BGInfo for Linux

## Install ImageMagick Utilities

Install ImageMagick utilities.

Install procinfo

## Set a background image

Right click on your Linux desktop and select Change Desktop Background.

Select an image of your choice or copy the image to the /usr/share/backgrounds folder. It may be different on other distributions.

Make a copy of this image and keep it somewhere so that the script uses the original image.

## Use the script attached

#!/bin/bash

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#

# Purpose: Add BGInfo like information on Linux Desktop

# File name: liinfo

SCHOME=/root/bin/backup

BGFILE=$SCHOME/sys.info

BG=$SCHOME/bg.png ### This is a generated image with sys information

WALL=/usr/share/backgrounds/backup/wall.png ### This is your original background image

NEWWALL=/usr/share/backgrounds/wall.png ### This is the new background image that you will use

> $BGFILE

A\_UPTIME=" Uptime : "

A\_HOSTNAME=" Host Name : "

A\_USERNAME=" User Name : "

A\_NUMCPU=" Num of CPU : "

A\_CPUMODEL=" CPU Model : "

A\_MEMTOTAL=" Total Memory : "

A\_OSVERSION=" OS Version : "

A\_IPADDRESS=" IP Address : "

A\_DNSSERVER=" DNS Server : "

A\_GATEWAY=" Gateway : "

A\_FREEDISK=" Disk Free Space : "

A\_SOFTWAR1=" DB2 10.1"

A\_SOFTWAR2=" Optim Performanace Manager 5.1.1"

A\_SOFTWAR3=" Data Studio 3.1.1"

B\_UPTIME=`procinfo | grep uptime | awk '{print $2}'`

B\_HOSTNAME=`hostname`

B\_USERNAME=`whoami`

B\_NUMCPU=`cat /proc/cpuinfo | grep processor | wc -l`

B\_CPUMODEL=`cat /proc/cpuinfo | grep "model name" | awk -F":" '{print $2}' | head -1 | sed -e 's/^ \*//'`

B\_MEMTOTAL=`cat /proc/meminfo | grep MemTotal | sed -e 's/^ \*//' | awk -F":" '{print $2}'`

B\_OSVERSION=`uname -srm`

B\_IPADDRESS=`/sbin/ifconfig | grep "inet addr" | grep -v 127.0.0.1 | awk '{print $2}' | awk -F":" '{print $2}'`

B\_DNSSERVER=`grep ^nameserver /etc/resolv.conf | awk '{print $2}'`

B\_GATEWAY=`netstat -rn | grep UG | awk '{print $2}'`

B\_FREEDISK=`df -k | grep ^/dev | awk '{print $1" "$4" KB Available"}'`

echo "$A\_UPTIME" $B\_UPTIME >> $BGFILE

echo "$A\_HOSTNAME" $B\_HOSTNAME >> $BGFILE

echo "$A\_USERNAME" $B\_USERNAME >> $BGFILE

echo "$A\_OSVERSION" $B\_OSVERSION >> $BGFILE

echo "$A\_IPADDRESS" $B\_IPADDRESS >> $BGFILE

echo "$A\_NUMCPU" $B\_NUMCPU >> $BGFILE

echo "$A\_DNSSERVER" $B\_DNSSERVER >> $BGFILE

echo "$A\_CPUMODEL" $B\_CPUMODEL >> $BGFILE

echo "$A\_MEMTOTAL" $B\_MEMTOTAL >> $BGFILE

echo "$A\_GATEWAY" $B\_GATEWAY >> $BGFILE

echo " " >> $BGFILE

echo "$A\_SOFTWARE" >> $BGFILE

echo "$A\_SOFTWAR1" >> $BGFILE

echo "$A\_SOFTWAR2" >> $BGFILE

echo "$A\_SOFTWAR3" >> $BGFILE

### The following ImageMagick utility generates an image with the

### transparent background from the file $BGFILE

cat $BGFILE | \

convert -font Courier-Bold -pointsize 30 \

-background none \

-fill white \

label:@- $BG

### This utility combines two images and creates a new image

composite -gravity south $BG $WALL $NEWWALL

## Add script to run at boot time

These instructions are for SuSe Linux and it may be different on other Linux distributions.

Create a file liinfi in /etc/init.d

chmod +x liinfo

Add folowing entries

#!/bin/bash

### BEGIN INIT INFO

# Provides: liinfo

# Required-Start: $network

# Required-Stop:

# Default-Start: 3 5

# Default-Stop: 0 1 2 6

# Description: Set BGInfo like info on your desktop

### END INIT INFO

/root/bin/liinfo

Run chkconfig -a liinfo

## Add Crontab Entry to refresh

Optionally, if you want your image to be refreshed every 15 minutes, add a crontab entry as shown:

# crontab -e

and add

\*/15 \* \* \* \* /root/bin/liinfo

and save the file.

## ImageMagick operation not authorized

Solution

Since ImageMagick is sometimes used on web servers to operate on images for users, it has security checks on certain operations.

Option 1:

sudo rm /etc/ImageMagick-6/policy.xml

Option 2:

sudo mv /etc/ImageMagick-6/policy.xml /etc/ImageMagick-6/policy.xml.off

When done, you can restore the original with

sudo mv /etc/ImageMagick-6/policy.xml.off /etc/ImageMagick-6/policy.xml

Option 3:

Edit the Imagemagick policy.xml file to uncomment this line:

<!-- <policy domain="module" rights="none" pattern="{PS,PDF,XPS}" /> -->

And change it from rights="none" to rights="read|write"

<policy domain="module" rights="read|write" pattern="{PS,PDF,XPS}" />

## Bulk patching using Ansible

When managing a lot of applications, it might be a worth considering something like [Ansible](https://www.ansible.com/) to quickly set-up, manage and patch all of your servers.

Ansible playbook to apply the above fix. It deals with the different ImageMagick directories as well!

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- name: Find ImageMagick directories

find:

paths: /etc

pattern: "ImageMagick(?:-\\d)"

file\_type: directory

use\_regex: yes

register: imagemagick\_directories

- name: Allow ImageMagick coder to read and write

lineinfile:

dest: "{{ item.path }}/policy.xml"

regexp: '\s\*<policy domain="coder" rights="none" pattern="PDF" />'

line: ' <policy domain="coder" rights="read|write" pattern="PDF" />'

backrefs: yes

with\_items: "{{ imagemagick\_directories.files }}"