

Live Support Over the Internet

December 2, 2003

FTA provides live support, training, and demos over the Internet where the user or customer communicates with technical personnel in FTA's office in Virginia. This interactive meeting provides the next best thing to on-site training. An introduction to NetMeeting, the technology, can be found at <http://support.microsoft.com/default.aspx?scid=kb;en-us;325408>. This is Microsoft Knowledge Base article 325408; it requires a sound card or headset for the audio.

Capabilities

Many different means of communication and training are available:

- voice both ways
- typed "chat" messages
- free-form drawing on a whiteboard that is visible to both ends
- web cam video transmitted both ways
- file transfer both ways
- FTA can run the Fta32 program on the customer's machine (training mode)
- customer can see the screens of an instrument running at FTA (demo mode)

The user must have a fast Internet connection to take advantage of all of these capabilities, but most large organizations have this now. For FTA personnel to run the customer's instrument (training mode), that instrument must be running from a computer connected to the Internet.

Software Requirements

The customer side uses an existing program in Windows: NetMeeting. This is available at Start | Programs | Accessories | Communications | NetMeeting, or by Run | conf. If a machine does not have NetMeeting, it can be downloaded from www.microsoft.com.

Web cam video can be supplied to NetMeeting through any USB camera. Customers who purchase an FTA instrument directly from FTA receive a Logitech camera with the instrument. Customers who purchase from a distributor should contact their distributor to borrow or purchase a web cam. USB cameras require a software driver installation; this may require the involvement of your information technology personnel. Web meetings can be conducted without web cam video, but are less effective, particularly when in training mode as the web cam can be directed at various parts of the instrument.

Web audio can be supplied to NetMeeting through a sound card and microphone or through a headset. Customers who purchase an FTA instrument directly from FTA receive a Logitech USB headset with the instrument. Customers who purchase from a distributor should contact the distributor, the same as with the web cam video. Web audio does not normally require any software setup as the sound card is already installed or, in the case of USB headsets, Windows recognizes them automatically.

An alternative to web audio is to place a traditional telephone call to FTA at the beginning of the meeting.

Both web cam video and web audio require USB ports. These can be easily added to older machines with an adaptor card.

Costs

All instruments sold directly by FTA receive a limited amount of free Internet based setup and training, the amount depending on the complexity of the instrument. This is shown on your quotation. Internet based training and support are available to all customers, world-wide, on a for-fee basis.

Demos to prospective customers are provided without charge, but the customer must provide their own audio web connection or place a telephone call to FTA for the meeting. The prospective customer does not need a web cam on their end since they will not originate video like the FTA end.

Appointments

Meetings and demos are arranged by appointment. Normal business hours for the Virginia office are 7:00AM (0700) to 7:00PM (1900). Virginia is in the Eastern time zone of the US, GMT – 5 hours. Meetings outside these times can be arranged for those in Asia and Australia. E-mail your request to sales@firsttenangstroms.com.

Software Setup

NetMeeting is built into Windows, so it does not need to be installed, but it will run a Wizard and ask the user certain questions when it is first run. You must supply your full name and e-mail address, so the party on the far end will know who you are. When asked by the Wizard, uncheck *Log on to directory server* and set the bandwidth/speed to that of your connection. This helps optimize communication speed. Finally, the Wizard will set your audio record and play volumes, so it is best to install any audio devices first.

If NetMeeting does not appear in Start | Programs | Accessories | Communications, click Start | Run and type `conf` in the Open box, then click OK. This will start NetMeeting the first time. The basic NetMeeting window appears in the following figure. NetMeeting has a good Help section which will answer most of your questions.



If you already have a sound card and microphone installed, you should use those rather than any headset supplied by FTA. The reason for this is that you may have some difficulty making the headset the “preferred device.” The headset will be automatically recognized by Windows, but you must go to Start | Settings | Control Panel | Sounds and Multimedia, as the following figure illustrates, to select which audio device will be used. You may have to choose from several devices in the drop-down list. In extreme cases, you may have to go to Start | Settings | Control Panel | System | Hardware | Device Manager and disable (not *uninstall*) the original sound device, and restart Windows, before the headset can be selected for both playback and recording.

Installing the driver for the Logitech camera is straightforward, but does require restarting Windows, again. Install the software from the CDROM (it can also be downloaded from www.logitech.com) before you plug the camera in the first time. When you do it this way, the camera will be recognized automatically.

You can not plug in or unplug USB devices while NetMeeting is running. NetMeeting only recognizes what is plugged in when it begins and can crash if you unplug something it is using.



One very nice feature of NetMeeting is that the various features can be tried out before starting a meeting. You should test everything several days before a meeting so any problems can be solved by your information technology personnel.

NetMeeting Functions

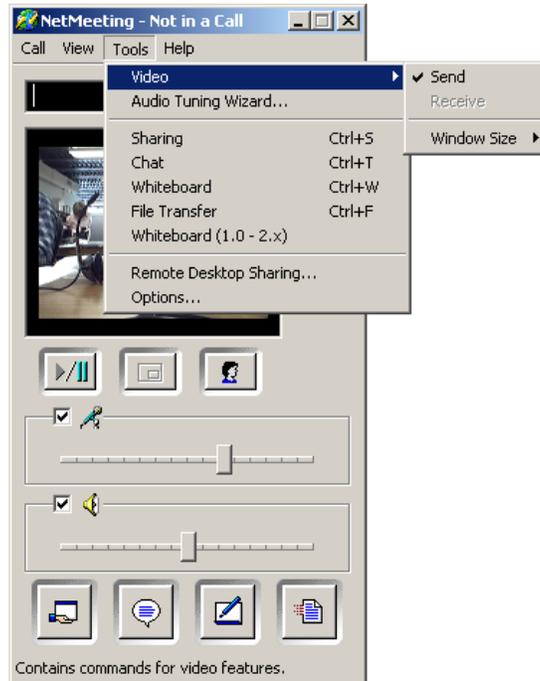
Initiating a call: NetMeeting calls are computer-to-computer, which is different from e-mails. You begin a call by clicking Call | New Call and typing `demo.firsttenangstroms.com` in the address field, then clicking Call, or by typing in the same address in the list box and clicking the upper telephone icon:



“demo” is the name of the computer at FTA which provides Internet support. You will get a reply from “demo” within a few seconds of initiating the call. You can terminate the call by clicking on the lower telephone icon:



To send or receive web cam video: Click Tools | Video to enable sending or receiving web cam video. You must be connected to a call to receive, but you can “send to yourself” without a call connection. If you are not connected, the video fills the screen, which in turn is sized by your choice of Window Size.



When connected, on the other hand, it is a little different. The principal window is filled by the incoming video from the far end. If you want to see what you are sending, which is useful, then you click the picture in a picture icon:

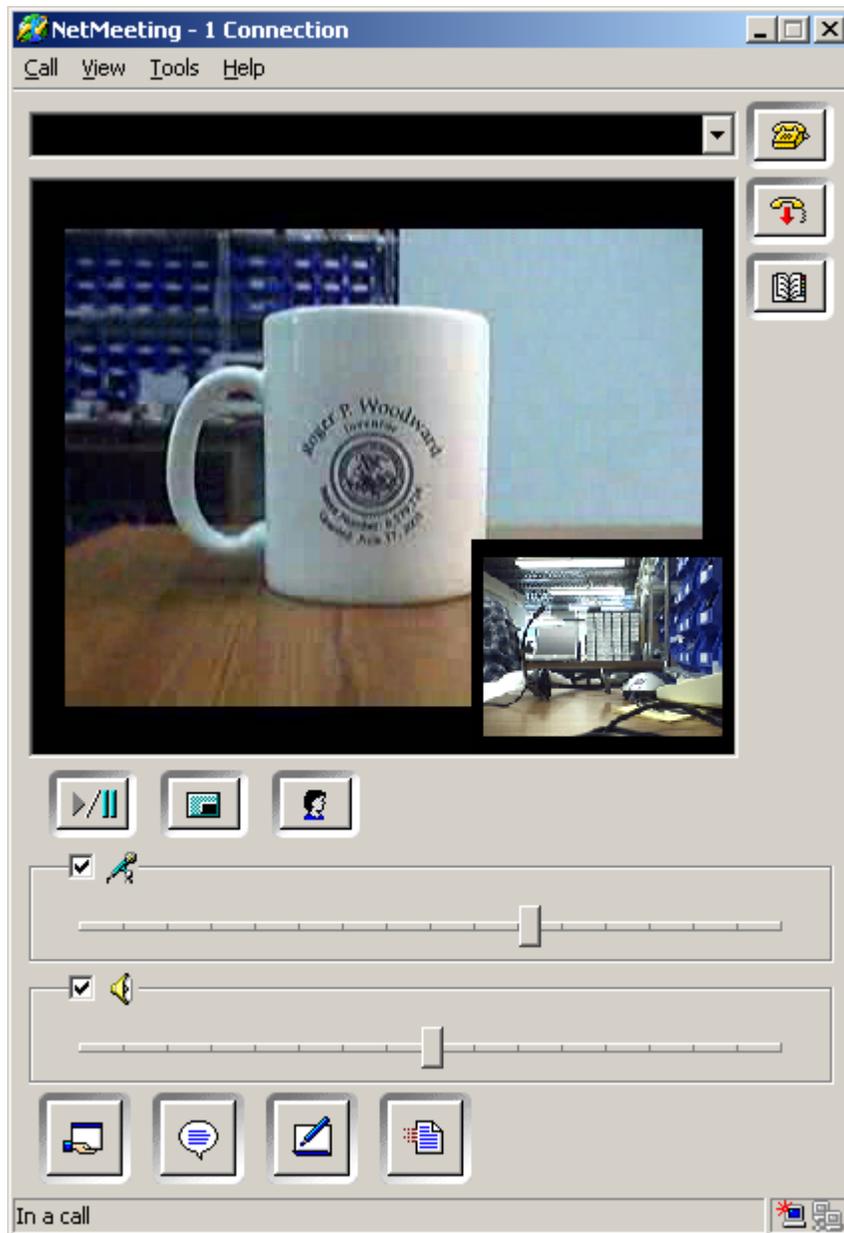


An example of a picture in a picture is on the following page. The coffee cup is being received from the far end. The warehouse image is being sent from this computer to the far end.

You can start and stop sending web cam video by:



Finally, note that the Logitech camera has an adjustable lens that allows you to focus near, as with the coffee cup, or far, as with the warehouse. You twist the plastic ring on the front of the camera to adjust the lens.



To send and receive audio: The Tools menu also has an audio tuning Wizard that will play music into your earphone or speaker and also show the volume level of the microphone. These must be run while not in a call. Once in a call, you can display the microphone and speaker levels, as illustrated above, by clicking

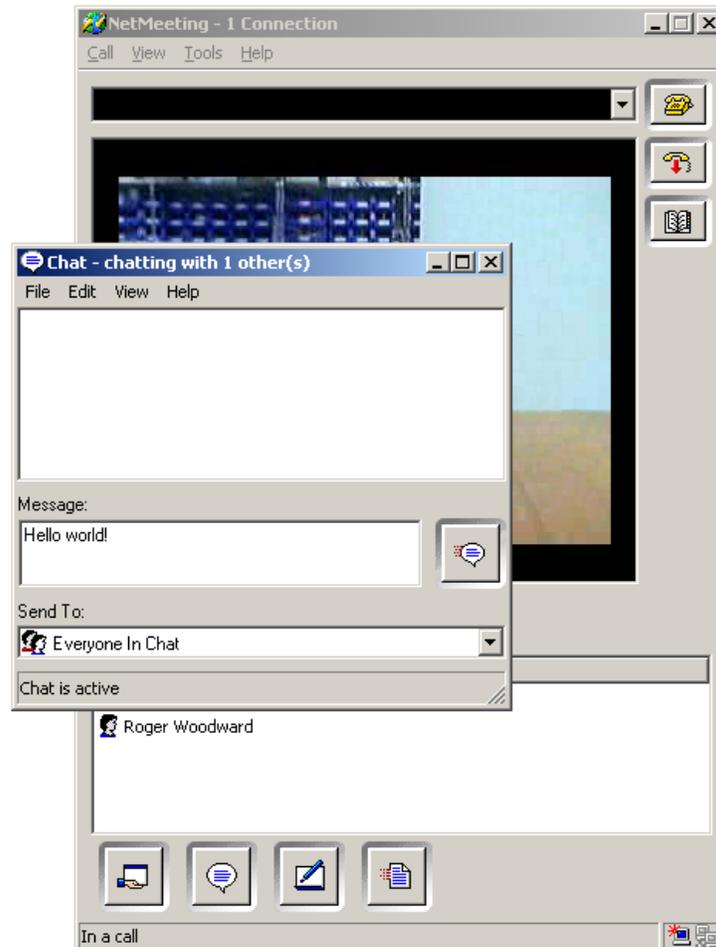


When clicked, this icon location alternates with the list of people attending the meeting.

To send/receive text chat and use the whiteboard: Text chat is started with the icon in the lower row of four:



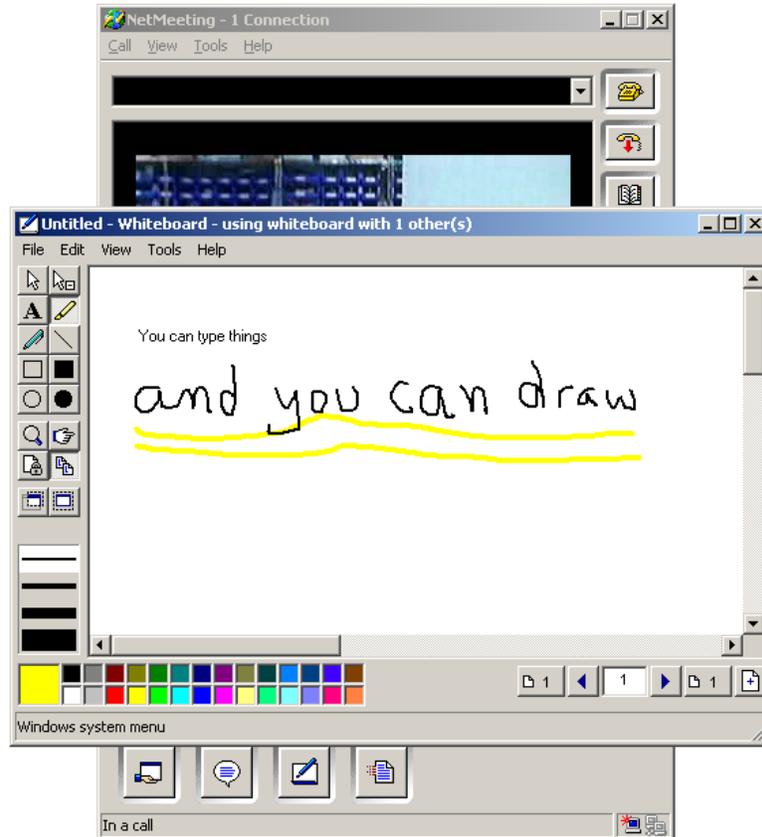
Text chat is an easy way to keep a written record of important points in the meeting. Chat can be saved as a file, e-mailed, and printed.



Using the whiteboard is equally easy:



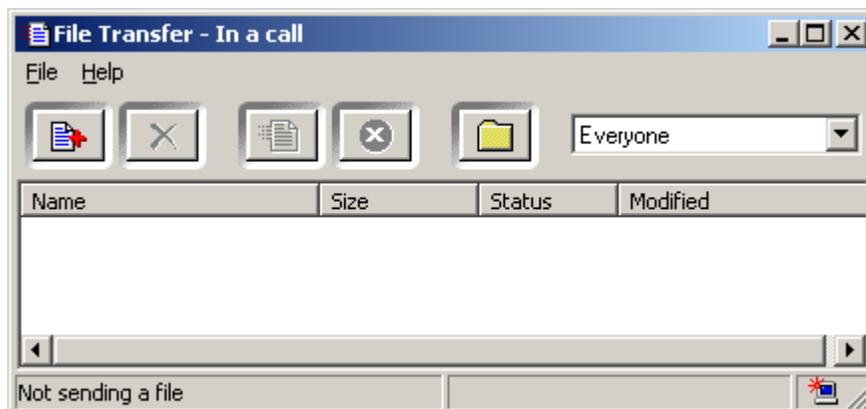
There are a variety of typing and drawing tools (similar to MSPaint). You erase by selecting a rectangular area (drag mouse) and then using Delete.



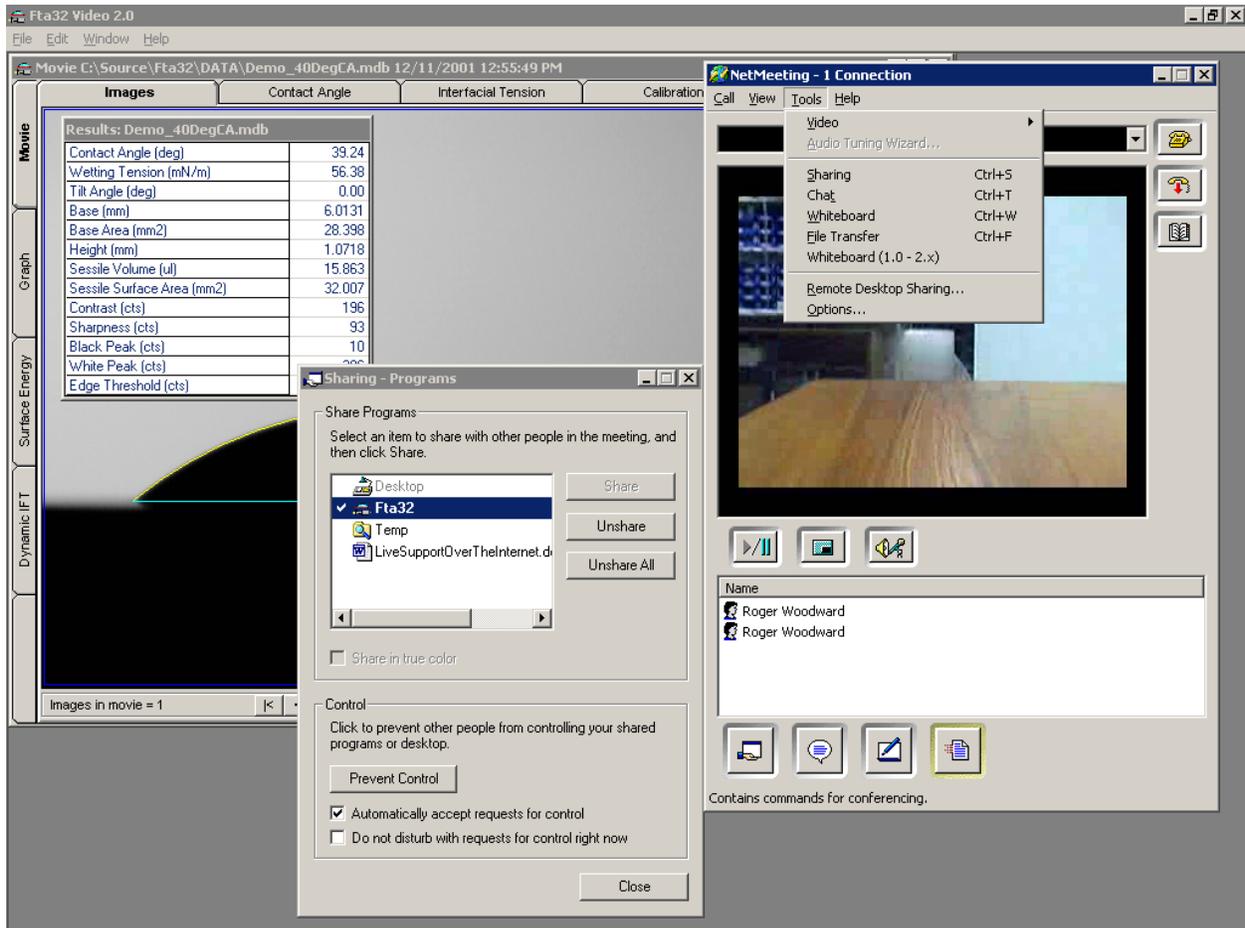
To send a file: Click the icon



and then the window which opens will allow you to specify a list of files to send and where to place files that you receive.



To share an application: This is the last, but perhaps most important capability. It allows FTA personnel to run your instrument or you to run an instrument at FTA. The party where the instrument is actually located must initiate the sharing by first opening the program and then allowing the far end to control it. Of course, you may prefer to share the program but keep control yourself. “Control” means who has the active mouse.



Note that the video in the Fta32 instrument is entirely different from the web cam video previously discussed. The web cam can be moved around and focused on any part of the instrument, but the Fta32 video is obviously focused on the drop.

There are limitations in the quality of the shared program window because of tradeoffs made to increase speed and responsiveness. These are seen on the receiving end, but not on the transmitting end, as its image is of normal quality. The principal limitation on shared program appearance is a mis-mapping of colors. For example, standard Windows background gray can appear as light green. This color distortion would be disturbing if you were constantly running over NetMeeting, but is not a serious limitation for training and demo purposes.

File: LiveSupportOverTheInternet.doc