

Summary Report on Reservation of Third Level Domains

Report for RN-WG

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1. Background

A. General Background

There are currently two TLDs that expressly reserve names at the third level, .pro and .name. In these two TLDs, domain names at the second level serve essentially as TLDs; the second level names are not registered to individual owners. Instead, they serve as quasi-domains where individual owners can register their individual domain name at the third level.

i. .Pro

The .pro TLD was proposed by RegistryPro as an unsponsored TLD restricted to registrations by persons and entities that provide professional services and are credentialed by governmental bodies, professional organizations and other appropriate entities. A key feature of the proposal, and one mentioned in the Board's selection process, is that the registration process for .pro provides a highly trustworthy framework for registrations by professionals.

The .pro TLD has second-level domains for specific professions, such as .med.pro for physicians. Members of the medical, legal, accounting and engineering professions, licensed in the United States, Canada, Germany or the United Kingdom, are eligible to register for third-level .Pro domains within the appropriate profession-specific second level domain (PS-SLD). Registrants can secure profession-specific third-level names such as [name].law.pro, [name].med.pro and [name].cpa.pro.

ii. .Name

The .name TLD was established by The Global Name Registry, Ltd. in 2002 as an unsponsored TLD where the second level represented the proper names of individuals (e.g., smith.name), including fictional characters for whom the registrant has rights. The third level would be the given name of a person (e.g., John.Smith.name) or fictional character (e.g., Harry.Potter.name), and could be registered by an individual or rightsholder.

B. Types of Reservations, Restrictions and Prohibitions

i. Prohibited Third-Level Labels

Appendix L to the Registry Agreements for .Pro and .Name specify certain strings (or "labels") that are not available for registration.

a. Prohibited Third-Level .pro Labels.

For .Pro, the prohibited third-level labels are:

av, ca, cca, cert, certificate, dir, directory, email, grpa, http, mail, mx, mx[followed by a number from 0 to 100], ns, ns[followed by a number from 0 to 100], pro, registrypro, verify, verification, wap, www and www[followed by a number from 0 to 100]. However, names having third-level labels that include any of the foregoing words and strings may be registered, such as dirksen.med.pro. (Section 2.4)

b. Prohibited Third-Level .name Labels.

For .Name, the prohibited third-level labels are:

dir, directory, email, genealogy, http, mail, mx, mx[followed by a number from 0 to 100], ns, ns[followed by a number from 0 to 100], wap, www and www[followed by a number from 0 to 100]. However, names having third-level labels that include any of the foregoing words and strings may be registered, such as dirk.smith.name. (Section 0.e)

ii. ICANN and IANA Reserved Names.

Appendix K to both Registry Agreements includes a list of names that are reserved “at all other levels within the TLD at which Registry Operator makes registrations.” Thus, these names are reserved at the third level. The names listed are the “ICANN and IANA Reserved Names,” which are dealt with in the report of that name. These Reserved Names are:

ICANN:

- aso
- dnso
- icann
- internic
- pso

IANA-related names:

- afrinic
- apnic
- arin
- example
- gtld-servers
- iab
- iana

- iana-servers
- iesg
- ietf
- irtf
- istf
- lacnic
- latnic
- rfc-editor
- ripe
- root-servers

iii. Patterns of names staying with the registry.

Appendix X to the Registry Agreements specifies that “directory” and “www” are not available for registration at the third level and will be delegated to the registry, as follows:

a. .Pro

1. directory.<PS-SLD>.pro
2. www.<PS-SLD>.pro

b. .Name

1. Directory.<second-level name>.name
2. www.<second-level name>.name

iv. Names Registered to Registry Operator

We note that Appendix X also lists certain names registered to the Registry Operator (and identified in the respective Appendices X for .name and .pro). These names are not dealt with here, since these are second level names and they are registered (or at least registerable) by the Registry Operator, and not reserved.

2. Role of Third Level Domain Name Reservation Requirement

Based on our discussions with experts, it appears that the role of the names specifically reserved at the third level is primarily to combat security concerns (e.g., a party registering www.med.pro could pose as the registrar for that domain). As a secondary matter, they may be needed overcome technical challenges presented by ‘double’ addresses (e.g., www.www.med.pro) and, to a lesser extent, consumer confusion. No documentation has been identified to date which provided the rationale for the reserved names.

3. Straw Recommendations to the Entire WG

We do not recommend any change in the treatment of “prohibited third level labels” and “patterns of names staying with the registry.” The ICANN and IANA reserved names at the third level should be harmonized with the recommendations regarding those names at the second level.

Description of Current Reserved Name Requirement			
Prohibited labels at the 3 rd level (dir, directory, email, http, mail, mx, mx[followed by a number from 0 to 100], ns, ns[followed by a number from 0 to 100], wap, www and www[followed by a number from 0 to 100] for .name and .pro) (av, ca, cca, cert, certificate, grpa, pro, registrypro, verify, and verification for .pro only) (genealogy for .name only)			
Level	Type	More Work?	Recommendations
3 rd	ASCII	No	N/A
3 rd	IDN	No	N/A
ICANN & IANA related names at the 3 rd level (for .name and .pro only)			
Level	Type	More Work?	Recommendations
3 rd	ASCII	No	N/A
3 rd	IDN	No	N/A
Patterns of names at the 3 rd level staying with the registry (for .name and .pro only)			
Level	Type	More Work?	Recommendations
3 rd	ASCII	No	N/A
3 rd	IDN	No	N/A

4. Consultation with Experts

The list of restricted names for both registries is very similar (though the restrictions for .name do not include av, ca, cca, cert and certificate). The decisions regarding these reserved names date back to 2001, and neither we nor the registries have been able to identify any documents that exist and which provide any context or detailing, for example, why: (i) these names were selected, (ii) the class of .name restrictions is more narrow than .pro; (iii) other names that were considered and rejected; etc.

However, in speaking with the registry experts it was learned that a common sense approach was taken to identify names that could cause security concerns and which should naturally be reserved (e.g., fraud concerns where a registrant poses as a registry through domain registrations such as www.law.pro). While security concerns outweighed technical limitations, there are scalability issues that helped identify names to be reserved at the third level. For example, where a very large number of users are added to a specific third level domain (e.g., [first name].smith.name). An example of this could be the email services offered by the .name registry which may cause it to partition off certain parts of its system to handle such larger levels (e.g., mx[1:100].smith.name and ns[1:100].smith.name). In short, the names selected for reservation were chosen through considered deliberation aimed at identifying names that may lend themselves to abuse and/or public confusion as well as functional needs of each registry.

As to IDNs, the opinion among the registries and the working group is that the approach adopted as to second level IDNs (e.g., if local equivalents are reserved) should likewise apply to the third level – particularly given that through certain mechanics of Registry Agreements some second level name reservations are applied to the third level (i.e., the names reserved pursuant to Appendix K of the agreements apply to both the second and third levels).

It is the working group’s opinion that no expert consultation is required beyond what has already been obtained from the .pro and .name registry experts given that this category is very unique to the business model, and the reserved names are, on their face, sufficiently reasonable as to warrant acceptance without significant expert involvement.

5. Summary of Information Sources

- A. ICANN Accra Meeting Topic: Approval of Registry Agreement for .pro. Discussion of proposal for .pro. (posted 7 March 2002, available at: <http://www.icann.org/accra/pro-agmt-topic.htm>)
- B. Website for Registry Pro, the exclusive Operator of .pro domains (http://nic.pro/products_overview.htm)
- C. .pro Registry Agreement (<http://www.icann.org/tlds/agreements/pro/>)
- D. .name Registry Agreement (<http://www.icann.org/tlds/agreements/name/>)
- E. Appendix L to Registry Agreements: Prohibited Names.

Appendix L to the Registry Agreements for .Pro and .Name specify “labels” that are not available for registrations. (<http://www.icann.org/tlds/agreements/pro/registry-agmt-appl-30sep04.htm>) (<http://www.icann.org/tlds/agreements/name/registry-agmt-appl-8aug03.htm>)

- F. Appendix K to Registry Agreements: Reserved Names.

Appendix K to both Registry Agreements includes a list of “Names Reserved at All Levels”; these are the “ICANN and IANA Reserved Names.” (<http://www.icann.org/tlds/agreements/pro/registry-agmt-appk-21may04.htm>) (<http://www.icann.org/tlds/agreements/name/registry-agmt-appk-8aug03.htm>).

- G. Appendix X to Registry Agreement: Names Registered to Registry Operator.

Appendix X lists certain strings that are registered to the Registry Operator at the third level – specifically “www” and “directory.”

(<http://www.icann.org/tlds/agreements/pro/registry-agmt-appx-21may04.htm>) (<http://www.icann.org/tlds/agreements/name/registry-agmt-appx-8aug03.htm>).