

# JETSON NANO is controlled via VNC remote desktop

Hint: Configured image, username: jetson original password: yahboom

**If you are using a configured image, VNC is already configured, you can jump directly to step 6 and log in to VNC based on the current IP address**

## 1. Install vino

```
sudo apt update
```

```
jetson@jetson-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: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: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]
Hit:15 http://ports.ubuntu.com/ubuntu-ports bionic InRelease
Hit:13 https://repo.download.nvidia.cn/jetson/common r32.4 InRelease
Hit:14 https://repo.download.nvidia.cn/jetson/t210 r32.4 InRelease
Get:16 http://ports.ubuntu.com/ubuntu-ports bionic-updates InRelease
```

```
sudo apt install vino
```

```
jetson@jetson-desktop:~$ sudo apt install vino
Reading package lists... Done
Building dependency tree
Reading state information... Done
vino is already the newest version (3.22.0-3ubuntu1.1).
vino set to manually installed.
The following packages were automatically installed and are no longer required:
  apt-clone archdetect-deb bogl-bterm busybox-static cryptsetup-bin
  kwayland-data kwin-common kwin-data kwin-x11 libdebian-installer4
  libkf5completion5 libkf5declarative-data libkf5declarative5 libkf5
  libkf5jobwidgets-data libkf5jobwidgets5 libkf5kcmutils-data libkf5
  libkf5package-data libkf5package5 libkf5plasma5 libkf5quickaddons
```

## 2. Set Enable VNC service (you can manually open the vnc server at this time)

```
sudo ln -s ../vino-server.service
/usr/lib/systemd/user/graphical-session.target.wants
```

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

# Configure VNC server:

```
gsettings set org.gnome.Vino prompt-enabled false
gsettings set org.gnome.Vino require-encryption false
```

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

Edit org.gnome, restore the lost "enabled" parameter, enter the following command to enter the file, and add the key content below to the end of the file. Save and exit.

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

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

```
<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>
```

```
<key name='disable-xdamage' type='b'>
  <summary>Whether we should disable the XDamage extension of X.org</summary>
  <description>
    If true, do not use the XDamage extension of X.org. This extension does
    not work properly on some video drivers when using 3D effects.
    Disabling it will make Vino work in these environments, with slower
    rendering as a side effect.
  </description>
  <default>false</default>
</key>
```

```
<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>
```

Set to Gnome compilation mode

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

Now the screen sharing panel works in the unit control center... but this is not enough to get vino running! So you need to add the program: VINO-server when the session starts, using the following command line:

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

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

This is a manual start. If you need to start it manually every time, it will be troublesome. The following will set the form of automatic startup at boot.

3. Set the VNC login password (change 'thepassword' to your own password)

```
gsettings set org.gnome.Vino authentication-methods "['vnc']"  
gsettings set org.gnome.Vino vnc-password $(echo -n 'thepassword' |base64)
```

```
jetson@jetson-desktop:~$ gsettings set org.gnome.Vino vnc-password $(echo -n 'yahboom' |base64)
```

4. Restart the machine to verify whether the VNC setting is successful

```
sudo reboot
```

5. Set the VNC Server to start automatically at boot

The VNC server is only available after you log in to Jetson locally. If you want VNC to be automatically available, use the System Settings application to enable automatic login.

```
gsettings set org.gnome.Vino enabled true  
mkdir -p ~/.config/autostart  
vi ~/.config/autostart/vino-server.desktop
```

Add the following content to the file, save and exit.

```
[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  
~  
~  
~  
~  
~  
~
```

If the system is set to require a user password to enter the desktop, the above script will not start until you enter the desktop. It is recommended to set the system so that users can automatically log in to the desktop.

## 6. Connect to VNC Server

Use vnc

viewer software to connect to VNC. First, you need to query the IP address. I found 192.168.1.195 here. Enter the IP address and click OK. Double-click the corresponding VNC user and enter the password. Finally, enter the VNC interface



