

1st International Workshop on Protocols and Applications with Multi-Homing Support (PAMS 2011)

to be held in conjunction with the

[25th International Conference on Advanced Information Networking and Applications \(AINA\)](#)

March 22-25, 2011, Singapore



<http://tdrwww.iem.uni-due.de/pams2011.html>

Scope

Network transport protocols like TCP/IP were designed under the assumption that an endpoint is connected to a single network and addressed by only one Network Layer address. But today, with the popularity of resilience-critical applications, like e-commerce, e-health and emergency services, there is interest in having multi-homed endpoints, where systems are connected to multiple networks to provide necessary resilience. The management of multi-homing creates challenges for applications and underlying protocols alike. For the best application performance, the approaches on the different protocol layers should work cooperatively.

While multi-homed Transport Layer protocols like SCTP have been available for quite some time, multi-homing has become a hot research topic because of the recent progress by the IETF to standardize Multi-Path TCP (MPTCP), a multi-homing extension for TCP. This effort has also led to research on the Session Layer (e.g. HIP) and Network Layer (e.g. LISP, ILNP), particularly for routing approaches with respect to resilience. Cross-layer optimisation in this field may lead to further improvements.

The intent of our proposed workshop is to bring together people from research and industry, in order to provide a discussion forum for state-of-the-art topics related to multi-homing on Network, Transport, Session and Application Layers. The workshop will include full-paper sessions as well as a poster session (with short presentations) to introduce preliminary ideas as well as work in progress.

Workshops proceedings will be published by IEEE CS Conference Publishing Service and will be included in the Digital Library.

Topics of Interest

Topics of interest include (but are not limited to):

- Network Resilience by Multi-Homing
- Network Architectures for Multi-Homed Systems
- Performance Evaluation of Multi-Homed Systems
- Deployment of Multi-Homed Protocols in Existing Networks with Middleboxes
- Design and Implementation of Multi-Homed Systems
- Load Sharing and Load Balancing for Multi-Homed Systems
- Mobility for Multi-Homed Systems
- Protocols with Multi-Homing Support
- Congestion and Flow Control of Multi-Homed Systems
- Quality of Service for Multi-Homed Systems
- Security of Multi-Homed Systems
- Application Deployment and Support for Legacy Applications
- Cross-Layer Optimization for Multi-Homed Systems
- Multi-Homing in the Context of Future Internets

Important Dates

- Paper Submission Deadline: October 15, 2010 (extended)
- Author Notification: November 1, 2010
- Author Registration: December 3, 2010

Organising Committee

General Chair:

Thomas Dreibholz, University of Duisburg-Essen, Germany

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Michael Tüxen, Münster University of Applied Sciences, Germany

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