SERVER LOG

ubuntu@ubuntu:~$ sudo -i apt install apache

[sudo] password for ubuntu:

E: dpkg was interrupted, you must manually run 'sudo dpkg --configure -a' to correct the problem.

ubuntu@ubuntu:~$ sudo chmod -x /ec/grub.d/20\_memest86+

chmod: cannot access '/ec/grub.d/20\_memest86+': No such file or directory

ubuntu@ubuntu:~$ sudo chmod -x /etc/grub.d/20\_memtest86+

ubuntu@ubuntu:~$ sudo update-grub

Sourcing file `/etc/default/grub'

Generating grub configuration file ...

Found linux image: /boot/vmlinuz-5.4.0-150-generic

Found linux image: /boot/vmlinuz-5.4.0-73-generic

Found initrd image: /boot/initrd.img-5.4.0-73-generic

Found linux image: /boot/vmlinuz-5.4.0-42-generic

Found initrd image: /boot/initrd.img-5.4.0-42-generic

done

ubuntu@ubuntu:~$ sudo -i apt update

Hit:1 http://us.archive.ubuntu.com/ubuntu bionic InRelease

Hit:2 http://us.archive.ubuntu.com/ubuntu bionic-updates InRelease

Hit:3 http://us.archive.ubuntu.com/ubuntu bionic-backports InRelease

Hit:4 http://security.ubuntu.com/ubuntu bionic-security InRelease

Reading package lists... Done

Building dependency tree

Reading state information... Done

All packages are up to date.

ubuntu@ubuntu:~$ sudo -i apt apache2

E: Invalid operation apache2

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E: Invalid operation apache2

ubuntu@ubuntu:~$ sudo -i apt install apache2

E: dpkg was interrupted, you must manually run 'sudo dpkg --configure -a' to correct the problem.

ubuntu@ubuntu:~$ sudo dpkg --configure -a

Setting up grub-pc (2.02-2ubuntu8.26) ...

Sourcing file `/etc/default/grub'

Generating grub configuration file ...

Found linux image: /boot/vmlinuz-5.4.0-150-generic

Found linux image: /boot/vmlinuz-5.4.0-73-generic

Found initrd image: /boot/initrd.img-5.4.0-73-generic

Found linux image: /boot/vmlinuz-5.4.0-42-generic

Found initrd image: /boot/initrd.img-5.4.0-42-generic

done

Setting up libirs160:amd64 (1:9.11.3+dfsg-1ubuntu1.18) ...

Setting up libbind9-160:amd64 (1:9.11.3+dfsg-1ubuntu1.18) ...

Setting up gnupg (2.2.4-1ubuntu1.6) ...

Setting up cups (2.2.7-1ubuntu2.10) ...

Updating PPD files for cups ...

Setting up linux-generic-hwe-18.04 (5.4.0.150.167~18.04.121) ...

Setting up cups-bsd (2.2.7-1ubuntu2.10) ...

Setting up software-properties-gtk (0.96.24.32.22) ...

Setting up bind9-host (1:9.11.3+dfsg-1ubuntu1.18) ...

Setting up dnsutils (1:9.11.3+dfsg-1ubuntu1.18) ...

Setting up python3-distupgrade (1:18.04.45) ...

Setting up libreoffice-style-galaxy (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up python3-update-manager (1:18.04.12) ...

Setting up ubuntu-release-upgrader-core (1:18.04.45) ...

Setting up libreoffice-style-tango (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up ubuntu-release-upgrader-gtk (1:18.04.45) ...

Setting up update-manager-core (1:18.04.12) ...

Setting up update-notifier-common (3.192.1.21) ...

Installing new version of config file /etc/cron.weekly/update-notifier-common ...

Setting up libreoffice-common (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-core (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up python3-uno (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up update-notifier (3.192.1.21) ...

Installing new version of config file /etc/xdg/autostart/update-notifier.desktop ...

Setting up libreoffice-gtk3 (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-style-breeze (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-gnome (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-pdfimport (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-draw (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-avmedia-backend-gstreamer (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-impress (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-math (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-base-core (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-calc (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-ogltrans (1:6.0.7-0ubuntu0.18.04.13) ...

Setting up libreoffice-writer (1:6.0.7-0ubuntu0.18.04.13) ...

Processing triggers for linux-image-5.4.0-150-generic (5.4.0-150.167~18.04.1) ...

/etc/kernel/postinst.d/initramfs-tools:

update-initramfs: Generating /boot/initrd.img-5.4.0-150-generic

/etc/kernel/postinst.d/vboxadd:

VirtualBox Guest Additions: Building the modules for kernel 5.4.0-150-generic.

This system is currently not set up to build kernel modules.

Please install the gcc make perl packages from your distribution.

/etc/kernel/postinst.d/zz-update-grub:

Sourcing file `/etc/default/grub'

Generating grub configuration file ...

Found linux image: /boot/vmlinuz-5.4.0-150-generic

Found initrd image: /boot/initrd.img-5.4.0-150-generic

Found linux image: /boot/vmlinuz-5.4.0-73-generic

Found initrd image: /boot/initrd.img-5.4.0-73-generic

Found linux image: /boot/vmlinuz-5.4.0-42-generic

Found initrd image: /boot/initrd.img-5.4.0-42-generic

done

Processing triggers for mime-support (3.60ubuntu1) ...

Processing triggers for ureadahead (0.100.0-21) ...

Processing triggers for desktop-file-utils (0.23-1ubuntu3.18.04.2) ...

Processing triggers for install-info (6.5.0.dfsg.1-2) ...

Processing triggers for plymouth-theme-ubuntu-text (0.9.3-1ubuntu7.18.04.2) ...

update-initramfs: deferring update (trigger activated)

Processing triggers for cracklib-runtime (2.9.2-5build1) ...

Processing triggers for libglib2.0-0:amd64 (2.56.4-0ubuntu0.18.04.9) ...

Processing triggers for initramfs-tools (0.130ubuntu3.13) ...

update-initramfs: Generating /boot/initrd.img-5.4.0-150-generic

Processing triggers for libc-bin (2.27-3ubuntu1.6) ...

Setting up update-manager (1:18.04.12) ...

Processing triggers for man-db (2.8.3-2ubuntu0.1) ...

Processing triggers for shared-mime-info (1.9-2) ...

Processing triggers for gnome-menus (3.13.3-11ubuntu1.1) ...

Processing triggers for dbus (1.12.2-1ubuntu1.4) ...

Processing triggers for hicolor-icon-theme (0.17-2) ...

Processing triggers for rsyslog (8.32.0-1ubuntu4.2) ...

ubuntu@ubuntu:~$ sudo -i apt install apache2

Reading package lists... Done

Building dependency tree

Reading state information... Done

apache2 is already the newest version (2.4.29-1ubuntu4.27).

The following packages were automatically installed and are no longer required:

gir1.2-goa-1.0 gir1.2-snapd-1 linux-headers-5.4.0-42-generic

linux-hwe-5.4-headers-5.4.0-42 linux-image-5.4.0-42-generic

linux-modules-5.4.0-42-generic linux-modules-extra-5.4.0-42-generic

Use 'sudo apt autoremove' to remove them.

0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

ubuntu@ubuntu:~$ sudo iptables -F

ubuntu@ubuntu:~$ sudo iptables -X

ubuntu@ubuntu:~$ sudo iptables -P INPUT DROP

ubuntu@ubuntu:~$ sudo iptables -P OUTPUT DROP

ubuntu@ubuntu:~$ sudo iptables -P FORWAD DROP

iptables: Bad built-in chain name.

ubuntu@ubuntu:~$ sudo iptables -P FORWARD DROP

ubuntu@ubuntu:~$ ipconfig

Command 'ipconfig' not found, did you mean:

command 'iwconfig' from deb wireless-tools

command 'ifconfig' from deb net-tools

command 'iconfig' from deb ipmiutil

Try: sudo apt install <deb name>

ubuntu@ubuntu:~$ route -n

Kernel IP routing table

Destination Gateway Genmask Flags Metric Ref Use Iface

0.0.0.0 10.0.2.1 0.0.0.0 UG 20100 0 0 enp0s3

0.0.0.0 10.0.1.1 0.0.0.0 UG 20101 0 0 enp0s8

10.0.1.0 0.0.0.0 255.255.255.0 U 101 0 0 enp0s8

10.0.2.0 0.0.0.0 255.255.255.0 U 100 0 0 enp0s3

169.254.0.0 0.0.0.0 255.255.0.0 U 1000 0 0 enp0s8

ubuntu@ubuntu:~$ ifconfig

enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500

inet 10.0.2.9 netmask 255.255.255.0 broadcast 10.0.2.255

inet6 fe80::2240:6e46:32bf:402a prefixlen 64 scopeid 0x20<link>

ether 08:00:27:6e:a4:6a txqueuelen 1000 (Ethernet)

RX packets 1841 bytes 1728139 (1.7 MB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 1707 bytes 214986 (214.9 KB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

enp0s8: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500

inet 10.0.1.7 netmask 255.255.255.0 broadcast 10.0.1.255

inet6 fe80::c27c:fba6:c11b:679d prefixlen 64 scopeid 0x20<link>

ether 08:00:27:67:91:97 txqueuelen 1000 (Ethernet)

RX packets 7 bytes 2010 (2.0 KB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 65 bytes 7361 (7.3 KB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536

inet 127.0.0.1 netmask 255.0.0.0

inet6 ::1 prefixlen 128 scopeid 0x10<host>

loop txqueuelen 1000 (Local Loopback)

RX packets 219 bytes 28680 (28.6 KB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 219 bytes 28680 (28.6 KB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

ubuntu@ubuntu:~$ iptables -A FORWARD -s 10.0.2.7 -d 8.8.8.8 -i \* -o enp0s3 -p icmp --icmp-type echo-request -j ACCEPT

Bad argument `Documents'

Try `iptables -h' or 'iptables --help' for more information.

ubuntu@ubuntu:~$ ipttables -h

Command 'ipttables' not found, did you mean:

command 'ip6tables' from deb iptables

command 'iptables' from deb iptables

Try: sudo apt install <deb name>

ubuntu@ubuntu:~$ iptables -h

iptables v1.6.1

Usage: iptables -[ACD] chain rule-specification [options]

iptables -I chain [rulenum] rule-specification [options]

iptables -R chain rulenum rule-specification [options]

iptables -D chain rulenum [options]

iptables -[LS] [chain [rulenum]] [options]

iptables -[FZ] [chain] [options]

iptables -[NX] chain

iptables -E old-chain-name new-chain-name

iptables -P chain target [options]

iptables -h (print this help information)

Commands:

Either long or short options are allowed.

--append -A chain Append to chain

--check -C chain Check for the existence of a rule

--delete -D chain Delete matching rule from chain

--delete -D chain rulenum

Delete rule rulenum (1 = first) from chain

--insert -I chain [rulenum]

Insert in chain as rulenum (default 1=first)

--replace -R chain rulenum

Replace rule rulenum (1 = first) in chain

--list -L [chain [rulenum]]

List the rules in a chain or all chains

--list-rules -S [chain [rulenum]]

Print the rules in a chain or all chains

--flush -F [chain] Delete all rules in chain or all chains

--zero -Z [chain [rulenum]]

Zero counters in chain or all chains

--new -N chain Create a new user-defined chain

--delete-chain

-X [chain] Delete a user-defined chain

--policy -P chain target

Change policy on chain to target

--rename-chain

-E old-chain new-chain

Change chain name, (moving any references)

Options:

--ipv4 -4 Nothing (line is ignored by ip6tables-restore)

--ipv6 -6 Error (line is ignored by iptables-restore)

[!] --protocol -p proto protocol: by number or name, eg. `tcp'

[!] --source -s address[/mask][...]

source specification

[!] --destination -d address[/mask][...]

destination specification

[!] --in-interface -i input name[+]

network interface name ([+] for wildcard)

--jump -j target

target for rule (may load target extension)

--goto -g chain

jump to chain with no return

--match -m match

extended match (may load extension)

--numeric -n numeric output of addresses and ports

[!] --out-interface -o output name[+]

network interface name ([+] for wildcard)

--table -t table table to manipulate (default: `filter')

--verbose -v verbose mode

--wait -w [seconds] maximum wait to acquire xtables lock before give up

--wait-interval -W [usecs] wait time to try to acquire xtables lock

default is 1 second

--line-numbers print line numbers when listing

--exact -x expand numbers (display exact values)

[!] --fragment -f match second or further fragments only

--modprobe=<command> try to insert modules using this command

--set-counters PKTS BYTES set the counter during insert/append

[!] --version -V print package version.

ubuntu@ubuntu:~$ ipconfig

Command 'ipconfig' not found, did you mean:

command 'ifconfig' from deb net-tools

command 'iwconfig' from deb wireless-tools

command 'iconfig' from deb ipmiutil

Try: sudo apt install <deb name>

ubuntu@ubuntu:~$ ifconfig

enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500

inet 10.0.2.9 netmask 255.255.255.0 broadcast 10.0.2.255

inet6 fe80::2240:6e46:32bf:402a prefixlen 64 scopeid 0x20<link>

ether 08:00:27:6e:a4:6a txqueuelen 1000 (Ethernet)

RX packets 1844 bytes 1728849 (1.7 MB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 1709 bytes 215435 (215.4 KB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

enp0s8: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500

inet 10.0.1.7 netmask 255.255.255.0 broadcast 10.0.1.255

inet6 fe80::c27c:fba6:c11b:679d prefixlen 64 scopeid 0x20<link>

ether 08:00:27:67:91:97 txqueuelen 1000 (Ethernet)

RX packets 9 bytes 3190 (3.1 KB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 67 bytes 7810 (7.8 KB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536

inet 127.0.0.1 netmask 255.0.0.0

inet6 ::1 prefixlen 128 scopeid 0x10<host>

loop txqueuelen 1000 (Local Loopback)

RX packets 219 bytes 28680 (28.6 KB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 219 bytes 28680 (28.6 KB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

ubuntu@ubuntu:~$ sudo iptables -A FORWARD -i enp0s3 -o enp0s8 -s 10.0.2.7 -d 8.8.8.8 -j ACCEPT

[sudo] password for ubuntu:

ubuntu@ubuntu:~$ iptables -L INPUT -v

iptables v1.6.1: can't initialize iptables table `filter': Permission denied (you must be root)

Perhaps iptables or your kernel needs to be upgraded.

ubuntu@ubuntu:~$ sudo -i

[sudo] password for ubuntu:

root@ubuntu:~# iptables -L INPUT -v

Chain INPUT (policy DROP 60 packets, 7848 bytes)

pkts bytes target prot opt in out source destination

root@ubuntu:~# iptables

iptables v1.6.1: no command specified

Try `iptables -h' or 'iptables --help' for more information.

root@ubuntu:~# iptables -L

Chain INPUT (policy DROP)

target prot opt source destination

Chain FORWARD (policy DROP)

target prot opt source destination

ACCEPT all -- 10.0.2.7 8.8.8.8

Chain OUTPUT (policy DROP)

target prot opt source destination

root@ubuntu:~# $IPTABLES -t nat -A POSTROUTING -o $Internet\_IFACE -d 8.8.8.8 -j MASQUERADE

-t: command not found

root@ubuntu:~# $IPTABLES -t nat -A POSTROUTING -o enp0s8 -d 8.8.8.8 -j MASQUERADE

-t: command not found

root@ubuntu:~# iptables -t nat -A POSTROUTING -o enp0s8 -d 8.8.8.8 -j MASQUERADE

root@ubuntu:~# ping localhost

PING localhost (127.0.0.1) 56(84) bytes of data.

ping: sendmsg: Operation not permitted

pping: sendmsg: Operation not permitted

icalping: sendmsg: Operation not permitted

ping: sendmsg: Operation not permitted

ping: sendmsg: Operation not permitted

ping: sendmsg: Operation not permitted

ping: sendmsg: Operation not permitted

^C

--- localhost ping statistics ---

7 packets transmitted, 0 received, 100% packet loss, time 6122ms

root@ubuntu:~# ping 10.0.2.7

PING 10.0.2.7 (10.0.2.7) 56(84) bytes of data.

ping: sendmsg: Operation not permitted

ping: sendmsg: Operation not permitted

ping: sendmsg: Operation not permitted

ping: sendmsg: Operation not permitted

^C

--- 10.0.2.7 ping statistics ---

4 packets transmitted, 0 received, 100% packet loss, time 3108ms

root@ubuntu:~# ping 8.8.8.8

PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.

ping: sendmsg: Operation not permitted

ping: sendmsg: Operation not permitted

ping: sendmsg: Operation not permitted

^C

--- 8.8.8.8 ping statistics ---

3 packets transmitted, 0 received, 100% packet loss, time 2053ms

root@ubuntu:~#