Multitouch in GNOME shell

Carlos Garnacho

carlos@lanedo.com
carlosg@gnome.org
Where do we lie?
• GNOME shell mildly touch aware
  • Some features touch friendly
  • Some others inaccessible
  • Nothing utterly broken
• Some branches will improve the experience
  • On screen keyboard
  • Xinput2
  • Multitouch (based on XInput2)
On screen keyboard
A brief trip down to Xorg
Touch events

• Slightly out of band with regular events
• Different interpreters of events
  • There is a concept of touch ownership
  • Unowned events may also be tracked
• Multitouch protocol still under review
• No recent repo, patched Xorg available in Natty/Oneiric
Touch events (2)

Onscreen touch display

Window manager

Application

Touch events
Advice #1

If you are going to hand over ownership, do it quick
Advice #2

Listen to unowned events if you will, but prepare for rolling them back
Do's and don'ts
• Don't rely on Enter/Leave events
• Breaking the (Fitt's) law
• Keep gestures simple
• Avoid cluttering
• Size matters
• Don't make assumptions about the hardware
Gestures in the shell
• Moving windows
• Tiling to left or right
• Maximizing
• Workspace switching?
The toppings
• Desktop rotation
  • Accelerometer where available
  • WMI hotkeys / tablet mode
    - Left handed or right handed? Ergonomics matter!
• Consistent input behavior
  • Dependent on the current input device
• Turn the right knobs
  • gtk-entry-password-hint-timeout
  • Hiding unneeded settings
Questions?
References

- Get the slides!
  - http://lanedo.com/~carlos/Multitouch-in-gnome-shell.odp
- Can't^W^W touch this, by Peter Hutterer
  - http://blip.tv/file/4695866
- Wiki
- Git branches on git://git.gnome.org/gnome-shell
  - osk
- Git branches on git://git.gnome.org/mutter
  - wip/xinput2
  - wip/multitouch
Thank You!