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Version 1.4

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Overview

NetLab is a 32bit multithreaded Winsock compliant program that has the following features:

Finger service   used to retrieve information about user on specific host or list of currently logged-in users. The host has to support finger service for you to be able to use it;

WhoIs service used to get information from Network Information Center servers. They provide databases of registered users and hosts from all around the world. It allows you to search for a system by name or for the manager of a system;

Daytime service   used to get time of day at the remote host's location;

Clock Synchronization used to synchronize your PC's clock with any daytime server available on the Internet. Many Naval observatories maintain atomic clock times and allow you to connect to their daytime server using this service;

Quote of the day   to get quote of the day from a remote host;

Ping service   to verify that a remote host is online;

Traceroute service   used to get a route a connection to a remote host takes. Returns each router hop on route to a   remote host;

DNS lookup used to lookup the IP address of any DNS registered   host   to resolve a Host name or IP Address. It also shows you possible aliases;

Scanner used to scan network for IP addresses, host names and ports on the host to identify services;

Winsock Info

Options

Using Finger Service

Enter e-mail address or host address in "**host**" field. You also can select one of your previous queries by opening the history drop down list by clicking on the down arrow. Check "**Full User Info**" for full output including plan files if desired. Click on "**Finger button**" or press Enter key. You can cancel current operation at any time by clicking on "**Cancel button**".   Addresses can be removed from history list by choosing address you want to remove and clicking on "**Delete button**".

You can also place your queries to *Address Book*. It can be opened by clicking "**AddrBook button**". You can add, delete query entries or do a finger query of the selected book entry.

<u>Adding the address</u>:
Enter new address in "**New address**" field and click on "**Add button**".

<u>Removing an address</u>:
Select the address you want to remove in the "**Addresses**" list and click on "**Delete button**".

Finger query is done by clicking on "**Finger button**" or by double-clicking the selected address.

Using WhoIs Service

Enter WhoIs server name in the **"WhoIs server"** field or choose the name from drop down list by clicking on the down arrow. Enter search string or command in **"Query string"** field. Click on **"WhoIs button"** or press Enter key. Server names can be removed from history list by choosing the name you want to remove and clicking on **"Delete button"**.

Using Time services

Daytime service: Type remote host's name in "**Remote host**" field or choose it from   drop down list by clicking on the down arrow. Click on "**DayTime button**". Should you want to remove host's name from the list, select the name and click on "**Delete button**".

Clock Synchronization: Enter time server name in "**Time server**" field or choose it from drop down list by clicking on the down arrow. Choose protocol to use. SNTP protocol is considered to be the most accurate one but not all hosts support it. Most Naval Observatories however do. Click on "**Synchronize button**". Your PC's clock will be synchronized with a chosen time server.

Automatic clock synchronization: Netlab can periodically connect to a choosen time server and correct PC's clock. To enable the feature check "**Auto adjust**" checkbox and choose how often you want your clock be corrected. Netlab will periodically attempt to connect to a current time server. If the server doesn't respond a list of servers will be scanned to get and set the time. You can tell NetLab to correct the time at startup i.e., when the program starts. To do that simply check "**Correct at startup**" checkbox.

Time Zone Offset is calculated automatically but if you have problems with the synchronization you can explicitly set your *current* Time Zone Offset. To do so click on **"Offset button"** and enter the offset in the form: GMT hour : minute.

Using Quote of the day

Enter remote host's name in the "**Remote host**" field or choose the name from drop down list by clicking on the down arrow. Click on "**Quote button**" or press Enter key. Names can be removed from history list by choosing the name you want to remove and pressing "**Delete button**".

Using Ping & Traceroute services

Ping service: Enter an address in the "**Remote host**" field or choose the name from drop down list by clicking on the down arrow. Click on "**Ping button**" or press Enter key.

How does ping work? *NetLab* sends an echo packet to a specified host and waits for a reply. All hosts are supposed to bounce the packet back so that the program can calculate the statistics and determine if the host is online or not.

For each ping you will receive the following information:
Number: the ping number;
IP address: the IP address of the host. If the address is shown in curly brackets, the response came from a wrong host;
Host name: the name of the host;
Packet round trip time: the time a packet takes to make a round trip.

You can set any of the following options:
"***Number of Pings***" - the number of times you want to ping the host;
"***Base Packet Size***" - the size, in bytes, of a ping message;
"***Timeout***"- the time, in seconds, NetLab will wait for a response;
"***Delay***" - the interval, in milliseconds, between pings;
"***Resolve IP addresses***" - resolves the IP addresses to get host name;
"***Don't fragment***" - tells NetLab not to fragment packets.

Traceroute service: Enter an address in the "**Remote host**" field or choose the name from drop down list by clicking on the down arrow. Click on "**Trace button**" or press Enter key.

For each host along the route you will receive the following information:
Hop number: the sequence number of the host in the route;
IP address: the IP address of the host;
Host name: the name of the host;
Response time: the time a packet takes to make a round trip.

You can set any of the following options:
"***Maximum hops***" - maximum number of hops to trace;
"***Delay***" - the interval, in milliseconds, between pings;
"***Data size***" - the size, in bytes, of a ping message;
"***Timeout***"- the time, in seconds, NetLab will wait for a response;
"***Start from hop***" - tells NetLab which hop to start from;
"***Resolve IP addresses***" - resolves the IP addresses to get host name.
"***Parallel Trace***" - NetLab processes all hops in parallel instead of consecutively. It works 5-10 times faster than conventional trace.

Context menu: You can copy IP address and/or Host name to *Finger, WhoIs, Ping, Traceroute, DNS* and *clipboard* by clicking on item you're interested in with right mouse button. Choose the destination from a simple context menu.

Warning: Ping and Traceroute require ***ICMP.DLL*** library that is currently supported only by Microsoft Winsock. If   Winsock installed on your computer cannot work with the library you will see "PING/Traceroute not supported by your Winsock" message in a status window.

Using DNS lookup

Enter remote host's name or IP address you want to do DNS lookup on in the "Remote host" field or choose the it from drop down list by clicking on the down arrow. Click on "**DNS button**" or press Enter key. Names or addresses can be removed from history list by choosing the item you want to remove and pressing "**Delete button**".

Using Scanner

Enter IP address range   to scan, port range or check service names to look for and click on "**Scan button**" or press Enter key. The operation can be canceled by clicking on "**Cancel button**".

Options:

"**Timeout**" - sets amount of time in milliseconds the program will wait for a response from a remote host. If you scan local network a value of 200-300 ms is sufficient. For a remote network it should be set to something greater than 1000 ms;

"**Resolve IP address** "- tells NetLab to resolve the hostname for each active IP address and display the names in the scan results;

"**Scan Ports**"- if checked for each IP address the program will scan a range of port numbers you have entered.

Winsock Info

This page shows you local host name and information about Winsock your machine uses and it's status.

Using Options

You can change window font used by Finger, WhoIs, Quote of the day and DNS lookup. To do that select Options and choose the font you like.

If you're behind a Firewall and it supports finger and/or WhoIs service you should set Finger and/or WhoIs Firewall servers to use the program. If it doesn't work most probably your Firewall is not configured to use Finger/WhoIs service. Talk to your network manager.
To use Firewall servers check "**Use Firewall**" check box and enter Finger & WhoIs server names or addresses.

If you would like tooltips to display help text when the mouse moves over buttons check "**Tips**" checkbox.

If you want NetLab to minimize to the system tray check "**Minimize to tray**" checkbox. This feature is not available for Windows NT 3.51 and lower. When the program is about to be minimized NetLab removes itself from the taskbar and adds an icon to the tray. Click on the icon to restore the program in its original window size.

To tell NetLab to remember the last used function check "**Remember last function**" checkbox. The program will start with the last used function.

License and Responsibility

This is a <u>freeware</u> program. You can use it **free.** If you like it and want to support the author, who spends his spare time writing public-domain software,   you can do so by writing a cheque on any amount you think it worth. I'd really appreciate it.

Since this program is **<u>FREEWARE</u>** there is no responsibility or warranty. So use the program at your own risk. If you find any bugs or have comments please send me e-mail.

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