elo

Video and Touch Rotation in Linux

Abstract

This document provides some means of performing the video and touch display rotation in Linux. It depends on the supported OS/system/hardware, choose the best method that applies.

Most of the time, when a touch display's input video is rotated, the reported touch coordinates will automatically rotate as well.

In the case that touch coordinates do not rotate with input video, then use the "xinput" system command to rotate touch.

Document History

Description of Change	Date
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How to rotate input video

Video display rotation can be done in Linux system in several different ways:

1. Using built-in rotation support in OS:
   System Settings > Display > Under Rotation, choose between Normal, Counterclockwise, Clockwise, and 180 Degrees > Apply.

2. Using command line to rotate video display:
   From the command prompt type: xrandr -o left
   xrandr -o right
   xrandr -o normal
   xrandr -o inverted

3. If it is supported by Linux distribution. Adding "display_rotate=x" to /boot/config.txt and reboot to change the video display rotation.
   Where x = 0 (normal), 1 is 90 degree, 2 is 180 degree, 3 is 270 degree.

How to rotate touch

In most cases (most Elo monitors and most modern linux kernels), touch will automatically rotate with the video. If it doesn't, use "xinput" command.

Example:
```
# Transform the touch coordination with the video
#xinput set-prop "Your Touchscreen's Name" --type=float "Coordinate Transformation Matrix" 0 -1 1 1 0 0 0 0 1
xinput set-prop "Elo multi-touch digitizer - 0 - 03eb:8a6e" --type=float "Coordinate Transformation Matrix" 0 -1 1 1 0 0 0 0 1


Elo multi-touch digitizer - 0 - 03eb:8a6e
Or use device id. Some system only allow using device id (like Xubuntu)

As you see, we replace "Your Touchscreen's Name" by "Elo multi-touch digitizer - 0 - 03eb:8a6e"
```

This command works for "Mouse" or "Digitizer" devices.