Using gnverifier on MS Windows 10

Dmitry Mozzherin

2021-04-10

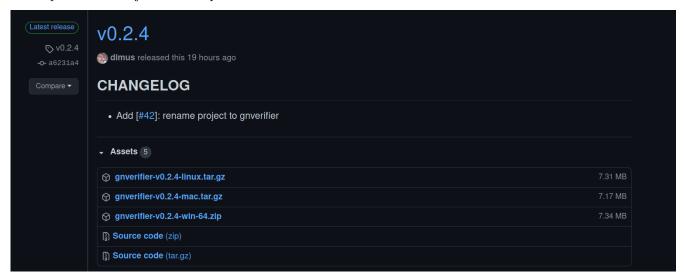
Contents

Installation	1
Usage	2
Making gnyerifier available from any folder	9

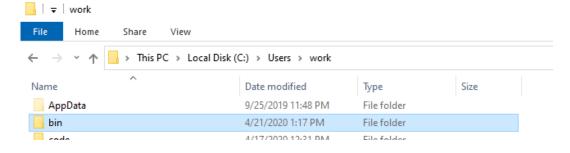
Installation

1. Go to https://github.com/gnames/gnverifier/releases/latest and download zip file for windows (it will have a version higher than on the picture).

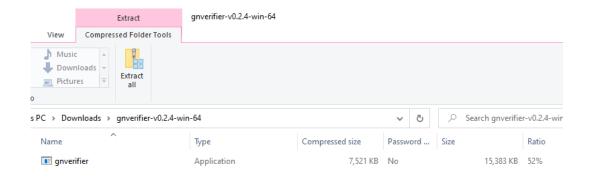
This zip file contains just one compressed executable file.



2. Create a folder called bin in your home folder (This is the folder with Downloads, Pictures, Desktop folders).



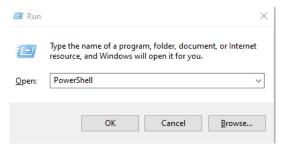
3. Unzip gnverifier.exe file from the zip and place it into the bin folder.



- 4. Create data folder in your home folder.
- 5. Open your data in Excel or Word and save scientific names, one per line or per row in a text file. Place this file into data folder. In our example we will call the file names.txt.

Usage

1. Push Win-R buttons on your keyboard to get a command prompt. Type there "PowerShell" and press the OK button.



2. Run gnfinder.

You will see the PowerShell terminal window. Type the following commands:

```
cd ~\bin
./gnverifier "Plantago major"
```

After a short delay, you should see a result printed on the screen as a comma-separated value output.

```
PS C:\Users\dimus\bin> ./gnverifier "Pardosa moesta" time="2021-04-02T07:54:32-07:00" level=info msg="Using config file: C:\\Users\\dimus\\.config\\gnverifier.yaml." Kind,MatchType,EditDistance,ScientificName,MatchedName,MatchedCanonical,TaxonId,CurrentName,Synonym,DataSourceId,DataSourceTitle,ClassificationPath,Error BestMatch,Exact,0,Pardosa moesta,"Pardosa moesta Banks, 1892",Pardosa moesta,3689429,"Pardosa moesta Banks, 1892",false,1,Catalogue of Life,Animalia|Arthropoda|Arachnida|Araneae|Lycosidae|Pardosa|Pardosa moesta,
```

For the next step, we will read data from a file and save the resulting output into a new file.

```
./gnverifier ..\data\names.txt > ..\data\names-col-map.csv
```

3. To map data from your checklist to, for example, Catalogue of Life data, type:

```
./gnverifier ..\data\names.txt -s 1 -o > ..\data\names-col-map.csv
```

This command will verify your names against data in Catalogue of Life and send resulting output to a new file. Now this file can be opened in Excel or Google Doc.

4. To learn more about options of gnverifier type:

```
./gnverifier --help
Windows PowerShell
                                                                                            PS C:\Users\dimus\bin> ./gnverifier --help
gnverifier uses a remote service to verify scientific names against
more than 100 biodiverisity data-sources.
  gnverifier [flags]
Flags:
  -f, --format string
                               Format of the output: "compact", "pretty", "csv".
                                 compact: compact JSON,
                                 pretty: pretty JSON,
                                 csv: CSV (DEFAULT) (default "csv")
  -h, --help
                               help for gnverifier
                               Number of jobs running in parallel. (default 4)
  -j, --jobs int
   -n, --name_field int
                               Set position of ScientificName field, the first field is 1. (d
efault 1)
   -p, --preferred_only
                               Ignores best match, returns only preferred results (if any).
                               IDs of important data-sources to verify against (ex "1,11").
   -s, --sources string
                                 If sources are set and there are matches to their data,
                                 such matches are returned in "preferred_result" results.
                                 To find IDs refer to "https://resolver.globalnames.org/data
sources".
                                 1 - Catalogue of Life
                                 3 - ITIS
                                 4 - NCBI
                                 9 - WoRMS
                                 11 - GBIF
                                 12 - Encyclopedia of Life
                                 167 - IPNI
                                 170 - Arctos
                                 172 - PaleoBioDB
```

You can also read about goverifier at its github site

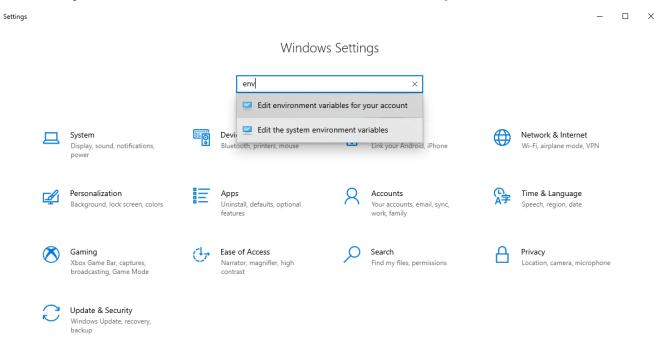
Making gnverifier available from any folder

You can always run ./gnverifier from the bin folder, but it is not very convenient. For example, you might like to run it from your data folder.

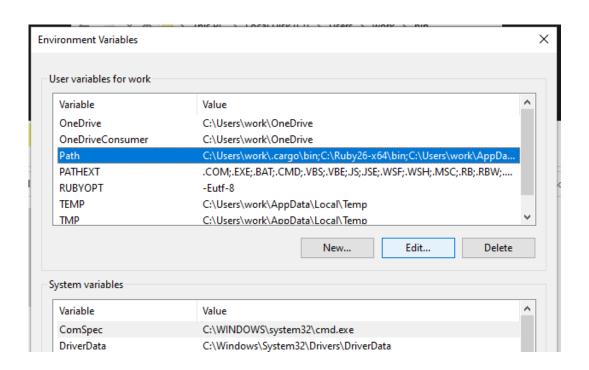
1. To make gnverifier available from any folder press the Win button and choose settings.



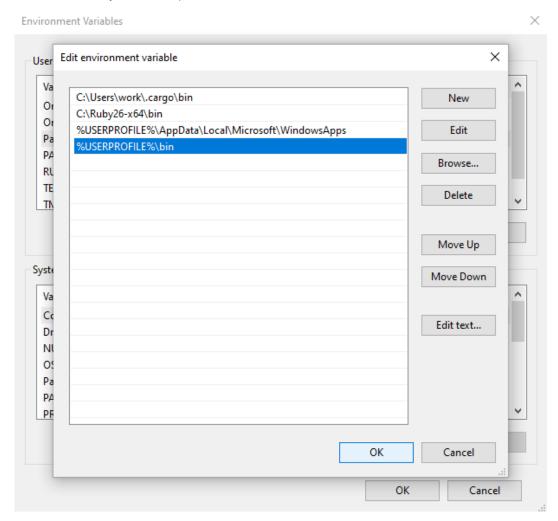
2. You will see settings windows with a search prompt in the center. Type "env" in the search prompt, and you will see a couple of returned results. Choose "Edit environment variables for your account".



3. Now we need to find Path variable in the first window, select it and push the "Edit" button



4. When you see Edit window, push the "New" button and type in either a full path to the bin folder (Something like C:\Users\my-user\bin) or %USERPROFILE%\bin



5. Now you can use goverifier from any folder in PowerShell or cmd terminal window.

cd ~\data
gnverifier names.txt