disabled. If this feature is enabled, iClarity IP Audio cannot function properly.
<p>Agents cannot log in to EAS.</p>	<p>Ensure that the following administration items have been addressed:</p> <ul style="list-style-type: none"> ● Feature Access Codes are administered. ● If the Avaya communication server has the station set for Auto-answer, ensure that Avaya IP Agent has the Enable support for auto-answer option enabled in the Program Options window. ● Ensure that the station is configured for an AUX button. Without this button, agents cannot log in correctly if the Avaya communication server is configured so that agents must enter AUX work mode when logging in to EAS.
<p>You changed your login extension but the Avaya communication server does not recognize your login.</p>	<p>Restart your personal computer and attempt the login procedure again.</p>

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: <ul style="list-style-type: none"> ● On the Avaya communication server, verify that the station has the following work mode features assigned to buttons. If these buttons are not assigned to the station, Avaya IP Agent cannot enable the work modes on Agent toolbar: <ul style="list-style-type: none"> – Auto-in or Manual-in – After Call Work (ACW) (optional) – Auxiliary Work (AUX). ● On the Avaya communication server, verify that the first <code>AUX work mode</code> button assigned to the station has a blank reason code or a reason code of 0.
The agent logs in but is immediately logged out.	If the station or agent is administered as <i>auto-answer</i> on the Avaya communication server, you must activate Enable support for auto-answer in the Program Options for Avaya IP Agent. After changing this setting in Avaya IP Agent, you must restart Avaya IP Agent for the change to take effect.
Agents are logged off repeatedly from EAS or the Avaya communication server.	<ul style="list-style-type: none"> ● Ensure that the network is not having stability problems or failures in service. ● On the Avaya communication server, ensure that the Auto-In field for the agent is set to <code>station</code> and not <code>aux</code>. Also, ensure that the Enable automatic login option in the Program Options dialog for Avaya IP Agent is activated.

Making and receiving calls

This section lists problems that are associated with placing outgoing calls and receiving incoming ACD calls through Avaya IP Agent.

Problem	What to do
Agents cannot place calls.	<ul style="list-style-type: none">● 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 Avaya communication server resides.● Ensure that calling cards are not being used.

Problem	What to do
<p>Picking up the handset does not automatically answer the incoming call displayed in the Avaya IP Agent window.</p>	<ul style="list-style-type: none"> ● Ensure that the <code>Service Link Mode</code>: for the station is set to <code>as-needed</code>. ● 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 personal computer. ● The auto-answer feature must be configured in Avaya IP Agent and for the station definition on the Avaya communication server.
<p>The Avaya IP Agent main window does not display that a call is incoming until the second or third ring.</p> <p>The main window is very slow in displaying the Call Information Panel for an incoming call.</p>	<ul style="list-style-type: none"> ● The processor of the personal computer 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 as follows: <code>C:\Program Files\Avaya\Avaya IP Agent</code> Alternatively, you can configure your virus scan program to scan instances only 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. ● Ensure that there is enough network bandwidth for Avaya IP Agent to receive the data channel information in a timely manner.

Other

This section lists general problems that one might encounter with Avaya IP Agent.

Problem	What to do
Collected digit information is not displayed.	<ul style="list-style-type: none"> ● You must have a callr-info button assigned for non-Callmaster telephones so that collected digit information is displayed. Buttons are configured for extensions through the <code>change station</code> command on the Avaya communication server. ● Ensure that VuStats is deactivated. This can be done by double-clicking on the Normal Mode button in the Phone Features window.
User-to-User-Information (UUI) is not being displayed.	On the Avaya communication server, ensure that the UUI IE Treatment field in the Trunk-Group definition form is set to service-provider .
The Call Information Panel (CIP) is not displaying any data.	This problem 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 if 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 on page 14 for telephones that support 80 character displays.
Touch-tones are not sent when the agent presses the buttons of the number pad on the telephone.	This situation occurs because the data portion of the Telecommuter configuration is sent through Avaya IP Agent on the personal computer and not the telephone. Use the Dial Pad or the personal computer keyboard to enter numbers where Dual Tone Multi-Frequency (DTMF) signals are needed.

Problem	What to do
Avaya IP Agent is reacting slowly.	The Event Logging feature of Avaya IP Agent can inhibit product performance. If you are not working with Avaya support personnel to solve a problem with Avaya IP Agent, this feature should be disabled.
The settings for one Avaya IP Agent installation were exported, but the import did not seem to work on another installation.	<ul style="list-style-type: none"> ● Ensure that you are not trying to use exported settings from an Avaya IP Agent installation on another operating system. Setting exports from an operating system, such as Microsoft Windows Server 2000, cannot be imported on a different operating system, such as Microsoft Windows Server 2003. ● If you are renaming items from the Phone Features or Personal Phone Features windows, you must use the Rename (All Extensions) option. Otherwise, the name change only occurs for the specific extension number.
The button feature assignments were changed for this extension, but the assignments either are not displayed in Avaya IP Agent or they fail to work.	<p>Do the first item in the following list. If the first item does not correct the problem, use the subsequent items that are appropriate for your configuration.</p> <ul style="list-style-type: none"> ● Select Tools > Phone Features from the main window and then select Rebuild All from the menu bar on the Phone Features window. ● 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 used with Avaya IP Agent, you must reboot the personal computer and log in again to regain these functions.
The agent was in Auto-In mode, received a call, and selected the After Call Work mode. When the call was finished, the work mode changed back to Auto-In.	If the agent needs to use the After Call Work mode consistently, use the Manual-In work mode instead of the Auto-In work mode.

Problem	What to do
The folders in the Phone Features window are not in the appropriate language.	This problem occurs when multiple languages are installed for Avaya IP Agent. When first opened, the Phone Features window displays the names of the folders in the language version of Avaya IP Agent that is currently running. However, if you change to a different language version, the folders in this window retain the language used when the window was first opened. 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.
How to remove the call timer	The call timer can be removed from Call Information Panels by editing the following entry in the Registry: [HKEY_CURRENT_USER\SOFTWARE\Avaya\Avaya IP Agent\Config\Settings] "HideCallTimer"=dword:00000001
Fatal errors are occurring when the Call History window is opened.	This could be a sign that the Avaya IP Agent database is corrupt. To resolve this problem, uninstall and reinstall Avaya IP Agent. Any data stored in the database previous to this action is lost.

Alternative solution possibilities

If the information in this section did not solve your problem, it is possible that areas other than Avaya IP Agent are at fault. You can investigate the following areas for solutions:

- Firewall configurations
- Network configurations and available bandwidth
- Speed and available resources of the personal computer being used with Avaya IP Agent
- Problems with the Central Office (your telephone service provider)
- Network failures (WAN/LAN)
- Problems occurring in the other party's telephone system
- Avaya communication server configuration problems

Glossary

Abbreviated Dial Feature	Allows the agent to store telephone numbers, that the agent selects, for quicker and easier dialing by selecting a single button. Each number can be a complete or partial telephone number, an extension number, or a trunk or feature code.
ACD	See Automatic Call Distribution (ACD).
Active Call	A call appearance state where the voice (talk) path between two parties has been connected.
ACW	See After Call Work (ACW).
Add/Remove Programs	A Microsoft Windows feature that allows you to remove programs that have been installed on your computer. The Add/Remove Programs component is found in the Control Panel.
After Call Work (ACW)	An ACD agent work mode in which agents are performing tasks related to a previously completed call. In this mode, the agents are unavailable to receive ACD calls.
Agent	A person who receives calls that are delivered from a split or skill.
Agent Mode	An agent logs into an Avaya communication server with a specific agent ID, which is associated with certain assigned skills and configuration settings. Do not confuse this with registering as an extension with the Avaya communication server as an agent must first register as an extension before logging in with an agent ID. Logging in as an agent enables the Agent toolbar in the main window.
Agent Skill	A centrally-defined attribute that is associated with an EAS ACD agent ID, which represents a certain ability or assignment for that agent. An agent can be assigned up to 20 skills. The meaning of each Agent Skill is customizable. Examples of what could be considered skills are: the ability to speak a particular language or the expertise to handle a certain product.
Agent work mode	A feature of agent call handling. Agent work modes are the different call work modes and call states an agent can be in (logins, logouts, After Call Work, AUX, and so forth). Data about these states is displayed in the history log.
Agent toolbar	A toolbar that provides buttons for agent login and logout and agent modes, such as Auto-In, Manual-In, and After Call Work.
Alternate Gatekeeper	A feature of Avaya communication servers that notifies IP endpoints of all IP addresses for a network region. If communication fails with an IP address on the Avaya communication server, Avaya IP Agent attempts to reconnect with another IP address within the same network region.
Alternate User Interface	Avaya IP Agent interfaces that use much less space on the Desktop than the main window.

Assist

Assist	Allows an agent to request assistance (whether on an active ACD call or not) from the split or skill supervisor by pressing the Assist button or by putting the call on hold and dialing the Assist feature access code, followed by the split group number. The agent must be logged into the split or skill.
Auto-answer	An Avaya communication server feature where calls directed to an agent are connected without any action required on the part of the agent. An agent can begin conversing with the other party without having to accept the call by activating a call appearance or releasing the switch hook.
Autodial	A telephone feature where a single button is used to dial a complete telephone number.
Auto-In	An ACD work mode. In the Auto-In mode, when an agent disconnects from a call, that agent is automatically available to receive another ACD call.
Automatic Call Distribution (ACD)	A method of call distribution where EAS agents are placed in groups called skills. An EAS agent can be logged into up to 20 skills simultaneously. EAS distributes calls to the extension of an agent that possesses the necessary skill.
Automatic Number Identification (ANI)	A service that provides the telephone number of an incoming call.
AutoPlay	A Microsoft Windows feature that causes an application on a CD-ROM to run without any user interaction as soon as the CD-ROM is inserted into the drive.
AUX	See Auxiliary Work (AUX) mode.
AUX RC	See Auxiliary Reason Code (AUX RC).
Auxiliary Reason Code (AUX RC)	A numeric code that describes the reason for entering the AUX work mode, such as lunch or meetings. This Expert Agent Selection (EAS) feature enables a contact center to track the time of an agent more precisely.
Auxiliary Work (AUX) mode	An ACD agent work mode indicating that the agent is unavailable (for example, observing a pre-defined period of inactivity or in training) to receive an ACD call.
Available	An agent state in which the agent is able to accept an ACD call. This is a sub-state of the Auto-In and Manual-In modes.
Avaya communication server	A DEFINITY, MultiVantage, or Communication Manager system. These systems receive and distribute communications throughout a contact center.
Avaya IP Softphone	Avaya IP Softphone is an Avaya product that enables you to log in to an Avaya communication server as an extension. Avaya IP Softphone does not support agent login and cannot co-reside with Avaya IP Agent.
Bandwidth	The maximum number of digital bits that can pass through a communications channel every second. For example, Ethernet 10BaseT has a maximum bandwidth of 10 megabits per second.

Basic Conference	A mode of joining multiple parties to the same call. Up to five parties can be added, for a total of six on a call. The agent selects Conference, dials the number through the keyboard, talks to the party, and selects Conference again. See also Enhanced Conference.
Basic Transfer	A transfer mode that sends the current call to another telephone number or extension. The agent remains on the line until the call is answered and can announce the call. See also Enhanced Transfer and Unsupervised Transfer.
Call appearance	A call connected to an extension. Most telephone types can support multiple call appearances simultaneously. Each call appearance is represented with a Call Information Panel in the main window.
Call Information Panel (CIP)	A single panel (40-character display) that displays information about a single call, such as caller name, call duration, status icon, and control buttons, such as Answer/Release and Reconnect.
Call Prompting	An Avaya communication server feature that routes incoming calls based on information entered by the calling party, such as an account number. The caller is prompted to select options from those listed in an announcement. See Prompted digits for related information.
Call Work Code	A numeric sequence, up to 16 digits, entered by an agent that identifies the type of call received by the agent. These codes are user-defined and administered on the Avaya communication server.
CIP	See Call Information Panel (CIP).
Circuit pack	Expansion modules that can be used to expand a DEFINITY, MultiVantage, or Communication Manager server. For Avaya IP Agent, the required circuit packs are related to IP communications.
Comma-separated values	Fields and records in a text file that are delimited by commas. This is a simple form of a database.
Communication Manager	The software used in Avaya communication servers. Communication Manager systems succeed and surpass DEFINITY and MultiVantage systems.
Communication server	A general term for Avaya DEFINITY, MultiVantage, and Communication Manager systems.
Conference	See Basic Conference or Enhanced Conference.
Connected	A trunk state in which a caller and an agent are able to converse on an ACD call.
Contact center	A location where communications are received and placed. These communications can be telephone calls, e-mail, Web-based instant messaging, and others.
DDE	See Dynamic Data Exchange (DDE).

DEFINITY ECS

DEFINITY ECS	DEFINITY Enterprise Communications Server (ECS). The DEFINITY ECS is a telecommunications system that routes voice and data information between various endpoints, such as telephones, terminals, and computers. It provides highly robust networking capabilities and includes an extensive set of standard features, such as Attendant Consoles, Voice Processing Interface, Call Coverage, DS1/E1 Connectivity, Hospitality Support, Recorded Announcement, and Trunk-to-Trunk Transfer. It also allows for the addition of optional features and upgrades to the system as business needs change.
Delimited text file	A file containing fields, records, and values that are separated by commas, tabs, semicolons, or other characters.
Dial Pad	An Avaya IP Agent dialog box that displays the 12 characters available on a telephone.
Dial Number button	A button on the Dial Number toolbar that an agent uses to go off-hook and initiate a dial tone or to dial the digits previously entered in the Number text box.
Dial Number toolbar	A toolbar that provides a number text box, access to the phone directory, call history, speed dial, and recent calls list. When an agent enters a string (for example, lan) followed by Enter, a popup menu displays with a list of the directory entries that start with that string. If the first character of the number is a letter, the title of the field will be changed from Number to Name.
Dial Plan	The configuration of an Avaya communication server that determines how extensions, external telephone numbers, and server features are contacted or activated. For example, a dial plan might determine that all internal extensions can be reached by dialing a five-digit number. Dial plans are configured through an Avaya communication server.
DNS	See Domain Naming System (DNS).
Domain	For Windows networking, a domain is a subnetwork comprised of a group of clients and servers under common control. For the Internet, a domain is the highest subdivision of a domain name. For example, .com, .org, and .net are domains.
Domain Naming System (DNS)	An Internet mechanism where Uniform Resource Locator (URL) addresses are translated to Internet Protocol (IP) addresses. For example, www.avaya.com translates to a series of numbers that use the format 123.123.123.123. DNS servers can exist inside private networks that are separated from the Internet.
Drop	An agent uses this feature to disconnect from a call and place another call or to disconnect the last person added to a conference call.
Dynamic Data Exchange (DDE)	A form of communication between Windows applications that allows the exchange of data, information, and commands.
EAS	See Expert Agent Selection (EAS).
Emergency Call Handling (ECH)	An Avaya communication server feature that determines the location of IP endpoints that place a call to emergency services, such as 911 in the United States.

Enhanced Conference	A feature that allows you to add up to six telephone numbers to a call. See also Basic Conference.
Enhanced Transfer	A transfer option that sends the present call to another phone number or extension. See also Basic Transfer and Unsupervised Transfer.
Expert Agent Selection (EAS)	An optional Avaya communication server feature that builds on the power of the Call Vectoring and ACD features to send a particular call to an agent who has at least one of the skills that the caller requires.
FAC	See Feature Access Code (FAC).
Feature Access Code (FAC)	A 1-to-4 digit number with an optional leading * or # that is assigned during Avaya communication server administration to invoke features. For example, *81 may invoke Service Observing Listen Only. FACs require an available call appearance with dial tone before the FAC can be sent to the Avaya communication server. Assigned FACs may not be available to all users on an Avaya communication server based on class of restrictions and whether the feature has been enabled in the Avaya communication server.
Feature button	A button that can be assigned to any one of a number of Avaya communication server features. Feature buttons are assigned to an extension during station administration on the Avaya communication system.
Firewall	Hardware, software, or a combination of the two that provide a boundary between two or more networks. Firewalls can be implemented on different devices with differing levels of security and access.
Graphical User Interface (GUI)	An environment where icons, dialog boxes, windows, buttons, fields, and other controls are presented through the use of program functions supplied by the operating system. You can interact with the interface with a pointing device, such as a mouse, and, usually, the keyboard.
GUI	See Graphical User Interface (GUI).
H.323	A specification that defines packet standards for multimedia communications over IP networks that interact with telephony networks.
Hold	A feature that allows an agent to leave a telephone call without disconnecting it. You can return to the call at any time.
HTML	See HyperText Markup Language (HTML).
Hypertext	A word or series of words in a software application that can be used to access information through user interaction.
HyperText Markup Language (HTML)	A structured language used in the authoring and presentation of information. See also Hypertext.
iClarity IP Audio	An Avaya component that provides station registration and voice/data signalling with an Avaya communication server.
Installation folder	The directory on the personal computer that contains the Avaya IP Agent files.

Internet Protocol address (IP address)

Internet Protocol address (IP address)	A unique, 32-bit (4-byte) number that identifies a computer on a TCP/IP network and is used in the transmission and delivery of data packets. An IP address is represented in four, 8-bit (1 byte) values, separated by periods. For example, 128.10.10.1. From left to right, each byte represents greater detail about the logical location within the network.
IP Address	See Internet Protocol address (IP address).
IP Endpoint	A telephone extension that uses IP for data signaling, voice communication, or both. Extensions that use the Telecommuter configuration are considered IP Endpoints.
IP Telephone	A telephone set that uses an Ethernet connection to relay voice communication. This is also the name for the configuration by which control of the telephone is shared by Avaya IP Agent.
LAN	See Local Area Network (LAN).
LDAP	See Lightweight Directory Access Protocol (LDAP).
Lightweight Directory Access Protocol (LDAP)	A network protocol used over TCP/IP networks for querying and retrieving information from a hierarchical directory.
Local Area Network (LAN)	A private, interactive communication network through which computers can communicate over short distances at high data transfer rates.
Log	A record of activity.
Login	The process of identifying a user with a computer, device, or server so that the user can use resources or features. In regards to Avaya IP Agent, an agent must log in to the Avaya communication server to receive ACD calls.
Login ID	A number and that allows an EAS agent to log in to the Avaya communication server. Skills and other information are assigned to the login ID of the agent.
Logout	The act of a user that notifies a computer, device, or server that no further tasks will be performed by this user at this time and that no resources should be allocated for this specific user.
Manual-In	An ACD work mode. In the Manual-In mode, the agent automatically enters the ACW mode when the agent disconnects from an ACD call. To become available to receive another ACD call, the agent must manually select the Auto-In or Manual-In mode.
Media Encryption	Communications between Avaya iClarity IP Audio and the Avaya communication server are encoded so that the information cannot be deciphered by unauthorized recipients.
MultiVantage	A line of next-generation communication servers offered by Avaya. MultiVantage systems succeed and surpass DEFINITY systems.
Network	A group of devices that are connected in such a way that data or communications can be transmitted and received between the devices.
Off-Hook	The voice path to your telephone is active.

On-Hook	The voice path to your telephone is inactive.
Phone display	A 40-character display that is located in the status bar of the Avaya IP Agent main window. This display area receives information from the Avaya communication server so that you can see call and non-call related information, such as call prompted digits and VuStats.
Prompted digits	One or more numbers entered by a caller that indicate responses to automated questions posed when the call first enters the contact center.
PSTN	See Public Switched Telephone Network (PSTN).
Public Directory	A database that can be accessed through the Lightweight Directory Access Protocol (LDAP) protocol. A Public Directory usually contains information on people or personnel within some unit of organization, such as a business, educational facility, and so forth.
Public Switched Telephone Network (PSTN)	The worldwide voice telephone network.
RC	See Reason Code (RC).
Read-only	A folder or file that can be read, but not modified, updated, or deleted.
Reason Code (RC)	A numeric code that describes the reason that an agent enters the AUX work mode or logs out of the system.
Registry	The system-wide repository of information supported and used by Windows.
Release	Disconnects the current call.
Response file	See Silent install.
Right-To-Use (RTU)	A licensing mechanism used in Avaya communication servers. In some situations, multiple RTUs can be used by a single extension so that data and voice signaling are supported.
Screen Pop	The automatic display of information on the screen of the personal computer from other sources, such as databases or Web pages. Screen Pops are activated by triggering criteria.
Skill	An attribute that is assigned to an ACD Agent. Agent Skills can be thought of as the ability for an Agent with a particular set of skills to handle a call that requires one of those skills.
Softphone	A software application that enables you to control telephone calls, both incoming and outgoing, directly from your computer, where communication is done through Voice-over-IP.
Split	A group of extensions that receives special-purpose calls in an efficient, cost-effective manner. Normally, calls to a split arrive primarily over one or a few trunk groups.
Station Login	The process of registering as an extension of an Avaya communication server. With Avaya IP Agent, a station login must be completed before an agent login can occur.

Switch

Switch	A private call-handling system providing voice-only or voice and data communications services, including access to public and private networks, for a group of terminals within a premises. See also Communication server.
System Tray	The area of the Windows task bar where applications can display an icon for simplified access to special features. Avaya IP Agent displays an icon in the System Tray.
TAPI Assisted Dialing	Avaya IP Agent supports telephony-enabled applications, such as Microsoft Scheduler. This support provides the ability for telephony-enabled Windows applications to originate a call and have the call reflected in the Avaya IP Agent application.
Telecommuter	An Avaya IP Agent configuration where voice communications are performed through a telephone and data communications are sent through the network to a personal computer. In this configuration, calls to an extension can be routed to any telephone number.
Telephone type	Avaya produces many different models of telephone sets with differing capabilities. Each model supported by Avaya IP Agent is considered a telephone type. Telephone types are identified by the unique number associated with each model.
Toll quality	A term used to compare audio quality and reliability of voice communications to that of telephone calls placed over the PSTN.
Toolbar	A row of buttons used to activate various functions of Avaya IP Agent through the main window.
Tooltips	Brief descriptions that are displayed when the mouse pointer is over a toolbar button or control in the application interface.
Transfer	See Basic Transfer, Enhanced Transfer, or Unsupervised Transfer.
Unsupervised Transfer	A call transfer option that lets an agent send the present call to another phone number or extension. The agent does not talk to the party receiving the transferred call. See also Basic Transfer and Enhanced Transfer.
User-to-User Information (UUI)	A unique identifier that is added to an incoming call through an external application, such as Avaya ASAI.
VDN of Origin Announcement (VOA)	A short announcement that is assigned to a Vector Directory Number (VDN) through Avaya communication server administration. The VOA identifies the origin or purpose of a call for the call center agent who answers the call.
Vector	On a communication server, a list of steps that processes calls according to a configuration set by the administrator. The steps in a vector can send calls to splits or skills, play announcements and music, disconnect calls, give calls a busy signal, prompt callers for information, or route calls to other destinations.
Virtual Private Network (VPN)	A group of computers or network devices that can communicate privately and securely over a public IP network through the use of encryption and special protocols.
VOA	See VDN of Origin Announcement (VOA).

Voice-over-Internet Protocol (VoIP)	A technology where speech is converted to a digital signal and transmitted through Internet Protocol packets over the Internet or an intranet.
VuStats	An Avaya communication server feature that displays contact center activity and information on the display of a telephone set. For Avaya IP Agent, this information can be viewed in the status bar of the main window and the VuStats Monitor window.
Windows Terminal Server / Windows Terminal Services	A Windows-based server that allows client terminals, PCs, and other devices to use an environment and applications supplied by the server. Depending on the type of client, processing and storage can take place on the server or the client.
Zip Tone	A short dial tone that indicates that an ACD call is being connected to the agent.

Zip Tone

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