

Trade Operations Client Reporting System - RFC and POC

Request for Change (RFC)

Project Name: Trade Operations Client Reporting System

Objective: To build an automated application that generates and distributes trade operation reports to clients using Microsoft Power Apps, Power Automate, and Power BI. The application will either read the previous day's trade data from the SQL server database or make REST API calls to retrieve intraday trade data from the BlackRock Aladdin trading platform. It will then process the data into a specified file format (CSV, Excel, or XML) as per client requirements and deliver the reports via SFTP.

Scope

1. Automate the process of generating daily trade reports.
2. Integrate data retrieval from the SQL server and BlackRock Aladdin platform.
3. Transform the data as per client-specified format (CSV, Excel, XML).
4. Schedule report generation at 6 PM EST.
5. Automate delivery via SFTP to the client's MFT account.

Stakeholders

- Trade Operations Team
- IT Department
- Compliance Team
- Client Services

Business Requirements

1. Retrieve the previous day's trade data from the company's SQL database.
2. Make API calls to fetch intraday trade data from BlackRock Aladdin when required.
3. Format the data as per client specifications:
 - File Format: CSV, Excel, XML
 - Headers: QUANTITY, SETTLE DATE, TRADE_DATE, TRANSACTION, BROKER, CUSIP, ISIN, PORTFOLIO, PRICE
 - Data Formatting:
 - QUANTITY: 2 decimal places
 - PRICE: 9 decimal places
 - SETTLE_DATE and TRADE_DATE: YYYYMMDD format
4. Automate the generation of the report at 6 PM EST daily.
5. Upload the generated report to the client's SFTP using their MFT account.

Architectural Overview

Components

1. Power Apps: User interface to manage and monitor trade report generation.
2. SQL Server Database: Stores historical trade data for retrieval.
3. BlackRock Aladdin (REST API): Provides intraday trade data for real-time reporting.
4. Power Automate: Central automation engine responsible for:
 - Data retrieval and processing from SQL Server and BlackRock Aladdin.
 - Report generation in CSV, Excel, and XML formats.
 - SFTP file transfer to the client's MFT account.
5. Report Formats: Supports CSV, Excel, and XML files as per client specifications.

6. SFTP Client Delivery: Automatically transfers generated files to the client's MFT account.

Proof of Concept (POC)

1. Set Up Data Retrieval: Configure Power Automate to connect to SQL Server and BlackRock Aladdin API.
2. Data Processing: Format data as per required structure (CSV, Excel, XML) using Power Automate.
3. Report Generation: Create templates in Power BI for data validation.
4. SFTP Delivery: Integrate SFTP for secure file transfer.
5. Testing and Validation: Conduct end-to-end testing and user acceptance.
6. Deployment and Monitoring: Deploy the solution and monitor file generation.

Success Criteria

- Accurate generation of trade reports daily.
- Successful SFTP transfer by 6 PM EST.
- Compliance with client formatting requirements.