

## Controlling Jetson Xavier NX by VNC desk

### 1. Input command to install vino

**sudo apt update**

```
nx@nx-desktop:~$ sudo apt update
Get:1 file:/var/cuda-repo-10-2-local-10.2.89 InRelease
Ign:1 file:/var/cuda-repo-10-2-local-10.2.89 InRelease
Get:2 file:/var/visionworks-repo InRelease
Ign:2 file:/var/visionworks-repo InRelease
Get:3 file:/var/visionworks-sfm-repo InRelease
Ign:3 file:/var/visionworks-sfm-repo InRelease
Get:4 file:/var/visionworks-tracking-repo InRelease
Ign:4 file:/var/visionworks-tracking-repo InRelease
Get:5 file:/var/cuda-repo-10-2-local-10.2.89 Release [574 B]
Get:6 file:/var/visionworks-repo Release [2,001 B]
Get:5 file:/var/cuda-repo-10-2-local-10.2.89 Release [574 B]
Get:6 file:/var/visionworks-repo Release [2,001 B]
Get:7 file:/var/visionworks-sfm-repo Release [2,005 B]
Get:7 file:/var/visionworks-sfm-repo Release [2,005 B]
Get:8 file:/var/visionworks-tracking-repo Release [2,010 B]
Get:8 file:/var/visionworks-tracking-repo Release [2,010 B]
```

**sudo apt install vino**

```
nx@nx-desktop:~$ sudo apt install vino
Reading package lists... Done
Building dependency tree
Reading state information... Done
```

### 2. Setting Enable VNC service

#### 2.1 Input following command

**sudo ln -s ../vino-server.service**

**/usr/lib/systemd/user/graphical-session.target.wants**

```
nx@nx-desktop:~$ sudo ln -s ../vino-server.service /usr/lib/systemd/user/graphical-session.target.wants
```

#### 2.2 Input following command to configure VNC server

**gsettings set org.gnome.Vino prompt-enabled false**

**gsettings set org.gnome.Vino require-encryption false**

```
nx@nx-desktop:~$ gsettings set org.gnome.Vino prompt-enabled false
nx@nx-desktop:~$ gsettings set org.gnome.Vino require-encryption false
```

#### 2.3 We need to edit org.gnome, restore lost "enabled" parameters,

#### 2.4 Input following command

**sudo vi /usr/share/glib-2.0/schemas/org.gnome.Vino.gschema.xml**

```
nx@nx-desktop:~$ sudo vi /usr/share/glib-2.0/schemas/org.gnome.Vino.gschema.xml
```

#### 2.5 Add the following content to the end of the file. As shown below.

```
<key name='enabled' type='b'>
  <summary>Enable remote access to the desktop</summary>
  <description>
    If true, allows remote access to the desktop via the RFB
    protocol. Users on remote machines may then connect to the
    desktop using a VNC viewer.
```

```
</description>
<default>>false</default>
</key>

</description>
<default>>false</default>
</key>

Web
<key name='notify-on-connect' type='b'>
  <summary>Notify on connect</summary>
  <description>
    If true, show a notification when a user connects to the system.
  </description>
  <default>true</default>
</key>

<key name='enabled' type='b'>
  <summary>Enable remote access to the desktop</summary>
  <description>
    If true, allows remote access to the desktop via the RFB
    protocol. Users on remote machines may then connect to the
    desktop using a VNC viewer.
  </description>
  <default>>false</default>
</key>
</schema>
</schemalist>
<.0/schemas/org.gnome.Vino.gschema.xml" 168L, 6328C 168,1 Bot
```

2.6 Save and exit.

2.7 Setting to Gnome compilation mode

`sudo glib-compile-schemas /usr/share/glib-2.0/schemas`

2.8 Inputting the following command to add the program when the session starts:

Vino-server

`/usr/lib/vino/vino-server`

```
nx@nx-desktop:~$ /usr/lib/vino/vino-server
```

This is a manual start, if you need to start manually every time will be more troublesome.

The following step is about how to set the form of self-starting after booting.

3. Setting VNC login password ('thepassword' is your own password)

`gsettings set org.gnome.Vino authentication-methods "['vnc']"`

`gsettings set org.gnome.Vino vnc-password $(echo -n 'thepassword' | base64)`

4. Inputting the following command to restart device and verify that vnc is set successfully.

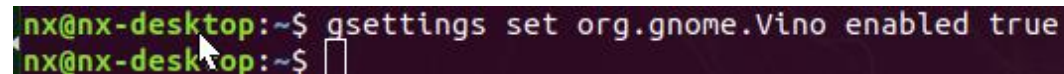
`sudo reboot`

5. Set VNC Server to start automatically

The VNC server is only available after you log in to Jetson locally. If you want VNC to be automatically started up, you need to use the system settings application to enable automatic login.

5.1 Inputting the following command

`gsettings set org.gnome.Vino enabled true`



```
nx@nx-desktop:~$ gsettings set org.gnome.Vino enabled true
nx@nx-desktop:~$
```

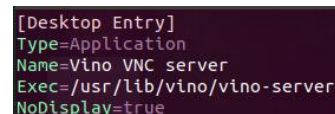
5.2 Inputting the following command

`mkdir -p ~/.config/autostart`

`vi ~/.config/autostart/vino-server.desktop`

5.3 Add the following content to this file. As shown below.

```
[Desktop Entry]
Type=Application
Name=Vino VNC server
Exec=/usr/lib/vino/vino-server
NoDisplay=true
```



```
[Desktop Entry]
Type=Application
Name=Vino VNC server
Exec=/usr/lib/vino/vino-server
NoDisplay=true
```

5.4 Save and exit.

**! Note: This script will not start until you enter the desktop.**

## 6. Connect VNC Server

Using VNC viewer software for VNC connection.

6.1 We need to view the IP address. My IP address is 192.168.1.234.

6.2 Input the IP address, click “OK”,

6.3 Double-click the corresponding VNC user to enter the password.

6.4 You can enter the VNC interface.

