**timeDiagram**

| Host 1 (Source) | | Host 2 (Destination) |
|---|---|---|

**Initialization & Capture Start**

**ARP Resolution (if Cache is Empty)**

ARP Request: Who has H2 IP? (Broadcast)
→

ARP Reply: H2 is at [MAC Address] (Unicast)
←

**ICMP Echo Process (Ping)**

ICMP Echo Request (type 8, seq 1)
→

ICMP Echo Reply (type 0, seq 1)
←

ICMP Echo Request (type 8, seq 2)
→

ICMP Echo Reply (type 0, seq 2)
←

ICMP Echo Request (type 8, seq 3)
→

ICMP Echo Reply (type 0, seq 3)
←

ICMP Echo Request (type 8, seq 4)
→

ICMP Echo Reply (type 0, seq 4)
←

| Host 1 (Source) | | Host 2 (Destination) |
|---|---|---|