Setting up LaTeX

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1   Introduction

The one thing you must have to use LaTeX is a TeX distribution. These come in many different flavors across different operating systems. Here we choose the TeX distribution that is *easiest* to install for each operating system: Mac, Windows, and Linux. Another good thing to have with your TeX distribution, is a text editor that is specialized to work with LaTeX. While this is not strictly necessary (you can write LaTeX documents in any text editor), it is a much better experience when using a LaTeX editor. Here, we use the editor that comes packaged with your TeX distribution, and this differs across operating systems.

   The videos in this course use Tex Live on a Mac, with the TeXShop editor. Thus, if you are using Windows, your interface may look different, but the LaTeX you write will be the same. In summary, your LaTeX environment will include 2 things:

1. A TeX distribution (this is the actual typesetting engine)

2. A LaTeX editor (this is the application you will use to create your documents)

2   Setting up on Mac

There are many ways to set up a LaTeX environment on your Mac. An easy all-in-one solution is provided by MacTeX. Follow these steps to set up your LaTeX environment:

1. Browse to the MacTeX website: `http://tug.org/mactex/`

2. Download the current distribution by clicking on the link 'MacTeX.pkg'

   - If you are using a version of Mac prior to 10.5 (Leopard), find the link that says "Click Here If You Are Running Mac OS 10.3 or 10.4", and follow that to download and unzip MacTeX-2010

3. Double click on your MacTeX.pkg file to install. Unless you know what you are doing, use the default settings as you go through the installation wizard.

4. After completing the installation, you should have TeX Live and TeXShop installed. TeX Live is the TeX system, and TeXShop is an editor you can use to create LaTeX documents.

5. Find TeXShop in your Applications folder, and click on it to start TeXing.

3   Setting up on Windows

There are many ways to set up a LaTeX environment on Windows. TeX Live and MiKTex are popular TeX distributions, and there are several options for LaTeX editors. This instructions follow an easy all-in-one installation solution.

1. Browse to the MiKTeX website: `http://miktex.org/download`

2. Download the Basic MiKTeX installer.

3. Double click on the file to start the installation. Unless you know what you are doing, use the default settings as you go through the installation wizard.

4. Run the MiKTeX update wizard (Start - Programs - MiKTeX - Update).

5. After completing the installation, you should have MiKTeX and TeXworks installed. MiKTeX the TeX system, and TeXworks is an editor you can use to create LaTeX documents.

6. Find TeXworks in your Start menu, and click on it to start T_EXing.

4   Setting up on Linux

If you are using Linux, your OS likely already has a TeX system installed. Search for Tex Live (newer) or teTeX. If you don't find it, install Tex Live using the customary method on your flavor of Linux, typically one of:

- apt-get install texlive

- yum install texlive

Next, you will want a LaTeX editor. If you use emacs, be sure you have the AUCTeX package installed. Other Linux distributions have specialized editors, such as Kile on KDE. Search the web for a LaTeX editor supported by your Linux distribution. Install your preferred editor, and launch to start T_EXing.