Moving the Linux Desktop to another Reality

xrdesktop

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2D Display and Input

- Monitor: rectangle(s), non-specific position
- X11/Wayland compositor handles rendering
- Keyboard: 101-105 digital buttons
- Mouse: 3-7 digital buttons, analog 2D
- libinput + X11/Wayland handles input
XR Tracked Input

- Tracking usually done on PC
  - Computer Vision
XR Rendering

- Perspective
- 1 perspective per eye
- Lens distortion
- Direct Mode \( (VK_{EXT\_acquire\_xlib\_display}) \)
XR runtime

- Handles Rendering & Input
  - Like libinput/X11/Wayland
- Many proprietary APIs
- Khronos: OpenXR

Monoado: Open Source Augmented & Virtual Reality

📅 3 Oct 2019, 09:00
⏰ 45m
Mirroring windows to XR
Interaction example: Push / Pull
Interaction Example: Arrangement
Get Involved

- Chat with us! 
  #xrdesktop on Freenode or Discord.
- Gitlab on freedesktop.
- Hands on demo Thursday
- https://fossxr.dev

FOSS XR CONFERENCE 2019
Saturday 26 October 2019
De Balie - Amsterdam
Notable FOSS Tracking Projects

- OpenHMD
- libsurvive
- Maplab (SLAM)
- Others: Lighthouse Redox, PSMoveService, OpenPSVR, OSVR, OpenTrack, openvslam