

## Standards-Based Desktop Video Conferencing

### Video Conferencing with COLLABORATE Desktop

- High definition video and audio quality videoconferencing
- Supports ISDN networking up to 4 BRI lines
- Multiple viewing modes from mini-mode to full-screen
- Incorporates H.239, HD DualStream for simultaneously sending and receiving video + data streams
- Supports encrypted conferences using the H.235 encryption standard
- ClearOne PacketAssist architecture for advanced Quality of Service (QoS) over IP
- Remote software upgrades from network administrator guarantee uniformity across the organization (with Collaborate Central)
- Fully compatible with Windows 8
- Variety of models
- 1080p Full HD incoming - Executive Model
- H.460.18/19 Firewall/NAT traversal support
- Recording \ Streaming \ Multicast
- SIP, H323, H320
- Advanced data sharing capabilities with no PC required – display presentations or videos, open various file types from USB storage devices

**COLLABORATE Desktop** offers high definition audio and video up to 720p and 1080p\*, and includes features and functionality that extend far beyond the capabilities of a desktop videoconferencing application. **Collaate Desktop** offers multiple media transmitting capabilities for video, audio and data. Among **Collaborate Desktop** advanced capabilities is the ability to send and receive video and data streams simultaneously, using DualStream™ technology. Additional streaming capability, using Simulcast™, allows **Collaborate Desktop** to chair or participate in corporate broadcasts.

**Collaborate Desktop** is a versatile, key application for any PC or laptop user, in organizations of any size. It is available in different models: Basic, and Executive, to suit varying corporate requirements.

This newly released version also includes recording and streaming capabilities, as well as the ability to connect across firewalls and NAT, compliant with H.460.18/19 firewall/NAT traversal protocols.

\* 1080P Incoming only is available in Executive mode.

### High Definition Video and Audio

Using the latest H.264 video standard, **Collaborate Desktop** sends and receives high definition quality video. Users can participate in videoconferences at data rates ranging from 64 Kbps to 4 Mbps, depending on the available bandwidth. The superb high definition image quality provided by 4CIF, 720p, and 1080p technology enables the sharpest images in natural color and full motion, even with a simple webcam.

**Collaborate Desktop's** audio features include full duplex echo cancellation, automatic noise suppression and wide-band audio in low bit-rate calls, all combined to deliver crisp audio to the desktop.

### Superior Collaboration Environment

**Collaborate Desktop** allows users to share data from their desktop with the remote side. Various forms of sharing are possible such as desktop, file, window and region sharing, utilizing a detachable data window. When deployed in conjunction with Collaborate Central, users can invite a 3rd party into their conference, and everyone will be placed automatically into a multipoint conference bridge. Other video telephony features, such as video call transfer and video call forward are also possible when an Collaborate Central server is used.

### Corporate Ready

Using a Collaborate Central Administrator program, the network administrator can remotely upgrade all **Collaborate Desktop** endpoints, as well as manage those endpoints on a day-to-day basis. **Collaborate Desktop** includes video and audio device discovery as well as an audio tuning wizard, making it easy to install and operate, no matter which cameras and audio the user chooses.



## Specifications

### Minimum PC Requirements

- Pentium IV 3 Ghz PC  
H.264 4CIF and above requires Core 2 Duo or Dual Core 3Ghz or faster CPU, or AMD equal to, or faster than Athlon 64x2 Dual
- 512MB 400 MHz RAM
- 25 MB available disk space
- Windows XP / 7 / 8
- Graphic display that supports DirectX 9.0
- Two available USB Ports (one for video device and one for a USB protection key if used).

### Video Specifications

Transmission Speed H.323: 64 Kbps - 4Mbps SIP: 64 Kbps - 4Mbps  
ISDN 64 Kbps - 512 Kbps (4BRI)

### SIP protocols

RFC 3261 2396, 2543, 2617, 2822, 2833, 2976, 3264, 3960, 5168, 3262, 3550, 3984, 4961  
Secure Authentication: MD5

### Video Standards

H.261, H.263, H.263+/++ H.264 - up to 2Mbps outgoing

### HD Video Resolution

1080p (1920 x 1080 pixels) incoming  
720p (1280 x 720 pixels)

### Other Video Resolution

4CIF (704 x 576 pixels)  
4SIF (704 x 480 pixels) VGA (640 x 480 pixels)  
Interlaced CIF (352 x 576 pixels)  
CIF (352 x 288 pixels)  
SIF (352 x 240 pixels) QVGA (320 x 240 pixels)  
QCIF (176 x 144 pixels)

### Video Frame Rate

Up to 15 fps: 64 - 128 Kbps  
Up to 20 fps: 192 Kbps  
Up to 30 fps: 256 Kbps +

### Video Features

Video device discovery Automatic NTSC/PAL detection Unlimited number of video devices supported  
HD Simulcast™  
Chair or Participant in any Interactive Multicast session  
Integrated Broadcast Viewer  
Uses bandwidth-efficient IP multicast

### Audio Specifications

Full duplex echo cancellation Automatic noise suppression (ANS)  
Automatic gain control (AGC)  
Audio device discovery  
Audio tuning wizard  
Unlimited number of audio devices supported  
Headset and speaker profiles  
Voice Activity Detection (VAD)

### Audio Standards

AAC-LD - 20Khz  
G.722.1- Annex C - 14Khz  
G722.G722.1 - 7Khz,  
G.711, G.723.1, G.728,G.729 - 3.4 KHz

### Data Specifications

HD DualStream™  
File, region, and window sharing - (Detachable data view)  
Windows desktop sharing  
H.239 support in both live video and multicast  
Tandberg DuoVideo support  
Sending and receiving capability  
1 live video source + 1 data source  
Resolutions supported:  
XGA, SVGA, 4CIF, VGA, CIF, QVGA

### Networking Specifications

**Standards Supported**  
ITU-T: H.323 v5.5  
H.281 Annex Q (FECC)  
H.460 17,18,19 (FW traversal) ISDN: H.320, H.221, H.242, H.230  
Dual network support

### H.323 QoS Features

DiffServ  
IP Precedence  
Firewall port sync  
NAT IP address mask  
Port pinholing  
Adaptive Bandwidth Adjustment Packet loss recovery (FEC)  
Packet ordering  
Packet duplication control  
Jitter correction  
Lip sync correction  
Overhead prediction  
Max packet size adjustment

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### Recording/Streaming/Multicasting

WMV format  
Low - CIF resolution HIGH - 4CIF resolution  
Only in executive version  
Multicasting is available in both Basic & Executive.

### Viewing Modes

Mini screen Regular screen  
Large screen Full screen  
Support for 16:9 aspect ratio in wide screen

### Dialing Modes

Manual  
Speed dial  
Personal address book Online directory Multicast chair Broadcast viewer

### Security

Encryption using H.235 (AES)

### Directory Services

1000+ local number directory  
10,000+ global number directory H.350 support (Collaborate Central mode) LDAP online directory support OpenLDAP  
Microsoft ILS, SiteServer, Active Directory and Exchange  
Sun iPlanet Netscape Directory Search and filter queries

### Language Support

English, French, German, Italian, Spanish, Chinese, Polish, Turkish, Norwegian, Korean, Russian, Indonesian