X11 ➟ Wayland

Lessons learned

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First impression: 2008

Wayland flowers, over the wall of Kristians cube in the Red Hat office
Another impression: 2013

A meeting at Kristians place to discuss the steps to get to “Wayland by default”.
Third impression: today

- 10 years since that first sighting
- Wayland is successful
- Multiple compositors
- Default in a few Linux distros
- Competition has come and gone
What have we learned?
Know why
Know why

- Every frame is perfect
Know why

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- Clients are isolated
Xsnow-1.41. December 16th 2000 by Rick Jansen (rja@euronet.nl)
Xsnow: http://www.euronet.nl/~rja/Xsnow/
Know why

- Every frame is perfect
- Clients are isolated
- No global coordinates
Know why

● Every frame is perfect
● Clients are isolated
● No global coordinates
● Do it client-side
Take your time
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- Replacing a graphics system is no walk in the park
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- Long tail of features: multi-monitor, a11y, middle-click, …
- Need to bring the apps along
- Backwards compatibility: XWayland
- Proprietary drivers make things much harder
- Easier to replace something if it is dead
There will be mistakes
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“Why X is Not Our Ideal Window System”
There will be mistakes

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Middle-click paste
There will be mistakes

“Why X is Not Our Ideal Window System”

Middle-click paste

Client-side key repeat
There will be mistakes

“Why X is Not Our Ideal Window System”

Middle-click paste

Client-side key repeat

Window positioning
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Join us and work on Wayland!
References

Thanks to Kristian, Owen, Jonas, Adam and Christian for their input

https://wayland.freedesktop.org/

https://wiki.gnome.org/Initiatives/Wayland

https://fedoraproject.org/wiki/Changes/WaylandByDefault

http://www.std.org/~msm/common/WhyX.pdf