# update

# Ubuntu

sudo apt update

sudo apt upgrade

sudp apt dist-upgrate

sudo do-release-upgrade # complete OS version upgrade

# CentOS 7

sudo yum update

# CentOS 8

sudo dnf update

# sync VM clock with system clock

sudo hwclock --hctosys

# remove nodejs from Ubuntu

sudo apt remove nodejs

sudo apt purge nodejs

# then you can delete the its repositoy

sudo rm -r /usr/lib/node\_modules/

sudo rm -r /etc/apt/sources.list.d/nodesource.list

# alternatively

# sudo apt-key list

# pub 4096R/68576280 2014-06-13 uid NodeSource <gpg@nodesource.com> sub 4096R/AA01DA2C 2014-06-13

# sudo apt-key del 68576280

# get Ubuntu version

lsb\_release -a

# get Linux version

uname -r

# useful listing aliases (in .bashrc or similar shell preconfig)

# sort by last modified

> alias llt=”ls -alht”

# sort by size

> alias lls=”ls -alhS”

# for reverse sorting of both, add the -r option

# lazy git user

git add .; git commit -am "$(echo "$(date +"%Y%m%d")") - $(this\_hour=$(($(date +"%H") + 0));if [ $this\_hour -lt 12 ]; then echo "morning"; elif [ $this\_hour -lt 22 ]; then echo "afternoon";else echo "night";fi)"; git push

# proxy switcher

tmp\_http\_proxy=$(git config --global http.proxy);echo tmp\_http\_proxy: ${tmp\_http\_proxy};tmp\_https\_proxy=$(git config --global https.proxy);echo tmp\_https\_proxy: ${tmp\_https\_proxy};git config --global --unset http.proxy;git config --global --unset https.proxy

# reset proxy

git config --global http.proxy ${tmp\_http\_proxy};git config --global https.proxy ${tmp\_https\_proxy}

# read arguments in script

echo “Argument 1: $1”

# parse a string with delimiter

# change default delimiter and set delimiter (e.g. ‘,’)

tIFS=$IFS

IFS=’,’

# standard read command to parse the output of the command (or string) to OUTPUT array

read -ar OUTPUT <<< $(COMMAND)

# reset default internal file separator

IFS=$tIFS

# useful ls commands

# list CPU info

lscpu

# list physical disk info

lsblk

# Storage and Partition Management

# list block devices (disks)

lsblk

# list specific disk and partitions

lsblk /dev/sda # or other disk

# list all partitions and type

sudo fdisk -l

# enter fdisk tool and perform partition operations

sudo fdisk /dev/sdc # or other disk as appropriate

# LVM

# add storage (physical volume) to LVM

# create physical volume

sudo pvcreate /dev/sdd # or appropriate attached and unallocated physical disk

# identify the volume group to attach physical disk to

sudo vgs # or sudo vgdisplay for more information

# extend the volume group

sudo vgextend [VOLUME\_GROUP\_NAME] /dev/sdd # or appropriate physical disk above

# list Logical Volumes

sudo lvs

# extend an lvm partition

sudo lvextend -L +5.2GB /dev/[VOLUME\_GROUP]/[LV\_PATH]

# alternatively extend partition to use remaining free space

# sudo lvextend -l +100%FREE /dev/[VOLUME\_GROUP]/[LV\_PATH] # e.g. /dev/vgroup/root

# SSH setup

# generate SSH keys

# ssh-keygen

# with specific encryption (rsa, dsa, ecdsa, en25519)

ssh-keygen -t [ENCRYPTION]

# enter location and key names and passphrase

# for full command to upload public key to remote server:

# cat ~/.ssh/[PUBLIC\_KEY\_FILE] | ssh [USER]@[SERVER] "mkdir -p ~/.ssh && chmod 700 ~/.ssh && cat >> ~/.ssh/authorized\_keys

# using ssh-copy

ssh-copy

# add key to SSH agent to avoid authenticating each time or to remove permission denied

ssh-add [PATH\_TO\_KEY]

# if SSH agent is not running

eval `ssh-agent -s`

# disable root login and password authentication

sudo nano /etc/ssh/sshd\_config:

# set: PermitRootLogin no

# set: PasswordAuthentication no

# save

sudo systemctl reload sshd

# DNS resolve issues

# edit: /etc/resolv.conf (non-ubuntu)

# add/edit

nameserver 8.8.8.8

# ubuntu: edit: /etc/netplan/sudo nano 01-network-manager.yaml

network:

version: 2

renderer: NetworkManager

ethernets:

enp0s3:

dhcp4: false

addresses: [192.168.X.X/24]

gateway4: 192.168.X.X

nameservers:

addresses: [8.8.8.8, 8.8.4.4]

enp0s8:

dhcp4: false

addresses: [192.168.X.X/24]

# for multiple adapter setups (e.g. host-only or internal network VMs), only one can have the gateway4 assigned to access internet as above.

# npm permission error on Windows for installing global packages

# edit: ~/.npmrc

cache=C:\Users\User\AppData\Roaming\npm-cache

prefix=C:\Users\User\AppData\Roaming\npm

# relaunch dpkg

sudo dpkg –configure -a