# A Recommendation for IPv6 Address Text Representation

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

# 6man IETF76

Seiichi Kawamura
kawamucho [at] mesh.ad.jp
Masanobu Kawashima
kawashimam [at] necat.nec.co.jp

# 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

timeline

# Thanks to everyone that gave input