

# KiloLink server free 和 KiloLink bonding server 如何无损升级至 KiloLink Server Pro

## 前言

目前我司已发布最新的 KiloLink 服务器,名称是 KiloLink Server Pro。它是 KiloLink server free 和 KiloLink bonding server 的结合体,同时支持设备管理和多链路聚合的功能。

由于早期客户已经部署 KiloLink server free 和 KiloLink bonding server,同时已有多台设备链接至服务器,如果完全重新部署服务器,可能需要将设备重新注册并连接至 KiloLink Server Pro,增加客户的更新难度和操作时间。

以下教程可帮助客户保留 KiloLink server free 的数据丢失,无损将服务器升级至 KiloLink Server Pro。设备(如 N3\N4、E1\E2 等)可自动连接至 KiloLink Server Pro)将无损切换连接至 KiloLink Server Pro,不需要再重复操作。

## 服务器情况

1.KiloLink server free 的数据已实现和 KiloLink Server Pro 的兼容, KiloLink Server Pro 可直接调取 KiloLink server free 的数据实现数据互通,避免再次注册和连接,请参考以下步骤,备份数据或者直接调取历史数据进行安装。

2.KiloLink bonding server 的数据与 KiloLink Server Pro 无法互通,新的 KiloLink Server Pro 采用了全新的架构,数据信息无法同步读取。因此已安装 KiloLink bonding server 请按照直接参考本教程的第四步,直接安装 KiloLink Server Pro,并在安装过程中根据提示删除 KiloLink bonding server。

## 数据备份

**数据备份支持两种方法: (具体步骤参考步骤三)**

**方法 1: 备份数据文件**

**方法 2: 调取历史数据**

## 解决方案

### 步骤一：使用 SSH 登录服务器，并赋予管理员权限

```
Xshell for Xmanager Enterprise 5 (Build 0787)
Copyright (c) 2002-2015 NetSarang Computer, Inc. All rights reserved.

Type 'help' to learn how to use Xshell prompt.
[c:\~]$

Connecting to 43.130.44.152:22038...
Connection established.
To escape to local shell, press 'Ctrl+Alt+J'.

Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.4.0-77-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Mon 17 Jun 2024 06:47:55 PM CST

System load:  0.13          Processes:      146
Usage of /:   11.5% of 98.38GB  Users logged in:  0
Memory usage: 16%          IPv4 address for eth0: 10.0.4.5
Swap usage:   0%

=> There is 1 zombie process.

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https://ubuntu.com/engage/secure-kubernetes-at-the-edge
New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Jun 17 10:47:56 2024 from 113.240.217.63
ubuntu@VM-4-5-ubuntu:~$ sudo su
root@VM-4-5-ubuntu:~/home/ubuntu#
```

### 步骤二：查看 KiloLink server free 数据的存储路径。

#### 命令：docker inspect kilolinkserverfree

```
root@VM-0-9-ubuntu:~# docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS        NAMES
1504cd04671b  kiloview/klnksrver              "/start_server.sh"     4 hours ago   Up 4 hours   kilolinkserver
5e899b376792  kiloview/kilolinkserverfree     "/start_server.sh"     4 hours ago   Up 4 hours   kilolinkserverfree
165e8ecd95f6  kiloview/kis-image              "/usr/local/bin/kis/_  5 months ago   Up 7 hours   KisServer

root@VM-0-9-ubuntu:~#
root@VM-0-9-ubuntu:~# docker inspect kilolinkserverfree
[
  {
    "Id": "5e899b3767921c73e51ab5e60843360f76e32402f9f9b4cd31181cebbce473e6",
    "Created": "2024-06-17T03:39:04.667281087Z",
    "Path": "/start_server.sh",
    "Args": [],
    "State": {
      "Status": "running",
      "Running": true,
      "Paused": false,
      "Restarting": false,
      "OOMKilled": false,
      "Dead": false,
      "Pid": 31447,
      "ExitCode": 0,
      "Error": "",
      "StartedAt": "2024-06-17T03:39:11.517397831Z",
      "FinishedAt": "0001-01-01T00:00:00Z"
    },
    "Image": "sha256:aee26623dbc132153904ab49fb7ce5a32379c3b478adf007a2ba0804a0c7788e",
    "ResolveConfPath": "/var/lib/docker/containers/5e899b3767921c73e51ab5e60843360f76e32402f9f9b4cd31181cebbce473e6/resolve.conf",
    "HostnamePath": "/var/lib/docker/containers/5e899b3767921c73e51ab5e60843360f76e32402f9f9b4cd31181cebbce473e6/hostname",
    "HostsPath": "/var/lib/docker/containers/5e899b3767921c73e51ab5e60843360f76e32402f9f9b4cd31181cebbce473e6/hosts",
    "LogPath": "/var/lib/docker/containers/5e899b3767921c73e51ab5e60843360f76e32402f9f9b4cd31181cebbce473e6/5e899b3767921c73e51ab5e60843360f76e32402f9f9b4cd31181cebbce473e6-json.log",
    "Name": "/kilolinkserverfree",
```

```

    "CpuPercent": 0,
    "IOMaximumIOps": 0,
    "IOMaximumBandwidth": 0,
    "MaskedPaths": null,
    "ReadOnlyPaths": null
  },
  "GraphDriver": {
    "Data": {
      "LowerDir": "/var/lib/docker/overlay2/93b734fa0c4549af3f0fab2f178a9caa59a41efd7e7b407344866f589488e44a-init/diff:/var/lib/docker/overlay2/14438702f50c044e2a657b9998a5fc0af21a3b1694e6ead372e1ad4947e068c4/diff:/var/lib/docker/overlay2/9073b2bdf749232eed4963fb88ba4d85d9d1c30ab72f21f7c989964213ad3ba/diff:/var/lib/docker/overlay2/665d82274f691218a135f000cbe2ccce8a4f4e361c309693ab6abb78ec1017f/diff:/var/lib/docker/overlay2/3af19b0129194052bb86b0d686d69b47e7cd2b1d26ad6a91a5df7f851eb36e4/diff:/var/lib/docker/overlay2/ef7f0bf78183634dc011e4ec4c5c4c7e23c0ba67a1072156bd099d2d6949c72/diff:/var/lib/docker/overlay2/9d7c2baa95b67eb039adb222facefbdabafb47145664201bc11e3e14c2d14db1/diff",
      "MergedDir": "/var/lib/docker/overlay2/93b734fa0c4549af3f0fab2f178a9caa59a41efd7e7b407344866f589488e44a/merged",
      "UpperDir": "/var/lib/docker/overlay2/93b734fa0c4549af3f0fab2f178a9caa59a41efd7e7b407344866f589488e44a/diff",
      "WorkDir": "/var/lib/docker/overlay2/93b734fa0c4549af3f0fab2f178a9caa59a41efd7e7b407344866f589488e44a/work"
    },
    "Name": "overlay2"
  },
  "Mounts": [
    {
      "Type": "bind",
      "Source": "/data",
      "Destination": "/data",
      "Mode": "",
      "RW": true,
      "Propagation": "rprivate"
    }
  ],
  "Config": {
    "Hostname": "VM-0-9-ubuntu",
    "Domainname": "",
    "User": "root",
    "AttachStdin": false,
    "AttachStdout": true,
    "AttachStderr": true,
    "ExposedPorts": {
      "83/tcp": {}
    }
  }
}

```

备注: KiloLink server free 数据的默认存储路径为: /data

### 步骤三: 备份数据文件或者直接调取历史数据

#### 方法 1: 备份数据文件;

假如备份至/data\_back (该文件名可由客户自定义, 如更改后续请使用相同的文件路径)

1.使用命令备份数据文件: `cp /data /data_back -rf`

```

root@VM-0-9-ubuntu:~# cp /data /data_back -rf
root@VM-0-9-ubuntu:~# ls
get.py      kilo-owl      kis.tar.gz    kv_ndicore_Pro_beta_v102.tar      mediaserver_2.zip  owt-server    systemctl
kiloLink-server  kis28.tar.gz  klnkserver.sh  kv_ndicore_senior_no_detector_0110.tar  mediaserver.tar    poly_worker.lua
root@VM-0-9-ubuntu:~# cd /data_back/
root@VM-0-9-ubuntu:~/data_back# ls
configs  container.conf  firmware  log  openldap  redis  serverinfo.conf  streamer-server
root@VM-0-9-ubuntu:~/data_back#

```

2.将文件数据复制到安装目录, KiloLink Server Pro 默认安装路径为: /root/kilolink-server。此时只需要创建/root/kilolink-server, 并将文件拷贝至默认路径即可。

命令 a:`mkdir /root/kilolink-server`

命令 b:`cp -rf /data_back/* /root/ kilolink-server`

```

root@VM-0-9-ubuntu:~#
root@VM-0-9-ubuntu:~# ls
bin          data      departments.conf  home      lib      media  poly_master.log  run  srv  usr      vmlinuz.old
boot        data-l    dev               initrd.img  lib64    mnt     proc            sbin  sys  var
configs_backupforHongkong_20211013  data_back  etc               initrd.img.old  lost+found  opt     root            snap  vmLinux
root@VM-0-9-ubuntu:~#
root@VM-0-9-ubuntu:~# cd /data_back/
root@VM-0-9-ubuntu:~/data_back# ls
configs  firmware  openldap  redis  streamer-server
root@VM-0-9-ubuntu:~/data_back#
root@VM-0-9-ubuntu:~/data_back#
root@VM-0-9-ubuntu:~/data_back#
root@VM-0-9-ubuntu:~/data_back# mkdir /root/kilolink-server
root@VM-0-9-ubuntu:~/data_back#
root@VM-0-9-ubuntu:~/data_back# cp -rf /data/* /root/kilolink-server/
root@VM-0-9-ubuntu:~/data_back#
root@VM-0-9-ubuntu:~/data_back#
root@VM-0-9-ubuntu:~/data_back#
root@VM-0-9-ubuntu:~/data_back#

```

## 方法 2: 直接调取历史数据

将 KiloLink Server Pro 的安装路径修改至/data, KiloLink Server Pro 将自动调取/date 目录下的文件数据。

```
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-----
#1. Load/download docker images
-----
Pulling/Updating the software images from 'kiloview/klnk-pro:latest' ...
latest: Pulling from kiloview/klnk-pro
0d349fa6e1d: Pull complete
a31576bf378b: Pull complete
cb7cd1acd91c: Pull complete
b93f24981bb2: Pull complete
38863dea5df2: Pull complete
bef7007ec913: Pull complete
b46056c73a00: Pull complete
f7c9efeeb840: Pull complete
3fc15af2e2c3: Pull complete
as77346547e0: Pull complete
a3a55fab4b77: Pull complete
3786dadaeed3: Pull complete
ebcc99e26987: Pull complete
fb86e5c711d0: Pull complete
f8c94b3719cc: Pull complete
2bb62615145b: Pull complete
Digest: sha256:55fdf0a4f83ffa4458052021441adbc3f088ac8645f8509c3d6630657dea8391
Status: Downloaded newer image for kiloview/klnk-pro:latest
docker.io/kiloview/klnk-pro:latest

Congratulations! The image is ready. Now please follow the instructions to complete the installation step by step.
-----
#2. Where do you want to install KiloLink Server
-----
You can input your install path below, or just press ENTER to install into default location [/root/kilolink-server]
[/root/kilolink-server] >/data
```

## 步骤四: 安装 KiloLink Server Pro

### 1. 运行命令:

```
/bin/bash <( curl -fsSL https://github.com/kiloview/klnk-server/raw/main/install.sh )
```

```
root@VM-0-9-ubuntu:/home/ubuntu# /bin/bash <( curl -fsSL https://github.com/kiloview/klnk-server/raw/main/install.sh )
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```

## 2.根据提示删除已安装的 kilolink server free 和 kilolink bonding server 服务器。如下:

```
aa77346547e0: Pull complete
a3a55fab4b77: Pull complete
3786dadaeed3: Pull complete
ebcc98e26087: Pull complete
fb86e5c711d8: Pull complete
f8c94b3719cc: Pull complete
2bb62615145b: Pull complete
Digest: sha256:55fdf0a4f83ffa4458052021441adbc3f088ac8645f8509c3d6630657dea8391
Status: Downloaded newer image for kiloview/klnk-pro:latest
docker.io/kiloview/klnk-pro:latest

Congratulations! The image is ready. Now please follow the instructions to complete the installation step by step.
-----
#2. Where do you want to install KiloLink Server
-----
You can input your install path below, or just press ENTER to install into default location [/root/kilolink-server]

[/root/kilolink-server] >/data
[WARNING!] '/data' is an exists directory! If you install KiloLink Server there and an exists KiloLink Server is there, it will try to keep the old system configurations, But we cannot guarantee that this is completely correct. So before that, it is recommended that you backup the data there before performing the overwrite installation.
Are you sure to install into there? [y/N]y
-----
#3. Checking your old configurations
-----
Checking the old software versions (docker containers) ...

[WARNING] You are installing the KiloLink Server to an brand new location, so I can't exactly know what container the old version is.
I have discovered some containers that are suspected to be older versions, as follows:
(kilolinkserverfree klnksvr kilolinkserverfree)
So this requires you to confirm whether certain containers need to be DELETED. However, please note that deleting old containers may affect your existing business, so please choose carefully; If the old container is not deleted, it may cause the new software to not work properly. If you are still unsure, please press CTRL+C to exit and seek necessary assistance.

(Enter DELETING container names separated by spaces) >kilolinkserverfree klnksvr kilolinkserverfree
Again, are you sure to delete these containers? [y/N]
```

**备注:** 该图片展示的备份方法是步骤执行的方法 2, 直接调取/data 的数据

## 3.安装完成。

确认端口以及 IP 地址后, 提示 ENJOY IT, 表示安装完成。

```
-----
#5. Finally checking ...
-----
#6. Creating docker container
-----
708529ee56136db5f67be2bc81366d3e3a2fa0e1edc8b9d88d68a0e48102c33d
-----
Install KiloLink Server SUCCESSFULLY!
-----
Please remember these access entrypoints:
* Access http://43.128.30.176:80 for web management.
* When you configure device to connects to the KiloLink Server, its IP is '43.128.30.176' and access port is 50000.
* Your docker container is named 'KLNKSVR-pro', you can use 'docker' commands to maintain it.

In addition, you also need to pay attention to checking your FIREWARE configuration, and at least ensure that the following ports are configured on the firewall to allow external access:
* UDP ports: 50000 50001
* TCP ports: 80

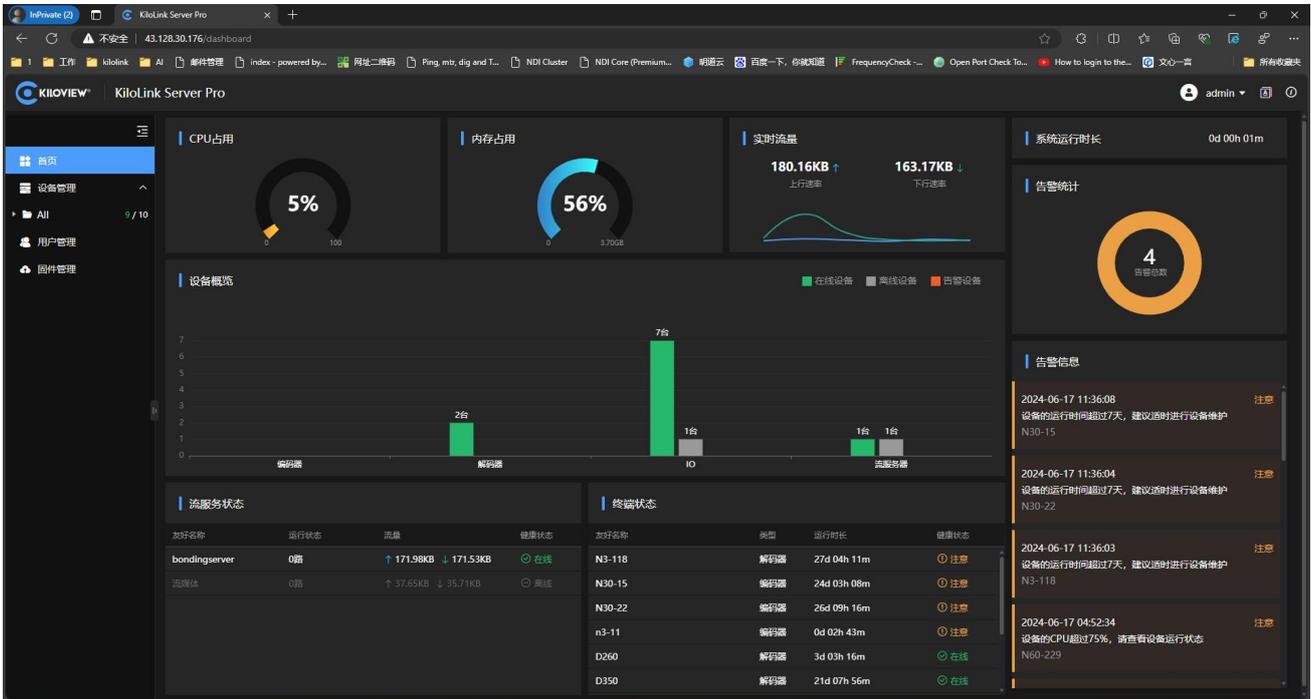
If you want to enable NDI|HX features:
(the following var N represents how many NDI|HX streams you wish to allow)
* UDP ports: 5353
* TCP ports: [5961, 5962, ...(keep at least N ports open)]
* TCP/UDP ports: 5960 [7960, 7961, ...(keep at least 4*N ports open)]

For other protocols such as RTSP,SRT,..., you also need to open the service port specified in the corresponding protocol.

ENJOY IT!

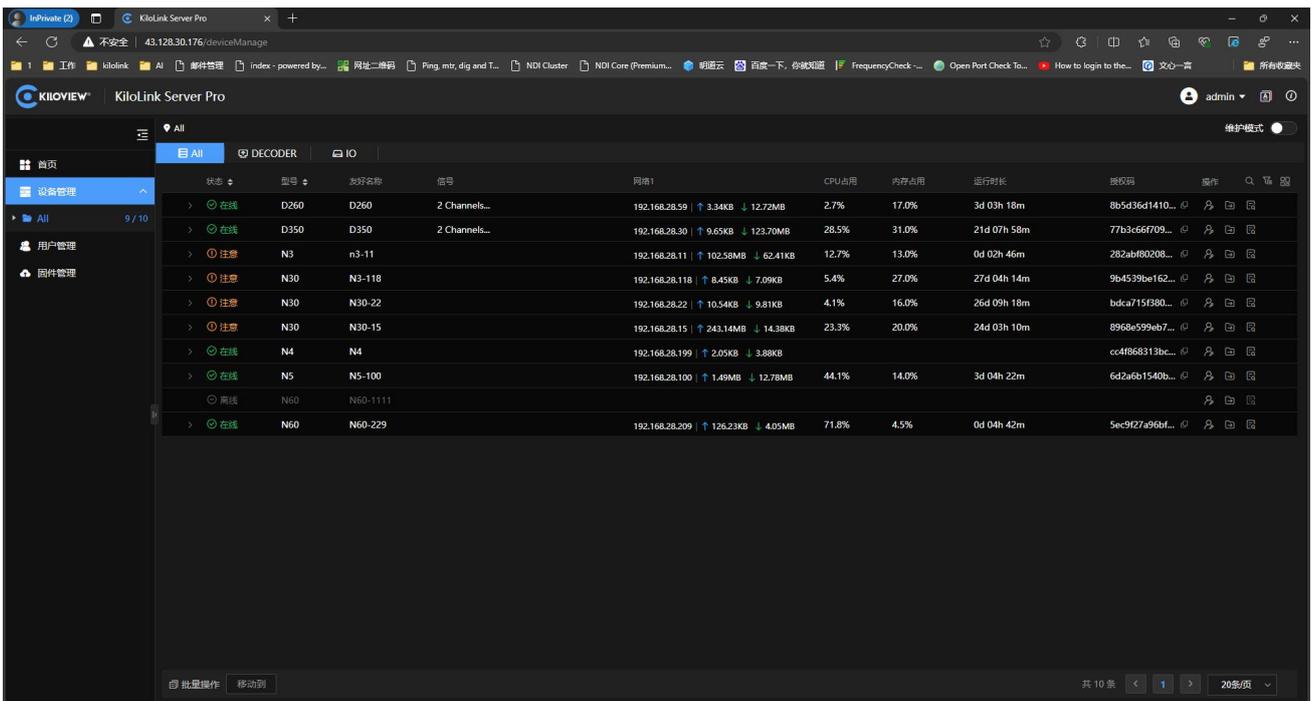
root@VM-0-9-ubuntu:/home/ubuntu#
```

### 步骤五：访问 web



### 步骤六：检查设备数据保留，设备是否在线

检查早期连接至 kilolink server free 的设备是否已经在线，如下图所示为早期连接 kilolink server free 的设备，现按照步骤调取数据以后，设备自动连接至 KiloLink Server Pro。



## 步骤七：更新固件

设备的固件将同步进行更新，更新以后设备连接 KiloLink Server Pro 更加稳定，同时支持一键重启、一键升级等功能。

更多固件下载请访问官网：<https://www.kiloview.com/en/support/download/>

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