

Download Files in C#

by Randy Charles Morin

This is the fifth article in a series on Internet Programming with C#. The first four articles addressed Internet Protocols; SMTP, POP3 and NNTP. The fourth address port scanning in C#. This article will address how to download files over the Internet with C#.

What exactly do I mean by download a file over the Internet? Neither the Internet protocol nor its popular TCP/IP (Transmission Control Protocol) transport directly support file downloads. File transfer over the Internet usually occur over FTP (File Transfer Protocol) or HTTP (HyperText Transfer Protocol). C# provides for downloading files using both of these protocols.

The more I've gotten to use C# and the dotNET library, the more I am impressed. In this case, the dotNET library has a class called WebClient that has a method DownloadFile. The method will download pretty much any file from a URI. This includes but is not limited to the three popular URI protocols; http and file. Unfortunately, the method doesn't seem to work for the ftp protocol.

Sample code to write a small download utility follows.

Listing 1: DownloadFile

```
static void Main(string[] args)
{
    if (args.Length < 2)
    {
        Console.WriteLine("Usage: downloadfile [url] [localfile]");
        return;
    }

    try
    {
        System.Net.WebClient client = new WebClient();
        client.DownloadFile(args[0], args[1]);
    }
    catch(Exception e)
    {
        Console.WriteLine(e.ToString());
    }
};
}
```

That's just too simple, but then, that's the beauty of Microsoft's new C# and dotNET framework. Congratulations to the Microsoft team.

About the Author

Randy Charles Morin lives with his wife, Bernadette and two kids, Adelaine and Brayden in Brampton, Canada. He is the author of the KBCafe.com website [<http://www.kbcafe.com>], many programming books and many articles.