

# Clarifying PROBE (RFC8335)

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# Background

Internet Engineering Task Force (IETF)  
Request for Comments: 8335  
Updates: [4884](#)  
Category: Standards Track  
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```
user@RO>probe 2001:db8:1::11 by-address 10.0.12.1 count 1
```

```
PROBE6(72=40+8+24 bytes) 2001:db8:1::10 --> 2001:db8:1::11  
32 bytes from 2001:db8:1::11, icmp_seq=0 hlim=255 code=0 state=0 active=1 IPv4=1 IPv6=1 time=6.443 ms  
  
--- 2001:db8:1::11 probe6 statistics ---  
1 packets transmitted, 1 packets received, 0% packet loss  
round-trip min/avg/max/std-dev = 6.443/6.443/6.443/0.000 ms
```

## Meaning

The proxy IP address, 2001:db8:1::11 displays the status of the probed IP address, 10.0.12.1 that resides on the proxy device. The output is verified with the following probe packet statistics:

- code=0 indicates that the probe request completes with out error.

## PROBE: A Utility for Probing Interfaces

### Abstract

This document describes a network diagnostic tool called PROBE. PROBE is similar to PING in that it can be used to query the status of a probed interface, but it differs from PING in that it does not require bidirectional connectivity between the probing and probed interfaces. Instead, PROBE requires bidirectional connectivity between the probing interface and a proxy interface. The proxy interface can reside on the same node as the probed interface, or it can reside on a node to which the probed interface is directly connected. This document updates [RFC 4884](#).

# RFC8335: Room for Improvement

3 different implementations, 3 interpretations on the text

- How ICMP Extension checksum is calculated
- Can Extended Echo Request contain extra data?
- Shall Extended Echo Reply contain the invoking packet?

# FixIt

draft-fenner-intarea-probe-clarification

- IETF120 slides
- IETF119 slides

Next Steps?

Comments/suggestions?

Adoption?