



openwayacademy

# WAY4 Main Objects



1. Business Objects and WAY4 Objects
2. Financial Institutions
3. Clients, Contracts, Products
4. Contract Hierarchy
5. Transactions, Entries
6. WAY4 Object interrelationship

# Business Objects and WAY4 Objects



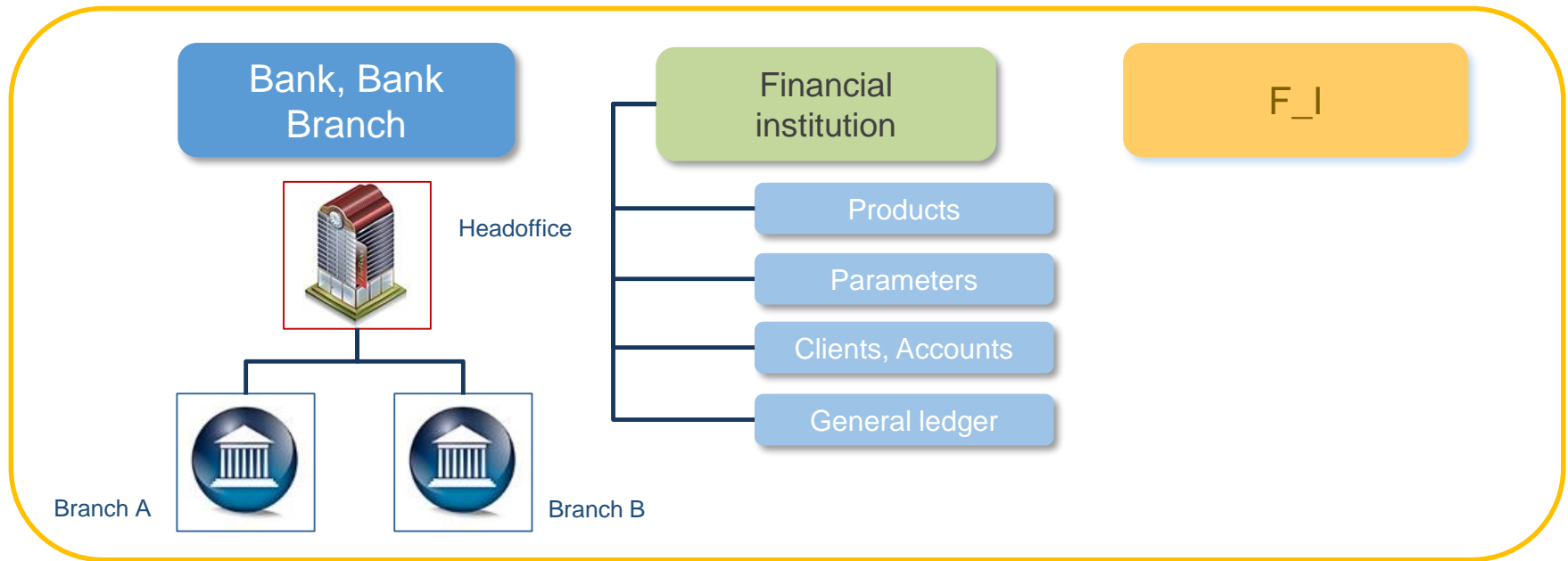
# Business Objects and their representation in WAY4

Business Object	WAY4 Object	DB Object
Bank, Bank Branch	?	?
Cardholder	?	?
Merchant	?	?
Cardholder account	?	?
Merchant Account	?	?
Card	?	?
Device	?	?
Product	?	?
Transaction, operation	?	?
General Ledger, Entry	?	?

# Financial Institutions in WAY4



# Financial Institutions



- **Financial Institutions** are mirrors of real financial organizations
- The majority of WAY4 objects are defined as belonged to the particular Financial Institution
- The System can process data of unlimited number of Financial Institutions
- For each Financial Institution we specify the set of parameters (currency, country etc.), Products and currency exchange rates
- Clients and their accounts belong to a Financial Institution
- Transaction data and General Ledger data stored in WAY4 after transaction processing is also linked to a specific financial institution.

# Clients, Contracts, Products





# Cardholder

Cardholder

CLIENT  
Private

CLIENT



Cardholder  
(Corporation)

CLIENT  
Commercial

CLIENT





- **Client objects** are used to identify clients and maintain profiles containing their classification and personal data. A set of additional parameters is used for corporate clients.
- Clients are grouped by category (natural persons, legal persons and bank branches) and by additional parameters determined by their financial institution.

# Client Category and Client Types

CARDHOLDER

Private  
CLIENT

MERCHANT

Commercial  
CLIENT

CORPORATION

Commercial  
CLIENT

BANK DIVISION

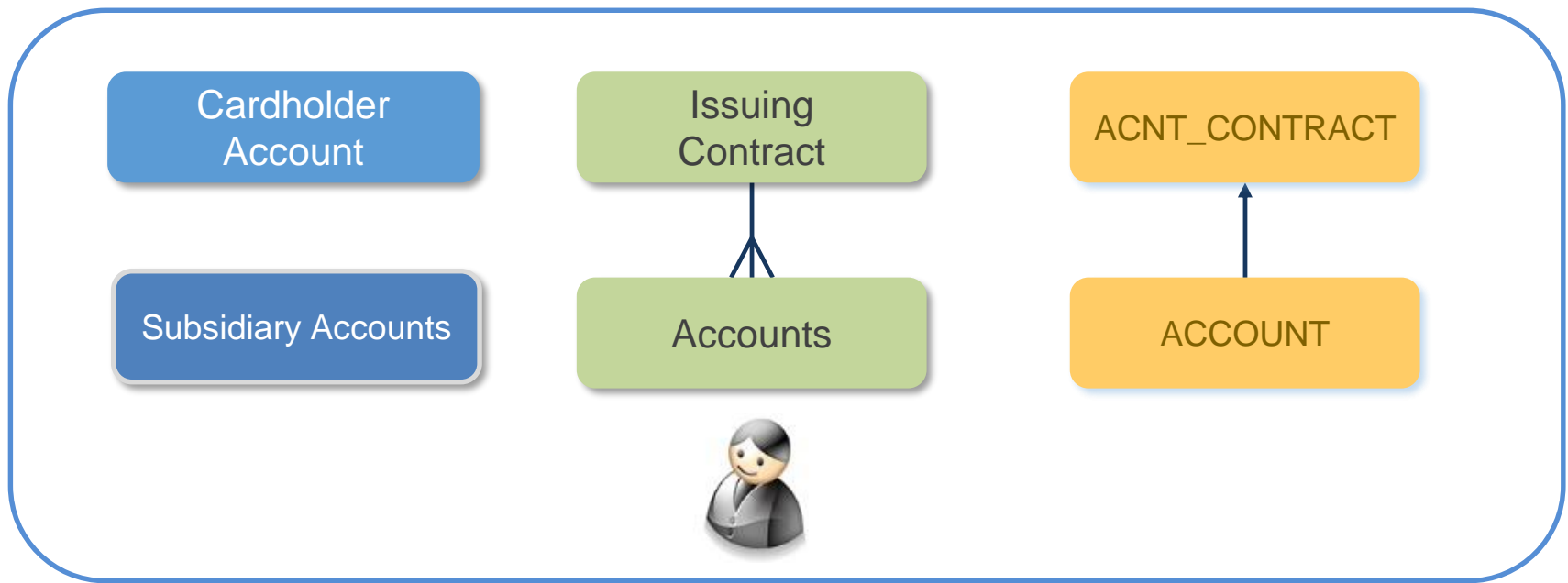
Accountant  
CLIENT

## Client Category

- Private
- Commercial
  - Corporate
  - Merchant
- Accountant

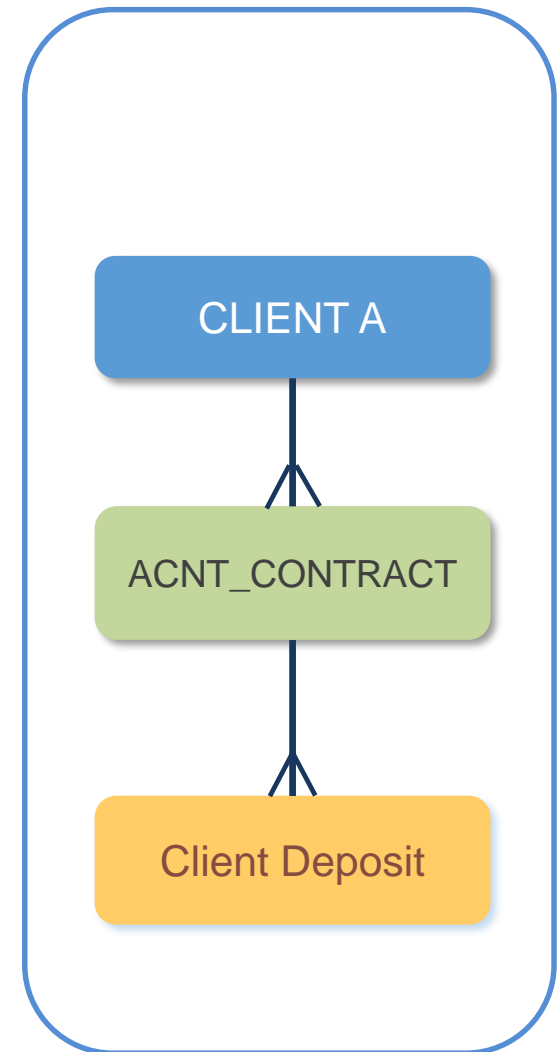
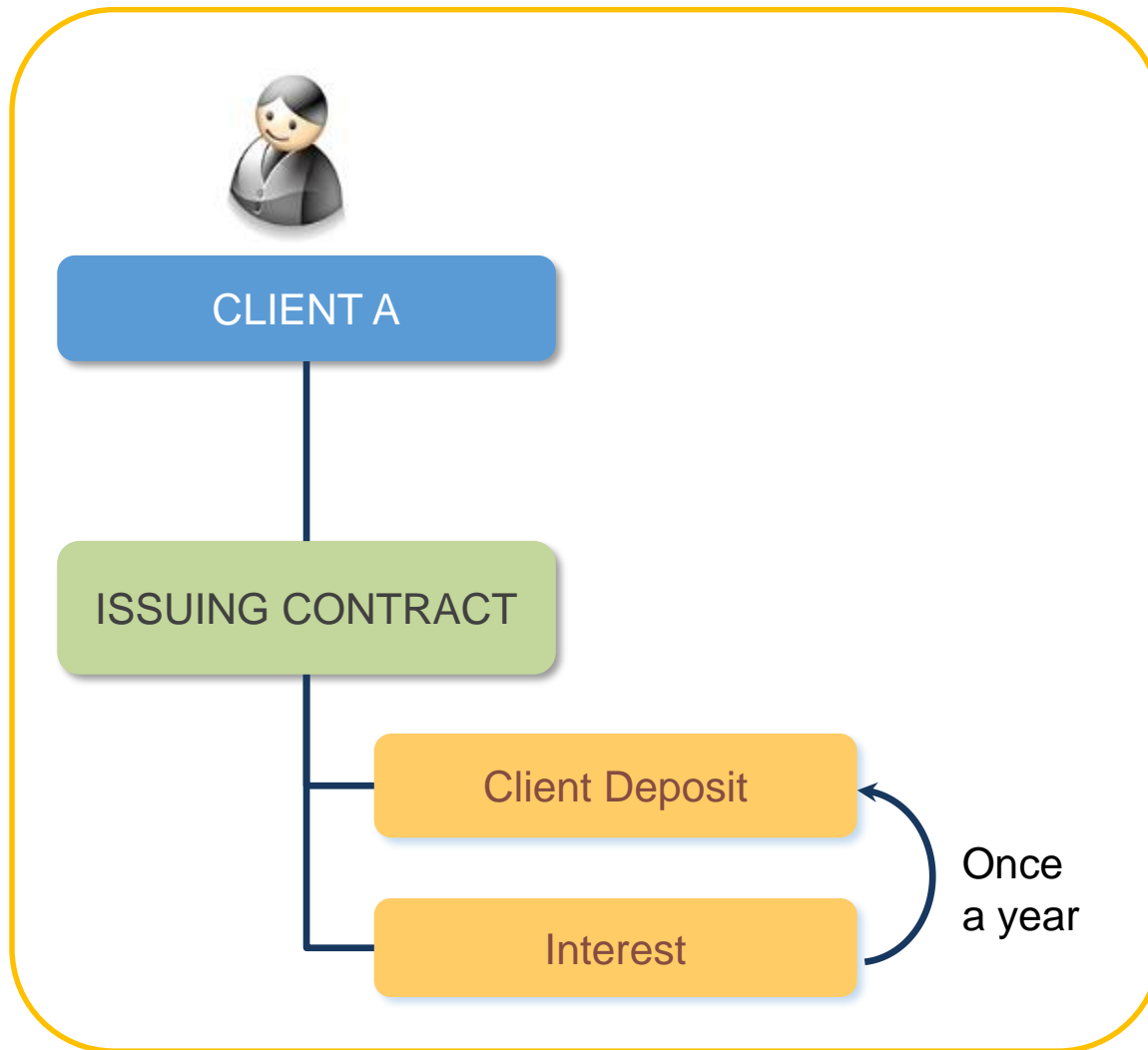
- *The list of Client Categories is hardcoded and can't be changed*
- *The list of standard Client types is preconfigured but can be changed*
- *The number of Client Types within a given Client Category is not limited*
- *Some WAY4 manager forms are filtered by the current context (Financial Institution, Client Category, Client Type)*

# Cardholder Account

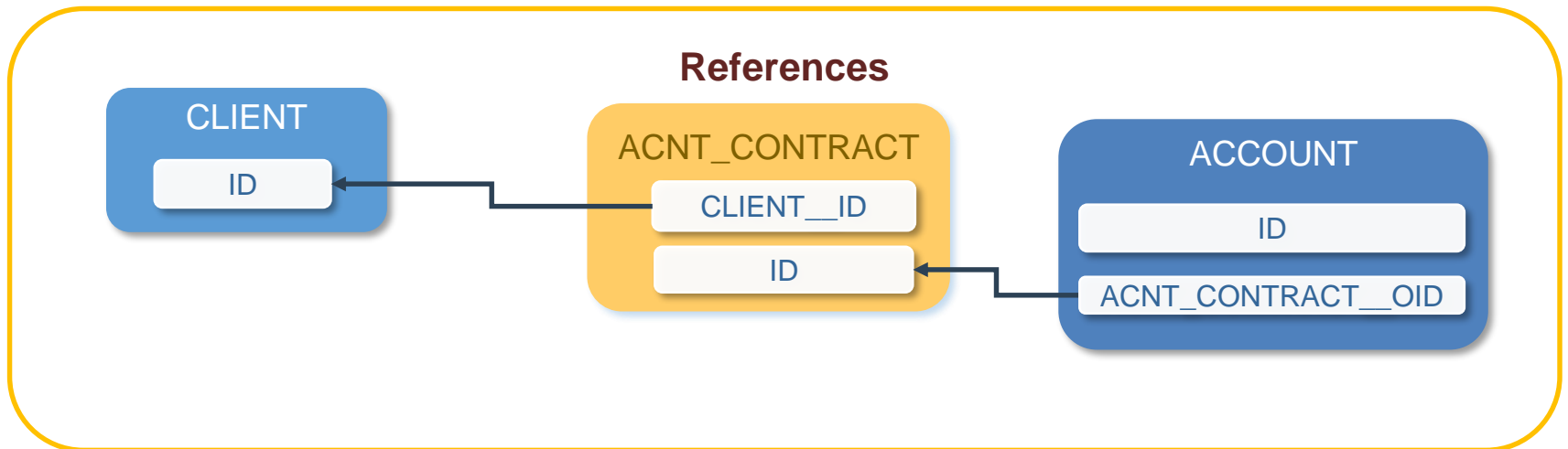
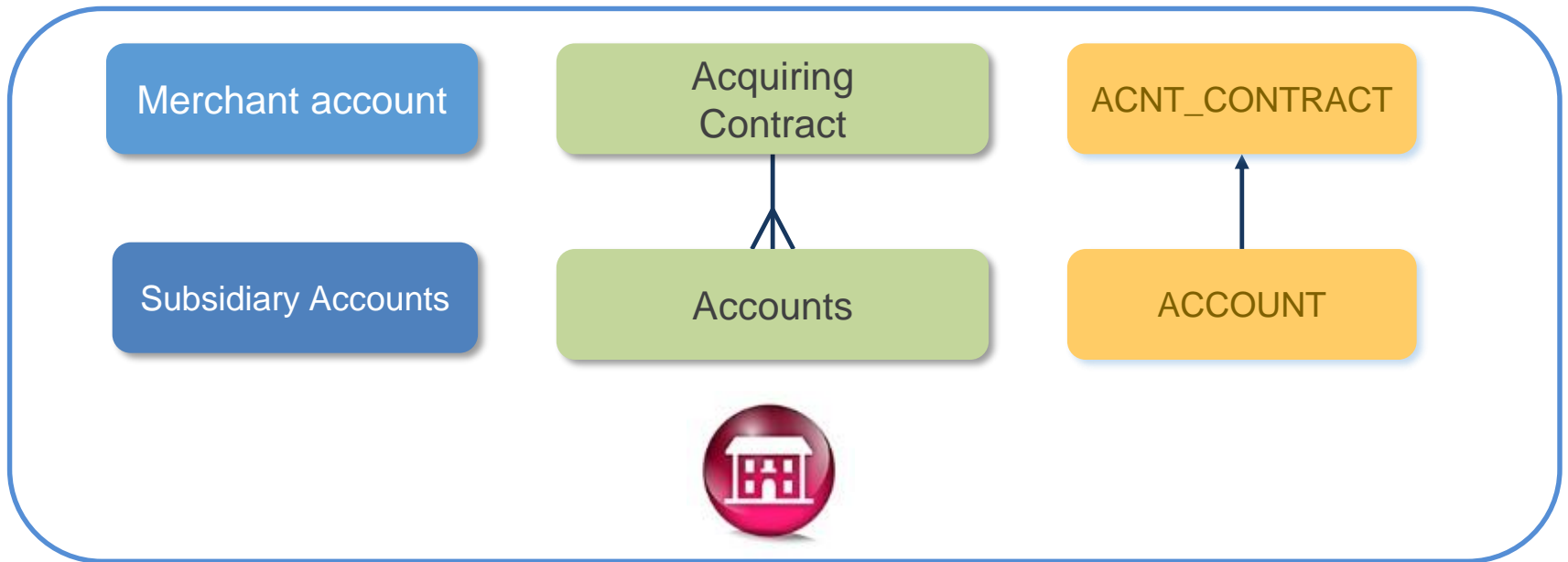


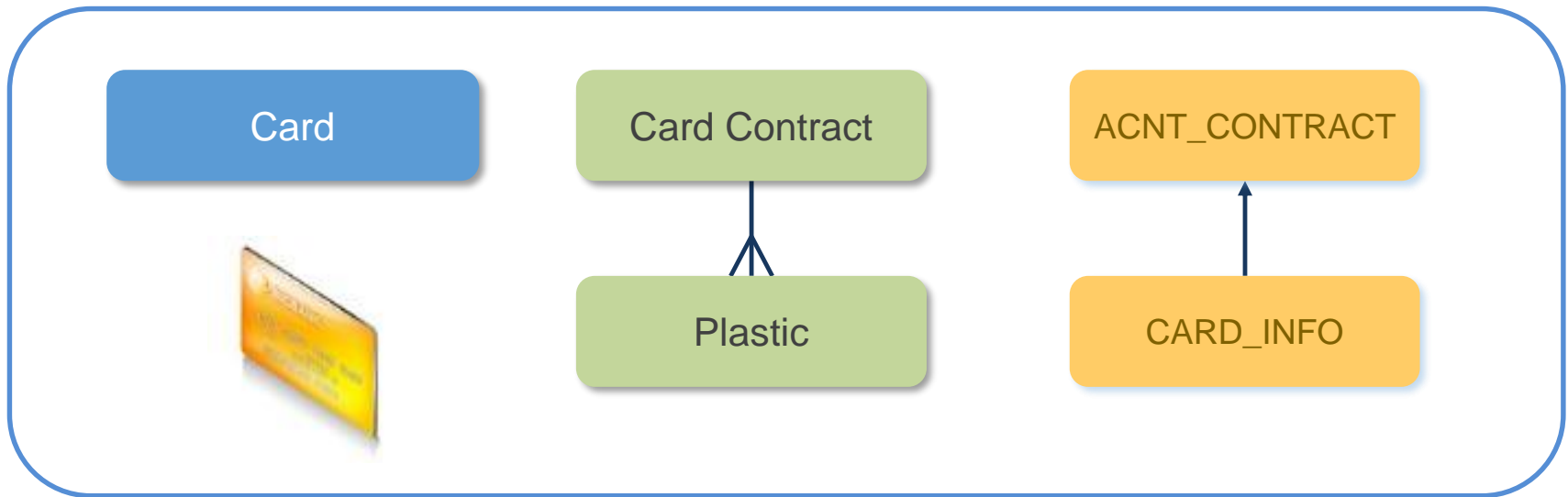
- **A contract** regulates relations between a financial institution (an issuer and/or an acquirer) and a party involved in a card transaction settlement (a cardholder, merchant or a bank branch).
- A contract is a set of accounts and rules for working with them.

# Client Accounts – an example

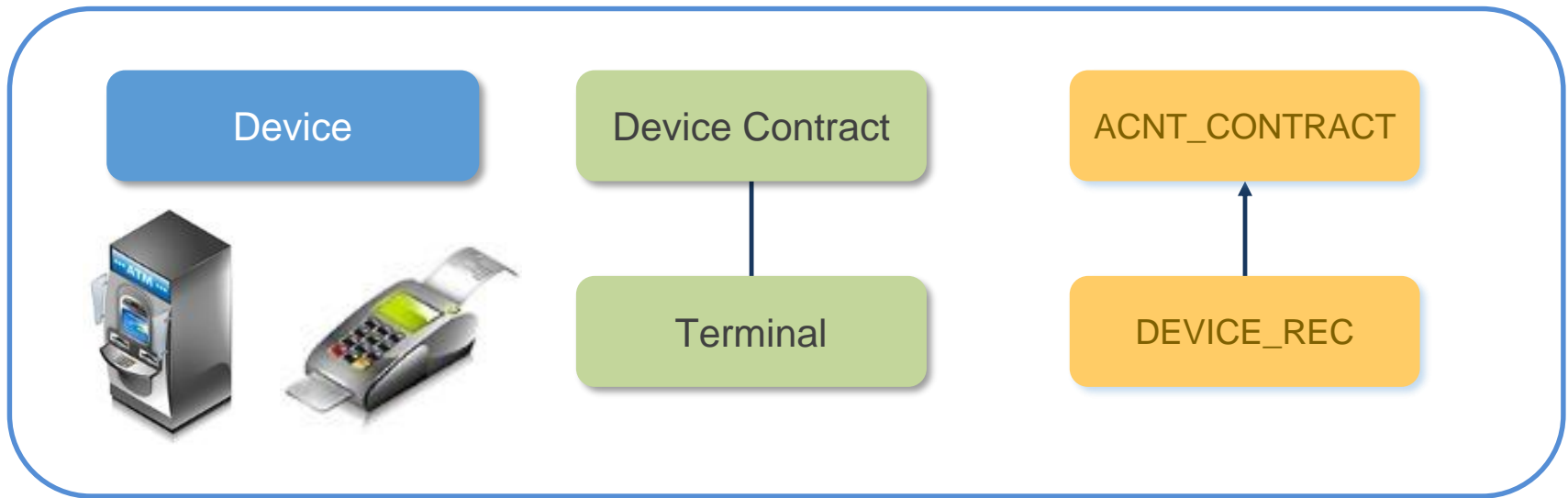


# Merchant Account





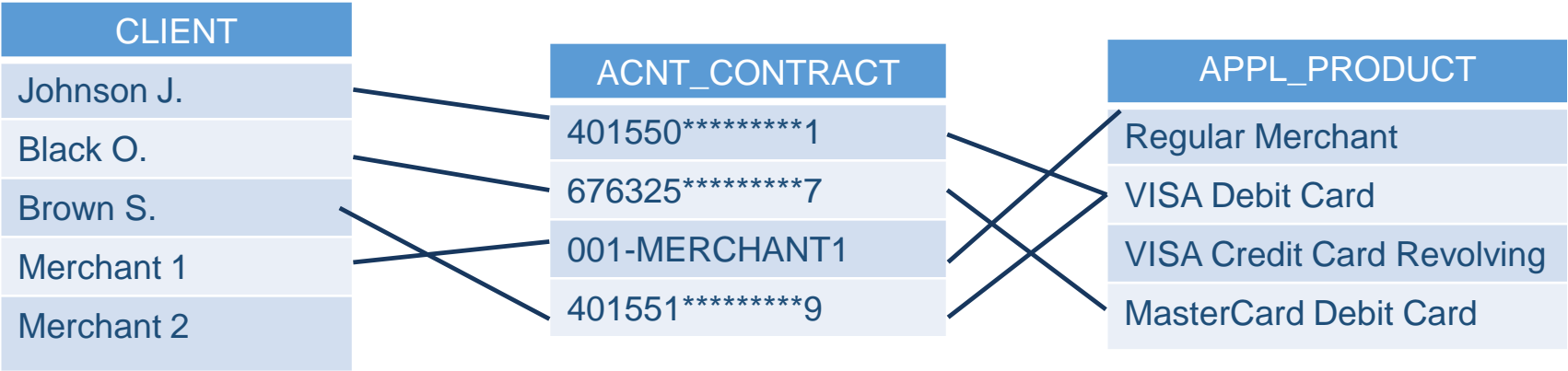
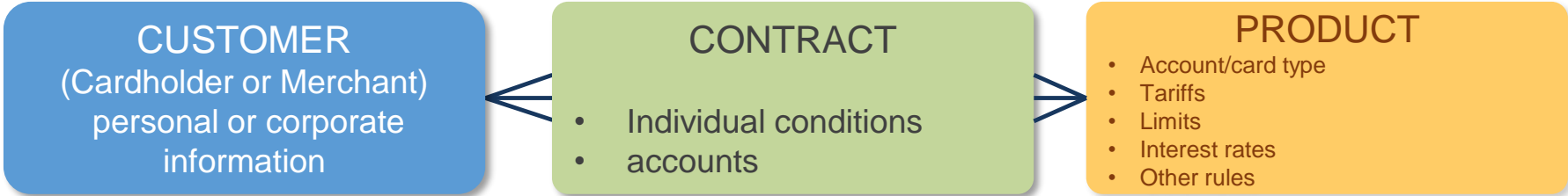
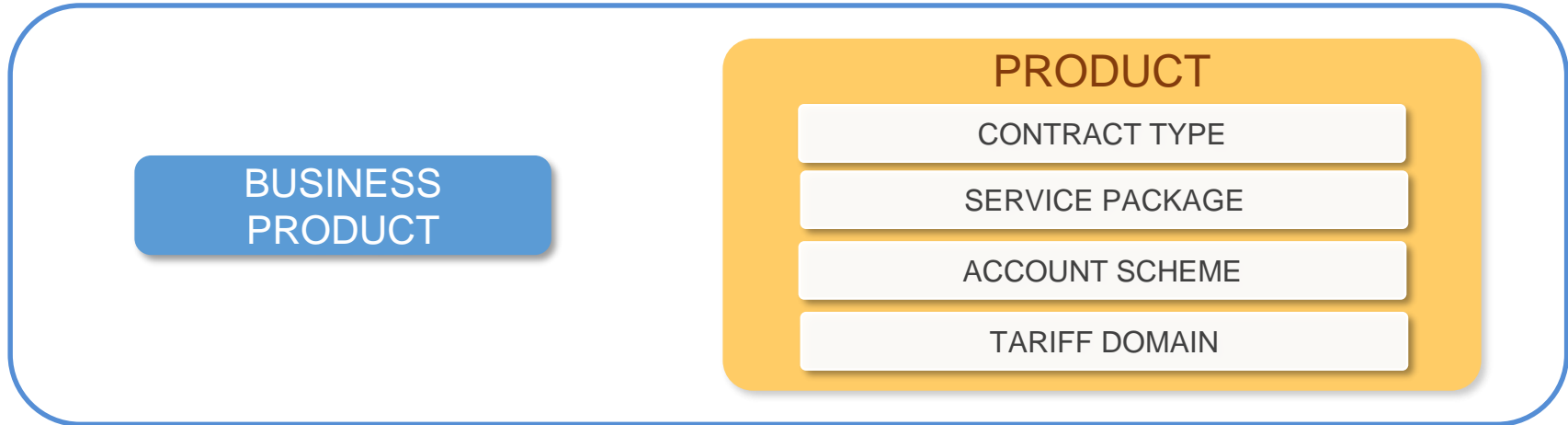
- **Card Contracts** contain information about the conditions of bankcard processing (bankcard number, embossing data, etc.)
- **CARD\_INFO** table contains information about plastics issued for a cardholder and their statuses



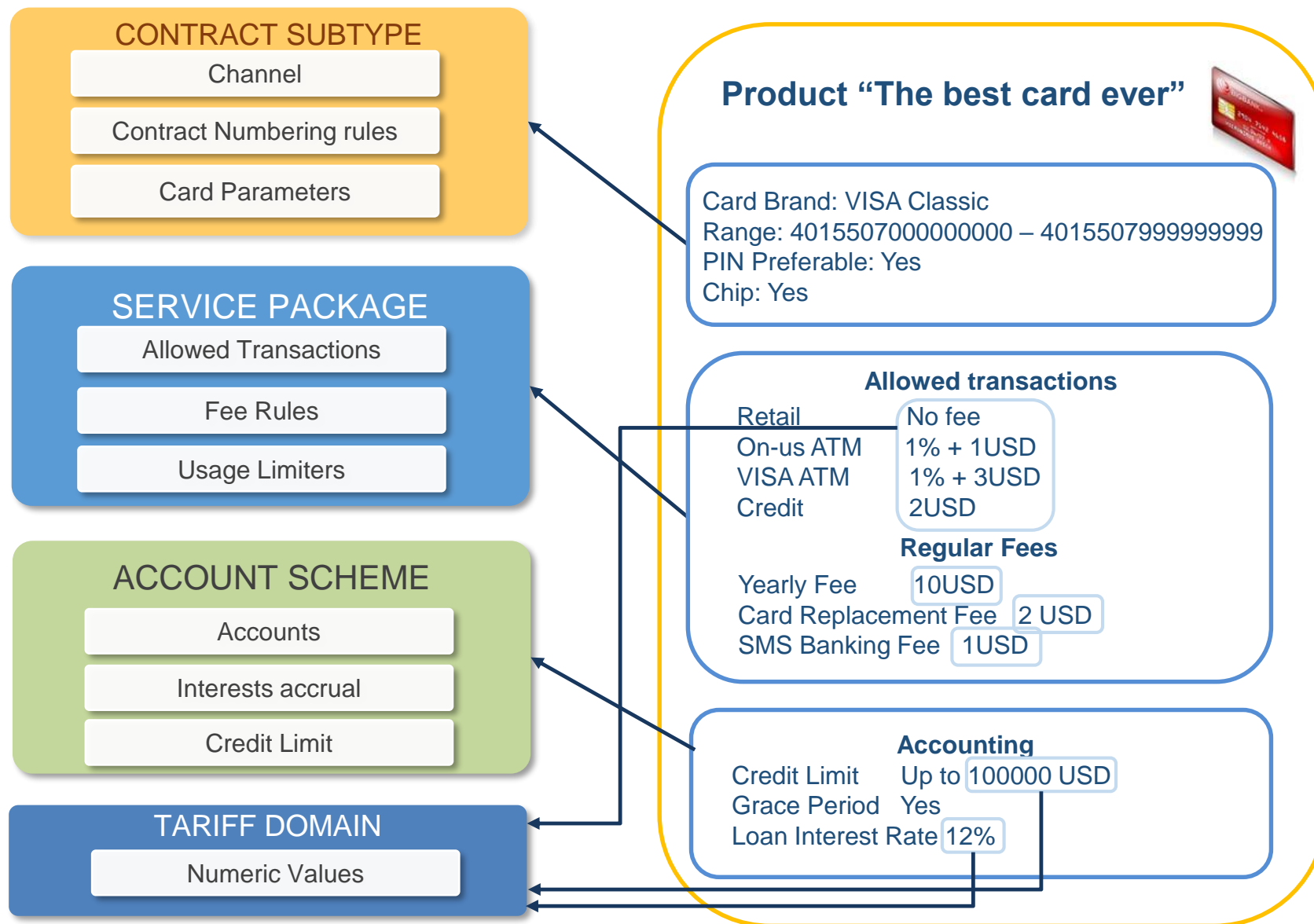
- **Device contracts** *contain information about device parameters*
- *DEVICE\_REC table contains device data such as device type, its number, working hours, location etc.*



# Products



# Product Components and their functions



# Client, Product and Contract Categories

## Client Category

- Private
- Commercial
- Accountant

## Product Category

- Issuing
- Acquiring
- Bank Accounting

## Contract Category

- Account
- Card
- Device

## ACNT\_CONTRACT Table

	CCAT	PCAT	CON_CAT
Card issued for a private customer	P (Private)	Issuing	C (Card)
Issuing Contract for a Corporation	C (Commercial)	Issuing	A (Account)
Device Contract	C (Commercial)	Acquiring	M (Device)
Routing Contract for “alien” cards	A (Accountant)	Bank Accounting	C (Card)

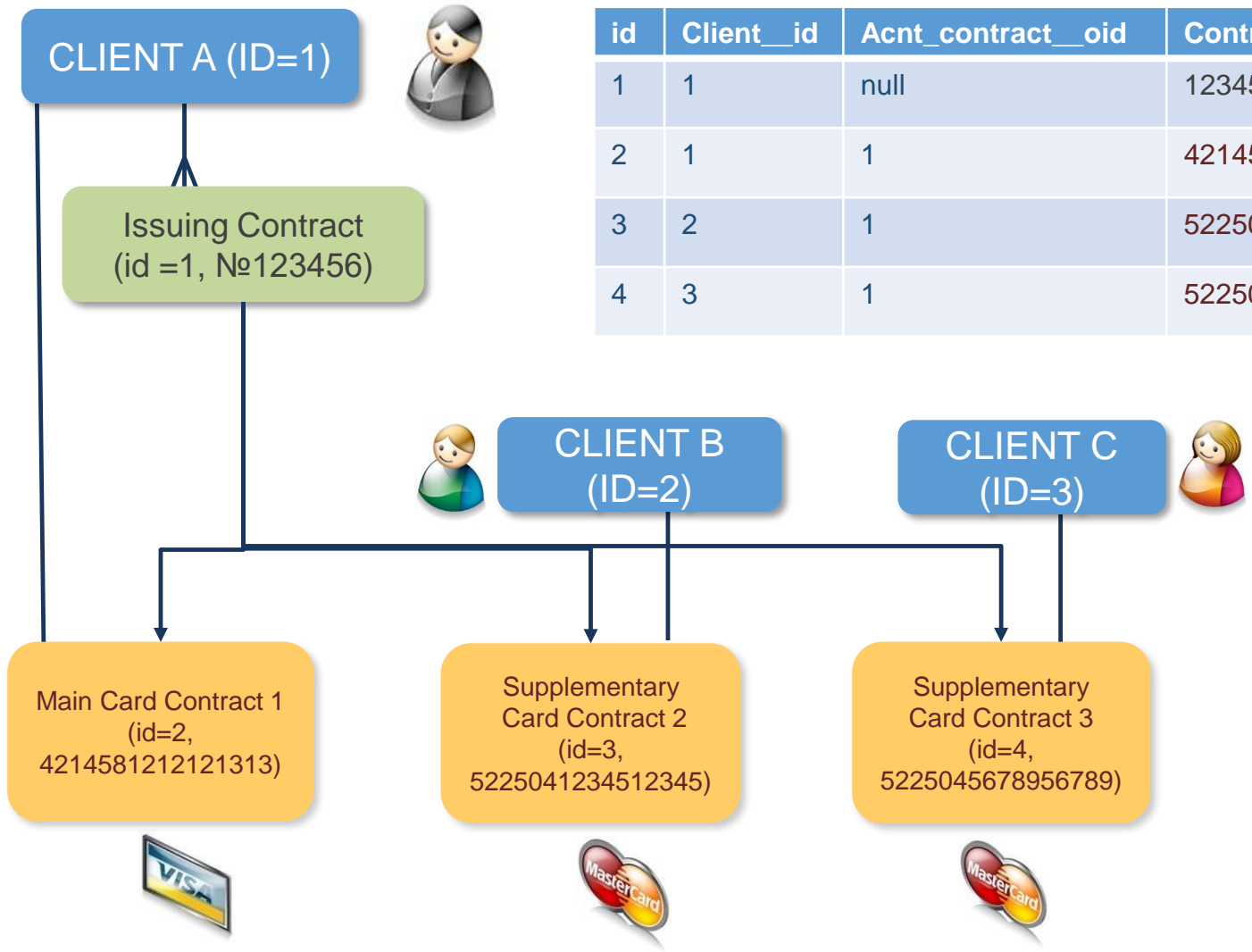
# Contract Hierarchy



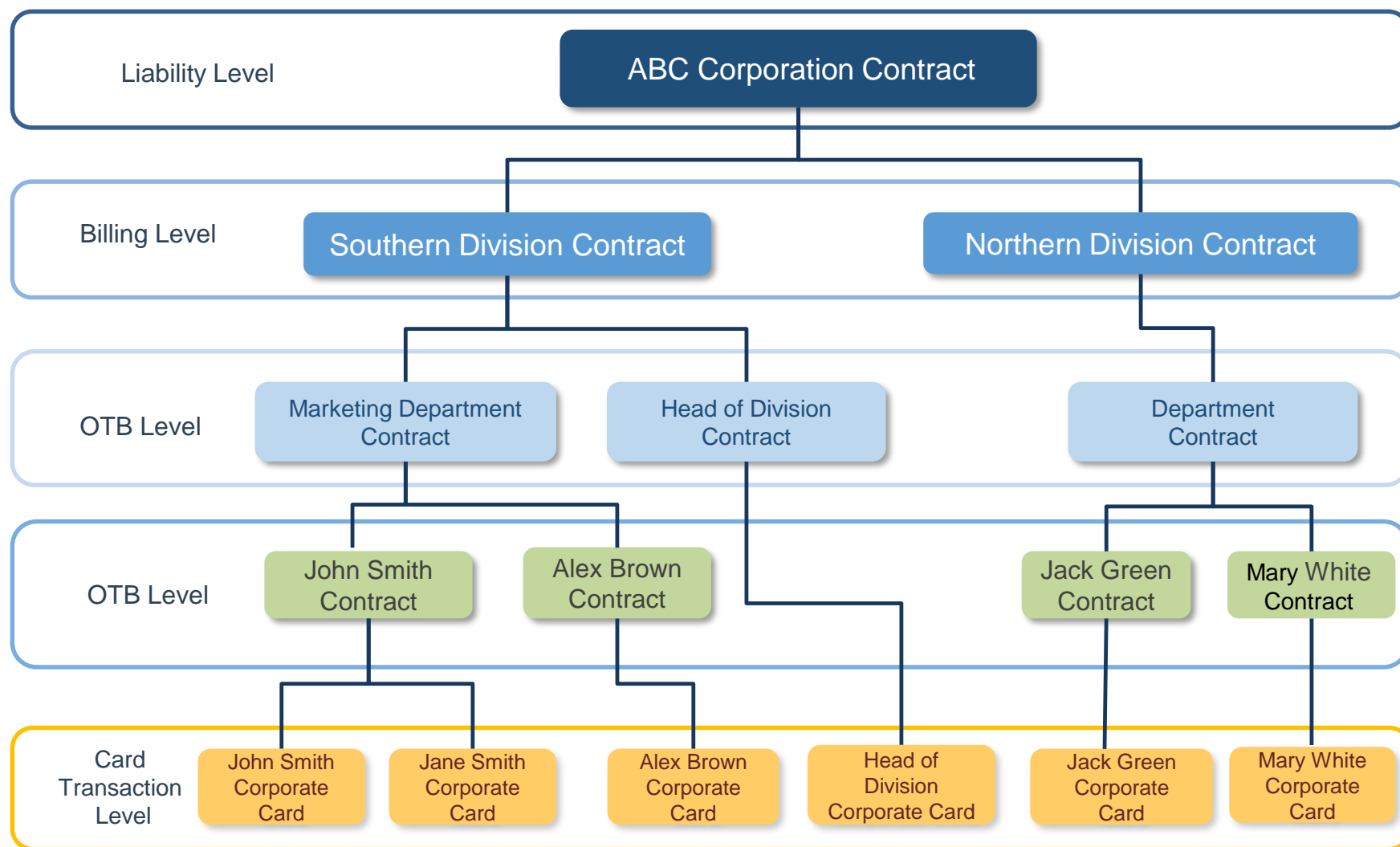
# Issuing Contract Hierarchy

ACNT\_CONTRACT

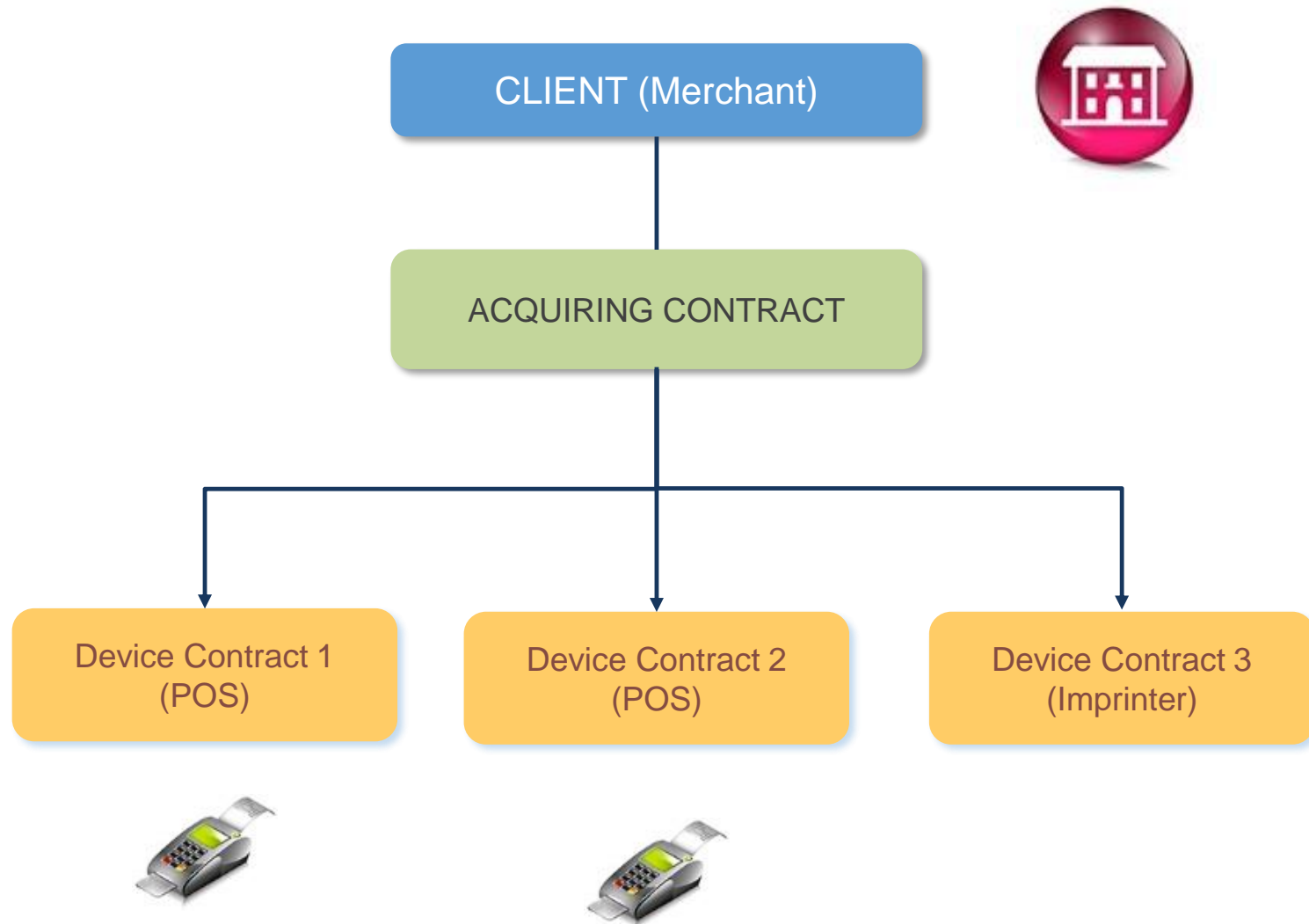
id	Client__id	Acnt_contract__oid	Contract_number
1	1	null	123456
2	1	1	4214581212121313
3	2	1	5225041234512345
4	3	1	5225045678956789



# Corporate Contract Hierarchy



# Acquiring Contract Hierarchy

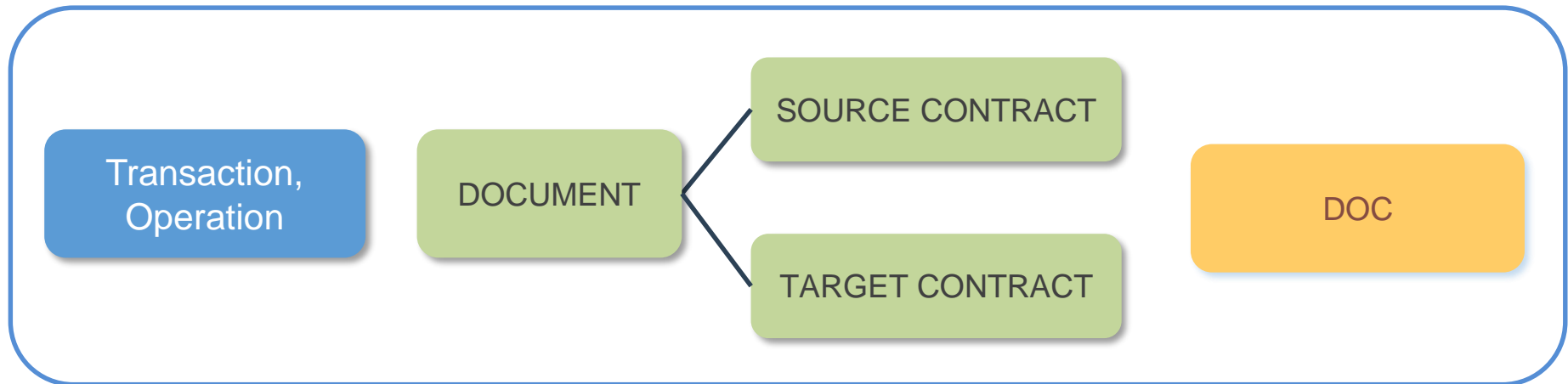


# Transactions, Entries





# Transaction

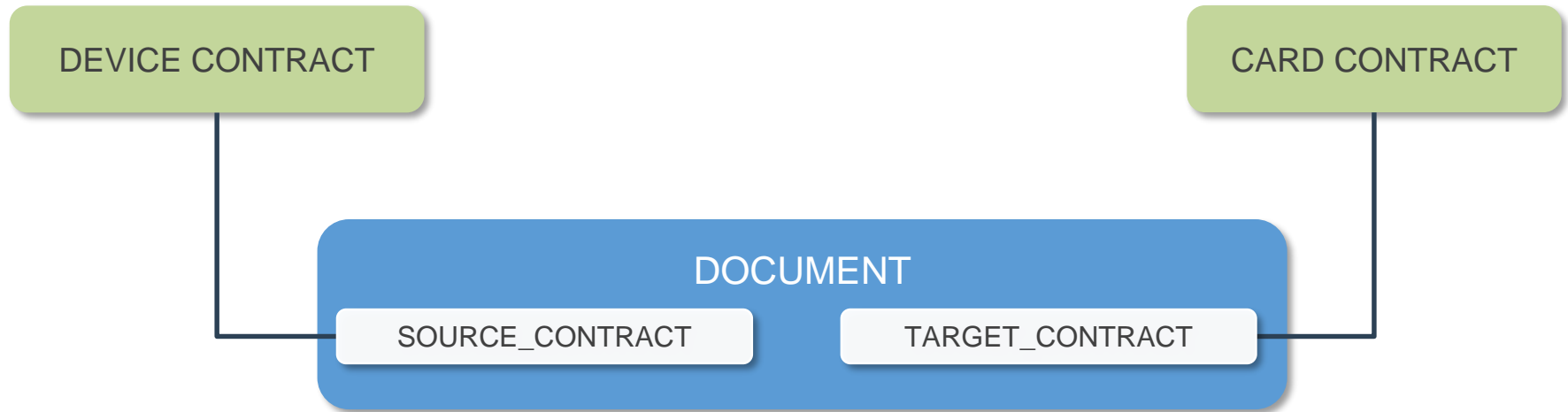


Samples of Documents in WAY4

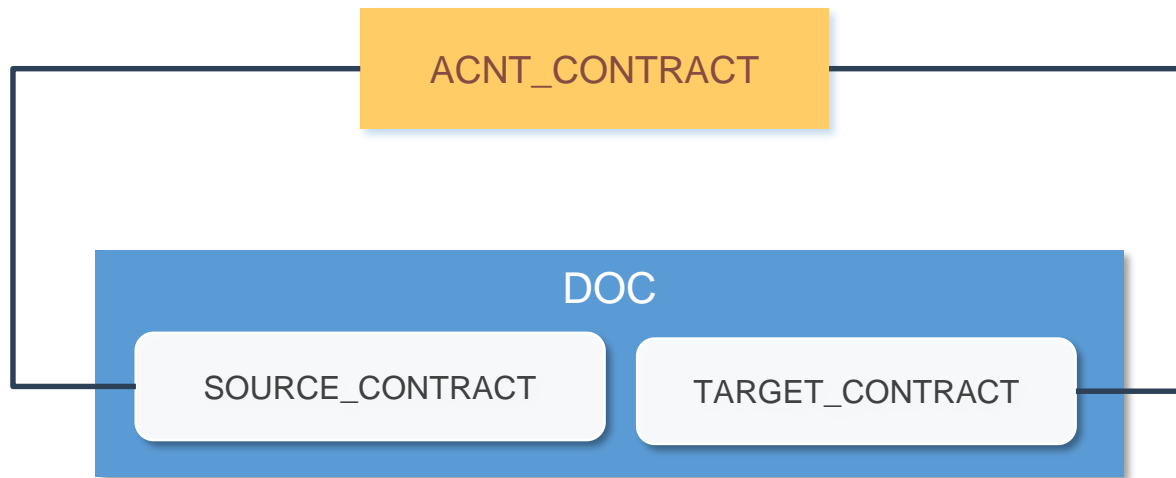
Date	Source Channel	Transaction Type	Is Auth	Source Number	Target Number	Trans Amount	Trans Currency	...
01.01.2015 11:00	VISA	Retail	Auth	12345678	401550*****1	100	EUR	...
01.01.2015 10:59	Our ATM	Balance Inquiry		ATM00001	676932*****2			...
01.01.2015 10:59	MasterCard	Credit	Fin	43467789	676932*****7	500	PLZ	...
01.01.2015 10:58	Our POS	Retail Reversal	Auth	POS12345	478777*****8	2000	RUB	...
01.01.2015 10:57		Card Yearly Fee	Fin		401550*****1	10	USD	...
01.01.2015 10:57	VISA	Retail Chargeback	Fin	487334*****6	POS12345	100.67	USD	...
...	..	...	...	...	...	...	...	...

# Transaction. DB Structure

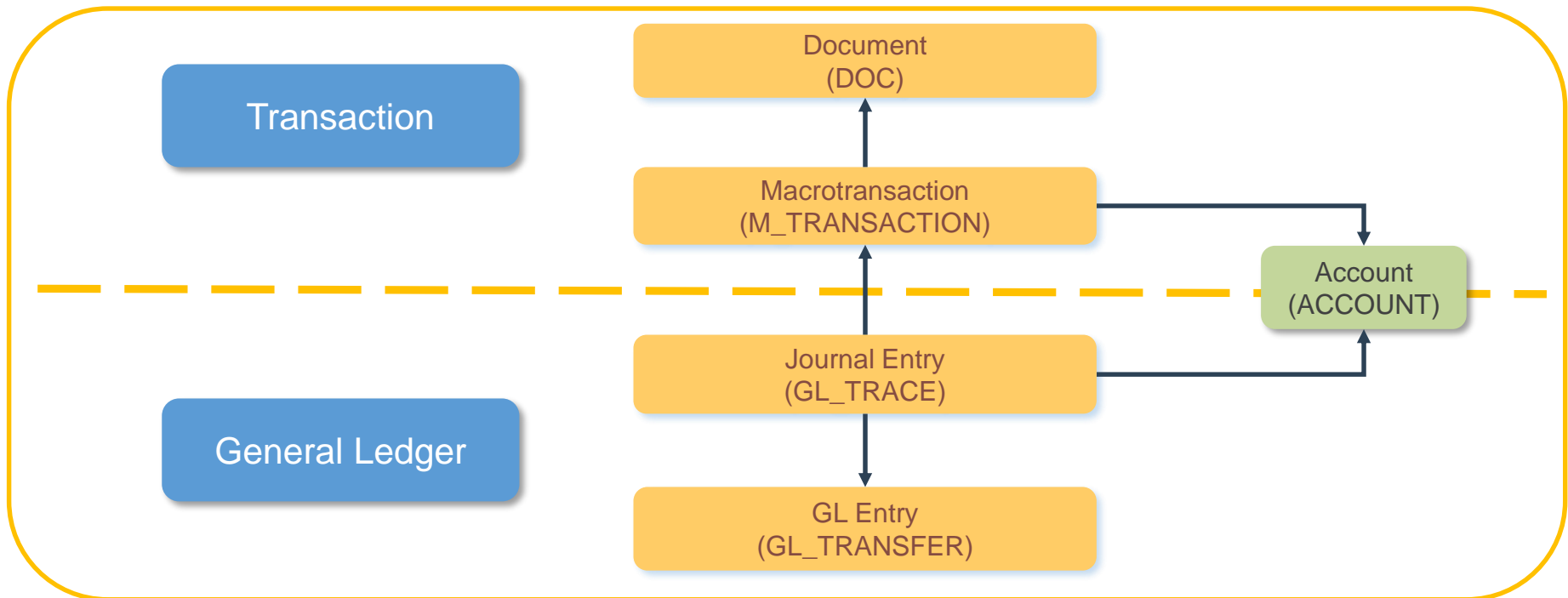
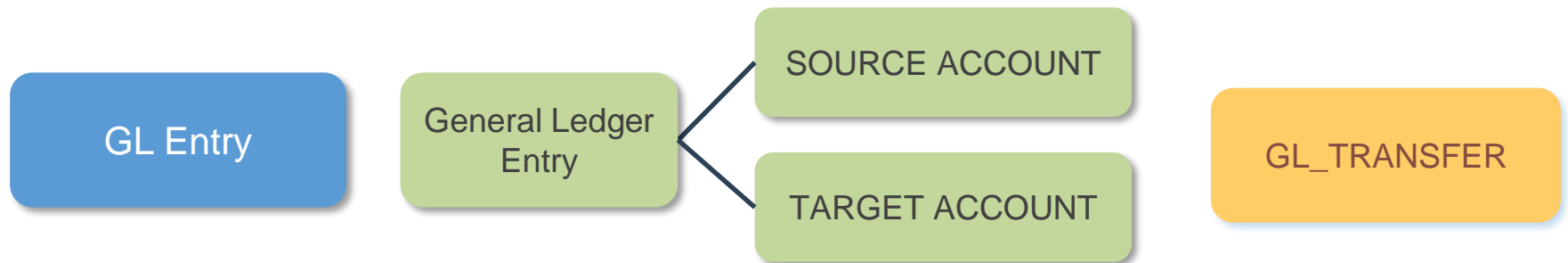
## On-Us Retail Transaction



## *In the database*



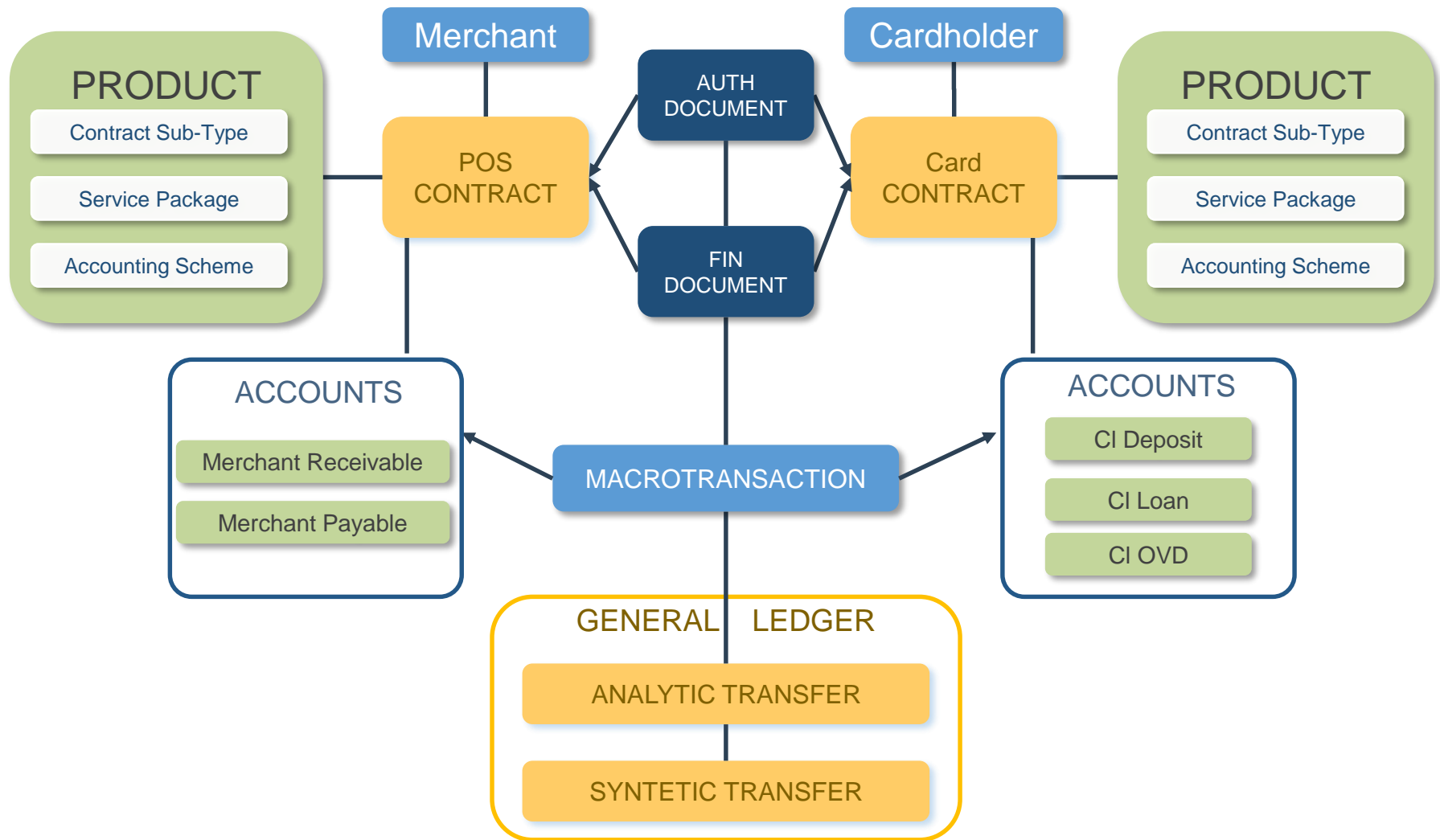
# Entries



# WAY4 Object Interrelationship



# WAY4 Objects Interrelationship



# Conclusion

- ✓ Business Objects and WAY4 Objects
- ✓ Financial Institutions
- ✓ Clients, Contracts, Products
- ✓ Contract Hierarchy
- ✓ Transactions, Entries
- ✓ WAY4 Object interrelationship

GO  
ahead!



# WAY4 Product

A horizontal bar composed of six colored segments: blue, teal, green, red, orange, and yellow.

Introduction

1. Main Concept
2. Product Components
3. Stages of Product Setup



# WAY4 Products

Introduction

# Banking Product

CUSTOMER



CONTRACT



BANK



**PRODUCT**  
Services + Conditions



CLIENT

CONTRACT

PRODUCT

# Issuing Products

- Magnetic Stripe Cards
- Smart
- Contactless (PayPass, PayWave)
- Multi-application smart
- Virtual



Type of Card

Payment System



**WAY4 Product**

VISA CHIP Credit card

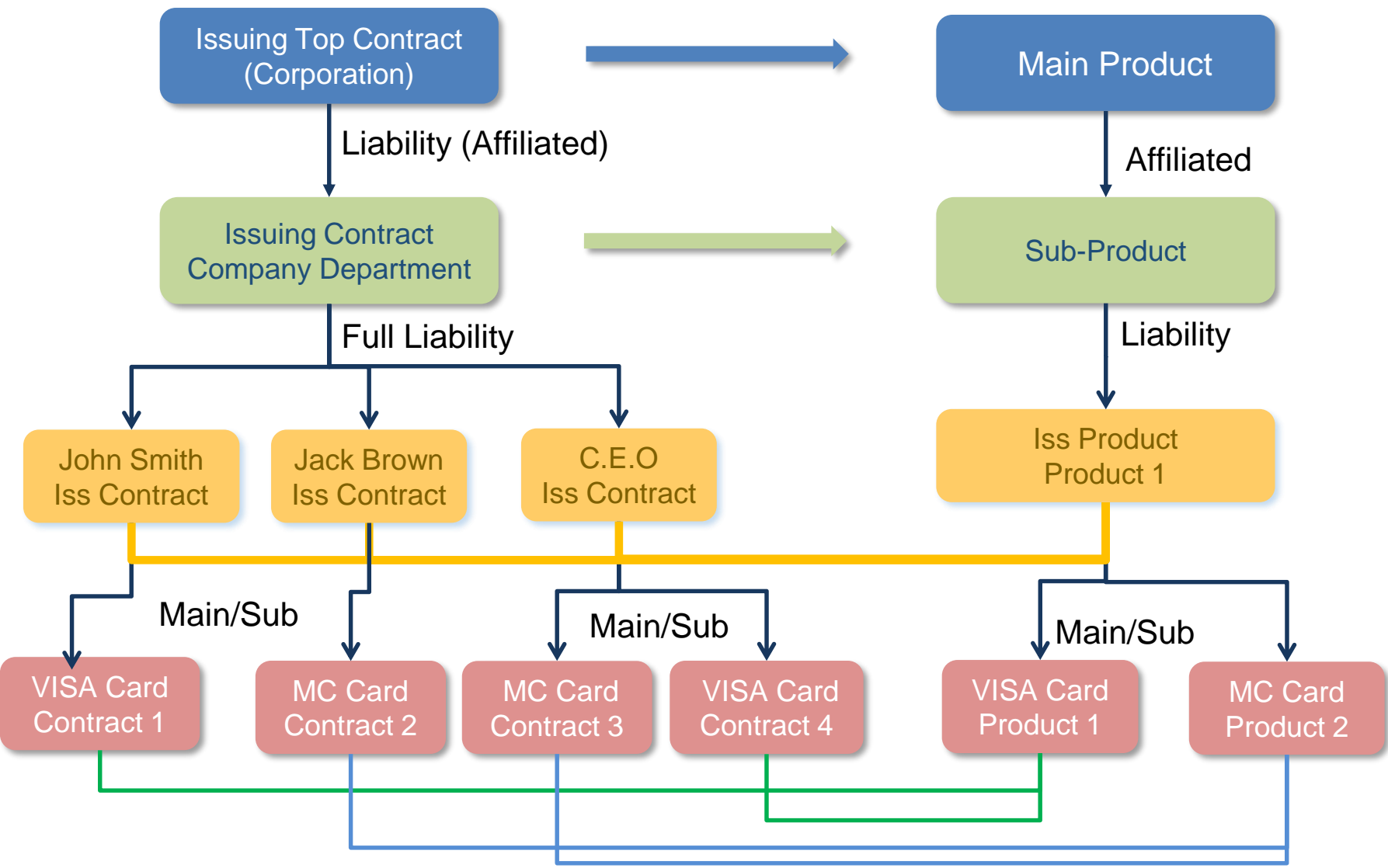
**Financial Conditions**

- Debit Cards
- Prepaid Cards
- Corporate Cards
- Credit Cards
- Installment

**Service Conditions**

- Loyalty
- Gift
- Purchasing
- Fuel/Fleet
- Travel & Entertainment

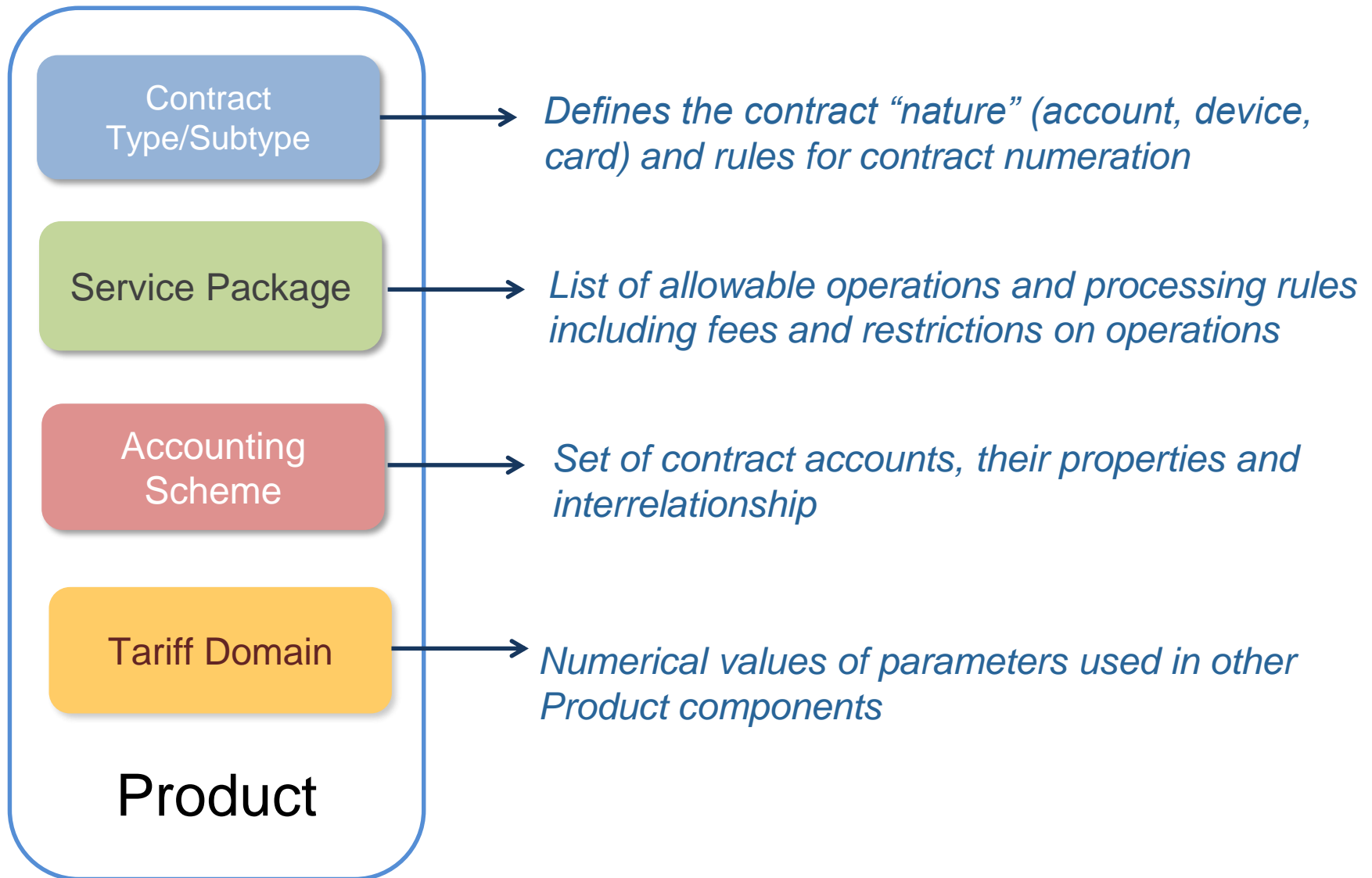
# Multi-level Contract Hierarchy



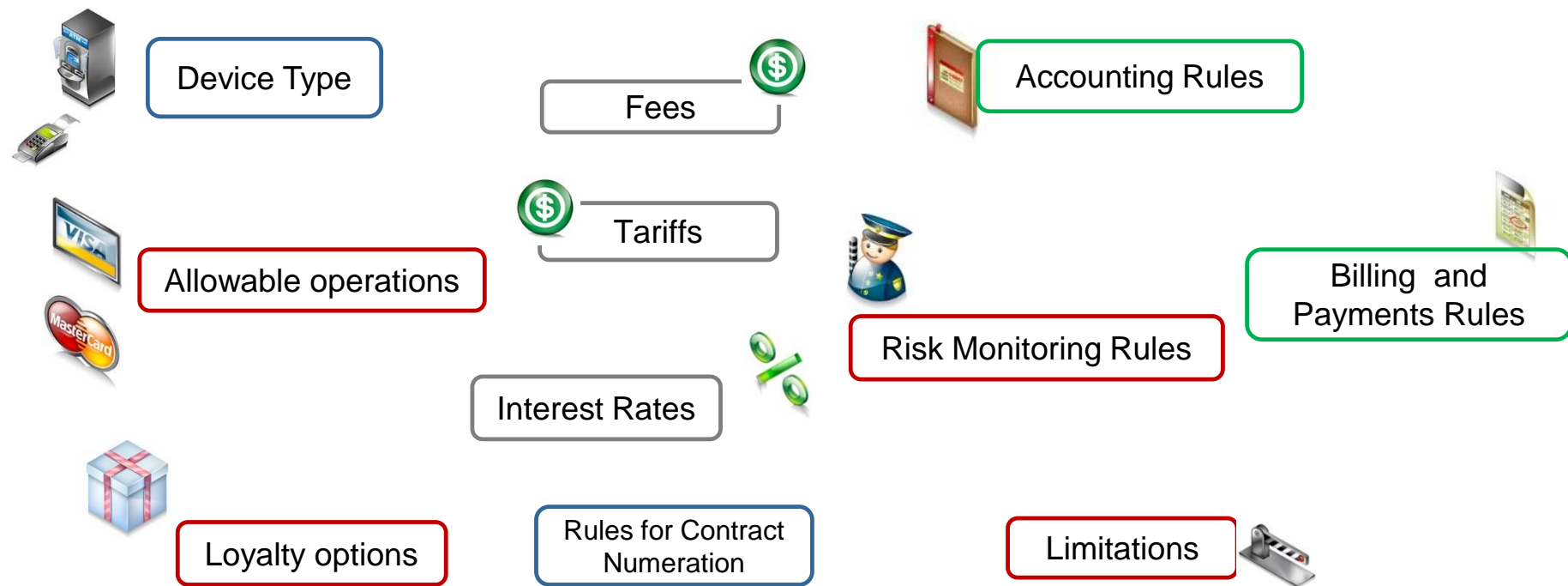
# Product Components



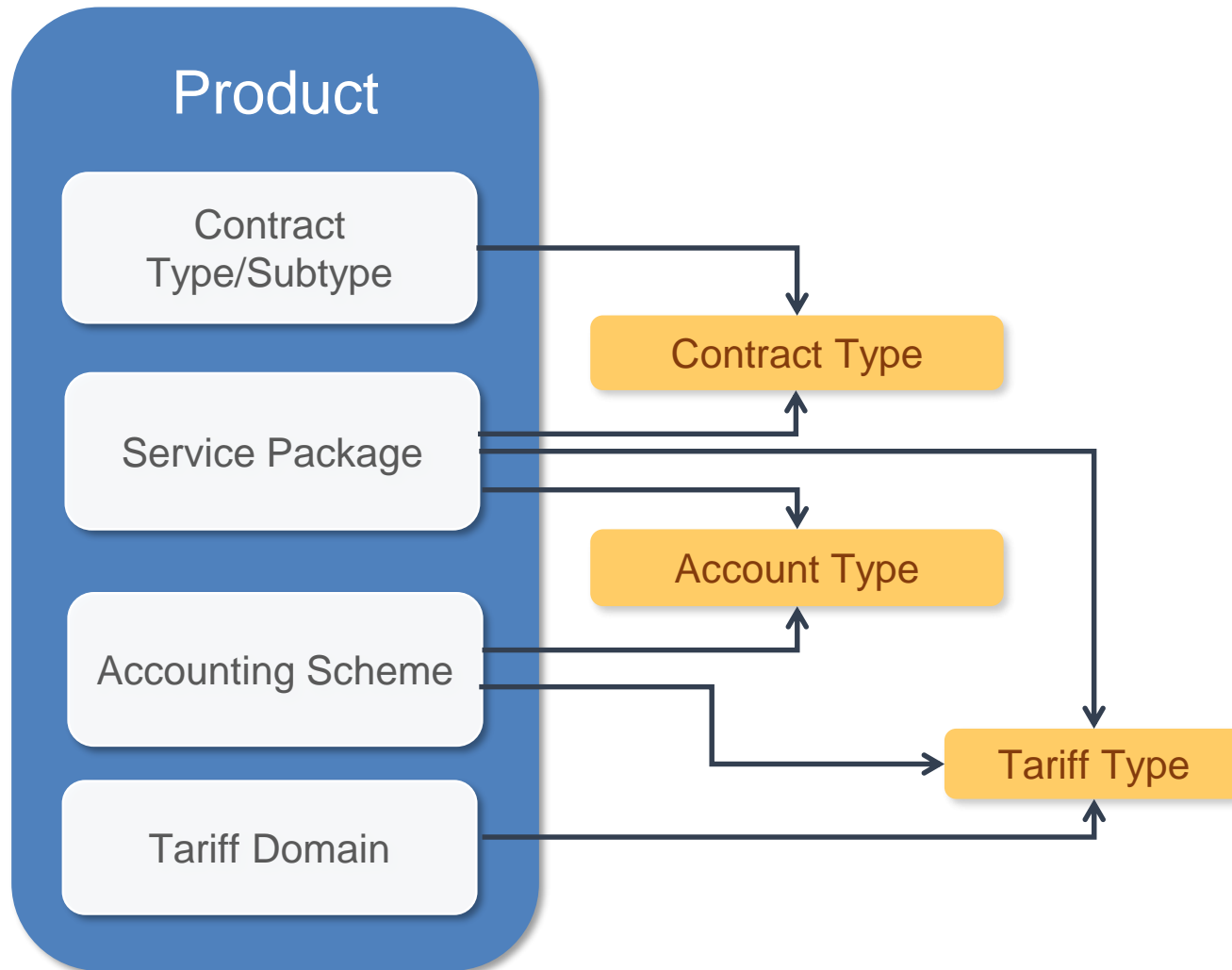
# Product Components



# Contract Parameters Distribution

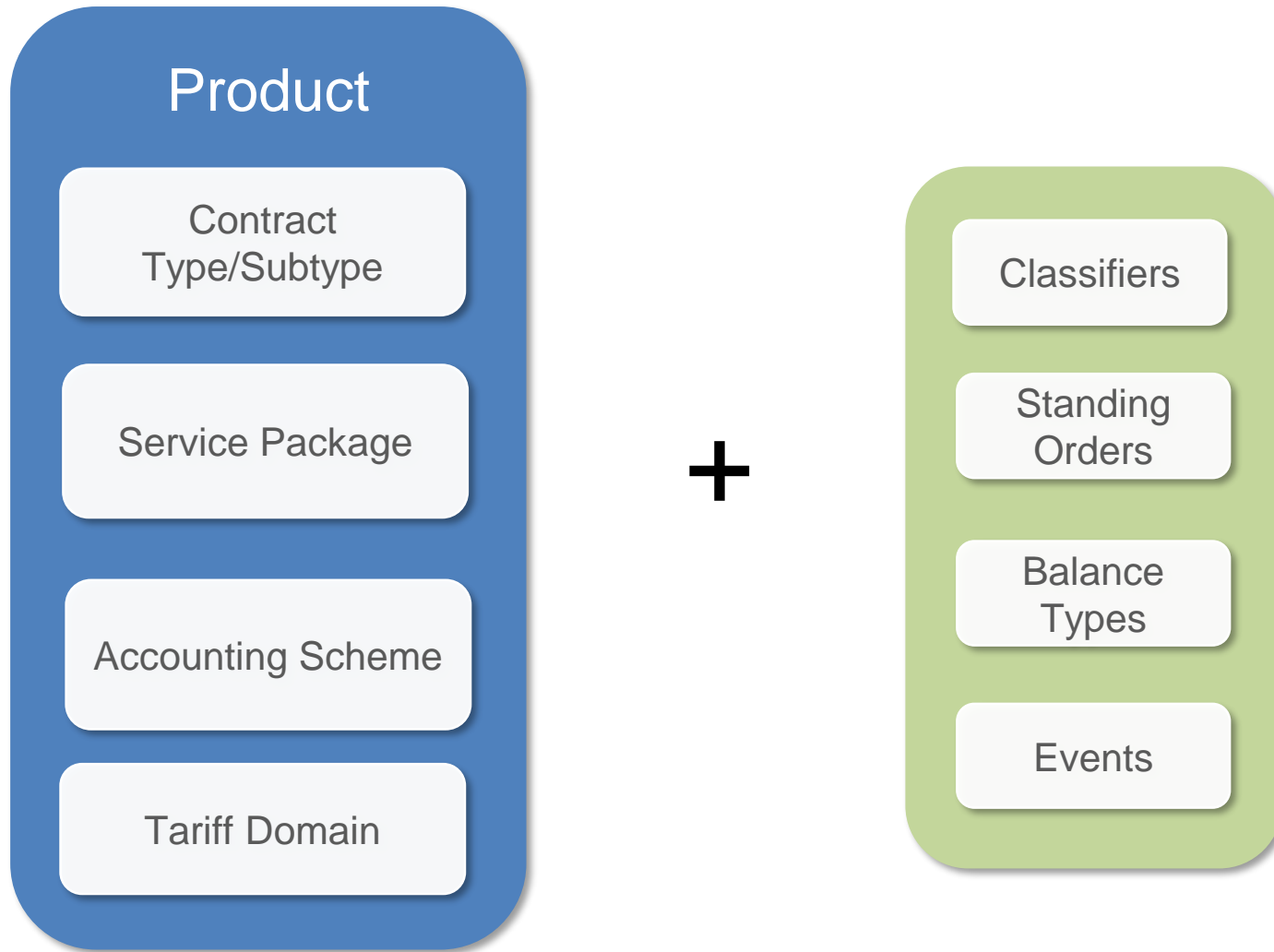


# Interrelationship of Product Components

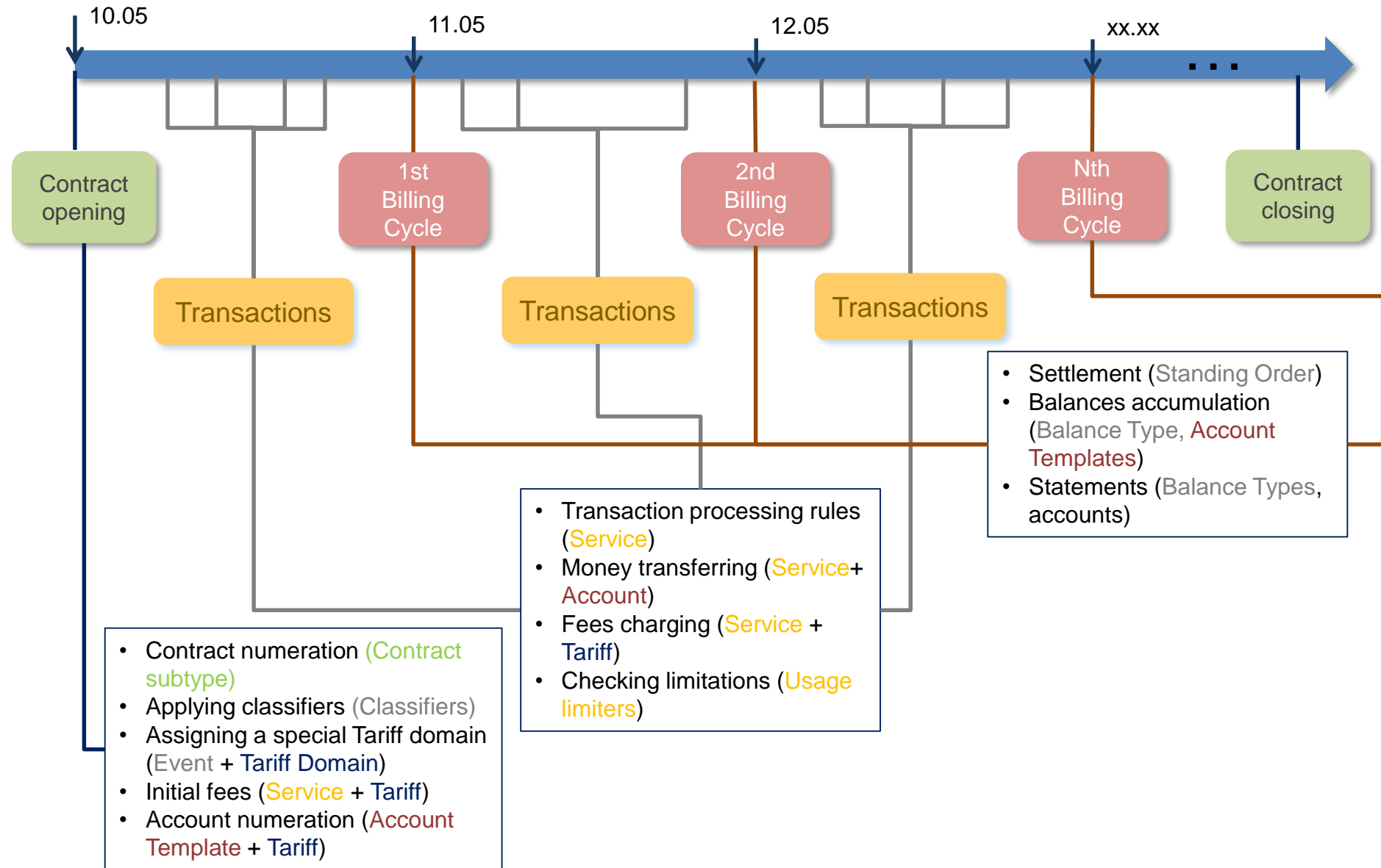




# Product Related Objects



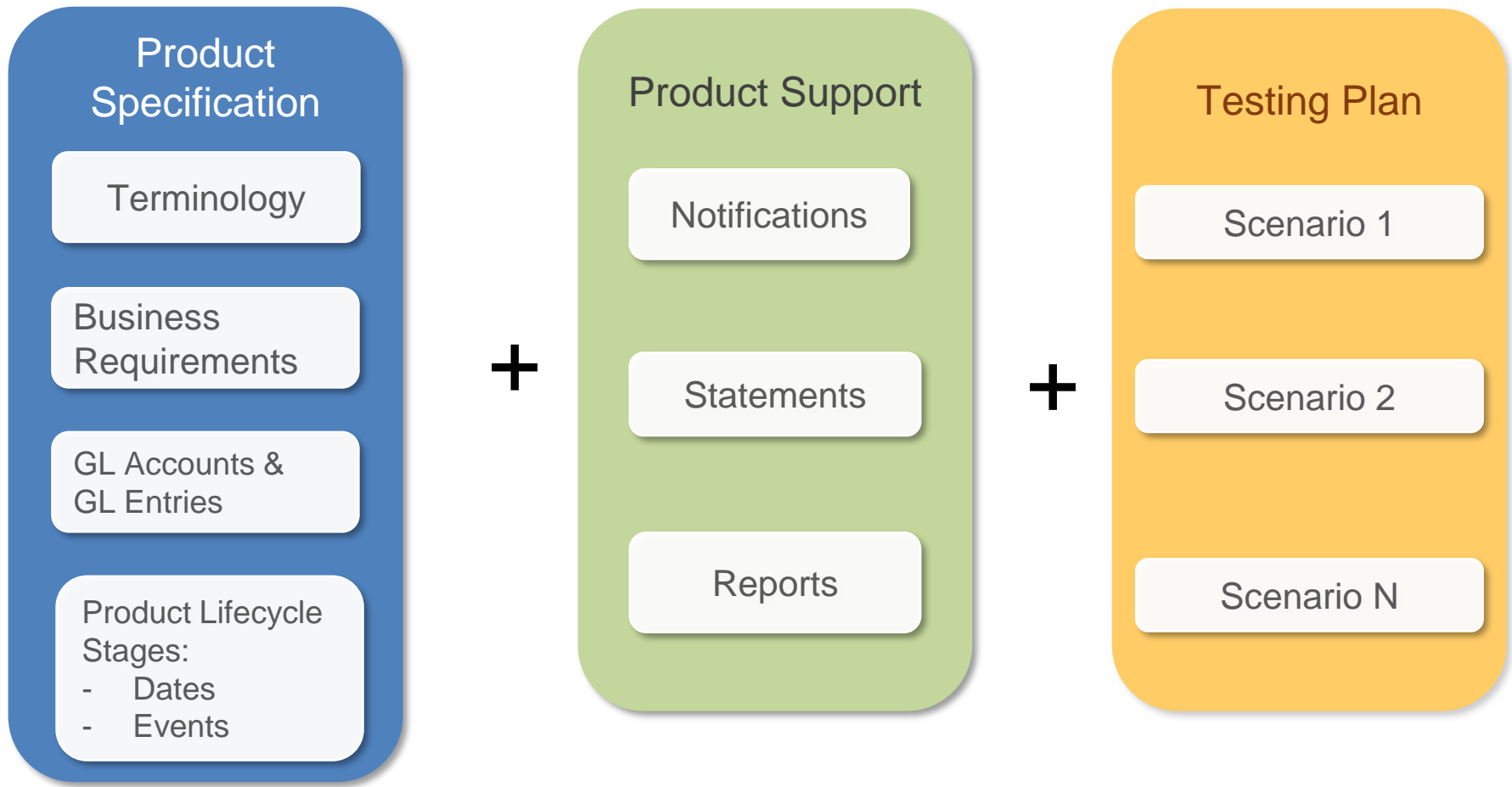
# Contract Lifecycle



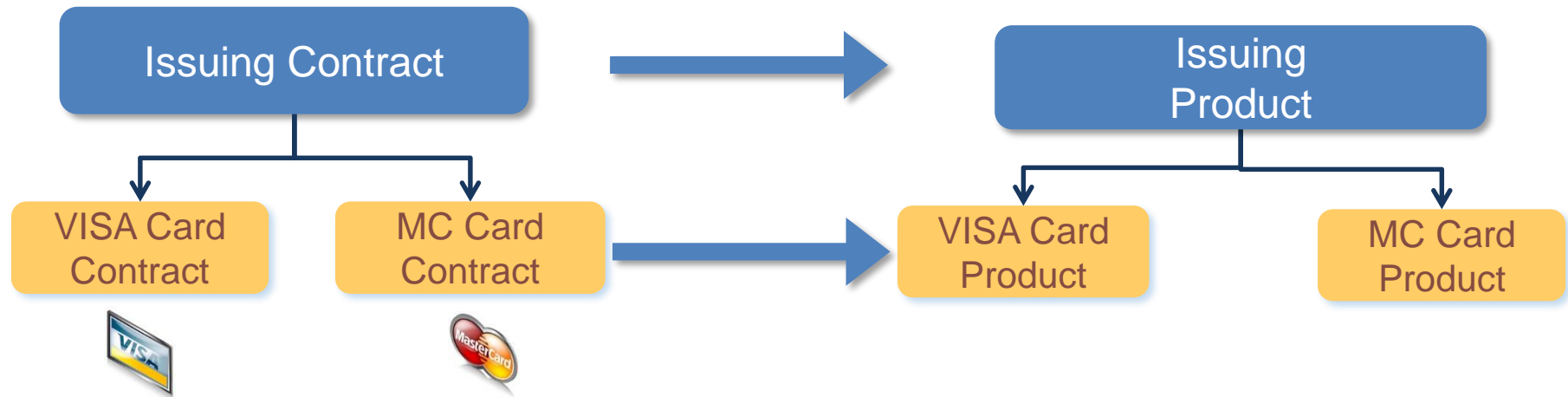
# Product Setup



# Product Specification



# 2 level Product Hierarchy



ROOT.OpenWay.Full.Configuration Setup.Products.Product Definition.Products

Products <Filtered*>																
	Institution	Client	Product	Contract	Product Group	Name	Acc Scheme	Tariff Domain	Is Ready	Product Template	Contr Subtype	Service Pack	Report Type	Date Scheme	Code	Custom Data
	Principal	Private	Issuing	Account	Issuing Debit	001-Simple Credit Product	001-Full Iss USD Priv		Ready		001-Private Client Account	001-Accounting Private			SMPL_CR	VERS=<PV170920140434>
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Subs for 001-Simple Credit Product																
	Name		Contract	Contr Subtype		Service Pack		Auth Sc		Code	Report Type	Product Group		Is Ready		
	001-VISA CREDIT SIMPLE		Card	001-VISA CLASS		001-Our Priv VISA		See main		SMPL_VISA_CR		Issuing Debit		Ready		
2	001-MC CREDIT SIMPLE		Card	001-EC/MC STAND		001-Our Priv EC/MC		See main		SMPL_MC_CR		Issuing Debit		Ready		
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# Conclusion

- ✓ Main Concept
- ✓ Product Components
- ✓ Stages of Product Setup

GO ahead!

