

Hello All!

I was implemented an interesting method for get key state:

The code like this:

```
bool get_key_state(dword p_k){
#ifdef PLATFORM_WIN32
    //... Here need to optimize
    if(p_k & 0xffff)
        return (((char)::GetKeyState(p_k & 0xffff)) & 128);

    if(p_k & K_ALT)
        return GetAlt();

    if(p_k & K_SHIFT)
        return GetShift();

    if(p_k & K_CTRL)
        return GetCtrl();
#elif PLATFORM_X11
    char key_map_stat[32];
    XQueryKeymap(Xdisplay, key_map_stat);

    if(p_k & 0xffff){
        KeyCode k_code = XKeysymToKeycode(Xdisplay, p_k & 0xffff);
        return ((key_map_stat[k_code >> 3] >> (k_code & 7)) & 1);
    }

    if(p_k & K_ALT){
        const KeyCode alt_l = XKeysymToKeycode(Xdisplay,XK_Alt_L);
        const KeyCode alt_r = XKeysymToKeycode(Xdisplay,XK_Alt_R);

        return (((key_map_stat[alt_l >> 3] >> (alt_l & 7)) & 1)
            ||((key_map_stat[alt_r >> 3] >> (alt_r & 7)) & 1));
    }

    if(p_k & K_SHIFT){
        const KeyCode shift_l = XKeysymToKeycode(Xdisplay,XK_Shift_L);
        const KeyCode shift_r = XKeysymToKeycode(Xdisplay,XK_Shift_R);

        return (((key_map_stat[shift_l >> 3] >> (shift_l & 7)) & 1)
            ||((key_map_stat[shift_r >> 3] >> (shift_r & 7)) & 1));
    }

    if(p_k & K_CTRL){
```

```

const KeyCode control_l = XKeysymToKeycode(Xdisplay,XK_Control_L);
const KeyCode control_r = XKeysymToKeycode(Xdisplay,XK_Control_R);

return (((key_map_stat[control_l >> 3] >> (control_l & 7)) & 1)
        ||((key_map_stat[control_r >> 3] >> (control_r & 7)) & 1));
}
#else
//ASSERT_(false, "Get key state is not implemented for this plathform")
#endif
return false;
}

```

It is first variant for get key state.
This method is missing in U++.
Any comments are welcome.

Subject: Re: GET KEY STATE for Linux and win32
Posted by [mirek](#) on Fri, 02 Oct 2009 10:40:59 GMT
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tojocky wrote on Fri, 02 October 2009 05:49Hello All!

I was implemented an interesting method for get key state:

The code like this:

```

bool get_key_state(dword p_k){
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XQueryKeymap(Xdisplay, key_map_stat);

if(p_k & 0xffff){
KeyCode k_code = XKeysymToKeycode(Xdisplay, p_k & 0xffff);
return ((key_map_stat[k_code >> 3] >> (k_code & 7)) & 1);
}
}

```

```

if(p_k & K_ALT){
    const KeyCode alt_l = XKeysymToKeycode(Xdisplay,XK_Alt_L);
    const KeyCode alt_r = XKeysymToKeycode(Xdisplay,XK_Alt_R);

    return (((key_map_stat[alt_l >> 3] >> (alt_l & 7)) & 1)
        ||((key_map_stat[alt_r >> 3] >> (alt_r & 7)) & 1));
}

if(p_k & K_SHIFT){
    const KeyCode shift_l = XKeysymToKeycode(Xdisplay,XK_Shift_L);
    const KeyCode shift_r = XKeysymToKeycode(Xdisplay,XK_Shift_R);

    return (((key_map_stat[shift_l >> 3] >> (shift_l & 7)) & 1)
        ||((key_map_stat[shift_r >> 3] >> (shift_r & 7)) & 1));
}

if(p_k & K_CTRL){
    const KeyCode control_l = XKeysymToKeycode(Xdisplay,XK_Control_L);
    const KeyCode control_r = XKeysymToKeycode(Xdisplay,XK_Control_R);

    return (((key_map_stat[control_l >> 3] >> (control_l & 7)) & 1)
        ||((key_map_stat[control_r >> 3] >> (control_r & 7)) & 1));
}
#else
    //ASSERT_(false, "Get key state is not implemented for this plathform")
#endif
    return false;
}

```

It is first variant for get key state.
 This method is missing in U++.
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What is wrong with

```

bool GetShift();
bool GetCtrl();
bool GetAlt();
bool GetCapsLock();
bool GetMouseLeft();
bool GetMouseRight();
bool GetMouseMiddle();

```

?

(But a nice find anyway...)

Mirek

Subject: Re: GET KEY STATE for Linux and win32
Posted by [mirek](#) on Fri, 02 Oct 2009 10:42:32 GMT
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Ah, sorry, now I see the point.

Mirek

Subject: Re: GET KEY STATE for Linux and win32
Posted by [tojocky](#) on Fri, 02 Oct 2009 11:11:19 GMT
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The second variant of code is:

```
bool get_key_state(dword p_k){
    bool result;
#ifdef PLATFORM_WIN32
    result = true;
    //... Here need to optimize
    if(p_k & 0xffff)
        result &= (bool)((((char)::GetKeyState(p_k & 0xffff)) & 128);

    if((result)&&(p_k & K_ALT))
        result &= GetAlt();

    if((result)&&(p_k & K_SHIFT))
        result &= GetShift();

    if((result)&&(p_k & K_CTRL))
        result &= GetCtrl();
#elif PLATFORM_X11
    result = true;
    char key_map_stat[32];
    XQueryKeymap(Xdisplay, key_map_stat);

    if(p_k & 0xffff){
        KeyCode k_code = XKeysymToKeycode(Xdisplay, p_k & 0xffff);
        result &= ((key_map_stat[k_code >> 3] >> (k_code & 7)) & 1);
    }

    if((result)&&(p_k & K_ALT)){
        const KeyCode alt_l = XKeysymToKeycode(Xdisplay,XK_Alt_L);
        const KeyCode alt_r = XKeysymToKeycode(Xdisplay,XK_Alt_R);

        result &= (((key_map_stat[alt_l >> 3] >> (alt_l & 7)) & 1)
            ||((key_map_stat[alt_r >> 3] >> (alt_r & 7)) & 1));
    }
}
```

```

if((result)&&(p_k & K_SHIFT)){
    const KeyCode shift_l = XKeysymToKeycode(Xdisplay,XK_Shift_L);
    const KeyCode shift_r = XKeysymToKeycode(Xdisplay,XK_Shift_R);

    result &= (((key_map_stat[shift_l >> 3] >> (shift_l & 7)) & 1)
        ||((key_map_stat[shift_r >> 3] >> (shift_r & 7)) & 1));
}

if((result)&&(p_k & K_CTRL)){
    const KeyCode control_l = XKeysymToKeycode(Xdisplay,XK_Control_L);
    const KeyCode control_r = XKeysymToKeycode(Xdisplay,XK_Control_R);

    result &= (((key_map_stat[control_l >> 3] >> (control_l & 7)) & 1)
        ||((key_map_stat[control_r >> 3] >> (control_r & 7)) & 1));
}
#else
    result = false;
    //ASSERT_(false, "Get key state is not implemented for this platform")
#endif
    return result;
}

```

This will process correct:

```

if(get_key_state(K_CTRL_C)){
    .....// add our code
}

```

Mirek, is it useful to add in U++?

Subject: Re: GET KEY STATE for Linux and win32
 Posted by [tojocky](#) on Sun, 24 Jan 2010 09:51:54 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello Mirek,

I have not feedback about my propose!

tojocky wrote on Fri, 02 October 2009 14:11The second variant of code is:

```

bool get_key_state(dword p_k){
    bool result;
#ifdef PLATFORM_WIN32
    result = true;
    //... Here need to optimize
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        result &= (bool)((char)::GetKeyState(p_k & 0xffff) & 128);

```

```

if((result)&&(p_k & K_ALT))
    result &= GetAlt();

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    }

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        result &= (((key_map_stat[alt_l >> 3] >> (alt_l & 7)) & 1)
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    }

    if((result)&&(p_k & K_SHIFT)){
        const KeyCode shift_l = XKeysymToKeycode(Xdisplay,XK_Shift_L);
        const KeyCode shift_r = XKeysymToKeycode(Xdisplay,XK_Shift_R);

        result &= (((key_map_stat[shift_l >> 3] >> (shift_l & 7)) & 1)
            ||((key_map_stat[shift_r >> 3] >> (shift_r & 7)) & 1));
    }

    if((result)&&(p_k & K_CTRL)){
        const KeyCode control_l = XKeysymToKeycode(Xdisplay,XK_Control_L);
        const KeyCode control_r = XKeysymToKeycode(Xdisplay,XK_Control_R);

        result &= (((key_map_stat[control_l >> 3] >> (control_l & 7)) & 1)
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#endif
    return result;
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This will process correct:
`if(get_key_state(K_CTRL_C)){
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