

What is NAME.SPACE

<http://name.space>
<http://name.space.xs2.NET>

The paradigm implemented by name.space is the most pro-competitive, democratic and open system proposed so far with respect to opening up the administration and operation of the Domain-Name-System ("DNS"). The structure advocated by name.space removes the artificial barriers to entry that exist today as a result of the monopolistic control over the domain name registration market exerted by Network Solutions, Inc. ("NSI"). The name.space paradigm incorporates a fair, competitive structure which encourages investment and innovation by companies wishing to compete in the provision of this service which is essential to the operation and continued growth of the Internet.

pgMedia, Inc. has created, through substantial private investment in research and development, its name.space registry administered by thirteen toplevel gTLD-directory servers located in five countries. The name.space registry uses innovative and creative techniques which bring the old DNS out of the Cold War and into The 90'S.

The name.space system decentralizes the administration of DNS and enables open competition in the Public Domain Toplevel Namespace without regulation by any governments or quasi-governmental authority, nor does it require the enactment of new laws or regulations.

Description of the name.space service:

On the name.space system, name registrations are taken by registrars who administer client accounts under the given toplevel name categories (publicly shared toplevel namespace). All registrars must register their digital ID with a trusted third party/parties which authenticates and authorizes them to function as registries. The application process is administered by an independent company, similar to the process used by banks when authorizing merchant credit-card accounts, and the operation of secure servers used in commercial transactions on the Internet today.

Registries update the database on demand based on the availability of a given name address using the SINDI system (SINDI= Integral Database Synchronization Demon), a secure protocol developed by pgMedia which is available, without limitation or charge. (A description of the SINDI protocol can be found at <http://namespace.xs2.net/sindi>). SINDI makes it technically feasible for ALL registries to share the toplevel namespace equally, eliminating any technical justification for "exclusive" control over any given toplevel name by a single registry, such as NSI currently enjoys with ".com".

Registration is accomplished instantaneously through an interactive, form-based interface on the World Wide Web with online payment options via a secure server. During the registration process, a registrant establishes an account, a contact "handle" and, of course its "name". The registrant has

the option to choose whether or not its personal contact information will be publicly listed. All other account information, of course, remains confidential. The registrant may then establish a Portable Address Record, over which it has full administrative access on the name.space nameservers. This service allows a registrant to change service providers and easily take its "name" to a new host without delay or complications. Upon completion of the registration process by the registrant, the name.space system immediately processes the information and creates the second level entry into the toplevel database, which is then distributed to all other root-servers via the SINDI protocol. The registration process and the creation of Portable Address Records are instantaneous, and function on the Internet within minutes, not days or weeks as in the current system.

Issues and Answers:

Under the name.space paradigm, the toplevel namespace functions as a Global Directory Service and would be managed within the competitive marketplace in the general interest of the Internet public through the various independent registrars. Each generic TLD ("gTLD") is administered by all registrars who wish to offer services thereunder with no exclusive claim of ownership of any toplevel name by any individual, corporation or government, subject to existing intellectual property law.

These gTLDs may be added or removed based on public demand. Also, gTLDs may include languages other than English, limited only to the US ASCII character set, the English alphabet plus 10 digits and the hyphen for a total of 37 characters.

All leading authorities are in agreement that there is no limit to the number of possible toplevel names, as there is no limit to the number of root directories under the UNIX file system. As NSI admits:

"DNS is highly scaleable. There is no technical limit to the number of new top-level names that could be introduced. The original designer of DNS, Paul Mockapetris, has verified the scalability of DNS."

(<http://rs.internic.net/nic-support/nicnews/jun97/MYTHS4.html>)

Thus, any claim that expanding the toplevel namespace is technically not feasible is simply unfounded. The proponents of such claims seem to be guided by a desire to limit the potential market so as to create an artificial scarcity which translate into higher prices and profits.

The use of arbitrarily defined and limited categories such as ".com" has forced many registrants to engage in verbal gymnastics, and to rely on unwieldy content-based search engines - this would be obviated by the full implementation of the name.space paradigm. Thus, for example, Acme.computers and Acme.plumbing could both have a presence on the Internet without having to artificially pervert their names. The "byte-counter mentality," which has plagued us with the dreaded "Millennium Bug," was responsible for the initial constraints on the toplevel domain name nomenclature. The name.space system simply recognizes that such limitations have long since been eliminated and are wholly artificial.

With respect to intellectual property issues, no regulatory framework can assure the complete protection of holders of such rights against infringement by unauthorized parties. However, the potential for such infringement, which exists in all published media, should not be used as a basis to limit the free speech rights of the vast majority of law abiding users of the Internet, while protecting artificial monopolies. Furthermore, it is wholly inappropriate to empower any registrar to adjudicate the rights of holders of intellectual property, for that role must ultimately reside with the courts.

Fees for registration services should be dictated by the market. Waiver of fees and discounts should be considered for qualifying educational and non-profit organizations, as well as a selection of totally free categories (such as the Free.Zone provided currently by name.space).

In conclusion, name.space has developed and implemented a new paradigm for the Global Directory Services on the Internet by bringing the function of the old DNS, a legacy of the Cold War, into sync with the current dynamic of the public, global, civilian and commercial Internet.

The name.space system is a reality today. The name.space automated registry has been fully functional for nearly one year now and has proven its reliability and desirability as evidenced by the thousands of users who have been using the name.space servers to resolve their DNS and those who have registered their names in name.space.

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