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Vlatacom ID Solution

Comprehensive ID Solution



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Overview

- Solution Analysis
- Solution description
 - Enrollment,
 - Approval,
 - Document Production,
 - Issuance
- Vlatacom ID Products



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Purpose

- Enrollment
- Permanent storing of demographic and biometric data
- Production of multiple types of documents
- Prevention of identity frauds
- Tracking of application history
- Tracking of production and post-issuance status of each document



Requirements

- Operational requirements
 - Reduced document issuance time
 - Flexibility
 - Redundancy
 - Scalability
 - Cost effectiveness
- Security requirements
 - Secure communication
 - Secure authentication of personnel and equipment
 - Non-repudiation of all actions



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Key features

- Multi-document support
- Flexible
- Secure communication
- Secure authentication
- Scalable
- Supports online/offline mode
- Privacy aware



Document Types

- Passport
- ID card
- Official ID card
- Driving license
- Vehicle license
- Health insurance card
- Weapon permit
- ...





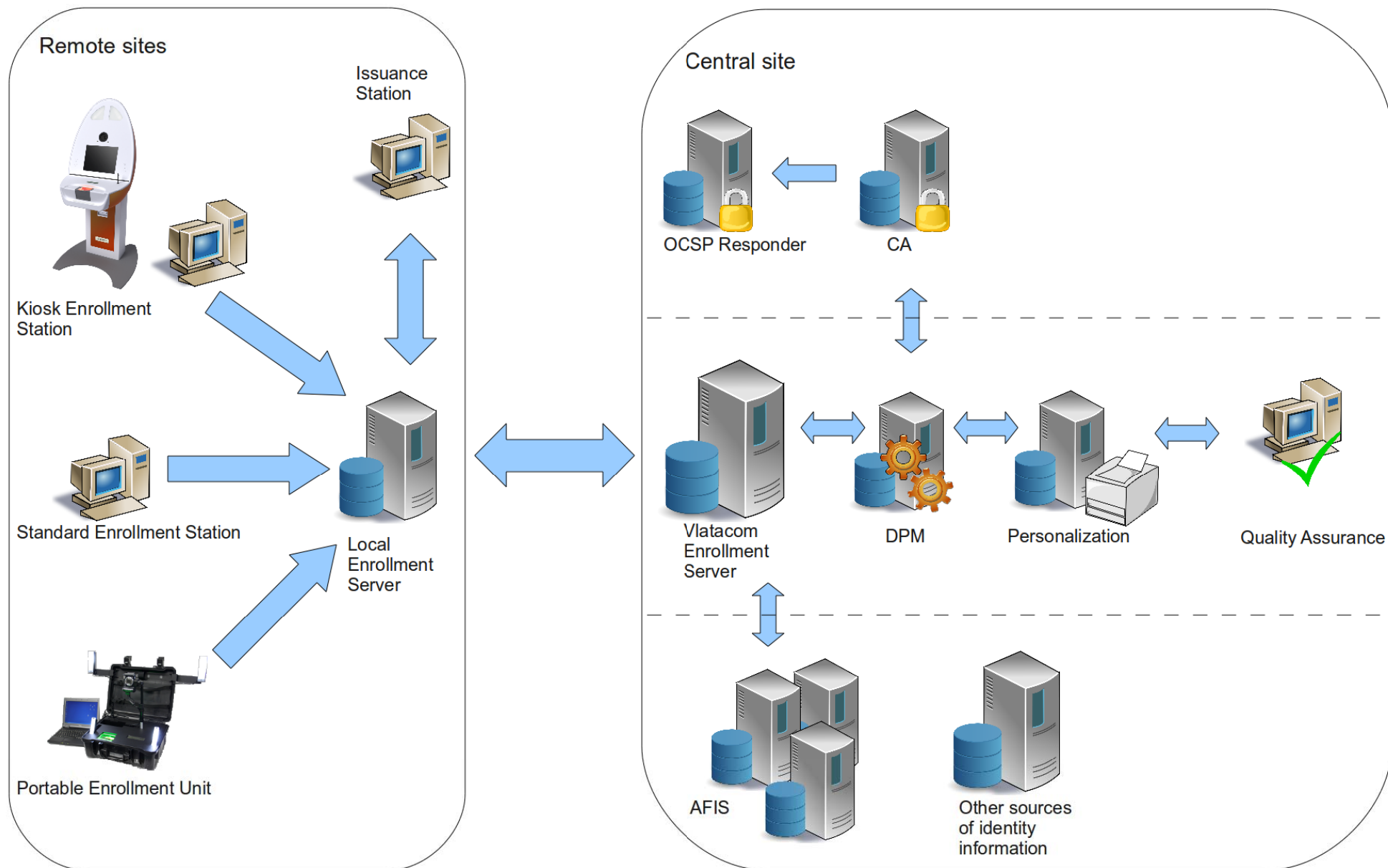
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Document Lifecycle Phases

- Enrollment
- Approval
- Data preparation
- Personalization
- QA
- Issuance
- Post-issuance (expiration, revocation, withdrawal ...)



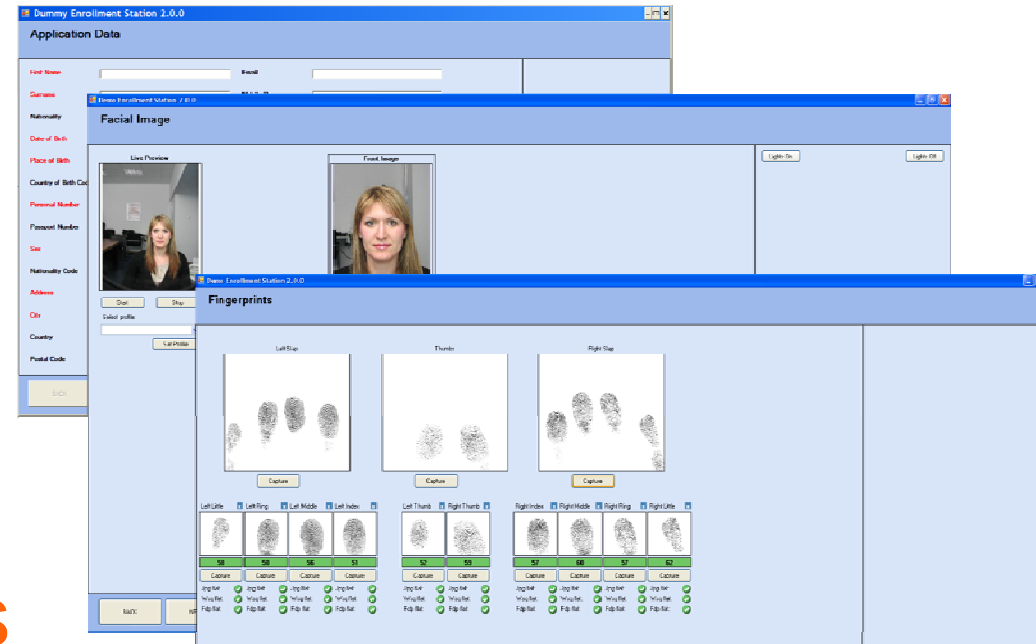
Solution architecture





Enrollment station – Enrolled data

- Demographic data
 - Name, surname, birth date, place of birth...
- Biometric data
 - Face image,
 - fingerprints,
 - iris...
- Supporting documents
 - Birth certificate...
- Distribution preference





Enrollment station – types



Standard Enrollment Station



Kiosk Based Enrollment Station



Mobile Enrollment Station



Portable Enrollment Station



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Enrollment station - features

- Simple and intuitive interface
- Customizable set of collected data per each document type
- Smart card based login
- Support for hardware provided by various vendors
- Online/offline operation
- Compact and kiosk operation



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LES

- Deployed at:
 - remote sites, when offline operation is required
 - central site, as an entry point in DMZ
- Reliable and secure distribution of collected data
- Handles network disruptions
- Optional secure out-of-band transport of data
- Supports multiple levels of indirection



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VES – basic functions

- Supports processing of application for multiple types of documents
- Tracks application status
- Tracks and records document complete life cycle
- Review of collected data by designated operators
- Operational and statistic reports



VES - features

- Business procedures based on workflow definitions
- Secure (certificate based login, signing of actions...)
- Scalable (based on J2EE technologies)
- High availability
- Database independent (Oracle, MSSQL, MySQL, Postgres...)
- Applicants identity can be verified with existing supporting systems



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VES – supporting systems

- Identity checks
 - Birth/death certificate databases
 - AFIS
 - Watch list systems (Interpol, Domestic...)
 - Any other required by the customer
- Other system components
 - Stock Manager
 - DPM
 - Certificate Authority



DPM

- Handles data preparation for multiple types of documents.
- Each document type is produced according to the workflow based definition of atomic actions.
- Database independent
- Extensible
- Interacts with Certificate Authority
- Flexible input/output interface



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Certificate Authority - EJBCA

- Flexible J2EE Certificate Authority
- Multiple CAs and level of CAs
- Algorithms (RSA, DSA, ECDSA)
- Certificates
 - X509
 - Card Verifiable certificates
- Certificate status publication
 - CRL
 - OCSP



Stock manager

- Tracks security sensitive material
 - Multiple unique identifiers per item type (chip serial number, card serial number, etc)
 - Quantity
 - State (In stock, production, lost, stolen, destroyed...)
 - Identity of handling operator per each state transfer
 - Location
- Stock tracking of all consumables related to document production (ribbons, printer parts...)



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Document Personalization

- Desktop and high volume production machines
- Supports load balancing and priority orders
- Document formats
 - ID1
 - Passport
 - Visa
 - ...
- Integrated with
 - Stock Manager
 - Quality Assurance



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Quality assurance

- Used to ensure high quality of resulting documents
- Batch processing
- Optical and Electronic QA
- Document readers
- Multiple types of document templates
- Separation of faulty documents



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Issuing Station

- Supports issuing of multiple types of documents
- Document review
- Biometric verification of document holder
- Smart card based login
- Integrated with Vlatacom Enrollment Server
- Supports changing of PIN codes when applicable
- Can create Certificate Signing Request using the client smart card



Enrollment kiosk

- Hardware and software for special verification:
 - High quality Digital Camera
 - Fingerprint scanner
 - Document reader
 - Diffuse cool lights
- Automatic quality verification for fingerprints and facial data.
- Ergonomic, user friendly design





Mobile Enrollment Station

- Used in remote or rural areas
- Equipped for autonomous operation
- Communication
 - Land-line
 - Wireless
 - Satellite
- Power supply
 - Land-line
 - Generator





VDR Document reader

Reads ICAO 9303 documents:

- e-Passports
- ID1 format travel documents
- Visa stickers

Also used for:

- Boarding tickets
- Seafarer cards
- Residence cards
- ID cards





VDR-C Document reader

- Full page optical reading in white, infrared, ultraviolet, coaxial, and 6 more lights
- 400 DPI
- Optical reading
 - MRZ (0,9 seconds)
 - 1D bar code
 - 2D bar code
- Contactless chip reading
- PA, AA, BAC and EAC enabled
- Dimensions: 210 x 170 x 112 mm





VDR handheld

- Enabled optical reading of entire document:
 - Fingerprint scanner
 - Passport reader
 - Contact/contactless chip reader
 - UV (365nm) and white lights
 - 5 inch touch screen
- Connectivity
 - USB
 - Ethernet
 - WiFi
 - External TETRA over RS-232
- Battery capacity 12+ hours





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Questions?

Thank you!

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