



ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

Secure Identity Changes in a Changing World

WG 5

Identity Management & Privacy Technologies

within

SC 27 – IT Security Techniques

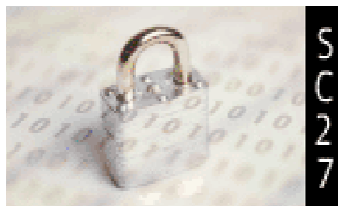


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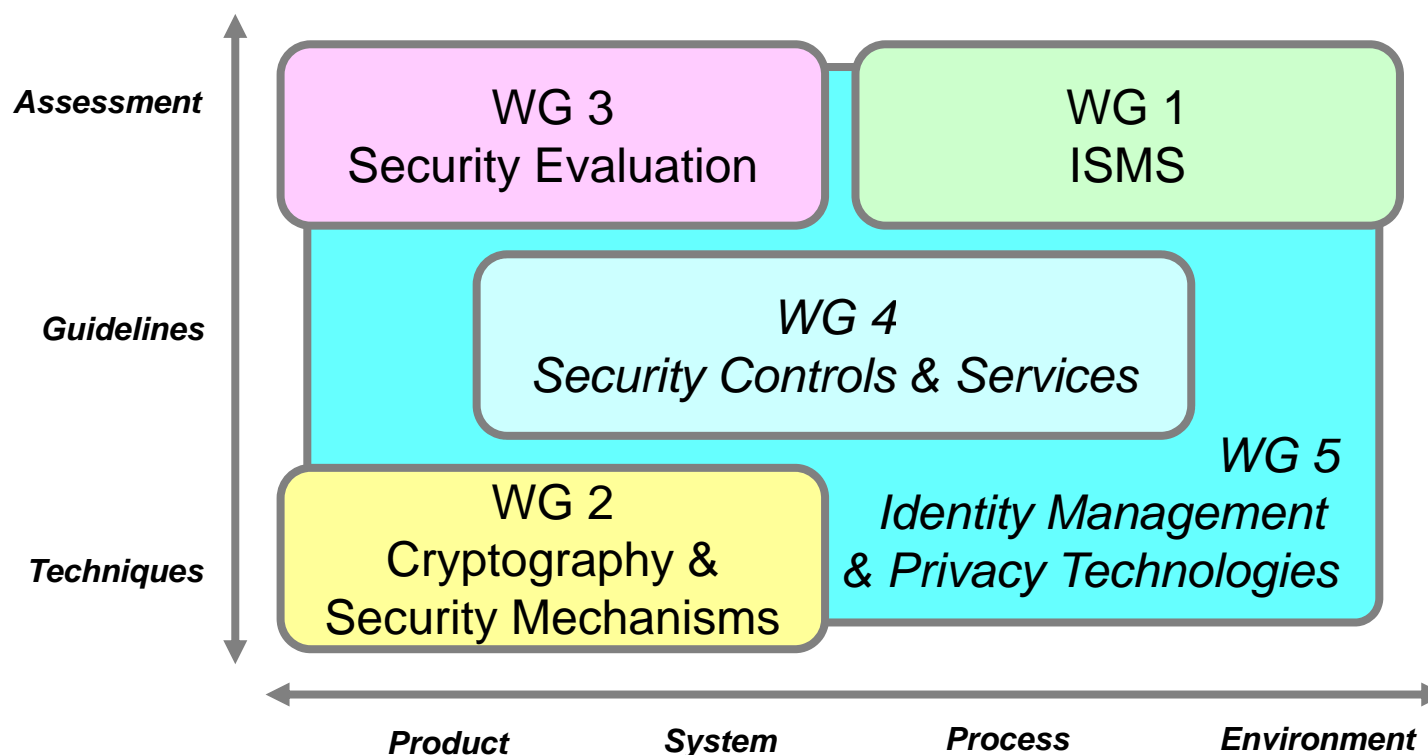
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WGs within ISO/IEC JTC 1/SC 27 – IT Security Techniques

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies



WG 5 Identity Management & Privacy Technologies

History

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

October 2003

JTC 1 Plenary established

- JTC 1 Study Group on Privacy Technologies (SGPT)
- for one year period of time (until October 2004) to identify standardization needs

October 2004

JTC 1 Plenary resolved to

- disband SGPT
- assign to SC 27 further activities in the Privacy Technologies area such as
 - a further inventory
 - a report back to the November 2006 JTC 1 Plenary

WG 5 Identity Management & Privacy Technologies

History

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

SC 27 activities (in response to JTC 1's request from October 2004)

- **October 2004**
 - Study Period on Identity Management established
- **May 2005**
 - Study Period on Privacy established
 - New Work Item Proposal: **A framework for identity management (ISO/IEC 24760)**
- **May 2006**
 - New **Working Group 5 on Identity Management and Privacy Technologies** established
 - Two new Work Item Proposals
 - **A privacy framework (ISO/IEC 29100)**
 - **A privacy reference architecture (ISO/IEC 29101)**



WG 5 Identity Management & Privacy Technologies Scope

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- Development and maintenance of standards and guidelines addressing security aspects of
 - Identity management
 - Biometrics and
 - Privacy



Identity Management (IdM)

2 sides of a medal with enormous economic potential

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- **Organisations** aim to sort out
 - User Accounts in different IT systems
 - Authentication
 - Rights management
 - Access control
 -
- **Unified identities** help to
 - ease administration
 - manage customer relations
- **Identity management systems**
 - ease single-sign-on by unify accounts
 - solve the problems of multiple passwords
- **People** live their life
 - in different roles (professional, private, volunteer)
 - using different identities (pseudonyms): email accounts, SIM cards, eBay trade names, chat names, 2ndLife names, ...)
- **Differentiated identities** help to
 - protect
 - privacy, especially anonymity
 - personal security/safety
 - enable reputation building at the same time
- **Identity management systems**
 - support users using role based identities
 - help to present the “right” identity in the right context



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WG 5 Identity Management & Privacy Technologies Programme of Work

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

Frameworks & Architectures

- A Framework for Identity Management (ISO/IEC 24760, WD)
- A Privacy Framework (ISO/IEC 29100, WD)
- A Privacy Reference Architecture (ISO/IEC 29101, WD)
- A Framework for Access Management (ISO/IEC 29146, WD)

Protection Concepts

- Biometric template protection (ISO/IEC 24745, WD)
- Access Control Mechanisms (Study Period)

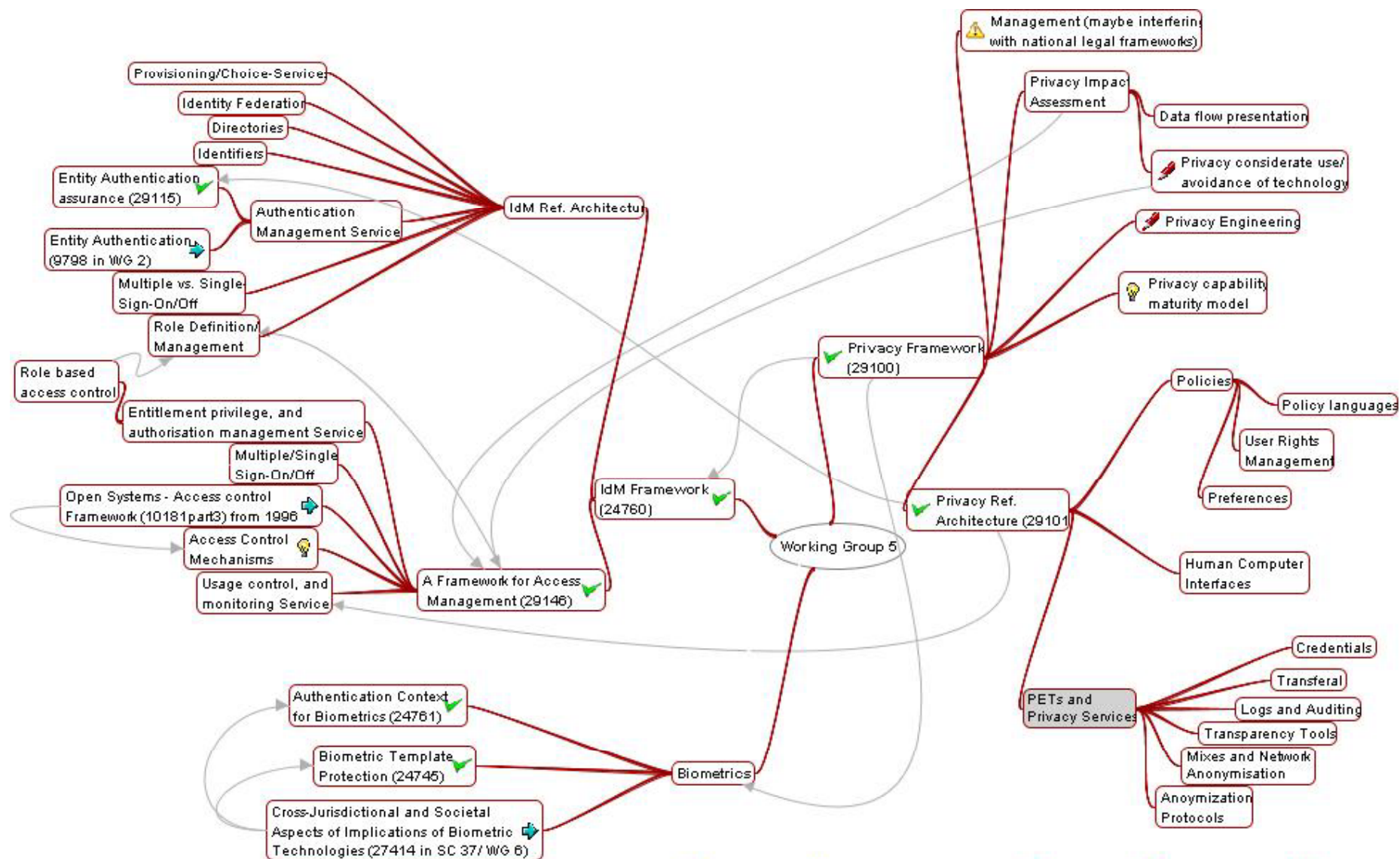
Guidance on Context and Assessment

- Authentication Context for Biometrics (ISO/IEC 24761, FDIS)
- Entity Authentication Assurance (ISO/IEC 29115, WD)
- Privacy Capability Maturity Models (Study Period)



WG 5 Identity Management & Privacy Technologies Roadmap

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies



Legend Study period New Work Item Proposal Guidelines Current Projects Projects of other WG



WG 5 Identity Management & Privacy Technologies WD 24760

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

Title: A framework for identity management

Co-editors: Christophe Stenuit (Belgium)

Rosa Garcia Ontoso (Spain)

Scope:

- This standard aims to provide a framework for the definition of identity and the secure, reliable, and private management of identity information.
- This framework should be applicable to individuals as well as organizations of all types and sizes, in any environment and regardless of the nature of the activities they are involved in.



WG 5 Identity Management & Privacy Technologies ISO/IEC 24760 A Framework for Identity Management

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- Identity concepts
 - Identity (Unification vs. Differentiation)
 - Identity References
 - Identifiers
- Identity management
 - Identity Lifecycle
 - Provisioning vs. Choice of Identities
- Identity management and IT
- Identity management and information security
- Related IT security concepts



WG 5 Identity Management & Privacy Technologies FDIS 24761

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

Title: Authentication context of biometrics
Editor: Asahiko Yamada (Japan)

Scope:

- This document defines the structure and the data elements of Authentication Context for Biometrics (ACBio), by which the **service provider (verifier) can judge** whether the biometric **verification result** is acceptable or not.
- The structure and the data elements are defined.



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ISO/EC 24761 Authentication context of biometrics

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

The structure and the data elements are being defined based on e.g. the following assumptions:

- **The targeted biometric verification process** shall be executed by one or more **BPUs (Biometric Process Units)**.
- Each BPU shall assure **a uniform security level** within that BPU.
- **A secure communication channel** among all the subject interconnected such as **BPUs**, the service requester (**claimant**), and the **service provider (verifier)** shall **not** be **assumed**.



WG 5 Identity Management & Privacy Technologies WD 29100

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

Title: A privacy framework
Editor: Stefan Weiss (Germany)

Scope:

- Aims at providing a framework for defining privacy safeguarding requirements as they relate to **PII (personally identifiable information)** processed by any information and communication system in any jurisdiction.
- To be **applicable on an international level** and addresses **system specific issues on a high level**.
- Puts organizational, **technical, procedural and regulatory aspects in perspective**.



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ISO/IEC 29100 A Privacy Framework

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- PII = Personally Identifiable Information
- Privacy Preferences
- Privacy Requirements
- Privacy Principles
 - Consent and Choice
 - Openness, Transparency and Notice
 - Accountability
 - Purpose Specification
 - Collection Limitation
 - Use, Retention and Disclosure Limitation
 - Data Minimisation
 - Accuracy and Quality
 - Individual Participation and Access
 - Security Safeguards
 - Compliance
- Privacy Aspects within the Data Processing Lifecycles
 - Collect, Transfer, Use, Store, Archive, Dispose
- Relating Privacy to IT Security



WG 5 Identity Management & Privacy Technologies

ISO/IEC 29100 A Privacy Framework

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- Privacy Principles
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 - Openness, Transparency and Notice
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WG 5 Identity Management & Privacy Technologies

ISO/IEC 29100 A Privacy Framework

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- Privacy Aspects within the Data Processing Lifecycles
 - Collect
 - Transfer
 - Use
 - Store
 - Archive
 - Dispose



WG 5 Identity Management & Privacy Technologies Topics

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- **Privacy technologies**
 - A Privacy Framework
 - A Privacy Reference Architecture
 - Privacy infrastructures
 - Anonymity and credentials
 - Specific Privacy Enhancing Technologies (PETs)
 - Privacy Engineering

- **Biometrics**
 - Protection of biometric data
 - Authentication techniques



WG 5 Identity Management & Privacy Technologies Liaisons and collaboration

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- Liaison with organizations and committees dealing with specific requirements and guidelines for services and applications, e.g.:
 - JTC 1/SC 17/WG 4 Integrated circuit card with contacts
 - JTC 1/SC 17/WG 11 Application of biometrics to cards and personal identification
 - JTC 1/SC 37 Biometrics
 - ISO TC 68/SC 2 Financial Services Security

 - ITU-T SG 13 Next generation networks
 - ITU-T SG 17 Security, languages and telecommunication software
 - ITU-T JCA Identity Management

 - FIDIS (Future of Identity in the Information Society)
 - PrimeLife
 - PICOS (Privacy in Community Services)
 - Liberty Alliance
 - The International Conference of Data Protection and Privacy Commissioners
 - The Open Group (IdM Forum and Jericho Forum)



WG 5 Identity Management & Privacy Technologies

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

Thank you very much for your interest

- Further reading
 - www.jtc1sc27.din.de/en
 - SD6 Glossary of IT Security Terminology
 - SD7 Catalogue of SC 27 Standards & Projects

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