

Account and Transaction API - Logical Model

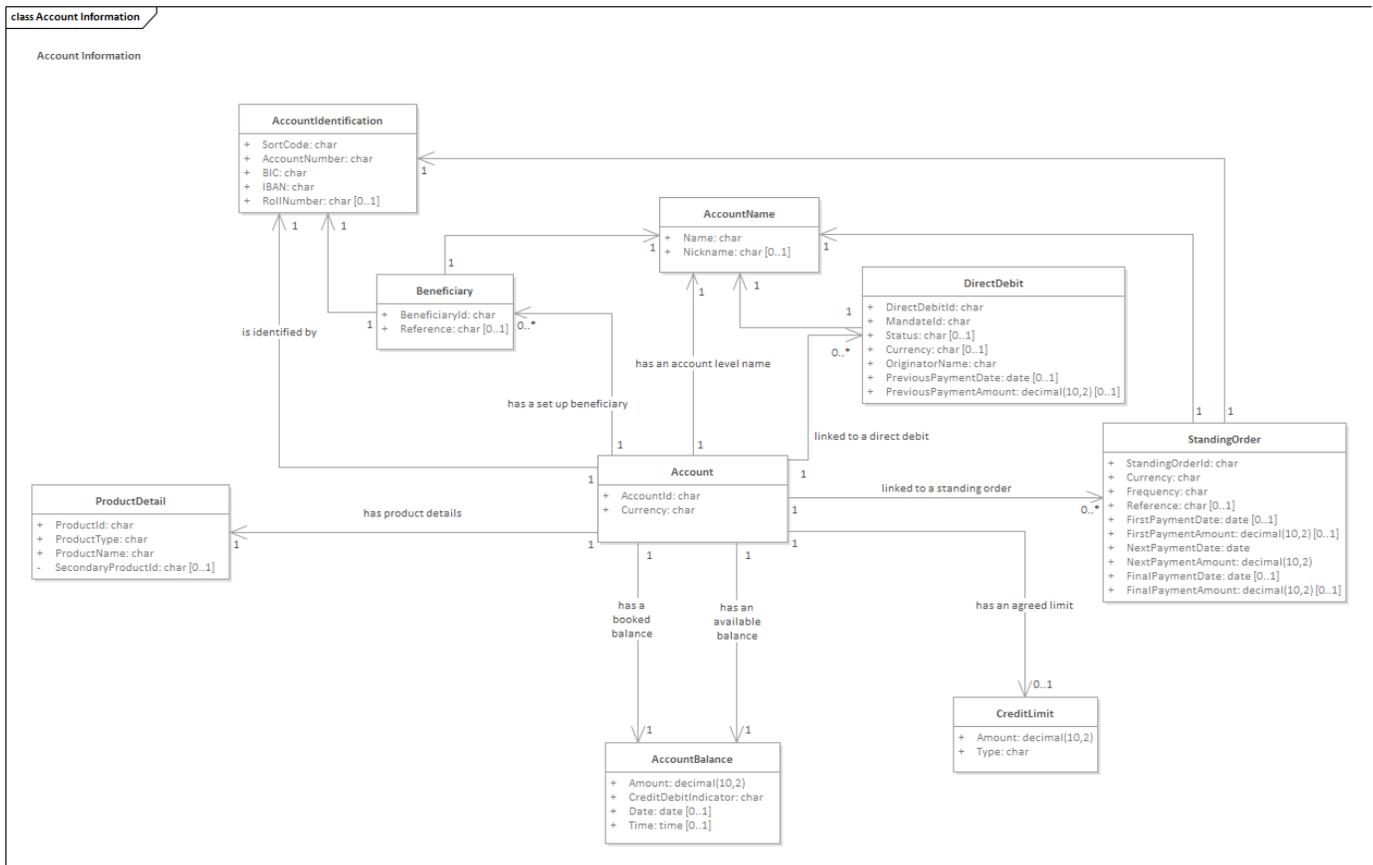
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This are the logical models for the Account Information and Transaction data for the initial release scope which was agreed in Workshop 7.

This initial release scope is documented here [Account/Transaction API MVP](#) after consensus voting. The purpose of the logical model is to describe the subject area - and how data entities relate, and to inform the design of the physical message models in the Technical Specification here: [Account/Transaction Draft Specification](#).

All **attributes** are mandatory - unless specified (with 0..1)

Account Information



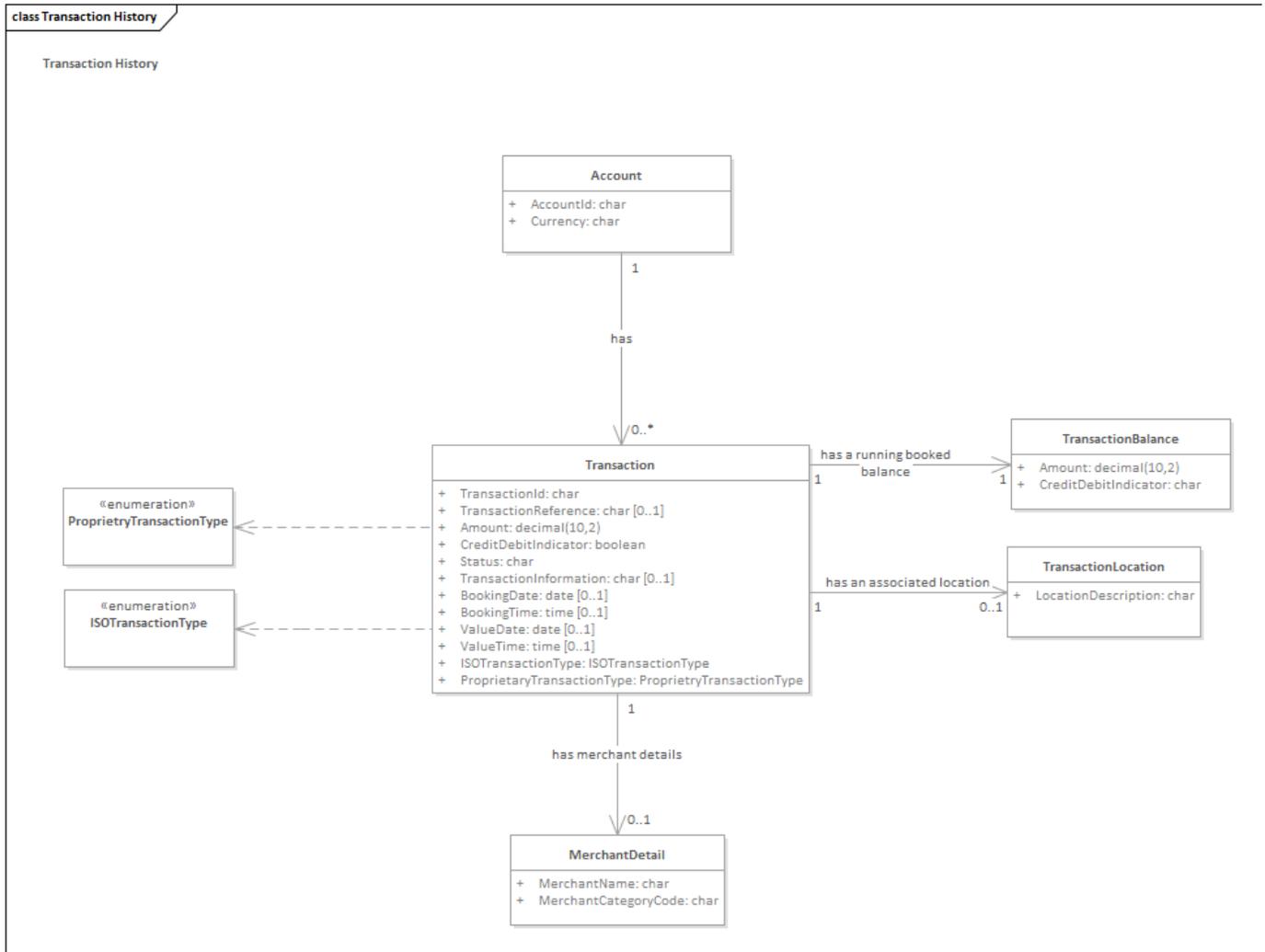
Notes

- The account level name is the name (or names) linked to the account at an account level. E.g., for a joint account this can be Mr David Jones and Mrs Emma Jones

Changes

- CreditLimit has been separated again from the Account class - this has been done to accommodate a Type attribute for the CreditLimit - as CMA9 members have feedback that there can be multiple different types of credit limits that affect the available balance
- Additional attributes have been specified for DirectDebit and StandingOrder - as the view from feedback was these classes provide little value without these elements
- A Beneficiary class has been added - which reflects set up (or trusted) accounts
- Added a Nickname attribute to the AccountName class - but specified this as optional - as some CMA9 members provide this functionality online (as suggested via feedback)
- Added a SecondaryProductId to the ProductDetail class - which may be used to additionally identify product details linked to an account

Transaction History



Notes

- We've agreed the principle to model the Transaction Types using the ISO standard - for the physical message models
- TransactionLocation and MerchantDetail are optional because they will not exist for all Transaction Types
- Propose to use the booked balance for the running balance - as this aligns with MiData (which used the posted balance)

Changes

- Specified a TransactionId which is a unique and immutable identifier for the transaction. This has been set as optional.

- Specified a TransactionReference - which is a reference unique to a payment rail - such as an FPS reference Id.
- Made explicit the ISOTransactionType and the ProprietaryTransactionType
- Corrected attributes types for TransactionBalance class

Class Definitions

Class	Definition
Account	The main class that represents the account to which credit and debit entries are made.
AccountIdentification	A set of elements that identify the account between the account servicer and the account owner.
AccountName	A set of elements that describe the name of the account (which is different to the account owner's name).
ProductDetail	A set of elements that describe the product details specific to the account.
AccountBalance	Representation of the net increases and decreases in an account at a specific point in time.
CreditLimit	A set of elements that describe the lines of credit, agreed between the account servicer and account owner, specific to the account.
Beneficiary	A set of elements that describe the list of trusted beneficiaries linked to a specific account.
DirectDebit	A set of elements that describe the list of direct debits that have been set up on a specific account.
StandingOrder	A set of elements that describe the list of standing orders that have been set up on a specific account.
Transaction	A posting to an account that results in an increase or decrease to a balance.
TransactionBalance	Representation of the net increases and decreases in an account - once the transaction has been applied.
TransactionLocation	Location information relating to a transaction – this may be the location of the transaction or the merchant.
TransactionMerchant	Merchant details relating to a transaction.

Attribute Definitions

Class	Attribute	Data Type	Occurrence	Definition
Account	AccountId	char	Mandatory	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
Account	Currency	char	Mandatory	Identification of the currency in which the account is held. Usage: Currency should only be used in case one and the same account number covers several currencies and the initiating party needs to identify which currency needs to be used for settlement on the account.
AccountIdentification	SortCode	char	Mandatory	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS).
AccountIdentification	AccountNumber	char	Mandatory	Unique and unambiguous identification for the account between the account owner and the account servicer - unique for each SortCode.
AccountIdentification	BIC	char	Mandatory	The Bank Identifier Code is an international code that banks use for financial transactions. Each bank has its own BIC. This way, European and international payment orders automatically arrive at the correct bank and branch. The BIC is also called a SWIFT address or SWIFT code. The BIC can be 8 or 11 characters long depending if it supplies branch information.

AccountIdentification	IBAN	char	Mandatory	The International Bank Account Number is a unique identifier helping banks process payments from person to person automatically. The IBAN contains all necessary information of the owner if a bank account such as the account number, bank and branch information and country code. Although no uniform length has been established for SEPA countries, the IBAN cannot exceed 34 characters. Most countries however, have different fixed lengths. Our validator automatically detects the country and length of the IBAN in order to make an accurate validation.
AccountIdentification	RollNumber	char	Optional	A roll number is used by building societies to additionally identify accounts (in addition to a sort code and account number combination).
AccountName	Name	char	Mandatory	Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account. Usage: The account name is different from the account owner name. The account name is used in certain user communities to provide a means of identifying the account, in addition to the account owner's identity and the account number.
AccountName	Nickname	char	Optional	The nickname of the account, assigned by the account owner in order to provide an additional means of identification of the account.
ProductDetail	ProductId	char	Mandatory	Identifier within the parent organisation for the product. Must be unique in the organisation.
ProductDetail	ProductType	char	Mandatory	Descriptive code for the product category.
ProductDetail	ProductName	char	Mandatory	The name of the product used for marketing purposes from a customer perspective. I.e. what the customer would recognise.
ProductDetail	SecondaryProductId	char	Optional	Secondary identification within the parent organisation for the product. Must be unique in the organisation.
AccountBalance	Amount	decimal(10,2)	Mandatory	Amount of money of the cash balance.
AccountBalance	CreditDebitIndicator	char	Mandatory	Indicates whether the balance is a credit or a debit balance. Usage: A zero balance is considered to be a credit balance.
AccountBalance	Date	date	Optional	Indicates the date of the balance.
AccountBalance	Time	time	Optional	Indicates the time of the balance.
CreditLimit	Amount	decimal(10,2)	Mandatory	Amount of money of the credit line.
CreditLimit	Type	char	Mandatory	Limit type, in a coded form.
Beneficiary	BeneficiaryId	char	Mandatory	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
Beneficiary	Reference	char	Optional	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction. Usage: If available, the initiating party should provide this reference in the structured remittance information, to enable reconciliation by the creditor upon receipt of the amount of money.
DirectDebit	DirectDebitId	char	Mandatory	A unique and immutable identifier used to identify the direct debit resource. This identifier has no meaning to the account owner.
DirectDebit	Mandateld	char	Mandatory	Direct Debit reference. For AUDDIS service users provide Core Reference. For non AUDDIS service users provide Core reference if possible or last used reference.
DirectDebit	Status	char	Optional	Specifies the status of the direct debit in code form.
DirectDebit	Currency	char	Optional	Identification of the currency in which the account is held.
DirectDebit	OriginatorName	char	Mandatory	Name of Service User.
DirectDebit	PreviousPaymentDate	date	Optional	Date of most recent direct debit collection.
DirectDebit	PreviousPaymentAmount	decimal(10,2)	Optional	The amount of the most recent direct debit collection.
StandingOrder	StandingOrderId	char	Mandatory	A unique and immutable identifier used to identify the standing order resource. This identifier has no meaning to the account owner.
StandingOrder	Currency	char	Mandatory	Identification of the currency in which the account is held.
StandingOrder	Frequency	char	Mandatory	Frequency of the standing order.

StandingOrder	Reference	char	Optional	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction. Usage: If available, the initiating party should provide this reference in the structured remittance information, to enable reconciliation by the creditor upon receipt of the amount of money.
StandingOrder	FirstPaymentDate	date	Optional	The date on which the first payment for a Standing Order schedule will be made.
StandingOrder	FirstPaymentAmount	decimal(10,2)	Optional	The amount of the first Standing Order
StandingOrder	NextPaymentDate	date	Mandatory	The date on which the next payment for a Standing Order schedule will be made.
StandingOrder	NextPaymentAmount	decimal(10,2)	Mandatory	The amount of the next Standing Order
StandingOrder	FinalPaymentDate	date	Optional	The date on which the final payment for a Standing Order schedule will be made.
StandingOrder	FinalPaymentAmount	decimal(10,2)	Optional	The amount of the final Standing Order
Transaction	TransactionId	char	Mandatory	
Transaction	TransactionReference	char	Optional	Unique reference for the transaction. This reference is optionally populated, and may as an example be the FPID in the Faster Payments context.
Transaction	Amount	decimal(10,2)	Mandatory	Amount of money in the cash transaction entry.
Transaction	CreditDebitIndicator	char	Mandatory	Indicates whether the transaction is a credit or a debit entry.
Transaction	Status	char	Mandatory	Status of a transaction entry on the books of the account servicer.
Transaction	TransactionInformation	char	Optional	Further details of the transaction. This is the transaction narrative, which in unstructured text.
Transaction	BookingDate	date	Optional	Date when a transaction entry is posted to an account on the account servicer's books. Usage: Booking date is the expected booking date, unless the status is booked, in which case it is the actual booking date
Transaction	BookingTime	time	Optional	Time when a transaction entry is posted to an account on the account servicer's books. Usage: Booking date is the expected booking date, unless the status is booked, in which case it is the actual booking date
Transaction	ValueDate	date	Optional	Date at which assets become available to the account owner in case of a credit entry, or cease to be available to the account owner in case of a debit transaction entry. Usage: If transaction entry status is pending and value date is present, then the value date refers to an expected/requested value date. For transaction entries subject to availability/float and for which availability information is provided, the value date must not be used. In this case the availability component identifies the number of availability days.
Transaction	ValueTime	time	Optional	Time at which assets become available to the account owner in case of a credit entry, or cease to be available to the account owner in case of a debit transaction entry. Usage: If transaction entry status is pending and value date is present, then the value date refers to an expected/requested value date. For transaction entries subject to availability/float and for which availability information is provided, the value date must not be used. In this case the availability component identifies the number of availability days.
Transaction	ISOTransactionType	enumeration	Mandatory	Set of elements used to fully identify the type of underlying transaction resulting in an entry.
Transaction	ProprietaryTransactionType	enumeration	Mandatory	Set of elements to fully identify a proprietary bank transaction code.
TransactionBalance	Amount	decimal(10,2)	Mandatory	Amount of money of the cash balance after a transaction entry is applied to the account..
TransactionBalance	CreditDebitIndicator	char	Mandatory	Indicates whether the balance is a credit or a debit balance. Usage: A zero balance is considered to be a credit balance.
TransactionLocation	LocationDescription	char	Mandatory	Information that locates and identifies a specific address for a transaction entry, that is presented in free format text.
TransactionMerchant	MerchantName	char	Mandatory	Name by which the merchant is known.

TransactionMerchant	MerchantCategoryCode	char	Mandatory	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.
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