# Privacy and Identity Management for Life

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# IFIP – The International Federation for Information Processing

IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

> *IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.*

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences;
- Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is less rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is in information may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly, National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

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# Privacy and Identity Management for Life

5th IFIP WG 9.2, 9.6/11.7, 11.4, 11.6/PrimeLife
International Summer School
Nice, France, September 7-11, 2009
Revised Selected Papers

Volume Editors

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# Preface

New Internet developments pose greater and greater privacy dilemmas. In the Information Society, the need for individuals to protect their autonomy and retain control over their personal information is becoming more and more important. Today, information and communication technologies—and the people responsible for making decisions about them, designing, and implementing them—scarcely consider those requirements, thereby potentially putting individuals' privacy at risk. The increasingly collaborative character of the Internet enables anyone to compose services and contribute and distribute information. It may become hard for individuals to manage and control information that concerns them and particularly how to eliminate outdated or unwanted personal information, thus leaving personal histories exposed permanently. These activities raise substantial new challenges for personal privacy at the technical, social, ethical, regulatory, and legal levels: How can privacy in emerging Internet applications such as collaborative scenarios and virtual communities be protected? What frameworks and technical tools could be utilized to maintain life-long privacy?

During September 3–10, 2009, IFIP (International Federation for Information Processing) working groups 9.2 (Social Accountability), 9.6/11.7 (IT Misuse and the Law), 11.4 (Network Security) and 11.6 (Identity Management) held their 5th International Summer School in cooperation with the EU FP7 integrated project PrimeLife in Sophia Antipolis and Nice, France. The focus of the event was on privacy and identity management for emerging Internet applications throughout a person's lifetime.

The aim of the IFIP Summer Schools has been to encourage young academic and industry entrants to share their own ideas about privacy and identity management and to build up collegial relationships with others. As such, the Summer Schools have been introducing participants to the social implications of information technology through the process of informed discussion.

Following the holistic approach advocated by the involved IFIP working groups and by the PrimeLife project, a diverse group of participants ranging from young doctoral students to leading researchers in the field engaged in discussions, dialogues and debates in an informal and supportive setting. The interdisciplinary, and international, emphasis of the Summer School allowed for a broader understanding of the issues in the technical and social spheres.

All topical sessions started with introductory lectures by invited speakers in the mornings, followed by parallel workshops and seminars in the afternoons. The workshops consisted of short presentations based on the contributions submitted by participating PhD students, followed by active discussions.

Contributions combining technical, social, ethical or legal perspectives were solicited. Keynote speeches provided the focus for the theme of the Summer School—Lifelong Privacy, Privacy Aspects of Social Networks, Privacy of Data,

Transparency and Data subject Access, Privacy Principles for Identity Management, Economic Privacy Aspects, Identity and Legal, Technical and Economic Aspects of a new regulatory Framework—and the contributions from participants enhanced the ideas generated by the keynote speeches. The Summer School was a very successful event. More than 50 delegates from more than 15 countries actively participated. We succeeded in initiating intensive discussions between PhD students and established researchers from different disciplines.

These proceedings include both keynote papers and submitted papers accepted by the Program Committee, which were presented at the Summer School. The review process consisted of two steps. In the first step, contributions for presentation at the Summer School were selected based on reviews of submitted short papers by the Summer School Program Committee. The second step took place after the Summer School, when the authors had an opportunity to submit their final full papers addressing discussions at the Summer School. The submissions were again reviewed, by three reviewers each, and those included in these proceedings were carefully selected by the International Summer School Program Committee and by additional reviewers according to common quality criteria.

It is our pleasure to thank the members of the Program Committee, the additional reviewers, the members of the Organizing Committee as well as all the speakers. Without their work and dedication, this Summer School would not have been possible. Last but not least, we owe special thanks to the PrimeLife project, SAP, Microsoft Research, Eurecom, HumanIT at Karlstad University as well as IFIP for their support.

March 2010
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# Organization

The PrimeLife/IFIP Summer School 2009 was organized by the EU FP7 Project PrimeLife and the IFIP Working Groups 9.2, 9.6/11.7, 11.4 and 11.6.

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