

## The ACE Prefix and Internationalized Domain Names

### Status of this Memo

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### Information

The ACE prefix used in Internationalized Domain Name (IDN) labels is two alphanumeric ASCII characters followed by two hyphen-minuses. Over the years a number of different ACE prefixes have been used in IDNs. This includes "bl--", "bq--", "dq--", "lq--", "mq--", "ra--", "wq--", and "zq--". At this time the ACE prefix used by the Proposed Standard RFC 3490 is "xn--".

While all IDN labels begin with the ACE prefix, not all labels beginning with the ACE prefix are necessarily IDNs. Non-IDN labels that begin with the ACE prefix will confuse users and SHOULD NOT be allowed in TLD DNS zones.

### Recommendation

The ACE prefix SHALL BE defined as any two alphanumeric ASCII characters followed by two hyphen-minuses. IDN Top-Level Domain (TLD) labels MUST begin with an ACE prefix. Non-IDN TLD labels MUST NOT begin with an ACE prefix.

### References

- [RFC 1034] P. Mockapetris, "Domain Names - Concepts and Facilities," RFC-1034, USC/Information Sciences Institute, November 1987.
- [RFC 1035] P. Mockapetris, "Domain names - Implementation and Specification," RFC-1035, USC/Information Sciences Institute, November 1987.
- [RFC 3490] P. Faltstrom, P. Hoffman, & A. Costello, "Internationalizing Domain Names in Applications (IDNA)," RFC-3490, Cisco, IMC & VPNC, & UC Berkeley, March 2003.

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