What Is a Podcast?

D o you have specific interests? How about triathlons? I have to admit, most radio broadcasts don't deal with those kind of subjects. But that's about to change. You can go to `http://enduranceradio.com` and download any program listed there about triathlons. You can listen to it live, you can store it and listen to it on portable media when you have time, or you can even store it on your hard drive and use it as a reference at a later date, such as when you finally start training for that iron man competition.

And it's not just triathlons. People are podcasting on more topics than you can imagine. Take, for example, the *Rock and Roll Geek Show,* a music review and commentary show; *Real Reviews,* a podcast that reviews movies and DVDs; *The Point,* a show for Mac users; and sound-seeing tours where various podcasters take you on sound tours of their parts of the world. Accessing these broadcasts is as simple as surfing the Internet.

Creating your own podcasts isn't much harder. Now you have the ability to reach listeners worldwide. You can air your ideas, share your passions, offer your music to the world, and much more.

Podcasters don't have to make advertisers happy. They don't have to worry about FCC regulations. They don't have to adhere to play lists. They don't have to pay attention to the corporate bottom line. They broadcast what they love, and you can too. The podcasting revolution has begun, and you don't want to be left behind!

You can listen to the radio, of course. You can even listen to radio while you are online. If you want to, you can record a radio program that interests you and listen to it later. So, how are the audio programs in podcasting different? Traditional radio is a business venture, governed by budget concerns and regulations. That means the information you can access is limited — probably mainstream. What if you could automatically download and listen to anything that interested you? What if, right from your home, you could broadcast programs to thousands of listeners worldwide about anything that interests you?

That's what podcasting is all about. And thousands of people are listening to and creating podcasts. You won't believe what's out there.

This chapter empowers you to take control of what you listen to. It introduces the concept of *walkaway content.* It gives you the straight story about the history of podcasting and introduces you to a sampling of podcast personalities and programs.

The Fundamentals of Podcasting

The term *podcasting*, in a way, puts you immediately into the right frame of mind. When I heard the term for the first time, the main idea that stuck in my mind was that podcasting somehow was a unique communications medium that was portable and had something to do with broadcasting.

That guess about the meaning of the term was very close, and I soon found out that podcasting represents a new way for individuals to communicate about things they love. They can actually broadcast content that comes from their hearts and are able to communicate with other people in a new and exciting way. For a long time, highly technical people have been recording and placing audio content on the Internet, but the barriers to entry were relatively high. Podcasting breaks down those barriers. The wow factor of podcasting is that the delivery vehicle has been automated for the listener and made simple enough for the person producing content so that anyone can do it.

Throughout the world today, individuals are driving to work in cars, sitting on buses, walking down the street, or waiting for a train while they listen to podcasts. Some are even tapping into podcasts while at work. Who and what are they listening to? Well, they're listening to music or to people like me talk to them about subjects we love. In Figure 1-1, I am driving down the street listening to *Tech Rag Tear Outs* via my FM-capable portable media device.

FIGURE 1-1: Listening to a podcast via my FM-capable MP3 player on the car radio.

I discovered podcasts in a hotel room in central Texas while surfing the Internet. It was like being given the keys to my first car, and being able to drive unaccompanied. The freedom we all felt the first time we drove by ourselves wasn't any different from when I listened to my first podcast. What I found intriguing was that podcasters could speak freely, without control and restrictions. The thing that also blew me away was that podcasters were regular people. Most are hardworking men and women, and it was obvious to me that everyday people with a passion were having fun creating podcasts. I immediately knew I was going to be a podcaster. It was a decision as natural as opening a door. The best part was that I didn't have to be rich to be a creator of a podcast.

I am a father of four, working a 7 to 5 job in Honolulu, Hawaii, and I've been listening to and producing podcasts since October 12, 2004. My first podcast was created in that same hotel room in Texas, where I basically taught myself how to create a show. The response and numbers of people that tuned in astounded me. I was getting comments from all over the world in a very short amount of time. Prior to this, I had my own weblog, called Geek News Central (`http://geeknewscentral.com`). Geek News Central is a site where I talk about technology and other things that interest me. I describe myself as a typical geek with a little rebel spark. I like to dig in and talk about new technologies and relevant news of the day. What drove me to podcasting was that I advocate fair use rights and had become disenchanted with the traditional broadcasting system and what I was listening to on the radio every day.

The reaction to my first podcast was nothing short of amazing. Today, the number of listeners continues to grow, and the readership of my weblog has increased dramatically. So, I can say that podcasting drew readers to my website and supplemented what I wanted to say but sometimes could not express completely with the written word. I was able for the first time to speak to readers and give them the raw emotion that is many times missing from a weblog post.

I hope to guide you in this book so that you don't make some of the mistakes I made in my early podcasts. I will cover everything I know about podcasting. I want you to feel the power of the medium as I do. The fundamental thing to remember about podcasting is to have fun and be yourself. Whether you are a listener or an aspiring podcaster, remember that the majority of podcast shows are created by average people. Sure, there are some high-end producers, but the majority are regular people having fun and creating content we love.

Podcasts are created in living rooms, cars, while walking down the street, and at home. They can be scripted or unscripted, but podcasters bring their listeners mostly unedited, real, and from-the-heart commentary. Podcasting, as a content-delivery medium, enables you to reach hundreds of thousands of listeners. You don't have to worry about licensing or government regulations. You don't have to worry about someone beating down your door or having to buy a lot of equipment. In fact, my first podcasts were created with a computer and a $7.95 microphone. Figure 1-2 shows what I used to create my first podcast.

FIGURE **1-2: A microphone and a computer are all you need to get started.**

The Power of Walkaway Content

You may say, "I have heard of this medium called podcasting, but do I need to have an Apple iPod to listen to shows?" The answer to that is no. In reality, you don't even need a portable media device. You can listen to podcasts via direct downloads from the podcaster's website and listen to them directly on your PC through the media player of your choice. The power of podcasting, however, is the ability to deliver content to any MP3 player capable of synchronizing with Windows Media Player or Apple iTunes. I have used an iRiver YP790, a Samsung Yepp, iPod Shuffle, and iPod. The list of players capable of playing MP3 files is endless.

Podcasting has spun heads because you can use a very simple software utility to automatically download audio programs to which you subscribe. Your downloads are then automatically transferred to Windows Media Player or Apple iTunes, and they, in turn, load the audio file automatically to your mobile media device. The great thing about podcasts is that you're not tied to your computer. You can walk away with fresh audio loaded on your MP3 player every day.

Imagine deciding that you want a sampling of audio shows on various subjects using one of the software packages I will highlight later in this book. You subscribe to those shows for free. You then leave that application running in your computer's taskbar and go to bed.

You wake up in the morning and get ready to go to work or school. Before you leave the house, you grab your portable media device, which has been automatically synchronized with the audio content you have subscribed to — content that you want to listen to. That is the power of walkaway content: you control what you listen to, and when and where you consume it.

FIGURE 1-3: No radio.

What are your listening choices today? What is typically on the radio? As we browse the traditional radio dial, we are given a wide variety of programming choices, but most of those programming choices — from songs played to on-air personalities — are controlled by major media companies. You may have a choice of a dozen different types of stations in your listening area, but the same media company likely owns half those stations. These companies control what you listen to; they offer only what they want you to hear. Everything is controlled and under the watchful eyes of those who make sure ratings stay high and certain artists get promoted. Furthermore, the Federal Communication Commission (FCC) monitors traditional radio. On the one hand, this means that kids won't be exposed to pornography or other types of unsuitable content. The FCC is mandated to keep the airways relatively clean. They have, in fact, fined radio broadcasters such as Howard Stern for inappropriate content.

Podcasters are not regulated by the FCC, so a wide variety of shows exists — literally thousands of them. The majority of the podcasts are safe for work listening; but be forewarned that some aren't, so preview shows before sharing them with sensitive co-workers. Along those lines, you will also want to monitor the podcasts your kids tune in to, just as you limit other Internet content you allow your children to access. In Figure 1-4, I am listening to a podcast while taking a walk through the neighborhood.

<small>FIGURE</small> **1-4: Listening to a podcast while on a walk.**

The History of Podcasting

The true godfathers of podcasting are Dave Winer and Adam Curry. Dave Winer (`http://scripting.com`) is a software developer and RSS evangelist; he developed the popular weblog package Radio Userland (`http://userland.com`). Today, Dave "produces" the popular podcast *Morning Coffee Notes* (`http://morningcoffeenotes.com`). Adam Curry produces the ever-popular *Daily Source Code* (`http://live.curry.com`). Adam is well-known as a mid-1980s former MTV VJ (see `http://live.curry.com`).

> **Note**
>
> For some of you, this short history will be a trip down memory lane. But many reporters have bungled the true history behind the evolution of podcasting. I want to give you the best perspective I could obtain.

Podcasting started, before the term was even invented, with an idea from a meeting in late 2000 between Adam Curry and Dave Winer about automated media distribution. The conversation was centered around video rather than audio; Dave had some concerns about the distribution of video over the Internet.

Remember, this was the year 2000, before the world-wide growth in the number of broadband Internet subscribers. Dave felt the Internet simply hadn't evolved to the point where it would support large video downloads, not to mention the cost of delivering content. His analogy was that it was taking longer to download video than it was to play it, and many times the video was of poor and uncertain quality.

Note

Check out `http://ipodder.org/history` for another perspective.

Adam's idea was to look at Internet connections differently and consider all the bandwidth that goes to waste when users aren't using their Internet connections. He wanted a software solution that could automatically download items that he subscribed to. This really wasn't a new idea, but there were no tools to do this in the fashion Adam desired.

Note

I must interject that Internet service providers hope you don't use your broadband connection around the clock. In some countries, people have to pay for the amount of bandwidth they consume. The idea of millions of computers pulling content automatically while we sleep makes most ISPs shudder.

Dave was already working on *Real Simple Syndication* (RSS). For those of you not familiar with RSS, I will cover it in Chapter 12 in greater detail. Just so you won't be confused at this point, I'll give you a quick review of RSS.

Various websites, although primarily weblogs and news sites, carry an icon that might be labeled RSS, RSS .91, RSS 2.0, or XML. They are typically small icons with white letters on an orange background. These icons are linked to an XML (extensible markup language) formatted file. These files contain text that is structured in the RSS specification. Podcatchers, or podcast aggregators, are programs that run on your desktop that can interpret the data in these files. I cover these software applications in Chapters 2 and 3.

Note

I encourage you to load `http://www.geeknewscentral.com/podcast.xml` in your web browser to see a sample of RSS 2.0. Obviously, you wouldn't want to have to read this in your web browser.

The site `http://webreference.com/authoring/languages/xml/rss/intro/` offers a detailed discussion of RSS. In the most basic terms, RSS enables you to share content across the Internet. Because an RSS file can include dynamic content as well as static content, you can use it to distribute content from your site to others.

Dave had made revisions to the original RSS 0.91 specification developed by Netscape and formalized those revisions as RSS 2.0 in 2003. The RSS 2.0 standard was released by Harvard under a Creative Commons license. More information on RSS can be found at the official site `http://blogs.law.harvard.edu/tech/rss`.

Note

I will cover the Creative Commons license in detail in Chapter 4, but I encourage you to visit `http://creativecommons.org/` for detailed information about this exciting media/material licensing avenue.

Dave knew after his discussion with Adam that there would have to be some additional software components developed to make delivery of content happen automatically. Dave thought the process would need to be broken into three categories:

1. What software do you use when creating the content?

2. What software reads the content?

3. Where do you find the content?

Four and a half years passed from the initial meeting, and during that time, file sharing became the main vector for net audio/video distribution. Sharing technologies arrived that allowed files to be downloaded faster than they could be listened to. That, in itself, helped set the stage for what was coming.

Until the summer of 2004, progress was slow, and even though many of the individual pieces were in place, they were not tied together. There were no open source solutions — only content delivery methods that were tied to commercial solutions. This changed when Adam decided to try his hand at programming and developed the first rudimentary podcatcher application with AppleScript. He termed it *iPodder*; the original application is no longer in use today, but the premise of his code, which I will review in Chapter 2, has been improved on.

Note Throughout this book, I will use the word *podcatcher*. You will also hear the term *podcast aggregator* used on the Internet. It is important to know that the terms mean the same thing.

Dave initially thought that what Adam had created would not work, but with Adam's hacked-together AppleScript, Adam was able to capture and download audio posts that Dave had recently started embedding in his weblog post.

Note Dave's provisioning of an element called an "enclosure" within an item in RSS 2.0 allowed the tool that Adam created to understand where media files were stored and grab and download the files automatically.

Adam's program read Dave's RSS feed and interpreted the "enclosure" information and downloaded the corresponding audio file. Adam's program simply grabbed the file linked within these enclosures, downloaded it, and then utilized it in the API released for iTunes. It put the file in his iTunes play list, which then was automatically uploaded to Adam's iPod.

Note I cover enclosures in greater detail in Chapter 12, but essentially an enclosure contains information on the physical location, size, and type of the file. It is important to note that the file can be anything and is not restricted to audio files, as long as the RSS feed has the "enclosure tag" incorporated.

Take a look at this enclosure example:

```
<enclosure url="http://libsyn.com/media/geeknews/GNC-
2005-3-25.mp3" length=" 17191017" type="audio/mpeg"/>
```

As you can see, the enclosure provides a link only to the physical storage location on the Internet.

Adam had aspired for four years after that original meeting to automate file downloads of video and audio content and make it easy for the masses. With Adam Curry being a quasi-celebrity, his show, *The Daily Source Code,* helped launch podcasting. We must recognize Dave's outstanding evangelism of podcasting, along with the huge contribution and development of the RSS 2.0 standard. RSS enabled sites with enclosures — the glue that allows for automated distribution — to work. Adam's simple AppleScript lit the fire for the development of podcasting tools, which is today in full swing.

Adam Curry says, "Podcasting is where developers and users party together." This has been a profound battle cry and has resulted in amazing achievements in a very short time.

Literally dozens of developers and thousands of podcaster are the driving force behind the widespread number of newly created podcatcher clients, along with improvements to pre-existing weblog RSS implementations. Even developers of news aggregator software are getting onboard. The media has been following and reporting on podcasting in record numbers.

In Chapter 2, I will go into great depth and review these new software packages and improvements to existing news aggregators.

How the Podcasting Term Originated

Whenever some new media delivery method is invented, there is always a word that everyone adopts to describe it. The term *podcasting* was coined in February 2004 by Ben Hammersley, in an article in the *Guardian*. This article predates Adam's *podcatcher*. Hammersley and others did not know what to call the growing self audio publishing medium at the time and had kicked around a couple of terms, including *podcast*. People who were already embedding audio on their sites realized they had a winner, but the automated tools were not in place. Those that existed were tied to commercial enterprises, and Adam's open source tool that automated the process did not yet exist.

The creation of that program by Adam in mid-2004 made a lot of people realize how easy publishing audio for automated delivery would be. Shows sprang up and the word spread.

The term that would define this exploding medium was decided by a simple act: the first podcasting domain registered to Dannie J. Gregoire in September 2004 and hyped by Dave Slusher, who produces the Evil Genius Chronicles (`http://evilgeniuschronicles.org`), and then made popular by Adam Curry, Doc Searls, Robert Scoble, Dave Winer and the rest of the podcasters.

Some have criticized the term *podcast*, as it makes podcasting sound like it is the exclusive domain of the Apple iPod. Without a doubt, the Apple iPod is the icon of mobile media devices. Few will disagree with that, including my daughter, who worked saved every penny of her allowance, Christmas, and birthday money to buy an iPod this past year. Most podcasters would agree that the iPod has its shortcomings, like other MP3 players. It's not perfect for listening to podcasts, but it's the best term we have at the moment.

We hope that the retail community will step up and listen to our needs and develop a truly revolutionary device or devices that will interact with our listeners and improve the podcasting listening and distribution process. Improvements need to be made so listeners can provide verbal recorded feedback midway through a program and even review show notes that podcasters could embed in the audio file that would help listeners quickly jump on the Net to look at a site or topic that has been discussed. Hopefully, we will soon have MP3 players with built-in WiFi and onboard software to automatically grab new podcasts.

It must be said, however, that without the millions of iPods and other media devices capable of storing large numbers of MP3 files, this medium would have never taken off in the way it has. We have given people a way to fill their iPods and other media devices with content other than music.

The Growth Rate of Podcasting

Podcasting was initially the next natural step for webloggers. In fact, many webloggers had previously been making audio posts on their sites, but because the majority of news aggregators and tools available did not recognize the audio files linked in those posts, their uptake was minimal. Audio blogging had not taken off, because only a small number of webloggers were posting audio comments. We must, of course, acknowledge that there have and continue to be a significant number of people creating audio content for streaming services, but those streams still mean you are locked to a desktop and not free to roam when listening to a podcast. Copyright concerns have also been the downfall of some of those services; the content is under strict Digital Rights Management (DRM) rules and usually can be listened to only while you are connected to the Internet. There are ways around this problem, of course, but it is still a manual process.

Forms of Digital Rights Management have been put in place by both Microsoft and Apple in order to placate organizations like the Recording Industry of America (RIAA) and Movie Producers of America (MPAA). DRM and other proprietary file formats serve to control audio and video content. Most commercial media today is under heavy copyright, and licensing control and restrictions in fair use are being encroached upon each day. DRM systems protect the copyright of materials by restricting, through software solutions, how the content can be used.

Fortunately, podcasters have largely adopted a Creative Commons License and are promoting bands and artists not under the control of the RIAA. In my opinion, the RIAA and similar organizations are probably hoping that the podcasting revolution goes away, as the medium has been generally open. Podcasters want you to share their content and are doing their best to keep the legal hand of the RIAA away by playing within the copyright rules.

As the term *podcast* began to be widely adopted, the typical land rush for domain names by early adopters began, and podcast directories started popping up. As the word got out and Google started indexing the *podcast* term, the search results went from a few hundred to 2.79 million hits within six months. The number of podcasts in the podcasting directories grew from 10 to over 4,500 in the same period. The numbers continue to grow. The podcasting revolution is truly underway.

Who Are Podcasters?

Obviously, people have been creating audio content for a very long time. The only difference is that most of that content has been available only via manual direct download. Some services stream audio content 24/7 with all varieties and types of shows, but they have been slow to adopt the podcasting delivery method. On the other hand, traditional radio is now getting onboard. Some content on such big broadcasters as the BBC and NPR are now available as podcasts. Thus, a lot of people in the corporate world have realized the power of walkaway content. By and large though, the majority of podcasters are webloggers, but it is not their sole domain. A lot of people are jumping on the bandwagon and making the necessary changes to their websites to allow listeners to download content while they sleep.

Personalities and Show Reviews

This section provides reviews of some shows I listen to. I currently subscribe to more shows than I can consume; thank goodness many of those shows are only once a week. The shows I follow range from 1 to 45 minutes. If I start a show and the topic of the day doesn't interest me, the power of walkaway content takes place as I hit the FFWD button, (just as many of you do on your TiVo). In Chapter 2, I list a large number of directories where you can find podcasts.

Review 1: Rock and Roll Geek Show

Michael Butler is a self-proclaimed rock-and-roll geek. Any geek that is as passionate as I am makes me take notice. His show (`http://americanheartbreak.com/movabletype/`) is a mix of music, trivia, and music reviews. Not only does Michael love rock, but he has his own band, American Heartbreak, with whom he plays bass guitar. After New Year's in 2004, Michael and his band traveled through Europe, podcasting from different locations and situations.

His band's fan base has grown because of podcasting; many listeners came to his band's shows in Europe. An interesting piece of trivia surrounds the *Rock and Roll Geek Show*. Michael was trying to get Heineken to sponsor his show for a couple cases of beer. Michael really likes Heineken and usually enjoys the beverage while doing his show. Some would consider that controversial, but it also demonstrates the fact that anything goes with podcasting.

Adam Curry tried to help Michael get Heineken to sponsor his show; instead, Heineken launched its own podcast. Most of us considered it a slap in the face. Heineken would have received a significant amount of press by simply giving Michael a couple cases of beer. Heck, I would have supported it by buying a couple for their effort. It has been rumored that Michael's podcast helped kick his band to the next level, and I'm sure they're on their way to bigger and better things.

I foresee a time in the near future when podcasters are the driving force behind the signing of an unknown band to a major label. In conclusion, Michael's *Rock and Roll Geek Show* is a great one to listen to and has been on my subscription list for a long time.

Review 2: Endurance Radio

Endurance Radio (`http://enduranceradio.com`), hosted by Tim Bourquin, is one of the podcasts that started as a streaming audio program. When Tim realized the potential growth of podcasting, he added the necessary code to his website and offered the content as podcast. Tim does a great job and has already produced nearly 100 shows. *Endurance Radio* is all about endurance sports, triathletes, adventure racers, cyclists, marathon runners, and mountain bikers. I am not much of an athlete, but I get motivated when I hear these people tell their stories. So, if you're into extreme sports, this is a podcast you will want to tune in to.

Review 3: Manic Minute

Michael Lehman does several podcasts, but a favorite of mine is his daily *Manic Minute* (manicminute.net/), a one-minute podcast in which he uses an audio trick to compress 2 to 3 minutes of fast-paced news and commentary into a show no longer than a minute. I listen as I am driving home from work, and there is always a gem or two in the podcast that galvanizes me to rush to my computer when I get home to look at the site he's talked about. This is one of the best short-format podcasts — it is like drinking from a fire hose; you get a quick blast and you're all filled up.

Review 4: IndieFeed

Looking for music on the Internet that is free of control by the Recording Industry Association of America and similar organizations? The *IndieFeed* podcasts provide just that. They highlight a variety of music styles, and, on an almost daily basis, bring to our listening palate two or three new songs. We can listen to the songs, and then go to the respective website and either download them for free, or better yet, support the independent artist they highlight and buy their music. With most radio stations today using the same boring play lists, *IndieFeed* provides fresh acts. *IndieFeed* features genres acceptable to any age group and music you would most likely not find anywhere else.

Summary

Podcasting began as an idea two people shared. They wanted a system that provided automatic delivery of audio content. They wanted it to synchronize automatically so their listeners weren't trapped behind a computer while enjoying their show.

The open source community jumped in, and now you can listen to any show you choose while you drive to work, jog through the park, or browse the aisles of a grocery store. Not only that, you can produce a show about anything you love and expose your thoughts and ideas to thousands of listeners.

The podcasting revolution has begun. Podcasting enables you to listen to any content you want about any subject that interests you, and there is a lot of it out there.

If nothing else, I want you to walk away from this chapter with two ideas:

- Podcasting is about having fun.
- Podcasting is generally unscripted and includes life's real moments.

Excited yet? In Chapter 2, you learn everything you need to know about choosing podcasting software.