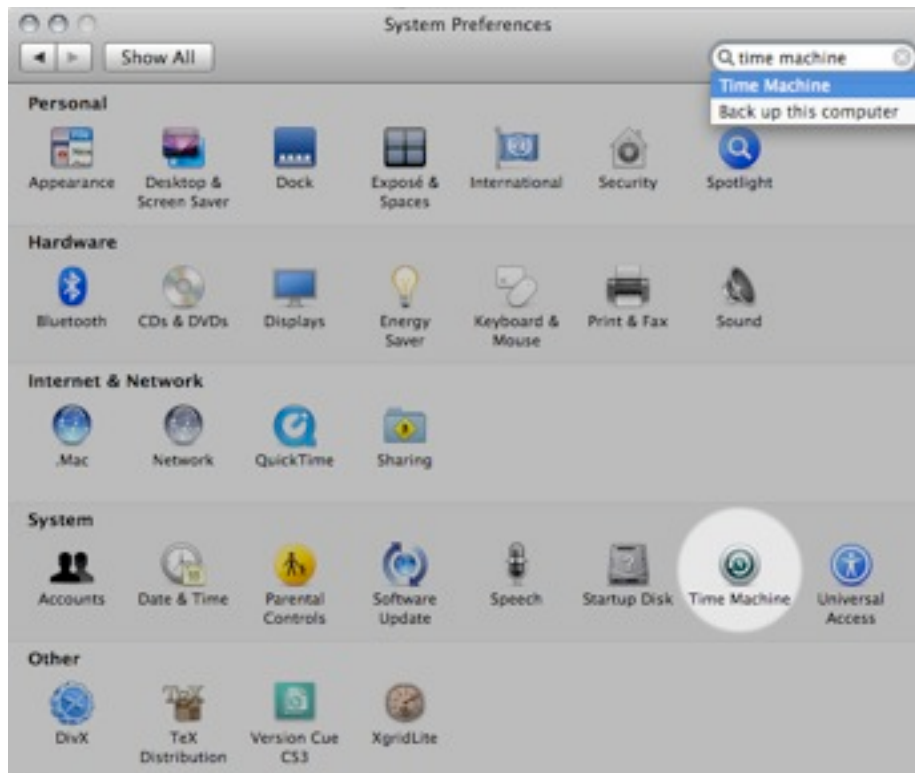


# Howto: Back up your data

## 1. Time Machine

Go to System Preferences and open the Time Machine preference pane:



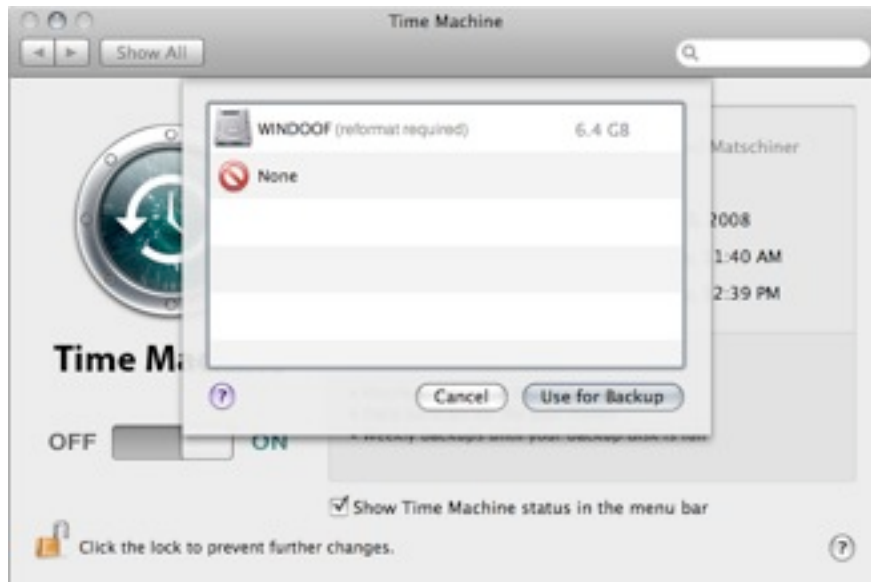
The following opens:



Set the switch to 'ON'.

Click on 'Change Disk...'

You'll see the this:



The only hard drive that shows up is your Boot Camp Windows partition, if you have one. Evo-lutra is not there, because Apple does not support Time Machine running over the network. Click 'Cancel' for now.

## 2. Hacking Time Machine

Open the Terminal and type:

```
defaults write com.apple.systempreferences TMShowUnsupportedNetworkVolumes 1
```

That's it. Close the Terminal.

### 3. Connect to evo-lutra, and to evo-parus

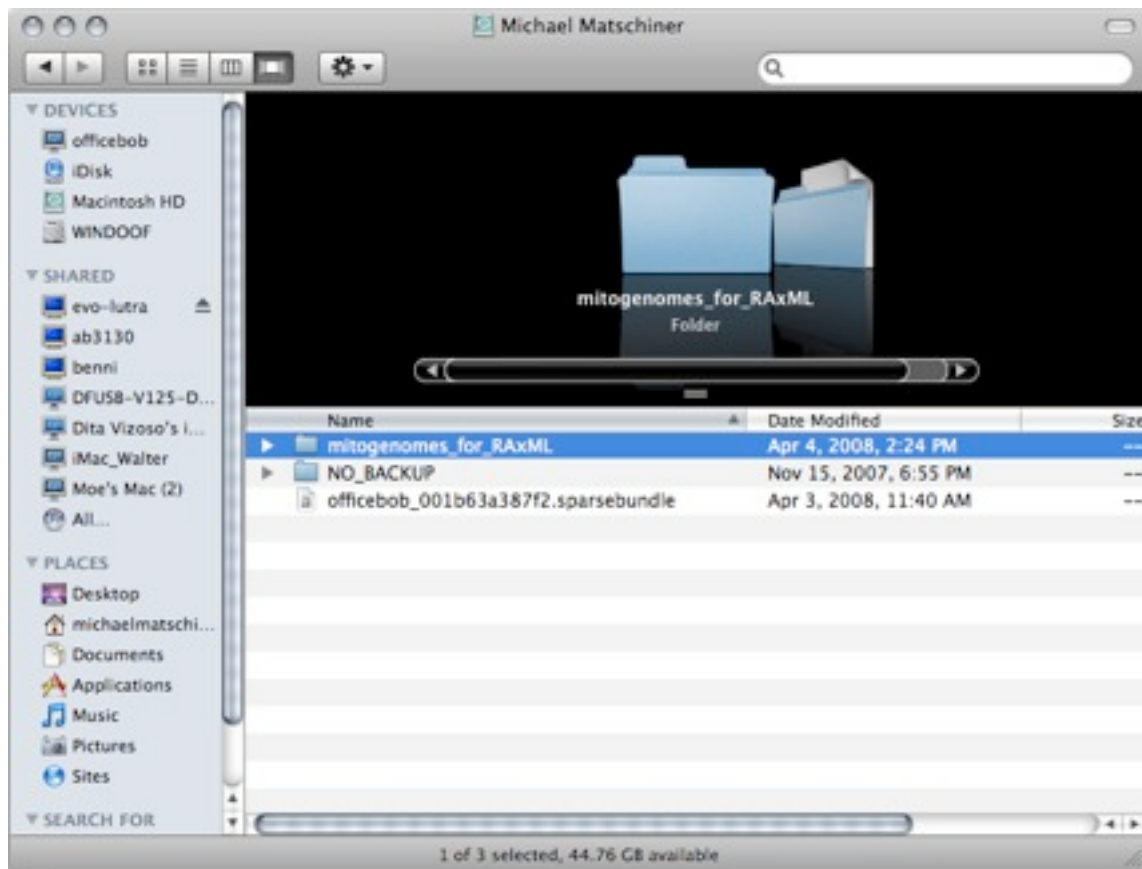
Go to the Finder and click 'All...' in the left side panel under 'Shared':



Double click evo-lutra. This way you will be connected as a guest, and you'll be able to see all home directories on evo-lutra, but you won't be able to access them. Therefore, click 'Connect as...' in the upper right corner of the window. You'll see an authentication prompt. Use the user name and the password that Lukas has send to you. (Connect as: 'Registered User')



You should then be able to access your home directory on evo-lutra, and the connection to evo-lutra should be indicated by the 'Eject' button (⏏) in the left side panel of the Finder:

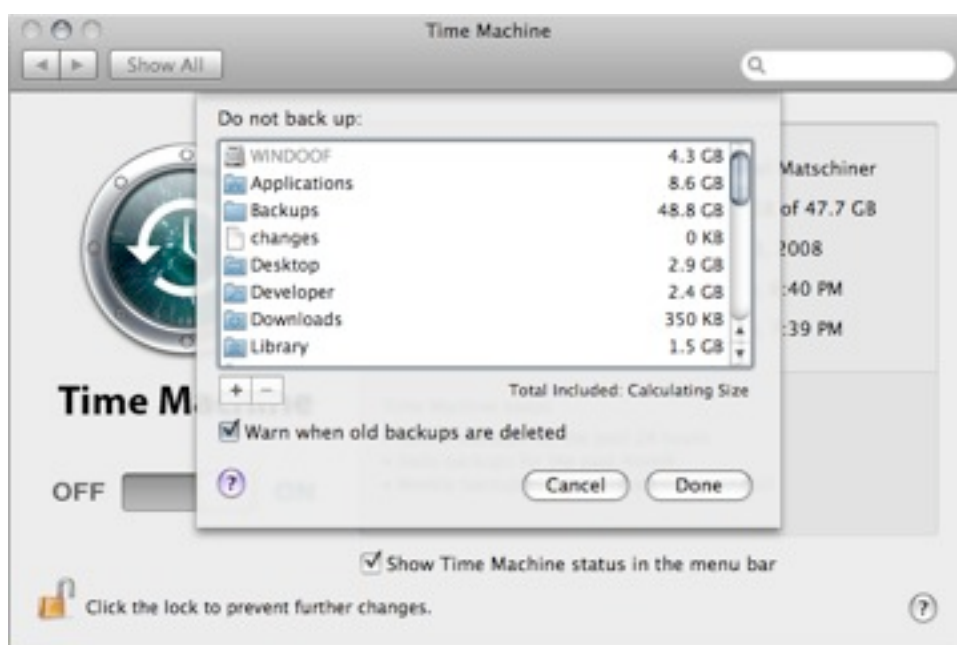


Repeat the same steps connecting to evo-parus (my computer), using 'walter lab' as login, and our standard password. Click on the folder 'walterlab' and evo-parus should show up in the left side panel with the 'Eject' button just below evo-lutra. Now you have connected to both evo-lutra and evo-parus. Let's get back to Time Machine.

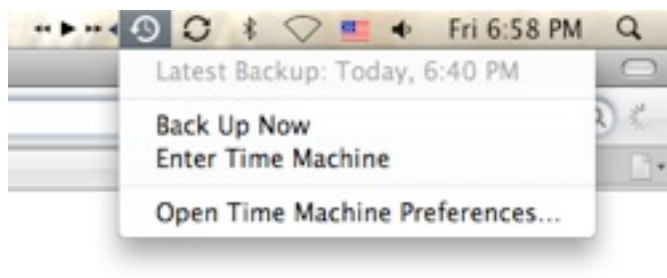
## 4. Hacking Time Machine, again

Open the Time Machine preference panel again. Click on 'Change disk...' again. You should now see not only the Boot Camp Windows partitions (if you have one), but also your home directories on evo-lutra and evo-parus. Now, what we would like to do is just to choose evo-lutra for the backups, and we're done. Unfortunately, this is not possible, because Time Machine does not easily recognize evo-lutra, probably because evo-lutra is a Linux hard drive. Instead you should for now choose evo-parus as your backup hard drive.

Furthermore, please click 'Options...' to tell Time Machine which files and folders NOT to back up, otherwise, you'll quickly exceed your backup space (50 GB on evo-lutra, much less on evo-parus). Click on the '+' symbol to choose all the folders that you do not wish to back up. For now, you should exclude almost all folders (except your Documents folder, or part of it), so that the actual backup size is below 2 GB or so (as calculated for 'Total included', but the calculation may take some time).



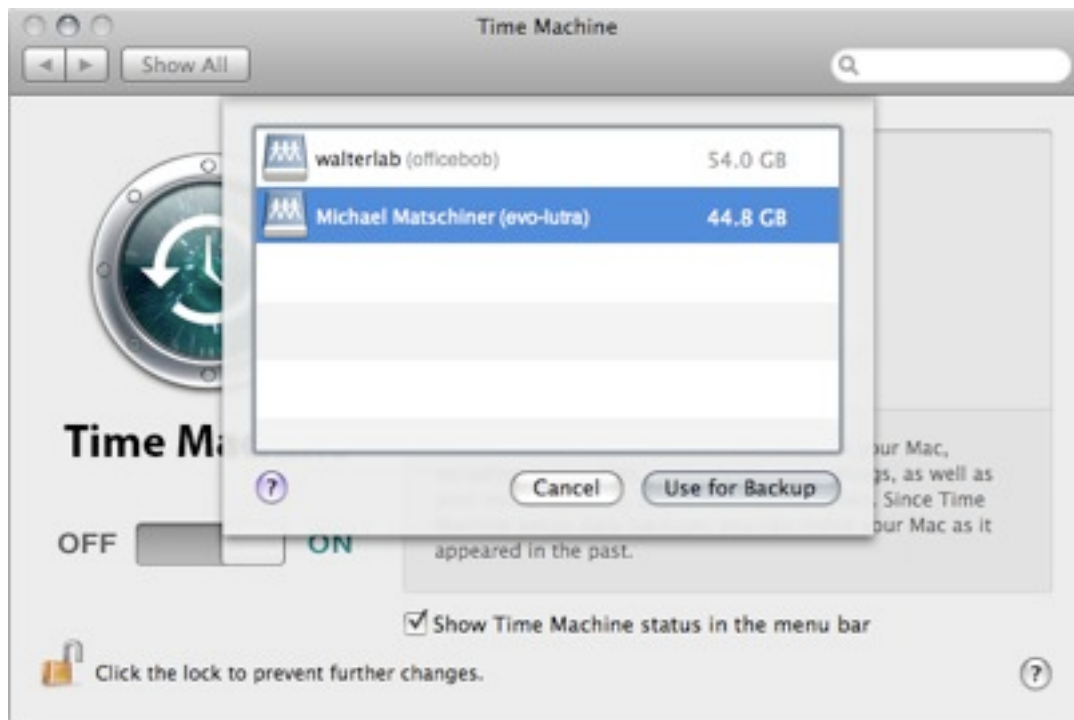
Following this, start a backup to evo-parus by clicking on the Time Machine icon in the menu bar and choosing 'Back Up Now'. **If you experience errors doing this, please let me know. In this case, we'll have to backup to a computer that is connected via the AirPort first.**



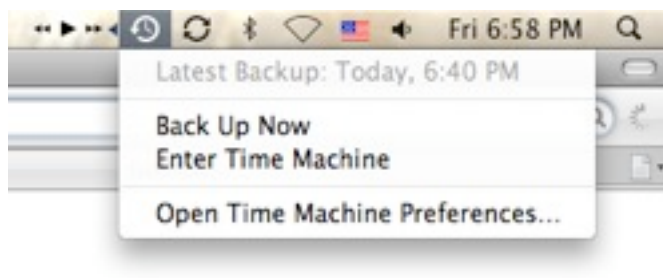
After this is done, Time Machine will have created a backup file on the walterlab folder of evo-parus. This file will be named 'yourcomputername\_somenumbersandletters.sparsebundle'. You have now installed a backup to my computer, evo-parus. However, we want to direct the backups to evo-lutra, and that's what we're gonna do now.

Use two Finder windows to open both the home directory of the 'walterlab' account on evo-parus, and your personal account's home directory on evo-lutra. Drag and drop your backup file ('yourcomputername\_somenumbersandletters.sparsebundle') from 'walterlab' on evo-parus to your home directory on evo-lutra.

Now go back to the Time Machine preference pane. Click 'Change Disk...' again. Choose your directory on evo-lutra:

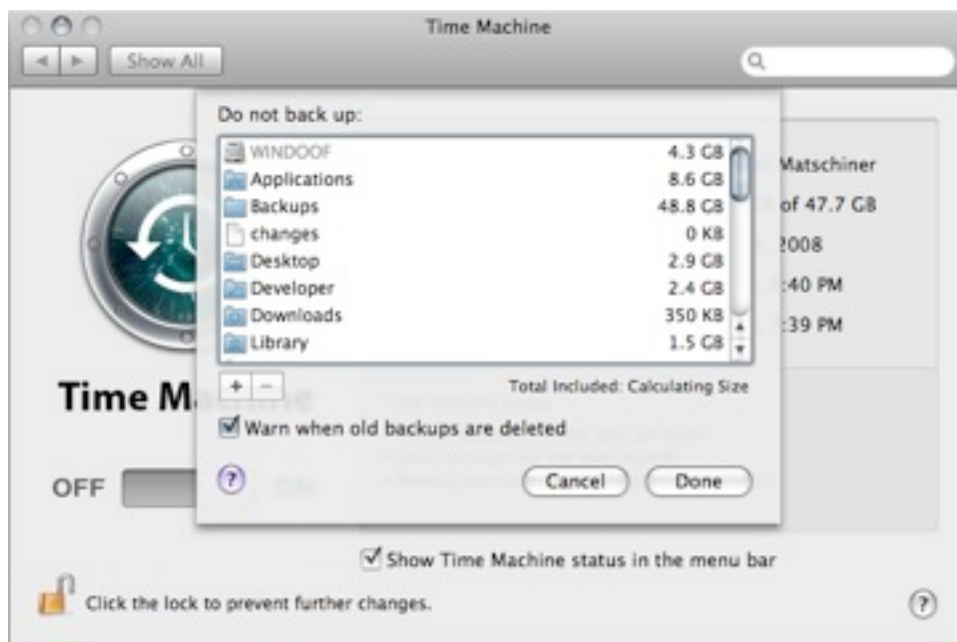


Do another backup by clicking the Time Machine icon in the menu bar and choosing 'Back Up Now' as you did before:



This backup will now be done on evo-lutra, as will all future backups. Please, as a last step go back to your directory on evo-parus, using the Finder, and delete your former backup file 'yourcomputername\_somenumbersandletters.sparsebundle', if you haven't done so before. Now, Time Machine should be set up to do backups on evo-lutra. If you want to, go back to the Time Machine preference pane and remove

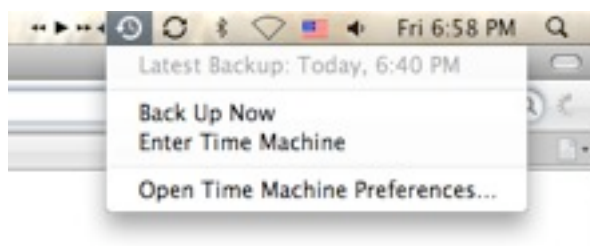
more folders from the list of folders that should NOT be backed up:



However, remember, that your share on evo-lutra holds 50 GB, and that Time Machine needs more than the actual total size of the files that you want to back up, because Time Machine keeps record not only of your current files, but also of the file version you had an hour, a day, a week, or a month ago, so that you will always be able to retrieve many different versions of every single file. I recommend you to choose 10-20 GB of your most important files to be backed up (*i.e.* that you exclude all the other files in the 'Do not back up' panel of Time Machine). Time Machine will automatically fill up the rest of your 50 GB share on evo-lutra, as older backup versions accumulate. Do not touch the .sparsebundle file from now on anymore, Time Machine knows best how to handle it. If you feel like you need more space for your backups, then tell Lukas, and he'll see what he can do.

## 5. Testing Time Machine

As written above, Apple does not support Time Machine backups over networks, and neither guarantees that you will actually be able to use your backups. I did a few tests, and in my cases, it worked. However, if you're sceptic about it (and also if you're not), I encourage you to test Time Machine. Create test files in one of the folder that Time Machine backs up. Start a backup. Change the test file. And then enter Time Machine via the menu bar icon...



...and try to retrieve the old file version that you had backed up before. You definitely have to contact me if you experience problems doing so (or if you run into any other problems while following this protocol...).