IPng IMPLEMENTORS MEETING REVIEW

IETF 31

San Jose, California

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sun microsystems

ADDRESSING MODEL

- Stay with IPv4 Model of Per-Interface Addresses
- Multiple Address Can be Assigned to an Interface
- Exceptions
  - Singe Address may be assigned to multiple physical interfaces if the implementation treats the multiple physical interfaces as a single aggregate and hides the details of this aggregation from the Internet Layer.
  - Routers may have unnumbered Interfaces for point-to-point links.

CLUSTER ADDRESSES

- Cluster Addresses should be considered “reserved” until a specific proposal for using cluster Addresses is developed.

NEIGHBOR INTERACTIONS

- Recommended to Continue with Bill Simpson's Draft describing ARP functionality over ICMP
- Retain the Current ARP Request Response model, but Implement it with extensions to ICMP

HOST KNOWLEDGE OF PREFIXES

- IPv6 Host will Learn the Subnet prefixes to be used on its packets from the routing advertisement messages it Receives though Router Discovery
- Routers Must be able to Send these Prefixes

SCOPE OF DISCOVERY

- Recommended Removing Description of Service Location Extensions from Discovery Document
- “System Heard” messages are still Under Consideration

ICMP ISSUES

- ICMPv6 would indicate “packet too big” as a Separate Error Message
- ICMPv6 specification should add that the 16-bit error pointer can in theory point beyond the end of the Packet
- ICMP Redirects are to be Left as described in the Current IPv6 ICMP Specification
- ICMPv6 Error Message will include 576 bytes of offending Message

AUTO ADDRESSING

- Recommended that the Address Life time filed be expanded to 32 bits and that All 1's indicate an assignment time of "infinity"

TRANSITION AND TESTING

- Recommended Leaving the Auto-Encapsulation Rules as is in the Current Specifications

DOMAIN NAME SYSTEM

- Recommended that Implementations be able to fall back to using some sort of Local File Support

TEST REPRESENTATION OF ADDRESSES

- Recommended to Keep Current Text Formats

MTU SIZE

- Recommended that Minimum Reassembly Buffer Size be Raised to 1,500 Bytes
- Minimum MTU Remains at 576 Bytes

REVERSING SOURCE ROUTES

- Recommended a “bit” in the Source Route which provides a hint from the source host indicating that the source route should be reversed on resulting ICMP packets.

PACKETS GREATER THAN 64K

- Recommended to stay with using “zero” in the length field to indicate the presence of an hop-by-hop option with has the real length.

LATENCY ELIMINATION FOR ARP

- Group Recommended to Stay with Current Mechanisms