#### **Introducing Traceroute**

Traceroute displays the route that data <u>packets</u> take to a host computer. Data is rarely delivered directly between source and destination computers, but often takes a series of <u>hops</u> through intermediary machines. This delivery process is called routing, and it is normally transparent. Each packet contains receiver and sender addresses, as well as other information that makes routing possible.

Traceroute is primarily a diagnostic tool for system administrators.

Related Topics Tracing the Route to a Host Setting Tracing Options

#### **Tracing the Route to a Host**

To trace a route to a host:

- 1. On the File menu, click Traceroute. The Traceroute Destination dialog box opens.
- 2. In the Host box, type the name or IP address of the host.
- 3. Click OK. The routing information appears in the display area.

Related Topics Setting Tracing Options Selecting a Display Mode

## **Selecting a Display Mode**

You can display routing information in a table or as a diagram.

To specify a display mode:

- 1. On the File menu, click Display.
- 2. Select the appropriate option:
  - To display routing information in a series of columns, select Traditional.
  - To display routing information as an annotated diagram of computers with links, select Graphical.

# **Setting Tracing Options**

**To set tracing options:** 

- 1. On the File menu, click Options. The Options dialog box opens.
- 2. Specify the appropriate options:
  - Lookup Names—Select this check box to display the host name during tracing. Clear this check box to display IP addresses.
  - Number of Probes—Specify the number of times Traceroute will attempt to reach the destination host. By default, Traceroute makes 3 probes. The maximum number of probes that Traceroute can make is 10.
  - Maximum Hops—Specify the number of hops Traceroute will permit in attempting to reach the destination host. By default, Traceroute allows 30 hops. The maximum number of hops is 255.
  - Data Size—Specify the size of data packets sent during route tracing. The default data packet size is 56. The maximum data packet size is 8192 (8 K).

**Note:** Large packet sizes slow the trace process.

- Port Number—Specify the destination port on the remote host. If another program is using this port, irregular performance can occur. In this case, specify another port number and try the trace again. The default port number is 33434.
- Save Configuration—Select this check box to save the trace settings you specified.

## **General Accessibility**

Hummingbird products are accessible to all users. Wherever possible, our software adheres to Microsoft Windows interface standards and contains a comprehensive set of accessibility features.

Access Keys All menus have associated access keys (mnemonics) that let you use the keyboard, rather than a mouse, to navigate the user interface (UI). These access keys appear as underlined letters in the names of most UI items. (If this is not the case, press Alt to reveal them.) To open any menu, press Alt and then press the key that corresponds with the underlined letter in the menu name. For example, to access the File menu in any Hummingbird application, press Alt+F.

Once you have opened a menu, you can access an item on the menu by pressing the underlined letter in the menu item name, or you can use the arrow keys to navigate the menu list.

**Keyboard Shortcuts** Some often-used menu options also have shortcut (accelerator) keys. The shortcut key for an item appears beside it on the menu.

**Directional Arrows** Use the directional arrows on the keyboard to navigate through menu items or to scroll vertically and horizontally. You can also use the directional arrows to navigate through multiple options. For example, if you have a series of radio buttons, you can use the arrow keys to navigate the possible selections.

**Tab Key Sequence** To navigate through a dialog box, press the Tab key. Selected items appear with a dotted border. You can also press Shift+Tab to go back to a previous selection within the dialog box.

**Spacebar** Press the Spacebar to select or clear check boxes, or to select buttons in a dialog box.

**Esc** Press the Esc key to close a dialog box without implementing any new settings.

**Enter** Press the Enter key to select the highlighted item or to close a dialog box and apply the new settings. You can also press the Enter key to close all About boxes.

**ToolTips** ToolTips appear for all functional icons. This feature lets users use Screen Reviewers to make interface information available through synthesized speech or through a refreshable Braille display.

### **Microsoft Accessibility Options**

Microsoft Windows environments contain accessibility options that let you change how you interact with the software. These options can add sound, increase the magnification, and create sticky keys.

To enable/disable Accessibility options:

- 1. In Control Panel, double-click Accessibility Options.
- 2. In the Accessibility Options dialog box, select or clear the option check boxes on the various tabs as required, and click Apply.
- 3. Click OK.

If you installed the Microsoft Accessibility components for your Windows system, you can find additional accessibility tools under Accessibility on the Start menu.

# **Technical Support**

You can contact the Hummingbird Technical Support department Monday to Friday between 8:00 a.m. and 8:00 p.m. Eastern Time.

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