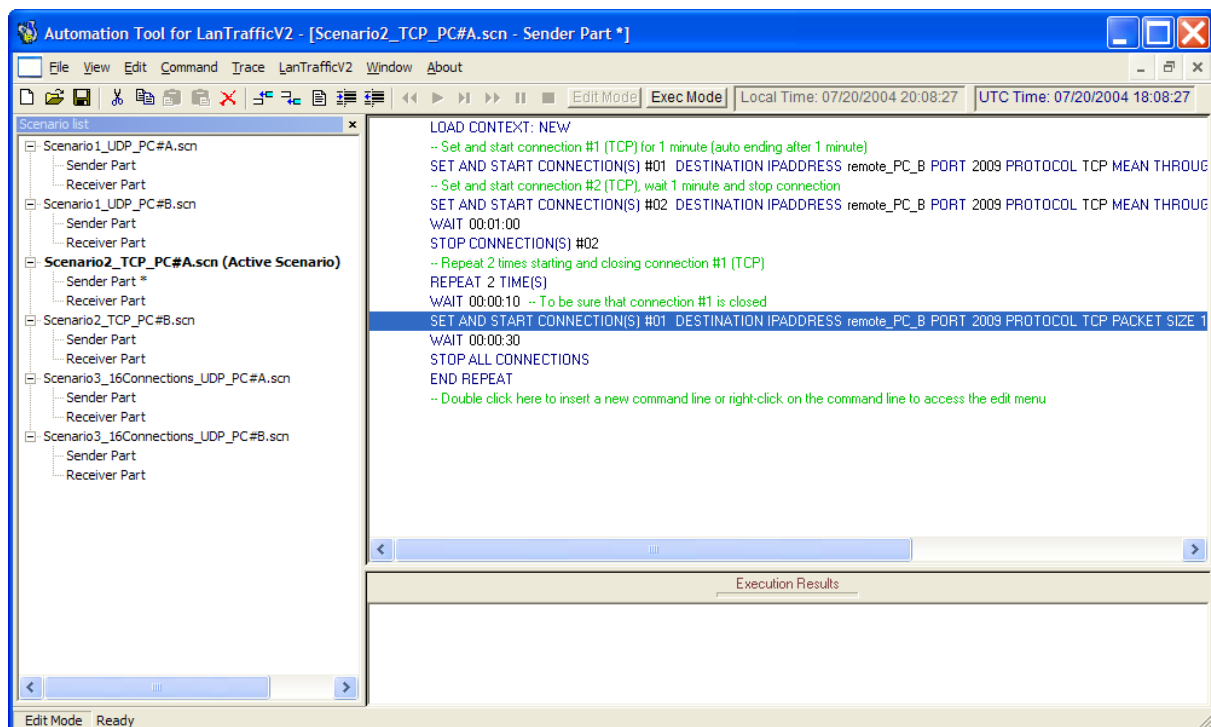




Version 1.6

Automation Tool for LanTraffic V2 Enhanced

Add-on to automate operations
with the LanTraffic V2 Enhanced software



The content of this User Guide is provided for informational use only. It is subject to change without notice, and must not be used as a commitment by ZTI.

ZTI could not be liable for any direct or indirect damages caused by the software or User Guide imperfection.

The elaboration of this guide has been made to be as accurate as possible. We hope that you will find all the information required to use our software in a convenient way. Failing to do so, do not hesitate to contact us at support@zti-telecom.com.

Except when allowed by license agreement between ZTI and the End User, no part of this guide or the software may be reproduced, transmitted in any form or by any means.

This guide allows discovering the “Automation Tool for LanTraffic V2 Enhanced” software and is not an exhaustive user manual.

To contact us:

ZTI
1 boulevard d'Armor
BP 20254
22302 Lannion Cedex
France

Phone: +33 2 9648 4343
Fax: +33 2 9648 1485

Web: <http://www.zti-telecom.com> or <http://www.zti.fr>
Email: contact@zti-telecom.com (sales & marketing)
support@zti-telecom.com (technical support)

Copyrights

Copyright ZTI 2008. All rights reserved.

The software described in this manual is protected by a License Agreement and may only be used in accordance with the terms of this agreement.

No part of this manual may be copied, reproduced, translated or recorded by any mean without prior written consent from ZTI.

All products and company names mentioned in this document are trademarks or registered trademarks of their respective owners.

Software License Agreement

This is an agreement between you (legal entity or physical person) and ZTI.

- **COPYRIGHT**

The enclosed Software and documentation (here after called the Products) remains the property of ZTI. French copyright laws and international treaties protect the products. ZTI grants you the right to use the products according to the following:

- **USE OF THE SOFTWARE**

You may:

- Install the software on the hard disk of your system accordingly with the software protection described in the next paragraph.
- Make one backup copy of the software, provided that this copy is not used or install on any computer.
- Use the Products properly.

In accordance with copyright and patent laws, the Licensee undertakes:

- To use the Products only for its own use
- Not to modify the Products
- Not to make illegal copy of the Products
- Not to give, rent, sublicense or sale the Products
- To protect and respect ZTI and Products reputation.

- **SOFTWARE PROTECTION**

Automation Tool for LanTraffic V2 Enhanced is licensed on a workstation basis. You will need to purchase a separate license for each machine that you install it on.

- **LIMITED WARRANTY**

Software is supplied without any express or implied warranty regarding the performances or results obtained by the use of the Products.

ZTI warrants that software media (i.e. CD-ROM) will be free of material defects for a ninety (90) days period following purchase. The limited warranty applies to the media and not the information contained on it. If the media does not comply with this limited warranty, the only remedy is the replacement of the media software. In no event, ZTI will be liable for any kind of direct or indirect damages caused by the Products.

- **COURT OF LAW**

French laws will govern this agreement.

The court of GUINGAMP (France) shall finally settle all disputes arising out of or in connection with this Agreement.

For further information, please contact: ZTI customer support department.

ZTI
1 boulevard d'Armor
BP 20254
22302 Lannion Cedex
France

Phone: +33 2 9648 4343
Fax: +33 2 9648 1485

Email: support@zti-telecom.com or support@zti.fr
Web: <http://www.zti-telecom.com> or <http://www.zti.fr>

Table of Contents

PART 0	Preface	6
0.1	Minimum System Requirements	6
0.2	Technical Support	6
PART 1	Product Overview	7
PART 2	Graphical User Interface	10
2.1	Main Window	10
2.2	Menu description	12
2.2.1	File menu	12
2.2.1.1	File/New	12
2.2.1.2	File/Open	12
2.2.1.3	File/Save	12
2.2.1.4	File/Save as	12
2.2.1.5	File/Recent Contexts	12
2.2.1.6	File/Exit	12
2.2.2	View menu	13
2.2.2.1	View/Toolbar	13
2.2.2.2	View/Status Bar	13
2.2.2.3	View/Scenario List	13
2.2.2.4	View/Options	13
2.2.3	Edit menu	13
2.2.3.1	Edit/Cut	14
2.2.3.2	Edit/Copy	14
2.2.3.3	Edit/Paste Before	14
2.2.3.4	Edit/Paste After	14
2.2.3.5	Edit/Delete	14
2.2.3.6	Edit/Insert Before	14
2.2.3.7	Edit/Insert After	14
2.2.3.8	Edit/Modify Command Parameters	14
2.2.3.9	Edit/Increase Indent	14
2.2.3.10	Edit/Decrease Indent	14
2.2.3.11	Edit/Shift Date/time	14
2.2.3.12	Edit/Export in a text file	15
2.2.4	Command menu	15
2.2.4.1	Command/Rewind	15
2.2.4.2	Command/Run	15
2.2.4.3	Command/Step by Step	15
2.2.4.4	Command/Go	15
2.2.4.5	Command/Pause	15
2.2.4.6	Command/Stop	15
2.2.5	Trace menu	16
2.2.5.1	Trace/Clear Scenario Results	16
2.2.5.2	Trace/Clear Sender Part Results	16
2.2.5.3	Trace/Clear Receiver Part Results	16
2.2.5.4	Trace/Save Scenario Results	16
2.2.5.5	Trace/Save Sender Part Results	16
2.2.5.6	Trace/Save Receiver Part Results	16
2.2.5.7	Trace/Options	17
2.2.6	LanTrafficV2 menu	17
2.2.6.1	LanTrafficV2/Open	17
2.2.6.2	LanTrafficV2/Close	17
2.2.6.3	LanTrafficV2/Bring to the top	17
2.2.7	Window menu	18
2.2.8	About menu	18
2.3	Tool Bar description	18

PART 3	Using the Automation Tool	20
3.1	<i>Create and edit a scenario</i>	<i>20</i>
3.2	<i>Run a scenario.....</i>	<i>21</i>
PART 4	Command Line Parameters	23
4.1	<i>General rule</i>	<i>23</i>
4.2	<i>Start the "Automation Tool for LanTraffic V2 Enhanced" and launch a scenario.....</i>	<i>23</i>
4.3	<i>Stop the "Automation Tool for LanTraffic V2 Enhanced" and "LanTraffic V2 Enhanced"</i>	<i>23</i>
PART 5	Commands and Instructions	24
5.1	<i>Commands and Instructions for the Sender</i>	<i>25</i>
5.2	<i>Commands and Instructions for the Receiver</i>	<i>26</i>

PART 0 Preface

0.1 Minimum System Requirements

The **Automation Tool for LanTraffic V2 Enhanced** software requires the following minimum system requirement to operate properly:

- Windows 2000 (32-bit only), Windows XP, Windows Server 2003 or Windows Vista (32-bit or 64-bit versions).
- Pentium processor with 512 MB memory
- 1024 x 768 display and DPI setting = Normal size (96 DPI)
- 20 MB free hard disk space

0.2 Technical Support

ZTI Technical support can assist you with all your technical problems, from installation to troubleshooting.

Before contacting technical support, please read the relevant sections of the product documentation and record the following information:

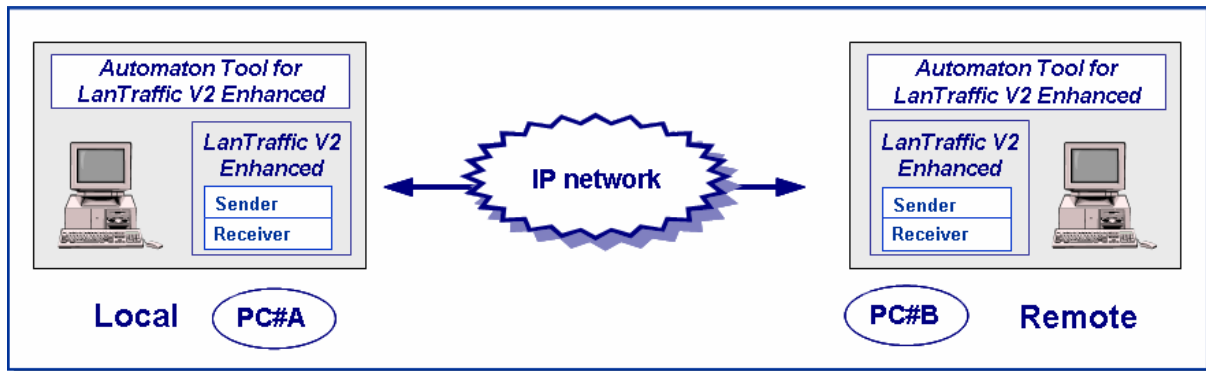
- Product name and version.
- Demo version or licensed product.
- System configuration.
- Problem details: settings, error messages...
- If the problem is repeatable, the details of how to create the problem.

You can contact Technical Support by:

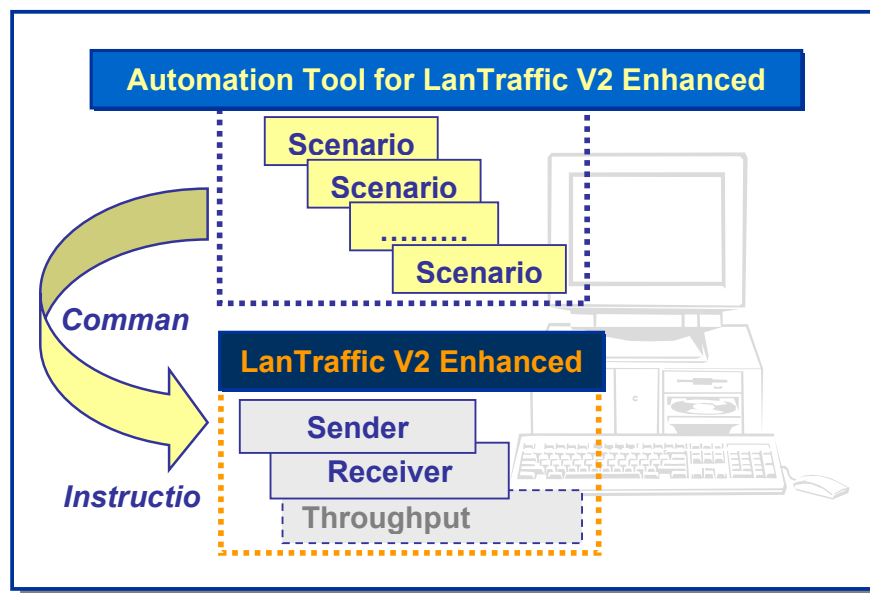
Email	Send as many details as possible to support@zti-telecom.com or support@zti.fr
Fax	Send as many details as possible to +33 2 9648 1485
Telephone	Telephone support is available from 09:00 am to 06:00 pm (GMT Time +1 or +2), Monday to Friday. Call +33 2 9648 4343

PART 1 Product Overview

The **Automation Tool for LanTraffic V2 Enhanced** software is an add-on tool for use with the **LanTraffic V2 Enhanced** software.



With this tool you can control and parameter the **LanTraffic V2 Enhanced** application by using a scenario.



This Automation Tool is based on the notion of **scenario**. A scenario is a succession of commands and instructions.

A command is used to parameter and/or to activate a function of the **LanTraffic V2 Enhanced** software, for example: 'Start Receiver' (this command is equivalent by pressing manually the 'Start receiving traffic' button in the 'Receiver – Traffic + Statistics' tab of the **LanTraffic V2 Enhanced** software).

An instruction is used by the Automation Tool to realize a specific treatment: for example: 'Wait 10 seconds'.

Note: max 20 scenarios can be opened at the same time.

A scenario is composed of two entities:

- the **Sender part** to pilot the 'Sender' module of **LanTraffic V2 Enhanced**,
- the **Receiver part** to pilot the 'Receiver' module of **LanTraffic V2 Enhanced**.

The description of each command or [instruction](#) is shown in PART 4

Commands and instructions for the Sender part	Commands and instructions for the Receiver part
Comments Disable Statistics Export Enable Statistics Export Launch External Application Load Context Repeat End Repeat Register Statistics Select Columns Select Interface Set Specific Parameters Set and Start Connection(s) Stop All Connections Stop Connection(s) Stop Scenario Wait	Comments Disable Statistics Export Enable Statistics Export Launch External Application Load Context Repeat End Repeat Register Statistics Select Columns Select Interface Set Specific Parameters Set Connections(s) Start Receiver Stop Receiver Stop Scenario Wait

An example of scenario is displayed below, with the following configuration:

- PC#A is acting as the 'Local' machine with the scenario file:
'Scenario1_UDP_PC#A.scn'
- PC#B is acting as the 'Remote' machine with the scenario file:
'Scenario1_UDP_PC#B.scn'

Contents of the [Scenario1_UDP_PC#A.scn](#) file

[Sender Part](#)

Scenario File: Scenario1_UDP_PC#A.scn - Sender Part

```
LOAD CONTEXT: NEW
-- Set and start connection #1 (UDP) for 1 minute (auto ending after 1 minute)
SET AND START CONNECTION(S)#01  DESTINATION IPADDRESS remote_PC_B PORT 2009
PROTOCOL UDP AVERAGE THROUGHPUT 512 kb/s PACKET SIZE 1024 bytes DSCP 00 DURATION
00:01:00
-- Set and start connection #2 (UDP), wait 1 minute and stop connection
SET AND START CONNECTION(S)#02  DESTINATION IPADDRESS remote_PC_B PORT 2010
PROTOCOL UDP AVERAGE THROUGHPUT 512 kb/s PACKET SIZE 1024 bytes DSCP 00
WAIT 00:01:00
STOP CONNECTION(S)#02
-- Repeat 2 times starting and closing connection #1 (UDP)
REPEAT 2 TIME(S)
WAIT 00:00:10 -- To be sure that connection #1 is closed
SET AND START CONNECTION(S)#01  DESTINATION IPADDRESS remote_PC_B PORT 2009
PROTOCOL UDP PACKET SIZE 1024 bytes INTERPACKETDELAY 50 ms DSCP 00
WAIT 00:00:30
STOP ALL CONNECTIONS
END REPEAT
```

Receiver Part

Scenario File: Scenario1_UDP_PC#A.scn - Receiver Part

Empty

Contents of the Scenario1_UDP_PC#B.scn file

Receiver Part

Scenario File: Scenario1_UDP_PC#B.scn - Receiver Part

```
LOAD CONTEXT: NEW
SET CONNECTION(S)#01  PORT 2009  PROTOCOL UDP
SET CONNECTION(S)#02  PORT 2010  PROTOCOL UDP
START RECEIVER
```

Sender Part

Scenario File: Scenario1_UDP_PC#B.scn - Sender Part

Empty

To execute the scenario [Scenario1_UDP_PC#A.scn](#), please proceed as follows:

- The **LanTraffic V2 Enhanced** and **Automation Tool for LanTraffic V2 Enhanced** software are running on PC #A and PC #B.
- First, the 'Scenario1_UDP_PC#B.scn' file is loaded on PC #B (Remote) and started.
- Second, the 'Scenario1_UDP_PC#A.scn' file is loaded on PC #A (Local).

Then define in the 'HOSTS' file of PC #A the following entries:

Remote_PC_B [IP address of PC #B]

Note: the 'HOSTS' file is generally installed in the directory C:\WINDOWS\SYSTEM32\DRIVERS\ETC

- You can then execute this scenario on PC #A

Note:

Three scenario examples are provided with the **Automation Tool For LanTraffic V2 Enhanced** with 2 files for each example.

Example 1: 2 UDP connections from PC#A to PC#B

- Scenario1_UDP_PC#A.scn (for PC#A)
- Scenario1_UDP_PC#B.scn (for PC#B)

Example 2: 2 TCP connections from PC#A to PC#B

- Scenario2_TCP_PC#A.scn (for PC#A)
- Scenario2_TCP_PC#B.scn (for PC#B)

Example 3: 16 UDP connections from PC#A to PC#B

- Scenario3_16Connections_UDP_PC#A.scn (for PC#A)
- Scenario3_16Connections_UDP_PC#B.scn (for PC#B)

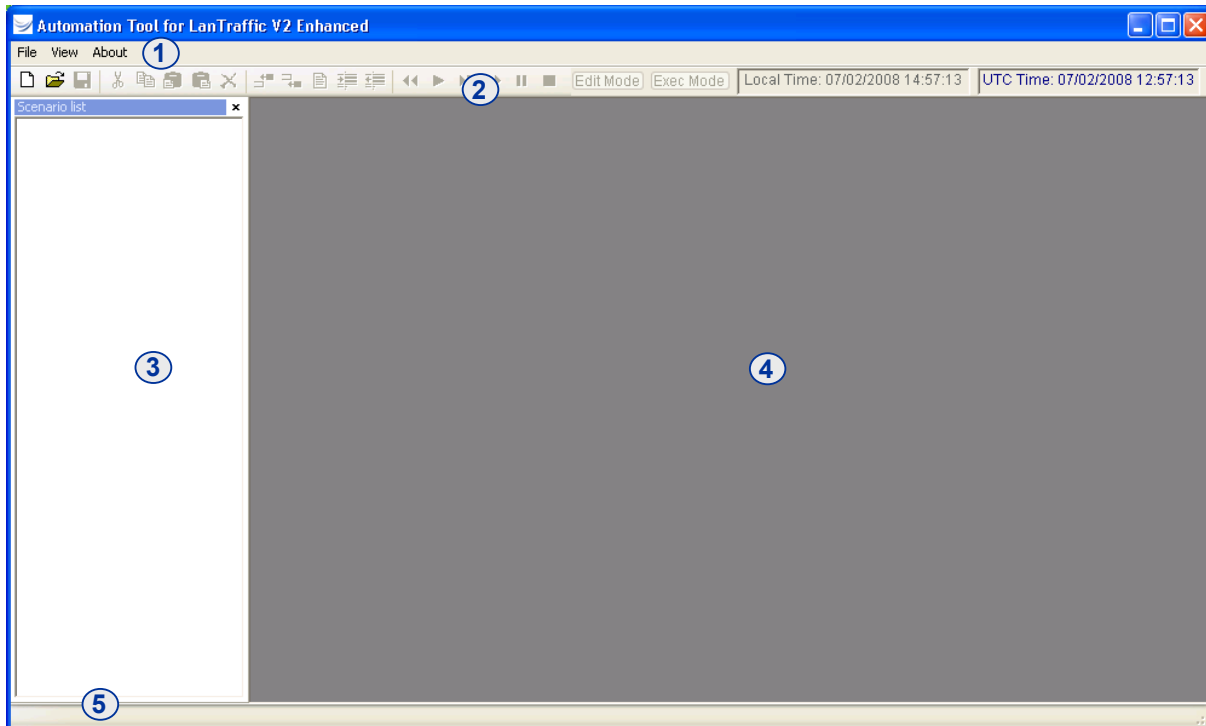
To execute these scenarios, proceed as described above.

These files are located in the installation directory of **LanTraffic V2 Enhanced**.

PART 2 Graphical User Interface

2.1 Main Window

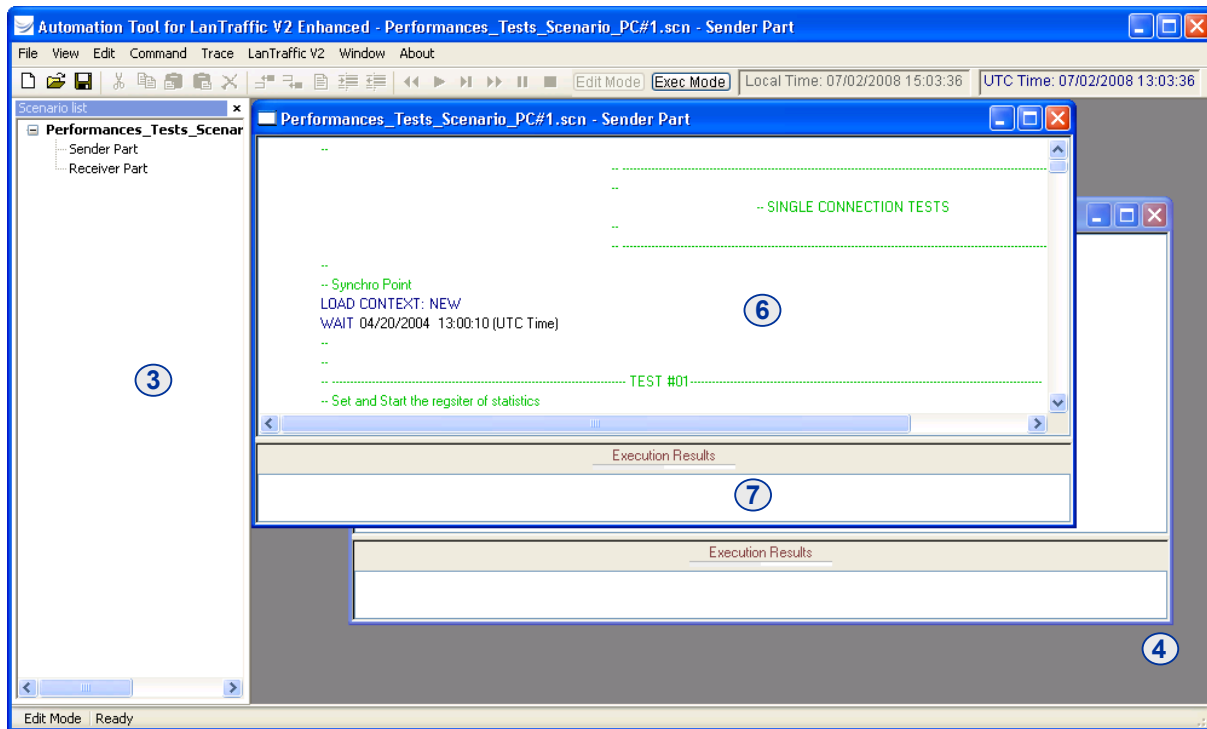
When the Automation Tool is started, the following main window is displayed:



This main window is composed of four areas:

- **Area 1:** the **Menu Bar**
- **Area 2:** the **Tool Bar**
- **Area 3:** to display the list of opened scenarios
- **Area 4:** working area used for editing and running a scenario
- **Area 5:** the **Status Bar** is composed of two fields used for displaying information. The first field indicates the scenario working mode: Edit mode or Exec mode. The second field is used for contextual help information.

When a scenario is opened, the information is displayed in the areas 3 and 4 as shown below and the Menu Bar is enriched:



A scenario is composed of 2 parts (area 3) displayed in two different windows (area 4):

- the Sender part,
- and the Receiver part.

Each window is also subdivided in two horizontal zones (area 6 and 7):

- Area 6: Edit zone
- Area 7: Execution zone

Two operating modes are available:

- Edit mode: to create, edit, modify and delete a scenario.
- Exec mode when running a scenario

You switch from a mode to the other mode by using the buttons 'Edit Mode' or 'Exec Mode' located in the **Tool Bar**:



2.2 Menu description

The items of the Menu Bar vary depending if a scenario is opened or not.

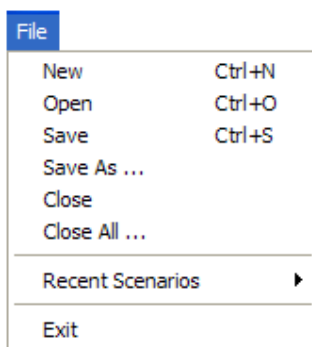
When you launch this tool or if no scenario is opened, the following items are displayed:

File View About

When one or more scenarios are opened, the Menu Bar is enriched with the following items:

File View Edit Command Trace LanTrafficV2 Window About

2.2.1 File menu



2.2.1.1 File/New

This command opens a new default scenario composed of two parts: Sender and Receiver.

2.2.1.2 File/Open

The “Open” command allows opening a scenario file (.SCN file), which contains a previously saved scenario.

2.2.1.3 File/Save

The “Save” command allows saving all the lines defined by the user in the opened scenario file.

2.2.1.4 File/Save as

This command allows saving all the parameters and commands defined in a scenario file defined by the user (.SCN file).

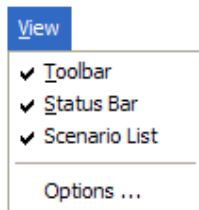
2.2.1.5 File/Recent Contexts

This command allows opening a scenario file previously loaded. The 6 most recent scenario files are shown in the list.

2.2.1.6 File/Exit

This command allows quitting the **Automation Tool for LanTraffic V2 Enhanced**. A confirmation message box is then displayed to save or not changes made to the opened scenarios for each modified scenario.

2.2.2 View menu



2.2.2.1 View/Toolbar

By clicking this item, the Toolbar is displayed or hidden.

2.2.2.2 View/Status Bar

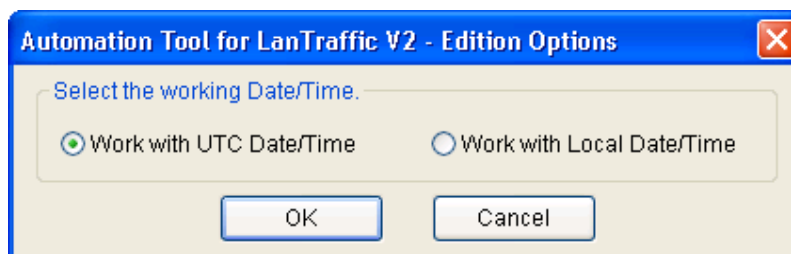
By clicking this item, the Status Bar is displayed or hidden.

2.2.2.3 View/Scenario List

By clicking this item, the Scenario List is displayed or hidden.

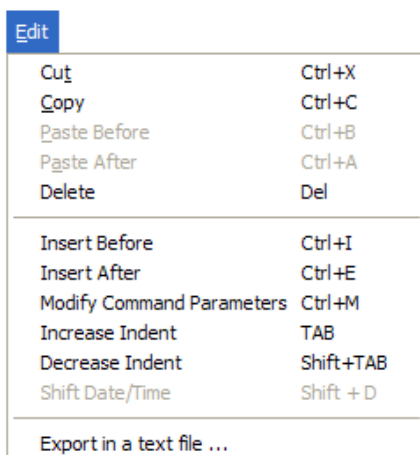
2.2.2.4 View/Options ...

You can select the time reference used for the scenarios (Local or UTC):



By default, the local Date/Time reference is used. The Date/Time set into a scenario will be interpreted regarding the Date/time reference chosen.

2.2.3 Edit menu



The items of this menu are only available in the “Edit Mode”.

2.2.3.1 Edit/Cut

Cut selected lines in a scenario.

2.2.3.2 Edit/Copy

Copy selected lines of a scenario.

2.2.3.3 Edit/Paste Before

Paste the previously copied lines before the selected line in the scenario.

2.2.3.4 Edit/Paste After

Paste the previously copied lines after the selected line in the scenario.

2.2.3.5 Edit/Delete

Delete the selected lines in the scenario.

2.2.3.6 Edit/Insert Before

Insert a new command or instruction before the selected line.

2.2.3.7 Edit/Insert After

Insert a new command or instruction after the selected line.

2.2.3.8 Edit/Modify Command Parameters

Modify the selected line of the scenario.

2.2.3.9 Edit/Increase Indent

Increase indentation of the selected line.

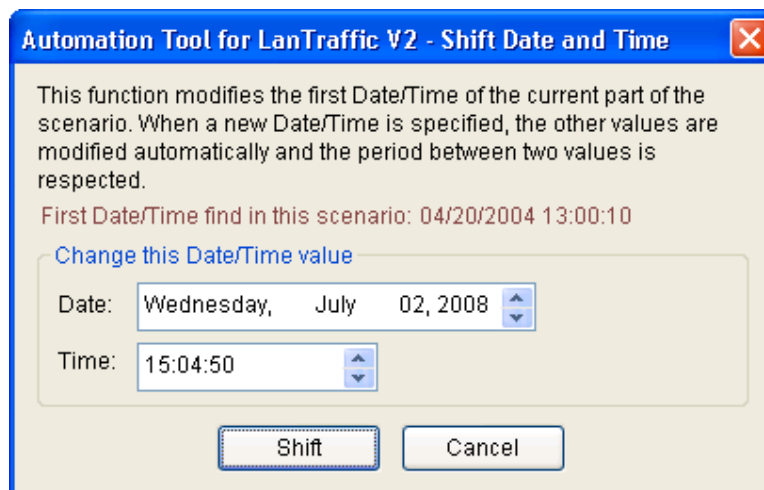
2.2.3.10 Edit/Decrease Indent

Decrease indentation of the selected line.

2.2.3.11 Edit/Shift Date/time

By using this function, you can modify and shift the Date/time for all commands and instructions of a scenario.

In the example below, the local Date/Time has been previously defined (View/Options ... menu) and the first command or instruction with a date is based on: 07/21/2004 12:00:00.



You can define for example a new date & time: 07/23/2004 08:15:00 and then press the 'Shift' button. So, the first command or instruction of the scenario with a date/time will refer to this new value, and automatically all others commands and instructions with a date/time will be updated with this new basis.

2.2.3.12 Edit/Export in a text file ...

Open a dialog box to save in a file the lines of the scenario (.TXT format).

2.2.4 Command menu

Command	
Rewind	F7
Run	F5
Step by step	F11
Go	F5
Pause	F4
Stop	F3

The items of this menu are only available in the "Exec Mode".

2.2.4.1 Command/Rewind

Set the execution point of the scenario to the first line.

2.2.4.2 Command/Run

Run the active scenario (Sender and Receiver parts).

2.2.4.3 Command/Step by Step

Execute the lines of the scenario step by step for the active window (Sender Part or Receiver Part).

2.2.4.4 Command/Go

This command can be used after a step by step execution.

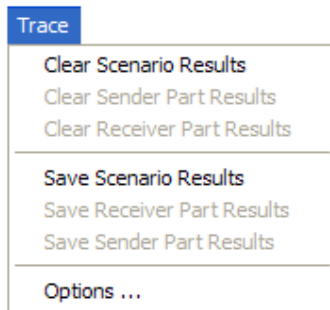
2.2.4.5 Command/Pause

Stop the execution of the scenario after the current line being executed.

2.2.4.6 Command/Stop

Stop the execution of the scenario.

2.2.5 Trace menu



The items of this menu are enabled in the “Exec Mode”. The “Options ...” item is always enabled.

2.2.5.1 Trace/Clear Scenario Results

This command clear the results of the execution in the ‘Execution Results’ zone for the Sender Part and the Receiver Part.

2.2.5.2 Trace/Clear Sender Part Results

This command clear the results of the execution in the ‘Execution Results’ zone for the Sender Part exclusively.

2.2.5.3 Trace/Clear Receiver Part Results

This command clear the results of the execution in the ‘Execution Results’ zone for the Receiver Part exclusively.

2.2.5.4 Trace/Save Scenario Results

Save the results of the execution in a file (.TXT format) for the Sender Part and the Receiver Part.

2.2.5.5 Trace/Save Sender Part Results

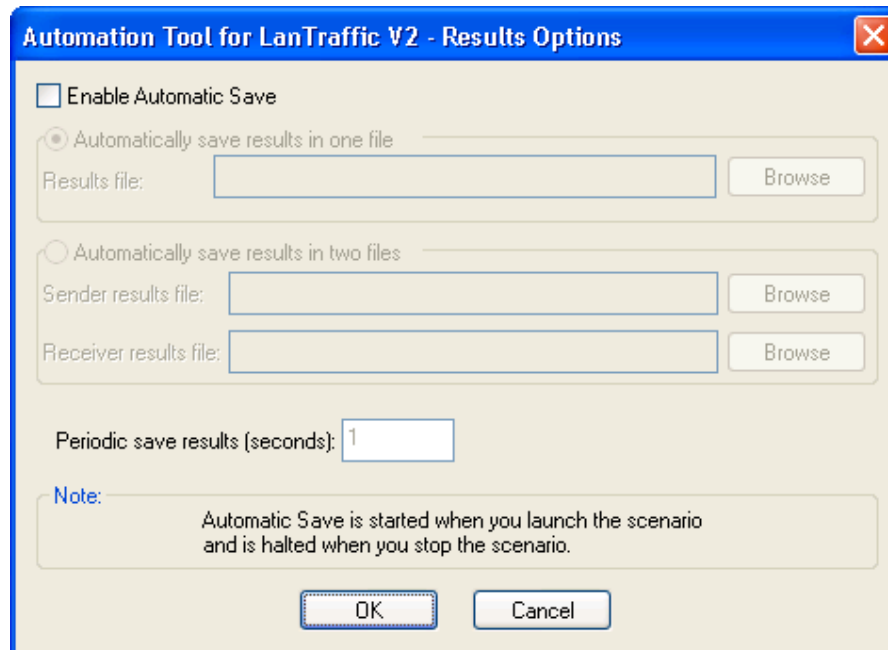
Save the results of the execution in a file (.TXT format) for the Sender Part exclusively.

2.2.5.6 Trace/Save Receiver Part Results

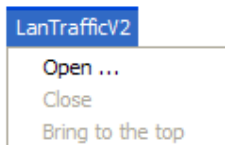
To save the results of the execution in a file (.TXT format) for the Receiver Part exclusively.

2.2.5.7 Trace/Options

This command is used to save the results while executing a scenario in one or two files (.TXT format) and you can define the periodicity of this automatic saving process.



2.2.6 LanTrafficV2 menu



This menu is used to start (Open ...) and stop (Close) manually **LanTraffic V2 Enhanced**.

2.2.6.1 LanTrafficV2/Open ...

This command is used to start manually and open **LanTraffic V2 Enhanced** (if already not launched).

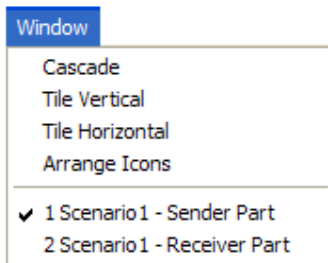
2.2.6.2 LanTrafficV2/Close

This command is used to stop manually and close **LanTraffic V2 Enhanced**.

2.2.6.3 LanTrafficV2/Bring to the top

This command is used to bring to the top the **LanTraffic V2 Enhanced** main window.

2.2.7 Window menu



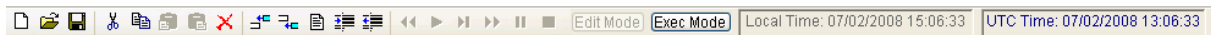
This menu is used to arrange the opened windows for the scenarios displayed on the right part with different methods:

- Cascade
- Tile vertical
- Tile horizontal
- Arrange icons (when the windows are iconized)

2.2.8 About menu

This command displays the version number and copyright of the **Automation Tool for LanTraffic V2 Enhanced**.

2.3 Tool Bar description



The tool bar is composed of icons, buttons and information zones.

Description of the objects from left to right:

- Create a new scenario
- Open a scenario file
- Save the active scenario in a file
- Cut the selection
- Copy the selection
- Paste before (the current line)
- Paste after (the current line)
- Delete the selected line(s)
- Insert before (the current line)
- Insert after (the current line)
- Modify (the current line)
- Increase indent (the selected lines)
- Decrease indent (the selected lines)
- Rewind (the execution mark is at the top of the scenario)

- Run the scenario
- Run the scenario step by step
- Go (after a step by step execution)
- Pause
- Stop

- Edit Mode button
- Exec Mode button

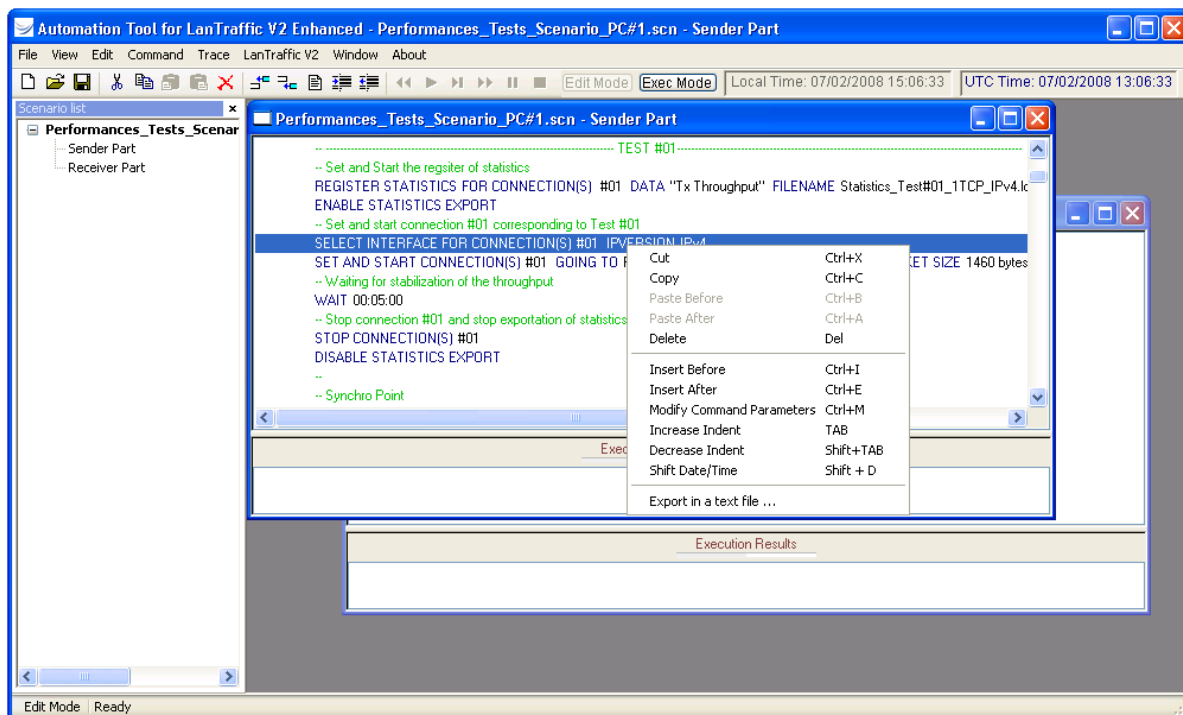
- Local time (current time of your machine)
- UTC time (absolute time)

PART 3 Using the Automation Tool

3.1 Create and edit a scenario

- **Step 1:** File/New
- **Step 2:** Select the window: Sender Part or Receiver Part
- **Step 3:** Double click on the line 'Double click here to insert a new command line'. A window is displayed to insert a command or instruction.
- **Step 4:** Select the command or instruction you want to insert and fill in the parameters, and then click OK.
- **Step 5:** Add new command or instruction lines to the scenario with a double click or a right click on the line 'Double click here to insert a new command line' or right click on the command line to access the edit menu"

In the example below, a right click on a command line opens a menu with different options:



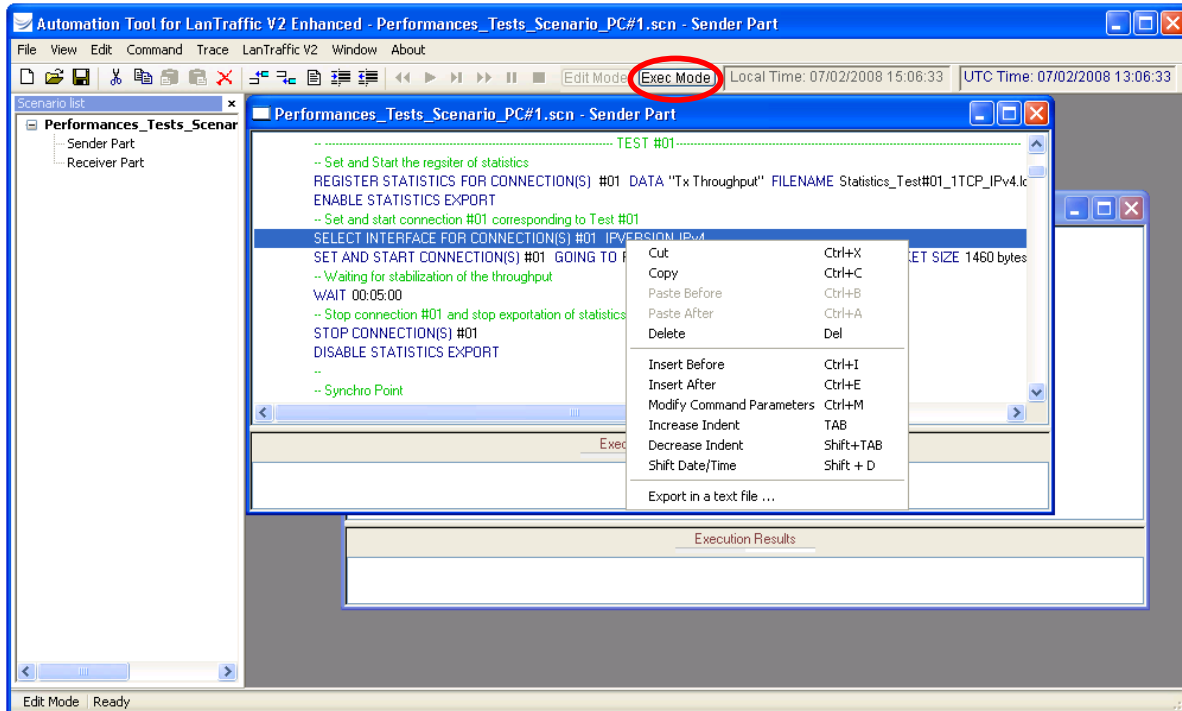
- **Step 6:** Save this new scenario in a scenario file (with the extension .SCN) by using the 'File/Save as ...' menu.

You can modify a line of the scenario in the 'Edit Mode' by double clicking on the line.

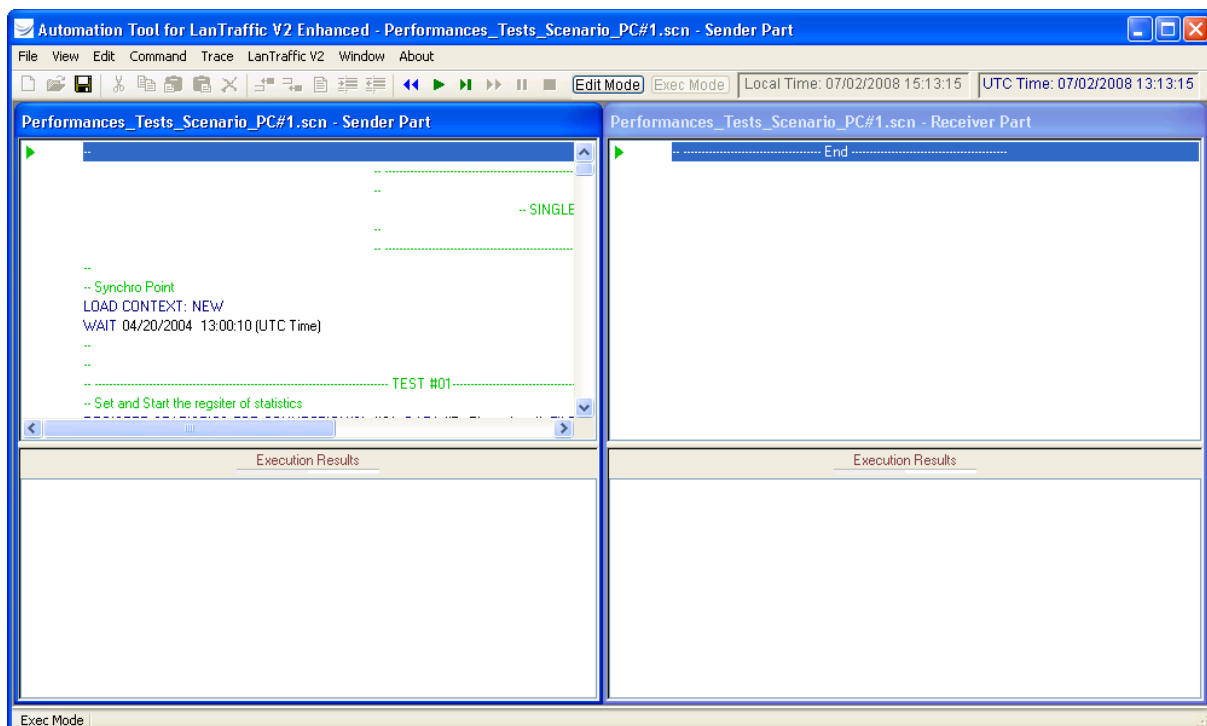
Important note: the reference time (Local or UTC) for the date/time specified in the Wait command and for the execution results of the scenario is defined by the 'View/Options ...' menu.

3.2 Run a scenario

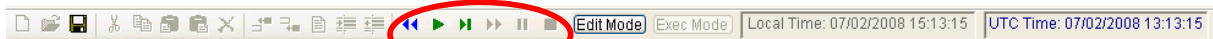
To run a scenario, switch in the 'Exec Mode' by pressing the button "Exec Mode" in the Tool Bar.



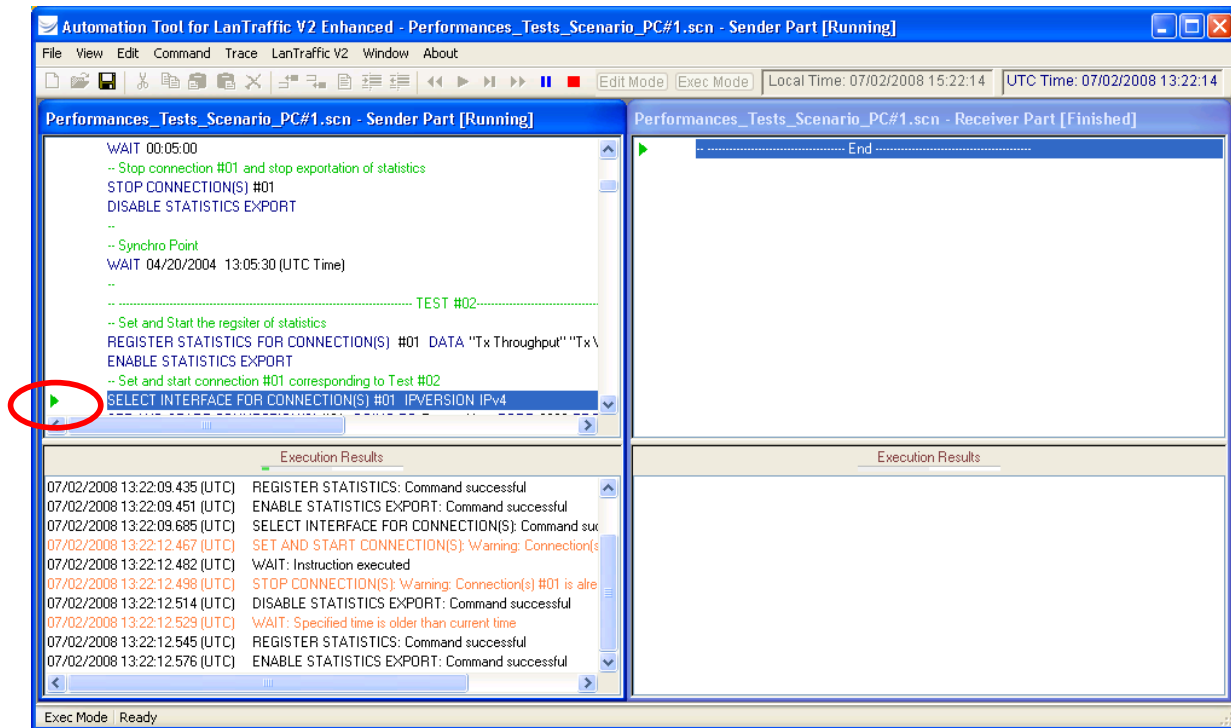
Then the "Sender Part" and the "Receiver Part" of the scenario are displayed in two windows as follows:



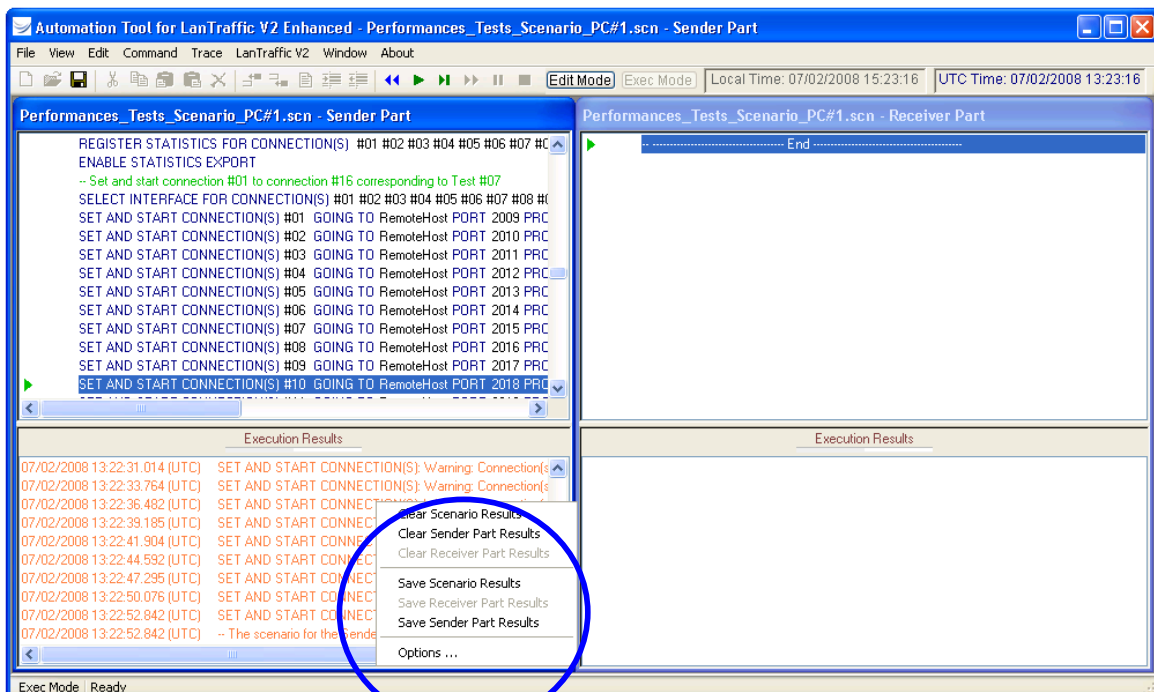
You can switch to the 'Edit Mode' by pressing the 'Edit Mode' button in the Tool Bar. To execute the scenario, you can use the commands available in the 'Command' menu or the buttons in the tool bar.



When the scenario is running, the symbol ► indicates the command being executed and the 'Execution Results' zone is filled with the result of each command or instruction.



When the execution of the scenario is ended, you can right click in the 'Execution Results' zone to clear and save the displayed results.



PART 4 Command Line Parameters

The **Automation Tool for LanTraffic V2 Enhanced** software can be started by using a command line with parameters.

4.1 General rule

Parameters should be separated from the application name by a space. The application name of **Automation Tool for LanTraffic V2 Enhanced** is "Aut_LTV2.exe". Under Windows, the application name is not case sensitive.

4.2 Start the "Automation Tool for LanTraffic V2 Enhanced" and launch a scenario

The scenario filename is a set of commands and instructions for **LanTraffic V2 Enhanced**. This set can be saved in a file and reloaded later.

The command line parameter to start the **Automation Tool for LanTraffic V2 Enhanced**, load and launch a scenario: **-START**

Syntax: **-START:filename**

Where filename may be:

C:\temp\scenario1.scn or

"C:\Program Files\LanTraffic V2 Enhanced\ scenario1.scn". The " symbol is necessary to use spaces in filenames or directories.

There in NO space between the parameter –START: and the filename.

Example:

Aut_LTV2 –START:"C:\Program Files\LanTraffic V2 Enhanced
\Scenario1_UDP_PC#B.scn"

4.3 Stop the "Automation Tool for LanTraffic V2 Enhanced" and "LanTraffic V2 Enhanced"

There is only one command line parameter to stop the execution of the scenario and then stop the **LanTraffic V2 Enhanced** and the **Automation Tool for LanTraffic V2 Enhanced** software.

Syntax: **-STOP**

Example:

Aut_LTV2 –STOP

PART 5 Commands and Instructions

Commands and instructions for the Sender part	Commands and instructions for the Receiver part
Comments Disable Statistics Export Enable Statistics Export Launch External Application Load Context Repeat End Repeat Register Statistics Select Columns Select Interface Set Specific Parameters Set and Start Connection(s) Stop All Connections Stop Connection(s) Stop Scenario Wait	Comments Disable Statistics Export Enable Statistics Export Launch External Application Load Context Repeat End Repeat Register Statistics Select Columns Select Interface Set Specific Parameters Set Connections(s) Start Receiver Stop Receiver Stop Scenario Wait

A specific window is attached to a command or [instruction](#) (an instruction has no action on the **LanTraffic V2 Enhanced** application).

A command or [instruction](#) is composed of 3 parts:

- <The command or Instruction name>
- <List of parameters> [may be null]
- <Comments> [optional]

The following paragraphs describe each command and instruction for the Sender and the Receiver.

5.1 Commands and *Instructions* for the Sender

<Description>	<List of parameters>	<Comments>
Comments	<i>No parameter</i>	
Disable Statistics Export	<i>No parameter</i>	
Enable Statistics Export	<i>No parameter</i>	
Launch External Application	Command Line respecting DOS syntax	
Load Context	New context Context file	
Repeat	Counter = number of iterations	
End repeat	<i>No parameter</i>	
Register Statistics	Filename Max size (in KB) Connections to export (#01 to #16) Transmitting statistics: Tx Throughput, Tx Pkts Throughput, Tx Volume, Tx Packets Receiving statistics: Rx Throughput, Rx Pkts Throughput, Rx Volume, Rx Packets Other statistics: Remaining Volume, Volume to Send, RTT, Jitter, Sequence Number Errors	
Select Columns	Up to 7 columns to choose among 13 Define order of the columns	
Select Interface	Connections to set (#1 to #16) IP version (IPv4 or IPv6) Local IP address (X.X.X.X or nn::nn)	
Set Specific Parameters	Refresh time for the GUI display Throughput sampling period	
Set and Start Connection(s)	Connections to set (#01 to #16) Destination IP address or Host Name Port Protocol (TCP, UDP, ICMP, SCTP or None) DSCP field Data size (in bytes) Inter Packet Delay (in millisecond) Mean throughput per connection: packet size or inter packet delay adjustable Volume per connection (expressed in B, KB, MB, GB, Pkt) Duration (HH:MM:SS)	
Stop All Connections	<i>No parameter</i>	
Stop Connection(s)	Connections to stop (#01 to #16)	
Stop Scenario	<i>No parameter</i>	
Wait	Date and/or Time Period: number of days and duration Duration (HH:MM:SS)	

5.2 Commands and *Instructions* for the Receiver

<Description>	<List of parameters>	<Comments>
Comments	<i>No parameter</i>	
Disable Statistics Export	<i>No parameter</i>	
Enable Statistics Export	<i>No parameter</i>	
Launch External Application	Command Line respecting DOS syntax	
Load Context	New context Context file	
Repeat	Counter = number of iterations	
End repeat	<i>No parameter</i>	
Register Statistics	Filename Max size (in KB) Connections to export (#01 to #16) Transmitting statistics: Tx Throughput, Tx Pkts Throughput, Tx Volume, Tx Packets Receiving statistics: Rx Throughput, Rx Pkts Throughput, Rx Volume, Rx Packets Other statistics: Data Not Echoed, Remaining Volume, Volume to Send, Jitter, Sequence Number Errors	
Select Columns	Up to 5 columns to choose among 13 Define order of the columns	
Select Interface	Connections to set (#01 to #16) IP version (IPv4 or IPv6) Local IP address (X.X.X.X or nn::nn))	
Set Specific Parameters	Refresh time for the GUI display Throughput sampling period	
Set Connection(s)	Connections to set (#01 to #16) Remote IP address or Hostname Port Protocol (TCP, UDP, SCTP or None) Working Mode	
Start Receiver	<i>No parameter</i>	
Stop Receiver	<i>No parameter</i>	
Stop Scenario	<i>No parameter</i>	
Wait	Date and/or Time Period: number of days and duration Duration (HH:MM:SS)	