

Avaya IP Softphone

AVAYA IP Softphone is for employees who work out of the main office, on the road, or at home, communications have just gotten easier with the Avaya Internet Protocol (IP) Softphone Release 3. Accessed through a simple graphical user interface on a personal computer or laptop, the Avaya IP Softphone gives the mobile worker anywhere, anytime access to voice, fax, data, and e-mail, as well as the full suite of MultiVantage features and functions. It brings the power of the Avaya's multiple appearance digital voice terminal to the remote user's computer screen.

IP Softphone delivers MultiVantage software to remote users. These features include high-quality Voice over IP, multiple Call Appearances, Caller ID, six-party Conference, Autodial, Abbreviated Dialing Lists, Send All Calls, Call Coverage, visual Message Waiting Indication, and many other features that increase productivity and overall cost savings.

Call traffic (simultaneous voice and data conversations) are delivered to IP Softphone in one of two ways. Two configurations are available to ensure the right solution for each remote user: Voice over IP (Road Warrior) or circuit-switched voice (Telecommuter). Avaya *iClarity* IP Audio, which is integrated in the Road Warrior application, provides world-class IP voice sound quality.

The Telecommuter configuration utilizes two ports, one for call control and one for voice traffic. An excellent application is a home office extension user who requires a PC, prefers to talk over a traditional telephone line, and needs the same capabilities provided to local digital extension users.

In the Road Warrior configuration, a *single* port provides LAN connection to a remote PC running IP Softphone software, which provides IP call control *and* call traffic handling. Avaya single-extension protocol simplifies administration, reduces hardware connections, and increases system capacities. An employee who travels on business can simply access the Internet to have all the features of his/her digital, multi-appearance office phone with display.

Lightweight Directory Access Protocol (LDAP) client allows IP Softphone access to LDAP-compatible databases, such as Enterprise Directory Gateway. The Avaya IP Softphone is also CTI/TAPI-enabled.

IP Softphone provides a Call History Log (both incoming and outgoing calls), local phone directory and other features designed to improve user productivity.

The Avaya IP Softphone Release 3 features include:

- Choice of a totally IP solution (Road Warrior), or a combination of IP and traditional voice solution (Telecommuter). This provides the flexibility to fully meet the specific needs of each remote user. It also opens choices regarding the number of ports your business chooses to use for remote users (single port for Road Warrior, and dual port for Telecommuter).
- Integrated iClarity (developed by Avaya Labs) H.323 client provides superior Voice over IP sound quality.
- Support for alternate Gatekeeper addresses increases reliability. IP Softphone accepts several Gatekeeper addresses via industry standard Dynamic Host

Configuration Protocol (DHCP) or manual administration. IP Softphone provides a user pull-down menu of alternate gatekeeper addresses from which the user can select, if attempts to contact the top priority address fail.

- Administrable Quality of Service (QoS) parameters enhance voice quality. IP voice needs to be delivered quickly to ensure quality. QoS prioritizes Voice over IP traffic over other network traffic.
- Software upgrades are remotely downloadable to IP Softphone, providing an efficient upgrade process, as well as future support for expanded features and applications.
- Avaya IP endpoints (such as IP Softphone) are industry standards-based IP endpoints. This allows the flexibility to support emerging standards and applications, which provides your business with long-term investment protection.
- Enhanced E911 service options: Administrable options, on a station-by-station basis, to either send the IP endpoint's extension number, send a number specified by the caller, or block E911 calls and force the caller to place E911 call over local trunk.
- Flexibility via emulation of a variety of Avaya voice terminals
- Easy-to-use voice terminal controls via graphical PC representation of digital, multi-appearance voice terminal, with point-and-click feature button control. Feature button LEDs illuminate when in use, allowing simplified control and use of a wealth of available features.
- Six-party conferencing delivered to remote office.
- Conference, Hold, Mute, Redial, and Volume control via fixed feature buttons.
- Programmable feature buttons with LED, and display-associated, programmable softkeys make features readily available to user.
- Access to the industry-leading 525+ feature-set of MultiVantage software (except call center agent features) help increase productivity, save time and money, and enhance customer service.
- Access to additional productivity tools - Phonebook, Call History Log, LDAP Directory client.
- Launch calls from TAPI-compliant Personal Information Managers.
- Support for standard audio codecs used in the IP industry: G.711 (A-law and Mu-law), G.723.1, and G.729 (including G.729A, G.729B, and G.729A+B) equates to enhanced IP voice quality.
- Multilanguage support: Brazilian Portuguese, English, European French, German, Japanese, Simplified Chinese, Korean, and Latin American Spanish.
- Choice of two easy-to-use graphical user interfaces: Call Bar View and Phone Picture View.

Administrable Quality of Service (QoS)

IP voice needs to be delivered quickly to ensure quality. QoS prioritizes Voice over IP traffic ahead of other network traffic in your Local Area Network (LAN) or Wide Area Network (WAN). Avaya IP Softphone QoS parameters include proven industry-standard Differentiated Services (DiffServ), 802.1p, and 802.1Q.

DiffServ uses the Type of Service (TOS) value to prioritize voice packets at Network Layer 3 of IP Protocol stack. The 802.1p and 802.1Q values provide eight levels of priority to increase throughput of voice packets at Data Link Layer 2 of IP Protocol stack. 802.1p and 802.1Q also allow identification of several Virtual LAN (VLAN) identifiers. The VLAN identifier at Layer 2 permits segregation of traffic to reduce traffic on individual links, increasing Voice over IP quality.

Voice over IP traffic can also be prioritized by administering IP User Datagram Protocol (UDP) port range values (used at Transport Layer 4 of the IP Protocol stack).

Avaya solutions allow administration by Network Region. A Network Region is a portion of your network that contains multiple IP endpoints (typically a group of endpoints with a common interest or function, such as a single campus in a multi-campus university). Network Regions can contain LAN Segments, which are a more specific grouping of IP endpoints within the Network Region. Administration by Network Region can provide additional flexibility to control traffic on your network, and reduce overall network traffic. One major advantage is enhanced IP voice quality.

Avaya solutions support the download of QoS parameters to IP endpoints (such as IP Softphone). QoS parameters download to an IP endpoints whenever the IP endpoint registers with a Avaya server, and whenever an administered QoS parameter changes values.

Avaya provides industry-leading Voice over IP solutions. These tools are only a few examples of how Avaya provides your business with effective control over the *quality of IP voice*.

IP Softphone Remote Worker Support for E911 Emergency Services

In an E911 emergency services network, equipment and dispatchers at the Public Safety Answering Point (PSAP) use the caller's number to specifically determine where to send emergency personnel. Avaya IP Softphone Release 3 allows options for your system administrator that can be administered on a station-by-station basis. MultiVantage software can be administered to send the IP endpoint's extension number, send a number specified by the caller during registration, or block the call and force the caller to place a 911 call locally.

This IP Softphone feature works in conjunction with the other industry-leading E911 solutions of its host, including CAMA trunks, Automatic Number Identification over ISDN-PRI, as well as crisis alerting to attendant consoles, to multi-button sets, and to digital pagers. Avaya delivers optimum E911 services.

IP Softphone Minimum Requirements

- MultiVantage software.
- Avaya server
- IBM-compatible PC with Intel Pentium 200 MHz (300 MHz recommended for Road Warrior) or compatible processor.
- Hard Disk with at least 30 MB of space available.
- 64 MB of RAM for Microsoft Windows NT 4.0 Server or Workstation with Service Pack 4.0, 128 MB of RAM for Microsoft Windows 2000 Server or Professional, and 32 MB (64 MB recommended for Road Warrior) for Microsoft Windows 98. Windows 95 is not supported.
- Sound card that supports full-duplex operation (for the Road Warrior and standalone H.323 configurations only).
- A speaker/headset and a microphone (for the Road Warrior and stand-alone H.323 configurations only). External microphone recommended for laptops.
- Second telephone line for telecommuter dual connect configuration only.

- Network Interface Card (NIC) for local area network (LAN) connectivity and/or a modem (28.8 Kbps or faster) for dial-up networking.