

# Deployment Manual

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# KiloLink Server Free (Linux System)

(2022-5 version)

# 1 KiloLink Server Free Deployment

## 1.1 Preparations

### (1) Hardware

Processor: Intel Core i3 CPU or higher

Hard disk: 64G hard disk or higher

RAM: 4GB RAM or higher

### (2) Software

Operating system: Linux64-bit operating system (Ubuntu 18.04+ / Debian 9+)

### (3) Network

IP address: one public IP address

Bandwidth: Plan according to the network situation, it is recommended to configure at least 4Mbps.

Port: The server needs to use the following ports. If there is a firewall in the server's network, the related ports need to be opened. Therefore, please make sure below ports are open.

Port	Protocol
83	TCP
50000	UDP

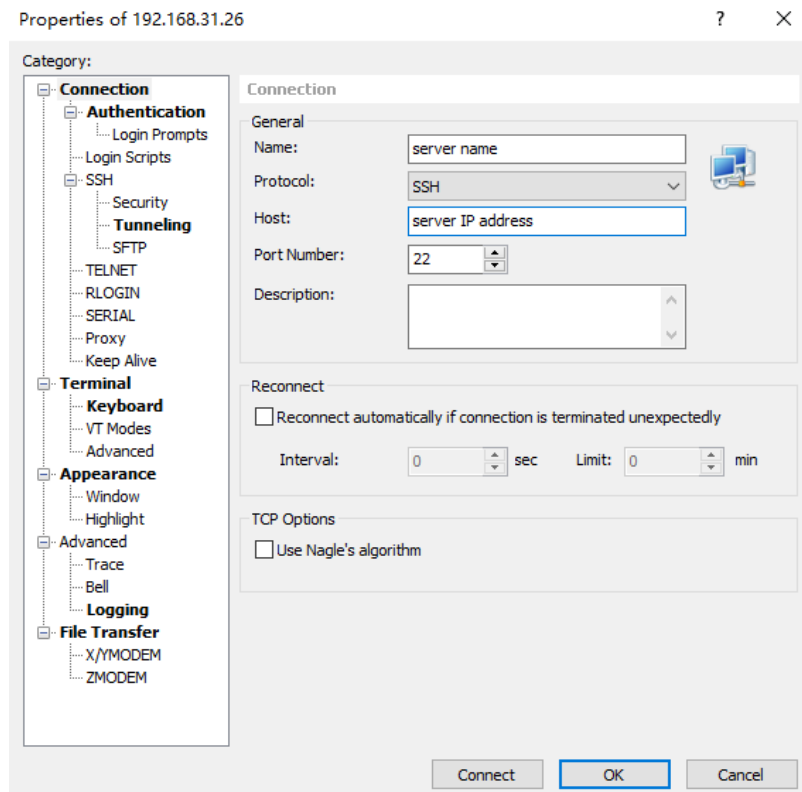
## 1.2 Logging In

Login to the server by remote terminal software, Xshell or PuTTY is recommended

Xshell download link: <https://www.netsarang.com/zh/xshell-download/>

PuTTY download link: <https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>

1) After downloading and installing, enter the server IP address in the new session, and chooses “SSH” protocol. The port number is 22 by default. Click “OK” when finished



(2) Enter the username and password in the pop-up dialog box, the users need “sudo” to obtain management authorization or login as the root user. Enter the following commands in the terminal:

```
sudo su -
```

## 1.3 Deployment steps

### 1.1.1 Step 1: Install docker

Enter the command in the terminal window:

```
curl -fsSL https://get.docker.com | bash
```

```
root@VM-4-13-ubuntu:/home# curl -fsSL https://get.docker.com | bash
# Executing docker install script, commit: 93d2499759296ac1f9c510605fef85052a2c32be
+ sh -c 'apt-get update -qq >/dev/null'
+ sh -c 'DEBIAN_FRONTEND=noninteractive apt-get install -y -qq apt-transport-https ca-certificates curl >/dev/null'
+ sh -c 'curl -fsSL "https://download.docker.com/linux/ubuntu/gpg" | gpg --dearmor --yes -o /usr/share/keyrings/docker-archive-keyring.gpg'
+ sh -c 'echo "deb [arch=amd64 signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu focal stable" > /etc/apt/sources.list.d/docker.list'
+ sh -c 'apt-get update -qq >/dev/null'
+ sh -c 'DEBIAN_FRONTEND=noninteractive apt-get install -y -qq --no-install-recommends docker-ce-cli docker-compose-plugin docker-ce >/dev/null'
+ version_gte 20.10
+ '[' -z '' ']'
+ return 0
+ sh -c 'DEBIAN_FRONTEND=noninteractive apt-get install -y -qq docker-ce-rootless-extras >/dev/null'
+ sh -c 'docker version'
Client: Docker Engine - Community
 Version:           20.10.8
 API version:       1.41
 Go version:        go1.16.6
 Git commit:        3967b7d
 Built:             Fri Jul 30 19:54:27 2021
 OS/Arch:           linux/amd64
 Context:           default
 Experimental:      true

Server: Docker Engine - Community
 Engine:
  Version:          20.10.8
  API version:      1.41 (minimum version 1.12)
  Go version:       go1.16.6
  Git commit:       75249d8
  Built:           Fri Jul 30 19:52:33 2021
  OS/Arch:         linux/amd64
  Experimental:    false
 containerd:
  Version:          1.4.9
  GitCommit:       e25210fe30a0a703442421b0f60afac609f950a3
 runc:
  Version:          1.0.1
  GitCommit:       v1.0.1-0-g4144b63
 docker-init:
  Version:          0.19.0
  GitCommit:       de40ad0
```

### 1.1.2 Step 2: Pull images

```
docker pull kiloview/kilolinkserverfree
```

```
root@kiloview-1:/home/kiloview# docker pull kiloview/kilolinkserverfree
Using default tag: latest
latest: Pulling from kiloview/kilolinkserverfree
11323ed2c653: Pull complete
dfe9cf35b9cb: Pull complete
62343e59dad9: Pull complete
a372c8f42a33: Pull complete
fd7b6b6f1fdd: Pull complete
05332eaaf212: Pull complete
Digest: sha256:2bf8e5825439ee2c72f520belac0b28b75a92e45cf1c58ee67441ce08b859fd2
Status: Downloaded newer image for kiloview/kilolinkserverfree:latest
docker.io/kiloview/kilolinkserverfree:latest
root@kiloview-1:/home/kiloview#
```

### 1.1.3 Step 3: Run container

Enter the command in the terminal window:

```
docker create --restart=always --name kilolinkserverfree -e KLNKPORT=50000 -v
/data:/data --privileged --user root --network host kiloview/kilolinkserverfree
```

```
root@kiloview-1:/home/kiloview# docker create --restart=always --name kilolinkserverfree -e KLNKPORT=60000 -v /data:/data --privileged --u
ser root --network host kiloview/kilolinkserverfree
093504f01528b99fe40ecb7d4c2cc2f74d52ac733449ce7d078eda77e82ad48c
root@kiloview-1:/home/kiloview#
```



#### Note

The host mode is used by default, so the host IP is used for deployment by default.

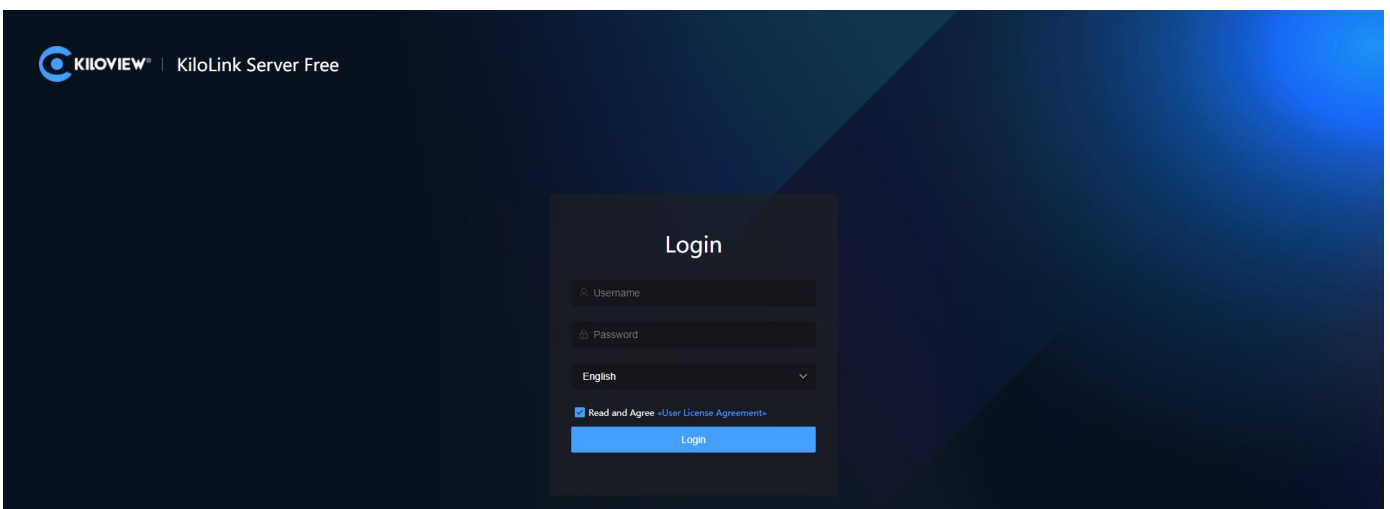
### 1.1.4 Step 4: Enable docker

```
docker start kilolinkserverfree
```

```
root@kiloview-1:/home/kiloview# docker start kilolinkserverfree
kilolinkserverfree
root@kiloview-1:/home/kiloview#
```

### 1.1.5 Step 5: Login authentication

Enter "IP address of server: 83" in the browser (Google is recommended), press enter to display the login interface of the KiloLink Server. The username is ***admin***, password is ***Kiloview001*** by default.



#### Note

- (1) The default port of the server login has been adjusted to 83.
  - (2) The device version needs to be updated to the latest version that supports KiloLink Server Free.
  - (3) The port number of the device is 50000.
-

## 2 General questions and solutions

### 2.1 If there is an error message during the deployment process.

**Solution:**

### 2.2 An error hint during the deployment

**Solution:**

Please check the version of your operation system, currently, it only supports Linux64-bit operating system (Ubuntu 18.04+ / Debian 9+)

1) Check Linux digits: getconf LONG\_BIT

```
Last login: Wed Oct 13 21:13:00 2021 from  
ubuntu@VM-4-5-ubuntu:~$ getconf LONG_BIT  
64  
ubuntu@VM-4-5-ubuntu:~$ █
```

2) Check the version number of the Linux: cat /proc/version

```
ubuntu@VM-4-5-ubuntu:~$ cat /proc/version  
Linux version 5.4.0-77-generic (buildd@lgw01-amd64-028) (gcc version 9.3.0 (Ubuntu 9.3.0-17ubuntu1~20.04))  
#86-Ubuntu SMP Thu Jun 17 02:35:03 UTC 2021  
ubuntu@VM-4-5-ubuntu:~$ █
```

## 2.3 No response for a long time for the installation of the docker

### Solution:

The process of the installation is relatively slow, please wait patiently. You can use the command “docker version” to check and confirm whether the installation is successful.

```
root@ndi:~/cp_data3# docker version
Client: Docker Engine - Community
 Version:      20.10.6
 API version:  1.41
 Go version:   go1.13.15
 Git commit:   370c289
 Built:        Fri Apr  9 22:47:17 2021
 OS/Arch:     linux/amd64
 Context:     default
 Experimental: true

Server: Docker Engine - Community
 Engine:
  Version:      20.10.6
  API version:  1.41 (minimum version 1.12)
  Go version:   go1.13.15
  Git commit:   8728dd2
  Built:        Fri Apr  9 22:45:28 2021
  OS/Arch:     linux/amd64
  Experimental: false
 containerd:
  Version:      1.4.4
  GitCommit:    05f951a3781f4f2c1911b05e61c160e9c30eaa8e
 runc:
  Version:      1.0.0-rc93
  GitCommit:    12644e614e25b05da6fd08a38ffa0cfe1903fdec
 docker-init:
  Version:      0.19.0
  GitCommit:    de40ad0
root@ndi:~/cp_data3#
```



## 2.4 Fail to pull the image

```

root@ndi:~# docker run -d --name status --restart=always -v /var/run/docker.sock:/var/run/docker.sock:ro --pid host --network host -e GLANCES_OPT="-w" nicolargo/glances
Unable to find image 'nicolargo/glances:latest' locally
latest: Pulling from nicolargo/glances
e1acd08e300c: Pulling fs layer
ecc7ff4d2622: Pulling fs layer
daed9fd74c1: Pulling fs layer
87bc5aa6fc42: Waiting
767124aca9af: Waiting
9c408e9c51a4: Waiting
c125888d0329: Waiting
342605490b7f: Waiting
docker: error pulling image configuration: Get https://production.cloudflare.docker.com/registry-v2/docker/registry-v2/blobs/sha256/b3/b39a65d9d3bba1f746dd5c3fde71c65ab5f7113448ee923d4459547969d65e222/data?verify=1636450334-W9x0k2Bd05e30MgJ4
08F3v2FByyQne4k3D: dial tcp 104.18.124.25:443: i/o timeout.
See 'docker run --help'.
root@ndi:~# docker run -d --name status --restart=always -v /var/run/docker.sock:/var/run/docker.sock:ro --pid host --network host -e GLANCES_OPT="-w" nicolargo/glances
Unable to find image 'nicolargo/glances:latest' locally
latest: Pulling from nicolargo/glances
docker: error parsing HTTP 408 response body: invalid character '<' looking for beginning of value: "<html><body><h1>408 Request Time-out</h1>\nYour browser didn't send a complete request in time.\n</body></html>\n\n".
See 'docker run --help'.
root@ndi:~#
  
```

### Solution:

To pull the image, you need to get the image files via the internet. If the network delay is high or you cannot connect to the internet, please check whether the network is smooth by pinging an external website.

```

# This is the network config written by 'subiquity'
network:
  ethernets:
    eno1:
      addresses:
        - 192.168.28.120/24
      gateway4: 192.168.28.254
      nameservers:
        addresses:
          - 8.8.8.8
    enp3s0f0:
      addresses:
        - 192.168.0.114/24
      gateway4: 192.168.0.1
    enp3s0f1:
      addresses:
        - 192.168.2.115/24
      gateway4: 192.168.2.1
  version: 2
  
```

## 2.5 “No such file or directory” error reported during command execution

```
Digest: sha256:174396f08a6900a9bf92afb07724b219648f2e7da9c34ca464778ee38e118f59
Status: Downloaded newer image for kiloview/klkserver:1220
docker.io/kiloview/klkserver:1220
root@OMNI-STREAM:/home/shaan# docker run -d --restart=always --name klnkserver -e PLATFORMIP=170.20.67.233 --privileged
--user root --network host kiloview/klkserver:1220
bash: docker run -d --restart=always --name klnkserver -e PLATFORMIP=170.20.67.233 --privileged --user root --network ho
st kiloview/klkserver:1220: No such file or directory
```

### Solution:

When you copy the command from the file, it may include the form character and cause the command to change. Please enter the corresponding command manually.

For more questions, please contact us via:

<https://www.kiloview.com/en/support>



Please scan with browser.

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