

# Clarifying PROBE (rfc8335)

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# Recall the motivation

## Do we need clarifications?

A survey of existing responders and my opinion simply based on the spec

	A	B	D	Me
Extended checksum required?	✓	✗	✓	✓
Packet data echoed?	✓	✓	n/a	✗
Extra data allowed?	✓	✓	✗	✗

## Do we need clarifications? (Users)

Is this a successful probe request?

```
user@Router> probe a.b.c.d by-name ae1
PROBE a.b.c.d (a.b.c.d):
27 bytes from a.b.c.d: icmp_seq=0 ttl=255 code=2 state=0
active=0 IPv4=0 IPv6=0 time=6.981 ms
27 bytes from a.b.c.d: icmp_seq=1 ttl=255 code=2 state=0
active=0 IPv4=0 IPv6=0 time=4.420 ms
27 bytes from a.b.c.d: icmp_seq=2 ttl=255 code=2 state=0
active=0 IPv4=0 IPv6=0 time=2.530 ms
```

## Do we need clarifications? (Clients)

A survey of existing clients and my opinion based on the spec

	A	C	Bill
Fill in extended checksum	✓	✗	✓
Include extra data	✓	✓	✗
Rely on responder echoing extra data	✓	✓	✗
Include padding in option length	✓	✗	✓

# Changes since last meeting

Used brackets to emphasize that the “Data” field is optional

Github Issues:

#1 - use NUL as specified in RFC20

#2 - update interfaces to use more yang-y and less SNMP-y names

# Current Status

Authors think it's a valuable update to RFC8335, and ready to move forward.

# Resources

<https://github.com/aristanetworks/probe-tools> contains an IPv4 client (to test a responder) and a synthetic response generator (to test a client)

Pull request [#1131](#) at <https://github.com/the-tcpdump-group/tcpdump/> implements PROBE printing for IPv6; IPv4 is in the top-of-tree (merged since last time)

<https://github.com/aristanetworks/iputils> contains:

- The list of issues from my review of the original code by Andreas Roeseler and Spencer Lang
- A rebase to the current iputils head of the original work, and fixes to most of the issues

<https://fenner.github.io/probe-clarification/> for this document

# What's next?

Before publication as RFC, decide what to do about author count limitation

Interop testing?

WG adoption?