

## Doomsday Engine - Feature #1886

### Use SDL 2 for window management, display modes, color correction, and keyboard/mouse/gamepad input

2014-10-20 15:17 - skyjake

<b>Status:</b>	In Progress	<b>Start date:</b>	2014-10-20
<b>Priority:</b>	Urgent	<b>% Done:</b>	90%
<b>Assignee:</b>	skyjake		
<b>Category:</b>	Redesign		
<b>Target version:</b>	3.0		
<b>Description</b>			
SDL 2 has quite good support for low-level functionality that is essential to games. Particularly, it supports native input APIs like XInput on Windows, for raw device events. Using SDL 2 instead of custom code and Qt for all these things (wm, video, input) should improve robustness and reduce the maintenance burden.			
In practice:			
<ul style="list-style-type: none"><li>• SDL 2 should be linked to libgui and there should be a variant of GLWindow that creates an underlying SDL_Window.</li><li>• DisplayMode should be removed and replaced with SDL video functions.</li><li>• Qt's OpenGL API wrappers should still be usable with an SDL-created OpenGL context (after creating a QOpenGLContext representing the previously created context).</li></ul>			
<b>Related issues:</b>			
Related to Feature #1229: Input plugins: generate events from connected contr...		<b>Rejected</b>	<b>2003-07-09</b>
Related to Feature #1741: Upgrade to SDL 2		<b>Closed</b>	<b>2014-03-27</b>
Related to Bug #778: Gamepad usability issues		<b>Progressed</b>	<b>2007-06-07</b>
Related to Bug #1042: [Windows] Alt key and console activation		<b>New</b>	<b>2012-05-15</b>
Related to Bug #1041: [Windows] Pressing Alt/AltGr key confuses turning		<b>New</b>	<b>2012-05-15</b>
Related to Feature #1758: Separate left/right modifier keys (Shift, Alt, etc.)		<b>New</b>	<b>2014-04-18</b>
Related to Bug #2259: Mouse unusable on ArchLinux with Gnome / Wayland		<b>New</b>	<b>2017-07-23</b>

### History

#### #1 - 2014-10-20 15:17 - skyjake

- Related to Feature #1229: Input plugins: generate events from connected controllers added

#### #2 - 2014-10-20 15:17 - skyjake

- Related to Feature #1741: Upgrade to SDL 2 added

#### #3 - 2014-10-20 15:17 - skyjake

- Subject changed from Use SDL2 for keyboard, mouse, and joystick input to Use SDL 2 for keyboard, mouse, and joystick input

#### #4 - 2014-10-20 15:25 - skyjake

- Tags changed from Input to Input, Plugin

#### #5 - 2015-01-16 12:14 - skyjake

- Description updated

#### #6 - 2015-01-16 12:15 - skyjake

- Description updated

#### #7 - 2015-01-16 12:15 - skyjake

- Related to Bug #778: Gamepad usability issues added

#### #8 - 2015-03-13 08:58 - skyjake

- Related to Bug #1042: [Windows] Alt key and console activation added

**#9 - 2015-03-13 08:58 - skyjake**

- Related to Bug #1041: [Windows] Pressing Alt/AltGr key confuses turning added

**#10 - 2015-04-22 04:31 - danij**

- Priority changed from Normal to High

**#11 - 2015-04-22 05:08 - danij**

- Assignee set to danij

**#12 - 2015-05-03 17:03 - skyjake**

- Target version changed from 42 to 2.0 – Home UI & Packages

**#13 - 2015-09-13 13:45 - skyjake**

Joysticks/gamepads are already being accessed via SDL2.

**#14 - 2015-11-03 09:20 - skyjake**

- Subject changed from Use SDL 2 for keyboard, mouse, and joystick input to Input plugins that use SDL 2 for keyboard, mouse, and joystick input

**#15 - 2015-11-03 09:20 - skyjake**

- Subject changed from Input plugins that use SDL 2 for keyboard, mouse, and joystick input to Input plugin that use SDL 2 for keyboard, mouse, and joystick input

**#16 - 2015-11-03 09:21 - skyjake**

- Subject changed from Input plugin that use SDL 2 for keyboard, mouse, and joystick input to Input plugin that uses SDL 2 for keyboard, mouse, and joystick input

**#17 - 2016-03-27 08:15 - skyjake**

- Target version changed from 2.0 – Home UI & Packages to Input and game controllers

**#18 - 2017-07-05 08:29 - skyjake**

- Assignee changed from danij to skyjake

- Priority changed from High to Urgent

- Target version changed from Input and game controllers to 2.1 (Late 2018)

**#19 - 2017-07-05 08:30 - skyjake**

- Subject changed from Input plugin that uses SDL 2 for keyboard, mouse, and joystick input to Input plugin that uses SDL 2 for keyboard and mouse input

**#20 - 2017-07-05 08:32 - skyjake**

When the game grabs key/mouse input, events should be received via SDL so that the appropriate low-level APIs are used.

UI event handling can still be done via Qt as currently.

**#21 - 2017-07-11 19:11 - skyjake**

- Subject changed from Input plugin that uses SDL 2 for keyboard and mouse input to Use SDL 2 for window management, display modes, color correction, and keyboard/mouse/gamepad input

- Description updated

- Category changed from Enhancement to Redesign

- Target version changed from 2.1 (Late 2018) to Rendering

**#22 - 2017-07-11 19:13 - skyjake**

- Related to Feature #1758: Separate left/right modifier keys (Shift, Alt, etc.) added

**#23 - 2017-07-24 08:22 - skyjake**

- Related to Bug #2259: Mouse unusable on ArchLinux with Gnome / Wayland added

**#24 - 2018-07-29 16:41 - skyjake**

- Target version changed from Rendering to 3.0

**#25 - 2018-07-29 16:41 - skyjake**

- Status changed from New to In Progress

- % Done changed from 0 to 50

**#26 - 2018-07-29 16:43 - skyjake**

I've been working on this recently, in addition to removing dependencies on Qt in the main executables. Currently debugging through a number of regressions. At least keyboard input should be much improved thanks to raw input modes.

**#27 - 2018-11-05 19:31 - skyjake**

- Target version changed from 3.0 to 2.2 (2019)

**#28 - 2019-06-28 06:58 - skyjake**

- % Done changed from 50 to 90

**#29 - 2019-10-14 10:23 - skyjake**

- Target version changed from 2.2 (2019) to 3.0