A Recommendation for IPv6 Address Text Representation

draft-ietf-6man-text-addr-representation-01

6man IETF76

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Quick review: what is this about?

One single IPv6 address can be text represented in many ways, and difference in implementation has caused many problems so far.

• This draft does the following
  • Describes some problems that happen
    • Operators, system engineers need to be cautious of these problems

• Recommends a canonical IPv6 representation format (inet_ntop/’windows ipconfig’ style)
Summary of the changes since IETF75

• Many editorial fixes

• Added an example where verifying data that contains IPv6 addresses may fail (e.g. X.509)

    Thanks to Heikki Vatiainen.
Summary of the changes since IETF75

- IPv4 addresses embedded in the last 32 bits
  - hex/decimal mixed notation is the recommended: no change here
  - Added a sentence that says, there may be cases where an address may be spelled in full hex to meet certain needs. (e.g. somewhat hide the private IPv4 address)
Summary of the changes since IETF75

• Representing addresses with port numbers
  • [address]:port is recommended (RFC3986)
  • other forms are ok if cross platform portability does not become an issue

Thanks to Dave Thaler.
Status of the draft

• draft-kawamura-ipv6-text-representation
  • Independent submission, March 2009
  • Discussions on v6ops, netmod, 6man

• Stockholm IETF75
  • Consensus on adopting as 6man WG item

• draft-ietf-6man-text-addr-representation-00
  • Submitted August 2009

• version-01
  • WGLC to end at Nov 5
Thanks to everyone that gave input