
HENSOLDT Cyber and CSIRO's Data61 collaborate on Trustworthy Systems Development

Brisbane, Australia, 19 September 2018 – HENSOLDT Cyber GmbH and CSIRO's Data61 have today announced an international partnership to develop a trustworthy hardware-software stack to protect against devastating cyber-attacks on defence systems, smart factories, autonomous vehicles and critical infrastructure at a time where threats are on the rise.

“Our uncompromising approach to cyber security combines secure processor hardware based on the open RISC-V architecture, secured production, and the mathematical security guarantees of the seL4 operating system,” said Marian Rachow, Managing Director of HENSOLDT Cyber GmbH.

Announced today at D61+ LIVE, Data61's annual data science and technology showcase, this partnership will secure cyber-physical systems through seL4, the world's most trustworthy operating system, mathematically proved free of implementation defects.

Data61's Trustworthy Systems group, the original developers of seL4, will adapt it to run efficiently on HENSOLDT Cyber processors, and will extend seL4's existing correctness proofs to apply to that hardware.

“seL4 is provably secure, but its security guarantee relies on the assumption that the underlying hardware is trustworthy,” said Professor Gernot Heiser, Chief Research Scientist for Trustworthy Systems at CSIRO's Data61. “We are excited to work with HENSOLDT Cyber, putting seL4 at the core of a security-focused integrated hardware-software stack to secure critical infrastructure.”

Munich-based HENSOLDT Cyber, founded just over a year ago as a joint venture of German companies HENSOLDT and Secure Elements, develops advanced secure IT solutions for cyber-physical systems deployed in industry and defence. “Collaborating with leading researchers to produce the best technology is core to our approach, and Data61 are world leaders in secure operating systems,” said Rachow. Securing Industry 4.0 is an early goal of the company, which is currently evaluating prototype solutions for smart production lines.

“Our first secure processor chips, capable of running seL4, will be produced in the first half of 2019,” said Simon Metzner, Chief Operations Officer (COO) of HENSOLDT Cyber. “The level of interest we see for this technology indicates a great market opportunity for our products.”

Gernot Heiser is also Chief Scientist Software at HENSOLDT Cyber, Scientia Professor and John Lions Chair at the University of New South Wales.

About HENSOLDT

HENSOLDT is a global pioneer of technology and innovation in the area of defence and security electronics. The company is a market leader in civilian and military sensor solutions, developing new products to counter evolving threats based on disruptive concepts in such fields as big data, robotics and cyber security. With a workforce of some 4,300 employees, HENSOLDT generates revenues of more than 1 billion euros per year.

www.hensoldt.net

About HENSOLDT Cyber

The German company develops embedded IT products that meet the highest security requirements. It integrates an invulnerable operating system with security-hardened hardware to build the most secure product on the global IT market. The company combines more than 50 years of domain experience with world-class expertise in hardware- and software design to achieve global leadership.

www.hensoldt-cyber.com

About CSIRO's Data61

CSIRO's Data61 is Australia's data innovation network that transforms existing industries and creates new ones through the application of science and technology. As an applied R&D partner, Data61's capabilities range from cybersecurity, confidential computing, IoT, robotics, machine learning and analytics, software and programming to behavioural sciences and more. Data61 is the data science and technology arm of Australia's national science agency, the Commonwealth Industrial and Scientific Research Organisation (CSIRO).

www.data61.csiro.au

Photo caption:

HENSOLDT Cyber combines secure processor hardware based on the open RISC-V architecture with secured production and the mathematical security guarantees of Data61's seL4 operating system.

Source: HENSOLDT

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