

Literature Repo User Guide

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This guide explains how to use the group's literature repository together with BibDesk. BibDesk is a free mac program that is a front end for a bibtex .bib file. It allows GUI-based manipulation of the database, easy importation of new references, and most importantly linking to a PDF of the article itself.

1 ssh key

First you need to create an ssh key that will identify you on the server. That way you don't have to type a password every time you want to sync your repo with the server. Open up a terminal and go to your home directory

```
cd ~
```

See if you have an ssh directory already:

```
ls .ssh
```

If you don't have the directory yet (you will see something like `ls: .ssh: No such file or directory`) then create it:

```
mkdir .ssh  
chmod 700 .ssh
```

Now change into the ssh directory and look around you:

```
cd .ssh  
ls
```

If you happen to see two files names `id_rsa` and `id_rsa.pub` then skip the following skip. Otherwise create a key:

```
ssh-keygen -f id_rsa -t rsa -q
```

Now add the key to the ssh agent:

```
ssh-add id_rsa
```

The next step is to email me (gvoet@ucsd.edu) the contents of id_rsa.pub. You could for example type

```
less id_rsa.pub
```

and then copy and paste the output to an email. I will copy your public key to the server.

2 git

If you are working on a Mac your system should come with git pre-installed. Now set your name and email address, this will later identify you when you push your changes to the server. Run the two following commands after you modify them:

```
git config --global user.name "Your Name"
git config --global user.email email@example.com
```

This should have created a file named .gitconfig in your home directory. Open .gitconfig with your editor of choice and add the following settings as new lines after your name and email:

```
[push]
    default = simple
[alias]
    ca = !sh -c 'git add -A && git commit -m \"$1\" && git push' -
[core]
    precomposeunicode = false
```

Now go to the directory where you want the literature repo to reside. It will come within it's own folder, so no need to create one extra directory level. This means if you go to your home directory now, the repo will be at /Users/yourhome/wavebib/. Choose any place you like! Now you are ready to clone the repository. This may take a while as it will copy a ton of pdfs that are already in there. Note that your ssh key has to be on the server for this to work!

```
git clone gituser@kipapa.ucsd.edu:/Users/gituser/repo/wavebib/
```

3 BibDesk

Once the repository has downloaded you can start right away. To get set up, open the main.bib file in BibDesk. You'll be able to browse all the articles in the main.bib database (thousands of articles). Many are linked to a PDF, which you should just be able to click on. To use the database most effectively and easily, make three changes in BibDesk preferences:

1. In 'General', set BibDesk to open the main.bib file upon starting.
2. Under 'Autofile' select 'File papers relative to each document' and check 'File papers automatically'. For 'local file format' select Custom and enter the following string (by clicking 'advanced'):

`articles/%a1/%a1%Y%u0.pdf`

Fig. 1 summarizes the settings in 'Autofile'.

3. Unfortunately, BibDesk can't generate the cite keys the way we want them, so under 'Cite Key Format' leave 'Autogenerate' unchecked.

Now, you can easily import new articles by simply dragging the PDF onto the reference in BibDesk. BibDesk will automatically file the paper. The format string tells it to store the articles in a folder by the author's last name, and to name them as (e.g.) Zhang2012a.pdf. If you add new references, please follow the convention we use for the cite key; e.g. zhange-tal12, alfordgregg01a, etc.

4 TexShop

Using BibDesk is really easy in TexShop. Make sure to check 'BibDeskCompletions' in the main preference pane. Once you have AutoCompletion setup, you can simply type part of the cite key in TexShop and hit Esc, and it will fill in the key from the database for you, letting you choose from a pulldown menu if there are multiples.

5 Making Changes

If this is going to be useful, we ALL have to have good practices for updating our changes. You 'check in' and 'check out' versions from the repository with the commands below. If you run into trouble, contact me (Gunnar) and we'll figure out how to merge different versions or how to get rid of unwanted changes. Here are the steps.

1. Before making any changes, make sure you are current by first closing main.bib or quitting BibDesk, and (from the terminal window on your computer from the directory in which you have stored the database) typing

`git pull`

This will make sure you have the latest version from the server.

2. Make your changes in the .bib file, add pdfs... Make sure you save the .bib file when you are done! You can then review your changes by typing

```
git status
```

3. Now you push your changes to the server using the alias you created earlier in your .gitconfig-file:

```
git ca "your short comment"
```

Please provide something meaningful in the comment, like the cite key of the entry you just added. Don't worry about it too much though if you just added a lot. Also, your name gets written to the log automatically, so no need to add your name to the comment. If everything is running smoothly your updates should now be up on the server and available to all other users.

Note that the alias 'git ca' is just a short form of the more general git workflow for adding changes and new files to the repository. You could also add your changes with the following commands that 1) add all changes 2) commit them and 3) push them to the server:

```
git add -A
git commit -m "your comment"
git push
```

6 Tips & Tricks

- On google scholar, if you go to Scholar preferences/Bibliography manager, you can select "Show links to import citations into Bibtex." Then you can just copy the citation info and paste it from the clipboard into BibDesk.
- To look up journal abbreviations (it's nice to have them consistent) go to <http://woodward.library.ubc.ca/research-help/journal-abbreviations/>
- You can link main.bib to your local texmf settings, that way you can include the file with the simple command

```
\bibliography{main}
```

in any latex file. To link the file, type

```
ln -s /your/path/to/your/main.bib ~/Library/texmf/bibtex/bib/main.bib
```

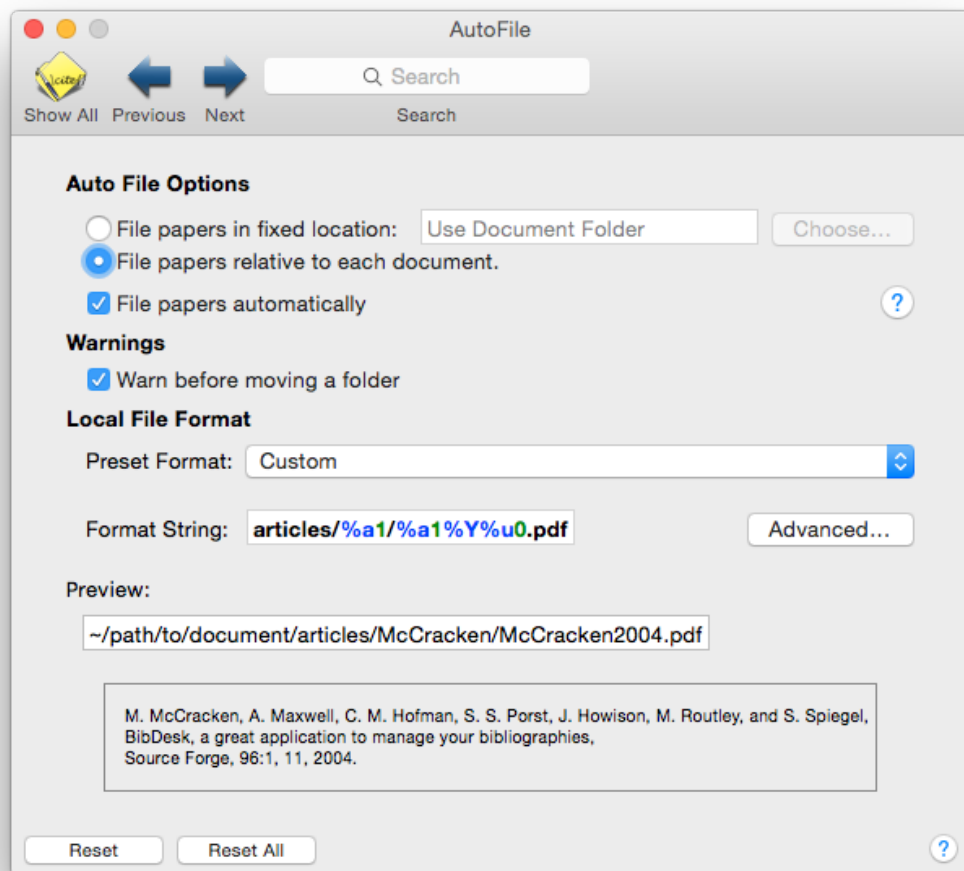


Figure 1: BibDesk AutoFile settings

THIS IS GIT. IT TRACKS COLLABORATIVE WORK
ON PROJECTS THROUGH A BEAUTIFUL
DISTRIBUTED GRAPH THEORY TREE MODEL.

COOL. HOW DO WE USE IT?

NO IDEA. JUST MEMORIZE THESE SHELL
COMMANDS AND TYPE THEM TO SYNC UP.
IF YOU GET ERRORS, SAVE YOUR WORK
ELSEWHERE, DELETE THE PROJECT,
AND DOWNLOAD A FRESH COPY.

