

Linux game programming

An introduction to the use of
interval timers and asynchronous
input notifications

Our prior animation demo

- We achieved the illusion of “smooth” and “flicker-free” animation, by synchronizing drawing-operations with Vertical Retrace
- But more is needed in a game that’s “fun”
- Some deficiencies in our ‘animate1’ demo:
 - Ball movements tied to Vertical Retrace
 - The viewer lacked any real-time control
- How can we overcome these limitations?

Decoupling 'move' from 'draw'

- Our program-loop had used logic like this:

```
do {  
    vsync();           // delay until start of the next retrace  
    hide_ball();      // "erase" the ball  
    move_ball();      // adjust its location  
    show_ball();      // "redraw" the ball  
    --count;          // decrement a counter  
}  
while ( count > 0 );
```

- So ball movement is delayed by vertical retraces