

Grand Unified Bootloader (GRUB)

CentOS Documentation SIG

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Abstract

This article describes GRUB Visual Style for CentOS Distribution. This screen is where the selection of which kernel to run and other boot-time options, are made. It is seen every time the computer boots.

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1 Workplace

- SVN:trunk/Identity/Themes/\$THEME/Distro/BootUp/GRUB/
- SVN:trunk/Translations/Identity/Themes/Distro/BootUp/GRUB/
- SVN:trunk/Scripts/Identity/Themes/Distro/BootUp/GRUB/

2 Theme

Target: /boot/grub/splash.xpm.gz
Package: redhat-logos
Description: gzip compressed data, was "splash.xpm", from Unix, last modified: Sat Jan 16 01:17:29 201

3 Design

Initially, *splash.xpm.gz* is a PNG image (*splash.png*) which is converted to *xpm.gz*. *splash.png* image is rendered for each major release of CentOS distribution. Each image is based in the same Artistic Motif and has the following components:

1. The CentOS Release Brand.
2. The CentOS Default Artistic Motif.

Image rendering is done using the rendering script (*render.sh*) available in the workplace of this section. This script creates the appropriate PNG images under *img/\$VERSION/* directory.

After image rendering, each *img/\$VERSION/splash.png* image should be indexed to 14 colors. This can be done using an image manipulation tool like GIMP, or ImageMagick. This color reduction could bring some noise to your design. If that is the case, you need to retouch your design in a 14 colors basis.

The final step is to convert the 14 colors indexed *splash.png* image into *splash.xpm.gz*. To do so, use the command *convert2xpm.sh* provided in the workplace. This command explores the *img/\$VERSION/* directories and converts¹ each *splash.png* image indexed to 14 colors to its *.xpm.gz* equivalent. The converted images are saved under *xpm/\$VERSION/* directories.

¹*convert splash.png splash.xpm* $\&\&$ *gzip splash.xpm*

4 Configuration

5 Rendering

6 Testing

7 Issues

The following issues were seen on a video card *Trident Microsystems CyberBlade/i1 (cyblafb)*:

Different colors : As more different colors you have on your design, more are the possibilities of increasing the amount of noise in your design after indexing to 14 colors. For example, if you include the actual CentOS symbol in this image, it occupies 3 colors (for the orange, green, violet) which are completely different and non-reusable in the blue toned background image.

CentOS Symbol : If the CentOS symbol is included in this image, colors used in the symbol after indexing the image are not the default colors defined as CentOS Symbol Colors.

To work around this, in first place, I used a variant of CentOS symbol without background colors, just the white borders. Later, I decided to remove it completely because that symbol could confuse people about which is the CentOS default symbol (see “The CentOS Brand” manual). Finally, I ended up using just the plain word CentOS to brand the GRUB.

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