

# Patient Identification in Healthcare Establishments

### Patient Identification: A Security Challenge

The multiple locations used for patient identification in healthcare establishments (admissions office, emergency services, care units, consultation services), the number and type of staff involved (administrative personnel, carers, etc.), the use of different software applications lead to risks of errors in patient identification:

- Duplications: The information system contains several identities for one and the same physical person;
- Collisions: Two physical persons are conflated under the same identity

The accuracy of the information collected about the patient's identity upon registration at reception is thus essential. There are numerous types of errors in identity data:

- Errors in spelling of name: letters, spaces, hyphens, etc.
- Errors in first name: Philip Phillip
- Surname first name inversions: John Robert
- Date of birth errors: inversion of 2 figures, day month

Only identity documents such as a driver's license, national ID card, residence permit or passports offer a guarantee of identity. Indeed, hospitals in many countries recommend having an identity card in one's possession for the purposes of admission, whether it is for hospitalisation or a consultation.

### Securely establish the identification of the patient upon admission

### Simplify and improve the fluidity of the patient admission process

- Reduce the number of manual data entry operations of customer information necessary to a minimum
- Strict rules on error-free collection (civil status identity document)



### **Strict identity characteristics:**

- Surname
- First names
- Date of birth
- Sex

#### Improve the quality of the information system

- Merger of a patient identifier in the information system
- Reduction in duplicates, collisions
- Archiving of image of document

#### **Additional features:**

- 1st level authentication of ICAO-compliant identity documents (Passport, Visa, Identity card)
- Reading of social security cards, cards for healthcare professionals

### Principle and features of the Thales Gemalto Document Reader QS1000

The system is centered around the Gemalto Document Reader QS1000 interfaced with the patient admission system for the automatic collection of identity data (surname, first name, date of birth, nationality, document number).



The patient presents his/her identity document

Thales document reader extracts the data from the identity document

Data saved to the patient record

### Thales Gemalto Document Reader OS1000

The Gemalto Document Reader QS1000 is designed for the fast and accurate extraction of information (MRZ, text, image) from identity documents for use in numerous applications where it is necessary to acquire civil status data (surname, first name, date of birth, nationality, document number, etc.).

The design and features of the QS1000 reader allow make it extremely intuitive to use simply by placing the document on the glass surface.

The automatic document detection system instantaneously triggers the reading and capture of various different items of information that are configured in advance using the SDK (Software Development Kit). The user experience is unique thanks to the "Active Video" system which allows the document to be placed in any position whilst maintaining the same read speed and accuracy.

The optical reader does not have any motorised parts ensuring a very high level of reliability so that virtually no maintenance will be necessary.

Its compact design allows it to be easily integrated into the majority of environments, such as check-in desks, offices, reception halls and counters.

### Main Characteristics and Features

- Reading of multiple documents and capture of images in 24-bit color
- High image resolution 400 DPI
- Capture area: 88mm x 125mm
- Sources of illumination visible, IR
- OCR data capture
- Total access to the OCR data and images captured via the Software Development Kit (SDK)
- Images captured available in BMP, PNG or JPEG format (resolution of 400 dpi)
- Auto-triggering of document capture presence of document is automatically detected

- Powered by USB 2.0
- No moving parts and IP50 rating (dust ingress protection)

### Reading Capability

- CAO-compliant document for infrared (IR) per ICAO 9303 specification Parts 1-4
- 1D barcodes (2 of 5 interleaved, Code 128, Code 39)
- 2D barcodes (PDF 417, QR, DataMatrix<sup>™</sup> and Aztec formats)
- Paper documents and smartphone

#### Illumination

- The reader illuminates documents in multiple wavelengths
- Infrared IR B900, 880nm, +/-5%
- Visible, 430-700nm

### Security

Key stone lock

### Minimum PC Specification

- The following minimum configuration is recommended for normal use to ensure that read speed is not affected:
- 1.7 GHz Pentium 4
- 512 Mb DRAM
- USB 2.0
- 100 Mb of available hard drive space
- Windows® 2000-SP4, XP or Vista®

### **Dimensions**

Length: 19.0 cm

Width: 16.2 cm

Height: 15.7 cm (with hood)

Weight: < 1 kg

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