



X11 → Wayland

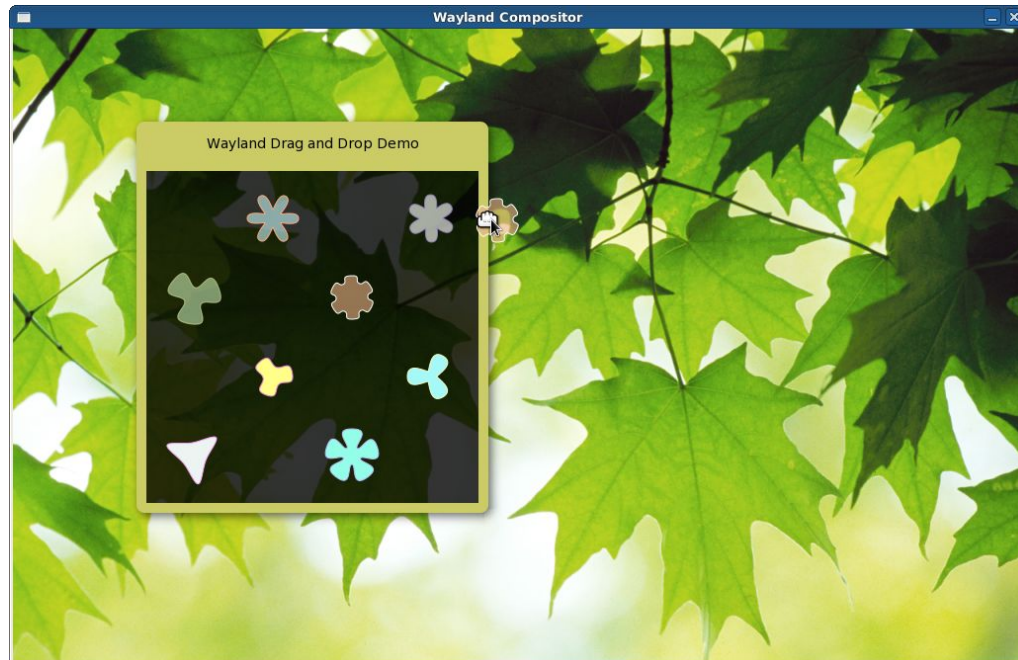
Lessons learned



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Open Source Summit 2018

# 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

Ubuntu Start Page - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://start.ubuntu.com/10.04/Google/

Quality A... Bugs in U... Bug #30... Bug #48... Bug #15... Bug Writi... Ubu...

ubuntu



Search

Ubuntu help > Ubuntu shop > Ubuntu community >

Done

Settings



System Information

Operating System: Linux-x86\_64  
NVIDIA Driver Version: 195.36.24

X Server Information

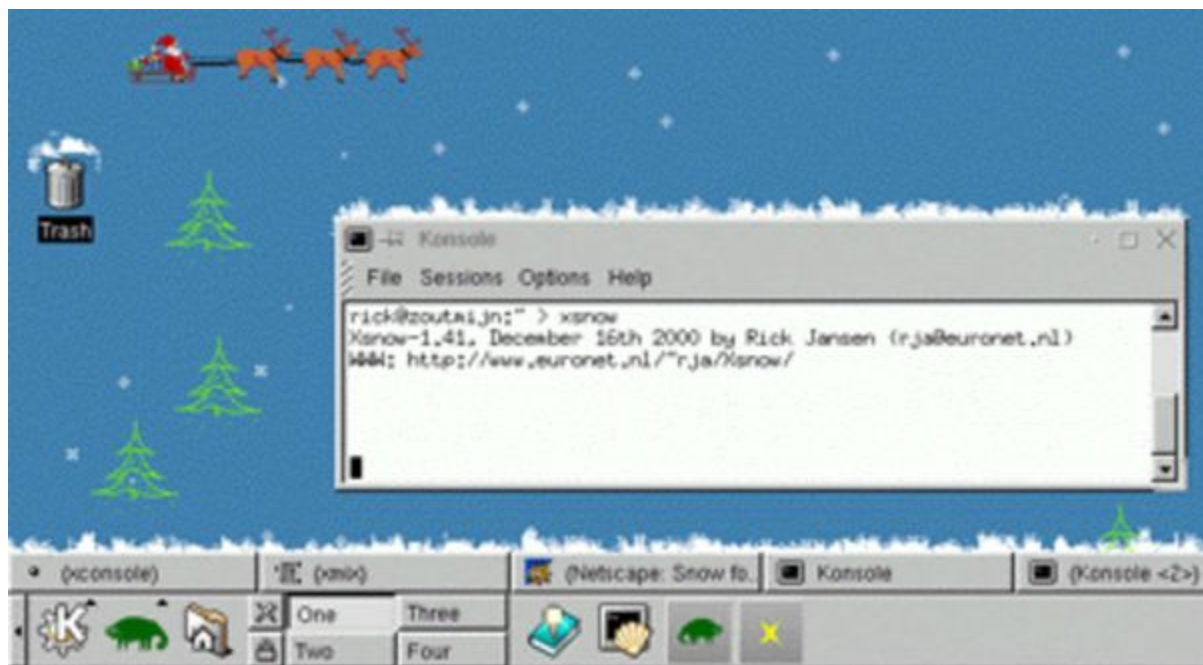
Display Name: ubuntu:0  
Server Version Number: 11.0  
Server Vendor String: The X.Org Foundation  
Server Vendor Version: 1.7.6 (10706000)  
NV-CONTROL Version: 1.22  
Screens: 1

Help Quit



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- Every frame is perfect
- Clients are isolated



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- No global coordinates

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- Clients are isolated
- No global coordinates
- Do it client-side

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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”

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Middle-click paste

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Client-side key repeat

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Window positioning



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Take your time  
There will be mistakes

Know why  
Take your time  
There will be mistakes  
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>

