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Subject: 32 bit wchar merged

Posted by [mirek](#) on Thu, 02 Dec 2021 11:09:12 GMT

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sizeof(wchar) is changed to 4 (32 bits) to support non BMP unicode characters

This might bring some incompatibilities in the code that expects wchar to be 16 bit, which especially involves dealing with Win32 (and to lesser extend MacOS) APIs, so if your application

is doing that, please check all instances of WCHAR (UniChar on MacOS) or even wchar especially type casts.

To support host APIs, char16 is introduced (but there is no 16-bit String varian).

Use ToSystemCharsetW, FromSystemCharsetW to convert texts to Win32 API.

- Support of drawing non-BMP characters in GUI
- Vastly improved character font replacement code (when drawing characters missing with requested font, replacement font is used)
- Last instances of Win32 ANSI calls (those ending with A) are removed
- UTF handling routines are refactored and their's naming is unified
- RTF is now being able to handle non-BMP characters (RTF is used as clipboard format for RichText)

Other minor changes:

- fixed TryRealloc issue
- improved MemoryCheck
- Removed MemoryAlloc48/MemoryFree48
- In theide Background parsing should less often cause delays in the main thread