

# fling: A Middlebox Measurement Platform

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[ **simula** . research laboratory ]

neat

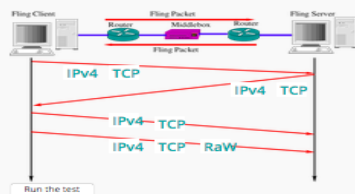
- Flexible platform where users can define tests describing **any** client-server dialogue of (almost) **any** type of packets, and observe what happens to them along a path.
- Upload json+pcap to our server; wait for clients to run the test; get complete results from server.
  - Currently installing clients on Nornet/MONROE, planning to extend.
  - Would you like to participate?

Tools (<http://fling-frontend.nntb.no/>)

- **onetime\_fling**: users could run a specific test and/or a set of default tests.
- **repetitive\_fling**: A permanently running tool.
- many possible tools in future

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## Sample Fling test



## Test Name

Interactive fling test

TCP Header																															
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Source port: 5001				Destination port: 80																											
Sequence number: 1000																															
Acknowledgment number (if ACK set): 0																															
Data offset: 000												Window Size: 14000																			
Reserved: 000												Checksum: 0000000000000000																			
Urgent pointer: 0000000000000000																															

Loading... (if the result does not come, try again --- it is under development)

Done.

## Packet number

## Initial Packet

## Changed Packet

1	{[frag: 0L, 'src': '10.6.4.10', 'proto': 6, 'tos': 0, 'dst': '77.88.71.145', 'ttl': 64, 'len': 40, 'id': 34937, 'version': 4L, 'flags': 0L, 'ihl': 5L, 'chksum': 20318, 'options': []], ('reserved': 0L, 'seq': 1000, 'ack': 0, 'dataofs': 5L, 'dport': 80, 'window': 14000, 'flags': 2L, 'chksum': 48760, 'urgptr': 0, 'sport': 5001)}	{[frag: 0L, 'src': '193.157.178.54', 'proto': 6, 'tos': 0, 'dst': '77.88.71.145', 'ttl': 55, 'len': 40, 'id': 34937, 'version': 4L, 'flags': 0L, 'ihl': 5L, 'chksum': 62105, 'options': []], ('reserved': 0L, 'seq': 1000, 'ack': 0, 'dataofs': 5L, 'dport': 80, 'window': 14000, 'flags': 2L, 'chksum': 22708, 'urgptr': 0, 'sport': 5001)}
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