

EY Remote Connect

Guide to High-Speed Access

A Guide to New Connections to High-Speed Access

How many ways can I get a remote connection to the E&Y network?
The availability of virtual private networking (VPN) at E&Y gives remote users an eagerly anticipated capability. When used in conjunction with an Internet connection, VPN enables secure connections to E&Y resources from firm-standard PCs. The firm will be offering dial-up Internet service, which offer cost savings to your business unit by reducing dependence on the per-minute charges of the current 800-number dial-up networking service.

In addition to providing this safe pipeline from the public Internet to firm resources, VPN can be used with a high-speed connection, such as a digital subscriber line (DSL) or cable, which provide faster connections than those available from remote dial-up connections.

This guide:

- Can help you make an informed decision about the appropriate technology for your needs
- Provides questions to ask potential access providers
- Addresses common installation issues
- Explains how your firm PC and home computer can simultaneously share the same high-speed connection.

What types of high-speed connections are available?

High-speed connections use different technologies to transmit data at relatively high rates. There are four major types of broadband connections:

- Digital Subscriber Line (DSL)
- Cable
- SONET
- Satellite

Each high-speed service offers slightly different speeds, but all offer faster connections than traditional dial-up Internet service. This means that you'll notice less of a delay when getting e-mail or accessing a database when you're not in an E&Y office.

What is Digital Subscriber Line (DSL)?

DSL connections provide instant Internet and network access at speeds up to 50 times faster than a 28.8 kilobits-per-second (Kbps) modem.

There are no dial-up delays and no busy signals with DSL because you're constantly connected to the Internet. In addition, DSL technology enables

New Connections to the E&Y Network

How many ways can I get a remote connection to the E&Y network?

Currently, there are two ways to connect remotely to the E&Y network:

- You can still use firm's current dial-up networking service.
- If you have a digital-subscriber line (DSL) or cable modem, you can use VPN to get a very fast connection, often referred to as a high-speed or broadband connection.

Later this year, the firm will deploy a dial-up Internet service that will let you connect to the E&Y network over regular telephone lines.

What are the benefits of using a high-speed connection?

The benefits of using VPN with a high-speed connection include:

- *Freeing up your home phone line* - High-speed access methods don't depend on additional phone lines. You'll either have a cable connection, or use a single phone line to make phone calls without losing your connection to the Internet.
- *No busy signals* - High-speed connections are similar to an in-office connection. When your PC is on, you're online. No dialing required, no wait for a connection and no annoying busy signals.
- *Faster rate of data transmission* - You can download information to your PC faster than using a dial-up connection.

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- ISDN
- Satellite.

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Can you summarize the advantages and disadvantages of each technology?

	Pros	Cons
Analog 28.8 – 56K	<ul style="list-style-type: none"> - Widely available - No additional equipment needed - Uses standard phone line - Firm-provided service 	<ul style="list-style-type: none"> - Connection speed and line quality vary greatly. - Not an “always-on” connection.
ISDN 64K – 128K	<ul style="list-style-type: none"> - Available in most areas - Faster than analog - Uses standard phone line - Doesn’t interfere with existing phone line 	<ul style="list-style-type: none"> - Requires pre-arranged appointment for installation by outside technician. - Not as fast as DSL or cable. - Requires ISDN modem.
DSL 64K – 2.3M	<ul style="list-style-type: none"> - Faster than analog or ISDN - Always connected. - Can use phone or fax machine while connected to the Internet. - Uses standard phone line. - In some cases, can be self-installed. 	<ul style="list-style-type: none"> - Not available in all areas. - Requires DSL modem.
Cable 500K – 30M	<ul style="list-style-type: none"> - Faster than analog or ISDN. - Always connected. - Does not use telephone line. - In some cases, can be self-installed. 	<ul style="list-style-type: none"> - Not available in all areas. - Must have cable connection. - Connection can slow down if many users are connected in the same area. - Requires cable modem.
Satellite ~400K	<ul style="list-style-type: none"> - Faster than analog - Always connected. - Does not use telephone line. - Usually available even in the most remote locations 	<ul style="list-style-type: none"> - More expensive in comparison to other options - Slowest speed of the available high-speed access technologies

On-Site Support by TSS Technician

- Support must be related to software or hardware issues connected with firm-related client support.
- TSS only provides out-of-allocation home support for VPN used with high-speed access. This service is charged at the published TSS hourly rate of \$75 plus mileage and expenses.
- Home support is dependent entirely on resource availability and is not held to the standard TSS service-level agreement of four-hour response time.

TSS cannot assist with installation or configuration of DSL, cable or ISDN. If you cannot handle these tasks yourself, professional installation by your service provider is strongly recommended.

Will my provider load another Web browser on my E&Y laptop?

DSL and cable-modem providers may provide you with additional software when your Internet access is installed. There are many different vendors on the market, and thus TSS is not able to test each piece of software from each vendor to ensure problem-free installation.

If there is an option to refuse the installation of this software during the installation process, it is recommended that the software NOT be installed. Any software not provided by TSS that is installed on your machine is installed at your own risk. TSS will support the software on a best-effort basis; but if the firm's loadset is compromised, a reinstallation (rewave) will be necessary. The rewave fee of \$250.00 will be billed to your business unit.

Can my firm PC share the same high-speed connection with my home PC?

There are couple ways of connecting to high-speed Internet access so that you can use home and EY computers. The method you select depends on whether you expect both PCs to be connected to the Internet at once.

- You can simply swap the cable between two computers. This provides only one PC – the one connected to the cable – with access.
- You can set up a gateway, also known as a home network, which involves buying additional hardware. With this method, both computers can be used simultaneously. See the Home Networks: Many PCs, One Connection section of this guide for more information.

Is there a way for two PCs to simultaneously share a connection without buying additional hardware?

If you want to swap PCs and avoid buying additional equipment, call your ISP and tell them you want to add another machine to access the Internet.

You will need the machine-address code (MAC) address for the new machine, which can be found by going to a command prompt and typing **ipconfig /all** (*make sure you have a space between ipconfig and the forward slash*). This command lists the configuration for your machine. The MAC address is the computer's physical address, which looks something like: **00-10-A4-07-F1-7C**.

Your ISP will also know how to obtain your MAC address. Once the ISP has added the second address you will be able to connect using your E&Y laptop.

You will need to release and renew the IP address each time you want to swap Internet access between your home PC and E&Y laptop. This can be done by:

- Typing **ipconfig / release** at the command prompt on your home PC.
 - This command is **winipcfg /release** if you are using Windows 98.
 - When you reattach the cable back to your home PC, you will type the command **winipcfg /renew** to renew the IP address.
- Turning off the cable modem.
- Connecting the cables to the EY laptop, powering up the cable modem, and the E&Y laptop.
- Typing **ipconfig / renew** at the command prompt, which will assign a new IP address to the machine.

What about Satellite TV?

Satellite service providers are enabling subscribers to access the Internet through the same connections that provide regular programming. Currently, satellite connections are not widely used due to their high expense and low connection speed. However, depending on where your home is located, none of the other high-speed access technologies may be available to you. In this instance, you may decide on a satellite connection, as the connection speed will be faster than an analog connection.

What hardware is required for different high-speed connections?

Access Type	Hardware Required
Analog	Analog modem Standard phone line
ISDN	ISDN modem Standard phone line
DSL	DSL modem Standard phone line
Cable	Cable modem Cable TV connection
Satellite	Satellite dish Satellite receiver Cable modem

Would I benefit from using a high-speed connection with VPN?

The benefits available in your situation depend on many factors:

- *Your practice area* – Tax Compliance and AABS are not participating in the VPN deployment. If you're in one of these areas, you're not eligible to use VPN at this time.
- *Your plans for the connection* – E-mail, Notes databases, Trax/Personal and the firm's intranet sites are readily available via VPN. However, certain applications, services, and resources are not accessible*. If you need regular access to an inaccessible service, you'll get limited benefit from a high-speed connection.
- *The services available in your area* – High-speed connections are not offered in every area of the country. Some technologies impose limitations on where they offer a service.

* For more information about the accessibility of applications, resources, and services via VPN, see this detailed list.