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Subject: Re: Native Browser inside U++ Ctrl  
Posted by [forlano](#) on Thu, 28 May 2026 17:33:48 GMT  
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zsolt wrote on Thu, 28 May 2026 17:23 Did you use a wrapper library like this one or use the platform's webviews solutions directly?

No, we do NOT use the webview wrapper. We use the platform's native APIs directly.

The reason is exactly what you might expect: webview is designed to create its own top-level window and run its own event loop via `webView::run()`. This makes it fundamentally incompatible with embedding inside an existing U++ `Ctrl` — two event loops cannot coexist in the same application.

Instead we call the platform APIs directly:

- **Windows**: `ICoreWebView2` COM API (WebView2 SDK)`. Loaded at runtime via `LoadLibrary("WebView2Loader.dll")` to avoid static linking issues with Clang. The WebView2 controller is created as a child of the TopWindow` HWND.`

- **macOS**: `WKWebView` (WebKit.framework)` via Objective-C++ in a file that is kept completely separate from U++ code to avoid namespace conflicts between Cocoa types (`NSRect` , `NSPoint` ) and U++ types ( `Rect` , `Point` ).`

- **Linux**: `WebKitWebView` (webkit2gtk-4.1)`. Since U++ renders everything with Cairo on a single `GtkDrawingArea` (not a `GtkContainer`), true embedding is not possible without patching U++ core. We currently use a GTK_WINDOW_TOPLEVEL` with GDK_WINDOW_TYPE_HINT_UTILITY` , synchronized with the U++ window via configure-event` and focus-in/out` signals for correct z-order management.`