# System Configuration Updates

(Archiving what is running)

St. Louis Linux Users Group by David Forrest December 17, 2020

## Biography

Dave is a retired construction firm owner with extensive involvement in IT from his Oregon State University beginning programing on the Alwac 3G in 1962. Years using IBM mainframes made him wary of upgrading as something would always go awry and weekends devoted to correcting invoicing, payrolls, accounts payables and operations research made him wary, almost to a fault.

Something is almost always guaranteed to misbehave and must be corrected.

It is nice and necessary to have the configuration information at hand

### The bash shell script is available

http://maplepark.com/~drf/RemoteReads/20201217 sys config update

As this is a virtual presentation, and if you're looking with multiple windows/desks available, it may be easier to open the script in a separate tab/window/desk.

( Using view or vi with :set number works best for me. Download this link:

http://maplepark.com/~drf/RemoteReads/ScriptAsRun

and try vi or view on it (with :set number)

#### Revised and when

The script has been updated 27 times on changes of my primary machine. Usually to add an application or to update a release. Some are easy and short and I'll show one in a slide.

Revised 06/04/10 for F13 installation; Revised 01/24/11 for F14; Revised 08/22/11 technical structure of DIRs; Revised 01/21/13 for CentOS6; Revised 06/15/14 for CentOS65June2014; Revised 10/25/14 for iptables; Revised 11/25/14 to document windxp VM in KVM; Revised 10/11/15 to begin Centos 7 update; Revised 04/21/19 Adjusted to report CentOS76-21APR19 data; Revised 04/28/19 CentOS7.6.1810 installation

And a bunch more.

Many are to just correct output for a current concern but I don't usually delete earlier entries, just comment out what doesn't work or is really irrelevant.

The basic idea is to add entries in my home archive directory (\$BASE\_DIR, currently "/home/drf/Desktop/SystemDocumentation/Centos8/) for the specific topic; for example "systemd" or "Interfaces". As the script runs it creates or rewrites the information output to the specific topic as a specific directory.

## sys\_config\_update

As the script runs it outputs the directory it is writing. My system sends me a message listing the directories altered. I do save some docs and other global information in my base directory that does survive through running script.

I run the script by a root crontab like this: @daily /usr/local/bin/sys\_config\_update

And I get an email listing the topics being reported daily. This is created by an "echo \$DIR" line following the "DIR=" definitions if desired. And I desire most of them, but not all. Errors do get sent, though, by my master root crontab configuration.

#### The script self-alters!!!

- # .... This script self-alters.
- 64 CONFIG\_USER="drf"
- 66 # Assume we are reporting CentOS76-957.27.2 (Using Centos8 as el7 else an Unknown error)
  - 67 #Fedora="Unknown"
  - Fedora=\$(/bin/uname -r | grep el7 >/dev/null && Fedora=Centos8)
  - 69 BASE\_DIR="/home/drf/Desktop/SystemDocumentation/\$Fedora"

ŀ

## A daily message from my root crontab

Cron Daemon) < root@dave.maplepark.com > 12:00 AM (11 hours ago) to me /home/drf/Desktop/SystemDocumentation//NetworkInterfaces /home/drf/Desktop/SystemDocumentation//systemd, and, with just the sub dirs. //boot, //CUPS, //KVM, //Crontabs, //DNS, //iptables, //SysStartupConfigs, //a2ps, //syslog, //NFS, //Samba, //sshd, //yum, //usr-local-bin, //usr-local-lynis, //FormsAndScripts, //SysConfigs, //ApplicationConfigs, and, //DisksIfacesRoutes.

## Creating subdirectories

# Subdirectories to the \$BASE\_DIR are script created by a statement starting in column 1

# formatted as: "DIR=\$BASE\_DIR/new\_subdirectory\_name"

## Cups - Common Unix Printing System

```
179 DIR=$BASE DIR/CUPS # Printing setup
180 echo $DIR
181 {
182 echo "Files in this directory sourced from /etc/cups" >$DIR/README
183 rsync -a /etc/cups/ $DIR/ &>/dev/null
184 rsync -a /etc/printcap $DIR
185 }
```

#### That's all, folks!

Question are desired!

We will just browse through the script and look for questions for the rest of this presentation until they kick me off! . Please remember I'm very hard of hearing - old age and construction noise have taken my higher frequency response to the trash bin. The chat window does work.

Dave