



Authentication Via Domain Names: Introducing *

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April 5, 2006

There is an urgent need for website authentication to protect the intellectual property of a business, reduce phishing, and provide “quality” assurance to searchers. Below I outline the potential of using a new domain name character, such as *, to signal the authenticity of the website’s organization.

The address box in an Internet browser displays the URL. The URL indicates the domain name, which identifies the organization owning the site. The URL also indicates the protocol used; in particular, when the site is SSL protected, the protocol is https. However, the existing domain name system does not provide a mechanism to authenticate the identified organization in the URL.

The first type of authentication can be achieved by granting trademark holders and brand name owners the option to register their domain names with an * at the end. Two-word marks would be separated by an *. The proposed character, combined with the newly introduced international domain names (IDNs), would create less friction in situations with multiple trademarks in various countries. Moreover, the proposed domain name can be auctioned to legitimate trademark holders. Furthermore, disallowing typos related to marks in a domain name would reduce phishing.

As for content quality authentication, pre-selected keyword domain names with the * can be auctioned off. The winning bid signals the allocation of the domain name to its best use.

Alternatives to Domain Name Solutions:

1. An alternative to authentication through domain names is the use of an authentication seal displayed on a website. However, it is not obvious that a technology can be implemented to ensure authenticity. Moreover, this venue does not eliminate issues related to standardized seal positioning and esthetic requirements among website owners.
2. Search engines filtering cannot resolve type-ins, email imbedded links, website referrals, and blogs.

3. For a discussion of alternatives see
 - a. Amir Herzberg, “Protecting Web Users from Malicious Content and Sites,” available online at <http://www.w3.org/2005/Security/usability-ws/papers/11-herzberg-protecting/>.
 - b. [Improving Authentication On The Internet](#) (gerv.net)

Concluding Remarks

Thus, the viability of such an authentication mechanism depends on whether the potential revenues outweigh the costs of technical implementation and pre-authenticating IP ownership. Nevertheless, one way to increase the likelihood of the success of such an initiative is to pre-auction options-to-buy the new domain names. The success of such an auction is a good indicator of the demand for such domain names. ■