



# CRYSTALVOICE® CLICK-TO-TALK ENHANCING THE WEB EXPERIENCE

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## Overview

CrystalVoice Communications is a leading provider of voice communications solutions over the raw, unmanaged Internet. CrystalVoice's patent-pending technology allows the user to experience full-duplex, high-quality voice over the Internet, even over low-bandwidth connections.

With high-quality voice over the Internet from CrystalVoice, it becomes possible to provide direct voice contact for consumers, improving customer satisfaction and transforming contact centers from "cost centers" to "revenue centers". While completing an eCommerce transaction or soliciting online support, customers can click a button to talk directly to a contact center agent, through their PC, to get the help they need when they most need it.



Contact centers now have the ability to reach out to many more customers throughout the world, with tremendous cost savings, improved productivity, and significantly increased customer convenience and satisfaction. Businesses generate increased revenue by reaching out to a larger, more accessible customer base, by dramatically reducing abandoned opportunities, and by introducing an opportunity for up-selling during customer interactions.

## CrystalVoice Components

CrystalVoice's click-to-talk solution includes the following components:

- CrystalVoice® client software, *Click-to-Talk (CTT)*, allowing web users to talk through their PC to agents or other voice network users. See Figure 1 for the application interface.
- CrystalVoice® server software includes the *Internet Soft Switch (ISS)*, which provides system services such as call routing, logging and reporting, and the *Internet Voice Transcoder (IVX)*, which performs call signaling and media transcoding to connect Internet calls to an existing voice network.

## Solution Benefits

### E-Commerce Applications

- Increase sales closure rates. Reduce abandonment.
- Integrate with CRM tools to improve efficiency and reduce call handling costs.
- Increase customer loyalty through increased customer dialog.
- Differentiate from the competition by providing a cost effective, value-added service.
- Enable more effective email campaigns for targeted marketing efforts.

### Technical Support Applications

- Enhance customer satisfaction by responding quickly to customer needs.
- Avoid the necessity of disconnecting from the Internet for single line users to place the support call.

### Conferencing and E-Training Applications

- Enable a user the opportunity to attend a conference or educational offering directly through the PC.
- Engage mobile and remote workers in corporate communication.
- Provide simultaneous access to collaborative voice and web applications with a single Internet connection.

Figure 1



Figure 1: The click-to-talk user interface provides for branded company identification. In addition, a keypad interface is provided to allow interaction with ACDs and other interactive voice response systems.

## Call Flow

The call flow for an example contact center solution, depicted in Figure 2, is outlined as follows:

- The consumer clicks on the **Click-to-Talk** button on the website. With user approval, the **Click-to-Talk** client application is downloaded to their computer, and the Internet call is initiated.
- The **Click-to-Talk** software communicates with the **Internet Soft Switch** to route the call over the Internet to the contact center, where the call is connected to the **Internet Voice Transcoder**.
- The **Internet Voice Transcoder** performs any needed transcoding to other standards-based protocols and passes the call to the contact center.
- The contact center is comprised of a PBX or ACD which connects the incoming call to the appropriate agent. If the PBX or ACD supports H.323, the **Internet Voice Transcoder** transfers the call directly to the PBX or ACD. If there is no support for H.323, a voice gateway is used to convert the standards-based IP voice stream to a circuit-switched call for routing to the agent.

## Technical Features

- Secure, web-based administration from any computer via the CrystalVoice® **Systems Manager**
- Audio wizard for sound card management
- Corporate and personal firewall support
- Network (Internet) performance meter
- Speaker volume control
- Small download
- Keypad interface

## System Requirements

### CrystalVoice® **Internet Soft Switch (ISS)** and **Internet Voice Transcoder (IVX)**

- Concurrent call capacity based on server capabilities
- Microsoft Internet Information Services (IIS) required for web-based administration
- Windows 2000 or XP
- SQL or MSDE database services
- Network Interface Card (Ethernet)

### CrystalVoice® **Click-to-Talk Client**

(client software on personal computer)

- 166 MHz Pentium CPU, full-duplex sound card
- Windows 95 (requires Winsock2), 98, ME, NT SP6 (or higher), 2000, or XP
- Standalone microphone and speakers, headset, or headset
- 14.4 kbps dial-up modem or better, or broadband Internet connection

Figure 2

