



xcb

[Edit](#)[Page History](#)[Repo Info](#)

## Introduction

The X protocol C-language Binding (XCB) is a replacement for Xlib [featuring](#) a small footprint, latency hiding, direct access to the protocol, improved threading support, and extensibility.

## News

April 2024: [xcb-proto 1.17](#) and [libxcb 1.17](#) were released. In addition to fixing bugs, this adds support for Present 1.4 and DRI3 1.4.

August 2023: [xcb-proto 1.16](#) and [libxcb 1.16](#) were released. In addition to fixing bugs, this adds support for DPMS 1.2 and documents some previously implemented X11 extensions.

May 2022: [xcb-proto 1.15](#) and [libxcb 1.15](#) were released. In addition to fixing bugs, this brings compatibility with check  $\geq 0.15$  and enables some new protocols like XI 2.4.

February 2020: [xcb-proto 1.14](#) and [libxcb 1.14](#) were released. In addition to fixing bugs, this brings compatibility with check  $\geq 0.13$  and adds xcb\_total\_read() and xcb\_total\_written() APIs.

March 2018: [xcb-proto 1.13](#) and [libxcb 1.13](#) were released. In addition to fixing bugs, this enables new and completed versions of some protocols.

May 2016: [xcb-proto 1.12](#) and [libxcb 1.12](#) were released.

September 2015: [libxcb 1.11.1](#) was released. This fixes some thread-related issues and adds 64-bit versions of some APIs.

August 2014: [xcb-proto 1.11](#) and [libxcb 1.11](#) were released. This is again mostly a bug-fix release.

December 2013: [xcb-proto 1.10](#) and [libxcb 1.10](#) were released, this time mainly fixing some API and ABI issues introduced with libxcb 1.9.2. See the linked announcements for more details.

May 2013: [libxcb 1.9.1](#) was released, fixing the python code to work with Python 3, and fixing an integer overflow in the read\_packet() function ([CVE-2013-2064](#))

October 2012: New releases of the XCB packages have been published, including autogenerated man pages for XCB API's - see the linked announcements for full details of what's changed in each

one:

- [xcb-proto 1.8](#)
- [libxcb 1.9](#)

## Download

- You can obtain released versions of XCB from <http://xcb.freedesktop.org/dist>.
- Follow the instructions from the [developer's guide](#) to build, except that you can use released versions of the dependencies, and you don't need git, automake, autoconf, or libtool.

## Development

- If you wish to work on XCB, please read the [developer's guide](#).
- **Mailing list:** Discussion of XCB and Xlib/XCB is through the [XCB mailing list](#).
- **IRC:** XCB developers also hang out on [IRC](#), and have occasional [meetings](#).
- Of course, there's still a lot [to do](#).

## Documentation

- The [XCB API](#) is documented. There is also a [tutorial](#) and some random [notes](#).
- People wanting to implement higher level applications can use [xcb-util](#).
- XCB is built atop an XML description of the X core protocol and common extension protocols called [XML/XCB](#). This protocol can be used in other interesting ways. Documentation of the X Window System protocol is also available at [X.org's website](#), and can be used in combination with XCB documentation as XCB functions largely reflect the protocol.
- To aid in porting applications, you can configure Xlib to use XCB for the transport layer. We call this [Xlib/XCB](#).
- There is automatically-generated [documentation for the XCB protocol bindings](#).
- The Windows (32 bit) port of XCB will be merged into the main code base soon. You can read more on that [here](#).

## Miscellaneous

- [The XCB logo](#)
- The XCB project has a long [history](#), during which it has produced many academic [publications](#). Various projects have [adopted](#) XCB.

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