



Linux Ubuntu 22.4.5 Manual Pages on command 'vncserver.1'

\$ man vncserver.1

tigervncserver(1) Virtual Network Computing tigervncserver(1)

NAME

tigervncserver - start or stop a TigerVNC server

SYNOPSIS

```
tigervncserver [[user@]host][:display#] [-dry-run] [-verbose] [-useold]
[-cleanstale] [-localhost [yes|no]] [-name desktop-name] [-geometry widthxheight]
[-depth depth] [-pixelformat format] [-xdisplaydefaults] [-wmDecoration widthx?
height] [-fp font-path] [-fg] [-autokill] [-noxstartup] [-xstartup script] [-rfb?
port port#] [-httpPort port#] [-baseHttpPort port#] [-SecurityTypes sec-types]
[-PlainUsers user-list] [-PAMService service-name] [-PasswordFile|-passwd|-rfbauth
passwd-file] [-X509Key cert-key-file] [-X509Cert cert-file] [Xtigervnc-options...]
[-- [Xtigervnc-session options...]]

tigervncserver -kill [[user@]host][:display#:*] [-dry-run] [-verbose] [-clean]

tigervncserver -list [[user@]host][:display#:*] [-cleanstale]
```

DESCRIPTION

tigervncserver is used to start a TigerVNC (Virtual Network Computing) desktop. tigervncserver is a Perl wrapper script which simplifies the process of starting an instance of the TigerVNC server Xtigervnc. It runs Xtigervnc with appropriate options and starts some X applications to be displayed in the TigerVNC desktop. tigervncserver can be run with no options at all. In this case it will choose the first available display number (usually :1), start Xtigervnc as that display, and run a couple of basic applications to get you started. You can also specify the

display number, in which case it will use that number if it is available and exit if not, e.g.:

```
tigervncserver :13
```

Moreover, a username and a hostname can be given to start the `tigervncserver` via SSH on the given machine under the provided user account, e.g.:

```
tigervncserver franz@kopernikus:13
```

Note that this requires the same version of the `tigervncserver` wrapper script on the remote machine as is on the local machine. System defaults for this wrapper script are found in `/etc/vnc.conf`. These defaults can be overwritten by the user defaults given in `$HOME/.vnc/vnc.conf`. Finally, commandline options have the highest priority overwriting the settings in both `/etc/vnc.conf` and `$HOME/.vnc/vnc.conf`. Editing the file `$HOME/.vnc/Xvnc-session` allows you to change the applications run at startup (but note that this will not affect an existing desktop).

OPTIONS

You can get a list of options by giving `-h` as an option to `tigervncserver`. In addition to the options listed below, any unrecognized options will be passed to `Xtigervnc` ? see the `Xtigervnc(1)` man page, or "`Xtigervnc -help`" for details.

`-dry-run`

Do not actually do anything, but only perform the checks if the requested action would be possible. For example, there will be checks performed for the availability of the requested display number `display#`.

`-verbose`

This will turn on some debug output.

`-useold`

Only start a new TigerVNC server if a `Xtigervnc` server for your account is not already running on the requested display number `display#`. If no display number is requested, a new TigerVNC server will only be started if there is no TigerVNC server running under your user account. In any case, information about the newly started TigerVNC server or the reused TigerVNC server session will be printed.

`-cleanstale`

Sometimes the `Xtigervnc` server crashes and does not clean up correctly. In

this case, there will be a stale pidfile in \$HOME/.vnc as well as stale X11 locks and sockets in /tmp. When the -cleanstale option is given, then tigervncserver first tries to cleanup all these stale files before trying to determine which X display number is available for use.

-localhost [yes|no]

Should the TigerVNC server only listen on localhost for incoming TigerVNC connections. Useful if you use SSH and want to stop non-SSH connections from any other hosts. If the option is not specified, then the behavior is as follows: We will only listen on localhost if the sec-types list does not contain any TLS* or X509* security types or if the list contains at least one *None security type. Otherwise, we will listen on all network addresses of the machine.

-name desktop-name

Each desktop has a name which may be displayed by the viewer. It defaults to "host:display# (username)" but you can change it with this option. It is passed in to the Xvnc-session script via the \$VNCDESKTOP environment variable, allowing you to run a different set of applications according to the name of the desktop.

-geometry widthxheight

Specify the size of the desktop to be created. Default is 1024x768.

-depth depth

Specify the pixel depth in bits of the desktop to be created. Default is 24, other possible values are 8, 15 and 16 - anything else is likely to cause strange behavior by applications.

-pixelformat format

Specify pixel format for server to use (BGRnnn or RGBnnn). The default for depth 8 is BGR233 (meaning the most significant two bits represent blue, the next three green, and the least significant three represent red), the default for depth 16 is RGB565 and for depth 24 is RGB888.

-cc 3 As an alternative to the default TrueColor visual, this allows you to run an Xtigervnc server with a PseudoColor visual (i.e. one which uses a color map or palette), which can be useful for running some old X applications which only work on such a display. Values other than 3 (PseudoColor) and 4 (TrueColor)

Color) for the `-cc` option may result in strange behavior, and `PseudoColor` desktops must be 8 bits deep.

`-xdisplaydefaults`

The `-xdisplaydefaults` option can be used to derive values for the above three options, i.e., `-geometry` to `-pixelformat`, from the running X session.

The derived dimensions are adjusted by the `-wmDecoration` option.

`-wmDecoration widthxheight`

sets the adjustment of the dimensions derived by `-xdisplaydefaults` to accommodate the window decoration used by the X11 window manager. This is used to fully display the VNC desktop even if the VNC viewer is not in full screen mode.

`-fp font-path`

If the `tigervncserver` script detects that a font path is configured in `/etc/X11/xorg.conf`, it will attempt to use this font path for `Xtigervnc`.

Otherwise, if no font path is configured, the `tigervncserver` script will attempt to start `Xtigervnc` and allow `Xtigervnc` to use its own preferred method of font handling (which may be a hard-coded font path or, on more recent systems, a font catalog.) The `-fp` argument allows you to override the above logic and specify a font path for `Xtigervnc` to use.

`-fg` Runs the `Xvnc-session` as a foreground process. This has two effects: (1) The `Xvnc-session` can be aborted with `CTRL-C`, and (2) the `TigerVNC` server will be killed as soon as the user logs out of the window manager in the `Xvnc-session`. This may be necessary when launching `TigerVNC` from within certain grid computing environments.

`-autokill`

Automatically kills the `TigerVNC` server whenever the `Xvnc-session` script exits. In most cases, this has the effect of terminating `Xtigervnc` when the user logs out of the window manager.

`-noxstartup`

Do not run the `$HOME/.vnc/Xvnc-session` script after launching `Xtigervnc`.

This option allows you to manually start a window manager in your `TigerVNC` session.

`-xstartup script`

Run a custom startup script, instead of `$HOME/.vnc/Xvnc-session`, after launching `Xtigervnc`. This is useful to run full-screen applications.

`-rfbport port#`

Specifies the TCP port on which `Xtigervnc` listens for connections from viewers (the protocol used in VNC is called RFB - "remote framebuffer"). The default is 5900 plus the display number `display#`.

`-httpPort port#`

Specifies the port on which the mini-HTTP server runs. On default, the server is not started.

`-baseHttpPort port#`

Specifies the base for the port number on which the mini-HTTP server runs. The real `-httpPort` option will be derived from this base plus the display number.

`-SecurityTypes sec-types`

Specify which security scheme to use for incoming connections. Valid values are a comma separated list of None, VncAuth, Plain, TLSNone, TLSVnc, TLSPlain, X509None, X509Vnc and X509Plain. Default is VncAuth if `-localhost` is not given and VncAuth, TLSVnc if `-localhost no` is given.

`-PlainUsers user-list`

A comma separated list of user names that are allowed to authenticate via any of the *Plain security types (Plain, TLSPlain, etc.). Specify * to allow any user to authenticate using this security type. Default is to only allow the user that has started the `tigervncserver` wrapper script.

`-PAMService service-name`

PAM service name to use when authenticating users using any of the *Plain security types. Default is `vnc` if `/etc/pam.d/vnc` is present and `tigervnc` otherwise. The `tigervnc-common` package ships the `/etc/pam.d/tigervnc` PAM service configuration for use by `tigervncserver`.

`-PasswordFile passwd-file | -passwd passwd-file | -rfbauth passwd-file`

Specifies the file containing the password used to authenticate viewers for the security types VncAuth, TLSVnc, and X509Vnc. The `passwd-file` is accessed each time a connection comes in, so it can be changed on the fly via `tigervncpasswd(1)`. The default password file is `$HOME/.vnc/passwd`.

`-X509Cert cert-path` and `-X509Key key-path`

Path to a X509 certificate in PEM format to be used for all X509 based security types (X509None, X509Vnc, etc.) as well as its private key also in PEM format. If the certificate and its key are not provided via the `-X509Cert` and `-X509Key` commandline options or their corresponding configuration parameters in `/etc/vnc.conf` or `$HOME/.vnc/vnc.conf`, then the `tigervncserver` wrapper script `auto` generates a self signed certificate. The auto generated self signed certificates are stored in the files `$HOME/.vnc/host-SrvCert.pem` and `$HOME/.vnc/host-SrvKey.pem`.

`-kill [[user@]host][:display#|:~*]`

This kills a TigerVNC desktop previously started with `tigervncserver`. It does this by killing the `Xtigervnc` process, whose process ID is stored in the file `$HOME/.vnc/host:display#.pid`. This can be useful so you can write "`tigervncserver -kill $DISPLAY`", e.g., at the end of your `Xvnc-session` file after a particular application exits. If `:~*` is given, then `tigervncserver` tries to kill all `Xtigervnc` processes with pidfiles in `$HOME/.vnc` on the local machine. If no display number is given, then `tigervncserver` tries to kill the `Xtigervnc` processes of the user on the local machine if only one such process is running and has a pidfile in `$HOME/.vnc`. If a host is specified, then `tigervncserver` will use SSH to kill a `Xtigervnc` process on the remote machine.

`-clean` If given with `-kill`, then the logfile `$HOME/.vnc/host:display#.log` is also removed.

`-list [[user@]host][:display#|:~*]`

This lists all running TigerVNC desktops previously started with `tigervncserver`. If a host is specified, then `tigervncserver` will use SSH to list `Xtigervnc` desktops on the remote machine. Stale entries are marked with (stale) in the output.

FILES

Several TigerVNC-related files are found in the directory `$HOME/.vnc`:

`$HOME/.vnc/vnc.conf`

The user configuration file for `tigervncserver`.

`$HOME/.vnc/Xvnc-session`

A shell script specifying X applications to be run when a TigerVNC desktop is started. If it doesn't exist and no system default is provided in `/etc/vnc.conf`, `tigervncserver` will create a new one which runs a couple of basic applications. To be compatible with older versions of this wrapper script, we will also use the file `$HOME/.vnc/xstartup` if it is present.

`$HOME/.vnc/passwd`

The TigerVNC password file for the security types `VncAuth`, `TLSVnc`, and `X509Vnc`.

`$HOME/.vnc/host:display#.log`

The log file for `Xtigervnc` and applications started in `Xvnc-session`.

`$HOME/.vnc/host:display#.pid`

Identifies the `Xtigervnc` process ID, used by the `-kill` option.

`$HOME/.vnc/host-SrvCert.pem` and `$HOME/.vnc/host-SrvKey.pem`

The security types `X509None`, `X509Vnc`, and `X509Plain` need a certificate and the corresponding private key. If these are not provided via the `-X509Cert` and `-X509Key` commandline options or their corresponding configuration parameters in `/etc/vnc.conf` or `$HOME/.vnc/vnc.conf`, then the `tigervncserver` wrapper script auto generates a self signed certificate for the `-X509Cert` and `-X509Key` options of the `Xtigervnc` server. The auto generated self signed certificates are stored in the above given two files. If the user wants their own certificate instead of the on demand auto generated one they can either specify it via the `-X509Cert` and `-X509Key` options to the `tigervncserver` wrapper script or replace the auto generated files `$HOME/.vnc/host-SrvCert.pem` and `$HOME/.vnc/host-SrvKey.pem`. These files will not be overwritten once generated by the `tigervncserver` wrapper script.

Furthermore, there is a global configuration file for `tigervncserver`:

`/etc/vnc.conf`

The global configuration file for `tigervncserver`.

SEE ALSO

`vnc.conf(5x)`, `xtigervncviewer(1)`, `tigervncpasswd(1)`, `tigervncconfig(1)`,

`Xtigervnc(1)`

<http://www.tigervnc.org>

Tristan Richardson, RealVNC Ltd., Joachim Falk and others. VNC was originally developed by the RealVNC team while at Olivetti Research Ltd / AT&T Laboratories Cambridge. TightVNC additions were implemented by Constantin Kaplinsky. Many other people have since participated in development, testing and support. This manual is part of the TigerVNC Debian packaging project.

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