ISSE 2012 Securing Electronic Business Processes

Helmut Reimer • Norbert Pohlmann
Wolfgang Schneider (Eds.)

ISSE 2012 Securing Electronic Business Processes

Highlights of the Information Security
Solutions Europe 2012 Conference

Springer Vieweg

Editors
Helmut Reimer
TeleTrust Deutschland e.V., Erfurt
Germany

Wolfgang Schneider
Wiesbaden
Germany

Norbert Pohlmann
Aachen
Germany

Contents

Security and Privacy Impact of Green Energy
Human Factors of IT Security

Solutions for Mobile Applications
Identity & Access Management

Trustworthy Infrastructures
Separation & Isolation _____ 207

EU Digital Agenda
Cyber Security: Hackers & Threats _____ 269

About this Book

The Information Security Solutions Europe Conference (ISSE) was started in 1999 by eema and TeleTrusT with the support of the European Commission and the German Federal Ministry of Technology and Economics. Today the annual conference is a fixed event in every IT security professional's calendar.

The range of topics has changed enormously since the founding of ISSE. In addition to our ongoing focus on securing IT applications and designing secure business processes, protecting against attacks on networks and their infrastructures is currently of vital importance. The ubiquity of social networks has also changed the role of users in a fundamental way: requiring increased awareness and competence to actively support systems security. ISSE offers a perfect platform for the discussion of the relationship between these considerations and for the presentation of the practical implementation of concepts with their technical, organisational and economic parameters.

From the beginning ISSE has been carefully prepared. The organisers succeeded in giving the conference a profile that combines a scientifically sophisticated and interdisciplinary discussion of IT security solutions while presenting pragmatic approaches for overcoming current IT security problems.

An enduring documentation of the presentations given at the conference which is available to every interested person thus became important. This year sees the publication of the tenth ISSE book – another mark of the event's success – and with about 30 carefully edited papers it bears witness to the quality of the conference.

An international programme committee is responsible for the selection of the conference contributions and the composition of the programme:
- **Ammar Alkassar**, Sirrix AG (Germany)
- **Ronny Bjones**, Microsoft (Belgium)
- **John Colley**, EMEA & (ISC)2 (United Kingdom)
- **Roger Dean**, eema (United Kingdom)
- **Jan De Clercq**, HP (Belgium)
- **Marijke De Soete**, Security4Biz (Belgium)
- **Jos Dumortier**, KU Leuven (Belgium)
- **Walter Fumy**, Bundesdruckerei (Germany)
- **Michael Hartmann**, SAP (Germany)
- **Jeremy Hilton**, Cranfield University (United Kingdom)
- **Francisco Jordan**, Safelayer (Spain)

- **Frank Jorissen**, tygris (Belgium)
- **Marc Kleff**, Siemens Enterprise Communications (Germany)
- **Hasse Kristiansen**, Ernst & Young (Norway)
- **Jaap Kuipers**, DigiNotar (The Netherlands)
- **Manuel Medina**, ENISA
- **Patrick Michaelis**, Research In Motion (Germany)
- **Norbert Pohlmann** (chairman), Institute for Internet Security, Westfälische Hochschule, Gelsenkirchen (Germany)
- **Bart Preneel**, KU Leuven (Belgium)
- **Helmut Reimer**, TeleTrusT (Germany)
- **Wolfgang Schneider**, Fraunhofer Institute SIT (Germany)
- **Jon Shamah**, EJ Consultants (United Kingdom)
- **Claire Vishik**, Intel (United Kingdom)

The editors have endeavoured to allocate the contributions in these proceedings – which differ from the structure of the conference programme – to topic areas which cover the interests of the readers. With this book TeleTrusT aims to continue documenting the many valuable contributions to ISSE. We would like to thank Bundesdruckerei GmbH Berlin and itWatch GmbH Munich for their support.

Norbert Pohlmann   *Helmut Reimer*   *Wolfgang Schneider*

TeleTrusT – IT Security Association Germany

TeleTrusT is a widespread competence network for IT security comprising members from industry, administration, research as well as national and international partner organizations with similar objectives. TeleTrusT provides interdisciplinary fora for IT security experts and facilitates information exchange between vendors, users and authorities.

TeleTrusT comments on technical, political and legal issues related to IT security and is organizer of events and conferences. TeleTrusT is carrier of the "European Bridge CA" (provision of public key certificates for secure e-mail communication), the quality seal "IT Security made in Germany" and runs the IT expert certification program "TeleTrusT Information Security Professional (T.I.S.P.)". TeleTrusT is member of the European Telecommunications Standards Institute (ETSI). The association is headquartered in Berlin, Germany.

Keeping in mind the raising importance of the European security market, TeleTrusT seeks co-operation with European and international organisations and authorities with similar objectives. Thus, this year's European Security Conference ISSE is being organized in collaboration with eema and LSEC and supported by the European Commission and ENISA.

Contact:

TeleTrusT – IT Security Association Germany
Dr. Holger Muehlbauer
Managing Director
Chausseestrasse 17
10115 Berlin
GERMANY
Tel.: +49 30 4005 4306
Fax: +49 30 4005 4311
http://www.teletrust.de

eema

For 25 years, EEMA has been Europe's leading independent, not-for-profit e-Identity & Security association, working with its European members, governmental bodies, standards organisations and interoperability initiatives throughout Europe to further e-Business and legislation.

EEMA's remit is to educate and inform over 1,500 Member contacts on the latest developments and technologies, at the same time enabling Members of the association to compare views and ideas. The work produced by the association with its Members (projects, papers, seminars, tutorials and reports etc) is funded by both membership subscriptions and revenue generated through fee-paying events. All of the information generated by EEMA and its members is available to other members free of charge.

Examples of recent EEMA events include The European e-ID interoperability conference in Biel, Switzerland (Featuring STORK, TDL (Trust in Digital Life), SSEDIC & GINI) and The European e-Identity Management Conference in Paris.

EEMA and its members are also involved in many European funded projects including STORK2, SSEDIC, ETICA and Future eID

Any organisation involved in e-Identity or Security (usually of a global or European nature) can become a member of EEMA, and any employee of that organisation is then able to participate in EEMA activities. Examples of organisations taking advantage of EEMA membership are Siemens, Hoffman la Roche, KPMG, Deloitte, ING, Novartis, , TOTAL, PGP, McAfee, Adobe, Magyar Telecom Rt, Nets, National Communications Authority, Hungary, Microsoft, HP, and the Norwegian Government Administration Services to name but a few.

Visit www.eema.org for more information or contact the association on +44 1386 793028 or at info@eema.org