CHAZAK AI | FEDERAL MODERNIZATION PLATFORM

BIG-BUILD

AI-Accelerated Migration: Any Legacy Source to Any Modern Target

Secure, documented, Section 508-ready modernization that runs inside your boundary.

AIR-GAPPED

FISMA-READY

SECTION 508

USWDS

Agencies still depend on legacy Oracle Forms, Oracle ADF and static web content that is costly to maintain and hard to secure. Cloud AI coding tools can't touch FISMA-regulated data. **BIG-BUILD** uses locally hosted AI to analyze legacy source, generate modern applications and produce the full documentation package — **without data ever leaving your environment.**

Migration Capabilities

ORACLE FORMS → ORACLE APEX

Forms Migration

- Parses Forms (FMB) source: blocks, triggers, program units, LOVs and canvases
- Generates APEX pages, SQL, validations, processes and reports
- Preserves PL/SQL business logic with traceability to the original form
- Proven on federal research systems in production

ORACLE ADF → ORACLE APEX

Oracle ADF Migration

- Analyzes ADF task flows, page definitions and business components
- Maps entity and view objects to APEX regions, forms and REST data sources
- Retires Java middleware and WebLogic overhead
- Keeps data and logic in the Oracle database you already run

LEGACY HTML → DRUPAL + USWDS

Content Migration

- Bulk ingests legacy web pages and extracts structure and metadata
- Maps content to Drupal types with U.S. Web Design System components
- Accessibility checks applied to every migrated page
- Engineered for near one-click migration of 10,000+ pages

ANY SOURCE → ANY TARGET

Any-to-Any Migration

- Extensible engine: analyze, document, generate, validate
- Legacy code, reports, databases and web content as sources
- Targets include low-code, modern web frameworks and Drupal
- New source/target pairs added without rebuilding the pipeline

87%	92%+	75%	80%+
faster migration	generated-code accuracy	less manual code review	of code auto-generated

Program performance targets based on BIG-BUILD pilot work; results vary by application complexity.

One Pipeline for Every Migration

1 DISCOVER	2 ANALYZE	3 GENERATE	4 DOCUMENT	5 VALIDATE	6 DEPLOY
Inventory source	Extract logic	Build target	BRD, Spec, RTM	508, SAST, tests	SME review gates

Built In to Every Migration

Automated Documentation
Business Requirements and Technical Specification documents with page mapping and legacy logic traceability.

Traceability & Testing
Requirements Traceability Matrices, test cases and code-review checklists for each module.

Accessibility & UX
Section 508 compliance checks and screen wireframes, ready for SME review.

Forensic Code Analysis
Finds hidden defects in existing apps: bad joins, missing validations, authorization gaps.

Air-Gapped AI
Open-weight LLMs on agency servers or GPU clusters. No data egress, no per-token fees.

Agency Fine-Tuning
Models tuned on your own code base, so accuracy rises with every application migrated.

Proven in Federal Production

Federal Research Agency Pilot
Accelerated Oracle Forms-to-APEX modernization of livestock research records, fleet maintenance and research-operations applications. Now the reference model for broader modernization.

Running Inside the Agency Boundary
Deployed on an agency-hosted, GPU-equipped server with a locally hosted LLM, proving AI-assisted development is achievable within FISMA controls.

End-to-End Pipeline, Air-Gapped
Source analysis through generated code, BRD, RTM, 508 review and wireframes executed on local models with no external API calls.

Defects Found Before Go-Live
Forensic analysis surfaced row-multiplying joins, missing validations and authorization gaps, creating a compliance-ready audit trail.

Why BIG-BUILD

	Manual Rewrite	Cloud AI Tools	BIG-BUILD
Usable with FISMA data	Yes	No	**Yes**
Delivery speed	Slow	Fast	**Fast**
Documentation package	Limited	Limited	**BRD, Spec, RTM, 508**
Learns your agency's code	No	No	**Yes (fine-tuned)**
Usage / per-token fees	N/A	Yes	**None (self-hosted)**

Security & Compliance

- Fully air-gapped on agency servers, GPU clusters or FedRAMP cloud
- No source code or data sent to third-party AI services
- Fits layered AI governance: cloud tools for public work, BIG-BUILD for FISMA workloads
- SAST scanning, code review and test-coverage quality gates
- Quarterly accuracy and model-drift reporting

How We Engage

1. **Assess**
   Inventory and prioritize legacy assets
2. **Pilot**
   Prove speed and quality in your environment
3. **Scale**
   Agile delivery with SME review gates
4. **Optimize**
   Fine-tune models on your code base

Ready to modernize? Start with a pilot.

Federal access through the AGOVX contract vehicle | CHAZAK AI suite: BIG-BUILD, BIG-OPS, BIG-AI, BIG-LAW

agovx.com | big-build.chazak.ai | chazak.ai