

VNC Neighborhood

Version 1.1.9

VNC Neighborhood Network Scanner User Guide

VNC Neighborhood

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April 2006

Table of Contents

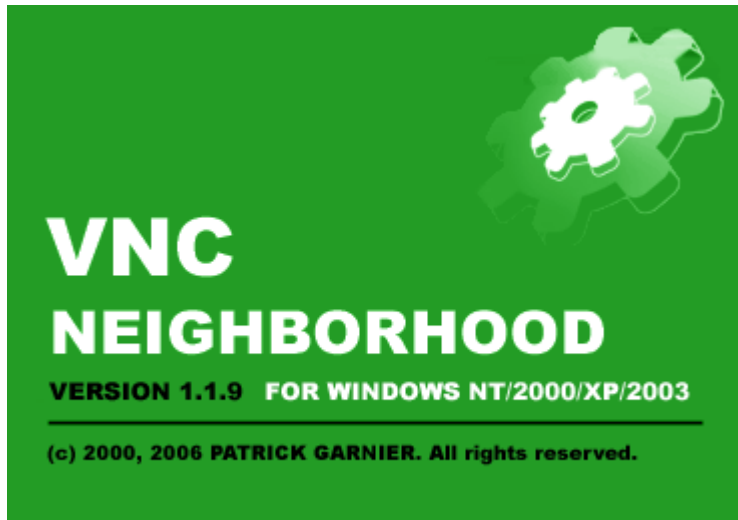
Part I Welcome to VNC Neighborhood	3
Part II Installing VNC Neighborhood	4
Part III Overview of VNC Neighborhood	11
Part IV VNC Neighborhood Interface	12
Part V Properties Tab	15
Part VI Scanner Tab	16
Part VII Viewer Tab	17
Part VIII Ports Tab	19
Part IX Filters Tab	20
Part X Tools Tab	21
Part XI Messages Tab	24
Part XII Updates Tab	25
Part XIII Command Line Parameters	26
Part XIV Built-in Variables	27
Part XV Registry & Ini File Settings	28
Part XVI EventID 4226: TCP/IP has ...	31
Part XVII Technical Support Resources	32
Part XVIII VNC Neighborhood Future	33
Part XIX History	33
Part XX License & Disclaimer	34
Part XXI Credits & Copyrights	35

1 Welcome to VNC Neighborhood

VNC Neighborhood version 1.1.9

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[Contacting Me](#)



VNC Neighborhood is a **free** VNC server TCP scanner. It's using **Microsoft Windows Networking** features to locate computers over the network through Microsoft Windows domains (and/or workgroups) and a multi-ports TCP scanner to check if VNC is installed and running.

VNC (Virtual Network Computing) is a complete remote control solution. It was a freeware from **AT&T Research Labs** and is now supported by RealVNC Ltd. The client and server are available for many computing system. It's also possible to use a web browser as client to connect a VNC Server. Before connecting a server you must know it's **name** or it's **IP address** and the **TCP port** on which the server is listening on. This software has been designed for system and network administrators which want to use VNC more easily.

Key features:

Support for all 32-bit Windows versions in use today -- Windows 95, 98, 2000, XP*, Me, NT 4.0 and even [PE Builder](#) v3.xx.

Very fast multi-threads, multi-ports TCP [scan engine](#).

Execute external [scripts and programs](#).

[Built-in variables](#) for customizing calls to external scripts and programs or messages.

Custom computer name [filters](#).

Send [messages](#) to clients.

Automatically found VNC servers on Windows Networks domains and workgroups.

Manage the command line parameters of every call to [VNC Viewer Free Edition](#) program.

VNC Neighborhood is based on VNC Manager threaded TCP search engine that has been around for over 5 years, and currently has many thousands of users worldwide.

Is it really free, even for commercial use?

Yes, it is completely free.

Why is it free?

When I had this application written, I realized there were plenty of other people with exactly the same predicament I had. I also think that if VNC was free then my VNC products should also be free...

**Windows XP SP2 users should read [this](#).*

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2 Installing VNC Neighborhood

You first need to download CAB file (for use with PE Builder only), MSI package or setup file from SysWorkSoft.net website.

- [Upgrading from previous versions](#)
- [Minimum requirements](#)
- [Installing VNC Neighborhood under PE Builder](#)
- [Installing VNC Neighborhood MSI Package](#)
- [Installing VNC Neighborhood classical Setup](#)
- [Uninstalling VNC Neighborhood](#)

Upgrading from previous versions:

If any version of VNC Neighborhood is already installed, **uninstall** it before installing the new release.

Minimum requirements:

Support for all 32-bit Windows versions in use today -- Windows 95, 98, 2000, 2003, XP*, Me, NT 4.0 and even [PE Builder](#) version 3.xx. I would recommend to use VNC Neighborhood with Windows 2000/ 2003 / XP or PE Builder v3.xx.

TCP/IP stack.

Client for Microsoft Networks.

Recommended 5MB hard disk space.

Recommended 128MB memory.

Windows:

All Windows platforms: [IE 5.5+](#)

Windows 95: [DCOM for Windows 95](#)

Windows NT: [Service Pack 6a](#)

Windows 2000: [Service Pack 4](#)

Windows XP: [Service Pack 2](#)

**Windows XP SP2 users should read [this](#).*

Windows Installer requirements:

Win95/98/Me: [Windows Installer 2.0+](#)

WinNT: [Windows Installer 1.1+](#)

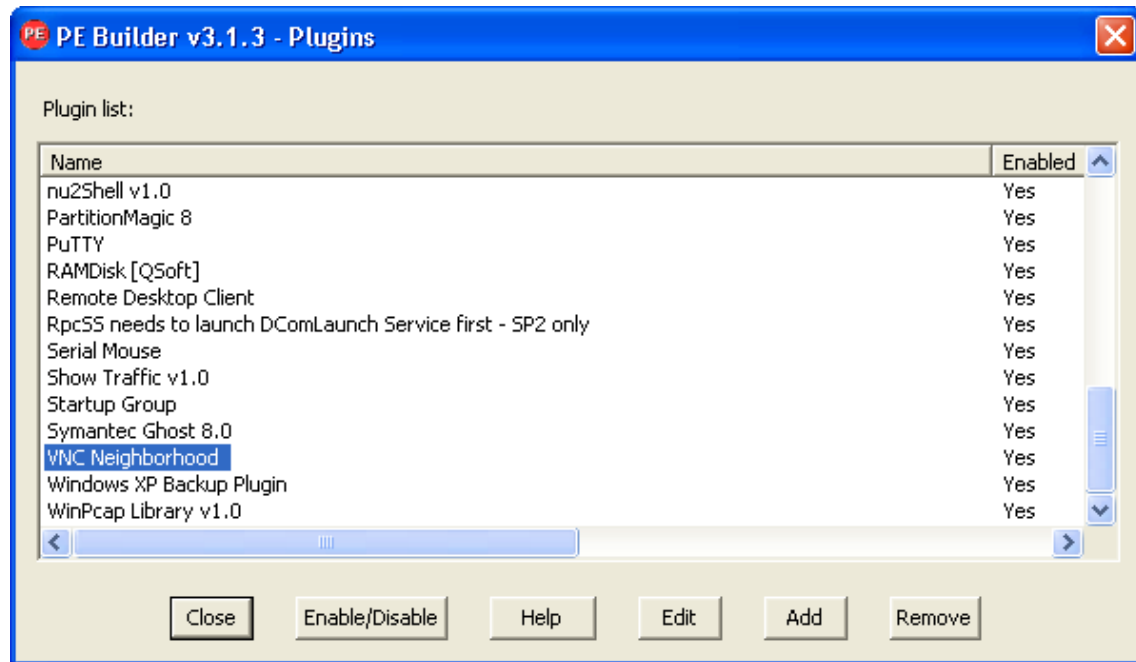
Win2K/XP: no additional requirements

Installing VNC Neighborhood under PE Builder:

VNC Neighborhood has been successfully tested with PE Builder 3.1.10a. Unpack the CAB file `vncneighborhood<xxx>.cab` (where `<xxx>` is a series of numbers representing the version and build numbers) to your [PE Builder](#) setup folder, in the `plugin\vncneighborhood` folder.

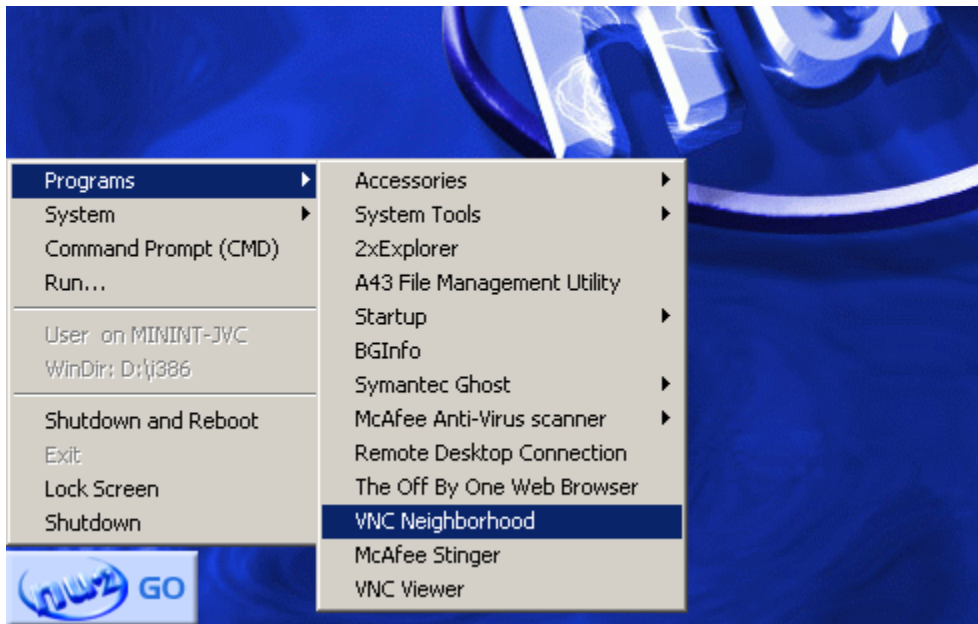
Then run **PE Builder** program to generate the ISO file.

VNC Neighborhood will appear in the PE Builder program plugin list:



Just enable the plugin and the package will be included into the ISO file.

VNC Neighborhood will be available from the **NU2 Menu | Programs | VNC Neighborhood 1.1.9**:



For more information about setting up PE Builder, please check [Bart's web site](#).

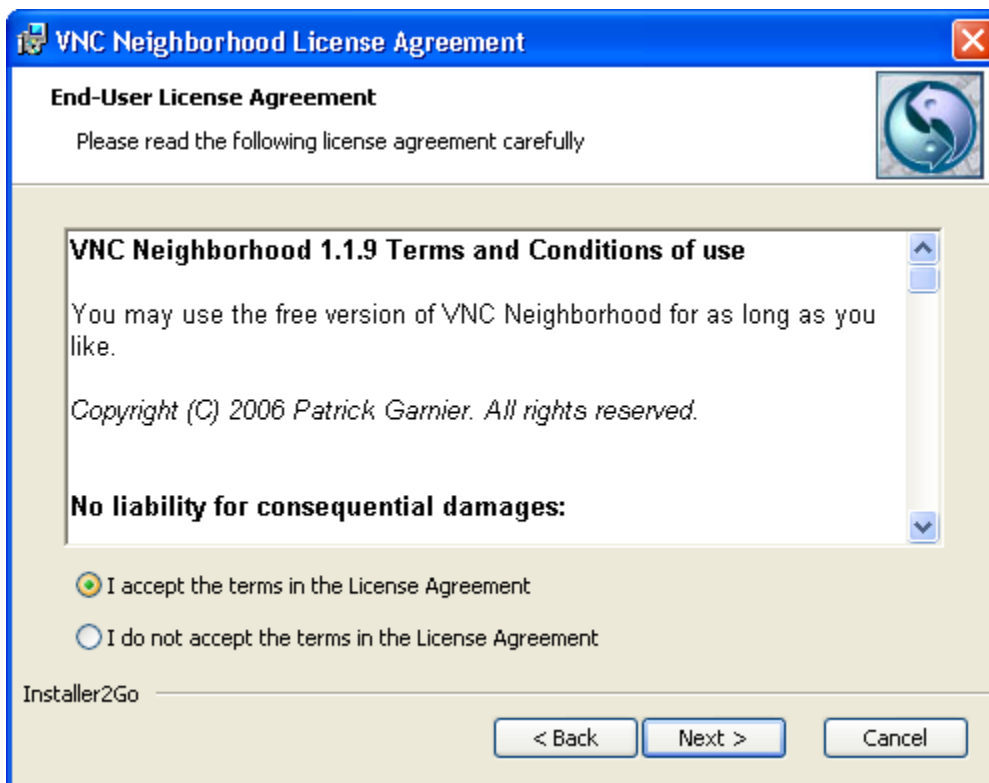
Installing VNC Neighborhood MSI Package:

Run `vnclineighborhood<xxx>.msi`, where `<xxx>` is a series of numbers representing the version and build numbers. A msi package can simply be launched by right-clicking on the file and select **Install** item.

The Welcome dialog box appears.

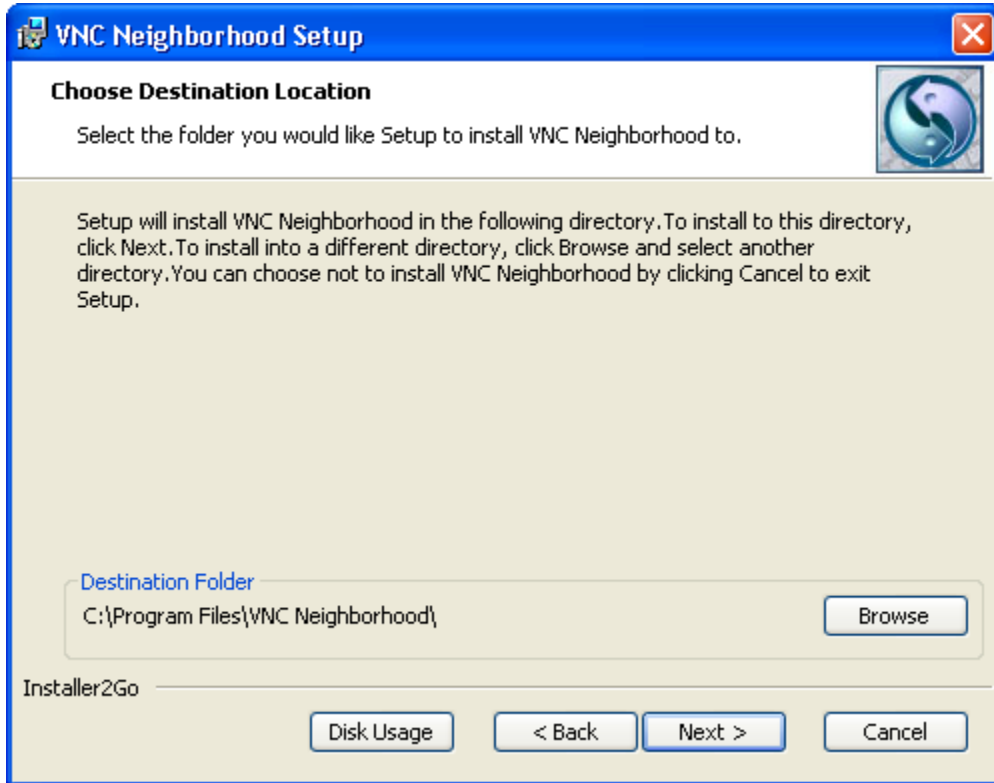


Click **Next**.



Acknowledge the end user license agreement (EULA). Select the **I accept the terms in the**

Licence Agreement option, then click **Next**.



Choose the directory in which to install VNC Neighborhood. To install it in a directory other than the default, click **browse** and select your directory of choice. If the directory does not exist, the installer creates it for you. Click **Next**.

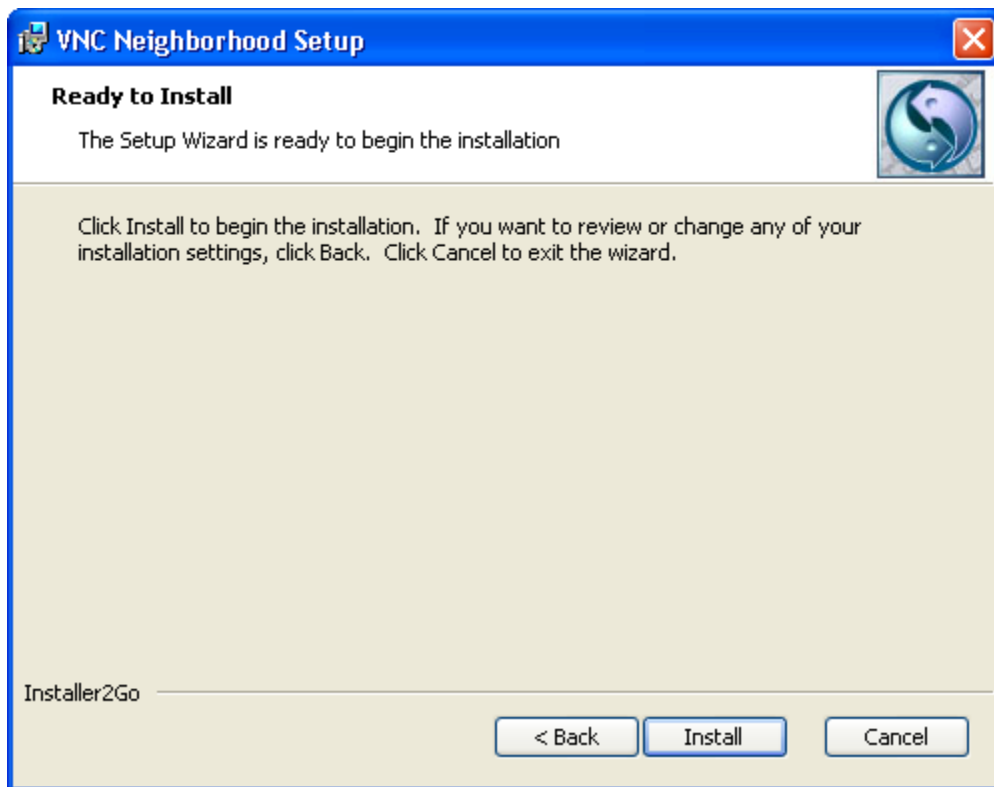


Caution:

It's not recommended to install VNC Neighborhood on a network drive.

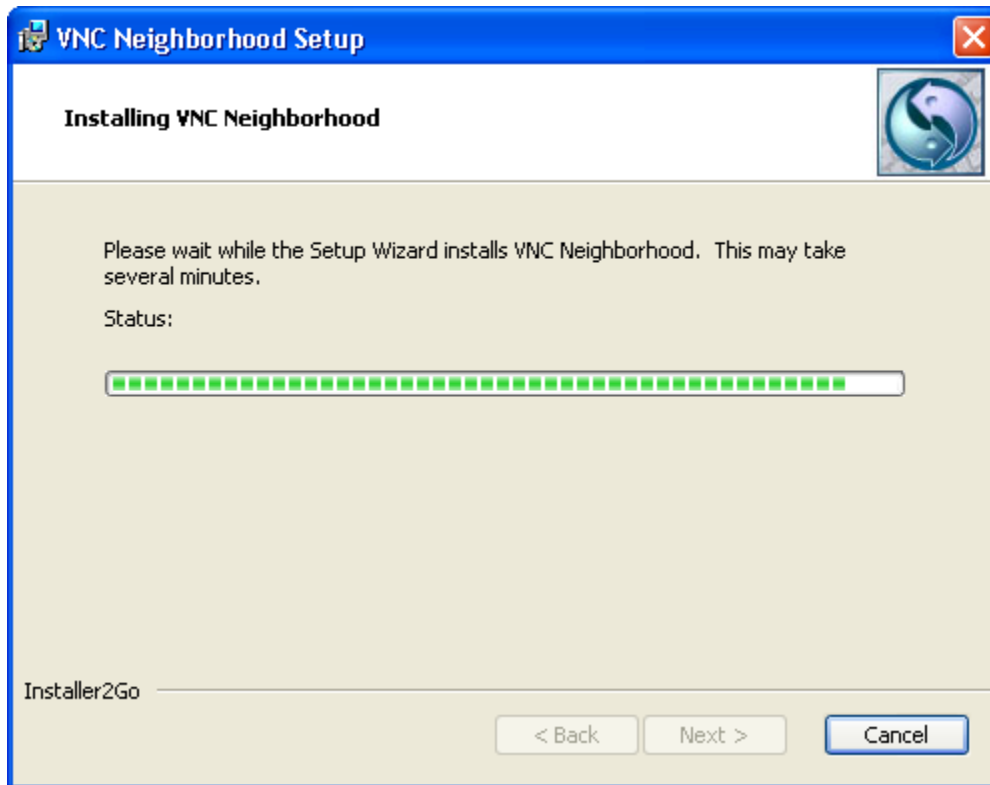
Note:

Windows and the Microsoft Installer limit the length of a path to a folder on a local drive to 255 characters. For a path to a folder on a mapped or shared drive, the limit is 240 characters. If the path to the VNC Neighborhood program folder exceeds this limit, an error message appears. You must select or enter a shorter path.



The installer has gathered the necessary information and is ready to begin installing the software.

If you want to change any settings or information you provided, now is the time to make those changes. Click **Back** until you reach the dialog box containing the information you want to change. If you do not need to make any changes, click **Install**.



The installer begins copying files to your computer.



Click **Finish**. VNC Neighborhood software is installed.

Installing VNC Neighborhood classical setup:

Run the file `vncneighborhood<xxx>.exe`, where `<xxx>` is a series of numbers representing the version and build numbers.

The procedure is exactly the same as for the MSI Package setup (see [upper](#)).

Uninstalling VNC Neighborhood:

To uninstall VNC Neighborhood, use **Add/Remove** programs control panel. Select the entry for VNC Neighborhood, then click **Remove**. Follow the on-screen instructions.

3 Overview of VNC Neighborhood

With the VNC Neighborhood you can **locate** and **access** any server running WinVNC service on Microsoft Windows Networks domains and workgroups.

VNC Neighborhood is using [Microsoft Windows Networks](#) features to locate clients over the network and a **powerful multi-ports TCP threaded scanner** to test if WinVNC service is installed and running. Clients name may be filtered using [regular expressions](#).

A built-in [update checker](#) is implemented to check for new version of VNC Neighborhood regularly.

With **VNC Neighborhood** you can:

- Scan your network for VNC computers
- Install* VNC to remote NT/2K/XP computers
- Manage computer system settings using the MMC interface*
- Start and stop remote VNC services*
- Connect to VNC servers with external viewer or web browser
- Reboot remote computers*
- Lock remote computers*
- Ping remote computers
- Get VNC version on remote computers
- Find who is logged into remote computers*
- Connect to Windows file shares on remote computers*
- and so much more...

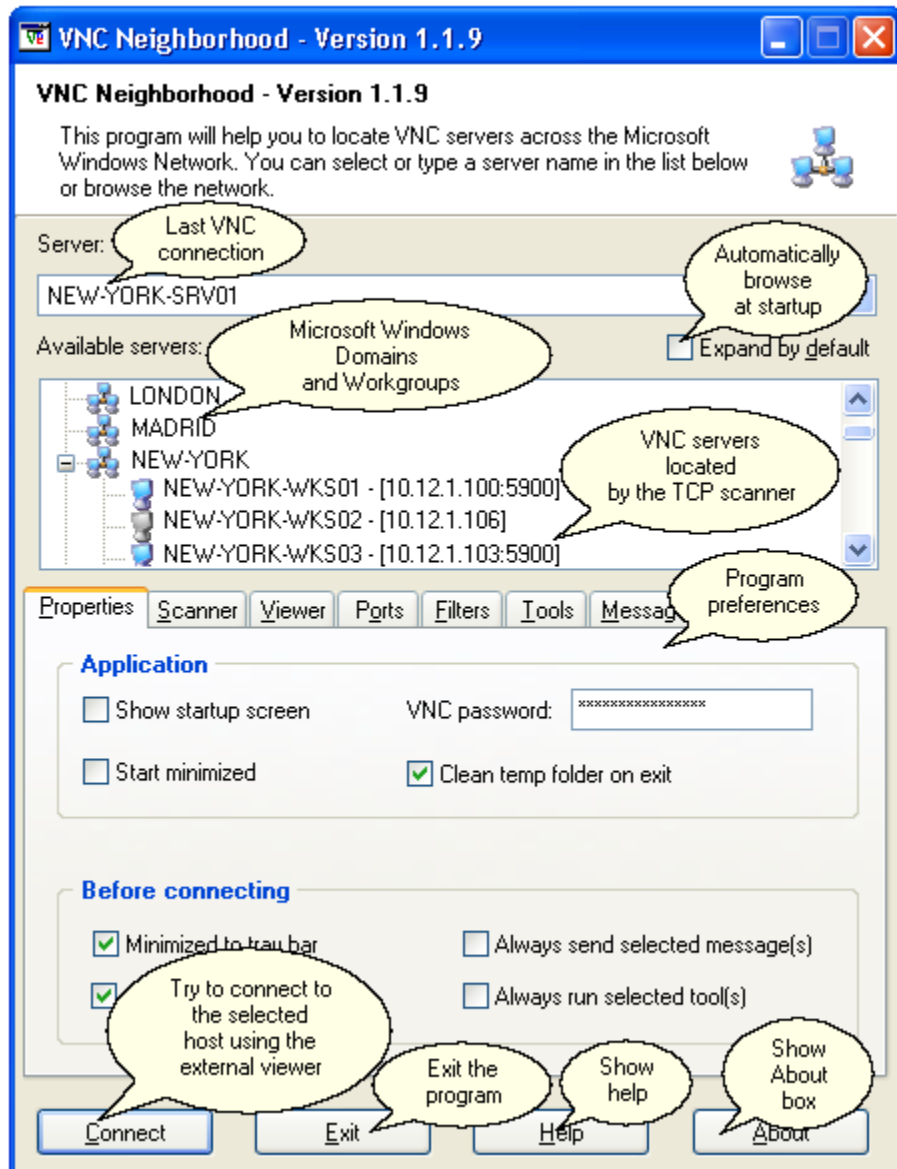
The Tools tab will give you the flexibility to [customize](#) VNC Neighborhood! It will surely fit all your needs, if not make a wish here!

** will require external applications or scripts (see [Tools Tab](#) section for more information).*

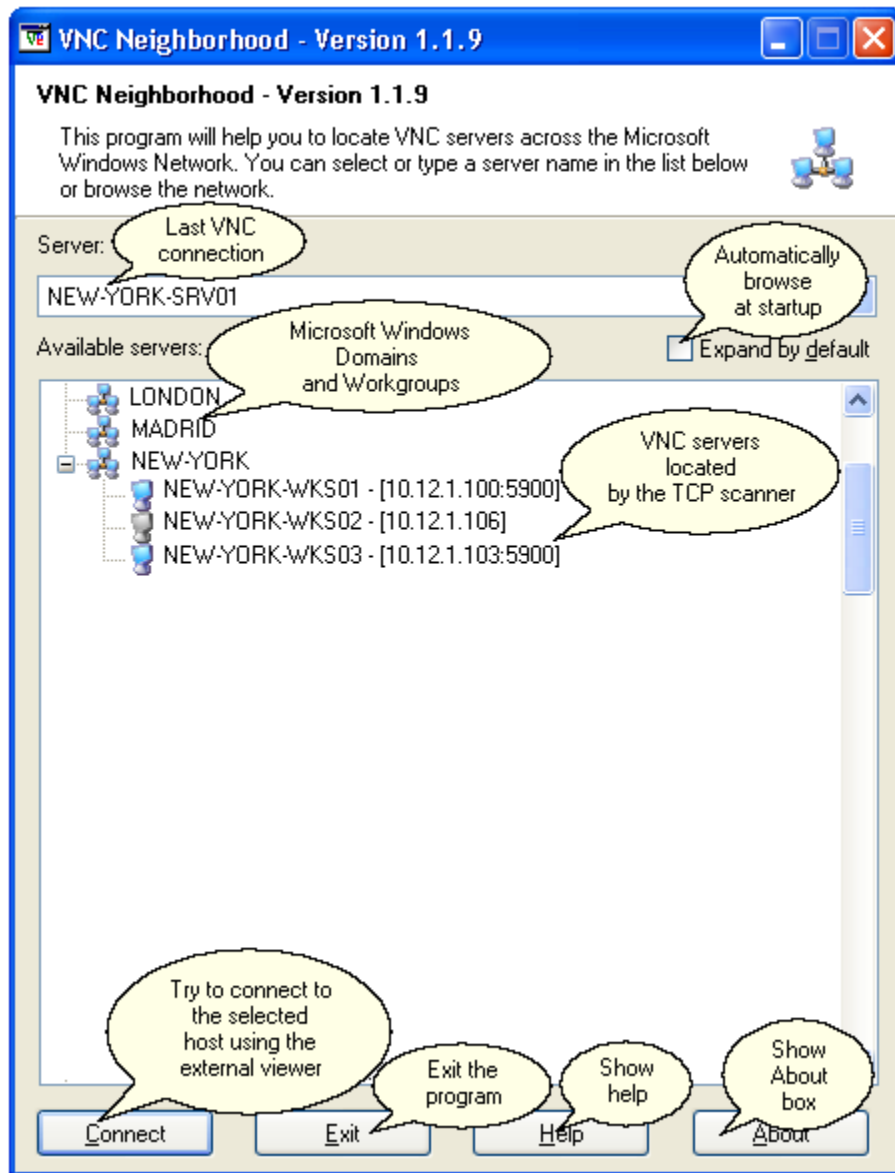
4 VNC Neighborhood Interface

VNC Neighborhood interface has been designed to be the more easy to use as possible.

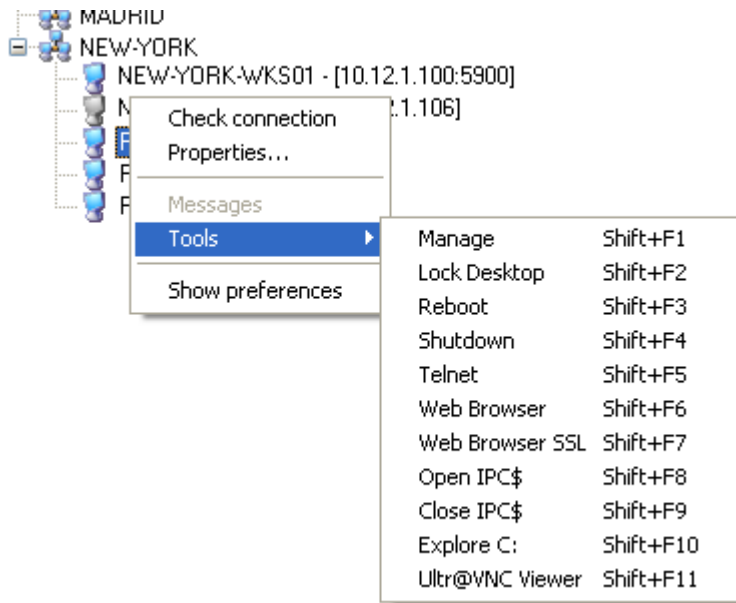
Just open **VNC Neighborhood**, double-click on the **domain** or **workgroup** you want to scan, select the **host**, press **connect** button and you're all done!



If you press **F8**, the program preferences tabs will disappear and the main window will be:



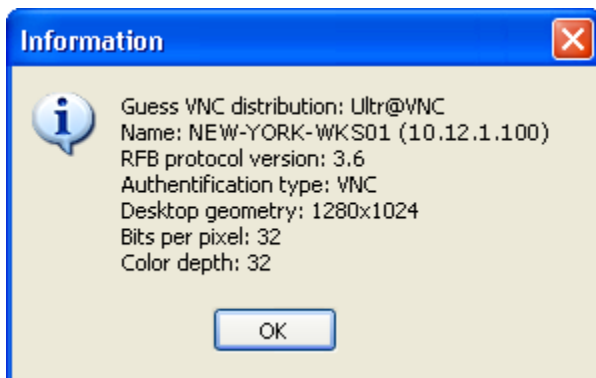
If you right-click on an item in the list you will get a popup menu like that one:



All **Tools** items can be defined and customized within the [Tools tab](#). Please note that this screenshot is just an example of what you can do with tools, no tools are defined by default when you will install the program.

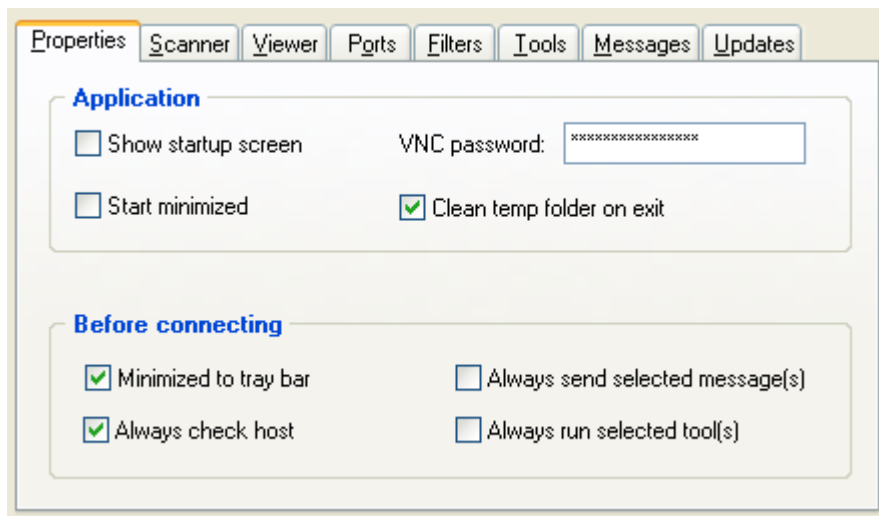
All program **preferences** may be modified in the [preferences tabs](#).

The **Check connection** menu will send an ICMP request (ping) to the remote host. You can also get the remote VNC server properties using the **Properties...** item. If the default password provided is correct, you will get a window like that one:



Otherwise you will get a connection error message.

5 Properties Tab



- **Show Startup Screen:**

Will display or not the splash screen at startup.

- **VNC Password:**

Fill this field with the password you want to use when connecting with the VNC viewer. If the password has been filled out then VNC Neighborhood will create a configuration file (hostname.cfg) located in the **%temp%** folder on your computer and use it when calling VNC viewer. Otherwise you will be prompt to enter the VNC password at the viewer connection.



Notes:

The password is stored exactly in the same way that VNC on the local computer, except that VNC Neighborhood is only user oriented, that means that only the **HKCU** hive is used to store the password. Using HKCU hive won't allow any user (even administrator) to grab the key value directly. **The password is also encrypted in the registry using VNC default encryption.**

VNC Neighborhood temp folder can be cleaned when exiting the program (see below).

- **Start Minimized:**

Select this check box to see the VNC Neighborhood icon in the tray bar next to the clock at startup. Double click on the icon will show VNC Neighborhood main form.

- **Clean Temp Folder On Exit:**

When connecting to a VNC server, a temp configuration file is created into the **%temp%** folder on your hard drive, select this option to clean-up the folder on exit.

- **Minimized to traybar:**

When connecting to a VNC server, minimized VNC Neighborhood to traybar.

- **Always check host:**

Before connecting to a VNC server, check that selected remote host is alive on the network using **ICMP**.

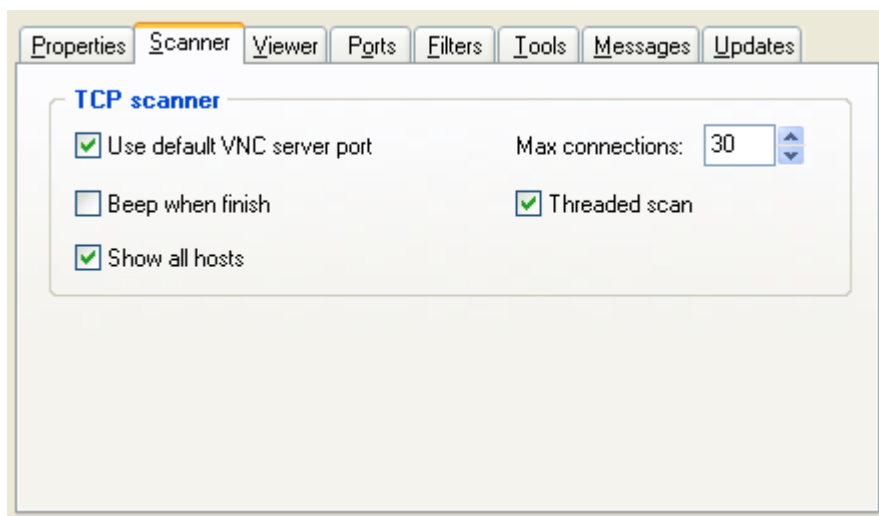
- **Always send selected message(s):**

Before connecting to a VNC server, send checked messages (see [Messages tab](#)) to the selected remote host. This feature will only work for Windows hosts. The **Messenger service** (or any **winpopup application**) should be **running** on the remote host.

- **Always run selected tool(s):**

Before connecting to a VNC server, run checked tools (see [Tools tab](#)) for the selected remote host.

6 Scanner Tab



- **Use Default VNC Server Port (default):**

This property will force the TCP scanner to check port **5900**. This property will simply overwrite any TCP port selection done in the [Ports tab](#).

- **Max Connections:**

Change the **maximum number of threads** that may run simultaneously during a scan. The default value is 30. Increasing this value too much may be dangerous for your computer

stability. You can try to use the following value depending on the operating system you are using:

Windows 9x	10
Windows Me	30
Windows NT	30
Windows 2000 / XP / 2K3	50

If this value is too high, you may get an **incomplete or empty list** of computers running WinVNC

- **Threaded Scan:**

If checked the scan will be threaded using a maximum of "Max Connections" threads, if you want to use sequential scan uncheck this property. May be useful if you're scanning a network **behind a firewall**, any scan detected will be dropped by the firewall. Using a sequential scan may correct the issue (depending of the firewall).

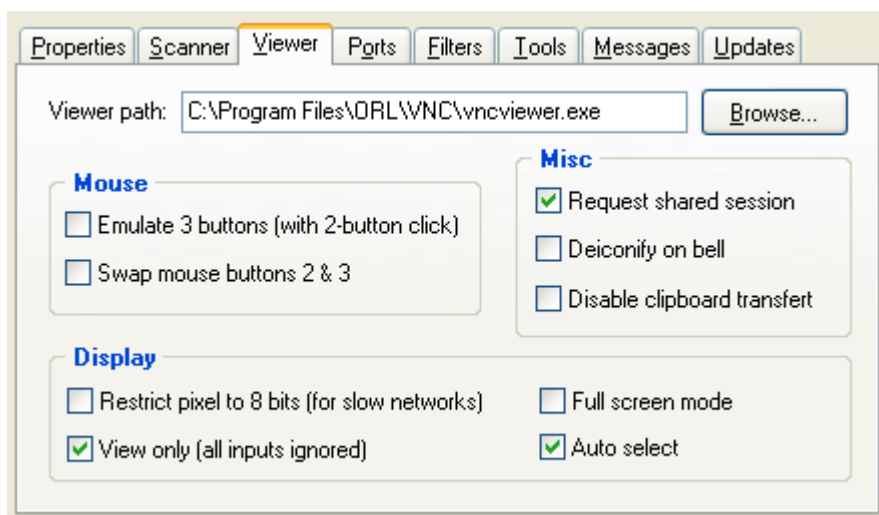
- **Beep When Finish:**

If checked a beep will occur at the end of the scan.

- **Show All Hosts:**

If checked you will see **all filtered host** including the one where WinVNC has not been detected. That is not meaning WinVNC is not installed on the remote computer, but WinVNC may be listening on another port that the one used during the scan or the service can be stopped.

7 Viewer Tab



These settings will be applied to any VNC Viewer Free Edition connections made with VNC

Neighborhood. Additional information regarding VNC Viewer Free Edition (only) may be found [here](#).

- **Viewer Path:**

Enter the location to vncviewer.exe. The file must exist.



Note:

You can use system variables in the viewer path (like %windir% for example). To check which variables are available on your system, open a command prompt and type "set" (without the quotes).

- **Emulate 3 buttons:**

Users with a two-button mouse can emulate a middle button by pressing both buttons at once if this option is enabled.

- **Swap Mouse:**

This option was more commonly used before the 3-button emulation was available.

- **Request Shared Session: (default)**

When you make a connection to a VNC server, all other existing connections to that server are normally closed. This option asks the server to leave any existing connections open, allowing you to share the desktop with someone already using it.

- **Deiconify on Bell:**

VNC allows for the transmission of a 'bell' character, causing a beep at the viewer if it has sound facilities.

- **Disable Clipboard Transfer:**

Clipboard changes caused by cutting or copying at either the viewer or server end are normally transmitted to the other end.

- **Restrict Pixel to 8 bits: (default)**

The viewer will normally request the current display format of the machine on which it is running. This setting forces the viewer to instead request 8-bit pixel data and to convert it locally for display, in order to reduce the bandwidth required.

- **View Only:**

In View-only mode, no mouse or keyboard events will be sent back to the server.

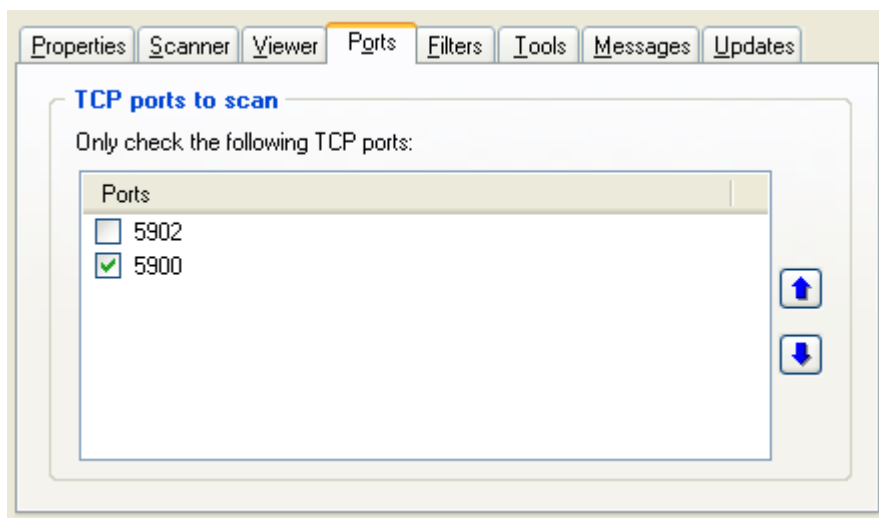
- **Full Screen Mode:**

This causes connections to start in full-screen mode.

- **Auto-Select: (default)**

Turn on the automatic selection of encoding and pixel format. Normally the viewer tests the speed of the connection to the server and chooses the encoding and pixel format appropriately.

8 Ports Tab



The **Ports tab** will help you to setup TCP ports that will be checked by the VNC Neighborhood network scanner in order to find VNC servers. If the list is **empty** or **no port is selected** VNC Neighborhood will assume that you're using a regular VNC configuration and will check for port **5900 only**. Port 5900 is the default TCP port used by VNC servers to listen for incoming connections.

You can add as many TCP ports as you want to this list, but I would recommend not select too much ports at the same time because the network scanner will check them all... For example, if you add and want to check 10 ports per host, VNC Neighborhood scanner won't skip port check if it find one replying, so you can imagine the time it could take to complete on a large domain!

VNC Neighborhood network scanner has been written to analyze initial handshake data send by the server when connecting (known as *ProtocolVersion message*, see [below](#)), so it's not useable as a regular TCP ports scanner. If you try to use VNC Neighborhood to localize hosts running other services than VNC server, it won't be of any help. That's just a way to be sure that VNC Neighborhood won't be used for illegal purpose.

**Notes:**

No regular expression is allowed in this list.

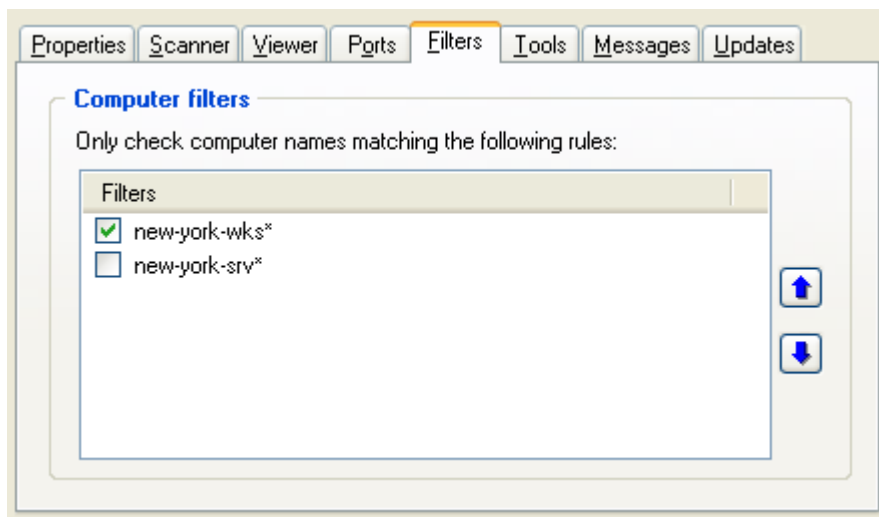
The **ProtocolVersion** message consists of 12 bytes interpreted as a string of ASCII characters in the format "RFB xxx.yyy\n" where xxx and yyy are the major and minor version numbers, padded with zeros.

# of bytes	Value
12	"RFB 003.003\n" (hex 52 46 42 20 30 30 33 2e 30 30 33 0a)
12	"RFB 003.007\n" (hex 52 46 42 20 30 30 33 2e 30 30 37 0a)

Links:

RFB Protocol, by Tristan Richardson <http://www.realvnc.com/docs/rfbproto.pdf>
 IANA registered TCP ports list <http://www.iana.org/assignments/port-numbers>

9 Filters Tab



The filters tab will help you to setup filters that will be used during a network scan, all filters in the list are **include only** filters, which means that computer name that does not match the filter won't be scan.

The filters are based on **regular expressions** which are used in **pattern matching**. A regular expression is really just a sequence or a pattern of characters that is matched against a string of text when performing searches. A simple regular expression consists of a single character or a set of characters that matches itself.

Regular expressions are made up of normal characters and **meta-characters**. Normal characters include upper and lower case letters and digits. The meta-characters used in VNC Neighborhood have special meanings and are described in detail below.

**Note:**

VNC Neighborhood filters are not case-sensitive!

The following meta chars may be used with VNC Neighborhood:

MetaChars	Means
*	Zero or more chars
?	Any char
[adjj]	Individual chars (inclusion)
[^adjj]	Individual chars (exclusion)
[a-d]	Range (inclusion)
[^a-d]	Range (exclusion)
[a-dg-j]	Multiple ranges (inclusion)
[^a-dg-j]	Multiple ranges (exclusion)
[ad-fhjnv-xz]	Mix of range & individual chars (inclusion)
[^ad-fhjnv-xz]	Mix of range & individual chars (exclusion)

Examples:

NEW-YORK-WKS01 and NEW-YORK-WKS* is **true**

NEW-YORK-SRV01 and NEW-YORK-WKS* is **false**

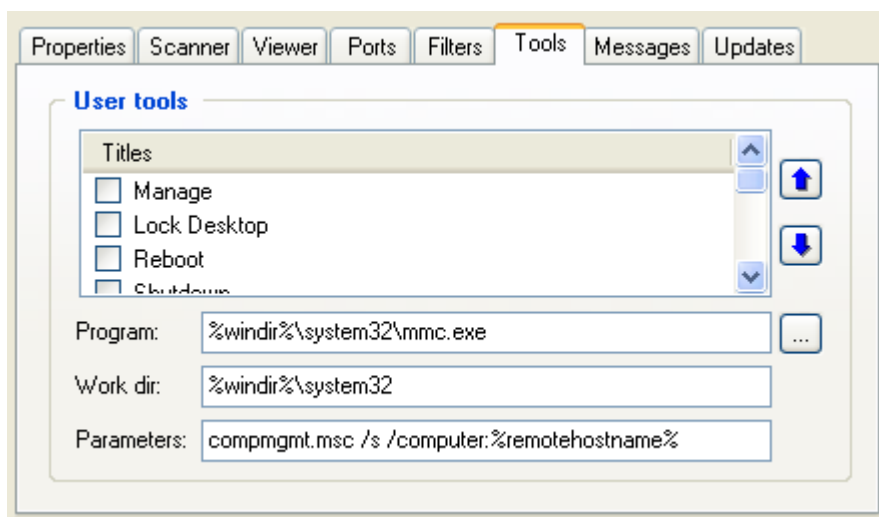
SNOOPY and SN[AEIOU]OPY is **true**

Links:

Regular Expression Library
 Regular Expression Howto
 Pattern Matching and Regular
 Expressions
 A Tao of Regular Expressions

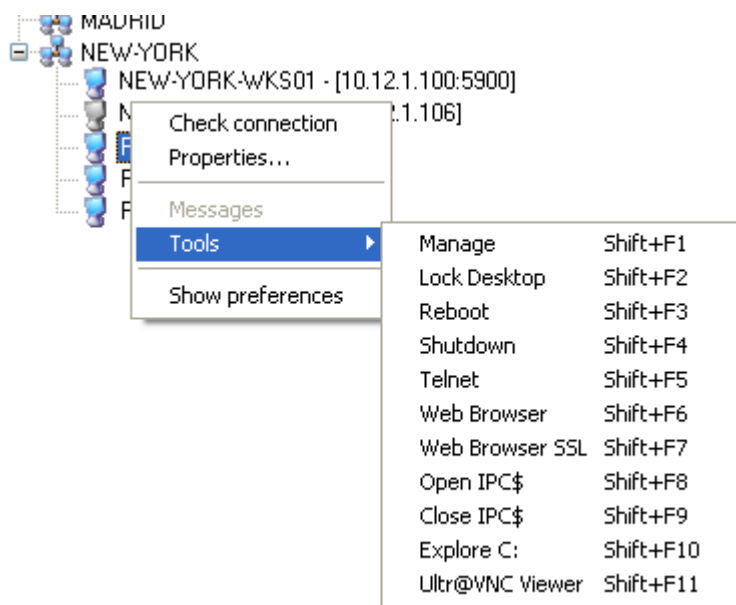
<http://www.regexlib.com>
<http://www.amk.ca/python/howto/regex/regex.html>
<http://www.webreference.com/js/column5>
http://sitescooper.org/tao_regexps.html

10 Tools Tab



One of the major improvement of VNC Neighborhood is the ability to use custom tools. All you need to do is to define them in the Tools tab and they will automatically appear in the host tree

view when clicking with the right button of your mouse:



Here's a list of possible use:

Manage computer system settings using the MMC interface

Program: %windir%\system32\mmc.exe
Work Dir: %windir%\system32
Parameters: compmgmt.msc /s /computer:%remotehostname%

Telnet

Program: telnet.exe
Work Dir: empty
Parameters: %remotehostname%

Start remote VNC services

Program: sc.exe
Work Dir: empty
Parameters: \\%remotehostname% start winvnc

Stop remote VNC services

Program: stopsvc.exe
Work Dir: empty
Parameters: \\%remotehostname% stop winvnc

Open IPC\$

Program: cmd.exe
Work Dir: empty
Parameters: /c "(net use \\%remotehostname%\ipc\$ /user:%remotehostname%\Administrator) & (pause)"

Close IPC\$

Program: cmd.exe
Work Dir: empty
Parameters: /c "(net use \\%remotehostname%\ipc\$ /delete) & (pause)"

Lock remote computer	<p><i>Program:</i> cmd.exe <i>Work Dir:</i> empty <i>Parameters:</i> /c ((copy %windir%\system32\wlock.exe \\%remotehostname%\admin\$) & (psexec.exe \\%remotehostname%\admin\$\wlock.exe "/y"))</p> <p>wlock.exe needs to be previously installed in %windir%\system32</p>
Reboot remote computer	<p><i>Program:</i> shutdown.exe <i>Work Dir:</i> empty <i>Parameters:</i> -h %remotehostname% -r -w 10</p>
Shutdown remote computer	<p><i>Program:</i> shutdown.exe <i>Work Dir:</i> empty <i>Parameters:</i> -h %remotehostname% -w 10</p>
Explore Drive C:	<p><i>Program:</i> explorer.exe <i>Work Dir:</i> empty <i>Parameters:</i> \\%remotehostname%\c\$</p>
Ultr@VNC viewer	<p>VNC Neighborhood was originally designed to support Real VNC product only, but 1.1.9 release will now work with additional viewers. Here's an example with Ultr@VNC viewer command line options that are not supported natively, but now you can teak it with the Tools!</p> <p><i>Program:</i> C:\Program Files\UltraVNC\vncviewer.exe <i>Work Dir:</i> empty <i>Parameters:</i> /nostatus %remotehostname%:%remotetcpport% /quickoption 1 /password %decryptedvncpassword%</p>
Change remote password	<p><i>Program:</i> vncpwd.exe <i>Work Dir:</i> empty <i>Parameters:</i> /h:%remotehostname% /y /g /v: %decryptedvncpassword%</p> <p>vncpwd.exe needs to be previously installed in %windir%\system32</p>
Richard Harris' FastPush script	<p><i>Program:</i> cmd.exe <i>Work Dir:</i> c:\fastpush <i>Parameters:</i> /c c:\fastpush\vnc.cmd %remotehostname%</p> <p>Fastpush script needs to be previously installed in c:\fastpush. You can download Fastpush script here. Thanks to Richard Harris for providing that great script! For advance command line parameters read this.</p>
Who is logged on the remote host?	<p><i>Program:</i> cmd.exe <i>Work Dir:</i> empty <i>Parameters:</i> /c "(psloggedon.exe \\%remotehostname% -l) & (pause)"</p>

If you find some killing tools to add, please send me an [email](#) and I will add them to that list.



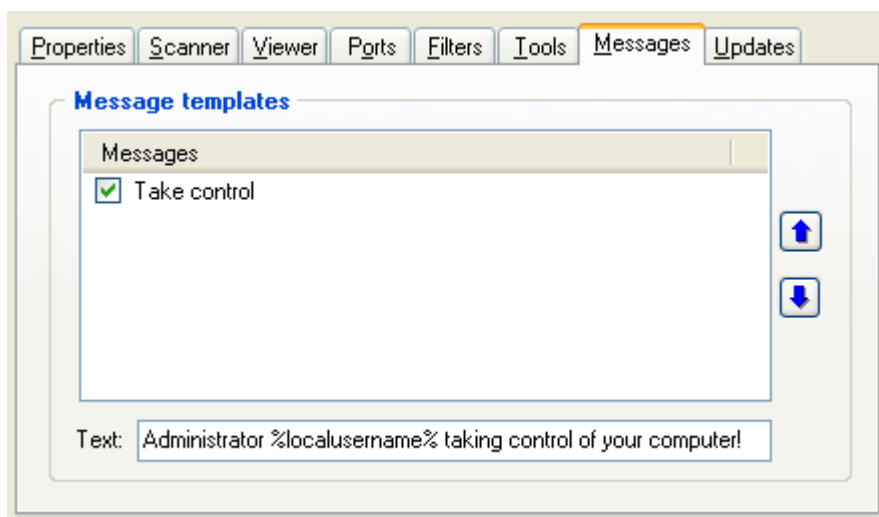
Note:

You can use system variables in the viewer path (like %windir% for example). To check which variables are available on your system, open a command prompt and type "set" (without the quotes).

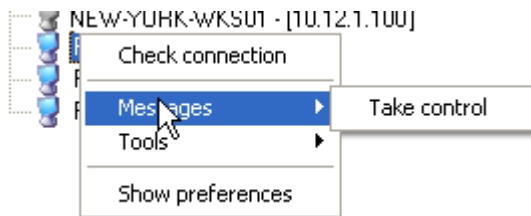
Links:

Scripting tools <http://www.sysworksoft.net/support/>
 Sysinternals PS Tools <http://www.sysinternals.com/ntw2k/freeware/pstools.shtml>
 Richard Harris' FastPush <http://www.darkage.co.uk>

11 Messages Tab

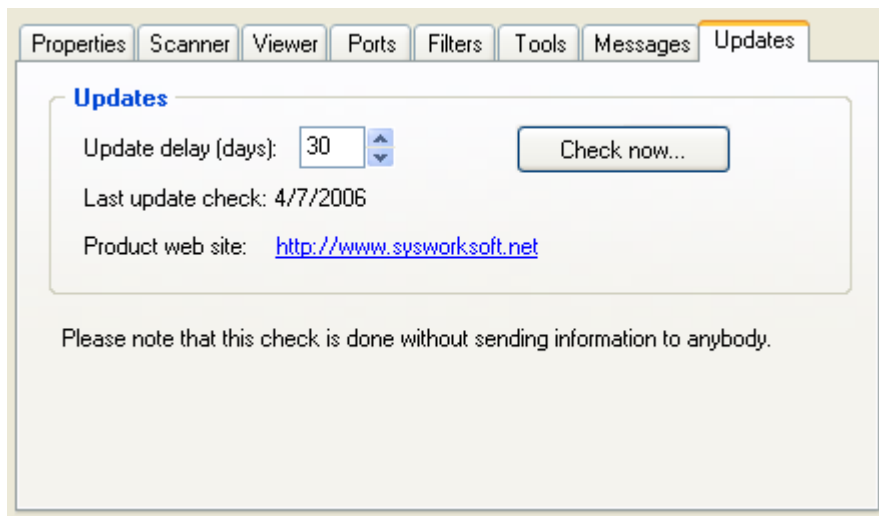


You can define customized messages that may be send when connecting a host. The **Messenger service** (or any **winpopup application**) should be **running** on the remote host.



Messages with a check box checked may be send before connecting with VNC viewer. May be useful to alert a user that he or she will be observed...

12 Updates Tab



VNC Neighborhood implements a built-in **update checker system**, that will regularly check on SysWorkSoft web site if an update is available. You can fix the delay between two checks in this tab. The default delay is 30 days.



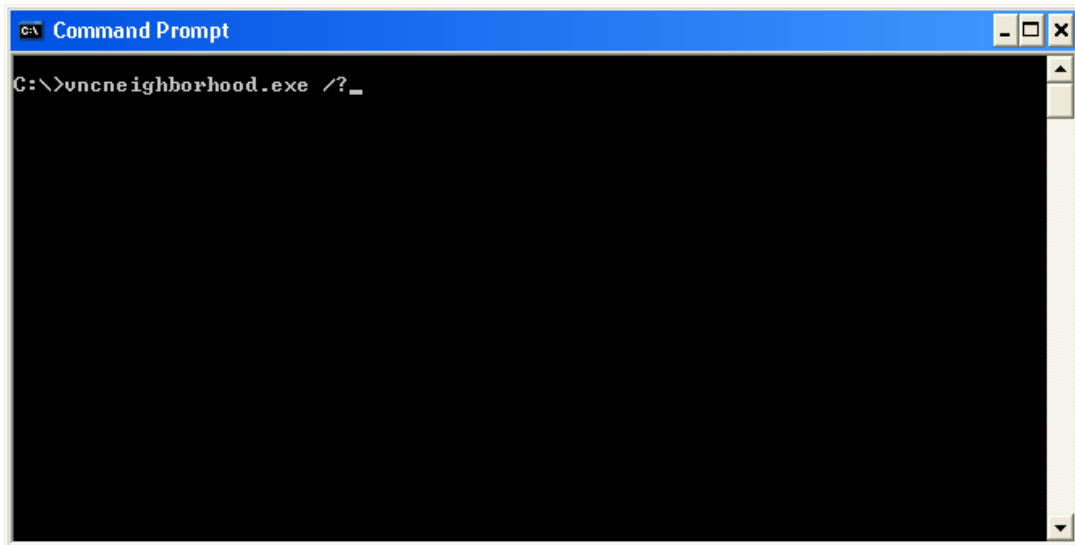
Note:

Please note that this check is done without sending information to anybody.

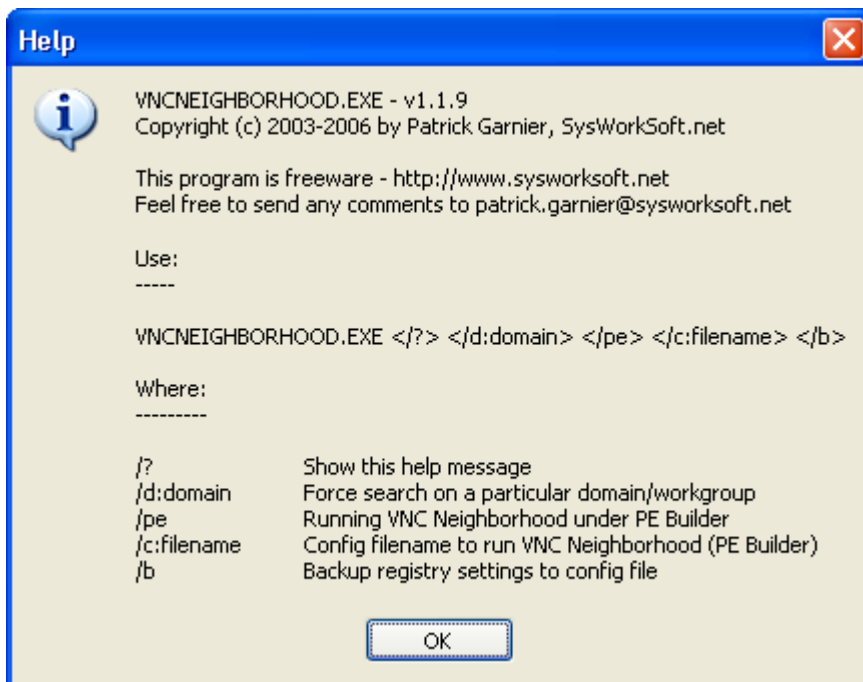
The check operation will simply download a html page from [sysworksoft.net](http://www.sysworksoft.net) web site and nothing else. At the first startup of VNC Neighborhood a check is automatically done, so firewall users don't have to worry about an external connection to [sysworksoft.net](http://www.sysworksoft.net) web site.

13 Command Line Parameters

Open a command prompt and just type the following command:



you should get this help screen:



The following commands are available from the command line:

/?	Show the previous help dialog and exit.
/d:domain	Force search on a particular domain/workgroup only. May be useful for user who can't see any domain/workgroup at startup.
/pe	If you want to use VNC Neighborhood under PE Builder.

/c:filename	Specify a config file for VNC Neighborhood settings, useful if you are working under PE Builder.
/b	Backup VNC Neighborhood registry settings to a config file (ini file). Useful if you want to recover some complex settings from your regular administrator Windows console under PE Builder.

14 Built-in Variables

One of the main key features added to **VNC Neighborhood 1.1.9** is the ability to use built-in variables, they might be used for customizing [messages](#) and external [scripts and programs](#) calls.

Here's the full list of supported variables:

%localhostname%	is the local computer name where VNC Neighborhood is running
%localusername%	is the local user name running VNC Neighborhood
%localdomainname%	is the local domain / workgroup to which belong the local computer
%remotehostname%	is the selected remote computer name
%remotedomainname%	is the selected remote computer name domain
%remoteipaddress%	is the selected remote computer name ip address
%remotetcpport%	is the remote computer name port where VNC server was found listening for an incoming connection for the selected host
%encryptedvncpassword%	is the encrypted VNC Password
%decryptedvncpassword%	is the decrypted VNC Password
%date%	is the current date (format: mm/dd/yyyy)
%day%	is the current day
%month%	is the current month
%year%	is the current year
%time%	is the current time
%hours%	is the current hours
%minutes%	is the current minutes
%seconds%	is the current seconds

All these variables will give the ability to create and use powerful external scripts and programs to complete VNC Neighborhood features and fit your exact needs for your day-to-day job.

**Note:**

VNC password related variables are using the VNC password entered into the [Properties](#) tab.

15 Registry & Ini File Settings

This section covered VNC Neighborhood registry settings and ini file (that may be used under PE Builder).

All settings are stored in the **HKEY_CURRENT_USER\Software\SysWorkSoft\VNCNeighborhood** branch. All registry settings are stored in a **REG_BINARY** format, so direct changes are not very easy. I don't want user to modify registry settings directly without knowing what they are doing...

But ini file settings are much more easy to change as the format is more classical, that was a requirement to use VNC Neighborhood under PE Builder.

The config file contains 7 sections:

- [General](#)
- [Viewer](#)
- [Filters](#)
- [Ports](#)
- [Messages](#)
- [Tools](#)
- [Update](#)

If you check the registry using regedit, you will notice that there's another section called **MRU Items**, which is not documented here. All last connections are stored in that branch. That branch is not exported by the [/b option](#) at the command prompt.

- **[General] section**

Name	Type	Default	Explain
CurrentServer	String	empty	Last VNC viewer client name
AutoExpand	DWord	0	Automatically expand last domain/workgroup at next startup of VNC Neighborhood
TopWindowX	DWord	0	Left window position
TopWindowY	DWord	0	Top window position
ShowSplash	DWord	1	Show or not splash screen at startup
Password	String	empty	Encrypted VNC password
MaxConnections	DWord	30	Maximum simultaneous scanner connections.
UseDefaultPort	DWord	1	Override all port settings to use VNC default (5900).
LastDomain	String	empty	Last domain/workgroup scanned before exiting.

ThreadedScan	DWord	1	Use a threaded scan method or not.
BeepAllow	DWord	1	Beep when scan finish
CleanTempExit	DWord	1	Clean VNC Neighborhood temp folder on exit
StartMinimized	DWord	0	Start VNC Neighborhood minimized
ShowAllHosts	DWord	0	Show all hosts even if VNC is not detected
AlwaysCheckHost	DWord	1	Check if host is alived before using the viewer
MinimizedToTray	DWord	1	Minimize VNC Neighborhood to tray when connecting with the viewer
ShowPreferences	DWord	1	Show preferences panel or not at startup
AlwaysSendMessage	DWord	0	Always try to send checked message(s) before using the viewer
AlwaysRunTools	DWord	0	Always run checked tool(s) before using the viewer
PreferencePanel	DWord	0	Last preference tab used

• **[Viewer] section**

Name	Type	Default	Explain
ViewerPath	String	empty	Path to VNC viewer
Emulate3	DWord	0	Users with a two-button mouse can emulate a middle button by pressing both buttons at once if this set to 1
SwapMouse	DWord	0	This option was more commonly used before the 3-button emulation was available
Shared	DWord	1	When you make a connection to a VNC server, all other existing connections to that server are normally closed if set to 0
Deiconify	DWord	0	VNC allows for the transmission of a 'bell' character, causing a beep at the viewer if it has sound facilities if set to 1
DisableClipboard	DWord	0	Clipboard changes caused by cutting or copying at either the viewer or server end are normally transmitted to the other end if set to 1
Restrict8Bits	DWord	0	This setting forces the viewer to request 8-bit pixel data and to convert it locally for display, in order to reduce the bandwidth required, if set to 1
ViewOnly	DWord	1	In View-only mode, no mouse or keyboard events will be sent back to the server if set to 1
FullScreen	DWord	0	This causes connections to start in full-screen mode if set to 1

AutoSelect	DWord	1	Turn on the automatic selection of encoding and pixel format if set to 1
------------	-------	---	--

- **[Filters] section**

Each filter definition consists of 2 entries. If one is missing the whole filter list is cleared.

Name	Type	Explain
Filters_1	String	A regular expression for filter 1
FiltersCheck_1	DWord	1 for check, 0 is not for filter 1
Filters_xx	String	A regular expression for filter xx
FiltersCheck_xx	DWord	1 for check, 0 is not for filter xx

- **[Ports] section**

Each port definition consists of 2 entries. If one is missing the whole filter list is cleared.

Name	Type	Explain
Ports_1	String	A value for port 1
PortsCheck_1	DWord	1 for check, 0 is not for port 1
Ports_xx	String	A value for port xx
PortsCheck_xx	DWord	1 for check, 0 is not for port xx

- **[Messages] section**

Each message definition consists of 3 entries. If one is missing the whole filter list is cleared.

Name	Type	Explain
MessageName_1	String	Title of message 1
MessageText_1	String	Text of message 1
MessageCheck_1	DWord	1 for check, 0 is not for message 1
MessageName_xx	String	Title of message xx
MessageText_xx	String	Text of message xx
MessageCheck_xx	DWord	1 for check, 0 is not for filter xx

- **[Tools] section**

Each tool definition consists of 5 entries. If one is missing the whole filter list is cleared.

Name	Type	Explain
ToolsTitle_1	String	Title of tool 1
ToolsProgram_1	String	Program or script for tool 1
ToolsRunPath_1	String	Run path for tool 1
ToolsParameters_1	String	Parameters for tool 1
ToolsCheck_1	DWord	1 for check, 0 is not for tool 1
ToolsTitle_xx	String	Title of tool xx
ToolsProgram_xx	String	Program or script for tool xx
ToolsRunPath_xx	String	Run path for tool xx
ToolsParameters_xx	String	Parameters for tool xx
ToolsCheck_xx	DWord	1 for check, 0 is not for tool xx

- **[Update] section**

Name	Type	Default	Explain
UpdateDelay	String	30	Delay in days between 2 checks

UpdateLocation	String	Web site URL	Automatically expand last domain/workgroup at next startup of VNC Neighborhood
UpdateRevision	String	4	Update revision number
UpdateLastDay	String	0	Last web check day
UpdateLastMonth	String	0	Last web check month
UpdateLastYear	String	0	Last web check year

16 EventID 4226: TCP/IP has ...

If you are running VNC Neighborhood with Windows XP SP2 you may experiment a strange behavior. In some cases you may get an incomplete list of machines running VNC server. Having a look to the event viewer of your machine may help. Search for event ID 4226 in the system log. If you find one appearing during a network scan:

System 40,354 event(s)			
Type	Date	Time	Source
Warning	4/13/2006	10:19:07 ...	Tcpip
Information	4/13/2006	10:03:41 ...	Applicat
Information	4/13/2006	10:02:56 ...	Applicat

it means that you have reached the new TCP outbound connections limit introduced by Windows XP SP2 during VNC Neighborhood network scan.

What is the impact on VNC Neighborhood?

You will get an incomplete list of machine running VNC server...

What is the problem?

The Windows XP SP2 TCP/IP stack now limits the number of simultaneous incomplete outbound TCP connection attempts. After the limit has been reached, subsequent connection attempts are put in a queue and will be resolved at a fixed rate. Under normal operation, when applications are connecting to available hosts at valid IP addresses, no connection rate-limiting will occur. When it does occur, a new event, with ID 4226, appears in the system's event log.

Microsoft made this change as of SP2 to limit the speed at which malicious programs, such as viruses and worms, spread to uninfected computers. SP2 limits the number of half open connections to 10.

Malicious programs often attempt to reach uninfected computers by opening simultaneous connections to random IP addresses. Most of these random addresses result in a failed connection, so a burst of such activity on a computer is a signal that it may have been infected by a malicious program.

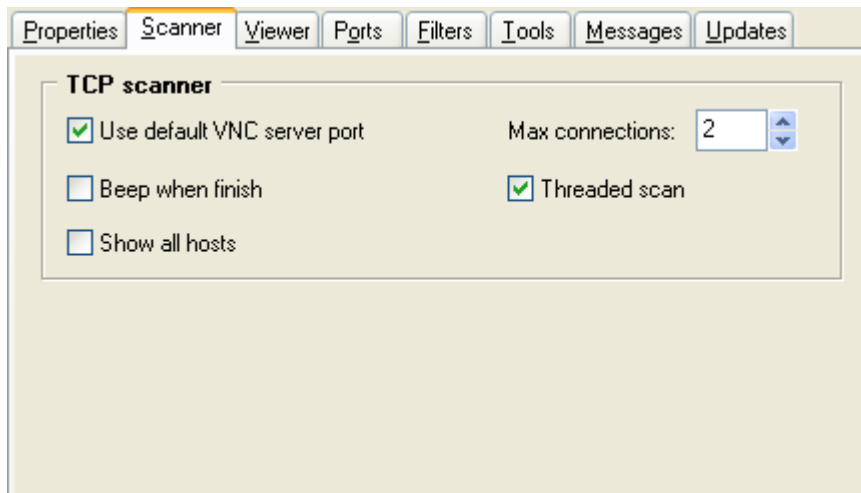
How can I solve this issue?

There is no official solution for this, and no registry value exists to increase this limit. However there is a small application developed by [LvlLord](#) which will hack the system file "TCPIP.SYS" and increase the max number of connections. You can find the patch [Here](#).

**Note:**

This is not an official patch, use it at your own risk.

You can also play with the VNC Neighborhood [scanner](#) parameters:



Reducing the "**Max connections**" value to 2 is really helping in most cases. If you still have issues you can also uncheck the "**Threaded scan**" checkbox. In both cases the network scan will get slower...

Useful links

<http://www.msfn.org/comments.php?shownews=9017>

<http://www.lvllord.de/>

<http://support.microsoft.com/default.aspx?kbid=314053>

17 Technical Support Resources

Documentation on the web

Full documentation for VNC Neighborhood, including the latest updates to this manual, can be found on SysWorkSoft.net web site at www.sysworksoft.net/support.

Reporting problems

If you have problem while running VNC Neighborhood, please report them at www.sysworksoft.net/contacts/, before submitting the request please make sure:

- you have read the Help Manual and documentation

- you have the most current version of the software
- you haven't been able to duplicate the problem with no other programs running

18 VNC Neighborhood Future

Planned features for next releases:

- Support for Windows 9x/Me platforms will be removed, next release will be only compatible with Windows NT/2K/XP and 2K3. This change will allow the use of many API's not available under previous release...
- Improve RealVNC 4.xx support.
- Built-in support for all flavour of VNC distributions (Ultr@VNC, TightVNC, ...). The viewer management will be able to handle command line parameters for different viewers.
- Improve client management support.

If you want to make a wish for a missing feature, please go online at:
<http://www.sysworksoft.net/contacts/>

19 History

Release 1.1.9 of 04/07/2006

- **Critical bug** - Fix an issue when no Windows domains are found.
- Add basic support for RealVNC 4.xx viewer.

Release 1.1.8 of 11/25/2003

- Added full support for system environment vars.
- Added support for PE Builder.
- Fading effect in the about box.
- Correcting an issue with check update date.
- Added shortcuts to tools menu items. Ability to move up and down tools in the view list.
- Added support for built-in vars.
- Added support for tools.
- Correcting some issues with combo box and XP.
- Possible to hide the preferences panel.
- Correcting a bug with the show help switch, the application was not stopped correctly after.
- Correcting bug with form placement.
- Added support for command line parameters to force a particular domain/workgroup name.
- Added check update now button.
- Add send network messages support.

Release 1.1.7 of 06/10/2003

- Never published on the internet.

Release 1.1.6 of 04/09/2003

- **Critical bug** - Fix an issue with date management used by the update checker with other regional settings that US English (thanks to Alexandre Chevrier).
- Add feature to get a list with non responsive WinVNC hosts.

Release 1.1.5 of 03/29/2003

- When scrolling with up and down keys in the main tree view, the selected name was not modified into the main selector combo box.
- Support for tray icon.
- Add some new preferences (Beep when finish, Start minimized, Clean temp folder on exit, Product web site link).

Release 1.1.0 of 03/22/2003

- First public release posted on my web site.

20 License & Disclaimer

All files are copyright © Patrick Garnier - [SysWorkSoft.net](http://www.sysworksoft.net), 2003-2006.

This software is provided as is - no warranty is given as to its suitability for any purposes to which you may wish to put it.

Please do not monitor network elements that you do not have control of without the expressed permission of the owner of those network elements. The author is not responsible in any way of the use of VNC Neighborhood.

About the Author

I'm Patrick Garnier - a hobbyist programmer living in France. I write mainly in Delphi, but also in C, C++ and Java. My programs are available for download on my website: <http://www.sysworksoft.net>. I can be contacted by e-mail on patrick.garnier@sysworksoft.net

If English is your first language, you can check my pages for spelling or typing errors and let me know. Since English is my second language I can easily make a spelling or typing error without seeing it...

21 Credits & Copyrights

Free programs, components & classes used by VNC Neighborhood:

RealVNC	Remote control software © 2002 RealVNC Ltd.
Ultr@VNC	Remote control software © Ultr@VNC Team .
PE Builder	Bart's PE Builder (3.0.22) © 2003 Bart Lagerweij .
Windows installer package (MSI)	Installer2Go © 1997-2003 SDS Software .
Delphi TCP components	Internet Direct , Indy (9.0.11) © 1993-2002 by Kudzu (Chad Z. Hower) and the Indy Pit Crew.
Cool Tray Icon	Cool Tray Icon Delphi Components 4.1.2 by Troels Jakobsen .

Index

- % -

%date% 27
 %day% 27
 %decryptedvncpassword% 27
 %encryptedvncpassword% 27
 %hours% 27
 %localdomainname% 27
 %localhostname% 27
 %localusername% 27
 %minutes% 27
 %month% 27
 %remotedomainname% 27
 %remotehostname% 27
 %remoteipaddress% 27
 %remotetcpport% 27
 %seconds% 27
 %time% 27
 %year% 27

- 4 -

4226 31

- 5 -

5900 16

- 8 -

8 bits 17

- A -

Always check host 15
 Always run selected tool(s) 15
 Always send selected message(s) 15
 AT&T Research Labs 3
 attempts 31
 Automatic Update Checker 11, 25
 Auto-Select 17

- B -

Beep When Finish 15

- C -

Clean Temp Folder On Exit 15
 Clipboard Transfert 17
 Command line parameters 26
 computername 27
 concurrent 31
 connect 31

- D -

Deiconify on Bell 17
 domain 27

- E -

Emulate 3 Buttons 17
 Event log 31
 EventID 31

- F -

Filters 20, 28
 firewall 16
 Full Screen 17
 Future 33

- G -

General 28

- H -

HKEY_CURRENT_USER 28

<http://www.sysinternals.com/ntw2k/freeware/pstools.shtml> 21

- I -

ICMP 12, 15
 ini file 28
 Inno Setup 35

Interface 12
Internet Direct (Indy) 35

- L -

Last Update Check 25
limit 31

- M -

Max Connections 16
Messages 28
Messenger service 15
Meta-characters 20
MetaChars 20
Microsoft Windows Network 11
Minimized to traybar 15
MRU Items 28
MSI 4
MSI Create 35
multi-ports TCP threaded scanner 11

- O -

outbound 31

- P -

Pattern Matching 20
PE Builder 4
ping 12
Ports 28
ProtocolVersion message 19
Push install 11

- R -

reached 31
REG_BINARY 28
regedit 28
registry settings 28
Regular Expressions 20
Request Shared Session 17
Restrict Pixel 17

- S -

Scan your network for VNC computers 11
security 31
Server Port 16
Simultaneous 16
Start Minimized 15
Startup Screen 15
Swap Mouse 17

- T -

TCP 31
TCP Port 16
TCP ports 19
TCP/IP 31
Threaded Scan 16
Threads 16
Tools 28

- U -

Uninstalling 4
Update 28
Update Delay 25
upper 4
username 27

- V -

Variables 27
View Only 17
Viewer 28
Viewer Path 17
Virtual Network Computing 3
VNC Neighborhood 11
VNC Password 15
VNC Server 11
VNC Viewer 11

- W -

Windows Installer 4
winpopup application 15
WinVNC 11
workgroup 27