

# Familyties User Guide

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<https://github.com/yogischogi/familyties/>

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## 1 Introduction

Familyties is a program to analyse Family Tree's Family Finder matches files. You can use it to

1. determine how many of your cousins have ancestry from which country.
2. find out how your family is connected to other parts of the world.

3. perform detailed analysis on parts of your family specified by surname or location.
4. discover ethnic origins of your family and yourself.
5. see which surnames are most frequent in your family.

## 2 Command Line Options

Familyties is a command line program. It is invoked by

```
familyties [options] [<Family Finder matches file>]
```

Options may be given in arbitrary order.

- help** Prints available program options.
- details** Performs detailed analysis for locations and surnames.
- min** <min> Prints only locations and names that occur at least <min> times.
- cluster** <cluster> Performs cluster analysis on the cousins who's ancestral surnames or locations match <cluster>. Accepts multiple clusters separated by commas.
- exclude** <exclude> Excludes cousins who's ancestral surnames or locations match <exclude>. Accepts multiple excludes separated by commas.
- csvout** <filename> Writes a table of locations in CSV format to a file. Useful to create a heat map.
- unite** <file1,file2,...> Merges input files separated by commas.
- intersect** <file1,file2,...> Intersects input files separated by commas.
- intersectbynames** <file1,file2,...> Intersects input files separated by commas.
- intersectbylocations** <file1,file2,...> Intersects input files separated by commas.

## 3 Installation

### 3.1 Windows

For Windows there is a precompiled binary available but it may not always be the latest version.

1. [Download the program](#) and unzip it into the same folder as your Family Finder results.
2. Open a command line interpreter and go to the previous directory. You can involve the familyties program directly. It is a simple command and does not change your Windows installation.

### 3.2 Linux Mint

1. Make sure that the Go programming language is installed. You can install it by typing  
`sudo apt-get install golang`
2. Read the Go [Getting Started](#) guide. Make sure to set your *GOPATH* variable and include it in your *PATH* so that Go programs can be found.
3. Fetch the familyties program with  
`go get github.com/yogischogi/familyties`
4. Install the program with  
`go install github.com/yogischogi/familyties`

### 3.3 FreeBSD, Mac OS X

1. Read the Go [Getting Started](#) guide and install the Go programming language. Make sure to set your *GOPATH* variable and include it in your *PATH* so that Go programs can be found.
2. Fetch the familyties program with  
`go get github.com/yogischogi/familyties`
3. Install the program with  
`go install github.com/yogischogi/familyties`

## 4 First Usage

1. Download your Family Finder matches file from Family Tree DNA in CSV (Comma Separated Values) format. You will find it at *Family Finder - Matches - Download Matches, CSV (bottom right of the page)*
2. Open a command line interpreter and switch to the directory where your matches file resides.
3. Issue a command, for example  
`familyties N123456.Family_Finder_Matches_20140920.csv`  
You do not need to type in the full filename. Just start typing and hit the TAB key for auto completion.

## 5 How to Create a Heat Map

### My Familie's Ancestral Locations

OPENHEATMAP

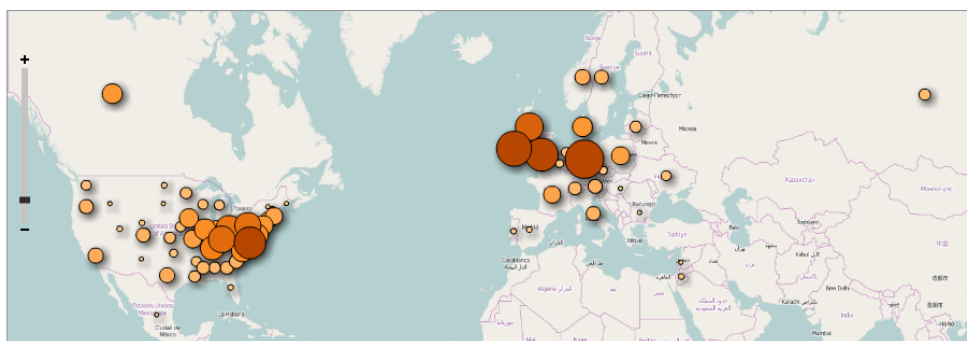


Figure 1: Ancestral locations of my family. It is hard to believe that this all happened within the relatively short time period of a genealogical time frame (about 400 years).

It is easy to create a heat map of your familie's ancestral locations by saving the results to a file and upload them to [OpenHeatMap](http://www.openheatmap.com). Here is how it is done:

1. Save the results to a file as Comma Separated Values:  
`familyties -csvout="Locations.csv" N12345.Family_Finder_Matches.csv`
2. Open your web browser and go to <http://www.openheatmap.com>.
  - (a) Click on *Create your map*.

- (b) *Excel or CSV file.*
  - (c) *Upload* your results file, in this example *Locations.csv*.
  - (d) *View your map* and adjust the settings until you like it.
  - (e) *Save & view*
3. You are done! You can share your map via social networks or take a screenshot of it.

## 6 Examples

1. Show how many of your cousins have ancestry from which country:  
`familyties N123456.Family_Finder_Matches_20140920.csv`
2. Save the results into the file *family.txt*:  
`familyties N123456.Family_Finder_Matches_20140920.csv`  
`> family.txt`
3. Show also the names of your cousins' ancestors:  
`familyties -details`  
`N123456.Family_Finder_Matches_20140920.csv`
4. Show only ancestral names that occur at least five times:  
`familyties -details -min=5`  
`N123456.Family_Finder_Matches_20140920.csv`
5. Show how many of your cousins have ancestry from which country, but exclude all who have ancestry from the USA:  
`familyties -exclude usa N123456.Family_Finder_Matches_20140920.csv`  
 Because of the large migrations from Europe to the USA the results are often significantly distorted if you want to find out something about your European ancestry only. In this case the exclude option is very useful.

## 7 Example Session

I want to get a first overview and start by typing:

```
familyties N123456.Family_Finder_Matches_20140920.csv
```

This yields:

--- Quick search for predefined countries ---

Number of cousins: Ancestry from:

59 USA  
42 Germany  
28 England  
28 Ireland  
21 Scotland  
10 France  
8 Denmark  
8 Poland  
7 Norway

From the results you might guess that I am either from the USA or Germany (I am German). 59 of my cousins have ancestry from the USA. I bet most of them are still there. I take a closer look by examining the USA cluster in detail and write the result into a file called *results.txt*:

```
familyties -details -cluster=USA  
N123456_Family_Finder_Matches_20140920.csv > results.txt
```

--- Detailed analysis of ancestral locations ---

Number of cousins: Ancestry from:

51 usa  
22 germany  
19 virginia  
18 north carolina

Now I know that many of them have ancestors from Virginia and North Carolina. I examine the Virginia cluster in detail because I am interested in the surnames:

```
familyties -details -cluster=Virginia  
N123456_Family_Finder_Matches_20140920.csv > results.txt
```

--- Detailed analysis of ancestral surnames ---

Number of cousins: Ancestral surname:

7 white  
6 smith  
6 jones

As expected the very common names come first (I left out the rest). Usually you would look for a high occurrence of less common names. This can yield some very detailed information sometimes.

Of course there is still much more information hidden in my results but I think this is enough to get you started.

## 8 How You Can Help

1. Provide ancestral information about yourself. Even if you do not have much information about your ancestors or think it is not important. Your cousins might be grateful for every piece of information. All these tiny pieces together show the whole family story.
2. Provide country names in English. A country usually has different names in different languages. Do not expect your cousins to speak the same language as yourself. So it is a good idea to provide an English name. You can also provide the native spelling and separate both names by commas.
3. Do not use fancy characters like slashes and braces. Use commas to separate different spellings of a name or towns and countries. Slashes and braces are used in the Family Finder matches file to separate entries. If you use such characters for your own purposes the format gets invalid and the familyties program can not parse the information correctly. Surnames and locations get mingled. You will see this sometimes when looking at the program's results.
4. Do not use abbreviations. Although the familyties program recognizes US state abbreviations your cousins might not. Generally it is a bad idea to use abbreviations. They often have different meanings in different countries.