

Tech Tips from Mr G

How the Internet Changes Listening to the Radio



Radio has sure changed a lot in the days since I was a kid. Back then, even though there were specific stations dedicated to classical, jazz, country, and easy listening; on the local **Top 40** station, you could hear a wide variety of artists from the Beatles to the Supremes to Dean Martin to Patsy Cline, to Ray Charles, and even Paul Mauriat. If the artist sold enough records, you'd hear them on the station. This meant that the entire family could listen to one station. But in an interview on **The Nerdist** podcast, musicologist Barry Hansen, known to many as **Dr Demento**, said that over the past few decades, broadcasting turned to narrowcasting, as station managers learned to aim their programming at certain specific demographics in order to attract certain advertisers.

I longed for the days when I could be exposed to a broad range of music on the radio, and even though it seemed at first as if the advent of the iPod and other mp3 players would increase the narrowness of narrowcasting, the rise of the iPhone, the iPod Touch, Android phones, and other app-driven devices have made it almost possible to listen like it was 1965 again. This handout will tell you all about that!

Music: To Stream or Not to Stream

Ah...that is the question! If you have an iPhone, an Android phone, or any other device that uses its cell service for always-on Internet, you have the option to stream music 24/7, no matter where you are. What this means is that you never have to buy anything, instead, using services like **Pandora**, **Spotify**, and now **iTunes Radio**, you can listen to it for free.

There are three problems with this model, however. The first is that because the music doesn't sit on your device, you're using up your precious monthly data allotment whenever you play something if you're out of range of regular WiFi. The second is that unless you've paid for the premium version of the service, you often can't choose when you want to listen to a particular song. The third is that you don't own the music.

As someone who read **1984** in 8th grade, I remember that Winston Smith giveth and Winston Smith taketh away, and worry that at some point the record companies might want to deny access to some of the songs that I've gotten used to streaming. With those three things in mind, I much prefer to buy my music, and be able to play what I want when I want it; and \$1.29 per song really isn't all that much when I consider what I paid for singles as a kid.

But before we talk more about that, let's talk about **discovery**.

You Know What You Like But...

You don't know what you haven't heard yet.

I have over 8,000 songs in iTunes on my laptop. Yes, you read that right...over 8,000 songs. I didn't buy them all from the **iTunes Store**; most of them came from CDs that I'd already owned and have collected over the course of over 25 years. I've put the songs I like into playlists that go onto my iPod, but this limits me to only hearing things that I know I like. How do I **discover** new music, which was something that radio used to be so good at helping me do? This is where apps like **Pandora**, **Spotify**, and the **iTunes Radio** feature of Apple's **Music** app come in.



Pandora



Spotify



Music

These three apps help you **discover** new music, based on what you tell it you already like. However, because they have to stream the music that they're playing for you from their servers, you need to be on a wireless network. This means that if you want to discover new music while you're driving (and I hope you're not driving with headphones on), the device you're running the apps on has to be capable of using cellular service for the Internet. But let me warn you again, unless you have an unlimited data plan, this can blow through your monthly allocation really fast.

Let's take a quick look at these three on the next page.

Pandora

Available for Windows, Mac, Android, and iOS, Pandora is the granddaddy, or rather, grandmama, of music streaming and discovery services. Based on something called the **Music Genome Project**, you let it know what kinds of music you like, and then it creates “stations” to match it.

It learns what types of music you like by asking you to give each song a “thumbs up” or a “thumbs down.”

One of the things I really like about Pandora is that you can create a station that’s a mix of all kinds of music...just like the old days.

If you hear a song you like, clicking on the **buy** link will take you either to the **iTunes Store** or the **Amazon MP3 Store**, depending on whether you’re on an iOS or Android device. At the **iTunes Store** you have the option to add the song to a **wish list** to purchase later.

What’s My Favorite?

Of the three, I much prefer Pandora, and that’s largely because of the ease with which I can seed my stations with a large variety of music from different genres. Take a look at the examples on the right to see what my **Real Mix of Stuff** station looks like in both Pandora and iTunes Radio. It’s obviously a real mix of stuff...just like the good old days! As I said, I think it’s slightly easier to edit the list in Pandora. Your mileage may vary, of course.

And now that I’ve discovered some new music that I like, I can download it and add it to one or more of my playlists for later. Now let’s move on to **podcasts**.

Spotify

Also available for Windows, Mac, Android, and iOS, Spotify claims to have access to more music than Pandora does, but it’s nowhere near as flexible. While I’m able to “seed” my Pandora stations with as many different artists from as many different genres as I want, unless I’m missing something, Spotify will only allow me to choose one artist or genre; and then creates a station based on that one choice.

Like Pandora, Spotify allows you to give a “thumbs up” or a “thumbs down” to a particular song.

Spotify’s mission is to let you stream any song, any particular song, exactly when you want it. This makes it different from both Pandora and iTunes Radio, which will not let you request to hear a certain song right now. Because of this, Spotify doesn’t have a mechanism for you to purchase songs or link you to places you can purchase them from. After all, they figure why would you need to buy when you can stream it on demand?

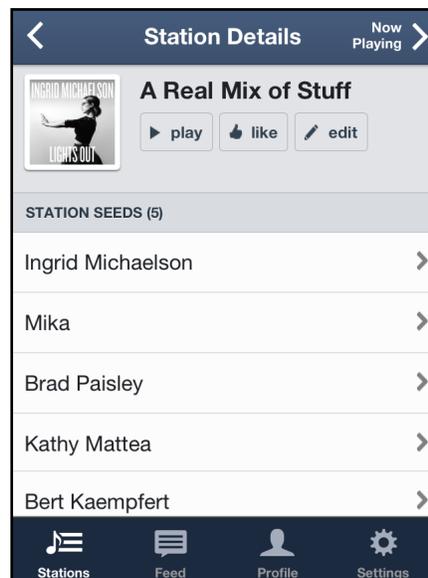
iTunes Radio

This is a feature of Apple’s **iTunes** and **Music** apps, which are only available for the Mac, Windows, and iOS devices; and is Apple’s attempt to get into the streaming market.

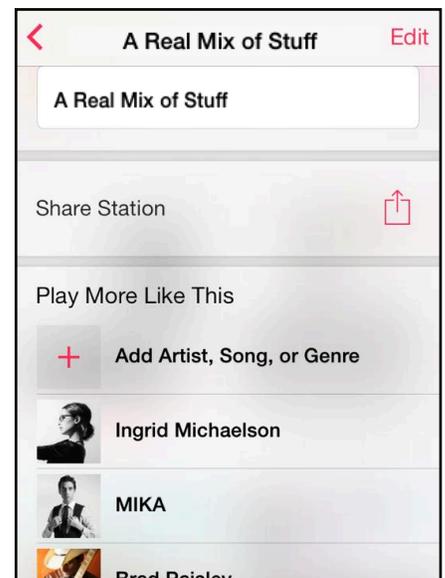
It allows you more flexibility in creating stations than Spotify, but not as much as Pandora; and the way it has you do it is a little clunky and hard to figure out at first.

Like the other two, it uses the thumbs up/thumbs down system of rating songs.

Because it’s a part of iTunes, on the **buy** link for a song will take you right to that song at the **iTunes Store**, where you have a choice to either buy it now or add it to your **wish list** for later.



Pandora Details



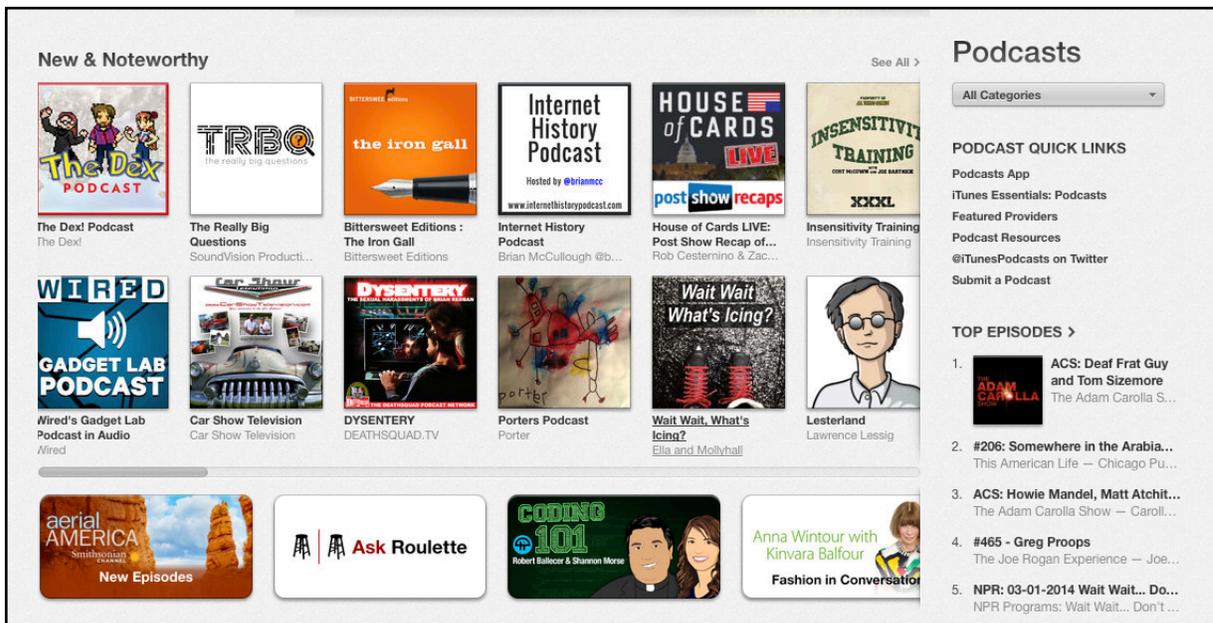
iTunes Radio Details

Podcasts

The term **podcast** comes from a combination of the terms **broadcast** and **iPod**. The easiest way to describe them is that they're programs in digital format (audio or video) than can be streamed or downloaded to the user's computer either on schedule or on demand.

The thing that makes podcasting so popular is that it requires much less equipment and expense than broadcasting. There are also no FCC rules about content that have to be worried about. The fact that podcasting is so inexpensive and easy to do means that even a two-person operation in Pulaski, NY can have a nationwide or even worldwide audience.

How do you find podcasts? I tend to hear about them by word of mouth. This is how I heard about such podcasts as **The Nerdist**, **Judge John Hodgman**, **Freakonomics Radio**, **TED Talks**, and NPR's **Wait Wait Don't Tell Me**. Many of these podcasts have their own websites where you can go to sign up for them. You can also find them in the **iTunes Store** under **Podcasts**. Just enter a search term, and see what you get.



A selection of podcasts from the iTunes Store within iTunes.

Once you've subscribed to your podcasts, you can include them in iTunes playlists (a little tricky, more on that shortly), or listen to them through the **Podcast** app (which is another good way to find podcasts).

For me, however, I'm a bit old school about this, and it's all about the playlists.

Downloading Other Audio Content

Remember the VCR? It was a device that existed before **Tivo** and services like **Hulu**. The important thing about it and what replaced it later on was that it allowed you to **time shift** your TV watching. If you weren't home to watch **The Cosby Show** on Thursday nights, you just set your VCR to record that, and the rest of NBC's Thursday night bloc, for when you got home.

Time shifting for radio has been a tricky thing because if anyone made something similar to a VCR for radio, almost no one has heard of it. But that all changed with the digital age. First of all, there are the **podcasts** that I mentioned previously. **NPR**, **CBC**, the **BBC**, and many other radio services provide podcasts of their shows.

But sometimes you don't want the whole show, merely segments of it. NPR regularly speaks about **Driveway Moments** or **Most Emailed Stories**; these are the one of two stories in each program that get a lot of attention. Frankly, I don't want to listen to a whole hour-long NPR program; I want the highlights. I want to cherry-pick the stories that I think I would find interesting. Fortunately, there's a way to do this.

At NPR's website, you can search for a particular program and a particular date, and then see a list of all the stories done on that day, with the option to download each story. This is what I do; I go to their website, download a week's worth of stories that look like they'd interest me, and I add them to my playlist.

This same technique works with other content sites too. On the next page you'll see an example of an NPR story waiting to be downloaded.

With Modern Makeovers, America's Libraries Are Branching Out
 by ELIZABETH BLAIR
 September 01, 2013 5:41 AM

Listen to the Story
 Weekend Edition Sunday 4 min 20 sec

Playlist
 Download
 Transcript

NPR story to be downloaded

Wink Wink, Nudge Nudge

Some very popular radio shows, like **A Prairie Home Companion**, will let you stream from their extensive archives and download certain segments of the show, but not download entire shows.

Why is this? It all has to do with the rights they've negotiated with the performers on the show. As long as it's being streamed to you, it's really no different than radio on demand; but the moment they start letting you download entire shows to save to your computer, a whole new set of rights needs to be negotiated with those performers; and this is just way too complicated for them to want to deal with.

But they know that there's software out there that lets you capture and record those streams so that it's not much different from time shifting a TV show with a VCR, and they know that this is how many people listen to the shows. But since you're the one doing the recording instead of them just giving it to you for free, it's different.

My favorite piece of software for doing this is one called **Audio Hijack**, and it's available for the Mac from **rogueamoeba.com**.

Player window for A Prairie Home Companion



Audio Hijack

About My Playlist

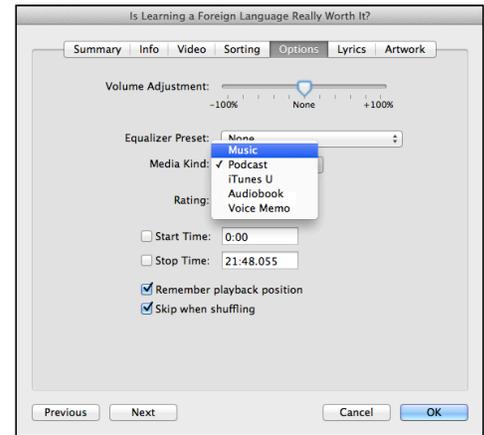
I have a special playlist called **Driving and Walking** that I listen to when I'm...driving and walking. I want it to be like a radio station where you hear a few songs then a little news piece, then a few more songs followed by another news piece. You know...radio the way it used to be. When my family is going on a long road trip, I make a point of filling up that playlist with enough music, NPR, and podcast segments to get us through a day's drive; and I try to have enough variety so that my wife and two daughters are happy too...once again, radio the way it used to be. Fortunately, my 11-year-old enjoys listening to NPR. The example below shows you what part of my playlist looks like.

Driving and Walking ▶ ⌵							
98 songs, 10 hours 30 minutes							
▲ ✓	Time	Name	Artist	Size	Plays	Album	...
24 ✓	3:53	Got a Hold on Me	Christine McVie	7.8 MB	110	Christine McVie	
25 ✓	4:01	20131218: Judge Softens Utah's Anti-Polygamy Law To Mixed Reac...	NPR	1.9 MB		Most Emailed Stories	
26 ✓	3:37	I Ain't Got Nobody	Prudence Johnson	4.2 MB	41	APHC	
27 ✓	3:01	She's Got A Way [live]	Billy Joel	3.5 MB	24	Greatest Hits, Vol. II (1978 - 1985...	
28 ✓	4:38	My Way	Frank Sinatra	6.4 MB	2	The Very Good Years	
29 ✓	36:52	20140206: What You Don't Know About Online Dating	Stephen J. Dubner	25.8 MB		Freakonomics Radio	
30 ✓	1:12	In The Middle In The Middle In The Middle	NYS Department Of Safety	1.4 MB	43	Television's Greatest Hits - The C...	
31 ✓	3:25	Stuck In The Middle With You	Stealers Wheel	7.4 MB	70	Golden Moments	
32 ✓	3:11	Make It With You	Bread	3.7 MB	3	Anthology	
33 ✓	3:18	20131218: Mixing It Up 50,000 Years Ago — Who Slept With Whom?	NPR	1.6 MB		Most Emailed Stories	
34 ✓	2:54	Light My Fire	The Doors	5.3 MB	1	Light My Fire / Crystal Ship [Digit...	
35 ✓	3:03	The Old Lamp Lighter	Sammy Kaye (Billy Williams)	2.8 MB	3	Your Hit Parade - 1946	
36 ✓	3:47	When I Grow Too Old To Dream	Linda Ronstadt	5.2 MB	54	Linda Ronstadt	
37 ✓	2:21	20131218: Retail Workers Forced To Deal With Holiday Tunes	NPR	1.1 MB		Most Emailed Stories	
38 ✓	3:56	All I Want for Christmas Is You	Dave Barnes	8 MB	18	Very Merry Christmas (Bonus Tra...	
39 ✓	2:25	Jingle Bell Rock	Sugar Beats	3.4 MB	297	C-01	
40 ✓	2:19	Chipmonk Song	David Seville and the Chipmonks	3.2 MB	99	C-01	

About Those Podcasts...

On Apple devices, podcasts like to live in a world of their own. They like to be part of the special Podcasts library in iTunes or to be played through the Podcasts app. Even though you may drag them into a mixed playlist of music and other items, and they'll show up on your computer, they won't show up on your mobile device without a little massaging.

And how do you do this massaging? **Right-click (control-click)** on the particular podcast and select **Get Info** from the pop-up menu to get a screen like the one on the right. If you change the **Media Kind** from **Podcast** to **Music**, you'll be able to see this item in any of your playlists...except, now, for the **Podcasts** one.



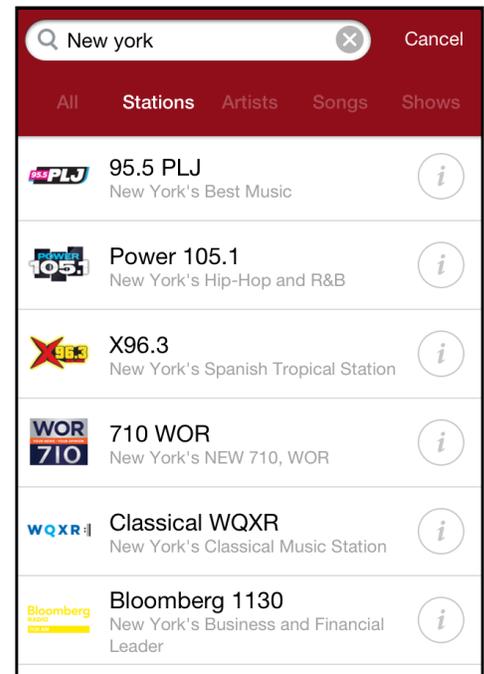
And Then There's Radio

Maybe all you really want to do is just listen to the radio. You know, like your favorite Top Hits, Country, or Classic Rock station. But you absolutely hate the fact that they never tell you the name of the song that they're playing, and when you try to call them to find out, they never answer (are there actually even real people at radio stations anymore?).

As the old saying goes, "there's an app for that."

iHeartRadio, from **Clear Channel**, owners of over 800 radio stations, is that app. It allows you to select from a list of radio stations by location or genre, and plays a live stream from that station, which in many cases, displays information about the current song... including links to the **iTunes**, **Amazon**, and **Google Play** stores if you want to buy it. And best of all, it doesn't limit you to just Clear Channel stations. The example of the right shows a partial selection of New York City stations.

But remember, because it's a stream, you have to be within WiFi or have a device that uses cellular Internet.



What About Android?

Because I'm a Mac user and have an iPod Touch, all of the examples I've shown have used iTunes and have assumed that you have an iOS device like an iPhone, and iPod Touch, or an iPad. But those of you who have Windows and/or Android devices are not completely out of luck!

If you have a Windows computer, you can still use iTunes and an iOS device. And if your mobile device runs Android, then I just discovered a great media player called **doubleTwist**, that lets you sync iTunes playlists with an Android device, and has desktop versions for Mac and Windows. You can read more about it at www.doubletwist.com.

Is There More?

Of course there's more. There's always more. But this should be enough to get you started. So now go and enjoy some "radio!"

keg 2014.03.11

Tech Tips from Mr G is a publication of the Liverpool Public Library.

You can find more of them at www.LPL.org/computers-and-computing/tech-tips

This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA.

