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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.

Jacques Berleur Magda David Hercheui  
Lorenz M. Hilty (Eds.)

# What Kind of Information Society? Governance, Virtuality, Surveillance, Sustainability, Resilience

9th IFIP TC 9 International Conference, HCC9 2010  
and 1st IFIP TC 11 International Conference, CIP 2010  
Held as Part of WCC 2010  
Brisbane, Australia, September 20-23, 2010  
Proceedings

**Volume Editors**

Jacques Berleur  
University of Namur, Faculty of Informatics  
61, rue de Bruxelles, 5000 Namur, Belgium  
E-mail: jberleur@info.fundp.ac.be

Magda David Hercheui  
Westminster Business School  
35 Marylebone Road, London NW1 5LS, UK  
E-mail: m.hercheui@westminster.ac.uk

Lorenz M. Hilty  
University of Zurich, Department of Informatics  
Binzmuehlestr. 14, 8050 Zurich, Switzerland  
E-mail: hilty@ifi.uzh.ch

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# **IFIP World Computer Congress 2010**

## **(WCC 2010)**

### **Message from the Chairs**

Every two years, the International Federation for Information Processing (IFIP) hosts a major event which showcases the scientific endeavors of its over one hundred technical committees and working groups. On the occasion of IFIP's 50th anniversary, 2010 saw the 21st IFIP World Computer Congress (WCC 2010) take place in Australia for the third time, at the Brisbane Convention and Exhibition Centre, Brisbane, Queensland, September 20–23, 2010.

The congress was hosted by the Australian Computer Society, ACS. It was run as a federation of co-located conferences offered by the different IFIP technical committees, working groups and special interest groups, under the coordination of the International Program Committee.

The event was larger than ever before, consisting of 17 parallel conferences, focusing on topics ranging from artificial intelligence to entertainment computing, human choice and computers, security, networks of the future and theoretical computer science. The conference History of Computing was a valuable contribution to IFIPs 50th anniversary, as it specifically addressed IT developments during those years. The conference e-Health was organized jointly with the International Medical Informatics Association (IMIA), which evolved from IFIP Technical Committee TC-4 "Medical Informatics".

Some of these were established conferences that run at regular intervals, e.g., annually, and some represented new, groundbreaking areas of computing. Each conference had a call for papers, an International Program Committee of experts and a thorough peer reviewing process of full papers. The congress received 642 papers for the 17 conferences, and selected 319 from those, representing an acceptance rate of 49.69% (averaged over all conferences). To support interoperation between events, conferences were grouped into 8 areas: Deliver IT, Govern IT, Learn IT, Play IT, Sustain IT, Treat IT, Trust IT, and Value IT.

This volume is one of 13 volumes associated with the 17 scientific conferences. Each volume covers a specific topic and separately or together they form a valuable record of the state of computing research in the world in 2010. Each volume was prepared for publication in the Springer IFIP Advances in Information and Communication Technology series by the conference's volume editors. The overall Publications Chair for all volumes published for this congress is Mike Hinchey.

For full details of the World Computer Congress, please refer to the webpage at <http://www.ifip.org>.

June 2010                  Augusto Casaca, Portugal, Chair, International Program Committee  
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## Preface

The present book contains the proceedings of two conferences held at the World Computer Congress 2010 in Brisbane, Australia (September 20–23) organised by the International Federation for Information Processing (IFIP). In the first part, the reader can find the proceedings of the 9th Human Choice and Computers International Conference (HCC9) organised by the IFIP Technical Committee TC9 on the Relationship Between ICT and Society. The HCC9 part is subdivided into four tracks: Ethics and ICT Governance, Virtual Technologies and Social Shaping, Surveillance and Privacy, and ICT and Sustainable Development. The second part consists of papers given at the Critical Information Infrastructure Protection Conference (CIP) organized by the IFIP Technical Committee TC11 on Security and Privacy Protection in Information Processing Systems.

The two parts of the book are introduced by the respective Conference Chairs. Chapter 1 introduces HCC9, providing a short summary of the HCC conference series, which started in 1974, and explaining the overview of HCC9, detailing the rationale behind each of the tracks in this conference. The details related to the papers of each track are discussed by the Track Chairs in the respective introductions to the specific tracks of HCC9 (Chaps. 2, 10, 16 and 22). Finally, Chap. 22 introduces the CIP part.

The papers selected for this book cover a variety of relevant subjects, drawing upon high-quality research and experience from professionals working in various parts of the world. It is our intention that academics, practitioners, governments and international organisations alike will benefit from these contributions. We hope readers will engage in the debate, pushing forward the collective work we present here.

July 2010

Jacques Berleur  
Magda David Hercheui  
Lorenz M. Hilty

# HCC9 2010

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Jacques Berleur	University of Namur, Belgium
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Gunnar Wenngren	AB Wenngrens i Linköping, Sweden
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Chris Zielinski	WHO, Congo

### Track 2

Niki Panteli	School of Management, University of Bath, UK
Martin Warnke	Computer Science & Culture, Leuphana University, Germany
Claus Pias	University of Vienna, Austria

### Track 3

Roger Clarke	Xamax Consultancy Pty Ltd., Australia
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David-Olivier Jaquet-Chiffelle	University of Lausanne, Switzerland
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Andreas Pfitzmann	TU Dresden, Germany
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Diane Whitehouse	The Castlegate Consultancy, UK
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Track 4

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Wolfgang Hofkirchner	University of Salzburg, Austria
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## CIP 2010

### *CIP Chair*

William Caelli	Information Security Institute, Queensland University of Technology, Australia
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