

MOSIP Create: Winning Solutions Showcase

OORU – Doc2VC Engine



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create

Doc2VC Engine — Instant Document-to- Credential Automation

This demo uses land records purely as an example. The system works for any paper or scanned document, transforming it into structured data and a digitally signed credential — all within a minute.

Theme Highlighted : Credential Facilitation for Empowerment

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Paper-Based Records Slow Down Digital Service Delivery

Unstructured documents create bottlenecks across verification, processing, and citizen services.

- Most government records exist only as PDFs or scans.
- Manual data entry leads to delays, errors, and inconsistencies.
- Lack of structured formats prevents automation.
- Citizens must repeatedly resubmit the same documents for different services.

Doc2VC is an OCR → LLM → credential pipeline that converts unstructured documents into structured, verifiable credentials, enabling faster verification and reuse across services.

DOC2VC WORKFLOW DIAGRAM



Issuance Portal
(upload documents)

n8n Workflow Engine

Credential Engine with Designer

Sunbird | SpruceID | Inji Certify

Claim 16:9
QR Code
Generator

eSignet

Mimoto

CredIssuer
Credential
Wallet



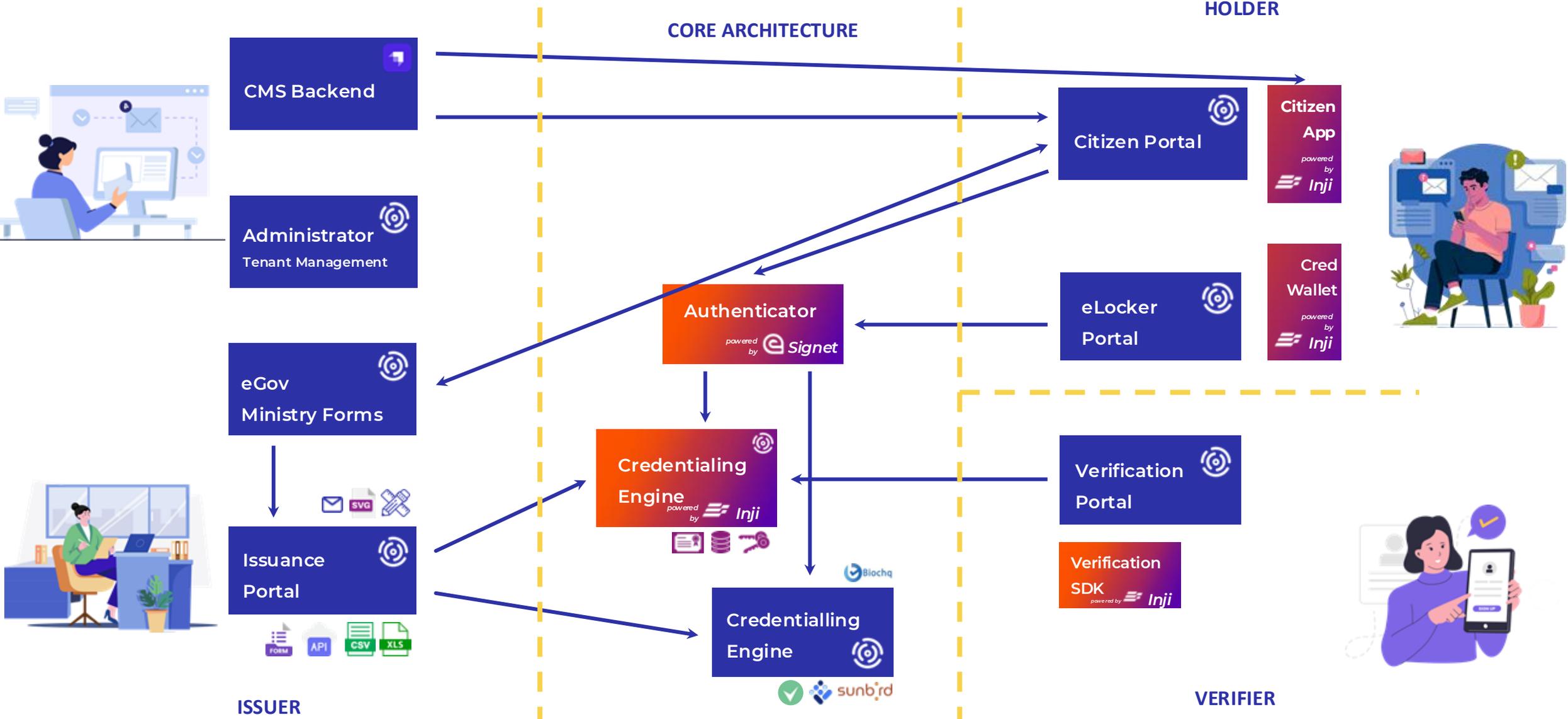
Verification Portal

ChatGPT | Inji Verify

LEGEND

- OORU's Components
- MOSIP's Components
- Build using MOSIP Spec or MOSIP Libraries
- Open source Components

CredIssuer Architecture



FEATURES OF THE DOC2VC ENGINE

Automated Credential Issuance (Inji Certify)

- Structured OCR+LLM output converted into credential format.
- Configurable schemas based on issuer needs.
- Fast, secure issuance via Inji Certify.
- Holder notified instantly.
- Supports single or bulk issuance

Credential Design & Delivery (CredIssuer Designer)

- Configure fields, QR placement, styling and metadata.
- Supports multiple templates per use case or issuer.
- Triggers notifications to holders via email/SMS.
- Handles end-user credential delivery automatically.

Credential Verification (Inji Verify)

- Secure QR enables instant verification.
- Primary pathway: Verified using Inji Verify for authenticity and integrity.
- Cryptographic signature checks ensure the credential hasn't been altered.
- Works in both online and offline environments.

AI-Powered Credential Assistant Bot

- Ask natural questions about any credential.
- Retrieves and summarises relevant fields instantly.
- Helps users locate information without manual searching.
- Works for admins, holders, and verifiers.
- Optional access-controlled responses.

Technology Stack

AI-Driven Digitisation Engine Built for High Accuracy

OCR Engine:

Noise-resistant text extraction, multilingual recognition, and signature/stamp detection from land documents.

Schema Validator:

Ensures the extracted land record data conforms to predefined templates.

Inji Verify

Performs cryptographic signature validation, key resolution, and secure QR decoding to confirm credential authenticity and detect any tampering.

LLM Parser:

Field classification, entity extraction, and schema mapping to convert unstructured land record data into structured formats.

Credential Issuer:

Uses CredIssuer Designer, which internally leverages Inji Certify, to generate digitally signed, tamper-proof land record credentials.

Workflow Automation:

n8n orchestrates automated workflows between OCR, LLM parsing, schema validation, credential issuance, and audit logging.

Who This Solution Is Built For

Stakeholders involved in converting paper-based workflows into structured, digital-ready records.

Government Departments & Agencies

Entities managing large volumes of legacy paper documents.

Verification & Compliance Authorities

Organisations responsible for validating records across services.

Document-Issuing Institutions

Any authority that originates official paper documents and needs digitisation.

Public Service Delivery Platforms

Citizen-facing portals that require structured, verified digital records.

Accessible Document Verification, Designed for Everyone

- No Manual Document Scrutiny**
Automatically reads and structures document data, removing the need for manual verification.
- Mobile-First Verification Experience**
Optimised for mobile use by field officers, administrators, and verifiers.
- Language-Agnostic Document Processing**
Reads and converts documents in any language into structured, verifiable credentials.
- Audio-Assisted Verification**
Can be optimised to enable voice-based queries and explanations, improving accessibility for low-literacy users.
- Extensible for Agentic AI-Driven Verification**
Designed to support AI agents for interpreting, summarising, and responding to document queries.

A Document-Agnostic Engine for Government Modernisation

Applicable across sectors, services, and document types.

Civil Registration: Birth, death, marriage certificates.

Enterprise: Registration certificates, compliance documents.

Licensing: Trade licenses, driving permits, construction approvals

Land & Property: Ownership documents, tax receipts, survey reports.

Social Welfare: Beneficiary records, entitlement letters.

Education: Transcripts, mark sheets, school leaving certificates

Healthcare: Immunisation cards, discharge summaries.

Legal: Court orders, affidavits, agreements, NOCs.