

# USB ISO Download Hints and Expectations

How long will it take to download the ISO(s) for my upcoming course? There are several variables that impact the time to download:

1. How fast is your Internet Connection?
  - a. Our Internet connections are rarely as fast as the advertised speed for service we are paying for. Additionally, the advertised speed is from the ISP's equipment in your location to a server that they have selected to get the best performance possible.
  - b. What matters is the speed of the connection from the server you are downloading from all the way to your computer. Running a tool like speedtest.net does not measure that speed. Speedtest.net is measuring the network speed from your cable modem to the Speedtest.net server. Usually your speed inside your house or office is significantly slower than that.
  - c. Use a site like [www.speedof.me](http://www.speedof.me) that measures your network speed all the way back to your computer. Compare the results speedof.me the to reported speed from speedtest.net. Use the speedof.me number to estimate the download time.
  - d. Your connection speed is also fluctuating up and down during the download so whatever the number you get from speed test sites, it will vary during the download.
  - e. If you have the option, use a hardwired connection to your router rather than a WiFi connection.
2. How big is the ISO file?
  - a. This varies from course to course, but they are going to be larger than your typical download.
3. How stable is your Internet Connection?
  - a. You might have blazing speed but the connection is dropped from time to time. You might not even notice this in your normal work but during a lengthy download, it can cause the download to fail or become corrupted. This may then require the download to be restarted.
4. Bottom line is that the download of the course ISO is likely to take hours.

What can you do to improve this?

1. Level set your expectations. In your browser, navigate to [www.speedof.me](http://www.speedof.me) and see what your true connection speed is. This is the speed that matters. It doesn't matter what your ISP says or what speedtest.net says. You may find that it is better at a particular time of day. Test different locations; sometimes you home connection may be faster than work. Hotel and Internet Cafes generally have slow connections.
2. Install a download manager extension in your browser. The download manger helps manage connections that my fluctuates. The manger can also help restart a download

after it fails without having to restart the download from the beginning. There are several choices of download manager for all the major browser such as Chrome, Firefox, Edge, Safari, etc.

### Download Manager Extensions

#### Firefox

- [Download Manager \(s3\)](#)
- [Turbo Download Manager](#)

#### Chrome

- [Chrono Download Manager](#)

#### Safari

- Download Shuttle: Speedboost