ALIDA

Home   About   Coding   Software   Fundamental

Engineering   Curated

Software

x11vnc remote access server installation and usage summary

alida   2022. 1. 4. 06:56

1 Introduction

x11vnc is a VNC server program that allows you to connect to a Linux environment remotely. It is mainly used as a VNC server program because it can be easily installed and used in Ubuntu 16.04 LTS environments. This post explains the installation method and various options.

2 Installation

x11vnc can be easily installed by opening a terminal and running the command below.

```
sudo apt-get install x11vnc
```

3 Registering daemon services

If you register x11vnc as a daemon service, the program will automatically run in the backg round when the PC reboots. So you don't have to start the server program every time you b oot. Create the x11vnc.service file in the /lib/systemd/system folder as follows.

```
sudo vim /lib/systemd/system/x11vnc.service

# write codes below.
[Unit]
Description="x11vnc"
Requires=display-manager.service
After=display-manager.service

[Service]
ExecStart=/usr/bin/x11vnc -xkb -norc -forever -shared -display :0 -auth guess -rfbauth /etc/x11vnc.pass  -o /var/log/x11vnc.log -rfbport 5902
ExecStop=/usr/bin/killall x11vnc
Restart=on-failure
Restart-sec=2

[Install]
WantedBy=multi-user.target
```

After saving the above file, add it to the service list through daemon reload.

```
$ sudo systemctl daemon-reload
```

Start the service. Also use the enable command to have it run automatically at boot time.

```
$ sudo systemctl start x11vnc.service
$ sudo systemctl enable x11vnc.service
```

4 Set a password

x11vnc can be connected without a password by default. If you want to set a password whe
n connecting for security, set it with the command below.

sudo x11vnc -storepasswd

 # Out[]:
Enter VNC passwd: [enter new password]
Verify password: [enter the new password again]
Write password to /home/ubuntu/.vnc/passwd? [y]/n y
Password written to : /home/ubuntu/.vnc/passwd

When the above command completes, a .vnc/passwd file is created. Copy the saved file to t
he /etc/x11vnc.pass file.

$ sudo cp ~/.vnc/passwd /etc/x11vnc.pass

Restart the x11vnc server for the password to take effect.

$ sudo service x11vnc restart

5 options

[Service]
ExecStart=/usr/bin/x11vnc -xkb -norc -forever -shared -display :0 -auth guess -rfbauth /etc/x11vnc.pass -o /var/log/x11v
nc.log -rfbport 5902 -allow 123.23 *# 123.23.x.x 의 IP 대역만 접속할 수 있다.*

- forever: Keeps the server running even after disconnecting once

- shared: Allow multiple clients to connect (if not, only 1 person can connect)

- rfbport: Use a specific port number as the VNC port (port 5902 is used in this article)

- rfbauth: Set the password file path for VNC connection via password (connect the file created via
  the -storepasswd command)

- o: Path to the file that stores the VNC connection log

- allow: Set up a whitelist to allow access only to permitted IPs.