

---

Subject: 2021.1 rc

Posted by [mirek](#) on Sun, 02 May 2021 15:59:01 GMT

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

---

Uploaded to <https://sourceforge.net/projects/upp/files/upp/2021.1rc1/>

Please test. If there are no issues detected, this will become 2021.1 in a couple of days.

#### Release highlights

New system for 3rd party modules, "UppHub": independently developed U++ modules residing in Git repositories now can be seamlessly integrated, including automatic installation of missing packages if they are in the UppHub.

#### Core

double NAN and INF values are now considered Null (IsNull returns true for them).

FileSystemInfo now returns volume names of network drives

Improvements in FindFile

String middle tier heap handling optimised

U++ does not require MemoryFreeThread call at the end of thread (it is now implemented using thread\_local destructor)

Core/SSH: the underlying libssh2 library is upgraded to v. 1.9.0

#### CtrlCore

New C++ style for iteration of widget children now possible for( Ctrl& q : widget)

Pen support (pressure, tilt etc...)

#### RichText, RichEdit

1.15 line spacing support

JPEG raw image data is now exported to PDF as JPEG (instead of recoding)

#### TheIDE

Context goto now support AK\_ key definitions

TheIDE now contains credentials manager for git and svn (including github tokens)

Various improvements to text comparison dialogs - ability to copy and delete individual lines between versions, filtering by file time (for directory comparison).

Repo history of .upp files directly available via package context menu

Open package dialog filtering options redesigned

New function to copy positions as text to clipboard (e.g. "RichEdit/Modify.cpp:27") and go to such position based on clipboard content. Useful for communication between developers.

Some common nest root files like README.md or LICENSE are now directly accessible through <meta> pseudo-package.

TheIDE/umk build flags MAKE\_LIB and MAKE\_MLIB force generation of library instead of executable.

New "Merge nests" function (in Package organizer) copies all used packages that are not in the first nest of assembly into the first nest. In U++, first nest usually contains the application code whole while other nests contain libraries (U++ or 3rd party libraries). This function is intended to "freeze" the non-application code before releasing / tagging / branching to reduce the chance that

a change of that code does not break the application.

The IDE now can "Open terminal" at various directories (output directory, package directory, source file directory etc...), with PATH augmented with current build executable directories.

Support for .md (markdown) format

Improved debugger threads tab

Support for override in virtual methods dialog

Ctrl+Shift+Up/Down now moving the line or block of text up/down

Win32

Now ships with minimal git (mingit) implementation

CLANG now at version 11.0.0