# How To Install Cygwin For +1Copybook

## +1 Software Engineering LLC June 1, 2021

To install Cygwin onto your laptop or PC in order to run +1Copybook, visit:

### https://cygwin.com/install.html

If your laptop is 64-bit (most likely), click on the **setup\_x86\_64.exe** link.

Once the setup\_x86\_64.exe binary has been downloaded to your laptop, click **Open file**.

Now click the following buttons to install Cygwin in this order:

- 1. For **Do you want to allow this app from an unknown publisher to make changes to your device?** Click **Yes** button.
- 2. Click Next button after reading Cygwin Net Release Setup Program text.
- 3. Click **Next** button to select the default of **Install from Internet**.
- 4. Click **Next** button to use default root directory of **C:\cygwin64** to install software.
- 5. Click Next button to use default Local Package Directory of C:\Users\<your\_userid>\Download.
- 6. Click **Next** button after selecting **Direct Connection**.
- 7. Click **Next** button after selecting one of the download sites, like <u>ftp://cygwin.mirror.rafal.ca</u>.

You can now select packages to install on your laptop.

Click on the **Skip** pull down menu found next to the package name to install. Select the most recent version of the software, like 4.1-63 for cron. You can use the scroll bar to the right to move up and down the list.

Below are the packages to select.

#### Admin Category

1. Select "cron: Vixie's cron".

#### **Devel Category**

- 1. Select "gcc-core: GNU Compiler Collection (C, OpenMP)".
- 2. Select "Gdb: The GNU Debugger".
- 3. Select "make: The GNU version of the 'make' utility".

#### **Editors Category**

1. Select "vim: Vi improved – enhanced vi editor".

#### **Net Category**

- 1. Select "openssh: The OpenSSH server and client programs".
- 2. Select "libssl-devel: A general purpose cryptography toolkit with TLS implementation (development)".

Once the above packages have been selected, click the **Next** button.

If you see **Resolving Dependencies** window, click **Next** button.

Click **Next** button if you see **Review and confirm changes**. Cygwin Setup will automatically update your software to the current versions each time you run setup.

The above packages will now be downloaded and installed onto your laptop.

Once the download completes, the **Create Icons** window will appear. Select **Create icon on Desktop** and **Add icon to Start Menu**, then click the **Finish** button.

Cygwin has now been installed on your laptop.

To run Cygwin commands, like "Is -I", in a Command Prompt window, you can update your PATH variable to include the Cygwin binary directory. To do this:

- 1. Click on the **Start Menu**.
- 2. Select Windows System.
- 3. Select Control Panel.
- 4. Select System.
- 5. Select Advanced system settings.
- 6. Click on the **Environment Variables** ... button.
- 7. Select Path.
- 8. Click on the **Edit** ... button.
- 9. Click New.
- 10. Type: C\:cygwin64\bin
- 11. Click **OK** button.
- 12. Click **OK** button.
- 13. Click OK button.
- 14. Exit out of the About/Settings window.
- 15. Exit out of the Control Panel window.

To test this change:

- 1. Click on the Start Menu.
- 2. Select Windows System.
- 3. Click on **Command Prompt** to open a new command prompt window.
- 4. Type: **Is -I**

If you see a long listing of the files in the directory, the PATH change worked. You can also type Cygwin commands in a PowerShell window.

We recommend moving the **setup\_x86\_64.exe** file in your **Downloads** folder to the **C:\cygwin** directory. Now if you ever need to update a package or want to download a new package, you can easily locate and run **setup\_x86\_64.exe**.

Contact +1 Software Engineering on where to download +1Copybook binaries. After downloading **cb.exe** and **de.exe** files to your laptop, copy or move these two files to the **C:\cygwin64\bin** directory.

By opening a Command Prompt window, you can run +1Copybook by running the **cb** command. To test, run: **cb** -**h**