## OpenSIPS 2.1 as edge proxy

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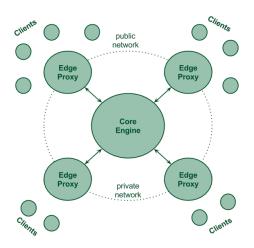
#### Overview



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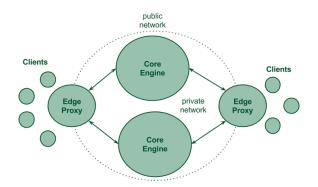
## What is an Edge Proxy?





# What is an Edge Proxy?





## Why use an Edge Proxy?



- Authenticate clients
- Filter traffic
  - non-SIP
  - detect attacks
  - malformed packets
- Normalize traffic
- Different protocols support
- Very easy to scale

# Why use an Edge Proxy?



- Load balancer
  - balance traffic across multiple Core Engines

- Topology Hiding
  - hide core components from your customers

## OpenSIPS as Edge Proxy



- Digest and IP based authentication
- Intrinsic SIP message parser
- RFC 3261 compliant SIP validation
- Detect attacks
  - Calling patterns (Fraud detection)
  - Network traffic (Pike)

#### Normalize Network Protocol



- UDP/SCTP/TCP/TLS/WebSocket support
- normalize everything to UDP towards Core Engines
- translate back towards clients

### Shape SIP Traffic



- Fix header values
  - rport, contact
- Headers compaction
  - use headers short names (m, i, c, l)
- Message compression
  - body and headers
- Add/Remove headers

#### Handle Media



- RTPEngine
- ICE support
- SRTP support
  - DTLS-SRTP and SDES
- Bridges RTP and SRTP

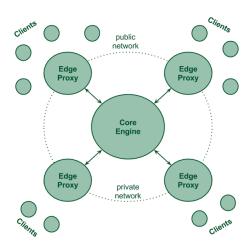
#### Load Balancer



- Dialplan
- Load Balancer
- Dispatcher
- Dynamic Routing

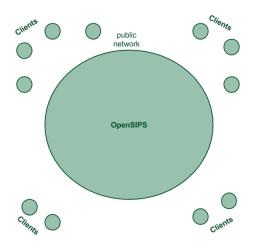
# Topology Hiding





## Topology Hiding





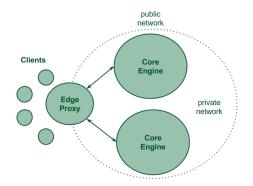
## Workshop





## Workshop Setup





### Take-Away Message

OpenSIPS can be easily used as a flexible and efficient Edge Proxy in a complex multi-tier/component platform

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