Title	*Working with Safe, Deterministic and Secure Intelligence from Cloud to Edge*
Speaker	**Dr. Astrid Elbe** Managing Director Intel Labs Europe

Abstract

The Internet of Things (IoT) will be the largest revolution in the data economy. At Intel, we understand the exponential power of data, and we're making it practical and economical to put it to work from the edge to the cloud. Intel® technologies purpose-built for IoT deliver optimized performance at every point, practical ways to use artificial intelligence, broad connectivity support, and a built-in foundation of functional safety, time determinism and security to help protect and make dependable your data and systems. By harnessing the massive flood of data generated by connected things—and using it to gain actionable insights—we'll accelerate business transformation to a degree never seen before.

Managing services and infrastructure at the edge is a complex balancing act that has to meet much more demanding timing and dependability constraints and requires vastly more speed and precision than in a conventional cloud data center. Satisfying the competing objectives of stringent Quality of Service (QoS) and workload consolidation in this complex IoT environment requires new approaches and advancements. Virtualization alone does not deliver the full potential for this IoT transformation. E.g. for challenging industrial workloads an automatic and self-managing approach will be needed.

Biography

Dr. Astrid Elbe is Managing Director of Intel Labs Europe leading Intel's research efforts in Europe as an essential group driving Intel strategy and hence company transformation.

The organization is focused on Edge Computing Research with a particular emphasis on Dependable Cyber Physical Systems.

Astrid brings >20 years of experience in semiconductor industry in various R&D and Engineering Management roles at Infineon Technologies Security and Wireless Business Group and within Intel Product Divisions. She studied Physics and Mathematics as well as Technology and Innovation Management. Astrid holds a PhD in Surface Physics and has more than 20 patents in areas including cryptography and microarchitecture.