

EXF Insights

Exafluence's exf Insights securely transforms data platforms reducing cost, speeding up integration time while increasing data quality and improving governance...

Exf Insights is the next generation of innovative data management accelerators by leveraging open source technology and focused data automation by way of Machine Learning, Artificial Intelligence and Natural Language Processing.

We automate the Business Analyst function reducing integration time by 50+%. Exf Insights analyzes multiple disparate data sets and scores them for the analyst to approve. Exafluence has applied a new meta data focused approach leveraging open source and Cloud native for digital transformation.

Improve your data quality with

- Low code data integration
- Gold Copy Creation
- Self-documenting as-built integration with visualization that keeps the data governance platform up to date
- Reverse engineering functionality to extract rules from legacy stored procedures, COBOL
- API's and ability to provide Python, JSON and PySpark code blocks for execution in client ETL solutions
- Easy integration to your existing legacy and new Cloud Native Data applications



Data Modernization Benefits

Business Analysts

- Empowered to validate and approve metadata matches for existing and new data sources
- Able to discover metadata by looking at values
- As SME, Business Analyst is able to do complex transformation
- Python/PySpark/JSON Code Blocks can be exported to SAP, Informatica, etc. for execution
- Data and Rule Lineage integrated into Data Governance tools
- Alerts for changes via integrated workflow

Data Governance Team

- Possible to see new data cataloged and subject to transform rules in near real-time
- Audit and Rule lineage for both metadata and transform rules
- New data sources and transformations are self documenting and provide Source to Target visualization
- Data Governance is part of day-to-day activity ensuring consistency and knowledge of owners, processes and systems

Operations

- More control over data used in a dynamic process
- Easy to see current and historic metadata mapping and transforms with full versioning and audit capabilities with rollback
- Python/PySpark/JSON Code Blocks can be exported to SAP, Informatica or any ETL for execution
- Data Governance program is kept up to date
- Full audit trail

Data Scientists/Analytics

- Up-to-date metadata catalog of Corporate and Departmental data for easy integration into BI tools
- Blending of additional datasets with curated quality air
- Ability to better understand metadata to facilitate better analysis

- Data available in the format required JSON, Python, PySpark
- Full audit trial

Metadata Match Automation UI Example

The screenshot shows the 'exf Insights' web application interface for metadata matching. It features a search bar with the key 'security', inclusion and exclusion filters, a percentage match cutoff of 40, and a table of business metadata matching recommendations.

Business MetaData Matching

Recommendation

EXAFUENCE	EAGLE	BLACK ROCK	ALTERYX	MARKIT
Instrument_Desc (59.09%)	ISSUE_DESCRIPTION_NAME (49.29%)	Security Name (53.64%)	SECURITY_DESCRIPTION (0.9)	SECURITY_DESCRIPTION (54.41%)

Buttons: Exel, Add Rules

Show: 10 entries

MATCHING_METADATA	PERCENT_SRC_APPLN	DATA_TYPE	BLACK ROCK	BLOOMBERG MNEMONIC
SECURITY_DESCRIPTION	90	char	<input type="radio"/> Security Type Code (47 %) <input type="radio"/> Security Name (48 %)	<input type="radio"/> SECURITY_TYP (63 %) <input type="radio"/> SECURITY_DES (75 %)

The system learns so that an analyst only needs to approve these relationships once. All relationships are catalogued and visualized. All sources and targets can be used regardless of format or type (file, message, queues, unstructured data or relational databases). Once approved exf Insights provides a fully documented and versioned specification, including visualization and data ownership. All the matching and transformation rules can be edited or new rules created by any business person.

Codeless Transformation Rules UI Example

Sources	Transformation Rule	Target Metadata	Target Name		
BLOOMBERG, EAGLE	IF BLOOMBERG.LONG_COMP_NAME is not null [0] THEN CONCAT(LONG_COMP_NAME); ELSE IF EAGLE.ENTITY_LONG_NAME is not null [0] THEN CONCAT(ENTITY_LONG_NAME); ELSE NULL;	LONG_NAME	SNOWFLAKE	Edit	X
BLOOMBERG, EAGLE	IF BLOOMBERG.SHORT_NAME is not null [0] THEN CONCAT(SHORT_NAME); ELSE IF EAGLE.SHORT_NAME is not null [0] THEN CONCAT(SHORT_NAME); ELSE NULL;	SHORT_NAME	SNOWFLAKE	Edit	X

SUMMARY

Digital Acceleration. Our Accelerators provide full, versioned Meta Data and Transform rules. For Digital Transformation our Reverse Engineering tools scan Stored Procedures or COBOL to create JSON/JAVA based output. Database comparison capabilities are also provided from legacy DBs to Open Source to help move you from DEV to TEST to PROD confidently.

Meta Data Matching

A proven Machine Learning/Artificial Intelligence set of algorithms that scores matches from multiple sources to harmonize to a gold master regardless of category and no additional programming required.

Transformation Rules

Low Code/Codeless. Simple conditional (Boolean) expressions to automate data changes, derive and improve upon your multiple sources of data without any coding and a full audit trail of these rules with easy rollback functionality.

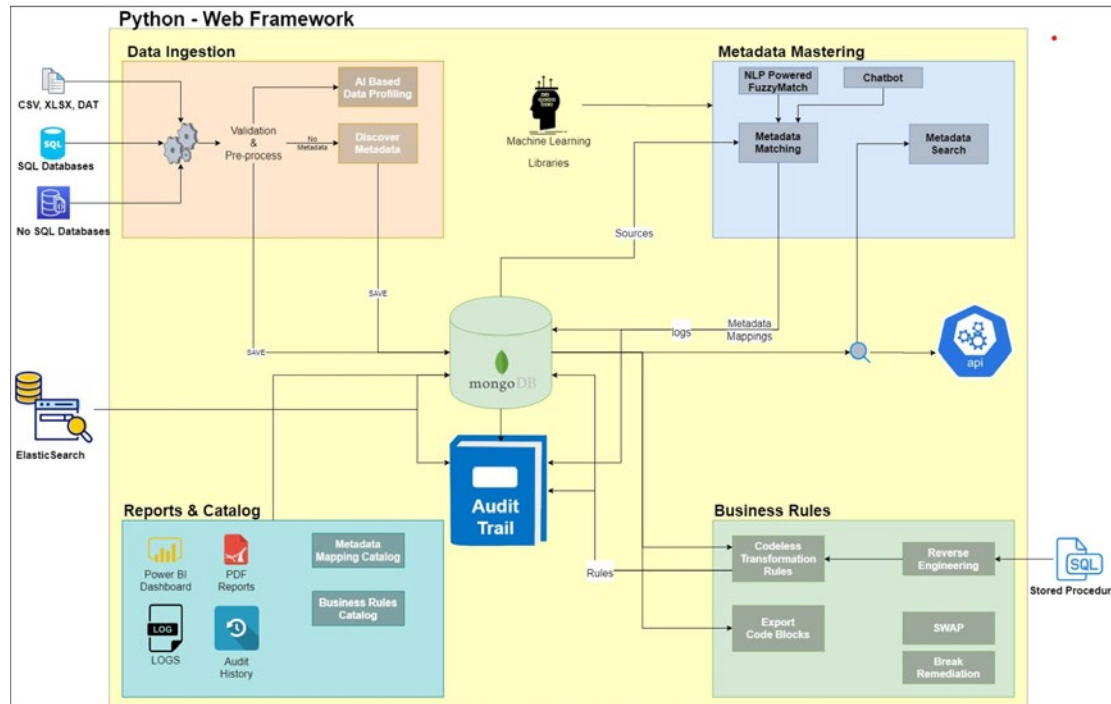
Data Governance

Self-documenting as-built integration with lineage, audit trail and published REST API for integration with Collibra, Alation, Alteryx Connect and others. Data catalog provided.

Intelligent Break Resolution Automation

exf Insights takes it beyond identification by suggesting a reason and remediation for something like an out of tolerance price due to a Corporate Action split or Dividend. Our speed let's firms do multi-pass screenings to check for factor changes arising from these events while meeting SLAs.

Reference Architecture



About Exafluence and EXF Insights

Exafluence is a 70 person MongoDB global Strategic Partner offering Systems Integration with Data Management Accelerators led by a team with decades of technology and engineering and experience in Financial Services, Healthcare and IoT. By combining SMEs, Technologists and DevOps we are able to deliver new capabilities ready for production. We provide cost-effective solutions to make our clients successful. As a managed service provider, we are happy to share our experiences and expertise to make you more successful. Whether Azure, AWS, Google or local install we stand ready to assist you. Additional information is available at www.exafluence.com and www.exfinsights.com.

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