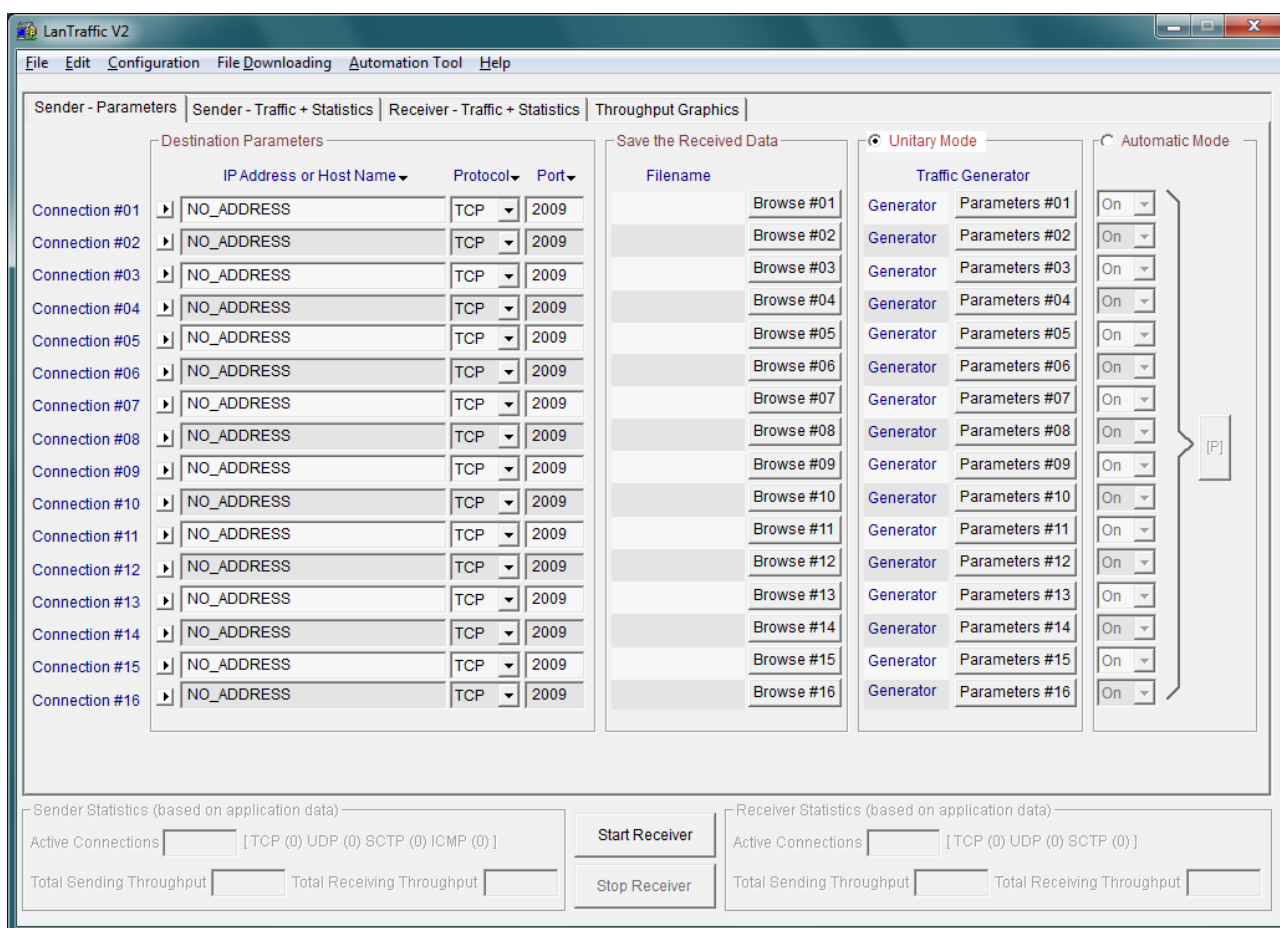


Version 2.9

Traffic Generator for IP Networks (IPv4 & IPv6) ***FTTx, LAN, MAN, WAN, WLAN, WWAN, Mobile, Satellite, PLC, etc.***



The screenshot shows the LanTraffic V2 software interface. The main window has a menu bar (File, Edit, Configuration, File Downloading, Automation Tool, Help) and a tabbed interface with four tabs: Sender - Parameters, Sender - Traffic + Statistics, Receiver - Traffic + Statistics, and Throughput Graphics. The 'Sender - Parameters' tab is active, showing a table of 16 connections. Each connection has a dropdown for 'Destination Parameters' (IP Address or Host Name, Protocol, Port) and a 'Browse' button. The 'Save the Received Data' section has a 'Filename' field and a 'Browse' button. The 'Traffic Generator' section has two modes: 'Unitary Mode' (selected) and 'Automatic Mode'. It lists 16 generators, each with a 'Parameters' field and an 'On/Off' toggle. A bracket on the right groups these generators under a '[P]' label. At the bottom, there are sections for 'Sender Statistics' and 'Receiver Statistics', each with 'Active Connections' and 'Total Sending/Receiving Throughput' fields. 'Start Receiver' and 'Stop Receiver' buttons are also present.

Connection	Destination Parameters	Protocol	Port	Filename	Generator	Parameters	On/Off
Connection #01	NO_ADDRESS	TCP	2009	Browse #01	Generator	Parameters #01	On
Connection #02	NO_ADDRESS	TCP	2009	Browse #02	Generator	Parameters #02	On
Connection #03	NO_ADDRESS	TCP	2009	Browse #03	Generator	Parameters #03	On
Connection #04	NO_ADDRESS	TCP	2009	Browse #04	Generator	Parameters #04	On
Connection #05	NO_ADDRESS	TCP	2009	Browse #05	Generator	Parameters #05	On
Connection #06	NO_ADDRESS	TCP	2009	Browse #06	Generator	Parameters #06	On
Connection #07	NO_ADDRESS	TCP	2009	Browse #07	Generator	Parameters #07	On
Connection #08	NO_ADDRESS	TCP	2009	Browse #08	Generator	Parameters #08	On
Connection #09	NO_ADDRESS	TCP	2009	Browse #09	Generator	Parameters #09	On
Connection #10	NO_ADDRESS	TCP	2009	Browse #10	Generator	Parameters #10	On
Connection #11	NO_ADDRESS	TCP	2009	Browse #11	Generator	Parameters #11	On
Connection #12	NO_ADDRESS	TCP	2009	Browse #12	Generator	Parameters #12	On
Connection #13	NO_ADDRESS	TCP	2009	Browse #13	Generator	Parameters #13	On
Connection #14	NO_ADDRESS	TCP	2009	Browse #14	Generator	Parameters #14	On
Connection #15	NO_ADDRESS	TCP	2009	Browse #15	Generator	Parameters #15	On
Connection #16	NO_ADDRESS	TCP	2009	Browse #16	Generator	Parameters #16	On

Read Me First

Summary

PART 0	Overview	3
0.1	<i>LanTraffic V2 Key Features.....</i>	<i>3</i>
0.2	<i>The Automation Tool for LanTraffic V2</i>	<i>7</i>
PART 1	What's new in LanTraffic V2 Version 2.9	9
PART 2	Install LanTraffic V2.....	10
2.1	<i>Forewords when upgrading from previous versions</i>	<i>10</i>
2.2	<i>How to install the software downloaded from the Internet.....</i>	<i>10</i>
2.3	<i>How to install the software from the CD-ROM</i>	<i>10</i>
2.4	<i>During the installation</i>	<i>11</i>
2.4.1	<i>LanTraffic V2 packages in a few words</i>	<i>11</i>
2.4.2	<i>Which package should I install?</i>	<i>11</i>
2.4.2.1	<i>I want to evaluate LanTraffic V2</i>	<i>12</i>
2.4.2.2	<i>I already use LanTraffic V2</i>	<i>12</i>
2.4.2.2.1	<i>... and I want to upgrade and use the USB Software Protection Key I bought</i>	<i>12</i>
2.4.2.3	<i>I just bought LanTraffic V2</i>	<i>12</i>
2.4.2.3.1	<i>... and I received the CDRom & USB Software Protection Key</i>	<i>12</i>
2.5	<i>What has been installed on my computer?.....</i>	<i>13</i>
2.6	<i>How to reinstall another package?</i>	<i>14</i>
2.7	<i>How to transfer the software to another computer?</i>	<i>14</i>
PART 3	How to handle your license.....	15
3.1	<i>LanTraffic V2 Trial.....</i>	<i>15</i>
3.1.1	<i>LanTraffic V2 License Information window</i>	<i>15</i>
3.1.2	<i>End of the fifteen-day trial period.....</i>	<i>15</i>
3.2	<i>LanTraffic V2 & USB Software Protection Key</i>	<i>16</i>
PART 4	Uninstall LanTraffic V2	17
PART 5	LanTraffic V2 Getting Started	18
PART 6	Run LanTraffic V2	22
PART 7	LanTraffic V2 and Windows Firewall.....	23
7.1	<i>How to authorize UDP and TCP connections with Windows Firewall.....</i>	<i>23</i>
7.2	<i>How to authorize ICMPv4 and ICMPv6 traffic with Windows Firewall.....</i>	<i>24</i>

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) or ICMP (Internet Control Message Protocol).

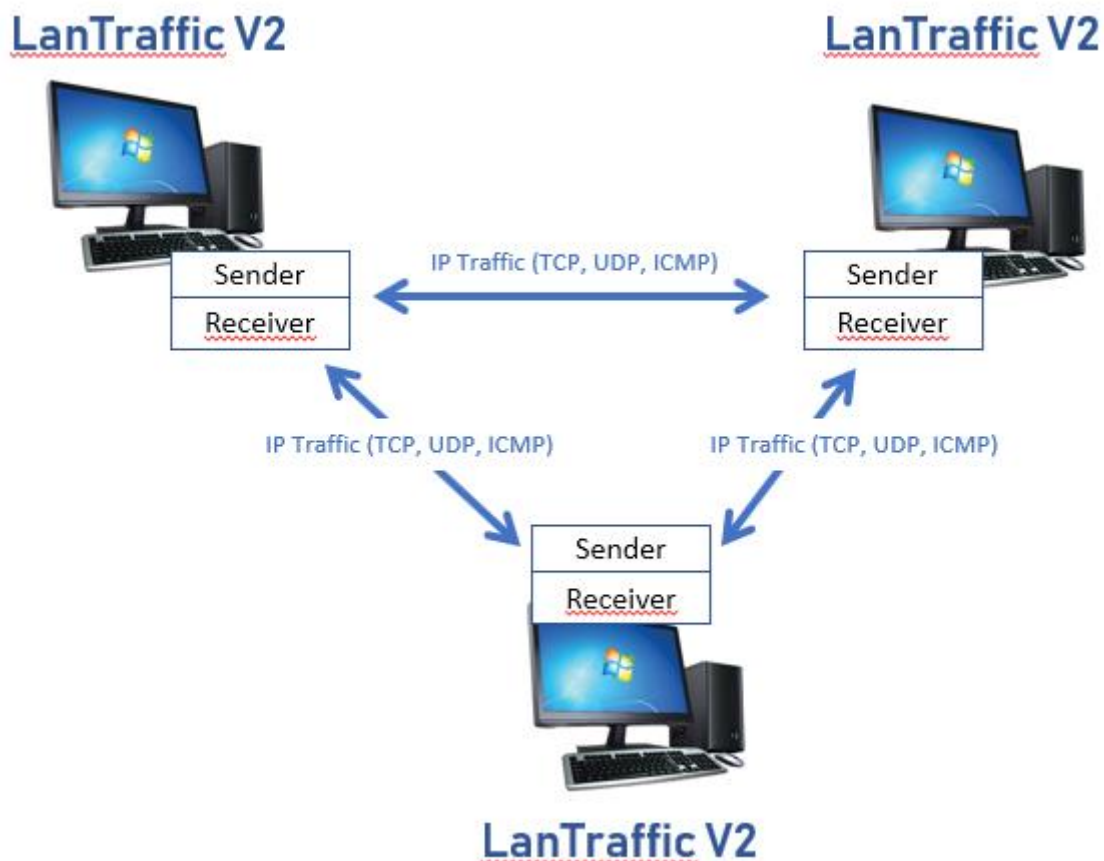
LanTraffic V2 is supported on the following platforms: Windows Seven, 8, 10 and 11, Windows Server 2008, 2008R2 or later. It needs at least one Ethernet connection (LAN or WLAN card i.e. NIC, remote access...).

The minimum screen resolution is 1024 x 768 and the DPI setting should be "Normal size (96 DPI)".

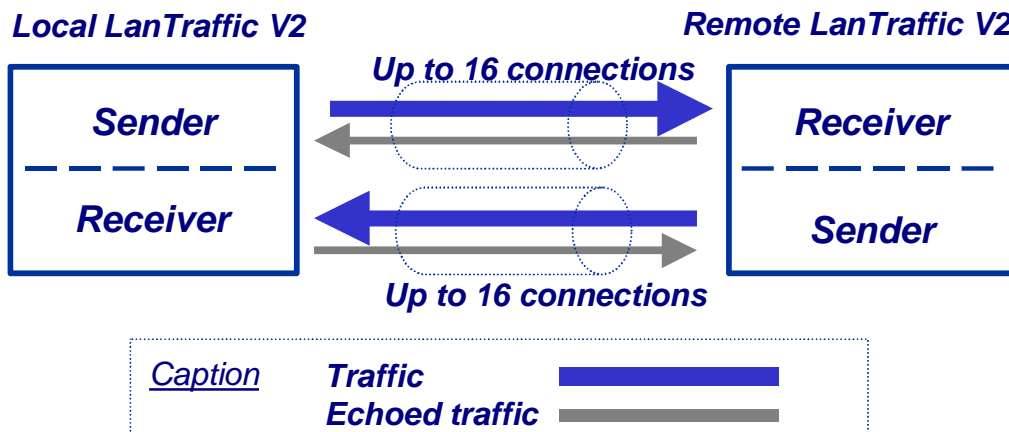
LanTraffic V2 requires Acrobat Reader XI to display the software's Help file.

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 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 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, ICMP connections can't be started.

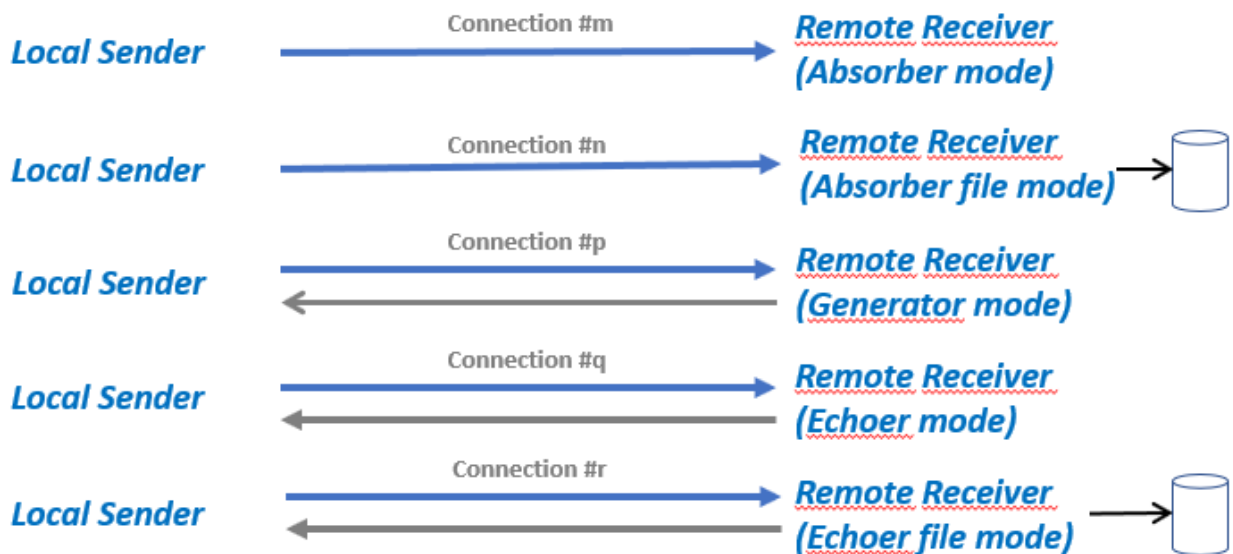
- ⇒ **Statistics:** for each connection the following statistics parameters are displayed by the **Sender** and can be saved in a file:

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

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

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

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

Please note that **LanTraffic V2** supports IPv6 when activated 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

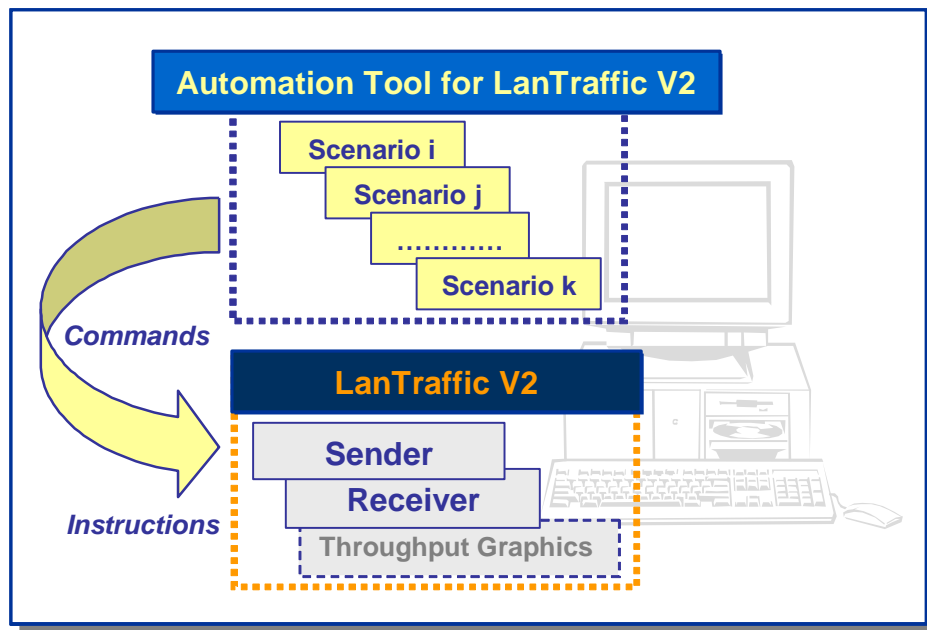
The interface selection of a LAN card (NIC), a virtual NIC such as an IP tunneling protocol, or a remote access is useful to control the data traffic hardware route. **LanTraffic V2** can generate and receive Unicast and Multicast IP traffic on a selected interface, giving the user a deeper control where data are exchanged and makes multiple routes definition easier.

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 2.9

This part is a general overview of new features and main improvements of **LanTraffic V2** version 2.9.

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 2.9)**

- Supports Windows Seven, 8, 10, 11, Server 2008 and later
- Tested on of 32-bit and 64-bit Windows edition.
- Improve performances
- Correction of various GUI messages

The contexts created with versions 2.0.12 and higher are reused automatically. When saved, they become the new 2.9 context file format.

⇒ **Automation Tool for LanTraffic V2 (Version 1.7)**

- Supports Windows Seven, 8, 10, 11, Server 2008 and later

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

The installation procedure is a standard installation program for Windows Seven 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 2.9. Starting from **LanTraffic V2** version 2.6, a new protection using the USB Software Protection Key has been introduced. However, 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.

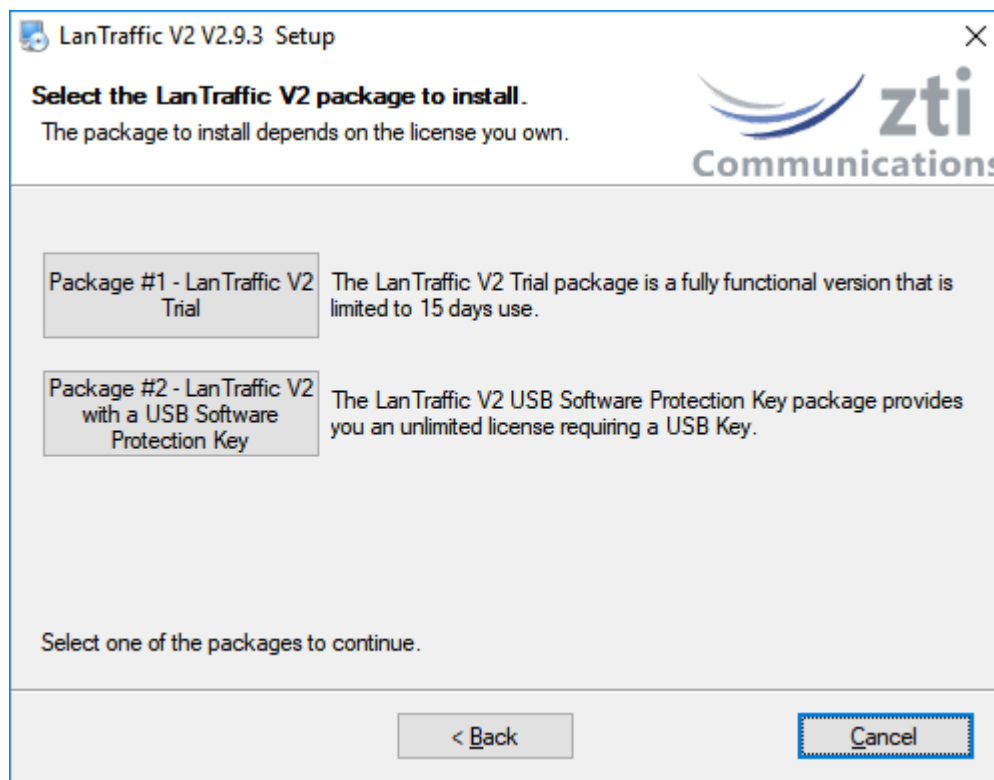


*To install **LanTraffic V2**, you must log on with your administrator rights.*

- 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.
- 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 Communications to get more details about the license migration program (see 3.2 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** for 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 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 2.9**.

2.4.2.3.1 ... 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**.

2.5 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**.*

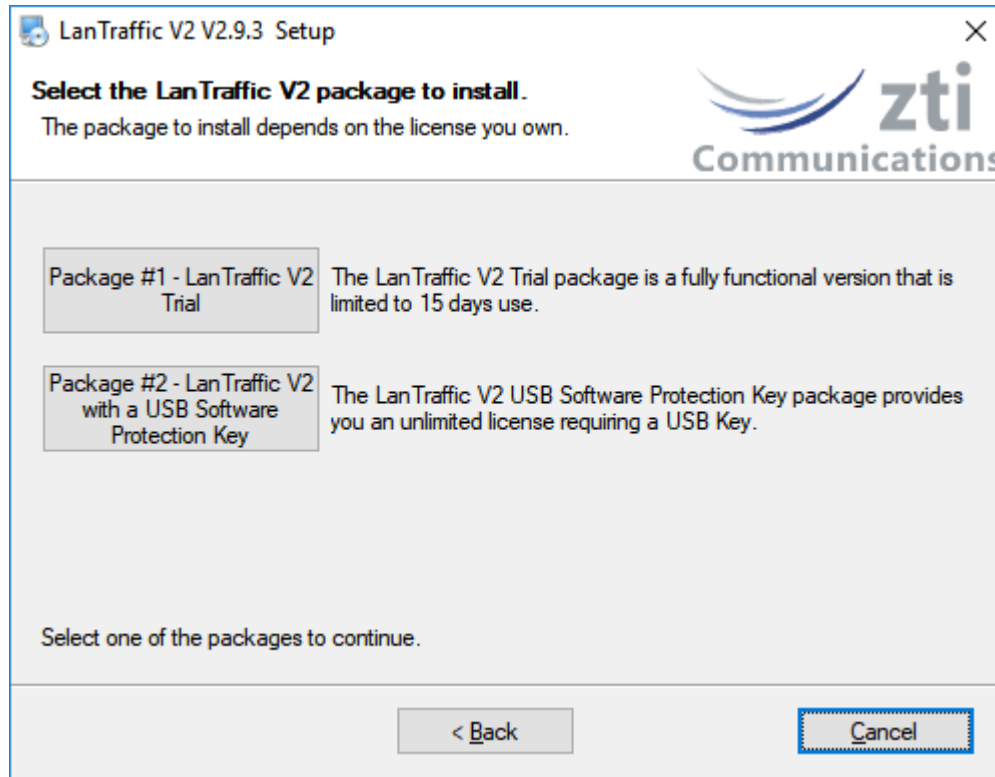
2.6 How to reinstall another package?



These steps are mandatory for users that want to install a new LanTraffic V2 package on their current LanTraffic V2 V2.9 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 V2.9 packages, you should uninstall first your current package (get more details at PART 4 Uninstall LanTraffic V2) before installing a new one. Then click [Setup_LanTrafficV2_Standard.exe](#) 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.

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 your local distributor or **ZTI Communications** to get a license.

3.2 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-communications.com) and get some information about how to exchange your Site Key to a **USB Software Protection key**.

PART 4 Uninstall LanTraffic V2

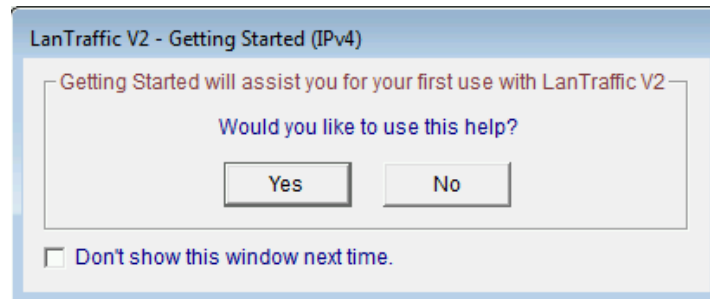
The uninstall procedure is a standard uninstall program. To uninstall **LanTraffic V2** select “Uninstall LanTraffic V2” in the “Start > Programs > LanTraffic V2” menu.

PART 5 LanTraffic V2 Getting Started



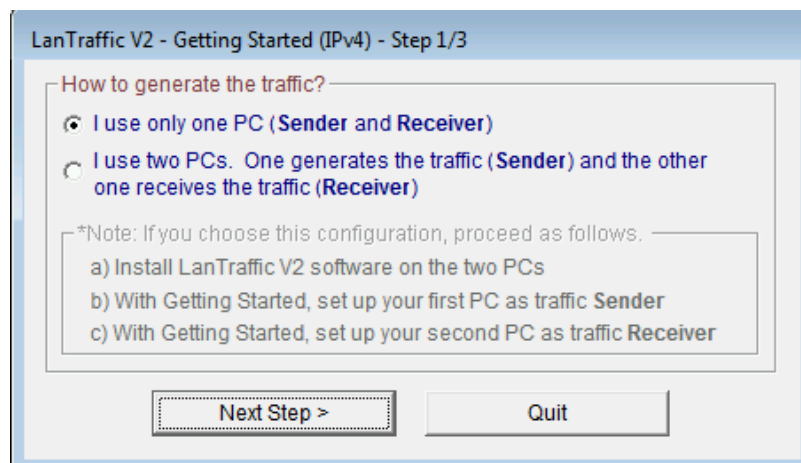
Anti-virus or firewall applications may disrupt **LanTraffic V2** when sending or receiving data. Please set up your security software before using **LanTraffic V2** (see PART 6 and PART 7).

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:

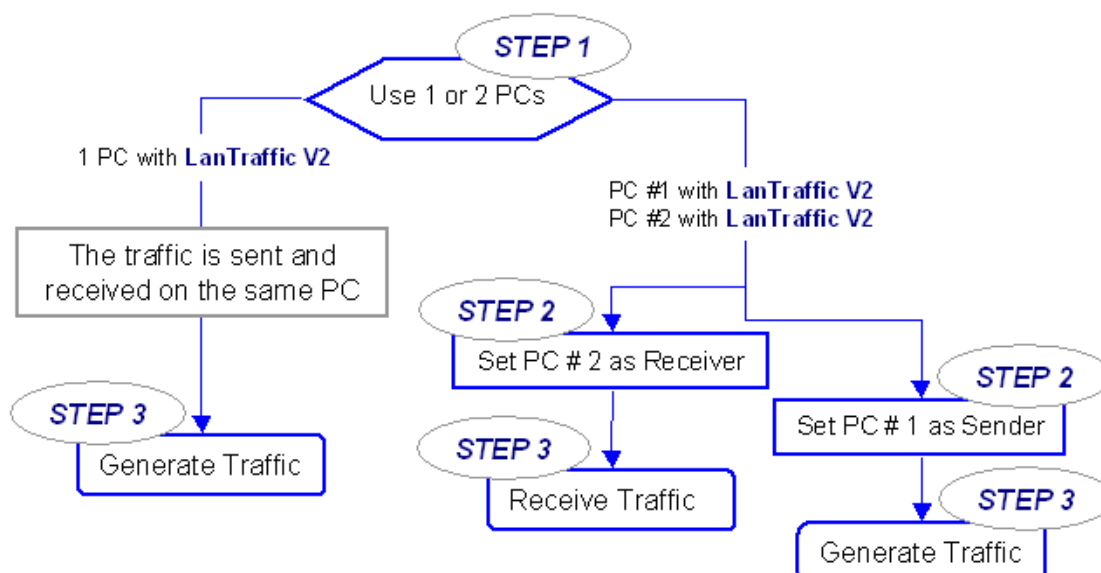


Press **No** if you don't want to use this help.

Press **Yes**, the next window will ask you if you want to use 1 or 2 PCs:

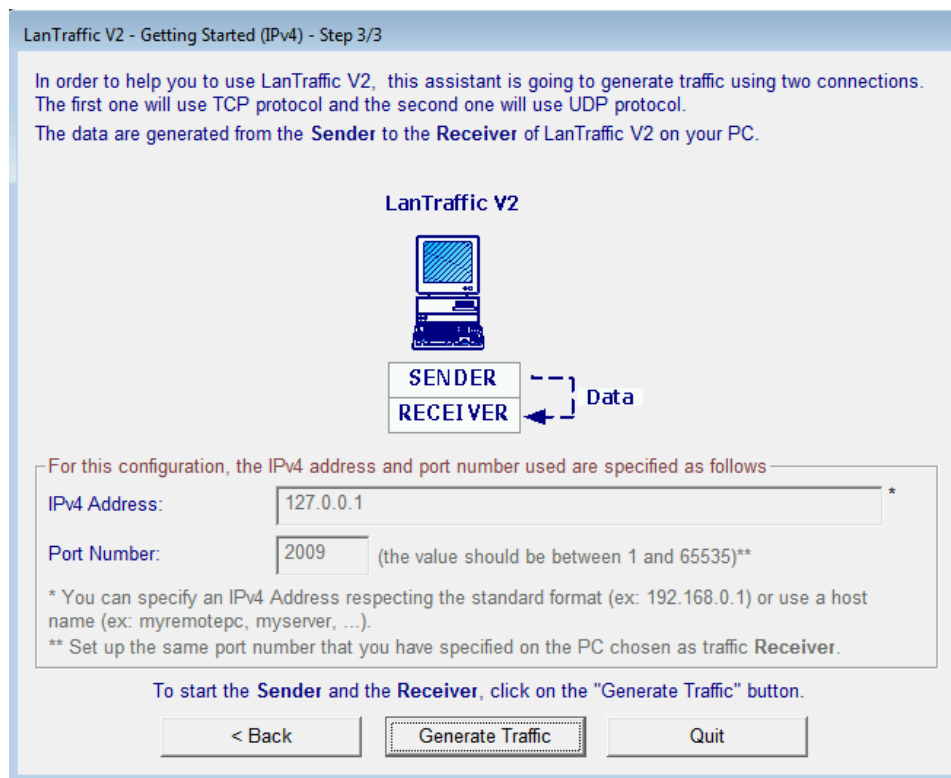


Depending on your choice to use 1 or 2 PCs, the plan below shows the steps:

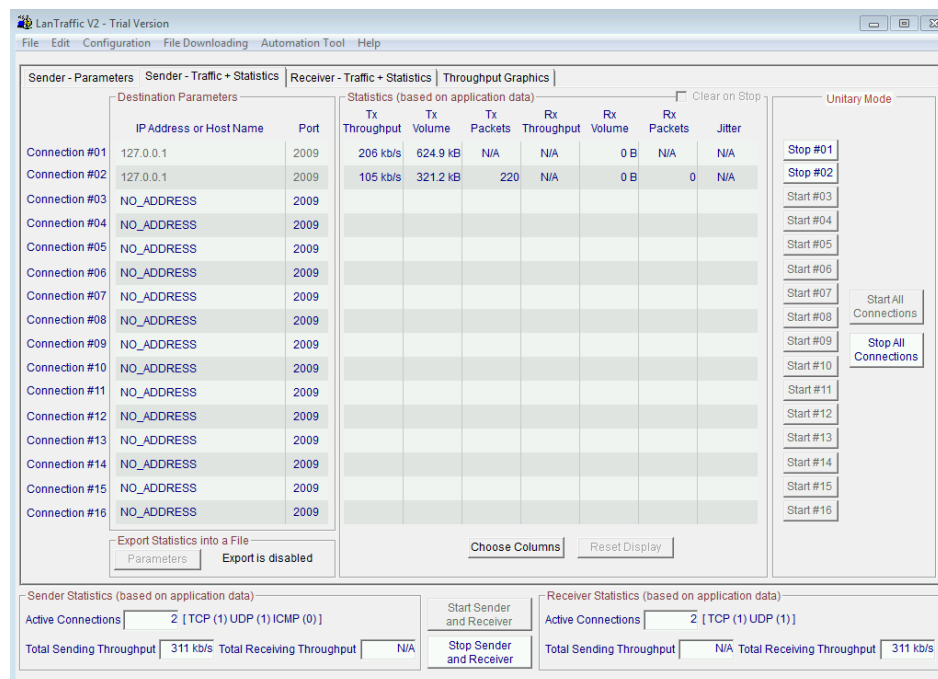


For the use of 1 PC

The following window is displayed.

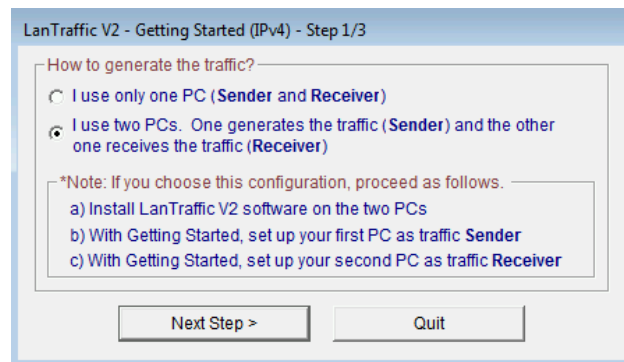


Then press the "Generate traffic" button to continue. The "Sender – Traffic + Statistics" tab of LanTraffic V2 will display the two first active connections as shown on the following window:

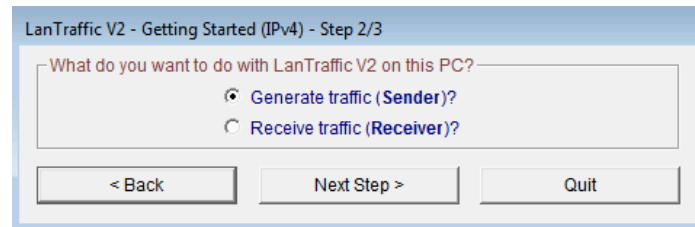


For the use of 2 PCs

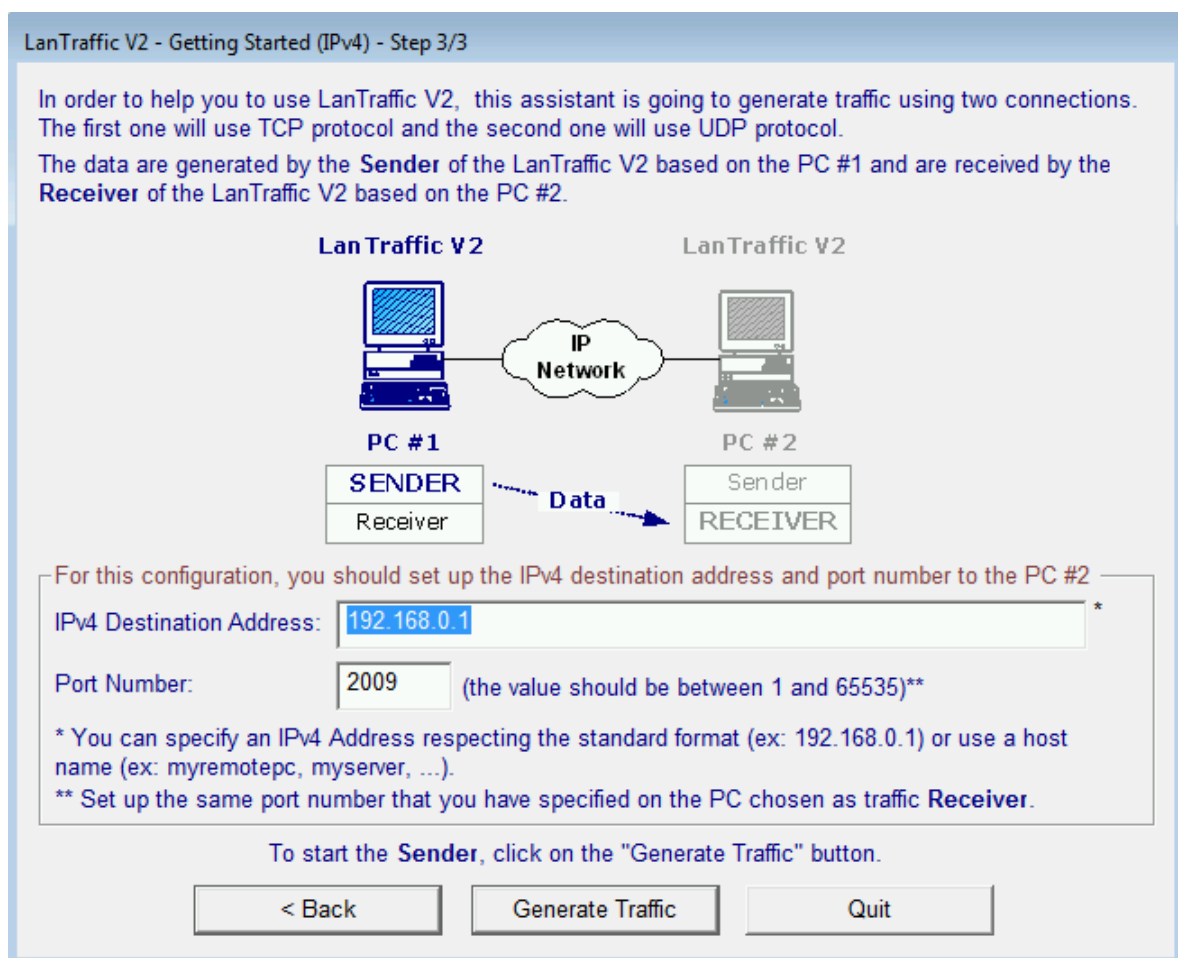
If you select the option: **I use two PCs**, read the following instructions. **LanTraffic V2** must be installed on the two PCs.



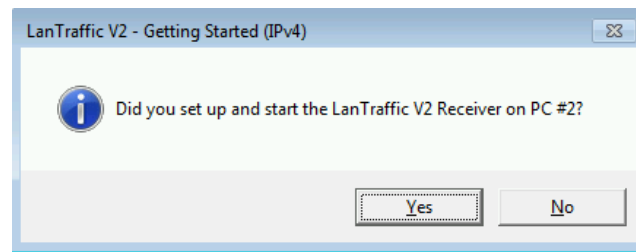
Press "Next Step >" to continue.



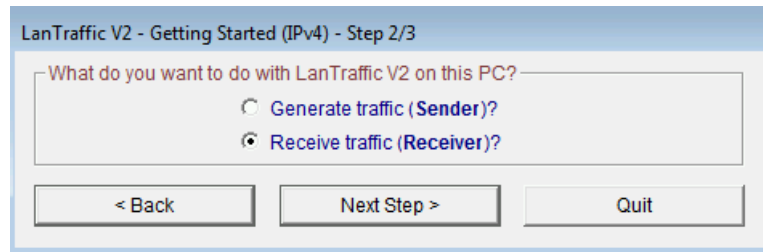
Then choose if you want to generate or receive the traffic on this PC. If you select "Generate traffic" the following window will appear:



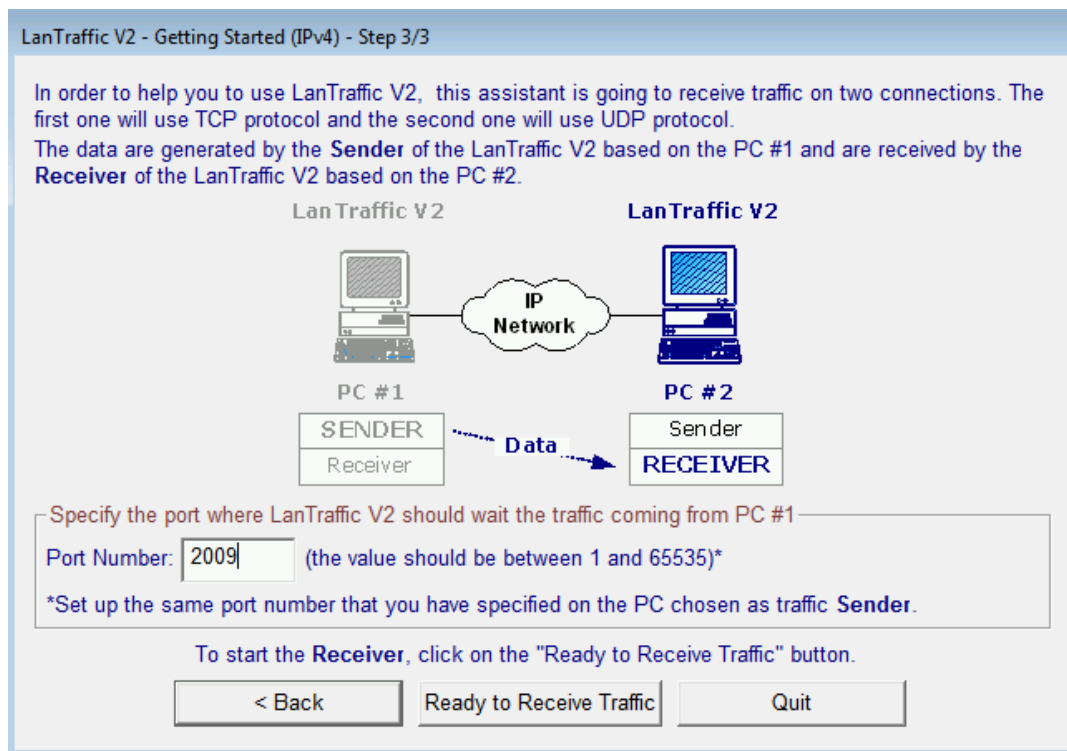
Define the IPv4 address and port number to use. Then press the "Generate traffic" button and a warning dialog is displayed:



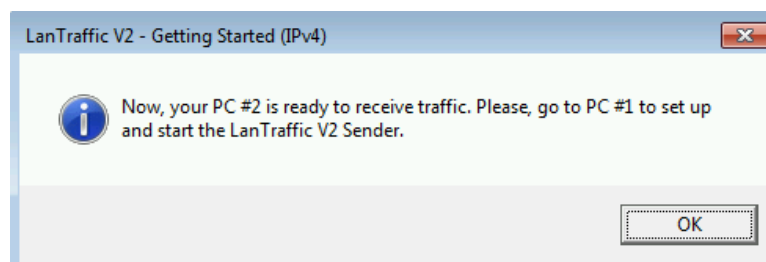
Before generating traffic towards PC # 2, the PC # 2 must be configured as Receiver.



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 Seven 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.

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

15 days trial version	USB Software Protection Key version
	<p>When you use a USB Software Protection Key, there is no window!</p>

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**.



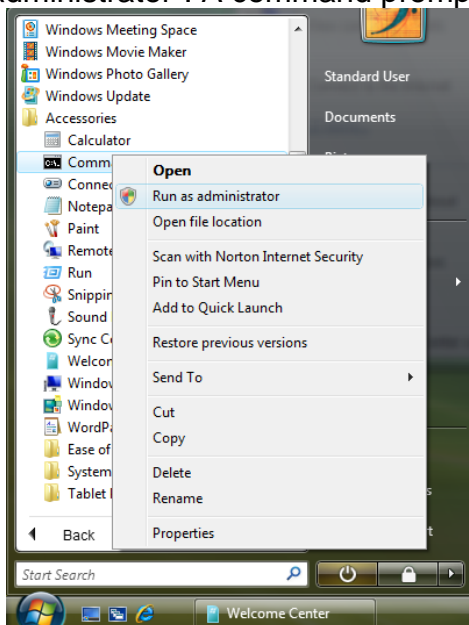
Windows Firewall may also disrupt the **LanTraffic V2** performances. To get best performances, you should disable Windows Firewall.

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 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".

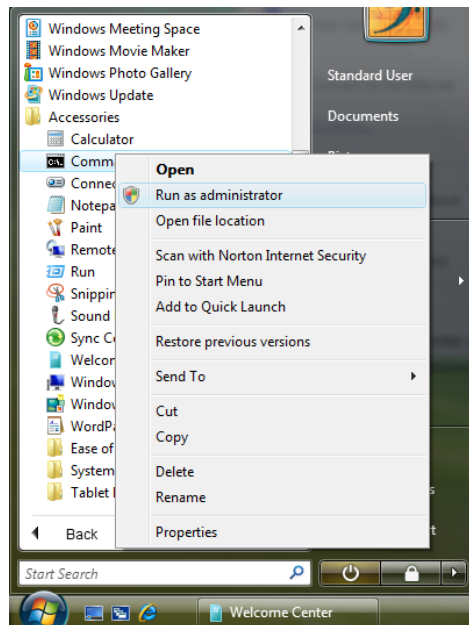
```
%> netsh firewall add allowedprogram program="C:\Program Files\LanTraffic V2\LanTrafficV2.exe" name="LanTraffic V2" mode=ENABLE scope=ALL profile=ALL
```

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.

7.2 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.