

Gnome 3 (r)evolution

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Where are we now?

- GLib 2.28.0 released on February 08
- GTK+ 3.0 released on February 10
- Gnome 3.0 planned for April 06
- Fedora 15 planned for May 10

Desktop

- no desktop icons?
- changing the way users work with documents
- desktop as a storage place, work place, "reminder" files → chaos
- windows covering desktop space
- cloud storage? (Google, Dropbox)
- unfinished story for 3.0

gnome-shell

- new font (Cantarell), new theme (Adwaita)
- mutter tweaks: drag to maximize, sticky transient dialogs
- persistent notifications, Rhythmbox play buttons
- system tray
- Dash
- symbolic icons
- drag&drop
- future Zeitgeist and Tracker integration

Fedora 15

- fallback: `gnome-session-is-accelerated` helper
- `gnome-panel` still available, not actively maintained anymore
- `gnome-power-manager` default to suspend on lid close

Nautilus

- removed emblems
- removed per-folder backgrounds
- browser mode by default
- sidebar redesign

Glib new API - G(tk)Application

- set of utilities related to an application running in a desktop session
- uniqueness: replaces libunique
- manages top-level windows
- application can export actions
 - - "The action support is not complete yet."

Glib new API - GSettings

- multiple backends (dconf, gconf, memory, null)
- dconf is default, fully supported
 - - dconf-service for writing
 - - atomic replace
 - - NFS workarounds
- dconf-editor
- convenient API: notification, binding
- gsettings command-line tool

Glib new API - GDBus

- a thread-safe D-Bus library
- clean implementation, written from scratch, GIO streams-based
- creates a private (shared) worker thread for IO

Glib new API

- GIO+TLS (SSL)
- x-scheme-handler mimetypes

Gtk3 changes - rendering cleanup

- all drawing in GTK+ 3 is done via cairo
- possibilities for drawing redirection - PDF, web (broadway branch)
- Gdk is now almost X11-independent

Gtk3 changes - pluggable backends

- GDK_BACKEND environment variable
- internal frontend/backend separation in GDK
- allowing to build a single gdk library that contains multiple backends (interesting combinations are x11+wayland or quartz+x11)

Gtk3 changes - theming

- CSS syntax for theme configuration
- `XDG_CONFIG_HOME/gtk-3.0/gtk.css`
- `$HOME/.themes/theme-name/gtk-3.0/gtk.css`

```
GtkButton, GtkEntry {  
    color: #ff00ea;  
    font: Comic Sans 12  
}
```

Gtk3 changes

- added support for Xinput2
- mouse wheel scrolling has been removed from GtkNotebook
- the directfb backend has been removed

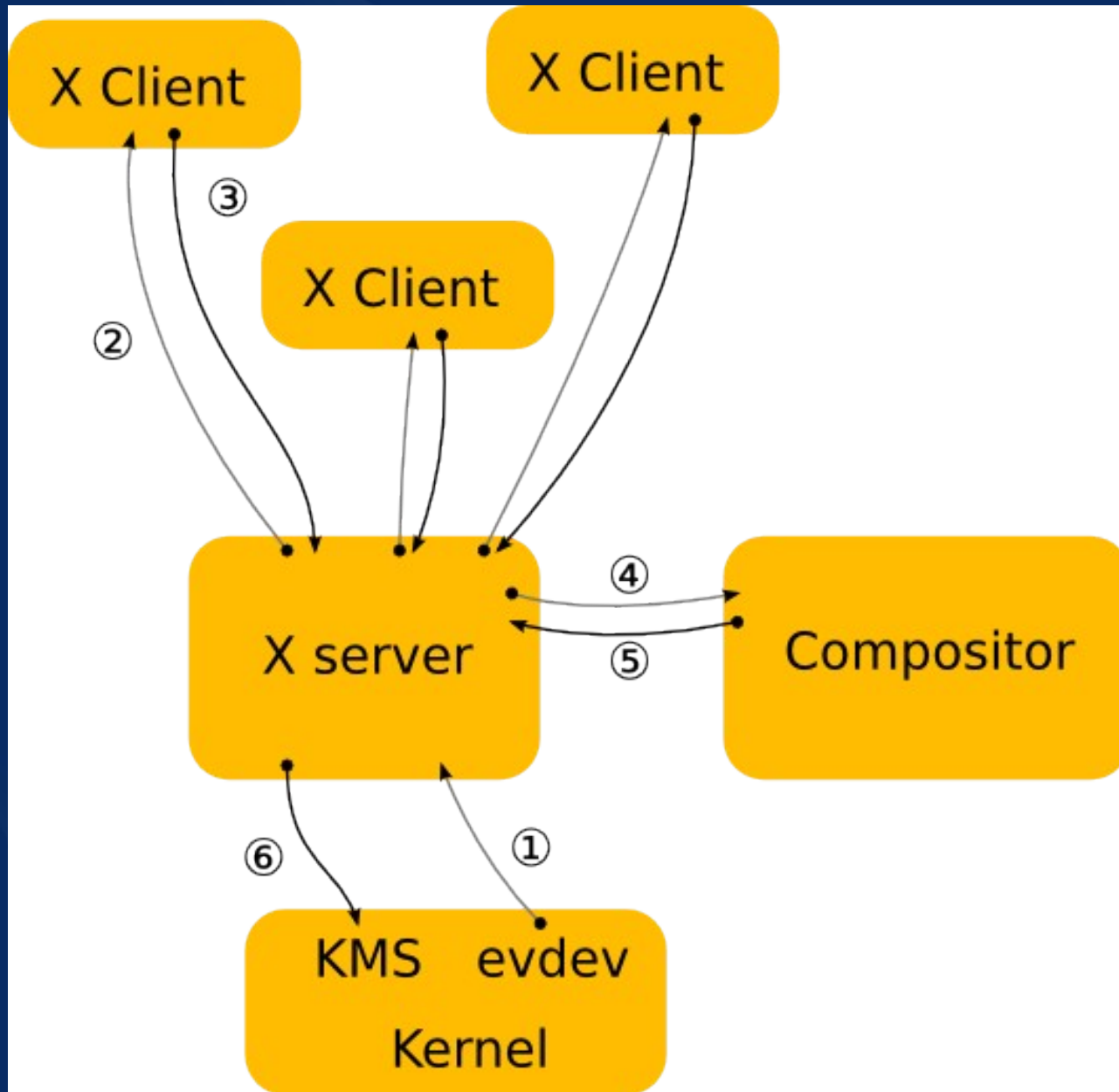


Wayland

- a compositor, an actual implementation and a library - not a X server fork!
- a protocol between a compositor and its clients
- standalone display server running on Linux kernel modesetting and evdev input devices
- reuses DRI drivers, KMS, Mesa
- does not define rendering API
- integrates the display server, window manager and compositor into one process

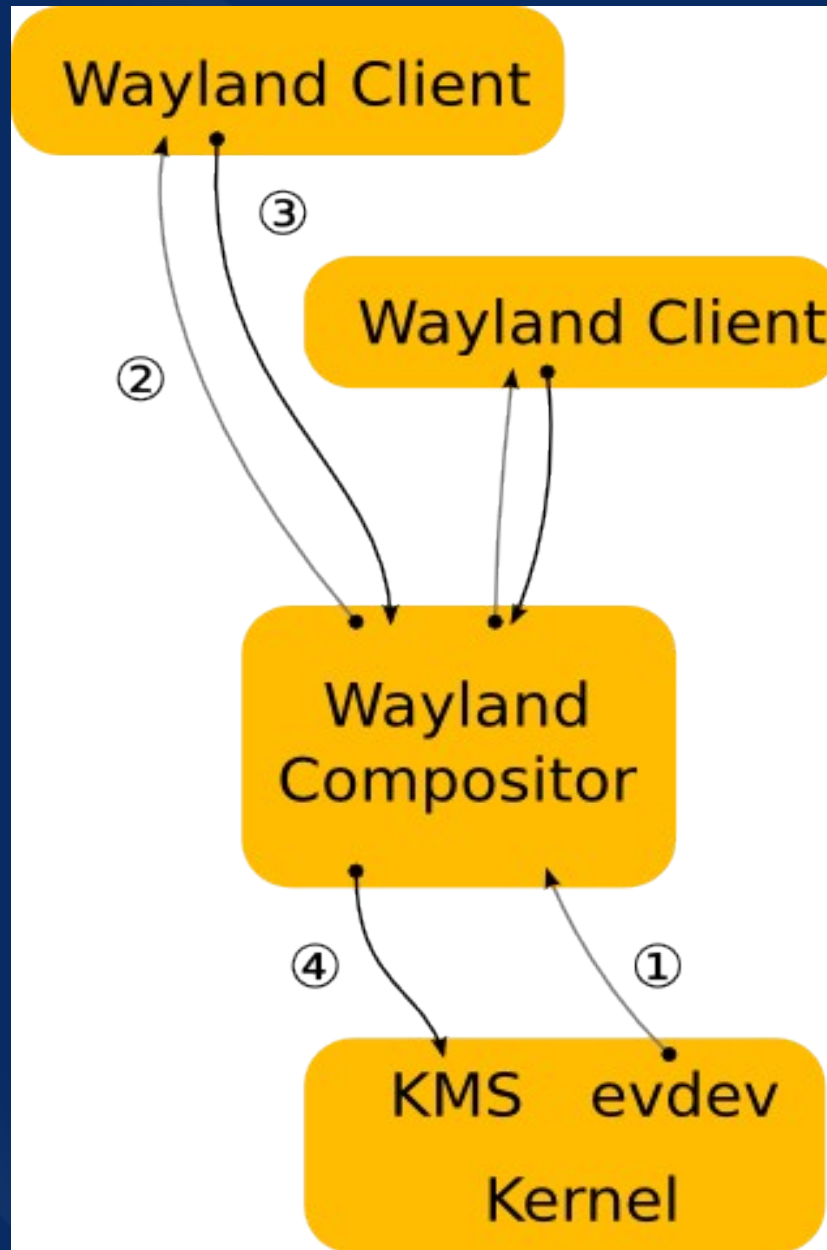


Wayland architecture



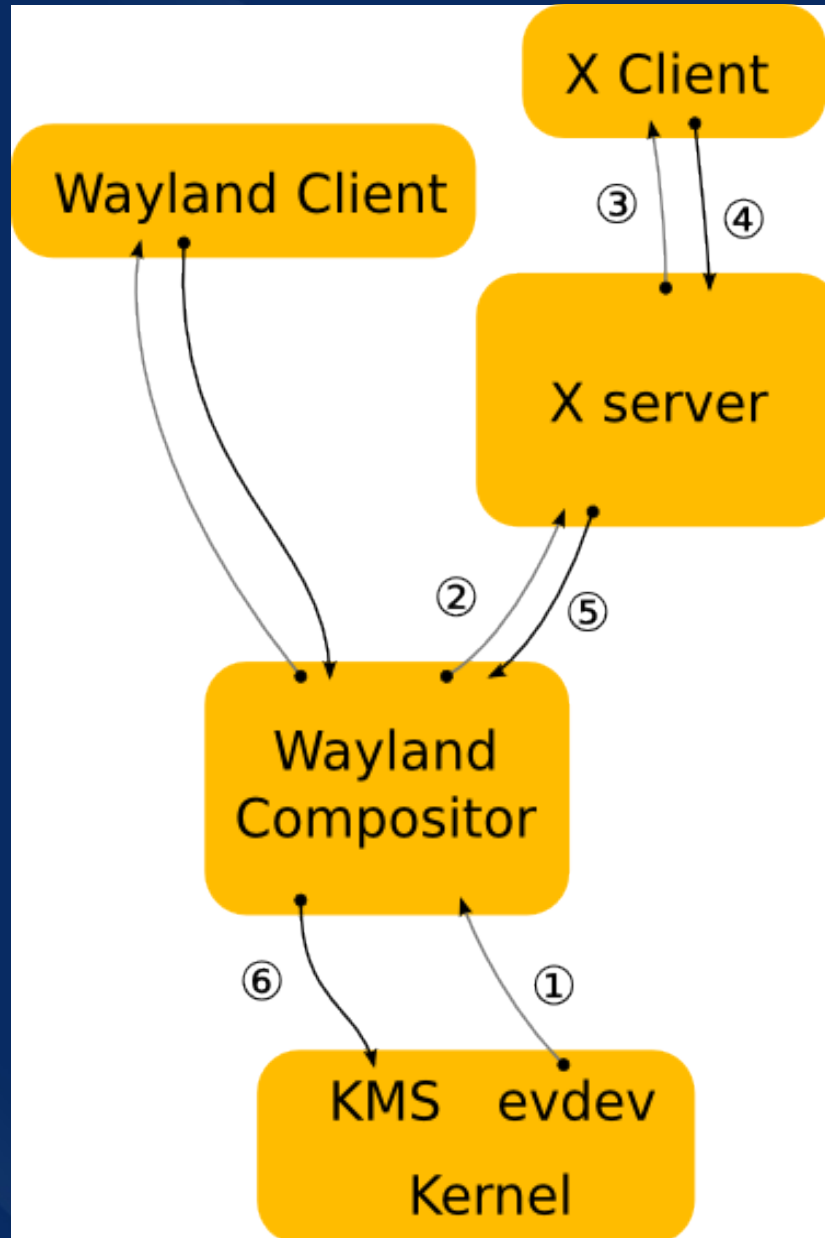


Wayland architecture





Wayland architecture





Wayland

- gdk-backend-wayland gtk3 branch
- qt-wayland branch on gitorious
- support in Clutter since 1.5.4
- remote X (and ssh tunnelling) concerns
 - use vnc and/or spice

Q's?