

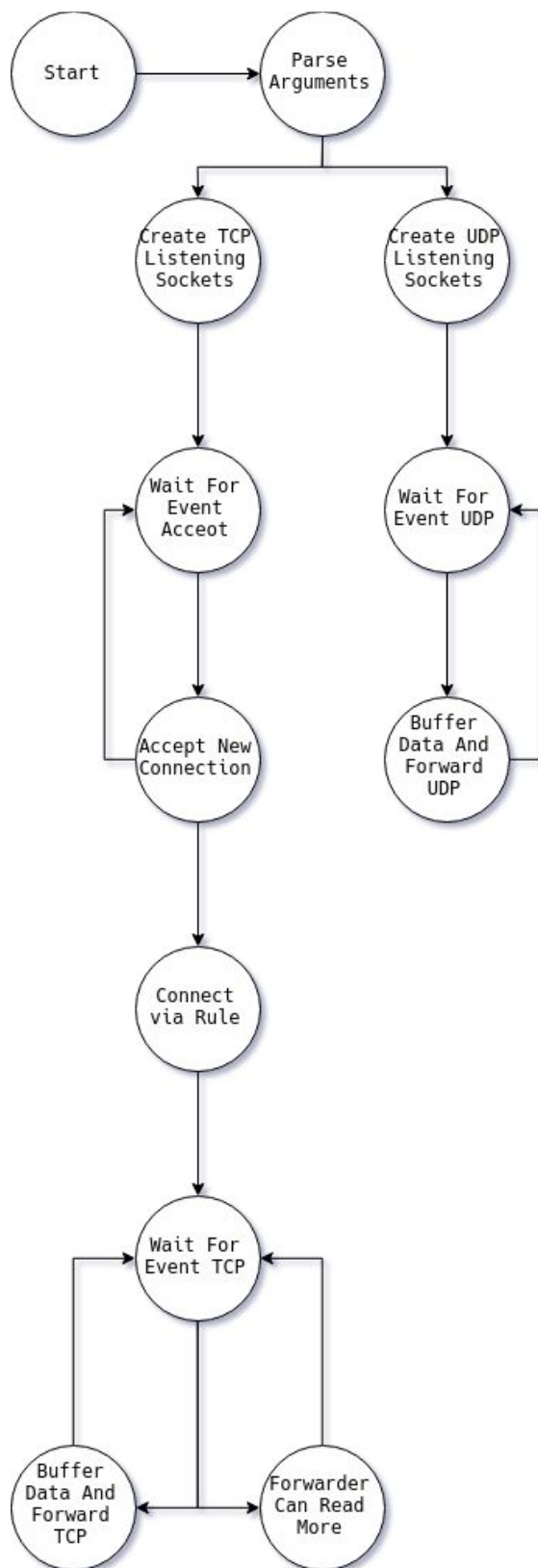
8005 Asn3 - Design

Trust me with your connections, I'm a nice app

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FSM



Pseudocode

Start

Allocate memory for connections

Goto Parse Arguments

Parse Arguments

Add the forwarding rules per arguments

If TCP is selected

Goto Create Listening Sockets

If UDP is selected

Goto Create UDP Listening Sockets

Create TCP Listening Sockets

Per each rule requested create a socket

Goto Wait For Event Accept Accept

Create UDP Listening Sockets

Per each rule requested create a socket

Goto Wait For Event UDP

Wait for Event Accept

Using epoll wait for inbound events

On event

Goto Connect Via Rule

Wait for Event UDP

On inbound event

Goto Buffer And Forward UDP

Wait for Event TCP

If inbound data can be read

Goto Buffer And Forward TCP

If outbound data can be send

Goto Forwarder Can Read More

Accept New Connection

Accept the new connection

On event

Goto Connect Via Rule

Waiting for more connections

Goto Connect Via Rule

Connect Via Rule

By the rules connect to the specified address

Goto Wait For Event TCP

Buffer Data And Forward TCP

Splice data from the connection pipe

Splice data to the outbound socket

Forwarder Con Read More

Splice data to the outbound socket

Buffer Data And Forward UDP

Read data in to buffers

Set the address of the return data

Forward the data via the rule

Goto Wait For Event UDP