

Using **gnverify** on MS Windows 10

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2020-04-21 16:39:27

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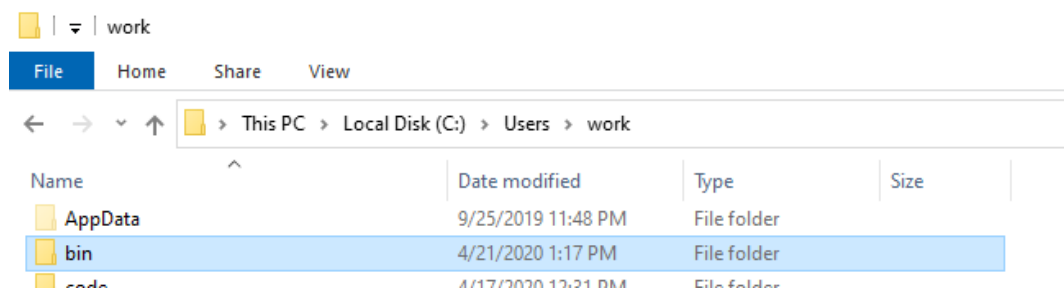
Installation

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

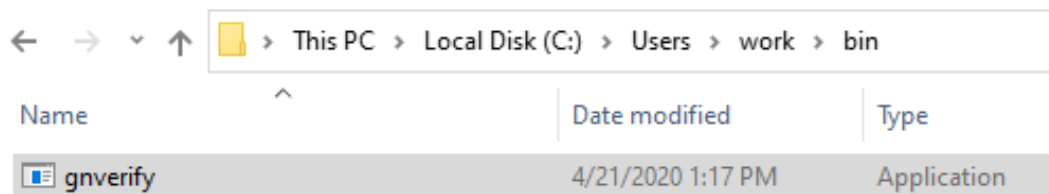
This zip file contains just one compressed executable file.



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



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

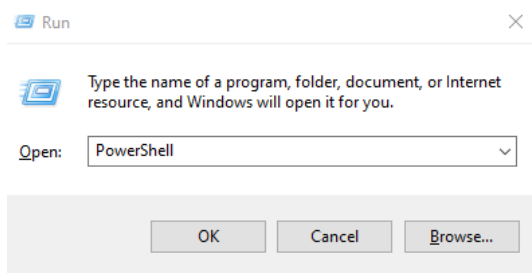


4. Create **data** folder in your home folder.
5. Open your data in Excel or Word and save scientific names, one per line or per row in a text file or tab-separated (TSV) file. Place this file into **data** folder. In our example, we will call the file **my-checklist.tsv**.

6. Note the position of the field that contains name-strings to verify. If you have it as the first/only field, no action is needed, but if it is the second, or the third etc. field in your tab-separated value, remember the number of the field. You will need to enter it for the **name_field** option.

Usage

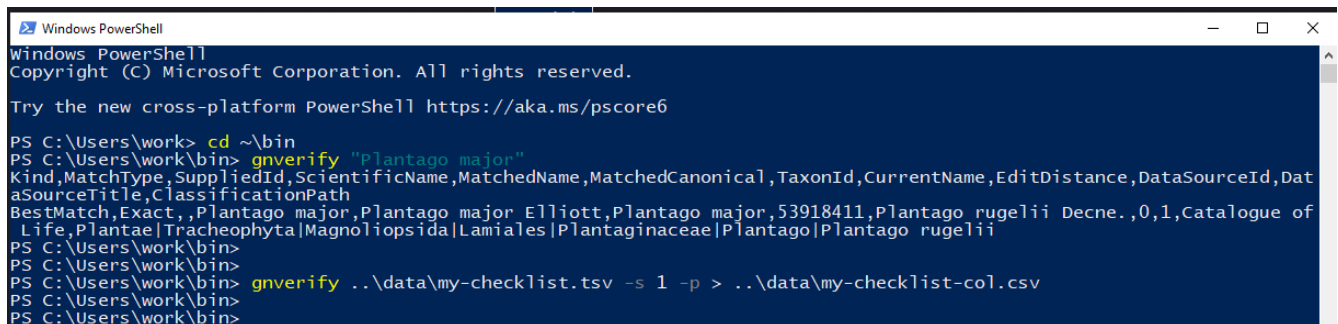
1. Push Win+R buttons on your keyboard to get a command prompt. Type there “PowerShell” and press the OK button.



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

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

After a short delay, you should see a result printed on the screen as a comma-separated value output. For the next step, we will read data from a file and save the resulting output into a new file.



```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/powershell

PS C:\Users\work> cd ~\bin
PS C:\Users\work\bin> gnverify "Plantago major"
Kind,MatchType,SuppliedId,ScientificName,MatchedName,MatchedCanonical,TaxonId,CurrentName,EditDistance,DataSourceId,Data
aSourceTitle,ClassificationPath
BestMatch,Exact,,Plantago major,Plantago major Elliott,Plantago major,53918411,Plantago rugelii Decne.,0,1,Catalogue of
Life,Plantae|Tracheophyta|Magnoliopsida|Lamiales|Plantaginaceae|Plantago|Plantago rugelii
PS C:\Users\work\bin>
PS C:\Users\work\bin>
PS C:\Users\work\bin> gnverify ..\data\my-checklist.tsv -s 1 -p > ..\data\my-checklist-col.csv
PS C:\Users\work\bin>
```

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

```
./gnverify ..\data\my-checklist.tsv -s 1 -p > ..\data\my-checklist-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.

If the name-string field, often labelled as **ScientificName** is not the first/only field in your data file, you have to enter the number for that field using **-name_field** option. For example, if you have **ScientificName** as the third field in your file, enter:

```
./gnverify ..\data\my-checklist.tsv -n 3 -s 1 -p > ..\data\my-checklist-col-map.csv
```

or

```
./gnverify ..\data\my-checklist.tsv --name_field=3 --sources=1
--preferred_only > ..\data\my-checklist-col-map.csv
```

4. To learn more about options of **gnverify** type

```
./gnverify --help
```

```
Windows PowerShell
PS C:\Users\work\bin> gnverify --help
gnverify 0.2.1
Verifies scientific names against many sources.

USAGE:
  gnverify.exe [FLAGS] [OPTIONS] [INPUT]

FLAGS:
  -h, --help           Prints help information
  -p, --preferred_only Ignores best match, returns only preferred results (if any).
  -V, --version        Prints version information

OPTIONS:
  -f, --format <format>      Format of the output: "compact", "pretty", "csv".
                             compact: compact JSON,
                             pretty: pretty JSON,
                             csv: CSV (DEFAULT)
  -s, --sources <sources>   IDs of important data-sources to verify against (ex "1,11").
                             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/resources".
                             1 - Catalogue of Life
                             3 - ITIS
                             4 - NCBI
                             9 - WORMS
                             11 - GBIF
                             12 - Encyclopedia of Life
                             167 - IPNI
                             170 - Arctos
                             172 - PaleoBiodB
                             181 - IRMNG

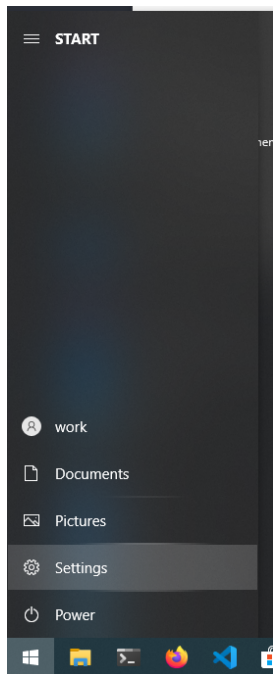
ARGS:
  <INPUT>      A name-string or file to verify
```

You can also read about gnverify at its github site

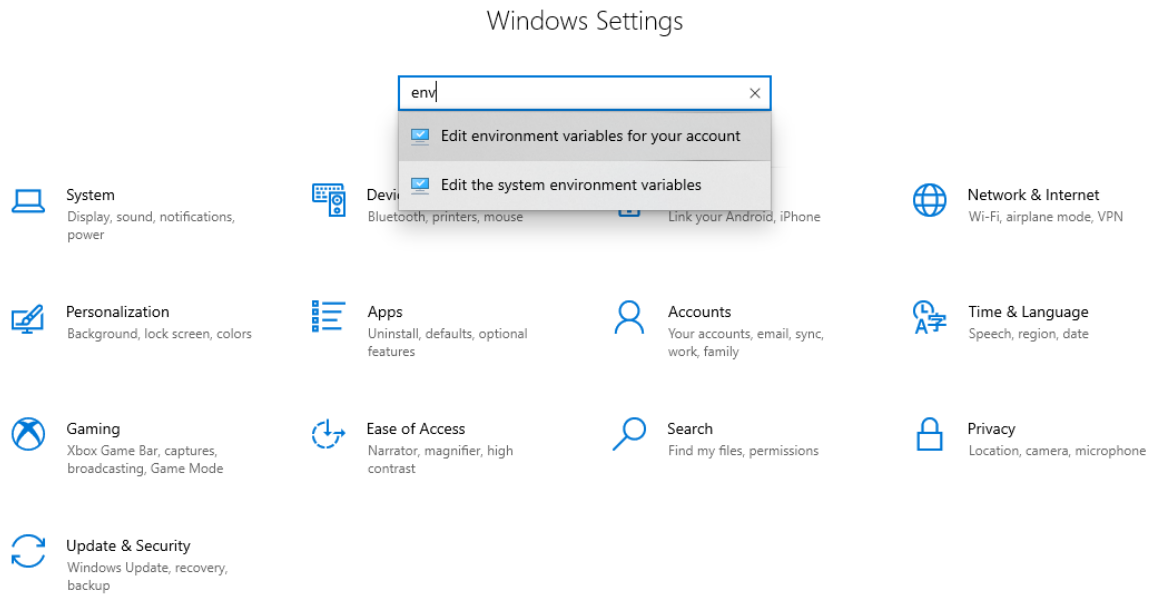
Making gnverify available from any folder

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

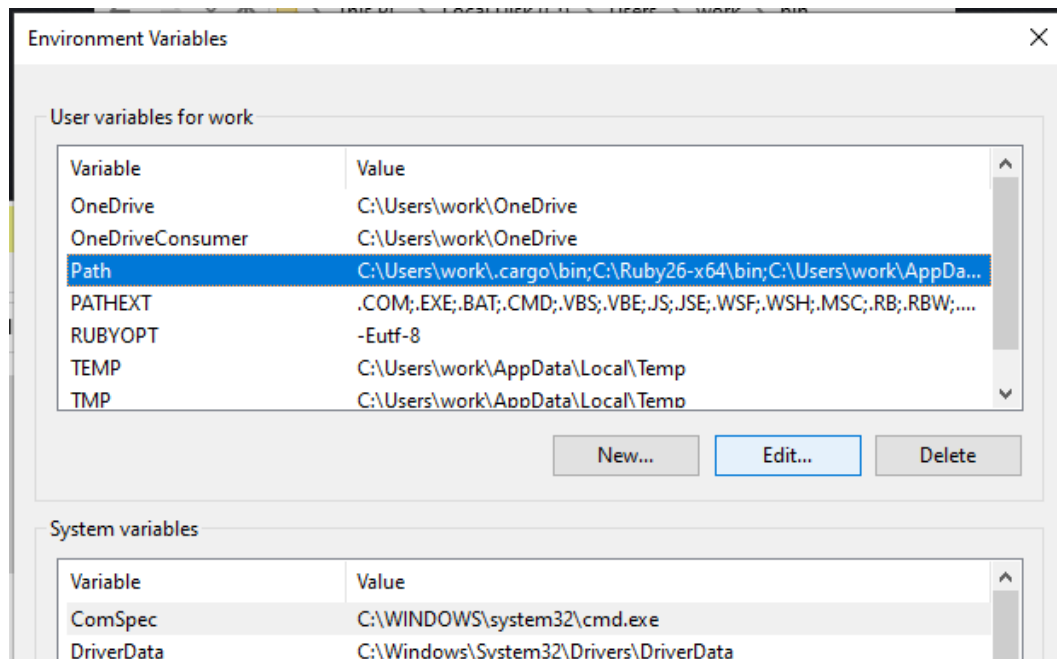
1. To make `gnverify` available from any folder press the Win button and choose settings.



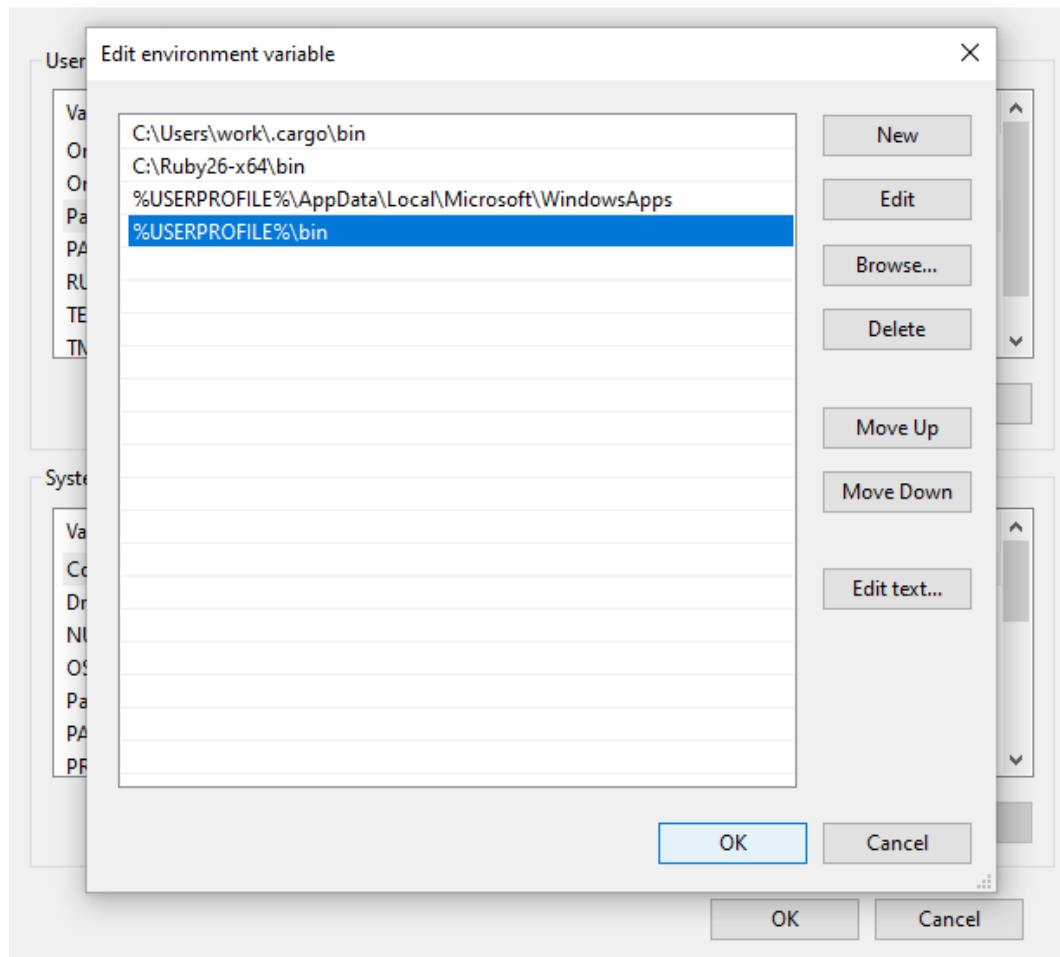
2. You will see settings windows with a search prompt in the center. Type “env” in the search prompt, and you will see a couple of returned results. Choose “Edit environment variables for your account”.



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 `gnverify` from any folder in PowerShell or cmd terminal window.

```
cd ~\data
gnverify my-checklist.tsv
```