

**Proposed High-level Changes From IDNA2003 To IDNA200x
draft-hoffman-idna200x-topics-03**

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Abstract

This document lists the changes that are proposed for IDNA200x. It covers both the changes in the initial documents from the design team and other changes proposed in the Working Group.

1. Introduction

This document lists the high-level changes that have been proposed for IDNA2003 in the idnabis WG. It does not list the low-level

changes, such as the disposition of individual characters.

This is a temporary document meant for the use by the idnabis WG.
This work is being discussed on the mailing list at
idna-update@alvestrand.no.

2. Proposed Changes from the Design Team Documents

The initial set of documents for the IDNA200x effort consist of the following:

- o [[IDNA200X-Protocol](#)] - Internationalizing Domain Names in Applications (IDNA): Protocol
- o [[IDNA200X-Tables](#)] - The Unicode Codepoints and IDNA
- o [[IDNA200X-BIDI](#)] - An updated IDNA criterion for right-to-left scripts
- o [[IDNA200X-Rationale](#)] - Internationalizing Domain Names for Applications (IDNA): Issues, Explanation, and Rationale

At the time of this writing, these documents propose the following changes to IDNA2003:

1. Update base character set from Unicode 3.2 to Unicode version-agnostic
2. Separate the definitions for the "registration" and "lookup" activities
3. Disallow symbol and punctuation characters except where special exceptions are necessary
4. Remove the mapping and normalization steps from the protocol and have them instead done by the applications themselves, possibly in a local fashion, before invoking the protocol
5. Change the way that the protocol specifies which characters are allowed in labels from "humans decide what the table of codepoints contains" to "decision about codepoints are based on Unicode properties plus a small exclusion list created by humans"
6. Introduce the new concept of characters that can be used only in specific contexts.

7. Allowing typical words and names in languages such as Dhivehi and Yiddish to be expressed
8. Make bidirectional domain names (delimited strings of labels, not just labels standing on their own) display in a non-surprising fashion
9. Make bidirectional domain names in a paragraph display in a non-surprising fashion
10. Remove the dot separator from the mandatory part of the protocol
11. Make some currently-legal, non-IDNA labels illegal

3. Changes Proposed by Individuals in the Working Group

In addition to the changes above, individuals in the Working Group have proposed high-level changes. These include:

- a. Add conversion between traditional and simplified Chinese characters
- b. Add guidelines or requirements for registration of character variants, along the lines of [RFC 3743](#)

4. Security Considerations

The eventual document(s) will all have security considerations sections of their own, some of which might point to the security considerations in other documents.

5. Informative References

[IDNA200X-BIDI]

Alvestrand, H. and C. Karp, "An updated IDNA criterion for right-to-left scripts", [draft-alvestrand-idna-bidi](#) (work in progress).

[IDNA200X-Protocol]

Klensin, J., "Internationalizing Domain Names in Applications (IDNA): Protocol", [draft-klensin-idnabis-protocol](#) (work in progress).

[IDNA200X-Rationale]

Klensin, J., "Internationalizing Domain Names for

Applications (IDNA): Issues, Explanation, and Rationale",
[draft-klensin-idnabis-issues](#) (work in progress).

[IDNA200X-Tables]

Faltstrom, P., "The Unicode Codepoints and IDNA",
[draft-faltstrom-idnabis-tables](#) (work in progress).

[Appendix A.](#) Change Log

[A.1.](#) Differences between -00 and -01

Added "Remove the dot separator from the mandatory part of the protocol" to the list.

Added "Make some currently-legal, non-IDNA labels illegal" to the list.

[A.2.](#) Differences between -01 and -02

Changed the title to "Proposed...". Reworded the abstract and intro to reflect this new coverage.

Added new section for WG-submitted changes.

[A.3.](#) Differences between -02 and -03

Clarified bullet 3.

Fixed the spelling of "eventual" in [Section 4](#) and the spelling of Alvestrand in the references.

Made the security considerations clearer and more vague.

Author's Address

Paul Hoffman
VPN Consortium

Email: paul.hoffman@vpnc.org

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