



IAP Symposium Spring 2014

The Internet Of Things

The programme will include

09:00	Registration and Refreshments
10.00	Welcome and Opening Remarks: <i>Alastair Revell, Director General</i>
10:10	Dom Guinard: <i>A Vision of the Web of Things</i>
10:55	Adrian Wright: <i>Securing the Internet of Things</i>
11:40	Refreshments
12:05	William Webb: <i>Weightless – A New Communication Standard for the Internet of Things</i>
12:50	Angela Sasse: <i>How Software Developers Can Make Security Easier</i>
13:35	Pre-Lunch Drinks

Our guest speakers for the IAP Symposium Spring 2014



Dom Guinard

Dom Guinard is the CTO and co-founder of EVERYTHING, a software company providing Active Digital Identities for any physical object. He got his PhD from ETH Zurich, where he worked on laying down the foundations of the Web of Things, a worldwide network of interconnected objects (sensors, appliances, machines and tagged objects) and co-founded the Web of Things (WoT) community. Before this, Dominique worked on bringing industrial networks of RFID-tagged objects to the Web at the MIT Auto-ID Labs in the USA. He has worked with Sun Microsystems and Nokia in researching and developing mobile Internet of Things prototypes. He also spent four years at SAP working on the software aspects of the next generation platform for integrating the Internet of Things with business processes.

He says this about his presentation: *"In the vision of the Web of Things, embedded devices become first-class citizens of the Web but what if every day objects could all become part of this gigantic network? What if your watch, guitar, bike or bottle of organic iced-tea could all have an active digital identity on the Web? With the advent of tagging technologies such as NFC, EPC or QR-codes, this is becoming a reality with a lot of potential for great innovations. In this presentation we'll discuss the foundations of the Internet and the Web of Things and extend this to what it means for everyday objects."*



M. Angela Sasse

M. Angela Sasse is the Professor of Human-Centred Technology and Head of Information Security Research in the Department of Computer Science at University College London (UCL), UK. A usability researcher by training, she started investigating the causes and effects of usability issues with security mechanisms in 1996. In addition to studying specific mechanisms such as passwords, biometrics and access control, her research group has developed human-centred frameworks that explain the role of security, privacy, identity and trust in human interactions with technology. A list of projects and publications can be found at http://sec.cs.ucl.ac.uk/people/m_angela_sasse/

She says, *"In this talk, I will examine the most common reasons why users shortcut security measures, using examples from Web and mobile security software. It reveals that users are not 'stupid' and easily distracted, but that they make rational choices about the cost and benefit of security measures. The lesson for software developers is that they need to take more responsibility (rather than just passing the buck to users), improve accuracy of detecting threats, and communicate risks and consequences more precisely."*



William Webb

William Webb is CEO of the Weightless SIG, a body standardizing a new M2M technology, and President-Elect of the IET. He was one of the founding directors of Neul, a company formed in 2011 to develop machine-to-machine technologies and networks. Prior to this, William was a Director at Ofcom where he managed a team providing technical advice and performing research. He has worked for a range of communications consultancies and spent three years providing strategic management across Motorola's entire communications portfolio, based in Chicago. William has published 13 books, 100 papers and 18 patents. He is a Visiting Professor at Surrey University and a Fellow of the Royal Academy of Engineering, the IEEE and the IET.

He introduces his presentation thus: *"The vast majority of machines envisaged to be connected as part of the IoT are low-cost entities such as dustbins or sensors for car parking spaces. They need a very low-cost radio solution with a battery life of a decade or more. Current wireless technologies cannot achieve this; hence the design of a new standard – Weightless – optimised entirely for ubiquitous, ultra low-cost machine connectivity. This talk will explain what Weightless is, how it is progressing and why it will become the equivalent of Bluetooth for machines."*



Adrian Wright

Adrian Wright is CEO of Secoda Risk Management. He is currently researching security implications of, and techniques in, the 'Internet of Things' space. He is also a member of the IoT Working Group at the Digital Policy Alliance. He was previously Director of Projects at ISSA-UK and remains a Board member and VP of Security Research there. For nearly 9 years, he was Global Director of Information Security at Thomson Reuters.

He says of his presentation: *"Predictions say that by 2020 some 30 to 50 billion 'things' will be connected to the internet, from simple widgets like temperature sensors and domestic water meters, to more critical devices such as power plant telemetry and ATMs. In this new world the people will have largely left the room leaving all sorts of devices talking directly to each other without human intervention or supervision."*

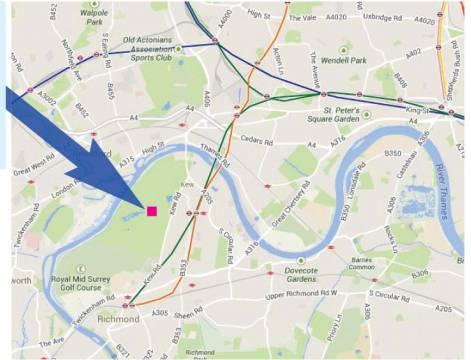
Integration of the physical and virtual worlds will become a reality, with players already positioning themselves to take part in the new gold rush. The security implications are obvious but cannot be assumed to have been addressed, which raises some important questions.

This session will explore the current status of the IoT, where it's heading and what we need to do to maximise the benefits of this brave new world to avoid it becoming the Achilles heel of modern civilisation."

Location



Cambridge Cottage,
Royal Botanic Gardens
Kew, 37 Kew Green,
London TW9 3AB



Nearest tube station

Kew Gardens (District Line, 10 minute walk)

Nearest train stations

Kew Bridge (5 minute walk)

Kew Gardens (10 minute walk)

Please see the Kew Gardens web site www.kew.org for more information about parking location and charges



Prices

Cost to IAP members is £200 including VAT

Cost to non-members is £250 including VAT

Cost to IAP Fellows is Free

Admission by ticket only



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