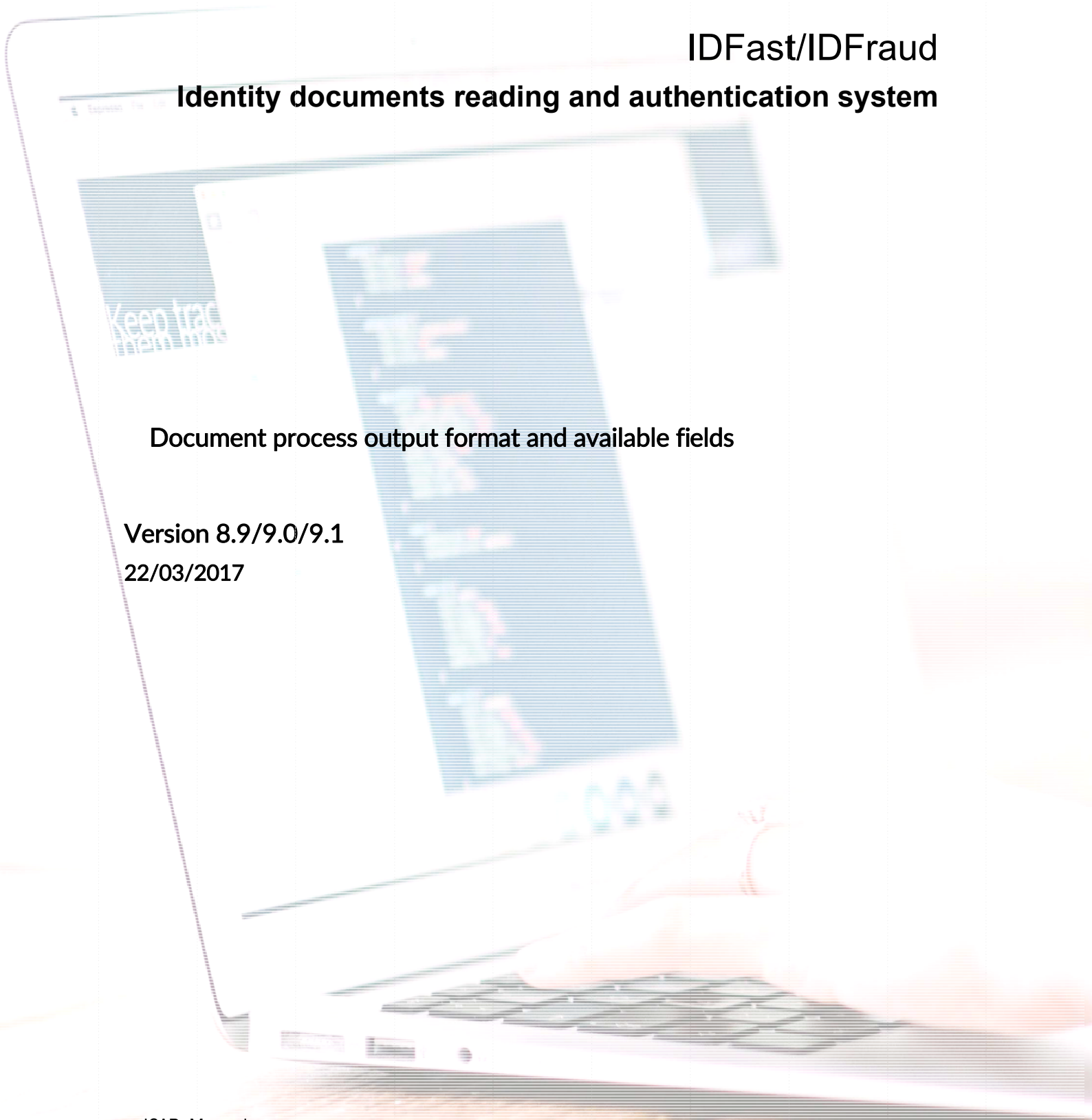
IDFast/IDFraud

Identity documents reading and authentication system



Document process output format and available fields

Version 8.9/9.0/9.1

22/03/2017

ICAR_Manual

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INTRODUCTION

Icar technology automatically reads and validates travel documents. The information contained on the document can be retrieved using integration of the IDFast/IDFraud libraries or by request to our webservice called IDCloud. The format of the result is lightly different depending if IDFast/IDFraud or IDCloud is used.

PROCESS FORMAT RESULT

IDFAST/IDFRAUD FORMAT RESULT

The data of the document can be obtained in three different ways. In all three cases the response will contain fields explained in the section

RESULT FIELDS.

1. **Parsing the result string from the process function** (see Example 1).
   - DLL: Accessing the field szOutput from ICAROutput structure [(1)].
   - COM / Active X: Using getResultString function [(1)].

   - The different data fields are separated by the # symbol.
   - Each of the fields has the form *fieldname: value*.

2. **Using functions to get every field value**.
   - DLL: Using icarGetFieldContent function[(1)].
   - COM / Active X: Using getFieldContent function[(1)].

3. **Parsing an XML file** (see Example 2).
   - Set the ICAR_RESULT_XMLFILEPATH property to get an XML file[(1)].

(1) For more details on using this functionality check the documents *Integration Manual.pdf* / *Reference Manual.pdf*.

Example 1. Result string example

The following string result corresponds to the reading and validation of the Spanish national identity card. The chain has been split into different lines for readability.

TYPE: IDENTITY #

SIDE: 1 #

MODEL: IDESPC1 #

```
OPPOSITE: IDESPC2 #
EXPEDITOR: ESP #
NATIONALITY: ESP #
NAME: ERNEST #
SURNAME: RAMADER #
SURNAME: CORTIELLA #
ID_NUMBER: 39279250B #
DOC_NUMBER: APM181842 #
BIRTHDATE: 04-26-1984 #
EXPIRY: 06-12-2018 # SEX: M #
TEST_UV_PAPER_REFLECTANCE: OK #
TEST_IR_INK: OK #
TEST_IR_FIELDS_VIZ_INK: OK ID_NUMBER_VIZ #
TEST_IR_FIELDS_VIZ_INK: OK NAME_VIZ #
TEST_IR_FIELDS_VIZ_INK: OK BIRTHDATE_VIZ #
TEST_IR_FIELDS_VIZ_INK: OK EXPIRY_VIZ #
TEST_IR_FIELDS_VIZ_INK: OK DOC_NUMBER_VIZ #
TEST_IR_FIELDS_VIZ_INK: OK SURNAME_VIZ #
TEST_IR_FIELDS_VIZ_INK: OK SEX_VIZ #
TEST_EXPIRY_DATE: OK #
TEST_COLOR_IMAGE: OK #
MODEL_ID: IDESPC1 #
```

Example 2. XML Result example

The following XML corresponds to the reading and validation of a Spanish national identity card.

```
<? xml version="1.0" encoding="UTF-16"?>
<ICAR_READER_RESULT version="1.0">
        <DOCUMENT index="1">
                <TYPE>IDENTITY</TYPE>
                <SIDE>1</SIDE>
                <EXPEDITOR>ESP</EXPEDITOR>
                <NATIONALITY>ESP</NATIONALITY>
                <NAME>MONTSERRAT</NAME>
                <SURNAME>NAVARRO</SURNAME>
                <SURNAME>GARCIA</SURNAME>
```

```
            <ID_NUMBER>45339044H</ID_NUMBER>
            <DOC_NUMBER>AJK125341</DOC_NUMBER>
            <BIRTHDATE>09-o5-1959</BIRTHDATE>
            <EXPIRY>06-31-2020</EXPIRY>
            <SEX>F</SEX>
            <TEST_EXPIRY_DATE>OK</TEST_EXPIRY_DATE>
            <TEST_COLOR_IMAGE>OK</TEST_COLOR_IMAGE>
            <TEST_GLOBAL_AUTHENTICITY_RATIO>1.000000</TEST_GLOBAL_AUTHENTICIT
            Y_RATIO>
    <TEST_GLOBAL_AUTHENTICITY_VALUE>OK</TEST_GLOBAL_AUTHENTICITY_VALUE>
            <MODEL_ID>IDESPC1</MODEL_ID>
            <SIDES_NUMBER>2</SIDES_NUMBER>
        </DOCUMENT>
</ICAR_READER_RESULT>
```

IDCLOUD FORMAT RESULT

IDCloud is the service provided for the identification and reading of identity documents and it is accessible via:

1. **Requests to webservice methods directly.** Please read *IDCloud Integration Manual EN.pdf* for more details.
2. **Using the widget module**. Please read *IDCloud Widget Integration Manual_EN.pdf for* more information.
3. **Using the IDMobile SDK.** Get more information in the IDMobile SDK package.

In all cases the response will contain fields present in the section

RESULT FIELDS.

DIFFERENCES BETWEEN IDFAST/IDFRAUD AND IDCLOUD

The main diferencies between IDFast/IDFraud and IDCloud results are related with validation results with composed value; values composed by the result itself and the field at which applies.

In **IDFast/IDFraud** each result is composed by:

(a) Field. Corresponds to the identifiers listed in the
(b) RESULT FIELDS table.
(c) Value. Value of the field.

Note. In validation results, the value of the field is composed by: (a) the test result and (b) opcionally more information related with the field at which applies.

IDFast / IDFraud return string of the process function

FIELD: VALUE #

Examples:

NAME: ERNEST#

TEST_MRZ_FIELDS_INTEGRITY: **OK DOC_NUMBER** #

TEST_CORRESPONDENCE_VISIBLE_MRZ: **FAIL NAME** #

IDFast / IDFraud XML result

<FIELD>VALUE</FIELD>

Examples:

<NAME>ERNEST</NAME>

<TEST_MRZ_FIELDS_INTEGRITY>**OK DOC_NUMBER**</TEST_MRZ_FIELDS_INTEGRITY

<TEST_CORRESPONDENCE_VISIBLE_MRZ>**OK NAME**</TEST_CORRESPONDENCE_VISIBLE_MRZ>

In IDCloud the list of result values has the following attributes for each value (see *IDCloud Integration Manual EN.pdf* for more details):

(a) Type. Type of the field (Normal / Validation).
(b) Code. Corresponds to the identifiers listed in the
(c) RESULT FIELDS table.
(d) Value. Field value.

For "Normal" fields, it contains the value read from the document.

For "Validation" fields, this field contains the result test as in

RESULT FIELDS: OK, DOUBTFULL, FAIL and UNVALIDATED [optionally the unvalidation reason can be returned between parenthesis]

(e) Description. Field description and usually the same as code.

Some "Validation" fields contain the result of test only availanle via IDCloud request see .

Note. In validation results with composed value, the information is returned lighly different from IDFast/IDFraud. In this case:

- Code contains the name of the test followed by the name of the field to which it applies.
- Value contains the test result.

IDCloud result

```
<Field>
        <Type>[Normal|Validation]</Type>
        <Code>FIELD</Code>
        <Value>VALUE</Value>
        <Description>FIELD</Description>
</Field>
```

Examples:

```
<Field>
        <Type>Normal</Type>
        <Code>NAME</Code>
        <Value>ERNEST</Value>
        <Description>NAME </Description>
</Field>
<Field>
        <Type>Validation</Type>
        <Code>TEST_MRZ_FIELDS_INTEGRITY DOC_NUMBER</Code>
        <Value>OK</Value>
        <Description>TEST_MRZ_FIELDS_INTEGRITY DOC_NUMBER</Description>
</Field>
<Field>
        <Type>Validation</Type>
        <Code>TEST_CORRESPONDENCE_VISIBLE_MRZ NAME</Code>
        <Value>FAIL</Value>
        <Description>TEST_CORRESPONDENCE_VISIBLE_MRZ NAME</Description>
</Field>
```

RESULT FIELDS

Field	Description	Value	Value description
Data Field read.			
MODEL_ID	Model identifier of the identified document.		
TYPE	Document type.	IDENTITY	Identity card.
		PASSPORT	Passport.
		DRIVER_LICENSE	Driver license.
		VISA	Visa.
		TRIPULATION	Crew card.
		RESIDENT_CARD	Resident card.
		PERSONAL_CARD	Custom card type.
		NONREAD_MRZ_DOCUMENT	MRZ document not properly recognized.
EXPEDITOR	ICAO key which refers to the document expeditor country.	See APPENDIX A. ICAO COUNTRY KEYS	
NATIONALITY	ICAO key which refers to the document bearer nationality.	See APPENDIX A. ICAO COUNTRY KEYS.	
SIDE	Document side.	1	Front side.
		2	Back side.
		0	Information integration of more than one side of the document.
MODEL	Model Identifier for the identified document.	Same values as MODULE_ID.	Appears if ICAR_CFG_OBTAIN_MODEL_ID property value is set to *true*.
OPPOSITE	Model Identifier for the opposite side of the identified document.	Same values as MODULE_ID.	Appears if ICAR_CFG_OBTAIN_MODEL_ID property value is set to *true*.
NAME	Document bearer name.		
SURNAME	Document bearer surname. If the bearer has more than one surname and they are separately written, some SURNAME fields, containing each one of the surnames, will be returned in order. If the surnames are not separately written, only one SURNAME field will be returned.		
DOC_NUMBER	Document number. Only document number in the expeditor country. This number appears in all officials documents.		
ID_NUMBER	Personal identification number. This number optionally appears in official documents.		
PERSONAL_ID	Personal identification number used by the issuing state. It appears in European Health Insurance Cards.		
SIDES_NUMBER	Number of sides of the document identified.		
ADDRESS	Document bearer address. More than one field could be returned for composed addresses.		

Field	Description	Value	Value description
STREET_ADDRESS	Street address. This field is available when it appears separated from other address fields in the document.		
CITY_ADDRESS	City. This field is available when it appears separated from other address fields in the document.		
STATE_ADDRESS	State or province. This field is available when it appears separated from other address fields in the document.		
ZIP	ZIP code. This field is available when it appears separated from other address fields in the document.		
BIRTHPLACE	Place of birth.		
BIRTHDATE	Document bearer birthday.		
EXPEDITION_DATE	Document expedition date.		
EXPIRY	Document expiration date.	Date or PERMANENT	Instead of date can be found a permanent string. Then is returned PERMANENT.
SEX	Document bearer gender.	M	Male.
		F	Female.
MRZ	Machine Readable Zone content. More than one field could be returned depending on the number of ICAO lines.		
PARENTS	Parents' name.		
ENTRY_DATE	Date of country entrance.		
GRANT_REASON	Reason for granting the document.		
SURNAME_AUX	Other surnames, like family or marital name.		
CITY_ISSUED	City of issue.		
ID_FISCAL	Fiscal identification number (Portugal ID).		
HEALTH_NUMBER	Health user number (Portugal ID).		
INSTITUTION	Competent institution of insurance or residence in European Health Insurance Cards.		
HEIGHT	Height.		
AUTHORITY	Authority.		
FORM_ID	Form identifier in European Health Insurance Cards.	E-111	
		E-111+	
		E-111B	
EQUIPO	Code of the document issuer.		
MAIDEN_NAME	Maiden name.		
AGE	Age.		
REGISTRY_FOLIO	Registry Folio.		
STATE	State.		
MUNICIPALITY	Municipality.		
LOCALITY	Locality.		
SECTION	Section.		

Field	Description	Value	Value description
REGISTRY YEAR	Registry year.		
ELECTOR_ID	Elector ID.		
EYE_COLOR	Eye color.		
PERSONAL_NUMBER	Personal number.		
TAX_NUMBER	Tax number.		
SOCIAL_SECURITY_NUMBER	Social Security number (Portugal ID).		
CPF	Individual registration (Cadastro de pessoa física)		
SEGURANCA	Insurance Number		
ADDITIONAL_INFO	Additional info for CNH (DL Brasil)		
CNH	Driver License number (Carteira nacional de Habilitaçao, DL Brasil)		
Image Quality Fields			
QUALITY_IMAGE_COMPRESSION	Information field on the quality of the image to be processed considering the compression factor of the jpeg image. Only available for scanned images from disk. Calculate the compression factor and returns the numeric value and its evaluation. When integrating the two sides of the same document, the result for both sides, always in order Front-Reverse, appears.	IQ_NORESULT NO_QUANTIZATION_TABLE	Evaluation not done. No quantization table found.
		IQ_NORESULT NO_JPG_IMAGE	Evaluation not done. The image is not a jpeg image format.
		IQ_POOR N	N <= 90
		IQ_GOOD N	N < 90
QUALITY_IMAGE_SIZE	Information field on the quality of the image to be processed considering the image size. When integrating the two sides of the same document, the result for both sides, always in order Front-Reverse, appears.	IQ_GOOD Width X height	Width >= 640 height >= 400 or Width >= 400 height >= 640
		IQ_POOR width X height	Width >= 640 height >= 400 or Width >= 400 height >= 640
QUALITY_IMAGE_RESOLUTION (from 9.0.0 version)	Information field on the quality of the image to be processed considering the image resolution. Calculates the image resolution, dots per inch, and returns the numeric value and its evaluation.	IQ_GOOD *Resolution*dpi	Resolution > 180
		IQ_POOR *resolution*dpi	Resolution < 180

Field	Description	Value	Value description
QUALITY_IMAGE_LUMINANCE (from 9.0.0 version)	Information field on the quality of the image to be processed considering the image luminance. Calculates two values for **saturation** and **darkness** and gives a qualitative value.	IQ_GOOD [sat, drk]	Color image: Sat< 0.6 Y drk< 0.8 gray scale image: Sat < 0.5 Y Drk < 0.5
		IQ_POOR [sat, drk]	Color image: Sat >0.6 O Drk > 0.8 gray scale image: Sat > 0.5 O Drk > 0.5
QUALITY_IMAGE_HIGHLIGHTS (from 9.0.0 version)	Information field on the highlights of the image	IQ_GOOD	-
		IQ_POOR	-
QUALITY_IMAGE_BLURRING (from 9.0.0 version)	Information field on the blurring of the image in %.	IQ_GOOD %	<50%
		IQ_POOR %	>50%
Test done under visible light.			
TEST_COLOR_IMAGE	Checks if the image is a color image or not.	OK	Color image
		DOUBTFUL	No confirmation.
		FAIL	Not a color image.
TEST_COHERENCE_EXPIRY	Test to evaluate the coherence between the expiry date and the other data read from the document. Only available for Spanish identity card.	OK	The expiry date is coherent
		FAIL	The expiry date is not coherent
TEST_EXPIRY_DATE	Expiry date check. Compares the system date with the expiry date of the document.	OK	The document is valid.
		FAIL	The document has expired.
		UNVALIDATED	Value was read but could not be validated.
TEST_TYPOGRAPHY	Check field to field text font. Only for identity and immigration Spanish cards.	OK	Text Font is correct.
		FAIL	Text Font is not correct.
TEST_OVERLAPPED_PHOTO_DETECTION	Verifies that the photo present in the document has not been overlapped. NOTE: Only available for models IDESPC1 and IDCOLA1.	OK	Photo has not been overlapped
		FAIL	Photo has been overlapped
		UNVALIDATED	Could not verify it.
TEST_VIZ_RG_VALID_NUMBER	Checks length of document number. Checks if document number value is smaller than	OK	
		FAIL	

Field	Description	Value	Value description
	maximum value for the issuing state.	UNVALIDATED	EXPEDITION_DATE unavailable DOC_NUMBER unavailable
TEST_VIZ_RG_CHECKSUM	Test of correctness of the document number based on the issuing state	OK	
		FAIL	
		UNVALIDATED	DOC_NUMBER too long: 9 digits or less expected EXPEDITION_DATE unavailable DOC_NUMBER unavailable
TEST_VIZ_PARENTS_ALIGNMENT	Checks the alignment of the letter E from the field Filiaçao (Parents) with the second letter of the field Naturalidade (Birthplace)	OK	
		FAIL	
		UNVALIDATED	BIRTHPLACE unavailable PARENTS unavailable or incomplete EXPEDITION_DATE unavailable
TEST_VIZ_RG_ALIGNMENT	Checks the alignment of the field firstname and doc	OK	
		FAIL	
		UNVALIDATED	NAME incomplete DOC_NUMBER incomplete NAME unavailable or incomplete DOC_NUMBER unavailable
TEST_VIZ_CPF_ALIGNMENT	Checks alignment between fifth number of the cont	OK	
		FAIL	
		UNVALIDATED	DOC_ORIG3 incomplete CPF incomplete CPF unavailable DOC_ORIG3 unavailable
TEST_VIZ_DOC_ORIGEN_FORMAT	This test checks if the field DOC_ORIG3 starts with CN:LV.A or CC:LV.B.	OK	
		FAIL	
		UNVALIDATED	DOC_ORIG3 incomplete
TEST_VIZ_PLASTIC_PATTERN	Test for IDBRAB1. Checks if the template “PROIBIDO PLASTIFICAR” can be found at the obverse side. Also the expedition date has to be newer than 01.12.2005. (Note: Test can only be done if both sides of the document are identified)	OK	
		FAIL	
		UNVALIDATED	MODEL_ID unavailable in side 1 EXPEDITION_DATE unavailable
TEST_VIZ_EXPEDITION_DATE_FORMAT	Checks if expeditions date follows a predetermined format. In case of Sao Paulo the month consists of three letters.	OK	
		FAIL	
		UNVALIDATED	EXPEDITION_DATE unavailable

Field	Description	Value	Value description
TEST_VIZ_BIRTHDATE_FORMAT	Checks if birthdate date follows a predetermined format. In case of Sao Paulo the month consists of three letters.	OK	
		FAIL	
		UNVALIDATED	BIRTHDATE unavailable
TEST_VIZ_INSTITUTE	Compares institute read at side 1 with some specific institute and validates it with the expedition date.	OK	
		FAIL	
		UNVALIDATED	SECRETARY_INSTITUTE unavailable EXPEDITION_DATE unavailable
TEST_VIZ_OFFICE_CODE	Compares that the field OfficeCode is the same on both side 1 and side 2.	OK	-
		FAIL	-
		UNVALIDATED	OFFICE_CODE unavailable in side 1 OFFICE_CODE unavailable in side 2 EXPEDITION_DATE unavailable
TEST_VIZ_NATURALIDADE	Checks if field “Naturalidade” has a defined format.	OK	-
		FAIL	-
		UNVALIDATED	BIRTHPLACE unavailable
TEST_VIZ_DATES_ALIGNMENT	Checks vertical alignment of the slashes from the fields expedition date and birthdate. They must have the following format to perform the test: DD/MM/YYY	OK	-
		FAIL	-
		UNVALIDATED	ExpeditionDate unavailable ExpeditionDate Year Format BirthDate unavailable
TEST_VIZ_ORIG3_ALIGNMENT	Checks if first slash of birthdate is vertical aligned to last slash of field DocOrig3. In case the format of the expedition year is DD/MM/YYYY then also the first slash is used for the check.	OK	-
		FAIL	-
		UNVALIDATED	DOC_ORIG3 unavailable BirthDate unavailable ExpeditionDate unavailable DOC_ORIG3 incomplete
TEST_VIZ_LEFT_ALIGNMENT	Checks if the fields are aligned left-handed.	OK	-
		FAIL	-
		UNVALIDATED	Fields unavailable
TEST_VIZ_CATEGORY_FORMAT	Checks if field DRIVER_LICENSE_CATEGROY contains one of the following types: A, B, C, D, E, AB, AC, AD, AE.	OK	-
		FAIL	-
		UNVALIDATED	DRIVER_LICENSE_CATEGORY unavailable
TEST_VIZ_DATES_FORMAT	Checks date format for given date fields of the document.	OK	Field Name
		FAIL	Field Name
		UNVALIDATED	Field Name
TEST_VIZ_CNH_FORMAT	Validates number of digits of CNH in relation to expedition field.	OK	-
		FAIL	-

Field	Description	Value	Value description
		UNVALIDATED	CNH unavailable EXPEDITION_DATE unavailable
TEST_VIZ_SEGURANCA_FORMAT	Checks if “Seguranca” field has a given length of 11 digits.	OK	-
		FAIL	-
		UNVALIDATED	SEGURANCA unavailable
TEST_VIZ_ADDITIONAL_INFO_FORMAT	Checks if ADDITIONAL_INFO field has a given length of 11 characters and the first two are a state abbreviation.	OK	-
		FAIL	-
		UNVALIDATED	ADDITIONAL_INFO unavailable
Test under UV light			
TEST_UV_PATTERNS	Test done under ultraviolet light to detect exclusive patterns in each card.	OK	The card contains the searched patterns.
		DOUBTFUL	The test can’t determine if the card contains the searched patterns.
		FAIL	The card hasn’t the searched patterns.
TEST_UV_PAPER_ REFLECTANCE	Test done under ultraviolet light to detect the presence or absence of optical whitening on the paper.	OK	No whitening presence detected in the card.
		DOUBTFUL	There’s no security about the whitening absence.
		FAIL	The card has whitening samples.
TEST_UV_SECURITY_ THREAD	Test done under ultraviolet light to detect the presence or absence of a security thread.	OK	The card contains the searched security thread.
		DOUBTFUL	The test can’t determine if the security thread is in the card.
		FAIL	The card hasn’t the searched security thread.
TEST_UV_PLANCHETTES	Test done under ultraviolet light to detect planchettes in the document.	OK	The card contains planchettes.
		DOUBTFUL	Could not assure there are planchettes in the card.
		FAIL	There are no planchettes in the card.
TEST_IR_INK	Test done under infrared light to detect the remaining ink in concrete zones.	OK	The card maintains the ink in the hoped zones.
		DOUBTFUL	The ink quantity found can’t determine its authenticity.
		FAIL	No ink found in required zones.
TEST_UV_TEXT_SHAPE	Test done under ultraviolet light to analyze text shapes.	OK	Text shapes does correspond.
		DOUBTFUL	The correspondence of text shapes is doubtful.
		FAIL	Text shapes does not correspond.
Test under infrared light.			
TEST_IR_INK	Test done under infrared light to detect the remaining ink in concrete zones.	OK	The card maintains the ink in the hoped zones.

Field	Description	Value	Value description
		DOUBTFUL	The ink quantity found can't determine its authenticity.
		FAIL	No ink found in required zones.
TEST_IR_FIELDS_VIZ_INK	Test done under infrared light to analyze fields' correspondence between data read under visible light and IR light.	OK	Fields do correspond.
		DOUBTFUL	The correspondence of fields is doubtful.
		FAIL	Fields do not correspond.
Tests related with document sides merging.			
TEST_SIDE_CORRESPONDENCE	Indicates whether the two images corresponding to the two faces of the same document model.	OK	The two images correspond to two sides of the same document model.
		FAIL	The two images do not correspond to two sides of the same document model.

Global document Test.			
TEST_GLOBAL_AUTHENTICITY_RATIO	Numeric value result of the document`s global validation based on the results of tests done on the document.	-1	The global test was not performed (i.e. UNVALIDATED) may be because there are no tests in the document to be done or a test could not be performed.
		0-1	Percentage value of the global test performed.
TEST_GLOBAL_AUTHENTICITY_VALUE	Result value for the document`s global validation based on the results of tests done on the document.	UNVALIDATED	Unable to perform the global test. By default, equivalent to -1 in the TEST_GLOBAL_AUTHENTICITY_RATIO field.
		OK	Valid document. By default, equivalent to higher values than 0.90 in the TEST_GLOBAL_AUTHENTICITY_RATIO field.
		DOUBTFUL	Unable to ensure it is a valid document. By default, equivalent to values between 0.75 and 0. 90 in the TEST_GLOBAL_AUTHENTICITY_RATIO field.
		FAIL	Invalid document. By default, equivalent to lower values than 0.75 in the TEST_GLOBAL_AUTHENTICITY_RATIO field.
Test related with MRZ.			
TEST_MRZ_GLOBAL_INTEGRITY	Integrity check of the global checksum of the MRZ code.	OK	MRZ code is correct.
		FAIL	MRZ code is incorrect.
TEST_MRZ FIELDS_INTEGRITY	Integrity checks of the checksum fields in the MRZ code.	OK FIELD	MRZ field called FIELD is correct.
		FAIL FIELD	MRZ field called FIELD is incorrect.
		UNVALIDATED FIELD	FIELD value was read but could not be validated.

TEST_CORRESPON DENCE VISIBLE_MRZ	Data correspondence between MRZ data and non-MRZ data.	OK FIELD	Field called FIELD does correspond.
		DOUBTFUL FIELD	The correspondence of field called FILED is doubtful.
		FAIL FIELD	Field called FIELD doesn't correspond.
TEST_CORRESPONDENCE_BARCODE_MRZ	Tests the correspondence between MRZ and barcode fields.	OK FIELD	Field called FIELD does correspond.
		DOUBTFUL FIELD	The correspondence of field called FILED is doubtful.
		FAIL FIELD	Field called FIELD does correspond.
Test related to barcode reading.			
{FIELD}_BARCODE	Bar Code reading result fields. Only if property ICAR_CFG_MRZ_VIZ_OUTPUT is set.	{FIELD}_ corresponds to the field read. Example: DOC_NUMBER_BARCODE	
BARCODE_PDF417	Bar Code PDF147 reading result.	https://en.wikipedia.org/wiki/PDF417	
BARCODE_CODE128	Bar Code Code128 reading result.	https://en.wikipedia.org/wiki/Code_128	
BARCODE_CODE39	Bar Code Code39 reading result.	https://en.wikipedia.org/wiki/Code_39	
BARCODE_QRCODE	QR reading result.	https://en.wikipedia.org/wiki/QR_code	
TEST_CORRESPONDENCE_BARCODE_MRZ	Data correspondence between MRZ data and barcode data.	OK FIELD	Field called FIELD does correspond.
		DOUBTFUL FIELD	The correspondence of field called FILED is doubtful.
		FAIL FIELD	Field called FIELD doesn't correspond.
TEST_CORRESPONDENCE_BARCODE_VISIBLE	Data correspondence between Barcode data and visible data.	OK FIELD	Field called FIELD does correspond.
		DOUBTFUL FIELD	The correspondence of field called FILED is doubtful.
		FAIL FIELD	Field called FIELD doesn't correspond.
Values and test related with the chip RFID			
RFID_TYPE	Document type.	PASSPORT	Passport.
RFID_NAME	Name.		
RFID_ID_NUMBER	Personal identification number. This number optionally appears in official.		
RFID_DOC_NUMBER	Document number. Only document number in the expeditor country. This number appears in all official documents.		
RFID_EXPEDITOR	ICAO key which refers to the document expeditor country.	See APPENDIX A. ICAO COUNTRY KEYS.	
RFID_NATIONALITY	ICAO key which refers to the document bearer nationality.	See APPENDIX A. ICAO COUNTRY KEYS.	
RFID_BIRTHDATE	Document bearer birthday.		
RFID_EXPIRY	Document expiration date.		
RFID_SEX	Document bearer gender.	M	Male.
		F	Female.

TEST_RFID_MRZ	Correspondence checking between document's MRZ data and e-passport MRZ data.	OK	Correspondence is correct
		DOUBTFUL	Correspondence is doubtful because of few characters.
		FAIL	Correspondence is not correct.
TEST_RFID_PHOTO	Correspondence checking between document's photograph and e-passport chip's photograph.	OK	Correspondence is correct.
		DOUBTFUL	Correspondence is doubtful.
		FAIL	Correspondence is not correct.
FIELD_CHAR_CONF	OCR characters confidences. FIELD could be any of processed fields (NAME, SURNAME, etc.). The property ICAR_CFG_OBTAIN_OCR_CONFIDENCE must be activated in order to retrieve this information.	For every read character this information is retrieved: "Character Confidence". Rank for confidences are [0-100] where 0 indicates the lowest and 100 indicates the higher confidence.	In case of whitespaces the string WHITESPACE will be retrieved as character. In case of noise, the string REJECTED will be retrieved.
FIELD_FIELD_CONF	OCR global field confidence. FIELD could be any of processed fields (NAME, SURNAME, etc.). The property ICAR_CFG_OBTAIN_OCR_CONFIDENCE must be activated in order to retrieve this information.	Numeric value between 0 a 100. Rank for confidences are [0-100] where 0 indicates the lowest and 100 indicates the higher confidence.	
{FIELD}_VIZ	Visible (VIZ) zone reading result. Only if property ICAR_CFG_MRZ_VIZ_OUTPUT is set.	{FIELD}_ corresponds to the field read	
{FIELD}_MRZ	MRZ zone reading result. Only if property ICAR_CFG_MRZ_VIZ_OUTPUT is set.	{FIELD}_ corresponds to the field read	
Test related to the Smart Card (SC). Chip reading.			
TEST_SC_CERTIFICATE	Check for certificate authenticity by means of SC chip.	OK	Correct certificate
		DOUBTFUL	Doubtful certificate.
		FAIL	Incorrect certificate.

IDCLOUD SPECIAL FIELDS

Field	Description	Value	Value description
Test related to Face Recognition			
TEST_FACE_RECOGNITION_VALUE	Compares the picture on the document with the user selfie.	OK	Selfie image matchs with the document picture.
		FAIL	Selfie image does not match with the document picture.
		UNVALIDATED	Comparison could not be performed.
TEST_FACE_RECOGNITION_RATIO	Correspondence between the Selfie and the document image in terms of a numeric value.	A value between 0 and 1, where 1 is a perfect match. Negative values correspond to UNVALIDATED	
Test related to e-mail and phone number validation			
TEST_MAIL_CHECKER	Performs a check to verify the existence of the e-mail address sent to the server.	OK	Mail is correct.
		FAIL	Mail is invalid.
		UNVALIDATED	An error has occurred during the process.
TEST_PHONE_CHECKER	Performs a check to verify the existence of the	OK	Mail is correct.

Field	Description	Value	Value description
	telephone number sent to the server.	FAIL	Mail is invalid.
		UNVALIDATED	An error has occurred during the process.
Fields related to Geolocation, device IP and device fingerprint.			
GEOLOCATION_ADDRESS_LAT	The latitude coordinate sent to the server.	Coordinate	
GEOLOCATION_ADDRESS_LNG	The longitude coordinate sent to the server.	Coordinate	
GEOLOCATION_ADDRESS_VIEWPORT_NE_LAT	The northeast viewport latitude coordinates from the read document address.	Coordinate	
GEOLOCATION_ADDRESS_VIEWPORT_NE_LNG	The northeast viewport longitude coordinates from the read document address.	Coordinate	
GEOLOCATION_ADDRESS_VIEWPORT_SW_LAT	The southeast viewport latitude coordinates from the read document address.	Coordinate	
GEOLOCATION_ADDRESS_VIEWPORT_SW_LNG	The southeast viewport longitudes coordinate from the read document address.	Coordinate	
DEVICE_IP	A valid IP of the device sent to the server.	"XXX.XXX.XXX.XXX" formated string.	
DEVICE_BROWSER_FINGERPRINT	String containing the device fingerprint sent to the server.	String.	

ADDITIONAL INFO ON THE OUTPUT

Some considerations must be taken into account about the output during integration.

- **Dynamic length for the name of the field**

The length is not fixed for all name fields and the maximum length of the field's name may change between versions. In ICAR integrations, name fields's length should never be limited to a fixed length.

- **Dynamic length for the value of the field**

The length of the value field is not fixed and the maximum length may change between versions. In ICAR integrations, value fields's length should never be limited to a fixed length.

- **Fields may or may not appear**

Any ICAR integration should take into account that not all fields are always returned. Fields may appear or not depending on:

- Errors in lecture of OCR. In case of any failure in reading, the affected fields may not appear in the result.
- Documents may not have those fields or they are not modelled.

- **Validation fields can appear or not**

Any ICAR integration should take into account that not all validation fields are always returned. Field may appear or not depending on:

- Documents may not have those validation fields.
- Depending on the image source (escaner, mobile, IDBox, etc) returned fields may vary.

- Errors in the lecture of the OCR.

- New fields and validation fields

Any ICAR integration should take into account that new fields and validation fields can be returned in newer ICAR versions.

APPENDIX A. ICAO COUNTRY KEYS

Consult the document ***icao_country_codes_EN.pdf***.

CHANGE HISTORY

Date	Changes	Version	Author
20150601	Created this document	8.5.0.0	Jordi Navarro
20151104	Updated TEST_GLOBAL_AUTHENTICITY_VALUE threshold values	8.6.0.0	Jordi Navarro
20151104	Added TEST_SIDE_CORRESPONDENCE, TEST_TYPOGRAPHY, TEST_COHERENCE_EXPIRY.	8.6.0.0	Jordi Navarro
20160719	Added references to IDCLOUD and Widget		Jordi Navarro
20161013	Added QUALITY_IMAGE fields for RESOLUTION and LUMINANCE Added TEST_OVERLAPPED_PHOTO_DETECTION	8.9.0.0	Jordi Navarro
20161229	Added SPECIFICITIES OF IDCLOUD		Jordi Navarro.
20170308	Added test and fields.	8.9.6.3	Enrique Nares.
20170315	General revision.		Eva Costa
20170317	Added quality fields.	8.9.6.3	Enrique Nares.
20170320	Added IDCLOUD SPECIAL FIELDS table	8.9, 9.0, 9.1	Jordi Navarro

TECHNICAL ASSISTANCE

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