

Thales Gemalto Document Verification (DV) Verifying Identity documents with peace of mind

Identity & Biometric Solutions



Thales Gemalto DV Sample Application

Overview

Identity theft profoundly affects the public and private sectors worldwide. According to US Federal Trade Commission (FTC) [2020 Data Book](#), there were 4.8 million identity theft and fraud reports received in 2020, up 45 percent from 3.3 million in 2019, mostly due to the 113 percent increase in identity theft complaints. Clearly, there is a growing need for reliable identity document verification, to enable public and private organizations to combat fraud and adhere to best practices in compliance with international laws and regulations.

Thales Gemalto Document Verification (DV) is a distributed software system delivered as an SDK and optional

components that automatically verifies electronic and optical security features of identity documents, ICAO and non-ICAO compliant, such as passports, visas, ID cards and driver's licenses. Two editions are available for customers with different use cases: Verification and Data Capture.

Thales Gemalto Document Verification addresses the needs of public entities (border control systems, entry exit systems, eGates, Kiosks, enrolment systems, etc) as well as private sector companies (telecoms, currency exchange, money transfer, post offices, car rental companies and more).

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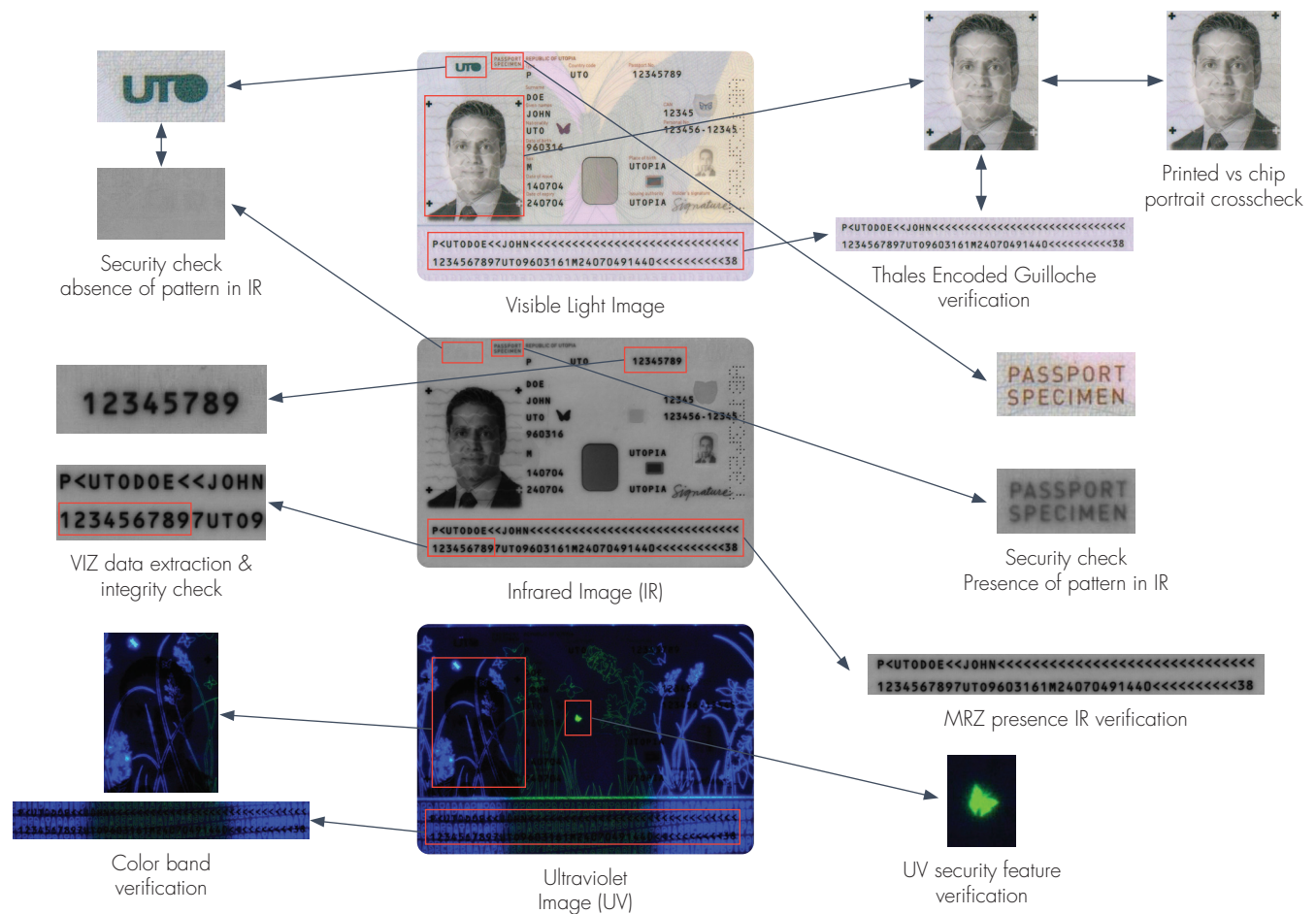
Document Verification (DV)

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Document verification removes the onus of ID checks from employees and law-enforcement agents. By utilizing software to check the document authenticity and its validity for each use case, users can focus on core business tasks and reduce human error.

DV Graphical Verification Examples



Main objectives of our customers today

- Mitigate risk of identity fraud and its inherent security, financial and reputational losses.
- Implement a future-proof system flexible enough to keep up with the demands of changing infrastructures, technologies, document standards, security features and attempts to perpetrate fraud.
- Ease of use with the peace of mind of automated, reliable checks.

Flexibility and scalability to fight emerging fraud

A DV template is not just a set of document characteristics, but rather a set of actions to carry out during verification. To fight

emerging fraud trends, these sets of actions can be re-evaluated and adjusted for specific documents. Administration of the document templates then becomes an essential tool to ensure continual adaptation to fraud threats.

Key benefits of Thales Gemalto Document Verification

- Reliable automated identification and electronic/optical verification of documents, reducing human error and allowing users to focus on business critical tasks
- Automated update of templates and CSCA certificates with optional on premise DV Server, which also allows for basic templates and certificates visualization and management
- Optional tool for visualizing and managing templates (DV Template Manager)

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- One of the largest template databases in the industry with active support
- Detailed report of verification results and extracted data, not just a global score
- Each security feature reports the expected and captured pattern
- Easy integration with customer PKI infrastructure (BSI compliant)

Supported Document Readers

- Thales AT9000 MK2
- Thales AT9000 MK2 720 DPI
- Thales KR9000
- Thales AT10K
- Thales AT10Ki
- Thales CR5400
- Thales QS2000 (For Data Capture Only)

System Requirements

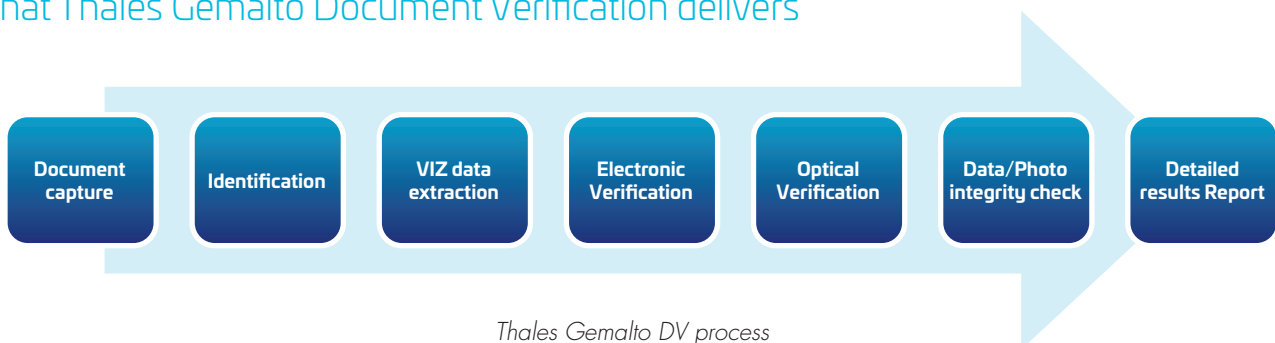
2.1. Minimum Requirements

- CPU: Intel Core i3-7300 or equivalent
- RAM: 4 GB
- OS: Windows 7 or higher (64 bits)
- Microsoft .NET Framework version 4.8
- .NET Core 3.1 Desktop Runtime

2.2. Recommended Requirements

- CPU: Intel Core i5-7500 or equivalent
- RAM: 8 GB
- OS: Windows 7 or higher (64 bits)
- Microsoft .NET Framework version 4.8
- .NET Core 3.1 Desktop Runtime

What Thales Gemalto Document Verification delivers



Thales Gemalto Document Verification offers convenience with highly reliable automated verifications

- Automated document identification (country, type, version)
- Automated verification of the electronic chip as per ICAO and BSI standards, including Passive Authentication, Active/Chip Authentication, and Terminal Authentication for reading sensible data using Extended Access Control (EAC), with optional interface to the customer PKI system
- Automated data integrity checks (MRZ vs. data page VIZ vs. chip vs. barcode)
- Automated photo integrity check (data page vs. chip)
- Automated verification of security features under all given light sources (visual, UV, IR, co-axial): presence and absence of patterns, UV dull paper, UV ink pattern, photo replacement

- Automated barcodes reading (PDF417, Aztec, QR® codes and Data Matrix™), including decoding for AMVAA format
- Automated Visual Inspection Zone data extraction in most languages and character sets, including all Latin based characters (English, French, Spanish, Italian, etc.), Cyrillic, Greek, Hebrew, Chinese, Korean, Japanese, Arabic and many more
- Extracted data and detailed verification results are automatically reported
- Centrally administered document repository with high resolution and optimized images

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Thales Gemalto Document Verification editions

DV SDK is provided in two editions:

Data Capture: For customers only requiring data capture for form filling and data storage applications. Document model is identified and data is read from available sources, including Visual Inspection Zone (VIZ), Machine Readable Zone (MRZ), chip and barcodes. Detailed report of each field and source is reported. Any supported Thales Document Reader can be used with the Data Capture edition; however, the QS2000 is the perfect match since it is a reader conceived for data capture.

Verification: Includes the full functionality of DV, including document model identification, data capture, electronic verification and all graphical and data integrity authentications. Intended to be used with Thales Document Readers conceived for authentication: AT9000 MK2, KR9000, AT10K, AT10Ki and CR5400.

Feature	Data Capture Edition	Verification Edition
Internal Document Capture Workflow (DV Manages Document Reader Capture)	✓	✓
External Document Capture Workflow (Integration Manages Document Reader Capture)	✓	✓
Document Identification	✓	✓
Data Capture from MRZ, VIZ, barcodes and chip	✓	✓
MRZ Data Format Verification		✓
Graphical Security Features Verification (VIS, IR, UV, Co-axial)		✓
Logical Security Checks		✓
Data Integrity Cross-check (VIZ vs MRZ vs barcodes vs chip)		✓
Portrait Cross-check (chip vs data page)		✓
ICAO Visual Digital Seal (VDS) and 2D-DOC Data Matrix Signature Verification		✓
Electronic Chip Verification as per ICAO and BSI Standards		✓
Optional Integration with Customer PKI System for Passive Authentication (PA) and Terminal Authentication (TA) as per ICAO and BSI Standards		✓
Document Expiration Check		✓
Specimen Detection		✓
Thales Encoded Guilloche Security Feature Verification		✓