## INTERNATIONAL STANDARD

ISO/IEC 27018

Second edition 2019-01

# Information technology — Security techniques — Code of practice for protection of personally identifiable information (PII) in public clouds acting as PII processors

Technologies de l'information — Techniques de sécurité — Code de bonnes pratiques pour la protection des informations personnelles identifiables (PII) dans l'informatique en nuage public agissant comme processeur de PII





#### **COPYRIGHT PROTECTED DOCUMENT**

© ISO/IEC 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

COI	ntent	S	Page				
Fore	word		vi				
Intro	oductio	n	vii				
1	Scon	e	1				
2	-	Normative references					
3	Terms and definitions						
4	Overview						
	4.1	Structure of this document					
	4.2	4.2 Control categories					
5		Information security policies					
	5.1	Management direction for information security					
		5.1.1 Policies for information security					
		5.1.2 Review of the policies for information security					
6	<b>Orga</b>	nization of information security					
	6.1	Internal organization					
		6.1.1 Information security roles and responsibilities					
		6.1.2 Segregation of duties					
		6.1.3 Contact with authorities					
		6.1.4 Contact with special interest groups 6.1.5 Information security in project management					
	62						
		6.2 Mobile devices and teleworking					
7		an resource security					
	7.1	Prior to employment					
	7.2	During employment					
		<ul><li>7.2.1 Management responsibilities</li></ul>					
		7.2.3 Disciplinary process					
	7.3	Termination and change of employment					
8							
	Asset management 6						
9	Access control						
	9.1	Business requirements of access control  User access management					
	9.2	9.2.1 User registration and de-registration					
		9.2.2 User access provisioning					
		9.2.3 Management of privileged access rights					
		9.2.4 Management of secret authentication information of users	7				
		9.2.5 Review of user access rights					
		9.2.6 Removal or adjustment of access rights					
	9.3	User responsibilities	7				
		9.3.1 Use of secret authentication information					
	9.4	System and application access control					
		9.4.1 Information access restriction					
		9.4.2 Secure log-on procedures					
		9.4.3 Password management system					
		9.4.4 Use of privileged utility programs					
		1 0					
10	Cryptography						
	10.1	Cryptographic controls					
		10.1.1 Policy on the use of cryptographic controls					
		10.1.2 Key management	8				

### ISO/IEC 27018:2019(E)

11	_		environmental security				
	11.1		areas				
	11.2		nent				
		11.2.1	Equipment siting and protection	9			
			Supporting utilities	9			
		11.2.3 11.2.4	Cabling security Equipment maintenance	9 0			
		11.2.4	Removal of assets	9			
		11.2.5	Security of equipment and assets off-premises	ر ۵			
		11.2.7	Secure disposal or re-use of equipment	 Q			
		11.2.7	Unattended user equipment	9			
			Clear desk and clear screen policy	9			
12	Oper		ecurity				
	12.1	Operati	ional procedures and responsibilities	9			
			Documented operating procedures				
			Change management				
0			Capacity management				
loq			Separation of development, testing and operational environments				
S-S	12.2		ion from malware				
S	12.3	Backup		10			
N V			Information backup				
I	12.4		g and monitoring				
via			Event logging				
py			Protection of log information				
ပိ			Administrator and operator logs				
ıly	40 =		Clock synchronization				
TO T	12.5		l of operational software				
iew	12.6		cal vulnerability management				
- Preview only Copy via ILNAS e-Shop <b>E1</b>		12.7 Information systems audit considerations					
<sup>-</sup> 13	Comi	nunicati	ons security	12			
19	13.1		k security management				
50	13.2		ation transfer				
18:		13.2.1	Information transfer policies and procedures	12			
270			Agreements on information transfer				
IEC 27018:2019			Electronic messaging				
			Confidentiality or non-disclosure agreements				
$\frac{0}{2}$ 14	System acquisition, development and maintenance						
15	Supp	lier relat	tionships	13			
16	Infor	Information security incident management					
	16.1	Manage	ement of information security incidents and improvements	13			
			Responsibilities and procedures				
			Reporting information security events				
			Reporting information security weaknesses				
			Assessment of and decision on information security events				
			Response to information security incidents				
			Learning from information security incidents				
		16.1.7	Collection of evidence				
17	Infor	mation s	security aspects of business continuity management	14			
18	Comp						
	18.1		ance with legal and contractual requirements				
	18.2	Informa	ation security reviews	14			
			Independent review of information security				
			Compliance with security policies and standards				
		18.2.3	Technical compliance review	14			

Annex A (normative) Public cloud PII processor extended control set for PII protection	15
Bibliography	23

#### 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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

Attention is drawn to the possibility that some of the elements of this document may be the subject 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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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

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, IT Security techniques.

This second edition cancels and replaces the first edition (ISO/IEC 27018:2014), of which it constitutes a minor revision. The main change compared to the previous edition is the correction of an editorial mistake in **Annex A**.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.