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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'modesetting.4' command

\$ man modesetting.4

MODESETTING(4) Kernel Interfaces Manual MODESETTING(4)

NAME

modesetting - video driver for framebuffer device

SYNOPSIS

Section "Device"

Identifier "devname"

Driver "modesetting"

BusID "pci:bus:dev:func"

...

EndSection

DESCRIPTION

modesetting is an Xorg driver for KMS devices. This driver supports TrueColor visuals at framebuffer depths of 15, 16, 24, and 30. RandR 1.2 is supported for multi-head configurations. Acceleration is available through glamor for devices supporting at least OpenGL ES 2.0 or OpenGL 2.1. If glamor is not enabled, a shadow framebuffer is configured based on the KMS drivers' preference (unless the framebuffer is 24 bits per pixel, in which case the shadow framebuffer is always used).

SUPPORTED HARDWARE

The modesetting driver supports all hardware where a KMS driver is available. modesetting uses the Linux DRM KMS ioctls and dumb object create/map.

CONFIGURATION DETAILS

Please refer to `xorg.conf(5)` for general configuration details. This section only covers configuration details specific to this driver.

For this driver it is not required to specify modes in the `screen` section of the config file. The modesetting driver can pick up the currently used video mode from the kernel driver and will use it if there are no video modes configured.

For PCI boards you might have to add a `BusID` line to the `Device` section. See above for a sample line.

The following driver Options are supported:

Option `"SWcursor"` `"boolean"`

Selects software cursor. The default is off.

Option `"kmsdev"` `"string"`

The framebuffer device to use. Default: `/dev/dri/card0`.

Option `"ShadowFB"` `"boolean"`

Enable or disable use of the shadow framebuffer layer. Default: on.

Option `"DoubleShadow"` `"boolean"`

Double-buffer shadow updates. When enabled, the driver will keep two copies of the shadow framebuffer. When the shadow framebuffer is flushed, the old and new versions of the shadow are compared, and only tiles that have actually changed are uploaded

to the device. This is an optimization for server-class GPUs with a remote display function (typically VNC), where updates are triggered by any framebuffer write, so minimizing the amount of data uploaded is crucial. This defaults to enabled for ASPEED and Matrox G200 devices, and disabled otherwise.

Option "AccelMethod" "string"

One of "glamor" or "none". Default: glamor.

Option "PageFlip" "boolean"

Enable DRI3 page flipping. The default is on.

Option "ZaphodHeads" "string"

Specify the RandR output(s) to use with zaphod mode for a particular driver instance. If you use this option you must use this option for all instances of the driver.

For example: Option "ZaphodHeads" "LVDS,VGA-0" will assign xrandr outputs LVDS and VGA-0 to this instance of the driver.

SEE ALSO

Xorg(1), xorg.conf(5), Xserver(1), X(7)

AUTHORS

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X Version 11

xorg-server 1.20.11

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