

Account and Transaction API - Logical Model

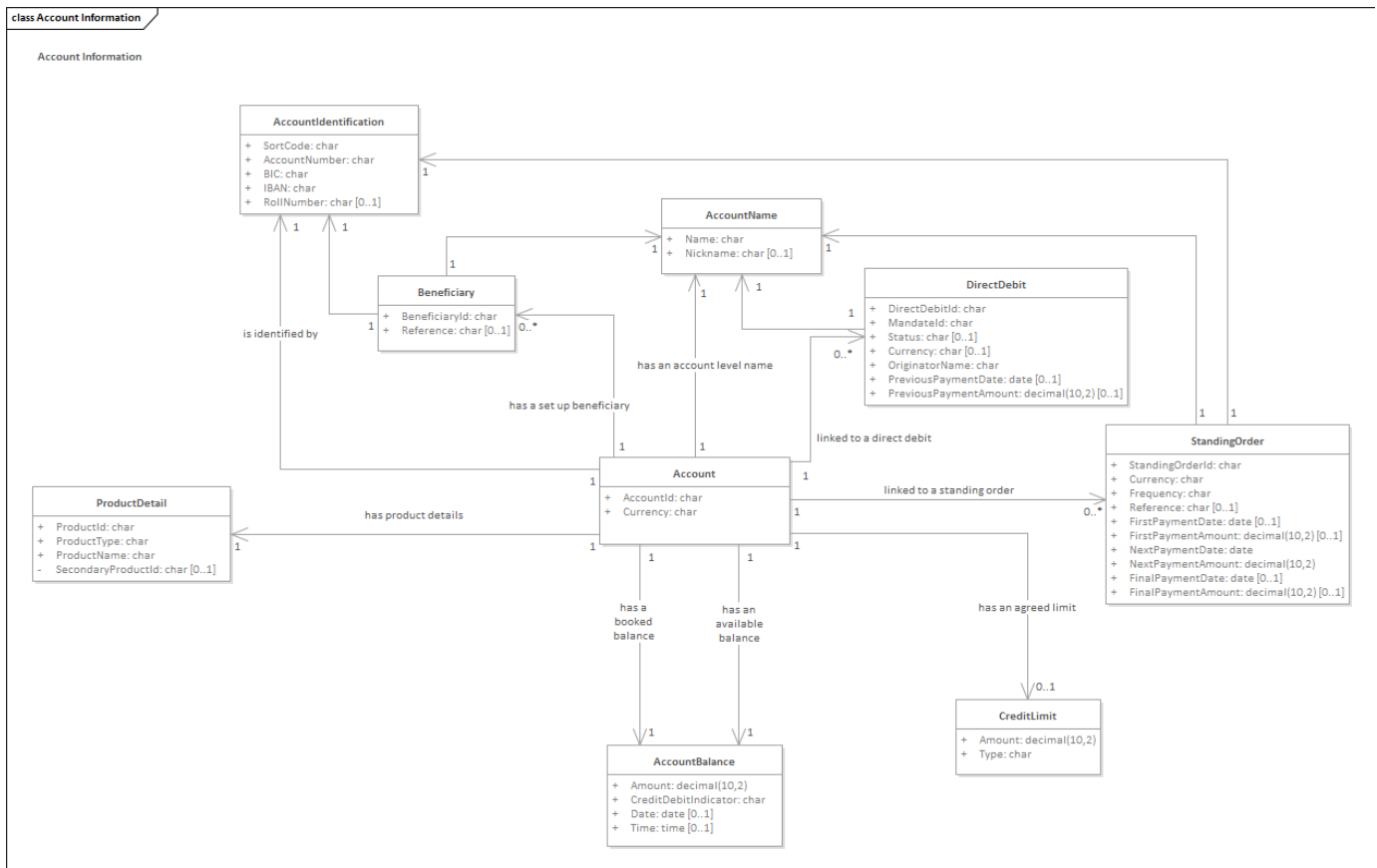
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This are the logical models for the Account Information and Transaction data for the initial release scope which was agreed in Workshop 7.

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



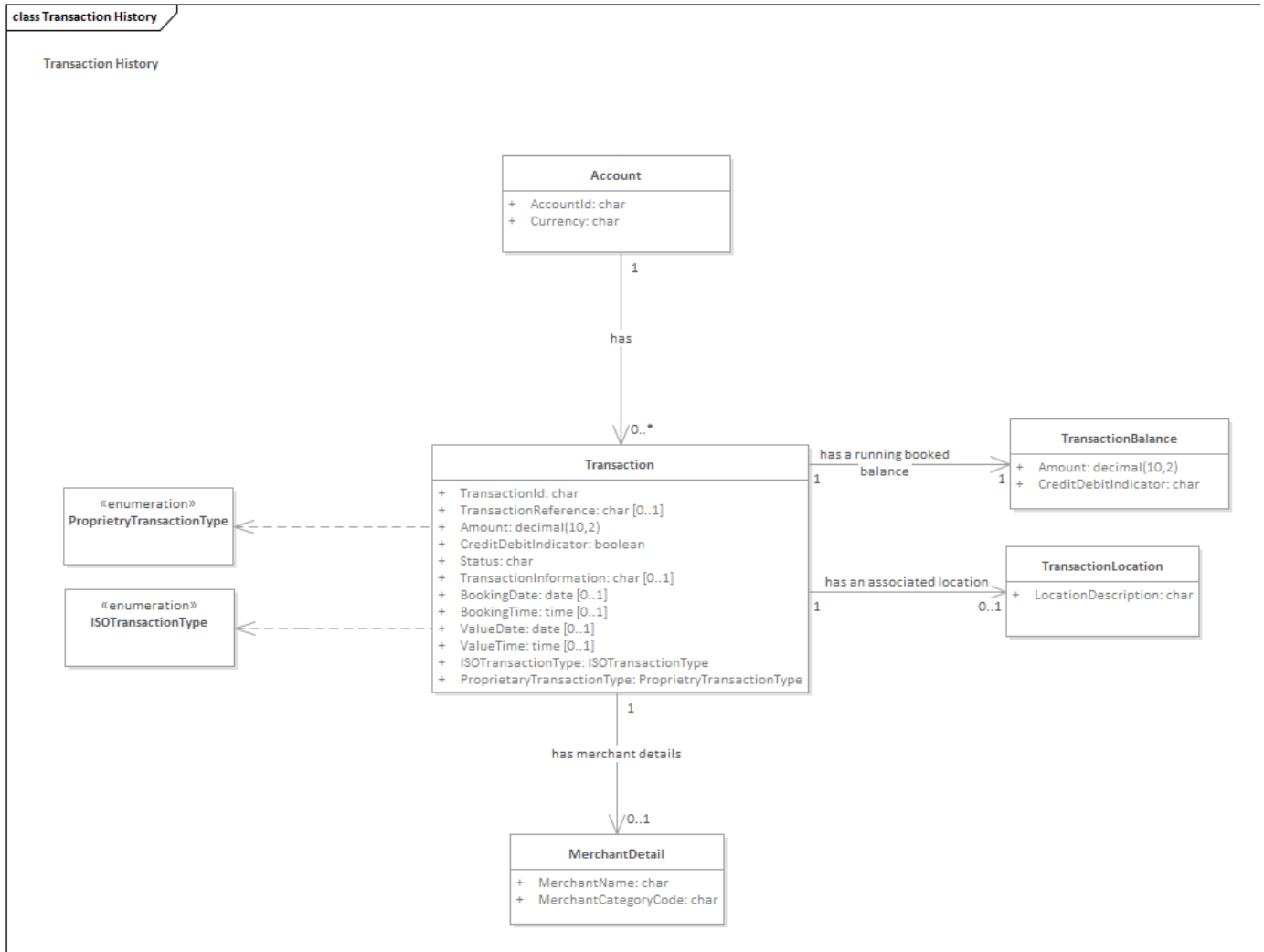
Notes

- 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. |

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| 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. |

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| 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. |

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| 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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