RIPE ncc

TLD-WG Proposal for RIPE area n-TLD interaction with IANA

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Version

This document is version 1.1 of the task force proposal, dated 14 January 1998.

Status

This document is still in draft form and is open to discussion from all parties

Scope

The intended audience for this document is the TLD-WG. Once consensus has been reached then the intended audience should be expanded to IANA, and any other interested parties. Comments to the authors are encouraged.

1. Introduction

At the RIPE 27 meeting (Dublin, May 1997), a TLD working group was set up within RIPE. An outcome of this meeting was that the working group agree to define "Terms of Reference"(ToR) and a "Working Plan"(WP). At the RIPE 28 meeting (Amsterdam, September 1997) the working group agreed upon the ToR and WP proposed. These can be found at http://www.ripe.net/wg/tld/index.html. Simultaneously the WP was also prioritised, with the vast majority of people agreeing to the single most important issue. That issue was the stability of IANA with regard to the "dot" root zone and the interaction that the RIPE area national TLD registries should have with IANA. Since events surrounding IANA and in particular the DNS side of its activities are moving very quickly it was felt that the tld-wg should make it's viewpoint known in the very near future. It was decided to set up a task force to look into the issue and take account of the views expressed.

This document is the preliminary outcome of that task force and outlines a proposal for a future structure and relationship between IANA and European (RIPE area) national TLD registries. Initially the present hierarchical relationship with IANA will be described. Following this the RIPE area national TLD requirements from IANA are discussed and finally a model is detailed by which the RIPE area national TLD can support IANA.

For information eight RIPE area n-TLD registries were represented at RIPE 28 and close contacts of four others were present. This proposal represents the perceived view of those present at the tld-wg and, as yet does not speak for the RIPE area national TLD registries as a whole. It is hoped that the discussion prompted by this proposal will alter this position and far more support will be made public. The task-force writing this proposal comprises of a cross-section of interested parties:

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Lars-Johan Liman: .SE Swedish Top Level Domain Registry

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2. Present hierarchical structure of IANA

IANA performs a central role in the Internet governance. The two main governance activities that it undertakes are:

- -the allocation of IP addresses to the Regional Internet Registries (presently RIPE NCC, AP-NIC, and ARIN), for further allocation
- -maintenance of the "dot" root zone

In addition IANA also performs such activities as editing RFCs and assigning protocol parameters (see RFC 1602 for more details). IANA has publically stated on numerous occasions that it sees its function as that of establishing and interpreting community consensus as opposed to actively defining governance policy. The discussion of how IANA derives its authority has been the subject of many interesting discussions but it is not pertinent to this proposal; IANA has the authority and we are looking to the future and not the past.

At present IANA is not a separate legal entity but is an activity of the Information Sciences Institute (ISI) at the University of Southern California (USC). Since IANA has no legal framework it is unable to make contracts in a legal sense, and there is no formal mechanism in place whereby stake-holders of IANA activities can share the financial responsibility for the work undertaken or participate in the direction of IANA. This informal structure of IANA has in the past served the Internet community exceptionally well, mainly due to the exemplary commitment and professionalism of IANA to date. Due to the IANA staff and in particularly Jon Postel IANA has been able to maintain the essential position of recognised neutrality.

The present key stake-holders in the activities of IANA are split into three categories; the Regional Internet Registries; generic top level domain registries; and national top level domain registries. This proposal is concerned with the last group of stake-holders and in particular the European (RIPE area) national TLD registries. However in order the be able to put the relationship of this stake-holder group with IANA in perspective an overview of the relationship between IANA and the other stake-holders in necessary.

2.1. Regional Internet Registries (RIR)

At present there are three RIRs in the world, RIPE NCC which covers Europe and surrounding areas, AP-NIC which covers the Asian-pacific, and ARIN which covers the Americas. All three RIRs are neutral organisations that have their own legal structures. They are all run in a bottom-up fashion by which the Local Internet Registries (LIR), which are mainly ISPs, below them directly fund, influence and approve all activities of the RIR. Since IANA has no legal structure there is no formal service contract between IANA and the RIRs. Services are given by IANA to the RIRs by consensus agreement of the community as a whole, and by the regional LIRs in particular.

The RIRs have frequent contact with IANA and each other and de-facto have a great influence on IP address related policy through this contact. Until April 1997 the RIRs have given no funding to IANA since it was fully funded by the US government. At the end of March 1997 it appeared that US government funding of IANA had stopped and thus the RIRs immediately gave funds to IANA for the continuation of their services. At present IANA is still holding the funds given by the RIRs. The RIRs plan to continue this funding and see it as a first step towards a broader bottom-up structure between IANA and its stake-holders. discussions are presently under way between IANA and the RIRs as to how and what form the best bottom-up structure could take. A position paper by Rob Blokzijl, Daniel Karrenberg, and Paul Ridley, describes in more detail the present and future relationship between IANA and the RIRs, and proposes a future structure for IANA.

2.2. Generic Top Level Domain Registries

At present it is unclear exactly what the roles of the future g-tld registries and g-tld bodies will be in the future. No matter what the final outcome of those on-going discussions are the g-tlds will be important stakeholders in IANA, and should be included in the discussions. Besides recognising the g-tlds as stakeholders these document will not discuss the g-tld situation.

2.3. Individual national TLD Registries

This group of stake-holders consists exclusively of ISO 3166 two letter country code n-tld registries. Unlike g-tlds and ISPs there is no coordinating organisation for these top level domain registries be that on a global or regional level. IANA delegates authority of administering an ISO 3166 n-tld to an individual organisation based upon IANAs judgment as to their ability and the consensus within that local community as the the suitability of that individual organisation being delegated this administration authority. No official contracts are drawn up to declare this agreement. IANA is the deciding authority if any n-TLD domain name issues arise (see RFC-1591). The n-tlds do not fund IANA in any manner, and presently have no mechanism whereby they can let their collective opinion be formed or heard.

3. European (RIPE area) national TLD registry requirements from IANA

In any future relationship that European national TLDs registries have with IANA it is desirable that the following requirements are met by IANA:

- -that IANA becomes a separate legal entity that has the ability to make contracts and who can be referred to by third parties.
- -that IANA be legally set up and make contracts in such a manner as to minimise the financial risk of possible legal disputes.
- -that the neutral and high quality of service now given by IANA in the management of the "dot" root zone be continued.
- -that the stability of the "dot" root zone be ensured.
- -that all stake-holders of the IANA activities and in particular the European national TLD registries have a mechanism whereby they can give collective input to IANA.
- -that IANA manages the needs of all of its stake-holders for the common good of the worldwide Internet community.

The requirements stated in this proposal mirror the requirements of one of the major stake-holders, the RIRs. It is felt that the common requirements needed simplify the matter slightly since IANA could create one structure, whereby these two stake-holders (at present these are the only stake-holder opinions known) and possibly more could be simultaneously served. A possible solution would be the creation of a new legal entity for IANA whereby the various stake-holders were represented on either a board of directors or a similar body. In creating such a structure not only would the needed requirements of the stake-holders be met, but it would give a true bottom-up hierarchical governance system for both DNS and IP numbers. This bottom-up system works well in the IP numbers area and is seen by the RIPE community in general as being the 'right thing' to form for IANA as a whole.

4. European national TLD registry support of IANA

The creation of a new structure for IANA so that the requirements detailed in section 3 can be met is only half of the bottom-up structure. The European national TLD registries will, in this new IANA structure, get more chance to have input and influence decisions but correspondingly the European national TLD registries should help fund IANA and organise themselves in such a way so as to be able to do so. The funding by this group of stake-holders would be complementary to that of the other stake-holders and at the appropriate time details of how much that funding should be can be worked out.

This proposal suggests that the most efficient way for the European national TLD registries to organise themselves is to copy a working bottom-up model. The model that could be followed is that of the RIRs, who although having slight differences all employ the same principles. It is proposed that an association be formed analogous to the RIPE NCC. So as to aid clarity let us give this association the working name of the RIPE Council of European National Tld Registries (RIPE CENTR). All national domains within the RIPE geographic area would be members of RIPE CENTR, just as all RIPE area LIRs are members of RIPE NCC. As with the RIPE NCC the members of RIPE

CENTR would have the power within the organisation and would elect an executive board for day-to-day governance. In true bottom-up fashion representation to and funding of IANA by the RIPE CENTR members would be focussed through RIPE CENTR itself. A more definite proposal for the structure of RIPE CENTR and the possible activities and liaison roles that it could undertake as well as the phases the setting up will undergo is outside the scope of this proposal. Such a proposal will be shortly forthcoming from the TLD-WG.

5. Summary

The European national TLDs appreciate the fine work that has been and is being done by IANA, and of special concern to them management of the "dot" zone. This proposal suggests two structural changes that would benefit the future relationship between IANA and the RIPE area national top level domains and increase the stability of both. The changes would also be in line with those wishes of other IANA activity stakeholders

Firstly it is proposed that IANA becomes a separate legal entity. this is in line with the discussions already happening between IANA and the RIRs. The structure of this legal entity should ensure the stability of IANA in legal and financial terms. This legal entity should also provide a mechanism e.g. a board of directors or a policy oversight committee whereby all stakeholders of IANA activities can be represented. The aim of IANA would be to best combine the needs of all the various stakeholders for the common good of the Internet community.

Secondly it is proposed that an association be set up to represent the European national TLDs. The working title for this association is the RIPE Council of European National Tld Registries (RIPE CENTR). RIPE CENTR analogous in structure to the RIPE NCC would be funded and governed by the European national tlds, all of which should be members. The exact role of RIPE CENTR is still very open but definite tasks would be funding of IANA and representation to IANA and other bodies. A more detailed proposal for the set up of RIPE CENTR will be shortly forthcoming from the TLD-WG.