Enlightenment as Standalone Wayland Compositor

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Identify components E relies on from X

- Rendering
- DRM and VT handling
- Input handling
- (Session recovery)
Allow Rendering with Wayland

- Wayland engines available in Evas
  - SHM with double and triple buffering
  - EGL engine
  - DRM software and hardware accelerated
- Switched all Xwindow usage to evas canvas to allow X11 as well as wayland surfaces
- Many other abstractions from X already existed in ecore for framebuffer and other display systems
DRM Handling

- Ecore Drm Library
  - Systemd for session control
  - Udev for device discovery/hotplugging
  - Libdrm for hardware access
  - Dbus for input device opening/closing
  - VT switching from ioctl
Input Handling

- Originally designed to use libinput from Wayland
  - Removed libinput due to issues with libinput event processing
  - Moving back to libinput now as final solution
  - Keyboard, mouse, and touch screen input supported
  - Libinput missing joystick support
Shell Support

- XDG shell support implemented
- wl_shell also supported
- IVI shell supported
Discussion Topics

• XDG: Better support for missing desktop related parts, like systray replacement, border icon advertising, uniconify
  – What alternatives are others using here?

• What should we use to replace xrandr?
  – Udev hotplug to support output reconfiguring?

• Session-recovery: E catches segfaults and allows session recovery with all applications restored, X helps here.
  – Protocol extension for this?
Thank you.