SIP Capturing in OpenSIPS 2.2 from A to Z
- workshop -

Ionut Ionita
OpenSIPS Developer
You can find me at ionutionita@opensips.org
Github @ionutrazvanionita
Motivation

- HOMER5 compatibility
- use new async features for sending/receiving HEP packets
- support for HEPv3(UDP/TCP)
- extend capturing agent functionality
PROTO_HEP

- network layer module
- used by **siptrace** and **sipcapture**
- support for HEPv1, HEPv2 and HEPv3
- supports TCP and UDP listeners

```plaintext
listen=hep_tcp:127.0.0.1:506
listen=hep_udp:127.0.0.1:506
```
SIPTRACE

- on demand – everything is now being made through sip_trace along with trace_id
- trace_id – allows defining databases, HEP and SIP destinations
- proto_hep for HEP forwarding
- multiple levels of tracing are now available
  - message level tracing
  - transaction level tracing
  - dialog level tracing
trace_id

- multiple trace ids can be nested under the same name
- MI function sip_trace for controlling trace_ids state
SIPCAPTURE

- fully HOMER5 compliant
- hep_route – special route for HEP packets
- HEP proxy – relay HEP packets based on routing rules
- capture packets different than SIP - report_capture()
- sip_capture() async
HEP features in SIPCAPTURE

- HEPv3 packet manipulation
  - add/modify chunks `hep_set()`
  - remove chunks `hep_del()`
  - read chunks `hep_get()`
- `hep_relay()` - relay packets based on OpenSIPS routing logic
- **HEPVERSION** – script variable
HEP features in SIPCAPTURE(2)

- **hep_route**
  - define a special route for HEP packets
  - packet payload is not parsed
  - `report_capture()` to save packets that are not HEP
  - parse message and go to SIP route with `hep_resume_sip()`

- **hep_net** - layer 3 and 4 information about receiving HEP interface
THANKS!

Any questions?

You can find me on GitHub at @ionutrazvanionita
& ionutionita@opensips.org