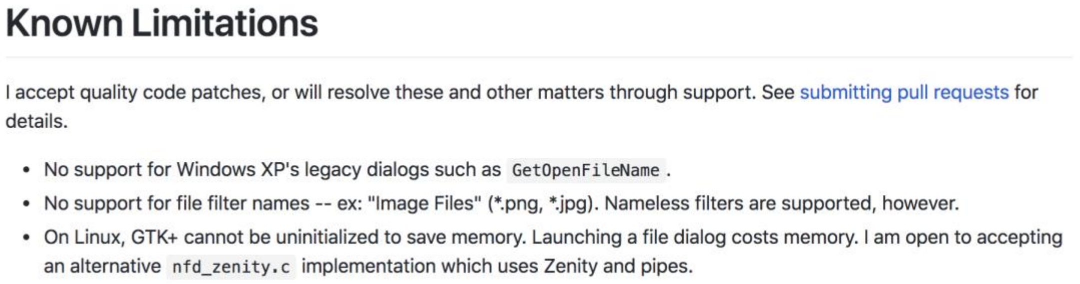
Valgrind Leaks Memory

We have detected that our game is leaking memory, but its fault of the NFD library. If we check their website we can read on the third point that GTK+ cannot be uninitialized to save memory.

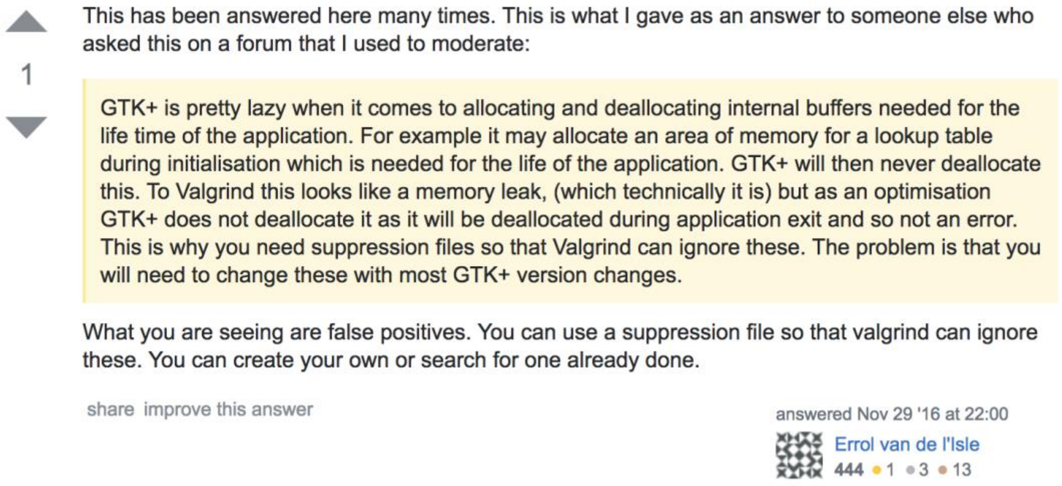


Known Limitations

I accept quality code patches, or will resolve these and other matters through support. See submitting pull requests for details.

- No support for Windows XP's legacy dialogs such as `GetOpenFileName`.
- No support for file filter names -- ex: "Image Files" (*.png, *.jpg). Nameless filters are supported, however.
- On Linux, GTK+ cannot be uninitialized to save memory. Launching a file dialog costs memory. I am open to accepting an alternative `nfd_zenity.c` implementation which uses Zenity and pipes.

We have been investigating about this problem of GTK and we found that is a normal problem, like you can read here:



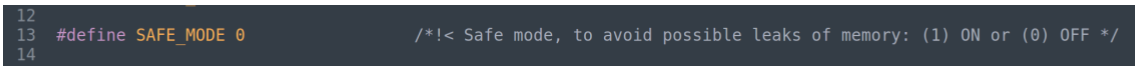
This has been answered here many times. This is what I gave as an answer to someone else who asked this on a forum that I used to moderate:

> GTK+ is pretty lazy when it comes to allocating and deallocating internal buffers needed for the life time of the application. For example it may allocate an area of memory for a lookup table during initialisation which is needed for the life of the application. GTK+ will then never deallocate this. To Valgrind this looks like a memory leak, (which technically it is) but as an optimisation GTK+ does not deallocate it as it will be deallocated during application exit and so not an error. This is why you need suppression files so that Valgrind can ignore these. The problem is that you will need to change these with most GTK+ version changes.

What you are seeing are false positives. You can use a suppression file so that valgrind can ignore these. You can create your own or search for one already done.

answered Nov 29 '16 at 22:00
Errol van de l'Isle
444 ● 1 ● 3 ● 13

Our solution for this error was to make a Safe Mode in order to avoid the compiling process of this library. It is a Macro in ./includes/types.h that disable the Native File Dialog system and run the game without Memory Leaks.



```

#define SAFE_MODE 0                   /*!< Safe mode, to avoid possible leaks of memory: (1) ON or (0) OFF */

```