What Influences SoftLINK's Video Player Performance during Video Synchronization

Summary

Video that is being shown to a client or group of clients using PCIVIDEO.EXE will be synchronized. The degree of synchronization will be determined by a number of factors. Some of those factors include the location of the file, the workstation's performance (faster processor means faster response time) and the size of the video file being shown.

Details

When showing a video file to clients that have the video file saved locally on each client workstation, the performance will not be affected by the network's bandwidth. The impact on the network is minimal because only the data to control the player (controls such as start, stop, and pause) and synchronization packets are sent. SoftLINK sends synchronization signals approximately twice per second and will resynchronize the client if it determines that they are more than 0.6 seconds ahead or 0.9 second behind the Tutor. To achieve optimum performance and to minimize the impact on the local area network, store all videos to be shared with the class locally on each workstation.

Videos that are not stored locally on each workstation will require additional network resources. Each client workstation would have to retrieve the video file from a shared network drive. Showing an AVI or MPG file on a 100Mbit/s network would lead to network demands averaging out to be about 1Mbit/s (125Kbytes/sec). On an ideal 100Mbit network there would be a theoretical maximum of approximately 1 Tutor and 99 Clients which would use the entire network bandwidth.

Note:

Storing video files locally on each workstation will result in minimal network traffic allowing for connection of more Clients.

Video files held on 10Mbit/s network: maximum of about 6 to 9 clients   (depends on the video).

Video files held on 100Mbit/s network: estimate maximum of about 60 to 90 clients.