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About the Intel Connection Advisor™ software (version 1.5)

{button See Also,AL(`Solutions;Tips',0,`,`')}


The Intel Connection Advisor™ software with ProShare® technology continuously monitors activity that might affect your Internet calls, such as delays in transmitting information over the Internet. The [Intel Connection Advisor software icon](#)  flashes to indicate a possible problem. Double-click the icon to open the status window.

How you know there's a problem

{button See Also,AL(` Solutions;Tips',0,)}

A flashing [icon](#) in your Windows* 95 [tray](#) (at the lower right of your screen) indicates a possible problem.

1 Double-click the icon to open the status window.

2 Look for the Caution symbol  to determine which activity might be causing a problem.

3 Position the cursor over the indicator that displays the Caution symbol beside it, right-click, then select the Help for this indicator option. This displays the help topic for the indicator.



Note

Measurements are updated continuously and may change as you watch.

Indicators and buttons

{ button See Also,AL(` Solutions;Tips',0,)}
}

General

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The Intel Connection Advisor software icon

Icon display

When the icon  is:

- Still The Intel Connection Advisor software is running and ready to monitor your Internet connection.
- Animated You are sending or receiving data across the Internet.
- Flashing A potential problem was detected. Double-click the icon to see the status window. Look for a yellow Caution symbol .

Icon location

The default icon placement is in the Windows* 95 tray in the lower right of the screen. If you minimize or close the status window, the application will display in the Taskbar, as well. You can choose to hide the Tray icon so it displays only in the Taskbar.


To display the icon only in the Taskbar:

- 1 Right-click the Tray icon to see a pop-up menu of options.
- 2 Select Hide Tray Icon.

To display the icon in the Tray:

- 1 Right-click the Taskbar icon to see a pop-up menu of options.
- 2 Select Show Tray Icon.

Caution symbol

The Caution symbol  Indicates which aspect of the Internet call is experiencing a problem. The Caution symbol appears beside an indicator in the status window.

Help button

Click this button to display the Contents topic for the online Help you're reading now.

More Information Shortcut


With the status window open, you can use this shortcut method to display information about a topic:

- 1** Position the cursor over any indicator.
- 2** Right-click with the mouse. A pop-up menu displays at the mouse pointer position.
- 3** Select the What's This? option to display a pop-up window with information about the topic.
- 4** For additional information or for possible solutions to problems, click the Help button to display the online Help Contents topic, then select the topic you want to know more about.

This shortcut is always available.

Help Shortcut

With the status window open, you can use this shortcut method to display a help topic:

- 1** Look for the [Caution symbol](#)  to determine which activity might be causing a problem.
- 2** Position the cursor over the indicator that displays the Caution symbol beside it.
- 3** Right-click with the mouse. A pop-up menu displays at the mouse pointer position.
- 4** Select the Help for this Indicator option to display the Help topic for the indicator.

This shortcut is available only when a Caution symbol is displayed beside the indicator.

ICA Home button

Uses your Internet browser to connect to the Intel Web site where you can view the latest information about this software and other Internet communication applications it supports.




Note

This button is not available if you don't have an Internet browser installed on your system.

Processor Use indicator

Shows how busy your computer is for both send and receive activity. If use is high, the applications running on your system are working your computer's processor near its maximum capacity.

A yellow [Caution symbol](#)  displays beside the indicator when the processor use is so high that it might adversely affect sending or receiving data over your Internet connection.

Use the [Help shortcut](#) to display information or click the Help button for additional information and possible [solutions](#).

Audio Duplex Mode indicator

Indicates whether the audio portion of your Internet call has full-duplex or half-duplex capability. In full-duplex mode, you can talk and listen at the same time. In half-duplex mode, you can talk or listen, but not at the same time.

Full-duplex audio means all of these conditions are true:

- You have a full-duplex sound card that fully supports the necessary full-duplex functionality.
- Your calling partner also has a supported full-duplex sound card.
- You have sufficient Internet connection [bandwidth](#) for full-duplex sound.

Half-duplex audio means one (or more) of these conditions is true:

- You have a full-duplex sound card that does **not** fully support the full-duplex functionality needed.
- Your calling partner does not have a supported full-duplex sound card.
- You have a half-duplex sound card.
- You have selected a user preference for half-duplex mode (possible with some applications).
- You do not have sufficient Internet connection bandwidth for full-duplex sound.



Note

Even if you and your calling partner have supported full-duplex sound cards, your duplex mode can fluctuate between full- and half-duplex depending on the Internet bandwidth.

Audio Activity indicator

Shows the amount of voice information from your Internet phone call that is being sent or received by your computer. Light activity means that no voice information is being sent.

This indicator by itself is not useful in determining whether a problem exists, but it can alert you to watch other indicators for potential problems.

Use the [Help shortcut](#) to display information or click the Help button for additional information and possible [solutions](#).

Audio Loss indicator


Shows what percentage of the voice transmission is being lost between your PC and the other person's.

High losses can interfere with clear reception. A yellow [Caution symbol](#)  displays beside the indicator when audio loss may cause a problem with your Internet connection.

Use the [Help shortcut](#) to display information or click the Help button for additional information and possible [solutions](#).

Audio Delay indicator

Indicates how long voice information waits before being sent between you and the person you're talking to. Long delays increase the amount of time it takes for one person to hear what the other has said. A yellow

[Caution symbol](#)  displays beside the indicator when audio delay may cause a problem with your Internet connection.

Use the [Help shortcut](#) to display information or click the Help button for additional information and possible [solutions](#).

Possible solutions to problems

{button See Also,AL(` Indicators;Tips',0,)}
}

Audio tab

[Solving Processor Use problems](#)

[Solving Audio Activity problems](#)

[Solving Audio Loss problems](#)

[Solving Audio Delay problems](#)

Solving Processor Use problems

Symptoms

When processor use is high, your call can take a long time to connect or the voices can break up. If you are not experiencing one of these problems with your call, you don't need to worry about high processor use.

Suggestions

- Close as many open applications as possible. (Don't close your Internet browser!)
- You may need a faster processor to run multiple applications while making Internet calls.

More information

This indicator shows the percentage of your computer's processing capacity being used. Your processor can run many applications at the same time, but if it tries to run multiple applications that require a lot of processing capacity, there may not be enough left to run your Internet phone call. The applications and your Internet phone call can slow down considerably. You can speed up these applications by decreasing the load on the processor.

However, some applications can cause high readings for processor usage even when they don't need to use much processor capacity. In such cases, there is still plenty of processing capacity available when other applications need it. That's why you should worry about a high reading only if you're experiencing problems with your call.

Solving Audio Activity problems

Symptoms

If the indicator shows no audio activity, either no one is speaking or you aren't receiving the other person's voice.

If the indicator shows a high level of audio activity, other Internet traffic on your computer could be interfering with your call.

Suggestions

- For **low** audio activity, check the Audio Loss and Audio Delay indicators. If they show active interference with your call on the Internet, follow the suggestions listed under [Solving Audio Loss problems](#) and [Solving Audio Delay problems](#).
- For **high** audio activity, check the Processor Use and Audio Quality Settings indicators. If they show a problem originating in your computer, follow the suggestions listed under [Solving Processor Use problems](#).

More information

Before any information, including your voice, can be sent to another computer, it is converted into pieces of digital information called *bits*. Your computer can send and receive millions of bits each second, but problems will occur if you try to transmit too many bits in too short a time.

The audio bits you send and receive during calls are only part of the total number of bits being transferred between your computer and the modem or network that connects it to the Internet. As your computer approaches its capacity for transferring bits, the quality of your call can deteriorate.

Solving Audio Loss problems

Symptoms

Audio loss occurs when you notice clicks or periods of silence that interfere with your calls.

Suggestions

- Stop other Internet activities that are transferring large quantities of information between your computer and the Internet. For example, don't use your browser to download large files from the Internet during a call.
- If you want to continue other Internet-intensive activities, hang up and try the call after you finish.
- Disconnect from your Internet service provider and then reconnect. This sometimes results in a faster connection. Then try making your Internet phone call again to see if the problem is resolved.
- If no other Internet activities are in progress, your call may be routed through particularly busy parts of the Internet. End your Internet phone call (hang up) and try the call again.

More information

Bits of compressed audio information are sent between PCs in small groups known as *packets*. During normal transmission, some packets can become lost; they never arrive at their destination or they arrive too late to be used.

A small number of lost packets does not affect call quality. However, if more packets are lost, the quality of your call is reduced. Packets can be lost when they are being sent faster than your computer can handle them or when problems occur on the Internet.

Solving Audio Delay problems

Symptoms

Your voices are delayed for long periods.

Suggestions

- Disconnect from your Internet service provider and then reconnect. This sometimes results in a faster connection. Then try making your Internet phone call again to see if the problem is resolved.
- Your call may be routed through particularly busy parts of the Internet. Hang up your Internet phone call and try the call again.

More information

Calls are usually routed through many links on the Internet. If these links are heavily used at the moment, it can take a long time for your voices to travel through all of them.


The amount of time it takes for the other person's voice to reach your computer is called *delay*. Delay can be affected by the speed of your connection to the Internet (your modem or network) and by the amount of activity on the Internet.

Tips for making Internet calls

When placing voice calls over the Internet, follow these guidelines to ensure the best connection quality:

- If you are browsing the Internet during your call, don't talk while your browser locates the requested page. Displaying and downloading information from the Internet can use most of your system's processing resources, which can cause connection problems. After your browser locates the page, you can resume your conversation.
- When starting other applications on your PC, don't talk until the application opens and remain as still as possible. Starting an application can use most of your system's processing resources. After it is open, you can resume your conversation and use the application.
- Your Internet phone depends on your PC's sound system. If you want to play a game or run some other application that uses sound during your Internet call, turn off the application's sound.

* Brand, name, or trademark owned by another company.

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Uses your Internet browser to connect to the Intel Web site where you can view the latest information about this software and other Internet communication applications it supports.

Displays online help for the Intel Connection Advisor™ software.

Shows how busy your computer is. If use is high, the applications running on your system are working your computer's processor near its maximum capacity.

The Intel Connection Advisor™ software displays a yellow Caution symbol when processor use may cause a problem with your Internet connection.

Indicates whether the audio portion of your Internet call has full-duplex or half-duplex capability.

Shows the amount of voice information from your Internet phone call that is being sent or received by your computer. Light activity means that no voice information is being sent.

Shows what percentage of the voice transmission is being lost between your PC and the other person's. High losses can interfere with clear reception.

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Indicates how long voice information waits before being sent between you and the person you're talking to. Long delays can increase the amount of time it takes for one person to hear what the other has said. The Intel Connection Advisor™ software displays a yellow Caution symbol when audio delay may cause a problem with your Internet connection.



Intel Connection Advisor software icon

The Internet's capacity to transmit data is called *bandwidth*.

The Internet bandwidth is dynamic and is affected by factors such as the amount of traffic on the Web at that moment. As more people connect to the Internet to access a growing range of services, you might have problems getting information through the congested pathways. For phone calls over the Internet, this can result in long delays or poor quality.

