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TLD names usage advice
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Abstract

This document analyzes the TLD names usage and gives some advices.

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Table of Contents

1. Introduction 3
1.1. Terminology 3
2. Current situations for TLD names 3
2.1. TLD names in the DNS zones 3
2.2. TLD names in the DNS stub resolvers 3
2.3. TLD names in the application 3
3. TLD name usage advice 4
4. IANA Considerations 4
5. Security Considerations 4
6. Acknowledgements 4
7. Change History 4
7.1. draft-yao-dnsop-tld-name: Version 00 4
8. Normative References 4
Author's Address 5

1. Introduction

The new generic top-level domain (gTLD) program of ICANN will introduce thousands of new TLD names to the root of the domain name system (DNS). Many new TLD names are the names or brands of some companies. These companies may want to use these TLD names directly in the application. If ABCD company has the TLD name "ABCD", this company may try to configure some DNS records for "ABCD" and uses it in some applications such as web and email. The users might put the URL http://ABCD/ or http://ABCD./ in the web browser to visit ABCD's homepage. The user might try to send the email to "administrator@abcd.". These operations might work or not, depending on the different scenarios or contexts. In order to have a good users' experences, some advice should be made to the TLD name owners. This document analyzes the TLD names usage and gives some advices.

1.1. Terminology

All the basic terms used in this specification are defined in the documents [RFC1034] and [RFC1035].

2. Current situations for TLD names

2.1. TLD names in the DNS zones

TLD names are legal in the DNS zones. The user can configure any records for it.

2.2. TLD names in the DNS stub resolvers

Different DNS stub resolvers may not always return the same result due to different configuration. This is caused by what is known as the "search path" option. The stub resolvers may try to search the TLD name adding a search path such as "example.com". And only if the query gets a nonexistent domain (NXDOMAIN) response for the TLD name adding a search path, the stub resolver would try TLD name directly.

2.3. TLD names in the application

Many application protocols do not insist that domain names always be fully qualified. That means that the domain names in the application can use single label instead of multi-labels. But many applications implemented refuse to regard the TLD names as the domain names. For example, for easy connection in the LAN, some users may configure the below record in the windows systym's hosts file.

192.168.1.1 apple.

then we can easily connect to apple machine via

http://apple./
or
http://apple/

The users trying to visit the homepage of apple will go to the local machine directly instead of trying to search the name via DNS.

3. TLD name usage advice

This document suggests not to configure TLD names with other RRs other than with NS related record in the root or TLD DNS server. If the users decide to use it, they should know that TLD names might not be universally reachable.

4. IANA Considerations

There is no IANA consideration.

5. Security Considerations

TBD

6. Acknowledgements

TBD

7. Change History

[[anchor10: RFC Editor: Please remove this section.]]

7.1. draft-yao-dnsop-tld-name: Version 00

o TLD name usage and advice

8. Normative References

[RFC1034] Mockapetris, P., "Domain names - concepts and facilities",

STD 13, RFC 1034, November 1987.

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