

---

Subject: 2020.1 alpha

Posted by [mirek](#) on Wed, 04 Mar 2020 11:23:54 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

I have mostly run to the end of my ToDo list for 2020.1, so I call current nightly build 2020.1 alpha. Hopefully, we will have final release in April.

Here are the new features for the 2020.1 (please tell me if I have missed something; I expect Koldo to add some points about ScatterCtrl):

#### Release highlights

- \* gtk3 replaces gtk2 as default linux backend
- \* Visual look&feel refactored in Linux and MacOS, improved dark theme support
- \* In Win32, PDB debugger now displays various U++ and standard library containers nicely
- \* Win32 release now ships with CLANG with llvm-mingw toolchain

#### Core

- \* SshExec improvements
- \* ConditionVariable and Semaphore now have Wait variant with timeout
- \* IsDoubleWidth function to detect double-width UNICODE glyphs
- \* MacOS is now using fast U++ heap when possible (not for new/delete)

#### CtrlCore

- \* Ctrl::GetAscendant utility method to get parent based on its type
- \* Dark mode is now enabled by default, CtrlLib: classic skin improvements
- \* MacOS multimonitor support and other fixes

#### CtrlLib

- \* Modernized widgets look in layout designer
- \* Added some less often used widgets like ColorPusher, TreeCtrl or ColumnList that were not previously directly supported in layout designer
- \* FileSel support of .lnk files in Win32
- \* Host native file selector, FileSelector, is now renamed to FileSelNative and is now available in MacOS too (in addition to Win32 and gtk3)
- \* GLCtrl in OpenGL/X11 refactored

#### Ide

- \* umk now implements use target directory flag (thanks Novo)
- \* Context goto (Alt+J) now able to detect files / links (and open the file / link in browser)
- \* Gdb frontend now can better handle executables without debug info
- \* Icon designer now can show synthesised UHD/Dark images
- \* New Insert file/clipboard as.. function allows insertion of clipboard or files directly to the text in various formats (C string, Base64 encode, raw byte values, compressed byte values using LZ4 or Zlib or LZMA).
- \* Move/Copy package function
- \* Find in files now has 3 output panes

#### Painter

- \* GetSVGPathBoundingBox function that gets bounding box of SVG path
- \* Xform2D::Map function creates matrix for affinity triangle->triangle mapping

## SQL

- \* PGSQL got now can escape ? as ?? or use NoQuestionParams method to avoid interpreting ? as parameter holder
- \* SQL\_RENAME .sch 'command' can be used to have different name of column in DB and code.

## uppsrc

- \* In POSIX, external library dependencies are now refactored with pkg-config

---

Subject: Re: 2020.1 alpha

Posted by [Novo](#) on Fri, 06 Mar 2020 05:06:24 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Problem with linking on Mac.

Undefined symbols for architecture x86\_64:

"Upp::CocoBeep()", referenced from:

Upp::BeepInformation() in Core\$blitz.o

Upp::BeepExclamation() in Core\$blitz.o

Upp::BeepError() in Core\$blitz.o

Upp::BeepQuestion() in Core\$blitz.o

ld: symbol(s) not found for architecture x86\_64

Tested against reference/Value

---

---

Subject: Re: 2020.1 alpha

Posted by [mirek](#) on Fri, 06 Mar 2020 09:26:22 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Novo wrote on Fri, 06 March 2020 06:06 Problem with linking on Mac.

Undefined symbols for architecture x86\_64:

"Upp::CocoBeep()", referenced from:

Upp::BeepInformation() in Core\$blitz.o

Upp::BeepExclamation() in Core\$blitz.o

Upp::BeepError() in Core\$blitz.o

Upp::BeepQuestion() in Core\$blitz.o

ld: symbol(s) not found for architecture x86\_64

Tested against reference/Value

Thanks, should be now fixed.

---

---

Subject: Re: 2020.1 alpha

Posted by [omari](#) on Fri, 06 Mar 2020 10:59:50 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

MacOS multimonitor issue, appear in the second monitor, when the monitors have different sizes.  
(the screenshot is from the second monitor)

i noticed that "Ctrl::GetPrimaryScreenArea()" return always the first screen.

```
Rect Ctrl::GetPrimaryScreenArea()
{
    for (NSScreen *screen in [NSScreen screens])
        return MakeScreenRect(screen, [screen frame]);
    return Rect(0, 0, 0, 0);
}
```

returning the screen that has the mouse pointer resolve the issue.

```
Rect Ctrl::GetPrimaryScreenArea()
{
    NSPoint mouseLoc = [NSEvent mouseLocation];
    NSEnumerator *screenEnum = [[NSScreen screens] objectEnumerator];
    NSScreen *screen;
    while ((screen = [screenEnum nextObject]) && !NSMouseInRect(mouseLoc, [screen frame], NO));

    if(screen)
        return MakeScreenRect(screen, [screen frame]);
    return Rect(0, 0, 1024, 768);
}
```

---

### File Attachments

1) [Screen Shot 2020-03-06 at 11.06.11.png](#), downloaded 1165 times

---

---

Subject: Re: 2020.1 alpha

Posted by [mirek](#) on Sat, 07 Mar 2020 16:21:11 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

omari wrote on Fri, 06 March 2020 11:59

```
Rect Ctrl::GetPrimaryScreenArea()
```

```

{
    NSPoint mouseLoc = [NSEvent mouseLocation];
    NSEnumerator *screenEnum = [[NSScreen screens] objectEnumerator];
    NSScreen *screen;
    while ((screen = [screenEnum nextObject]) && !NSMouseInRect(mouseLoc, [screen frame],
    NO));

    if(screen)
        return MakeScreenRect(screen, [screen frame]);
    return Rect(0, 0, 1024, 768);
}

```

Thanks for catching this.

Well, GetPrimaryScreenArea definitely is not supposed to depend on the mouse, moreover it must rather depend on window's position than on mouse pos.

That said, the correct fix is quite similar - new method GetScreenArea(Point), now in trunk...

Mirek

---

Subject: Re: 2020.1 alpha  
 Posted by [Oblivion](#) on Wed, 11 Mar 2020 22:26:21 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hello Mirek,

U++ applications fail to have window borders & actions, and have incorrect mouse input on Gnome 3 Wayland session (running on xwayland).

This was not the case with gtk2.

Here is a screenshot of TheIDE on Gnome wayland session (neither borders, window events, nor mouse or key events are correctly recognized):

Here are the debug messages logged on terminal:

```

(theide:62665): Gdk-CRITICAL **: 01:16:06.150: gdk_monitor_get_workarea: assertion
'GDK_IS_MONITOR (monitor)' failed

```

(theide:62665): Gdk-CRITICAL \*\*: 01:16:06.190: gdk\_monitor\_get\_workarea: assertion 'GDK\_IS\_MONITOR (monitor)' failed

(theide:62665): Gdk-WARNING \*\*: 01:16:06.289: Couldn't map as window 0x56455c0c0450 as popup because it doesn't have a parent

(theide:62665): GLib-GObject-WARNING \*\*: 01:16:07.151: instance with invalid (NULL) class pointer

(theide:62665): GLib-GObject-CRITICAL \*\*: 01:16:07.151: g\_signal\_emit\_by\_name: assertion 'G\_TYPE\_CHECK\_INSTANCE (instance)' failed

(theide:62665): GLib-GObject-CRITICAL \*\*: 01:16:07.151: g\_object\_get: assertion 'G\_IS\_OBJECT (object)' failed

Best regards,  
Oblivion

#### File Attachments

1) [TheIde - xwayland - Gnome.png](#), downloaded 1107 times

---

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Thu, 12 Mar 2020 08:31:59 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Oblivion wrote on Wed, 11 March 2020 23:26Hello Mirek,

U++ applications fail to have window borders & actions, and have incorrect mouse input on Gnome 3 Wayland session (running on xwayland).

:(

I really would appreciate help with this one - I have troubles to get any wayland desktop to work....

Is it even possible to run wayland in VirtualBox?

---

---

Subject: Re: 2020.1 alpha  
Posted by [Oblivion](#) on Thu, 12 Mar 2020 15:49:15 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hello Mirek,

Today I've looked into the issue more closely:

Good news:

Using the `gdk_set_allowed_backends()` function does the trick in a proper way.  
It can be used to force a GTK3 app to use the x11 (xwayland) backend:

Excerpt from <https://developer.gnome.org/gdk3/stable/gdk3-General.html>

```
void  
gdk_set_allowed_backends (const gchar *backends);
```

Sets a list of backends that GDK should try to use.

This can be useful if your application does not work with certain GDK backends.

By default, GDK tries all included backends.

This call must happen prior to `gdk_display_open()`, `gtk_init()`, `gtk_init_with_args()` or `gtk_init_check()` in order to take effect.

So I've tried:

```
gdk_set_allowed_backends ("x11");
```

I'd suggest putting it into an INIT block.

Now the U++ apps, including TheIDE, are running smooth and fine on wayland. :)

Quote:

Is it even possible to run wayland in VirtualBox?

Well, I tried Fedora 31 on VirtualBox. It uses wayland by default and runs just fine here. (No special setup)

I decided to move one of my PCs to Gnome (3.36) wayland backend (I'm using it for nearly two weeks and I'd say it is fantastic!)

Also my laptop (Gnome 3.34) runs wayland too (while wayland on 3.34 has some annoying problems. yet it works.)

What's common for my setups is that my machines don't have NVIDIA gfx cards. Do you use NVidia cards on your machine? Because wayland is known to be very buggy on NVIDIA's drivers.

Best regards,  
Oblivion

---

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Thu, 12 Mar 2020 16:19:48 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Perfect. I have tried to put it into InitGtkApp, can you please test unmodified trunk?

Mirek

---

---

Subject: Re: 2020.1 alpha  
Posted by [Oblivion](#) on Thu, 12 Mar 2020 16:58:08 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Quote:Perfect. I have tried to put it into InitGtkApp, can you please test unmodified trunk?

Done.

I've recompiled TheIDE and some U++ examples with GTK3 backend on Gnome (3.34).  
Now they all work fine on both native X11, and xwayland backends.

Thanks!

I will give you feedback if I encounter any further problem or glitches on wayland...

Best regards,  
Oblivion

---

---

Subject: Re: 2020.1 alpha  
Posted by [xue38495](#) on Sat, 14 Mar 2020 02:20:20 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

can you make a 32-bit version.

---

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Sun, 15 Mar 2020 20:03:41 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

We can. Do we want to?

---

---

Subject: Re: 2020.1 alpha  
Posted by [Klugier](#) on Mon, 16 Mar 2020 21:24:11 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hello Mirek,

Can you look at following dark theme issues. I think there should be relatively easy to fix:

- <https://www.ultimatepp.org/redmine/issues/2020>
- <https://www.ultimatepp.org/redmine/issues/2021>

All reports came from Manjaro KDE Edition.

---

xue38495 - can you provide more information why you want 32-bit version of TheIDE? Also, please tell us what is your operating system?

Sincerely,  
Klugier

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Tue, 17 Mar 2020 09:16:58 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Providing info about the Manjaro theme active would be really helpful... :)

---

---

Subject: Re: 2020.1 alpha  
Posted by [Oblivion](#) on Tue, 17 Mar 2020 11:27:43 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hello Mirek,

Same problem for CodeEditor here with the adwaita-dark theme (gnome's default dark theme).

Also there is one other minor annoyance with the overall dark themes:

As you can see the parameter/return types, qualifiers etc. are very hard to read on the navigator (and on other places as well), due to their color. That color (purple?) is particularly hard to read on dark backgrounds. IMO a different and lighter color would be great.

Best regards,  
Oblivion



## File Attachments

1) [TheIDE - Adwaita-dark.png](#), downloaded 952 times

---

---

Subject: Re: 2020.1 alpha

Posted by [Klugier](#) on Tue, 17 Mar 2020 12:44:10 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Hello Mirek,

I use "Breeth Dark" for Manjaro KDE. The code editor problem is universal for all dark theme. It is even observe on mac os basing on screenshot provided by omari. The problem here is that editor bar is not dark theme griendly. It uses exactly the same colors for light/dark theme. Line numbers color should also be improved.

Sincerely,  
Klugier

---

---

Subject: Re: 2020.1 alpha

Posted by [mirek](#) on Tue, 17 Mar 2020 13:04:54 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Klugier wrote on Tue, 17 March 2020 13:44Hello Mirek,

I use "Breeth Dark" for Manjaro KDE. The code editor problem is universal for all dark theme. It is even observe on mac os basing on screenshot provided by omari. The problem here is that editor bar is not dark theme griendly. It uses exactly the same colors for light/dark theme. Line numbers color should also be improved.

Sincerely,  
Klugier

Bar is already fixed, that was easy one. Placeholders are the problem :)

---

---

Subject: Re: 2020.1 alpha

Posted by [mirek](#) on Tue, 17 Mar 2020 14:37:53 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

gtk3 / dark theme issues should be now fixed. Please check

---

---

Subject: Re: 2020.1 alpha

Posted by [Oblivion](#) on Tue, 17 Mar 2020 14:57:41 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Thanks!

It's much easier on the eyes now:

Best regards,  
Oblivion

### File Attachments

1) [TheIDE - Dark Theme - Fized.png](#), downloaded 847 times

---

---

Subject: Re: 2020.1 alpha

Posted by [Klugier](#) on Wed, 18 Mar 2020 17:50:15 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Hello Mirek,

Small warning on macOS:

```
../Applications/TheIDE.app/Contents/SharedSupport/uppsrc/ide/Browser/ItemDisplay.cpp (7):  
warning: unused variable 'dark' [-Wunused-variable]  
( ): bool d ark = IsDarkTheme();
```

Fix on trunk.

Sincerely,  
Klugier

---

---

Subject: Re: 2020.1 alpha

Posted by [omari](#) on Thu, 19 Mar 2020 15:42:04 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

a small patch for theide toolbar

the build buttons are the most used in the toolbar, then they shall be always visible.  
in the current version, they disappear with a small window width.

```
diff --git a/uppsrc/ide/idebar.cpp b/uppsrc/ide/idebar.cpp  
index aafa8f44b..972170003 100644
```

```

--- a/uppsrc/ide/idebar.cpp
+++ b/uppsrc/ide/idebar.cpp
@@ -445,9 +445,9 @@ void Ide::Project(Bar& menu)
{
    mainconfiglist.Enable(idestate == EDITING);
    buildmode.Enable(idestate == EDITING);
-    menu.Add(mainconfiglist, HorzLayoutZoom(180));
+    menu.Add(mainconfiglist, HorzLayoutZoom(120));
    menu.Gap(4);
-    menu.Add(buildmode, HorzLayoutZoom(180));
+    menu.Add(buildmode, HorzLayoutZoom(120));
    menu.Separator();
}
if(!IsEditorMode()) {
@@ -845,7 +845,6 @@ void Ide::MainTool(Bar& bar)
    DebugMenu(bar);
    bar.Separator();
}
- Project(bar);
if(!IsEditorMode()) {
    BuildMenu(bar);
    if(!debugger) {
@@ -854,6 +853,7 @@ void Ide::MainTool(Bar& bar)
    }
    bar.Separator();
}
+ Project(bar);
+ HelpMenu(bar);
}

```

---

Subject: Re: 2020.1 alpha

Posted by [mirek](#) on Thu, 19 Mar 2020 15:53:52 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Sorry, but I am not quite ok with making mainconfiglist or buildmode narrower. In fact, I had to extend these a couple of years back. Check how it often end looking in large projects:

Besides, I do not even think that build icon is the most often used, most of time I just press F7....

## File Attachments

---

1) [Clipboard01.jpg](#), downloaded 723 times

---

Subject: Re: 2020.1 alpha  
Posted by [Tom1](#) on Mon, 23 Mar 2020 20:42:41 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi,

I decided to try this new option of using CLANG or CLANGx64 instead of MSBT19x64, but have trouble with Protect package (and gdal/ogr too).

[EDIT] OK, I removed the unnecessary compiler log as simply removing xed/VERSION solved the Xed compilation issue.

However, ProtectEncrypt does not seem to work well with CLANG generated exes.

Best regards,

Tom

---

---

Subject: Re: 2020.1 alpha  
Posted by [omari](#) on Tue, 24 Mar 2020 13:39:37 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Quote:

Sorry, but I am not quite ok with making mainconfiglist or buildmode narrower. In fact, I had to extend these a couple of years back.

OK, this is just an idea.

Quote:

Besides, I do not even think that build icon is the most often used, most of time I just press F7....

here two screenshots without and with the patch:

the highlighted buttons in the second toolbar, are hidden in the first one, and there is no way to find them.

in my MacBook, there are no physical Fx buttons, then using the toolbar buttons is faster.

### File Attachments

1) [Screen Shot 2020-03-24 at 13.17.57.png](#), downloaded 747 times

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Tue, 24 Mar 2020 13:49:04 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

What resolution is this? Is font size OK? (What Mac mode this actually is?)

Maybe we should just split toolbar to two lines in case it does not fit? (based on resolution)

---

---

Subject: Re: 2020.1 alpha  
Posted by [Klugier](#) on Tue, 24 Mar 2020 14:08:24 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hello Omari and Mirek,

It seems that macOS version of TheIDE doesn't move cutted toolbar entries to the sperate line. It works greate on Linux with GTK (I tested it yestarday). So, it seems that the bug is related to macOS GUI implementation.

Sincerely,  
Klugier

---

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Tue, 24 Mar 2020 14:38:54 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Thanks, somehow I forgot it should work that way :)

---

---

Subject: Re: 2020.1 alpha  
Posted by [omari](#) on Tue, 24 Mar 2020 16:04:47 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Quote:What resolution is this? Is font size OK? (What Mac mode this actually is?)

Maybe we should just split toolbar to two lines in case it does not fit? (based on resolution)

theide is open in a Half of the Screen.

i have to open two instance of theide side by side.

---

---

Subject: Re: 2020.1 alpha

---

Posted by [mirek](#) on Tue, 24 Mar 2020 16:28:36 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Please retry with trunk.

Thankfully, problem was not in CtrlCore/CtrlLib, just needed a bit rework in ide code....

Mirek

---

---

Subject: Re: 2020.1 alpha

Posted by [omari](#) on Tue, 24 Mar 2020 17:19:21 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Thanks, the toolbar is split on two lines.

by the way, please check the toolbar's tooltips textcolor in dark mode.

---

---

Subject: Re: 2020.1 alpha

Posted by [Tom1](#) on Wed, 25 Mar 2020 09:53:46 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Hi,

I just noticed that the current version has a visualization issue with the edge rectangle of entryfields, lists, etc. I confirmed all these issues on UWord with current version. This can be seen in e.g. standard FileSel where the file and directory lists and the File entryfield all lack vertical edges. Additionally, if the width of the FileSel is increased by dragging, the horizontal edges do not extend all the way to the right edge of each panel. There are also some other corner effects that look strange on UWord main window.

TheIDE does not show these problems for me possibly because I have 'Dark' theme selected there.

Best regards,

Tom

---

---

Subject: Re: 2020.1 alpha

Posted by [mirek](#) on Wed, 25 Mar 2020 10:00:07 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Would it possible (here and in general in error reports about appearance) to post a screenshot, ideally with some markings so that I know where to look?

Mirek

---

---

Subject: Re: 2020.1 alpha  
Posted by [Tom1](#) on Wed, 25 Mar 2020 10:28:28 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Sorry,

I considered it so obvious... :blush:

Best regards,

Tom

---

File Attachments

1) [FileSelSample.png](#), downloaded 705 times

---

---

Subject: Re: 2020.1 alpha  
Posted by [Tom1](#) on Wed, 25 Mar 2020 10:32:12 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

And here...

Best regards,

Tom

---

File Attachments

1) [UWordSample.png](#), downloaded 688 times

---

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Wed, 25 Mar 2020 11:46:53 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

I have tested Uword with all 4 'normal' build methods, in UHD mode and I am not seeing anything like this :(

That said, I absolutely believe you have the issue, we just need to track down the difference

between mine and yours setup....

Are you testing with latest trunk (check that examples are linked to trunk uppsrc...)? What is the build mode?

## File Attachments

1) [Clipboard01.png](#), downloaded 656 times

---

---

Subject: Re: 2020.1 alpha

Posted by [Tom1](#) on Wed, 25 Mar 2020 12:10:05 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

I have Windows Dark theme enabled at UHD 4k resolution.

I was running the yesterday's version and just now updated to current version. Build mode MSBT19x64 Release. The problem remains.

Now tried with CLANGx64 and surprisingly, the issue disappeared!

Additionally, with CLANGx64, the dark system theme is followed by the UWord, unlike with MSBT19x64, which stays light in any case.

Best regards,

Tom

---

---

Subject: Re: 2020.1 alpha

Posted by [mirek](#) on Wed, 25 Mar 2020 12:33:04 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Tom1 wrote on Wed, 25 March 2020 13:10

Additionally, with CLANGx64, the dark system theme is followed by the UWord, unlike with MSBT19x64, which stays light in any case.

Now that is a clue... Going to check that.

(just to be sure: you did try rebuild all, right?)

---

---



Subject: Re: 2020.1 alpha  
Posted by [Tom1](#) on Wed, 25 Mar 2020 12:34:33 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

What is really interesting is that MSBT17 and MSBT17x64 both work correctly!

It is just this brand new MSBT19 and MSBT19x64 that fails...

(I need to emphasize that I just installed a fresh MSBT19 a couple of days ago on this computer. Could all this be linked with the MSC compiler issue you discovered recently on MSBT19?)

Best regards,

Tom

---

Subject: Re: 2020.1 alpha  
Posted by [Tom1](#) on Wed, 25 Mar 2020 12:36:07 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Yes I did rebuild all...

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Wed, 25 Mar 2020 13:29:26 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Tom1 wrote on Wed, 25 March 2020 13:34What is really interesting is that MSBT17 and MSBT17x64 both work correctly!

It is just this brand new MSBT19 and MSBT19x64 that fails...

(I need to emphasize that I just installed a fresh MSBT19 a couple of days ago on this computer. Could all this be linked with the MSC compiler issue you discovered recently on MSBT19?)

Best regards,

Tom

Quite likely :( Does it do that warning?

---

Subject: Re: 2020.1 alpha

Posted by [Tom1](#) on Wed, 25 Mar 2020 13:51:12 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Well, it gives a whole bunch of these:

```
C:\upp-svn\upp.src\uppsrc\Core\InetUtil.cpp(333): warning C4927: illegal conversion; more than
one user-defined conversion has been implicitly applied
```

```
C:\upp-svn\upp.src\uppsrc\Core\InetUtil.cpp(333): note: while calling the constructor
```

```
'Upp::String::String(const char *)'
```

```
C:\upp-svn\upp.src\uppsrc\Core\AString.hpp(310): note: see declaration of 'Upp::String::String'
```

63 warnings in Core...

And Microsoft is still 'Considering' this issue...

Best regards,

Tom

---

---

Subject: Re: 2020.1 alpha

Posted by [mirek](#) on Wed, 25 Mar 2020 17:28:33 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Tom1 wrote on Wed, 25 March 2020 14:51 Well, it gives a whole bunch of these:

```
C:\upp-svn\upp.src\uppsrc\Core\InetUtil.cpp(333): warning C4927: illegal conversion; more than
one user-defined conversion has been implicitly applied
```

```
C:\upp-svn\upp.src\uppsrc\Core\InetUtil.cpp(333): note: while calling the constructor
```

```
'Upp::String::String(const char *)'
```

```
C:\upp-svn\upp.src\uppsrc\Core\AString.hpp(310): note: see declaration of 'Upp::String::String'
```

63 warnings in Core...

And Microsoft is still 'Considering' this issue...

Best regards,

Tom

Yes, these are the problem :(

Mirek

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Wed, 25 Mar 2020 17:29:22 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

omari wrote on Tue, 24 March 2020 18:19 Thanks, the toolbar is split on two lines.

by the way, please check the toolbar's tooltips textcolor in dark mode.

Should be now fixed. Thanks for reporting.

Mirek

---

---

Subject: Re: 2020.1 alpha  
Posted by [koldo](#) on Thu, 26 Mar 2020 11:48:57 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Please review install instructions in [https://www.ultimatepp.org/www\\$suppweb\\$suppx11\\$en-us.html](https://www.ultimatepp.org/www$suppweb$suppx11$en-us.html) as it says to install libgtk2.0-dev.

---

---

Subject: Re: 2020.1 alpha  
Posted by [koldo](#) on Thu, 26 Mar 2020 12:09:29 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

koldo wrote on Thu, 26 March 2020 12:48 Please review install instructions in [https://www.ultimatepp.org/www\\$suppweb\\$suppx11\\$en-us.html](https://www.ultimatepp.org/www$suppweb$suppx11$en-us.html) as it says to install libgtk2.0-dev. Reviewed for Ubuntu. Please check if it is right for Fedora and other distros.

---

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Thu, 26 Mar 2020 21:25:13 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Should that be rewritten to use buildrequires?

---

---

Subject: Re: 2020.1 alpha  
Posted by [Novo](#) on Thu, 26 Mar 2020 22:53:41 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

koldo wrote on Thu, 26 March 2020 08:09 koldo wrote on Thu, 26 March 2020 12:48 Please review install instructions in [https://www.ultimatepp.org/www\\$suppweb\\$suppx11\\$en-us.html](https://www.ultimatepp.org/www$suppweb$suppx11$en-us.html) as it says to install libgtk2.0-dev. Reviewed for Ubuntu. Please check if it is right for Fedora and other distros.

---

I always thought that this release is gtk3-based ...  
Am I missing something?  
What gtk2 is needed for?

---

---

Subject: Re: 2020.1 alpha  
Posted by [busiek](#) on Fri, 27 Mar 2020 16:08:46 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Tom1 wrote on Wed, 25 March 2020 10:53Hi,

I just noticed that the current version has a visualization issue with the edge rectangle of entryfields, lists, etc. I confirmed all these issues on UWord with current version. This can be seen in e.g. standard FileSel where the file and directory lists and the File entryfield all lack vertical edges. Additionally, if the width of the FileSel is increased by dragging, the horizontal edges do not extend all the way to the right edge of each panel. There are also some other corner effects that look strange on UWord main window.

TheIDE does not show these problems for me possibly because I have 'Dark' theme selected there.

Best regards,

Tom

I have the same problem on Windows with the newest trunk. Just checked 2 hours ago. I am using MSVC 2019 and default theme. Simply edit fields seem to have too narrow painting rectangle.

Jakub

---

---

Subject: Re: 2020.1 alpha  
Posted by [Tom1](#) on Fri, 27 Mar 2020 16:19:52 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

busiek wrote on Fri, 27 March 2020 18:08Tom1 wrote on Wed, 25 March 2020 10:53Hi,

I just noticed that the current version has a visualization issue with the edge rectangle of entryfields, lists, etc. I confirmed all these issues on UWord with current version. This can be seen in e.g. standard FileSel where the file and directory lists and the File entryfield all lack vertical edges. Additionally, if the width of the FileSel is increased by dragging, the horizontal edges do not extend all the way to the right edge of each panel. There are also some other corner effects that look strange on UWord main window.

TheIDE does not show these problems for me possibly because I have 'Dark' theme selected there.

Best regards,

Tom

I have the same problem on Windows with the newest trunk. Just checked 2 hours ago. I am using MSVC 2019 and default theme. Simply edit fields seem to have too narrow painting rectangle.

Jakub

Hi Jakub,

The problem is in the recent version of MSVC2019 / MSBT2019 compiler:

<https://developercommunity.visualstudio.com/content/problem/912723/recent-version-of-visual-c-compiler-might-have-ove.html>

Please try MSVC2017 / MSBT2017 instead. (Or the newly available CLANG-MINGW combo, which is looking promising...) :)

Best regards,

Tom

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Fri, 27 Mar 2020 16:21:12 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

busiek wrote on Fri, 27 March 2020 17:08Tom1 wrote on Wed, 25 March 2020 10:53Hi,

I just noticed that the current version has a visualization issue with the edge rectangle of entryfields, lists, etc. I confirmed all these issues on UWord with current version. This can be seen in e.g. standard FileSel where the file and directory lists and the File entryfield all lack vertical edges. Additionally, if the width of the FileSel is increased by dragging, the horizontal edges do not extend all the way to the right edge of each panel. There are also some other corner effects that look strange on UWord main window.

TheIDE does not show these problems for me possibly because I have 'Dark' theme selected there.

Best regards,

Tom

I have the same problem on Windows with the newest trunk. Just checked 2 hours ago. I am using MSVC 2019 and default theme. Simply edit fields seem to have too narrow painting rectangle.

Jakub

Are you getting these warnings? If yes, you are too victim of broken compiler...

Mirek

---

---

Subject: Re: 2020.1 alpha  
Posted by [busiek](#) on Fri, 27 Mar 2020 16:23:04 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

mirek wrote on Fri, 27 March 2020 17:21busiek wrote on Fri, 27 March 2020 17:08Tom1 wrote on Wed, 25 March 2020 10:53Hi,

I just noticed that the current version has a visualization issue with the edge rectangle of entryfields, lists, etc. I confirmed all these issues on UWord with current version. This can be seen in e.g. standard FileSel where the file and directory lists and the File entryfield all lack vertical edges. Additionally, if the width of the FileSel is increased by dragging, the horizontal edges do not extend all the way to the right edge of each panel. There are also some other corner effects that look strange on UWord main window.

TheIDE does not show these problems for me possibly because I have 'Dark' theme selected there.

Best regards,

Tom

I have the same problem on Windows with the newest trunk. Just checked 2 hours ago. I am using MSVC 2019 and default theme. Simply edit fields seem to have too narrow painting rectangle.

Jakub

Are you getting these warnings? If yes, you are too victim of broken compiler...

Mirek

I'll check that the next time I will be under Windows.

---

---

Subject: Re: 2020.1 alpha

Posted by [Novo](#) on Sun, 29 Mar 2020 20:04:34 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

It would be great to add support of "Use unique output directory per assembly (append assembly name to output directory)" to umk. I tried to do that by myself, but got lost in different variants of SaveVars/LoadVars. I couldn't figure out how to force umk to use assembly name as a folder name. I was always getting a different folder name.

TIA

---

---

Subject: Re: 2020.1 alpha

Posted by [Sender Ghost](#) on Sun, 29 Mar 2020 20:55:02 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Novo wrote on Sun, 29 March 2020 20:04

I couldn't figure out how to force umk to use assembly name as a folder name. I was always getting a different folder name.

There is a possibility to specify output directory/file for umk. Just need to use absolute path to available output directory or create it before umk usage.

For example:

```
% mkdir -p out/uppsrc
% ./umk uppsrc ide CLANG -brs +GUI ${PWD}/out/uppsrc/theide
<..>
% ./umk uppsrc ide CLANG -brs +GUI ${PWD}/out/uppsrc
<..>
% ls -l out/uppsrc
ide
theide
```

---

---

Subject: Re: 2020.1 alpha

Posted by [Novo](#) on Sun, 29 Mar 2020 23:26:47 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Sender Ghost wrote on Sun, 29 March 2020 16:55Novo wrote on Sun, 29 March 2020 20:04

I couldn't figure out how to force umk to use assembly name as a folder name. I was always getting a different folder name.

There is a possibility to specify output directory/file for umk. Just need to use absolute path to available output directory or create it before umk usage.

For example:

```
% mkdir -p out/uppsrc
% ./umk uppsrc ide CLANG -brs +GUI ${PWD}/out/uppsrc/theide
```

---

```
<..>
% ./umk uppsrc ide CLANG -brs +GUI ${PWD}/out/uppsrc
<..>
% ls -l out/uppsrc
ide
theide
```

Thanks. I knew that it is possible to pass to umk an absolute path to an output directory.  
But it is much more convenient to pass an extra-option and get behavior identical to TheIDE.

---

---

Subject: Re: 2020.1 alpha  
Posted by [amrein](#) on Mon, 30 Mar 2020 11:43:22 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

It would be great to have an extra umk parameter to specify the configuration folder instead of having to pass the absolute path.  
With absolute path, the generated Makefile is static (it uses absolute path within).

---

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Mon, 30 Mar 2020 12:57:57 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

amrein wrote on Mon, 30 March 2020 13:43It would be great to have an extra umk parameter to specify the configuration folder instead of having to pass the absolute path.  
With absolute path, the generated Makefile is static (it uses absolute path within).

Sorry, right now I am a bit confused here... What exactly do you mean by config folder?  
~/.upp/umk?

Example of absolute path in Makefile?

Mirek

---

---

Subject: Re: 2020.1 alpha  
Posted by [amrein](#) on Mon, 30 Mar 2020 20:02:39 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

mirek wrote on Mon, 30 March 2020 14:57amrein wrote on Mon, 30 March 2020 13:43It would be great to have an extra umk parameter to specify the configuration folder instead of having to pass the absolute path.  
With absolute path, the generated Makefile is static (it uses absolute path within).

Sorry, right now I am a bit confused here... What exactly do you mean by config folder?  
~/.upp/umk?



Yes exactly.

Quote:

Example of absolute path in Makefile?

In my memory, the .bm absolute path was inside the Makefile. I tested umk today and apparently I was wrong.

---

Subject: Re: 2020.1 alpha  
Posted by [Tom1](#) on Tue, 31 Mar 2020 11:02:28 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi Mirek,

I'm using the wonderful new `Xform2D::Map()` to render a raster map image over a specific area with specific corner coordinates. This is a great feature, but `BufferPainter::Fill(image)` suffers from edge effects at the borders of the image fill. The fill leaves narrow gaps between the filled triangles. Both `FILL_FAST` and `FILL_EXACT` exhibit this problem. Even a simple `BufferPainter::Fill(Blue())` exhibits this issue, although the gap seems slightly narrower then.

At this time I would like to be able to use at least `FILL_FAST`. Can you take a look at this?

Here's a testcase:

```
#include <CtrlLib/CtrlLib.h>

using namespace Upp;

class PainterImageMapping : public TopWindow {
public:
    typedef PainterImageMapping CLASSNAME;

    PainterImageMapping(){
        Sizeable();
    }

    virtual void Paint(Draw &draw){
        ImageBuffer ib(GetSize());
        {
            ImageBuffer imb(500,500);
```

```

{
    BufferPainter iw(imb);
    iw.Clear(Black());
}

Image img(imb);

// image coordinates
Pointf iNW(0,0);
Pointf iNE(img.GetWidth(),0);
Pointf iSW(0,img.GetHeight());
Pointf iSE(img.GetWidth(),img.GetHeight());

BufferPainter w(ib);
w.Clear(White());

dword flags=FILL_FAST;
//dword flags=FILL_EXACT;
{
    Pointf nw(100,100);
    Pointf ne(700,100);
    Pointf sw(100,700);
    Pointf se(650,750);
    w.Move(nw).Line(ne).Line(se).Fill(img, Xform2D::Map(iNW,iNE,iSE,nw,ne,se), flags);
    w.Move(nw).Line(sw).Line(se).Fill(img, Xform2D::Map(iNW,iSW,iSE,nw,sw,se), flags);
}
{
    Pointf nw(700,100);
    Pointf ne(1400,120);
    Pointf sw(650,750);
    Pointf se(1300,720);
    w.Move(nw).Line(ne).Line(se).Fill(img, Xform2D::Map(iNW,iNE,iSE,nw,ne,se), flags);
    w.Move(nw).Line(sw).Line(se).Fill(img, Xform2D::Map(iNW,iSW,iSE,nw,sw,se), flags);
}
{
    Pointf nw(100,700);
    Pointf ne(650,750);
    Pointf sw(100,1200);
    Pointf se(650,1350);
    w.Move(nw).Line(ne).Line(se).Fill(img, Xform2D::Map(iNW,iNE,iSE,nw,ne,se), flags);
    w.Move(nw).Line(sw).Line(se).Fill(img, Xform2D::Map(iNW,iSW,iSE,nw,sw,se), flags);
}
{
    Pointf nw(650,750);
    Pointf ne(1300,720);
    Pointf sw(650,1350);
    Pointf se(1300,1220);
    w.Move(nw).Line(ne).Line(se).Fill(img, Xform2D::Map(iNW,iNE,iSE,nw,ne,se), flags);
}

```

```
w.Move(nw).Line(sw).Line(se).Fill(img, Xform2D::Map(iNW,iSW,iSE,nw,sw,se), flags);  
}  
  
w.Finish();  
}  
SetSurface(draw,Rect(ib.GetSize()),ib,ib.GetSize(),Point(0,0));  
}  
};  
  
GUI_APP_MAIN  
{  
    PainterImageMapping().Run();  
}
```

Best regards,

Tom

[EDIT] - Expanded testcase to include another row of tiles. This effectively adds (nearly) horizontal facing edges.

---

Subject: Re: 2020.1 alpha  
Posted by [Tom1](#) on Tue, 31 Mar 2020 11:38:53 GMT  
[View Forum Message](#) <> [Reply to Message](#)

Hi,

Here's a zoomed in detail from the image rendered by the above test case. The center of the image shows the common point of six triangles.

Best regards,

Tom

#### File Attachments

1) [BufferPainterFillEdges.png](#), downloaded 574 times

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Tue, 31 Mar 2020 13:15:35 GMT  
[View Forum Message](#) <> [Reply to Message](#)

Tom1 wrote on Tue, 31 March 2020 13:02Hi Mirek,

I'm using the wonderful new `Xform2D::Map()` to render a raster map image over a specific area with specific corner coordinates. This is a great feature, but `BufferPainter::Fill(image)` suffers from edge effects at the borders of the image fill. The fill leaves narrow gaps between the filled triangles.

I am afraid this is just a feature of antialiased rendering. Problem is gradual composition of those edge points I think.

`FILL_FAST` unfortunately is still based on the same method, just rounding values to 0/1.

Mirek

---

Subject: Re: 2020.1 alpha  
Posted by [Tom1](#) on Tue, 31 Mar 2020 13:28:31 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi,

I tried with `MODE_NOAA` too, but some of the borders still show a 'dashed' gap. It is sharper of course in this case.

Could it be possible to fix those gaps seen in `MODE_NOAA` rendering and then internally use that mode with `FILL_FAST` while rest of the rendering is done according to the selected mode?

Or is there any other known way around this issue to clean up the visual appearance?

Best regards,

Tom

---

Subject: Re: 2020.1 alpha  
Posted by [mirek](#) on Tue, 31 Mar 2020 13:46:59 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Ugly quick fix:

```
#include <CtrlLib/CtrlLib.h>
```

```
using namespace Upp;
```

```

class PainterImageMapping : public TopWindow {
public:
    typedef PainterImageMapping CLASSNAME;

    PainterImageMapping(){
        Sizeable();
    }

    virtual void Paint(Draw &draw){
        DrawPainter w(draw, GetSize());

        Image img = CreateImage(Size(500, 500), Black());

        // image coordinates
        Pointf iNW(0,0);
        Pointf iNE(img.GetWidth(),0);
        Pointf iSW(0,img.GetHeight());
        Pointf iSE(img.GetWidth(),img.GetHeight());

        w.Clear(White());

        dword flags=FILL_FAST;
        auto Do = [&](const Xform2D xform) {
            w.Fill(img, xform, flags).Stroke(2, img, xform, flags);
        };

        {
            Pointf nw(100,100);
            Pointf ne(700,100);
            Pointf sw(100,700);
            Pointf se(650,750);
            w.Move(nw).Line(ne).Line(se); Do(Xform2D::Map(iNW,iNE,iSE,nw,ne,se));
            w.Move(nw).Line(sw).Line(se); Do(Xform2D::Map(iNW,iSW,iSE,nw,sw,se));
        }
        {
            Pointf nw(700,100);
            Pointf ne(1400,120);
            Pointf sw(650,750);
            Pointf se(1300,720);
            w.Move(nw).Line(ne).Line(se); Do(Xform2D::Map(iNW,iNE,iSE,nw,ne,se));
            w.Move(nw).Line(sw).Line(se); Do(Xform2D::Map(iNW,iSW,iSE,nw,sw,se));
        }
        {
            Pointf nw(100,700);
            Pointf ne(650,750);
            Pointf sw(100,1200);
            Pointf se(650,1350);

```

```

w.Move(nw).Line(ne).Line(se); Do(Xform2D::Map(iNW,iNE,iSE,nw,ne,se));
w.Move(nw).Line(sw).Line(se); Do(Xform2D::Map(iNW,iSW,iSE,nw,sw,se));
}
{
    Pointf nw(650,750);
    Pointf ne(1300,720);
    Pointf sw(650,1350);
    Pointf se(1300,1220);
    w.Move(nw).Line(ne).Line(se); Do(Xform2D::Map(iNW,iNE,iSE,nw,ne,se));
    w.Move(nw).Line(sw).Line(se); Do(Xform2D::Map(iNW,iSW,iSE,nw,sw,se));
}
}
};

GUI_APP_MAIN
{
    PainterImageMapping().Run();
}

```

---

**Subject:** Re: 2020.1 alpha  
**Posted by** [mirek](#) on Tue, 31 Mar 2020 13:49:29 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Tom1 wrote on Tue, 31 March 2020 15:28Hi,

I tried with MODE\_NOAA too, but some of the borders still show a 'dashed' gap. It is sharper of course in this case.

Could it be possible to fix those gaps seen in MODE\_NOAA rendering and then internally use that mode with FILL\_FAST while rest of the rendering is done according to the selected mode?

Or is there any other known way around this issue to clean up the visual appearance?

Best regards,

Tom

Yeah, in my previous message, I really confused MODE\_NOAA with FILL\_FAST. So no, MODE\_NOAA can be a tiny bit faster, but really works just by rounding aliasing alpha to 0 or 255.

---

**Subject:** Re: 2020.1 alpha

Posted by [Tom1](#) on Tue, 31 Mar 2020 17:09:30 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Hi,

OK, Thanks. It (adding Stroke) does work indeed, but the penalty is 40% increase in execution time.

-

Interestingly, this combo works too:

```
BufferPainter w(ib,MODE_NOAA);
```

```
dword flags=FILL_HREFLECT|FILL_VREFLECT|FILL_FAST;
```

But of course I do not wish to use MODE\_NOAA as it ruins everything else.

Could this observation be used to tweak the same behavior out of BufferPainter using MODE\_ANTIALIASED with minor modifications?

IMO, switching internally temporarily to MODE\_NOAA while rendering with FILL\_FAST is quite OK -- if only possible.

Best regards,

Tom

---

Subject: Re: 2020.1 alpha

Posted by [mirek](#) on Tue, 31 Mar 2020 17:59:14 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Tom1 wrote on Tue, 31 March 2020 19:09Hi,

OK, Thanks. It (adding Stroke) does work indeed, but the penalty is 40% increase in execution time.

Well, the alternative is enlarge rectangles 1 pixel... That should be fast.

---

Subject: Re: 2020.1 alpha

Posted by [Tom1](#) on Tue, 31 Mar 2020 20:04:13 GMT

Hi,

Thanks Mirek! It works just perfectly.

I used the following pattern to sufficiently overlap and expand the triangles:

```
w.Move(nw+Pointf(-2,-1)).Line(ne+Pointf(1,-1)).Line(se+Pointf(1,1)).Fill(img,
Xform2D::Map(iNW,iNE,iSE,nw,ne,se), flags);
w.Move(nw+Pointf(-1,-1)).Line(sw+Pointf(-1,1)).Line(se+Pointf(2,1)).Fill(img,
Xform2D::Map(iNW,iSW,iSE,nw,sw,se), flags);
```

And: No observable slowdown! :)

Thanks and best regards,

Tom

---