

Volume

1

BF TECHNOLOGIES

AccessVideo™ Client Quick Start Guide

AccessVideo™ Client Quick Start Guide

BF TECHNOLOGIES, INC.

AccessVideo™ Client Quick Start Guide

© 2005-10 BF Technologies, Inc.
12989 Chaparral Ridge Road, San Diego, CA 92130
Phone 858.792.6407 • Fax 858.792.9131
Revised: 2/4/2010

Table of Contents

1 - INSTALLATION

Installing the Application	1
Computer Settings	1

2 - APPLICATION SETUP

Target Response Time.....	2
Setting a Capture Directory.....	3

3 - ADDING CONNECTIONS

Connection List.....	3
Connection Panel.....	4
Network Panel	4

4 - CONNECTION STARTUP

Link measurement	4
Startup & Auto QoS	5
Connection Quality Indicator Lights	5
Simplified Camera Control.....	6
Recording a Video Session	6
Still Image Capture	6

5 - TROUBLESHOOTING

Cannot connect to server	6
Server busy message.....	7
Choppy audio or video	7
Screeching noises with audio.....	7
Excessive delay	7
Support contacts	7

1 - Installation

Installing the Application

The AccessVideo™ client software may appear in a variety of forms: via e-mail attachment, FTP download, flash stick, CD-ROM, or pre-installed. Except for pre-installed software, installation consists of installing two packages: AccessVideo-XXX.msi and Common-XXX.msi, where XXX denotes the build number. Note that these MSI files may be delivered as a single ZIP archive, in which case, you must first unzip these files to extract them.)

We strongly recommend that you update your operating system to use the latest patches offered by Microsoft. In particular, updating to the latest DirectX® 9.0c (or later) and Windows Media Player 10 packages will help insure the best possible video and audio quality.

Step 1. If you received a ZIP file, extract the AccessVideo-XXX.msi and Common-XXX.msi files. You can extract these files to any convenient directory and delete them after installation to save disk space. We recommend that you keep the original ZIP file in a safe place for backup purposes.

Step 2. Double-click on Common-XXX.msi and follow the directions to finish the installation. We suggest that you simply select all the default choices for installation. You can select the installation directory, but we recommend that you use the default installation directory for ease of support.

Step 3. Double-click and complete the installation of AccessVideo-XXX.msi. You **MUST** use the same installation directory as in Step 2. Accept all the defaults, as before.

After completing this procedure, you should see an AccessVideo icon on your desktop. Double-clicking this icon will start the client application.

Computer Settings

The following settings will help insure optimal performance.

- **SCREEN SAVER** should be disabled or set to a long enough interval so as to not interrupt a video session: right-click on screen background; click *properties*; click *Screen Saver* tab; either increase *wait* time as desired or select (*None*) screen saver.
- If using a microphone connected to the *mic input*, then the microphone must be selected as the **AUDIO INPUT DEVICE**: click *Start/Control Panel*; double-click on *Sounds and Audio Devices*; select *Audio* device; make certain that under *Sound recording* the correct *default device* is selected, especially if a USB video camera having a mic is plugged in; click on *Volume...*; select microphone and adjust volume. Mic volume can be adjusted while application is started.
- Make certain that speakers are connected and set to the proper volume. Bring up *Sounds and Audio Devices* panel as described above to adjust volume under the *Sound playback* section of that panel.
- For slower machines (less than 2.4 GHz CPU), you may wish to optimize Windows for best performance. Open the *System* panel from the *Start/Control Panel*. Click on the *Advanced* tab, then click on *Settings* under the *Performance* section. Then click on *Adjust for Best Performance*.

2 - Application Setup

To bring up the application setup panel, click on the *Settings...* option under the *File* menu. The options you see on this panel (Figure 1) provide general defaults and video and connection characteristics that apply to the setup of all links.

Target Response Time

The *Target Response Time* lets *AccessVideo*™ know what the maximum total round-trip signal delay that you are willing to tolerate in order to optimize signal robustness. A smaller value provides a faster, more interactive connection, which is better for video conferencing, but at the expense of making the connection more susceptible to Internet interference and data loss. Conversely, a larger value provides for a more robust signal, but with longer delays. You specify the total response time in milliseconds. The minimum value is 400 ms (0.4 seconds) in order to account for encoding and synchronization delays (100 milliseconds for encoding in each direction and 100 milliseconds of synchronization buffering in each direction to account for clock frequency drift). However, 400 ms leaves little if any margin for error correction. The Target Response Time is a target value only. *AccessVideo*™ attempts to honor this constraint, but if FEC or ARQ is checked (see below), *AccessVideo*™ may add additional latency to provide a basic level of service quality protections.

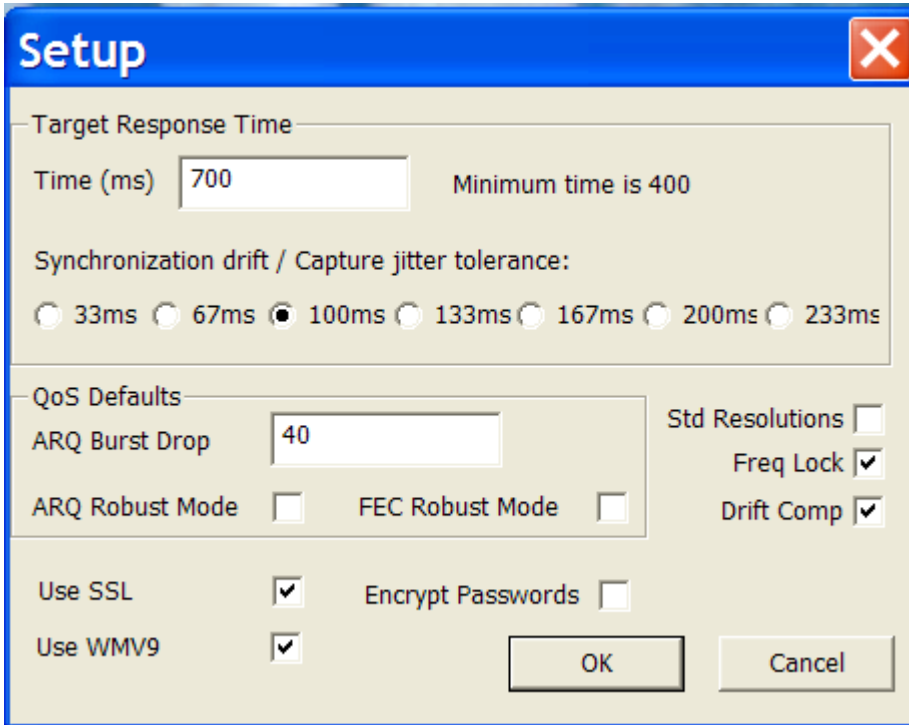


FIGURE 1. AccessVideo™ setup panel.

Setting a Capture Directory

Click on *File/Capture Settings...* and use the *Browse...* button to find a directory to store captured video (and still image) content, fill in a name, and click *Save*.

3 - Adding a Connection

When first launching the application, you should see a connection list as in Figure 2, below.

Connections List

To add a new connection, double-click on *New Connection...* and a *New Connection* panel will pop up. To edit an existing connection, select the connection from the connection list with a single mouse click, and then select *Edit* from the *Connection* menu. A connection panel, similar to that shown in Figure 3 will appear. A connection panel has four tabs: *Connection*, *Network*, *QoS*, *Send*, and *Receive*. Each tab has its own panel. However, the defaults are fine for most of these parameters. In this Quick Start Guide, we limit ourselves to only the minimal essential settings.

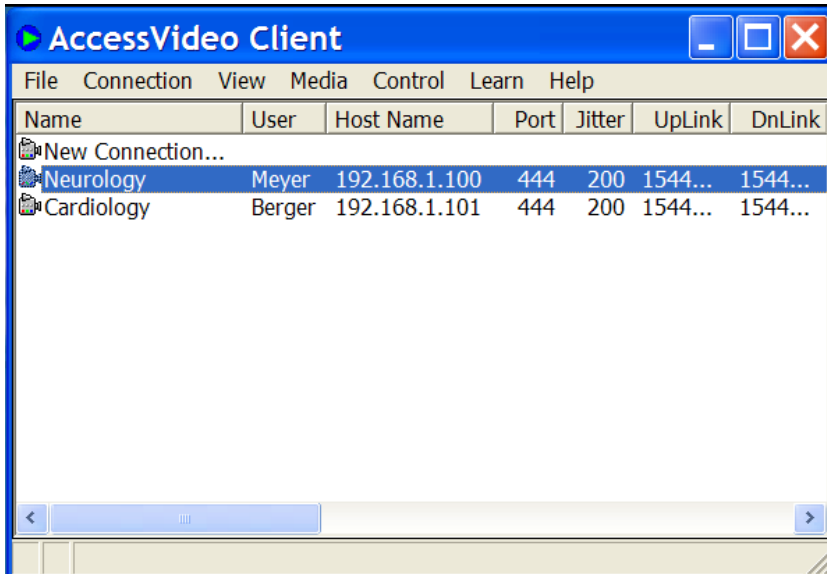


FIGURE 2. Connection list

Connection Panel

The Connection Panel, as shown below in Figure 3, provides general information about the connection, such as the connection name and user login information. You must enter a name for the connection. This connection name can be any arbitrary name you choose. You must also enter a valid username and password. You should contact the AccessVideo server administrator to set up a user account. The description field is only added as a convenience to store notes about the connection. You can ignore this field.

Network Panel

The Network Panel allows you to specify general network connection information to reach the desired AccessVideo server. The most important parameter is the *Hostname*. Under the *Hostname* field of the network panel you must enter either the IP address for the AccessVideo server, or otherwise enter the fully-qualified hostname. The rest of the parameters, such as *SSL Port*, *Jitter*, *Uplink Speed*, *Downlink Speed*, *Auto QoS*, *Encrypt*, and *Camera Control* come pre-configured with reasonable defaults. You can change any of these settings, but be aware that the *Uplink* and *Downlink* Speeds are automatically updated when you measure the connection speed and the *Jitter* field is updated whenever you start a connection and the *Auto QoS* setting is enabled.

4 - Connection Startup

Link Measurement

Before starting a connection for the first time, you should measure the connection using the automated Link Measurement tool. To access this feature, first highlight the connection you

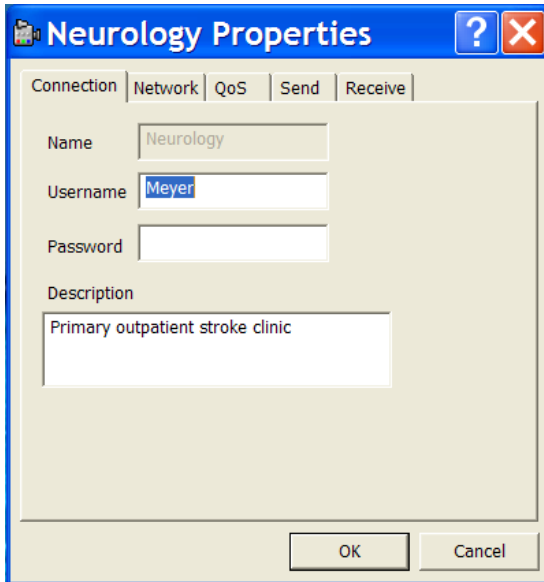


FIGURE 3. Editing a connection.

would like to measure by a single mouse click, and then click on *Measure Bitrates* from the *Connection* menu item of the main connection list window. You can monitor its progress along the bottom bar of the connection list window as it measures the up and downstream bit rates. When the bit rate measurement completes, it fills the measured values into their appropriate fields in the network tab for the connection.

Startup and Auto QoS

Double-clicking on a connection in the Connection List will start that connection and transform the Connection List into a video window. If *AutoQoS* is enabled, *AccessVideo™* will measure the connection characteristics for about 10 seconds to automatically optimize the QoS and error correction features of *AccessVideo™*. If anytime later you suspect that the network characteristics have significantly changed, you can click on *Reset Auto QoS* under the *Connection* menu item to reset the QoS settings to the latest line and network conditions. Because *AccessVideo™* is always measuring the network conditions, resetting auto QoS instantaneously updates the QoS settings.

Note: Resetting the QoS settings may cause a momentary pause or disruption in the video or audio feed. For this reason, the QoS settings are not continuously updating.

Caution: Do NOT access the camera controls either during the initial QoS measurements or anytime just prior to an auto QoS reset. Also we strongly advise against opening, moving, activating, or closing any other software applications or windows during the initial QoS measurement or just prior to an Auto-QoS reset. Any such disturbances during an auto QoS measurement may result in inaccurate QoS settings.

Connection Quality Indicator Lights

The two connection quality indicator lights in the lower left corner of the video window change color between yellow, red, and green, depending upon the status of the audio and video signals

being received. The left-most indicator shows the status of the audio and video stream currently being received and displayed by the AccessVideo client application. The indicator to its immediate right shows the status received by the server end of the connection and whether a person watching or listening to the video at the server end is getting a lossless video/audio feed. As long as video and audio packets continue to arrive in time and without any loss, so that the audio and video played out to the user has no network-induced flaws, these indicators will stay green. Any packet loss will cause the corresponding indicator to change from green to red for at least one second. When first starting a connection, during the period when *AccessVideo*™ is measuring the link characteristics, both of these indicator lights are yellow.

Simplified Camera Control

To center the view, you can simply right-click anywhere in the video and the camera will automatically pan and tilt such that the point that was clicked on would become the new center of the view. Alternatively, you can use the left mouse button to draw a rectangle over a portion of the view by holding down the left mouse button, dragging the mouse to draw the new view area within the current view area, and then release the mouse button. Upon releasing the mouse button, the camera will automatically scale the zoom factor as well as move the camera such that the drawn view rectangle will fill the screen. The *Back* button on the camera control toolbar will revert to the previous camera pan/tilt/zoom setting.

Recording a Video Session

To record a video clip from a live stream, first configure a file name for the clip from the *Capture Settings...* panel under the *File* menu. By default, AccessVideo will use the data/time stamp as the file name and place the file on the desktop. To begin the recording, click in the *Rec* button on the camera control toolbar. Clicking the *Rec* button again, so that the button is out, its default state, will stop the recording.

Still Image Capture

In addition to capturing video clips from a session, AccessVideo also provides the ability to capture snapshots of a video frame during the video session and store them as JPEG-compressed pictures. To take a snapshot, i.e., a capture a still image, from a live video stream, just click on *Save Image* menu item from the *File* menu. A JPEG file (having a .jpg suffix) will appear in the directory specified by the file name in the *Capture Settings...* panel under the *File* menu.

5 – Troubleshooting

Cannot connect to server

The client cannot send a packet to the server. Please check that the IP address or hostname is correct and that the server is up. Often, it may mean that the server is down or off-line.

Server busy message

Only one user can connect into a system at a time. This message means that another user has logged into the system and is using the server. You must wait for that user to disconnect before trying to connect again.

Choppy audio or video

A poor Internet connection will drop packets and cause the video to pause or become jerky. Likewise, lost audio packets will cause pops, drop-outs, or other artifacts on the audio. You should disconnect and then try increasing the QoS parameters or re-measuring the bit rate before reconnecting.

Screeching noises with audio

AccessVideo servers come with an echo-cancelling microphone on the server, but no echo cancellation on the client side. If you enable audio send and receive and do not use a headset or directional microphone on the client, you may experience feedback problems that manifest itself as a screeching or howling noise. Try lowering the speaker volume and/or microphone sensitivity and speak closely into the microphone.

Excessive delay

The round-trip connection delay is usually set to the *Target Response Time* as set under the *File/Settings...* menu. However, setting *Robust* mode for ARQ may increase the total connection delay. You may wish to turn off *Robust* mode or lower the target response time and suffer with a higher degree of packet loss if the delay becomes unacceptable.

Also, slow link speeds will add to connection latency to accommodate large bursts of video data. If you are able to obtain a higher connection to the server or reduce the video resolution, the delay can often be lowered significantly.

Support contacts

For troubleshooting information and the latest software, please contact BF Technologies either by phone or e-mail at:

Phone: (858) 437-1136

E-mail: support@bf-technologies.com

Support Hours: Monday - Friday 9:00 am to 5:00 pm PST