How to Obtain and Activate a Fully Qualified Domain Name (FQDN)

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Domain Names

Domain Creation Overview

Here's a quick overview of the entire domain registration and activation process:

- 1. Determine the criteria by which you will define the name for your online presence
 - a. Discover a domain name that meets your criteria
- 2. Successfully register a domain name with an Internet registrar
 - a. Retain your domain registration credentials
 - b. Pay for the registration, preferably by credit card
- 3. Wait for the confirmation email from the registrar indicating your domain is ready
- 4. Use the information in the confirmation email to change the attributes of the domain
 - a. Contact Information
 - b. Name Server Records (NS)
- 5. Configure a name servers to respond to the domain name
- 6. Configure a web server to respond to the domain name you registered
- 7. Place something on the Web Server to satisfy client requests
 - a. "Under Construction" page
 - b. Already developed website

Tips On Defining Domain Name Criteria

Defining a "Domain Name Criteria" is a matter of taste and therefore is half art, half science. It is up to the entity searching for a domain name to define the rules of the criteria – some aspects of the domain name may be hard and fast (i.e. it must be in the .com domain), some may be flexible (variant spellings like Eleanor as opposed to Elanor).

Obviously, everyone wants a domain name that reflects the intent of his or her business (or its name) in some way. Unfortunately, because there are no geographic barriers on the Internet, every "Smiths Grocery" in the world has equal rights to that particular domain, regardless of where the grocery store is physically situated.

This can make the domain search seem pretty discouraging, on the other hand, it is also a source of great innovation – many unusual and highly memorable domain names have resulted from the imaginative use of combinations and sounds that would have not been utilized had the original domain been available. Because of this, most *easy* domain names have already been reserved, taken long ago by legitimate businesses or by **domain name speculators**.

Since there was money (at one time) to be made in domain speculation, many useful domain have been reserved, but sit idle. That too may be a factor in terms of your domain name strategy.

My advice? Be thoughtful, retain your sense of humor no matter how many failed attempts you make and make liberal use of the dash "-" character. If you follow this advice I am positive you will find a domain name that is not already taken.

Obtaining A Reserved Domain

If you absolutely **must** have a domain name that has been registered by someone else, you have some options:

- 1. You can offer to buy it
- 2. You can wait for the registration to expire
- 3. You can launch a legal action claiming your legitimacy to the domain name

Buying a Domain

By far the quickest of the methods, it also can be the most expensive.

Domains do not get reserved by accident. If you discover that the domain name you want is reserved but idle, you are most likely going to become involved with a domain name speculator. Domain speculators are people who basically take an "option" on a domain in the hope that at some future time they will be contacted by someone wishing to purchase that name. Because they are in the business of selling names and only a small percentage of names are dear enough to someone to actually motivate them to buy it, they hope to recoup some of the cost of their many (hundreds, thousands) of speculative registrations **plus** make a profit on this particular deal. Those conditions do not spell a cheap deal for you.

Certain domains sales have been the subject of a great deal of incredulity, for instance **business.com** which sold for the exorbitant sum of **\$USD8M**, or **\$USD1M** per letter.

Here's a brief list of some recent record domain name transactions:

AsSeenOnTv.com \$5.1 million \$3.3 million Altavista.com Wine.com \$2.9 million Autos.com \$2.2 million Express.com \$1.8 million Wallstreet.com \$1m Rock.com \$1m \$970,000 Websites.com

(extracted from http://www.webdevelopersjournal.com/articles/domain_names.html)

Waiting for a Domain To Expire

Sometimes the best option is to lie in wait for a domain expiry. This is often the most sensible thing to do when a domain is reserved, inactive and the expiry date is soon.

Many companies build their solution under the guise of a credible temporary alternate brand name, their plan B in case the target domain is never attainable. They then lie in wait for the expiration of the domain reservation. The moment the domain becomes available they scoop it up.

Honestly, this approach seldom works. The owner of the reservation receives multiple notifications of their expiry well before the domain actually expires. On the other hand, sometimes the scenario works you – there are few sensations as glorious as receiving the confirmation message that you have reserved a domain you've waited for (weeks, months) to gain ownership of.

One of the many free services that notify you when a domain registration has expired is available from **Domain 2 Trade**. Register your email and the domain in question with their service and it will email you the day the domain expires. The **domain watcher** utility is available at http://www.domain2trade.com/domainwatcher.htm

Suing for a Domain

This approach hinges on the legitimacy of your claim to that domain name in the eyes of the law. Simply really wanting a particular domain name doesn't make the grade with the judge or the arbitrator. Simply put, you have to have a case.

There is ample information available on the Internet concerning how to launch an action to wrest a domain from the hands of a speculator, including which arbitration firms are responsible for settling such disputes at:

http://www.newsbytes.com/news/01/172619.html

There is also advice available on the net to aid those persons who are "cybersquatting", either intentionally or innocently at

http://www.patents.com/dno.htm.

The Domain Search Process, Step-by-Step

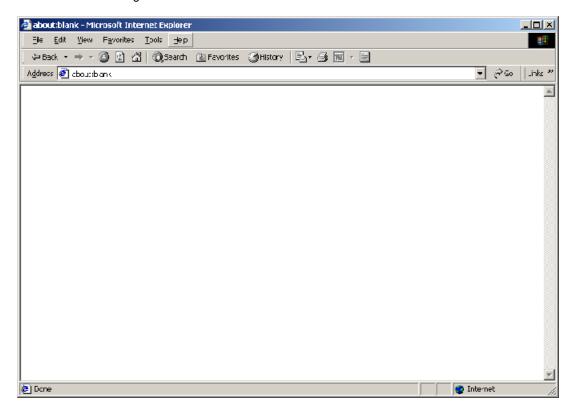
Researching a domain registration is usually fairly simple. Most Internet registrars have a domain name search function that naturally flows into their domain name registration process.

As an example, we will examine the registration process offered by one of my favorite registrars, **look.ca**.

Starting the Domain Registration Process

First of all, open up Internet Explorer

Consider the following:



In the above example a start page for Internet Explorer, set to display the about:blank page.

The about:blank page is built into IE to help it start quickly.

Go to www.look.ca

Consider the following:

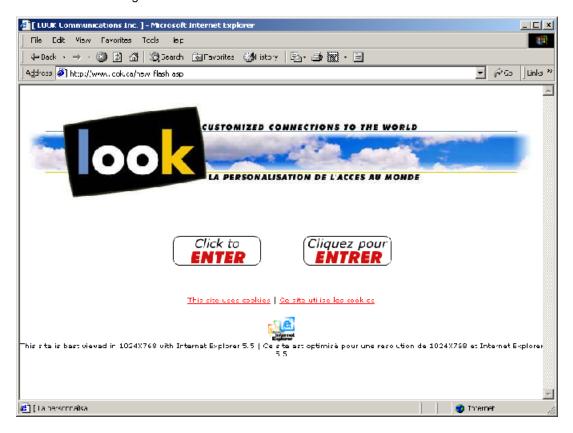


In the above example is the dialog box opened when a user presses CTRL-O in IE.

The dialog box gathers the URL of an Internet destination. We are going to look.ca.

The look.ca website

Consider the following:

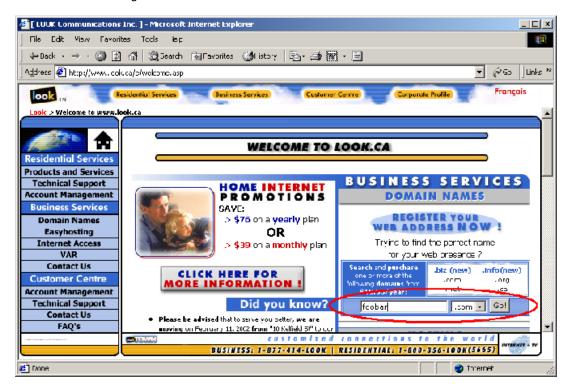


In the above example, the welcome screen for www.look.ca is displayed.

Click on the Click to ENTER button.

Performing an Unsuccessful domain search at look.ca

Consider the following:



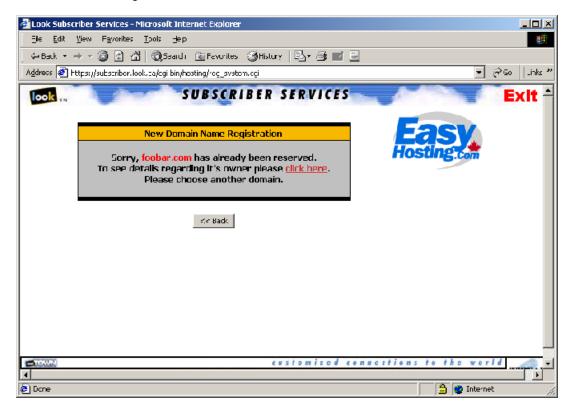
In the above example the main page of **look.ca** is displayed.

While there is a lot of information available on the page, the functionality we want to use is the **domain search** function, circled and bearing the value **foobar.com**.

The Unavailable Domain Notice

If the domain is unavailable, you will see a screen like this:

Consider the following:

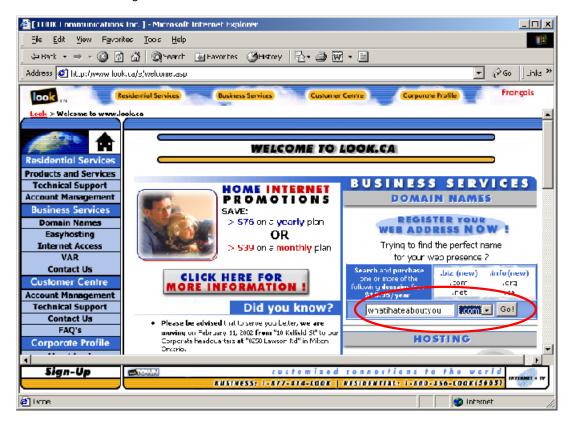


In the above example is a message that indicates an unsuccessful domain search. The message indicates that the domain is unavailable. It has already reserved by someone.

Click on the **back** button to attempt another domain search.

Performing a Successful domain search on look.ca

Consider the following:

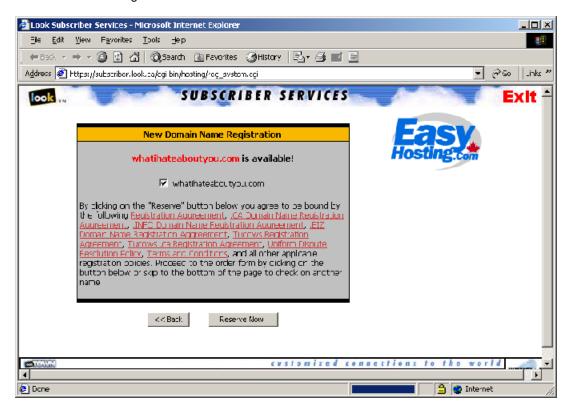


In the above example is an attempt to register the domain whatihateaboutyou.com.

Available Domain Notice

If the domain you selected is available, you will get a screen indicating its availability.

Consider the following:

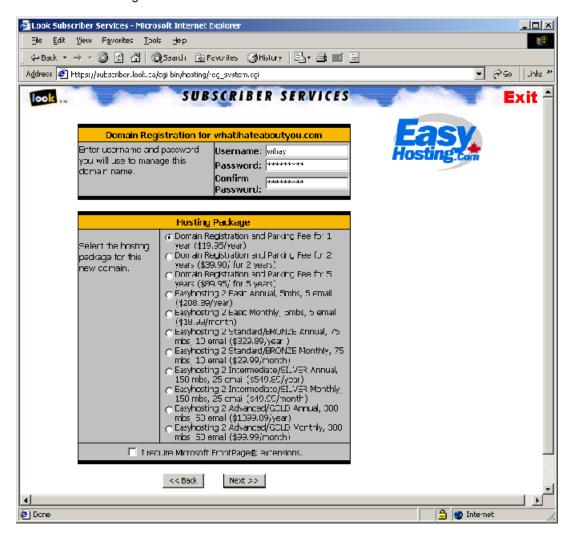


In the above example the domain **whatihateaboutyou.com** is available, an offer to register the domain is displayed.

To register the domain, click on Reserve Now!

Registering a Domain at look.ca

Consider the following:



In the above example is two areas of **critical information**:

At the top of the screen is the **username** and **password** used to manage the domain.

DO NOT LOSE THIS INFORMATION!

Without it, you will not be able to transfer the domain away from look.ca!

The section section is equally important, since it concerns **money**. There are a variety of billing options available from **look.ca**. The registration option we are most interested in is the **Domain Registration and Parking Fee for 1 year (\$19.95/year)** option.

Enter the appropriate information, note the username and password down, click on Next

The Three Contacts In A Domain Registration

Domain registrations require three areas of information

- 1. Technical Information
- 2. Contact Information
- 3. Billing Information

In the old days, a registrar called InterNIC handled all Internet registrations. They figured that most organizations had three kinds of representatives:

- 1. Billing people in the accounting department
- 2. Technical people in the computer department
- 3. Contact people in administration

There is no reason why these three different contacts cannot be the same person, but because the Internet was originally designed to handle **large** organizations (i.e. schools, IBM, the US government) it was designed to handle the need to point to people in different departments, even different divisions or companies.

The look.ca Registration Form, Part 1

Consider the following:

Look Subsc	riber Services - Microsoft Internet	Explorer	×	
Ele Edit	View Favorites Tools ∃ep		3	
→ Bauk → → Ø ② △				
A <u>d</u> dress <mark>€</mark> F	ttps://subscriber.look.ca/cgi-bin/hosting/	^l rog_svstom.cgi	•	
		Domain Information		
Domains Desired: whatinateaboutycu.com				
		tion Period: 1 Year -		
		Profile: New		
Registration Type: New Domain				
	Hrst Name:			
	Last Name:			
	Organization Name:			
	Street Address:			
	cptchal Address 2:			
	cptchal Address 3:			
	□tty:			
	Province/State:	(i.e. ON for Ontario/O+ for Ohe)		
	Country:	Canada		
	Postal/Zip Dode:	(i.e. a1A La1 / 12345)		
	Phone Number:	(1.5, 999-000-9999)		
	^optional* Fax Number:			
	Fmail:			
Done			🔒 🌍 Inbernet	

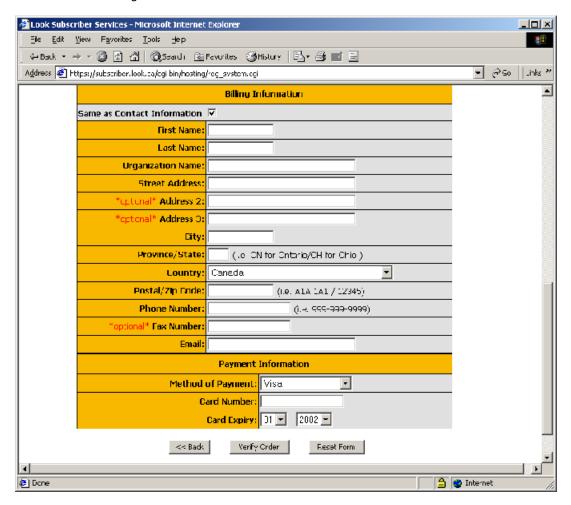
In the above example the look.ca website is requesting **Contact Information**.

NOTE: The look.ca registration engine assumes that you intend to host your domain with them. Due to this assumption, the **look.ca** registration process does not gather the **Technical Contact** Information. It invisibly populates these fields with **look.ca** information.

The look.ca Registration Form, Part 2

The next area of information is the **Billing Contact** Information, as well as information supporting the **credit card payment option**.

Consider the following:

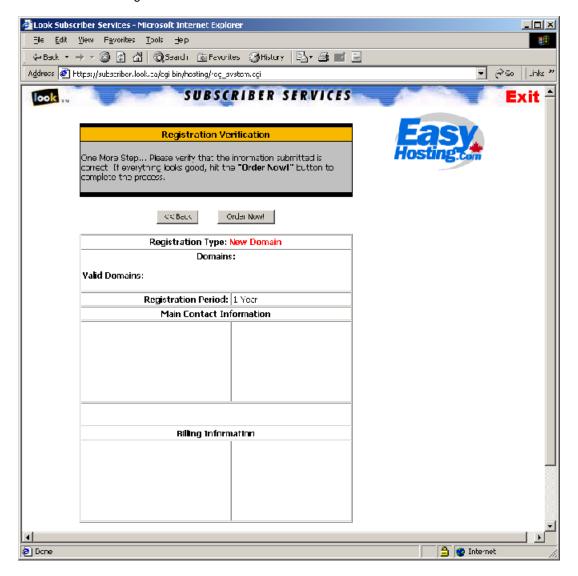


In the above example the look.ca website is requesting **Billing Information**, including **credit card** information.

Registering a Domain at look.ca, page 3

Once the appropriate information has been gathered, the look.ca domain registration website displays a summary sheet for the customer to examine. This is the step where the customer can correct or add any information they feel is required.

Consider the following:



In the above example, the look.ca website is displaying a confirmation summary of all the information that has been supplied by the user thus far.

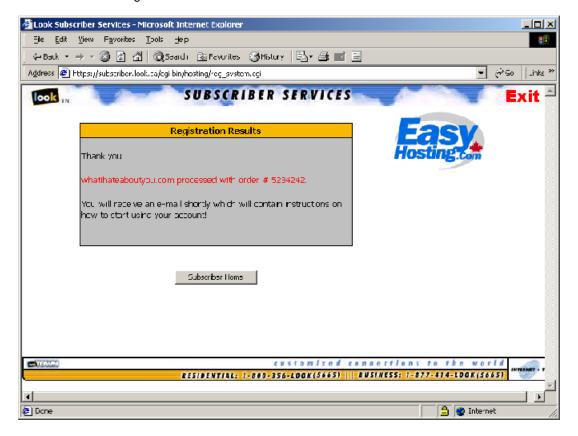
NOTE: Information has been removed from this form to protect the confidentiality of the domain being registered. When you register a domain using this guide, the screen will bear a summary of the information you supplied to **look.ca**. Examine it carefully.

The Registration Confirmation Message

Once the summary has been approved, the look.ca website:

- 1. Authorizes and bills the supplied credit card account
- 2. Processes the form information
- 3. Supplies feedback to the client on the status of their order.

Consider the following:



In the above example the look.ca website has processed the information supplied by the customer and issued a confirmation message and instructions on what they should expect to see (and do) next.

The Registration Confirmation Email

The next step in the domain registration process is to wait for a confirmation email to arrive at the email account supplied in the registration process.

Consider the following:



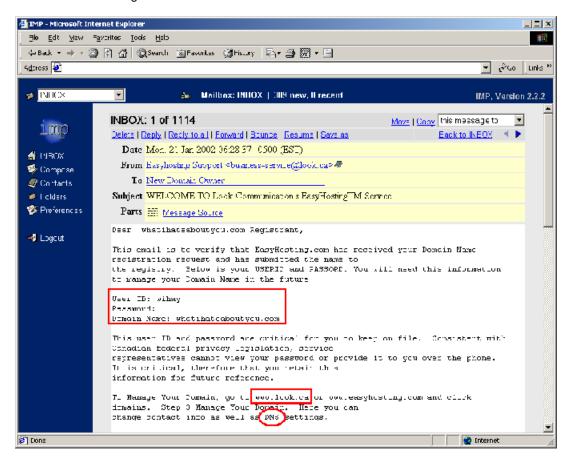
In the above example an email from **Easyhosting Support** (Easyhosting is another name for **look.ca**) concerning the **Look Communication's EasyHostingTM Service**.

This email confirms that the domain is ready and signals the beginning of the domain transfer process.

Details of the Registration Confirmation Email

Using the information within the email, the domain transfer process can begin.

Consider the following:



In the above example, the email from **Easyhosting Support** details the **domain**, **username** and **password** that concern your domain registration. This information is outlined by a large square for emphasis.

Furthermore, the email contains instructions (at the bottom) on where to go to manage the domain (small square), including a reference that you can change the DNS settings there (small circle).

Internet Hosting Companies

For the purposes of this example, the **whatihateaboutyou.com** domain will be hosted by **imperators.ca**, a Canadian company, but the website for the domain will be hosted on a physical machine that is privately managed.

In other words, while **imperators.ca** will host the **DNS** records for **whatihateaboutyou.com**, it will not host the actual website. Sometimes companies want their **DNS** to be always available even when their website isn't. This may be due to the fact that companies that **host DNS** are required to maintain **two** separate **DNS servers** when their agreement with their Internet provider only allows for a **single IP address**. Some do it because the company that is hosting their **DNS** is also receiving mail for them should their mail server ever become unavailable, preventing bounced emails. It is fairly common.

It is prudent (and quite instructive) to research your hosting company – especially in these days of failing dotcoms. One means of researching the company is the WHOIS database.

WHOIS

The WHOIS database, a global repository of Internet-related information about companies. There are many WHOIS servers, divided according to the different Top Level Domains (TLD):

.com

The .com WHOIS database can be queried online at the *American Registry for Internet Numbers* (ARIN), available at **www.arin.net**.

.hk & .hk.com

There are two main Hong Kong registrars, the .hk registrar is HKNIC, available at http://web.hkdnr.net.hk and SARNIC, available at http://www.sarnic.hk.com.

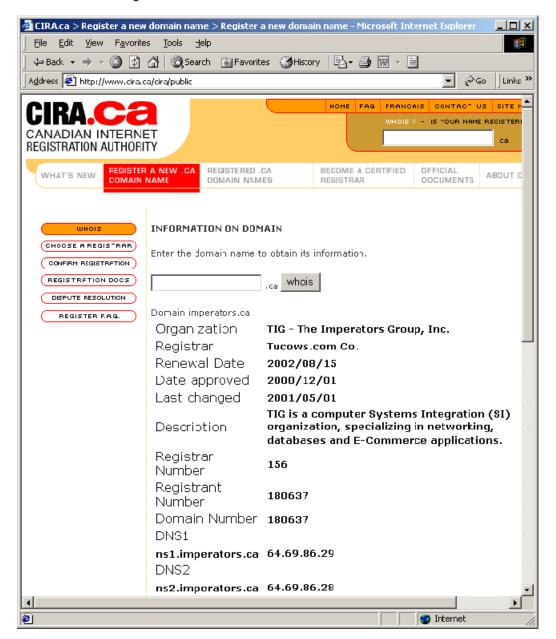
.ca

The Canadian registrar is the Canadian Internet Registration Authority (CIRA), available at http://www.cira.ca.

Researching The Hosting Company With WHOIS

There is a lot of useful information held within the WHOIS database. Some of it is generally useful, like their listing of the **purpose** of the company. Other information is more to the point.

Consider the following:



In the above example the CIRA WHOIS database has returned information about the domain **imperators.ca**. What is most immediately important is the information about the **name servers**. Take special note of the **Fully Qualified Domain Names (FQDN)** of the **imperators.ca name servers**, as well as their **IP Addresses** - this information is crucial to a successful domain transfer.

Armed with the **name server** information for our new hosting company, we can now go ahead with moving the domain from **look.ca** to **imperators.ca**.

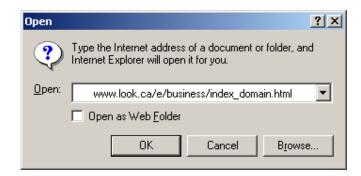
What Is Involved with Moving A Domain

Two tasks need to be completed to successfully move a domain.

- 1. The name server records for the domain need to be changed
- 2. The contact information must be validated
 - a. Administrative
 - b. Billing
 - c. Technical (particularly for look.ca registrations)

The place to do this is in the domain management section of the look.ca website.

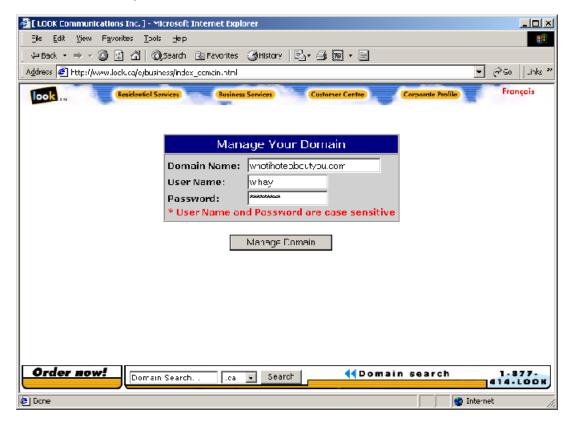
The URL for this site is http://www.look.ca/e/business/index_domain.html.



Moving Away From look.ca

The first step in transferring a domain away from **look.ca** is to log in to the domain management website at **look.ca**.

Consider the following:



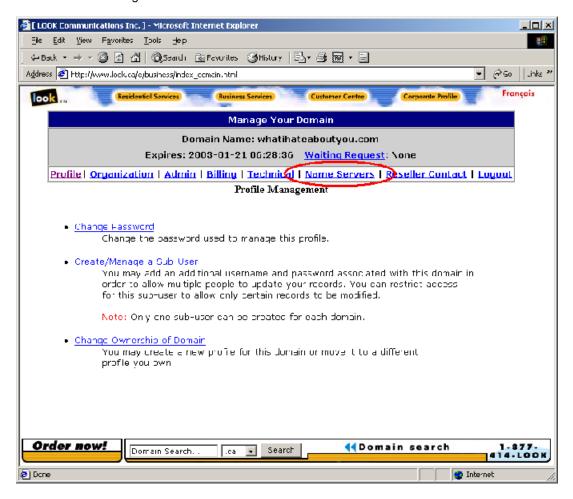
In the above example we are about to enter the **look.ca** domain management website. The username and password has been entered in the appropriate fields in the **Manage Your Domain** dialog box.

Click on Manage Domain to continue

Changing The Name Server Assignments, Part I

After entering the **look.ca** management website, the first task is to change the assignment of the **name servers** for the domain.

Consider the following:



In the above example the main page of the **look.ca** domain management website is displayed.

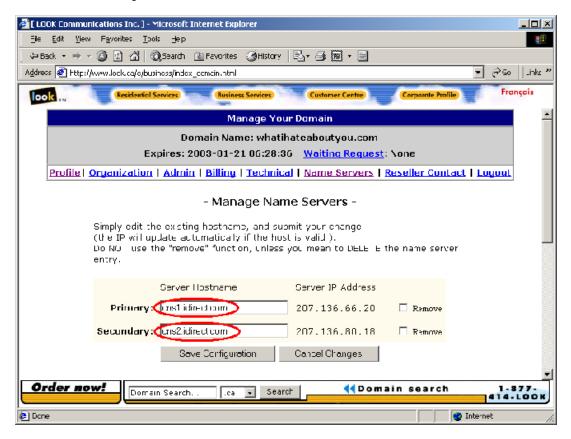
The function to change the name server assignments, **Name Servers** is circled.

Changing The Name Server Assignments, Part II

Because the **look.ca** registration process assumes that the domain will be hosted at **look.ca**, certain information was entered in the domain registration that must be corrected for a successful domain transfer to happen.

In particular, the **name server** assignments must be changed from that for **look.ca** to the new hosting company, **imperators.ca**.

Consider the following:

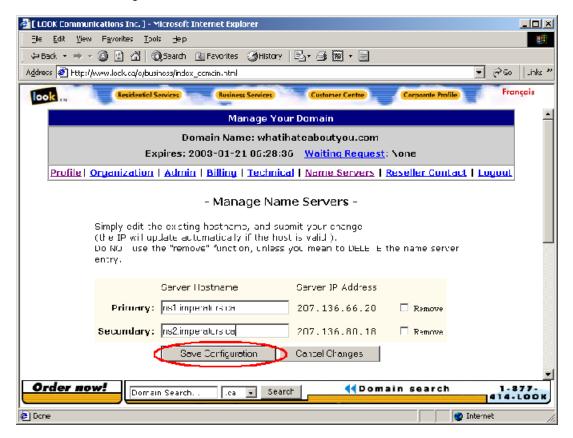


In the above example the **name server assignments** for the domain **whatihateaboutyou.com** are displayed. These assignments are **INCORRECT** and need to be changed to the **imperators.ca** values we gathered while researching the WHOIS information for that company.

Changing The Name Server Assignments, Part III

The **look.ca** name server assignments area features an **auto-verify** function. Simply enter the **names** of the **imperators.ca** name servers and click on the **Save Configuration** button and the page will be automatically updated.

Consider the following:

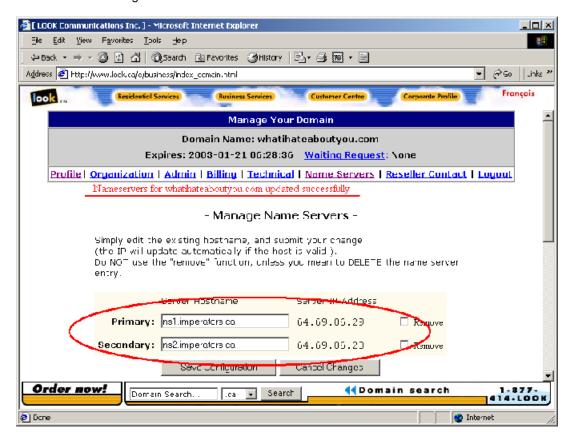


In the above example the **names** of the **imperators.ca** web servers has been entered in the appropriate fields, but their corresponding **IP addresses** have not yet appeared because we have not yet pressed the **Save Configuration** button.

Changing The Name Server Assignments, Part IV

Once the **Save Configuration** button has been pressed, the page will be updated and the **IP** addresses that match the **name server names** will appear on the right side of the page.

Consider the following:

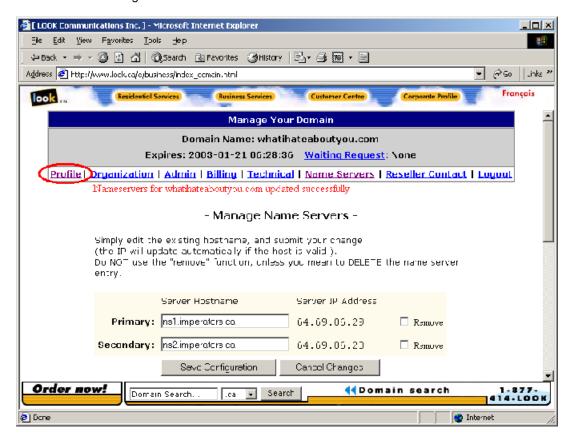


In the above example the **IP addresses** of the supplied name servers appears to the right of the names (circled). A confirmation message (underlined) appears towards the top of the screen, indicating that the **name server** information for the domain **whatihateaboutyou.com** has been updated.

Changing The Account Profile, Part I

Once the **name server** assignments have been shifted, the only remaining task is to verify/correct the **contact information** for the domain. Fortunately, information for one contact can be used to update the others in one simple operation.

Consider the following:



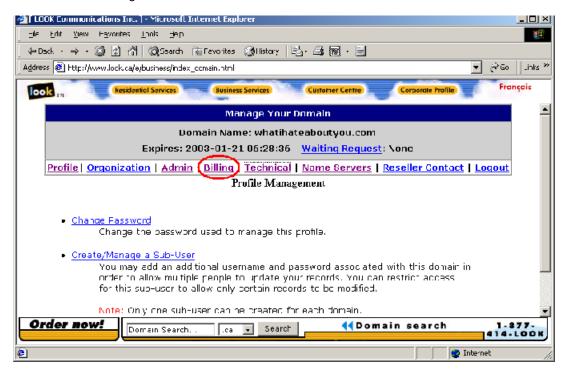
In the above example the **name server** assignments for **whatihateaboutyou.com** has been successfully updated. At this point the **profile** information is now the next step to accomplish.

To enter the **profile** editor, click on the top menu item labeled **profile** (circled).

Changing The Account Profile, Part II

Once the **profile** information appears on-screen, click on any of the contact-related menu items (Admin, Billing, Technical). In our example we will update the **Billing** information and use that information to update the **Technical** and **Admin** information in one operation.

Consider the following:



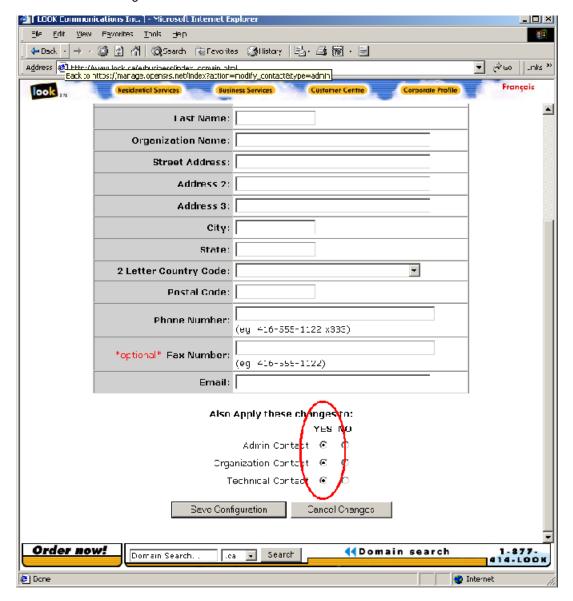
In the above example the **Billing** information will be used to update all of the contact information for the domain **whatihateaboutyou.com**.

Click on Billing (circled) to continue.

Changing The Account Profile, Part III

The **Billing** contact information is standard and should match the information you supplied when you originally reserved the domain with **look.ca**. Verify that the information is correct, indicate that this information should be used to update **all** of the contact information for the domain (circled) and then click on **Save Configuration**.

Consider the following:



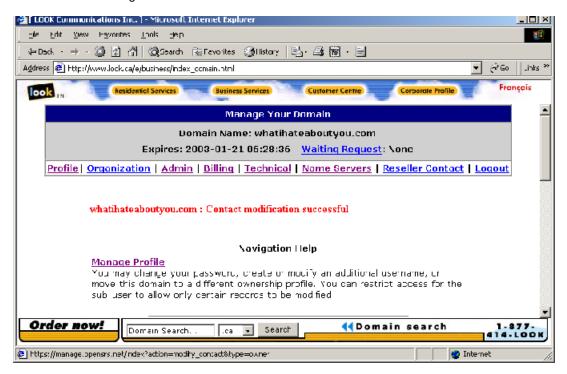
In the above example the **Billing Contact** information is being used to update **all** of the contact information via the **Also Apply these changes to:** function.

Click on Save Configuration to continue.

Receiving The Account Modification Confirmation

Once the **contact information** has been updated a confirmation message will appear.

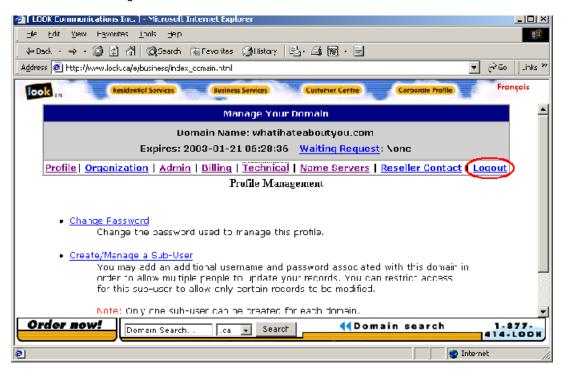
Consider the following:



In the above example appears a **confirmation message** from **look.ca** indicating that the **Contact Information** for the domain **whatihateaboutyou.com** has been successfully modified.

Leaving the look.ca Domain Management Website

Consider the following:



In the above example, the domain transfer process is now complete and the **look.ca** website can now be exited.

Click on Logout to exit.