API Extraction Workflow

Nathan Lunceford

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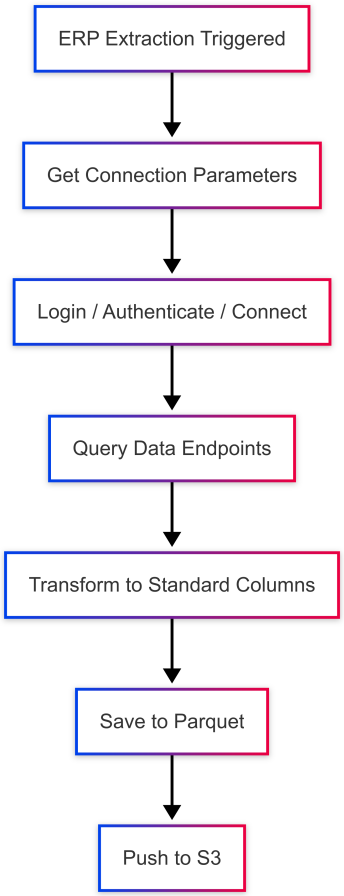
1 Workflow Overview



2 Process Steps

2.1 ERP Extraction Triggered

The workflow begins when an extraction request is initiated. This could happen:

- On a scheduled basis (e.g., nightly extractions)
- On-demand through user-initiated requests
- As part of a larger data processing workflow

2.2 Get Connection Parameters

The system retrieves the necessary connection parameters for the specified ERP system and client:

- API endpoint URLs
- Connection settings
- Timeout configurations

The system establishes a secure connection to the ERP API by:

- Retrieving secure credentials from the vault
- Applying the appropriate authentication method (API key, OAuth token, etc.)
- Establishing the connection with the ERP API
- Verifying successful authentication

2.3 Query Data Endpoints

With a successful connection established, the system queries the appropriate endpoints to extract the required data:

- Sales orders
- Sales order details
- Inventory spec fields
- Customer details
- Vendor details
- Product spec fields

2.4 Transform to Standard Columns

The raw data from the ERP system is transformed to follow our standardized data model:

- Column names are mapped to our standard naming conventions
- Basic data quality checks are performed

2.5 Save to Parquet

The transformed data is converted to Parquet format:

- Efficient columnar storage format
- Compressed to save space
- Optimized for analytical queries
- Schema is preserved with appropriate data types

2.6 Push to S3

The Parquet files are uploaded to our S3 storage: - Organized by client and data type - Stored with appropriate metadata - Secured with proper access controls - Made available for downstream processing