



PEACH
FUZZER

ICMPv6 Peach Pit
Data Sheet

- Peach Pit: ICMPv6
- Target: Client
- Supported Platforms: Windows, Linux, OS X

The Internet Control Message Protocol (ICMP) version 6, is an integral part of the Internet Protocol suite version 6. Functionally, ICMP v6 retains the administrative responsibilities of ICMP version 4 (its predecessor). Yet, ICMPv6 differs from v4 in the following ways:

- Includes functionality from previous versions of ARP and IGMP
- Removes obsolete messages from ICMP v4
- Allows for future enhancements

ICMPv6 messages are transported within an IPv6 packet. Messages divide into two groups: error messages and informational messages.

Specifications

Specification	Title
RFC4443	Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification
RFC2460	Internet Protocol, Version 6 (IPv6) Specification
RFC2710	Multicast Listener Discovery (MLD) for IPv6
RFC4861	Neighbor Discovery for IP version 6 (IPv6)
RFC6275	Mobility Support in IPv6
RFC4620	IPv6 Node Information Queries
RFC3122	Extensions to IPv6 Neighbor Discovery for Inverse Discovery Specification
RFC3810	Multicast Listener Discovery Version 2 (MLDv2) for IPv6
RFC4286	Multicast Router Discovery
RFC4861	Neighbor Discovery
RFC5568	Mobile IPv6 Fast Handovers
RFC3971	SEcure Neighbor Discovery (SEND)

Specification	Title
RFC6550	RPL: IPv6 Routing Protocol for Low-Power and Lossy Networks
RFC6743	ICMP Locator Update Message for the Identifier-Locator Network Protocol for IPv6 (ILNPv6)

Use Cases

Messages	Specification
Destination Unreachable	RFC4443 (Section 3.1)
Packet Too Big	RFC4443 (Section 3.2)
Time Exceeded	RFC4443 (Section 3.3)
Parameter Problem	RFC4443 (Section 3.4)
Echo Request	RFC4443 (Section 4.1)
Echo Reply	RFC4443 (Section 4.2)