Understanding 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 in, 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. The information Finger displays 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. For example, DOS, Windows, and Netware users cannot create a plan file, whereas UNIX (in the .plan file) and VMS (in the plan.txt file) users can create plan files. User's can put any information they want in their plan file. In the Finger output, any plan information follows the heading "Plan." If there is no plan file, the output sometimes shows "[No Plan]."

{button ,KL(`Finger,')} Related Topics

Displays the results of the Finger inquiry.

Enter the name of the user about whom you want to obtain information. 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.

Enter the name of the host about which you want to obtain information. If the user is on a local network, you do not need to enter a host name.

Check Verbose to have Finger return all available information. 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.

Understanding 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). This information can be useful if you are having trouble connecting to a machine. For example, if you look up a host name such as daisy.yoyodyne.com, you get information about its IP address and perhaps its operating system. If you look up an IP address, you get the system's host name.

The information you get comes from your host table or DNS server. Which is used depends on the search order you set up when configuring the TCP/IP stack.

If you are having trouble connecting to a system, and you are using a host table, use Host Lookup to determine the name and IP address of the problem system. Then, use the Configuration Utility to disable the host table, and use Host Lookup again. Compare the host name and IP address of the system with the results using your host table. If they are different, your host table may need to be updated.

{button ,KL(`Host Lookup,')} Related Topics

Enter a host name or an IP address. For hosts on the local network, you can just enter the host name without the domain name (for example, `daisy`). Otherwise, use a fully-qualified host name (for example, `daisy.yoyodyne.com`), or an IP address (for example, `192.168.32.42`).

Displays the results of Host Lookup. If you are having problems reaching a host, and you are using host tables, you may want to first disable your host table and then use Host Lookup (make sure you are also using DNS servers). That way, you can be sure the information returned is from the DNS server.

Understanding Ping

Ping lets you determine if a host can be accessed. Ping sends ICMP (Internet Control Message Protocol) 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. 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.

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.yoydyne.com with a data length of [56]
56 bytes from 192.168.50.113  Seq = 0  Time = 7ms.
56 bytes from 192.168.50.113  Seq = 1  Time = 5ms.
56 bytes from 192.168.50.113  Seq = 2  Time = 6ms.
56 bytes from 192.168.50.113  Seq = 3  Time = 6ms.
56 bytes from 192.168.50.113  Seq = 4  Time = 6ms.

Finished Ping of redwood.
Losses:        Times:
Sent:   5              Min:    5
Recv:   5              Max:    7
Loss:   0%             Avg:    6
```

In this example, five packets are sent to the host `redwood.yoyodyne.com`. The packet response times ranged from 5 to 7 ms. The statistics at the end show that all five packets were received with no losses, and that the average response time was 6 ms. This indicates no problems communicating with the host.

When communicating with a host on a local area network, you can expect to see statistics like those above, that is, few packets lost and 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.

{button ,KL(`Ping,')} Related Topics

Enter the number of ICMP echo request packets to send to the other host. To Ping a host indefinitely until you click the Stop button, use 0 (zero).

Displays the results of the Ping.

Understanding TraceRoute

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 workstation cannot communicate with a remote host, TraceRoute can determine at which gateway the difficulty is occurring.

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	192.168.50.1	0	0	0
2	BARRNET.YOYODYNE.COM	192.168.50.1	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.

{button ,KL(`TraceRoute,')} Related Topics

Displays TraceRoute results. The columns are:

- **Hop**: shows the sequential order in which TraceRoute encounters gateways along the route to the host. The first gateway is hop number one, the second gateway is hop number 2, and so on.
- **Host Name**: lists the host name of each gateway along the route to the remote host.
- **Host IP**: lists the IP address of each gateway along the route to the remote host.
- **Rtt**: displays the Rtt (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.

Understanding 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. 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.

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.**

The white pages servers, RS.INTERNIC.NET (the Internet registry server), WHOIS.RIPE.NET (the primary white page server in Europe), WHOIS.APNIC.NET (the Asian white page server), and NIC.DDS.MIL (the Military's white pages server) are listed in the Whois drop-down list. You can query any of these 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.

{button ,KL(`Whois,')} Related Topics

Enter 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.

Displays the white pages servers that are known to Net Tools. 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.

Displays the results of the Whois query.

Click the Start button to start the application.

Click the Stop button to stop the current operation.

Click the Close button to exit Net Tools.

Click the Help button to access online help.

Click the Save As button to save the information appearing in the Results window to a file.

Click the Print button to print the information appearing in the Results window.

To start Net Tools:

- Choose Net Tools from the Cisco Suite program group.

Tips

{button ,JI(`MNTOOL32.HLP>main',`Start_from_command')} You can also use Net Tools from the DOS command prompt

Starting Net Tools from the DOS Command Prompt

You can start Net Tools from the DOS command prompt, or to create a shortcut icon that starts Net Tools with a specific tab opened and fields already prime with the user or host names.

The command is:

drive:\path`mntool32` ***/options***

where:

drive:\path
The installation drive and path for Cisco TCP/IP Suite. If the Cisco TCP/IP Suite installation directory is in your path, you can enter the command without prefacing it with drive and path information. Otherwise, be sure to include the drive and path for the command.

mntool32
The Net Tools command.

/options
Any of these options. All options and their values must be in lowercase letters. Each option must be preceeded by a slash.

/t<tab>
The tab you want to use. If you specify a tab and do not include a user or host, Net Tools displays the last values used on that tab, if any. If you use the host option and do not specify a tab, Net Tools displays the last tab you used. Possible options (including the /t) are:

/tfinger
For Finger.

/tlookup
For Host Lookup.

/tping
For Ping.

/ttrace
For TraceRoute.

/twhois
For Whois.

/u<username>
The name of the user for Finger queries. For example, `/umaggie`.

/h<hostname>
The name or IP address of the host for Finger, Host Lookup, Ping, and TraceRoute queries, or the host or user name for Whois queries. For example, `/hdaisy.yoyodyne.com` or `/h192.168.32.42`.

For example, to Ping daisy.yoyodyne.com from the DOS command prompt, enter:

```
mntool32  /tping /hdaisy.yoyodyne.com
```

Net Tools starts opened to the Ping tab with the fields primed to ping daisy.yoyodyne.com.

To use Finger:

1 Click the Finger tab.
2 Enter the user name in the User field.
3 Enter the host name in the Host field.
4 Check Verbose if you want all information, including any plan file, to be returned.
5 Click the Start button.

Tips:

- If you want to see which users are logged into a particular host, do not enter a user name.
- If you want to get information about a particular user on the local network, do not enter a host name.
- Many systems do not respond to Finger, including DOS, Windows, and Netware systems; system administrators on other system might disable Finger. Therefore, you might not get a response to your query.

{button ,KL(`Finger,')} Related Topics

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 in the Host field.
3 Click the Start button.

{button ,KL(`Host Lookup,')} Related Topics

To use Ping:

1 Click the Ping tab.
2 Enter a host name or IP address in the Host Field.
3 Enter the number of times you want to Ping the host in the Packets field.
4 Click the Start button.

{button ,KL(`Ping,')} Related Topics

To use TraceRoute:

1 Click the TraceRoute tab.
2 Enter the host name or IP address of the remote host in the Host field.
3 Click Start.

{button ,KL(`TraceRoute,')} Related Topics

To use Whois:

1 Click the Whois tab.
2 Enter the host, network, or domain name you want to query in the Query field.
3 Choose the white pages server you want to query from the Server drop-down list or enter the name of a new server. If you enter a new server, that server is added to the drop-down list.
4 Click the Start button.

Tips:

- Because Whois displays all entries in the white pages server that match the entry in the Query field, be as specific as possible.

{button ,KL(`Whois,')} Related Topics

To print results:

- Click the Print button after the application is finished writing output to the Results window.

To save results to a file:

- Click the Save As button after the application is finished writing output to the Results window.

Understanding Net Tools

Net Tools consists of these information-gathering applications:

{button ,KL(`Finger,')} 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.

{button ,KL(`Host Lookup,')} Host Lookup gives you the name, IP address, CPU, and operating system type of a host.

{button ,KL(`Ping,')} Ping indicates whether you can communicate with a remote host.

{button ,KL(`TraceRoute,')} TraceRoute shows the route packets take when communicating with a remote host.

{button ,KL(`Whois,')} 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.