



Match Engine API



Configurable **strategy based data matching** for ABBYY Vantage

Customer Challenge

- ▶ **Extraction is Solved** with ABBYY Vantage, but the next challenge is to reconcile that data against external sources.

ABBYY Vantage includes data catalogues, best suited for simple lookup operations. Misalignment in document and catalogue data, empty values, ambiguous results, and data which is "a bit too fuzzy" mean matching miss.

Unmatched and unreconciled data leads to increased verification effort and reduced STP rates.

Enhancing ABBYY Vantage

- ▶ Match Engine API is a stateless, transactional service that executes matching operations without persisting or retaining any customer data at any stage.

Match Engine applies 20 core matching algorithms, with optional LLM integration, to deliver weighted and scored results for accurate source-to-target data list matching.

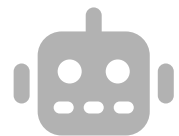
Match results are returned for every source item, identifying the best match alongside ranked alternative candidates.



weighted matching



layered algorithms



AI search



improved STP



Match Engine API

Typical Use Cases

Invoice to Purchase Order line matching

- ▶ Use Match Engine to deliver one-one and one-many 'repeating item' match candidates.

"Best-match" thresholds increase STP, while retention of additional matching metadata enables downstream issue resolution.

Example: match lines based on SKU, description, carton size, value within range

Generating Match Strategies using Historic Data

- ▶ Matching strategies can be defined as parameters, enabling flexible configuration and repeatable testing.

Using historical match data, strategies can be refined, benchmarked and validated to ensure optimal performance across real-world scenarios.

Custom GPTs can be used to take a small data sample and propose effective strategies.

Example: performance monitoring reveals that invoices received from a particular vendor, or orders from a particular customer, require greater operator verification effort. Use of a bespoke strategy achieves significantly better results.

Industry specific strategy using knowledge based semantic expansion is easily tuned to the context in which it is operating.

Benefits

- Explainable matching with confidence-based scoring
- Threshold based 'auto-match' returns other candidates for consideration
- Context tuned strategies can be applied when needed
- Works with any data model
- Supports one-many and many-many match scenarios

Key Features

- 'Strategy as a parameter' allows field level algorithms and weighting
- Use 20 built-in algorithms as well as native OpenAI, Azure, Claude & Gemini
- Matches can be based on pattern, fuzzy text, alias, date, numeric as well as soundex and knowledge based semantic expansion
- Value based flexibility, e.g. within %, allows weighted variation within acceptable boundaries

Delivering Next Generation Data Matching

Match Engine delivers flexible, explainable, confidence-based matching across diverse data models with easily configured context-based strategies.