Installation

Created: June 23, 2008; Updated: May 16, 2024.

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 ncbi-blast-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. Please be sure to have available (or install) the necessary compile time dependencies. Download the tarball, expand it, change directories to the newly created directory, and type the following commands:

In Linux	In macOS
cd c++	cd c++
./configure	./configure --without-openmp
cd ReleaseMT/build	cd ReleaseMT/build
make all_r	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 http://www.ncbi.nlm.nih.gov/toolkit/doc/book. Please send questions about compiling the NCBI C++ toolkit to toolbox@ncbi.nlm.nih.gov