# TightVNC for Windows: Installation and Getting Started

TightVNC Version 2.6

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# **Introduction to TightVNC**

TightVNC is a remote desktop software application. It lets you connect to another computer and display its live remote desktop or control the remote computer with your mouse and keyboard, just like you do it sitting in front of that computer. Since it is designed to work out of a box, TightVNC can be very handy not only for system administrators and support service, but for all users who want to benefit from TightVNC.

Like other VNC systems, it consists of two parts: the **Server**, which shares the screen of the machine it's running on, and the **Viewer**, which shows the remote screen received from the server. So to get started, you just need to run a server on the machine you want to access remotely, and connect to it with a viewer. TightVNC distribution for Windows includes both the server and the viewer parts available under GNU GPL license v.2 and <u>commercial license [HTML]</u>.

#### **Installation**

Starting from the version 2.5, TightVNC comes in the form of MSI-packages. They can be easily installed using standard Windows Installer. Just select the package matching a type of your operating system (32-bit or 64-bit), run it and follow the installation wizard. The TightVNC Setup Wizard lets you choose the components to install (TightVNC Server and/or TightVNC Viewer) and adjust some installation settings.

The default settings suit most users needs. However, if you want to change them, a few check boxes on "Select additional tasks" step may require an explanation.

- ✓ Register TightVNC Server as a system service (recommended)

  By default, TightVNC Server is installed as a Windows service and starts immediately after installation. At the end of the installation you will be asked about passwords for TightVNC Server as a service, in order to protect it from unauthorized access. If you uncheck this check box, TightVNC Server will be available only as a normal Windows application, but you can always register it as service later. See the "TightVNC Server" chapter for more information.
- ✓ Configure system to allow services simulate Ctrl-Alt-Del When TightVNC server runs as a Windows service, it can simulate "Ctrl-Alt-Del" key combination. If you want to disable this combination to prevent access to task manager and system reboot, uncheck this check box.

After you install TightVNC, we also recommend you to download and set up <u>DFMirage mirror display driver [EXE]</u>. It allows TightVNC to gain the best performance under Windows. With DFMirage, TightVNC Server can detect screen updates and grab pixel data in a very efficient way, which decreases CPU consumption.

Also some administrators may wish to install TightVNC using silent installation mode. A silent installation runs on its own without any intervention so that administrators are freed from the task of monitoring the installation and providing input to dialog boxes. This method also lets you to preconfigure your TightVNC server settings. Silent installation is described in detail in the documentation on TightVNC MSI installer [PDF].

In case you are curious, the table below shows where TightVNC keeps its files. Note that TightVNC

does not install anything into the system directory.

TightVNC files	Location	
Default destination	Program Files\TightVNC	
"Start" menu entry	Start->Programs->TightVNC	
Registry keys	HKEY_LOCAL_MACHINE\Software\TightVNC	
	HKEY_CURRENT_USER\Software\TightVNC	

Table 1: TightVNC data

# **Getting Started**

### TightVNC Server

TightVNC Server is designed to run in two modes:

- application mode (personal server for a current user);
- service mode (system-wide server running in the background).

In application mode, the server, just like any other desktop software, can be running only during the current user session and quits on the logout. Each user has his/her personal settings and passwords.

To make a machine accessible even while there is no user logged in, and to make the server start automatically on reboot, the TightVNC Server should be running as a system service. Service mode is configured independently of application mode; the settings and passwords of TightVNC Server as a service are global for all users.

The distinctions between these modes are illustrated in the table below.

	TightVNC Server (application mode)	TightVNC Server (service mode)
"Start" menu entry	Programs\TightVNC\TightVNC Server (Application Mode)	Programs\TightVNC\TightVNC Server (Service Mode)
Tray icon label	TightVNC Server	TightVNC Service
Starts automatically	No	Yes
Server activity	Runs only for current user (quits when the user logs out)	Runs in the background as long as Windows is running
Server settings	Personal settings for each user	Global settings common for all Windows users
Allows "Ctrl+Alt+Delete" combination	No	Yes

Table 2: The differences between application and service modes of TightVNC Server

# Running TightVNC Server in Application Mode

To start TightVNC Server in the application mode, choose:

Start->Programs->TightVNC->TightVNC Server (Application Mode)->Run TightVNC Server.

If you want to quit the TightVNC server, right-click the TightVNC tray icon and choose "Shutdown TightVNC Server".

### **Running TightVNC Server in Service Mode**

To run TightVNC Server as a system service, follow these instructions:

- 1. If you unchecked the recommended option "Register TightVNC Server as a system service" during installation, first, you need to register TightVNC Server as a service. Click:
  - Start->Programs->TightVNC->TightVNC Server (Service Mode)->Register TightVNC Service.
- 2. To start TightVNC Server as a service, click:

Start->Programs->TightVNC->TightVNC Server (Service Mode)->Start TightVNC Service or type in the command line:

net start tvnserver

3. If you want the server to show its tray icon, click:

Start->Programs->TightVNC->TightVNC Server (Service Mode)->TightVNC Server – Control Interface

To stop TightVNC Server in service mode, use one of two ways:

- click Start->Programs->TightVNC->TightVNC Server (Service Mode)->Stop TightVNC Service
- type in the command line:

net stop tvnserver

### **Using TightVNC Server**

Despite the differences mentioned above, TightVNC server modes are configured and used in the same way.

On successful startup, TightVNC will add a small icon to the tray in the system task bar (notification area). Moving the mouse over this icon shows the server mode and the IP address of the machine (which can be entered in the remote viewer to access this server).



Mouse over the icon shows TightVNC Server mode (as a service) and the IP address



Mouse over the icon shows TightVNC Server mode (as an application) and the IP address

When you launch TightVNC Server for the first time, it will ask the passwords for control interface and VNC authentications. For security reasons, the server will not accept incoming connections, until you specify required passwords or intentionally cancel VNC authentication. The last option is not safe, and TightVNC Server will notify you about it:



Hint is warning that no authorization is being used

To protect the machine from unauthorized access, you should set passwords for VNC authentication. Follow these instructions:

- 1. Click the TightVNC Server/Service tray icon.
- 2. In the "Server" tab, check "Require VNC authentication".
- 3. Set passwords for full-control access (Primary password) and view-only access (View-only password).

Also you may wish to set a control interface password. In Configuration window, click the "Administration" tab, check "Protect control operations with an administrative password" and set desirable password.

The passwords for TightVNC Server in a service mode are set similarly using its own control interface (click the TightVNC Service tray icon). If you want to set passwords for TightVNC Service while it is not running, use Offline Configuration (*Start->Programs->TightVNC->TightVNC Service Mode*)-> *TightVNC Service — Offline Configuration*).

#### **TightVNC Server Status**

The TightVNC Server/Service tray icon indicates you about server status. It has white background if the server is ready but there is no viewer connected, and inverted colors when at least one viewer has accessed the desktop.



Icon shows that server is running and ready to accept new client connections



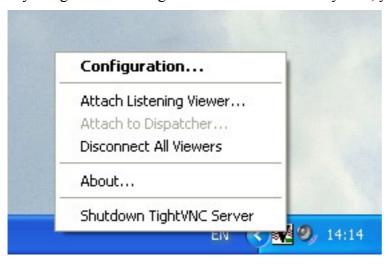
Icon is shown in inverted colors when viewers are connected

Red border around TightVNC Server tray icon means that the server does not accept client connections. It may happen in case you forbid incoming connection in the TightVNC control interface or for some other reasons, which will be shown in the tray icon hint.



Red border indicates that new client connections are disabled

If you right-click the TightVNC Server/Service tray icon, you will see TightVNC Server menu:



TightVNC Server menu

Lets take a look at the TightVNC Server menu:

- Configuration... Displays TightVNC configuration window (Control Interface), which allows the user to change various parameters of the TightVNC Server. This window is also displayed on click the tray icon.
- Attach Listening Viewer... Connects from the TightVNC server to a viewer started in the "listening" mode. The name of the target viewer machine and port are entered in the dialog. This so called "reverse connection" is treated as shared.
- Attach to Dispatcher... This is a future extension that will allow to connect a server and a viewer from different networks using a mediator, or Dispatcher.
- **Disconnect All Viewers** Disconnects all currently connected viewers from the server.
- **About...** Shows information about the software.
- Shutdown TightVNC Server Quits.

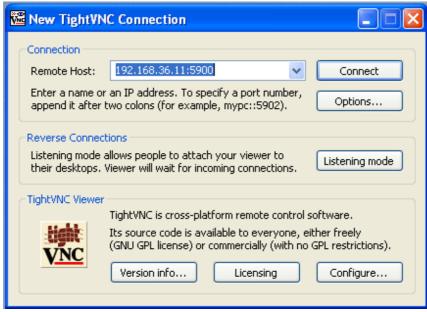
Now, when you run TightVNC Server and set all required passwords, the server is accessible for incoming connections.

# Running TightVNC Viewer

To view and control a remote desktop where a TightVNC Server is running, you need to run the TightVNC Viewer. To run the viewer, choose:

Start->Programs->TightVNC->TightVNC Viewer.

You will see a window allowing to choose a server to connect to.



"New Connection" dialog window

To connect to remote server, enter its host name or IP address in the field "Remote Host" and click "Connect". Port number is optional; you need to specify it only if it differs from the default value (5900). On successful connection, you will be prompted for the server password, if there is one. After you provide a correct password, you will see the remote desktop.

When you're not able to connect to a remote server (e.g. when the server is "hidden" in local network behind a router), you may try a reverse connection. In this case, you connect from a server to a client, not vice versa. To set the viewer to listening more, click "Listening mode" button. After you do so, the viewer's icon will appear in the system tray area, and the viewer will be able to accept incoming connections from a TightVNC server (see the <u>description of "Attach Listening Viewer..." TightVNC Server menu item</u>).

# Using Web Browser as a Viewer (TightVNC Java Viewer)

TightVNC Server contains a small web server as well. This server listens for incoming HTTP connections on 5800 port (by default). If you connect to the server with a web browser, it will send you back a Java applet – TightVNC Java Viewer. The applet allows you to connect to this remote server and control its desktop directly from your web browser.

In order to connect to the remote machine "myhost", you should point your web browser at: http://myhost:5800/. The applet will prompt you for a TightVNC authentication password, and then display the remote desktop. Obviously, the browser must support Java applets. Also you should enable "Serve Java Viewer to Web clients" option in the TightVNC Server configuration.

# **Uninstalling TightVNC**

TightVNC can be uninstalled using the Add/Remove Programs utility under the Control Panel.

#### References

For additional information on installation and configuration see the main documentation page and the TightVNC FAQ.

If you want to compile the source yourself, please, read instructions in the BUILDING.txt file included in the source archive.