Welcome to
WAMOS 2015
the 2nd Wiesbaden Workshop on Advanced Microkernel Operating Systems

August, 6th 2015
Wiesbaden, Germany

WAMOS 2015

Solicited only *short* papers.

- up to three pages
- intended for reports on work in progress
- or concepts (aka possibly weird ideas)

Received 8 submissions
Review process

- each paper received three or four reviews
- 6 unconditionally accepted
- 2 weakly accepted

Accepted all 8 papers

- re-submission of camera-ready papers
- improved quality

Many thanks to the program committee!

Alexander Baumgärtner
Sergej Bomke
Olga Dedi
Annalena Gutheil
Daniel Mierswa
Steffen Reichmann
Kevin Sapper
Florian Schneider
Daniel Tkocz
Benjamin Weißer
Andreas Werner
RheinMain University of Applied Sciences, Wiesbaden, Germany

Agenda

Diverse program:

- Kernel Design Principles
- IPC Performance and Security
- Microkernel Scheduling
- Device Drivers and I/O

Morning:

- 9:15 – 10:15 Keynote: Alex Züpke on *AUTOBEST: A microkernel-based system (not only) for automotive applications*
- 10:30 – 11:30 Session 1: Kernel Design Principles
- 11:45 – 12:25 Session 2: IPC Performance and Security

Afternoon:

- 14:00 – 15:00 Session 3: Microkernel Scheduling
- 15:15 – 16:15 Session 4: Device Drivers and I/O

9:15 – 10:15: Keynote talk

**AUTOBEST: A microkernel-based system
(not only) for automotive applications**

Alex Züpke, HSRM

Session 1: Kernel Design Principles (10:30 – 11:30)

- Unikernels
  Kevin Sapper
- Shared libraries for the seL4 Kernel
  Andreas Werner

Session 2: IPC Performance and Security (11:45 – 12:45)

- Improvement of IPC responsiveness in microkernel-based operating systems
  Steffen Reichmann
- Side Channel and Covert Channel Attacks on Microkernel Architectures
  Florian Schneider and Alexander Baumgärtner

Session 3: Microkernel Scheduling (14:00 – 15:00)

- Towards policy-free Microkernels
  Olga Dedi
- User-level CPU Inheritance Scheduling
  Sergej Bomke

Session 4: Device Drivers and I/O (15:15 – 16:00)

- USB in a microkernel based operating system
  Daniel Mierswa and Daniel Tkocz

- User-mode device driver development
  Annalena Gutheil and Benjamin Weißer

Discussion and Closing Remarks

Many thanks to the authors and the PC for an interesting day!

Grades to be determined by end of August.
WAMOS'16 not very likely to happen, maybe WAMOS'17
If not yet done, please send me your slides (PDF)

Feedback and suggestions for next year?

- Need more time for preparation!
- Lab environment must work out of the box
- Use a different Microkernel?
- ....