

Database Systems Project Part I – Modeling

Name: Chenyi Lyu NID: N15220231

Name: Zoe Tan NID: N15948322

This model describes the high level architecture that can be applied to contract management systems that involves interactions between distributed objects. Our model can be broken into five main subject groups.

Color Key
Customer Information
Agent Information
Group Master / Flex Account
Flex Agreements
Payments
Ratebook
Claims

Customer Information - This group contains data with regard to the basic information of customers, including name, DOB, and SSN etc.

Agent Information - This group holds data of associates and services they provide. It contains several bridge tables connected to other groups, showing how associates' business interacted with other components.

Group Master/Flex Account - This group stores registered company data as well as the basic information of these accounts.

Flex agreements - This group describes contracts made between customers and business partners, stores details such as contract benefits.

Payments - This group stores information of invoices once a payment has been placed.

Ratebook - This group represents the product data, including the product series, series description, price tier and specifications.

Claims - This group stores data of customer claims, holding claim basic information.

Group Master/Flex Account

Table Name: Account

Description: This table contains the company's basic information.

Table Name: AccountAdmin

Description: This table contains information of Account Administrators.

Table Name: Acct_Admin

Description: This table acts as a bridge between Account Administrators and Account, contains information about administrator roles and descriptions.

Table Name: Account_Account

Description: Each row in the table describes a relationship between accounts. It has Many-to-many relationships with the Account table.

Table Name: CompanyCode

Description: This table contains information about CompanyCode, which is a foreign key of the main Account table.

Table Name: BillingAccount

Description: This table contains the billing address of accounts. Note a billing address can match 0 to many accounts. Conversely, an account could have many billing addresses.

Table Name: Account_BillingAccount

Description: This table is structured as a bridge table between accounts and billing accounts. It describes in detail about when and how the account adopts the billing account.

Table Name: AccountMember

Description: This table associates the customer with account, and contains information about when the relationship starts.

Payment

Table Name: Invoice

Description: This table holds information about details of each payment. Each payment is defined by one customer and one billing account.

Customer Information

Table Name: Customer

Description: This table contains customer's basic information.

Table Name: CustomerAlias

Description: This table contains customer's alias for customer in Customer table (if exists).

Table Name: CustomerRelation

Description: This table describes relationships between customers.

Flex agreements

Table Name: Contract

Description: This table combines data for each contract, stores detail information regarding on plan specifications, payment options etc.

Table Name: ContractPremium

Description: This table stores premium contract information.

Table Name: ContractBenefit

Description: This table stores benefit information for each plan and contract pair.

Agent Information

Table Name: WritingNumber

Description: This table contains data to represent each writing notice defined by DBAs and company.

Table Name: AssocDBAs

Description: This table stores additional DBA information for associates.

Table Name: Associate

Description: This table contains basic personnel information of each associate.

Table Name: AssocRelation

Description: This table describes relationships between associates, such as broker, recruiter, manager, etc.

Table Name: ManagerContract

Description: This table holds basic data pertaining to manager contract.

Ratebook

Table Name: Product

Description: This table represents product records.

Table Name: ProductSeries

Description: This table represents product series records.

Table Name: ProductPlan

Description: This table represents product plan details, which contains information from Product and ProductSeries.

Claims

Table Name: Claim

Description: This table stores basic information of claims.

Table Name: Claimant/Participant

Description: This table describes the who involved in each claim, and stores information about the progress of claim. Default only one claim can be open per contract by one customer.