

# NAT UDP Binding Timeout Results

## INTRODUCTION

This poster shows the current results of different tests done to measure NAT binding timeouts for UDP protocol. Even though the number of devices is not very high, the current devices still show results that differ radically.

## INITIAL UDP TIMEOUT

This test measures how long a NAT device keeps NAT binding if it has seen only one packet that created the binding.

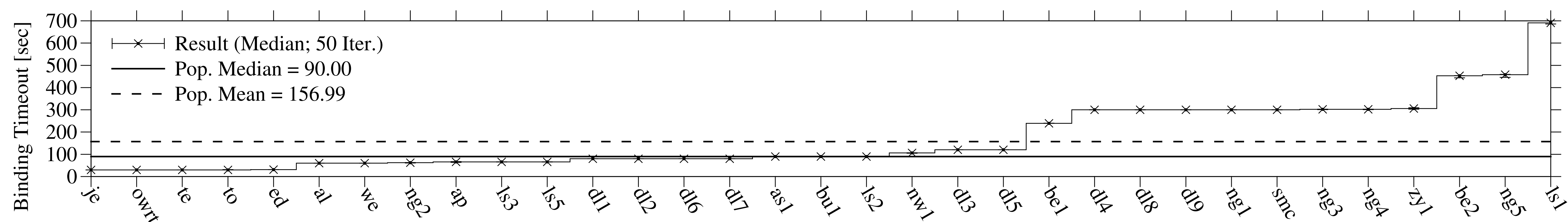


Figure: Single packet, outbound only.

## UDP TIMEOUT FOR INCOMING PACKETS

This test measures how long a binding is kept alive if there is only inbound traffic through the device.

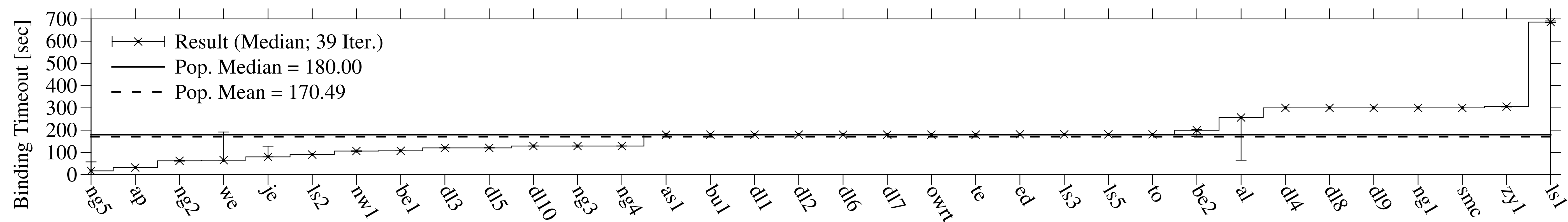


Figure: Single packet out, multiple packets in.

## UDP TIMEOUT FOR BIDIRECTIONAL TRAFFIC

This test measures how long a binding is kept alive if the test client acknowledges every test packet, i.e. the NAT sees traffic going both ways.

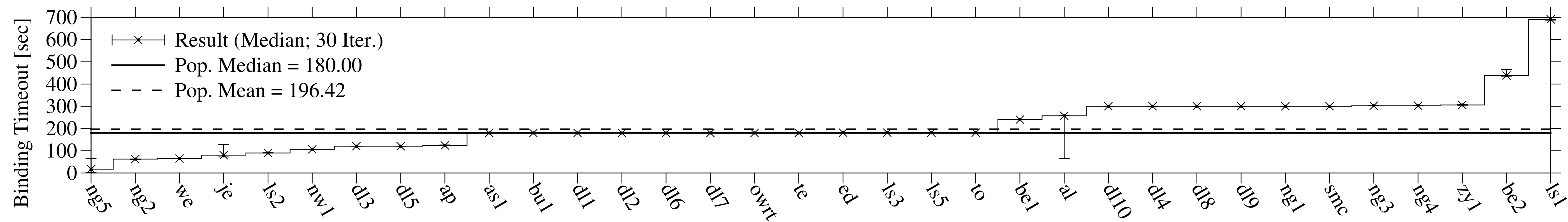


Figure: Multiple packets out- and inbound.

## UDP TIMEOUT FOR WELL-KNOWN PORTS

The intend of this test is to determine if the NAT devices use a different timeout scheme for well-known ports like DNS (53).

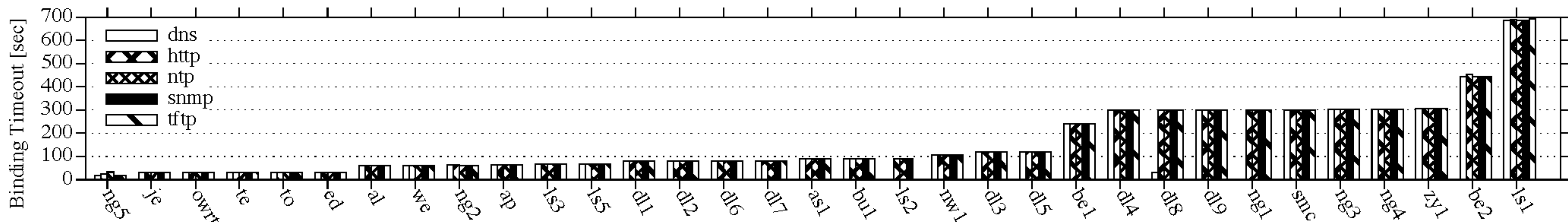


Figure: Binding lifetime variations for different well-known ports.