Mike Ungerman, a past president of CFCS and the Florida Association of Computer User Groups, will provide our September presentation at our main meeting. The topic will be: Sharing Media: Using your computer to stream media to your home entertainment center.

Sharing Media: Using your computer to stream media to your home entertainment center
By Mike Ungerman

Just about everyone these days has some kind of media on their computer; whether it's pictures, audio recordings, or video. Most likely, the only transferring of media that you've attempted has been to transfer audio recordings to a portable player. Some of you may also have a player that can play videos/movies, and so you've also transferred media that you've downloaded from the Internet to your portable player.

But how about that nice big TV set you have in your living room or den? Whether it's a standard CRT based TV set or a new high definition panel, it may be going to waste when it comes to looking at your collection of pictures, or playing your video clips, whether they are full movies/TV shows or videos that you've taken with your digital camera or cam-corder.

There are now a number of methods you can use to transfer your media to your TV or stream them in real time across a wired or wireless network to a box that connects to your TV set. The "box" can be a dedicated media receiver designed for that purpose, or it can be included in general entertainment and gaming boxes like the Microsoft X-Box or Sony Playstation 3.

I'll discuss my solution for media streaming first and then include a number of methods that are currently available for reasonable prices. In the future, I would expect to see television sets that include wireless media streaming receivers of one sort of another, but since that hasn't happened yet, let's look at my setup and then go from there.

To send or stream media from your computer, you need a media server. In all likelihood, you already have such a server, but may not be aware of it. Microsoft's Media Player, version 11, includes the ability to stream your pictures, audio and video libraries over your home wired or wireless network. You configure it through the Tools, Options menu, and set it up under the Library and Network tabs. For families with children, there are settings to control Parental ratings and the ability to select which types of media to share.

You may need to check your computer's services to see if Universal Plug and Play (UP&P) Device Host services are enabled. Under Control Panel's Administrative Tools menu, choose Services and scroll down to UP&P and see if the status is "started." If not, you can right click on the entry, choose properties and set the Startup Type to Automatic. If you wish, you can also start the services on the current session by right clicking again and choosing Start.

Now you can configure your Media Player's library to contain the media you wish, and it will be available to any media receiver (including another computer running Media Player) on your network.

So, if you stream media only periodically, using your computer and Microsoft's Media Player can be a good solution for you. However, in my case, I never know when I'm going to want to listen to audio, or look at our pictures on our TV in the family room, so I opted to purchase and install a media streaming device in my computer room independent of my desktop computer. The device I chose to purchase is Buffalo Technology's (http://www.buffalotech.com/home/) Link Station Live Multimedia Storage Server. This is an external, "Network Attached Storage (NAS)" hard drive that also contains a media streaming server. NAS allows you to have a large hard drive on your network and available for file access and backup independent of your computer. Buffalo Tech's device adds the media streaming along with the bonus of a print server and a USB connection for an additional or backup hard drive. Street pricing for the 500 gb version is between $168 and $223, so shop wisely.

I synchronize the My Documents folder between my computer's internal hard drives and the Link Station, so I have a real time backup of all my data as well as the ability to stream my media files across my network whether or not my computer is on at the time. And the extra bonus of having my

office's laser printer plugged into the print server so that I can print to it from my notebook or my wife's computer; again, without having to have my office's computer on.

Once I decided on a server method, I turned my attention to the receiving methodology. Actually, the decision had already been made for me, as about a year ago I had purchased a Sony Playstation 3 to attach to our large screen, high definition, television in the family room. I had wanted a Blu-Ray DVD player, and with the initial prices of stand alone players at the $1,000 level, it only made sense to buy a Playstation 3 in the $600 range and get the additional capabilities of gaming and viewing media. Today's pricing is about half the original!

The Playstation 3 is much more than just a game machine. Containing an internal hard drive and USB ports supporting many USB devices, it's possible to load it with all sorts of media independent of what may already be on your computer. In fact, I have copied a lot of my videos and audio files directly to the Playstation 3's internal hard drive and can view them using the interactive menu. However, about 6 months ago, Sony upgraded the Playstation's software to include the ability to receive streaming media across our home network, and only recently started a media service for pay-per-view of media (movies and TV shows) directly from the Internet.

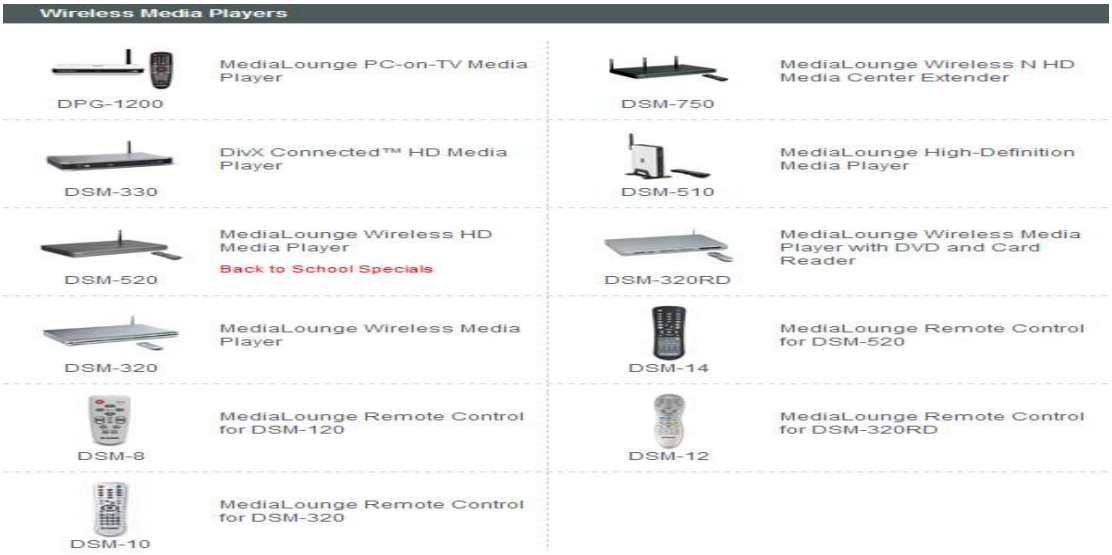
With my network connected to the PS3, and the PS3 connected to my television through a home entertainment receiver, I can view slideshows set to music of all our family pictures on our media server. I can also select video media that has been saved to the server and watch it on the much larger screen of our TV compared to our LCD monitors on my office's computer. If I just want some great background music, I can select a play list from my media server and listen to it over our family room's speakers. And, yes, I can play games on it too. Sony has a network service that provides demonstrations of many of the latest games free of charge. That's one way to be sure not to buy something I'm never going to be good at playing!

Putting it all together, the figure shown here shows what is needed to accomplish a similar solution for anyone interesting in media streaming. Note that Buffalo Tech also has their solution for the receiver called the Link Theater. It's not currently available, as there are some legal issues they are fighting to allow the wireless protocols they want to include to enable them to sell their units world wide.

The method of linking all this together can be wired, wireless or a combination of both. The Playstation 3 solution includes a wireless networking transceiver and wired network connection. Other devices that are currently available include:

There are many solutions to choosing the networked media player as the industry has recognized the demand for playing media content in a home theater environment. Let's take a look at some of the companies providing equipment:

D-Link (http://tinyurl.com/3ask3o) has no fewer than 7 devices presently on the market to receive streaming media and play it on your TV. A portion of their web site shown in this figure contains excellent resources including educational videos on how it all goes together. Just select one of the devices and scroll down to the D-LinkTV options and take a look:



Linksys (http://tinyurl.com/5ak8ul) , a division of Cisco, has also joined the media streaming business with a smaller selection of devices:

Note that both companies have combined a unit that plays streaming media as well as DVD's. I'd recommend, however, that you wait for the next generation of models if you intend on playing Blu-Ray DVD's, as neither player currently does.

Finally, if you want all the bells and whistles of a home media center in your family room or den, you can build or buy a media center computer for your entertainment center. A media center computer is designed to receive streaming media from your own network as well as the Internet. Coupled with Windows Vista Home Premium or Ultimate and a wireless keyboard and mouse, you have full interaction with the media that is available for streaming on your new, high definition panel tv....you do have one or plan on getting one, right? A short video showing this combination is available from Linksys at http://tinyurl.com/6oj4ct . Media center computers can be purchased in the range of $800-$1100, or may be a great build it yourself project with a little research, but that's another article.