1st EURO_PKI

1st European PKI Workshop: Research and Applications

June 25-26, 2004, Samos island, GREECE www.aegean.gr/EuroPKI2004



Workshop Programme

Thursday, June 24 18:00-21:00 Registration ("Samaina Inn" Hotel) 20.45-22:00 Cocktail (by the "Samaina Inn" Hotel pool)

Friday, June 25

8:30-9:00 Registration

9:00-9:10 Opening: Prof. Sokratis K. Katsikas, University of the Aegean, Greece, Workshop General Chair

9:10-10:00 Keynote address: "PKI: Past, Present, and Future", Prof. David W. Chadwick, University of Salford, UK

10:00-10:15 Coffee/Tea/Refreshments Break

10:15-11:55 Session Chair: Sokratis K. Katsikas, University of the Aegean, Greece

Introduction to the Belgian EID card: Danny De Cock, Karel Wouters, and Bart Preneel (Katholieke Universiteit Leuven, Belgium)

The EuroPKI experience: Antonio Lioy, Marius Marian, Natalia Moltchanova, and Massimiliano Pala (Politecnico di Torino, Italy)

CERVANTES - A Certificate Validation Test-bed: Jose L. Muñoz, Jordi Forne, Oscar Esparza, and Miguel Soriano (Technical University of Catalonia, Spain)

Flexible and Scalable Public Key Security for SSH: Yasir Ali, and Sean Smith (Dartmouth College, USA)

11:55-12:15 Coffee/Tea/Refreshments Break

12:15-13:30 Session Chair: Bart Preneel, Katholieke Universiteit Leuven, Belgium

What is Possible with Identity Based Cryptography for PKIs and What Still Must Be Improved: *Benoit Libert* (UCL, Belgium and Ecole Polytechnique, France), and Jean-Jacques Quisquater (UCL, Belgium)

Identity-based Cryptography in Public Key Management: Dae Hyun Yum, and Pil Joong Lee (POSTECH, Republic of Korea)

Pre-production Methods of a Response to Certificates with the Common Status -- Design and Theoretical Evaluation: Satoshi Koga (Kyushu University, Japan), Jae-Cheol Ryou (Chungnam National University, Korea), and Kouichi Sakurai (Kyushu University, Japan)

13:30-15:00 Lunch Break

15:00-16:15 Session Chair: Spyros Kokolakis, University of the Aegean, Greece

Filling the Gap between Requirements Engineering and Public Key/Trust Management Infrastructures: **Paolo** Giorgini (University of Trendo, Italy), Fabio Massacci (University of Trendo, Italy), John Mylopoulos (University of Trendo, Italy and University of Toronto, Canada), and Nicola Zannone (University of Trendo, Italy)

A Framework for Evaluating the Usability and Utility of PKI-enabled Applications: *Tobias Straub*, and Harald Baier (Darmstadt University of Technology, Germany)

Using LDAP Directories for Management of PKI Processes: Vangelis Karatsiolis (Technische Universitat Darmstadt and Fraunhofer Institute for Secure Telecooperation, Germany), Marcus Lippert (Technische Universitat Darmstadt, Germany), and Alexander Wiesmaier (Technische Universitat Darmstadt, Germany)

16:15-16:35 Coffee/Tea/Refreshments Break

16:35-18:20 Session Chair: Gerald Guirchmayr, University of Vienna, Austria

Recursive Certificate Structures for X.509 Systems: Selwyn Russell (Queenslad University of Technology, Australia)

A Probabilistic Model for Evaluating the Operational Cost of PKI-based Financial Transactions: Agapio Platis, Costas Lambrinoudakis, and Asimakis Leros (University of the Aegean, Greece)

A practical approach of X.509 Attribute Certificate Framework as support to obtain Privilege Delegation: *Jose A. Montenegro, and Fernando Moya (University of Malaga, Spain)*

TACAR - A simple and fast way for building trust among PKIs: Diego R. Lopez (RedIRIS, Spain), Chelo Malagon (RedIRIS, Spain), and Licia Florio (TERENA, The Netherlands)

On the Synergy Between Certificate Verification Trees and PayTree-Like Micropayments: Josep Domingo-Ferrer (Universitat Rovira i Virgili, Catalonia, Spain)

19:50 Gala Dinner

Saturday, June 26

9:15-10.30 Session Chair: Costas Lambrinoudakis, University of the Aegean, Greece

A Socially Inspired Reputation Model: Nicola Mezzetti (University of Bologna, Italy)

Using EMV Cards for Single Sign-On: Andreas Pashalidis, and Chris J. Mitchell (Royal Holloway, University of London, UK)

Distributing Security-Mediated PKI: Gabriel Vanrenen, and Sean Smith (Dartmouth College, USA)

10.30-10:50 Coffee/Tea/Refreshments Break

10:50-12:05 Session Chair: Stefanos Gritzalis, University of the Aegean, Greece

Distributed CA-based PKI for Mobile Ad hoc Networks using Elliptic Curve Cryptography: *Charikleia* Zouridaki (George Mason University, USA), Brian L. Mark (George Mason University, USA), Kris Gaj (George Mason University, USA), and Roshan K. Thomas (McAfee Research, Network Associates, Inc., USA)

AETHER - An Authorization Management Architecture for Ubiquitous Computing: *Patroklos G. Argyroudis,* and Donal O'Mahony (University of Dublin, Trinity College, Ireland)

Trustworthy Accounting for Wireless LAN Sharing Communities: *Elias C. Efstathiou*, and George C. Polyzos (Athens University of Economics and Business, Greece)

12:05-12:25 Coffee/Tea/Refreshments Break

12:25-13:35 Session Chair: Antonio Lioy, Politecnico di Torino, Italy

Mobile Qualified Electronic Signatures and Certification on Demand: *Heiko Rossnagel (Johann Wolfgang Goethe University Frankfurt, Germany)*

Performance Evaluation of Certificate Based Authentication in Integrated Emerging 3G and Wi-Fi Networks: *George Kambourakis* (University of the Aegean, Greece), Angelos Rouskas University of the Aegean, Greece), and Dimitris Gritzalis (Athens University of Economics and Business, Greece)

A Credential Conversion Service for SAML-based scenarios: Oscar Cánovas, Gabriel López, and Antonio F. Gómez-Skarmeta (University of Murcia, Spain)

A New Design of Privilege Management Infrastructure with Binding Signature Semantics: *Kemal Bicakci*, and Nazife Baykal (Middle East Technical University, Turkey)

13:35-15:00 Lunch break

15:00-16:40 Session Chair: Javier Lopez, University of Malaga, Spain

How to Qualify Electronic Signatures and Time stamps: *Detlef Huehnlein* (secunet Security Networks AG, Germany)

An Efficient Revocation Scheme for Stateless Receivers: **Yong Ho Hwang** (POSTECH, Korea), Chong Hee Kim (POSTECH and Samsung Electronics Co., Korea), and Pil Joong Lee (POSTECH, Korea)

On the use of Weber Polynomials in Elliptic Curve cryptography: *Elisavet Konstantinou* (Computer Technology Institute and University of Patras, Greece), Yannis Stamatiou (Computer Technology Institute and University of the Aegean, Greece), and Christos Zaroliagis (Computer Technology Institute and University of Patras, Greece)

Threshold Password-Based Authentication Using Bilinear Pairings: Songwon Lee (Information and Communications University, Korea), Kyusuk Han (Information and Communications University, Korea), Seok-kyu Kang (Information and Communications University, Korea), Kwangjo Kim (Information and Communications University, Korea), and So Ran Ine (NITZ. Corp., Korea)

50' Round Table: Identifying and Overcoming Obstacles to PKI Deployment and Usage

17:30 Workshop closing - "2nd European PKI Workshop" announcement