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Get connected: Common ways to get wired

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Get connected: Common ways to get wired

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Get connected: Common ways to get wired

Posted on **February 1, 2002** by **Editor**



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.01. INTRODUCTION ([Return to Index](#))

There are more people are getting on the Internet everyday. Some people connect at work, home, school, or even all three. There are a number of way people can get wired, each having benefits and disadvantages over other connection methods. First, we'll cover some Internet lingo you might hear and give it some meaning. Not sure what "kbps" is? This is the article for you. We'll also outline some of the more common ways of getting connected to the Internet, giving the pros and cons of each.

.02. INTERNET TALK ([Return to Index](#))

This first section is to get a handle on some words that may be thrown around when talking

about different ways of connecting to the Internet. Some of these are paraphrased from <http://www.webopedia.com>

Kbps (Kilobits per second): This is a measure of data transfer speed. If you are using dial-up modem, you get about 56 Kbps. This means that on average, every second you are connected, your modem will send 56 thousand bits every second. This really isn't very fast. If a web page contains 5 K (kilobytes, not bits) of text, and one kilobyte is 1024 bytes, then a web page contains 5120 bytes * 8 bits (8 bits in a byte) = 40960 bits, or roughly 40 kilobits. Thus, a web page containing 5 kilobytes of text can be downloaded in about a second.

Mbps (megabits per second): This is also a measure of data transfer speed. Mbps is used when comparing high-speed Internet connections. If you have a 1.5 Mbps downstream Internet connection (typical of cable modems and DSL) then you are capable of downloading 1.5 million bits per second.

Downstream: Transmission from a server to an end user. Downstream is usually measured in Kbps and Mbps.

Upstream: Transmission from an end user to a server. This is usually lower in speeds than downstream, and many people do not run servers for home use. This is also measured in Kbps and Mbps.

.03. **TRIED AND TRUE: DIAL-UP SERVICE** ([Return to Index](#))

Dial-Up service is still one of the most common ways people connect to the Internet. For Dial-Up service, you need a modem. A modem is a piece of hardware that usually takes up a PCI slot (for PC users) and uses a telephone line to communicate with the Internet. Modems cost around \$30 but come with most PCs.

Pros:

- It may be your only option. Because many high-speed services are limited to urban areas, many people who live in suburban and rural areas are forced to use dial-up service if they want to get connected.
- Dial-up service is the cheapest of all connection methods.

Cons:

- The slowest of all connection methods. Its speed is limited to 56 kbps. This is the theoretical max. Speeds are usually slower, especially the further away from urban areas you live. Where I'm originally from, Coos Bay, living 12 miles from town meant having 28 Kbps as my max connection speed.
- Dial-Up also ties up the phone line. If you are connected to the Internet then you can't

make out-going calls or receive incoming calls. Many people opt for a second phone line dedicated to their dial-up connection.

Who should use it: People who have no other choice, people who can't afford a faster connection method, or people who only want to do basic web browsing and email. Even people who do a lot of web browsing may want to check out something faster if available.

Average Cost:

Modem: \$30

ISP: \$20 a month.

.04. **DIAL-UP'S DISTANT COUSIN: DSL** ([Return to Index](#))

DSL stands for Digital Subscriber Line and comes in two flavors. DSL is sometime referred to as xDSL, because there is ADSL and SDSL.

ADSL stands for Asymmetric Digital Subscriber Line. ADSL allows more data to be sent over copper phone lines at a much greater speed than Dial-Up offers. On average, ADSL supports downstream data rates from 1.5 to 9 Mbps and upstream data rates from 16 to 640 Kbps. ADSL is more popular in the United States.

SDSL stands for Symmetric Digital Subscriber line. SDSL allows for data transfer speeds of up to 3 Mbps. SDSL is called symmetric because the upstream and downstream speeds are the same. SDSL works by sending digital pulses in the high-frequency area of telephone wires. Because normal voice communications do not use SDSL, it can operate simultaneously with voice connections over the same wires. SDSL is more popular in Europe.

To connect to the Internet with xDSL, you need to purchase a special DSL modem that connects to your current phone line. This is usually purchased as part of the package you order when you get your xDSL Service.

Pros:

- Much faster than dial-up service (starting packages are more than 10 times faster than dial-up).
- Very stable. Little or no fluctuations in speed.
- Great for downloading, web surfing, email, playing online games, etc.
- Doesn't tie up phone line even though runs on existing phone line.
- Great values. Fast speeds at reasonable prices.
- Can set up home network and have multiple computers connected to the Internet.

Cons:

- More expensive than dial-up. Starting packages range around \$50 a month, plus the

modem is comparatively expensive also.

- Speeds are not set in stone. For example, if you purchase a 1.5 Mbps downstream / 128 kbps upstream package, you may only get 800 Kbps downstream, but might get 200 Kbps upstream. It usually depends on the distance from your telephone company's central station. This rate fluctuates little however.

Who should use it: Heavy web browsers, people who want to download large files and programs, online gamers, smaller server administrators (if upstream is high enough).

Costs:

Modem: \$50-\$75

Network Card: \$30-\$50

ISP: \$50-\$100 a month depending on package.

.05. **DSL'S ENEMY: CABLE MODEM** ([Return to Index](#))

Cable modem service competes with DSL for the home broadband market. Instead of transmitting data over phone lines, data is sent over coaxial wire used by cable companies to send video signals. Coaxial cable provides greater bandwidth than standard telephone lines. Since millions are already wired for cable, it makes sense to be able to access the Internet over a pre existing infrastructure. However, cable television signals were only meant to be sent in one direction (from the "server" to the "client"). The Internet is a two-way system, but, because of recent technology advancements, upstream speeds have increased and are comparable to DSL speeds.

Cable Modem services usually get data transfer speeds of up to 2 Mbps downstream and up to 600 Mbps upstream on average. To connect to the Internet with a cable modem service, you need to have cable installed if not already. You also need to purchase a cable modem that runs about the same price as a DSL modem and usually comes with your package.

Pros:

- Depending on area, about the same speeds as DSL
- Comes in on preexisting cable wires.
- Depending on area, usually slightly cheaper than DSL
- Farther reaching than DSL. Cable modem users can be in more suburban areas and still get broadband access.

Cons:

- If you don't already have cable, it will cost you for cable installation
- Not as stable as DSL. Bandwidth is shared over a neighborhood, so if other people in your area are using cable modem service when you are, you will notice speed drops.

Who should use it: Heavy web browsers, people who want to download large files and programs, online gamers.

Costs:

\$30-\$75 for cable installation

\$50-\$75 for cable modem

\$30-\$50 for network card

\$30-\$80 a month for ISP

.06. **ISDN: A SPECIAL KIND OF BROADBAND** ([Return to Index](#))

ISDN stands for Integrated Services Digital Network. ISDN comes in over phone lines, but requires that you dial into the network for access. ISDN is almost always guaranteed a certain speed, but the speeds are quite low considering the other options. Packages come in the form of 64 Kbps and 128 Kbps. This is shared so there is no upstream / downstream. Connections are made with an ISDN modem that usually comes with your package. Availability is also limited. ISDN also tends to be a bit pricier than other broadband options. As it stands, ISDN is mainly used for video conferencing lines.

Pros:

- Limited availability
- Comes in over phone lines
- Faster than Dial-up
- Guaranteed speed

Cons:

- Slower than other broadband options
- Most packages only allow you so many hours of use per month.
- Packages are more costly than other broadband counterparts.
- Still have to dial in.

Who should use: People who can't get DSL or Cable modem service, people who want to do frequent video conferencing.

.07. **T-1, T-3, AND EVEN BIGGER** ([Return to Index](#))

T-1 lines are brought in over fiber optic line (or sometimes copper wire) that carries 24 digitized voice channels, or it can carry data at a rate of around 1.5 Mbps.

T-1s are generally used for businesses that want to run a server that will generate a lot of traffic, or companies that needs to split the bandwidth among its' employees. However, the costs are astronomical, and the availability is limited. Installation can run around \$500, plus monthly fees of

thousands of dollars. Usually, one person does not have a T-1 run into their home but some people do this.

T-3s are the next step up. T-3 is considered a backbone part of the Internet, and yes, connections can get even bigger. A T-3 can support 43 Mbps speeds and is composed of multiple T-1s. I have yet to hear of a single person or family with a T-3 in their home. T-3 connections are for large businesses, colleges and universities, and other large institutions.

T-1 and T-3 services also need lots of equipment to be useful. Routers, splitters, switches, are all hardware that is required to divide the bandwidth over its users. T-1 and T-3 lines are directly connected to the ISP so speed is almost guaranteed.

Pros:

- Very high speeds
- Great for large institutions
- Little or no speed fluctuations

Cons:

- Incredible costs

Who should use: Large institutions (schools, businesses, government buildings, etc), people who want to run heavy traffic servers.

Costs:

\$500-\$1000+ installation fees

\$1000-\$5000+ monthly fees

\$500- \$3000+ for additional hardware costs.

.08. **CONCLUSION** ([Return to Index](#))

I hope this has helped you get a basic overview of how people get on the Internet. Of course, some of these numbers may already be out of date as far as transfer speeds go. The Internet grows at an incredible rate. Within 10 years, this document will probably be obsolete, as 10 years ago 56kbps modems were just becoming the norm. The services will still be the same, but as technology gets better and the thirst for bandwidth grows, we will see a great increase in speeds.

This entry was posted in Uncategorized by **Editor**. Bookmark the **permalink** [<http://bcis.pacificu.edu/interface/?p=2323>].

43 THOUGHTS ON "GET CONNECTED: COMMON WAYS TO GET WIRED"

naija

on **January 30, 2014 at 1:57 PM** said:

This is my first time pay a visit at the following and i am really impressed to read everthing at alone place.

best work boots for men

on **January 31, 2014 at 12:16 AM** said:

Hello there! This article could not be written much better!

Looking through this post reminds me of my previous roommate!
He continually kept preaching about this. I will send this article to him.
Pretty sure he'll have a good read. Thanks for sharing!

plotka

on **February 1, 2014 at 1:49 AM** said:

I also agree with you. i feel that there are numerous lessons being learned from this book. By not reading the book, we miss out on some issues which are a positive impact to our life. However, I do think you need to be a particular maturity to be able to get from this book what you need

kuchnia

on **February 1, 2014 at 2:17 AM** said:

Its like you read my mind! You appear to know a lot about this, like you wrote the book in it or something. I think that you simply can do with some pics to drive the message house a bit, but rather than that, this is wonderful blog. A good read. I am going to definitely be back.

gmail backup

on **February 1, 2014 at 6:23 AM** said:

I do not even know how I finished up here, but I assumed this put up was good. I do not realize who you might be but certainly you are going to a well-known blogger when you aren't already.

Cheers!

best induction cooktop

on **February 3, 2014 at 8:37 PM** said:

Very good article! We are linking to this great post on our site. Keep up the great writing.

folding bike reviews

on **February 3, 2014 at 8:39 PM** said:

Thank you for the good writeup. It actually was a amusement account it. Glance complex to more added agreeable from you! By the way, how could we keep in touch?

vacuum sealer reviews

on **February 3, 2014 at 11:12 PM** said:

I am genuinely thankful to the owner of this website who has shared this wonderful article at at this place.

pressure washer reviews

on **February 3, 2014 at 11:51 PM** said:

I was able to find good information from your blog articles.

best scroll saw

on **February 4, 2014 at 12:14 AM** said:

What's Happening i'm new to this, I stumbled upon this I have found It absolutely useful and it has aided me out loads. I hope to contribute & aid different customers like its helped me. Good job.

online profits group llc

on **February 4, 2014 at 12:44 AM** said:

After checking out a few of the blog articles on your website, I seriously like your technique of writing a blog. I book-marked it to my bookmark website list and will be checking back in the near future. Please visit my website too and let me know how you feel.

rifle scope reviews

on **February 4, 2014 at 12:47 AM** said:

Hello this is kinda of off topic but I was wanting to know if blogs use WYSIWYG editors or if you have to manually code with HTML. I'm starting a blog soon but have no coding experience so I wanted to get advice from someone with experience. Any help would be greatly appreciated!

Nellie

on **February 4, 2014 at 2:54 AM** said:

you're really a just right webmaster. The site loading velocity is amazing. It kind of feels that you are doing any distinctive trick. Furthermore, The contents are masterwork. you have done a fantastic activity in this subject!

video marketing new zealand

on **February 4, 2014 at 3:53 AM** said:

Thanks for your marvelous posting! I actually enjoyed reading it, you are a great author.I will remember to bookmark your blog and may come back later on. I want to encourage continue your great writing, have a nice weekend!

best exercise bike

on **February 4, 2014 at 4:42 AM** said:

I'm gone to say to my little brother, that he should also pay a visit this blog on regular basis to obtain updated from most up-to-date gossip.

espresso machine reviews

on **February 4, 2014 at 4:49 AM** said:

Wow that was odd. I just wrote an really long comment but after I clicked submit my comment didn't show up. Grrrr... well I'm not writing all that over again. Anyways, just wanted to say superb blog!

garment steamer reviews

on **February 4, 2014 at 4:50 AM** said:

Thanks for sharing your thoughts about miami wrongful death lawyer.
Regards

sms text message software

on **February 4, 2014 at 5:01 AM** said:

I am regular visitor, how are you everybody? This paragraph posted at this web page is really pleasant.

Work uniforms

on **February 4, 2014 at 5:04 AM** said:

Hello! I've been reading your site for a while now and finally got the bravery to go ahead and give you a shout out from New Caney Tx!
Just wanted to tell you keep up the excellent job!

Sandy

on **February 4, 2014 at 5:34 AM** said:

Hurrah! At last I got a website from where I be able to really get valuable data concerning my study and knowledge.

loan back

on **February 4, 2014 at 7:27 AM** said:

Thank you for another wonderful post. Where else may anybody get that type of information in such a perfect approach of writing? I've a presentation subsequent week, and I am at the search for such information.

make money from home data entry uk

on **February 4, 2014 at 7:43 AM** said:

Thanks for sharing your thoughts about brain injury lawyers

law lemon pa

art institute houston

human resources degrees

discout tire

asbestos mesothelioma law

photostamp

forming a llc

tampa attorney

refinancing a second mortgage

dedicated sql server hosting

indiana lemon law

indiana law lemon

car home insurance

www mypc com

chiropractic billing software

suntrust student loans

whole life insurance explained

help desk applications

unsecured student loans

sell structured settlement payment

auto bad credit loan seattle

debt counseling services

2007 buick lucerne

gierki

bubbels

forex trading brokers

crm products

online mortgage quote

test equipment rental

personal injury lawsuits

online brokerage account

chevrolet aveo 2007

remortgage deals

insurance life whole

siebel crm ondemand

star logic

rent dvd projector

online credit counseling
tesco car insurance quote
debt settlements
sql web hosting
los angeles car accident attorney
car accident claims
virtual dedicated servers
web based edi
cash rebate credit card
home equity loan bankruptcy
phoenix arizona dui lawyer
chicago dui attorney
forex trading sites
lowest refinance
home loan mortgage rate refinancing
miami home equity loan
exchange 2000 spam filter
wireless credit card terminal
help desks
retail merchant account
chev suv
long term care leads
auto loan quotes
texas defensive driving course online
download winrar
soulja slim
cheat codes com
referaty
hot wives
leticia
caligula
love quizzes
canli yayin
winrar download
cunnilingus
trakya
mahsun kÄ±rmÄ±zÄ±gÄ±1/4l
unique baby names
oklahoma lottery
wichita eagle
jaundice
mixed wrestling
spreekwoorden

mario brothers
business debt restructuring
quote auto
florida criminal defense attorney
hydrocodone detox
cheap california auto insurance
workers compensation attorney
fha streamline refinance
eurorail passes
timekeeping systems
attorney dui tampa
mujeres putas
celia cruz
patriot ledger
heather smith
varicelle
106.1
ministerio de vivienda
cindy margolis
knights of the old republic
andrew carnegie
periodo fertil
123 love
infected mushroom
anna's linens
how to masturbate
asunnot
kaleb
black dick
result
april fools day
teenies
hot blonde
wickedweasel
hotelcheck
suck my dick
buddah
resenha
define clew
lil wayne pictures
free cartoon porn
quilt patterns
ear infection

melee
96.5
pictureview
alanis morissette
mckinley high school
multiplication
ratedesi
schnauzer
inquisitive
email marketing companies
small business telephone system
golf courses in las vegas
law lemon nj
colorado attorneys
return of premium life insurance
best web hosting reviews
car insurance mercury
los angeles accident lawyer
loan consolidations
www lending tree com
pay per click campaign
migraine medicines
florida refinance mortgage rate
online data backup service
houses for sale in las vegas
mesothelioma lawyer texas
canadian online stock trading
family intervention
winchester auto
google ad word
california home equity loan rate
vgn ux280p
financial advisor training
refinancing car loans
home loan mortgage rate
car insurance auto insurance
refinance mortgage quote
filmek
rachel aldana
glitter text
supertanga
get a tattoo
Ø±Ù†Ø\$Øª

asstraffic
protagonist
maidmarian
michael w smith
tapety na komputer
business buildings insurance
nd mortgage
ladys car cheap insurance
personal loan uk
consolidation fixed loan rate student
lasik eye surgery los angeles
bmw insurance
optical express
debt management advice
pictures of hearts
babyboy
php proxy
dirty sex
yahoo pool
faction
plankton
french food
radiocanada
french maid
skate boarding
golden point
manyak
big tit patrol
lazylaces
bignaturals
streamwood high school
future fta
sprites
gumbo
map of japan
david williams
voa
borax
rodrigo
adult pictures
seduce
40 cal
yuffie

evanescence
map of ireland
jeff beck
jessica hahn
jay sean
parts of speech
mario barrett
tanz
vile
jacquie et
kaci brown
ottoman empire
í•œê,€
à'€à,"à'†à,
mercury news
lauryn
i love you so much
ryan phillipe
iranian
cheap insurance term
san francisco florists
home appliance insurance
edi transactions
car insurance rate comparisons
freecredit reports
secure credit card processing
donation automobile
21st century auto
powerdialer
free conference call service
female car insurance quote
drug addiction treatment program
Åÿebnem ferah
imkb
definitive guide to google adwords
online home mortgage loan
christian debt services
best secured loan
direct insurance life
kansas auto insurance. Regards

make money from home crafts

on **February 4, 2014 at 8:02 AM** said:

This information is worth everyone's attention. Where can I find out more?

table saw reviews

on **February 4, 2014 at 11:45 AM** said:

Have you ever thought about including a little bit more than just your articles?
I mean, what you say is fundamental and everything.

But imagine if you added some great pictures or videos to
give your posts more, "pop"! Your content is excellent but with images and clips,
this blog could certainly be one of the greatest in its field.

Fantastic blog!

best online way to make money

on **February 4, 2014 at 1:29 PM** said:

If some one needs to be updated with most up-to-date technologies
afterward he must be pay a quick visit this site and be up
to date every day.

free money transfer

on **February 4, 2014 at 2:08 PM** said:

Have you ever considered publishing an e-book or guest
authoring on other sites? I have a blog based on the same ideas you discuss and would
love to have you share some stories/information.

I know my subscribers would value your work. If you're
even remotely interested, feel free to send me an email.

precious metal hunting

on **February 4, 2014 at 2:26 PM** said:

Hey there would you mind stating which blog platform you're working with? I'm planning to start my own blog soon but I'm having a hard time making a decision between BlogEngine/Wordpress/B2evolution and Drupal. The reason I ask is because your layout seems different then most blogs and I'm looking for something unique. P.S My apologies for being off-topic but I had to ask!

teenagers making money online

on **February 4, 2014 at 3:20 PM** said:

Hello it's me, I am also visiting this web page regularly, this website is actually fastidious and the viewers are genuinely sharing pleasant thoughts.

dating in gta 5

on **February 4, 2014 at 4:04 PM** said:

Awesome article.

teaching your kids about money

on **February 4, 2014 at 4:54 PM** said:

I was pretty pleased to find this site. I need to to thank you for ones time for this wonderful read!! I definitely loved every part of it and i also have you book marked to check out new stuff on your web site.

garbage disposal reviews

on **February 4, 2014 at 9:59 PM** said:

I couldn't resist commenting. Very well written!

best electric kettle

on **February 4, 2014 at 10:13 PM** said:

I all the time used to study piece of writing in news papers but now as I am a user of internet therefore from now I am using net for posts, thanks to web.

Samara

on **February 4, 2014 at 11:33 PM** said:

Saved as a favorite, I like your blog!

Facebook Quotes And Saying

on **February 4, 2014 at 11:39 PM** said:

I really like your blog.. very nice colors & theme. Did you make this website yourself or did you hire someone to do it for you? Plz answer back as I'm looking to construct my own blog and would like to find out where u got this from. many thanks

advertising salaries

on **February 4, 2014 at 11:47 PM** said:

Great info. Lucky me I discovered your website by chance (stumbleupon). I've saved as a favorite for later!

best home gym

on **February 4, 2014 at 11:48 PM** said:

Wow, that's what I was exploring for, what a stuff! existing here at this web site, thanks admin of this web page.

jig saw reviews

on **February 5, 2014 at 12:09 AM** said:

This is really fascinating, You're a very professional blogger. I have joined your feed and look forward to seeking extra of your wonderful post. Also, I have shared your site in my social networks

Nigeria social network

on **February 5, 2014 at 12:18 AM** said:

Wow, someone was thinking. A excellent program you put in place. I'm sure it is going to consume a lot of the stress away !

Cassie

on **February 5, 2014 at 12:28 AM** said:

An intriguing discussion is worth comment.
I think that you need to write more on this topic, it might not be a taboo matter but usually people don't talk about such issues. To the next!
Best wishes!!

make money jobs

on **February 5, 2014 at 12:45 AM** said:

I am genuinely grateful to the holder of this web page who has shared this great article at at this time.

best crossfit shoes

on **February 5, 2014 at 2:28 AM** said:

It's amazing to pay a visit this website and reading the views of all colleagues regarding this paragraph, while I am also keen of getting experience.

Mallory

on **February 5, 2014 at 3:07 AM** said:

Spot on with this write-up, I actually think this web site needs far more attention. I'll probably be returning to see more, thanks for the info!

cell Phones

on **February 5, 2014 at 5:22 PM** said:

Asking questions are truly good thing if you are not understanding something totally, except this post provides good understanding yet.