IPv6
Operations and Transitional Issues

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unexpected implementation

- restrictions
  - prefix-length
  - Path MTU handling
- IPv6 Extension Headers
  - Packet filter by port numbers
    - Upper Layer Header

poor user experiences

- poor connectivity
  - ISPs can't get native IPv6 transit in some countries
  - randomly configured tunnels
- broken path MTU discovery
  - http://www.attn.jp/maz/p/t/tmp/pmtud-failure-cases-maz.pdf
  - low priority for ICMP generation

mysterious specs

- u/g bit of Interface Identifiers
  - I can't rely on source address

- Reserved IPv6 Subnet Anycast Addresses
  - no use case so far

- linklocal address is 'MUST'
  - but we want to disable this on specific interfaces
    - Internet eXchanges, inter-ISP links and so on