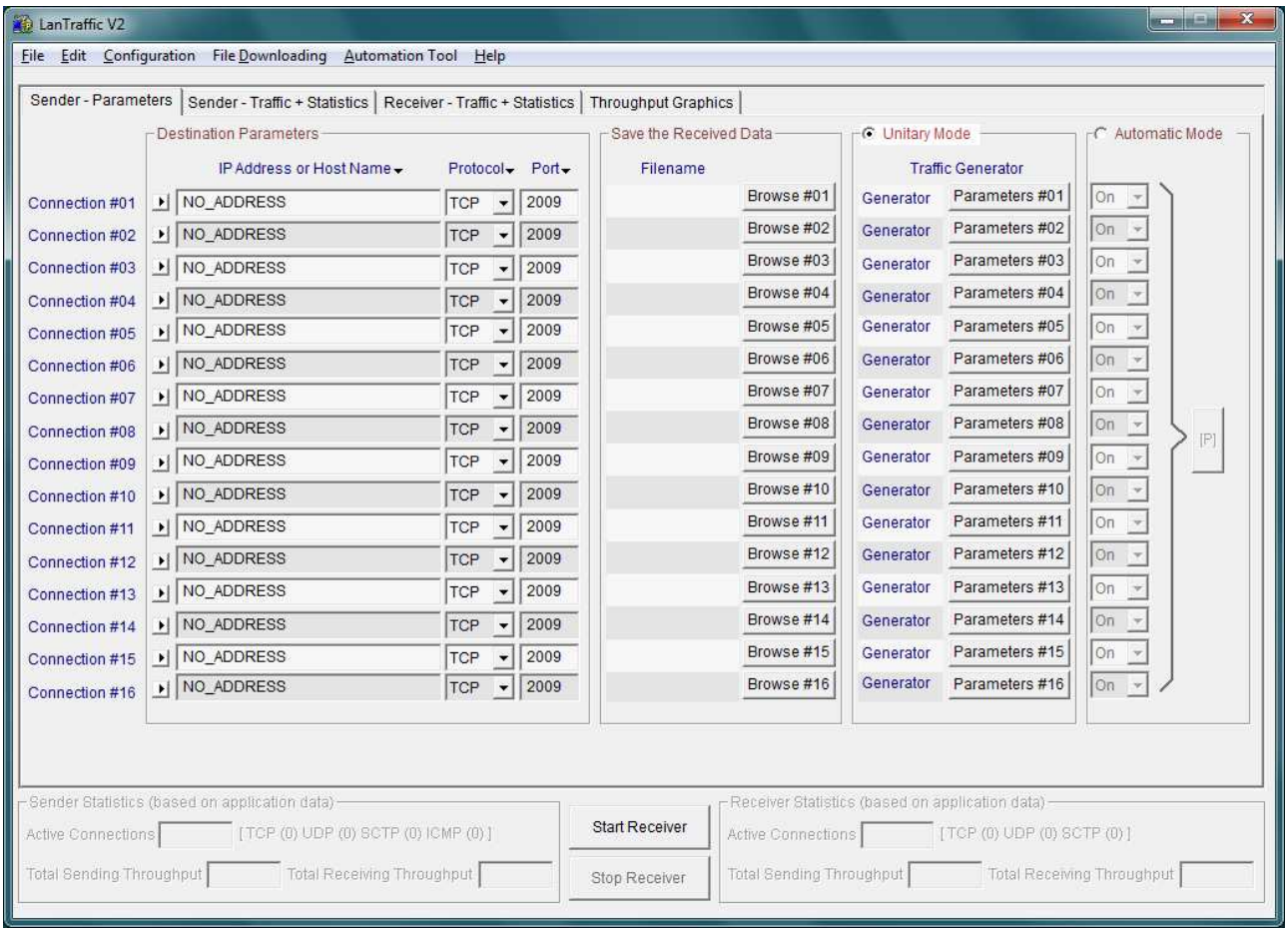
LanTraffic V2

Version 2.7

Traffic Generator for IP Networks (IPv4 & IPv6)

FTTx, LAN, MAN, WAN, WLAN, WWAN, Mobile, Satellite, PLC, etc.



Read Me First

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Summary

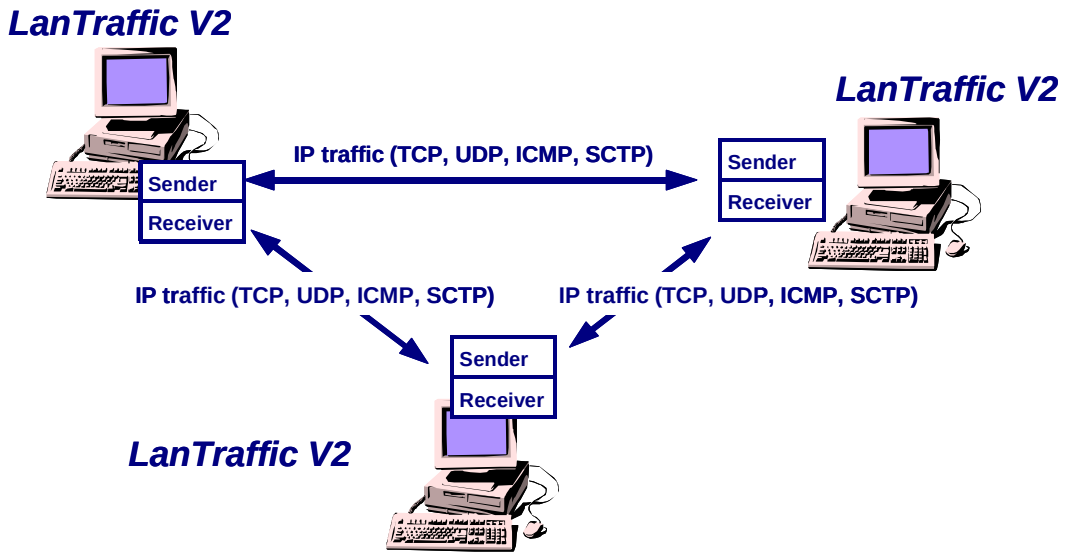
PART 0 Overview

0.1 LanTraffic V2 Key Features

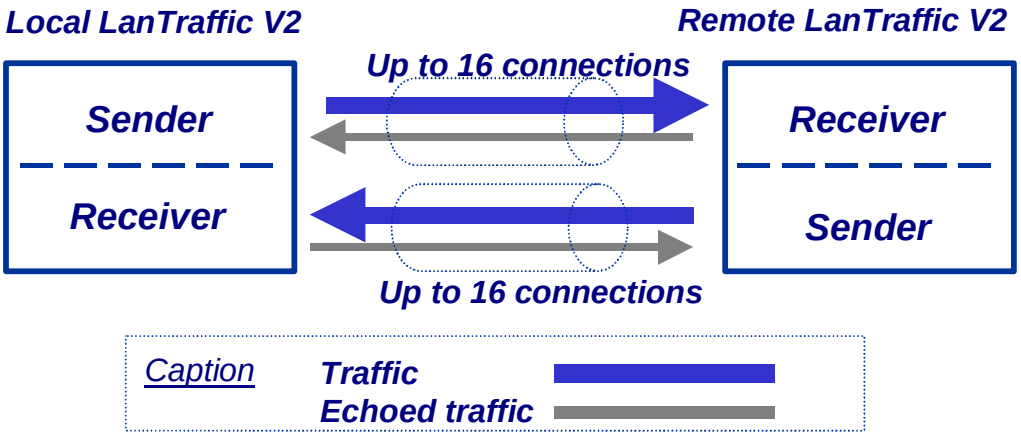
The **LanTraffic V2** software generates traffic for IP networks by using the following protocols: TCP (Transmission Control Protocol), UDP (User Datagram Protocol), ICMP (Internet Control Message Protocol) or SCTP (Stream Control Transmission Protocol).

LanTraffic V2 is supported on the following platforms: Windows Vista Business, Windows Server 2003 or Server 2008, Windows XP Home or Professional, Windows Seven Professional or Enterprise. It needs at least one Ethernet connection (LAN or WLAN card i.e. NIC, remote access…).
The minimum screen resolution is 1024 x 768 and the DPI setting should be “Normal size (96 DPI)”.
LanTraffic V2 requires Acrobat Reader to display the software's Help file.
The add-on software called **Automation Tool for LanTraffic V2** allows automating operations with **LanTraffic V2**. For instance, you can run test campaigns automatically.

Various testing configurations can be implemented using more than two PCs. **LanTraffic V2** creates TCP or UDP (Unicast, Multicast or Broadcast) connections between PCs through the IP network. **LanTraffic V2** creates also SCTP and ICMP connections.



The **LanTraffic V2** testing tool is made of a **Sender** part and a **Receiver** part.



- The **Sender** generates up to 16 simultaneous UDP (Unicast, Multicast or Broadcast) and/or TCP connections and/or SCTP connections and/or ICMP connections. The connections can be established in two different testing modes:

  Unitary Mode: you can select the traffic generator data source and configure packets size and inter packet delay for each connection. With the ICMP protocol you can:

  ⇨ ICMP Echo request packet number and content: packet generator (fixed, randomized, alternated and increasing / decreasing).

  ⇨ ICMP Echo Request data size: fixed, randomized, alternated and increasing / decreasing.

  ⇨ ICMP Echo Reply receiving timeout: fixed, randomized, alternated, increasing / decreasing or use of a mathematical law.

  LanTraffic V2 offers three different data sources:

  - Automatic data generator by using mathematical laws,
  - Packets generator: many parameters can be defined (number of packets to send, inter packet delay, packet contents, …)
  - File: selection of a file to send.

  ⇨ ***Automatic Mode***: select one mathematical law for connections generating (up to 16 connections) and starting time, and then select a second mathematical law for data volume to be sent. This mode is available with UDP and TCP only. With this mode, SCTP and ICMP connections can not be started.

  ⇨ **Statistics**: for each connection the following statistics parameters are displayed by the **Sender** and can be saved in a file:

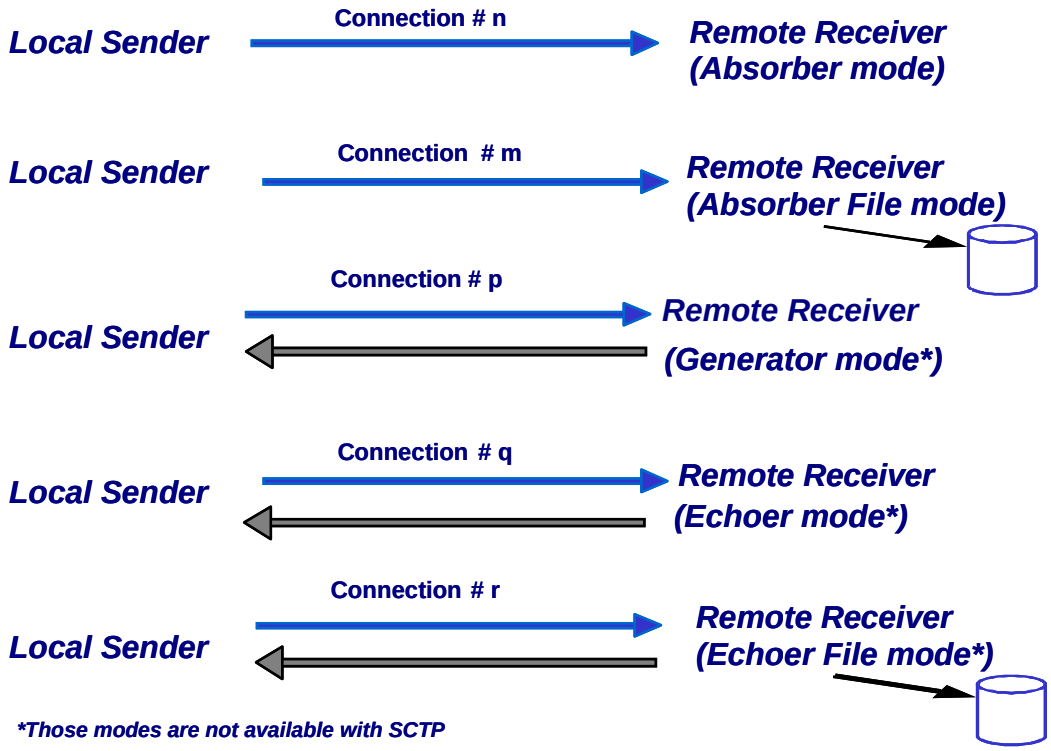
  - Sent throughput(2)
  - Received throughput(1) (2)
  - Sent packet throughput(2)
  - Received packet throughput(1) (2)
  - Sent data volume(2)
  - Received data volume (volume of data sent by the remote) (1) (2)
  - Sent packets

- Received packets (packets sent by the remote) (1)
- Data volume to send(2)
- Remaining volume (of data to send) (2)
- Sequence numbering errors(1)
- RTT Mean (Round Trip Time) (1)
- Jitter(1) (2)

(1) These statistics are not available with SCTP protocol.

(2) These statistics are not available with ICMP protocol.

- The **Receiver** receives traffic (up to 16 simultaneous connections) and operates five different working modes: Absorber, Absorber File, Generator, Echoer and Echoer File. With SCTP protocol, only the Absorber and Absorber File working modes are available. SCTP can not be used on both Sender and Receiver parts at the same time.
  - Each Receiver connection can be set up according to one of the following five modes:



Note: We consider that the local machine is used for sending traffic and the remote one is used for receiving traffic.

⇨ **Statistics**: for each connection the following statistics parameters are displayed by the **Receiver** part and can be saved in a file:

- Sent throughput(1)
- Received throughput
- Sent packet throughput(1)
- Received packet throughput
- Sent data volume(1)
- Received data volume (volume of data sent by the remote)
- Sent packets(1)
- Received packets (packets sent by the remote)
- Data volume to send(1)
- Remaining volume (of data to send) (1)
- Sequence numbering errors
- Data not echoed(1)
- Jitter

(1) These statistics are not available with SCTP protocol.

Multicast feature

LanTraffic V2 is able to generate and receive Multicast IP traffic (IPv4 and IPv6). The multicast feature is used for the UDP protocol only.

- **Multicast & IPV4**: IPv4 addresses from 224.0.0.0 to 239.255.255.255 are MULTICAST IP addresses. These addresses can be used to generate multicast IP traffic (define the multicast IP address in the Sender part) or to receive multicast IP traffic (define the multicast IP address in the Receiver part).

- **Multicast & IPv6**: IPv6 multicast addresses are defined in "IP Version 6 Addressing Architecture" [RFC2373].
  This defines fixed and variable scope multicast addresses. IPv6 multicast addresses are distinguished from unicast addresses by the value of the high-order octet of the addresses: a value of 0xFF (binary 11111111) identifies an address as a multicast address; any other value identifies an address as a unicast address (FE80::/10 are Link local addresses, FEC0::/10 are Site Local addresses where FF00::/8 are Multicast addresses).
  Multicast addresses from FF01:: through FF0F:: are reserved.
  The complete list of Reserved IPv6 multicast addresses can be found in “IPv6 Multicast Address Assignments” [RFC 2375].
  The ICMPv6 messages are used to convey IPv6 Multicast addresses resolution.

Broadcast feature (available with IPv4 only)

LanTraffic V2 is able to generate and receive Broadcast IP traffic (IPv4 only). The broadcast feature is used for the UDP protocol only.

- **Broadcast & IPV4**: IPv4 addresses as 255.255.255.255 or 192.168.0.255 are BROADCAST IP addresses. These addresses can be used to generate broadcast IP traffic (define the broadcast IP address in the Sender part). To receive broadcast IP traffic, specify the unicast IP address of the Sender in the Receiver part.
- **Broadcast & IPv6:** broadcast does not apply to IPv6.

IP version selection (Windows XP and later)

Please note that **LanTraffic V2** supports IPv6 for Windows XP and later versions (i.e. Server 2003 or Vista, Seven, etc.). On Windows XP, IPv6 is not installed by default: it should be added on the network interface you want to use.
LanTraffic V2 *supports the IPv6 numerical address format (128 bits long) as well as canonical addresses. The IPv6 multicast is available with* ***LanTraffic V2*** *in accordance to RFC 2373 where a multicast IPv6 address starts with FF.*

With IPv6 the maximum size of the packet to avoid fragmentation is **1440** bytes whereas it is 1460 bytes in TCP with IPv4.

Interface selection

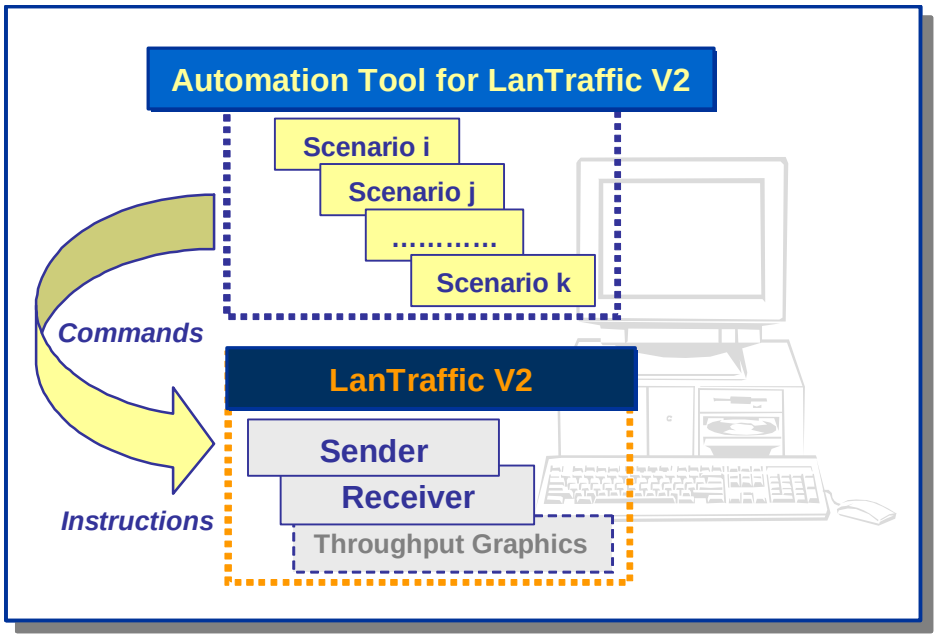
The interface selection of a LAN card (NIC), a virtual NIC such as an IP tunneling protocol or a remote access is useful to control the data traffic hardware route. **LanTraffic V2** is able to generate and receive Unicast and Multicast IP traffic on a selected interface, giving the user a deeper control where data are exchanged and makes multiple routes definition easier. The interface selection is not available with SCTP.

Statistics values

Statistics values presented by **LanTraffic V2** are calculated at the Application level. They don’t include the protocol header, the IP header nor data link header and/or trailer.

0.2 The Automation Tool for LanTraffic V2

The add-on software **Automation Tool for LanTraffic V2** allows you to edit scenarios, to carry out scenarios, to set the **LanTraffic V2** parameters and to pilot **LanTraffic V2** automatically on the same PC.



A scenario is a succession of commands and instructions.

A command is used to set parameters and/or activate a function of **LanTraffic V2**.
For example the *Set and Start connection(s)* command helps to set parameters for IP connections and to start the traffic on these connections. With such command you specify the IP address, port number, protocol, packet size, inter packet delay, duration, etc. and you start the traffic generation for these connections.

An instruction is used by the Automation Tool to create an internal process. For example, the *Wait Date/Time* instruction suspends the scenario execution up to the specified date and time before to continue.

By using the **Automation Tool for LanTraffic V2** you can:

- Set automatically the parameters of the **LanTraffic V2** software,
- Start and stop IP connections based on timers,
- Execute the scheduled operations in accordance with your own timing,
- Make repetitive tests operations automatically,
- Simplify the tests reproduction,
- And more…

PART 1 What's new in LanTraffic V2 Version 2.7

This part is a general overview of new features and main improvements of **LanTraffic V2** version 2.7.

Details regarding features and corrections included in the different versions of **LanTraffic V2** can be found in the version.txt file located in the installation directory (by default: C:\Program Files\LanTraffic V2). To upgrade your software from previous versions, please refer to paragraph 2.1.

⇨ LanTraffic V2 (Version 2.7)

- Supports Windows XP, Vista, Seven, Server 2003 and Server 2008
- Tested on of 32-bit and 64-bit Windows edition.

The contexts created with versions 2.0.12 and higher are reused automatically. When saved, they become the new 2.7 context file format.

⇨ Automation Tool for LanTraffic V2 (Version 1.6)

- Supports Windows XP, Vista, Seven, Server 2003 and Server 2008
- Various corrections

The scenarios created with older versions are reused automatically. When saved, they become the new 1.7 scenario file format.

PART 2 Install LanTraffic V2

LanTraffic V2 requires less than 15 MB of free disk-space. The default settings folder is C:\Program files\LanTraffic V2. The "**Automation Tool for LanTraffic V2**" add-on software is automatically installed with **LanTraffic V2**.

** To run **LanTraffic V2** your computer screen resolution must be at least 1024 X 768 and the DPI setting should be set up with the "Normal size (96 DPI)" value.*

** To install **LanTraffic V2**, you must log on with the administrator rights.*

*We recommend that you shutdown first your anti-virus application before installing **LanTraffic V2**. Please note that you should mask the task bar in a 1024x768 screen resolution, so you get an optimal view of the software interface.*

The installation procedure is a standard installation program for Windows XP and later.

2.1 Forewords when upgrading from previous versions

There is no need to uninstall earlier version of **LanTraffic V2** before upgrading to version 2.7. Starting by **LanTraffic V2** version 2.6 a new protection using the USB Software Protection Key has introduced. But previous users of **LanTraffic V2** can continue using their Site Key license. **When upgrading from a previous version of LanTraffic V2, do not uninstall the previous version to keep your existing license**.

2.2 How to install the software downloaded from the Internet

*To install **LanTraffic V2**, you must log on with the administrator rights.*

If you have downloaded **LanTraffic V2** trial version from our website, you have downloaded the "LanTrafficV2.zip" file including the software and the related documentation. You must first unzip this file in a temporary directory. Then run Setup_LanTrafficV2_Standard.exe from this temporary directory to launch the setup procedure.

2.3 How to install the software from the CD-ROM

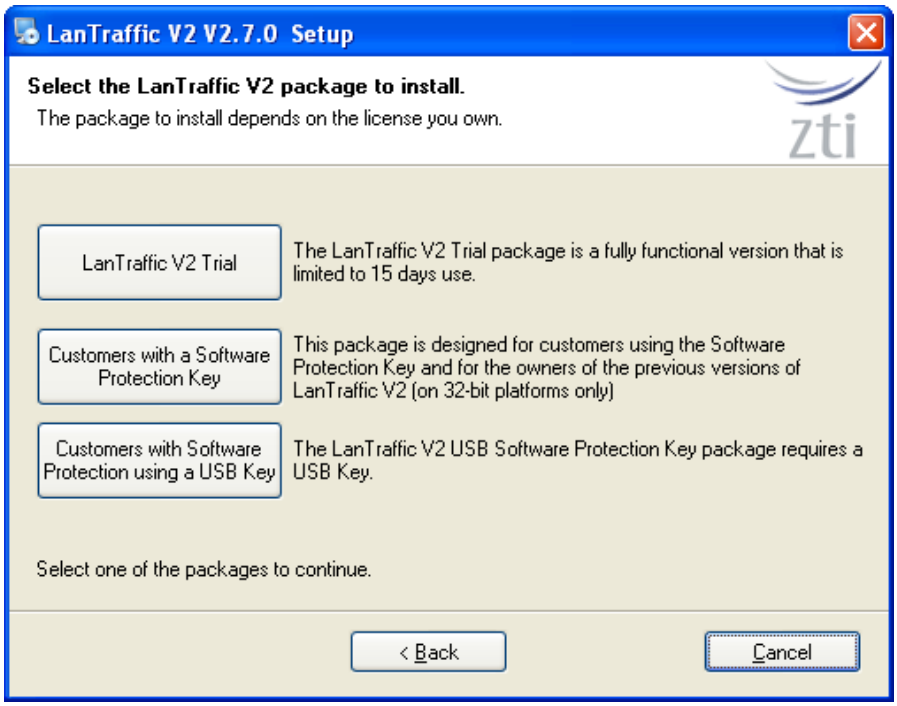
The installation procedure is a standard installation program.

*To install **LanTraffic V2**, you must log on with your administrator rights.*

- First, insert the **LanTraffic V2** CD-ROM in your CD-ROM drive.
- Click on Setup_LanTrafficV2_Standard.exe
  Follow the **LanTraffic V2** setup instructions to proceed with the installation.

2.4 During the installation

Follow the instructions until reaching the **LanTraffic V2** package selection window.



2.4.1 LanTraffic V2 packages in a few words

To use the **LanTraffic V2** software, there are 3 license schemes:

- The **LanTraffic V2 Trial package** allows you to use **LanTraffic V2** during 15 days after the first run. When the trial period has expired, the license should be purchased.
- The **LanTraffic V2 Software Protection Key package** has been designed for users owning a Software License key and for the users of the previous versions of **LanTraffic V2**. It keeps your current installation and files, without additional requirement.
- For new users, the **LanTraffic V2 USB Software Protection Key package** requires a USB key with the **LanTraffic V2** license. The **USB key** is provided with **LanTraffic V2** from version 2.6. This package allows the installation of **LanTraffic V2** on several PCs but the only PC able to run **LanTraffic V2** is the one having the USB key plugged in.

As previous users, you may be interested to move to a USB Software Protection Key: please contact your distributor or ZTI to get more details about the license migration program (see 3.3 LanTraffic V2 & USB Software Protection Key for more details).

This software is licensed on a per workstation basis. This means that you will need to get a separate license for each machine you will run it on. The license may be a software key (for previous users) or the USB key. Each licensed copy of the software gets a USB Software Protection key that can be moved from one installation to the other.

The USB key contains only the license information. The software is available on a separate CD-ROM.

2.4.2 Which package should I install?

Depending on your needs, please find here below the package most suitable for you.

2.4.2.1 I want to evaluate LanTraffic V2

In that case, choose the *"IP Traffic – Test & Measure Trial"* package. You will be able to use **LanTraffic V2** during 15 days only.

2.4.2.2 I already use LanTraffic V2 …

This paragraph is dedicated to the users owning a previous version of **LanTraffic V2.**

2.4.2.2.1 … and I want to upgrade and keep my permanent license

In that case, choose the *"Customers with a Software Protection Key"* package. Your installation will be upgraded and your existing permanent Software Protection Key will be kept.

2.4.2.2.2 … and I want to upgrade and use the USB Software Protection Key I bought

In that case, choose the package *"Customers with Software Protection using a USB Key"*. Plug the USB Software Protection Key before launching **LanTraffic V2.**

2.4.2.3 I just bought LanTraffic V2 …

This paragraph is related to the users purchasing **LanTraffic V2 version 2.7.**

2.4.2.3.1 … and I chose the Electronic Software Delivery (ESD)

In that case, choose the package *"Customers with a Software Protection Key".* When you launch the software for the first time, press the "Enter" key when the ZTI logo appears. Then, get the site code and mail it to us with your details and your purchase order reference at contact@zti-telecom.com. We will send you back the site key enabling your permanent Software Protection Key. More details about the way to proceed are available in paragraph *"3.2.1 Installation of the Software Protection Key".*

2.4.2.3.2 … and I received the CDROM & USB Software Protection Key

In that case, choose the package *"Customers with Software Protection using a USB Key"*. Plug the USB Software Protection Key before running **LanTraffic V2.**

2.4.2.3.3 … and I will receive the CDROM & USB Software Protection Key in a few days

In that case, choose the package *"Customers with a Software Protection Key"*. You will get a fully functional but time-limited Software Protection Key.

2.5 What has been installed on my computer?

The default settings install **LanTraffic V2** in the following directory: C:\Program Files\LanTraffic V2.

The **LanTraffic V2** installation procedure installs the main following files on your hard disk:

- LanTrafficV2.exe: program file
- LanTraffic V2 User Guide: PDF file.
- Read Me First: PDF file
- Aut_LTV2.exe: program file (Automation tool)
- Automation Tool for LanTraffic V2 User Guide: PDF file
- Automation scenario samples and other files required by the software
- Viewer.exe: program file installed with the USB Software Protection package
- ElevateLanTrafficV2.exe: allows running LanTrafficV2 as administrator (for Windows Vista and later)
- Version.txt: text file containing information about the versions.

Start Menu shortcuts created:

Start > Programs > **LanTraffic V2**

- ⇨ **Automation Tool for LanTrafficV2** (click to run the software)
- ⇨ Automation Tool for LanTrafficV2 User Guide (PDF file)
- ⇨ **LanTraffic V2** (click to run the software)
- ⇨ **LanTraffic V2 (Run as administrator)** (on Windows Vista and later)
- ⇨ LanTrafficV2 User Guide (PDF file)
- ⇨ Read Me First (PDF file)

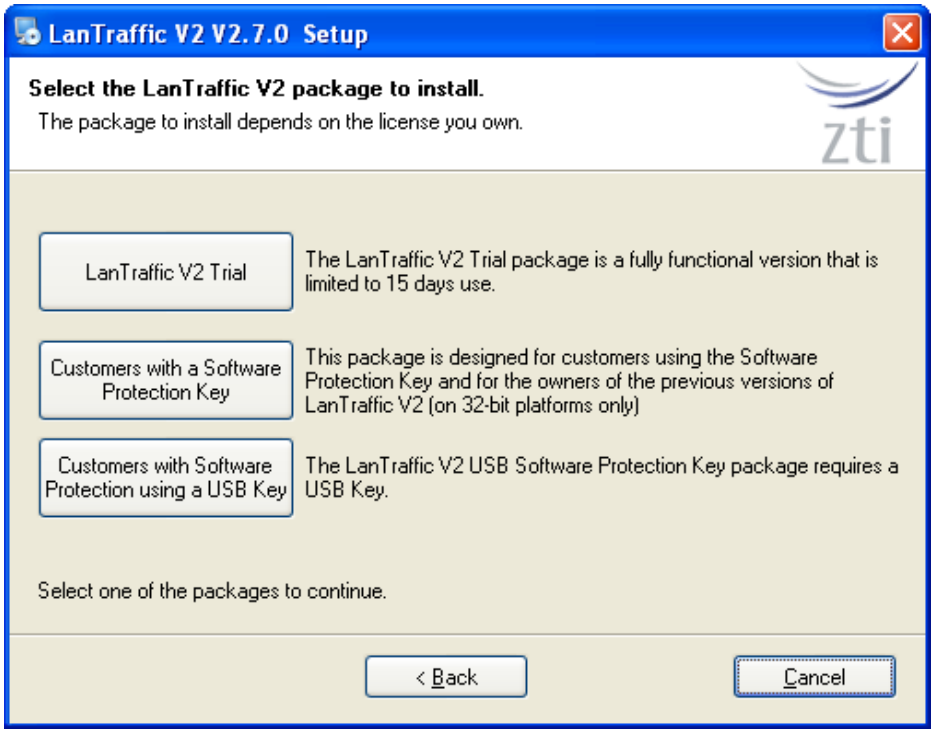
*If the RPC mechanism is disabled, a message will ask automatically for the system reboot at the end of the installation. This is mandatory to allow the dialog between the Automation Tool and **LanTraffic V2**.*

2.6 How to reinstall another package?

These steps are mandatory for users that want to install a new LanTraffic V2 package on their current LanTraffic V2 V2.7 configuration.

The users having LanTraffic V2 V2.6 or older are not concerned by the following steps. To upgrade from previous versions, refer to paragraph 2.1 "Forewords when upgrading from previous versions"

If you have already installed one of the LanTraffic V2 V2.7 packages, you should uninstall first your current package (get more details at PART 4 Uninstall LanTraffic V2) before installing a new one. Then click LanTrafficV2.msi and select, in the window below, the new package you want to install.



2.7 How to transfer the software to another computer?

Install the software on the target computer. You don't need to do any particular operation with the *"Customers with Software Protection using a USB Key"* and *"LanTraffic V2 Trial"* packages.
With **LanTraffic V2** & USB Software Protection Key, you do need to plug the USB key before running the software on the target computer.

With the package *"Customers with a Software Protection Key"*, install the software on the target computer and refer to the paragraph *"3.2.2 Software License Transfers"* to know how to transfer the Software Protection Key.

PART 3 How to handle your license

3.1 LanTraffic V2 Trial

You don't require any license to install the **LanTraffic V2 Trial package**. After the first run of **LanTraffic V2,** the **LanTraffic V2 Trial package** can be used during 15 days.

3.1.1 LanTraffic V2 License Information window

When you run **LanTraffic V2,** the information about your trial license is displayed, as shown below.

You are now able to use **LanTraffic V2** during the next 15 days.

3.1.2 End of the fifteen-day trial period

Once the trial period is finished, you are not allowed to use **LanTraffic V2** anymore, as shown below:

When you press the **OK** button, **LanTraffic V2** will stop running. To continue to use **LanTraffic V2 please contact you local distributor or ZTI** to get a license.

3.2 LanTraffic V2 & Software Protection Key

The section 3.2.1 is relevant only for users that got the Software Protection Key.

Licensed users of **LanTraffic V2** that are already using the Software Protection Key should not need to refer to the section 3.2.1. To transfer the owned Software Protection Key to another PC or to another directory, please go directly to section 3.2.2.

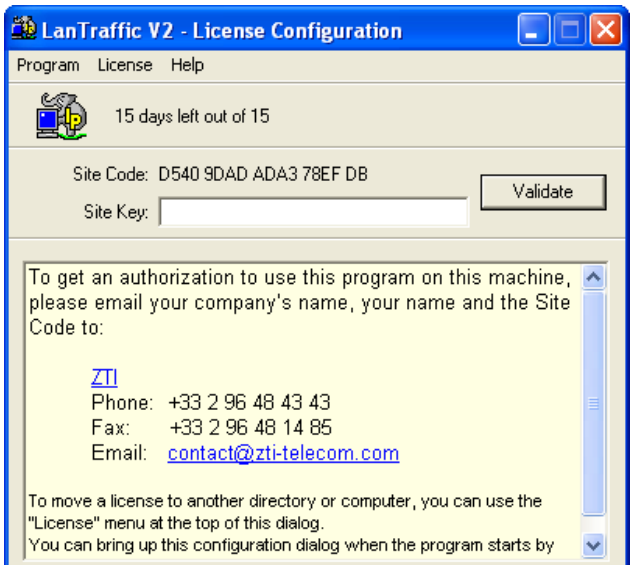
3.2.1 Installation of the Software Protection Key

*This software is licensed on a per workstation basis. This means that you will need to get a separate license for each machine you will install it on. Each licensed copy of the software installed on a system has a unique **Site Code** that requires a corresponding unique **Site Key** to work. A period of 15 days is automatically enabled at the first installation of the software. If you try to install the software again, the Software Protection Key will disable the trial period.*

If you want to configure your Software Protection Key before the trial period ends, press **Enter** just after launching the **LanTraffic V2** when the following message is displayed:

Then, you will see the following Software License configuration window:

Under Windows Vista and later, you must have the administrator rights to be able to use the Software Protection Key. Launch LanTraffic V2 by clicking on "LanTraffic V2 (Run as administrator)" shortcut.



*At the end of the trial period when you launch **LanTraffic V2**, the same software license configuration window appears, but saying "Program not authorized" instead of showing the remaining days of use.*

To get the **Site Key** and obtain an unlimited version, please send an email to contact@zti-telecom.com or contact@zti.fr with the following information:

a. The **Site Code** (you can copy and paste the Site Code displayed in the license window)

b. The name of the software: **LanTraffic V2**

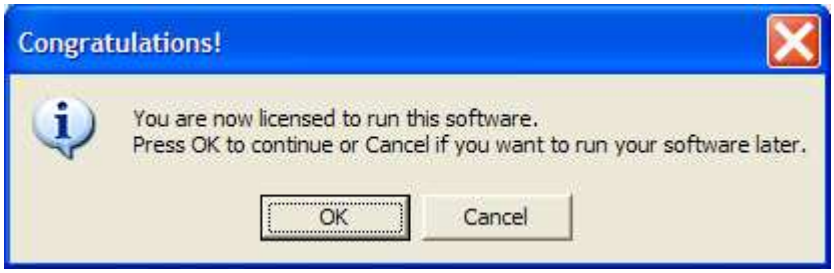
c. The OS used

d. Your details

e. The purchase order's number and date of purchase

We will then email you the **Site Key**. You can now close the license's window.

After you have received the email with the **Site Key**, open the Software License configuration window again by pressing the Enter key as explained before. Copy the Site Key in and then click "Validate". After validation of the Site Key, you will get the following message:



⇨ Important: one **Site Code** is associated with one **Site Key**, and only one. A **Site Code** is unique for each PC installed. For security reasons, as soon as you validate a **Site Key** (trial or unlimited), the Software License program generates a new **Site Code** automatically.

⇨ For any question or further information, please contact our technical support:
Email: support@zti-telecom.com or support@zti.fr

Phone: +33 2 9648 4343

Fax: +33 2 9648 1485

*When you launch **LanTraffic V2** with an unlimited software License, you will see the following window:*

3.2.2 Software License Transfers

A Software License transfer is not a duplication of any type.
Please contact ZTI or your authorized distributor for site software license information and for several software licenses purchase.

Software Licenses can be transferred using one of the following methods:

⇨ Direct transfer: **move the Software License to another directory of the same PC or between two PCs linked to the same network.**

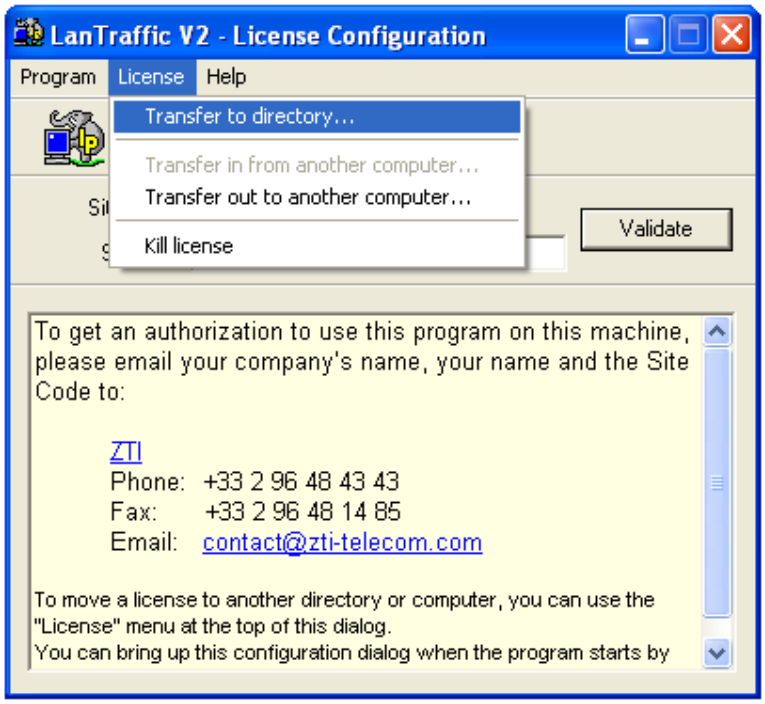
⇨ Transfer by media: **move the Software License from a source PC to a target PC by using a floppy disk or USB key.**

3.2.3 Direct Transfer: move the Software License from one local directory to another

This transfer mechanism must be used to move a Software License in two cases:
- From a source to a target directory of the same PC
- From a source to a target directory of networked PCs

- First, copy the program (copy the **LanTraffic V2** folder) to the target directory.
  For example from "C:\Program Files\LanTraffic V2" to "C:\Temp\LanTraffic V2"

- Then run the program from its original directory (*from "C:\Program Files\LanTraffic V2"*). When the license configuration window appears, press **Enter** and select "License > Transfer to directory …" in the License menu as shown below:



- Provide the path name of the target program (*for example C:\Program Files\LanTraffic V2\LanTrafficV2.exe*).
  The Software License is now transferred to the new directory.

3.2.4 Transfer by Media (floppy disk or USB key) from a source PC to a target PC

A floppy disk or USB key is needed for this kind of transfer.

To transfer the Software License from the source PC (PC #1) to the target PC (PC #2), proceed as described in the following order:

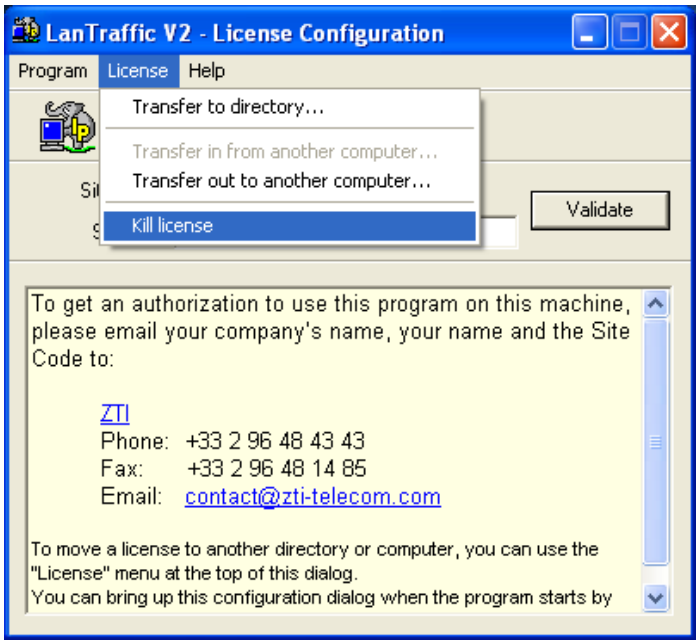
1) First install the program on the target PC (PC #2).

2) Run the software on PC # 2 and Kill the trial Software License in order to get an unauthorized license on this PC.

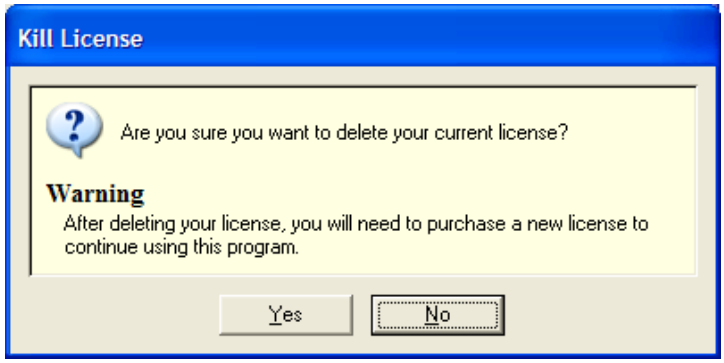
If the "Transfer in from another computer …" item of the license menu is disabled, you must kill the license.

3.2.4.1 How to kill the Software License?

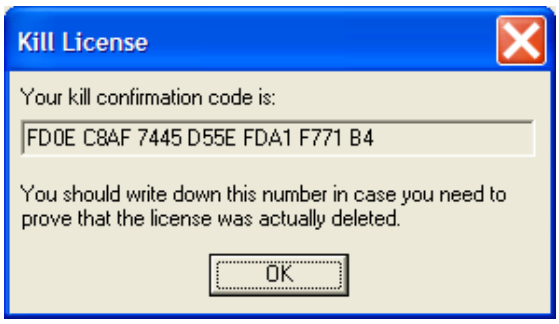
When the Software License configuration window appears, press **Enter** and select “License > Kill license” in the license menu.



A message box will appear:

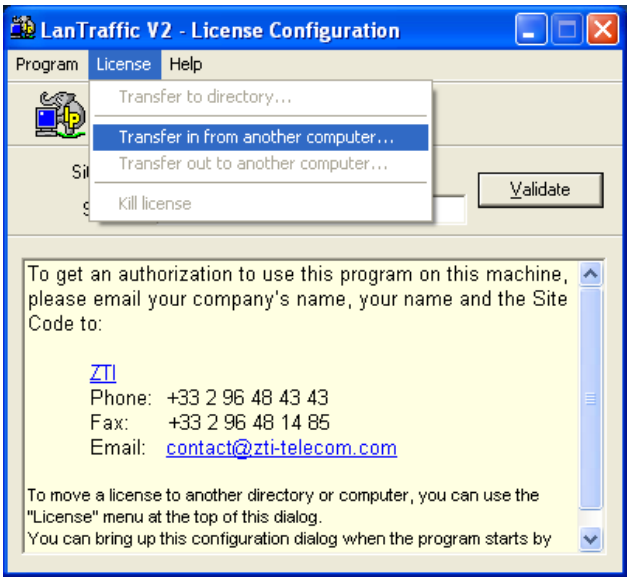


Press 'Yes' to kill the Software License and a confirmation code is displayed:

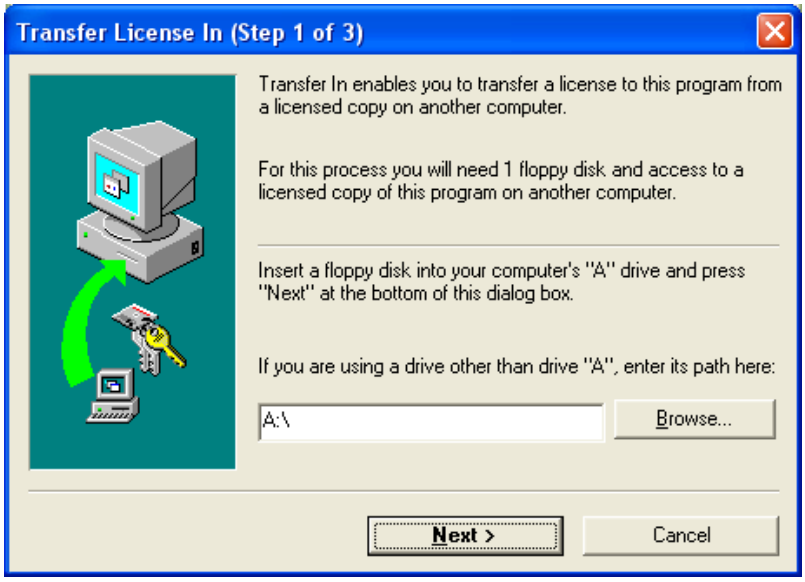


Click 'OK' and the license window displays now "Program not authorized":

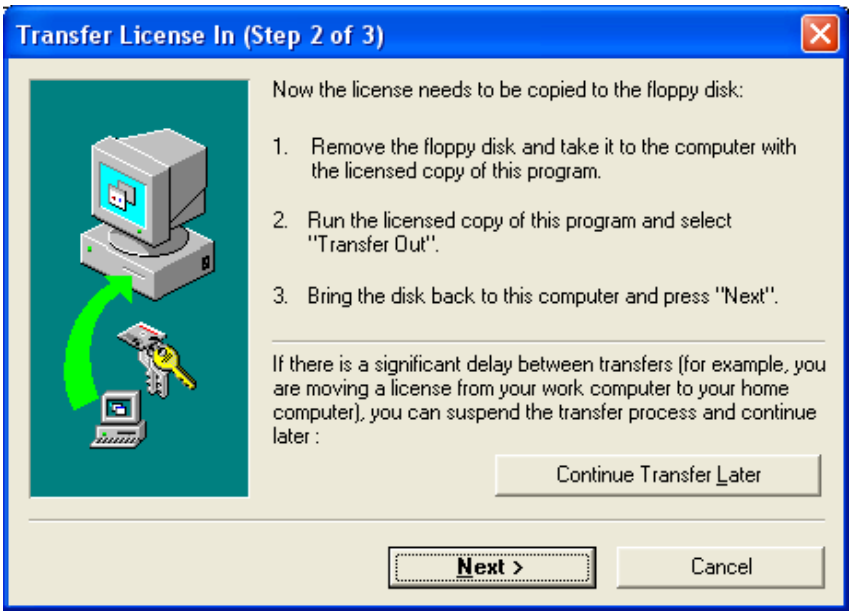
3) Select “License > Transfer in from another computer …” from in the Software License menu:



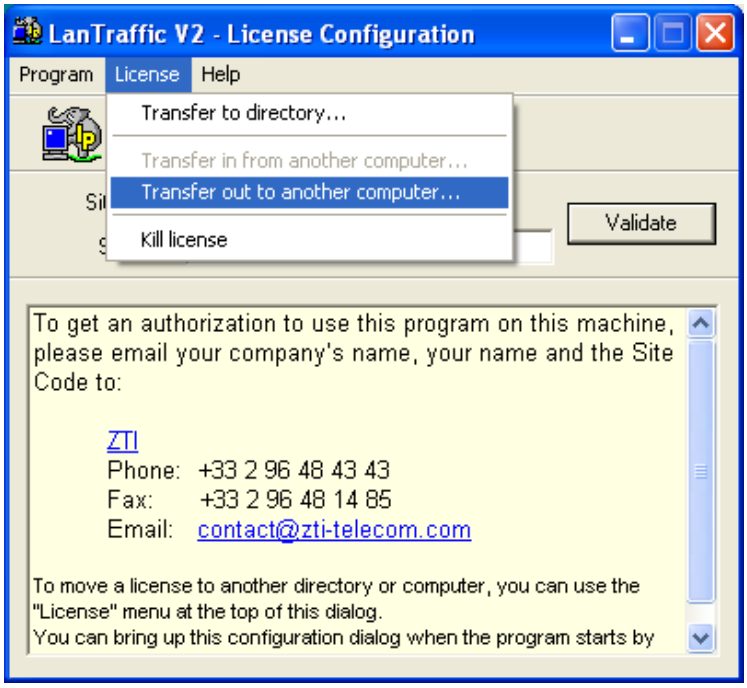
The "Transfer License In (Step 1 of 3)" window is displayed:



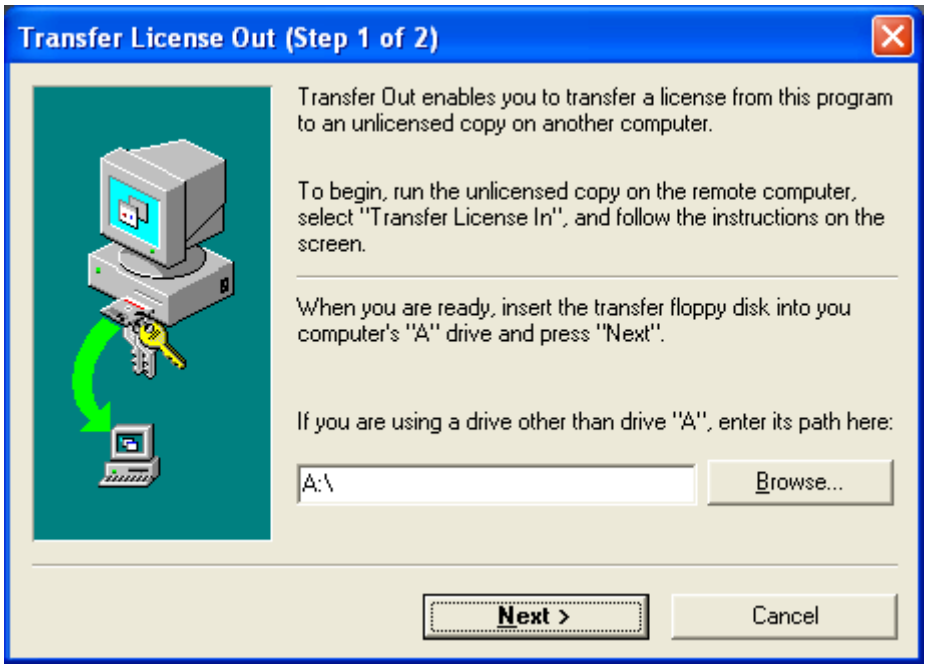
4) Insert a floppy disk or use a USB key as requested in step 1 of 3 and specify the path. Then press “Next >”: the "Transfer License In (Step 2 of 3)" window is displayed:



5) Go to the source PC (PC #1) and insert the media (floppy disk or USB key). Then start the program on PC #1. When the license configuration window appears, press **Enter** and select “License > Transfer out to another computer …” as shown below:

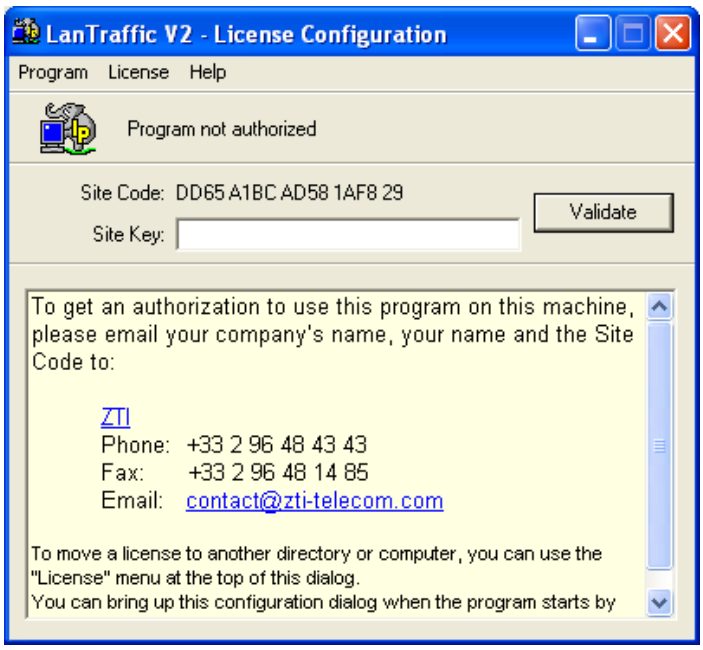


The following window is displayed:



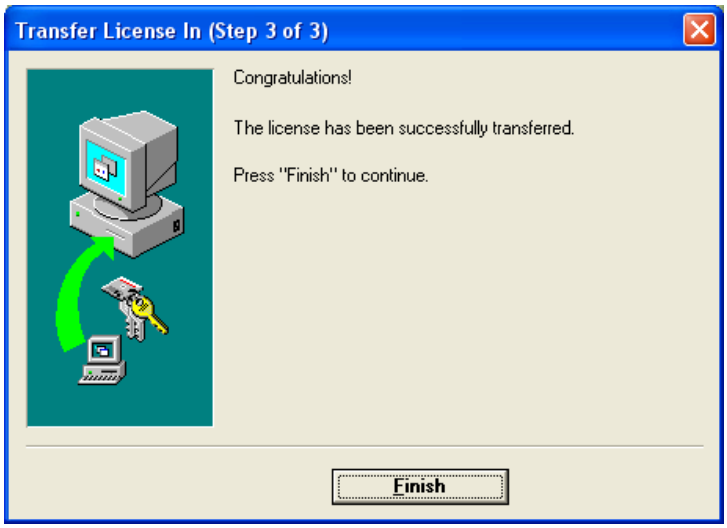
Input the media path (floppy disk or USB key) and then press "Next >".

When the license is put on the media, you get the “Program not authorized” message:



You can check that the license is not available anymore on the source PC since the **LanTraffic V2** software license is on a workstation basis. *Contact us to get information on site license (contact@zti.fr or contact@zti-telecom.com).*

6) Remove the media from PC #1 and return to PC #2.
Click the 'Next' button on the step 2 of 3 of the “Transfer license in” window (on PC #2) to complete the transfer.
The unlimited Software License key is now transferred from the source PC to the target PC, and you get the following message:



Click Finish to continue.

3.3 LanTraffic V2 & USB Software Protection Key

The USB Software Protection Key is the most flexible way to transfer your license to any other PC. Plug it in the computer you want to use **LanTraffic V2** on.

If you are a user of a previous version of **LanTraffic V2** (version 2.5 and under) change for more flexibility to a **USB Software Protection Key** by contacting the Sales Offices (sales@zti-telecom.com) and get some information about how to exchange your Site Key to a **USB Software Protection key**.

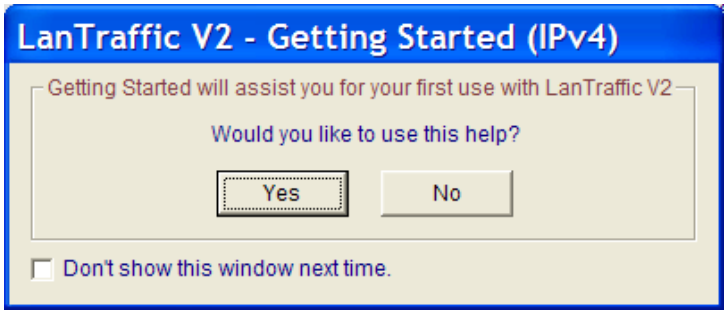
PART 4 Uninstall LanTraffic V2

The uninstall procedure is a standard uninstall program. To uninstall **LanTraffic V2** select “Uninstall LanTraffic V2” in the “Start > Programs > LanTraffic V2” menu.

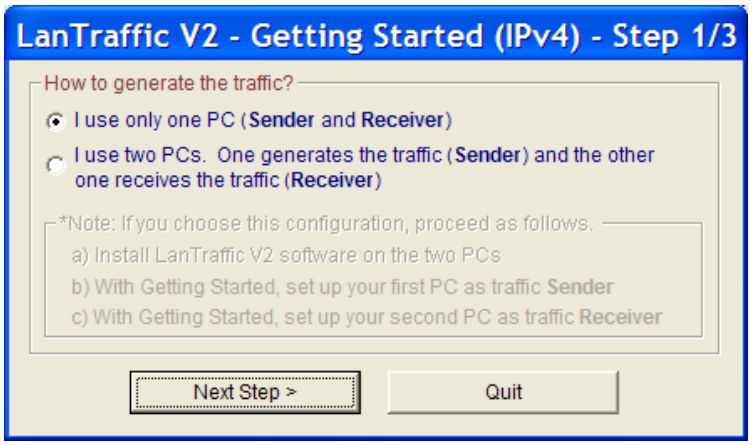
PART 5 LanTraffic V2 Getting Started

*Anti-virus or firewall applications may disrupt **LanTraffic V2** when sending or receiving data. Please set up your security software before using **LanTraffic V2** (see PART 6 and PART 7).*

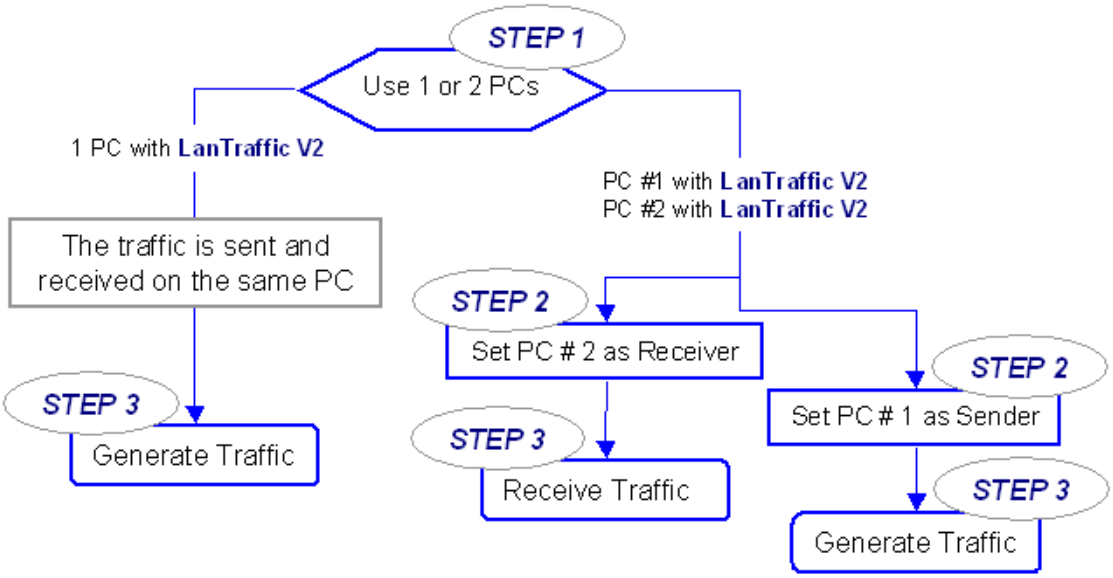
New users can use this help as an introduction to **LanTraffic V2** and generate or receive TCP and UDP data with the IPv4 protocol in a few clicks. Just after launching **LanTraffic V2**, the Getting Started Window is displayed:



Press **No** if you don't want to use this help.
Press **Yes**, the next window will ask you if you want to use 1 or 2 PCs:

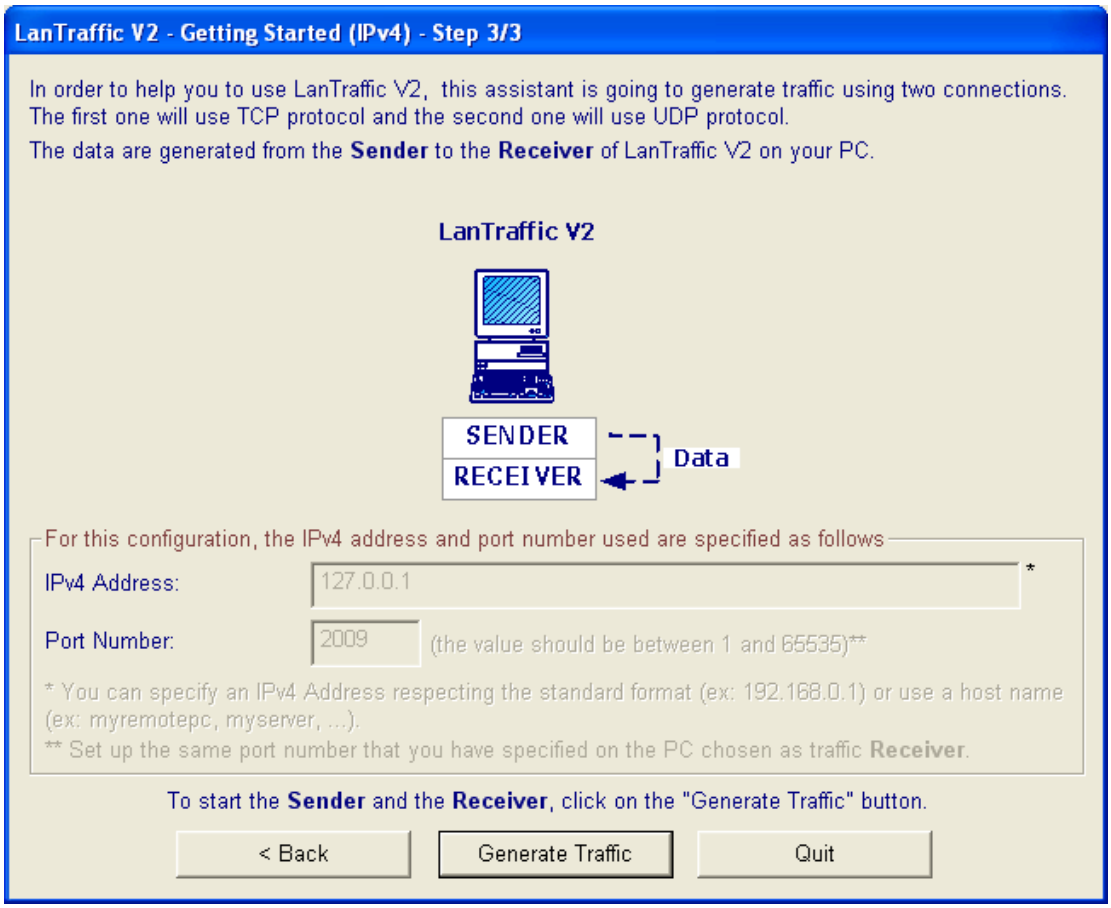


Depending on your choice to use 1 or 2 PCs, the plan below shows the steps:

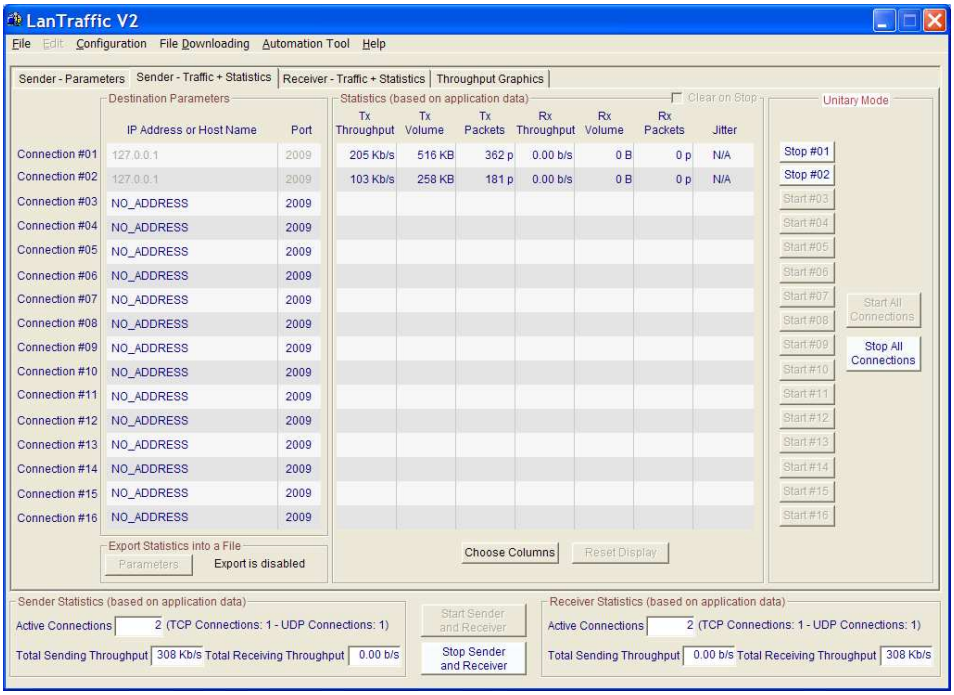


For the use of 1 PC

The following window is displayed.

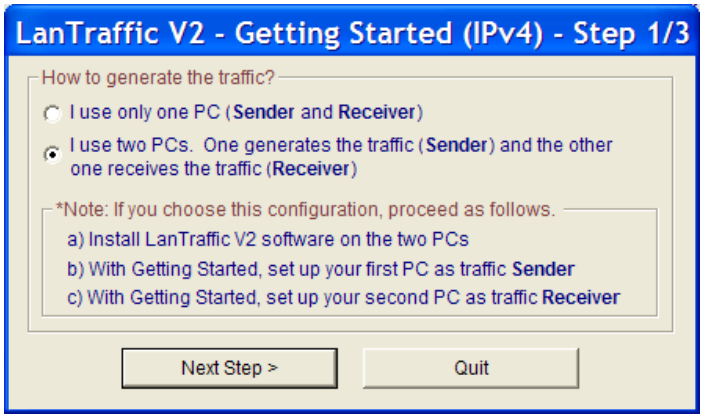


Then press the "Generate traffic" button to continue. The "Sender – Traffic + Statistics" tab of LanTraffic V2 will display the two first active connections as shown on the following window:

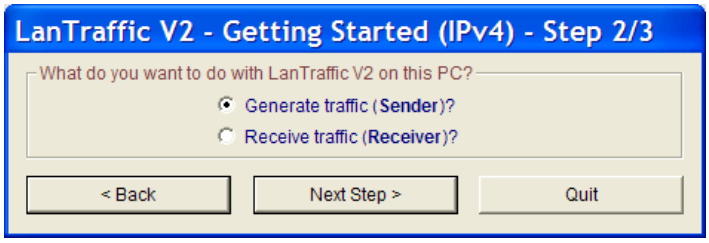


For the use of 2 PCs

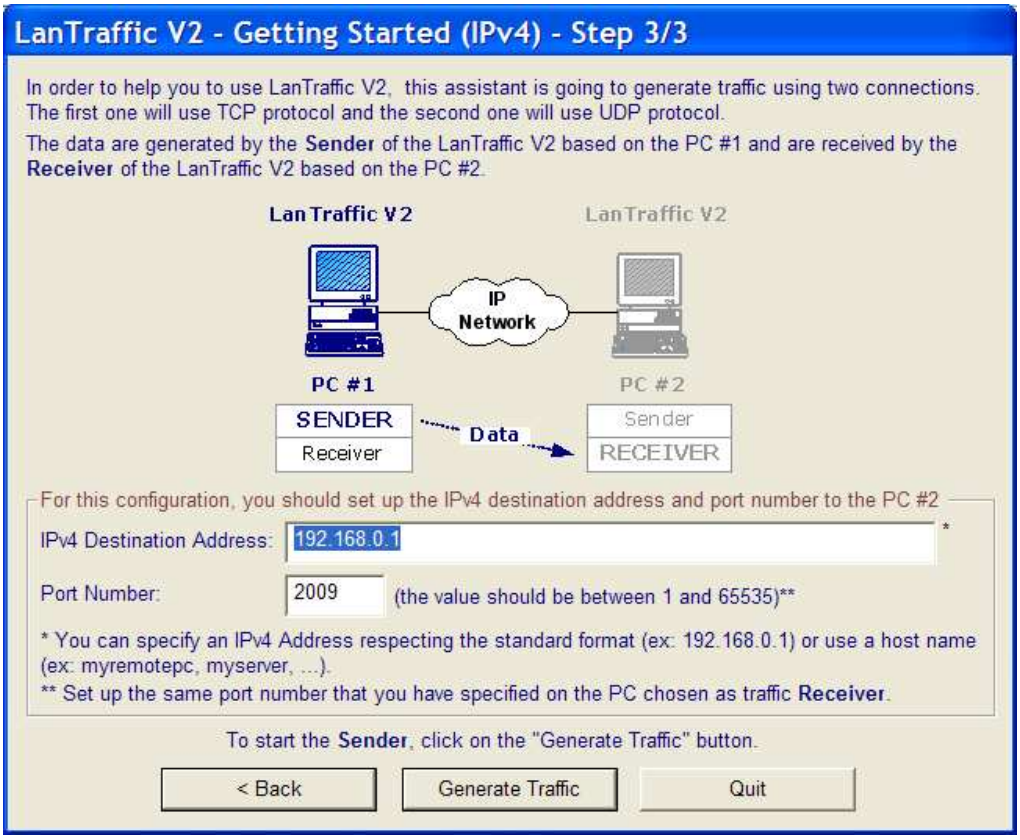
If you select the option: **I use two PCs**, read the following instructions. **LanTraffic V2** must be installed on the two PCs.



Press "Next Step >" to continue.

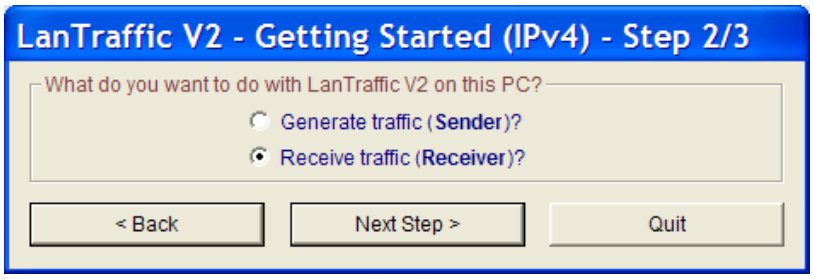


Then choose if you want to generate or receive the traffic on this PC. If you select "Generate traffic" the following window will appear:

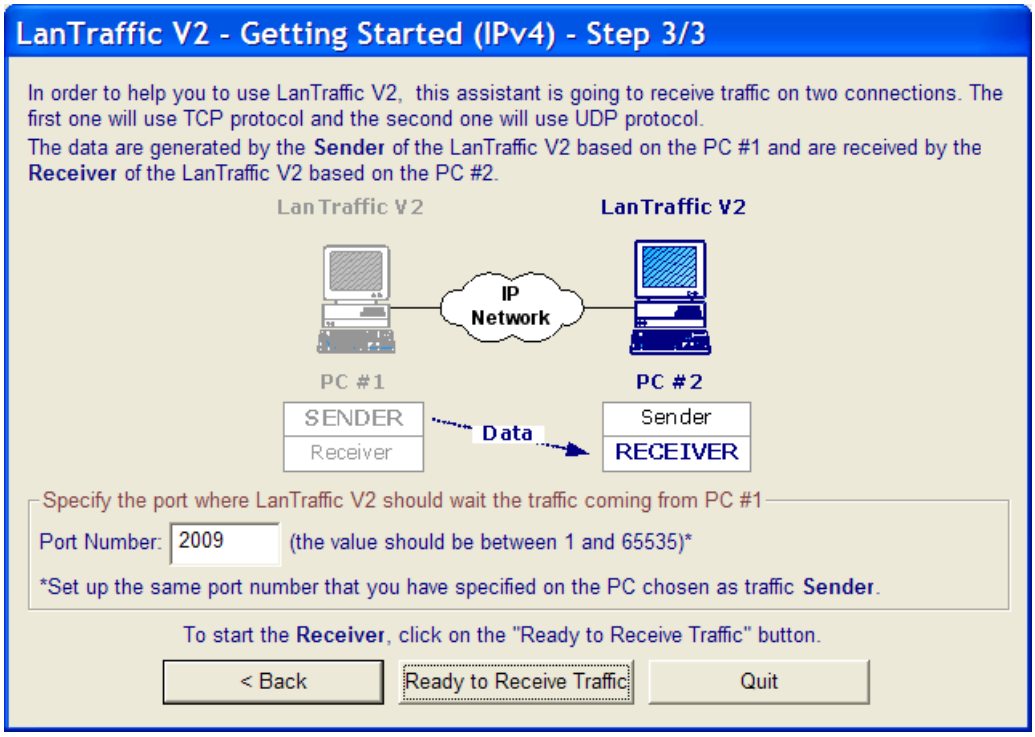


Define the IPv4 address and port number to use. Then press the "Generate traffic" button and a warning dialog is displayed:

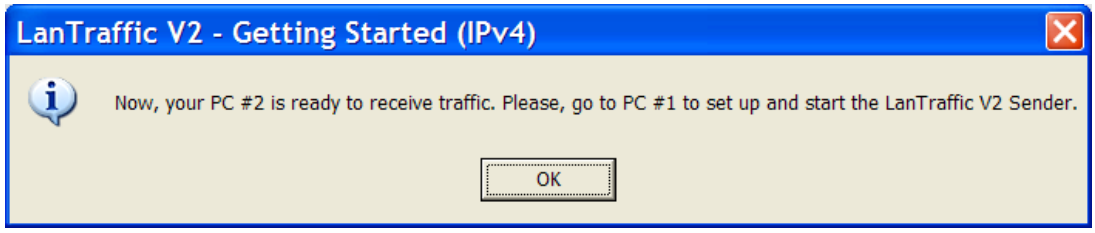
Before generating traffic towards PC # 2, the PC # 2 must be configured as Receiver.



Press "Next Step >" to continue on PC # 2.



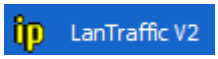
After pressing the "Ready to Receive Traffic" button, a warning message will appear:



Press "OK" and the "Receiver – Traffic + Statistics" tab of **LanTraffic V2** is displayed on PC # 2.
Then go to PC # 1 and start the **LanTraffic V2** Sender. The "Sender – Traffic + Statistics" tab of **LanTraffic V2** displays now the two first active connections. You have now 2 connections generating traffic from PC #1 to PC # 2.

PART 6 Run LanTraffic V2

Use the Windows start menu:

Start ► All Programs ► LanTraffic V2 ► 

Click here.

Under Windows Vista and later, a new shortcut allows starting LanTraffic V2 with the administrator rights (Start > All Programs > LanTraffic V2 > LanTraffic V2 (Run as administrator)). You must have the administrator rights to be able to use the DSCP field.

Under Windows Vista and later, you must have the administrator rights to be able to run the Software Protection Key. If you installed this package, LanTraffic V2 must be started using the "LanTraffic V2 (Run as administrator)" shortcut.

After a few seconds and depending on your license, you will get one of the following license windows:

15 days trial version	***Software Protection Key version***
	

USB Software Protection Key version
If you use a USB Software Protection Key, there is no window!

The Windows Firewall may display the following window, to allow configuring the Windows Firewall settings for **LanTraffic V2**. Click on the "Allow Access" (or "Unblock" depending on the target OS) button to add **LanTraffic V2** into the authorized programs list.

PART 7 LanTraffic V2 and Windows Firewall

*Anti-virus or firewall applications may disrupt **LanTraffic V2** from sending or receiving data. Please set up your security software before using **LanTraffic V2**.*

*Windows Firewall may also disrupt the **LanTraffic V2** performances. To get best performances, you should disable Windows Firewall.*

Some anti-virus configurations can stop **LanTraffic V2** working because of their security settings. For commercial anti-virus, please refer to the related documentation to authorize **LanTraffic V2** to work.

7.1 How to authorize TCP and UDP connections with Windows XP Service Pack 2 and Windows Server 2003

The Windows Firewall on Windows XP Service Pack 2 and Windows Server 2003 blocks incoming network connections except for the authorized programs. To allow LanTraffic V2 receiving incoming TCP or UDP connections, you must add it in the exceptions list of Windows Firewall by proceeding as follows:

Step1: Open a command prompt window. You should be logged on an account giving the administrator rights to be able to modify the firewall configuration.

Step 2: type the command line below and press "Enter".

%> netsh firewall add allowedprogram program="C:\Program Files\LanTraffic V2\LanTrafficV2.exe" name="LanTraffic V2" mode=ENABLE scope=ALL profile=ALL

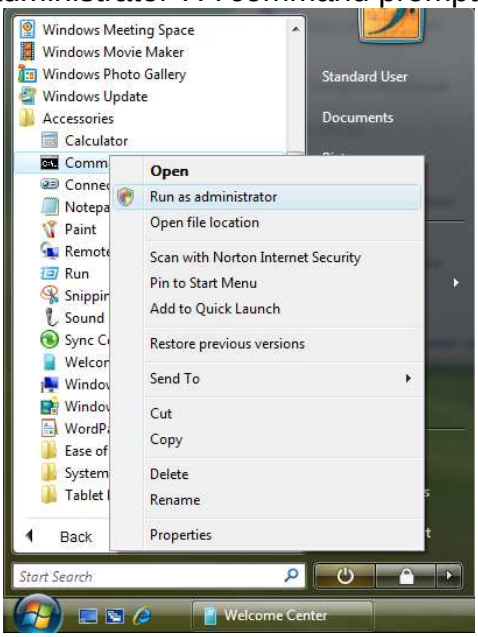
Make sure that "C:\Program Files\LanTraffic V2\" is the installation directory of LanTraffic V2. A message of confirmation is returned by *netsh* if the command is succeeded. If the path you have specified is invalid, *netsh* returns an error message close to the following message: *The system cannot find the file specified.* In that case, please renew Step 2.

Unlike under Windows Vista and later, the firewall allows the incoming echo replies and SCTP traffic. You don't need to add a rule to be able to receive ICMPv4/ICMPv6 "echo reply" messages or to send/receive SCTP data.

7.2 How to authorize UDP and TCP connections with Windows Firewall

The Windows Firewall blocks incoming and outgoing network connections except for the authorized programs. By default, all outgoing connections are allowed. But to authorize LanTraffic V2 receiving incoming connections, you must add it in the exceptions list of Windows Firewall by proceeding as follows:

Step1: Open a command prompt window with the administrator rights. The administrator rights are mandatory to set up the firewall configuration. Open the "All Programs / Accessories" folder and right-click on the "Command Prompt" icon as shown on the figure below and choose "Run as administrator". A command prompt window is opened.



Step 2: type the command line below and press "Enter".

%> netsh firewall add allowedprogram program="C:\Program Files\LanTraffic V2\LanTrafficV2.exe" name="LanTraffic V2" mode=ENABLE scope=ALL profile=ALL

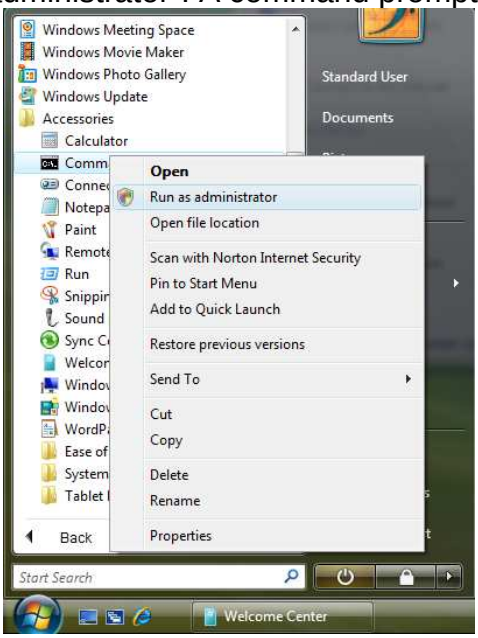
Make sure that "C:\Program Files\LanTraffic V2\" is the installation directory of LanTraffic V2. A message of confirmation is returned by *netsh* if the command is succeeded. If the path you have specified is invalid, *netsh* returns an error message close to the following message: *The system cannot find the file specified.* In that case, please renew Step 2.

With Windows Vista and later, the firewall blocks the incoming echo replies and SCTP traffic. You must add a rule to be able to receive ICMPv4/ICMPv6 "echo reply" messages or to send/receive SCTP data. Please refer to the paragraphs here after.

7.3 How to authorize ICMPv4 and ICMPv6 traffic with Windows Firewall

The Windows Firewall blocks incoming ICMPv4 and ICMPv6 "echo reply" messages. To be able to receive these messages, you must add two new rules by proceeding as follows:

Step1: Open a command prompt window with the administrator rights. The administrator rights are mandatory to do the firewall configuration. Open the "All Programs / Accessories" folder and right-click on the "Command Prompt" icon as shown on the figure below and choose "Run as administrator". A command prompt window is opened.



Step 2: To create the rule for ICMPv4 echo reply messages, type the command line below and press "Enter".

%> netsh advfirewall firewall add rule name="Echo Reply ICMPv4 (used by LanTraffic V2)" dir=in action=allow profile=any localip=any remoteip=any protocol=icmpv4:0,0 interfacetype=any

A message of confirmation is returned by *netsh* if the command is succeeded.

Step 3: To create the rule for ICMPv6 echo reply messages, type the command line below and press "Enter".

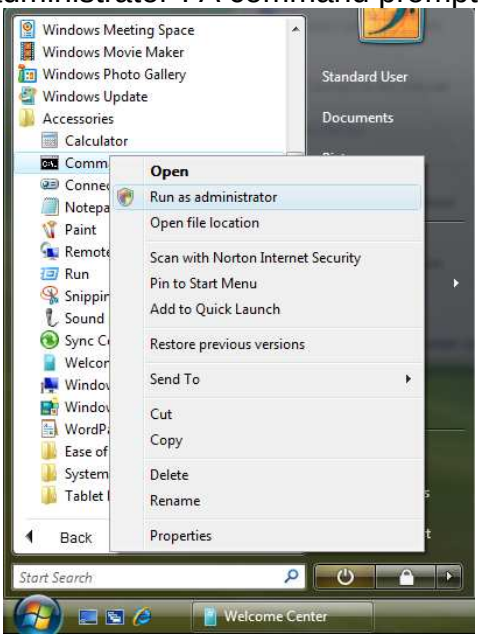
%> netsh advfirewall firewall add rule name="Echo Reply ICMPv6 (used by LanTraffic V2)" dir=in action=allow profile=any localip=any remoteip=any protocol=icmpv6:129,0 interfacetype=any

A message of confirmation is returned by *netsh* if the command is succeeded.

7.4 How to authorize SCTP connections with Windows Firewall

The Windows Firewall blocks incoming and outgoing SCTP traffic. To be able to send and receive SCTP data, you must add two new rules by proceeding as follows:

Step1: Open a command prompt window with the administrator rights. The administrator rights are mandatory to set up the firewall configuration. Open the "All Programs / Accessories" folder and right-click on the "Command Prompt" icon as shown on the figure below and choose "Run as administrator". A command prompt window is opened.



Step 2: To create the rule for incoming SCTP traffic, type the command line below and press "Enter".

%> netsh advfirewall firewall add rule name="SCTP (used by LanTraffic V2)" dir=in action=allow profile=any localip=any remoteip=any protocol=132 interfacetype=any

A message of confirmation is returned by *netsh* if the command is succeeded.

Step 3: To create the rule for outgoing SCTP traffic, type the command line below and press "Enter".

%> netsh advfirewall firewall add rule name="SCTP (used by LanTraffic V2)" dir=out action=allow profile=any localip=any remoteip=any protocol=132 interfacetype=any

A message of confirmation is returned by *netsh* if the command is succeeded.