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Finger Tab

The Finger tab lets you use Finger on a particular host and view the results.

Finger lets you get information about a user or group of users that log onto a particular system. Finger displays a users full name, login name, last login date, and directory if you specify both a user and a host. If you specify only the host name, Finger lists all users currently logged onto that system.

The Finger tab contains these fields and buttons:

User
The name of the user with whom you want to use Finger.   You can include the host name with the user name using the @ sign (for example, user@daisy.yoyodyne.com): in this case, leave the Host field empty.

Host
The name of the host you want to Finger.   If you want information about a user on a local network, you do not need to enter a host name.

Verbose
Enables and disables the Finger verbose option.   The results of enabling Verbose depends on the system with which you are using Finger.   Some systems do not support the Verbose option, while some systems display the plan file only if Verbose is enabled.

Results
The results of the Finger inquiry.

Start button
Starts the Finger.

Stop button
Stops the Finger.

Save As
Saves the results to a file.

Print
Prints the results.

Close
Exits the application.

See Also:

- Using Finger
- About Finger

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Host Lookup Tab

The Host Lookup tab displays host information, including host name, IP address, and CPU and operating system type (if configured in your local host table or in DNS).

The Host Lookup tab contains these fields and buttons:

Host
 The host name or IP address of the host you are looking up.   If you use a host name, either your host table or DNS servers are used, depending on how you configured the TCP/IP stack for DNS (Domain Name System) or host tables.

Results
 The results of the host lookup.

Start button
 Starts the lookup.

Stop button
 Stops the lookup.

Save As
 Saves the results to a file.

Print
 Prints the results.

Close
 Exits the application.

See Also:

- Using Host Lookup
- About Host Lookup
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Ping Tab

The Ping tab contains controls that allow you to Ping a host and view the results.

Ping sends ICMP echo request packets to the specified host and measures the elapsed time between the transmission of the request and the receipt of the reply back at your host.   If a host cannot be reached, a message appears indicating so.   Short elapsed times indicate that the destination is relatively few hops away.   Longer elapsed times can indicate a variety of conditions including: the network is congested, the destination is many hops away, or that the destination can only be reached by a satellite link or by transoceanic link.

The Ping tab contains these fields and buttons:

Host
   The name or IP address of a host.   If your host is not configured for use with a host table or DNS, only an IP address can be entered.   For hosts on the local network, a single word can be used for the host name, such as PINE.   If the host is at another site, enter the fully-qualified domain name, such as OAK.YOYODYNE.COM.

Packets
   The number of ICMP echo request packets to send to the other host.   Specify a numeric value; to Ping a host indefinitely, use 0 (zero).   If Ping runs indefinitely, use the Stop button to terminate the session.

Results
   The results of the Ping.

Start button
   Starts the Ping.

Stop button
   Stops the Ping.

Save As
   Saves the results to a file.

Print
   Prints the results.

Close
   Exits the application.

See Also:

- Using Ping
- About Ping

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TraceRoute Tab

The TraceRoute tab lets you use TraceRoute, and view the results.

TraceRoute traces the route of 3 packets from the local host to a remote host. It displays the names (if they can be determined), IP addresses, and the packet round-trip times of each gateway along the way to the remote host. If your PC cannot communicate with a remote host, TraceRoute can determine at which gateway the difficulty is occurring.

Host
    The name or IP address of the host whose route you want to trace.

Results
    The results of the trace:

    Hop
        The sequential order in which gateways are encountered along the route to the remote host. The first gateway is hop number one, the second gateway is hop number 2, and so on.

    Host Name
        The host name of each gateway along the route to the remote host.

    Host IP
        The IP address of the gateway host.

    Rtt (3 columns)
        The round-trip times of the packets sent between your host and each gateway along the route to the remote host.   TraceRoute sends three packets; the three columns represent the round-trip times for each packet.

Start button
    Starts the trace.

Stop button
    Stops the trace.

Save As
    Saves the results to a file.

Print
    Prints the results.

Close
    Exits the application.

See Also:

- Using TraceRoute
- About TraceRoute

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Whois Tab

The Whois tab lets you use Whois to query a <u>white pages</u> server and view the results.

Whois queries a white pages server to get information about people or other Internet entities such as <u>networks</u>, <u>domains</u> and <u>hosts</u>. Whois can retrieve company names, addresses, phone numbers, and in the case of networks, the names of the administrators. Whois is useful when you need to contact the administrator of a network.

Query
The network, domain or host name that you want to query with Whois.   Entries in the database that match the query appear in the Results window.

Server
The <u>white pages</u> servers that are known to Net Tools.   You can select one of the known servers or enter the name of a new server.   Once you enter the name of a new server, that server is added to the drop-down list.

Results
The results of the query.

Start button
Starts the query.

Stop button
Stops the query.

Save As
Saves the results to a file.

Print
Prints the results.

Close
Exits the application.

See Also:

- <u>Using Whois</u>
- <u>About Whois</u>

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Save As Dialog Box

The Save As dialog box lets you save results to a file:

File Name
    The name of the file in which to save the results.

Save File As Type
    The file format for the file.

Directories
    The directory for the file.

Drives
    The drive for storing the file.

Network
    Connects to another network location so you can assign it a new drive letter.

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Print Dialog Box

The Print dialog box lets you print the results:

Printer
Shows the active printer and printer connection.   Click the Setup button to change the printer and printer connection.

Print Range group
Lets you specify the pages you want to print: All pages; just the data you selected in the Host Statistics window; or a specific page range.

Print Quality
Determines how clear the printout is, based on the capabilities of your printer.

Copies
The number of copies you want to print.

Collate Copies
Whether you want each copy printed in page number order (checked), or whether you want all copies of each page printed together, so that, for example, all page ones are printed first before printing page two (unchecked).

Setup button
Lets you select a printer and set other printer options using the <u>Print Setup dialog box.</u>

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Print Setup Dialog Box

The Print Setup dialog box lets you select a printer, page orientation and dimensions, paper source and other options:

Printer group
Lets you select either the default printer, or another printer that you have installed.

Orientation group
Determines whether the printout is in portrait or landscape orientation.

Paper group
Determines the size of the paper and the paper tray that is used.

Options button
Additional options that you can set for the selected printer.

Network button
Lets you connect to a printer on your network.

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Starting Net Tools

You can start Net Tools either from the Net Tools icon or by issuing a command.

To start Net Tools from the icon:

1. Double-click on the Net Tools icon located in the Cisco TCP/IP Suite group.

To start Net Tools by issuing a command:

1. Choose the Run option from the Program Manager File menu.

2. Enter *drive:path***mntools.exe** in the Command Line edit box, replacing *drive* with the drive letter where Cisco TCP/IP Suite is installed, and *path* with the directory where Cisco TCP/IP Suite is installed.

3. If you want to start Net Tools using command-line options, enter the command-line options in the Command Line edit box after **mntools**.

4. Click the OK button.

You can also use the command line arguments to create a shortcut icon to start Net Tools with a specific tab opened, and with the user and host name already filled.
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Using Finger

1. Click the Finger tab.

2. To retrieve information about a particular user, enter the user name in the User edit box.

3. Enter the host name in the Host edit box.   If using Finger to view a user on a local network, the host name is not necessary.

4. To enable the Verbose option, check the Verbose check box.

5. To start Finger, click the Start button.   The output from Finger appears in the Results Window.

6. Once Finger starts, it will self terminate. Alternately, click the Stop button.

7. To save the results in a file, click the Save As... button. To print the results, click the Print button.

8. To exit Net Tools, click the Close button.

See Also:

- About Finger

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Using Host Lookup

To use Host Lookup:

1. Click the Host Lookup tab.

2. Enter the name or IP address of the host you wish to look up into the Host Name / IP Address edit box.

3. To start Host Lookup, click the Start button.   The information appears in the Results Window.

4. Once Host Lookup starts, it will self terminate.   Alternately, click the Stop button.

5. To save the results in a file, click the Save As... button. To print the results, click the Print button.

6. To exit Net Tools, click the Close button.

See Also:

- About Host Lookup
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Using Ping

1. Click the Ping tab.

2. Enter a host name or IP address in the Host Edit Box.

3. Enter the number of times you wish to Ping the host in the Packets edit box.

4. To start Ping, click the Start button.   The output from Ping appears in the Results Window.

5. Once Ping starts, it will self terminate.   Alternately, click the Stop button.

6. To save the results in a file, click the Save As... button. To print the results, click the Print button.

7. To exit Net Tools, click the Close button.

See Also:

- About Ping

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Using TraceRoute

To use TraceRoute:

1. Click the TraceRoute tab.

2. Enter the host name or IP address of the remote host in the Host edit box.

3. To start TraceRoute, click the Start button.   The output from TraceRoute appears in the Results Window.

4. Once TraceRoute starts, it will self terminate. Alternately, click the Stop button.

5. To save the results in a file, click the Save As... button. To print the results, click the Print button.

6. To exit Net Tools, click the Close button.

See Also:

- About TraceRoute

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Using Whois

To use Whois:

1. Click the Whois tab.

2. Enter the host, network, or domain name you wish to query in the Query edit box. Because Whois displays all entries in the white pages server that match the entry in the Query edit box, we recommend you be as specific as possible.

3. Choose the white pages server you wish to query with the Server drop-down list or enter the name of a new server. If you enter a new server, that server will be added to the drop-down list.

4. Click the Start button.   The results of a Whois query appear in the Results window.

5. Once Whois starts, it will self terminate. Alternately, click the Stop button.

6. To save the results in a file, click the Save As... button. To print the results, click the Print button.

7. To exit Net Tools, click the Close button.

See Also:

- About Whois
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Printing Information

To print the results of a Net Tools application:

1. Click the tab of the application whose results you want to print.

2. Start the application.

3. After the results appear in the Results window, click the Print button.

4. To print the information, click the OK button.

See Also:

- Using Finger
- Using Host Lookup
- Using Ping
- Using TraceRoute
- Using Whois

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Storing Information in a File

To store information in a file:

1. Click the tab of the application whose results you wish to save in a file.
2. Start the application.
3. After the results appear in the Results window, click the Save As... button.
4. Enter the desired file name in the File Name edit box.
5. To save the information, click the OK button.

See Also:

- Using Finger
- Using Host Lookup
- Using Ping
- Using TraceRoute
- Using Whois

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About Finger

Finger lets you get information about a user or group of users that log into a specific system. You can use Finger to see if someone is currently logged on, or to identify a login name.

When you enter only a host name, Finger lists all users logged onto that host. When you enter a host and user name, Finger lists the full name, login name, login status, and last login time for that person. Finger is a useful tool for identifying a user's login name. For example, if you use Finger with user **masaka** on host **yoyodyne.com**, you might see:

```
MASAKA  Sun Masaka        MASAKA not logged in
Last login Fri 3-Mar-95 3:29PM-PST

No new mail, last read on Wed 24-May-95 12:27PM-PDT

[No plan]
```

The information retrieved above shows a typical response to Finger. It shows Masaka's full name, login status, and the time of her last login. The information that Finger returns depends on the configuration of the system being accessed. Many systems, including most DOS, Windows, and NetWare systems, do not respond to Finger. Other systems return varying amounts of information.

Finger also reads and displays the contents of a plan file if the user has created it, and the user's system is configured to display a plan file. This feature lets users distribute small amounts of information easily. For example, if user **masaka** in the earlier example had saved a plan file on her system, you might see:

```
MASAKA  Sun Masaka        MASAKA not logged in
Last login Fri 3-Mar-95 3:29PM-PST

No new mail, last read on Wed 24-May-95 12:27PM-PDT

Plan:
1) To get as much sleep as possible.
2) Find Corgano.
3) Chase him from the sky.
```

All of the information displayed after the heading Plan: is stored in the Masaka's plan file. If no plan file is available, Finger sometimes displays [No plan] as in the first example.

See Also:

- Finger Tab
- Using Finger

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About Host Lookup

Host Lookup displays host information, including host name, IP address, and CPU and operating system type (if configured in your local host table or in DNS). For example, assume you need to know the IP address of the host **masaka**. Using Host Lookup, supply the host name **masaka.yoydyne.com**. The following is displayed:

```
Hostname = masaka.yoyodyne.com
IP Address = 191.87.202.113
cpu type: P60
operating system: MSDOS
```

You now have the IP address. If you need the name of a host and have the IP address, you can supply the IP address and receive the same information. For example, supply IP address `191.87.202.113`. The following is displayed:

```
Hostname = masaka.yoyodyne.com
IP Address = 191.87.202.113
cpu type: P60
operating system: MSDOS
```

See Also:

- Host Lookup Tab
- Using Host Lookup

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About Ping

Ping lets you determine if a host can be accessed. Ping sends ICMP echo request packets to the specified host and measures the time that elapses from the time the packet is sent to the host until it is received back at your host. The greater the time that elapses, the greater the possibility of a network problem.   If a host cannot be reached, a message appears indicating so. Ping stands for Packet Internet Groper. ICMP stands for Internet Control Message Protocol; ICMP provides a standardized format for sending messages between hosts.

Ping sends a packet to the remote host every second and measures the time until the reply is received. When Ping is terminated, statistics are displayed showing the number of packets received, number of packets lost, and the average response time. For example:

```
Initiating Ping:
Pinging redwood with a data length of [56]
56 bytes from 191.87.50.113  Seq = 0  Time = 0ms.
56 bytes from 191.87.50.113  Seq = 1  Time = 0ms.
56 bytes from 191.87.50.113  Seq = 2  Time = 0ms.
56 bytes from 191.87.50.113  Seq = 3  Time = 0ms.
56 bytes from 191.87.50.113  Seq = 4  Time = 0ms.

Finished Ping of redwood.
Losses:            Times:
Sent: 5            Min:  0
Recv: 5            Max:  0
Loss: 0%           Avg:  0
```

In the example above, five packets are sent to the host redwood. Each packet had a response time of 0 ms. The statistics at the end show that all five packets were received with no losses, and that the average response time was 0 ms. This indicates no problems communicating with the host redwood.

When communicating with a host on a local area network, you can expect to see statistics like those above, that is, very few packets lost and very quick response times. If the packet loss is high or the response time is slow, it could indicate a network hardware problem. Wide area networks can show longer response times and higher numbers of lost packets. Long response times or lost packets can mean that you are communicating with a host that is many hops away, that the network is congested, or that the destination can only be reached by satellite link or transoceanic link.

See Also:

- Ping Tab
- Using Ping

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About TraceRoute

TraceRoute displays the route packets take when communicating with a remote host. TraceRoute is useful when troubleshooting communication problems because it can identify communication problems with gateways in the route to the remote host.

When supplied with the name or IP address of a host, TraceRoute displays the name (if available) and IP address of each gateway encountered along the way to the remote host. TraceRoute also displays the round trip times of three packets sent to each gateway. For example, if you specify host **whitehouse.gov**, TraceRoute displays information similar to the following:

```
Hop    Host Name                                Host IP            Rtt   Rtt  Rtt
1      BARRNET.YOYODYNE.COM                     191.87.50.1        0     0    0
2      BARRNET.YOYODYNE.COM                     191.87.50.1        0     50   0
3      UCSC.BARRNET.NET                         131.119.78.193     0     50   0
4      SU-SP.BARRNET.NET                        131.119.78.145     0     50   0
5      border1-hssil-0.SanFrancisco.mci.net     204.70.32.5        0     50   0
6      core-fddi-0.SanFrancisco.mci.net         204.70.2.161       0     50   0
7      core-fddi-0.SanFrancisco.mci.net         204.70.2.161       0     50   0
8      core-hssi-2.Denver.mci.net               204.70.1.37        60    0    50
9      border2-fddi0-0.Washington.mci.net       204.70.3.2         50    50   50
10     mae-east-cpe.Washington.mci.net          204.70.57.10       50    110  110
11     sl-mae-e-F0/0.icp.net                    192.41.177.241     110   110  110
12     sl-dc-8-H1/0-T3.sprintlink.net           144.228.10.41      110   110  110
13     sl-dc-3-F0.sprintlink.net                144.228.20.3       60    60   110
14     sl-dc-3-F0.sprintlink.net                144.228.20.3       50    110  110
15     whitehouse.gov                           198.137.241.30     110   110  50
```

In this example, TraceRoute detected 15 hops, or communicated with 14 different gateways before reaching the desired host (the 15th hop). The round-trip times for each of the three packets sent to each gateway are displayed in milliseconds (ms) in the Rtt columns. This example indicates that the time to communicate with the remote host is 110 ms.

If the display had shown packets being lost or the communication ending after reaching a particular gateway, it would indicate a problem communicating with that gateway, and could explain the difficulty in reaching the remote host.

See Also:

- TraceRoute Tab
- Using TraceRoute

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About Whois

Whois retrieves basic information about people, [networks](#), [domains](#), [hosts](#), and other Internet entities from an Internet [white pages](#) server. When you supply a name, or any portion of a name, and the host name of the white pages server you wish to search, Whois retrieves all records from the white pages server that match the name or portion of a name that you supplied.

For example, the server RS.INTERNIC.NET is the Internet Registry database. All people, domains, networks, and hosts that are registered with the Internet are listed in this database. To discover the name of the administrator of the network **yoyodyne.com**, query RS.INTERNIC.NET with the name **yoyodyne.com.**   Whois responds with information similar to the following:

```
        Yoyodyne Software Systems (YOYODYNE-DOM)
           PO Box 337
                  Soquel, CA  95073

           Domain Name: YOYODYNE.COM


           Administrative Contact:
              Van, I. Louis  (ILV)  Van@YOYODYNE.COM
              (408) 555-5200
           Technical Contact, Zone Contact:
              McBride, Joe L.  (JLM)  mcbride@INTESTIN.COM
              713-555-5544

           Record last updated on 27-Dec-93.


           Domain servers in listed order:

           NS1.YOYODYNE.COM                191.87.50.70
           NS2.YOYODYNE.COM                191.87.224.2



        The InterNIC Registration Services Host contains ONLY Internet
        Information
        (Networks, ASN's, Domains, and POC's).
        Please use the whois server at nic.ddn.mil for MILNET Information.
```

The information retrieved includes the name and address of Yoyodyne, their Internet registry number (YOYODYNE-DOM), their administrative and technical contact, and the host names of their domain servers.

Two white pages servers, RS.INTERNIC.NET (the Internet registry server) and NIC.DDS.MIL (the Military's white pages server) are listed in the Whois drop-down list. You can query either of these two servers, or you can enter the name of another white pages server. Once you have entered the name of another server in the drop-down list, that name is saved and becomes an entry in the drop-down list.

See Also:

- [Whois Tab](#)
- [Using Whois](#)

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About Net Tools

The Net Tools Application consists of five well-known information-gathering applications:
- Finger retrieves information about users or groups of users that log onto a specific host. The information Finger retrieves can be a list of all users logged onto a host, or Finger can retrieve a user's full name, login name, login status, and last login time. Finger can also display the contents of a plan file.
- Host Lookup gives you the name, IP address, CPU, and operating system type of a host.
- Ping indicates whether or not you can communicate with a remote host, and allows you to judge the speed of that communication.
- TraceRoute shows the route packets take when communicating with a remote host.
- Whois searches databases of people and other Internet entities, such as networks, domains and hosts, to get information about these entities. The information available usually includes name, address, phone number, network administrator, and domain server names.

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Net Tools Command-Line Options

By default, when Net Tools start, it displays the most recently used tab with the last entries used on that tab. However, if you start Net Tools from the Run option of the File Menu in Program Manager, you can modify its initial display by including command-line options. The available command-line options are:

- /t <tab> - where <tab> is finger, lookup, ping, trace, or whois
- /u <username> - where <username> is the name of the user
- /n <hostname> - where <hostname> is the name of the host

The Net Tools command follows the format:

> mntools [/t<tab> [/u<username>] [/h<hostname>]]

For example, to use Finger with user **masaka** on host **yoyodyne.com**, you would enter:

> mntools /tfinger /umasaka /hyoyodyne.com

If no tab is specified, other options are ignored. If the tab is specified, but no other options are specified, the last entries on that tab are used. When you specify a user or host, only the user or host on the specified tab is affected. All other tabs retain their previous entries.

All option specifiers must be followed by a space and then the option argument. Option specifiers must be in lowercase. Case of the option argument is not important. The order of options is not important.

See Also:

- Starting MultinNet Tools
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Plan File

A plan file is a text file stored on a user's system that is displayed when the user's system is accessed with Finger. The file name of a plan file differs between Operating Systems. Some Operating Systems and the name of the plan file are:

Operating System	**Plan File Name**
UNIX	.plan
VMS	plan.txt
DOS / Windows	N/A
NetWare	N/A

DOS, Windows, and NetWare systems cannot be configured to display plan files.