



WELCOME

The 6th edition of Kamailio World Conference





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EVARISTE
SYSTEMS

KAMAILIO WORLD

CONFERENCE & EXHIBITION
BERLIN GERMANY MAY 14-16, 2018

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VUC

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dynamics



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Agenda

- **Day One**

- **May 15 - Conference Sessions**

- 09:00 - 10:30 [Spektrum] Presentations
- 10:30 - 11:00 [Atrium] Coffee Break
- 11:00 - 12:30 [Spektrum] Presentations
- 12:30 - 13:30 [Atrium] Lunch
- 13:30 - 15:30 [Spektrum] Presentations
- 15:30 - 16:00 [Atrium] Coffee Break
- 16:00 - 18:45 [Spektrum] Presentations

- May 15 - Social Event - Cocktail Party - Drinks - Finger Food
 - 19:00 - 21:00 [Atrium]

- **Spektrum** - the conference room
- **Atrium** - the expo area (just outside of the conference room)
- **Dom** - the catering area (next to expo area)

- **Day Two**

- **May 16 - Conference Sessions**

- 09:00 - 10:30 [Spektrum] Presentations
- 10:30 - 11:00 [Atrium] Coffee Break
- 11:00 - 12:30 [Spektrum] Presentations
- 12:30 - 13:30 [Atrium] Lunch
- 13:30 - 15:30 [Spektrum] Presentations
- 15:30 - 16:00 [Atrium] Coffee Break
- 16:00 - 18:00 [Spektrum] Presentations



Interactive Sessions

- **Pre-Conference Day**
- **May 14 - Workshops (done yesterday)**
 - [Spektrum] Victor Seva - Kamilio - Ask Me Anything
- **Conference Day One**
- **May 15**
 - 17:50 - 18:40 [Spektrum] Randy Resnick - VUC Visions
- **Conference Day Two**
- **May 16**
 - 11:45 - 12:30 [Spektrum] James Body - Dangerous Demos
- **Spektrum** - the conference room
- **Atrium** - the expo area (just outside of the conference room)
- **Dom** - the catering area (next to expo area)



WIFI

- Network Name (ESSID): **FhG-Guests** or **FhG-Feranstaltung**

- Open a browser, try to access a web page:
 - username: **FraunhoferForum**
 - password: ... *see the flyers* ...

- Flyers with these details are on the back of the room
 - if needed, ask the registration desk for support

Registration VAT

*** According to European Union regulations, VAT at the location of the event must be charged to all participants. The 19% German VAT is already included in the price.*

*Participants with a valid EU VAT number **can claim the VAT** back in their country of origin, each local tax authority should provide an electronic portal for this operation.*

Non-European taxable persons can still reclaim the German VAT using the paper-based procedure.

http://ec.europa.eu/taxation_customs/taxation/vat/how_vat_works/vat_on_services/index_en.htm#supply_services

you can claim back 19% from your country tax authority



Social Networking

- **Twitter hashtag: #KamailioWorld**
- **Twitter Accounts**
 - @KamailioWorld
 - @kamailio
- **Facebook - kamailio (page)**
 - <https://www.facebook.com/Kamailio>
- **Google+ - kamailio (page)**
 - <https://plus.google.com/114984922071338017631>
- **LinkedIn - kamailio (group)**
 - <https://www.linkedin.com/groups/kamailio-145924/about>



Live Video Stream

<http://live.pascom.net>

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Last Year In Review



Kamailio Major Releases

- ❖ 0.7.x (2001)
- ❖ 0.8.x (2002)
- ❖ 0.9.x (2004)
- ❖ 1.0.x (2005)
- ❖ 1.1.x (2006)
- ❖ 1.2.x (2007)
- ❖ 1.3.x (2007)
- ❖ 1.4.x (2008)
- ❖ 1.5.x (2009)
- ❖ 3.0.x (2010)
- ❖ 3.1.x (2010)
- ❖ 3.2.x (2011)
- ❖ 3.3.x (2012)
- ❖ 4.0.x (2013)
- ❖ 4.1.x (2013)
- ❖ 4.2.x (2014)
- ❖ 4.3.x (2015)
- ❖ 4.4.x (2016)
- ❖ 5.0.x (2017)
- ❖ 5.1.x (2017)
- ❖ 5.2.x-dev (2018)

New Modules



acc_diameter

app_sqlang

call_obj

evrexec

ims_diameter_server

keepalive

phonenum



sipdump

topos_redis

acc_json

app_python3

db_redis

pua_json

New Features

- **Kamailio Embedded Interface (KEMI)**

- Lot of exports
- Common modules should be close to 100%
- Still to do: IMS and Diameter extensions
- New scripting languages: JavaScript, Squirrel Language and Python3
- Script reload support for Python and Python3

- **Enhancements**

- Lots of improvements to IMS/VoLTE extensions
- RTP recording and transcoding capabilities to rtpengine
- Latency statistics and routing for dispatcher (load balancer)
- Topology stripping (topos module)
- Many Redis-related additions, including cluster support, pipeline and backend for topos
- HEP3 (sipcapture) packet forwarding - sip_capture_forward("uri") - sip_capture_forward("sip:127.0.0.1:5090")
- Transparent SIP proxy (anycast)
- RPM packaging in better shape

Transparent SIP Proxy - Anycast

- **Expectations**

- Forward without adding/removing headers required in SIP specifications
- Mainly about to not alter Via stack
 - Do not add for SIP request
 - Do not remove for SIP response
- Set source IP (\$si) and local socket (\$Ri)
- It was there for very long time - **send(...)** and the variants
 - Easy with deployments running on a single socket

- **Corex module**

- Added some helper functions to help on deployments with multiple network interfaces
- <https://kamailio.org/docs/modules/devel/modules/corex.html>

```
# before forwarding request
via_add_srv("1");
$xavp(via=>node) = "10.1.0.1";
via_add_xavp_params("1");

# testing if a response belongs to a transaction
if(!t_check_trans()) {
    append_hf("X-Src-Addr: $su\r\n");
    $var(d) = $(hdr(Via){s.select, ,-1}{param.value,node});
    send_data("sip:$var(d)", "$mbu");
    drop();
}

# once receiving a transparent proxied request
set_rcv_socket("udp:10.0.0.1:5060");
set_source_address("udp:10.0.0.100:5080");
```

Kamailio Ecosystem

- **Kamailio Unit Testing Framework**

- Leverage Docker for isolated execution
- Relies on common cli tools like sipsak, sipp, pjsua
- <https://github.com/kamailio/kamailio-tests>
- Check the workshop by Giacomo Vacca

- **Organization**

- Markus Monka in the Management Team in place of Marcus Hunger
- New: Kamailio Admin Team - daily operations and administration for Kamailio project - 14 people

- **Twitter**

- We were assigned **@kamailio** handle



Next For Kamailio

- **development**

- no major features missing
- but there will be new stuff as always
- anyhow expect polishing and improvements to no-sql based data replication, distributed message queue (dmq), presence, ims/voip, ...
- next major release on autumn/winter 2018
- more efforts on continuous integration
- finalize the architecture for the unit testing framework and add units
- documentation for KEMI functions

- ***eco-systems***

- get admin team rolling
- upgrades to the infrastructure
- events world wide (astricon, cluecon, fosdem, ...)
- Kamailio World Conference 2019



Kamailio Business Directory

Anyone offering services related to Kamailio can get listed there with:

- *name and contact coordinates*
- *short description*

<https://www.kamailio.org/w/business-directory/>

Home

Features

Download

Business Directory

Management

Contact Us

Business Directory

This is a list of companies and individuals offering commercial products or services based on Kamailio or SIP Express Router (SER). The list is managed by Kamailio project, if you want to apply to be listed check first the [Business Directory Rules](#). Also, check our [Business web page](#) for other details regarding business environment related to this project.

Disclaimer: whilst we do the best to select serious applications, Kamailio and SER projects, along

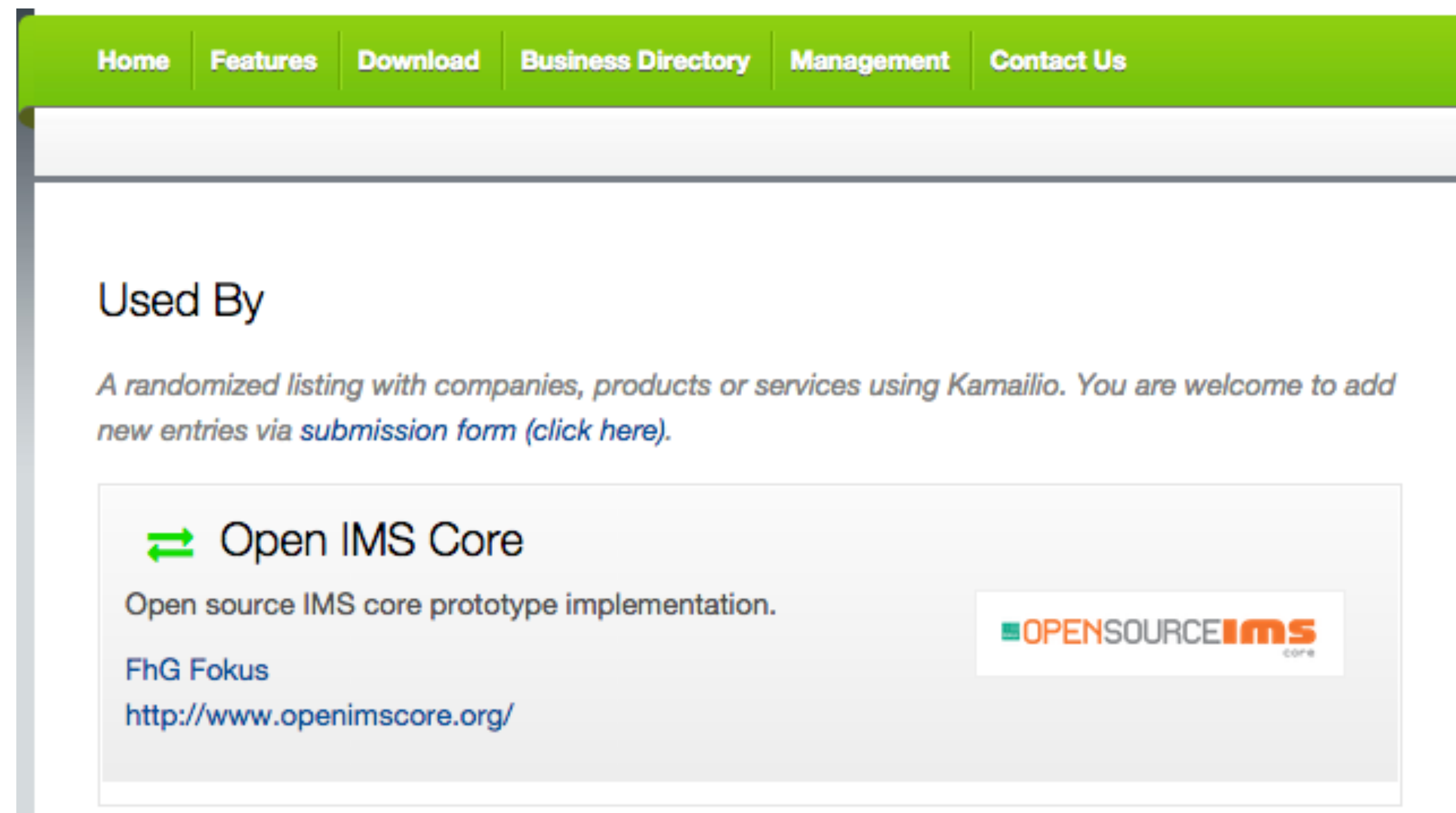


Kamailio Used-By Directory

Anyone using Kamailio can get listed there with:

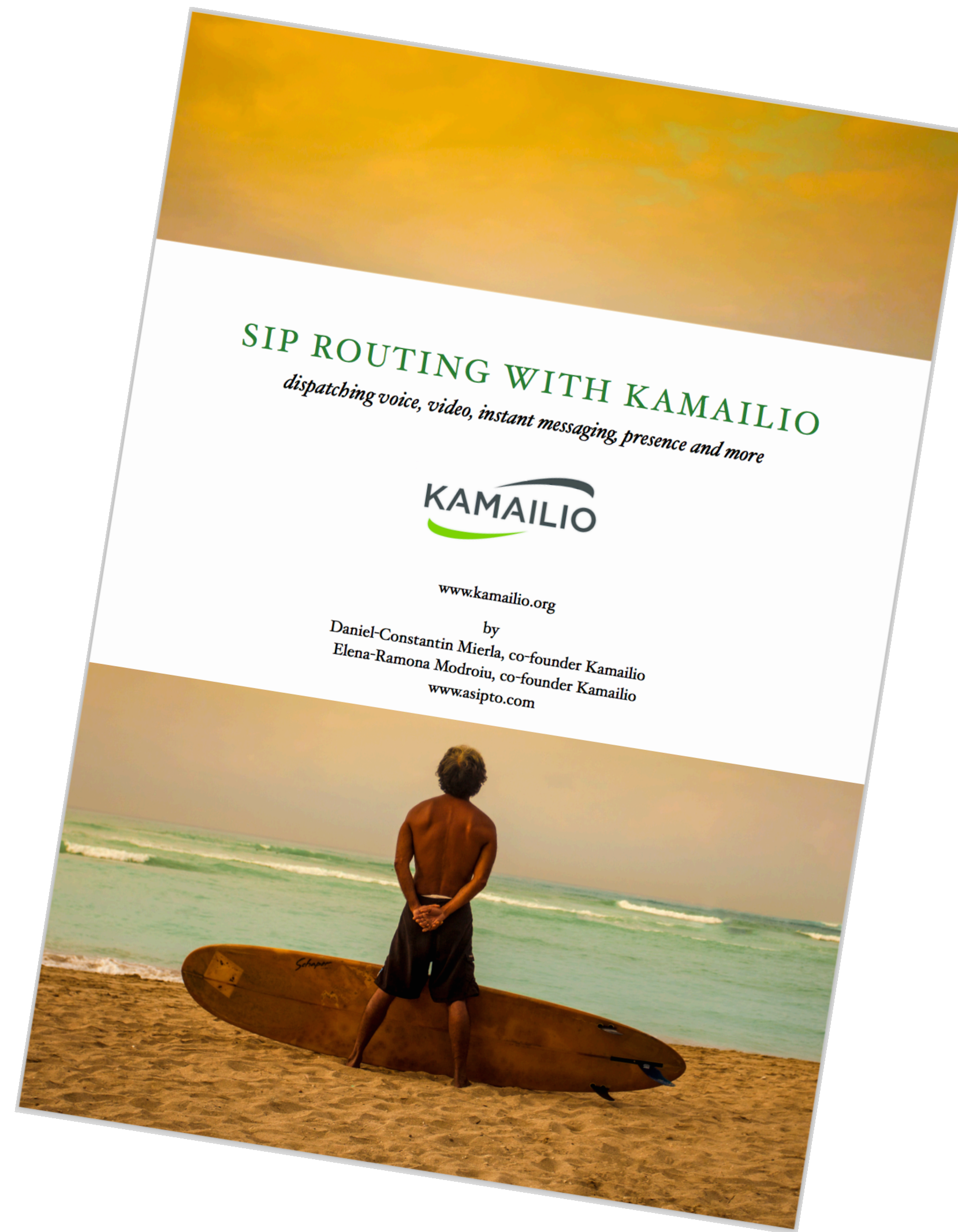
- *name and contact coordinates*
- *short description*
- *logo*

<https://www.kamailio.org/w/used-by/>



The screenshot shows the Kamailio website's navigation menu with options: Home, Features, Download, Business Directory, Management, and Contact Us. Below the menu, the 'Used By' section is displayed, featuring a randomized listing of companies, products, or services using Kamailio. A specific listing for 'Open IMS Core' is highlighted, including a description, the provider 'FhG Fokus', and the website URL 'http://www.openimscore.org/'. The listing also features the 'OpenSourceIMS core' logo.





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



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Thank You!



Enjoy the event!

Elena-Ramona Modroiu
Daniel-Constantin Mierla
www.asipto.com