Deployment and Notice

Kiloview NDI Core Server Deployment Guide

(V1.0 version)
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To deploy the NDI Core, you need to load the NDI Core mirror locally. Please contact the sales staff at Kiloview or send an email to info@kiloview.com to obtain the mirror.

1 Kiloview NDI Core server deployment

1.1 Server environment preparation

1.1.1 Hardware environment

Processor: High frequency CPU, such as E2288G, 12 Generation Core i5 12600K.

Hard disk: 64G or higher.

Memory: 4GB RAM or above 16G.

Network card: one or more 10G or higher speed network card.

1.1.2 Software environment

Operation system: Linux64-bit operating system (Ubuntu 18.04, 20.04).

1.1.3 Network environment

Internet application tools and image files.

LAN Bandwidth: 10 Gigabit networks.
1.2 Login to server

You can use remote terminal software to login to the server, Xshell or PuTTy is recommended.

Xshell download website: https://www.netsarang.com/zh/xshell-download/

PuTTy download website: https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html

1) After installing Xshell, enter IP address of the server in the new session and use SSH protocol to communicate. The default port is 22, click “Ok” after input completed.
2) Enter the user name and password in the pop-up dialog box. Ordinary users need sudo to obtain management right or log in as root user. The deployment process in the following is completed by root user.

You can enter “sudo su-” in command window to switch to the root user.

1.3 Deployment guide


```
# Executing docker install script. commit: 63e4f997f903f8809c7b6c6f5e5053a2c33be
+ sh -c apt-get update && q && NULL
+ sh -c DEBIAN_FRONTEND=noninteractive apt-get install -y -qq apt-transport-https ca-certificates curl > /dev/null
+ sh -c curl -sS 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 $(lsb_release -cs) stable" > /etc/apt/sources.list.d/docker.list
+ sh -c apt-get update && q && NULL
+ sh -c DEBIAN_FRONTEND=noninteractive apt-get install -y -qq --no-install-recommends docker-ce-cli docker-ce containerd.io
+ version 19.10.18
  + "[...]"
+ return 0
+ sh -c DEBIAN_FRONTEND=noninteractive apt-get install -y -qq docker-ce-robotless-extras && NULL
+ sh -c 'docker version'
Client: Docker Engine - Community
  Version: 20.10.8
  API version: 1.41
  Go version: golang.10.6
  Git commit: 396777d
  Built: Fri Jan 30 19:54:27 2021
  OS/Arch: linux/amd64
  Context: default
  Experimental: true
Server: Docker Engine - Community
  Version: 20.10.8
  API version: 1.41 (minimum version 1.12)
  Go version: golang.10.6
  Git commit: 752494b
  Built: Fri Jan 30 19:52:33 2021
  OS/Arch: linux/amd64
  Experimental: false
  containerd:
  Version: 1.4.9
  Git Commit: e25212ff3a3bb97073442421bb9f68afac095f006a8
  runc:
  Version: 1.0.1
  Git Commit: v1.0.1-0-g146b63
  docker-init:
  Version: 0.10.0
  Git Commit: de804d9
```

Step 2: Install NDI discovery tool. Enter “apt install avahi-daemon” in the terminal window.
Enter Y behind “Do you want to continue?[Y/n]”. Waiting for the installation completed.

Step 3: Install netdata to obtain CPU, network datasheet, etc. Enter

```
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```

in the terminal window.

Step 4: Upload NDI Core image to the server

(1) Upload NDI Core image from personal computer to server.

Note

NDI Core image need to be uploaded to Linux system from NDI local personal computer, which is required to transfer files by a file transfer tool. Deployers can use xftp files transferring tool that comes with the Xhell or other file transfer tool, such as SecureCRT.
Step 1: Click file transfer icon in the Xhell.

Step 2: Drag NDI Core image file in your computer from left window to the right window, to finish files transferring from local PC to server. (Please contact Kiloview sales or mail to info@kiloview.com with NDI Core image documents).

(2) Load NDI Core image in the server

docker load -i trial_ndimatrix.tar
If the location of the NDI image file is not in the current directory, you need to specify the
folder where NDI image file is located.

For example: If the directory where NDI image file is located as /home/kiloview, then the
NDI image file loading command is “docker load -i /home/kiloview/trial_ndimatrix.tar”

Step 4: Run container

docker run -d -v /home/data:/data/configs -v /var/run/avahi-daemon:/var/run/avahi-daemon -
v /var/run/dbus:/var/run/dbus --restart=always --name kv_ndimatrix --network host --
privileged=true kiloview/trial_ndimatrix:latest
Note:

The last image name in the above command (like trial ndimatrix in the below picture) must be the same as the name behind the loaded image at the top of the command line.

1.4 Login authentications

Enter “IP address of server:81” in the browser (Google is recommended), press enter to display the login interface of the NDI Core. The default user name and password are admin.
2  General Questions and Solutions

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

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

```
$ getconf LONG_BIT
64
```

(2) Check the version number of the linux: cat /proc/version

```
$ cat /proc/version
Linux version 5.4.0-77-generic (buildd@quay-1564-028) (gcc version 9.3.0 (Ubuntu 9.3.0-3ubuntu1-04.94)) #1 SMP Thu Jun 17 02:36:03 UTC 2021
```

2.2  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 command “docker version” to check and confirm whether the installation is successful.
2.3 Fail to pull image

To pull the image, you need to get the image file by the internet. If the network delay is high or you cannot connect to the internet, kindly check whether the network is smooth by ping an external website.
2.4 NDI Core could not be logged in normally

Solution:

Check the server whether it could start normally. “win+R” to open command prompt window -> “cmd”

-> “ping server ip”.

(1) If it is able to ping the server IP, please check via below command.

<1> Check the status of running docker: systemctl status docker

If docker could not start normally, start docker: systemctl start docker

<2> Check the status of running container: docker ps -a

If container runs abnormally, execute below command to delete container and image, then redeploy as deployment guide.

Stop all containers: docker stop $(docker ps -aq)

Delete all containers: docker rm $(docker ps -aq)

Delete all images: docker rmi $(docker images -q)
(2) If it is unable to ping the server IP, please check as below instruction.

<1> Check whether maintenance PC and server run normally or not and whether LAN port light flashes normally or not.

<2> The server IP maybe already changed, directly connect server “win+R” -> “cmd” -> “ifconfig” , and apply changed IP address: 81 to visit.

2.5 How to set static IP address for NDI Core

Solution:

The ways of setting static IP address may be different as different operation system. Configuration ways in below applies to ubuntu 20.04 version.

sudo vi /etc/netplan/00-installer-config.yaml

Note:

(1) The Internet configuration file name for different minor versions may be different, as “00-installer-config.yaml ” files name is different, enter netplan file via cd /etc/netplan, search Internet configuration file, enter corresponding Internet configuration files by vi command.

(2) Press “i” to access the file editing mode.

(3) After inputting, enter “ESC” , and then enter” :wq “, save the file and exit.
(4) If you make a mistake input and don’t want to save the file, press “ESC” and input “:q!” , exit without saving files.

2.6 It shows "no such file or directory" error during command execution.

```
root@1:~# docker run -d -v /home/data:/data/configs -v /var/run/avahi-daemon:/var/run/avahi-daemon -v /var/run/dbus:/var/run/dbus --restart=always --name kv_n dimatrix --network host --privileged=true kiloview/trial_ndimatrix:latest
bash: docker run -d -v /home/data:/data/configs -v /var/run/avahi-daemon:/var/run/avahi-daemon -v /var/run/dbus:/var/run/dbus --restart=always --name kv_n dimatrix: No such file or directory
root@1:~# ls
```

Solution:

When you copy the command from the file, it may include the form character and cause the command to change. When you encounter this, please execute the command manually.
For more questions, please contact us via:
https://www.kiloview.com/en/support

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