

Thursday, August 26. 2010

stream a webcam, using highly compressed h264 instead of typical mpg

Got a logitech webcam c300, it uses the "uvcvideo" kernel module.

Typically you would grab video using "motion" and stream it on mpeg, well that's rubbish if you want better compression, so let's do it using the best of the best: h264.

```
#!/bin/ksh
DEV=/dev/logitechcam
ps -ef | grep -i vlc | grep -v grep |grep -i logitechcam | awk '{ print $2 }'| while read P;do
kill -9 $P
done
VLC="/usr/local/bin/cvlc v4l2://$DEV :input=2 :input-slave=alsa://hw:2,0 --alsa-samplerate=32000
--v4l2-controls-reset --v4l2-auto-white-balance=1 --v4l2-do-white-balance=1 --v4l2-autogain=1 --sout "
```

CAM="transcode{vcodec=h264,acodec=mp4a,width=320,height=240,vb=64,ab=24,channels=1,venc=x264}:standard


```
#CAM="transcode{vcodec=mjpg,width=320,height=240}:duplicate{dst=std{access=http{mime=multipart/x-mixed-repl  
${VLC} "#$CAM"
```

this produces a very decent quality stream at around 100kbps, audio also included!

Enjoy!

Posted by rdircio in Linux at 13:53

Friday, August 20. 2010

Test nics to see if we're on the desired vlan

You want to know if one of your nics is in the vlan you need it to be? Quite tedious if you want to do it manually.

check this small script to config the ip, ping and unconfig

```
for i in 1 2 3 4 5 6 7 8 9 10 11;do set -x;ifconfig eth$i inet 10.203.102.102 netmask 255.255.254.0 up; ping -c 5 10.203.102.1; ifconfig eth$i down; done
```

Posted by rdircio in Linux at 09:35

Friday, August 6. 2010

Create LVM structures

for each disk to include in a volume group, initialize it as a LVM disk:

```
pvcreate /dev/sdX
```

create a volume group with that disk:

```
vgcreate myvg /dev/sdX
```

Create a 20gb volume called "myvol" inside the "myvg" volume group:

```
lvcreate -L 20g -n myvol myvg
```

Make a filesystem in the new volume:

```
mkfs.ext3 /dev/mapper/myvg-myvol
```

Posted by rdircio in Linux at 03:27

Monday, July 12. 2010

Adding udev rules

I inspected all the devices i wanted to add to udev using "udevadm info" for each path i knew was the device i needed.

```
udevadm info -a -p $(udevadm info -q path -n /dev/video1)
udevadm info -a -p $(udevadm info -q path -n /dev/video0)
udevadm info -a -p $(udevadm info -q path -n /dev/input/mouse1)
udevadm info -a -p $(udevadm info -q path -n /dev/input/event1)
udevadm info -a -p $(udevadm info -q path -n /dev/input/event2)
udevadm info -a -p $(udevadm info -q path -n /dev/input/mouse2)
```

Then just created the udev file /etc/udev/rules.d/95-my.rules

```
KERNEL=="video*", SUBSYSTEM=="video4linux", ATTR{name}=="saa7133*", SYMLINK+="tvcad"
SUBSYSTEM=="video4linux", ATTR{name}=="gspca main driver", SYMLINK+="geniuscam"
KERNEL=="mouse*", ATTRS{name}=="Microsoft Basic Optical Mouse", SYMLINK+="input/cecimouse"
KERNEL=="event*", ATTRS{name}=="AT Translated Set 2 keyboard", SYMLINK+="input/cecikb"
KERNEL=="event*", ATTRS{name}=="Logitech Logitech USB Keyboard", SYMLINK+="input/betokb"
KERNEL=="mouse*", ATTRS{name}=="USB Optical Mouse", SYMLINK+="input/betomouse"
```

reboot, and i get pretty aliases for all my devs :)

Posted by rdircio in Linux at 17:38

Get asterisk music-on-hold live from an icecast+ices2 server

My asterisk version is 1.6.2.6

My freepbx version is 2.7.0.1

To get music-on-hold from a live source, i made a script (/scripts/streamx.ksh):

```
#!/bin/ksh
/usr/bin/ogg123 -q -b 128 -p 32 -d wav -f - http://kraftek.com:8000/stream.ogg| sox -t wav - -r 8000 -c 1 -t raw
- vol 0.10
```

and configured `/etc/asterisk/musiconhold_additional.ksh` with:

```
[default]  
mode=custom  
application=/scripts/streamx.ksh
```

And that is it!, just dial a conference room and you'll get live music on hold while waiting for your friends to join :)

Posted by rdircio in Linux at 13:19

Tuesday, July 6. 2010

See a live list of open connections to mysql

```
watch 'mysql -e "show processlist;"'
```

Posted by rdircio in Linux at 11:43

Wednesday, May 12. 2010

Multiseat xorg+gdm on slackware 13 x86_64

One computer, two people using it, that means

- 2 video cards, one in the motherboard, and another in PCI-E
- 2 monitors, 2 keyboards, 2 mice

lspci says:

```
root@kraftek:~# lspci | grep -i vga
02:00.0 VGA compatible controller: nVidia Corporation C77 [GeForce 8200] (rev a2)
03:00.0 VGA compatible controller: nVidia Corporation G98 [GeForce 8400 GS] (rev a1)
```

Make sure you select the pci-e as the first card to be initialised in the bios

To find out which mouse and keyboard is which, for each `/dev/input/mouse*` and `/dev/input/event*` do a:

```
# cat /dev/input/mouseX
# cat /dev/input/eventX
```

and move the mouse or type in the keyboard, if you see characters in the terminal, that is your kb or mouse.

Also make sure you enable this on the ServerFlags section in `xorg.conf` so that xorg honors the devices you select in `xorg.conf`

```
Option "AutoAddDevices" "false"
```

my [/etc/X11/xorg.conf](#)

my [/etc/X11/gdm/custom.conf](#)

The gdm custom.conf is necessary so you have 2 login screens, one on each screen, the important part is:

```
[servers]
0=Standard device=/dev/console
1=Standard1
[server-Standard]
name=Standard server
command=/usr/X11R6/bin/X -nolisten tcp -novtswitch -sharevts -layout seat1
flexible=true
[server-Standard1]
name=Standard server
command=/usr/X11R6/bin/X -nolisten tcp -novtswitch -sharevts -layout seat2
flexible=true
```

enjoy!

Posted by rdircio in Linux at 08:11

Wednesday, March 10. 2010

up2date usage for new package install

If you want to use up2date to install new packages that are not installed in your system, you can search by doing:

```
# up2date --showall
```

andgrep for your desired package, then you can install by doing:

```
# up2date <packagename>
```

Posted by rdircio in Linux at 19:27

setting up a RTSP vlc streaming server

I wanted to watch my movies remotely, so i used h264 for video and aac for audio, and built a vlc config to startup a daemonized RTSP server. I built a script to create the config file by scanning all my videos, and then start the vlc daemon :). Here it is:

```
#!/bin/ksh
ps -ef | grep -i vlc | grep -v grep | awk '{ print $2 }' | while read p;do
    kill $p
done
(
x=0
find /disk2/VIDEO -type f | egrep -i 'avi|mpg' | while read v;do
#---- if not using x264
# echo "new $x vod enabled"
# echo -n "setup $x input \"file://$v\" output"
#---- if using x264
echo "new $x vod"
echo -n "setup $x input \"file://$v\" enabled output"
#---- low quality
#echo " #transcode{vcodec=mp4v,acodec=mp4a,width=640,height=480,fps=12,vb=128,ab=8}"
echo " #transcode{vcodec=h264,acodec=mp4a,width=640,height=480,vb=100,ab=4}"
#---- mid quality
#echo " #transcode{vcodec=mp4v,acodec=mp4a,scale=.5,fps=10,vb=256,ab=64}"
#echo " #transcode{vcodec=h264,acodec=mp4a,scale=.5,fps=12,vb=256,ab=64}"
#---- high quality
#echo " #transcode{vcodec=mp4v,acodec=mp4a,scale=.5,fps=10,vb=512,ab=64}"
#echo " #transcode{vcodec=h264,acodec=mp4a,scale=.5,fps=12,vb=512,ab=128}"
echo " "
x=$((x+1))
done
) > /etc/v.config
nohup cvlc --vlm-conf /etc/v.config -l telnet --telnet-password vl --rtsp-host 0.0.0.0:564 &
```

Try it, and enjoy :)

Monday, February 8. 2010

Scan for wireless accesspoints, parse the output

so, iwlist throws its output in different order depending of the wifi nic, so we need to scan and parse, to see 3 columns:

```
signal strength: encryption needed: ESSID
27:on:CASA
27:on:AP1133
30:on:CC5763
32:on:XX1330
36:off:gg54g
```

So, we wrote a script called "scan" that loops to all wlan interfaces and scans for APs.

```
#!/bin/bash
ifconfig -a |grep -i wlan | awk '{ print $1 }'|while read i;do
    echo "#--- scanning on $i"
    (
        ifconfig $i up
        iwlist $i scan | egrep -i 'essid|freq|qual|encr' |nawk 'ORS=NR%4?" ":"\n"| tr -s ' '| while read l;do
            AP=`echo "$l" |awk '{s=substr($0,index($0,"ESSID:")+7);print substr(s,1,index(s,"")-1)}'`
            EN=`echo "$l" |awk '{s=substr($0,index($0,"Encryption key:")+15);print substr(s,1,index(s,"")-1)}'`
            QU=`echo "$l" |awk '{s=substr($0,index($0,"Quality=")+8);print substr(s,1,index(s,"/")+1)}'`
            echo "$QU:$EN:$AP"
        done
    ) | sort -n
done
```

Posted by rdircio in Linux at 12:52

Wednesday, February 3. 2010

Airoscript leaves you with many "mon" interfaces

if you run airoscript too much you'll be left with mon0, mon1, mon2... etc

To remove them all you can do:

```
ifconfig -a | grep -i mon | awk '{ print $1 }' | while read i;do airmon-ng stop $i;done
```

Posted by rdircio in Linux at 12:23

Friday, December 11. 2009

Moving LVM volumes between nodes on LINUX

First node where the FS are currently mounted:

umount FS

vgchange -an vgdata

vgexport vgdata

Second node, where we want to mount the volumes:

vgimport vgdata

vgchange -ay vgdata

pvscan (will show you the active/inactive volumes)

Thx to Hiram Ruiz

Posted by rdircio in Linux at 13:47

Friday, November 20. 2009

Performance charts

I made some performance charts from the output of sar and custom scripts, check them out!

<http://www.kraftek.com/perf/>

The source is in

<http://www.kraftek.com/perfsrc/>

they were built using [open flash chart](#) and my own php/ksh scripts.

Posted by rdircio in Linux at 23:05

Tuesday, November 17. 2009

The kernel still uses the old table. The new table will be used at the next reboot.

if, when creating partitions with fdisk or cfdisk you get this message on exit:

*WARNING: Re-reading the partition table failed with error 16: Device or resource busy.
The kernel still uses the old table.
The new table will be used at the next reboot.
Syncing disks.*

You don't need to reboot the box, just issue "partprobe"

Posted by rdircio in Linux at 14:23

Saturday, November 7. 2009

using mod_deflate in apache2 to compress everything

We're trying to save bandwidth here, so we added to httpd.conf:

```
LoadModule deflate_module lib64/httpd/modules/mod_deflate.so
SetOutputFilter DEFLATE
DeflateCompressionLevel 9
BrowserMatch ^Mozilla/4 gzip-only-text/html
BrowserMatch ^Mozilla/4.[0678] no-gzip
BrowserMatch \bMSIE !no-gzip !gzip-only-text/html
DeflateFilterNote Input input_info
DeflateFilterNote Output output_info
DeflateFilterNote Ratio ratio_info
LogFormat "%r" %b (%{input_info}n====>{%output_info}n) (%{ratio_info}n%%)' deflate
CustomLog /var/log/httpd/deflate_log deflate
```

We can see some entries in the /var/log/httpd/deflate_log

```
"GET /blog/images/magplus.gif HTTP/1.1" 192 (923====>174) (18%)
"GET /blog/ HTTP/1.1" 8044 (50582====>8026) (15%)
"GET /blog/index.php?/serendipity.css HTTP/1.1" 2778 (11987====>2760) (23%)
"GET /blog/templates/translucency/transblue.css HTTP/1.1" 903 (2787====>885) (31%)
"GET /nomove.js HTTP/1.1" 274 (566====>256) (45%)
```

Posted by rdircio in Linux at 11:55

Monday, November 2. 2009

mount server reported tcp not available, falling back to udp

If your nfs client has this:

```
# mount /usr/sap/trans  
mount server reported tcp not available, falling back to udp  
mount: RPC: Program not registered
```

and this:

```
# rpcinfo -p nfsserver  
No remote programs registered.
```

you may have tcpwrappers in the nfs server, so, in the nfs server edit /etc/hosts.allow and add:

```
portmap : usdaapp151,10.21.40.100 : ALLOW  
portmap : ALL : DENY  
nfs-server : 10.21.40.100 : ALLOW  
nfs-server: ALL : DENY
```

do not restart anything, just mount your filesystem in the client

Thanks to Alfredo Rioja

Posted by rdircio in Linux at 20:29

Wednesday, October 21. 2009

disable dm_multipath

if, when you do a lsmod you find dm_multipath, but your multipath.conf says it's disabled...

```
# mv /etc/multipath.conf /etc/multipath.conf.old  
# init 6
```

you'll see the module disappear on next reboot

Posted by rdircio in Linux at 17:20

linux boots to fsck and you don't know the root password

if you are at the console, and you booted up a crashed server, and it wants you to type the root password because it needs a fsck, reboot it and pass the "fastboot" option to grub. It will not fsck on boot.

Posted by rdircio in Linux at 17:18

Friday, September 25. 2009

on slack13

kraftek is now running in slackware 13 x86_64

Posted by rdircio in Linux at 00:23

Thursday, September 24. 2009

Split files

I've splitted a 31gb file to fit into dvds:

```
split --bytes=4296m 80gbdd.7z 80gbdd_7z_
```

To join the pieces back:

```
cat 80gbdd_7z_* > 80gbdd_joined.7z
```

Posted by rdircio in Linux at 06:16

Saturday, September 12. 2009

no java console option on Dell DRAC 5

If your dell DRAC 5 card does not give you the option of a Java Console, you might have an old DRAC firmware, older than 1.40 perhaps.

You should check in the properties tab the firmware version. If it is older than 1.40, you can get 1.45 from dell's page

<http://support.dell.com/support/downloads/download.aspx?c=us&l=en&s=gen&releaseid=R209365&SystemID=PWE>

that will be an .exe file, so download it into a windoze PC and run it. It will uncompress and give you a file called "firmimg.d5"

You will use that file to upgrade your drac firmware.

transfer it to the server in question. if you have linux and all the OM tools installed, you just need to run this command while you are in the directory where you put the "firmimg.d5" file.

```
# racadm fwupdate -p -u -d .
```

That will upgrade your DRAC5 firmware to level 1.45, which includes the java console feature. Now enjoy your console.

Posted by rdircio in Linux at 02:12

Thursday, August 27. 2009

jailing a user in ssh without a patch for openssh

You can use a combination of "jailkit" and pam's chroot module for this, we'll jail user "rdpm" in this example.

First, get jailkit from <http://olivier.sessink.nl/jailkit/> , build it and install it

Now, create a generic jail

```
jk_init -v /home/jail sftp scp ssh jk_lsh basicshell
```

let's now create the user "rdpm"

```
useradd -m -d /home/rdpm -g 10 rdpm  
passwd rdpm
```

We want this to work only for ssh, so let's add a line to /etc/pam.d/sshd to load the chroot module

```
session required pam_chroot.so debug
```

so, now let's make rdpm's home inside the jail directory

```
mkdir /home/jail/home/rdpm  
chown rdpm /home/jail/home/rdpm
```

You may, if you want so, mount loopback his real home dir into the jail:

```
mount --bind /home/rdpm /home/jail/home/rdpm
```

And you may also make that bind mount permanent:

```
echo "/home/rdpm /home/jail/home/rdpm bind defaults,bind 0 0" >> /etc/fstab
```

let's copy rdpm's auth info into the jail

```
grep rdpm /etc/passwd >> /home/jail/etc/passwd
```

```
grep rdpm /etc/shadow >> /home/jail/etc/shadow
```

Let's configure the chroot pam module

```
echo "rdpm /home/jail" >> /etc/security/chroot.conf
```

and that's all, now "ssh rdpm@yourserver" and you'll find yourself in a jail

Posted by rdircio in Linux at 00:40

Sunday, May 24, 2009

readonly /etc/fstab

If you're trying to save your /etc/fstab and you get:

"fstab" E212: Can't open file for writing

And you know you can write any other file in "/", then it's not a readonly FS.

You need to check the file's attributes.

```
[root@myserver etc]# lsattr /etc/fstab
----i----- /etc/fstab
```

if it has a "i" then it's write protected, so change it

```
[root@myserver etc]# chattr -i /etc/fstab
[root@myserver etc]# lsattr /etc/fstab
----- /etc/fstab
Then you can edit the file
```

Posted by rdircio in Linux at 19:48

Saturday, March 14. 2009

usb vfs: cannot open root device sda1 or unknown-block

if you get that error while trying to boot from a USB disk, and you're 100% sure it is the right disk and partition, then pass:

```
rootdelay=10
```

to your grub parameters. That will make the kernel wait a bit until your usb drive appears.

Posted by rdircio in Linux at 19:00

Thursday, March 5, 2009

grub possible boot disks

If you get obfuscated about grub's disk device numbering, in the grub prompt you can do:

"root (" + tab

like:

```
grub > root ( <press the tab key>
```

```
Possible disks are: fd0 hd0 hd1
```

Posted by rdircio in Linux at 22:51

Sunday, January 11. 2009

What to do when hpacucli is locked but there is no process for it

```
# hpacucli
```

```
HP
```

```
Array Configuration Utility CLI 7.50.18.0
```

```
Detecting Controllers...
```

```
Error:
```

```
Another instance of ACU is already running (possibly a service). Please
```

```
    terminate the ACU application before running the ACU
```

```
CLI.
```

```
# ps -ef | grep -i
```

```
acu
```

```
root  26127 11377 0 15:12 pts/3  00:00:00 grep -i
```

```
acu
```

go to /opt/compaq/cpqacuxe/bld/locks and remove all the files in that directory, then run hpacucli
Thanks to Justin Lim

Posted by rdircio in Linux at 22:02

Monday, December 29, 2008

Stop/start iptables

```
# /etc/init.d/iptables stop  
# /etc/init.d/iptables save  
# /etc/init.d/iptables start
```

Posted by rdircio in Linux at 15:34

Thursday, November 13. 2008

Open a port using iptables

If you want to open, for instance, port 32 to any peer:

```
# iptables -I INPUT -p tcp --dport 32 -j ACCEPT
```

Posted by rdircio in Linux at 10:29

Wednesday, October 22. 2008

Use hpsasmcli to diagnose your HP hardware

To check your hardware for failures, if you have hpsasm installed:

```
# hpsasmcli -s "help show"
```

```
USAGE: SHOW [ ASR | BOOT | DIMM | F1 | FANS | HT | IML | IPL | NAME | PORTMAP | POWERSUPPLY |  
PXE | SERIAL | SERVER | TEMP | UID | WOL ]
```

```
# hpsasmcli -s "show dimm"
```

```
# hpsasmcli -s "show fans"
```

```
# hpsasmcli -s "show iml"
```

```
# hpsasmcli -s "show powersupply"
```

```
# hpsasmcli -s "show server"
```

```
# hpsasmcli -s "show temp"
```

If you want to use the web interface use <http://thehost:2301>

Thanks to Justin Lim

Posted by rdircio in Linux at 08:20

Using OMSA cli to diagnose DELL Hardware

If you have omsa installed in your OS, you can do:

```
# omreport system -?
```

```
# omreport system alertlog
```

```
# omreport system events
```

```
# omreport system alertaction
```

```
# omreport system postlog
```

```
# omreport system shutdown
```

```
# omreport system summary
```

```
# omreport system pedestinations
```

```
# omreport system recovery
```

```
# omreport system platformevents
```

```
# omreport system esmlog
```

You may use the web interface by browsing <https://hostname:1311>

OMSA can be obtained by browsing <http://ftp.us.dell.com/sysman/>

to start it you can run:

```
srvadmin-services.sh start
```

Thanks to Justin Lim

Posted by rdircio in Linux at 08:15

Monday, October 20, 2008

Vmware tools won't compile on suse 9.2

You basically get `"/bin/sh: scripts/basic/fixdep: No such file or directory"`

Using 2.6.x kernel build system.

make: Entering directory `/tmp/vmware-config9/vmmon-only'

make -C /usr/src/linux/include/.. SUBDIRS=\$PWD SRCROOT=\$PWD/. modules

make[1]: Entering directory `/usr/src/linux-2.6.5-7.314'

Makefile:465: .config: No such file or directory

CC [M] /tmp/vmware-config9/vmmon-only/linux/driver.o

/bin/sh: scripts/basic/fixdep: No such file or directory

*make[2]: *** [/tmp/vmware-config9/vmmon-only/linux/driver.o] Error 1*

*make[1]: *** [module/tmp/vmware-config9/vmmon-only] Error 2*

make[1]: Leaving directory `/usr/src/linux-2.6.5-7.314'

*make: *** [vmmon.ko] Error 2*

make: Leaving directory `/tmp/vmware-config9/vmmon-only'

Unable to build the vmmon module.

If you don't have a `.config` file in your kernel source you can:

```
# make cloneconfig
```

Then it might complain that `"scripts/modpost: No such file or directory"`

So you just copy it according to the kernel you're running:

```
# uname -a
```

```
Linux imdalapp300b 2.6.5-7.314-smp #1 SMP Mon Sep 15 16:43:00 UTC 2008 i686 athlon i386 GNU/Linux
```

```
# cp /usr/src/linux-2.6.5-7.314-obj/i386/smp/scripts/modpost /usr/src/linux-2.6.5-7.314
```

Now you can run again "vmware-config-tools.pl"

Posted by rdircio in Linux at 20:20

Saturday, October 11. 2008

build an iso image

if you want to make a cdrom image of a file, you can just run:

```
mkisofs -o the_iso.iso -R -v the_file.tar.gz
```

Posted by rdircio in Linux at 08:47

Thursday, September 25. 2008

Force password reset at next login

```
# chage -d 0 username
```

Posted by rdircio in Linux at 13:33

Unlock account

In redhat...

```
# passwd -u rdircio
```

```
# faillog -u rdircio -r
```

Posted by rdircio in Linux at 13:29

pwconv and pwck cannot lock /etc/passwd

```
[root@myserver root]# pwck
```

```
pwck: cannot lock file /etc/passwd
```

you need to remove the lock file

```
[root@myserver root]# ls -la /etc/.pwd.lock
-rw----- 1 root  root    0 Jul 14 2003 /etc/.pwd.lock
[root@myserver root]# rm /etc/.pwd.lock
rm: remove `/etc/.pwd.lock'? y
```

```
[root@dbn-ie2k214 root]# pwck
user adm: directory /var/adm does not exist
user news: directory /var/spool/news does not exist
user uucp: directory /var/spool/uucp does not exist
user gopher: directory /var/gopher does not exist
user wnn: directory /home/wnn does not exist
user gdm: directory /var/gdm does not exist
pwck: no changes
```

ck

Posted by rdircio in Linux at 12:42

Monday, September 15, 2008

Get server model and manufacturer

[dmidecode](#) | [more](#)

Thanks to Justin Lim

Posted by rdircio in Linux at 07:41

Create a bridge interface in the host to use it in VirtualBox

To have a host ip inside your VirtualBox guest OS, you must create it a tap interface in the HOST OS, i wrote two scripts to create the needed interface, and to remove it (tapstart.ksh/tapstop.ksh)

These scripts are made for Slackware 12(the host os), since it has no config files for tap/tun/bridge interfaces in /etc afaik.

TAPSTART.KSH:

```
#!/bin/ksh
## The real interface, this should already have an ip, in this case it is
## a static ip
REAL=eth1
REALIP=172.16.1.88
NETMASK=255.255.0.0
GATEWAY=172.16.0.1
## The bridge interface, this will have the REALIP once all is setup
BRIDGE=br0
## The tap interface, we'll use this device inside VirtualBox
TAP=tap0
mkdir /dev/net
mknod /dev/net/tun c 10 200
groupadd umlnetwork
chgrp umlnetwork /dev/net/tun
chmod g+rw /dev/net/tun
modprobe tun
brctl addbr $BRIDGE
ifconfig $REAL 0.0.0.0 promisc up
brctl addif $BRIDGE $REAL
tunctl -t $TAP -u root
brctl addif $BRIDGE $TAP
ifconfig $TAP up
ifconfig $BRIDGE inet $REALIP netmask $NETMASK
route add default gw $GATEWAY $BRIDGE
chmod 0666 /dev/net/tun
```

TAPSTOP.KSH:

```
#!/bin/ksh
## the tap,bridge and real interface as configured in tapstart.ksh
TAP=tap0
BRIDGE=br0
REAL=eth1
REALIP=172.16.1.88
NETMASK=255.255.0.0
ifconfig $TAP down
```

```
tunctl -d $TAP  
ifconfig $BRIDGE down  
brctl delbr $BRIDGE  
ifconfig eth1 inet $REALIP netmask $NETMASK up
```

Now all we have to do in virtual box is select "host" networking, use "tap0" as the interface and use 'tapstart.ksh" and "tapstop.ksh" as the networking start/stop scripts.

Your Guest OS's nic can be configured to use dhcp, for instance, and will get an address from your LAN's dhcp server.

Posted by rdircio in Linux at 23:50

Saturday, May 31. 2008

Slackware 12 does not automount usb or cdrom media

An error about HAL not having sufficient permissions appears.

To overcome this:

```
root@darkstar:~# usermod -G audio,video,cdrom,plugdev root
root@darkstar:~# /etc/rc.d/rc.messagebus reload
Reloading system message bus configuration...
```

And replug your usb device :)

Cheers

Posted by rdircio in Linux at 01:41

Tuesday, May 13. 2008

Grow an ext3 Filesystem online

If you want to grow an ext2/ext3 filesystem online and `resize2fs` can't do it, use "ext2online"

```
# ext2online /dev/mapper/my_vg-u10
```

This will grow the filesystem up to the maximum size the vg allows

thanks to Fergus O'Hea

Posted by rdircio in Linux at 11:03

Saturday, April 19. 2008

Disable password aging for a particular account using "chage"

If you want a user's password to never expire use:

```
# chage -l -1 -m 0 -M 99999 -E -1 theuser
```

If you just want to check the user's password expiry then

```
# chage -l theuser
```

```
# passwd -Sa | grep -i theuser
```

Posted by rdircio in Linux at 13:31

Generate a multipath.conf from a multipath -l output

If you do not have configured multipath.conf, but you just have the module enabled and no lun blacklisted you can use this script to generate a multipath.conf:

```
#!/bin/ksh
echo "multipaths {"
x=0
multipath -l | egrep '3600|size' | gawk 'ORS=NR%2?" ":"\n"' | awk '{ print $1 $2 }' | sed 's/[size=/ /g' | while read
l;do
W=`echo $l | awk '{ print $1 }'`
S=`echo $l | awk '{ print $2 }'`
echo " multipath {"
echo " wwid $W"
echo " alias disk${x}_${S}Gb"
echo " path_grouping_policy failover"
echo " path_checker readsector0"
echo " path_selector \"round-robin 0\""
echo " failback immediate"
echo "}"
x=`echo "$x + 1"|bc`
done
echo "}"
```

Posted by rdircio in Linux at 02:08

Sunday, April 13. 2008

"swapon -s" shows swap spaces as "(deleted)" if these are lvm volumes

```
[root@mylinux]# swapon -s  
Filename Type Size Used Priority  
/dev/systemvg/swapvol (deleted) partition 4095992 0 -3
```

According to http://kbase.redhat.com/faq/FAQ_79_4331.shtm we need to add "swapoff -a && swapon -a" to the end of /etc/rc.d/rc.sysinit

We can also run

```
#swapoff -a && swapon -a
```

To fix it live, and we'll see:

```
[root@mylinux]# swapon -s  
Filename Type Size Used Priority  
/dev/systemvg/swapvol partition 4095992 0 -3
```

Posted by rdircio in Linux at 13:29

Monday, March 24. 2008

NFS taking >1 minute to mount each share

If your redhat NFS client takes too long to mount, but it does mount the shares, it may need portmap to be turned on:

```
# chkconfig --level 2345 portmap on  
# /etc/init.d/portmap start
```

This will make the mounts come up almost instantly

Posted by rdircio in Linux at 14:53

Reconfigure RILO address, and password

If your HP rilo,rib,ilo card (i don't get these names) is not accessible, and the server is booted up to linux, you can configure its address using "hponcfg"

```
theserver:~ # hponcfg -f rdpm.xml
Firmware Revision = 1.91 Device type = iLO Driver name = cpqci
Script succeeded
```

Where rdpm.xml has contents:

```
<RIBCL VERSION="2.0">
  <LOGIN USER_LOGIN="currentuser" PASSWORD="currentpassword">
    <USER_INFO MODE="write">
      <MOD_USER USER_LOGIN="Administrator">
        <PASSWORD value="apassword" />
      </MOD_USER>
    </USER_INFO>
  <RIB_INFO MODE="write">
    <MOD_NETWORK_SETTINGS>
      <ENABLE_NIC value="Yes" />
      <REG_DDNS_SERVER value="No" />
      <PING_GATEWAY value="No" />
      <DHCP_DOMAIN_NAME value="Yes" />
      <SPEED_AUTOSELECT value="No" />
      <NIC_SPEED value="100" />
      <FULL_DUPLEX value="Yes" />
      <DHCP_ENABLE value="No" />
      <IP_ADDRESS value="172.168.120.106" />
      <SUBNET_MASK value="255.255.255.0" />
      <DNS_NAME value="theserver-ilo" />
      <DOMAIN_NAME value="rilos.com" />
      <REG_WINS_SERVER value="No" />
    </MOD_NETWORK_SETTINGS>
  </RIB_INFO>
</LOGIN>
</RIBCL>
```

Posted by rdircio in Linux at 21:28

Wednesday, February 27, 2008

Curses on linux kernel

Ok, i've seen it elsewhere, but i made my own list of these comments inside the linux source code, that say things like:

```
./drivers/char/rio/rioctrl.c: /* It's hardware like this that really gets on my tits. */  
./drivers/char/watchdog/shwdt.c: * brain-damage, it's managed to fuck things up one step further..  
./Documentation/DocBook/kernel-locking.tmpl: If you don't see why, please stay the fuck away from my code.
```

so, get the list [here](#).

Posted by rdircio in Linux at 17:23

Tuesday, February 26. 2008

ps -ef shows uids instead of usernames

This happens:

```
# ps -ef
oracle 31868 1 0 08:37 ? 00:00:00 ora_p103_salerep
103 1789 1788 0 08:39 pts/2 00:00:00 -bash
103 2099 1789 0 08:39 pts/2 00:00:00 ps -ef
103 2100 1789 0 08:39 pts/2 00:00:00 grep -i 103
```

Notice we see "103" in the first column instead of the username, this is because uid 103 is "siebadmin", which is >8 characters long. Ps has a column width of 8 on the first column, and if the username does not fit, it uses the uid. This is not fixable, unless in source.

Posted by rdircio in Linux at 08:38

Friday, February 15, 2008

Nmon

To add to our previous performance post, we can equip our linux server with nmon, from IBM.

I'm not an IBM fan, this is free, but closed source!!!, despite this, it looks good, get it at:
<http://www-941.haw.ibm.com/collaboration/wiki/display/WikiPtype/nmon>

Posted by rdircio in Linux at 18:46

Thursday, February 14. 2008

"prstat -va" equivalent for linux.

Solaris has "prstat -va" when you want to know which process is using %SYS cpu.

```
#prstat -va
```

```
PID USERNAME USR SYS TRP TFL DFL LCK SLP LAT VCX ICX SCL SIG PROCESS/NLWP
4188 rdircio 3.0 0.2 0.0 0.0 0.0 0.0 97 0.0 91 26 826 0 nxagent/1
19877 root 1.0 0.0 0.0 0.0 0.0 0.0 99 0.0 3 4 115 0 ssh/1
22010 rdircio 0.2 0.8 0.0 0.0 0.0 0.0 99 0.0 46 4 916 0 prstat/1
Notice the SYS column.
```

Linux standard "top" does not have that. so we can use "atop": <http://www.atcomputing.nl/Tools/atop/>

```
# atop
```

```
PID SYSCPU USRCPU VGROW RGROW USERNAME THR ST EXC S CPU CMD 1/1
23876 8.18s 1.43s OK OK wbmthds 1 -- - R 100% gam_server
13785 0.14s 0.03s OK OK root 1 -- - S 2% atop
? 0.06s 0.02s OK OK smmsp 0 NE 0 E 1% <sendmail>
? 0.06s 0.01s OK OK root 0 NE 0 E 1% <accountunloc>
25971 0.02s 0.01s OK OK wbmthds 79 -- - S 0% awbroker
14113 0.02s 0.00s OK OK root 1 -- - R 0% atop
```

Hope this helps for your performance/sysstat needs

Posted by rdircio in Linux at 15:29

Thursday, January 31. 2008

Slackware 12 Samba 3.0.28 bound to Windows 2003 Active Directory

This is how to get a Slackware 12 bound to a Windows 2003 Active Directory, using AD (kerberos/ldap).

First, you need a windows 2003 server, with Active Directory enabled, i assume you know how to do that part, in my case this one is called fwa-dc01.

```
172.16.1.55 fwa-dc01 fwa-dc01.aww.com
```

Now with our slackware 12... This one is called "kraftek"

```
172.16.1.50 kraftek kraftek.aww.com
```

We will use all slack12 included packages except samba, so please make sure these pkgs are at /var/log/packages:

```
krb5-1.6.1-i686-2dl  
cyrus-sasl-2.1.22-i486-1  
openldap-client-2.3.36-i686-1dl  
openssl-0.9.8e-i486-3  
openssl-solibs-0.9.8e-i486-3  
db42-4.2.52-i486-3  
db44-4.4.20-i486-2
```

Then we should get the latest samba sources, we need to build SAMBA, since the slackware 12 included samba does not support ActiveDirectory. The release i got is samba 3.0.28, from <http://us4.samba.org/samba/ftp/stable/samba-3.0.28.tar.gz>

after uncompressing, it all fell into /builds/samba-3.0.28, so i did:

```
# cd /builds/samba-3.0.28/source  
# ./configure --with-ads --with-winbind --with-smbmount --prefix=/usr/samba_ad --with-pam  
# make && make install
```

This builds it all and places samba at /usr/samba_ad

We also need to install the nss helpers to our system default directories:

```
# cp /builds/samba-3.0.28/source/nsswitch/libnss_winbind.so /lib  
# cp /builds/samba-3.0.28/source/nsswitch/libnss_wins.so /lib  
# ln -s /lib/libnss_winbind.so /lib/libnss_winbind.so.2  
# ln -s /lib/libnss_wins.so /lib/libnss_wins.so.2
```

Then, we need to configure Kerberos ;), i placed this in /etc/krb5.conf:

```
[libdefaults]  
clockskew = 300
```

```

default_realm = AWW.COM
[realms]
AWW.COM = {
kdc = fwa-dc01.aww.com
default_domain = AWW
kpasswd_server = fwa-dc01.aww.com
}
[domain_realm]
.AWW = AWW.COM
[logging]
default = SYSLOG:NOTICE:DAEMON
kdc = FILE:/var/log/kdc.log
kadmind = FILE:/var/log/kadmind.log
[appdefaults]
pam = {
ticket_lifetime = 1d
renew_lifetime = 1d
forwardable = true
proxiable = false
retain_after_close = false
minimum_uid = 0
debug = false
}

```

Of course we need to edit /etc/hosts and add our Active Directory PDC there, and our server name with a fqdn, both belonging to aww.com(our AD domain):

```

172.16.1.55 fwa-dc01 fwa-dc01.aww.com
172.16.1.50 kraftek kraftek.aww.com

```

We do not really need to do much at /etc/resolv.conf, we don't need DNS lookups to AD here.

We need to modify /etc/nsswitch.conf, and add "winbind" as an option to passwd and group:

```

passwd: files compat winbind
group: files compat winbind

```

Notice that for this to work you REALLY have to have /lib/libnss_winbind.so in place!!!

Now we configure SAMBA, the SAMBA we compiled looks for its smb.conf at /usr/samba_ad/lib/smb.conf, so that's where we place it, and it has:

```

[global]
realm = AWW.COM
workgroup = AWW
password server = fwa-dc01.aww.com
security = ADS
encrypt passwords = yes
map to guest = never
client use spnego = yes
idmap uid = 10000-60000
winbind gid = 10000-60000
winbind use default domain = yes
netbios name = kraftek
loglevel = 10

```

```
interfaces = 172.16.1.50
bind interfaces only = yes
[200gb]
comment = 200gb disk
path = /200gb
read only = no
public = yes
browseable = yes
writeable = yes
create mode = 644
valid users = AWW\bmahock
[htdocs]
comment = Apache htdocs
path = /usr/local/apache2/htdocs
read only = no
public = yes
browseable = yes
writeable = yes
create mode = 644
valid users = AWW\bmahock
```

Good, notice we're using security=ADS and we specify the realm and workgroup, and our windows 2003 server is fwa-dc01.aww.com, just as in /etc/hosts
Now it is time to make the machinery move!!!!!!

Get our PATH set up to use our samba

```
# export PATH=$PATH:/usr/samba_ad/sbin:/usr/samba_ad/bin
```

Kill any existing samba

```
# pkill winbindd
# pkill smbd
# pkill nmbd
```

Destroy all kerberos tickets we have

```
# kdestroy
```

Get a kerberos ticket from our windows 2003 PDC, this reads /etc/krb5.conf

```
# kinit Administrator@AWW.COM
Password for Administrator@AWW.COM:
```

Join our windows 2003 AD domain

```
# /usr/samba_ad/bin/net ads join -U Administrator
Administrator's password:
Using short domain name -- AWW
Joined 'KRAFTEK' to realm 'AWW.COM'
```

Start our samba deamons

```
# /usr/samba_ad/sbin/winbindd -B
# /usr/samba_ad/sbin/smbd -D
# /usr/samba_ad/sbin/nmbd -D
```

Test our config

```
# /usr/samba_ad/bin/smbclient -L kraftek -U%
Domain=[AWW] OS=[Unix] Server=[Samba 3.0.28]
Sharename Type Comment
```

```
-----
200gb Disk 200gb disk
htdocs Disk Apache htdocs
IPC$ IPC IPC Service (Samba 3.0.28)
deskjet Printer Hp deskjet 845c at Home
Domain=[AWW] OS=[Unix] Server=[Samba 3.0.28]
Server Comment
```

```
-----
KRAFTEK Samba 3.0.28
Workgroup Master
```

```
-----
AWW
```

Check what are our trusted users, a list should appear, including users at our Windows 2003 PDC

```
# /usr/samba_ad/bin/wbinfo -u
administrator
guest
support_388945a0
krbtgt
bmahock
tpsmith
quser
```

Check our known groups, this should list our windows 2003 groups

```
# /usr/samba_ad/bin/wbinfo -g
BUILTIN\administrators
BUILTIN\users
domain computers
domain controllers
schema admins
enterprise admins
domain admins
domain users
domain guests
group policy creator owners
dnsupdateproxy
```

Check our trusted domains, this is extra important!!!, our windows 2003 domain (AWW) should be there!

```
# /usr/samba_ad/bin/wbinfo -m
AWW
```

Getent should give us details of any Windows 2003 user, this passes thru /etc/nsswitch.conf, then uses

/lib/libnss_winbind.so, connects to the running winbind daemon and queries the windows pdc

```
# getent passwd "AWW\bmahock"
```

```
bmahock:*:10000:10006:Brian Mahocker:/home/AWW/bmahock:/bin/false
```

Finally , do a test authentication with wbinfo, if this, and all previous tests work, you have a single sign on Samba, bound to a Windows 2003 Active Directory

```
# wbinfo -a "bmahock%R3515t0l1"
```

```
plaintext password authentication succeeded
```

```
challenge/response password authentication succeeded
```

Enjoy

Posted by rdircio in Linux at 11:43

Thursday, January 24. 2008

Setting the max number of file descriptors open limit

To check kernel set open files limit

```
% cat /proc/sys/fs/file-max  
8192
```

To increase kernel set to 65535 (as root)

```
# echo "65535" > /proc/sys/fs/file-max
```

If you want this new value to survive across reboots add it to `/etc/sysctl.conf`

```
fs.file-max = 65535
```

You can load these values live from the `sysctl.conf` file.

```
# sysctl -p /etc/sysctl.conf
```

The previous settings will only be for root, we need to adjust some files for all the users to have them inherited.

To increase this to 65535 for all users (as root)
add two lines to `/etc/security/limits.conf`

```
* soft nofile 65535  
* hard nofile 65535
```

Now add the next entry to `/etc/pam.d/login`

```
session required /lib/security/pam_limits.so
```

Relogin as your non-root user and check the new file open limit with:

```
$ ulimit -n
```

Posted by rdircio in Linux at 20:23

Sunday, September 2, 2007

NX + freenx Slackware 12 package

After having a hard time to make it all work, i built a package to install both freenx 0.7.0 and the nomachine NX libraries version 2.1.0-2.

Download [freenx_0.7.0_nx_2.1.0-2.tgz](#)

It is a SLACKWARE 12 package. Once you downlad it do a:

```
# installpkg freenx_0.7.0_nx_2.1.0-2.tgz
```

```
# nxsetup --install
```

And connect to your linux server using the client downloaded from:

http://www.nomachine.com/download-package.php?Prod_Id=65

ENJOY

Posted by rdircio in Linux at 17:02

Wednesday, August 1. 2007

Disaster recovery linux procedure

Here it goes!!! A [linux bare metal restore procedure](#) using netbackup, it can save you lots of research, all for free!!!!

Posted by rdircio in Linux at 22:58

Friday, July 20. 2007

Print extended info about your rpms

Use the queryformat modifier to print more info about your rpm

```
# rpm -qa --queryformat %-{name}-{version}-{release}-{arch}"\n"  
You can grep for something there, because it is a full listing
```

Thanks to Fergus O'hea

Posted by rdircio in Linux at 12:49

create user's homes from the entries at /etc/passwd

i don't like to do a

```
# cat /etc/passwd
```

and manually create the users and chown their dirs...

So, this is a one liner:

```
# grep -i home /etc/passwd | awk -F: '{print "mkdir " $6 " ; chown " $1 " " $6 }' > somefile; chmod 755  
somefile;./somefile
```

Posted by rdircio in Linux at 09:50

Saturday, July 14. 2007

Add a kickstart install image to an existing kickstart server

These are the steps to add oracle enterprise linux as a kickstart option at an existing kickstart server, it does pxe boot and serves the package install by http. Your server must be on the kickstart network to be pxe booted by this.

Make a directory to store your downloaded ISOS, and store them there:

```
# mkdir -p /u01/ISOS/ORACLE_EL4x64
```

```
# ls/u01/ISOS/ORACLE_EL4x64
```

```
.   Enterprise-R4-U5-x86_64-disc1.iso  Enterprise-R4-U5-x86_64-disc3.iso
..  Enterprise-R4-U5-x86_64-disc2.iso  Enterprise-R4-U5-x86_64-disc4.iso
```

Make a directory to store all the RPMs and all install files for your distro

```
# mkdir /installroot/oracle_el4x64
```

Copy all the files from the isos to /installroot/oracle_el4x64 by mounting them loopback and doing a cpio:

```
# mount -o loop /u01/ISOS/ORACLE_EL4x64/Enterprise?-R4-U5-x86_64-disc1.iso /mnt
# cd /mnt/
# find . -depth -print | cpio -pdmv /installroot/oracle_el4x64/
# cd /
# umount /mnt
# mount -o loop /u01/ISOS/ORACLE_EL4x64/Enterprise?-R4-U5-x86_64-disc2.iso /mnt
# cd /mnt
# find . -depth -print | cpio -pdmv /installroot/oracle_el4x64/
# cd /
# umount /mnt
# mount -o loop /u01/ISOS/ORACLE_EL4x64/Enterprise?-R4-U5-x86_64-disc3.iso /mnt
# cd /mnt
# find . -depth -print | cpio -pdmv /installroot/oracle_el4x64/
# cd /
```

```
# umount /mnt
# mount -o loop /u01/ISOS/ORACLE_EL4x64/Enterprise?-R4-U5-x86_64-disc4.iso /mnt
# cd /mnt
# find . -depth -print | cpio -pdumv /installroot/oracle_el4x64/
# cd /
# umount /mnt
```

Make a directory to put all the files that will be served by tftp when the server to be installed is pxe booted

```
# mkdir /tftpboot/oracle_el4x64
```

Copy the small os and small kernel that is served by pxe/tftp when the server is pxe booted

```
# cp -rp /installroot/oracle_el4x64/images/pxeboot/initrd.img
/tftpboot/oracle_el4x64/
# cp -rp /installroot/oracle_el4x64/images/pxeboot/vmlinuz
/tftpboot/oracle_el4x64/
```

Add a profile to the pxe boot options

1. `vi /tftpboot/pxelinux.cfg/default`

```
label oracle_el4x64
```

```
kernel oracle_el4x64/vmlinuz
append initrd=oracle_el4x64/initrd.img load_ramdisk=1 ip=dhcp
```

Add a http docbase to serve the install files and rpms using apache

```
# vi /etc/apache2/conf.d/inst_server.conf
```

```
<IfDefine? inst_server>
  Alias /oracle_el4x64/ /installroot/oracle_el4x64/
  Alias /oracle_el4x64 /installroot/oracle_el4x64
  <Directory /installroot/oracle_el4x64>
```

```
Options +Indexes +FollowSymLinks?
  IndexOptions? +NameWidth?=*
```

```
Order allow,deny
  Allow from all
```

```
</Directory?>
</IfDefine?>
```

Add a custom message that appears on the screen when the server to be installed is pxe booted:

```
# vi /tftpboot/bootmsg.txt
```

(for version 4 choose oracle_el4x64)

Restart apache so the new apache docbase is active

```
# /etc/init.d/apache2 stop
# /etc/init.d/apache2 start
```

Reboot the server to be installed and enjoy!

Posted by rdircio in Linux at 00:30

Sunday, July 8. 2007

multipathing in oracle enterprise linux 5

```
# cp /usr/share/doc/device-mapper-multipath-0.4.7/multipath.conf.annotated /etc/multipath.conf
```

```
# chkconfig --add multipathd
```

```
# chkconfig multipathd on
```

```
# reboot
```

For each lun assigned to you a device under /device/mapper will appear, do a fdisk to each one:

```
# fdisk /dev/mapper/360060e80047656000000765600000e43
```

```
# fdisk /dev/mapper/360060e80047656000000765600000e44
```

```
# fdisk /dev/mapper/360060e80047656000000765600000e45
```

```
# fdisk /dev/mapper/360060e80047656000000765600000e46
```

```
# fdisk /dev/mapper/360060e80047656000000765600000e47
```

```
# fdisk /dev/mapper/360060e80047656000000765600000e48
```

```
# fdisk /dev/mapper/360060e80047656000000765600000e49
```

In each case do a "p" and then a "w" to overwrite the volume label, you will have to restart the server.

```
# reboot
```

Once back, open the lvm assistant:

```
# /usr/bin/system-config-lvm
```

once there initialize each block device found at:

```
# ls /dev/dm*
```

after that you can create a volume group and volumes :)

Posted by rdircio in Linux at 21:15

Monday, July 2. 2007

resizing / on Oracle Enterprise Linux

i needed a bigger swap, its size was 2 Gb and we needed it to grow to 16gb, so we decided to shrink /. A task anybody would say not possible.

So we tuck in the first installation CD for oracle enterprise linux and when prompted for a kernel option we issued

```
: linux recover
```

Once asked to mount the root partition we said yes...

it ended up in /dev/VolGroup00/LogVol00

we checked a df -k, and it was mounted as /mnt/sysimage, and had a dev, proc and other directories mounted inside, which were not evident in the df -k, so did a

```
# cat /etc/mtab
```

and found other dirs mounted, so for each entry in mtab inside /mnt/sysimage we unmounted it, and ended up unmounting /mnt/sysimage

```
#umount /mnt/sysimage/selinux
```

```
#umount /mnt/sysimage/dev
```

```
#umount /mnt/sysimage/sys
```

```
#umount /mnt/sysimage/proc
```

```
#umount /mnt/sysimage/boot
```

```
#umount /mnt/sysimage
```

To reduce the filesystem, after unmounted and we issued:

```
# e2fsck -f /dev/VolGroup00/LogVol00
```

```
# resize2fs /dev/VolGroup00/LogVol00 110G
```

After that we needed to resize the volume, so we issued:

```
# lvm
```

```
> lvreduce -L -16G /dev/VolGroup00/LogVol00
```

And that did the trick to reduce the / filesystem

Then we booted up the server and resized the swap volume issuing:

```
# lvresize -L +16G /dev/VolGroup00/LogVol01
```

Had to remake the swap area

```
# swapoff /dev/VolGroup00/LogVol01  
# mkswap /dev/VolGroup00/LogVol01
```

And remount it

```
# swapon -a
```

You can verify the new swap size with a "top"

Posted by rdircio in Linux at 22:45

Friday, May 4. 2007

Cron entry to reboot a server the first Sunday of every month

This cannot be expressed in the typical crontab syntax, so we run a script every sunday in the crontab:

```
00 11 * * 0 root /scripts/monthlyreboot.ksh > /var/log/rebootlog 2>&1
```

The script checks if this is the first sunday of the current month, if it is, it performs a reboot, the contents of /scripts/monthlyreboot.ksh are:

```
#!/bin/ksh
# get today's month and year
T=`date +%m" "%Y | sed 's/^0//`
# get this month's first sunday
S=`cal $T | cut -c 1-2 | sed 's//g' | grep . | head -2 | tail -1`

# get what day of the month today is
D=`date +%d | sed 's/^0//`
echo -n "`date` --- the day is $D, first sunday of $T is $S"
if [ $D -eq $S ];then
    echo ", so we are going to reboot"
    sleep 3
    /sbin/shutdown -t 00 -r now
else
    echo ", no reboot today"
fi
```

Posted by rdircio in Linux at 23:10

Wednesday, April 18, 2007

enable ftp logins in redhat

Not recommended for security purposes, but if you want to do it:

First edit the file `/etc/ftpaccess` and comment out the 'deny-uid' and 'deny-gid' lines.

Remove any users you need to connect from `/etc/ftpusers`

Posted by rdircio in Linux at 13:00

Friday, February 2. 2007

See connections to your server

You ever wanted to see what connections are in place to your server?

I wrote a script called `/usr/bin/conn` with this:

```
netstat -na | egrep 'tcp' | grep -v LISTEN
```

and then just ran

```
# chmod 755 /usr/bin/conn
```

```
# watch conn
```

and now i'm watching the live connections!

Posted by rdircio in Linux at 18:14

Friday, January 26. 2007

How to know if my linux is running at 64 or 32 bits?

Issue:

```
# uname -m
```

i386 or i686 ==> 32 bit

x86_64 ==> 64bit

Posted by rdircio in Linux at 13:42

Netbackup 4.5 linux client not backing up >2Gb files

If you cannot upgrade to netbackup client 5.x or 6.x and you have this error message:

```
13:33:12.827 [313] <4> bpbkar: INF - Processing /dir/bigfile
```

```
13:33:12.836 [313] <8> bpbkar: WRN - Cannot process path /dir/bigfile: Value too large for defined data type. Skipping.
```

Please refer to <http://seer.support.veritas.com/docs/256923.htm>

and install the client version that supports +2Gb file sizes

Linux Client (v2.4) on NBU 4.5FP4

Posted by rdircio in Linux at 13:38

Thursday, January 25, 2007

convert ext2 to ext3

Unmount your ext2 filesystem, then issue:

```
# tune2fs -j /dev/hda1
```

Where /dev/hda1 is the ext2 FS you want to convert.

then edit your fstab and change /dev/hda1 entry to be ext3

Easy!

Posted by rdircio in Linux at 17:44

Tuesday, January 16. 2007

configure up2date on RHEL AS 2.1

If you don't like graphics...

go to `/etc/sysconfig/rhn`

and edit "up2date" and "rh_register"

... and a happy new year

Posted by rdircio in Linux at 15:45

check network speed in suse

I wrote a script that shows you in a condensed way if you're in network card speed trouble:

```
# ----- server app213
bond0= eth1 eth2
bond0 : : : : 10.20.9.38
eth0 : 100Mb/s : Half : on : yes : 192.168.5.119
eth1 : 100Mb/s : Half : on : yes :
eth2 : 100Mb/s : Half : on : yes :
eth3 : Unknown! (65535) : Unknown! (255) : on : no :
```

Here it goes:

```
#!/bin/bash
DIR=/tmp/.dir
mkdir $DIR > /dev/null 2>&1
HB=`ifconfig -a | grep -i bond | wc -l | sed 's//g'`
if [ "$HB" -ne "0" ];then
for i in `ifconfig -a | cut -c0-10 | egrep -i 'bond'| grep -v ':'`;do
    echo -n "$i="
    for i in `cat /etc/sysconfig/network/ifcfg-$i | grep "BONDING_SLAVE" | awk -F=" '{ print $2 }' | awk -F"" '{
print $2 }'`;do
        echo -n " $i"
    done
    echo ""
done
fi
for i in `ifconfig -a | cut -c0-10 | egrep -i 'bond|eth'| grep -v ':'`;do
    SP=`ethtool $i | grep "Speed:" | awk -F: '{ print $2 }'`
    DU=`ethtool $i | grep "Duplex:" | awk -F: '{ print $2 }'`
    AU=`ethtool $i | grep "Auto-negotiation:" | awk -F: '{ print $2 }'`
    LI=`ethtool $i | grep "Link detected: " | awk -F: '{ print $2 }'`
    (for w in `ifconfig $i`;do
        echo "$w"
    done) | grep "addr:" | awk -F: '{ print $2 }' > $DIR/addr
    echo "$i : $SP : $DU : $AU : $LI : `cat $DIR/addr` "
done
```

Posted by rdircio in Linux at 22:15

Saturday, October 28. 2006

remote copy files using ssh and tar

to copy a whole directory from this server to another do:

```
cd /dir/to/copy/from; tar zpcf - * | ssh otherserver "(cd /dir/to/copy/to && tar zxvpf -)"
```

Posted by rdircio in Linux at 18:49

Sunday, September 10, 2006

setting kernel params in redhat

To determine the maximum size of a shared memory segment, run:

```
# cat /proc/sys/kernel/shmmax
2147483648
```

The default shared memory limit for SHMMAX can be changed in the proc file system without reboot:

```
# echo 2147483648 > /proc/sys/kernel/shmmax
```

Alternatively, you can use `sysctl(8)` to change it:

```
# sysctl -w kernel.shmmax=2147483648
```

To make a change permanent, add the following line to the file `/etc/sysctl.conf` (your setting may vary). This file is used during the boot process.

```
# echo "kernel.shmmax=2147483648" >> /etc/sysctl.conf
```

We also got this:

Checking kernel

parameters
Checking for
semmsl=250; found semmsl=250. Passed
Checking for
semmns=32000; found semmns=32000. Passed
Checking for
semopm=100; found semopm=32. Failed
<<<<
Checking for
semmni=128; found semmni=128. Passed
Checking for
shmmax=536870912; found shmmax=33554432. Failed
<<<<
Checking for
shmmni=4096; found shmmni=4096. Passed
Checking for
shmall=2097152; found shmall=2097152. Passed
Checking for
file-max=65536; found file-max=751357. Passed
Checking for
VERSION=2.6.9; found VERSION=2.6.9-55.0.0.0.2.ELlargesmp.
Passed
Checking for
ip_local_port_range=1024 - 65000; found ip_local_port_range=32768
- 61000. Failed
<<<<
Checking for
rmem_default=262144; found rmem_default=135168. Failed
<<<<
Checking for
rmem_max=262144; found rmem_max=135168. Failed
<<<<
Checking for
wmem_default=262144; found wmem_default=135168. Failed
<<<<
Checking for
wmem_max=262144; found wmem_max=135168. Failed
<<<<
Check complete. The
overall result of this check is: Failed
<<<<
Problem: The kernel
parameters do not meet the minimum requirements (see
above).
Recommendation: Perform
operating system specific instructions to update the kernel
parameters.

so for semopm we do a:

```
[root@irwdbd1 ~]# ipcs -ls
----- Semaphore Limits -----
max number of arrays = 128
max semaphores per array = 250
max semaphores system wide = 32000
max ops per semop call = 32
semaphore max value = 32767
```

and set it to be changed on reboot as:

```
[root@server ~]# echo "kernel.sem=250 32000 100 128" >> /etc/sysctl.conf
```

set it also live as:

```
[root@server ~]# echo "250 32000 100 128" > /proc/sys/kernel/sem
```

For the rest, i just added these lines to /etc/sysctl.conf:

```
net.ipv4.ip_local_port_range = 1024 65000
net.core.rmem_default=262144
net.core.wmem_default=262144
net.core.rmem_max=262144
net.core.wmem_max=262144
```

and ran a

```
[root@server ~]# /sbin/sysctl -p
net.ipv4.ip_forward = 0
net.ipv4.conf.default.rp_filter = 1
net.ipv4.conf.default.accept_source_route = 0
kernel.sysrq = 0
kernel.core_uses_pid = 1
kernel.sem = 250 32000 100 128
```

```
kernel.shmmax = 536870912
net.ipv4.ip_local_port_range = 1024 65000
net.core.rmem_default = 262144
net.core.wmem_default = 262144
net.core.rmem_max = 262144
net.core.wmem_max = 262144
```

You can also run these commands to get the variables oracle recommends to tune:

```
sysctl -a | grep -i shmmni
sysctl -a | grep -i 'kernel.sem'
sysctl -a | grep -i ip_local_port_range
sysctl -a | grep -i rmem_default
sysctl -a | grep -i rmem_max
sysctl -a | grep -i wmem_default
sysctl -a | grep -i wmem_max
sysctl -a | grep -i shmmax
```

You will get something like:

```
kernel.shmmni = 4096
kernel.sem = 250 32000 100 128
net.ipv4.ip_local_port_range = 1024 65000
net.core.rmem_default = 262144
net.core.rmem_max = 262144
net.core.wmem_default = 262144
net.core.wmem_max = 262144
kernel.shmmax = 2147483648
```

Posted by rdircio in Linux at 20:37

Friday, September 8. 2006

root rsh on redhat linux

DO NOT DO THIS AT HOME, it is highly insecure.

After the rude warning, just had to let you know that if you ever need to have a passwordless root login with rsh on redhat you have to do this...

Add these lines to /etc/securetty

```
rexec
rsh
rlogin
pts/0
pts/1
```

Activate the services by issuing

```
chkconfig rexec on
chkconfig rlogin on
chkconfig rsh on
```

add a /root/.rhosts file with the name of the host you want to trust to enter as root

In my case it contains only

```
otherpc
```

Change the permissions of the file to 600

```
chmod 600 /root/.rhosts
```

Add "otherpc" to your /etc/hosts file

```
10.10.10.1 otherpc
```

You're all set, you can rsh from "otherpc" without having to type the root password.

I REPEAT, do not do this for daily production servers, or any server you take seriously, it is foolish.

Posted by rdircio in Linux at 12:52

Tuesday, August 15, 2006

share a printer to winxp from samba

To share a printer to the windows world you should:

Modify /etc/cups/cupsd.conf

```
<Location /printers/deskjet>
#Order Allow,Deny //comment
#Deny From All //comment
Allow From 127.0.0.1
Allow From 172.16.1.*
#AuthType None
Allow from All
</Location>
<Location />
#Order Deny,Allow
#Deny From All
Allow From 127.0.0.1
Allow From 172.16.1.*
</Location>
Browsing On
BrowseProtocols cups
#BrowseOrder Deny,Allow
BrowseAllow @LOCAL
```

Modify smb.conf, ensure the following is set:

```
printing = cups
printcap name = cups
```

```
[printers]
comment = All Printers
path = /var/spool/samba
browseable = no
guest ok = no
writable = no
printable = yes
printing = cups
public = yes
printer name = deskjet
```

Then I had this error:

```
lpr: unable to print file: client-error-document-format-not-supported
So we edit /etc/cups/mime.types and change:
application/vnd.cups-raw (string(0,<1B>E) + !string(2,<1B>%0B)) \
string(0,<1B>@) \
(contains(0,128,<1B>%-12345X) + \
```

```
(contains(0,1024,"LANGUAGE=PCL") \
contains(0,1024,"LANGUAGE = PCL"))
to
application/vnd.cups-raw (string(0,<1B>E) + !string(2,<1B>%0B)) \
string(0,<1B>@) \
(contains(0,4096,<1B>%-12345X) + \
(contains(0,4096,"LANGUAGE=PCL") \
contains(0,4096,"LANGUAGE = PCL")))
```

Posted by rdircio in Linux at 16:56

Friday, June 9. 2006

s9y comment spam protection

I was been attacked by comment spam in this blog... this had me a bit down for a while.

Soon i found out there is an easy way to make comment spam difficult on serendipity(s9y) blog.

Go to "Configure Plugins" ---> "Event Plugins" ----> "Spam Protector"

And you'll solve all your problems :)

- rdircio

Posted by rdircio in Linux at 08:37

Thursday, June 8, 2006

get cpu and memory info in linux

to know how many cpus do you have there:

```
# cat /proc/cpuinfo
```

to know memory info

```
# cat /proc/meminfo
```

Posted by rdircio in Linux at 15:51

Parse a top -b output to a csv file

To monitor a machine's performance, in a very raw manner, you can run top in batch mode and redirect it to a file, like:

```
# top -b -c 10 > toplevel.txt &
```

then parse the output file/s in a script

```
#!/bin/ksh
echo "DATE,CPUIDLE,MEMUSED,MEMFREE"
(X=0;
B="";
awk 'NF!=12 && length>0' top* | grep -iv defunct | while read line;do
L=`echo "$X % 5" | bc`
if [ $L -eq 0 ];then
echo "$B"
B=""
fi
B=`echo $B$line | sed 's/_/_/g'`
X=`echo "$X + 1" | bc`
done ) | awk -F'_' '{ print $3 "," $31 "," $41 "," $43 }'
```

This was tested on a linux Suse 9 on IBM OpenPower equipment.

=)

Posted by rdircio in Linux at 14:58

Sunday, February 5, 2006

Building gnophone

Problems building gnophone... solved using this:

<http://forums.gentoo.org/viewtopic-t-118309-highlight-gnophone.html?sid=88ab1b0aa8bc97b17c3290be0ed95817>

i quote:

Odd that this problem should be the same now as it was when those other posts were made, but in case anyone else is having this problem, here is how to make it compile:

there are two files with multi-line strings in them. GCC doesn't seem to allow this... perhaps other versions do? I dunno.

Here is a diff of the file that ships with it, and the file fixed: (sounds/raw2h.c)

Code:

31c31,44

```
Signed 16-bit audio data\n \n Source: %s\n \n Copyright (C) 1999, Mark Spencer and Linux Support Services\n \n Distributed under the terms of the GNU General Public License\n \n \nstatic signed short %s[] = { \n",  
argv[1], n);
```

```
> fprintf(o,  
> "/  
> Signed 16-bit audio data  
>  
> Source: %s  
>  
> Copyright (C) 1999, Mark Spencer and Linux Support Services  
>  
> Distributed under the terms of the GNU General Public License  
>  
> /  
>  
> static signed short %s[] = {  
> ", argv[1], n);
```

(sounds/mkdtmf.c)

Code:

28c28,40

```
\n Signed 16-bit audio data representing '%s' in dtmf\n \n Copyright (C) 2000, Linux Support Services, Inc.\n \n Distributed under the terms of the GNU General\n Public License\n \n \nstatic short %s[] = { \n", argv[1],  
argv[2]);
```

```
> printf(  
> "/  
> Signed 16-bit audio data representing '%s' in dtmf
```

```
>
> Copyright (C) 2000, Linux Support Services, Inc.
>
> Distributed under the terms of the GNU General
> Public License
>
> */
>
> static short %s[] = {
> ", argv[1], argv[2]);
```

then in src/gnophone_gui.c, below the line 1399, you need to add a line that says "break;" after the line with "default:" on it.

Here is the diff:

Code:

```
1399d1398
```

Finally, some may have one last problem that I had. After some searching, it was found that the file: /usr/include/linux/ixjuser.h line 353 needs to be changed from:

Code:

```
IXJ_CADENCE_ELEMENT __user *ce;
```

to

Code:

```
IXJ_CADENCE_ELEMENT __user, *ce;
```

after that, it should compile correctly. Maybe someday someone will make an ebuild that does this automatically, or something. Hope this helps someone.

Posted by rdircio in Linux at 23:52

Friday, January 6. 2006

Configure samba with users and groups

I needed to share several directories with write permissions to some people and read permissions to others, so I had to create all the necessary infrastructure for samba to work.

You have to create unix users and groups to later map them to samba users and groups.

In order to make this work with w95,w98, wxp, and w2k, I needed to use exactly the same usernames the people have in their machines.

So, if, to say, Bob signs in his machine with the user bobd, i need to create bobd in my samba server, as a unix account, and then map it to a smb user. The password is not going to be the same as his windows password, this would require joining the windows NT/NT4 domain.

Said that, we proceed to create the groups and users like this

```
# groupadd infra
# useradd -m -d /home/rdircio -g infra rdircio
# passwd rdircio
```

Then, to add the users in samba

```
# smbpasswd -a rdircio
```

To map the unix groups we need to do

```
# net groupmap add ntgroup="infra" unixgroup=infra type=d
```

After this, created the shared directories,inside /shared ending up like this

```
drwxrwxr-x 2 root infra 48 2006-01-03 12:20 cambios/
drwxr-xr-x 2 luis infra 48 2006-01-03 12:51 diagramas/
drwxrwxr-x 2 root infra 48 2006-01-03 12:17 inventario/
drwxrwxr-x 6 root inversion 240 2006-01-03 12:30 inversion/
drwxrwxr-x 10 root infra 280 2006-01-03 12:27 ismas/
drwxrwxr-x 5 root infra 152 2006-01-04 07:35 mantenimiento/
drwxrwxr-x 2 ppispm1 root 48 2006-01-03 09:47 publico/
```

you can see the permissions attached to specific users and groups, so read/write permission is achieved.

the smb.conf corresponding to this is:

```
[global]
workgroup = INFRA
server string = INFRA UNIX
security = SHARE
```

```
[mp3]
comment = musica
```

path = /mp3
read only = No
guest ok = Yes

[inversion]

writeable = yes
read list = @infra
write list = @inversion
path = /shared/inversion
comment = Proyectos de Inversion
valid users = @infra
public = yes

[inventario]

writeable = yes
read list = @infra
write list = @infra
path = /shared/inventario
comment = Informacion de Infraestructura
valid users = @infra
public = yes

[mantto]

read list = @infra
writeable = yes
path = /shared/mantenimiento
write list = @infra
comment = Informacion de Infraestructura
valid users = @infra
public = yes
create mode = 775
directory mode = 775

[info general]

writeable = yes
read list = @infra
admin users = ppispm1
write list = ppispm1
path = /shared/publico
comment = Informacion de Infraestructura
valid users = @infra
public = yes

[cambios]

writeable = yes
read list = @infra
write list = @infra
path = /shared/cambios
comment = Informacion de Infraestructura
valid users = @infra
public = yes

```
[ ismas ]  
writeable = yes  
read list = @infra  
write list = @infra  
path = /shared/ismas  
comment = Informacion de Infraestructura  
valid users = @infra  
public = yes
```

```
[ homes ]  
writeable = yes  
read list = @infra  
write list = @infra  
path = /home  
comment = Informacion de Infraestructura  
valid users = @infra  
public = yes
```

```
[my home]  
comment=%u home dir  
path=/home/%u  
writeable = yes  
read list = @infra  
write list = @infra  
comment = homes  
valid users = @infra  
public = yes
```

The first share is totally public, anyone can enter, but the others require password.

We can avoid using different passwords for samba and unix users using pam_smbpass, we'll discuss how to do this later

Posted by rdircio in Linux at 08:20

Tuesday, December 20. 2005

Mounting loopback in linux

If you are creating a chroot jail and need to mount a filesystem from outside the jail, you can mount it as loopback, before entering the jail.

For example, to mount /etc inside /jail/etc

```
# mount --bind /etc /jail/etc
```

done.

Posted by rdircio in Linux at 17:17

Building a VPN with ppp over ssh within 2 linuxes

To build a Virtual Private Network within two remote machines, you might follow the howto at <http://www.tldp.org/HOWTO/VPN-HOWTO/index.html> which is very detailed, or, if you have two slackware 10.x with default 2.4.x kernels, just use the procedure described in this document. This OBSOLETEs the ssh reverse telnet entry previously detailed in this blog.

Requirements:

- 2 machines, machineA and machineB.
- machineA will be the ppp client and machineB the ppp server
- machineA MUST have access to machineB through ssh.
- pty-redir in machineA from <http://www.shinythings.com/pty-redir/>
- No extra ethernet interfaces needed.

At machine A:

Make a file at /scripts/rtelnet/rt.ksh with contents:

```
#!/bin/bash
ADATE=`date "+%Y-%m-%d-%H:%M"`
PS=`ps -ef | grep -v grep |grep ppp | wc -l`
if [ $PS -gt 0 ]; then
echo "no need to retunnel $ADATE" >> /dev/null
else
echo "now retunneling ppp: $ADATE" >> /root/rtelnet.log
K=`ps -fe | grep ssh | grep -i Batchmode | awk '{ print $2 }'`
kill -9 $K >> /root/rtelnet.log
/usr/sbin/pty-redir /usr/bin/ssh -C -t -e none -o 'Batchmode yes' vpn@machineB > /tmp/vpn-device
sleep 10
/usr/sbin/pppd `cat /tmp/vpn-device` 192.168.40.253:192.168.40.254
fi
```

You can choose 192.168.x.x addresses or 172.16.x addresses at your own will...

Then make a link to this file at /etc/cron.hourly:

```
machineA# ln -s /scripts/rtelnet/rt.ksh /etc/cron.hourly/rt.ksh
```

At machine B:

Create user vpn with shell /usr/sbin/pppd, and allow him to execute pppd:

```
machineB# useradd -d /home/vpn -m vpn -s /usr/sbin/pppd
machineB# mkdir -p /home/vpn/.ssh; chown vpn /home/vpn/.ssh
machineB# chmod u+s /usr/sbin/pppd
```

At machine A:

Copy a ssh key to allow root to login as user vpn in machine B

```
machineA# scp /root/.ssh/id_dsa.pub machineB:/home/vpn/.ssh/authorized_keys
```

At machine B:

```
machineB# chown vpn /home/vpn/.ssh/authorized_keys
machineB# chmod -fR 700 /home/vpn/.ssh
```

Edit /etc/ppp/options, and make sure you have enabled:

```
noauth
proxyarp
ipcp-accept-local
ipcp-accept-remote
```

You might then run the script manually at machineA:

```
machineA#/scripts/rtelnet/rt.ksh
```

Or wait until the crontab executes it hourly.

You can see the results as having a ppp interface when you type ifconfig -a:

```
machineA# ifconfig -a
eth0 Link encap:Ethernet HWaddr 00:11:43:01:BF:97
inet addr:150.100.106.32 Bcast:150.100.106.255 Mask:255.255.255.0
UP BROADCAST NOTRAILERS RUNNING MULTICAST MTU:1500 Metric:1
RX packets:1442299 errors:0 dropped:0 overruns:0 frame:8
TX packets:791769 errors:0 dropped:0 overruns:0 carrier:0
collisions:108549 txqueuelen:1000
RX bytes:725406260 (691.8 Mb) TX bytes:113886692 (108.6 Mb)
Interrupt:11
```

```
lo Link encap:Local Loopback
inet addr:127.0.0.1 Mask:255.0.0.0
UP LOOPBACK RUNNING MTU:16436 Metric:1
RX packets:7662 errors:0 dropped:0 overruns:0 frame:0
TX packets:7662 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:9507700 (9.0 Mb) TX bytes:9507700 (9.0 Mb)
```

```
ppp0 Link encap:Point-to-Point Protocol
inet addr:192.168.40.253 P-t-P:192.168.40.254 Mask:255.255.255.255
UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1
RX packets:116175 errors:0 dropped:0 overruns:0 frame:0
TX packets:111813 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:3
RX bytes:31145420 (29.7 Mb) TX bytes:7337890 (6.9 Mb)
```

Now do the same in machineB:

```
machineB# ifconfig -a
eth0 Link encap:Ethernet HWaddr 00:0C:76:AC:C7:AD
inet addr:201.154.187.65 Bcast:201.154.187.67 Mask:255.255.255.252
UP BROADCAST NOTRAILERS RUNNING MULTICAST MTU:1500 Metric:1
RX packets:1128235 errors:0 dropped:0 overruns:0 frame:0
TX packets:798177 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:1028702533 (981.0 Mb) TX bytes:139249041 (132.7 Mb)
Interrupt:10 Base address:0x4000
```

```
lo Link encap:Local Loopback
inet addr:127.0.0.1 Mask:255.0.0.0
UP LOOPBACK RUNNING MTU:16436 Metric:1
RX packets:94489 errors:0 dropped:0 overruns:0 frame:0
TX packets:94489 errors:0 dropped:0 overruns:0 carrier:0
```

*collisions:0 txqueuelen:0
RX bytes:550735249 (525.2 Mb) TX bytes:550735249 (525.2 Mb)*

*ppp0 Link encap:Point-to-Point Protocol
inet addr:192.168.40.254 P-t-P:192.168.40.253 Mask:255.255.255.255
UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1
RX packets:111998 errors:0 dropped:0 overruns:0 frame:0
TX packets:116406 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:3
RX bytes:7353046 (7.0 Mb) TX bytes:31169104 (29.7 Mb)*

You'll see machine A as 192.168.40.253 and machineB as 192.168.40.254.
Go ahead and ping'em, nmap'em, use their samba resources, or whatever you want, you have a network within them!

Posted by rdircio in Linux at 11:28

Wednesday, October 12. 2005

Veritas vea java swing window displaying incorrectly in a ssh X11Forwarded session

I connect to a Solaris server using ssh, and turning "ForwardX11 yes" in my ssh client, as well as "X11Forwarding yes" in my remote solaris server.

The X11 forwarding works fine, because i can exec and view remote solaris dtterms in my slackware machine.

The problem is with java swing apps, like Veritas vea, which, when run, is displayed, but in an incorrectly huge window size, and with some parts not well redrawn, to the point that it is unusable. Also affected is the WebSphere console...

This is an old bug:

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=4374153

Everyone basically tells you to set these variables on your shell before executing vea:

```
NO_AWT_MITSHM=true
```

```
NO_J2D_DGA=true
```

```
export NO_AWT_MITSHM;export NO_J2D_DGA
```

But i tried it to no avail. What solved the problem for me was adding a line to my /etc/ssh/ssh_config like this:

```
ForwardX11Trusted yes
```

after this everything worked fine!

Posted by rdircio in Linux at 00:13

Friday, October 7, 2005

Store your ALSA settings to get your preset volumes on restart (Slackware 10.2)

Whenever i rebooted my machine, it was muted, so I needed to run alsamixer and set the volume each time i wanted to play sounds.

I found a way to set the volume with alsamixer, and save the settings to be used the next time you reboot, just do:

```
# alsamixer (set your volume levels)
# touch /etc/asound.state && alsactl store
```

This guarantees you have the same volume everytime you reboot.

Posted by rdircio in Linux at 22:52

Friday, September 2. 2005

kde 3.4.2 in slackware 10.1

To upgrade kde from 3.3.2 to 34.2 on slackware 10.1 i did this:

```
# mkdir /sw/newkde; cd /sw/newkde
# wget --tries=10 -r -nd -nc http://ftp.gtlb.cc.gatech.edu/pub/kde/stable/3.4.2/contrib/Slackware/10.1/
# mkdir /sw/kdei18n; cd /sw/kdei18n
# wget --tries=10 -r -nd -nc http://ftp.gtlb.cc.gatech.edu/pub/kde/stable/3.4.2/contrib/Slackware/noarch/
```

wait until all has been downloaded...

after that:

```
# init 3
```

And do an "installpkg" on every tgz you find on your way.

Posted by rdircio in Linux at 18:38

Thursday, September 1. 2005

Dropline gnome on slackware 10.1

I decided to upgrade my gnome installation. Slackware 10.1's gnome is old...
You can install it easily using Dropline gnome's installer, which you can obtain from:
<http://dropline-gnome.sourceforge.net/download.html>
Notice you REQUIRE Slackware 10.1
After downloading the installer you must switch to level 3

```
# init 3
# installpkg dropline-installer-2.10.2-i686-1dl.tgz
# dropline-installer
```

and relax, it will all install by itself. I messed my setup because i didn't go to level 3, and my machine hung on GDM.

If you happen to FK up your dropline install like me, just go to level 3 and invoke again the dropline installer, it does not have to download all pkgs.

Posted by rdircio in Linux at 17:12

Friday, August 26. 2005

A mirror of sunfreeware

I've got an "internal" mirror of sunfreeware, only for my workplace using the default slackware 10 cron facility to calendarize an everyday update of solaris 8, 9 and 10 packages form mirrors.xmission.com.

I'm taking advantage of the specific crontab line:

```
40 4 * /usr/bin/run-parts /etc/cron.daily 1> /dev/null
```

This way I put a shell in /etc/cron.daily/freeware.sh with these contents:

```
#!/bin/sh
rm /software/SOLARIS/sol10-freeware/*index.html*
rm /software/SOLARIS/sol9-freeware/*index.html*
rm /software/SOLARIS/sol8-freeware/*index.html*
cd /software/SOLARIS/sol10-freeware
wget --tries=10 -r -nd -nc http://mirrors.xmission.com/sunfreeware/sparc/10
cd /software/SOLARIS/sol9-freeware
wget --tries=10 -r -nd -nc http://mirrors.xmission.com/sunfreeware/sparc/9
cd /software/SOLARIS/sol8-freeware
wget --tries=10 -r -nd -nc http://mirrors.xmission.com/sunfreeware/sparc/8
```

Posted by rdircio in Linux at 13:39

change filenames with command line utils

This oneliner substitutes replaces dog for cat in a filename:

```
for file in *; do mv "$file" "${file/dog/cat}"; done
```

This means a file called "hotdog.txt" will be renamed to "hotcat.txt",
If you only want to get rid of the word "dog" the oneliner will be like this:

```
for file in *; do mv "$file" "${file/dog/}"; done
```

Posted by rdircio in Linux at 12:11

Friday, August 5. 2005

Speedful ssh remote X11 connections

You can use X11Forwarding in ssh, but it's darn slow through WAN lines.

To cope with this, without using VNC or FreeNX you can get some good speed by compressing your ssh traffic, you just have to pass the "-C" option to ssh, and then you can have responsive X11 windows....

```
# ssh -C your.host
```

I've been blind all the time....

Posted by rdircio in Linux at 08:46

Monday, July 18. 2005

A Screenshot



This is my current desktop, notice the resolution, it's horizontally stretched because I'm using a radeon 9200 card with two 17" monitors doing Xinerama!

Posted by rdircio in Linux at 00:35

Sunday, July 10. 2005

free ntp time sync on Slackware

Sometimes my clock can deceive me with its timing, so I decided not to give it a chance to be wrong....

I found out there's a free ntp service at <http://www.pool.ntp.org/>, the instructions of usage are at <http://www.pool.ntp.org/#use>.

In slackware I first set the date with:

```
# ntpdate pool.ntp.org
```

Then edited my /etc/ntp.conf and put it like this:

```
driftfile /var/lib/ntp/ntp.drift
server 0.pool.ntp.org
server 1.pool.ntp.org
server 2.pool.ntp.org
```

and put a rc script called rc.ntp with this:

```
#!/bin/sh
case "$1" in
'start')
/usr/sbin/ntpd
;;
'stop')
killall ntpd
;;
'restart')
killall ntpd
/usr/sbin/ntpd
;;
*)
/usr/sbin/ntpd
esac
```

I ran rc.ntpd and after a few minutes queried the state of it with:

```
# ntpq -pn
```

to see if it was syncing.

Seems like dhcpd messes up with my /etc/ntp.conf, rewriting it to the "original" table, which basically is useless,? to solve this i need to start dhcpd with the "-N" option, as stated in http://ntp.isc.org/bin/view/Support/TroubleshootingNTP#Section_9.8.

I did so, substituting all dhcpd entries in /etc/rc.d/rc.inet1 to "dhcpd -N" using this on vi:

```
%s/dhcpd/dhcpd -N/g
```

yeah!

Posted by rdircio in Linux at 14:43

Wednesday, July 6. 2005

Using a 20Gb iPod in Slackware 10

I got this little baby for attending to a Solaris10 course here in MX. Needless saying that i feared it would only work on Windows, and I had to reboot kraftek.com into windoze (as scary as it is).

I wouldn't let that defeat me, would i?

So i formatted the iPod as vfat in windows, compiled gtkpod and wrote this little script in /usr/bin/miipod:

```
#!/bin/ksh
mount -t vfat /dev/sda2 /mnt/ipod && gtkpod && umount /mnt/ipod
```

The side FX of using the double ampersands is that the gtkpod window does not appear if the iPod is not connected correctly.

It is nice play.... Still not using windows at all.

Posted by rdircio in Linux at 17:15

Sunday, May 29, 2005

Stunnel over IMAP, POP3 and SMTP on slackware 10

So, you want to have secure email connections over internet using outlook and sendmail?
Please first uncomment your imap and pop lines in /etc/inetd.conf and kill -HUP <inetd process>
Then you can use stunnel!, here we go!

This is /etc/stunnel/stunnel.cnf:

```
cert = /usr/local/etc/stunnel/mail.pem
chroot = /var/tmp/stunnel
pid = /stunnel.pid
setuid = stunnel
setgid = stunnel
debug = 5
output = stunnel.log
client = no
[pop3s]
accept = 995
connect = 110
[imaps]
accept = 993
connect = 143
[ssmtp]
accept = 465
connect = 25
```

Go to /etc/stunnel and exec
./generate-stunnel-key.sh
ln -s stunnel.pem mail.pem

Add the stunnel user and group
groupadd stunnel
useradd -d /home/stunnel -m -g stunnel stunnel

Build the chrooted jail
mkdir /var/tmp/stunnel
chown -R stunnel:stunnel /var/tmp/stunnel

Run stunnel
stunnel

Optionally create a rc script to run it at boot!

Now, you can connect your M\$ outlook stuff to the secure ports... Done!

Posted by rdircio in Linux at 18:00

Tuesday, May 24. 2005

xorg.conf to use both synaptics touchpad and a usbmouse

Been dealing with mandrake, which does load the usbmouse when you have a usb mouse connected, but does not configure xorg to use it automatically.

So, to use the usbmouse my mouse sections in /etc/X11/xorg.conf are like this:

```
Section "InputDevice"  
Identifier "Mouse1"  
Driver "mouse"  
Option "Protocol" "IMPS/2"  
Option "Device" "/dev/mouse"  
EndSection
```

```
Section "InputDevice"  
Identifier "Mouse2"  
Driver "mouse"  
Option "Protocol" "PS/2"  
Option "Device" "/dev/input/mice"  
EndSection
```

```
Section "ServerLayout"  
Identifier "layout1"  
InputDevice "Keyboard1" "CoreKeyboard"  
InputDevice "Mouse1" "AlwaysCore"  
InputDevice "Mouse2" "CorePointer"  
Screen "screen1"  
EndSection
```

You can see two "InputDevice" sections, the first is for the synaptics touchpad, the second, pointing to /dev/input/mice, is the usbmouse.

In the "ServerLayout" section, i labeled "AlwaysCore" over Mouse1.

That's it!

Posted by rdircio in Linux at 19:47

Wednesday, May 11. 2005

glibc, you'll be laughing at me

As part of my endeavour to use h323, i installed the packages i mentioned in the last post....
I have Slackware 10.0, and these are for Slackware 10.1

```
evolution-data-server-1.0.3-i486-1pcx.tgz howl-0.9.8-i486-1pcx.tgz
glib2-2.4.6-i486-1pcx.tgz
libsoup-2.2.1-i486-1pcx.tgz
glibc-solibs-2.3.4-i486-1.tgz
openh323-1.15.3-i486-1pcx.tgz
glibc-zoneinfo-2.3.4-noarch-1.tgz openldap-2.2.23-i486-1pcx.tgz
gnomemeeting-1.2.1-i486-1pcx.tgz pwlib-1.8.4-i486-1pcx.tgz
```

I made a VERY STUPID mistake!!!!!! I installed glibc-solibs-2.3.4, and
F^%\$ED up my slackware installation.... the first symptom was a
"Segmentation fault" message after issuing "ls". Then it was lots and
lots of ugly,bad stuff.

While trying to solve it, I reinstalled packages from CD1, which in
turn overwrote my kernel, and my slack was left unusable!!!!

I will have to thank suse 9, because the 1st disk also acts as a rescue disk, which gives you a shell.

After getting the shell, i fixed my kernel replacement with lilo

```
# mount /dev/hda2 /mountpoint
# chroot /mountpoint
# lilo
```

Then, after reinstalling the packages for glibc 2.3.2 i found out
the

OS couldn't get rid of the 2.3.4 libraries in /lib, so i got out of the
chroot jail and went into /mountpoint/lib, and manually removed all
2.3.4 libraries, and created symlinks appropriately to get this:

```
ld-2.3.2.so*
ld-linux.so.2 -> ld-2.3.2.so*
libBrokenLocale-2.3.2.so*
libBrokenLocale.so.1 -> libBrokenLocale-2.3.2.so*
libacl.so.1.1.0*
libanl-2.3.2.so*
libanl.so.1 -> libanl-2.3.2.so*
libc-2.3.2.so*
libc.so.6 -> libc-2.3.2.so*
libcrypt-2.3.2.so*
libcrypt.so.1 -> libcrypt-2.3.2.so*
libdl-2.3.2.so*
libdl.so.2 -> libdl-2.3.2.so*
```

libm-2.3.2.so*
libm.so.6 -> libm-2.3.2.so*
libnsl-2.3.2.so*
libnsl.so.1 -> libnsl-2.3.2.so*
libnss_compat-2.3.2.so*
libnss_compat.so.2 -> libnss_compat-2.3.2.so*
libnss_dns-2.3.2.so*
libnss_dns.so.2 -> libnss_dns-2.3.2.so*
libnss_files-2.3.2.so*
libnss_files.so.2 -> libnss_files-2.3.2.so*
libnss_hesiod-2.3.2.so*
libnss_hesiod.so.2 -> libnss_hesiod-2.3.2.so*
libnss_nis-2.3.2.so*
libnss_nis.so.2 -> libnss_nis-2.3.2.so*
libnss_nisplus-2.3.2.so*
libnss_nisplus.so.2 -> libnss_nisplus-2.3.2.so*
libresolv-2.3.2.so*
libresolv.so.2 -> libresolv-2.3.2.so*
librt-2.3.2.so*
librt.so.1 -> librt-2.3.2.so*
libutil-2.3.2.so*
libutil.so.1 -> libutil-2.3.2.so*

After this and an ldconfig, everything seems quite stable.

MAN it was a nightmare!!!!

NEVER do this!!!!!!

Posted by rdircio in Linux at 10:26

Tuesday, May 10, 2005

openh323

So, you want audio and video in your application, with streaming????
Consider h323....

You can find precompiled packages for slackware at:

<http://www.gnomemeeting.org/index.php?rub=5&path=slackware/10.1>

and

<ftp://ftp3.linuxpackages.net/pub/Slackware-10.0/pcxz/>

Posted by rdircio in Linux at 08:50

Monday, May 2, 2005

Icecast and ices, to broadcast audio!

We get these sources:

ices-0.4.tar.gz

icecast-2.2.0.tar.gz

We need libshout for icecast:

libshout-2.1.tar.gz

use the classic *configure && make && make install*, to build libshout, ices and icecast. Don't forget to do a *ldconfig* after building libshout.

Added the icecast user and icecast group

```
# groupadd iceuser
```

```
# useradd -g iceuser -d /usr/local/icecast2 iceuser
```

Put config files in /usr/local/icecast2, due to some suggestion i found on the net.

http://www.gnuware.com/icecast/sect_04_08.html

You can get all my /usr/local/icecast2 files from this [tarball](#), and use it as an example.

Basically, what i wanted was to broadcast audio from a microphone...

Changed the whole directory ownership

```
# chown -fR iceuser:iceuser /usr/local/icecast2
```

Starting icecast

```
# icecast -b -c /usr/local/icecast2/conf/icecast.xml
```

Starting icecast2

Detaching from the console

Changed groupid to 104.

Changed userid to 1001.

Starting ices

```
# ices /usr/local/icecast2/conf/ices-live.xml
```

I had to make a watchdog daemon, because ices fell down....

```
#!/bin/ksh
```

```
while true; do
```

```
IC=`ps -ef | grep -i icecast | grep -v grep | wc -l`
```

```
ICES=`ps -ef | grep ices | grep -v grep | wc -l`
```

```
if [ $IC -eq 0 ];then
```

```
echo "icecast down"
```

```
/usr/local/bin/icecast -b -c /usr/local/icecast2/conf/icecast.xml &
```

```
fi
```

```
if [ $ICES -eq 0 ];then
```

```
echo "ices down"
```

```
/usr/local/bin/ices /usr/local/icecast2/conf/ices-live.xml &
```

```
fi  
sleep 10  
done
```

Posted by rdircio in Linux at 17:54

Tuesday, March 29. 2005

The random quotes in the new shell terminals in linux (slackware)

I get a kick out of the great quotes that appear randomly on the terminals when they open. I kept looking for them. In slackware, they're at:

```
/usr/share/games/fortunes/fortunes  
/usr/share/games/fortunes/fortunes2  
/usr/share/games/fortunes/linuxcookie
```

as stated in

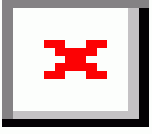
```
/etc/profile.d/bsd-games-login-fortune.sh
```

for your entertainment

Posted by rdircio in Linux at 15:58

Wednesday, March 23. 2005

Ways to create cdrom iso images



Create an ISO from files:

```
/usr/bin/mkisofs -r -o disc.iso /some/path
```

Create an ISO from a disc

```
/bin/dd if=/dev/cdrom of=disc.iso
```

Posted by rdircio in Linux at 09:15

Tuesday, March 22. 2005

Intel 536EP used as a speakerphone in Slackware Linux

bought too many modems, it looked like christmas!

This is a cheapo speakerphone modem (like 9 usd). I needed to use it to generate calls for a project. I unsuccessfully tried to use a sm56 motorola chipset modem(Driver only works with some kernel versions), an Ambient HAM modem(Discontinued, intel bought ambient), and an intel 537EP voice modem(no speakerphone capabilities), and buying a TrendNet [TFM-560X external modem](#). All of this was pure waste of time.

So, i reconnected my pci OEM 9 buck modem to the pci slot, and compiled intel's software driver from [here](#). It builds easily,

```
# make all && make install
```

It changes your /etc/modules.conf, and adds a script to your init scripts directory, whichever it is in your distribution, in the case of slacware it adds /etc/rc.d/536ep-boot. To check if everything went fine, init 6 and check your modules:

```
#lsmod
536ep 5400 0 (unused)
536epcore 687424 0 [536ep]
```

Check that the /dev/modem symlink has been crated

```
# ls -la /dev/modem
lrwxrwxrwx 1 root root 10 2005-03-22 06:04 /dev/modem -> /dev/536ep
```

Create, if it does not exist a serial line link, i use it for java commapi

```
# ln -s /dev/modem /dev/ttyS14
# ls -la /dev/ttyS14
```

```
lrwxrwxrwx 1 root root 10 2005-03-22 06:04 /dev/ttyS14 -> /dev/536ep
```

This part is my favourite!. I didn't find the init string googling around. And i really needed to do a speakerphone app. So I went into winxp, and got a serial port monitor application. Searched on google for "Serial port monitor", and found this: <http://www.hhdsoftware.com/sermon.html>, and downloaded the trial version of "Serial Monitor Professional".

My modem comes with this software: "Classic phone tools", which has the speakerphone function. I launched the serial port monitor, connected it to COM3, and started the "Classic phone tools", and got all the modem conversation, which in turn is reduced to this:

The initialisation:

```
AT &F E0 Q0 X4 S0=0 &D2 &C1 &S0 V1 W4 E1
AT S7=60S30=0L0M1+ES=3,0,2;%C1+DS=3,0;+DS44=3,0;&K3X4
at+vcid=1
ATS0=0
AT &F E0 H0 Q0 V1 X4 &C1 S7=140
```

```
AT S0=0 &D2
ATM1
```

Make a speakerphone modem call:

```
AT &F E0 H0 Q0 V1 &D2
AT X4
AT+FCLASS=8; +VRN=0
ATDT56078942
AT#VSPS=0;+VSP=1
AT+VLS=7 ;+VGS=126;+VGM=126
```

I'm using a great java app to do the speakerphone tests, its called [jdialer](#). It uses java.comm classes, the installation of these in linux are out of scope here, maybe I'll get to it in another blog entry.

Jdialer has an INIs directory, in which you place the at commands for your modem. I created an Intel536EP.ini file with this:

```
[Init]AT &F E0 Q0 X4 S0=0 &D2 &C1 &S0 V1 W4 E1/nAT
S7=60S30=0L0M1+ES=3,0,2;%C1+DS=3,0;+DS44=3,0;&K3X4/nat+vcid=1/nATS0=0/nAT &F E0 H0 Q0 V1
X4 &C1 S7=140/nAT S0=0 &D2/nATM1/n
[CallMonitorOFF]AT+GCI=<RegionCode>/n
[Call]ATDT<Number>/n
[Speakerphone]AT &F E0 H0 Q0 V1 &D2/nAT X4/nAT+FCLASS=8;
+VRN=0/nATDT<Number>/nAT#VSPS=0;+VSP=1/nAT+VLS=7 ;+VGS=126;+VGM=126/n
[HangUp]ATH1/n
[HangUpSpeakerphone]ATH0/natz/n
[HangDown]ATH/nATS0=0/n
[Digit]AT+VTS=<Digit>/n
```

I still have to improve it, but it basically does the job.

Just connect a mike and some headphones to your modem, launch jdialer, and you have a speakerphone!

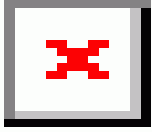
```
# java -jar JDialer.jar
```

Awesome.

Posted by rdircio in Linux at 08:07

Monday, March 21. 2005

gnome bgchanger, to rotate wallpapers



It's boring having a wallpaper for months, and Gnome (at least the version I have), doesn't have a wallpaper changer. There's this thing called bgchanger that does the job.

Get it from:

<http://bgchanger.sourceforge.net/>

to install it:

```
# tar zxvf bgchanger-0.9-1.tar.gz
```

It makes a bgchanger directory, you should move it to /usr/share/bgchanger

```
# mv bgchanger /usr/share/bgchanger
# ln -s /usr/share/bgchanger/bin/bgchanger /usr/local/bin/
# ln -s /usr/share/bgchanger/bin/bgconfig /usr/local/bin/
# mkdir ~/.bgchanger
# cp /usr/share/bgchanger/bgchanger.conf ~/.bgchanger/
```

You need pygtk, you might get it like this:

```
# wget http://ftp.gnome.org/pub/GNOME/sources/pygtk/2.0/pygtk-2.0.0.tar.gz
```

Build it the classical way

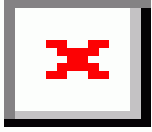
```
# ./configure && make && make install
```

Launch bgconfig to configure it.

Posted by rdircio in Linux at 11:14

Tuesday, March 1. 2005

Updating the font path for x3270 fonts on Slackware



While using x3270, I noticed that it doesn't find its default fonts, although, they are installed in the fontpath. It seems it is just a question of updating the font database.

We have to go to the `/usr/X11R6/lib/X11/fonts/misc/` directory, and rebuild the database:

```
#cd /usr/X11R6/lib/X11/fonts/misc/  
#mkfontscale  
#mkfontdir  
#cf-cache
```

and restart your X session, then run x3270, after this the fonts are fine

Posted by rdircio in Linux at 13:42

Tuesday, February 22. 2005

Speed of network interfaces in Linux with mii-tool (SuSe 9)

Now that we are into the Network card configuration week, let's get into linux too....

To find out the speed of your ports do:

```
www1:/etc/rc.d # mii-tool -v
eth0: negotiated 100baseTx-FD, link ok
product info: vendor 00:08:18, model 22 rev 2
basic mode: autonegotiation enabled
basic status: autonegotiation complete, link ok
capabilities: 100baseTx-FD 100baseTx-HD 10baseT-FD 10baseT-HD
advertising: 100baseTx-FD 100baseTx-HD 10baseT-FD 10baseT-HD
link partner: 100baseTx-FD 100baseTx-HD 10baseT-FD 10baseT-HD flow-control
eth1: no link
product info: vendor 00:08:18, model 22 rev 2
basic mode: autonegotiation enabled
basic status: no link
capabilities: 100baseTx-FD 100baseTx-HD 10baseT-FD 10baseT-HD
advertising: 100baseTx-FD 100baseTx-HD 10baseT-FD 10baseT-HD
eth2: 100 Mbit, full duplex, link ok
product info: vendor 00:08:18, model 22 rev 2
basic mode: 100 Mbit, full duplex
basic status: link ok
capabilities: 100baseTx-FD 100baseTx-HD 10baseT-FD 10baseT-HD
advertising: 100baseTx-FD 100baseTx-HD 10baseT-FD 10baseT-HD
```

To change it, and force no autonegotiation in eth2 do:

```
# mii-tool -F 100baseTx-FD eth2
```

To put that into init scripts create a script /etc/rc.d/network-speed with this

```
#!/bin/sh
case "$1" in
start)
echo "Running mii-tool"
set -x
/sbin/mii-tool -F 100baseTx-FD eth2
set +x
;;

stop|restart|reload|status|probe)
;;

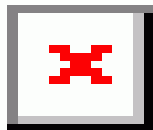
*)
echo "Usage: $0 start"
exit 1
;;
esac
```

Make a symbolic link to it in /etc/rc.d/rc3.d/S10network-speed:
ln -s /etc/rc.d/network-speed /etc/rc.d/rc3.d/S10network-speed

done!

Posted by rdircio in Linux at 12:37

Serial console in slackware linux 10



I am using a VIA little box, with an EDEN c3 processor inside, to power up a little project. It is meant to be a headless box, so a service alternative is to have a tty over its serial port, so we can connect to it and diagnose its problems, if any.

There's some configuration to be done in order to achieve this:

1.- Add an entry to lilo (dunno about grub), in order to make a "serial" entry.

```
# vi /etc/lilo.conf
boot = /dev/hda
message = /boot/boot_message.txt
prompt
timeout = 12
change-rules
reset
vga = 773
image = /boot/vmlinuz
root = /dev/hda2
label = Linux-Serial
append = "console=ttyS0,9600"
read-only
```

```
image = /boot/vmlinuz
root = /dev/hda2
label = Linux
read-only
```

2.- Add this image to lilo:

```
# lilo
Added Linux-Serial *
Added Linux
```

3.- Uncomment ttyS0 from /etc/securetty

4.- Uncomment this line in /etc/inittab

```
s1:12345:respawn:/sbin/agetty -L ttyS0 9600 vt100
```

Done!

Posted by rdircio in Linux at 06:21

Saturday, January 1. 2005

tnet1130 pcmcia wireless card in Mandrake 10.1

I bought a TNET1130 PCMCIA Wireless Network unbranded card, a very cheapo one, and adventured to plug it in my (very old) Compaq Presario 1600.

This card has a Texas Instruments chipset!

For the ease of use, this time i decided using the new release of Mandrake Linux, the 10.1, to make it work.

AFAIK, there's no native linux driver for the TNET1130 card, though some say it can be done with a acx100 kernel module, I didn't get to that point....

Either you use the acx100_pci module, or ndiswrapper, so you MUST get rid of acx100_pci:

```
# rmmod acx100_pci
# modprobe -r acx100_pci
```

I decided to use ndiswrapper (<http://ndiswrapper.sourceforge.net/>), to configure this card.

I proceeded to download the source, but i found out Mandrake 10.1 had a RPM package for that. So I only needed to rpm -i ndiswrapper-xxxxxx, and also install all the dhcp client rpms.

After this, I inserted the driver CDROM that came with this card and went to the winXP driver (it has a win98, w2k and winXP driver).

I did a to install the driver into ndiswrapper:

```
# ndiswrapper -i TNET1130.INF
```

After this, i checked that the driver had been inserted:

```
[root@compa builds]# ndiswrapper -l
```

Installed ndis drivers:

```
tnet1130 hardware present
```

The next thing to do is to insert the ndiswrapper module into the kernel.

```
# modprobe ndiswrapper
```

After inserting the module, we have to use iwconfig to see if there's a wlan interface active:

```
[root@compa builds]# iwconfig
```

```
lo no wireless extensions.
```

```
wlan0 IEEE 802.11g ESSID:"2WIRE294" Nickname:"compa.casa.net"
```

```
Mode:Managed Channel:0 Access Point: 00:0D:72:3C:B0:91
```

```
Bit Rate=22Mb/s Tx-Power:0 dBm Sensitivity=0/3
```

```
RTS thr=4096 B Fragment thr=4096 B
```

```
Encryption key:6E61-706F-6C Security mode:open
```

```
Power Management:off
```

```
Link Quality:100/100 Signal level:-72 dBm Noise level:-256 dBm
```

```
Rx invalid nwid:0 Rx invalid crypt:0 Rx invalid frag:0
```

```
Tx excessive retries:0 Invalid misc:0 Missed beacon:0
```

```
sit0 no wireless extensions.
```

We can configure this manually by doing:

```
# iwlist wlan0 scan
```

```
# iwconfig wlan0 key open s:mkey (i am using an open security, opposed to restricted)
```

```
# dhclient wlan0
```

```
# ifconfig -a
```

```
wlan0 Link encap:Ethernet HWaddr 00:E0:98:BD:C1:87
```

```
inet addr:172.16.1.34 Bcast:172.16.255.255 Mask:255.255.0.0
inet6 addr: fe80::2e0:98ff:febd:c187/64 Scope:Link
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:8401 errors:0 dropped:0 overruns:0 frame:0
TX packets:5551 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:8876338 (8.4 Mb) TX bytes:524098 (511.8 Kb)
Interrupt:9 Memory:10820000-10821fff
```

We have an ip address after this!!!!

To make this valid until reboot, I put a script in:

```
/etc/sysconfig/network-scripts/ifcfg-wlan0
```

with these contents:

```
DEVICE=wlan0
BOOTPROTO=dhcp
ONBOOT=yes
HWADDR=00:e0:98:bd:c1:87
METRIC=10
MII_NOT_SUPPORTED=no
WIRELESS_MODE=Managed
WIRELESS_ESSID=2WIRE294
WIRELESS_IWCONFIG="key open s:mkey"
DHCP_HOSTNAME=compa
NEEDHOSTNAME=yes
```

Notice I decided to name my machine "compa", inserted the name of my wireless gateway "2WIRE294" (obtained from `iwlist wlan0 scan`). The mac address was obtained from "`ifconfig wlan0`". I also had to append the key to the `iwconfig` parameters as: "key open s:mkey" (where mkey is my open key)

Mandrake is smart, and it seems to me it loads the `ndiswrapper` module before it initializes the network, because the configuration file is enough to get wireless network at boot.

After some tweaking was done, the file looks like this:

```
DEVICE=wlan0
BOOTPROTO=dhcp
ONBOOT=yes
HWADDR=00:e0:98:bd:c1:87
METRIC=10
MII_NOT_SUPPORTED=no
WIRELESS_MODE=Managed
WIRELESS_ESSID=any
WIRELESS_ENC_KEY=2194531752
DHCP_HOSTNAME=compa
NEEDHOSTNAME=yes
```

Posted by rdircio in Linux at 19:33

Wednesday, December 29. 2004

On building 2.4.x or 2.6.x linux kernels

This is just to pinpoint the differences on building the different series of kernels.

- 2.6.x kernel

```
# make  
# make modules_install
```

- 2.4.x kernel

```
# make dep  
# make bzImage  
# make modules  
# make modules_install
```

Posted by rdircio in Linux at 06:35

Tuesday, December 28. 2004

ZoneMinder, the first encounter

I'm trying to build ZoneMinder to get a project done, it seems i need ffmpeg and lame support, so i got into building them....

ffmpeg needs several libs:

```
mp3lame enabled no
vorbis enabled no
faad enabled no
faadbin enabled no
faac enabled no
a52 support no
a52 dlopened no
pp support no
```

got libogg and libvorbis, built'em.

got faac and faad, from <http://www.audiocoding.com/modules/mydownloads>

built faad like this:

```
# autoreconf -vif
# ./configure --with-mp4v2
# make && make install
```

Installed ffmpeg like this:

```
# ./configure --enable-pp --enable-mp3lame --enable-vorbis --enable-faad --enable-faac --enable-a52 --enable-shared
--enable-gpl && make && make install
```

We need lame!!!!

You can download from <http://www.videolan.org/vlc/download-sources.html>

We also need the cambozola applet... so i had to get it... <http://www.charliemouse.com/code/cambozola/>

it needs apache ant to build... <http://ant.apache.org/bindownload.cgi>

```
# tar zxvf apache-ant-1.6.2-bin.tar.gz
# mv -f apache-ant-1.6.2 /usr
# cd /usr
# mv apache-ant-1.6.2 ant
# vi /root/.bashrc <----- added /usr/ant/bin to $PATH
# vi /root/.bash_profile <----- added /usr/ant/bin to $PATH
# export PATH=$PATH:/usr/ant/bin
# cd cambozola-0.63/
# ant
# mkdir /usr/local/cambozola
# cp dist/cambozola* /usr/local/cambozola <----- copied .jar files here
# ln -s /usr/local/cambazola /usr/local/apache2/htdocs
```

back to ZoneMinder....

```
# ./configure --with-mysql=/usr --with-webdir=/usr/local/apache2/htdocs/zm
--with-cgidir=/usr/local/apache2/htdocs/zm/cgi-bin --with-ffmpeg=/usr/local --with-lame=/usr/local/lib
```

Had to put a password to the mysql 'root' user to run 'perl zmconfig.pl',

```
# mysql
> UPDATE mysql.user SET Password = PASSWORD('zm') WHERE User = 'root';
> UPDATE mysql.user SET Password = PASSWORD('zm') WHERE User = "";
> flush privileges
```

Created the database, first editing zmschema.sql and changing MyIsam to innodb, to recover from power failures

```
# mysql -p < db/zmschema.sql
```

Configured the ZM default options

```
# perl zmconfig.pl
```

Had to create the 'apache' group and the 'apache' user. I also had to reconfigure apache's httpd.conf to make it run as apache:apache.

```
# groupadd apache
# useradd -d /home/apache -m -g apache apache
```

Built the sources:

```
# make && make install
```

If you change the mysql password, you should edit the 'zm_config.php' file in your zm htdocs.

Posted by rdircio in Linux at 07:02

Friday, December 24. 2004

amulecmd 2 html , and my cellphone, yes, my cellphone!

I've been requested to download some stuff from amule, by some VERY PERSISTENT person, which calls me over my cellphone to ask if the download is complete.

It's 5 ISO images, over a 256kbps adsl, so i can't stay 5 days in front of my computer checking how the download is going....

I know you can monitor your amule downloads with amuleweb, but unfortunately for the people that have firewalls and proxies, it runs over some port other than 80 or 443.

So i compiled amulecmd, which is a very basic command tool to show your downloads pause and unpause them, and made a little shell:

```
-----  
echo "<html><head><meta http-equiv='refresh' content='137'></head><body><pre>"  
date  
/usr/local/bin/amulecmd -pw mypassword -c "show dl" |grep ":"  
echo "</pre></body></html>"  
-----
```

This is executed in a cron job like this:

```
0,5,10,15,20,25,30,25,40,45,50,55 /scripts/amule/amulehtml.sh > /usr/local/apache2/htdocs/amule-dl/index.html 2>&1
```

So every five minutes it checks the download process and writes a document at a public html folder....

I happen to own a Nokia 3595, which apparently was just another POS (Piece of S...), but it actually has some nice features, like a web browser that connects via my service provider....

In order to view what's going on with my amule downloads while on the street, driving, eating, riding a bus, or wherever the f#\$% i want i can add a bookmark in my phone like this:

Menu>Services>Bookmarks>Options>New bookmark

and write the complete address of wherever i put the html doc, like <http://my.server.org/amule-dl/>

then you have to name it, i called it "amule"

After this i can use the bookmark as:

Menu>Services>Bookmarks>amule>go to

And you'll get an up to date status of your amule downloads, wherever the F#\$%# you are!

Posted by rdircio in Linux at 09:50

Friday, December 17. 2004

Apache2, mod_rewrite and how to redirect http urls to https

There are several ways to make your users get to secure connections over https in apache, one of them is to rewrite the url, so everything that has some custom substring, goes into https.

For this we can use the mod_rewrite module for apache2.

It must be configured and loaded into the modules section of your httpd.conf....

to write some rules:

```
#-----  
# rewrite environment  
RewriteEngine on  
RewriteLog /usr/local/apache2/logs/https_rewrite_log  
RewriteLogLevel 3  
# redirect http to https  
# If you don't try to access https, then redirect to https  
RewriteCond %{SERVER_PORT} !^443$  
RewriteRule ^/my_secrets/(.*)$ https://%{SERVER_NAME}/my_secrets/$1 [L,R]  
RewriteRule ^/private_dir/(.*)$ https://%{SERVER_NAME}/private_dir/$1 [L,R]  
RewriteRule ^/webmin/(.*)$ https://%{SERVER_NAME}/webmin/$1 [L,R]  
#-----
```

These activate the engine, direct every output to a log, and redirect everything containing the strings "my_secrets", "private_dir", and "webmin", to a url with the same characteristics, but on https!!

Notice the rule: " RewriteCond %{SERVER_PORT} !^443\$"... This means the module only takes part when you are not trying to access https.

This will transform:

http://www.somewhere.org/my_secrets/index.html

to

https://www.somewhere.org/my_secrets/index.html

The effect is to redirect you to that https url, not giving you a chance to use unencrypted traffic.

Enjoy

Posted by rdircio in Linux at 10:54

Thursday, December 9, 2004

Dell Optiplex gx280

I received a dell optiplex gx280 today, and the first thing i did?

I put a Slackware 10 in the cd tray, and hit the reset button....

There is no kernel in the disks for SATA drives, so the thing i did, to work around that issue, is to enable a compatibility mode in the machine's bios.

Now the SATA drives look like little IDE puppies.

I guess I'll stick to it until I have a time to find out how to configure a kernel that supports SATA.

I also had to download the bcm5700 module for the ethernet card from broadcom

(<http://www.broadcom.com/drivers/downloaddrivers.php>)

I'm currently getting the SATA.i kernel image from <http://www.oltenia.ro/download/pub/distributions/Slackware/sata/> to see if i can make the SATA drives work

Happy Holidays!

Posted by rdircio in Linux at 17:21

Tuesday, December 7, 2004

Kernel 2.6.10-rc3 over slackware 10 and 9.1

Feeling some curiosity on the new kernel releases, got the sources of 2.6.9 from www.kernel.org, then got "The latest prepatch for the stable Linux kernel tree is:

2.6.10-rc3"...

Unpacked 2.6.9 and patched the source tree with 2.6.10-rc3...

After selecting all of what appeared on `lspci`, `lsusb` and `lsmod`, just compiled like this:

```
make && rm -fR /lib/modules/2.6.10-rc3/ && make modules_install && cp arch/i386/boot/bzImage /boot/vmlinuz-2.6.10
```

Added a section to `/etc/lilo.conf` like this:

```
image = /boot/vmlinuz-2.6.10
```

```
root = /dev/hda2
```

```
label = Linux26.10
```

```
read-only
```

....and booted

Just to find out the commands "less", "man", and others, were broken.... After googling for a while found out I had to disable:

Legacy (BSD) PTY support

This option comes selected by default in the kernel config file, and it looks quite inoffensive....

After disabling it, (almost) everything is stable.

Had to build some modules out of the kernel, for compatibility, these are:

```
snd-mixer-oss
```

```
snd-pcm-oss
```

```
nfs
```

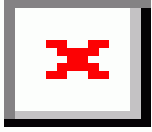
```
nfsd
```

This is only because slackware likes loading them...

Posted by `rdircio` in Linux at 10:04

Wednesday, December 1. 2004

Linux Webcams: Chicony TwinkleCam, and Genius VideoCam Express



Cheap cameras, cheap names, who on earth would call a company "Chicony"????
Well, it's their company.... And they do more bucks than I do... =)

Anyways, I bought a couple of cams, to do some project... I found some misleading articles all over the place, looking over ov-51x drivers for cameras, and other drivers....

Finally found out both cameras use the same kind of driver!!!!
<http://spca50x.sourceforge.net/spca50x.php>

Get it... do a normal `./configure && make && make install`
then

```
#modprobe videodev  
#modprobe spca50x
```

And you're in!

You'll get a camera at `/dev/video0`, and the other at `/dev/video1`

I personally recommend using `gideo` to get a first glance at your cameras, get `gideo` at:
<http://mxhaard.free.fr/download.html>

Build it and use it as:
`# gideo -d /dev/video0 &`
`# gideo -d /dev/video1 &`

Posted by `rdircio` in `Linux` at 08:35

Tuesday, November 30, 2004

"Reverse telnet" over ssh, over corkscrew

Get to your servers, wherever they are...

Yeah, again with the proxy thingie....

Need to work @ home... I got some setting that allows me to connect home from office, but I really need the inverse.

You know, sometimes you have those late night calls....

I put a script in the machine at work, to do a tunnel to my home machine and redirect a port:

```
-----  
#!/bin/bash  
PS=`ps -ef | grep ssh | grep 2222 | wc -l`  
echo $PS  
if [ $PS -gt 0 ]; then  
echo "no need to retunnel" > /dev/null  
else  
echo "need to retunnel `date`" >> /root/rtelnet.log  
ssh -F /root/.ssh/config.corkscrew -p 443 -R 2222:rdircio:22 -L 5901:rdircio:5901 rdircio.no-ip.org "watch1" <  
/dev/tty1 > /dev/null&  
fi  
-----
```

It uses the corkscrew base explained before, to tunnel ssh over the proxy... but now, it also redirects ports, the "-R 2222:rdircio:22" redirects machine at work's 22 to machine at home's 2222, and "-L 5901:rdircio:5901" redirects machine at home's 5901 to machine at work's 5901.

This means, i can ssh to work from home, and vnc from work to home.

I needed to do some tricks in order to make it work in a cron line like this:

```
0,5,10,15,20,25,30,35,40,45,50,55 6-23,0-8 * /scripts/rtelnet/rt.ksh
```

The first problem is the tty, it "needs" one!, that's what "< /dev/tty1 > /dev/null" is for.

The second problem is keeping the session alive... so i put /usr/bin/watch1 at the home machine... like this:

```
-----  
#!/bin/ksh  
X=0  
while [ x -eq 0 ]; do  
ls *txt  
sleep 10  
clear  
done  
-----
```

So it never dies!!!!!!

All I need at home is to do a:

```
# ssh -p 2222 localhost
```

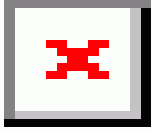
And i'm at work!!!!

PS... please learn to use the "screen" utility, just in case you get disconnected....

Posted by rdircio in Linux at 19:21

Tuesday, November 9, 2004

Tk.pm in slackware



When trying to use perlbox-voice, had this error:

```
Can't locate Tk.pm in @INC (@INC contains: ./usr/lib/perl5/5.8.4/i486-linux /usr/lib/perl5/5.8.4
/usr/lib/perl5/site_perl/5.8.4/i486-linux /usr/lib/perl5/site_perl/5.8.4 /usr/lib/perl5/site_perl .) at ./install.pl line
28.
```

```
BEGIN failed--compilation aborted at ./install.pl line 28.
```

So i found out i needed Tk.pm, downloaded it from:<http://search.cpan.org/~ni-s/Tk-800.024/>

did a:

```
# perl Makefile.PL
# make ; make test; make install
```

and now perlbox-voice works!

Posted by rdircio in Linux at 22:17

Tuesday, October 26. 2004

Printing from slackware to hplj4000, using CUPS

futuristic

Hey, got more than 4 months without printing at all from my linux box, i hadn't had the time to start configuring, but had nightmares thinking i had to join my samba to the w2k domain, and then filter the requests through samba and then cups or something.

Finally, someone just came in and told me i should configure a cups printer through a tcp/ip port, so i started with configuring my printer from kdeprint...

My cups printers.conf file ended up like this:

```
DefaultPrinter hplj4000
Info
Location near
DeviceURI socket://150.100.107.47:9100
State Idle
Accepting Yes
JobSheets none none
QuotaPeriod 0
PageLimit 0
KLimit 0
/Printer
```

The configuration in cups is ok, checked it in <http://localhost:631/printers> and sent a test print job. That went ok.

The trickiest part is to make it work on staroffice7 and MSOffice using WINE (from crossover). Both were not printing....

The trick was to go to /usr/bin, and delete the links lpc, lpr, lpq, and lprm... these were pointing to lpc-lprng, lpr-lprng, lpq-lprng...

After this I just created the same links, but now pointing to lpc-cups, lpr-cups,lpq-cups,lprm-cups....

And just like magic, printed to the hplj4000, without modifying settings in office or staroffice.

Posted by rdircio in Linux at 12:33

Friday, October 15. 2004

How corkscrew and dynamic dns got me ssh through the http proxy

"Next step, a vpn, like symantec's"

I've got some terrible proxy policy at work, nothing but port 80 and 443 can pass through the http proxy. Hey, even the urls containing the word "mail" are forbidden!!!
(pipermail,mail.yahoo.com,webmail.netscape.com)

This actually excludes a lot of good mailing lists support personnel like me find quite useful in solving my company's problems.

So, without much of a lengthy explanation, I'll tell you how to break an http based proxy and tunnel your ssh connection through it, to (almost) anywhere.

Phase 1, the machines

I've got a linux slackware 9 at work, behind a firewall, and behind an old Netscape Proxy 3.5.2 on Solaris 5.6, it's an http proxy!.

I've got a linux slackware 10 at home, with an ADSL connection giving me some good public IPs, seen everywhere around the globe. (cool!). Yeah, but IPS change each time the ADSL router disconnects. No Prob!, I'm using the excellent dynamic dns service at <http://www.no-ip.com>, so no matter if my ip changes, I can always know my machine as rdircio.no-ip.org.

Phase 2, the machine at home

So, got only 80 and 443 allowed at the proxy at work???, no prob, you just edit your `/etc/ssh/sshd_config`, and change "Port 22" for "Port 443". Yeah, an easy one. Then you just kill `-HUP` and you've got ssh running instead of https. Of course this method is not useful for people with https servers, but that is not my case. To get the great dynamic dns feature, download the client at <http://ww.no-ip.com>, you just have to register, it's free!!! (for some names)

Phase 3, the machine at work

Ok, say, you want to make an ssh session to your remote machine... Download corkscrew from <http://www.agroman.net/corkscrew/>, and do an easy `./configure && make && make install`.

After this, copy your `ssh_config` file elsewhere, maybe in your `.ssh` directory., I did it in `/root/.ssh/config.corkscrew`

The contents of this file are:

Host *

ForwardX11 yes

ProxyCommand /usr/local/bin/corkscrew 150.100.204.19 8080 %h %p /root/.ssh/myauth

Only 3 lines!!!!!!!, pay attention to the third line, it's got the "ProxyCommand" directive, a program to use the proxy, the ip and port of the proxy, a placeholder for login and password authentication, and a file to find these user and password.

The contents of `/root/.ssh/myauth` are the login and password, like this:

mylogin:mypassword

For convenience i did some alias in my bashrc to use ssh and scp with this feature:

```
alias sshc='ssh -F /root/.ssh/config.corkscrew -p 443 '  
alias scpc='scp -F /root/.ssh/config.corkscrew -P 443 '
```

These can be used like this

```
# sshc my.host.name  
# scpc some_file my.host.name:/some/directory
```

Easy!

So I just enjoyed it!, now I can, to a certain level do a home office day, just copy the files i need home, and i can do my work at home!

Actually yesterday I put a cron that got a backup log from a server, and put it in my computer at home, each 5 minutes. Felt so great to be capable of enjoying my kids while watching a backup finish successfully.

Corkscrew is absolutely great.

Posted by rdircio in Linux at 18:43

Saturday, October 9. 2004

gDesklets 0.3.0 on Slackware 10

chaos

Desklets are transparent windows on top of your gnome wallpaper that display very useful data, like the disk space available, cpu and network usage.

Equivalent to this is SuperKaramba on KDE...

I decided to give gDesklets a try, but the build was not as straightforward as thought.

We required these additional libs on slack 10

pygtk, gnome-python, and swig

1. pygtk and gnome-python had to be built with the path pointing to /usr:

```
# ./configure --prefix=/usr && make && make install
```

2. swig got a normal

```
# ./configure && make && make install
```

3. after this, just went into gDesklets and again:

```
# ./configure && make && make install
```

Done!

But it doesnt work =(

Posted by rdircio in Linux at 14:42

Installing apache2, tomcat, modjk and php in RedHat8 from source

"everything seems so natural"

1. Versions (Ingredients)

- openssl-0.9.7c
- apache httpd-2.0.49
- Jakarta-tomcat-4.1.30
- J2sdk-1_4_2_04-linux
- Php4.3.4

2. Procedure

2.1 Openssl

To install apache with ssl support, first compile openssl

```
# cd openssl-0.9.7c
# ./config (found another tip to use "config shared", gotta try)
# make && make install
# make build-shared
# mv libssl.so* /usr/local/lib
# mv libcrypto.so* /usr/local/lib
# ldconfig
```

Make build-shared helps us to build the shared versions of openssl, this is due to an inconvenience in apache's mod_ssl, which fails to link if compiled with static openssl libraries.

Openssl is now installed in /usr/local/ssl

After this you are ready to compile apache

2.2 Apache

```
# cd httpd-2.0.49
# export LD_LIBRARY_PATH=/usr/ssl/lib
# ./configure --enable-mods-shared=all --prefix=/usr/local/apache2 --enable-ssl --with-ssl=/usr/local/ssl
# make && make install
```

Apache is then located in /usr/local/apache2, notice you will need this to compile mod_jk and php

2.3 PHP

```
# cd php-4.3.4
# ./configure -with-apxs2=/usr/local/apache2/bin/apxs
# make && make install
```

Before installing tomcat, install j2se sdk in /usr/java, and then define JAVA_HOME in /root/.bashrc as
export JAVA_HOME=/usr/java

2.4 GENERATE CERTIFICATE

```
[root@apdu1017 certs]# ./cert3.sh
Generating RSA private key, 1024 bit long modulus
.....++++++
.....++++++
e is 65537 (0x10001)
Enter PEM pass phrase:
```

Verifying password - Enter PEM pass phrase:

Using configuration from /usr/share/ssl/openssl.cnf

Enter PEM pass phrase:

You are about to be asked to enter information that will be incorporated into your certificate request.

What you are about to enter is what is called a Distinguished Name or a DN.

There are quite a few fields but you can leave some blank For some fields there will be a default value, If you enter '.', the field will be left blank.

Country Name (2 letter code) [GB]:MX

State or Province Name (full name) [Berkshire]:DF

Locality Name (eg, city) [Newbury]:Mexico DF

Organization Name (eg, company) [My Company Ltd]:PRMX

Organizational Unit Name (eg, section) []:GT

Common Name (eg, your name or your server's hostname) []:www.to.com

Email Address []:root@to.com

Please enter the following 'extra' attributes to be sent with your certificate request

A challenge password []:

An optional company name []:

Using configuration from /usr/share/ssl/openssl.cnf

Enter PEM pass phrase:

You are about to be asked to enter information that will be incorporated into your certificate request.

What you are about to enter is what is called a Distinguished Name or a DN.

There are quite a few fields but you can leave some blank

For some fields there will be a default value,

If you enter '.', the field will be left blank.

Country Name (2 letter code) [GB]:MX

State or Province Name (full name) [Berkshire]:DF

Locality Name (eg, city) [Newbury]:Mexico DF

Organization Name (eg, company) [My Company Ltd]:PRMX

Organizational Unit Name (eg, section) []:GT

Common Name (eg, your name or your server's hostname) []:www.to.com

Email Address []:root@to.com

The contents of cert3.sh are:

```
openssl genrsa -des3 -out server.key 1024
```

```
openssl req -new -key server.key -out server.csr
```

```
openssl req -new -key server.key -x509 -out server.crt
```

```
cp server.key /usr/local/apache2/conf/ssl.key/
```

```
cp server.crt /usr/local/apache2/conf/ssl.crt/
```

Notice we are using openssl from the distro, not the one we compiled? so it must not be so different than the one we built.

2.5 MYSQL

In order to appropriately start mysql as bundled with RH8 you must disable innodb support, or configure it explicitly in /etc/my.cnf, we decided to disable it adding a line with "skip-innodb" into the [mysqld] section in my.cnf

And changed permissions to /var/lib/mysql as:

```
# chown -fR mysql:mysql /var/lib/mysql/
Then changed the root password for mysql
# /usr/bin/mysqladmin -u root password new-pass
# /usr/bin/mysqladmin -u root -h apdu1017 password new-pass
The real password was introduced instead of the string "new-pass".
```

2.6 MOD_JK2

```
Downloaded mod_jk2 from
http://apache.mirrors.hoobly.com/jakarta/tomcat-connectors/jk2/
as file jakarta-tomcat-connectors-jk2-src-current.tar.gz
Decompressed it as
# tar zxvf jakarta-tomcat-connectors-jk2-src-current.tar.gz
# cd jakarta-tomcat-connectors-jk2-2.0.2-src
Went into the native2 directory?
# cd jk.native2
# ./configure --with-apxs2=/usr/local/apache2/bin/apxs --with-tomcat41=/opt/tomcat
# make
There is no make install here!!!
We have to get the module from jakarta-tomcat-connectors-jk2-2.0.2-src/jk/build/jk2/apache2
# cd jakarta-tomcat-connectors-jk2-2.0.2-src/jk/build/jk2/apache2
# cp mod_jk2.so /usr/local/apache2/modules
Done this, we need to add a line to httpd.conf where all the LoadModule directives are like:
LoadModule jk2_module modules/mod_jk2.so
```

Appendix 1. Opening a firewall for port 443

```
To open firewall on 443 edit /etc/sysconfig/iptables
# Firewall configuration written by lokkit
# Manual customization of this file is not recommended.
# Note: ifup-post will punch the current nameservers through the
# firewall; such entries will not be listed here.
*filter
:INPUT ACCEPT [0:0]
:FORWARD ACCEPT [0:0]
:OUTPUT ACCEPT [0:0]
:RH-Lokkit-0-50-INPUT - [0:0]
-A INPUT -j RH-Lokkit-0-50-INPUT
-A RH-Lokkit-0-50-INPUT -p tcp -m tcp --dport 25 --syn -j ACCEPT
-A RH-Lokkit-0-50-INPUT -p tcp -m tcp --dport 80 --syn -j ACCEPT
#-A RH-Lokkit-0-50-INPUT -p tcp -m tcp --dport 21 --syn -j ACCEPT
-A RH-Lokkit-0-50-INPUT -p tcp -m tcp --dport 443 --syn -j ACCEPT
-A RH-Lokkit-0-50-INPUT -p tcp -m tcp --dport 22 --syn -j ACCEPT
-A RH-Lokkit-0-50-INPUT -i lo -j ACCEPT
-A RH-Lokkit-0-50-INPUT -p udp -m udp -s 200.57.128.34 --sport 53 -d 0/0 -j ACCEPT
-A RH-Lokkit-0-50-INPUT -p tcp -m tcp --syn -j REJECT
-A RH-Lokkit-0-50-INPUT -p udp -m udp -j REJECT
Posted by rdircio in Linux at 15:05
```

VLC 0.7.2 on slackware 10

"happy compiling!"

Following the install of my slack10, I found out i lacked of several codecs in xine, and couldn't play some files.

Maybe it was overkill, but opted to build the VideoLan player...

<http://www.videolan.org/vlc/>

The source for 0.7.2 is in: <http://download.videolan.org/pub/videolan/vlc/0.7.2>

You can find most libraries it depends on: <http://download.videolan.org/pub/videolan/vlc/0.7.2/contrib>

Most all was built on the normal "./configure && make && make install fashion". This was the build order...

```
a52dec....done
faac... done
faad... done
flac... needs id3lib..built without it...done
fribidi... done
goom... done
lame... done
libdvbpsi... done
libdvdcss...done
libdvdread... done
libdvdplay... needs libdvdread... done
libebml... done
libid3tag...done
libmad...done
libmatroska...done
libmodplug...done
libogg-1.1...done
libspeex...done
libtheora...done
libvorbis...done
live...done (gotta put attention to the location)
madplay...done
mpeg2dec...done
openslp...done
wxWindows...done
id3lib...done
ffmpeg... needs lame...done #./configure --enable-pp --enable-mp3lame --enable-vorbis --enable-faad
--enable-faac --enable-a52 --enable-shared --enable-gpl
vlc...needs libcdio,libcddb
```

Posted by rdircio in Linux at 11:52

using mysql in slack9 or slack10

It would be really nice if it was pre-configured, but oh, well...
had to find the right spot

If you do a "cd /usr; /usr/bin/mysqld_safe &" on a freshly installed slackware 9 or 10, it will exit soon, claiming it cannot find some files.

To solve this:

```
# cd /usr
# /usr/bin/mysql_install_db
# chown -fR mysql /var/lib/mysql/mysql
# /usr/bin/mysqld_safe &
```

To be compatible with other linux distros we could link the socket location

```
# ln -s /var/run/mysql/mysql.sock /tmp/mysql.sock
```

if we don't make this link, phpmyadmin and other php apps may complain.

now we're talking bussiness!!!!

Posted by rdircio in Linux at 11:42

my phpmyadmin(2.6.0pl1) setup on slackware 10 and mysql 4.0.20

Thought i knew how to install phpmyadmin, but got into a whole lot of steps in through it...
"easy as a day on the park"

A summary:

```
#cd /usr/local/apache2/htdocs  
#tar zxvf phpmyadmin-xxxx.tar.gz  
#mv phpmyadmin. xxxx phpmyadmin
```

The cool new features of phpmyadmin

Up to now, we are functional, but we can't use the relational features, or the cool pdf generation... for that

```
#cd /usr/local/apache2/htdocs/phpmyadmin/scripts  
# mysql < create_tables.sql
```

Then created /usr/local/apache2/phpmyadmin/pmuser.sql with contents :

```
-----  
GRANT USAGE ON mysql.* TO 'pma'@'localhost' IDENTIFIED BY 'pmapass';  
GRANT SELECT ( Host, User, Select_priv, Insert_priv, Update_priv, Delete_priv, Create_priv, Drop_priv,  
Reload_priv, Shutdown_priv, Process_priv, File_priv, Grant_priv, References_priv, Index_priv, Alter_priv,  
Show_db_priv, Super_priv, Create_tmp_table_priv, Lock_tables_priv, Execute_priv, Repl_slave_priv,  
Repl_client_priv ) ON mysql.user TO 'pma'@'localhost';  
GRANT SELECT ON mysql.db TO 'pma'@'localhost'; GRANT SELECT ON mysql.host TO 'pma'@'localhost';  
GRANT SELECT (Host, Db, User, Table_name, Table_priv, Column_priv) ON mysql.tables_priv TO  
'pma'@'localhost';  
-----
```

NOTE: this is because we're using mysql 4.0.20, other versions manage permissions differently

Used pmuser.sql...

```
# msyql < pmuser.sql
```

edited /usr/local/apache2/htdocs/phpmyadmin/config.inc.php and modified the next lines:

```
-----  
$cfg['PmaAbsoluteUri'] = 'http://my.complete.domain/phpmyadmin';  
$cfg['Servers'][$i]['controluser'] = 'pma';  
$cfg['Servers'][$i]['controlpass'] = 'pmapass';  
$cfg['Servers'][$i]['pmadb'] = 'phpmyadmin';  
$cfg['Servers'][$i]['bookmarktable'] = 'pma_bookmark';  
$cfg['Servers'][$i]['relation'] = 'pma_relation';  
$cfg['Servers'][$i]['table_info'] = 'pma_table_info';  
$cfg['Servers'][$i]['table_coords'] = 'pma_table_coords';
```

```
$cfg['Servers'][$i]['pdf_pages'] = 'pma_pdf_pages';  
$cfg['Servers'][$i]['column_info'] = 'pma_column_info';  
$cfg['Servers'][$i]['history'] = 'pma_history';
```

Success!!!

Posted by rdircio in Linux at 09:31