

Journey to the Right of the Dot: ICANN's New Web Extensions

On November 16, 2000, seven new generic Top-Level Domains (gTLDs) were approved for use on the Internet. These new gTLDs – *.biz*, *.info*, *.name*, *.pro*, *.aero*, *.coop*, and *.museum* – are expected to be available for use by the end of 2001.

This white paper will explain in layman's terms why new gTLDs are being introduced, how and why these seven were chosen, and how and when consumers and businesses can begin requesting, registering and using them.

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Executive Summary:

The seven new Web extensions chosen by the Internet Corporation for Assigned Names and Numbers (ICANN) represent the first major expansion of the domain space ever undertaken. It's important for companies and individuals to understand how they can maximize their chances of getting the Web addresses they want.

Though some of the new extensions have more restrictions on them than the existing ones, they are still open to large classes of organizations and individuals. Thus, groups that know they want a specific Domain Name should act now to request it, through one of the several registrars offering this service.

It's important to note that requesting a Domain Name does not guarantee it will eventually be registered in the applicant's name. Most registries will process their accumulated requests in random order, and will register each name based on the first request for that name processed. All other requests for that name will be denied. Trademark holders may have the opportunity to request names in some extensions before they are available to the general public, but here too there are no guarantees. For both businesses and consumers, filing domain name requests as soon as possible is the best way to increase the chances of a successful registration.

New Names – Why Now?

On November 16, 2000, the Internet Corporation for Assigned Names and Numbers (ICANN) announced that seven new generic Top-Level Domains (gTLDs) had been selected for use beginning in 2001¹. The new gTLDs, also known as “Web extensions,” were selected based on several factors, but all towards the goal of continuing the stable growth of the Internet.

To understand the significance of the new extensions, it makes sense to think of Web addresses as akin to phone numbers, and the new gTLDs as new area codes. In this framework, *.com*, *.net*, and *.org* can be seen as the (800) numbers of the Internet phone book – effective, powerful, and (for the best combinations of letters or numbers) hard to come by. The new gTLDs are comparable to the recently introduced (888) and (877) toll-free area codes, which extended an established communications tool by increasing the number of useful, memorable addresses available.

Before we discuss each of the new gTLDs in detail, it is useful to remember the reasons for new Web extensions in general. Reasons for creating new gTLDs are numerous and include:

- *The overcrowding of dot-com.* The gTLDs currently available to the general public – *.com*, *.net*, and *.org*, – were chosen in the early days of the Internet, when it was used solely by government and educational institutions. In the 1990s, *.com* took the lead as the most popular gTLD, and today it accounts for eighty percent of all registered Domain Names². This popularity has led to much of the *.com* space being reserved, making it harder for individuals and corporations to register meaningful, memorable Domain Names. New gTLDs will create new opportunities for companies and individuals to establish their unique identities on the Web.
- *Reflecting the Web’s global nature.* Though the Web’s roots are in U.S. Defense Department research, the Internet today is a global medium. New gTLDs should reflect the needs and preferences of the international Internet community.
- *Supporting the goals of the original extensions.* The original gTLDs were intended to make the Internet more navigable by separating addresses into categories based on the registering organization or individual. Meaningful gTLDs let a site’s address convey more information about the site’s owner, and also increase the overall number of possible Domain Names. The addition of new gTLDs will let more companies and individuals get the Domain Name they want, and will help those names mean more.

International Corporation for Assigned Names and Numbers (ICANN) – the group formed in 1998 to handle administration of the Internet. The group’s mission is to maintain the operational stability of the Internet and ensure its utility for the worldwide Internet community.

Top-Level Domain (TLD) – the extension that ends a full Domain Name, the most common of which is dot-com. TLDs tell Internet servers what registry to look for an address in. The two classes of TLDs are generic (gTLDs), like *.com*, *.net*, and *.org*, and country code (ccTLDs), like *.co.uk* for the United Kingdom and *.de* for Germany.

¹ ICANN News Release, “ICANN Announces Selections for New Top-Level Domains,” 11/16/00

² VeriSign’s DotCom Research Web site, <http://www.dotcom.com/facts/quickstats.html>, viewed 3/14/01

- *Decreasing the potential for 'cybersquatting'.* The Internet Corporation for Assigned Names and Numbers (ICANN) believes that individuals and companies who reserve Domain Names to sell (rather than to use) inhibit the natural growth of the Internet. New batches of Domain Names should make attractive names less scarce, and thus, less attractive to cybersquatters. Additionally, applying and enforcing restrictions as to who may register names in each new gTLD should make it more difficult for cybersquatters to register names in bad faith.

There are some arguments against new gTLDs, including the potential for consumer confusion and the increased burden on trademark holders, but the arguments in favor of expansion have been judged to carry more weight.

New gTLDs: The Magnificent (?) Seven

Though some say new gTLDs have been justified for years³, this is the first major expansion of the Domain Name system since it was introduced in 1985⁴. Thus, another goal of this expansion is to enable ICANN to test the process of creating new gTLDs.

Each new Web extension was selected based on a proposal from a group that aspired to run the new extension's registry. There were 44 proposals for over a hundred extensions⁵, and in the end, the business plan, experience and geographical location of the proposing groups factored into the selection as much as the proposed extension itself⁶.

With this in mind, it makes sense that the new gTLDs are a varied bunch. Though the process of introducing a new Web extension into the Internet infrastructure is fairly simple, establishing and maintaining a new registry is complex, and some attractive extensions were seemingly undone by unstable business plans. So, while these gTLDs may not appear to be the ones which would most ease congestion on today's Internet, it makes sense to assume that the number of gTLDs will continue to grow, as more companies gain expertise at running registries and ICANN becomes more comfortable with the process of introducing new gTLDs. Indeed, ICANN stated that a main criterion for evaluating this set of proposals (second only to "the need to maintain the Internet's stability") was "the extent to which selection of the proposal would lead to an effective 'proof of concept' concerning the introduction of top-level domains in the future."⁷

Registry – the database of information that runs a gTLD. The database includes what Domain Names are registered, who registered them, and what servers each reserved address should point to.

Registrar – a business that enables consumers and businesses to register Domain Names with a gTLD's central registry. Potential registrants must request a specific name from a registrar, which then checks with the registry to see if the name is available and reports back to the registrant. Each gTLD has only one registry, but each gTLD's registry can have an unlimited number of registrars feeding into it.

³ Karl Auerbach, CNN Digital Jam interview, November 6, 2000 19:30:00 pm ET

⁴ VeriSign's DotCom Research page, <http://www.dotcom.com/facts/funfacts.html>, viewed 3/14/01

⁵ ICANN Web site, "New TLD Program Application Process Archive," <http://www.icann.org/tlds/app-index.htm>, viewed on 3/9/01

⁶ ICANN Web site, "Report on TLD Applications: Application of the August 15 Criteria to Each Category or Group," 11/9/00, <http://www.icann.org/tlds/report/report-iiib1a-09nov00.htm>, viewed on 3/14/01.

⁷ Ibid.

Of the seven new gTLDs, four are “unsponsored,” meaning the registries are relatively open and will be run as for-profit businesses. These are the *.biz*, *.info*, *.name* and *.pro* registries. There are also three “sponsored” gTLDs, which will be run by their sponsoring organizations for a small constituency of potential registrants (though anyone may visit the sites). They are *.aero*, *.coop*, and *.museum*.

As we review the new gTLDs, it helps to remember one of the goals of the original extensions: to make the Internet more navigable by separating addresses into categories based on the registering organization or individual.

.biz was selected to open up a section of the Web solely for businesses. While the *.com* gTLD is also for businesses, the *.biz* extension will specifically target commercial organizations by requiring registrants to certify they will use the site for “legitimate commercial use.”

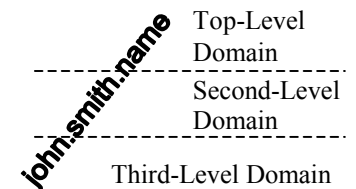
.info sites will provide general information, and are intended for both companies and individuals. *.info* is seen as an internationally friendly Web extension, as the word “information” translates similarly across many languages. The *.info* registry will be run by a consortium of 18 leading registrars, the combined experience of which was attractive to the Internet Corporation for Assigned Names and Numbers (ICANN).

.name sites will allow individuals to have a section of the Web zoned solely for personal use. The *.name* registry will only allow registration of third-level Domain Names – the “jane” part of “jane.smith.name” – to allow for a greater number of personal Web addresses. The registry will also allow the request and registration of specific email addresses within second-level names, i.e. firstname@lastname.name. This registry will be run by a British company, supporting ICANN’s goal to increase the geographical diversity of the registries.

.pro is intended for use exclusively by “professionals,” such as lawyers, doctors, and accountants. As in the *.name* registry, only third-level Domain Names will be registered, as in “janesmith.law.pro.” Registrants will have to provide proof of their professional credentials to reserve a Domain Name in this space.

.aero sites are reserved for “legitimate members of the air transport industry and civil aviation sector” including airlines, airports, and related industry bodies⁸. This registry will be run by the Societe Internationale de Telecommunications Aeronautiques S C. SITA intends to keep third-level Domain Names consistent across most airports, as in “arrivals.jfk.aero.” SITA’s French headquarters support ICANN’s geographical diversity goals.

Top-level, Second-level and Third-level – these names correspond to different sections of a Domain Name. The “top-level” name at the end of the address is the most general, (i.e. “.com”); moving to the left leads to the second level, third level, etc. Each step to the left helps narrow down the address until it leads to a specific server.



⁸ SITA Web site, “Information for companies and organizations interested in registering domain names on the new “.aero” Top-Level Domain,” <http://www.sita.int/aero/info/compinfo.asp>, viewed 3/9/01

.coop will be run for “business cooperatives,” such as credit unions and rural electric cooperatives, by the National Cooperative Business Association (NCBA). **.coop** Domain Names will initially be available for registration only by members of the NCBA or an affiliated group.

.museum is intended for use as a sign of authenticity, to assure users that sources of information about cultural and scientific heritage are verifiable⁹. The Museum Domain Management Association, a non-profit trade association founded by the International Council of Museums and the J. Paul Getty Trust, will run this registry.

Requesting a New Place in Cyberspace

As stated above, each of the new Web extensions has its own set of rules and intended constituency. Some of the contracts between ICANN and the new registries are still being negotiated, so these guidelines are subject to change, but there are some commonalities.

In general, the existing proposals call for each registry to open with a special startup period, during which the registry will take preliminary requests for specific domain names, then process those requests in random order. This is done to ensure no registrant or registrar has an unfair advantage. (Some registries have proposed special provisions for trademark holders to reserve and/or protect relevant Domain Names in advance of general registration, but among trademark holders with claims to identical names, a similar process will apply.) Following the startup period, the registries will open for “realtime registration,” with names registered on a first-come, first-served basis.

The process of submitting Domain Names is already under way for *.biz*, *.info*, and *.name*. *.pro* is expected to begin taking requests by the end of 2001. The sponsored gTLDs (*.aero*, *.coop*, and *.museum*) are still negotiating their contracts with ICANN.

Several registrars are currently taking non-binding requests for Domain Names in the new gTLDs. If the registry for a new gTLD is not yet processing requests, each registrar will compile its own database. If a registrar receives multiple requests for the same name, it can add each of them to the set of requests that will eventually be processed by the appropriate registry.

Though there is no guarantee of success, corporations and individuals should act now to request any Domain Name they know they want. Even if a Domain Name seems too specific to require fast action, there is no reason not to file the request as early as possible, as there is generally little or no cost involved. Many registrars will process requests for free, and will only bill if the name is successfully registered. (One

Reminder:

Registry – the master database of information needed to run a gTLD.

Registrar – A business that acts as an interface between registrants and the registry. Any number of registrars can interact with the same registry. Registries must certify that they will treat all registrars equally.

⁹MuseDoma press release, “Dot-Museum (.Museum) Named As One Of Seven Winners In Expansion Of Internet Domain Names,” 11/20/00.

exception: the *.biz* registry charges a small fee for each request, so *.biz* requests are rarely offered for free by the registrars.)

Since most of the registries will process their queue of requests in random order, one way to increase the chances of getting a specific name is to submit more than one request. Methods of doing this vary from registry to registry. For *.biz*, customers can simply pay for multiple submissions of the same request. For *.info*, customers may typically only file one request per registrar for a given name, but may file requests at multiple registrars. More information on the specifics of requesting Domain Names in each new gTLD is listed in a table at the end of this report.

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| Queue – a list of requests or instructions, which are usually processed in the order in which they were received. |
|--|

An important final point on requesting Domain Names: both ICANN and the U.S. Federal Trade Commission¹⁰ have expressed the desire that registrars not charge for filing requests, since they cannot be guaranteed to be successful. Be wary of registrars which charge for this service for any gTLD other than *.biz*.

Calling All Web Sites

Domain Names in *.biz*, *.info*, and *.name* are expected to start resolving by Q4 2001, meaning end users will be able visit websites using addresses that end in those extensions. Soon after that, those registries should open for realtime registration, so any available Domain Names with those extensions can be registered immediately.

For the *.pro*, *.aero*, *.coop*, and *.museum* registries, the following steps must take place:

- Contracts must be negotiated between ICANN and the registries
- Contracts must be negotiated between registries and registrars
- Sunrise periods (if applicable) must be completed.

VeriSign will update this white paper and information on its Web site as information becomes available in the coming weeks and months.

Last updated November 5, 2001

¹⁰ FTC Web site, "What's Dot and What's Not: Domain Name Registration Scams, December 2000," <http://www.ftc.gov/bcp/online/pubs/alerts/domainalrt.htm>, viewed 3/14/01

Appendix A: More detailed information on reserving Domain Names in each new gTLD

| gTLD | Restrictions | Proposed Steps to Reserving a Domain Name | Proposed Trademark Guidelines | Registry |
|--------------|--|--|---|--|
| .biz | Commercial use by businesses and individuals | <p>Between June 25th* and September 21st, the .biz registry will take requests for specific Domain Names. The registry is charging a small application fee for each request; this fee is non-refundable, even if the application is unsuccessful. Customers may pay for multiple submissions to increase their chances of registering a specific name.</p> <p>Between September 22nd and 30th, all Domain Name requests from all registrars will be put into a single batch and processed in random order, thus ensuring no registrar or applicant receives any preference. Successful applicants will be notified and billed.</p> <p>.biz will be available for realtime registrations on November 5, 2001.</p> | <p>Trademark Claim Forms filed between May 21st and August 6th have been entered into a database. Anyone who requests a Domain Name which matches one in the database will be informed that someone has claimed a trademark of that name, but will be able to continue to file an application. Submission of a Trademark Claim Form does not create any special rights with respect to registering a particular Domain Name.</p> <p>If a Domain Name request which requests a name listed in the trademark database is successful, that name will be put on hold for 30 days, giving the trademark claimants the right to contest the registration through a standard dispute resolution process. If no successful challenge is filed, the Domain Name will automatically resolve to the registrant after 30 days; otherwise, it will resolve after the dispute is settled.</p> | NeuLevel, Inc. www.neulevel.biz |
| .info | Unrestricted; general use | .info is now available for realtime registrations. | During the Sunrise Period between July 25 th and August 27 th , owners of any valid and enforceable trademark or service mark registration having national effect that issued prior to October 2, 2000 were eligible to register a Domain Name that is identical to the textual or word elements of such trademark or service mark, using ASCII characters only. | Afilias, Ltd. www.afilias.info |

*All dates 2001 unless otherwise specified.

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|----------------|---|---|---|---|
| .name | Individuals | <p>Between August 15th and November 22nd, the .name registry is taking requests for domain names and email addresses.</p> <p>Startup requests will be processed in random order between November 22nd and December 13th. .name Domain Names and email addresses are expected to resolve beginning in December 13th. Requests will continue to be processed in batches intermittently until the registry begins taking realtime registrations in Q2 2002.</p> | <p>Since this gTLD is restricted to individuals, there should be minimal corporate trademark concerns. However, between August 15th and November 12th, corporations can request a “defensive registration” of their trademarks, blocking them from registration. This will prevent an individual from later registering, for example, “microsoft.smith.name”.</p> <p>The .name registry will also allow trademark holders to request reports of registrations that contain names which are identical to their trademarks.</p> | Global Name Registry www.gnr.com |
| .pro | Professionals and professional associations | Registration procedure yet to be made public by the registry, which hopes to open in Q4 2001. | Expects to offer a Sunrise Period ¹² , but since this gTLD is mostly restricted to individuals, there should be no major trademark concerns. | RegistryPro www.registrypro.com |
| .aero | Airlines and the air transport industry | Registration procedure yet to be made public by the registry. | Because the registry will monitor each request, it is expected to manage and arbitrate all trademark disputes. | Societe Internationale de Telecommunications Aeronautique www.sita.int |
| .coop | Business cooperatives | Registration procedure yet to be made public by the registry. | Because the registry will monitor each request, it is expected to manage and arbitrate all trademark disputes. | National Cooperative Business Association www.ncba.org |
| .museum | Museums | Registration procedure yet to be made public by the registry. | Because the registry will monitor each request, it is expected to manage and arbitrate all trademark disputes. | Museum Domain Management Association www.musedoma.org |

¹² Reuters - “ICANN: Launch of New Domain Names Behind Schedule,” Eric Lai, 3/2/01