team
the graphics stack
challenges
future
team
the graphics stack
challenges
future
agenda

team
the graphics stack
challenges
future
agenda

team
the graphics stack
challenges
future
graphics team
small team
use github
multiple repositories
github.com/FreeBSDDesktop
small team
use github
multiple repositories
github.com/FreeBSDDesktop
small team
use github
multiple repositories
github.com/FreeBSDDesktop
small team
use github
multiple repositories
github.com/FreeBSDDesktop
~300 ports
ports infrastructure
drivers
team

~300 ports

ports infrastructure

drivers
~300 ports
ports infrastructure
drivers
core libraries
X servers
wayland
applications
core libraries
X servers
wayland
applications
core libraries
X servers
wayland
applications
drivers
legacy driver in base
complete port
comparable to Linux 3.8
graphics drivers

legacy driver in base
complete port
comparable to Linux 3.8
legacy driver in base
complete port
comparable to Linux 3.8
planned removal in FreeBSD 13
replaced by drm-legacy-kmod
avoid conflicting drivers
planned removal in FreeBSD 13
replaced by drm-legacy-kmod
avoid conflicting drivers
planned removal in FreeBSD 13
replaced by drm-legacy-kmod
avoid conflicting drivers
new drivers in ports

uses Linux kpi (lkpi)

amd64 tier1

i386 and ppc64 secondary
new drivers in ports
uses Linux kpi (lkpi)
amd64 tier1
i386 and ppc64 secondary
new drivers in ports
uses Linux kpi (lkpi)
amd64 tier1
i386 and ppc64 secondary
new drivers in ports
uses Linux kpi (lkpi)
amd64 tier1
i386 and ppc64 secondary
multiple versions

meta port: graphics/drm-kmod

available in FreeBSD 11.2 and 12.0
multiple versions

meta port: graphics/drm-kmod

available in FreeBSD 11.2 and 12.0
multiple versions

meta port: graphics/drm-kmod

available in FreeBSD 11.2 and 12.0
libraries
mesa – OpenGL
libdrm
xorg libraries
libraries

mesa – OpenGL
libdrm
xorg libraries
libraries

mesa – OpenGL
libdrm
xorg libraries
X server
X server

out of date
ddx drivers
modesetting
X server

out of date

ddx drivers

modesetting
out of date
ddx drivers
modesetting
focus upstream
support in default packages
up to date
focus upstream

support in default packages

up to date
focus upstream support in default packages
up to date
sway available

evdev support needed in kernel

needs more testing
sway available

evdev support needed in kernel

needs more testing
wayland

sway available

evdev support needed in kernel

needs more testing
getting started
install FreeBSD

# pkg install xorg
# pkg install drm-kmod
$ startx
install FreeBSD

# pkg install xorg

# pkg install drm-kmod

$ startx
install FreeBSD

# pkg install xorg
# pkg install drm-kmod
$ startx
install FreeBSD

# pkg install xorg
# pkg install drm-kmod

$ startx
challenges
testing
build time
developer bandwidth
challenges

testing

build time

developer bandwidth
challenges

testing

build time

developer bandwidth
future
input devices

drm-legacy

autoloading

more architectures
input devices
drm-legacy
autoloading
more architectures
input devices
drm-legacy
autoloading
more architectures
input devices
drm-legacy
autoloading
more architectures
network manager
power management
wifi support
future

network manager
power management
wifi support
future

network manager
power management
wifi support
summary
FreeBSD graphics

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