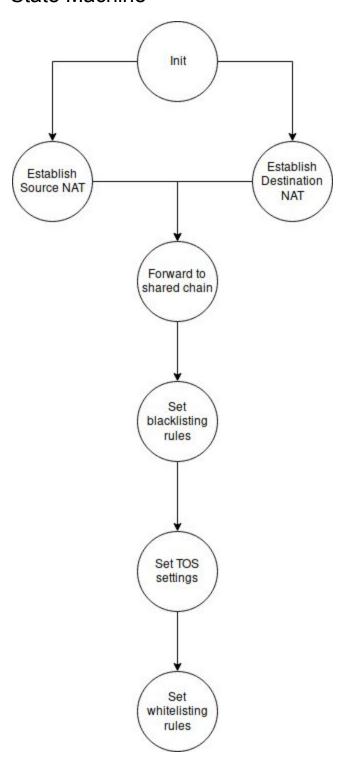
8006 Asn2 - Design

Only the true packets may continue Isaac Morneau; A00958405 John Agapeyev; A00928238

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State Machine



Pseudocode

Init:

- Flush default rules
- · Delete all existing user-defined chains
- Set default policies to drop
- goto ENABLE SOURCE NAT state
- goto ENABLE DESTINATION NAT state

Enable Source NAT:

- Translate outgoing packets to use the firewall's source address
- goto FORWARD TO SHARED CHAIN state

Enable Destination NAT:

- Translate incoming packet to use the internal network's destination address
- goto FORWARD TO SHARED CHAIN state

Forward to Shared Chain:

- Create user chain
- Forward all traffic not bound for firewall machine to user chain
- goto SET BLACKLLISTING RULES state

Set Blacklisting Rules:

- Set rules that are specific, and must be specialized beyond whitelisting
- goto SET TOS SETTINGS state

Set TOS settings:

- Set TOS setting for FTP and SSH packets to prioritize data
- goto SET WHITELISTING RULES

Set Whitelisting Rules:

- · Set rules that can be easily whitelisting
 - TCP Ports
 - UDP Ports
 - ICMP type
- Exit script