

# 20- MEDIA CAPTURE (AT THE NETWORK STACK)

by Francis Chao

fchao2@yahoo.com

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# SUMMARY

When you use software programs to record streaming media at the network stack, you end up with the highest possible video and audio quality and you usually can record faster than the actual video or audio that plays out in real time.

# TOPICS

- Media Capture Is Done At The Network Stack
- Advantages of Media Capture
- Some Web sites Where "Media Capture" Can Be Done
- Labor-saving Tricks for Media Capture

# TOPICS (continued)

- A Rigorous "Torture Test" for Testing a Software Program That Can Do Media Capture

# "MEDIA CAPTURE" IS DONE AT THE "NETWORK STACK"

- "Media capture" consists of using a software program to capture/grab/download the media stream at the network stack:
- Applian's "Replay Media Catcher" uses "Method 1"

Web server

to

your computer's network adapter

to

network stack (drivers and software)

to

Web browser (Chrome, Firefox, Edge)

to

"Graphics Device Interface" ("GDI")

to

Web browser as video or audio

# "MEDIA CAPTURE" IS DONE AT THE "NETWORK STACK" (continued)

- Method 1 is more difficult for a software developer to implement because streaming videos and audio can arrive at your computer as endless data streams with no file start and end indicators, single file downloads, and various kinds of file chunks



# ADVANTAGES OF "MEDIA CAPTURE"

- Capture process is usually faster than a real-time recording of the same streaming media
- Capture process results in a higher-quality recorded media file relative to the screen recording process.

# WEB SITES WHERE "MEDIA CAPTURE" CAN BE DONE

- YouTube.com
- Vimeo.com
- <https://www.cnn.com/videos>

# LABOR-SAVING TRICKS FOR "MEDIA CAPTURE"

- Make sure that the streaming video or audio is playing.

The Use the right mouse button to click on a streaming video or audio to see if it has a "Copy..URL" option. If it does, click on this option. Then right click on the URL field, paste it in, and hit the <Enter> key

# LABOR-SAVING TRICKS FOR "MEDIA CAPTURE" (continued)

- Lots of Web pages run more than one streaming video and/or audio at the same time.  
Turn off the ones that you do not wish to capture.

# LABOR-SAVING TRICKS FOR "MEDIA CAPTURE" (continued)

- If you can capture a streaming video or audio without turning on "Auto" in your media capture software, do not turn on "Auto".

Prior to turning on "Auto", try to start the media capture by copying the URL of the source Web site and then clicking on the download button of your media capture software.<sup>13</sup>

# LABOR-SAVING TRICKS FOR

## "MEDIA CAPTURE" (continued)

- Turn on the "Auto" feature of your media capture software for only a few seconds at a time to avoid two problems:

Problem 1: Making multiple captures of the same streaming media

Problem 2: Capturing streaming media such as ads that you do not want to capture

# RIGOROUS "TORTURE TEST" TO SEE IF A SOFTWARE PROGRAM CAN RELIABLY PERFORM "MEDIA CAPTURE"

- See [http://aztcs.org/meeting\\_notes/wi  
nhardsig/media/21-  
media\\_capture\\_test.pdf](http://aztcs.org/meeting_notes/wi<br/>nhardsig/media/21-<br/>media_capture_test.pdf)