

### ATTENDEE REQUIREMENTS

- GOOD KNOWLEDGE OF LINUX
- GOOD KNOWLEDGE OF SIP AND VOIP
- SPOKEN ENGLISH
- LAPTOP FOR LABS

#### ON SITE LOGISTICS

- LAB ENVIRONMENT WITH NETWORK INFRASTRUCTURE, INTERNET, WIFI
- WHITE BOARD, PROJECTOR, COURSE MATERIALS AND STUDENT KIT
- BREAKS WITH COFFEE, SNACKS, BEVERAGES AND LUNCH



## HERNDON, VA, (WASHINGTON, DC) USA MARCH 25-27, 2019

## Kamailio SIP Router Advanced Training

THE BEST OPEN SOURCE SOLUTION FOR HANDLING CARRIER GRADE SIP TRAFFIC

Kamailio (former OpenSER) is a robust open source SIP Server implementation. Starting with version 3.0.0, Kamailio integrated the SIP Express Router (SER) and OpenIMSCore projects, Kamailio was awarded Best of Open Source Networking Software by InfoWorld Magazine. Last stable series is version 5.2.x.



#### **COURSE STRUCTURE**

#### **DAY 1:**

- Kamailio Architecture, VoIP and SIP routing
- · Config file structure and language
- Debugging and troubleshooting
- Authentication, Authorization, Accounting
- Registration and location services
- · Labs: Installation; AAA

#### DAY 2:

- RTP relay and NAT traversal
- · Call control: redirect, forward, hunt
- Traffic dispatching, Load balancing
- Least cost routing, Prefix based routing DID
- SIP Peering and trunking
- Labs: Load Balancing; Advanced Call Control DAY 3:
- Traffic shaping rates and active calls limits
- TLS encrypted communication, WebRTC
- Security: topology hiding, flooding detection
- Fraud prevention
- High Availability, Redundancy
- · Labs: High Availability, Traffic Shaping

NOTE: first day starts at 9:30am, last day ends at 4:30pm, otherwise the start is at 8:30am and the end at 5:00pm, includes several short breaks for coffee and one longer for lunch. Lunch is provided by the organizers, included in the price of the training.

#### TRAINER: DANIEL-CONSTANTIN MIERLA

Daniel started to work with SIP Express Router (SER) from its early beginning in 2002. In 2005 he cofounded Kamailio (OpenSER), being the leader of the project, involved in development as well as in management. Daniel is a frequent speaker at VoIP and Open Source events world wide, advocating SER and Kamailio, publishing articles about real time

15 years of hands on expertise and teaching experience.



communication technologies. He has over http://www.kamailio.org/w/daniel-constantin-mierla/

# flexible routing for your sip and voip traffic

#### BENEFITS

After completing the class, you will be able to setup and maintain a carrier grade SIP platform, offering secure peering, trunking, high availability, redundancy, load balancing and least cost routing, backed up by a Kamailio for Carriers Administrator certificate.

The training is more than a teaching event, offering you the chance to meet people that developed the technology and network with other companies acting on communications market.



The training is organized by **Asipto** in

collaboration with nexVortex:

https://www.nexvortex.com

http://www.asipto.com

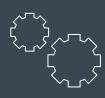
**ORGANIZERS** 

You can bring your equipment if you want to test it during the labs and you can rise your own topics within the open discussion panels.

Being an advanced class, the focus is on practice, during the labs the target is to build real world scenarios.

The class is run on the latest stable version, the 5.2.x series. More details about what is new in this version can be found at:

- http://www.kamailio.org



email: office@asipto.com web: http://www.asipto.com tel: +49 174 5434030

\$1845 : before Mar 12, 2019 \$2345 : before Mar 25, 2019



#### **ABOUT KAMAILIO**

Kamailio started in 2005 (under name OpenSER) as a fork of SIP Express Router (SER), becoming one of leading open source SIP servers. Shortly after renaming to Kamailio in 2008 due to trademark issues, the project restarted the collaboration with SER in order to provide a solid and reliable development environment. Kamailio is used world wide by providers with millions of active phones, routing billions of minutes per month Read more at:



#### **ABOUT ASIPTO**

Asipto is a German based company focusing on professional services and solutions built around Kamailio and SIP Express Router (SER). The team is led by two co-founders of Kamailio Project. Read more about at: http://www.asipto.com

