

FACE-TO-FACE: Using Internet video to communicate live.



More and more, people are turning to Internet video calling as a way to better communicate with friends, relatives and business partners. Sometimes, the ability to see a person's expression can make all the difference in being understood.

What is Internet Video Calling?

An Internet video call is a voice and picture call from your computer (or video call device) to someone else's computer. It allows you to talk to one another live, and to see each other at the same time.

What equipment do you need?

To make and receive video calls, you'll need a webcam hooked up to your computer, a microphone (many webcams have mics built in) and speakers. You'll also need broadband Internet access. (Cable, DSL or other high-speed line.)

Alternatively, you can make and receive video calls without a computer if you have a video phone. For our purposes, we'll focus on the computer/webcam configuration.



How do I make it work?

1. Find a provider online. For this article, we'll focus on Skype. Skype is free for video calling. They do offer other services like voice mail, voice over IP calling, and more, for which you must pay, but currently the video calling service is completely free and easy to use.



2. Subscribe to the service. For Skype, go to www.Skype.com and download the software. Install it. (NOTE: For Skype to work, you and your communication partner must both have Skype installed.) You can find instructions for downloading and installation at the NYSHFA web site: www.nyshfa.org/Downloads/SkypeInstall.pdf.
3. Now that you've installed the software, you can begin to use Skype. Identify your Skype calling partners and test a call to them. Remember, they have to be at the computer, so you might need to set up a call at a designated time in order to be sure they'll be around to answer.
4. That's it! Besides changing the angle of your camera or adjusting the lighting, you are ready to talk face-to-face with your communication partners.

Some Video Calling Tips

When you make a video call, you want to make sure that people can see you clearly -- and that means paying attention to lighting. Here are some lighting tips for when you make video calls.

- Use halogen bulbs, florescent lights and natural sunlight. Regular bulbs give off a yellow light and are not the best for video.
- Diffused lighting works best, so point lights off walls or ceilings.
- Turn off any lights behind or above you that the webcam can see or it will blind the webcam. All lighting should point toward your face, just like the flash of a camera.
- Use the brightness adjustment in your webcam settings to adjust the brightness when needed.
- Lighting should be equal to a well-lit office.

In the setup document, we mention a few settings in Skype that you might find desirable. These settings control who can call you, what the "normal" calling/receiving state your computer will default to, and whether or not you want to communicate with new callers. We recommend you keep a contact list of approved callers and allow calls only to and from them. New users can send you a "chat" note requesting access and then you can approve or disapprove based on the identity.

Some Network Concerns

- *Policy:* If you are using Skype in a business setting, it is important that this type of communication is considered in your Computer / Internet usage policy, and that your staff is aware of that policy. Using Skype at home presents similar concerns, in particular when you have children who use the computer with little or no supervision.
- *Security:* Experts say that Skype does a good job authenticating users both by IP and login credentials. Their session establishment protocol protects against recording sessions for replay configuration. Sometimes the issue has to do with users being “tricked” into visiting a link to a site containing unwanted files that may cause problems on the Skype user’s system.

Skype works *around* your firewall. It uses commonly open ports to make sure the transmission can go through. Many IT experts dislike Skype for this reason. Anything that evades the firewall cannot be controlled through the firewall.

- *Use of Bandwidth:* For some, the use of bandwidth for a video call is a valid reason NOT to allow its use. Each Skype call uses anywhere from 40Kbps to 75Kbps. This is manageable under most high-speed scenarios. A typical T1 line could accommodate about 20 Skype calls at a time.

Managing the Concerns

- *Change default settings:*
 1. Limit access to those in your contact list.
 2. Avoid using “SkypeMe” calling status.
 3. Uncheck “Associate Skype with callto: links on the web” option.
 4. Turn off the “Allow chats from Anyone” option.
 5. Disable Skype API (Application Programming Interface: allows third party hardware devices or software and services to perform Skype related commands using the Skype Windows client). This change requires a registry edit.
 6. Disable File Transfer.
 7. Disable HTTP Ports.
- *Download Skype Program updates.* Many of the updates have advanced security advantages. You should endeavor to have the latest available software.
- *Use Good Common Sense:* As we mentioned, some threats that can be communicated through Skype are the same as you would receive in an unwanted email. Avoid clicking on links from unknown senders. Don’t talk to strangers!
- *Develop and implement a Skype Use Policy.*
 1. Include what is and is not allowed.
 2. Limit the number of concurrent calls, perhaps by limiting the camera installation to the number of calls your bandwidth can handle without disrupting other Internet use.
 3. Include the requirement to disclose whether a PC has the Skype software installed.
 4. Include any configuration and usage policies AND/OR
 5. Manage the configuration through the I.T. department.

- *AT HOME:*
 1. Set up a Skype configuration and usage policy. Sure you can!
 2. Teach users the advantages and pitfalls of using video calling. Include the potential dangers to personal, financial, and equipment status as a result of communicating with strangers.
 3. Monitor underage users.

- *Do the Homework:* Check out Skype, or any program you are planning to utilize. Have an I.T. expert help you with the details. Go online to the program site to find out more about it. Google® the program to find out what others have been saying about it. Make sure you know what you are getting into and how to manage the use of it.

- *Ask for Help:* If you are implementing Skype or other Internet calling utility, contact someone who has installed it. They may have found and overcome obstacles that you can avoid. If you are using Skype, feel free to call Roy Aanonsen or Ellen Bagley at NYSHFA. (518)462-4800 Extensions 18 and 16 respectively.

Video calling can bring a new dimension to the way we communicate. You still can't give a hug over the Internet, but you can show your expressions, share your child's newest talent, and look your caller in the eye while having a conversation. As with all technology, it is incumbent upon the user to make sure she is using it properly and to her own best advantage. Happy Skyping!