KAMAILIO

2001 - 2022
development

KAMAILIO WORLD
CONFERENCE

2013 - 2022

KAMAILIO

2002 - 2022

Open Source - GPL

KAMAILIO WORLD
CONFERENCE
online

September 7-8, 2022

21ST
ANNIVERSARY

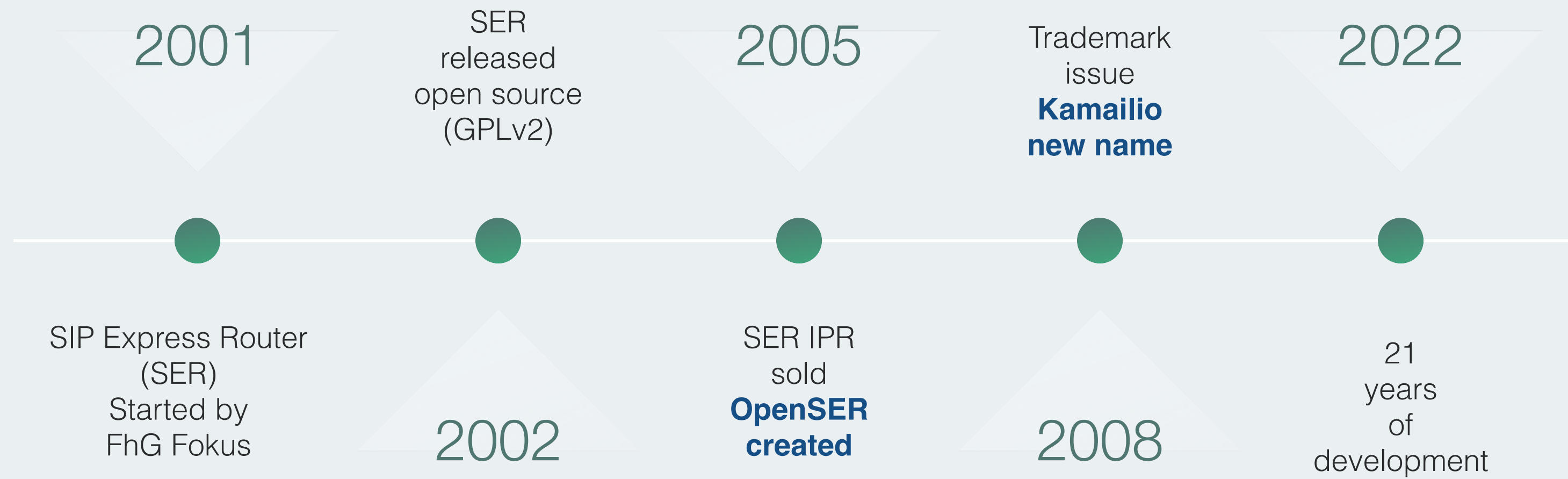KAMAILIO

Last Year In Review

the updates of the ecosystem

- Kamailio World Online, September 7-8, 2022 -

Daniel-Constantin Mierla   Co-Founder Kamailio Project   daniel@asipto.com

Best of
KAMAILIO

▸ Originally from Romania, living in Berlin, Germany

▸ Computer science software engineer - Polytechnics University Bucharest (2001)

▸ Researcher in RTC at Fraunhofer Fokus Institute, Berlin, Germany (2002-2005)

▸ Co-founder, main coordinator and lead developer of Kamailio, an open source SIP Server

▸ Professional consultancy for SIP, VoIP, Kamailio and all RTC at asipto.com

▸ Involved in open source real time communications since 2002

▸ Working with open standard protocols, mainly from IETF, GSMA/3GPP/ITU

▸ C software developer - mainly VoIP server side infrastructure

▸ Co-organizer of Kamailio World Conference, FOSDEM RTC DevRoom

▸ Speaking and promoting OSS RTC at world wide events

Let's Speak SIP   =   E Kama'ilio SIP
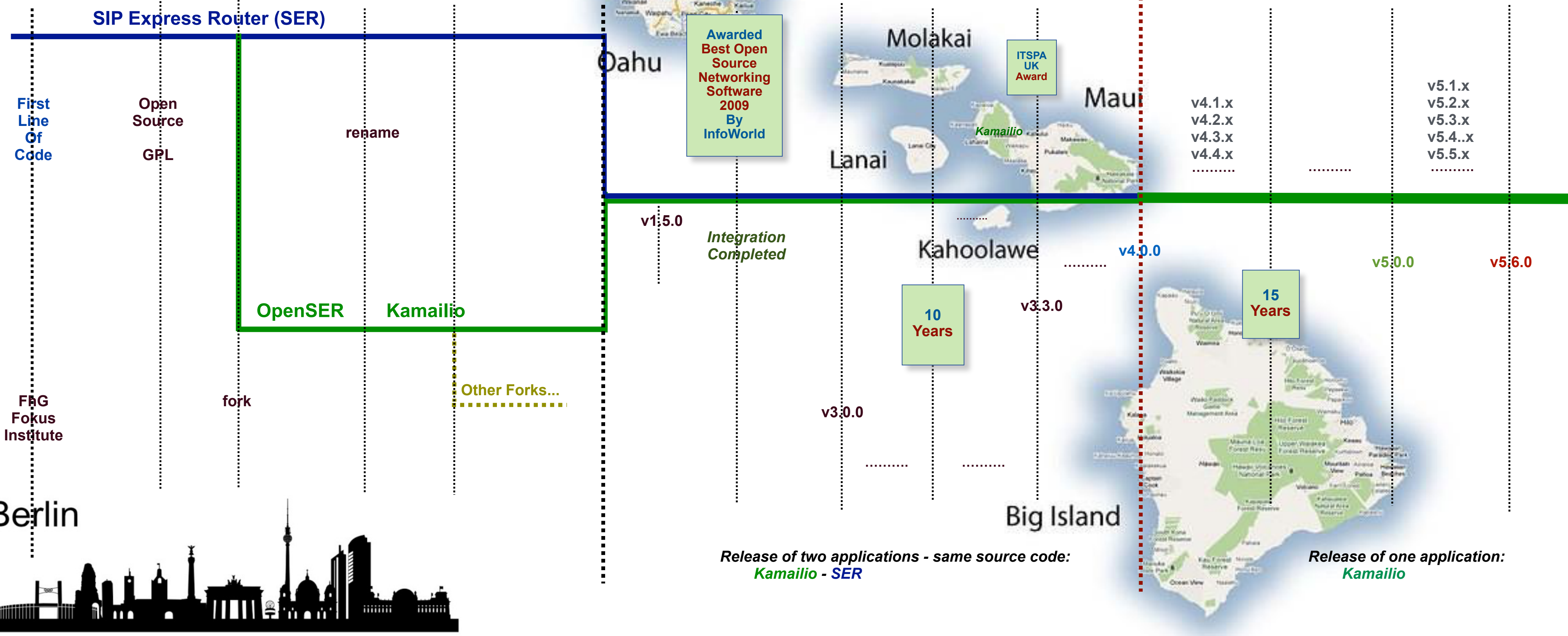
New In Kamailio

2021 - 2022

* Major release v5.5.x - out on May 5, 2021

* Six new modules

  * sworker - delegate sip message processing to a group of special workers

  * jwt - json web token generation and validation

  * stirshaken - new option implementing STIR-SHAKEN authentication and verification

  * lwsc - websocket client connector for interaction with external system

  * lrkproxy - new RTP relay module using kernel forwarding

  * secsipid_proc - pseudo-module with per-process STIR/SHAKEN API for secsipid

* Lot of enhancements to core and many modules

https://www.kamailio.org/w/kamailio-v5-5-0-release-notes/

* Major release v5.6.x - out on May 23, 2022

* Seven new modules

  * misctest - facilitate OSS Fuzz troubleshooting and incorporates the former malloc_test module

  * nats - connector to NATS pub-sub messaging system

  * posops - operations using the position in the SIP message buffer

  * ruxc - useful config functions (e.g., http client query) using Rust libraries

  * siprepo - in-memory SIP message storage

  * slack - connector to Slack channels

  * tlsa - TLS module with statically linked libss

https://www.kamailio.org/w/kamailio-v5-6-0-release-notes/

KAMAILIO

V5.6.0 - NEW FEATURES

* sipdump module can delete traffic stored files with a time based rule

* updates for Lua (5.4), Python (3.x), JavaScript and Squirrel interpreters

* variables with expressions to access the attributes of the local listen sockets

* ability to add DNS SRV records in cache at startup via corex parameters

* DNS SRV support for dispatcher module with option to refresh records on timer

* generic iterators for headers and body lines with functions to change content

* dedicated variables for headers with a list of values (Via, Contact, Record-Route, …)

* function to query RTPengine instances with result available in JSON format

* more flexibility in building Identity headers with secsipid (stir/shaken) module

* function to set the entire SIP message buffer content

* functions to set and remove items in htable using iterators

* option to remove TCP/TLS contacts when loading from database

* significant number of new variables and transformations

KAMAILIO

https://www.kamailio.org/w/kamailio-v5-6-0-release-notes/

✳ To be released in 2023 - new additions during the last months

  ✳ New modules

    ✳ tls_wolfssl - TLS support using libwolfssl

  ✳ $shvinc(…) - atomic increment a shared memory variable value

  ✳ function to rotate XAVPs in a list

  ✳ function to return several contact attributes in XAVPs

  ✳ function to push XAVPs fields to a destination set (create a new target)

  ✳ functions to get/set dialog variables using SIP message attributes

  ✳ function to check if traffic comes from a registered endpoint

  ✳ option to specify reply codes for dns srv failover

  ✳ topos enhancements (filter by methods, rules to skip adding contact, split headers)

  ✳ new variables and defines

  ✳ enhancements to dialog, tm, IMS and many other modules
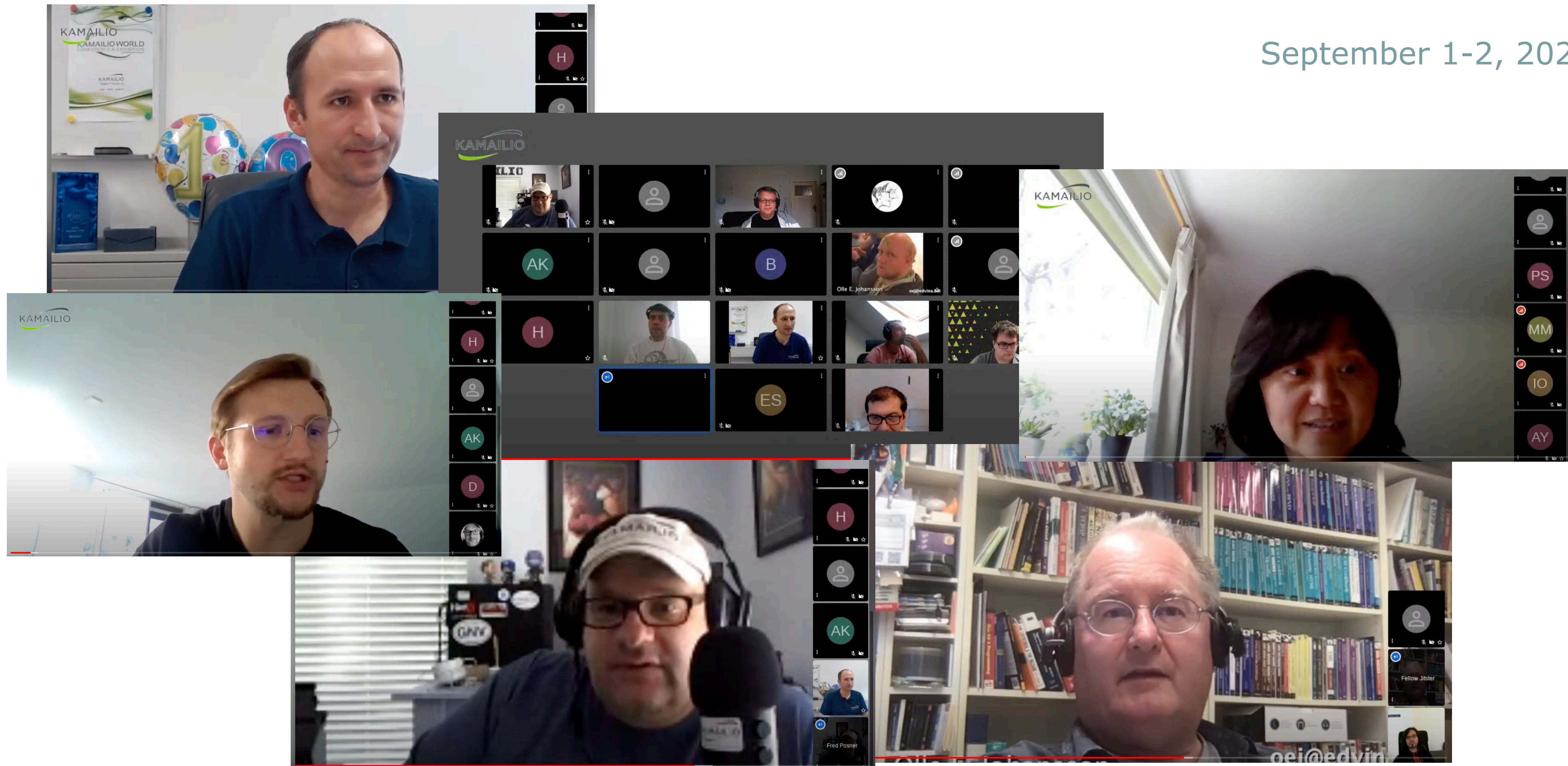
KAMAILIO

The Ecosystem

2021 - 2022

Kamailio World 2021
Online

September 1-2, 2021

KAMCLI - KAMAILIO COMMAND LINE INTERFACE TOOL

https://github.com/kamailio/kamcli

* Alternative to kamctl

  * Most of the subcommands are the same like for kamctl

  * ie., you can replace kamcli with kamctl in many of the examples

  * Over the times should replace completely kamctl

* Written in Python3

  * Allows better input validation

  * More options for format the output

* Modular design using the Click framework

* New subcommands can be added by just placing a Python file in kamcli/commands/ folder

  * Enables easier management of custom database tables or control commands

* Interacts with Kamailio via jsonrpcs module

* Fancy features such as interactive shell with auto-completion, persistent history, completion suggestions, cli syntax highlighting, usual shell key bindings for navigation

* Among last additions: RPC command auto-completion, Acc/CDRs enhancements, Kamailio info on startup, APIBan integration, …

```
(venv) saturnx@saturnxs-MacBook-Pro-2 kamcli$
```

SecSIPIDx Project

https://github.com/asipto/secsipidx

Components:

- `secsipid`: Go library - common functions
- `csecsipid`: C library - wrapper code to build dynamic or static library and .h include files
- `secsipidx`: `main.go` - CLI tool and HTTP API server for checking or building SIP identity

Secure SIP Identity Extensions - IETF STIR and SHAKEN

🕐 **41** commits	⑂ **1** branch	📦 **0** packages	🏷 **0** releases	👥 **1** contributor	⚖ GPL-2.0

Branch: **master** ▾   New pull request   Find file   Clone or download ▾

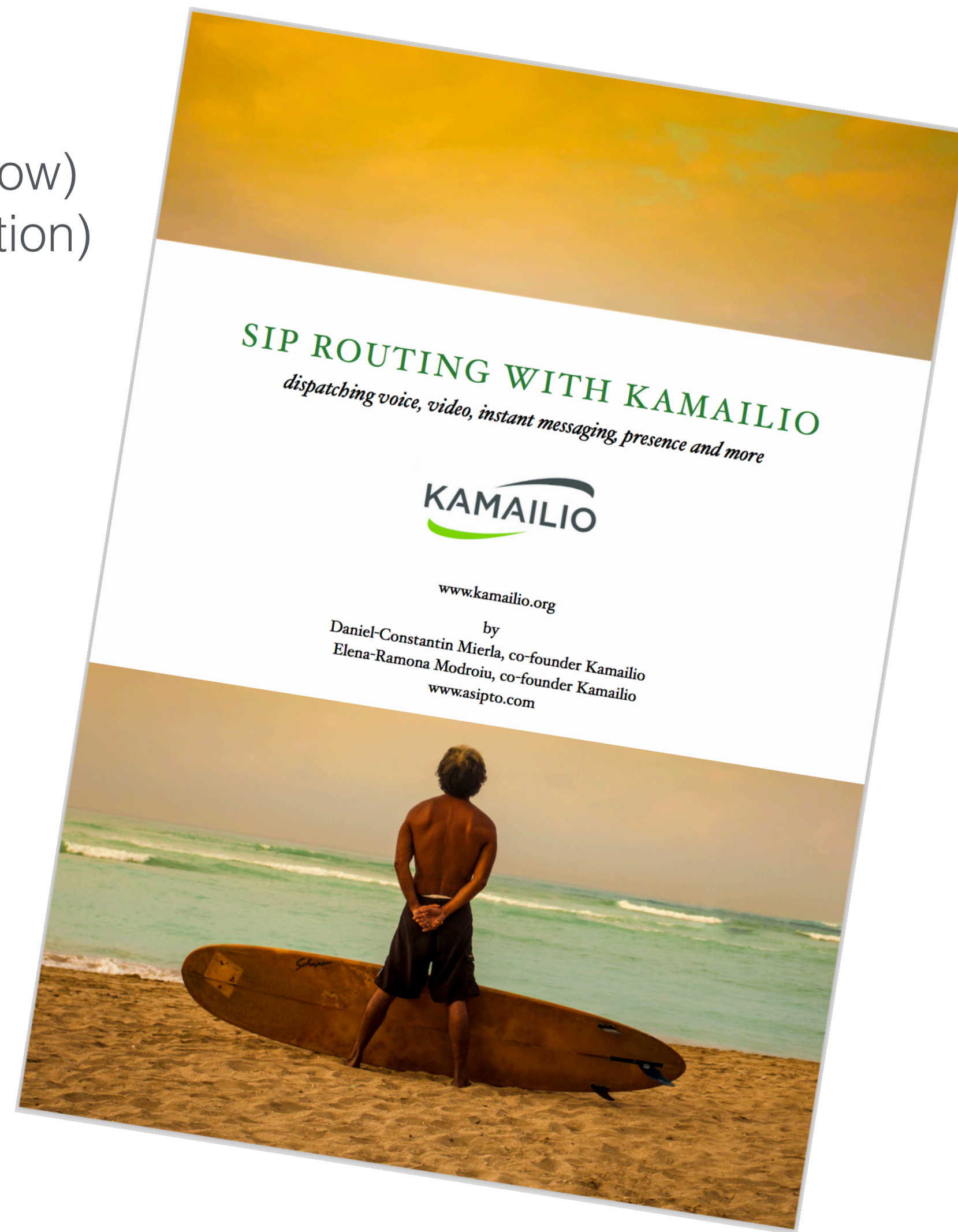| 👤 miconda README.md: updated to-do list - the https server mode implemented		Latest commit 18500a4 26 days ago
📁 csecsipid	csecsipid: include local file to get rid of cgo warning	last month
📁 secsipid	secsipid: propagate origid via parameter	last month
📄 .gitignore	.gitignore: skip binary app	2 months ago
📄 LICENSE	Initial commit	2 months ago
📄 README.md	README.md: updated to-do list - the https server mode implemented	25 days ago
📄 main.go	secsipidx: coherent naming for command line parameters	last month

📖 **README.md**

secsipidx

Secure SIP/Telephony Identity Extensions

Overview

Applications and libraries implementing STIR and SHAKEN (RFC8224, RFC8588), used in SIP/VoIP services:

- RFC8224 - https://tools.ietf.org/html/rfc8224
- RFC8588 - https://tools.ietf.org/html/rfc8588

- content update for v5.3.x (selling now)
- new chapters under work (new edition)

SIP ROUTING WITH KAMAILIO
dispatching voice, video, instant messaging, presence and more

KAMAILIO

www.kamailio.org

by
Daniel-Constantin Mierla, co-founder Kamailio
Elena-Ramona Modroiu, co-founder Kamailio
www.asipto.com

https://www.asipto.com/sw/kamailio-admin-book/

Resources

- **Website: https://www.kamailio.org**

- Development project: https://github.com/kamailio/kamailio

- Documentation page: https://www.kamailio.org/w/documentation/

- Wiki tutorials: https://www.kamailio.org/wiki/

- Bug tracker: https://github.com/kamailio/kamailio/issues

- Users mailing list: https://lists.kamailio.org/cgi-bin/mailman/listinfo/sr-users

- Realtime channels: IRC: #kamailio (freenode.net) - Matrix: #kamailio (kamailio.dev)

- Business directory: https://www.kamailio.org/w/business-directory/

- Download: https://www.kamailio.org/w/download/ (or OS distro repos)

PLANNING FOR THIS AUTUMN

KAMAILIO
developers
event

Düsseldorf, Germany

hosted by

sipgate

Decision To Be Announced Very Soon

www.kamailio.org

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