(Approx. 1140 words)

Music in all rooms – from one source By Phil Sorrentino, Technical Thoughts, Sarasota Technology Users Group, Florida April 2018 issue, STUGMonitor www.thestug.org philsorr (at) yahoo.com



There are audio systems that distribute music throughout the home; Sonos immediately comes to mind. From the Sonos website "Sonos is the Wireless Home Sound System that fills as many rooms as you want with great sounding music, movies and TV." Not having any "hands on" experience with Sonos or similar systems, I cannot vouch for how well they work, but I am willing to take the positive results of the available reviews. Basically, they are wi-fi connected speakers that you set up in

any room. From the reviews, they seem to work well and do the job of delivering music to each room in a home, but they do come at a cost, possibly \$200 for one speaker and twice that for stereo. If you have a wi-fi network at home, with a few additions, you may already have the components to do what the very expensive Sonos system can do. This is not a review of the Sonos system but rather another way of accomplishing the same results, that of distributing music to every room, done with equipment you may already be using.

So, what equipment will you need to pull this off? First, and maybe obviously, you need wi-fi that covers all the rooms or locations where you want to listen to the music. (If you want music in the Garage, you must get wi-fi into the garage.) In addition to this you will need a computer at each of the locations, (Yes, even one in the garage.) All the computer needs is a Microsoft operating system, like Windows 10 or Windows 7. (It will probably even work with XP, but please don't go there.) It will not need much memory and it will only need enough storage to hold the operating system and a little more. 1 GB of RAM and 32GB of storage will easily do the trick. So, the computer can be small and probably inexpensive, possibly one of the "netbooks" that run somewhere around \$200. (Dell, HP, and Lenovo have models that sometimes go on good sales.) The audio from these inexpensive computers is not of the highest quality, so if it is quality audio that you want at a particular location you may have to use an amplifier and some external speakers. If you don't have this equipment at a location, then this solution may not be any cheaper than a similar Sonos solution. But, if you have some old equipment, or can get it for a low cost, this may still be less expensive.

Next, and most important, is the software that runs the whole setup. Take a guess? It is Windows Media Player. Yes, the one that comes with Windows; it actually comes with all current versions of Windows. It has been part of windows since before Windows XP.

You play music at a location by running Windows Media Player on the computer at that location. Windows Media Player can be set up to play Playlists. A Playlist is a list of songs, or tunes, that you would like to play in a sequence. A Playlist can be a list of any Tunes. They don't have to have anything in common, although the reason you put together a playlist is usually to have a lot of related music for your listening pleasure. You might want a playlist of love songs to create a certain mood. Or, you might like an "Old Favorites" playlist for a nostalgic evening. Many people make playlists for music of certain genres. I have created playlists for "Rock & Roll", "Pre-Rock & Roll" (think Eddie Fisher), "Folk", "Favorites", "Country", "Country Legends", "Christmas", "Big Bands", "MoTown", and "Fun Songs". There really is no right or wrong way to develop your Playlists. (Though, the Genre indication on the song may help you place it into a playlist.) I even have a playlist for each of the artists that have created a large body of work, like Neil Diamond, Barbara Streisand, Billy Joel, Simon & Garfunkel, Frank Sinatra, Willy Nelson, "Peter, Paul & Mary", Perry Como, Ray Charles - you get the idea. (Sometimes you just want to hear a lot of one artist. I love to listen to Neil Diamond.) Once you've decided on the Playlist type, all you must do is cull through your music collection (of .mp3 files) and put the tunes that support that type of listening into the list. Playlists can get long; many of my playlists provide 3 and 4 hours of listening.

If that was all you had to do, it probably wouldn't be the subject of a Technical Thoughts article. The "secret sauce" here is the ability to have only one database of music tunes on one computer and have all the computers using that one central database. (The one music database will be in the one computer that has enough memory to support a substantial sized music database. For this article, we'll call it the "main" computer, and yes, it must be turned on whenever you are playing music.) If you are wondering why it is important that we have only one database, well, it's because maintaining multiple databases, and keeping them in sync can be a very time consuming, and error prone activity. Every time you wanted to add a tune to the database, or change a playlist, you would have to change the music database in all the computers. Also, as I indicated at the beginning of the article, you would only need a small amount of memory in the computers. A music database could grow to beyond the available memory in a small netbook with only 32GB of storage. (My music database itself is 37GB now.) So, if you want to take advantage of the least expensive netbooks in some of the locations, this technique is a necessity. The technique is to create a set of playlists that only use the database in the "main" computer. Then, when you are setting up Windows Media Player in all the other computers, just include the Playlists, not the tunes. When Windows Media Player uses the playlist, it will access the music in the main computer, over the wi-fi network, behind the scenes, and the listener will never realize that the music files are coming from another computer. You might have to experiment a little at first to make sure each of the music entries in the playlist has the complete location, such as \\MainComputer\MP3Music\ Tunetitle.mp3. Now you can play any of the playlists at any of the computers, at different times or even simultaneously. Windows Media Player takes care of all the details and you are left only to enjoy all the music.