CONFERENCE SESSION

DDMS 2.0 and AI

The Roadmap for the Future

Modern records management and sovereign AI for government agencies on Alfresco Enterprise

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THE STARTING POINT

DDMS: a strong foundation to build on

Already in place

- **Alfresco Enterprise**
  Trusted central repository
- **File plans**
  Records classified by function
- **Security and audit**
  Access control, audit trail, holds
- **Workflows**
  Approvals and minutes in DDMS

What still slows agencies down

01 Paper keeps arriving

Scanning, indexing and filing are manual steps at different desks.

02 Indexing depends on people

Metadata is typed by hand, so quality and speed vary by officer.

03 Retention is hard to apply

Schedules live in documents, not in the system holding the records.

04 Answers take too long

Search finds the file; officers still read it end to end for the answer.

WHAT CHANGES IN DDMS 2.0

Three pillars on the platform you already own

01

Capture smarter

Paper to record in one flow

- Scanning built into DigiWorks
- OCR on every page
- AI fills in the index fields

Outcome: Less typing, consistent metadata

02

Govern automatically

Retention that runs itself

- File plan with inherited policies
- Retention master, bulk loaded
- Disposition with e-signature

Outcome: Compliance without manual tracking

03

Use records intelligently

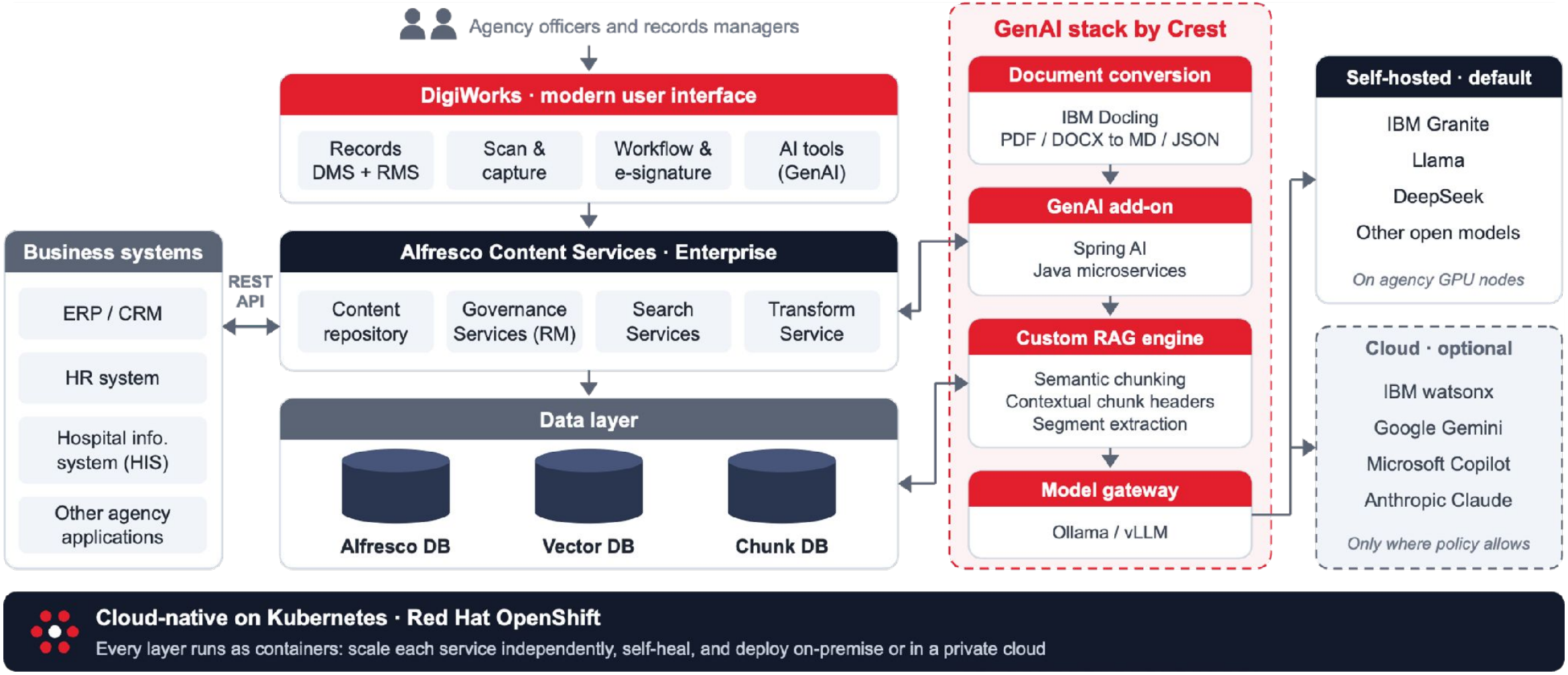
Answers, not just files

- AI summary and translation
- Q&A chat on any record
- Natural-language search

Outcome: Faster decisions from your records

Foundation: Alfresco Enterprise, cloud-native on OpenShift · DigiWorks · Self-hosted GenAI by Crest

Alfresco at the core, AI alongside

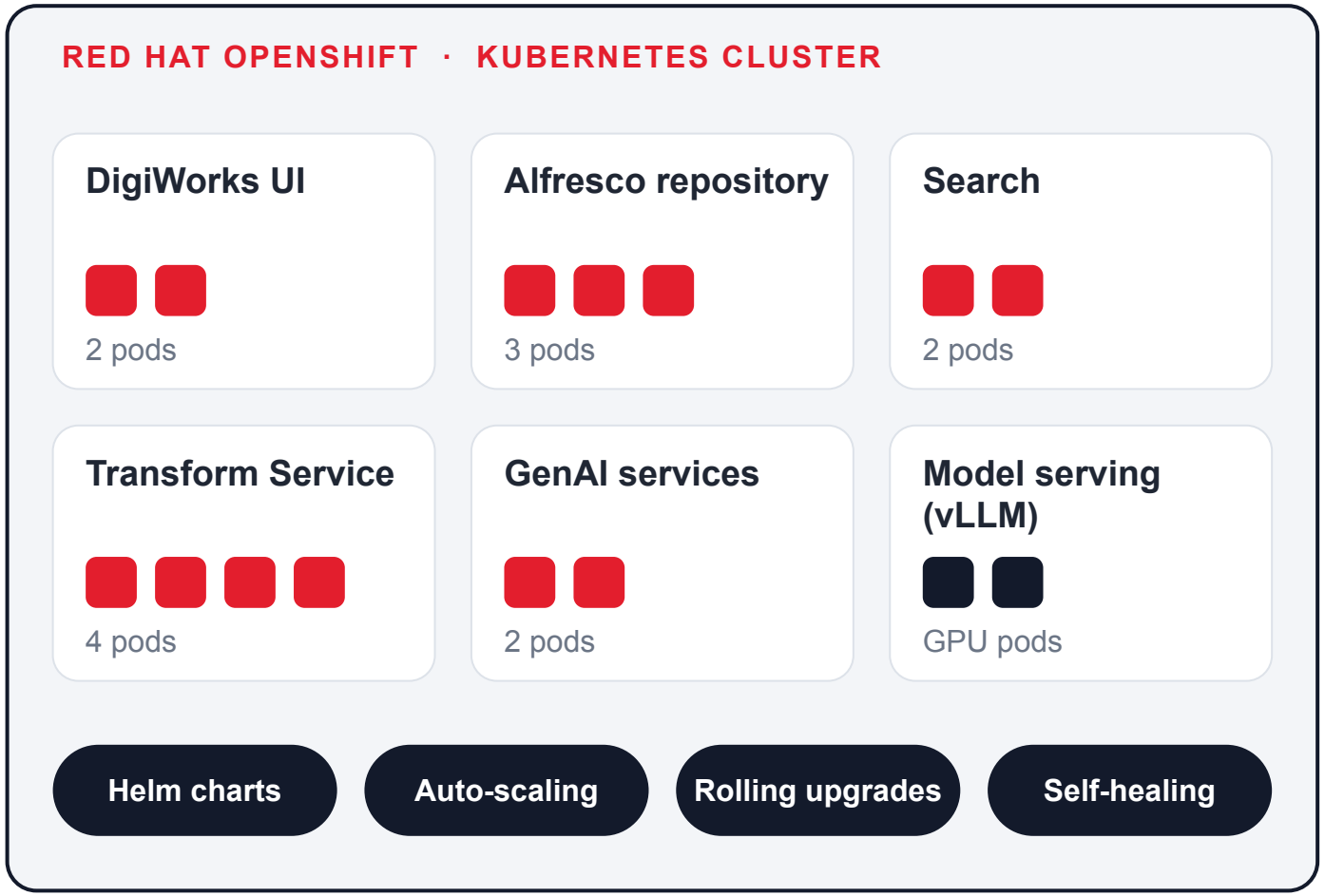


PLATFORM · CLOUD-NATIVE

Alfresco runs cloud-native on Red Hat OpenShift

The latest Alfresco Content Services is delivered as containers for Kubernetes platforms such as Red Hat OpenShift.

- **Scale each service on its own**
  Add repository, search or transform capacity only where load grows.
- **Resilient by design**
  Failed containers restart; rolling upgrades keep DDMS available.
- **Repeatable deployments**
  Helm charts deploy the same stack to every agency.
- **Your infrastructure, your choice**
  On-premise, government private cloud or public cloud.

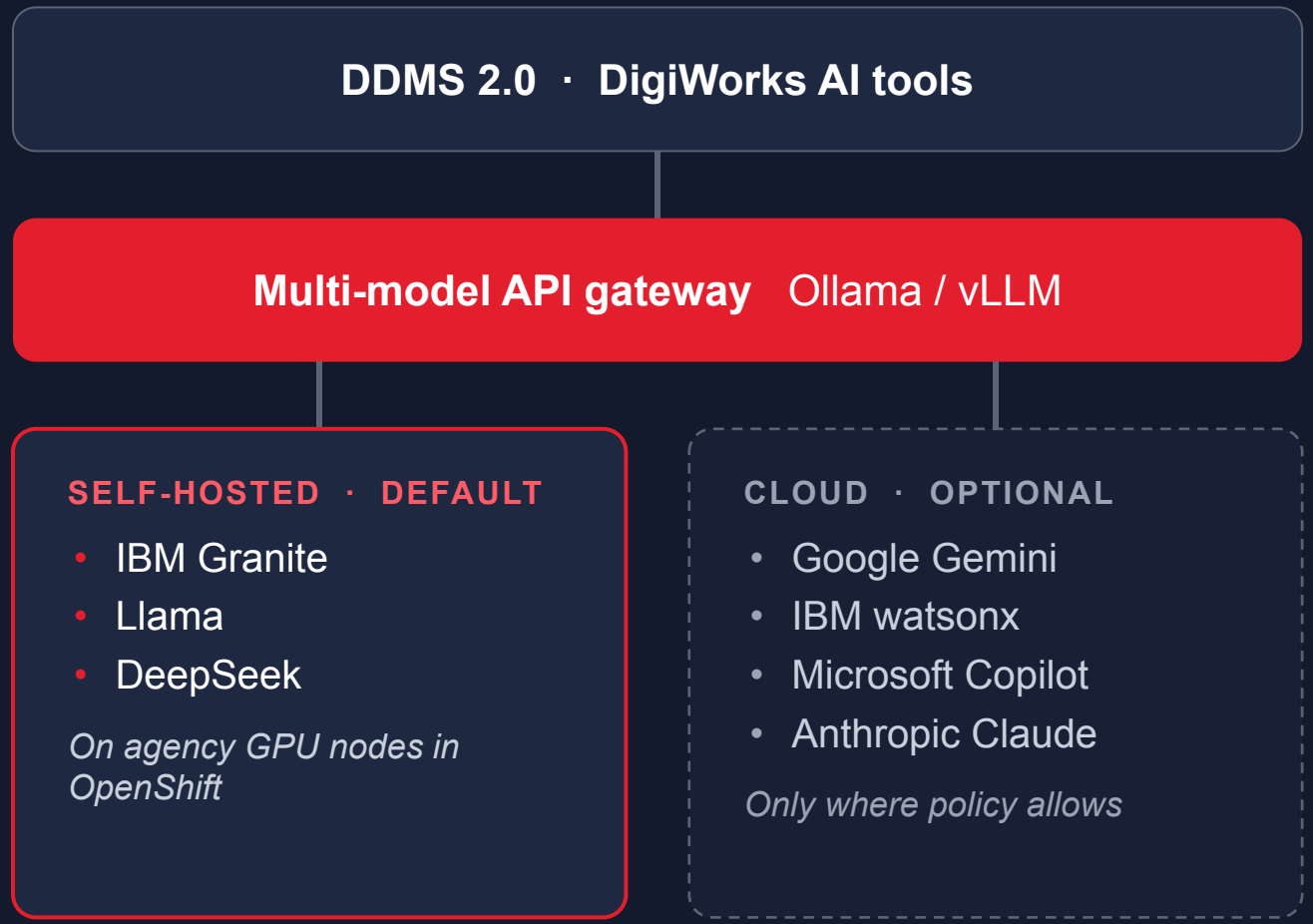


SOVEREIGN AI

Your records stay in your data centre

DDMS 2.0 runs open-source language models on agency infrastructure. Cloud models are optional and controlled by policy.

- **Data stays on-premise**
  Documents, embeddings and prompts stay inside the government network.
- **The right model for each task**
  One gateway routes every request to an approved model.
- **No lock-in**
  Swap or upgrade models without changing DDMS.



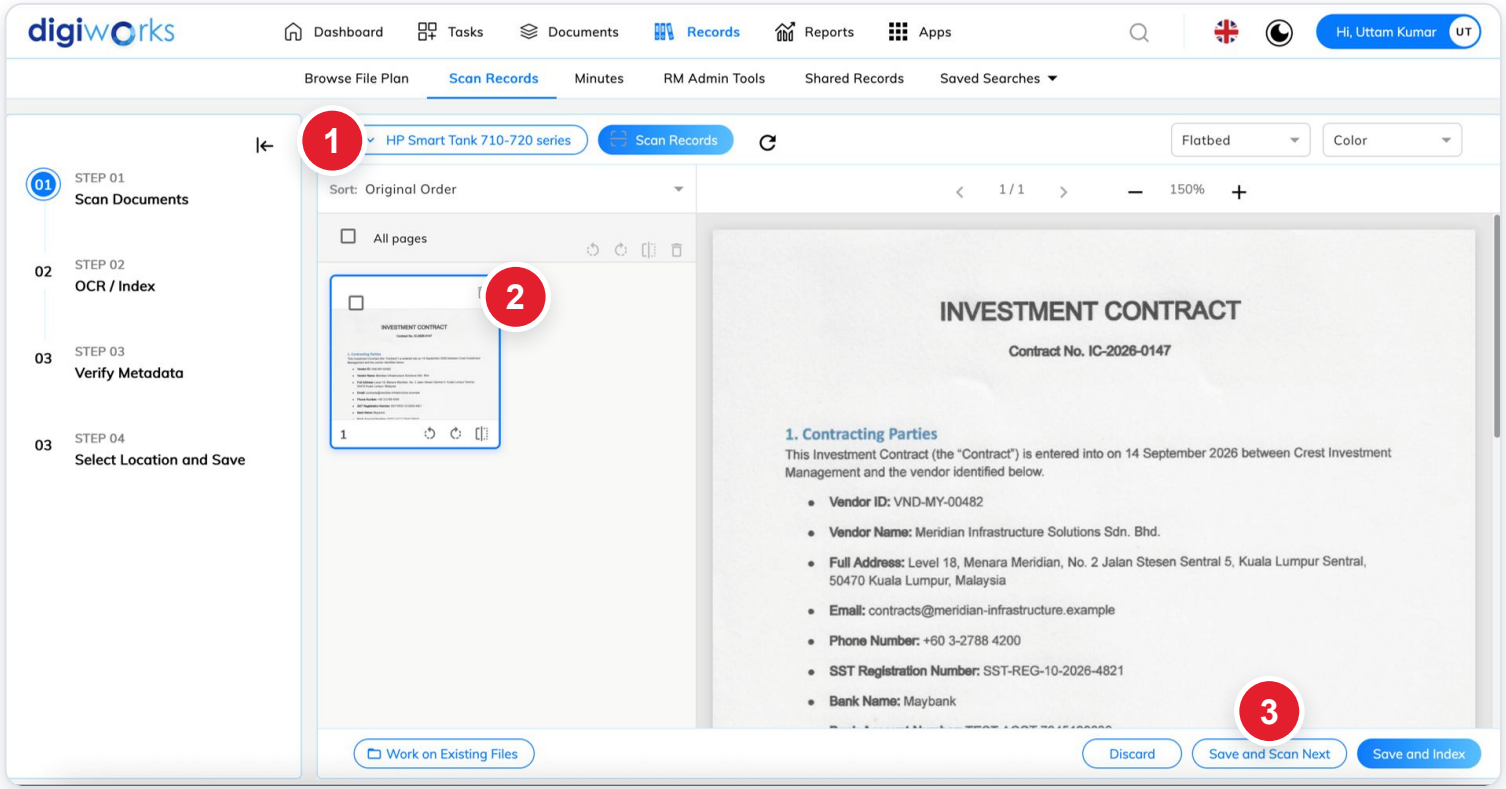
Scan straight into DDMS from the browser

Scanning is part of DigiWorks, so officers capture records where they already work.

1. **Pick scanner and settings**
   Device, flatbed or feeder, colour or greyscale.

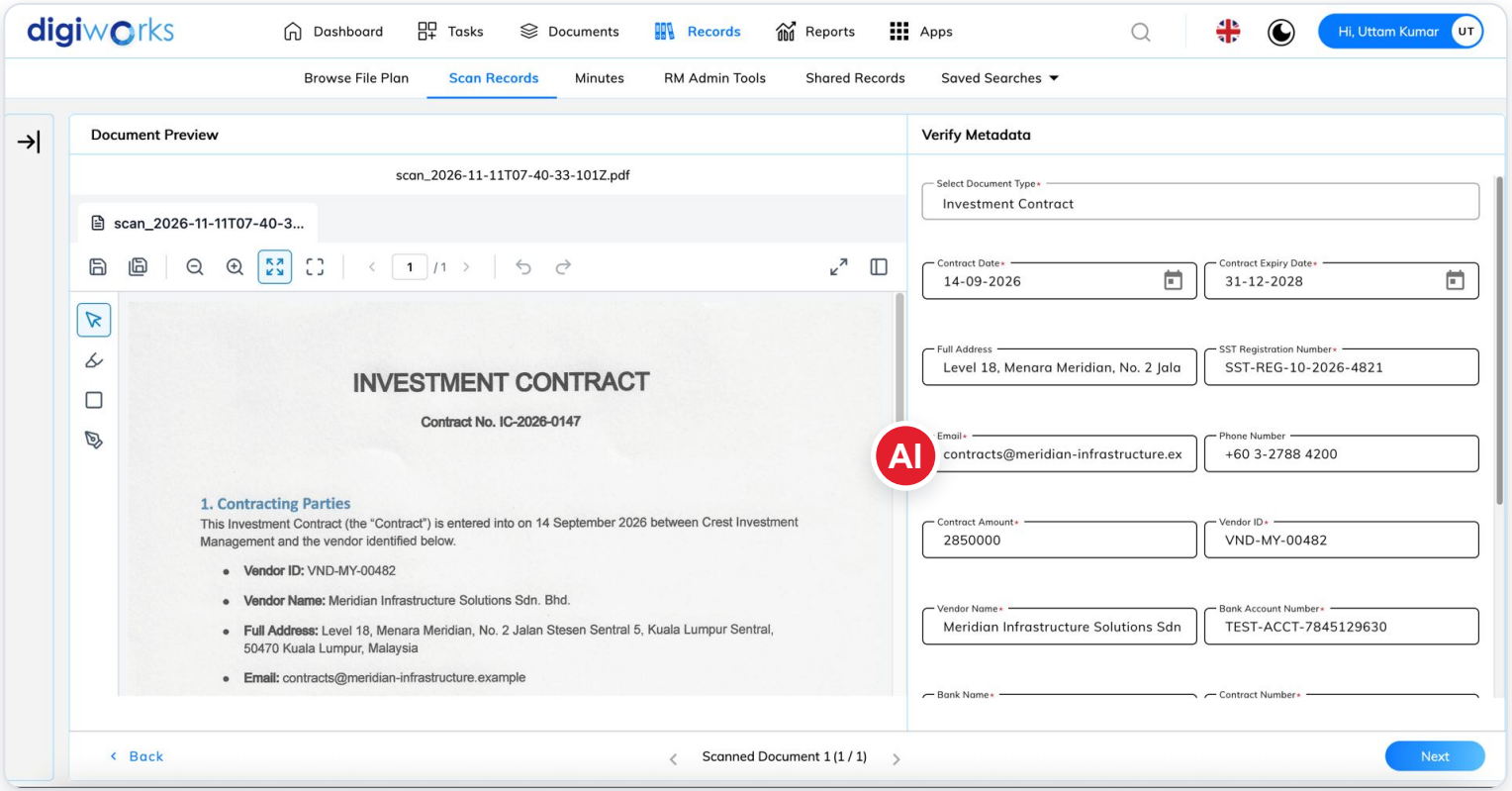
2. **Check every page**
   Preview, reorder, rotate or remove pages.

3. **Keep the batch moving**
   Save and scan the next document in one click.



CAPTURE · 2 OF 3

OCR and AI fill in the metadata for you



AI reads the scanned page, recognises the document type and extracts its index fields.

FROM THIS SCAN

Detected: Investment Contract

Contract and expiry dates, vendor name and ID, SST number, amount, bank account, email and phone

- **Officers verify, not type**
  Fields arrive pre-filled; the officer checks and confirms.

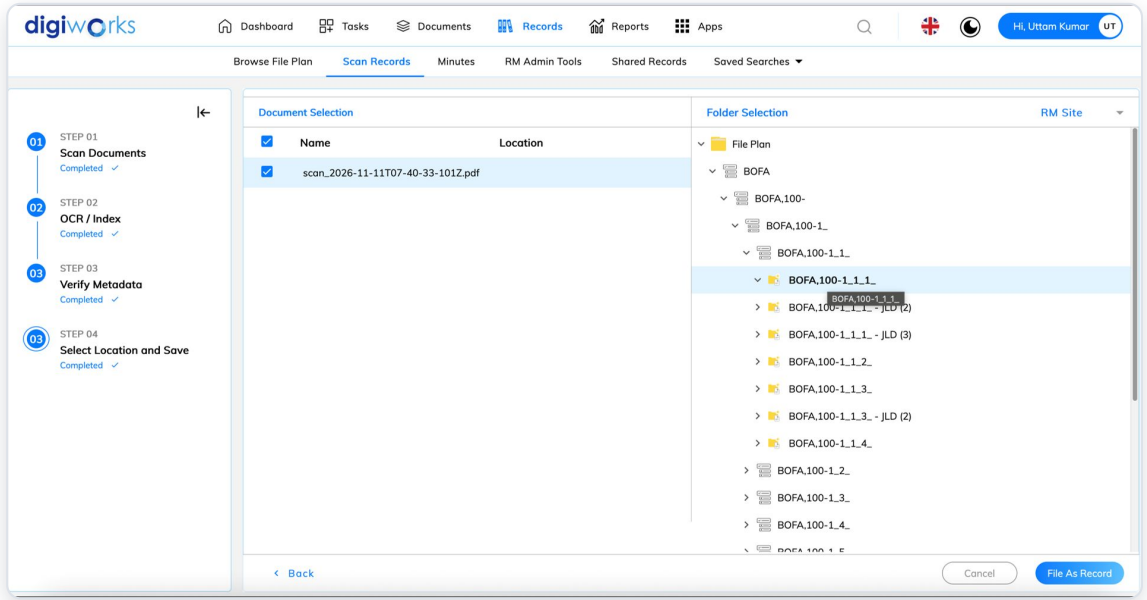
From paper to declared record in one flow

01 **Scan documents**

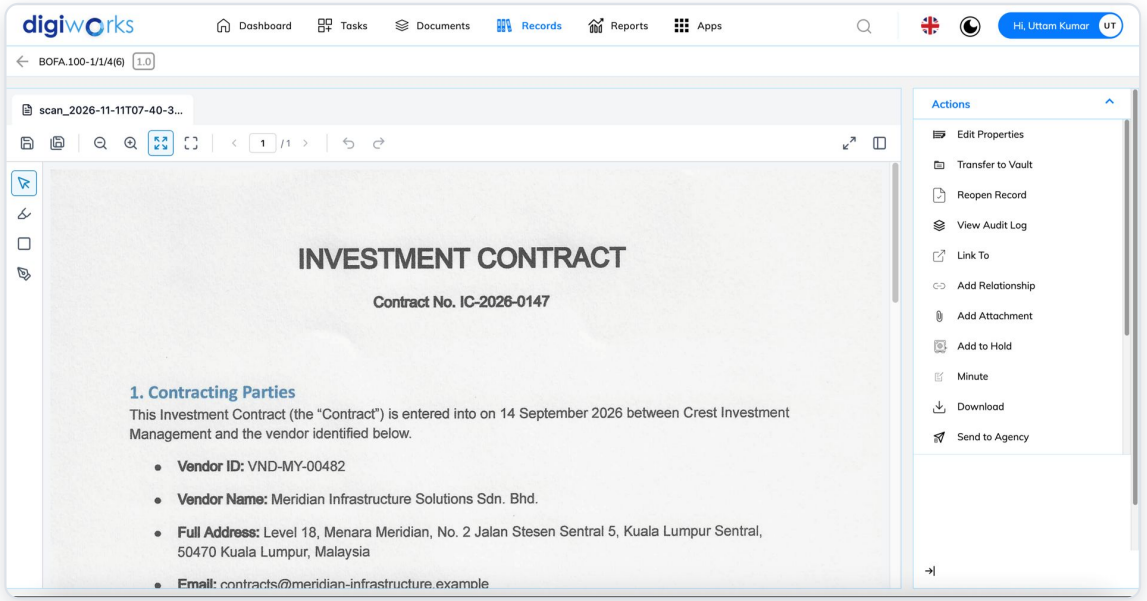
02 **OCR and index**

03 **Verify metadata**

04 **File as record**



Pick the file plan folder, then File As Record



The declared record, with audit log, holds and transfer actions

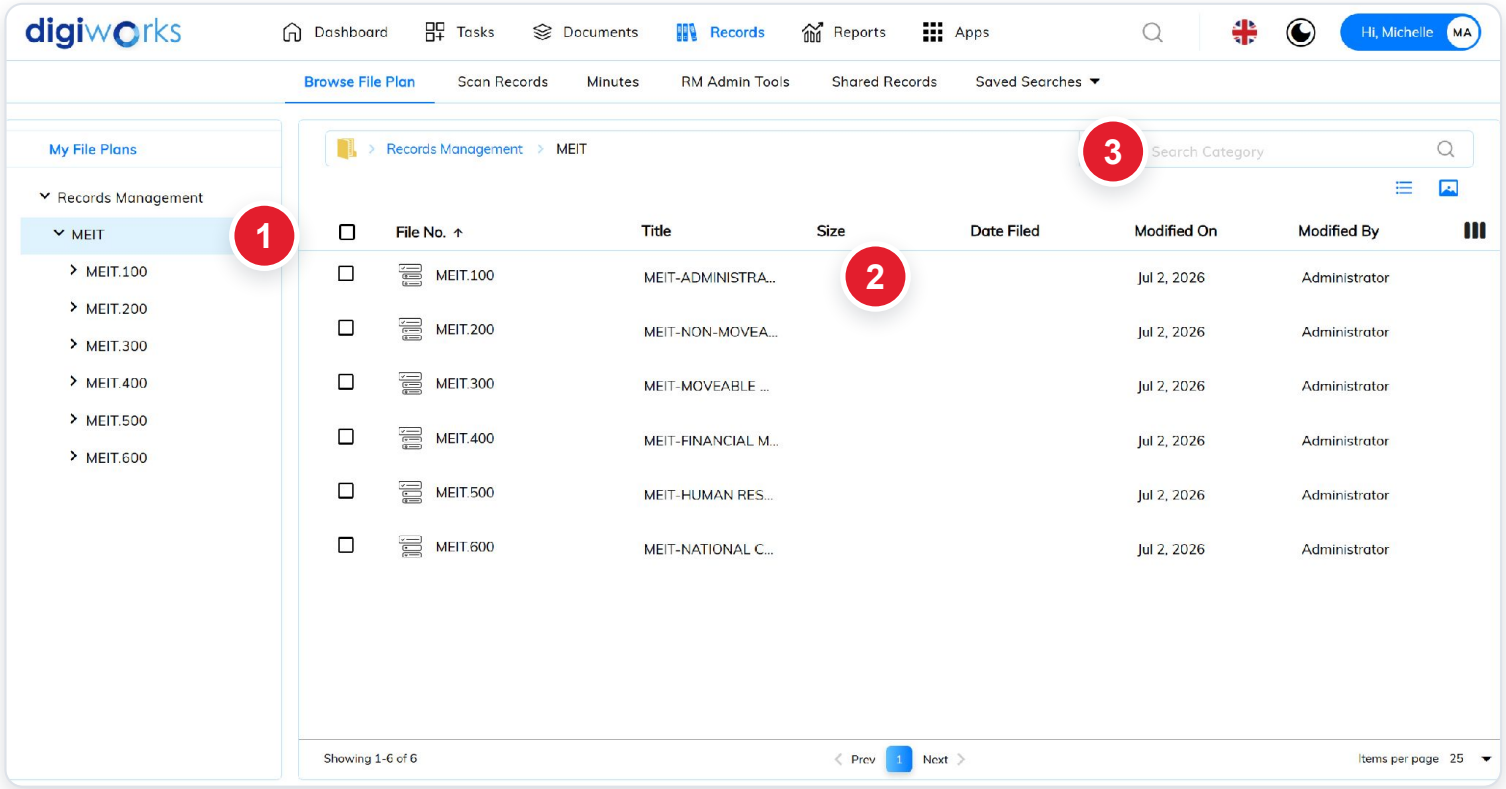
One file plan, organised by agency function

Records are classified by function, so retention and access follow each record automatically.

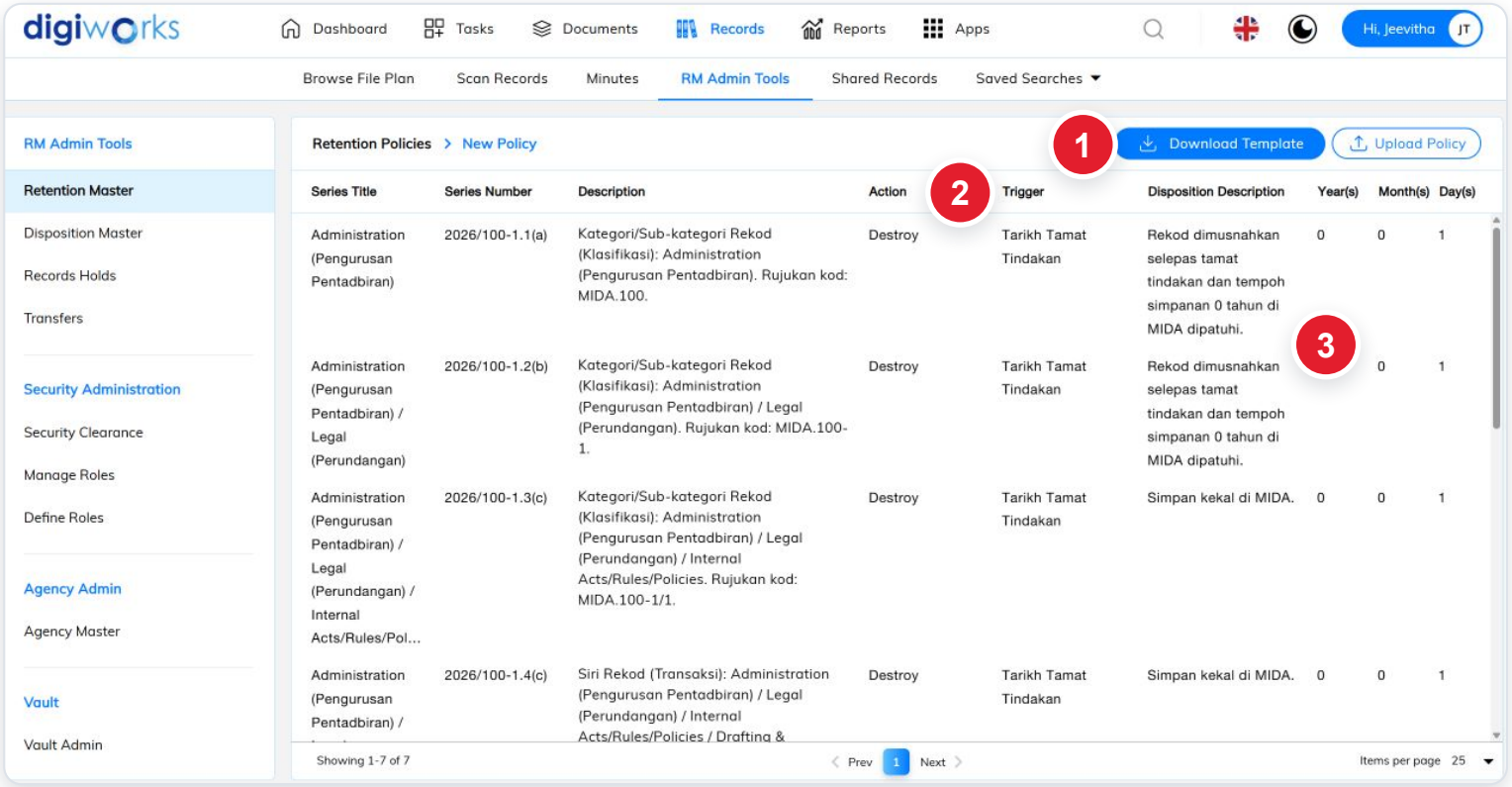
1 **Function-based hierarchy**
Administration, finance, assets and HR, coded to the agency.

2 **Policies inherited**
Records filed under a series inherit its retention rule.

3 **Easy to find**
Browse by number or title, or search the plan.



Retention policies set once, applied everywhere



1 Bulk upload

Fill in the template with the agency schedule and upload it in one go.

2 Action, trigger, period

Destroy or keep, the trigger event, and years, months and days.

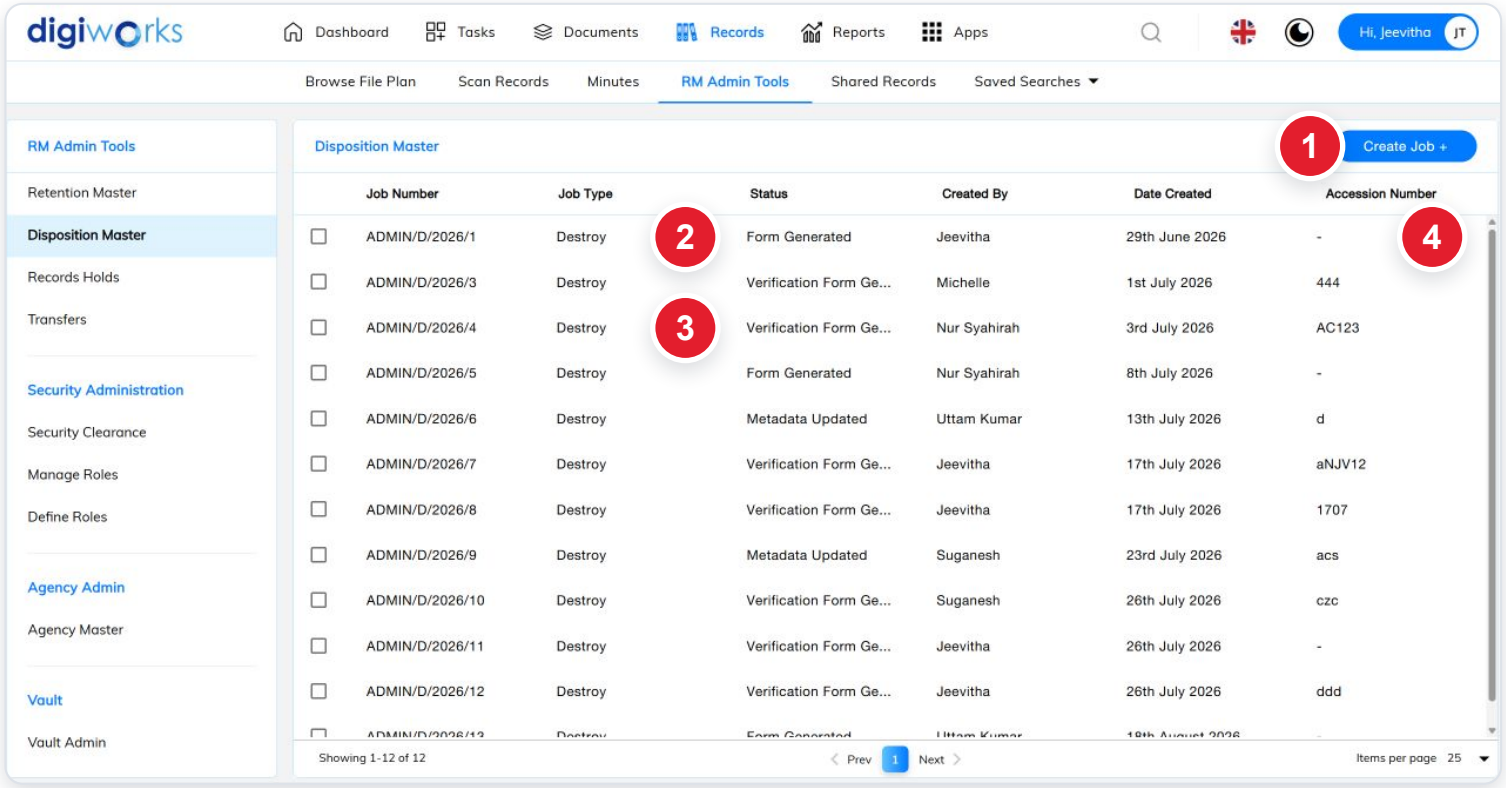
3 In the schedule's words

Descriptions stay in Bahasa Malaysia, as in the schedule.

Disposition runs as tracked jobs, not paperwork

Every disposition batch is a job with a number, a status and a signed approval.

1. **Create the job**
   Pick due records: destroy or transfer.
2. **Generate the form**
   DDMS prepares it for approval.
3. **Verify and sign**
   The approver signs digitally.
4. **Dispose or transfer**
   Destroyed, or sent to the archives.



GOVERNANCE · AUTOMATION

The retention lifecycle, automated end to end

01 — 02 — 03 — 04 — 05 — 06

Capture
Scanned, OCR'd and indexed by AI

Classify
Filed in the file plan; policy inherited

Retain
The clock starts at the trigger event

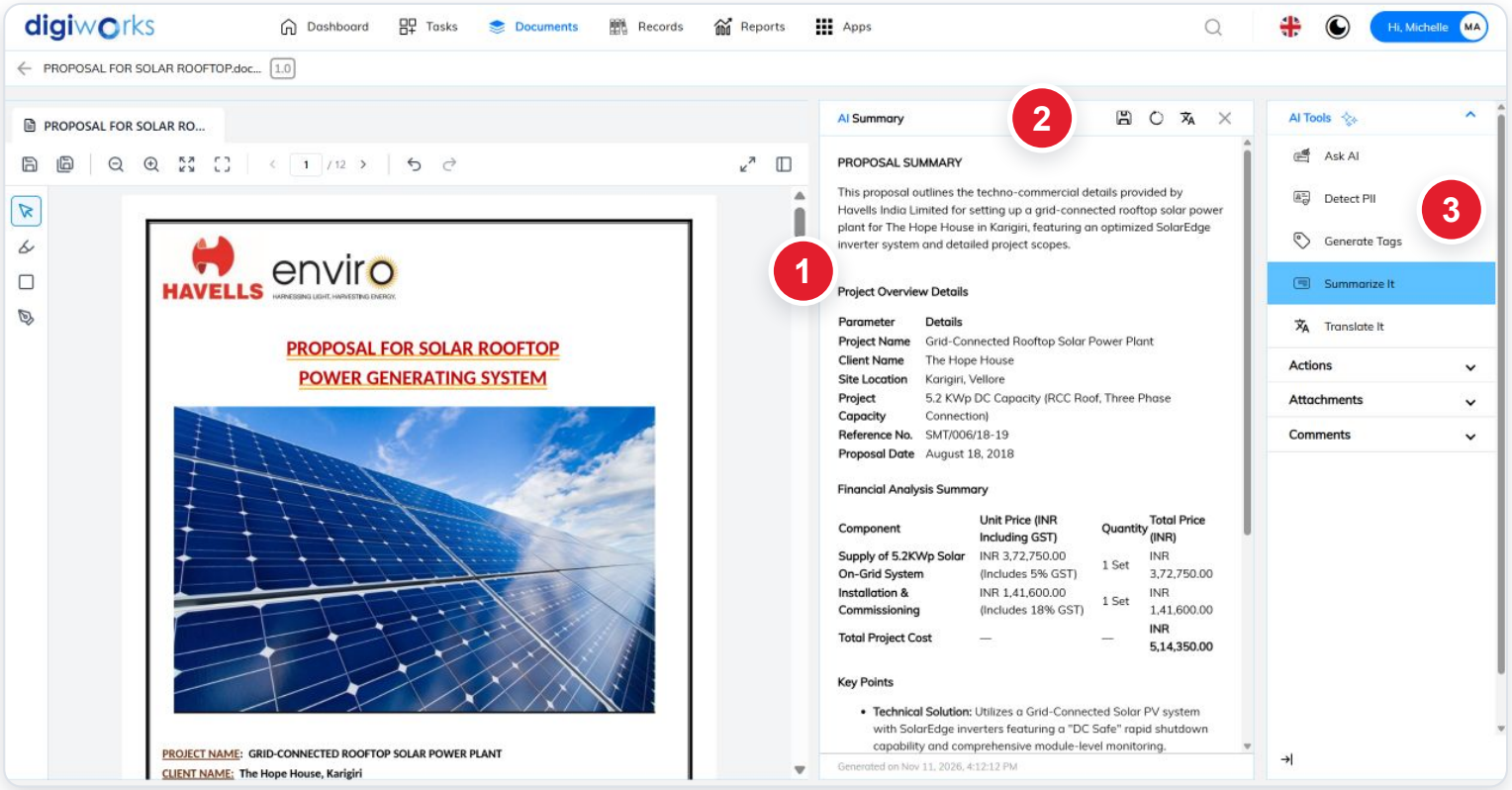
Review
Due records gathered into a job

Approve
Officer signs the form digitally

Dispose
Destroyed, transferred or kept

Always on: Holds pause disposition · Every action is audited · Certificates stay with the record

A 12-page proposal, summarised in one click



Decision-makers get the essentials without reading the whole file.

1. **Structured like a brief**
   Overview, key figures and key points.

2. **Kept with the document**
   Time-stamped, and can be saved.

3. **All AI tools in one panel**
   Ask AI, Detect PII, Tags, Summarise, Translate.

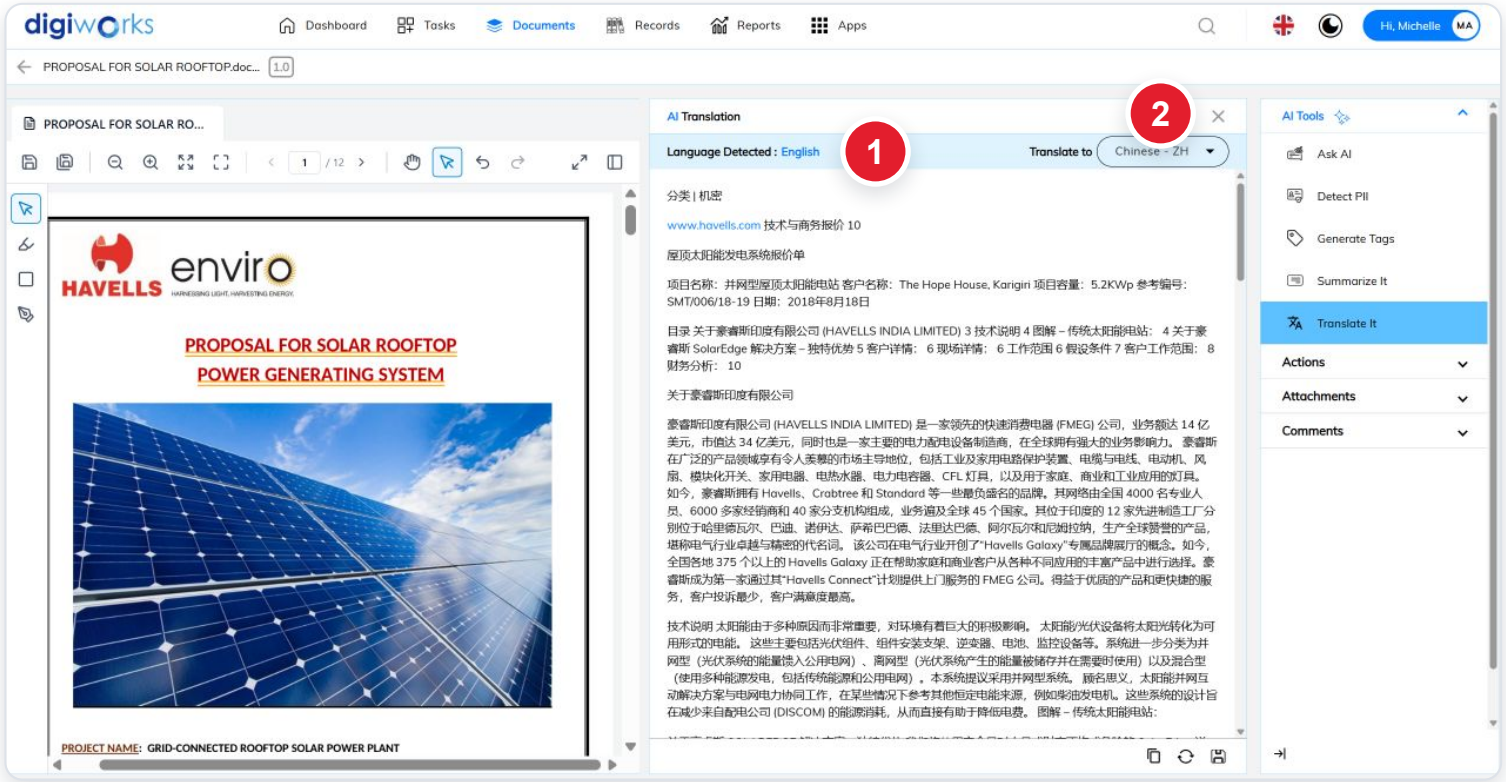
Read any record in the language you need

DDMS detects the source language; the officer picks a target language and translates.

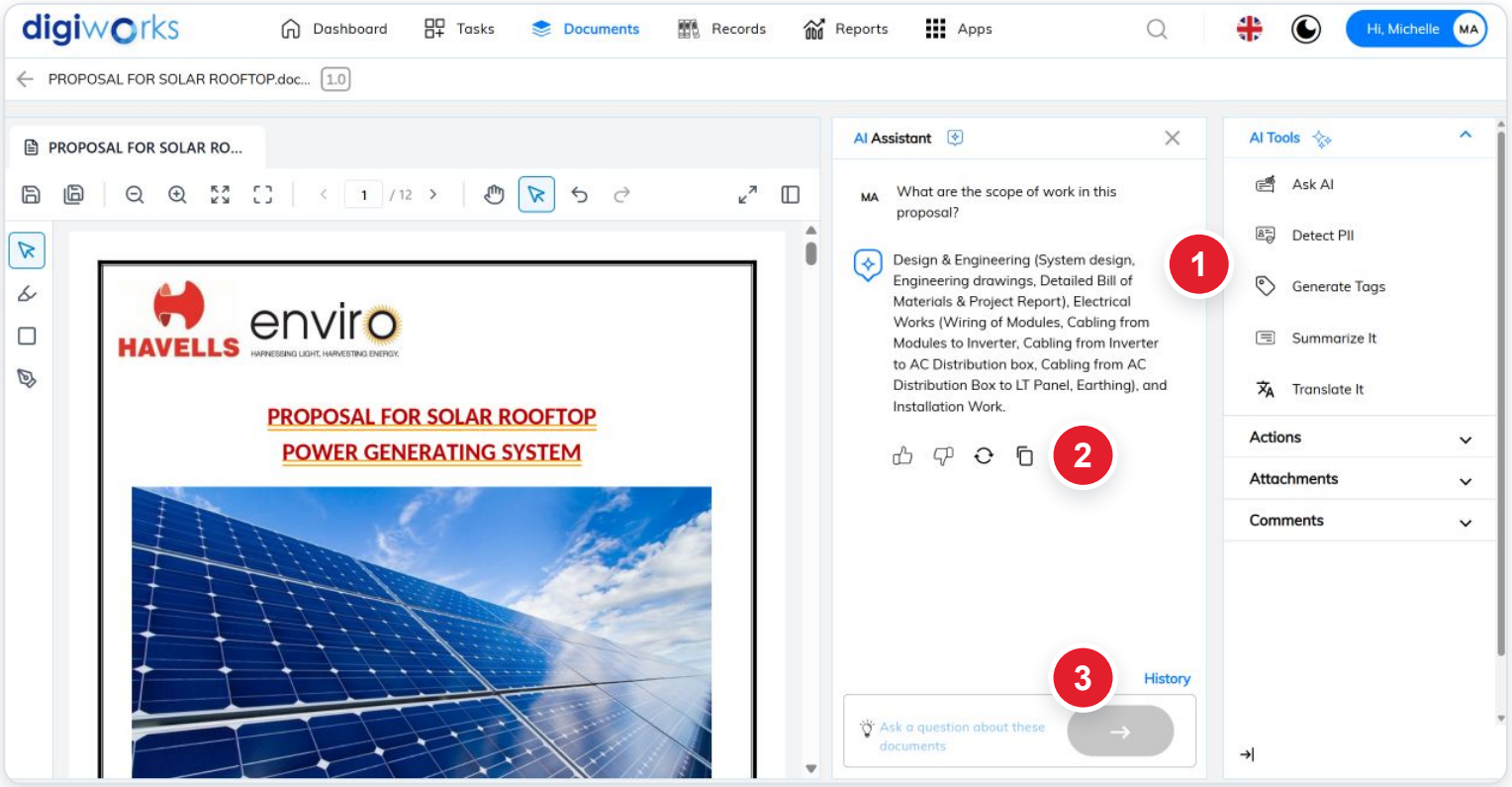
1 Automatic detection
The source language is identified first.

2 Many languages
Bahasa Malaysia, English, Chinese and more, by model.

3 Can stay in-house
Use the self-hosted model so text never leaves the agency.



Ask a record a question, get a grounded answer



Officers ask in plain language; the answer comes from the document itself.

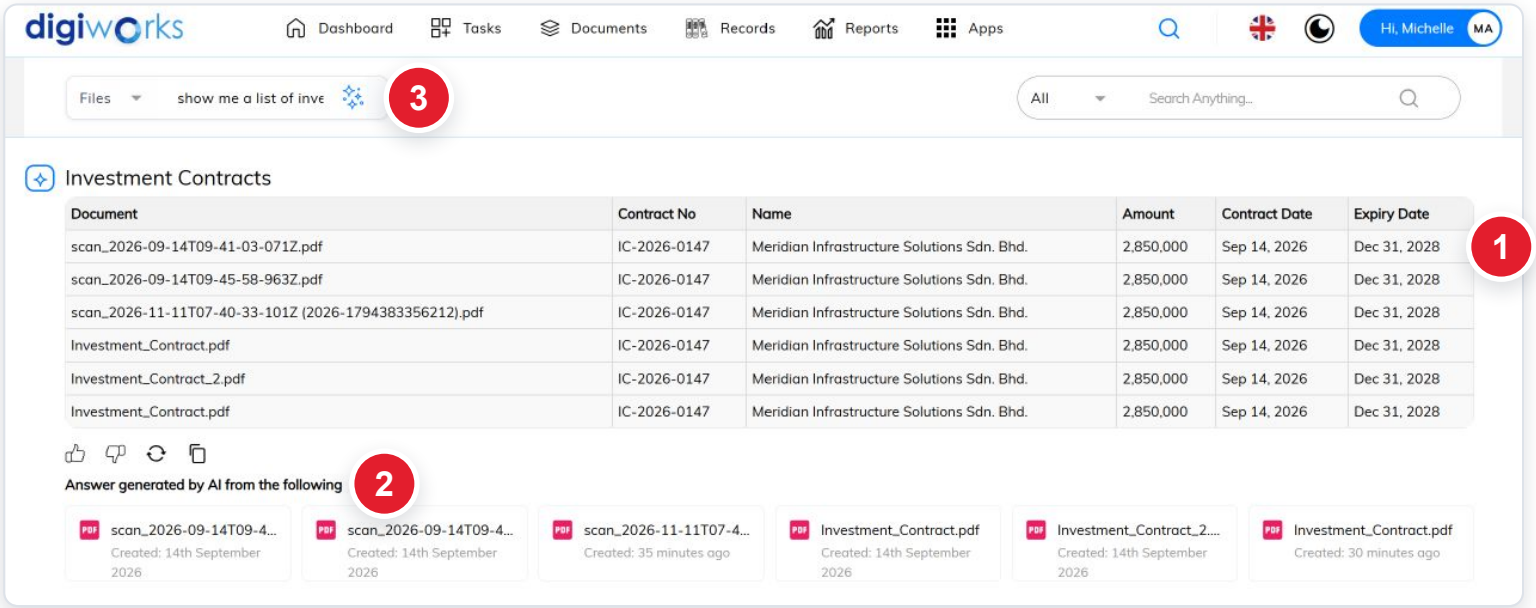
1. **Grounded in the record**
   The RAG engine answers from the document's own text.

2. **Built-in feedback**
   Rate, regenerate or copy each answer.

3. **Conversation history**
   Earlier questions stay available.

Search the way you speak

Officer asks: *“Show me a list of investment contracts”*

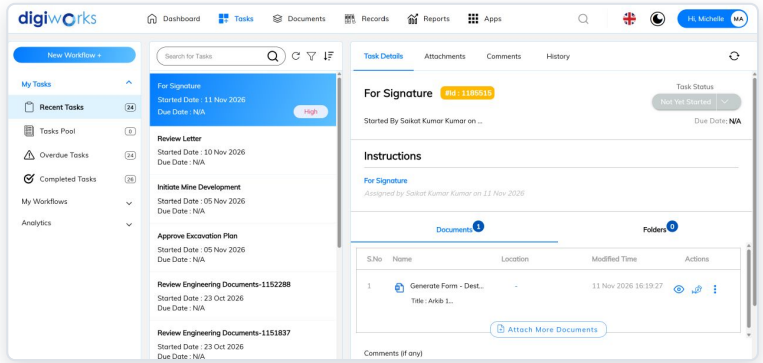


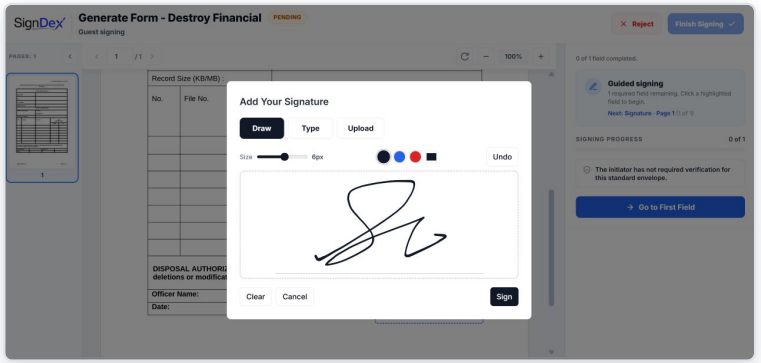
1. **Results as a table**
   Contract number, vendor, amount and dates from each match.

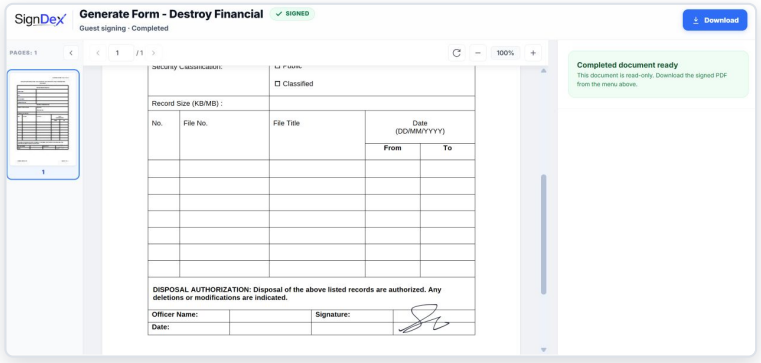
2. **Sources shown**
   Every answer lists the documents it came from.

3. **No file numbers needed**
   No folder paths or exact keywords required.

Approve and sign without printing







01 Task arrives in DDMS

The disposition form is assigned to the approver as a workflow task.

02 Guided signing

Required fields are highlighted; draw, type or upload a signature.

03 Signed and locked

The completed PDF is read-only and returns to DDMS with the task.

No printing · No couriers · **Signed form filed with the record automatically**

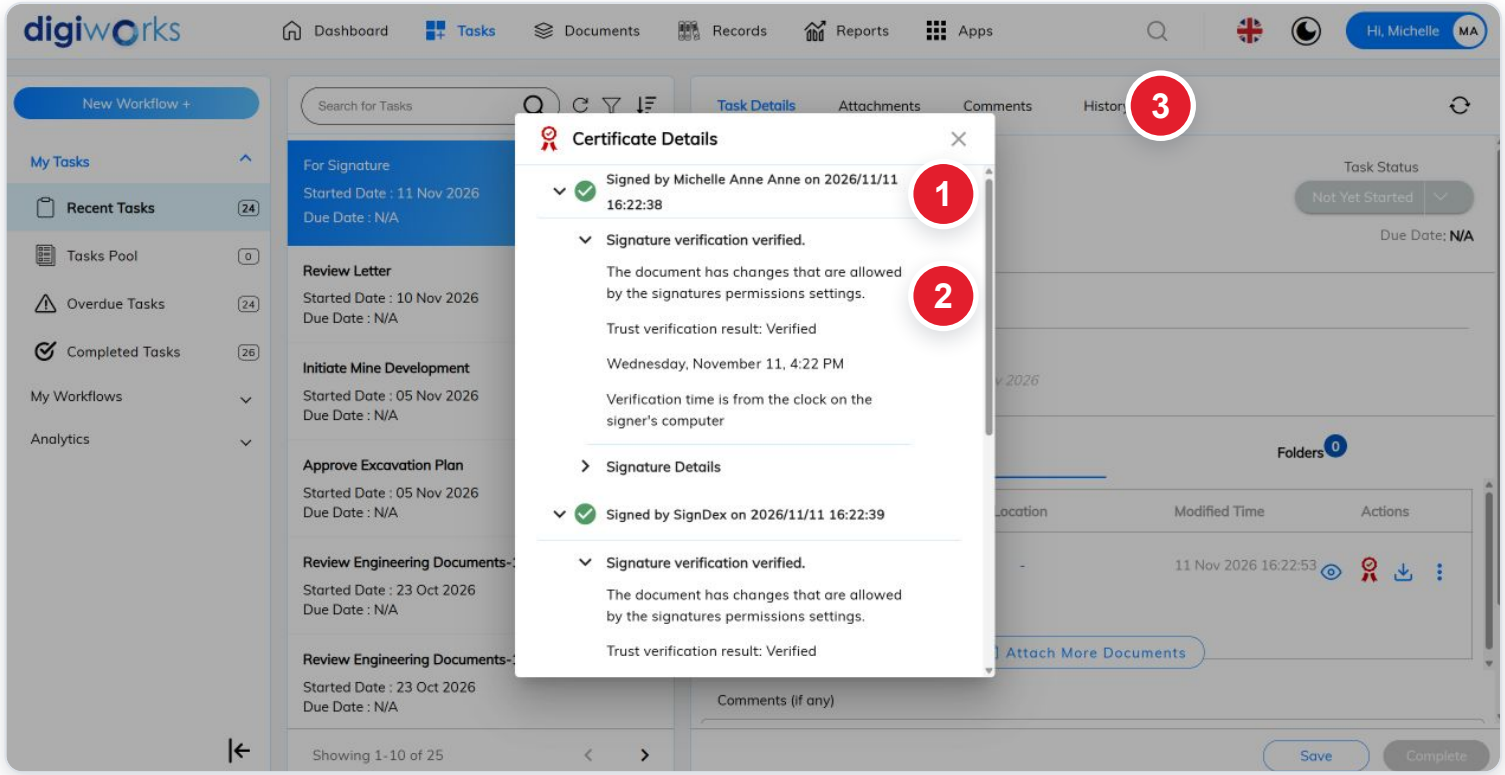
Every signature carries its own proof

Signed documents can be verified at any time, directly from the task.

1 Certificate per signature
Signer, date and time for each signature.

2 Verification shown
DDMS shows whether the signature checks out.

3 Complete audit trail
Signing, filing and disposition are all logged.



PROCESS SERVICES · OVERVIEW

Turn paper processes into digital ones

01 — 02 — 03 — 04

Design

Drag and drop

Business teams build e-forms and workflows visually, and change them without a new software release.

Submit

Online, not on paper

Applicants and officers complete validated e-forms with attachments. No printing, no counter queue.

Automate

Workflow and REST

Tasks reach the right officer, and steps call existing systems through secure REST APIs.

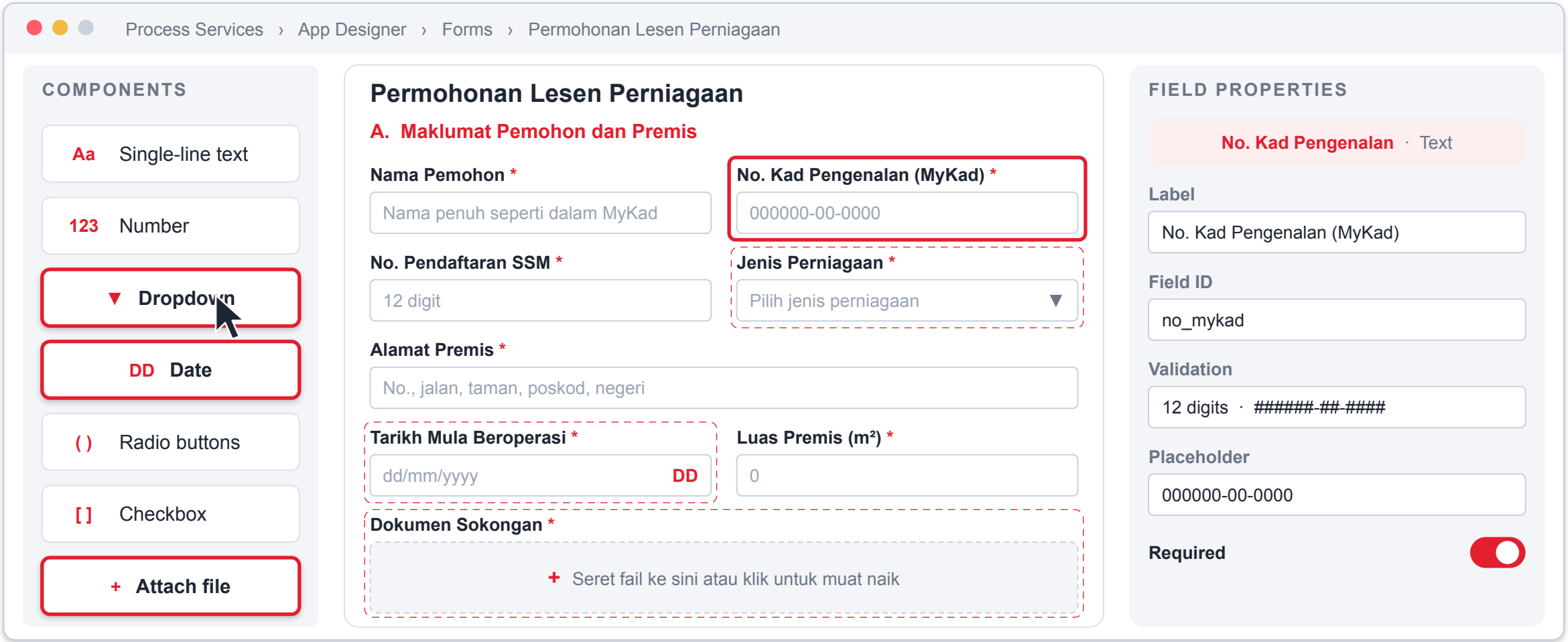
Record

Born digital in DDMS

On completion, the data and documents are filed in DDMS 2.0 as governed records.

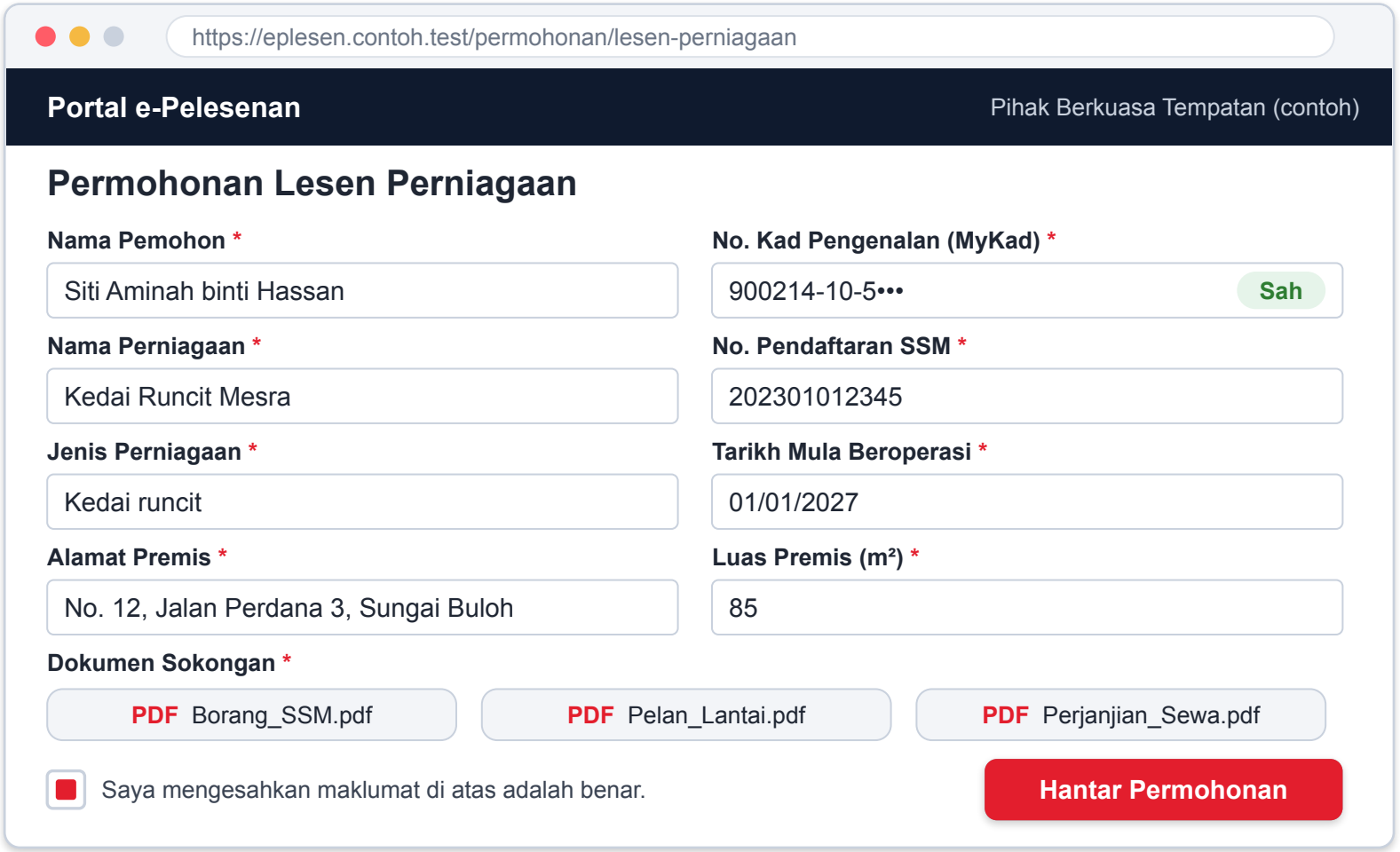
Use case in this section: Business licence application (Permohonan Lesen Perniagaan) at a local authority

Drag and drop to build the e-form



Illustrative mockup. Field labels are in Bahasa Malaysia, as the agency would configure them.

Applicants fill in and submit online



Illustrative mockup. Names and numbers are fictional.

1 Validated as you type

MyKad format and mandatory fields are checked before the form can be sent.

2 Documents go with the form

Supporting files are uploaded online, so nothing is brought to the counter.

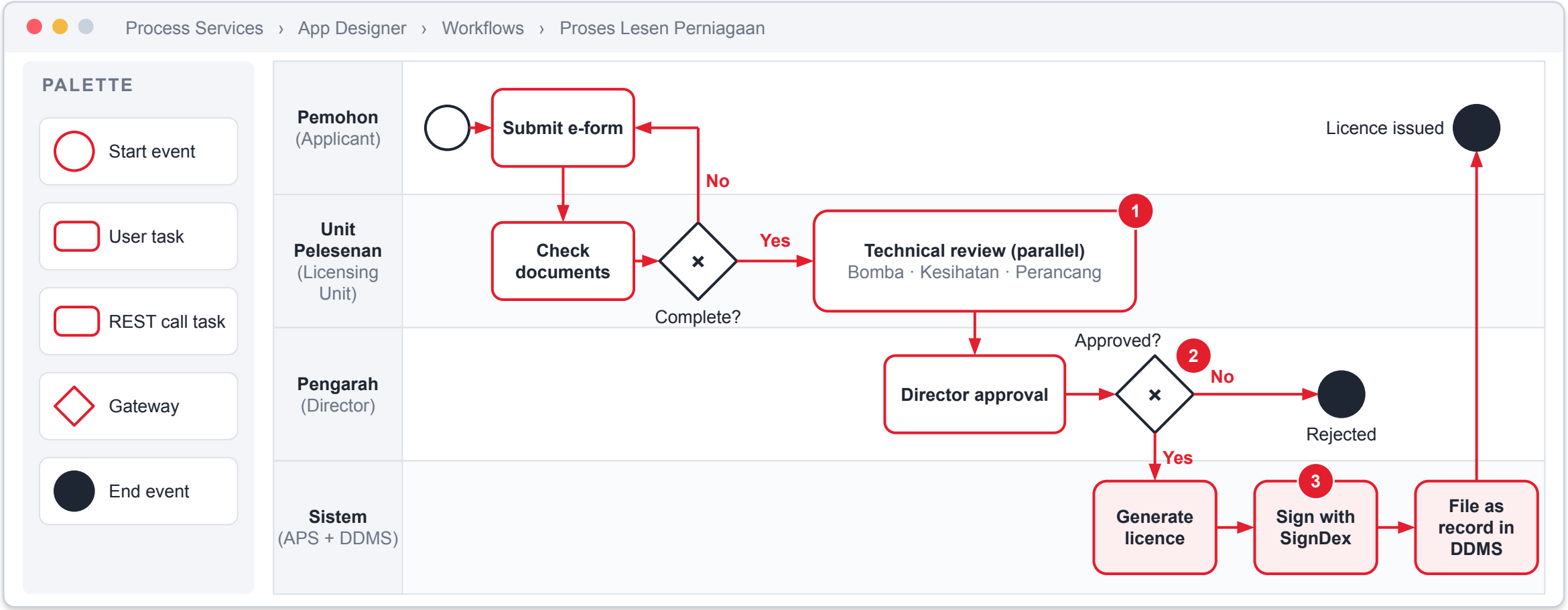
3 Submit starts the workflow

A reference number is issued and the case reaches the licensing officer.

Case LP/2026/004521 created

Task “Check documents” is now in the Licensing Unit inbox.

Design the workflow visually, then run it

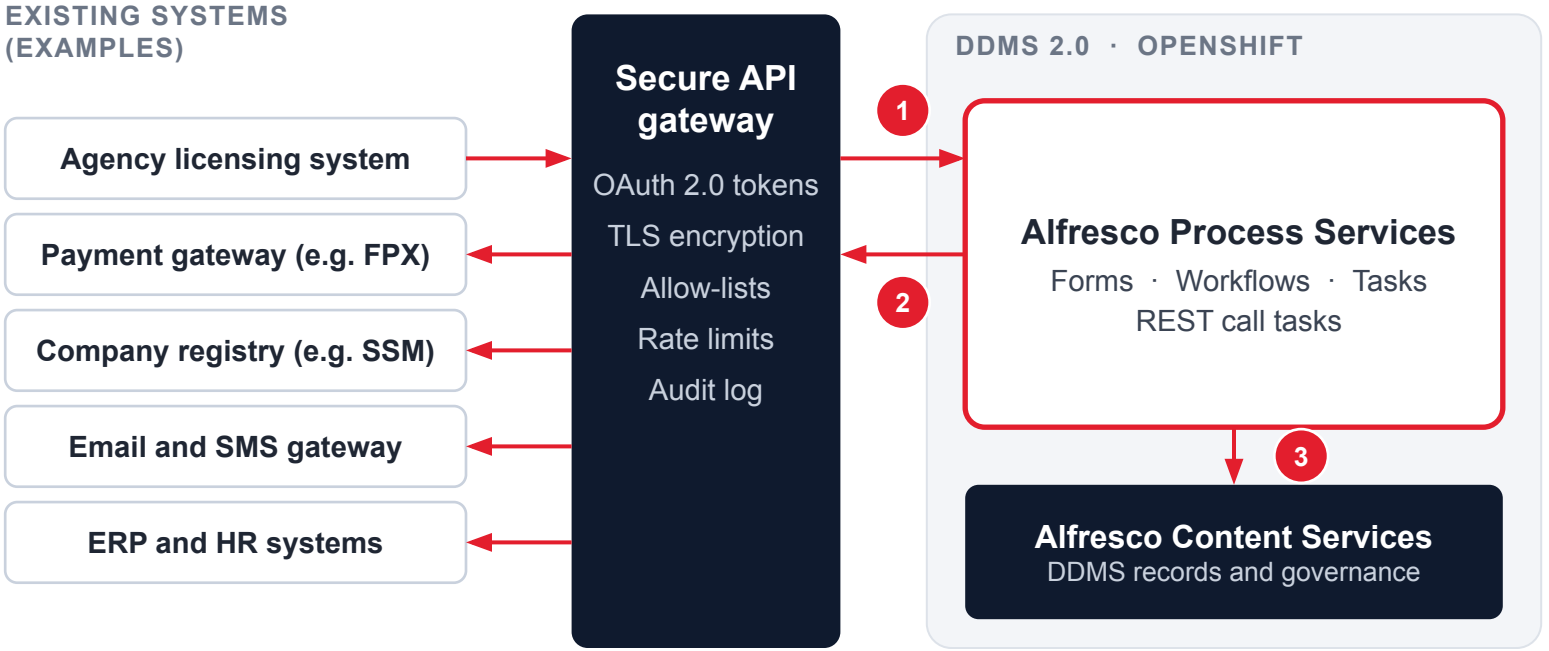


1 Parallel reviews by the technical departments

2 A decision gateway approves or rejects

3 REST, signing and filing steps run without manual work

Secure REST integration with your systems



1 Application starts a case through REST

2 Workflow calls your systems

3 Record is filed in DDMS

```
# 1  The licensing system starts a case
POST /api/enterprise/process-instances
Authorization: Bearer <access-token>
{"processDefinitionKey":"lesen_perniagaan","name":"LP/2026/004521"}
```

Authenticated

Calls carry OAuth 2.0 tokens from the agency identity provider.

Encrypted

TLS in transit. Secrets sit in a vault, never in the process model.

Controlled

The gateway allows only approved endpoints and request rates.

Audited

Every call is logged, and the data stays inside the agency network.

Every case ends as a record in DDMS 2.0

Form data
Applicant, SSM number, business type and dates

Documents
E-form PDF, SSM form, floor plan, tenancy agreement

Signed licence
PDF signed with SignDex, certificate attached

Publish to DDMS

Lesen Perniagaan · LP/2026/004521

File plan: Pelesenan › Lesen Perniagaan › 2026

Declared record

Pemohon	**Siti Aminah binti Hassan**
No. SSM	**202301012345**
Jenis perniagaan	**Kedai runcit**
Status	**Diluluskan**
Sah sehingga	**31/12/2027**

DOCUMENTS

- PDF E-form (PDF)
- PDF Supporting documents (3)
- PDF Lesen_Perniagaan.pdf — Signed

Retention inherited from the file plan · Audit log on · Access by role

Paper avoided at four points: Submission · Routing · Approval · Filing

ROADMAP

Three phases from DDMS to DDMS 2.0 and AI

1 — 2 — 3

PHASE 1

Modernise

- Cloud-native Alfresco on OpenShift
- DigiWorks modern interface
- Web scanning, OCR, AI indexing
- Retention and disposition masters
- E-signature for approvals
- Digital forms and workflows (APS)

PHASE 2

Add AI to every record

- Self-hosted LLM and RAG engine
- AI summary, translation, Q&A
- Natural-language search
- PII detection and auto-tagging

PHASE 3 · FUTURE DIRECTION

Intelligent records

- AI suggests classification at capture
- AI prepares disposition lists
- Cross-agency knowledge search
- AI agents, with officer approval

WHY NOW

Why move to DDMS 2.0 now

- **No platform change**
  Builds on your Alfresco investment.
- **Sovereign by design**
  AI runs on agency infrastructure.
- **Compliance on autopilot**
  Retention runs from policy.
- **Cloud-native and scalable**
  Grows with demand on OpenShift.

Thank you · Questions?

Suggested next steps

1. **Discovery workshop**
   Map your file plan, schedules and AI use cases.
2. **Pilot in one agency**
   Prove capture, retention and AI on real records.
3. **Phased rollout**
   Extend across agencies, phase by phase.

Alfresco™

CREST
— Ideate — Innovate — Implement —