



EK

Totally not a hacker Email Twitter Github

Linux-Unix-IT Tips and Tricks #2

Different Linux / Unix / IT tips, notes, howto part 2

Other parts

[Part 1](#) [Part 2](#) [Part 3](#)

MySQL log rotate

```
/etc/logrotate.d/mysql
/logs/mysql/mysql /logs/mysql/mysql.err /logs/mysql/mysql-slow.log /log
notifempty
daily
rotate 7
missingok
compress
sharedscripts
postrotate
# just if mysqld is really running
if test -x /usr/bin/mysqladmin && \
    /usr/bin/mysqladmin ping &>/dev/null
then
    /usr/bin/mysqladmin flush-logs
fi
endscript
}
```

CONTENTS

[Other parts](#)[MySQL log rotate](#)[MySQL dump with procedures/functions/triggers](#)[Show last login history](#)[Enable PostgreSQL Vacuum](#)[Create GEO DB for nginx](#)[Connect to COM port from FreeBSD or Linux](#)[Upload IOS to Cisco router\switch from CentOS tftp](#)[Enable SSH on Cisco 2960 switch](#)[Restore Cisco password](#)[Boot CentOS in a Single-User Mode](#)[Delete MySQL binary logs](#)[Show memory map of a process](#)

MySQL dump with procedures/functions/triggers

```
mysqldump --routines --no-create-info --no-data --no-create-db --skip-o
mysql <database> < outputfile.sql
```

Show last login history

```
last -f /var/log/wtmp.0
-f file Specifies a file to search other than /var/log/wtmp.
```

Enable PostgreSQL Vacuum

```
vacuum full VERBOSE analyze;
```

Create GEO DB for nginx

```
For use by the ngx_http_geo_module
wget http://geolite.feeders.com/download/geolite/database/GeoIPCountryCS
unzip GeoIPCountryCSV.zip
wget http://www.dlhubusercontent.com/simplegeo/nginx/master/contrib/
perl geo2nginx.pl < GeoIPCountryWhois.csv > geo.conf
```

Connect to COM port from FreeBSD or Linux

Show all packages files in CentOS

Find duplicate files in Linux

SSH+SVN error

Kill all long MySQL request

Check LAST_ACK

SYN flood protection

MegaCli on FreeBSD

Convert MySQL db from cp1251 to Utf8

Insert text in the top of file

IPMI in Linux of FreeBSD

Disable NginX\Apache server token

Show installed perl modules

Use strace\lsof

Create Patch

Create gstripe in FreeBSD

Delete trailing spaces in text with VIM

Disable Apache dir listing

```
FreeBSD:
tip -vs9600 com1
to disconnect shift+~~+.

or
cu -l /dev/cuau0 -s9600

Linux:
minicom -s
/dev/ttyS0
9600 8N1
sudo -u root minicom -s
```

Upload IOS to Cisco router\switch from CentOS tftp

```
centos# yum -y install tftp-server tftp
centos# /etc/xinetd.d/tftp
disable = no
centos# service xinetd start

switch# copy tftp: flash:
switch# dir flash:
switch#show boot
switch# configure terminal
switch# (config)#boot system flash:c3550-i5q3l2-mz.121-13.
```

Enable SSH on Cisco 2960 switch

```
You IOS must support K9, ex c2960s-universalk9-mz.122-55.SE3.bin

conf t
ip domain-name domain.com
```

MySQL load data grant

MySQL grants for fields in table

Determine MAX MTU

Upgrade CentOS Password Hashing

Linux Pkg search

Run echo cmd with sudo

Change percentage of root FS

Disable Ipv6 on CentOS

Fix chmod -x chmod

Get webserver http code answer

Clone disk with DD by network

SSH x11 forwarding

Extract RPM pkg

Create FFS snapshot

Exim cli commands

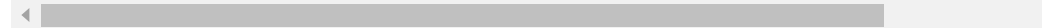
Clean Postfix queue

```
crypto key generate rsa
```

```
line vty 0 4  
transport input ssh  
exec-timeout 0 0
```

Restore Cisco password

```
Connect COM port  
Reboot router and wait «Self decompressing the image: » press Ctrl-C or  
confreg 0x2142(default - 2102)  
reload  
copy start run  
make change with config  
config-register 0x2102  
reload
```



Boot CentOS in a Single-User Mode

```
add to grub line that start with kernel - single  
or  
init=/bin/sh
```

Delete MySQL binary logs

```
/etc/my.cnf  
expire_logs_days = 7  
PURGE BINARY LOGS TO 'mysqld-bin.000123';
```

Find all notpkgs files
FreeBSD

Display real LVM block
devices

Mount ISO in FreeBSD

Cisco CSS 1501 Tacacs

Show FreeBSD kernel config

HTTP redirect with HTML
and JavaScript

Show memory map of a process

```
pmap PID
```

Show all packages files in CentOS

```
for i in `rpm -qa`; do echo $i; rpm -ql $i; done
```

Find duplicate files in Linux

```
for i in `find *`; do [ -f "$i" ] && echo "`md5sum \"$i\"`"; done | sort  
or  
find /dir -type f -print0 | xargs -0 md5sum | sort | uniq -w32 -D # | awk
```

SSH+SVN error

```
ssh svn: Network connection closed unexpectedly  
This mean that you dont have sshkey fingerprint in know_hosts  
try ssh to server first
```

Kill all long MySQL request

```
mysql -e 'show full processlist'|grep -v Command |awk '{if ($6 >= 10) p
```

Check LAST_ACK

```
LAST_ACK - mean that remote host is disconnected and socker is closed,

sysctl -a |grep last_ack
net.ipv4.netfilter.ip_conntrack_tcp_timeout_last_ack = 30
sysctl -w net.ipv4.netfilter.ip_conntrack_tcp_timeout_last_ack=10
netstat -ant | fgrep ":" | cut -b 77-90 | sort | uniq -c

cat /proc/sys/net/netfilter/nf_conntrack_count
cat /proc/sys/net/ipv4/netfilter/ip_conntrack_count
cat /proc/sys/net/ipv4/ip_conntrack_max
echo 131072 > /proc/sys/net/ipv4/ip_conntrack_max
sysctl net.ipv4.netfilter.ip_conntrack_max=1048576

or disable conntrack for port

iptables -A INPUT -p tcp --dport 443 -j ACCEPT
iptables -t raw -A PREROUTING -p tcp --dport 443 -j NOTRACK
```

SYN flood protection

```
echo "20000" > /proc/sys/net/ipv4/tcp_max_syn_backlog
echo "1" > /proc/sys/net/ipv4/tcp_synack_retries
echo "30" > /proc/sys/net/ipv4/tcp_fin_timeout
echo "5" > /proc/sys/net/ipv4/tcp_keepalive_probes
echo "15" > /proc/sys/net/ipv4/tcp_keepalive_intvl
echo "20000" > /proc/sys/net/core/netdev_max_backlog
echo "20000" > /proc/sys/net/core/somaxconn

iptables -N syn_flood
$IPT -A INPUT -p tcp --syn -j syn_flood
```

```
$IPT -A syn_flood -m limit --limit 500/s --limit-burst 1500 -j RETURN
$IPT -A syn_flood -j DROP
```

MegaCli on FreeBSD

```
Install linux compat from ports
mkdir -p /usr/compat/linux/proc
linsys          /compat/linux/sys      linsysfs        rw 0 0
linproc         /compat/linux/proc    linprocfs       rw 0 0
mount linsys
mount linproc
MegaCli -CfgDsply -a0
```

Convert MySQL db from cp1251 to Utf8

```
mysqldump --default-character-set=utf8 database > database.utf8.sql
mysql --default-character-set=utf8 database_new < database.utf8.sql

or

mysqldump -u admin --password=PASS --opt --default-character-set=latin1
sed -i 's/character set cp1251 collate cp1251_bin/character set utf8 co
sed -i 's/CHARSET=cp1251/CHARSET=utf8/' database.sql
```

Insert text in the top of file

```
perl -i~ -0777pe's/^/New first line\n/' yourfile
```

IPMI in Linux of FreeBSD

```
Linux
yum install OpenIPMI OpenIPMI-tools
http://www.openfusion.net/linux/ipmi_on_centos
/sbin/modprobe ipmi_devintf; /sbin/modprobe ipmi_si; /sbin/modprobe ipmi
# Logging
ipmitool sel info
ipmitool sel list

FreeBSD
# kldload ipmi
# dmesg | tail
ipmi0: on isa0
ipmi0: KCS mode found at io 0xca2 alignment 0x1 on isa
ipmi0: IPMI device rev. 1, firmware rev. 0.2, version 2.0
ipmi0: Number of channels 2
ipmi0: Attached watchdog

# ipmitool chassis status
System Power          : on
Power Overload        : false
Power Interlock       : inactive
Main Power Fault      : false
Power Control Fault   : false
Power Restore Policy  : always-on
Last Power Event      : command
```

Disable NginX\Apache server token

```
NginX
server_tokens off

Apache
```



```
ServerTokens ProductOnly
ServerSignature Off
```

Show installed perl modules

```
perl -MFile::Find=find -MFile::Spec::Functions -Tlwe \
'find { wanted => sub { print canonpath $_ if /\.pm\z/ }, no_chdir => 1
```

Use strace\lsof

```
strace -e trace=network -p PID
strace $(pidof httpd | sed 's/\([0-9]*\) /\-p \1/g')

lsof -nPp PID
lsof -a -U -u username
lsof -F pcfm
lsof +d /mnt/DIR
lsof +D /mnt/DIR
lsof -i [46][protocol] [@hostname|hostaddr] [:service|port]
```

Create Patch

```
diff -crB tpl_lib.c.orig tpl_lib.c > tpl_lib.patchc
patch -p1 -i tpl_lib.patch
```

Create gstripe in FreeBSD

```
kldload geom_stripe
sysctl kern.geom.debugflags=16
gstripe lable -v st0 /dev/da1 /dev/da2 /dev/da3 /dev/da4 /dev/da5
gstripe create -v st0 /dev/da1 /dev/da2 /dev/da3 /dev/da4 /dev/da5
bsdlabel -wB /dev/stripe/st0
newfs -O 2 -U /dev/stripe/st0a
mount /dev/stripe/st0a /www

echo 'geom_stripe_load="YES"' >> /boot/loader.conf

/etc/fstab
/dev/stripe/st0a      /www                ufs      rw,noatime

tunefs -m 1 /dev/stripe/st0a
```

Delete trailing spaces in text with VIM

```
:%s/\s\+$//
delete blank lines
:g/^$/d
```

Disable Apache dir listing

```
<Directory />
  Options -Indexes
  AllowOverride all
  Order allow,deny
  Allow from all
</Directory>
```

MySQL load data grant

```
grant file on *.* to user@localhost identified by 'P@ssw0rd';
```

MySQL grants for fields in table

```
GRANT SELECT (col1), INSERT (col1,col2) ON mydb.mytbl TO 'someuser'@'so
```

Determine MAX MTU

```
ping ya.ru -v -M dont -s 1472 -W 1
```

Upgrade CentOS Password Hashing

```
authconfig --test | grep hashing  
authconfig --passalgo=sha512 --update
```

Linux Pkg search

```
http://pkg.go.dev
```

Run echo cmd with sudo

```
for i in server;do echo $i; echo 'echo "' > /logs/test.log|ssh $i su
```

Change percentage of root FS

```
tune2fs -m 0 /dev/sdc1
```

Disable Ipv6 on CentOS

```
echo "alias net-pf-10 off" >/etc/modprobe.conf
echo "alias ipv6 off" >>/etc/modprobe.conf
chkconfig ip6tables off
sed -i 's/NETWORKING_IPV6=yes/NETWORKING_IPV6=no/g' /etc/sysconfig/netw
reboot
```

Fix chmod -x chmod

```
perl -e 'chmod 0755, "/bin/chmod"'
python -c 'import os; os.chmod("chmod", 0755)'

or

cp /bin/sh ~/chmod2
cat /bin/chmod > ~/chmod2
sudo ~/chmod2 +x /bin/chmod
rm ~/chmod2

or
```

```

sudo apt-get --reinstall install `dpkg -S /bin/chmod | cut -f1 -d:`

gcc -x c - <<CHMOD
#include <sys/stat.h>
main(){chmod("/bin/chmod", S_IXUSR | S_IXGRP | S_IXOTH);}
CHMOD
sudo ./a.out
rm a.out

or

/lib/ld-linux-x86-64.so.2 /bin/chown +x /bin/chown

```

Get webserver http code answer

```
wget --server-response -T 5 -t 1 http://ya.ru 2>&1 | awk '/^ HTTP/{pri
```

Clone disk with DD by network

```

dd if=/dev/sdd1 bs=1M | ssh -c arcfour user@server "dd of=/dev/sdf1 bs=

disk with errors
dd if=/dev/sdd1 bs=1M conv=sync,noerror | ssh -c arcfour user@server "d

use nc
dd if=/dev/sde1 bs=1M | nc newserver 7000
nc -l 7000 | dd of=/dev/sde1 bs=1M

```

SSH x11 forwarding

```
yum install xorg-x11-xauth  
apt-get install xauth  
ssh -X
```

Extract RPM pkg

```
rpm2cpio myrpmfile.rpm | cpio -idmv
```

Create FFS snapshot

```
mksnap_ffs /www/.snap/1  
mdconfig -a -t vnode -o readonly -f /www/.snap/1  
mount -o ro /dev/md0 /mnt/  
sync  
umount -f /mnt  
sync  
mdconfig -d -u /dev/md0  
sync  
rm -f /www/.snap/1  
sync
```

Exim cli commands

```
# remove from queue frozen messages  
exiqgrep -z -i|xargs exim -Mrm  
exipick -zi | xargs exim4 -Mrm
```

```

exim -bp | awk '$6~"frozen" { print $3 }' | xargs exim -Mrm
# view a message's headers
exim -Mvh <message-id>
# view a message's body
exim -Mvb <message-id>
# remove from queue messages older than week
exipick -io 86400 | xargs exim4 -Mrm
# remove all messages from queue
exipick -i | xargs exim4 -Mrm
# remove message by ID
exim -v -Mrm ID
# frozen message by email
exiqgrep -i -f email | xargs exim -Mf
# remove messages by email
exiqgrep -i -f email | xargs exim -Mrm

```

Clean Postfix queue

```

mailq|grep 'MAILER-DAEMON'|awk '{print $1}'|postsuper -d -

```

Find all notpkgs files FreeBSD

```

find /usr/local -type f | xargs -J% pkg_which -v "%" | fgrep '?'

```

Display real LVM block devices

```

lvdisplay| awk '/LV Name/{n=$3} /Block device/{d=$3; sub(".*:", "dm-", d)}
lvdisplay| awk '/LV Name/{blockdev=$3} /Block device/{bdid=$3; sub("[0-

```

Mount ISO in FreeBSD

```
mdconfig -a -t vnode -f image.iso -u 0
mount -t cd9660 -o ro /dev/md0 /mount_point
umount /mount_point
mdconfig -d -u 0
```

Cisco CSS 1501 Tacacs

```
virtual authentication primary tacacs
virtual authentication secondary local
tacacs-server authorize config
tacacs-server authorize non-config
tacacs-server account non-config
tacacs-server account config
tacacs-server X.X.X.X primary frequency 10
tacacs-server key SecretKeyCisco
```

Show FreeBSD kernel config

```
sysctl -b kern.conf.txt
```

HTTP redirect with HTML and JavaScript

```
<html>
<head>
<title>301 moved permanently</title>
<meta name="robots" content="noindex">
```



```
<meta http-equiv="refresh" content="0; url=http://example.ru/goto.html"
</head>
<body>
<!-- <a href="http://example.ru/goto.html">Moved permanently</a> -->
<script type="text/javascript"><!--
document.location = "http://example.ru/goto.html";
// --></script>
</body>
</html>
```

Linux-Unix-IT Tips and Tricks #2 was published on June 29, 2015 and last modified on June 29, 2014.

0 Comments

EK BLOG

 Login ▾

 Recommend

 Tweet

 Share

Sort by Best ▾



Start the discussion...

LOG IN WITH

OR SIGN UP WITH DISQUS 



Name

Be the first to comment.

 Subscribe

 Add Disqus

 Disqus' Privacy Policy

DISQUS

YOU MIGHT ALSO ENJOY

(VIEW ALL POSTS)

- [Move from HDD to SSD with ArchLinux](#)
- [Linux SysAdm/DevOps Interview Questions](#)
- [ArchLinux Installation Guide](#)

