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General update install

- ❖ Copy the Cloud-maxwell file from the google-drive into the server in the temp folder using scp command .

[Cloud-maxwell](#)

scp file_name <Server_Domain_name >

- ❖ Please type the below commands for general updates:

- **sudo apt-get update**
- **sudo apt-get -y install python-pip**
- **sudo pip install speedtest-cli**
- **sudo apt-get -y install monit**
- **sudo apt-get -y install trash-cli**
- **sudo apt-get -y install fail2ban**
- **sudo apt-get -y install python-apt**
- **sudo apt-get -y install htop**
- **sudo apt-get -y install iftop**
- **sudo apt-get -y install bwm-ng**
- **sudo apt-get install s3cmd**

Install kernel

- ❖ On the server go to the temp folder where you have copied the cloud-maxwell folder.
- ❖ In this folder go to the deb folder

cd /home/ubuntu/temp/cloud-maxwell/deb

- ❖ Then type below command:

- **sudo dpkg -i linux-image-3.18.20-watchy_3.18.20-1_amd64.deb**
- **sudo update-grub**

Install iproute packages

- ❖ installing Iprotue dependencies and Installing IPRoute.

- **sudo apt-get install libdb5.1**

- `sudo dpkg -i iproute2_4.0.89-0-1_amd64.deb`

Install libsimplog

❖ To install libsimplog, type the following command in the deb folder.

- `sudo dpkg -i libsimplelog1_1.0.0_amd64.deb`

Install tcp intercept

❖ To install the tcp intercept type the following command in the deb folder.

- `sudo apt-get -y install libdaemon0`
- `sudo apt-get -y install libev4`
- `sudo dpkg -i tcp-intercept_1.1.1_amd64.deb`

Install openvpn

❖ To install the openvpn type the following command.

- `sudo apt-get -y install liblzo2-2`
- `sudo apt-get -y install libpkcs11-helper1`
- `sudo apt-get -f install`
- `sudo dpkg -i openvpn_2.3.2-7ubuntu3.1_amd64.deb`

Config openvpn

❖ To configure the openvpn untaring ovpn folder in the temp directory.

`tar -zvxf openvpn.tar.gz`

❖ Create the openvpn directory in the /etc/ path.

`etc$ Sudo mkdir openvpn`

❖ Go back to the temp directory in that openvpn directory.

- `cd temp/cloud-maxwell/openvpn/`
- `sudo cp -pr * /etc/openvpn/`
- ❖ Restart the openvpn.
 - `sudo service openvpn stop`
 - `sudo service openvpn start`
 - `sudo service openvpn status`

Maxwell folder

- ❖ Untaring maxwell folder for temp directory
 - `tar -zxvf maxwell.tar.gz`
- ❖ Create the maxwell director in opt/ path
 - `cd /opt/`
 - `Sudo mkdir maxwell`
- ❖ Go back to the temp directory in that maxwell director then copy all the .sh file into the `opt/maxwell/` path directory.
 - `sudo cp *.sh /opt/maxwell/`
- ❖ Go back to the copied maxwell file and set the execution permission
 - `cd /opt/maxwell/`
 - `sudo chmod +x set_*`
 - `sudo chmod +x ip.sh`
 - `sudo chmod +x maxwell_firewall`

Version check

- ❖ Here we are cross verifying the all installed versions
 - `sudo dpkg -l iproute2*`

```
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/openvpn$ sudo dpkg -l iproute2*
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/half-conf/Half-inst/trig-aWait/Trig-pend
||/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version       Architecture      Description
+++-+-----+-----+-----+-----+
ii  iproute2      4.0.89-0-1    amd64          watchy tech, networking tool
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/openvpn$
```

- **sudo dpkg -l tcp-intercept**

```
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/openvpn$ sudo dpkg -l tcp-intercept
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/half-conf/Half-inst/trig-aWait/Trig-pend
||/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version       Architecture      Description
+++-+-----+-----+-----+-----+
ii  tcp-intercept  1.1.1        amd64          Watchy build - Intercept TCP-sessions with help of t
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/openvpn$
```

- **sudo dpkg -l openvpn**

```
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/openvpn$ sudo dpkg -l openvpn
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/half-conf/Half-inst/trig-aWait/Trig-pend
||/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version       Architecture      Description
+++-+-----+-----+-----+-----+
ii  openvpn       2.3.2-7ubuntu3.1  amd64          WatchyTech, virtual private network daemon
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/openvpn$
```

- **sudo dpkg -l libsim***

```
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/openvpn$ sudo dpkg -l libsim*
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/half-conf/Half-inst/trig-aWait/Trig-pend
||/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name          Version       Architecture      Description
+++-+-----+-----+-----+-----+
ii  libsimplelog1 1.0.0        amd64          Minimal logging library
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/openvpn$
```

- **lsb_release -a**

```
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/openvpn$ lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 14.04.6 LTS
Release:        14.04
Codename:       trusty
ubuntu@ip-172-31-4-109:~/temp/cloud-maxwell/openvpn$ 
```

- ❖ Checking Port forwarding option.

- **cat /proc/sys/net/ipv4/ip_forward**

- ❖ If the output is 1 then configuration is fine else follow below steps to configure the port forwarding.

- **Sudo vim /etc/sysctl.conf**

```
# /etc/sysctl.conf - Configuration file for setting system variables
# See /etc/sysctl.d/ for additional system variables.
# See sysctl.conf (5) for information.
#
#kernel.domainname = example.com

# Uncomment the following to stop low-level messages on console
#kernel.printk = 3 4 1 3

#####
# Functions previously found in netbase
#

# Uncomment the next two lines to enable Spoof protection (reverse-path filter)
# Turn on Source Address Verification in all interfaces to
# prevent some spoofing attacks
#net.ipv4.conf.default.rp_filter=1
#net.ipv4.conf.all.rp_filter=1

# Uncomment the next line to enable TCP/IP SYN cookies
# See http://lwn.net/Articles/277146/
# Note: This may impact IPv6 TCP sessions too
#net.ipv4.tcp_syncookies=1

# Uncomment the next line to enable packet forwarding for IPv4
net.ipv4.ip_forward=1

# Uncomment the next line to enable packet forwarding for IPv6
# Enabling this option disables Stateless Address Autoconfiguration
# based on Router Advertisements for this host
#net.ipv6.conf.all.forwarding=1
```

Reboot

- ❖ Before reboot type this command the after reboot the server.
 - **sudo iptables -t nat -A POSTROUTING -s 10.0.0.1/24 -o eth0 -j MASQUERADE**
- ❖ Reboot the server.
 - Sudo Reboot.

Now the server is ready you can connect the zifilink box to it.