



International Workshop on MILS: Architecture and Assurance for Secure Systems

Sergey Tverdyshev

SYSGO AG

stv@sysgo.com

Amsterdam, 20.01.2015

Welcome to the MILS world

- Security is keeping making headlines in news
- Growing systems complexity and interconnections make addressing security issues harder
- MILS can help solving these problems by
 - addressing security issues modularly
 - allowing mixing applications/components with different security criticalities
 - allowing achieving high-, medium-, basic assurances
 - providing standardised open APIs
 - providing scaling from local systems to networked applications
 - supporting system designers with templates, guidelines and good-practices at all stages of system development
 - integrating with certification schemes
 - ...

- There are some active working groups on MILS topics
- EURO-MILS
 - FP7/H2020 project
 - The Open Group “MILS WG”
 - working group under umbrella of The Open Group
- D-MILS
 - FP7/H2020 project

10:00	Welcome
10:15	<i>EURO-MILS: Building and certifying modular secure systems</i> , Sergey Tverdyshev, SYSGO
11:00	Coffe break
11:30	<i>Two Architecture Approaches for MILS Systems in Mobility Domains (Automobile, Railway and Avionik)</i> . Daniel Adam, Sergey Tverdyshev, Peter Kleiner, Carsten Rolfes, Timo Sandmann, Steffen Baehr, Oliver Sander, Uwe Baumgarten and Juergen Becker.
12:00	<i>ProvenCore: Towards a Verified Isolation Micro-Kernel</i> . Stéphane Lescuyer
12:30	<i>Security Type Checking for MILS-AADL Specifications</i> . Kevin van der Pol and Thomas Noll.
13:00	Lunch
14:00	<i>MILS Initiatives within The Open Group</i> . Rance DeLong, TOG
14:45	<i>Security-Informed Safety Case Approach to Analysing MILS Systems</i> . Kateryna Netkachova, Kevin Müller, Michael Paulitsch and Robin Bloomfield.
15:15	<i>Evaluation paradigm selection according to Common Criteria for an incremental product development</i> . Andreas Sinnhofer, Wolfgang Raschke, Christian Steger and Christian Kreiner
15:30	Coffe break
16:00	<i>D-MILS: Specification, Analysis, Deployment, and Assurance of Distributed Critical Systems</i> . Harald Ruess, fortiss, and Stefano Tonetta, Fondazione Bruno Kessler
16:45	<i>Partitioning in Safety and Security: Mapping to Separation Kernel Partitioning Mechanisms</i> , Holger Blasum
17:00	<i>Developing Assurance Cases for D-MILS Systems</i> . Richard Hawkins, Tim Kelly and Ibrahim Habli
17:15	<i>Formal Methods for MILS: Formalisations of the GWV Firewall</i> , Ruud Koolen and Julien Schmaltz
17:30	Summary

Final countdown

- This a workshop, feel free to ask questions

- For presenters, please keep timing and also for questions
 - We will help you by giving a signal:
 - Yellow card 5 minutes left
 - Red card 1 minute left

- Let's start ...

EURO-MILS CONTRACT NO: 318353

“This project has received funding from the European Union’s Seventh Framework Programme for research, technological development and demonstration under grant agreement n° 318353.”

If you need further information, please contact the coordinator:

Technikon Forschungs- und Planungsgesellschaft mbH

Burgplatz 3a, 9500 Villach, AUSTRIA

Tel: +43 4242 233 55 Fax: +43 4242 233 55 77

E-Mail: coordination@euromils.eu

The information in this document is provided “as is”, and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at its sole risk and liability.