

NAME

splash - splash screen / screen saver interface

SYNOPSIS

device splash

DESCRIPTION

The **splash** pseudo device driver adds support for the splash screen and screen savers to the kernel. This driver is required if the splash bitmap image is to be loaded or any screen saver is to be used.

Splash screen

You can load and display an arbitrary bitmap image file as a welcome banner on the screen when the system is about to start. This image will remain on the screen during kernel initialization process until the login prompt appears on the screen or until a screen saver is loaded and initialized. The image will also disappear if you hit any key, although this may not work immediately if the kernel is still probing devices.

If you specify the **-c** or **-v** boot option when loading the kernel, the splash image will not appear. However, it is still loaded and can be used as a screen saver later: see below.

In order to display the bitmap, the bitmap file itself and the matching splash image decoder module must be loaded by the boot loader. Currently the following decoder modules are available:

- splash_bmp.ko* Windows BMP file decoder. While the BMP file format allows images of various color depths, this decoder currently only handles 256 color bitmaps. Bitmaps of other color depths will not be displayed.
- splash_pcx.ko* ZSoft PCX decoder. This decoder currently only supports version 5 8-bpp single-plane images.
- splash_txt.ko* TheDraw binary ASCII drawing file decoder. Displays a text-mode 80x25 ASCII drawing, such as that produced by the Binary save format in TheDraw. This format consists of a sequence of two byte pairs representing the 80x25 display, where the first byte is the ASCII character to draw and the second byte indicates the colors/attributes to use when drawing the character.

The *EXAMPLES* section illustrates how to set up the splash screen.

If the standard VGA video mode is used, the size of the bitmap must be 320x200 or less. If you enable the VESA mode support in the kernel, either by statically linking the VESA module or by loading the VESA module (see *vga(4)*), you can load bitmaps up to a resolution of 1024x768, depending on the VESA BIOS and the amount of video memory on the video card.

Screen saver

The screen saver will activate when the system is considered idle: i.e. when the user has not typed a key or moved the mouse for a specified period of time. As the screen saver is an optional module, it must be explicitly loaded into memory. Currently the following screen saver modules are available:

<i>blank_saver.ko</i>	This screen saver simply blanks the screen.
<i>beastie_saver.ko</i>	Animated graphical BSD Daemon.
<i>daemon_saver.ko</i>	Animated BSD Daemon screen saver.
<i>dragon_saver.ko</i>	Draws a random dragon curve.
<i>fade_saver.ko</i>	The screen will gradually fade away.
<i>fire_saver.ko</i>	A fire which becomes higher as load increases.
<i>green_saver.ko</i>	The screen will be blanked, similar to <i>blank_saver.ko</i> . If the monitor and the video card's BIOS support it the screen will also be powered off.
<i>logo_saver.ko</i>	Animated graphical FreeBSD logo.
<i>plasma_saver.ko</i>	Draws an animated interference pattern.
<i>rain_saver.ko</i>	Draws a shower on the screen.
<i>snake_saver.ko</i>	Draws a snake of string.
<i>star_saver.ko</i>	Twinkling stars.
<i>warp_saver.ko</i>	Streaking stars.

Screen saver modules can be loaded using `kldload(8)`:

```
kldload logo_saver
```

The timeout value in seconds can be specified as follows:

```
vidcontrol -t N
```

Alternatively, you can set the *saver* variable in the */etc/rc.conf* to the screen saver of your choice and the timeout value to the *blanktime* variable so that the screen saver is automatically loaded and the timeout value is set when the system starts.

The screen saver may be instantly activated by hitting the *saver* key: the defaults are *Shift-Pause* on the AT enhanced keyboard and *Shift-Ctrl-NumLock/Pause* on the AT 84 keyboard. You can change the *saver* key by modifying the keymap (see `kbdcontrol(1)`, `keymap(5)`), and assign the *saver* function to a key of your preference.

The screen saver will not run if the screen is not in text mode.

Splash screen as a screen saver

If you load a splash image but do not load a screen saver, you can continue using the splash module as a screen saver. The screen blanking interval can be specified as described in the *Screen saver* section above.

FILES

<i>/boot/defaults/loader.conf</i>	boot loader configuration defaults
<i>/etc/rc.conf</i>	system configuration information
<i>/boot/kernel/splash_*.ko</i>	splash image decoder modules
<i>/boot/kernel/*_saver.ko</i>	screen saver modules
<i>/boot/kernel/vesa.ko</i>	the VESA support module

EXAMPLES

In order to load the splash screen or the screen saver, you must have the following line in the kernel configuration file.

```
device splash
```

Next, edit */boot/loader.conf* (see *loader.conf(5)*) and include the following lines:

```
splash_bmp_load="YES"
bitmap_load="YES"
bitmap_name="/boot/chuck.bmp"
```

In the above example, the file */boot/chuck.bmp* is loaded. In the following example, the VESA module is loaded so that a bitmap file which cannot be displayed in standard VGA modes may be shown using one of the VESA video modes.

```
splash_pcx_load="YES"
vesa_load="YES"
bitmap_load="YES"
bitmap_name="/boot/chuck.pcx"
```

If the VESA support is statically linked to the kernel, it is not necessary to load the VESA module. Just load the bitmap file and the splash decoder module as in the first example above.

To load a binary ASCII drawing and display this while booting, include the following into your */boot/loader.conf*:

```
splash_txt_load="YES"
bitmap_load="YES"
```

```
bitmap_name="/boot/splash.bin"
```

SEE ALSO

vidcontrol(1), syscons(4), vga(4), loader.conf(5), rc.conf(5), kldload(8), kldunload(8)

HISTORY

The **splash** driver first appeared in FreeBSD 3.1.

AUTHORS

The **splash** driver and this manual page were written by Kazutaka Yokota <yokota@FreeBSD.org>. The *splash_bmp* module was written by Michael Smith <msmith@FreeBSD.org> and Kazutaka Yokota. The *splash_pcx* module was written by Dag-Erling Smørgrav <des@FreeBSD.org> based on the *splash_bmp* code. The *splash_txt* module was written by Antony Mawer <antony@mawer.org> based on the *splash_bmp* code, with some additional inspiration from the *daemon_saver* code. The *logo_saver*, *plasma_saver*, *rain_saver* and *warp_saver* modules were written by Dag-Erling Smørgrav <des@FreeBSD.org>.

CAVEATS

Both the splash screen and the screen saver work with syscons(4) only.

BUGS

If you load a screen saver while another screen saver has already been loaded, the first screen saver will not be automatically unloaded and will remain in memory, wasting kernel memory space.