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feature story

HOSTING: CHOICES, CHOICES...

Ok. You finally bit the bullet. It's 2002 and you've realized you can't continue to miss out on the global marketplace. You've jumped headlong into the world of cyberspace with a dynamic web presence geared towards generating new revenue streams while providing 24/7 customer service and support.

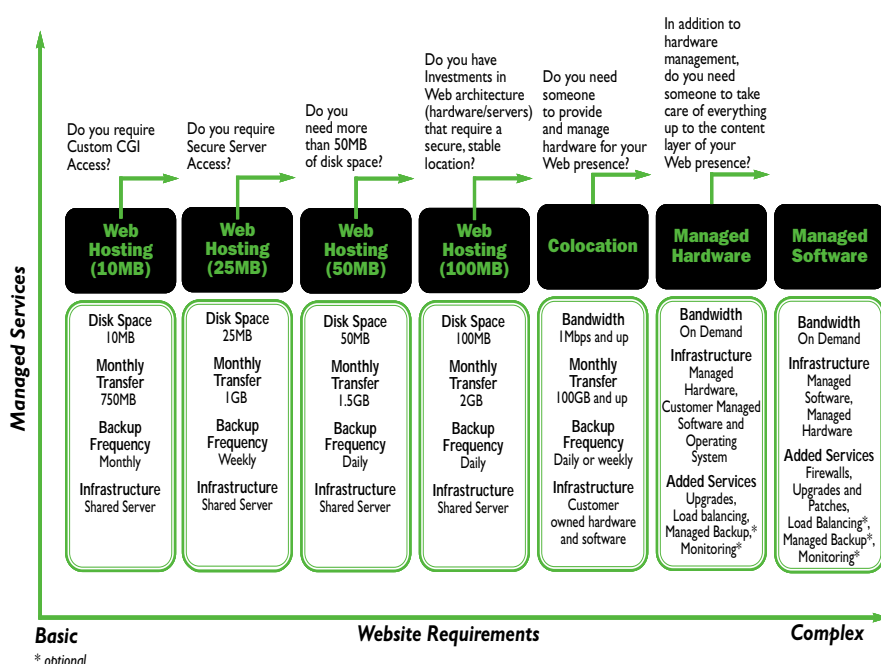
Excellent, you're on your way. But there's a critical issue that you need to address before the cheques start rolling in. It's terrific to have a web site raring to go, but how are you going to get it up and live on the World Wide Web and provide ongoing support and maintenance to ensure it's up all the time?

The answer is you need a host for your web site. Every web page of every web site found on the Internet is hosted somewhere on some server in some back room of some building. The key is to find a solution that works for your circumstances.

Companies who provide these services are called Internet Service Providers (ISPs). They come in all shapes and sizes – from conglomerates like AOL Time Warner to your local neighborhood ISP in rented office space next door – and can offer a world of services that you couldn't even imagine was available.

But what do you really need?

Typically there are three types of hosting services from which to choose, although businesses will tend to require more and more services as they continue to grow. For instance, what you require right now would be drastically less than if you suddenly added an e-commerce element to your business. Check out the chart below to get a handle on where you might fit in now and in the future.



using its own equipment. A Managed solution gives you complete peace of mind, as the entire solution is managed by professionals who will constantly ensure your uptime, monitor your system and help you adapt to network resource and bandwidth scalability issues immediately.

In each case, the real benefit is the luxury of your being able to focus on your core business, not on your hosting issues. You have enough to worry about.

Return On Investment

Comparing Costs of In-house Management to Outsourced Managed Hosting Solutions:

	In-house	Managed Hosting
Average Initial Coats		
NT Server and Firewall	\$20,000	Included
Router/CSU/DSU	5,000	Included
UPS Backup	5,000	Included
Set-up	5,000	\$5,860
Total Initial Cost	\$35,000	\$5,860
Average Monthly Costs		
Technical Staff	\$11,250	Included
Bandwidth	3,000	\$1,500
Managed Servers and Firewall		5,860
Total Monthly Cost	\$14,250	\$7,320
TOTAL FIRST YEAR COST	\$206,000	\$93,700

Basic Shared Solution – This is for lower-end, straightforward web sites that have little complexity and don't require much bandwidth. Your basic brochureware web sites. Shared solution customers are typically one of potentially hundreds of web sites that can be adequately hosted on minimal servers.

Colocation – This solution allows customers to bring their own equipment into an ISP's data centre, where the customer manages his own equipment, operating systems, applications and content. The provider simply provides space, power and direct connectivity to its network.

Managed Hosting Solution – This is a total outsourced solution. With a Managed Solution, the provider can manage everything, including the customer's web site, hardware, operating system and various applications in their Data Centre. The only element customers would provide in a managed solution is the content.

What Are The Benefits?

Because your solution depends on the type of requirements you have individually, the benefits from customer to customer will vary. A shared solution is a no-frills deal that doesn't offer much more than the posting of your very basic web site live. However, if that's all you need, then this is the plan for you. Colocation offers customers the ability to leverage a provider's network and Data Centre while

Some Questions To Ponder

Before you jump into a hosting solution that may or may not work for you, it's a good idea to ask a few questions to ensure you know everything you need to know to make an informed, intelligent business decision. Here are some questions you should have answers to before selecting a hosting solution provider.

- Is this a Tier 1 Data Centre; a sophisticated, high-throughput data centre featuring state-of-the-art equipment and support?
- Whose actual network are you using? Is it your own network that you control and maintain?
- How much would the implementation of a hosting solution cost?
- How will I be supported?
- Can I scale easily as my needs change?
- Do I have easy access to Technical expertise?
- Do they have the necessary features and options to allow me to grow while maintaining uptime?

Find out more on AT&T Canada's Hosting solutions by contacting your local AT&T Canada representative, or visit us at www.attcanada.com.

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Telecommunications Made *Eeeeeasyyyyyyy*...

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ISDN PRI – Not Just Another Confusing Acronym

When it comes to setting up your local phone service, you've surely heard vendors talking about ISDN and other fabulous options. And if your head has spun when trying to choose a service that works well for your business, you're certainly not alone.

Because ISDN calls are digital they offer faster connection and clearer signals as compared to conventional public networks.

What is ISDN PRI anyway?

ISDN (Integrated Services Digital Network) PRI (Primary Rate Interface) is a digital local phone service that accommodates multiple types of incoming and outgoing calls, enabling you to simultaneously transmit both voice and data in high-speed, over a single pipe.

In other words, with ISDN PRI you can simultaneously surf the Internet, run a video conference call, fax an invoice and transfer huge data files. Oh, and of course you can talk to your customers over the phone.

And because ISDN calls are digital they offer faster connection and clearer signals as compared to conventional public networks. This means long distance calls, faxes and calls dialed by an automated dialer terminate quicker.

What Are Some Of The Other Benefits?

First and foremost, the fact that data can be transmitted over ISDN means the potential for huge cost savings in that you may not need to invest in a traditional data network. As well, reputable ISDN PRI vendors offer a variety of other goodies to enhance your local service. Check out the chart to see what other features your ISDN solution can typically add to your business.

Feature	Benefit
Call Throttling	Allows customers to define the maximum number of calls in or out of a specific trunk group. This way the customer is assured that a high volume of calls to one trunk group (i.e. your Customer Support Line) will not prevent calls from reaching other trunk groups (i.e. Sales).
Call By Call Routing	This allows you to control the minimum and maximum number of calls for trunk groups.
Overflow	Allows incoming calls destined for a congested trunk to be automatically re-routed to another trunk.
Tie Trunks	Allows the customer to connect two or more branches in the same city without incurring tie trunk mileage charges or additional TI charges. This is a free service.
Release Line Trunking (RLT)	Typically when transferring calls internally, you actually occupy two separate lines. With RLT, once calls are transferred, the lines they occupied are immediately freed up for use by other employees.
Unlimited 2-way connectivity	Allows traffic to flow in two directions. You dictate how the PRI is to be designed.
Traditional Voice Services	Access to Directory Assistance (411), Repair (611), Message Relay Service (711), Emergency Service (911), Operator Services (0), Long Distance Service (EEA), and access to the Public Switched Telephone Network (PSTN).
DID (Direct Inward Dialing)	Enables an outside caller to call an internal extension without having to pass through an operator or attendant first.
Calling Name and Number	Allows you to know in advance who is calling.

What You Need To Know

Of course, it's a good idea to know the score before you make a critical business decision that will have as much impact on your business as your local service package. Here are some questions you should ask yourself or your vendor before taking on an ISDN service:

- How many telcos do you deal with?
- Do you offer a single bill for the entire PRI?
- How will I be supported?
- Can I create a VPN using PRI without any added cost?
- What added features will you (the vendor) provide me with should I choose your service?

- How much will this cost?
- Is there a volume discount based on the number of PRI or on the length of contract I choose to enter?

Get more information on AT&T Canada's ISDN PRI solution by contacting your local AT&T Canada representative, or by visiting us at www.attcanada.com.

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Just So You Know...

- According to a Retail Forward 2001 study, the top three e-tailers in the U.S. were, in order, Amazon (\$3.12 billion), Office Depot (\$1.60 billion) and Staples (\$0.95 billion).
- Yankee Group reports in 2002 that 23% of U.S. wireless customers with children have at least one child under the age of 18 using a cellphone.
- According to a Positively Broadband/Winston Group report, over one-half of U.S. adults think their quality of life would be improved if they could telecommute.
- According to a 2002 Profit Magazine survey, when asked the question, 'What would you tell a young entrepreneur planning to start a new business in Canada today?', 11% of current Canadian entrepreneurs said 'Forget it!'.
- Osterman Research finds that 51% of North American companies using Microsoft Exchange message systems have e-mail retention policies in place and 84% say they enforce mailbox size quotas.
- In Canada, it is illegal to pretend to practice witchcraft.
- In Florida, if an elephant is left tied to a parking meter, the parking fee has to be paid just as it would for a vehicle.



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Redundancy - It's All About Uptime All The Time

Imagine for a second that your business, like so many others in this day and age, is heavily dependent on your connection to the Internet. You use the Net as your primary source of communication and transacting with your customers. It works well. Everyone's happy.

Except on that perilous day when, for whatever reason, your connection goes down. What do you do? The numbers are scary when it comes to Internet downtime for companies who conduct business online. Revenue may potentially be lost with every minute of downtime. Think about it. New users coming to the site will think it's not operational and go to your competitor instead. Existing users will wonder why they're unable to connect and will be frustrated. Transactions that were in progress at the time of the service cut would be lost. And there's no end to the PR damage this could create.

This kind of extended downtime could actually spell the end of your business, believe it or not.

The good news is that there is a safety net available to ensure this situation doesn't happen to you. It's called Redundancy, and it's an absolute necessity to companies operating online in any way.

A redundancy service provides you with the ability to fail over to an alternate service if something should happen to your primary service.

"If a router goes down, if the loop goes down, if something on the edge of the network goes down, customers who depend on the Internet would be in serious trouble," says Andrea Sorensen, a Senior Product Manager at AT&T Canada. "With a redundancy service in place, these businesses would automatically fail over to something else, resulting in no downtime at all."

What Are The Real Benefits of A Redundancy Solution?

When it comes to something as mission critical as your Internet service, the bottom line is the peace of mind this service brings. But there are other tangible benefits you need to know about:

- A reliable fail over connection that provides zero downtime for you and your customers.
- It can easily be integrated into your security product package.
- There are a variety of redundancy options available to customers. There are options for the cost conscious organization, right up to more elaborate solutions. For example, a T1 customer might choose to fail over to Small Office ADSL. Whereas an OC3 customer may wish to fail over to a dual T1.
- A secondary service can also include load sharing, which is a service that alleviates bandwidth pressure on your primary service, by sharing the traffic over the secondary service.

(see box below)

Load Sharing: What Is It?

Primary to Fail Over	Depending on your Internet service connection, load sharing is a special feature that seamlessly runs traffic through both connections at all times, this not only ensures a Fail Over service should your primary go down, it also prevents your primary bandwidth from overloading. The services for which the load sharing option is available are listed on the left.
OC3 → OC3	
OC3 → T1	
T1 → T1	

Before You Decide

In order to make the best decision for your business, it's a good idea to know what you're getting into. Here are some questions to ask your provider before signing on the dotted line.

What can you offer my business that your competitors cannot?

What do I need on my end to implement a redundancy solution?

How long have you been providing this service?

How can you guarantee the service not going down?

How will the cost impact my decision?

What are the multiple levels of redundancy?

Will purchasing my secondary service from the same vendor as my primary source qualify me for a discount on the secondary service?

How is privacy and security assured?

What kind of support can I expect to receive?

Keep your comfort level high and your Internet connection up with a Redundancy solution.

For more information about AT&T Canada's Redundancy service, contact your local AT&T representative or visit www.attcanada.com.

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Plan, Chat, and Store: The Three Big Trends This Year

futurescope

With the tech bubble behind us and the equity markets recovering from a dismal summer, the IT crowd is watching a smaller and more manageable set of business technologies. These are my picks for the developments most likely to emerge between now and June 2003.

PLAN: Organizer Enhancements

The average office worker receives more than 100 emails per day, most of which can easily be categorized as “frivolous”: unnecessary carbon copies, mailing lists, spam, and so on. And with budget cuts forcing companies to ask people to take on an ever-increasing task load, the time is ripe for improvements to small-business and enterprise-scale day planning and email tools.

In the SOHO email market, I like Nelson Email Organizer (www.emailorganizer.com) – it integrates seamlessly with Microsoft Outlook, used by many businesses, yet writes its own index, making searching quick and management painless.

On the enterprise-scale, watch for Microsoft to upgrade its Outlook client to handle daily task management better, with Novell’s Groupwise still languishing at least three years behind the game.

Fans of the Franklin Covey system, for instance, should watch for the “PlanPlus” add-on to Outlook, which builds the Covey-like philosophy of work-life balance directly into one’s Outlook routine.

Strategy: Buy, buy, buy. Incremental productivity improvements are the hidden secret in business. One minute saved per hour for each employee of a 40-person law firm can add up to well past six figures saved. But remember to account for training costs – likely minimal if your tools are added onto existing programs.

CHAT: Instant Messengers

Enterprises have been slow to adopt instant messaging (IM) for very good reasons – potential security risks and lack of conversation logging (read: liability open-door!). People in enterprises, however, have been sneaking around firewalls to use consumer-brand IM tools like ICQ, MSN, and AOL’s.

Fact is, used properly, IM can be a great tool for quick messages and file transfer. Little wonder IDC predicts corporate IM users are expected to rocket to 181 million in 2004 from a meager 6 million last year. IBM’s “Sametime” program has led the pack in the corporate market – I also like “Jabber” which lets users encrypt messages. Other vendors to investigate in the upcoming nine months: Jabber, Mercury Prime, QuickSilver, 2Way, Ikimbo, Ezenia, NetLert and Bantu.

Strategy: If you decide to implement such a system, so far best results are coming from companies who use a trial group of employees to see if the technology fits with your culture and work process. Warning: Be prepared to commit – if they like it, they’ll talk it up endlessly!

STORE: Storage

Now that Microsoft’s Office suite is incorporating stronger ties to web technologies, such as writing documents directly to intranets and public web sites, the number of digital documents being created is growing exponentially.

Two technologies will emerge to manage these – one, searching, is being quietly led in the corporate market by search-engine darling Google. The other technology is the less-sexy storage. Watch for major advances in storage technology which will boost the size of server hard disks and file share media.

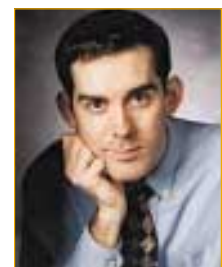
IBM, for instance, is talking up its nanotech drive which stores information with a miniature soldering iron on pieces of plastic not much bigger than a postage stamp; Toshiba, already a pioneer in DVD technology, plans to offer alternative blue-laser drives it believes will be cheaper and more compatible with existing red-laser technology.

Strategy: For now, just watch from afar and invest your IT budget into high-volume RAID drives or similar reliable storage. Online storage, where your corporate data is transferred over secure Internet lines to an off-site location, will still prove to be too pricey for most businesses.

Tod Maffin is “one of Canada’s most influential futurists” [Report on Business] and speaks to more than 50 conferences each year on the future of technology in small- and medium-sized business. He hosts “Future Now” on CBC Television. His web site is www.todmaffin.com

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Here's your chance to tell us how you feel about Sphere.

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What didn't you like?

What's missing that you would you like to see?

And most of all, what would you like to learn from Sphere and from AT&T Canada?

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