wxWidgets 3.1.1 Release Notes

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Welcome to the latest development release of wxWidgets, a free and open source

cross-platform C++ framework for writing advanced GUI applications using native

controls.

wxWidgets allows you to write native-looking GUI applications for all the major

desktop platforms and also helps with abstracting the differences in the non-GUI

aspects between them. It is free for the use in both open source and commercial

applications, comes with the full, easy to read and modify, source and extensive

documentation and a collection of more than a hundred examples. You can learn

more about wxWidgets at:

\* https://www.wxwidgets.org/

Documentation is available online at:

\* http://docs.wxwidgets.org/3.1.1/

wxWidgets sources and binaries for the selected platforms are available for

download from:

\* https://github.com/wxWidgets/wxWidgets/releases/tag/v3.1.1/

Changes since 3.1.0

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There have been more than 2800 commits from more than 160 contributors (79 with

multiple contributions) since 3.1.0 release. New features added since then

include:

- Support for gesture events has been added (GSoC 2017 project).

- wxWebView can now return JavaScript results to the C++ code (GSoC 2017).

- New wxSecretStore class for securely storing user passwords.

Some of the other improvements:

- wxWidgets can now be built with CMake too.

- Strings can now be translated differently depending on their context.

- Converting between wxString and UTF-8 encoded std::string is now

simpler and unsafe wxString can now be disabled on the opt-in basis

(see http://wxwidgets.blogspot.com/2017/02/safer-s.html)

- It is possible to use any window (e.g. wxCheckBox) as wxStaticBox label now.

- Many improvements to accessibility support under MSW.

- wxGraphicsContext now supports pens with fractional widths.

- Support for XDG file layout under Unix.

- Many bug fixes to the behaviour (including TAB navigation) and appearances,

especially in wxGTK3 and wxOSX ports.

- wxDataViewCtrl items and headers can be formatted using simple markup

and it is simpler to combine to put items with checkboxes into it. Many bugs

and inconsistencies between platforms in this control have been fixed too.

- Several enhancements to wxStyledTextCtrl including better support for

custom lexers and auto-completion.

- Many improvements to the (still experimental) wxQt port.

Additionally, the latest versions of compilers (e.g. MSVS 2017) and

operating systems (macOS 10.12) are now supported and all the third

party libraries have been updated to their latest versions.

Please refer to the detailed change log for the full list of changes:

https://raw.githubusercontent.com/wxWidgets/wxWidgets/v3.1.1/docs/changes.txt

Changes since 3.0

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Compared to the stable 3.0.x series, this version brings too many

improvements and even more bug fixes to list them them all. Here is the

maximally condensed summary:

- New features: support for mouse gesture events (GSoC 2017 project);

fractional pen widths in wxGraphicsContext; arbitrary label windows in

wxStaticBox; markup in wxDataViewCtrl items text; better support for high DPI

monitors; support for ZIP 64 files; much improved accessibility support under

MSW.

- New classes: wxActivityIndicator, wxAddRemoveCtrl,

wxAppProgressIndicator, wxNativeWindow, wxPowerResourceBlocker,

wxSecretStore.

- And methods: wxDateTime::GetWeekBasedYear(), wxListBox::GetTopItem(),

wxProcess::Activate(), wxTextEntry::ForceUpper(), several ones in

wxRendererNative, wxStandardPaths::GetUserDir(), wxUIActionSimulator

::Select() and many others.

- Significant improvements to: wxBusyInfo, wxNotificationMessage.

- Latest versions of all bundled 3rd party libraries, including all the

security fixed and support for WebKit 2 and GStreamer 1.7 under Unix.

- Revamped OpenGL support better suited to modern OpenGL (3.2+).

- Further C++11 support improvements.

- New CMake-based alternative build system.

- Support for latest compilers: MSVS 2017, g++ 7, clang 6.

- A lot of bug fixes, especially in wxGTK3 and wxOSX/Cocoa ports.

- New experimental wxQt port.

Platforms Supported

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wxWidgets currently supports the following primary platforms:

\* Windows XP, Vista, 7, 8 and 10 (32/64 bits).

\* Most Unix variants using the GTK+ toolkit (version 2.6 or newer)

\* OS X (10.7 or newer) using Cocoa (32/64 bits)

There is some support for the following platforms:

\* Most Unix variants with X11

\* Most Unix variants with Motif/Lesstif

\* Most Unix variants with GTK+ 1.2

\* Most Unix variants with Qt 5 or newer (experimental)

Most popular C++ compilers are supported; see the install.txt file for each

platform (following the links from docs/index.htm).

Files

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wxWidgets is distributed in source form in several archive formats. ZIP and 7z

archives are for Microsoft Windows users and contain the files with DOS/Windows

line endings while the compressed tar archives are for Unix systems (including

OS X) and contain the files with Unix line endings. Please notice that some

Windows tools still don't accept files with Unix line endings and that compiling

sources with DOS line endings under Unix will fail, so please choose the correct

file for your system.

In addition to the sources, documentation in HTML, CHM and HTB (wxWidgets help

viewer) formats is provided as well as an installer for Microsoft Windows.

Notice that you will still need to compile wxWidgets even when using the

installer.

We also supply binaries of wxMSW libraries built with several versions of

Microsoft Visual C++ and GNU g++ compiler for this release.

Installation

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Unless you have downloaded the binaries for your compiler, you will need to

build wxWidgets before you can test out the samples or write your own

applications. For installation information, please see the install.txt file in

the docs subdirectory appropriate for the platform you use.

Licence

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For licensing information, please see the files:

\* docs/preamble.txt

\* docs/licence.txt

\* docs/licendoc.txt

\* docs/gpl.txt

\* docs/lgpl.txt

\* docs/xserver.txt

Although this may seem complex, it is there to allow authors of proprietary,

commercial applications to use wxWidgets in addition to those writing GPL'ed

applications. In summary, the licence is LGPL plus a clause allowing

unrestricted distribution of application binaries. To answer a FAQ, you don't

have to distribute any source if you wish to write commercial applications using

wxWidgets.

However, if you distribute wxGTK, wxQt or wxMotif (with Lesstif) version of your

application, don't forget that it is linked against GTK+, Qt or Lesstif, which

are covered by LGPL \*without\* exception notice and so is bound by its

requirements.

If you use TIFF image handler, please see src/tiff/COPYRIGHT for libtiff licence

details.

If you use JPEG image handler, documentation for your program should contain

following sentence: "This software is based in part on the work of the

Independent JPEG Group". See src/jpeg/README for details.

If you use wxRegEx class on a system without native regular expressions support

(i.e. MS Windows), see src/regex/COPYRIGHT file for Henry Spencer's regular

expression library copyright.

If you use wxXML classes or XRC, see src/expat/COPYING for licence details.

Reporting Bugs

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The wxWidgets bug tracker can be found here:

\* https://trac.wxwidgets.org/newticket

Please use the search function of our Trac installation to find any possibly

relevant bugs before reporting new ones. Also please notice that often trying to

correct the bug yourself is the quickest way to fix it. Even if you fail to do

it, you may discover valuable information allowing us to fix it while doing it.

We also give much higher priority to bug reports with patches fixing the

problems so this ensures that your report will be addressed sooner.

Further Information

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If you are looking for support, you can get it from

\* Mailing Lists: https://www.wxwidgets.org/support/mailing-lists/

\* Discussion Forums: https://forums.wxwidgets.org/

\* #wxwidgets IRC Channel: https://www.wxwidgets.org/support/irc/

\* Stack Overflow (tag your questions with "wxwidgets"):

https://stackoverflow.com/questions/tagged/wxwidgets

Have fun!

The wxWidgets Team, February 2018