

# Esi-Check Setup and User's Guide

Designed for the remote IP phone user, **Esi-Check** provides a continual monitor of IP link quality. The current quality of the IP link is evaluated in terms of the parameters critical to high-quality remote IP phone audio performance. *Esi-Check* installs in the *Windows* Startup Group, launching each time the PC boots up. The *Esi-Check* icon resides in the System Tray at the bottom of your PC screen, changing colors to provide a continual indication of the link quality and the audio quality to expect from your remote IP phone:

- **Green** — Good. Expect good voice quality.
- **Yellow** — Fair. Expect some audio distortion such as occasional pops or clicks or minor warbling.
- **Red** — Poor. Expect significant audio distortion such as frequent pops and clicks, significant warbling and crackling. At this level, other problems (such as missed key presses and improper display updates) may occur with the remote IP phone.
- **Blinking red** — Not available. Your link is currently down.
- **Blinking green** — *Esi-Check* needs to be set up with a link address (see “The *Esi-Check* user window,” below).

To open *Esi-Check*, double-click on the *Esi-Check* icon in the system tray. (If you have chosen to close *Esi-Check*, you can re-open it by launching it from the *Esi-Tools* selector.)

## The *Esi-Check* user window

The *Esi-Check* window includes three tabs:

- **Link Status** — Shows the current link measurements of latency, jitter and lost packets. See the Help topics on these subjects for more information.
- **Link Address** — Lets you enter the link address to check or check a previously entered link address. (See “Setting up *Esi-Check*,” page 4, for instructions on setting the link address.)
- **Link Bandwidth** — Runs a link bandwidth check to the current link address. See the Help topic on link bandwidth for more information.

*Esi-Check* continues to run, checking link quality, whether the *Esi-Check* window is open or minimized.

## System requirements

### Operating system

*Esi-Check* can be used on a PC using any of the following *Windows*® operating systems:

- *Windows 95*®, *Windows 98*®, *Windows 98 SE*®, and *Windows ME*®<sup>1</sup>
- *Windows NT*® (version 4.0 with SP6)<sup>1</sup>, *Windows 2000*®, and *Windows XP*®

**Note:** At the time when this document was issued, *Esi-Check* had not yet been tested with *Windows Vista*.® Consult your ESI Reseller if this presents problems for you.

### Hardware requirements

*Esi-Check* requires a 66 MHz Pentium® processor as a minimum. A faster processor is recommended for better response, but *Esi-Check* will work properly regardless of processor speed.

*Esi-Check* usually requires an Ethernet interface (dual-speed 10/100 Mb recommended); however, you can use a USB interface, instead, if the computer is connected to an Ethernet router with a USB port.

<sup>1</sup> These operating systems not supported after April 25, 2008.

## Downloading and installing *Esi-Check*

**Note:** If your *Windows* setting is the Microsoft default for viewing files, you won't see the *.exe* or *.msi* file extensions mentioned below. Because the ability to see extensions is an aid in detecting viruses (some of which use fake extensions in front of real ones that otherwise might not appear), **we suggest you alter this setting so that *Windows* does show file extensions.** To do so:

1. Open *Windows Explorer* (or *My Computer*, as you may prefer).
2. Click the **View** menu and select **Folder Options**.
3. Locate the item entitled *Hide extensions for known file types*.
4. Make sure that this item **isn't** checked; if it is, **uncheck** it.
5. Click **OK** to finish.

1. On your *Windows* PC, create a folder on the *Windows* Desktop. (We'll call it "Download" for the remainder of these instructions, but you can use whatever name you wish, such as "Esi-Check Download" or similar.)
2. In your Web browser, go to [www.esiusers.com/downloads](http://www.esiusers.com/downloads).
3. Click the "*Esi-Check* software and *User's Guide*" link to scroll down to that section on the Web page.
4. Click the "**Esi-Check software** ('EsiCheck.exe')" link to download the *Esi-Check* installation file archive from [www.esiusers.com/downloads](http://www.esiusers.com/downloads). When prompted by your browser for a destination, select the "Download" folder you created in step 1. (When the file finishes downloading, you may close your Web browser if you wish.)
5. Double-click the "Download" folder to open it, and then double-click the *EsiCheck.exe* file you downloaded there in the previous step.
6. You will see a "Self-Extractor" window (**Fig. 1**). Click the **Unzip** button. This will extract to your "Download" folder a file called *EsiCheck.msi*. Double-click this file, which will open the *Esi-Check Setup Wizard*.

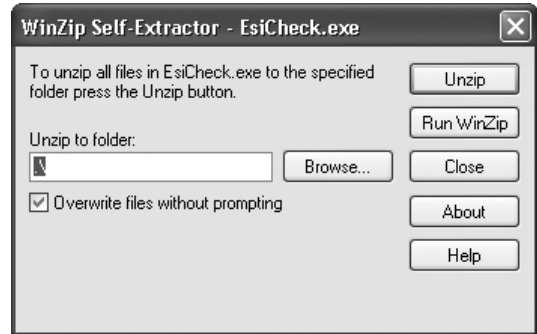


Fig. 1

7. Click **Next** in each of the *Setup Wizard's* first two screens (**Fig. 2**) to proceed with the installation of *Esi-Check*.

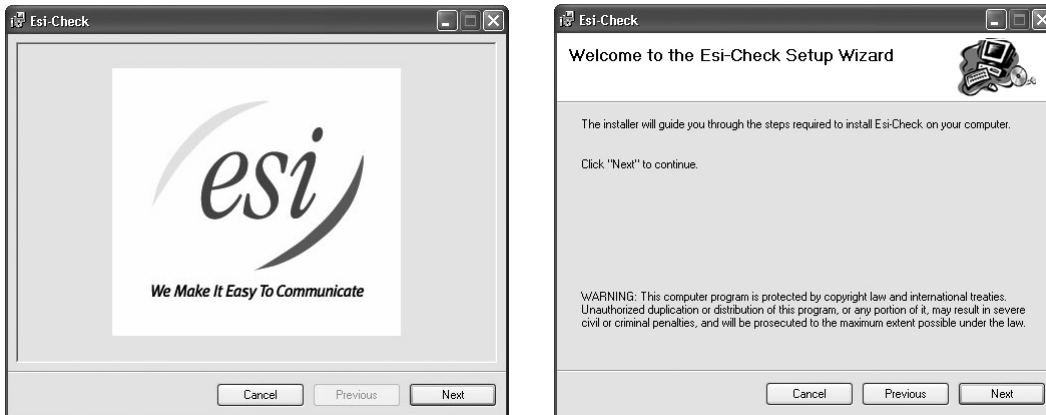


Fig. 2

(Continued)

- The *Setup Wizard* now asks (Fig. 3) where on your PC you want to install *Esi-Check*. We strongly suggest that you accept the default location shown in the "Folder" field. Click **Next** to proceed.

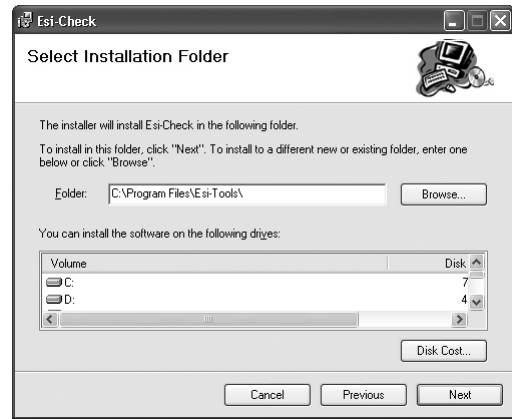


Fig. 3

- A "Confirm Installation" window appears, telling that the *Setup Wizard* ("the Installer") is ready to install *Esi-Check*. Click **Next** to proceed.

- The *Setup Wizard* will proceed with the installation (Fig. 4).

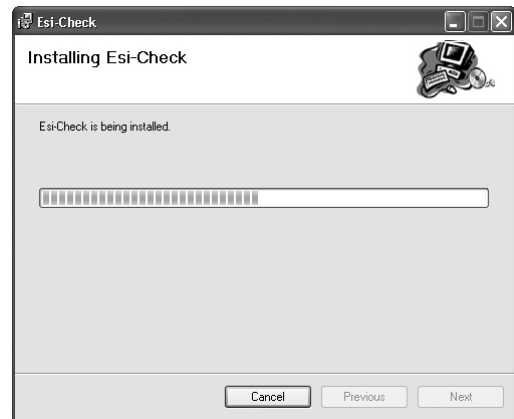


Fig. 4

- When you see the screen shown in Fig. 5, the *Setup Wizard* has successfully installed *Esi-Check* on your PC. Click **Close** to exit the *Setup Wizard*.

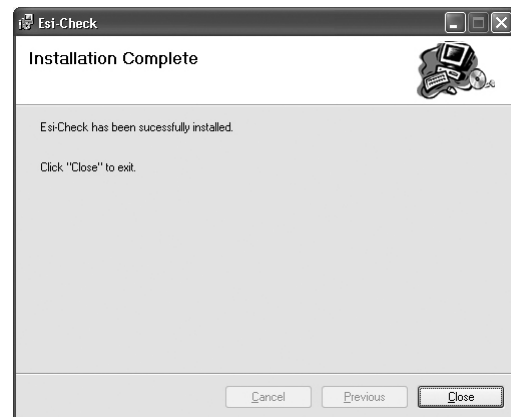


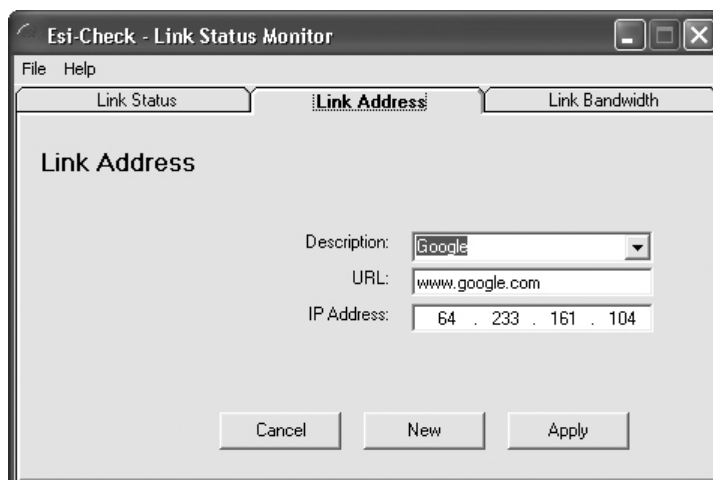
Fig. 5

- Open *Esi-Check* by clicking the *Windows Start* button, then **All Programs**, then **Esi-Tools**, and then **Esi-Check**.

## Setting up *Esi-Check*

In the *Esi-Check* user window, click the **Link Address** tab (shown, *right*). Click **New** to enter a new link address as either an IP address (such as *169.254.172.79*) or a URL (such as *www.xyz.com*).

**Note:** The screen shot shows both a URL and an IP address. However, this is because the DNS to which the PC's connected has resolved whichever entry the person made, whether in the **IP Address** field or the **URL** field. (Sometimes this occurs, sometimes it doesn't.) The point is, it's not necessary to enter both; either will do.



To monitor remote IP phone performance, set the link address to the public IP address of the gateway or router at the main office where your IP PBX is located. (Your System Administrator or ESI reseller can provide this address.) Also, enter a description for this link address. This will allow you to re-select this link address without re-entering.

When ready for *Esi-Check* to check the specified link click **Apply**. *Esi-Check* will begin monitoring the link. To view the detailed results, select the **Link Status** tab. Minimize the *Esi-Check* window and the *Esi-Check* icon will continue to display link status as green, yellow or red.

**Important:** Often, on a call from a remote IP phone to an IP PBX across the public Internet, audio packets in one direction will travel a different route than those in the opposite direction. This can cause audio to be good in one direction and distorted in the other. The *Esi-Check* **Link Status** indication reflects the link performance in the direction of the link address. The **Link Quality** indication the *Esi-Check* user sees is for the audio of a listener at the **other end** of the IP call. A remote IP phone user who sees a **Poor Link Quality** indication can reasonably assume the other person at the other end of the call is hearing audio distortion.

## Using other link addresses

In some cases it may be helpful to check the link to an IP address other than the one used to check the link to the main office. An example of this is when *Esi-Check* is indicating a poor or lost connection to the main office. The problem could be due to the IP connection at the remote IP phone location or at the IP PBX main office location. Thus, run *Esi-Check* against another site (perhaps a Web site you have accessed recently and know to be reliable) to get an indication of how well the IP connection at the remote IP phone location is working. IP connection problems at the main office will not affect this check.

To check the connection at a different link address, go to the **Link Address** tab and click **New**. Enter the URL or the IP address. Enter a description to make it easier for you to retrieve this address in the future. Click **Apply** to start the link check to this new address. *Esi-Check* will check the link status to this new address. You may want to check the link status to other Web sites, in case the Web site you have selected is currently having problems.

If the link status to this alternate address is good and the performance to the main office link address is poor or not available, the problem is most likely with the IP connection at the main office. Notify the network administrator at the main office.

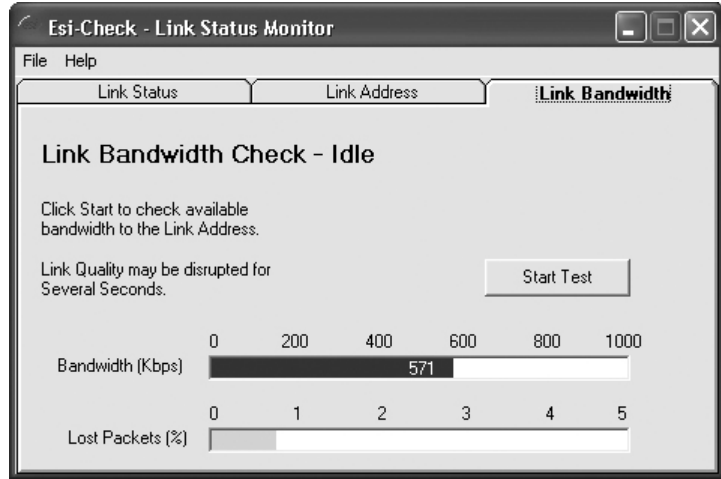
If the link status to the alternate address is about the same as that to the main office, the problem is likely with the IP connection at this end. In this case, you need to contact your ISP for technical support.

To return to the main office link address (or any previously entered link address), go to the **Link Address** tab and click on the pull-down menu in the **Description** field. Select the appropriate description and click **Apply**. *Esi-Check* will resume testing the link to the main office.

## Link bandwidth check

During continual link monitoring, *Esi-Check* utilizes a low data rate (less than 3 Kbps). In most cases, this rate will provide an adequate measure of link quality without consuming significant bandwidth. However, there are times when link performance may suffer due to limited bandwidth. The link bandwidth check gives remote IP phone users the capability to quickly measure link bandwidth. The link bandwidth check runs when initiated by the user from the **Link Bandwidth** tab.

The link bandwidth check takes about 10 seconds to complete. When it's finished, the meters will indicate the measured bandwidth, up to 1,000 Kbps, along with the percent of packets lost during the bandwidth check. At the completion of the link bandwidth check, *Esi-Check* automatically returns to continual link monitoring.



Click the **Link Bandwidth** tab to go to the link bandwidth check. Click **Start Test** to begin the bandwidth check. (If the continuous check is currently running, the **Start Test** button will be grayed-out; when the currently running check finishes, the **Start Test** button will become active again.)

**Caution:** The link bandwidth check will consume whatever bandwidth is available on the link. This will put the link in a nearly overloaded condition for the duration of the bandwidth check (about 10 seconds). During this time, there may be noticeable distortion on a remote IP phone call in progress. This can happen to a remote IP phone at the same location or one at another location connected to the same main office IP PBX. Therefore, **avoid using** the link bandwidth check when there is a possibility of interfering with a remote IP phone call.

### About ESI

*ESI (Estech Systems, Inc.) is a privately held corporation based in Plano, Texas. Founded in 1987, ESI specializes in business communications systems. ESI pioneered the all-in-one telephone and voice mail system. The original IVX, introduced in 1996, represented a radical breakthrough in system design: the inclusion of a full suite of features within a single integrated system.*

*Since its days as a small start-up, ESI has enjoyed exceptional stability and growth while maintaining its dedication to small-company values — including the need to take care of the most important part of the equation: your business.*



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