

— SOLUTION OVERVIEW



Spectra: Intelligent Entity Extraction

Context

Federal digital workflows require processing vast volumes of unstructured documents (e.g., legal filings, background checks, medical forms) containing critical named entities like individuals, locations, addresses, and legal histories.

The Problem

Converting unstructured documents into structured data is a major operational bottleneck:

- **Resource Intensive:** Manual document review and entity labeling are slow, error-prone, and require extensive manpower.
- **Fragmented Tooling:** Major cloud service providers do not offer cohesive, end-to-end workflows that combine custom data labeling, model training, and extraction in a single package.
- **Third-Party Vendor Friction:** Legacy labeling services (e.g., SageMaker Ground Truth) often present compliance and data privacy challenges for federal records.

The Solution

Spectra streamlines the automated extraction, labeling, and structured output of key entities from digital documents.

- **Auto Extract Engine:** Automatically extracts target entities along with precise spatial metadata (e.g., page number, X/Y coordinates).
- **Hardened Labeling Workflows:** Features role-based access control (RBAC) human-in-the-loop labeling interfaces for training custom extraction models.
- **API-First Architecture:** Exposes lightweight REST APIs to embed extraction and labeling capabilities directly into existing agency web applications.

Differentiation

- **Complete Lifecycle in One Box:** Replaces disjointed cloud services by unifying labeling, training, and extraction into a single hardened application.
- **Precision Attribution:** Extracted outputs include exact location tracking (x, y coordinates and page numbers) within source documents for rapid auditing.
- **In-Boundary Self-Hosting:** Designed to run entirely inside federal cloud boundaries, ensuring sensitive documents and trained models never leave agency custody.

Your mission is our commitment

Contact us at build@bridgephase.com to inquire about working together.