

OpenSIPS 2.1

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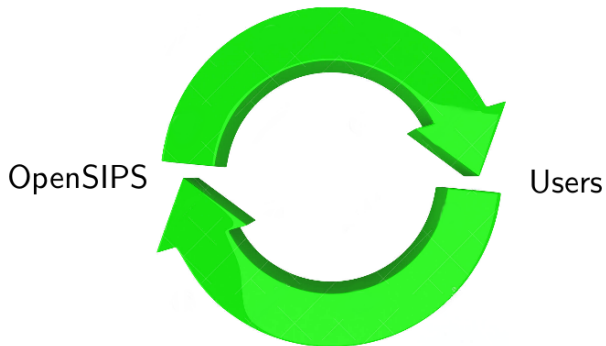
OpenSIPS Project

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August 3, 2015



- *"by users, for users"*



- Monthly IRC Meetings
 - every last Wednesday of the month

- Open discussions
 - new trends
 - technical solutions
 - usage scenarios

- OpenSIPS 1.4



- OpenSIPS 1.11



- OpenSIPS 2.1



- OpenSIPS 3.1

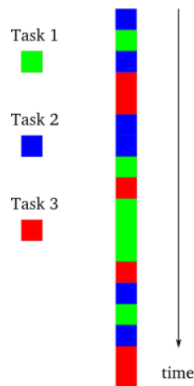
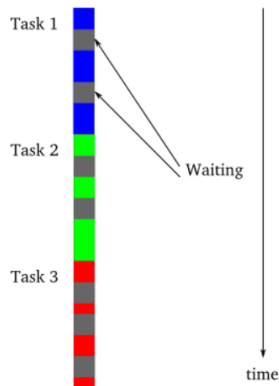


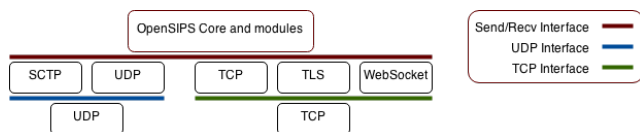
- 2.1 latest stable release
- 1.11 is still maintained (as LTS)
- 1.8 and 1.10 are no longer maintained

- First version benefiting from the OpenSIPS Experimental work
- A new internal architecture (async reactor based)
- New concepts (processing context, execution resume)

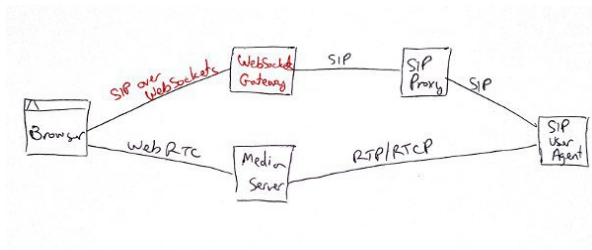
- Support for async operations from script.
- Initial support for external interactions:
 - REST client
 - SQL queries
 - exec() calls
- Requires TM support and scripting enhancements.

- Support for async operations from script.
- Initial support for external interactions:
 - REST client
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- Requires TM support and scripting enhancements.
- **No more I/O blocking !!!**





- Transport protocols are now encapsulated as separate modules
- The core implements the low level network protocols
 - UDP and TCP management
- The transport modules implement the SIP transport layer
 - reuse the network proto implementation from core



- WebSocket support - server side
- build on top of the existing TCP management code
- OpenSIPS does WS <> SIP gatewaying
- But the media part must be separately handled (RTPEngine)

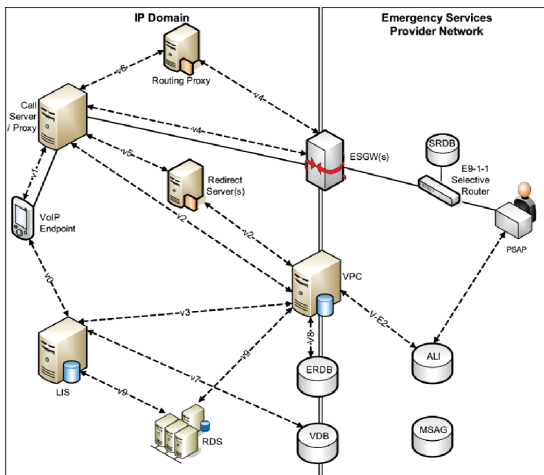
- **Partition** = a standalone set of data that can be separately managed
- Allows using same module for multiple different scopes
- Completely separated (in DB and memory)
 - can be individually reloaded
- Targeted modules: Dynamic Routing, Dispatcher, DialPlan

- Fraud detection based on calling profiles
 - time intervals
 - number of calls per interval
 - number of parallel calls
 - gray-listed destinations
- Profiles can be assigned to subscribers/trunks
- The module triggers the event
 - action is custom defined in event routes

- Simple SIP-wise traffic compacting
 - headers with short names
 - merge/combine headers with same name
 - filter out unwanted headers
- Compress the non-routing information (header and body)
- Reduces bandwidth
 - minimizes MTU related issues
 - avoids unnecessary SIP parsing

- New module on top of routing engines that uses list of gateways/destinations
 - Example: Dynamic Routing, Dispatcher
- Collect on the fly information about the call's quality
 - Example: ASR, PDD, ACD
- Reorder in real-time the used gateways to remove poor quality gateways or to prioritize good quality gateways
- Complex but flexible system of thresholds, alerts and actions

- New module to perform routing for emergency calls
- Follows the IETF specs (RFC 6881, RFC6442)
- Compliant with the i2 specification of the American entity NENA (National Emergency Number Association)



Legend:
 — Voice Traffic
 - - - - Signaling messages
 (e.g., location and routing related information retrieval)

- Quality based routing
- Config file refactoring
- SQLite support
- Edge proxy support
- WebSocket client side + WSS
- Clustering user location
- More async – radius, TLS

- Thank you!

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