#### **NAME**

Xvnc – an X server providing VNC connectivity

# **SYNOPSIS**

#### Xvnc

[:display] [-geometry widthxheight] [-depth depth] [-pixelformat rgbNNN|bgrNNN] [-udpinput-port port] [-rfbport port] [-rfbwait time] [-nocursor] [-rfbauth passwd-file] [-httpd dir] [-httpport port] [-deferupdate time] [-economictranslate] [-lazytight] [-desktop name] [-alwaysshared] [-nevershared] [-dontdisconnect] [-viewonly] [-localhost] [-interface ipaddr] [-i

# **DESCRIPTION**

**Xvnc** is a VNC (Virtual Network Computing) server. It acts like an X server with a virtual display. The display can be seen by a VNC viewer application, which may be running on a different machine: see **vncviewer(1)**. Xvnc is built inside the source code tree of XFree86, and shares many options with it.

Normally, you don't need to start Xvnc manually; use the **vncserver(1)** wrapper script instead. This script sets reasonable defaults for Xvnc session, checks many error conditions etc.

Please read the **BUGS** section if you plan to use VNC on an untrusted network.

# **OPTIONS**

Xvnc supports many standard X server options and a number of VNC-specific options. To see what standard X server options are supported, please look at the  $\mathbf{Xvnc}$  -help output and read the  $\mathbf{Xserver}(1)$  manual page for details on those options.

The VNC-specific options are as follows:

# **-geometry** width**x**height

Set desktop width and height.

### -depth depth

Set the colour depth of the visual to provide, in bits per pixel. Must be a value between 8 and 32.

# -pixelformat rgbNNN|bgrNNN

Set colour format for pixels representation. The viewer can do the conversion to any other pixel format, but it is faster if the depth and pixel format of the server is the same as the equivalent values on the viewer display.

# -udpinputport port

UDP port for keyboard/pointer data.

# -rfbport port

TCP port for RFB protocol. The RFB protocol is used for communication between VNC server and clients.

## -rfbwait time

Maximum time, in milliseconds, to wait for an RFB client (VNC viewer).

#### -nocursor

Don't put up a pointer cursor on the desktop.

# **-rfbauth** *passwd-file*

Use authentication on RFB protocol from the specified file. The *passwd-file* can be created using the **vncpasswd(1)** utility.

# -httpd dir

Serve files via HTTP protocol from the specified directory. Normally, Java viewer classes are stored in such directory.

# -httpport port

TCP port on which Xvnc should listen for incoming HTTP connections (to allow access to the desktop from any Java-capable browser).

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# -deferupdate time

Time in milliseconds, to defer screen updates (default 40). Deferring updates helps to coalesce many small desktop changes into a few larger updates thus saving network bandwidth.

#### -economictranslate

Use less memory-hungry pixel format translation.

# -lazytight

Disable the "gradient" filter in Tight encoding (TightVNC-specific). The "gradient" filter often helps to improve data compression ratios, but may slow down the server performance. Please note that this filter is never used when a client enables JPEG compression in the Tight encoding.

#### -desktop name

Set VNC desktop name ("x11" by default).

#### -alwaysshared

Always treat new clients as shared, never disconnect existing client on a new client connection.

#### -nevershared

Never treat new clients as shared, do not allow several simultaneous client connections.

#### -dontdisconnect

Don't disconnect existing clients when a new non-shared connection comes in, refuse new connection instead.

# -viewonly

Don't accept keboard and pointer events from clients. All clients will be able to see the desktop but won't be able to control it.

#### -localhost

Only allow loopback connections from localhost. This option is useful in conjunction with SSH tunneling.

# -interface ipaddr

Listen for client connections only on the network interface with given *ipaddr*.

-inetd Xvnc is launched by inetd. This option causes Xvnc to redirect network input/output to stdin/stdout.

## -compatiblekbd

Set META and ALT keys to the same X modifier flag, as in the original version of Xvnc by AT&T labs (TightVNC-specific).

# BUGS

There are many security problems in current Xvnc implementation. It's recommended to restrict network access to Xvnc servers from untrusted network addresses. Probably, the best way to secure Xvnc server is to allow only loopback connections from the server machine (the *-localhost* option) and to use SSH tunneling for remote access to the Xvnc server. For details on SSH tunneling, see <URL:http://www.cl.cam.ac.uk/Research/DTG/attarchive/vnc/sshvnc.html>

# **SEE ALSO**

vncserver(1), vncviewer(1), vncpasswd(1), vncconnect(1), sshd(1)

## **AUTHORS**

Original VNC was developed in AT&T Laboratories Cambridge. TightVNC additions were implemented by Constantin Kaplinsky. Many other people participated in development, testing and support.

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