Preface

Visual Net Supervisor is an graphical network monitoring tool that initiates both visual and audible alarms when monitored network elements do not respond to polling. Visual Net Supervisor will even notify you remotely by, alphanumeric pager, or e-mail.

Visual Net Supervisor will work with any 32-bit TCP/IP stack, such as those bundled with Windows 95 or Windows NT. In addition, you do not need any special training to configure Visual Net Supervisor and start monitoring your networks.

Available for Intel, and MIPS platforms, you can use Visual Net Supervisor effectively in any network environment. It provides both a low-cost solution for small networks and a simplified tool to complement the more extensive network management systems found in large networks.

Visual Net Supervisor also facilitates remote support and diagnosis by providing easy access to all network elements.

Conventions Used in this Manual

We have used a few conventions in the manual in order to help keep explanations clear. Certain generic terms (such as eMail) are used to consistently indicate specific things (i.e., host names) throughout the manual. The following table identifies these conventions:

Generic Term host.domain

domain

user@domain

Examples host.domain idefix.insys.fr domain insys.fr sales.insys.fr user@domain AlexandreD@insys.fr

Meaning within this Manual

Fully qualified domain name

Partial domain

E-mail address using partial domain name (*i.e.* host name excluded. We call this host name hidding.)

Questions and Comments

If you can't find an answer to a question in the manual, check the FAQ located on our web site at http://www.insys.fr or send E-mail to

```
support-vns@insys.fr
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To suggest improvements to this manual, send E-mail to : vns@insys.fr

Note: Copies of this manual can be obtained by anonymous FTP to ftp.insys.fr or from the web site at http://www.insys.fr.

A detailed table of contents follow to help you find coverage of specific topics. We hope you enjoy using Visual Net Supervisor and look forward to your feedback.

Requirements

This program requires Microsoft Windows NT or Microsoft Windows 95 with the TCP/IP stack. (It works best on Windows NT).

This program is designed to work on any Winsock DLL, however it works BEST on the Microsoft TCP/IP 32 stack that comes with Windows NT 3.51 and later)

Operating system

Windows NT 3.51 Windows NT 4.0 Windows 95 Stack Microsoft TCP/IP Microsoft TCP/IP Microsoft TCP/IP

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Quick Start

Legal Notices Setting up your Workstation

Setting up your Workstation

This chapters helps you up your workstation to run Visual Net Supervisor. The setup program sets up your Visual Net Supervisor file, install the sample file on a drive, and creates program icons.

Before You Set Up Setting Up under Windows 95 and NT

Before You Set Up

You only need to read the information in this section if your workstation does not run TCP/IP services. For TCP/IP to work on your computer, it must be configured with IP addresses, subnet masks, and default gateway for each network adapter on the computer. TCP/IP can be configured in one of two ways:

- Automatically, if there is a Dynamic Host Configuration Protocol (DHCP) server on your internetwork.
- Manually, if there is no DHCP server, or if you are configuring a Windows NT Server computer to be a DHCP server.
- Note See the Installing and Configuring Microsoft TCP/IP in the TCPIP.HLP help file. The settings take effect after you restart the computer.

Setting Up under Windows 95 and NT

To set up your workstation :

Start Windows 95, or Windows NT :

In Program Manager, choose File / Run
In the Command Line entry field, type the following : *path*:\setup
where path is the local floppy disk location. For example *a:\setup*c. choose OK

Select the directory to install the Visual Net Supervisor software.
For example choose *C:\VNS*Follow the on screen instructions to complete workstation setup.
See README.TXT in the installation directory for important, last-minute additions to the Visual Net Supervisor

How to run Visual Net Supervisor

documentation.

To run Visual Net Supervisor : Click on the Visual Net Supervisor Icon in the program group

Guided Tour

Scan your own network

This section provides instructions for using the scan function.

- Choose Network, Scan in the Visual Net Supervisor menu.
- The dialog box will appears with your own IP address for example 192.168.100.[1-254]

Scan	×
Class C Address :	OK
192 168 100 1	Cancel
to 254	
[CMP Time out (ms] : 750	
Number of echo to send : 1	
E Add virtual host	

· Click on the OK button, to start the scanning

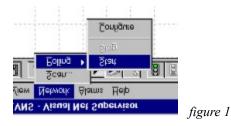
×
Stop

The scan feature automatically detects and displays icons for the systems in your network. You specify a range of C class addresses to be scanned, and Visual Net Supervisor polls each address. When Visual Net Supervisor can find an active host if the ICMP service is running, it creates :

- an icon with an unknown type
- adds the network services with the monitor property (such as ICMP, TCP/ECHO, FTP, SMTP, NTTP, POP3, WWW).

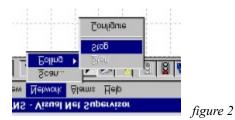
Ready to poll

Push the start button or choose Start in the Network menu (figure 1)



This section provides instructions for using the pool function. Choose Network, Pool in the Visual Net Supervisor menu.

Now stop push the stop button or choose stop in the Network menu *(figure 2)*



Polling Configuration

Polling configuration	
Wait between <u>H</u> ost (ms) :	OK
Wait betweenLoop (ms) :	Cancel

Visual Net Supervisor polls each monitored host in the network area, the pool engine wait for the **wait time between host** and after a complete cycle wait for the **wait between Loop**

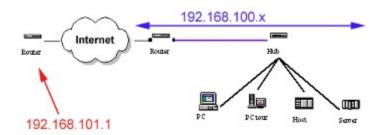
For this item	Do this
Wait between Host (ms)	A wait time between host of 5000 milliseconds is usually valid.
Wait between Loop (ms)	A wait time between loop of 10000 milliseconds is usually valid.

Note

Use the wait values to limit the Visual Net Supervisor overhead on your network.

Add a specific host

Now, you can add a specific host for example which can not be reach your class C IP address. For example



We add the specific host router 192.168.101.1

Host's properties	×
Host's configuration Notes	
Display Name : Router	
System Type : Router 💌	
Wait Time between services (ms): 2000	
✓ Monitor ☐ Earce NSLookUp	
OK Cancel Apply	

Use this dialog box to changes the host's parameters.

For this item	<u>Do this</u>
Display Name	Enter the display name (for example, Router)
IP Address/Name	Enter the IP Address or host's name (for example, 127.0.0.1 or localhost, or www.insys.fr)
System type	Choose one of the system type (none, host, server, vax, router, hub, printer, workstation)
Wait Time between services (ms)	Use this value to limited the VNS overhead on your host.
Monitor	If the monitor is disabled, VNS does not poll any services of this station event if there are monitored. If the monitor is enabled, VNS do pool any monitored services of this station
Force NSLookUp	When VNS poll this host, it try to resolve the host name. If look up failed VNS call the union of alarm set for each services.

Design your network map

Now you will learn how to design your network map.

Mouse commands

<u>Left button click</u> <u>Right button click</u> <u>Left button double-click</u> <u>Control key + left button click</u>

Left button click

You can use left button click :

- on any object to select it.
- on client area to select more than one object
- (left button click on client area and moving over objects while left button is down).

Right button click

You can use right button click :

- on client area to create a new host (Cf. picture 1).
- on any object to modify host's characteristics (Cf. picture 2).

Left button double-click

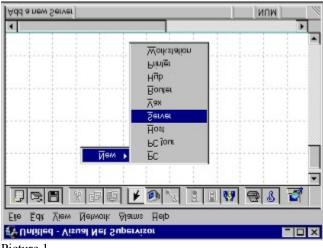
You can use left button double-click on any host *to display information about services*. (Cf. picture 6).

Control key + left button click

You can use control key + left button click to clone an existing object.

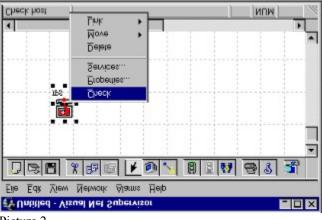
Main design functions

You can create a new host by using right button click on client area. Now, you can choose a specific host amid menu items.



Picture 1.

You can modify host's characteristics by using right button click on new object.

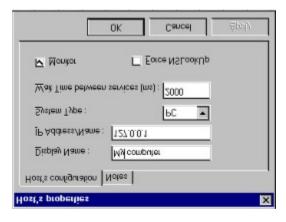


Picture 2.

Host menu commands

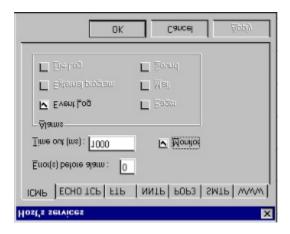
Check Allow you to check services of selected host.

Properties Display properties dialog box.



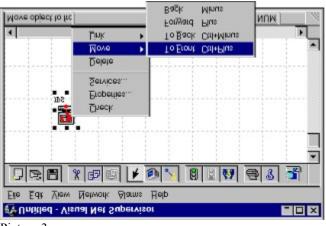
Services

Display services dialog box.



Delete Delete selected object.

You can define overlay for each host or OLE object.

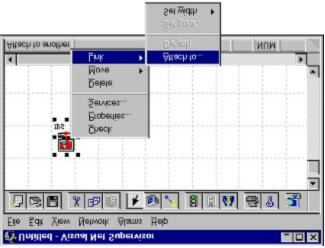


Picture 3.

MOVE POP UP MENU COMMANDS

Move Cf. pop up menu on picture 3.

You can attach an object to another by choosing *Attach to* item. For each link, you can set color and width.

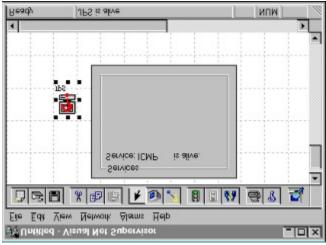


Picture 4.

LINK POP UP MENU COMMANDS

Attach to	Create a link to another object.	
Detach	Delete current link to anther object.	
Set color	Display color dialog box to set color of link.	
Set width	Display pop up menu to choose width of link in pixels.	

You can display information about services by using left button double-click on selected host.



Picture 6.

Services

ICMP

Host's services	×
ICMP ECHO TCP FTP	NNTP POP3 SMTP WWW
Error(s) before alarm :	
<u>T</u> ime out [ms] : 1000	<u>Monitor</u>
Alarms	
☑ Event Log	🗖 Kobby
Egternal program	🗖 <u>M</u> ei
🗖 Eis Log	🗖 <u>S</u> ound
-	
OK	Cancel Apply

Use this dialog box to changes host's parameters.

For this item	<u>Do this</u>
Event Log	Use this check box to log alarm (like alarm or warning) event to the Windows NT Event Viewer
External Program	Use this check box to launch an external program when an alarm event occurs
File Log	Use this check box to log alarm (like alarm or warning) event to a file.
Pagger	Use this check box to send pager message when en alarm event occur
Mail	Use this check box to send a email message when en alarm event occur
Sound	Use this check box to play a sound when en alarm event occur

ECHO TCP

Host's services	×
ICMP ECHO TCP FTP	NNTP POP3 SMTP WWW
Error(s) before alarm :	-
<u>T</u> ime out (ms) : 1000	Monitor
Alarms	
✓ Event Log	🗖 Kobby
Egternal program	🗖 <u>M</u> ei
🗖 Eis Log	🗖 <u>S</u> ound
OK	Cancel Apply

Use this dialog box to change host's Echo TCP parameters

When you have finished setting error(s) before alarm, time out and Alarms , click OK to confirm your choices and close the dialog box, or click Cancel to disregard all changes and exit.

For this item	<u>Do this</u>
Error(s) before alarm	An alarm is send when the station has missed n pools. An alarm have a time to live preset to an half hours.
Time out (ms)	
Monitor	Use this check box to monitor the service.
Event Log	Use this check box to write alarm event (like alarm or warning) to the Windows NT Event Viewer
External Program	Use this check box to launch an external program when en alarm event occur
File Log	Use this check box to write alarm event (like alarm or warning) to a log file.
Pagger	Use this check box to send pager message when en alarm event occur
Mail	Use this check box to send a mail message when en alarm event occur
Sound	Use this check box to play a sound file when en alarm event occur

FTP

Host's services	×
ICMP ECHO TCP FTP	NNTP POP3 SMTP WWW
Error(s) before alarm :	I
<u>T</u> ime out (ms) : 1000	□ <u>M</u> onitor
Alarms	
EventLog	🗖 Kothy
🗖 Egternal program	□ <u>M</u> ei
🗖 Ele Log	🗖 gound
OK	Cancel Apply

Use this dialog box to changes the host's FTP services parameters

When you have finished setting sound file name, click OK to confirm your choices and close the dialog box, or click Cancel to disregard all changes and exit.

For this item	<u>Do this</u>
Error(s) before alarm	
Time out (ms)	
Monitor	Use this check box to this service.
Event Log	Use this check box to write alarm event (like alarm or warning) to the Windows NT Event Viewer
External Program	Use this check box to launch an external program when en alarm event occur
File Log	Use this check box to write alarm event (like alarm or warning) to a log file.
Pagger	Use this check box to send pager message when en alarm event occur
Mail	Use this check box to send a mail message when en alarm event occur
Sound	Use this check box to play a sound file when en alarm event occur

NNTP

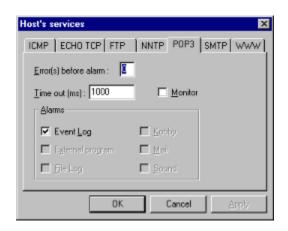
Host's services	×
ICMP ECHO TCP FTP	NNTP POP3 SMTP WWW
Error(s) before alarm :	
<u>T</u> ime out (ms) : 1000	□ <u>M</u> onitor
Alarms	
Event Log	🗖 Kothy
🗖 Egternal program	□ <u>M</u> ei
🗖 File Log	🗖 Sound
OK	Cancel Apply

Use this dialog box to changes the host's NNTP services parameters

When you have finished setting sound file name, click OK to confirm your choices and close the dialog box, or click Cancel to disregard all changes and exit.

For this item	<u>Do this</u>
Error(s) before alarm	
Time out (ms)	
Monitor	Use this check box to this service.
Event Log	Use this check box to write alarm event (like alarm or warning) to the Windows NT Event Viewer
External Program	Use this check box to launch an external program when en alarm event occur
File Log	Use this check box to write alarm event (like alarm or warning) to a log file.
Pagger	Use this check box to send pager message when en alarm event occur
Mail	Use this check box to send a mail message when en alarm event occur
Sound	Use this check box to play a sound file when en alarm event occur

POP 3



Use this dialog box to changes the host's POP3 service parameters

When you have finished setting error(s) before alarm, time out and Alarms , click OK to confirm your choices and close the dialog box, or click Cancel to disregard all changes and exit.

For this item	Do this
Error(s) before alarm	This parameter enable
Time out (ms)	
Monitor	
Event Log	Use this check box to write alarm event (like alarm or warning) to the Windows NT Event Viewer
External Program	Use this check box to launch an external program when en alarm event occur
File Log	Use this check box to write alarm event (like alarm or warning) to a log file.
Pagger	Use this check box to send pager message when en alarm event occur
Mail	Use this check box to send a mail message when en alarm event occur
Sound	Use this check box to play a sound file when en alarm event occur

SMTP

Error(s) before alarm :	□ <u>M</u> onitor
Time out [ms] : 100	00
Eostmaster E-Mail :	
Alarms I Event Log	🗖 Kobby
External program	🗖 Mei
🗖 File Log	E Sound

Use this dialog box to changes the host's SMTP service parameters

When you have finished setting error(s) before alarm, time out and Alarms , click OK to confirm your choices and close the dialog box, or click Cancel to disregard all changes and exit.

For this item	<u>Do this</u>
Error(s) before alarm	
Time out (ms)	
Monitor	
Event Log	Use this check box to write alarm event (like alarm or warning) to the Windows NT Event Viewer
External Program	Use this check box to launch an external program when en alarm event occur
File Log	Use this check box to write alarm event (like alarm or warning) to a log file.
Kobby	Use this check box to send pager message when en alarm event occur
Mail	Use this check box to send a mail message when en alarm event occur
Sound	Use this check box to play a sound file when en alarm event occur

WWW

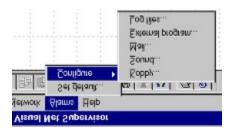
Host's services	×
ICMP ECHO TCP FTP	NNTP POP3 SMTP WWW
Error(s) before alarm : 0	Monitor
Time out (ms) : 100	0
Port number : 0	
Alarms	Kobby
External program	🗖 Mei
🗖 File Log	🗖 Sound
OK	Cancel Apply

Use this dialog box to changes the host's WWW service parameters

When you have finished setting error(s) before alarm, time out and Alarms , click OK to confirm your choices and close the dialog box, or click Cancel to disregard all changes and exit.

For this item	<u>Do this</u>
Error(s) before alarm	
Time out (ms)	
Monitor	
Event Log	Use this check box to write alarm event (like alarm or warning) to the Windows NT Event Viewer
External Program	Use this check box to launch an external program when en alarm event occur
File Log	Use this check box to write alarm event (like alarm or warning) to a log file.
Kobby	Use this check box to send pager message when en alarm event occur
Mail	Use this check box to send a mail message when en alarm event occur
Sound	Use this check box to play a sound file when en alarm event occur

Alarm configuration



When the network element does not respond to pooling, Visual Net Supervisor can send notification event via :

- <u>Pager</u>
- <u>Sound</u>
- <u>Mail</u>
- External program
- Log files
- Event Log

Sound Alarm

own Action	
Loop infinite	OK
Sound file (WAV) :	Cancel
	∐est

Use this dialog box to open a sound file name.

- If you specify "Loop Infinte," when an error occur Visual Net Supervisor play the sound file infinite. You must press the stop pooling button to stop the alarm.
- If you press the test button, Visual Net Supervisor play the sound file that you choose in the space to type the name of the file.

When you have finished setting sound file name, click OK to confirm your choices and close the dialog box, or click Cancel to disregard all changes and exit.

For this item	<u>Do this</u>
Sound file (WAV)	Enter a wav file name (for example, C:\VNS\DOWN.WAV)
Loop infinite	Play the sound file infinity

Mail

Mail Configuration	×
Mail gerver :	OK
	Cancel
E- <u>M</u> ail:	Test
1	

Use this dialog box to specify your mail SMTP server and to register e-mail address or an administrator e-mail address.

When you have finished setting Identity preferences, click OK to confirm your choices and close the dialog box, or click Cancel to disregard all changes and exit, or click Test to send a test message.

<u>For this item</u>	<u>Do this</u>
Outgoing Mail (SMTP) Server	Enter the host name of the server. If you do not know the name of your SMTP server, ask your service provider or system administrator.
e-mail	Enter your e-mail address (for example, vns@insys.fr).

Pager

COBBY	OK
	Cancel
Call Parameters	
Erefix:	Frequency
Beceiver Id :	⊡one ■
Call moderator (mn)	C Pylse
Baud Rate	- Flow Control
C 1200 C 2400 C 4800 @ 9600	
O 14.4K O 19.2K O 38.4K O 57.6K	○ None
Port	
Com1 Com2 Com3 Com4	<u>I</u> est

Use this dialog box to specify the pager properties

<u>Do this</u>
Enter your prefix; for example 0,
Enter your kobby pager id
Enter the max time between calls.
Enter the baud rate
Enter the port number
Enter the modem initialization string; for example ATZ
Choose hardware or none flow control (none is recommanded)
Choose Pulse or Tone frequency

Call External Program

×
OK
Cancel
Test

Use this dialog box to set the external program parameters

- If you specify "Use file name as argument," when an error occur Visual Net Supervisor launch the
 external program and add a file tempory name to the command line. The file contains the error
 messages (for example if you specify " myexternal.exe ", Visual Net supervisor launch
 " myexternal.exe c:\temp\vns56.tmp ").
- If you press the test button, Visual Net Supervisor launch the external program file than you choose in the space to type the name of the file.

When you have finished setting sound file name, click OK to confirm your choices and close the dialog box, or click Cancel to disregard all changes and exit.

For this item	Do this
External program	Enter a program file name (for example, C:\winnt\system32\cmd.exe).

• For example (Use file name as argument unchecked)

For this sample	<u>Do this</u>
External program	C:\WINNT\system32\cmd.exe /C C:\VNS\external.bat

Use file name as argument unchecked

Use this external batch file named external.bat :

This sample generate a send message box :

Service M	essagerie	×
Message de II	DEFIX à IDEFIX le 16/07/96	17:03
VNS Test Pa	rameter	
	OK I	

• For example (Use file name as argument checked)

For this sample

External program

Do this C:\WINNT\system32\cmd /C C:\VNS\external.bat

Use file name as argument checked

This sample generate a send message box :

	Messagerie	
Message de	IDEFIX à IDEFIX le 16/07/	96 17:04
D:\TEMP\v	ns56.tmp	
	[

Ø type D :\TEMP\vns56.tmp VNS Test Parameter

Log Files

ОК		

Use this dialog box to specify the log files directory.

When you have finished setting directory, click OK to confirm your choices and close the dialog box, or click Cancel to disregard all changes and exit.

For this item	Do this
Log files directory	Enter a directory name (for example, C:\LOG).
Log Warning	checked to add warnings messages

Event Log

Date	Time	Source	Category	Event	User	Compute	r
17/07/96	18:10:47	Visual Net Sup	enAucun	3	Non disp.	IDEFIX	1
17/07/96	18:09:50	Visual Net Sup	enAucun	2	Non disp.	IDEFIX	
17/07/96	18:07:59	Visual Net Sup	enAucun	2	Non disp.	IDEFIX	
017/07/96	18:06:08	Visual Net Sup	enAucun	2	Non disp.	IDEFIX	
17/07/96	18:04:27	Visual Net Sup	enAucun	2	Non disp.	IDEFIX	. 1
17/07/96	17:32:47	Visual Net Sup	enAucun	3	Non disp.	IDEFIX	
17/07/96	17:32:21	Visual Net Sup	enAucun	2	Non disp.	IDEFIX	
17/07/96	17:31:54	Visual Net Sup	enAucun	3	Non disp.	IDEFIX	
017/07/96	17:31:53	Visual Net Sup	enAucun	2	Non disp.	IDEFIX	
17/07/96	17:31:36	Visual Net Sup	enAucun	2	Non disp.	IDEFIX	
17/07/96	17:31:12	Visual Net Sup	enAucun	3	Non disp.	IDEFIX	
0 17/07/96	17:30:54	Visual Net Sup	enAucun	2	Non disp.	IDEFIX	
0 17/07/96	17:30:27	Visual Net Sup	enAucun	2	Non disp.	IDEFIX	
0 17/07/96	17:29:59	Visual Net Sup	enAucun	2	Non disp.	IDEFIX	
0 17/07/96	17:29:32	Visual Net Sup		2	Non disp.	IDEFIX	
A 17/07/00	17-70-04	Maural Mat Cur	an Augus	-	Man dian	IDEEN	-

When you check event on a specified service, Visual Net Supervisor write errors to the Windows NT Event Viewer. Visual Net supervisor send a information event when the pool start and stop

Contents

- Preface Conventions Used in this Manual Questions and Comments **Requirements** Quick Start Legal Notices Setting up your Workstation Suided tour Scan your own network Ready to poll Polling Configuration Add a specific host Design your network map Main design functions Mouse commands Host menu commands Services ♦ <u>ICMP</u> ECHO TCP 🔶 <u>FTP</u> ♦ <u>POP 3</u> SMTP **NNTP** ♦ <u>WWW</u> Alarm configuration Sound Alarm 🐤 Mail Pager Section Call External Program
 - Log Files
 - Section 2013 Event Log