

The NCBI C++ Toolkit

Book Information

Contributing Authors

For list of contributors, see Table 1.

Table 1

List of Contributors

Special Thanks	
Jim Ostell	Established the biological and bibliographic data model supported by the C++ Toolkit. He also established the overall design, priorities, and goals for C++ Toolkit based on experience building and using the NCBI C Toolkit which preceded it. He continues to cheer on the list of talented software developers and scientists below who are primarily responsible for making the C++ Toolkit a reality and for introducing most of its nicer features.
Full-time developers NOTE: This table is always a draft and virtually never up-to-date. Last updated: 21 Apr 2009	
Denis Vakarov (since Oct 1998)	Fathered the Toolkit. Coordinate all works on the portable (core, non-internal) projects of the Toolkit, actively participate in the design (and sometimes implementation details) of all core APIs. CONFIGURE -- orig.author and eventual supporter. CORELIB -- orig.author of many modules and active supporter/developer. CGI -- orig.author of "CGI Request" and "CGI Application". DBAPI -- a massive code and API revision on incorporating DBAPI into the Toolkit (with the orig.author, V.Soussov); participate in the core (exception, diagnostic, driver manager) code support and development. CONNECT -- orig.author of the core, abstract connection(CONN) and portable socket (SOCK) APIs, and FW-daemon. GUI -- helped setup the project structure, namespace and common definitions. DOC -- "Reference Manual", "FAQ", mailing lists; snapshots, announcements.
Eugene Vasilchenko (Nov 1999 - Feb 2001) (Aug 2002 - current)	CORELIB -- "CObject, CRef<>", multi-threading CGI -- orig.author of "CGI Response", "Fast-CGI module" HTML -- orig.author SERIAL -- orig.author DATATOOL -- orig.author OBJMGR -- taking over the client-side "loader" code; revising some "user" APIs
Anton Lavrentiev (since Mar 2000)	CONNECT -- <i>[principal developer]</i> author of "NCBI Services": network client API, load balancer, service mapper, dispatcher and launcher; daemons' installation, configuration and monitoring. CTOOLS -- <i>[principal developer]</i> connectivity with the NCBI C Toolkit. MSVC++ project multi-configuration <i>[principal developer]</i> . Help with the internal wxWindows installations on MS-Win and Solaris. DOC -- documentation on all of the above Tune-up of online docs and source browsers.
Aleksey Grichenko (since Jan 2001)	CORELIB -- orig.author of the thread library SERIAL -- support and further development DATATOOL -- support and further development OBJMGR -- <i>[principal developer]</i> client-side API and implementation Incorporation of MT-safety and "safe-static" features to all of the above
Aaron Ucko (since Aug 2001)	ID1_FETCH -- <i>[principal developer]</i> developed from a test/demo application to a real client. CONFIGURE -- <i>[principal developer]</i> ; active support and development of the UNIX building framework CORELIB -- generalized error handlers, implemented E-mail and CGI/HTML ones UTIL,CONNECT -- blocking-queue; multi-threaded network server API OBJECTS -- adding new functionality, QA'ing other people's additions ALNMGR -- participated in the design PubMed (internal) -- <i>[principal developer]</i> developing C++ bio-sequence indexer framework Toolkit builds on UNIXes (internal) -- support of the building and installation framework
Andrei Gourianov (since Nov 2001)	CORELIB -- major revamp of the exception API -- structure, standartize. OBJMGR -- client-side API, implementation, and docs. DATATOOL -- adding DTD/XML support for the code generator
Vladimir Ivanov (since Apr 2001)	HTML -- further support and development CORELIB, UTIL -- porting of some very platform-dependent extensions Tune-up of online docs and source browsers. Internal wxWindows installations on MS-Win and Solaris.
Diane Zimmerman (2000 only)	DOC -- "Programming Manual"
Chris Lanczycki (summer 2002 only)	DOC -- major reorganization of the docs structure and appearance
Major contributors	
Anton Butanaev	OBJMGR -- helped to implement ID1 loader DBAPI (in progress) -- driver for MySQL
Cliff Clausen	OBJECTS -- ported various bio-sequence related code and utilities (from C Toolkit)
Mike DiCuccio	GBENCH -- (in progress) extendable C++ FLTK/OpenGL based GUI tool for the retrieval, visualization, analysis, editing, and submitting of biological sequences
Jonathan Kans	OBJECTS -- helped port seq. validator (from C Toolkit). Provide MAC platform support. Contributed code (which sometimes other people ported) for fast sequence alphabet conversion and for translation of coding regions. Also writing the 5-column feature table reader.

Special Thanks	
Jim Ostell	Established the biological and bibliographic data model supported by the C++ Toolkit. He also established the overall design, priorities, and goals for C++ Toolkit based on experience building and using the NCBI C Toolkit which preceded it. He continues to cheer on the list of talented software developers and scientists below who are primarily responsible for making the C++ Toolkit a reality and for introducing most of its nicer features.
Full-time developers NOTE: This table is always a draft and virtually never up-to-date. Last updated: 21 Apr 2009	
Michael Kholodov	DBAPI -- author of the "user-level" database API based on Vladimir Soussov's portable "driver-level" API. SERIAL, DATATOOL -- provided eventual support of (in the beginning of 2001)
Michael Kimelman	OBJMGR (in progress) -- server-side API and implementation, client-side loader (both generic and its implementation for ID)
Vladimir Lebedev	GUI_SEQ -- the first FLTK/OpenGL based GUI widgets for bio-seq visualization Provide MAC platform support.
Peter Meric	GBENCH (in progress) -- extendable C++ FLTK/OpenGL based GUI tool for the retrieval, visualization, analysis, editing, and submitting of biological sequences and maps (eg. MapViewer data)
Vsevolod Sandomirskiy	CORELIB, CGI -- draft-authored some application- and context- classes
Victor Sapojnikov	DBAPI -- participated in the implementation of the Microsoft DBLIB driver on MS Windows; (in progress) multiplatform "network bridge" driver
Vladimir Soussov	DBAPI -- <i>[principal developer]</i> author of the portable DB driver API and its implementations for CTLIB(Sybase for UNIX and MS-Win), DBLIB (Sybase and Microsoft), FreeTDS and ODBC
Kamen Todorov	ALNMGR -- library to deal with bio-sequence alignments
Paul Thiessen	APP/CN3D -- Cn3D: graphical protein and alignment viewing, editing, and annotation. ALGO/STRUCTURE/STRUCT_DP -- Block-based dynamic programming sequence alignments. OBJTOOLS/CDDALIGNVIEW -- HTML sequence alignment displays.
Charlie (Chunlei) Liu, Chris Lanczycki	ALGO/STRUCTURE/CD_UTILS -- These contain numerous algorithms used by the structure group and the CDD project.
Thomas Madden, Christiam Camacho, George Coulouris, Ning Ma, Vahram Avagyan, Jian Ye	BLAST -- Basic Local Alignment Search Tool
Greg Boratyn, Richa Agarwala	COBALT -- Constraint Based Alignment Tool
Jonathan Kans	5-column feature table reader; Defline generator function; GenBank flatfile generator; Basic and Extended sequence cleanup; Sequence record validator; Alignment readers; Various format readers (e.g., BED, WIGGLE)

License

DISCLAIMER: This (book-located) copy of the license may be out-of-date - please see the up-to-date version at: http://www.ncbi.nlm.nih.gov/IEB/ToolBox/CPP_DOC/lxr/source/doc/public/LICENSE

CONTENTS

Public Domain Notice

Exceptions (for bundled 3rd-party code)

Copyright F.A.Q.

=====

PUBLIC DOMAIN NOTICE

National Center for Biotechnology Information

With the exception of certain third-party files summarized below, this software is a "United States Government Work" under the terms of the United States Copyright Act. It was written as part of the authors' official duties as United States Government employees and thus cannot be copyrighted. This software is freely available to the public for use. The National Library of Medicine and the U.S. Government have not placed any restriction on its use or reproduction.

Although all reasonable efforts have been taken to ensure the accuracy and reliability of the software and data, the NLM and the U.S. Government do not and cannot warrant the performance or results that may be obtained by using this software or data. The NLM and the U.S. Government disclaim all warranties, express or implied, including warranties of performance, merchantability or fitness for any particular purpose.

Please cite the authors in any work or product based on this material.

=====

EXCEPTIONS (in all cases excluding NCBI-written makefiles):

Location: configure

Authors: Free Software Foundation, Inc.

License: Unrestricted; at top of file

Location: config.guess, config.sub

Authors: FSF

License: Unrestricted when distributed with the Toolkit;
standalone, GNU General Public License [gpl.txt]

Location: {src,include}/dbapi/driver/ftds*/freetds

Authors: See src/dbapi/driver/ftds*/freetds/AUTHORS

License: GNU Library/Lesser General Public License

[src/dbapi/driver/ftds*/freetds/COPYING.LIB]

Location: include/dbapi/driver/odbc/unix_odbc

Authors: Peter Harvey and Nick Gorham

License: GNU LGPL

Location: {src,include}/gui/widgets/FLU

Authors: Jason Bryan

License: GNU LGPL

Location: {src,include}/gui/widgets/Fl_Table

Authors: Greg Ercolano

License: GNU LGPL

Location: include/util/bitset

Author: Anatoliy Kuznetsov

License: MIT [include/util/bitset/license.txt]

Location: {src,include}/util/compress/bzip2

Author: Julian R Seward

License: BSDish [src/util/compress/bzip2/LICENSE]

Location: {src,include}/util/compress/zlib

Authors: Jean-loup Gailly and Mark Adler

License: BSDish [include/util/compress/zlib/zlib.h]

Location: {src,include}/util/regex

Author: Philip Hazel

License: BSDish [src/util/regex/doc/LICENCE]

Location: {src,include}/misc/xmlwrapp

Author: Peter J Jones et al. [src/misc/xmlwrapp/AUTHORS]

License: BSDish [src/misc/xmlwrapp/LICENSE]

=====
Copyright F.A.Q.

Q. Our product makes use of the NCBI source code, and we did changes and additions to that version of the NCBI code to better fit it to our needs. Can we copyright the code, and how?

A. You can copyright only the *changes* or the *additions* you made to the NCBI source code. You should identify unambiguously those sections of the code that were modified, e.g. by commenting any changes you made in the code you distribute. Therefore, your license has to make clear to users that your product is a combination of code that is public domain within the U.S. (but may be subject to copyright by the U.S. in foreign countries) and code that has been created or modified by you.

Q. Can we (re)license all or part of the NCBI source code?

A. No, you cannot license or relicense the source code written by NCBI since you cannot claim any copyright in the software that was developed at NCBI as a 'government work' and consequently is in the public domain within the U.S.

Q. What if these copyright guidelines are not clear enough or are not applicable to my particular case?

A. Contact us. Send your questions to 'toolbox@ncbi.nlm.nih.gov'.