

# Integrating New CDD Software into Existing Bank Systems

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## Introduction

- A bank is digitizing its Customer Due Diligence procedure.
- The bank purchased GoAML

## System Designs

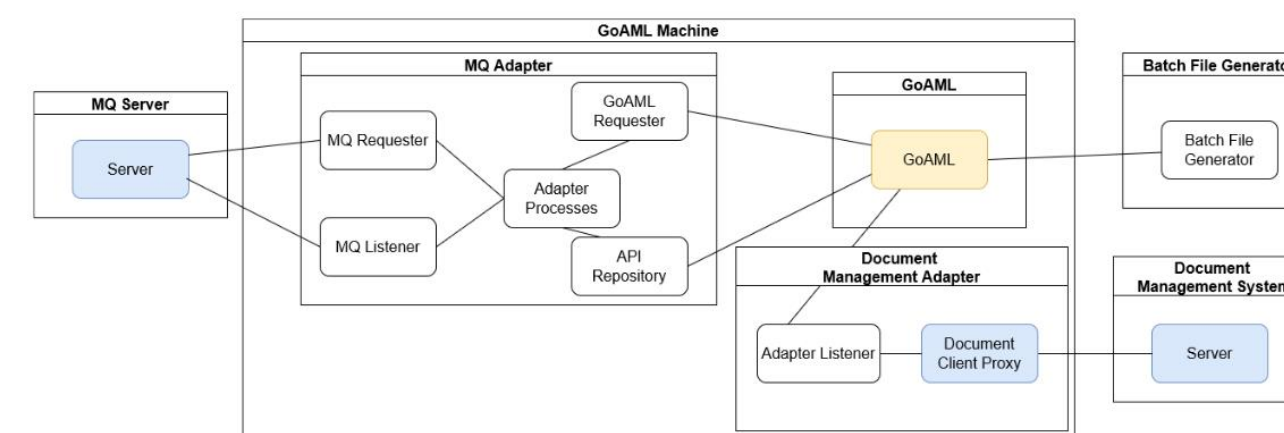
System	GoAML	Bank
Launguage	C#	Java
Communication	HTTP	IBM MQ
Message Format	Json	XML

An adapter is needed

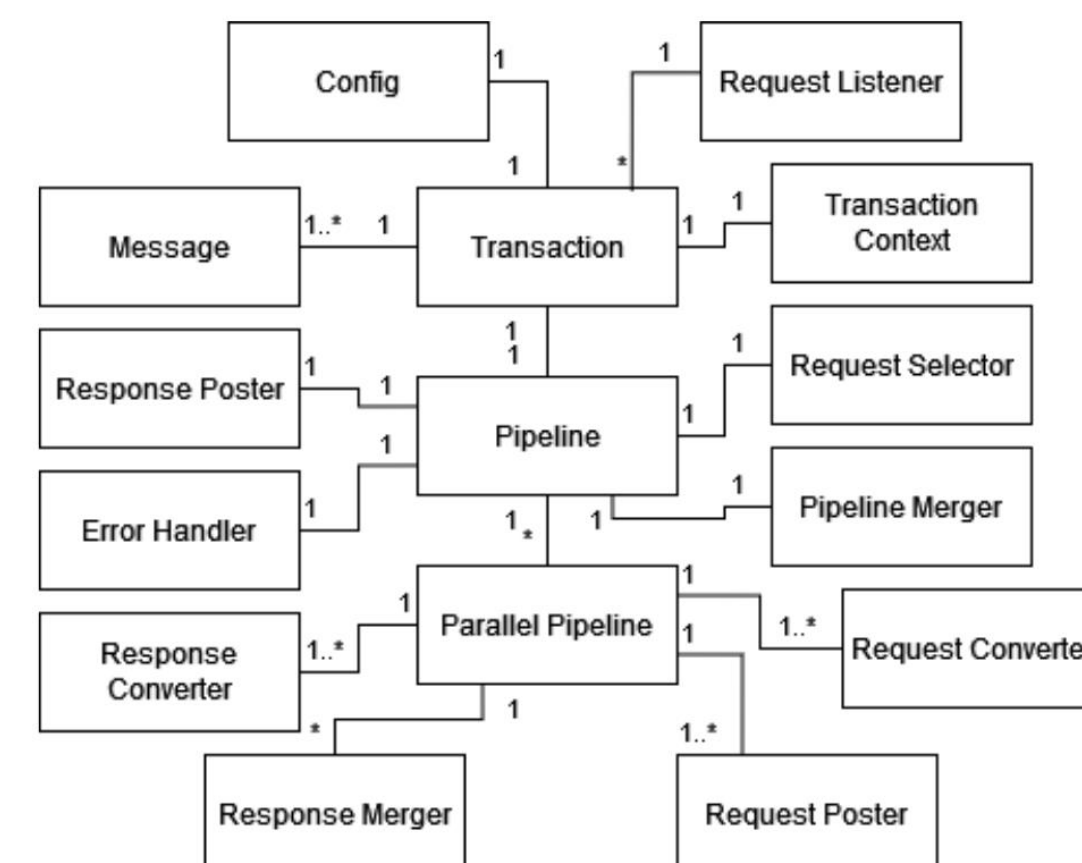
## Tasks to Complete

- Communicate with real time MQ system
  - Get newest customer data
  - Post CDD result to other systems
  - Allow creation of new case
  - Update customer number
  - Authorize user access
- Upload document to server
- Generate and upload batch file

## System Design

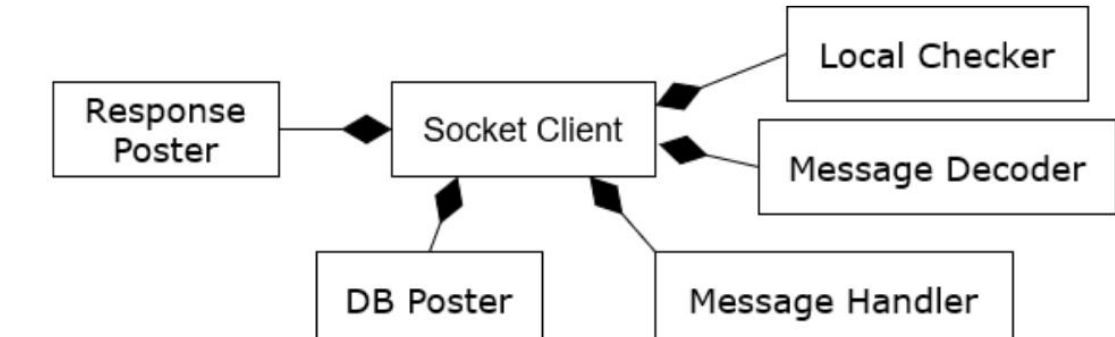


## MQ Adapter



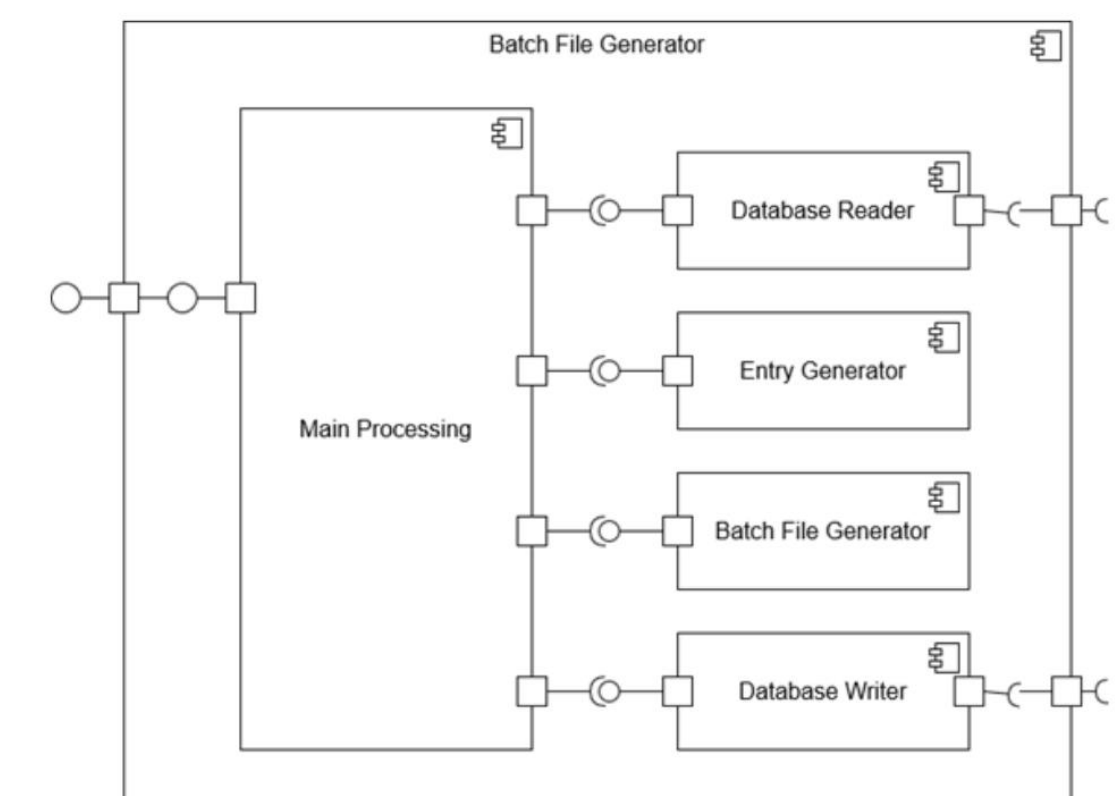
- **Request Listener:** Flask for API, pymqi for MQ server
- **Converter:** Parse as dictionary, generate output
- **Request Poster:** Post request, wait for response
- **Merger:** check for fail, merge the result
- **Error Handler:** Log Error and generate response

## Document Management Adapter



- Socket Client: Netty package
- Local Checker: Check if message is from same machine
- Decoder: Convert byte to string
- Handler: Send upload command
- DB Poster: Log result to DB
- Response Poster: Send result to GoAML

## Batch File Generator



- Main Processing: Call other Components
- Database Reader: Read entries in database
- Entry Generator: Generate batch file entries
- Batch File Generator: Write the batch file
- Database Writer: Update the database