**“Phishing with Unicode Domains”****: What You Need to Know**

By TBD at UASG

 You may have noticed a focus over the past week of a script mixing technique that phishing scammers could potentially use to trick Internet users into visiting malicious websites. This phishing method takes advantage of the fact that characters from various languages and scripts are sometimes visually similar to each other. For example, the Cyrillic “а” and the Latin “a” look virtually identical. This technique is known as a homograph attack, though recent articles talk about “Unicode domains”.

Homographic phishing efforts are not new. In fact, they date back to the early 2000s. Registries have since implemented policies that preclude mixing scripts[[1]](#footnote-2) within a domain name label. And, research shows that homographic phishing efforts are minor tactic in the ocean of single-script phishing attacks.

The context for this news is the important and welcome spread of [Internationalized Domain Names](https://www.icann.org/resources/pages/idn-2012-02-25-en) (IDNs). These make global Internet accessible to countless millions of people who use languages other than English. These are not “Unicode domains”, they are Internationalized Domain Names, part of a globalization of the Internet. Every change to the Internet gives scammers new tools for their bag of tricks, this pales in comparison to the great benefits the provide. IDNs are no exception.

While homograph attacks should be taken seriously and serves as an important reminder of consumer safety, various IDN and anti-abuse groups are actively working to mitigate potential threats, and there are already certain browser-set protections in place. In the meantime, Internet users should practice the same basic security hygiene that is always recommended: avoid clicking suspicious links, and use a good password manager that will only enter login credentials on trusted sites.

Equally important is to recognize the benefits of IDNs and avoid disabling them, which could lead to an unpredictable user experience and eventually a decrease in adoption. IDNs are essential in bringing non-English speakers – the majority of the world’s population – online, and allowing those users to create their own highly relevant online identities as well as navigate the Internet in their native languages. In addition to the social and cultural benefits of IDNs, they also represent a significant economic opportunity; a recent [report](https://uasg.tech/whitepaper/) commissioned by the Universal Acceptance Steering Group (UASG) found that online spending from new IDN users could start at USD 6.2 billion per year.

The UASG’s mission is to help software developers and website owners keep pace with the evolving Domain Name System (DNS) – and this includes issues around the adoption and acceptance of IDNs. If you’d like to get involved in helping work toward a solution to this and other IDN-related issues, please visit <https://uasg.tech/> or [get in touch](https://uasg.tech/contact/) to learn more.

1. Exceptions are practiced for languages with established orthographies and conventions that require the commingled use of multiple scripts, e.g. the Japanese writing system. [↑](#footnote-ref-2)