

NLM Citation: BLAST[®] Command Line Applications User Manual [Internet]. Bethesda (MD): National Center for Biotechnology Information (US); 2008-. Installation. **Bookshelf URL:** https://www.ncbi.nlm.nih.gov/books/



Installation instructions are available for Windows and LINUX/UNIX. This section provides instructions for a few cases not covered by those entries.

The BLAST+ applications are distributed both as an executable and as source code. For the executable formats we provide installers as well as tarballs; the source code is only provided as a tarball. These are freely available at ftp://ftp.ncbi.nlm.nih.gov/blast/executables/blast+/. Please be sure to use the most recent available version; this will be indicated in the file name (for instance, in the sections below, version 2.2.18 is listed, but this should be replaced accordingly).

MacOSX

For users without administrator privileges: follow the procedure described in http://www.ncbi.nlm.nih.gov/books/NBK52640/

For users with administrator privileges and machines MacOSX version 10.5 or higher: Download the ncbiblast-2.2.18+.dmg installer and double click on it. Double click the newly mounted ncbi-blast-2.2.18+ volume, double click on ncbi-blast-2.2.18+.pkg and follow the instructions in the installer. By default the BLAST+ applications are installed in /usr/local/ncbi/blast, overwriting its previous contents (an uninstaller is provided and it is recommended when upgrading a BLAST+ installation).

RedHat Linux

Download the appropriate *.rpm file for your platform and either install or upgrade the ncbi-blast+ package as appropriate using the commands:

```
Install:
    rpm -ivh ncbi-blast-2.2.18-1.x86_64.rpm
Upgrade:
    rpm -Uvh ncbi-blast-2.2.18-1.x86_64.rpm
```

Note: one must have root privileges to run these commands. If you do not have root privileges, please use the procedure described in http://www.ncbi.nlm.nih.gov/books/NBK52640/

Source tarball

Use this approach to build the BLAST+ applications yourself. Download the tarball, expand it, change directories to the newly created directory, and type the following commands:

cd c++ ./configure

```
cd ReleaseMT/build make all_r
```

The compiled executables will be found in c++/ReleaseMT/bin. Please note that this sequence of commands will build the applications with optimizations, with support for multi-threading and it may require the installation of dependencies (see following section). If a different configuration is desired, please use the configure.orig script located in the same directory.

Building sources in Windows

Extract the appropriate tarball (e.g.: ncbi-blast-VERSION+-x64-win64-tar.gz) and open the appropriate MSVC solution or project file (e.g.: c++\compilers\msvc1000_prj\static\build\ncbi_cpp.sln), build the -CONFIGURE-project, click on "Reload" when prompted by the development environment, and then build the -BUILD-ALL-project. The compiled executables will be found in the directory corresponding to the build configuration selected (e.g.: c++\compilers\msvc1000_prj\static\bin\debugdll).

Note regarding building the source code

The BLAST source tarballs are a subset of the NCBI C++ toolkit. Information on using and compiling the NCBI C++ toolkit is available at <u>http://www.ncbi.nlm.nih.gov/toolkit/doc/book</u>. Please send questions about compiling the NCBI C++ toolkit to toolbox@ncbi.nlm.nih.gov