Using tlmgr with MacTEX 2008

1 Introduction

TeX Live 2008 has a new command line application, called tlmgr, that will automatically update the TeX Live distribution with new packages, etc., as time goes on. Unfortunately, in the initial release of TeX Live 2008 (and therefore MacTeX 2008), and on the TUG DVD, tlmgr needs to be updated before using it to update the system. There will be an updated release of MacTeX where tlmgr will be updated already. This short article¹ is meant as an interim solution for those who have installed the initial MacTeX 2008 or BasicTeX 2008 release or have installed from the DVD.

2 Initial Setup and Updating tlmgr

Setting up the the tlmgr update system is a two step process. First you have to set up a preference that tells tlmgr where to find the files to update in future runs and then update tlmgr.

2.1 Setting the Server Preference

Tlmgr retrieves updates from one of the many CTAN servers. To avoid overloading a particular server tlmgr is usually configured to use a "mirror link," mirror.ctan.org, which parcels out requests to different servers. The usual command for setting the link preference is

sudo tlmgr option location http://mirror.ctan.org/systems/texlive/tlnet/2008

in the Terminal application and then enter your administrator password at the prompt. But please keep reading...

Unfortunately, the original version of tlmgr might contact one site to begin updating a particular package, and then contact a different site to complete the updating process. If these sites are not in sync, the update could fail, leaving a user's system in an inconsistent state. This bug is fixed in the updated tlmgr. It is necessary to work around this problem in the initial upgrade to the new tlmgr so you should temporarily issue a command which chooses a particular server rather than the mirror link. Replace mirror.ctan.org in the command above by one of the servers on the list found at http://www.tug.org/mactex/mirrorpage.html. E.g., in the USA you might replace mirror.ctan.org in the command above by ctan.math.utah.edu so the command becomes

sudo tlmgr option location http://ctan.math.utah.edu/systems/texlive/tlnet/2008 and enter your administrator password when prompted.

Once tlmgr is updated it is advisable to return to the "mirror link" using the command in the first paragraph above.

¹Based on the contents of http://www.tug.org/texlive/tlmgr.html.

²This is a list of servers that seem to be updated fairly regularly. Don't click on the link (which will start a download of MacTpX), copy its name from the list.

2.2 Updating tlmgr

Then you must update tlmgr: run

```
sudo tlmgr update bin-texlive texlive.infra
```

again in the Terminal application; you may have to enter your administrator password again. This downloads and installs the latest version of tlmgr among other things.

Once the above commands have been run you will be able to use tlmgr to update your MacTeX 2008 system.

2.3 In Case of Disaster

If all of the above doesn't work you can force a download and install of tlmgr using the shell script update-tlmgr-latest.sh. After downloading the script, put it on your Desktop and run the commands

```
cd ~/Desktop
chmod a+x update-tlmgr-latest.sh
sudo ./update-tlmgr-latest.sh
```

in Terminal entering your administrator password when prompted. You may get more prompts generated by update-tlmgr-latest.sh; I haven't had to go this far.

3 Updating MacTrX 2008 Using tlmgr

To do a general update of your MacTeX 2008 you need only run

```
sudo tlmgr update --all
```

in the Terminal application and enter your administrator password. To see what will be updated before actually updating you should run

```
tlmgr update --list
```

where you don't need to use sudo since tlmgr will not be writing to the T_FX distribution.

To get more information on all the other things you can do with tlmgr run

```
texdoc tlmgr
```

in the Terminal application. This should bring up a pdf copy of the the tlmgr manual pages in Preview which you can then save to your Desktop.