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American National Standard

INCITS/ISO/IEC 29101:2018 (2019)

(ISO/IEC 29101:2018, IDT)

Information technology -- Security techniques -- Privacy architecture framework

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Where IT all begins

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Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Symbols and abbreviated terms ... **1**

5 Overview of the privacy architecture framework ... **1**
5.1 Elements of the framework ... 1
5.2 Relationship with management systems ... 3

6 Actors and PII ... **3**
6.1 Overview ... 3
6.2 Phases of the PII processing life cycle ... 4
6.2.1 Collection ... 4
6.2.2 Transfer ... 5
6.2.3 Use ... 5
6.2.4 Storage ... 6
6.2.5 Disposal ... 6

7 Concerns ... **6**
7.1 Overview ... 6
7.2 The privacy principles of ISO/IEC 29100 ... 6
7.3 Privacy safeguarding requirements ... 7

8 Architectural views ... **7**
8.1 General ... 7
8.2 Component view ... 8
8.2.1 General ... 8
8.2.2 Privacy settings layer ... 9
8.2.3 Identity management and access management layer ... 12
8.2.4 PII layer ... 14
8.3 Actor view ... 19
8.3.1 General ... 19
8.3.2 ICT system of the PII principal ... 20
8.3.3 ICT system of the PII controller ... 20
8.3.4 ICT system of the PII processor ... 21
8.4 Interaction view ... 22
8.4.1 General ... 22
8.4.2 Privacy settings layer ... 22
8.4.3 Identity and access management layer ... 23
8.4.4 PII layer ... 23

Annex A (informative) **Examples of the PII-related concerns of an ICT system** ... **25**

Annex B (informative) **A PII aggregation system with secure computation** ... **30**

Annex C (informative) **A privacy-friendly, pseudonymous system for identity and access control management** ... **37**

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *Security techniques*.

This second edition cancels and replaces the first edition (ISO/IEC 29101:2013) which has been technically revised. The main change compared to the previous edition is that old Annex D has been removed.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

This document describes a high-level architecture framework and associated controls for the safeguarding of privacy in information and communication technology (ICT) systems that store and process personally identifiable information (PII).

The privacy architecture framework described in this document:

— provides a consistent, high-level approach to the implementation of privacy controls for the processing of PII in ICT systems;

— provides guidance for planning, designing and building ICT system architectures that safeguard the privacy of PII principals by controlling the processing, access and transfer of personally identifiable information; and

— shows how privacy enhancing technologies (PETs) can be used as privacy controls.

This document builds on the privacy framework provided by ISO/IEC 29100 to help an organization define its privacy safeguarding requirements as they relate to PII processed by any ICT system. In some countries, privacy safeguarding requirements are understood to be synonymous with data protection/privacy requirements and are the subject of data protection/privacy legislation.

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Information technology — Security techniques — Privacy architecture framework

1 Scope

This document defines a privacy architecture framework that:

— specifies concerns for ICT systems that process PII;

— lists components for the implementation of such systems; and

— provides architectural views contextualizing these components.

This document is applicable to entities involved in specifying, procuring, architecting, designing, testing, maintaining, administering and operating ICT systems that process PII.

It focuses primarily on ICT systems that are designed to interact with PII principals.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 29100, *Information technology — Security techniques — Privacy framework*

ISO/IEC/IEEE 42010, *Systems and software engineering — Architecture description*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 29100 and ISO/IEC/IEEE 42010 apply.

4 Symbols and abbreviated terms

The following abbreviations apply to this document.

ICT Information and Communication Technology

PET Privacy Enhancing Technology

PII Personally Identifiable Information

5 Overview of the privacy architecture framework

5.1 Elements of the framework

The privacy architecture framework presented in this document is intended as a technical reference for developers of ICT systems that process PII. This document does not set requirements for privacy policies; it assumes that a privacy policy is in place and that privacy safeguarding requirements have been defined and that appropriate safeguards are implemented within the ICT system.

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