Network Working Group
Request for Comments: 5241
Category: Informational

A. Falk
BBN
S. Bradner
Harvard University

1 April 2008

Naming Rights in IETF Protocols

Status of This Memo

This memo provides information for the Internet community. It does not specify an Internet standard of any kind. Distribution of this memo is unlimited.

Abstract

This document proposes a new revenue source for the IETF to support standardization activities: protocol field naming rights, i.e., the association of commercial brands with protocol fields. This memo describes a process for assignment of rights and explores some of the issues associated with the process. Individuals or organizations that wish to purchase naming rights for one or more protocol fields are expected to follow this process.

1. Introduction

Normal engineering practice involves assigning names to fields in network protocols. These names are generally carefully chosen to reflect the function of the field, for example, the IPv4 Destination Address field.

As protocol designers engage in their work, many become intensely involved with these protocol fields. Some of the most intense discussions within the IETF have been over details about such fields. In fact, it is an advantage to the continued viability of the IETF that dueling is outlawed in the countries in which it meets.

But the financial realities of funding the Internet engineering and standardization processes may dictate that the IETF must consider whether names associated with such protocol fields represent an asset capable of responsible monetization. This notion may be offensive to some protocol purists; however, we believe the exigencies of the situation make the proposal below worthy of consideration.

This document describes a process and some issues associated with managing the sale of commercial branding rights (or naming rights) for IETF protocol fields. The authors believe that this modest proposal may serve as a source of revenue capable of supporting IETF standardization activities for years to come.

This proposal arose from the realization that the sports industry has made energetic and successful use of naming rights, for stadiums in particular, e.g., the Staples Center in Los Angeles (basketball), Qualcomm Stadium in San Diego (football), Minute Maid Park in Houston (baseball), and the Aaron's "Lucky Dog" get-a-lap-back (car racing).

The Internet has enabled a new online economy that, even in the wake of the burst bubble in early 2000, is generating astounding growth and new services. It is clear that many old-economy companies would place high value on being associated with the new online economy and would be willing to pay for the privilege. Internet protocols are used around the world in myriad operating systems and devices. To be part of the Internet protocols is to be part of the engine that is revolutionizing how commerce is done. Many protocol fields are displayed in popular user applications either as key aspects of the GUI or in error or diagnostic messages. By requiring the use of the branded protocol field, the IETF is in a position to put client company brands in front of not only the thousands of software developers who build with these protocols but also the hundreds of millions of users who benefit from them. Finally, those who license and brand a protocol field will be able to use that field in their other marketing and claim, truthfully, that they are "in the network".

This proposal includes creating a primary name value for each protocol field in the IANA registry and setting up a process whereby an organization or an individual can license the right to record a name of their choice in that field.

This document makes the case for the need for additional revenue for the IETF (Section 2), followed by an introduction of the concept of branding in IETF protocols (Section 3). Several rules and constraints necessary to make such a revenue stream practical are then explored (Sections 4-14). Finally, this memo concludes with an initial assessment of the changes required by the IANA and RFC Editor to support such a service (Sections 15-17).

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119].

2. Revenue Needs

Running the IETF is not inexpensive. It was reported at the 71st IETF meeting in Philadelphia, PA, USA that the 2008 budget [BUDGET] for the IETF had surpassed US$4.5 M, up from $4.1 M in 2007. About US$3 M of revenue in this budget flows directly from IETF activities, including meeting fees and sponsorships, and the remainder flows from the Internet Society (ISOC). Over the last few years the IETF has had to raise meeting fees repeatedly in order to keep this budget balance reasonable.

Raising an additional US$1 M from the rental of naming rights could significantly change the budget dynamics. Perhaps meeting fees could be reduced for all attendees or special subsidies could be provided to needy students, researchers, or job seekers. Other options for the use of the increased revenue could be sizing the break cookies large enough to feed a family of geeks for a week rather than the mere day and a half as was the case at the 71st IETF, or renting out a bar for the working group chairs social rather than having to put up with the rowdy locals. There are many other equally deserving ways that the IETF could spend the resources generated by this proposal. It should be noted that any such benefits may have to be delayed for a few years to pay for the startup costs noted below.

3. How Are Branded Protocol Fields Used?

3.1. Within the IETF

When a protocol field name is licensed from the IETF, all future IETF activities, and documentation for products claiming to conform to IETF standards, MUST use the complete branded name. The output from protocol implementations, and associated documentation, MUST be considered non-conformant if the complete branded name is not used.

3.2. Externally

The official IETF name for a purchased field is the complete branded name. Thus, all externally generated documentation that references the protocol must be considered incomplete unless it used the complete branded name where one exists. The IETF leaves it to the licensee to enforce the use of complete branded names in non-IETF documents.

4. Names Must Be in Good Taste

The combination of brand names and protocol field names must avoid uses that may be considered offensive by some part of the Internet community. Name purchases shall be reviewed for taste. Prospective purchasers must prepare a proposal for how the branded protocol name will be used in advertising or other media. (Note that a well-developed taste-review process may prove useful for other IETF activities, for example, IETF working group names, T-shirts, and host presentations.)

Within the limits of taste, the branded protocol field may be used for any purpose.

5. When Names Change

As has been discovered in other areas where naming rights are sold or leased, commercial realities and developments mean that a brand name can suddenly go out of favor or even cease to denote an existing entity. In addition, branding is leased (i.e., sold to be used over a limited time) and the branding for a particular field may change when the lease is up. Thus, there must be a mechanism to change branding when needed. See the IANA Considerations, RFC Editor Considerations, and Tools Considerations sections for more information.

6. Example Names

The most effective names are those that pair the semantics of a field with a characteristic desirable to a sponsor. The following examples of good and bad pairings illustrate how an appropriate pairing can be appealing.

6.1. Acceptable Taste-Wise

IP: Garmin GPS Destination Address
IP: White & Day Mortuary Time-to-live
TCP: Princess Cruise Lines Port Number
ARP: Springfield Preschool Timeout
BGP: Sharpie Marker field
TFRC: Traveler’s Insurance Loss Period
SCTP: Hershey’s Chunk {type|flags|length}
SMTP: eHarmony HELO

Protocol names appear within the fields of other protocols; therefore, the protocols themselves may be candidates for branding:

BEEP: AAA BEEP
SOAP: Downey SOAP
PPP: FloMax PPP

There is no requirement for branding to be limited to company names or other trademarked terms. For example, a publisher could decide to honor one of their authors:

The Thomas Wolfe Source Address Field

6.2. In Bad Taste

SIP: Seagrams Vodka SIP Event
SIP: Calvin Klein Event Package
IP: Viagra Total Length

6.3. Confusing Names

Places where the brand could interfere with the understanding of the protocol are prohibited:

SMTP: US Postal Service Mail command
IPv6: ITU-T Protocol field
IKE: RSA Vendor ID

6.4. Valid Names

In order to be printed in the ASCII-only Real-RFC (described in Section 16) all brands must include an ASCII form. The ASCII name MUST conform to the requirements in RFC 2223 [RFC2233]. The brand MAY optionally include a UTF-8 version for use in non-ASCII representations. See RFC 3629 [RFC3629].

7. Who Can Buy Naming Rights?

Any organization or individual can purchase the right to brand a protocol field. The IETF will not undertake to ensure that the purchasing organization has the right to use the name they choose to use. All purchasing organizations MUST indemnify the IETF against any challenges to the authority of the purchasing organization to use the name.

8. Scope of Naming Applicability

Because the application of IETF protocols is not controlled in a way that corresponds to legal jurisdictions, it is difficult to restrict naming rights to include just those places where a particular trademark may be registered. The process described in this memo does not include the use of geographic or geopolitical boundaries on the use of branded fields. The design team is working on a proposal to overcome this issue. If the design team is successful, the same proposal should find application in a number of areas of international diplomacy.

9. Who Can Sell Naming Rights?

The IETF SHALL retain the sole right to permit branded protocol names to be used within IETF protocols. The IETF MAY sell rights for external use of branded protocol names if the protocols have been developed within the IETF process and if the protocol field has not already been branded by someone else using the same process.

10. Pricing

Multiple pricing strategies for the naming rights to protocol fields will likely be used over time. The primary objective of pricing is to enable the greatest possible revenue for the IETF. Initially, prices will be set by negotiation between the party wishing to purchase the naming right and the Internet Auction Board (IAB) representative. However, we strongly suggest migrating to an all pay auction (also known as a Tullock auction) for finding the optimal price when there are multiple bidders [KOVENOCK]. Alternatively, open-outcry auctions [EKLOR], perhaps with a secret reserve price, could be held at IETF meetings using a BoF session, permitting taste review and brand assignment (sale) to be conducted concurrently and with open participation. See [MILGROM] for information on various auction styles.

11. Time of Ownership

The design team could not come to consensus on a default term of a lease of the authority to name a protocol field. It was split between a term that would best represent the half-life of an Internet startup (1 or 2 years) and a term that would best represent the half-life of a product offered by a mature Internet company (8 to 10 years). The idea of terms any longer than 10 years, for example, leases that would terminate when a protocol advanced on the standards track (i.e., roughly infinite), was discussed but generally discarded because so few companies survive in any recognizable form for that

length of time in the Internet space. In the end, the design team concluded that the lease term should be part of the negotiation between the IETF and the purchasing organization.

12. How Are Naming Rights Purchased?

The right to name a protocol field is purchased using the following process: licensees complete an application where they identify the protocol field they wish to use and the particular RFC in which it appears (Internet-Draft tags are available for short term lease). At that time, they identify their brand and present their proposal for external use and length of ownership. The next step is a taste review followed by an auction or IAB negotiation. The purchase concludes with the IANA updating their protocol field name mapping database.

13. Dispute Resolutions

All disputes arising from this process MUST be resolved using the ICANN Uniform Domain-Name Dispute-Resolution Policy [UDRP]. While the protocol fields are not domain names, branding them presents the same types of issues and we feel that it’s better to make use of an existing process rather than to invent a new one.

14. Future Expansions

If this proposal proves successful, it can be easily expanded to include other protocol features such as options and parameters. For example:

IPv6: The Herman Melville Jumbogram option

15. IANA Considerations

Upon the adoption of this proposal the IANA SHALL set up a protocol field-to-brand-name database (the "IETF Protocol Branding Catalog") that includes all protocol fields in IETF-developed or -maintained protocols. This database can be bootstrapped from the existing protocol registries database [PROTREG], but this list will have to be augmented to include all fields in all IETF protocols, even the ones in which no IANA assignments are made.

The two brand name fields associated with each protocol field (the ASCII field and the optional UTF-8 field) are initialized as NULL.

Whenever the IETF leases a protocol field, the IANA SHALL enter the brand name(s) into the brand-named fields associated with the protocol field and SHALL set the lease termination date to the proper value.

In addition, the IANA SHALL regularly scan the database to look for leases terminating within the next 30 days and inform the IETF of any such leases so that the IAB can approach the leaseholder to sign up for an additional term. The IANA SHALL remove any brand names from their database when the lease expires.

16. RFC Editor Considerations

Upon the adoption of this proposal the RFC Editor SHALL create XML versions of all IETF RFCs. The XML must be such that a perfect copy of the original RFC can be produced using a tool such as xml2rfc [XML2RFC]. The XML versions of RFCs must identify all individual protocol fields using an XML protocol field element of the form:

```
<pfield name="IPv4 Destination Address"/>
```

(Doing this for all existing RFCs may involve some work.)

As the XML RFCs are completed, the RFC Editor SHALL then create an ASCII version of the RFC from the XML file using the naming convention of "Real_RFCxxxx.txt". During the translation, each protocol field is looked up in the IANA protocol field-to-brand name database. If there is an ASCII brand name associated with the protocol field, the word "the" and the brand name are prepended to the IETF name for the field (unless the name appears in ASCII art where changing the length of the name would distort the art). For example, if the protocol field is "Destination Address" and the brand name in the IANA database is "Garmin GPS", the string "the Garmin GPS Destination Address" would be used in the Real_RFC. Changing the lengths of such names may require adjusting the other details of the document such as page numbering in the Table of Contents. The software to do some of the formatting might be a bit tricky.

The RFC Editor may optionally produce other non-normative versions of Real_RFCs. For example, a non-normative Portable Document Format (PDF) version may be created in addition to the ASCII Real_RFC version. The RFC Editor may use the UTF-8 brand, if present, in such alternate versions.

The Real_RFC SHALL be used for all normal purposes within the IETF and elsewhere with the original version being reserved as an archival reference.

The RFC Editor SHALL rebuild all the Real_RFCs on a regular basis to create up-to-date Real_RFCs that reflect the current status of the protocol field licenses.

The RFC Editor SHALL provide a list of un-leased field names to the IANA for inclusion in the IETF Protocol Branding Catalog.

17. Tool Builder Considerations

Upon the adoption of this proposal, the maintainer of the official xml2rfc tool SHALL update the tool to support the protocol field element and to consult the IANA database when being used to produce Real_RFCs (or Real_IDs). Upon the adoption of this proposal, document authors will be required to transmit the raw XML input file for the xml2rfc tool to the RFC Editor when the document is approved for publication.

18. Security Considerations

The fact that the IETF will not undertake to ensure that the purchasing organization has the right to use the name they choose to use can lead to mischief. For example, a Microsoft competitor could purchase the right to name the IPv4 Header Security Flag [RFC3514] "the Microsoft Evil bit".

19. Conclusion

The discussion above has introduced the concept of branding IETF protocols and the associated implications. Clearly there are non-trivial costs to starting up and maintaining such a revenue stream. However, advertising has a long and distinguished history of supporting valuable community services such as free broadcast television and Google.

As branded protocols become established, new protocols will be developed with names conducive to branding. In fact, licensees may initiate new IETF work just to see an appropriate field established. So, besides the economic benefits to the IETF, this initiative may in fact help ensure the IETF is never without work and, thus, self-sustaining and self-perpetuating.

20. References

20.1. Normative References

[RFC2233] Postel, J. and J. Reynolds, "Instructions to RFC Authors", RFC 2223, October 1997.

20.2. Informative References

[BUDGET] IETF 2008 budget, <http://iaoc.ietf.org/documents/2008_Budget_Final.pdf>.

[EKLOR] Eklor, M and A. Launander, "Open outcry auctions with secret reserve prices: an empirical application to executive auctions of tenant owner’s apartments in Sweden", Journal of Econometrics, Volume 114, Issue 2, June 2003, pages 243-260.

[KOVENOCK] Kovenock, D. & de Vries, C.G., 1995. "The All-Pay Auction with Complete Information", UFAE and IAE Working Papers 311.95, Unitat de Fonaments de l’Analisi Economica (UAB) and Institut d’Analisi Economica (CSIC), revised.

[MILGROM] Milgrom, P., "Auctions and Bidding: A Primer", Journal of Economic Perspectives, American Economic Association, vol. 3(3), pages 3-22, Summer 1989.

[PROTREG] IANA Protocol Registries, <http://www.iana.org/protocols/>.

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

[RFC3514] Bellovin, S., "The Security Flag in the IPv4 Header," RFC 3514, 1 April 2003.

[RFC3629] Yergeau, F., "UTF-8, a transformation format of ISO 10646", STD 63, RFC 3629, November 2003.

[UDRP] ICANN, "Uniform Domain-Name Dispute-Resolution Policy", <http://www.icann.org/udrp/udrp.htm>.

[XML2RFC] "A handy little tool", <http://xml.resource.org/>.

21. Acknowledgments

Craig Milo Rogers receives credit for the idea which lead to this proposal. Allison Mankin contributed to some early discussions of the issues associated with naming rights. Also, thanks to David Parkes for his advice on types of auctions.

Editors' Addresses

Aaron Falk
BBN Technologies
10 Moulton Street
Cambridge MA, 02138 USA

Phone: +1 617 873 2575
EMail: falk@bbn.com

Scott Bradner
Harvard University
29 Oxford St.
Cambridge MA, 02138 USA

Phone: +1 617 495 3864
EMail: sob@harvard.edu

Full Copyright Statement

Copyright (C) The IETF Trust (2008).

This document is subject to the rights, licenses and restrictions contained in BCP 78, and except as set forth therein, the authors retain all their rights.

This document and the information contained herein are provided on an "AS IS" basis and THE CONTRIBUTOR, THE ORGANIZATION HE/SHE REPRESENTS OR IS SPONSORED BY (IF ANY), THE INTERNET SOCIETY, THE IETF TRUST AND THE INTERNET ENGINEERING TASK FORCE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Intellectual Property

The IETF takes no position regarding the validity or scope of any Intellectual Property Rights or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; nor does it represent that it has made any independent effort to identify any such rights. Information on the procedures with respect to rights in RFC documents can be found in BCP 78 and BCP 79.

Copies of IPR disclosures made to the IETF Secretariat and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this specification can be obtained from the IETF on-line IPR repository at http://www.ietf.org/ipr.

The IETF invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights that may cover technology that may be required to implement this standard. Please address the information to the IETF at ietf-ipr@ietf.org.