



Teleskill Live Video Conference

Professional
Web-Based Interactive
Video Communication

Teleskill Live Video Conference

Synchronous audio-visual interactive communication between multiple remote users

Teleskill Live allows users to quickly and easily set up on-line video conferences, interactive multi-media meetings, seminars and video-classes. Participants can connect from anywhere through the public or private network and share their images, documents, videos,... thus achieving significant time and cost reduction benefits.

The service is offered by Teleskill over the internet in ASP mode and does not require expensive hardware and software infrastructure investments to be made by the user. The solution can also be used to provide the service internally and autonomously within the corporate network (VPN, intranet, etc.).

Teleskill Live has been developed compliant with Adobe Macromedia Flash technology and is instantly accessible with just a web browser. A webcam and headphone-microphone combination can be used for interactive audio-visual participation.

Participants interact from any work station (Windows, Mac OS, Linux). No additional software installation is required.

Applications

- Distance learning and remote training
- Internal corporate communication
- Remote consulting and technical support
- Telecommuting
- Sales and marketing

General characteristics

Communication occurs directly through the use of a microphone and optional webcam connected to the PC, and is based on the modern TCP/IP audio/video/data transport technology (VoIP).

The tool enables the Conference Manger to communicate audio-visually with all the participants and present slides, documents, images and video material. Additionally, the moderator can share files, write freely on a whiteboard and request feedback from the other participants by polling and chatting with them. Meanwhile, the users can signal their status and request permission from the moderator to take part in the discussion, ask a question or make a comment. Based on the specific application scenario (video conference, virtual classroom, web seminar, etc.), the Conference Manger can choose to add the audio/video from one or more remote participants (up to a maximum of 8 concurrently in full-duplex mode) to the interactive session so that these participants become audible by and visible to everybody in the meeting.

Each function (e.g., video, user list, chat, etc.) is displayed on screen in a separate window which can be resized in real time by the Conference Manager. Some windows can also be located on a "hidden area" so that only the Conference Manager can view its contents.

Available features and functions

Multipoint full-duplex video/audio



The solution allows up to 8 concurrent remote users to actively participate in the event in full-duplex mode. The Conference Manger selects these users from the list of meeting participants. The selected users can listen and speak to each other at the same time, just like in a normal conversation, while the rest of the audience is able to see and hear them live.

File sharing



The system allows users participating in the meeting to share files in real-time. Participants can upload and download any file of collective interest to and from the central server at any time during the meeting.

Synchronous presentation of slides, documents and images



The solution allows timely sharing of slides, documents, images and video.

This function enables the Conference Manger to share his or her contents with the other participants in real time. This includes presentations, slides, images, documents,... available on the Conference Manger's PC during the meeting.

Interactive whiteboard



Interactive tool allowing the Conference Manger and participants to write and draw freely in an appropriate section of the screen visible to all participants, emulating an electronic whiteboard.

Chat



This function allows each remote user to interact with other users by sending them public or private messages in text format.

Polls



The tool contains a polling function that enables the Conference Manger to perform a survey among the audience by posing questions, obtaining the answers and graphically displaying the results.

Question! (hand raised)

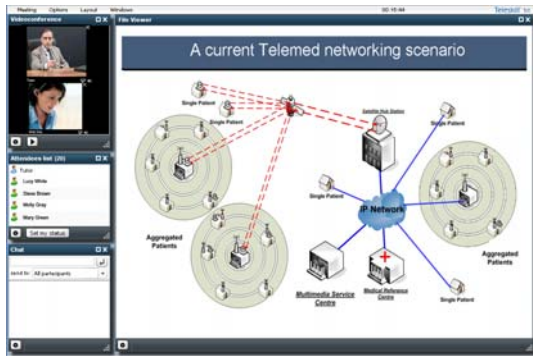


The participant can ask to take part in the discussion, ask a question or make a comment in audio/video form by changing his or her status.

Application scenarios – communication format

Each function (e.g., video, user list, chat, etc.) is displayed on screen in a separate window. The windows that appear on the screen at any one time and their layout can be defined based on the type of event being held (meeting, seminar, remote classes, etc.). Each window can be positioned and sized to make the respective function more or less visible to participants. Teleskill Live also offers a set of recommended function/window layout formats for some of the most widely used application scenarios. These are exemplified below.

Virtual classroom



Scenario

Classes taught in a virtual classroom to actively participating remote students (e.g., 30 students identified by name).

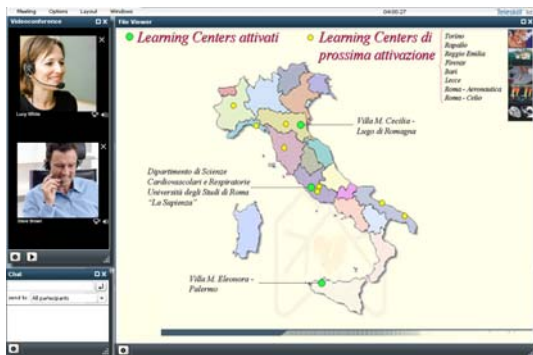
Format

Video of teacher/lecturer. Video of student enabled to ask questions, reply or interact with the teacher. Teacher's slides. Whiteboard. Public chat. List of student names and hands raised.

Communication flow

Audio/Video+Slides/WhiteBoard: teacher → students
Hands raised, chat (audio/video optional): students → teacher

Web seminar



Scenario

Web broadcasting of meetings and seminars involving one or more speakers (panel discussions, interviews,...). Audience consisting of many users (e.g., 400 not listed by name) listening to the broadcast and able to send comments via private chat.

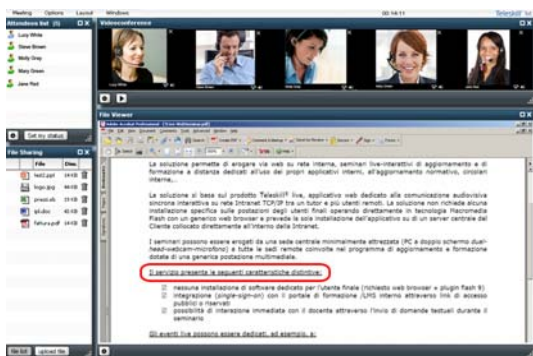
Format

Video of one or more panel participants. Presentations. Private chat.

Communication flow

Audio/Video+Slides: speakers → audience (listeners)
Private chat for comments: listeners in the audience → speakers

Multi-video conference



Scenario

Interactive, full-duplex audio-video conference between multiple remote users. Up to 8 simultaneous nominal participants. Presentation of slides, documents and images. File sharing.

Format

Audio and video of all participants simultaneously. Sharing of slides, documents and video of conference moderator. File sharing among everyone.

Communication flow

Audio/Video/File sharing: full-duplex, many to many
Sharing: moderator → other participants

WebTV



Scenario

Broadcasting of any video signal (recorded or live). Audience consisting of many users (e.g., 500 not listed by name) listening to the broadcast and able to send comments via private chat (only in the case of live broadcast).

Format

Window containing video being broadcasted. Optional private chat.

Comunicazione

Audio/Video: origin → audience (listeners)
Private chat for comments: listeners → origin

[Integration with any independent web site by means of Application Program Interface \(API\)](#)

Teleskill Live contains a large API (Application Program Interface) instruction set that can be used to interface the multimedia sessions directly with any pre-existing web site such as the customer's portal. This allows the customer to arrange events, set up meeting rooms, call for meetings, invite participants, etc. autonomously without Teleskill's intervention.

[Minimum hardware, software and network requirements](#)

- Multimedia PC or Mac (Intel Pentium 1 Ghz -256 MB RAM Windows 2000/XP/Vista /MAC OSX 10.2.8 o sup.)
- Full-duplex sound card – 1024 x 768 screen resolution with web-browser (Internet Explorer 6.x, Netscape-Mozilla 7.x, Opera 6.x, Safari,...containing plug-in of Macromedia Flash 9 or later version)
- Headphones-microphone, optional webcam for video participation. Use of speakers is allowed only for passive video conference users (that listen to what is being said but do not transmit audio to the meeting participants) or in a special multimedia classroom equipped with sound amplification systems and close-proximity microphones (with anti-Larsen effect capability).
- Required bandwidth: 150kbps upload and download data rate to and from the server (for use over the internet, the bandwidth provided by a typical ADSL connection)
- Access via firewall and proxy: Teleskill Live uses HTTP Tunnelling (on port 80) and guarantees that the audio-video transmission is compatible with most of the existing firewalls and or proxies. Access to the service through proxies might introduce a sensible (1-2 sec.) delay to the audio video communications.