
**Biometrics interoperability
profiles — Best practices for slap
tenprint captures**

*Profils biométriques interopérables — Recommandations pour les
captures de 10 doigts à plat*

Withdrawn

Withdrawn



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, 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
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
1 Scope	1
2 Sensor hardware requirement	1
3 Acquisition software	2
3.1 Acquisition process.....	2
3.2 User feedback.....	2
3.3 Acquisition check.....	2
3.4 Image processing.....	3
3.4.1 Segmentation.....	3
3.4.2 Compression.....	3
4 Logging and evaluation of data	3
4.1 General.....	3
4.2 Logging data.....	4
4.3 Useful statistical evaluations.....	4
5 Operational process	5
5.1 General user guidance.....	5
5.2 Acquisition process recommendations.....	7
6 Operational issues	9
6.1 Placement recommendations.....	9
6.2 Calibration recommendations.....	9
6.3 Cleaning recommendations.....	10
6.4 Operator recommendations.....	10
Annex A (informative) Example of acquisition process	11
Annex B (informative) Example of an acquisition process based on composite records	12
Annex C (informative) Example of a quality metric for the acquisition process	15
Bibliography	16

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 ISO documents 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 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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/JTC 1, *Information technology*, Subcommittee SC 37, *Biometrics*.

It has been adopted from the European Technical Specification, CEN/TS 16428:2012, *Biometrics Interoperability profiles — Best Practices for slap tenprint captures*.

Biometrics interoperability profiles — Best practices for slap tenprint captures

1 Scope

The main goal of this Technical Specification is to give guidelines to follow during the acquisition process of slap tenprints in order to obtain fingerprints with the best quality possible within acceptable time constraints.

Non-cooperative users are out of the scope of this Technical Specification.

When using ten-fingerprint sensors, it is fundamental to know how to use them and how to proceed during the acquisition. This Technical Specification describes how to capture fingerprints correctly by specifying best practices for slap tenprint captures.

It gives guidance on the following topics:

- 1) recommendations on the hardware of the fingerprint sensor and its deployment;
- 2) recommendations on user guidance;
- 3) recommendations on the enrolment process including a sample workflow;
- 4) recommendations for developers and system integrators on application software;
- 5) recommendations on processing, compression and coding of the acquired fingerprint images;
- 6) recommendations on operational issues and data logging;
- 7) recommendations on the evaluation of a solution and its components.

Although this Technical Specification primarily focuses on reaching optimal data quality for enrolment purposes, the recommendations given here are applicable for other purposes. All processes which rely on good quality tenprint slaps can take advantage of the best practices reported here.