

Linux????

??????????

- [Linux???\(???????\)](#)
 - [Ubuntu 20.04/22.04????????????](#)
 - [Ubuntu Linux??cron??????](#)
 - [vps????swap???????](#)
 - [Ubuntu???????NW????????????](#)
 - [Ubuntu??????????????](#)
 - [????????????????????????](#)
 - [cd??????pwd??????](#)
- [Linux-?????????-](#)
 - [S3??????????\(wasabi\)](#)
- [Linux -???TIPS-](#)
 - [????????????????](#)

Linux????(?????????)

Linux???(???????)

Ubuntu 20.04/22.04????????????

????????????????????????????????

SSH??

Ubuntu?OS????????????SSH????????????

```
sudo apt install ssh
```

SSH????

????????????

```
ssh-keygen -t ed25519
```

- ??????Enter?/?home/hoge/.ssh/
- ?????????

SSH??????

- ?????????????
- ?????????????????????
- ?????????

```
cd .ssh
```

- ???????

```
ls -l
```

????????????

1. id_ed25519
2. id_ed25519.pub

?????????scp????????????

??????

???authorized_keys????????

- ??????

```
mv id_ed25519.pub authorized_keys
```

- ????????

```
chmod 600 authorized_keys
```

????

????????????id_ed25519?SSH????????????????????????

SSH??????????

- SSH??????????

```
sudo cp -pi /etc/ssh/sshd_config /path/to/backup/directory/sshd_config.$(date +%Y%m%d)
```

????????????????????

- ???????

```
diff -u /etc/ssh/sshd_config /path/to/backup/directory/sshd_config.$(date +%Y%m%d)
```

????????????????????

- ???????

```
sudo sed -i -e 's/^#PasswordAuthentication yes/PasswordAuthentication no/' -e 's/^#PermitEmptyPasswords no/PermitEmptyPasswords no/' /etc/ssh/sshd_config
```

- ????

```
diff -u /etc/old/sshd_config.$(date +%Y%m%d) /etc/ssh/sshd_config
```

- ??

```
-#PasswordAuthentication yes
-#PermitEmptyPasswords no
+PasswordAuthentication no
+PermitEmptyPasswords no
```

- SSH???

????????????SSH????????????????

```
sudo systemctl restart ssh.service
```

SSH?????

- 1. ????????????
- 2. ?????SSH???????????????
- 3. ????????????????????????????

??????????????????

????????????????????

```
sudo apt update && sudo apt upgrade
```

????????????????????

```
sudo reboot
```

????????????????

Ubuntu?OS????????? hoge.example.com ??????

```
uname -n
```

????????????????????????

```
sudo hostnamectl set-hostname hoge.example.com
```

????????????????????????

???

```
uname -n
```

hoge.example.com???????

????????

??????????

```
hoge@hoge$
```

????????????????????????

- ??????.bashrc??

```
cat << __EOF__ | tee -a ~/.bashrc
PS1="[u@\H \W]\$ "
```

```
# [REDACTED]
if [ "\$PS1" ]; then
    if [ "\$(id -u)" -eq 0 ]; then # root[REDACTED]
        PS1='\[\e[0;31m\][\u@\H \W]#\[\e[0m\] '
    else # [REDACTED]
        PS1='\[\e[0;32m\][\u@\H \W]\$\[\e[0m\] '
    fi
fi
__EOF__
```

- root

Ubuntu??.bashrc????????????????????

```
sudo su -
```

```
cat << __EOF__ | tee -a ~/.bashrc
PS1="[\u@\H \W]\\$ "

# [REDACTED]
if [ "\$PS1" ]; then
    if [ "\$(id -u)" -eq 0 ]; then # root[REDACTED]
        PS1='\[\e[0;31m\][\u@\H \W]#\[\e[0m\] '
    else # [REDACTED]
        PS1='\[\e[0;32m\][\u@\H \W]\$\[\e[0m\] '
    fi
fi
__EOF__
```

???SSH????????????????

1. ??? [hoge@hoge.example.com~]\$??????????????????
2. ??? [root@hoge.example.com~]# ??????????root?

aptitude?????

????????????????apt???aptitude?????

```
sudo apt install aptitude
```

Linux???(???????)

Ubuntu Linux??cron???????

??

Ubuntu?Linus?????(cron)????????????????????????

rsyslogd?Cron??????

- ?????????????

```
sudo cp -pi /etc/rsyslog.d/50-default.conf /path/to/backup/directory/50-default.conf.$(date +%Y%m%d)
```

????????????????????

- ?????????

```
diff -u /etc/rsyslog.d/50-default.conf /path/to/backup/directory/50-default.conf.$(date +%Y%m%d)
```

????????????????????

????????????

- Sed????????

```
sudo sed -i 's/^#cron.*/cron.*          \var\log\cron.log/' /etc/rsyslog.d/50-default.conf
```

- ???

```
diff -u /path/to/backup/directory/50-default.conf.$(date +%Y%m%d) /etc/rsyslog.d/50-default.conf
```

- ??

```
-#cron.*          /var/log/cron.log
+cron.*          /var/log/cron.log
```

rsyslogd??

- ?????rsylogd??????

```
systemctl status rsyslog.service
```

active (running)??????

- rsyslog???

```
sudo systemctl restart rsyslog.service
```

- ?????rsylogd??????

```
systemctl status rsyslog.service
```


vps????swap???????

[illegible]

- Ubuntu 24.04
- 4GB??/80GB????????????

1. ?????????????????
2. Swap????????
3. ???Swap????????
4. Swap????????????
5. fstab????
6. fstab????????????Swap????????

[illegible]

- ????????

-h?????(human readable)???????

	total	used	free	shared	buff/cache	available
Mem:	3.8Gi	450Mi	2.9Gi	2.5Mi	688Mi	3.4Gi
Swap:	0B	0B	0B			

- ????

```
df -h
```

- ?????

Filesystem	Size	Used	Avail	Use%	Mounted on
/dev/root	78G	5.0G	73G	7%	/
tmpfs	2.0G	0	2.0G	0%	/dev/shm
tmpfs	784M	980K	783M	1%	/run
tmpfs	5.0M	0	5.0M	0%	/run/lock
/dev/vda15	105M	6.1M	99M	6%	/boot/efi
tmpfs	392M	12K	392M	1%	/run/user/1001

????????????????4GB?????????

Swap????

- Swap????

```
sudo fallocate -l 4G /swap
```

- ????????

```
ls -ldh /swap
```

????????4GB????????????????

Swap????

- /swap?????????

```
sudo chmod 600 /swap
```

- ??????????

```
ls -ldh /swap
```

root????????????????\

/swap???

- Swap????

```
sudo mkswap /swap
```

- ????

```
df -h 1 GiB = 4 GiB (4294963200 bytes)
df -h, UUID=08cf06da-757e-4ab4-b049-e7da8ee73341
```

??/swap???

```
sudo swapon /swap
```

Swap????

- ??????

```
free -h
```

- ????

	total	used	free	shared	buff/cache	available
Mem:	3.8Gi	446Mi	2.9Gi	2.5Mi	689Mi	3.4Gi
Swap:	4.0Gi	0B	4.0Gi			

4GB?Swap??????????

fstab??

- /etc/fstab??????

```
sudo cp -pi /etc/fstab /path/to/backup/directory/fstab.$(date +%Y%m%d)
```

- ??????????

```
diff -u /path/to/backup/directory/fstab.$(date +%Y%m%d) /etc/fstab
```

????????????????????????

- /etc/fstab??

```
cat <<- __EOF__ | sudo tee -a /etc/fstab
/swap none swap sw 0 0
__EOF__
```

- ???

```
diff -u /path/to/backup/directory/fstab.$(date +%Y%m%d) /etc/fstab
```

- ??

`+/swap none swap sw 0 0`

????????

- ??????

`sudo reboot`

- ??????

????????????

1. ?????????
2. Web????????????????????
3. free -h ???Swap????????

Ubuntu?????NW?????????

????????????????????

net-tools

?????????(ifconfig/netstat?)?????

```
sudo aptitude install net-tools
```

ifconfig?????

?????	??	??
-a	?????????????????	?????????????????
-s	???????????	?????????????????
up	???????????	???????????????
down	???????????	???????????????
inet	IP???????	?????????????IP???????
netmask	?????????	?????????????
broadcast	???????????????	???????????????????
mtu	???????MTU?????	?????????????????
promisc	???????????????	???????????????
-promisc	???????????????	?????????
arp	ARP?????????	?????????????????
-arp	ARP?????????	ARP???????
allmulti	?????????????????	?????????????????????
-allmulti	?????????????????	?????????

netstat?????

?????	??	??
-a	?????????????????	?????????????????
-t	TCP???????	TCP???????????
-u	UDP???????	UDP???????????
-l	???????????????	?????????????????
-p	???ID???????????	???????????????????????
-n	?????????????????	???????????????

????	??	??
-r	??????????	????????????
-s	??????????	????????????
-c	??????????	????????????

Linux???(???????)

Ubuntu????????????

????????????????????????????

```
sudo tee -a /etc/profile.d/history.sh > /dev/null << 'EOF'
export HISTSIZE=50000
export HISTFILESIZE=50000
export HISTTIMEFORMAT='%Y/%m/%d %H:%M:%S '
EOF
```

- ?????history?????5?????
- ?????????

????????????????

```
source /etc/profile.d/history.sh
```

????????????

Linux????(???????)

????????????????????????????????

??????????

```
sudo su -
```

??

- Ubuntu 20.04 / 22.04 / 24.04

??root????????????????*????????????????

??????????????

- ???????????

```
sudo cp -pi /etc/sudoers /path/to/backup/directory/sudoers.$(date +%Y%m%d)
```

????????????????????

- ????????

```
sudo diff -u /path/to/backup/directory/sudoers.$(date +%Y%m%d) /etc/sudoers
```

????????????????

?????????

- sed??????????

```
sudo sed -i 's/^Defaults\s\+env_reset$/Defaults env_reset,pwfeedback/' /etc/sudoers
```

- ????

```
sudo diff -u /path/to/backup/directory/sudoers.$(date +%Y%m%d) /etc/sudoers
```

```
-Defaults      env_reset
+Defaults env_reset,pwfeedback
```

??????

????????????????SSH????????????

sudo su -

????????*????????????????

Linux???(???????)

cd?????pwd?????

Linux??

????Linux????????????????????????????????????

```
cd /hoge
```

?????

```
pwd
```

????????????????

????

- ???

```
sudo tee -a /etc/profile.d/pwd.sh > /dev/null << 'EOF'
cd() {
  builtin cd "$@" && pwd
}
EOF
```

- ???

```
source /etc/profile.d/pwd.sh
```

???

```
cd /hoge
```

?

```
cd /hoge && pwd
```

????????????????

Linux-?????????-

Linux-?????????-

S3????????(wasabi)

????????????S3(Amazon Simple Storage Service)?

????????????????????????????????

??

- Ubuntu 20.04 / 24.04

??

- S3????????(???Wasabi????????)?
 - ?????????
 - ?????????
 - ?????????

??

Linux????????????

```
sudo aptitude install s3fs
```

????????????????????

????????????????????????????????

- ????: `.passwd-s3fs`

????????????????

```
□□□□:□□
```

- ???

```
cat .passwd-s3fs
```

????????

????????????

- ?????

```
sudo chmod 600 .passwd-s3fs
```

- ??????

```
ls -l .passwd-s3fs
```

?????600?????

????????????????

- ?????????

```
sudo mkdir /mnt/wasabi
```

????????????????

- ???

```
ls -ld /mnt/wasabi
```

????????????????

```
sudo s3fs [wasabi] /mnt/wasabi -o passwd_file=[ ]/.passwd-s3fs -o url=https://[ ]
use_path_request_style -o endpoint=[ ] -o allow_other
```

URL????????????????

????????????????

- fstab??????

```
sudo cp -pi /etc/fstab /path/to/directory/fstab.$(date +%Y%m%d)
```

????????????????

- ?????????

```
diff -u /path/to/directory/fstab.$(date +%Y%m%d) /etc/fstab
```

????????????????

- fstab??

????????????????/etc/fstab ??????????

```
s3fs#[wasabi] /mnt/wasabi fuse _netdev,allow_other,passwd_file=/[ ]/.passwd-
s3fs,url=https://s3.[ ]wasabisys.com,use_path_request_style,endpoint=[ ] 0 0
```

????????????????????????????

- ???

```
diff -u /path/to/directory/fstab.$(date +%Y%m%d) /etc/fstab
```

```
+ s3fs# [ ] wasabi[ ] /mnt/wasabi fuse _netdev,allow_other,passwd_file=/[ ]/.passwd-  
s3fs,url=https://s3.[ ]wasabisys.com,use_path_request_style,endpoint=[ ] 0 0
```

- ??????

```
sudo reboot
```

??

- ?????

```
df -h
```

s3fs ??????????????????????

- ?????

```
cd /mnt/wasabi
```

????????????????

- ??????

```
sudo touch test.txt
```

```
ls -l test.txt
```

????????????????

????????????????????????????

Linux -????TIPS-

????????????

??

????????????????????????????????conf????????????????????

???

```
sudo cp -pi /path/to/src/directory/*.conf /path/to/backup/directory/
```

??

- ??????????????
- `.bk.yyyy-mm-dd` ????????

??TIPS??

????

```
for file in /path/to/src/directory/*.conf; do sudo cp "$file" "/path/to/backup/directory/${basename "$file"}.bk.${date +%Y%m%d}"; done
```

????????? `.conf` ?????????????????????? `.conf.bk.yyyy-mm-dd` ????????????????