blast2go
Command Line Tools

Blast2GO®
Command Line Tools

A flexible high-performance solution for your automatic functional annotation needs

Blast2GO® Command Line Tools allows you to integrate and automate your functional annotation task in a flexible way. Generate high-quality results in a reproducible way directly integrated into your data analysis workflows.

HIGH-PERFORMANCE

The command-line version of Blast2GO allows you to analyse large dataset on your performant computing servers will nearly no extra effort.

FLEXIBLE

Easily integrate your functional annotation tasks within your custom analysis pipeline and run different analysis scenarios in parallel.

AUTOMATIC DATA GENERATION

Generate all the statistics charts Blast2GO offers in a automatic fashion. This includes a summary report in PDF as well as images and text file formats.

REPRODUCIBILITY

Control the whole analysis with a simple configuration file. This allows you to set up different analysis strategies and reproduce the multiple scenario for one or various datasets.

SECURE

Run BLAST, InterProScan and the Blast2GO annotation offline on your own servers according to your security requirements. Take 100% control of data sources and versions you use throughout the analysis.

Run Blast2GO on your own servers and control all analysis steps from the command line.

MAIN COMMAND LINE FEATURES

- Automate your functional annotation
- Reproduce your results in a consistent manner
- Handle tens of thousand of sequences
- Design advanced annotation strategies
- Integrate Blast2GO into your existing analysis pipeline
- Work offline with your own databases
- Create your own local Blast2GO database
- Fast import of BLAST and InterProScan results
- Automatically generate PDF Reports
- Save all your results to specific project folders
- Work consistent and effective once you found the right settings for your analysis

IMPORTANT COMMAND LINE OPTIONS

- **Load Data Options**
  Annotation File (annot)
  BLAST results (xml)
  Blast2GO Projects (dat)
  Fasta Files (fasta)
  InterProScan results (xml)

- **Analysis Options**
  Gene Ontology Mapping and, Annotation,
  Annex, GoSlim

- **Result Options**
  Blast2GO Projects (dat)
  Project report (pdf)
  Gene Ontology Graphs
  Annotation file (annot)
  Summary Charts (png)
  Data export as text (txt)

- **Other Options**
  Set input and output folder
  Generation of a local Blast2GO Database

DEVELOPED BY

Blast2GO is developed and maintained by BioBam Bioinformatics which is internationally recognised for its expertise in functional annotation and genome analysis - and demonstrated by over 1000 citations. With our solutions we transform the process of complex data analysis into an attractive and interactive task for biologists reducing the gap between experimental work, bioinformatics analysis, and applied research.

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Blast2GO Command Line v0.9.0 build: 20131217

usage: blast2go_cli [-annex] [-annotation] [-help] [-loadannot <path>] [-loadips50 <path>] [-mapping] [-nodat]
       -creategodb <files>] [-loadblast <path>] [-createkeyfile] [-gogr
       <graphs>] [-goslim <name>] [-loadips48 <path>] [-createkeyfile] [-loa
       -loadfasta <path>]  [-projectfolder <path-to-folder>] [-statistics <charts>] [-tempfolder <path-to
       [-overwrite] [-projectfolder <path-to-folder>] [-statistics <charts>] [-tempfolder <path-to
       [-saveseqtable] [-showlicenseinfo]

options:
 -annex                           Run ANNEX
 -annotation                      Run GO annotation
 -creategodb <files>              Creates a GO database on a mysql server you specify,
                                  necessary files (4) will be downloaded automatically, you ca
                                  adjust the uris in the in the properties file.
                                  Create a file containing the workstation information, the file
                                  (information.b2g) will be located in the current folder
 -createkeyfile                   Comma separated list of desired graphs e.g. mf,bp,c
 -gograph <graphs>                Name of the desired *.obo file (goslim_generic.obo,
 -goslim <name>                   goslim_plant.obo, goslim_pir.obo, goslim_yeast.obo,
                                  goslim_goa.obo, goslim_tair.obo, goslim_candida.obo,
                                  goslim_pombe.obo)
 -help                            Display this message
 -loadannot <path>                Path to .annot file
 -loadblast <path>                Path to Blast xml file
 -loaddat <path>                  Path to B2G-Project file
 -loadfasta <path>                Path to fasta file (Do not forget to add -prot
                                  necessary)
 -loadips48 <path>                Path to InterProScan 4.8 folder
 -loadips50 <path>                Path to InterProScan 5.0 file or folder
 -mapping                         Run GO mapping
 -nodat                           Do not create .dat file (default: false)
 -noreport                        Do not create .pdf report (default: false)
 -overwrite                       Overwrite project folder (default: false)
 -projectfolder <path-to-folder>  Project folder (default: current folder)
 -projectname <name>              Project name (default: b2g_project)
 -protein                         Interprete fasta file content as pro
                                  used together with -loadfasta optio
 -saveannot                       Saves the .annot file after finish
 -saveseqtable                    Saves a tab separated text file th
                                  your data as it would be shown in
 -showlicenseinfo                 Show details about the currently
 -statistics <charts>             Comma separated list of desired
                                  charts)
 -tempfolder <path-to-folder>     Path to temporary folder (defa
                                  can be shared among different
```

SYSTEM REQUIREMENTS

Blast2GO Command line tools are designed to work on Linux platforms but can be adapted to other systems. All systems have to have Java from Sun/Oracle (version 1.6 or higher) installed. We recommend at least 1 GB of ram. For a local Blast2-GO database a MySql database (GPL licence) installation is necessary.