

Representing IPv6 Zone Identifiers in Uniform Resource Identifiers

draft-ietf-6man-uri-zoneid-00

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Motivation

- Literal addresses in URIs are intended for operational and diagnostic use.
- Sometimes, there is a need to make tests that relate to a specific interface on the host.
 - A web browser might be the handiest tool for this
- For link-local addresses, RFC 4007 defines a text representation of the Zone Identifier (in practice usually equal to an interface name).
 - There is no defined mapping for the Zone ID in URI syntax, so browsers cannot support it.

Current draft

- Proposes an update to the ABNF for URIs (RFC 3986)
 - Use % as separator, like RFC 4007
 - Since % is the escape character in RFC 3986, the % itself has to be escaped
 - Modifies the *IP-literal* branch of the ABNF
 - It's entirely possible we have misunderstood how to describe the % according to RFC 3986

Previous work

- draft-fenner-literal-zone tackled this topic in 2005
- Proposed a different solution
 - Used `_` underscore as separator instead of `%`
 - Used the *IPvFuture* branch of the URI syntax
- Insufficient interest at that time
 - It seems that operational interest is stronger now

Options

- Link local address with no Zone ID
http://[fe80::a] Works today
- With RFC4007 Zone ID
http://[fe80::a%en1] Broken (% = escape)
- With RFC3986-legal Zone ID http://[fe80::a
%25en1] Ugly, confusing
- With alternative separator != RFC4007
http://[fe80::a_en1]
- With “IPvFuture” syntax Confusing
http://[v6. fe80::a_en1]

Status

- Note that ABNF details are best handled by email, so we have not covered them here.
- There is not a consensus on the current approach