

Invitation TIOBE User Day

“Trends, Challenges and Solutions regarding Embedded System Security”

Eindhoven, Apr. 25th, 2018

Dear client/partner,

Hereby, we would like to draw your attention to the following. On May 30th, 2018, TIOBE Software B.V. organizes its User Day. The event will comprise:

1. Expert views on the trends, challenges, industry best practices and experiences regarding the topic “security in embedded systems”. For this, we have invited various speakers. Each speaker will address the topic from his/her own perspective, assuring a broad and attractive program.
2. Offer networking opportunities and foster debate among up to 150 participants from all over Europe, including the TIOBE team.
3. Announcement of the winner of TIOBE’s contest (information will be received after registration).

The specifics of this event are:

Date:	May 30 th , 2018
Time:	13:00 – 19:00
Venue:	High Tech Campus I – The Strip Auditorium (reception at Röntgen) 5656 AE Eindhoven
Audience:	R&D/software managers, architects, engineers and testers (max 150 seats)
Program:	as attached

We would highly appreciate your presence during this event, which will of course be free of charge. In case you are not able to join us, you are free to pass this invitation on to one of your colleagues.

For registration to the event, please send an email to Hans Sassenburg (hans.sassenburg@tiobe.com). Upon confirmation of your registration, you will receive travel and other practical information within a few days.

We very much look forward seeing you this May in Eindhoven!

Paul Jansen
(CEO)

Hans Sassenburg
(Board member)

Program

13:00 – 14:00 Reception

14:00 – 14:10 *Opening - Hans Sassenburg (chairman)*

14:10 – 14:45 *“Embedded Systems Software Security, Trends, Frameworks and Challenges”*
Kuai Hinojosa
Manager technical security programs (TomTom)

14:45 – 15:30 *“Software protection in Embedded Systems”*
Maarten Bodlaender
Lead Security Technologies department (Philips Intellectual Property & Standards)

15:30 – 16:00 Break

16:00 – 16:30 *“How Security is measured with the TIOBE Quality Indicator (TQI)”*
Paul Jansen
CEO (TIOBE Software BV)

16:30 – 17:00 *“Security in Internet of Things”*
Stefan Kuipers
Senior Principal System Security Architect (NXP)

17:00 – 17:30 *“Security throughout the lifecycle in Image Guided Therapy Systems”*
Daan van der Munnik,
Technical Department Manager Software (Philips Healthcare)

17:30 – 17:45 *Closure – Hans Sassenburg (chairman), includes announcement of contest winner.*

17:45 – 19:00 Networking (with drinks and snacks)

<p>Kuai Hinojosa (TomTom)</p> 	<p>The future is here, we are now building more and more embedded connected devices to power the way we travel, improve our health and monitor our homes. In addition, we are using the strength of data analytics and AI to innovate the embedded devices world. As we continue to innovate in this space, we are facing overwhelming challenges to keep embedded systems secured and the data such systems manage, secured and private. In this talk, key challenges and trends we are facing are discussed, and most importantly, a key security framework or model will be shared that can aid organizations in building a software assurance program that can support a secure software development program for embedded systems.</p>
<p>Maarten Bodlaender (Philips)</p> 	<p>Cybersecurity is front and center in the transition to connected care, and product and information security is a combination of education, policies and procedures, physical security and technology. The Security Technologies department within Philips Intellectual Property & Standards) focuses on creating new technical solutions to secure systems against implementation attacks and to migrate to post quantum cryptography solutions. In this talk will, protecting sensitive algorithms against implementation attacks will be discussed.</p>
<p>Paul Jansen (TIOBE Software BV)</p> 	<p>Security is one of the 8 quality attributes of the ISO/IEC 25010 standard about software product quality. Now that embedded software is getting more and more connected, security is becoming an issue in this market.</p> <p>Until recently, TIOBE measured security only implicitly as part of other metrics. It was below the radar. Now that the demand of customers is high in this respect, TIOBE decided to make a change and promote security as an explicit software metric including qualification in its definition of the TIOBE Quality Indicator.</p>
<p>Stefan Kuipers (NXP)</p> 	<p>Security is a broad topic that cannot be approached looking just at the end-node or infrastructure perspective. From the system design phase, security needs to be considered ranging from - the expected type of attacks, e.g. remote, local or both as well as the required level of attack resistance.</p> <p>Lifecycle management that covers all stages like key provisioning, onboarding, device updates / upgrades and de-commissioning are becoming increasingly important as IOT devices will remain longer in the field than any device before. What is needed in terms of security greatly depends on use-cases, market segments, availability of network connections, but also on geographical locations and corresponding legislation where no one fits all architecture.</p>
<p>Daan van der Munnik (Philips HC)</p> 	<p>The IGT-Systems business unit within Philips delivers world-class image guided therapy devices, used in cardiovascular interventional procedures. Combining patient and operator safety with state-of-the-art image quality has been our main driver for many years. Over the last decade, security has become an increasingly important factor in this.</p> <p>In this talk, the different aspects of security that we face during lifecycle of these systems will be highlighted. It will cover aspects related to the design, implementation, certification and post-market-surveillance of the system itself. Next to this, it will also touch upon the environment (tools, procedures and infrastructure) used to develop and maintain these systems.</p>