

Data is POWER

Objective

To build PBM (Pharmacy Benefit Manager) Claim Adjudication System that would adjudicate the prescription claims submitted by pharmacies through pharmacy exchanges.

Scope

- Build a rule engine through which all the claims will be processed and will decide the fate of claim; either accepted or rejected (along with the reason, if rejected).
- Datamodel design and Database development.
- Continuous Integration (CI) for build and deployment.
- Build Data Access Layer which will be responsible for accessing data.
- Design messaging queue from where claim messages will flow in and out of the system.
- Design data cache for faster data access.
- Build User Interface for claim management

Technology

- Rule Engine – jBoss Drools
- Database – MariaDb
- Data Access Layer - Java Object Oriented Querying (JOOQ)
- Messaging Queue – RabbitMQ
- Data Cache – Redis
- User Interface – ReactJs, MongoDB (User Administration)
- Development Language – Java
- Continuous Integration – Unix, Shell scripting, Azure CLI

Challenges

- Building a rule engine which can process multiple claims without much delay (no greater than 1-2 seconds).
- Queue integration.
- Data cache design

Key feature & Benefits

- Performance intensive claim processing engine.
- Easily extensible and scalable.
- Best technology for each component of system.
- Modular approach.