

### Functional

R1)The tool shall generate network traffic streams in the form of a pcap file containing up to 10,000 packets with the following customisable attributes: Protocol stack implemented by packets, Data payload of packets (size and content), Size of stream (in packets, bytes or seconds), Packet timing (as packet rate, inter-packet gap or byte rate)

R2)The tool shall read, save and summarise pcap file contents

R6) There shall be a command-line interface which can call the core pcap generation functionality

### Performance

R5)Both traffic generation and analysis should execute in a minute or less for up to 10,000 packets.

### Usability

R3)The generated pcaps shall be compatible with the the SNE traffic replay feature

R4)The analysis component shall be compatible with pcaps generated by the SNE traffic capture

R7) The CLI interface should be intuitively usable for other company engineers (easier than calling the python API function)