

Node Information Queries

<draft-ietf-ipngwg-icmp-name-lookups-09.txt>

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Yokohama IETF

Bob Hinden / Nokia

CHANGES IN NEW DRAFT (-09)

- Added Applicability Statement

IPv6 Node Information Queries include the capability to provide forward and reverse name lookups independent of the DNS by sending packets directly to IPv6 nodes or groups of nodes.

The applicability of these mechanics is currently limited to diagnostic and debugging tools. These mechanisms can be used to learn the addresses and names for nodes on the other end of a point-to-point link or nodes on a shared-medium link such as an Ethernet. This is very useful when debugging problems or when bringing up IPv6 service where there isn't global routing or DNS name services available. IPv6's large auto-configured addresses make debugging network problems and bringing up IPv6 service difficult without these mechanisms. An example of a IPv6 debugging tool using IPv6 Node Information Queries is the ping6 program in the KAME, USAGI, and other IPv6 implementations [KAME].

The mechanisms defined in this document may have wider applicability in the future (for example, name lookups in zero configuration networks, global reverse name lookups, etc.), but any use beyond debugging and diagnostic tools is left for further study and is beyond the scope of this document.

IESG COMMENTS (1)

- Technical Comments
 - Text in draft inconsistent with Applicability Statement
 - Several reference to use for DNS forward/reverse lookups
 - Missing guidance on using mechanisms for temporary addresses
 - Need to update security considerations
 - Protocol has many options for extensions and is resulting complex
 - IANA considerations allow anyone to get an code point for an extention.

IESG COMMENTS (2)

- Meta Comments (e.g., use beyond Applicability text)
 - Potential problem of mixing or contaminating DNS
 - Raises complex security and trust issues
 - Expressed concern people expressed on Ipng list that some feeling that using the ICMP mechanism as a replacement for DNS operations is a desirable approach
 - Document needs to be updated to clarify that results from ICMP lookups are never mixed with DNS lookups
 - Not consistent with use of reverse lookups as access control method

NEXT STEPS

- Continue work on Draft?
- Update Draft
 - Address technical comments
 - Augment Applicability statement for meta comments

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