

TM Forum Specification

Account Management

TMF666

Maturity Level: General availability	Team Approved Date: 29-09-2023
Release Status: Production	Approval Status: Team Approved
Version 5.0.0	IPR Mode: RAND

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Introduction

The Account API provides standardized mechanism for the management of billing and settlement accounts, as well as for financial accounting (account receivable) contexts.

It allows creation, update and retrieval of account information for common business models such as B2C, B2B2C (creation of mass market customer billing account within a “Billing on Behalf of” process for example), or B2B (creation of a billing/settlement account for a partner or B2B customer).

It also allows creation and query of bill items allowing partners or customers to check their invoice.

Accounts typically refer to parties and party roles. However the management of party and party roles is out of the scope of this API. The TMF APIs Party Management, Customer Management and Party Role Management are used for this purpose.

Sample Use Cases

Reader will find example of use cases using Usage API in “Open Digital Architecture Business Scenarios and Use Cases” document IG1228.

Support of polymorphism and extension patterns

Support of polymorphic collections and types and schema based extension is provided by means of a list of generic meta-attributes that we describe below. Polymorphism in collections occurs when entities inherit from base entities, for instance a `BillingAccount` and `SettlementAccount` inheriting properties from the abstract `Account` entity.

Generic support of polymorphism and pattern extensions is described in the TMF API Guidelines v3.0 Part 2 document.

The `@type` attribute provides a way to represent the actual class type of an entity. For example, within a list of `Account` instances some may be instances of `BillingAccount` where other could be instances of `SettlementAccount`. The `@type` gives this information. All resources and sub-resources of this API have a `@type` attributes that can be provided when this is useful.

The `@referredType` can be used within reference entities (like for instance an `AccountRef` object) to explicitly denote the actual entity type of the referred class. Notice that in reference entities the `@type`, when used, denotes the class type of the reference itself, such as `BillingAccountRef` or `SettlementAccountRef`, and not the class type of the referred object. However since reference classes are rarely sub-classed, `@type` is generally not useful in reference objects.

The `@schemaLocation` property can be used in resources to allow specifying user-defined properties of an Entity or to specify the expected *characteristics* of an entity.

The `@baseType` attribute gives a way to provide explicitly the base of class of a given resource that has been extended.

RESOURCE MODEL

Managed Entity and Task Resource Models

BillFormat resource

A detailed description of the way in which a bill is presented.

Resource model

BillFormat
description : String href : String id : String name : String @baseType : String @schemaLocation : String @type = BillFormat

(1) : Mandatory property

Figure 1 - BillFormat

Field descriptions

BillFormat fields

description	A String. An explanatory text for this bill format.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. A short descriptive name.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Json representation sample(s)

We provide below a JSON representation as example of the 'BillFormat' resource object.

```
{
  "@type": "BillFormat",
  "description": "This bill format describes a fancy layout for our youth
submarket",
  "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/8718",
  "id": "8718",
  "name": "Detailed invoice for youth market"
```

}

PartyAccount resource

Account used for billing or for settlement purposes concerning a given party (an organization or an individual). It is a specialization of entity Account.

Resource model

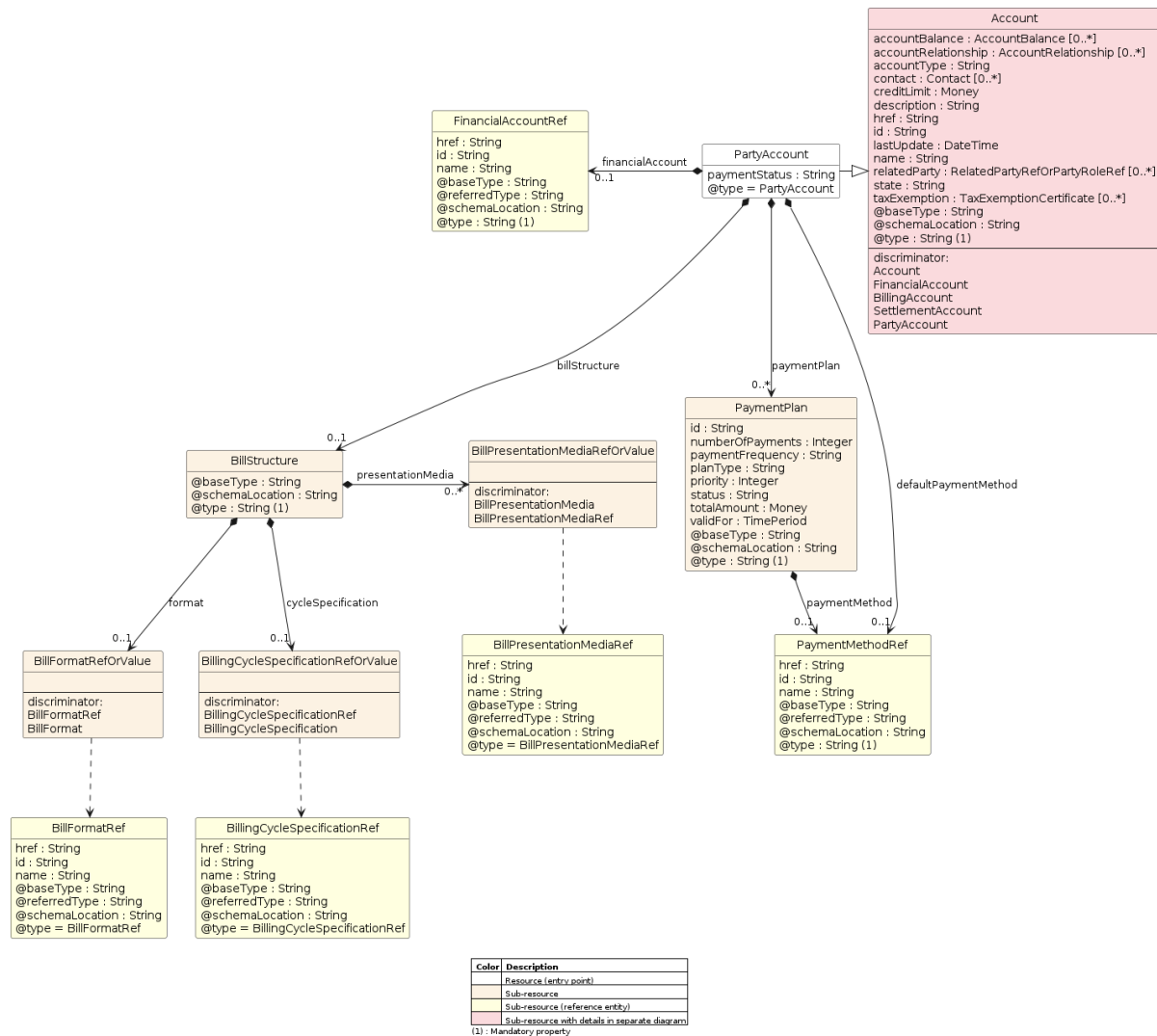


Figure 2 - PartyAccount

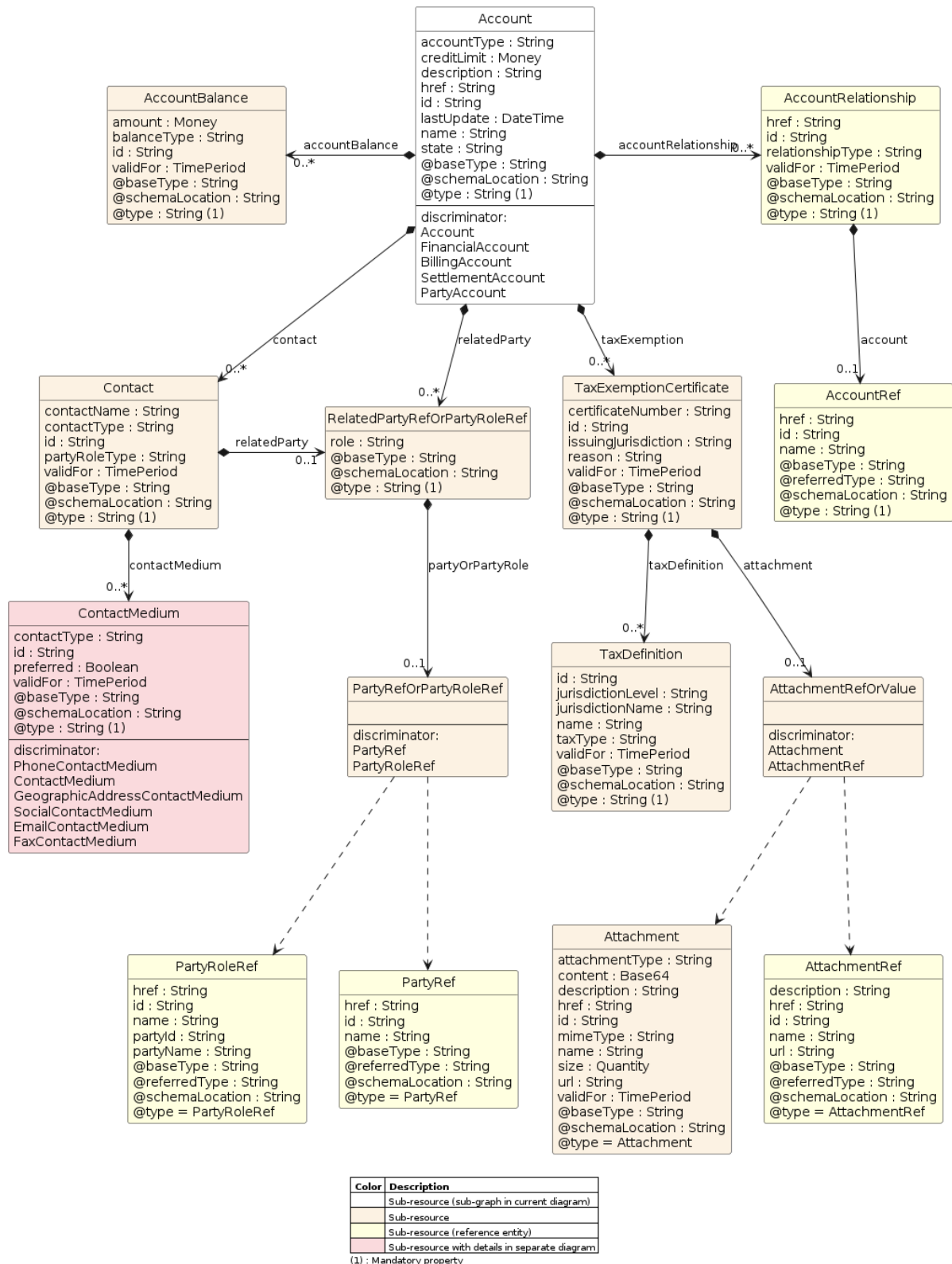


Figure 3 - Account

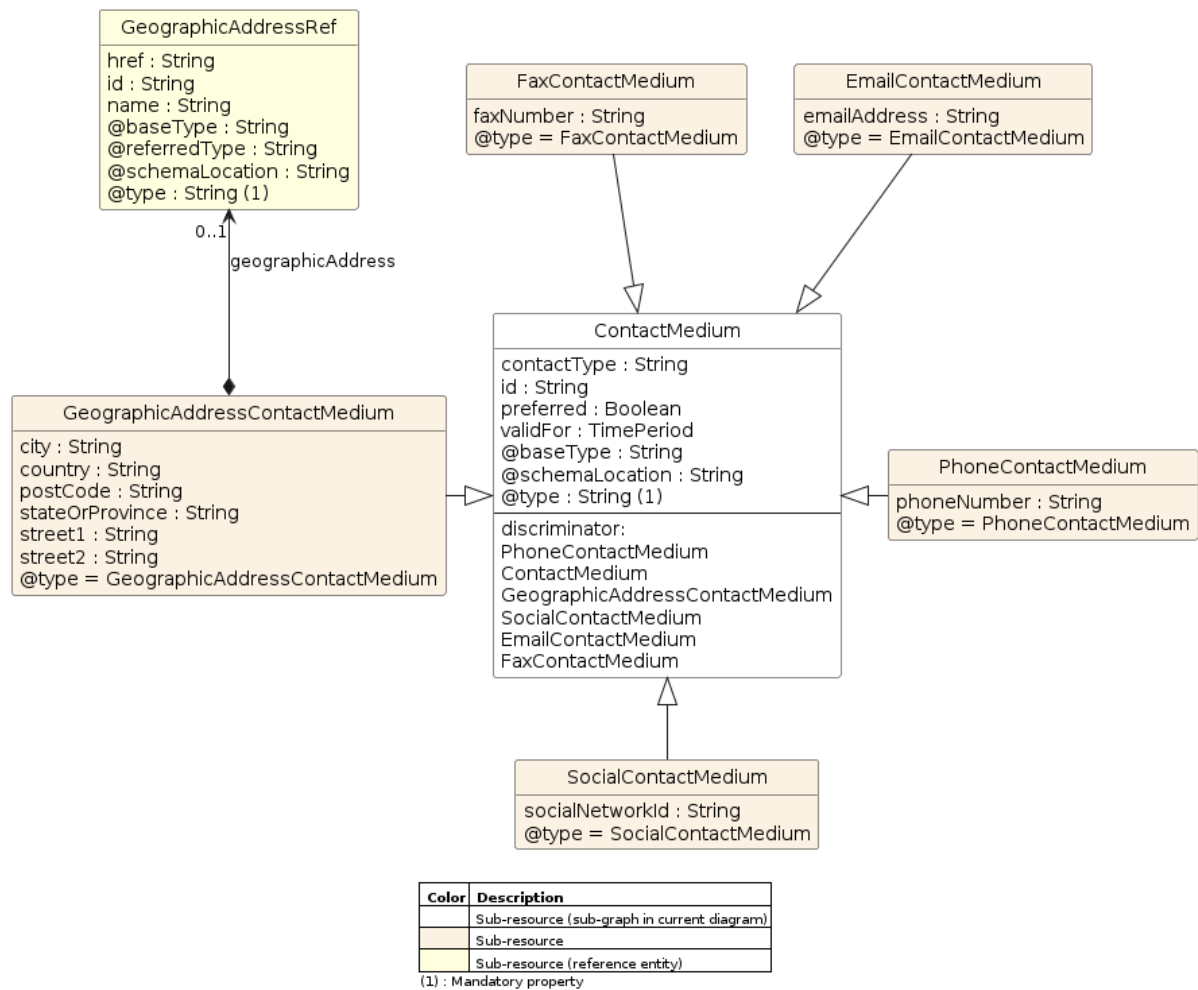


Figure 4 - ContactMedium

Field descriptions

PartyAccount fields

accountBalance	An AccountBalance. List of balances for the account, for example regular postpaid balance, deposit balance, write-off balance.
accountRelationship	An AccountRelationship. List of balances related to the account. For example a list of billing accounts that contribute to a financial account.
accountType	A String. A categorization of an account, such as individual, joint, and so forth, whose instances share some of the same characteristics. Note: for flexibility we use a String here but an implementation may use an enumeration with a limited list of valid values.
billStructure	A BillStructure. The structure of the bill for party accounts (billing or settlement).
contact	A Contact. List of people who could be contacted regarding the account, for example the accountant who authorizes payments.

creditLimit	A Money. A base / value business entity used to represent money.
defaultPaymentMethod	A PaymentMethodRef. PaymentMethod reference. A payment method defines a specific mean of payment (e.g direct debit).
description	A String. Detailed description of the account.
financialAccount	A FinancialAccountRef. AccountReceivable reference. An account of money owed by a party to another entity in exchange for goods or services that have been delivered or used. An account receivable aggregates the amounts of one or more party accounts (billing or settlement) owned by a given party.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
lastUpdate	A DateTime. The date and time that the account was last updated.
name	A String. Name of the account.
paymentPlan	A PaymentPlan. A list of payment plans that are active or expired for the account, for example if the customer had difficulty in paying.
paymentStatus	A String. The condition of the account, such as due, paid, in arrears.
relatedParty	A RelatedPartyRefOrPartyRoleRef. List of parties that have some relationship with the account, for example the customer to whom the account belongs.
state	A String. Contains the lifecycle state such as: Active, Closed, Suspended and so on.
taxExemption	A TaxExemptionCertificate. List of tax exemptions that can be applied when calculating charges levied to the account.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Account sub-resource fields

accountBalance	An AccountBalance. List of balances for the account, for example regular postpaid balance, deposit balance, write-off balance.
accountRelationship	An AccountRelationship. List of balances related to the account. For example a list of billing accounts that contribute to a financial account.

accountType	A String. A categorization of an account, such as individual, joint, and so forth, whose instances share some of the same characteristics. Note: for flexibility we use a String here but an implementation may use an enumeration with a limited list of valid values.
contact	A Contact. List of people who could be contacted regarding the account, for example the accountant who authorizes payments.
creditLimit	A Money. A base / value business entity used to represent money.
description	A String. Detailed description of the account.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
lastUpdate	A DateTime. The date and time that the account was last updated.
name	A String. Name of the account.
relatedParty	A RelatedPartyRefOrPartyRoleRef. List of parties that have some relationship with the account, for example the customer to whom the account belongs.
state	A String. Contains the lifecycle state such as: Active, Closed, Suspended and so on.
taxExemption	A TaxExemptionCertificate. List of tax exemptions that can be applied when calculating charges levied to the account.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountBalance sub-resource fields

amount	A Money. A base / value business entity used to represent money.
balanceType	A String. Type of the balance : deposit balance, disputed balance, loyalty balance, receivable balance...
id	A String. Identifier of the balance within list of the balances (for entities with list).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountRelationship sub-resource fields

account	An AccountRef. Account reference. A account may be a party account or a financial account.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
relationshipType	A String. Type of relationship.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Attachment sub-resource fields

attachmentType	A String. A business characterization of the purpose of the attachment, for example logo, instructionManual, contractCopy.
content	A Base64. The actual contents of the attachment object, if embedded, encoded as base64.
description	A String. A narrative text describing the content of the attachment.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
contentType	A String. A technical characterization of the attachment content format using IETF Mime Types.
name	A String. The name of the attachment.
size	A Quantity. An amount in a given unit.

url	A String. Uniform Resource Locator, is a web page address (a subset of URI).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AttachmentRef sub-resource fields

description	A String. A narrative text describing the content of the attachment.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
url	A String. Link to the attachment media/content.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillFormat sub-resource fields

description	A String. An explanatory text for this bill format.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. A short descriptive name.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillFormatRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.

name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillPresentationMedia sub-resource fields

description	A String. An explanatory text describing this bill presentation media.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. A short descriptive name.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillPresentationMediaRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillStructure sub-resource fields

cycleSpecification	A BillingCycleSpecificationRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the BillingCycleSpecification entity and not the BillingCycleSpecificationRefOrValue class itself.
--------------------	--

format	A BillFormatRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the BillFormat entity and not the BillFormatRefOrValue class itself.
presentationMedia	A BillPresentationMediaRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the BillPresentationMedia entity and not the BillPresentationMediaRefOrValue class itself.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillingCycleSpecification sub-resource fields

billingDateShift	An Integer. An offset of a billing/settlement date. The offset is expressed as number of days with regard to the start of the billing/settlement period.
billingPeriod	A String. A billing time period. It can be recurring, for example: week, month, quarter of year, year .
chargeDateOffset	An Integer. An offset of a date through which charges previously received by the billing system will appear on the bill. The offset is expressed as number of days with regard to the start of the BillingPeriod.
creditDateOffset	An Integer. An offset of a date through which credits previously received by the billing system will appear on the bill. The offset is expressed as number of days with regard to the start of the BillingPeriod.
description	A String. An explanation regarding this billing cycle specification.
frequency	A String. Frequency of the billing cycle (monthly for instance).
href	A String. Hyperlink reference.
id	A String. Unique identifier.
mailingDateOffset	An Integer. An offset of a customer bill mailing date. The offset is expressed as number of days with regard to the start of the BillingPeriod.
name	A String. A short descriptive name.
paymentDueDateOffset	An Integer. An offset of a payment due date. The offset is expressed as number of days with regard to the start of the BillingPeriod.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.

@type	A String. When sub-classing, this defines the sub-class Extensible name.
-------	--

BillingCycleSpecificationRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Contact sub-resource fields

contactMedium	A ContactMedium. List of contact mediums for the contact, such as mobile phone number, email address, etc.
contactName	A String. A displayable name for that contact.
contactType	A String. Type of contact (primary, secondary...).
id	A String. Identifier of the contact within list of the contacts (for entities with list).
partyRoleType	A String. Identifies what kind of party role type is linked to the contact (a account manager...).
relatedParty	A RelatedPartyRefOrPartyRoleRef. RelatedParty reference. A related party defines party or party role or its reference, linked to a specific entity.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

ContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.

preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

EmailContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
emailAddress	A String. Full email address in standard format.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

FaxContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
faxNumber	A String. The fax number of the contact.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

FinancialAccountRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

GeographicAddressContactMedium sub-resource fields

city	A String. The city.
contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
country	A String. The country.
geographicAddress	A GeographicAddressRef. Reference to a Geographic Address.
id	A String. Identifier for this contact medium.
postCode	A String. Postcode.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
stateOrProvince	A String. State or province.
street1	A String. Describes the street.
street2	A String. Complementary street description.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

GeographicAddressRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.

@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PartyRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PartyRoleRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
partyId	A String. The identifier of the engaged party that is linked to the PartyRole object.
partyName	A String. The name of the engaged party that is linked to the PartyRole object.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PaymentMethodRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.

@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PaymentPlan sub-resource fields

id	A String. Identifier of the plan within list of the plans (for entities with list).
numberOfPayments	An Integer. Number of payments used to spread the global payment.
paymentFrequency	A String. Frequency of the payments, such as monthly and bimonthly.
paymentMethod	A PaymentMethodRef. PaymentMethod reference. A payment method defines a specific mean of payment (e.g direct debit).
planType	A String. Type of payment plan.
priority	An Integer. Priority of the payment plan.
status	A String. Status of the payment plan (effective, ineffective).
totalAmount	A Money. A base / value business entity used to represent money.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PhoneContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.
phoneNumber	A String. The phone number of the contact.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.

@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

RelatedPartyRefOrPartyRoleRef sub-resource fields

partyOrPartyRole	A PartyRefOrPartyRoleRef.
role	A String. Role played by the related party or party role in the context of the specific entity it is linked to. Such as 'initiator', 'customer', 'salesAgent', 'user'.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

SocialContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
socialNetworkId	A String. Identifier as a member of a social network.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

TaxDefinition sub-resource fields

id	A String. Unique identifier of the tax.
jurisdictionLevel	A String. Level of the jurisdiction that levies the tax.
jurisdictionName	A String. Name of the jurisdiction that levies the tax.
name	A String. Tax name.
taxType	A String. Type of the tax.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.

@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

TaxExemptionCertificate sub-resource fields

attachment	An AttachmentRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the Attachment entity and not the AttachmentRefOrValue class itself.
certificateNumber	A String. Identifier of a document that shows proof of exemption from taxes for the taxing jurisdiction.
id	A String. Identifier of the tax exemption within list of the exemptions.
issuingJurisdiction	A String. Name of the jurisdiction that issued the exemption.
reason	A String. Reason for the tax exemption.
taxDefinition	A TaxDefinition. A list of taxes that are covered by the exemption, e.g. City Tax, State Tax. The definition would include the exemption (e.g. for a rate exemption 0% would be a full exemption, 5% could be a partial exemption if the actual rate was 10%).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Json representation sample(s)

We provide below a JSON representation as example of the 'PartyAccount' resource object.

```
{
  "@type": "PartyAccount",
  "creditLimit": {
    "unit": "USD",
    "value": 20000
  },
  "description": "This party account ...",
  "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/4458",
  "id": "4458",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Travel account",
  "state": "Suspended",
  "accountType": "Business",
  "paymentStatus": "In Arrears",
  "billStructure": {
    "@type": "BillStructure",
    "presentationMedia": [
```

```

    {
      "@type": "BillPresentationMedia",
      "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/8800",
      "id": "8800",
      "name": "Electronic"
    },
    {
      "format": {
        "@type": "BillFormat",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billFormat/4824",
        "id": "4824",
        "name": "Summary invoice"
      },
      "cycleSpecification": {
        "@type": "BillingCycleSpecification",
        "dateShift": 8,
        "frequency": "monthly",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/1309",
        "id": "1309",
        "name": "Monthly billing"
      }
    },
    {
      "paymentPlan": [
        {
          "@type": "PaymentPlan",
          "numberOfPayments": 12,
          "paymentFrequency": "monthly",
          "priority": 2,
          "status": "Ineffective",
          "totalAmount": {
            "unit": "USD",
            "value": 100.0
          },
          "planType": "regular",
          "validFor": {
            "startDateTime": "2018-06-17T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
          },
          "paymentMethod": {
            "@type": "PaymentMethodRef",
            "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/6895",
            "id": "6895",
            "name": "family payment"
          }
        }
      ],
      "financialAccount": {
        "@referredType": "FinancialAccount",
        "@type": "FinancialAccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/2209",
        "id": "2209",
        "name": "Travel account"
      },
      "defaultPaymentMethod": {
        "@type": "PaymentMethodRef",
        "href": "https://host:port/tmf-api/paymentMethods/v5/paymentMethod/6514",
        "id": "6514",
        "name": "family payment"
      }
    }
  ]
}

```

```

    },
    "relatedParty": [
      {
        "role": "owner",
        "@type": "RelatedPartyRefOrPartyRoleRef",
        "partyOrPartyRole": {
          "@type": "PartyRefOrPartyRoleRef",
          "@referredType": "Organization",
          "href": "https://host:port/tmf-api/partyManagement/v5/party/4665",
          "id": "4665",
          "name": "John Doe Ltd"
        }
      }
    ],
    "taxExemption": [
      {
        "@type": "TaxExemption",
        "certificateNumber": "45678889876",
        "issuingJurisdiction": "USA",
        "reason": "Embassy",
        "taxDefinition": [
          {
            "@type": "TaxDefinition",
            "id": "96",
            "name": "Value Added Tax",
            "taxType": "federalVat"
          }
        ],
        "attachment": {
          "@type": "Attachment",
          "id": "654321234334534552",
          "href": "https://host:port/tmf-api/document/v5/attachment/654321234334534552",
          "attachmentType": "taxExemptionCertificate",
          "name": "TaxExemptionCertificate-654321.pdf",
          "description": "Electronic version of the tax exemption certificate",
          "mimeType": "application/pdf",
          "url": "http://host:port/DocumentManager/666/TaxExemptionCertificate-654321.pdf"
        },
        "validFor": {
          "startDateTime": "2018-06-13T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        }
      }
    ],
    "contact": [
      {
        "@type": "Contact",
        "contactName": "Anna Cristal",
        "contactType": "primary",
        "partyRoleType": "Publisher",
        "validFor": {
          "startDateTime": "2018-06-11T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "contactMedium": [
          {
            "@type": "GeographicAddressContactMedium",
            "preferred": true,
            "mediumType": "PostalAddress",

```

```

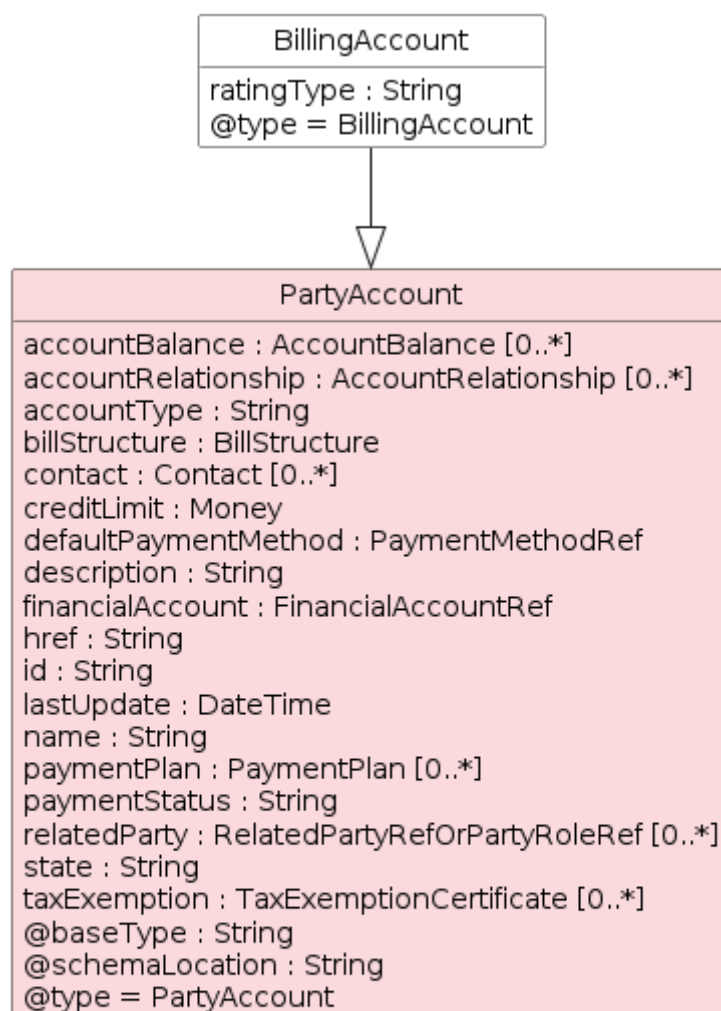
        "validFor": {
            "startDateTime": "2018-06-14T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "city": "Paris",
        "country": "France",
        "postCode": "75014",
        "street1": "15 Rue des Canards"
    }
},
"relatedParty": {
    "role": "owner",
    "@type": "RelatedPartyRefOrPartyRoleRef",
    "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/party/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
    }
}
},
],
"accountBalance": [
    {
        "@type": "AccountBalance",
        "amount": {
            "unit": "USD",
            "value": 53.29
        },
        "balanceType": "DepositBalance",
        "validFor": {
            "startDateTime": "2018-06-13T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        }
    }
],
"accountRelationship": [
    {
        "@type": "AccountRelationship",
        "relationshipType": "contains",
        "validFor": {
            "startDateTime": "2018-06-10T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "account": {
            "@referredType": "BillingAccount",
            "@type": "AccountRef",
            "href": "https://host:port/tmf-
api/accountManagement/v5/billingAccount/9522",
            "id": "9522",
            "name": "Travel Account"
        }
    }
]
}

```

BillingAccount resource

A party account used for billing purposes. It includes a description of the bill structure (frequency, presentation media, format and so on). It is a specialization of entity PartyAccount.

Resource model



Color	Description
	Resource (entry point)
	Sub-resource with details in separate diagram

(1) : Mandatory property

Figure 5 - BillingAccount

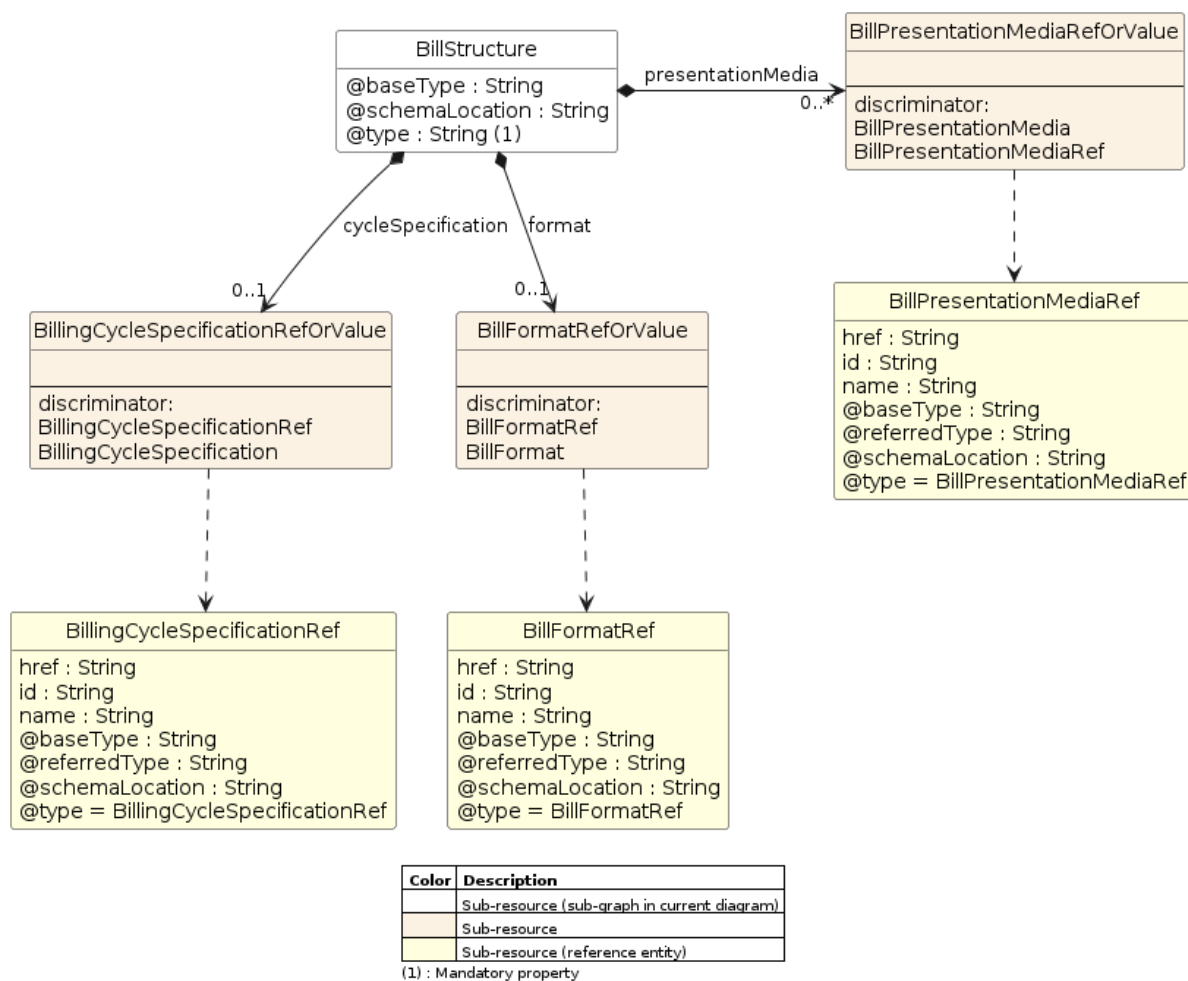


Figure 6 - BillStructure

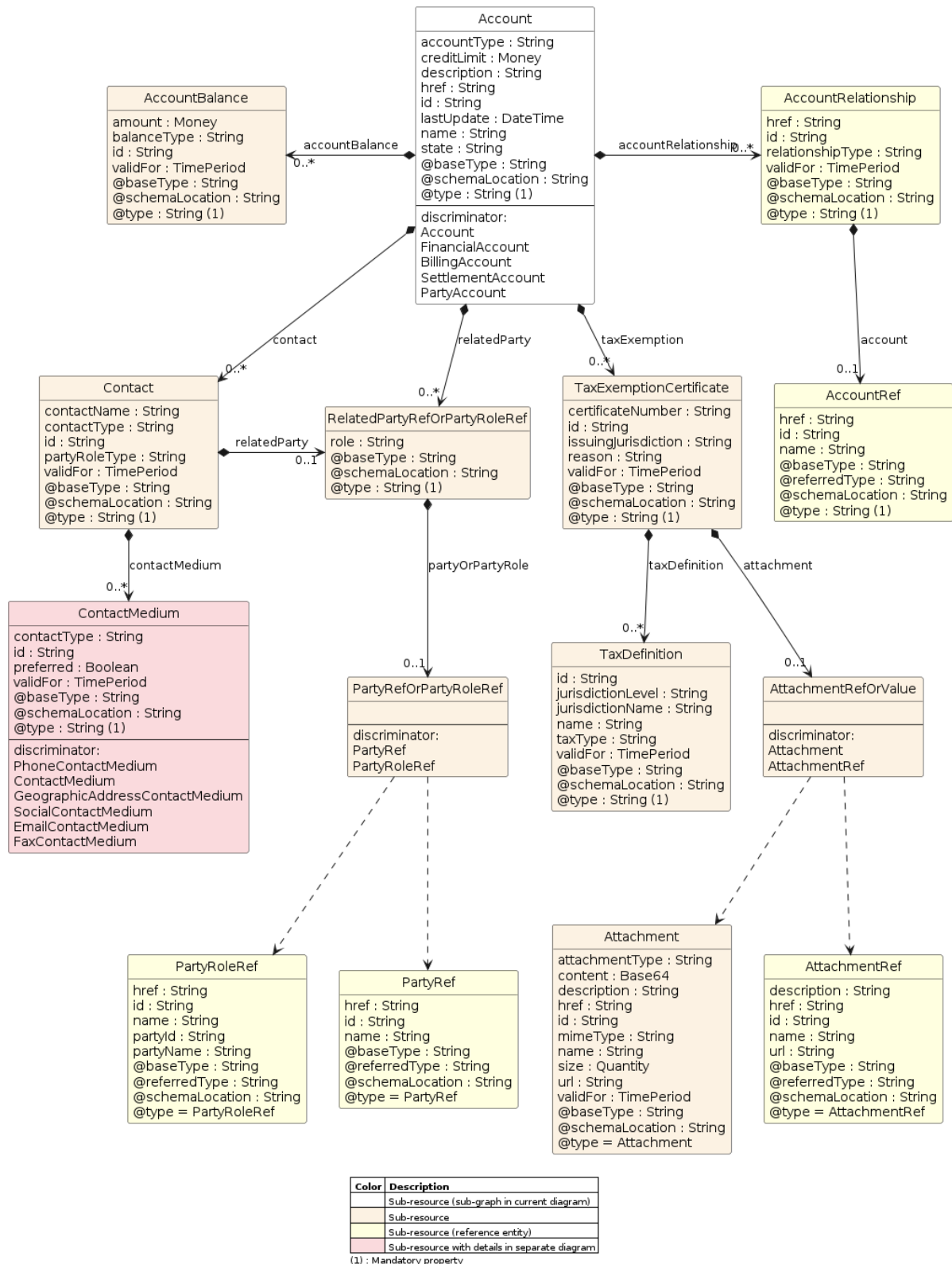


Figure 7 - Account

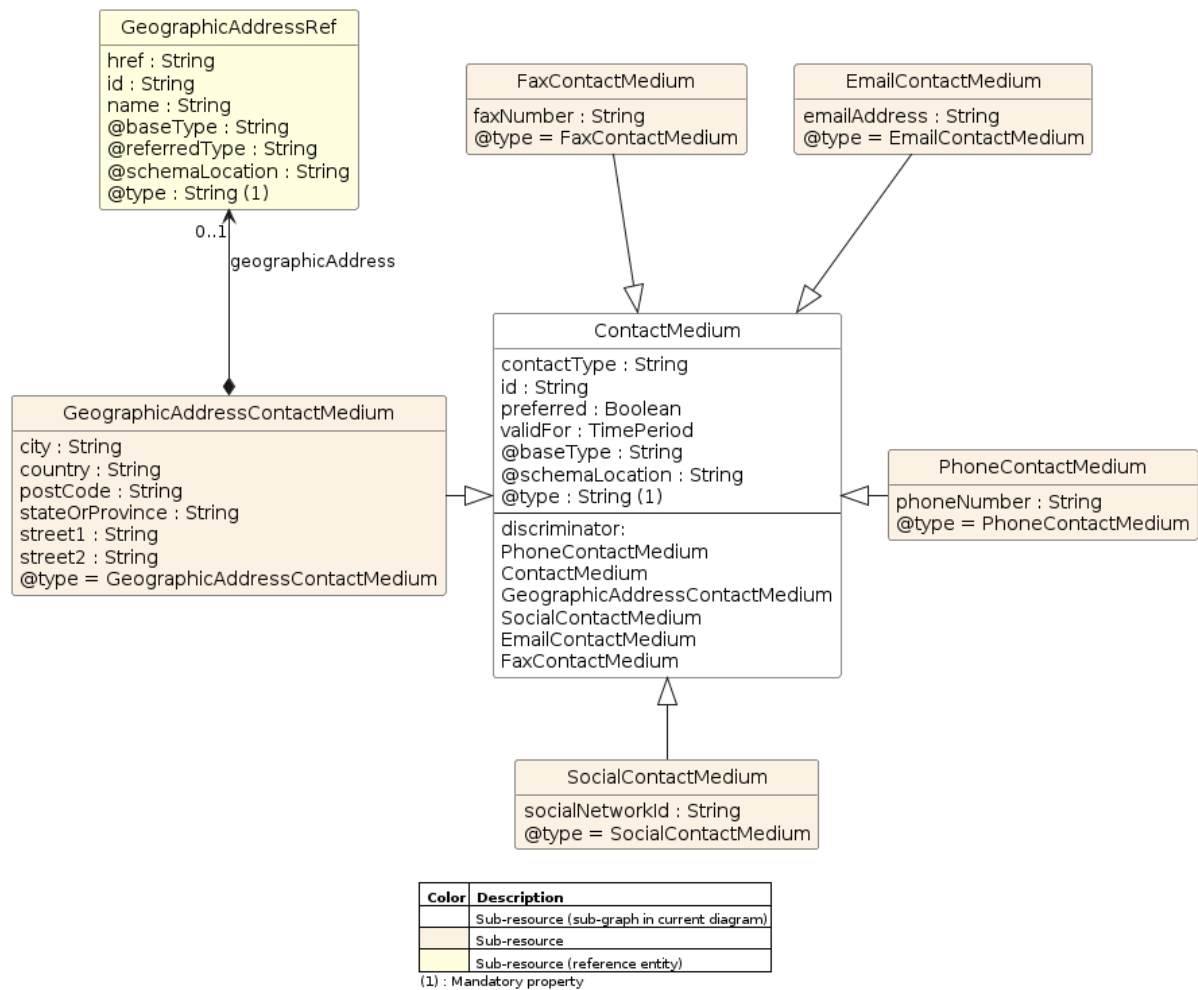


Figure 8 - ContactMedium

Field descriptions

BillingAccount fields

accountBalance	An AccountBalance. List of balances for the account, for example regular postpaid balance, deposit balance, write-off balance.
accountRelationship	An AccountRelationship. List of balances related to the account. For example a list of billing accounts that contribute to a financial account.
accountType	A String. A categorization of an account, such as individual, joint, and so forth, whose instances share some of the same characteristics. Note: for flexibility we use a String here but an implementation may use an enumeration with a limited list of valid values.
billStructure	A BillStructure. The structure of the bill for party accounts (billing or settlement).
contact	A Contact. List of people who could be contacted regarding the account, for example the accountant who authorizes payments.

creditLimit	A Money. A base / value business entity used to represent money.
defaultPaymentMethod	A PaymentMethodRef. PaymentMethod reference. A payment method defines a specific mean of payment (e.g direct debit).
description	A String. Detailed description of the account.
financialAccount	A FinancialAccountRef. AccountReceivable reference. An account of money owed by a party to another entity in exchange for goods or services that have been delivered or used. An account receivable aggregates the amounts of one or more party accounts (billing or settlement) owned by a given party.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
lastUpdate	A DateTime. The date and time that the account was last updated.
name	A String. Name of the account.
paymentPlan	A PaymentPlan. A list of payment plans that are active or expired for the account, for example if the customer had difficulty in paying.
paymentStatus	A String. The condition of the account, such as due, paid, in arrears.
ratingType	A String. Indicates whether the account follows a specific payment option such as prepaid or postpaid.
relatedParty	A RelatedPartyRefOrPartyRoleRef. List of parties that have some relationship with the account, for example the customer to whom the account belongs.
state	A String. Contains the lifecycle state such as: Active, Closed, Suspended and so on.
taxExemption	A TaxExemptionCertificate. List of tax exemptions that can be applied when calculating charges levied to the account.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Account sub-resource fields

accountBalance	An AccountBalance. List of balances for the account, for example regular postpaid balance, deposit balance, write-off balance.
accountRelationship	An AccountRelationship. List of balances related to the account. For example a list of billing accounts that contribute to a financial account.

accountType	A String. A categorization of an account, such as individual, joint, and so forth, whose instances share some of the same characteristics. Note: for flexibility we use a String here but an implementation may use an enumeration with a limited list of valid values.
contact	A Contact. List of people who could be contacted regarding the account, for example the accountant who authorizes payments.
creditLimit	A Money. A base / value business entity used to represent money.
description	A String. Detailed description of the account.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
lastUpdate	A DateTime. The date and time that the account was last updated.
name	A String. Name of the account.
relatedParty	A RelatedPartyRefOrPartyRoleRef. List of parties that have some relationship with the account, for example the customer to whom the account belongs.
state	A String. Contains the lifecycle state such as: Active, Closed, Suspended and so on.
taxExemption	A TaxExemptionCertificate. List of tax exemptions that can be applied when calculating charges levied to the account.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountBalance sub-resource fields

amount	A Money. A base / value business entity used to represent money.
balanceType	A String. Type of the balance : deposit balance, disputed balance, loyalty balance, receivable balance...
id	A String. Identifier of the balance within list of the balances (for entities with list).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountRelationship sub-resource fields

account	An AccountRef. Account reference. A account may be a party account or a financial account.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
relationshipType	A String. Type of relationship.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Attachment sub-resource fields

attachmentType	A String. A business characterization of the purpose of the attachment, for example logo, instructionManual, contractCopy.
content	A Base64. The actual contents of the attachment object, if embedded, encoded as base64.
description	A String. A narrative text describing the content of the attachment.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
contentType	A String. A technical characterization of the attachment content format using IETF Mime Types.
name	A String. The name of the attachment.
size	A Quantity. An amount in a given unit.

url	A String. Uniform Resource Locator, is a web page address (a subset of URI).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AttachmentRef sub-resource fields

description	A String. A narrative text describing the content of the attachment.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
url	A String. Link to the attachment media/content.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillFormat sub-resource fields

description	A String. An explanatory text for this bill format.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. A short descriptive name.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillFormatRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.

name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillPresentationMedia sub-resource fields

description	A String. An explanatory text describing this bill presentation media.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. A short descriptive name.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillPresentationMediaRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillStructure sub-resource fields

cycleSpecification	A BillingCycleSpecificationRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the BillingCycleSpecification entity and not the BillingCycleSpecificationRefOrValue class itself.
--------------------	--

format	A BillFormatRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the BillFormat entity and not the BillFormatRefOrValue class itself.
presentationMedia	A BillPresentationMediaRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the BillPresentationMedia entity and not the BillPresentationMediaRefOrValue class itself.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillingCycleSpecification sub-resource fields

billingDateShift	An Integer. An offset of a billing/settlement date. The offset is expressed as number of days with regard to the start of the billing/settlement period.
billingPeriod	A String. A billing time period. It can be recurring, for example: week, month, quarter of year, year .
chargeDateOffset	An Integer. An offset of a date through which charges previously received by the billing system will appear on the bill. The offset is expressed as number of days with regard to the start of the BillingPeriod.
creditDateOffset	An Integer. An offset of a date through which credits previously received by the billing system will appear on the bill. The offset is expressed as number of days with regard to the start of the BillingPeriod.
description	A String. An explanation regarding this billing cycle specification.
frequency	A String. Frequency of the billing cycle (monthly for instance).
href	A String. Hyperlink reference.
id	A String. Unique identifier.
mailingDateOffset	An Integer. An offset of a customer bill mailing date. The offset is expressed as number of days with regard to the start of the BillingPeriod.
name	A String. A short descriptive name.
paymentDueDateOffset	An Integer. An offset of a payment due date. The offset is expressed as number of days with regard to the start of the BillingPeriod.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.

@type	A String. When sub-classing, this defines the sub-class Extensible name.
-------	--

BillingCycleSpecificationRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Contact sub-resource fields

contactMedium	A ContactMedium. List of contact mediums for the contact, such as mobile phone number, email address, etc.
contactName	A String. A displayable name for that contact.
contactType	A String. Type of contact (primary, secondary...).
id	A String. Identifier of the contact within list of the contacts (for entities with list).
partyRoleType	A String. Identifies what kind of party role type is linked to the contact (a account manager...).
relatedParty	A RelatedPartyRefOrPartyRoleRef. RelatedParty reference. A related party defines party or party role or its reference, linked to a specific entity.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

ContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.

preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

EmailContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
emailAddress	A String. Full email address in standard format.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

FaxContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
faxNumber	A String. The fax number of the contact.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

FinancialAccountRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

GeographicAddressContactMedium sub-resource fields

city	A String. The city.
contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
country	A String. The country.
geographicAddress	A GeographicAddressRef. Reference to a Geographic Address.
id	A String. Identifier for this contact medium.
postCode	A String. Postcode.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
stateOrProvince	A String. State or province.
street1	A String. Describes the street.
street2	A String. Complementary street description.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

GeographicAddressRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.

@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PartyAccount sub-resource fields

accountBalance	An AccountBalance. List of balances for the account, for example regular postpaid balance, deposit balance, write-off balance.
accountRelationship	An AccountRelationship. List of balances related to the account. For example a list of billing accounts that contribute to a financial account.
accountType	A String. A categorization of an account, such as individual, joint, and so forth, whose instances share some of the same characteristics. Note: for flexibility we use a String here but an implementation may use an enumeration with a limited list of valid values.
billStructure	A BillStructure. The structure of the bill for party accounts (billing or settlement).
contact	A Contact. List of people who could be contacted regarding the account, for example the accountant who authorizes payments.
creditLimit	A Money. A base / value business entity used to represent money.
defaultPaymentMethod	A PaymentMethodRef. PaymentMethod reference. A payment method defines a specific mean of payment (e.g direct debit).
description	A String. Detailed description of the account.
financialAccount	A FinancialAccountRef. AccountReceivable reference. An account of money owed by a party to another entity in exchange for goods or services that have been delivered or used. An account receivable aggregates the amounts of one or more party accounts (billing or settlement) owned by a given party.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
lastUpdate	A DateTime. The date and time that the account was last updated.
name	A String. Name of the account.
paymentPlan	A PaymentPlan. A list of payment plans that are active or expired for the account, for example if the customer had difficulty in paying.
paymentStatus	A String. The condition of the account, such as due, paid, in arrears.

relatedParty	A RelatedPartyRefOrPartyRoleRef. List of parties that have some relationship with the account, for example the customer to whom the account belongs.
state	A String. Contains the lifecycle state such as: Active, Closed, Suspended and so on.
taxExemption	A TaxExemptionCertificate. List of tax exemptions that can be applied when calculating charges levied to the account.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PartyRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PartyRoleRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
partyId	A String. The identifier of the engaged party that is linked to the PartyRole object.
partyName	A String. The name of the engaged party that is linked to the PartyRole object.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PaymentMethodRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PaymentPlan sub-resource fields

id	A String. Identifier of the plan within list of the plans (for entities with list).
numberOfPayments	An Integer. Number of payments used to spread the global payment.
paymentFrequency	A String. Frequency of the payments, such as monthly and bimonthly.
paymentMethod	A PaymentMethodRef. PaymentMethod reference. A payment method defines a specific mean of payment (e.g direct debit).
planType	A String. Type of payment plan.
priority	An Integer. Priority of the payment plan.
status	A String. Status of the payment plan (effective, ineffective).
totalAmount	A Money. A base / value business entity used to represent money.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PhoneContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.
phoneNumber	A String. The phone number of the contact.

preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

RelatedPartyRefOrPartyRoleRef sub-resource fields

partyOrPartyRole	A PartyRefOrPartyRoleRef.
role	A String. Role played by the related party or party role in the context of the specific entity it is linked to. Such as 'initiator', 'customer', 'salesAgent', 'user'.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

SocialContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
socialNetworkId	A String. Identifier as a member of a social network.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

TaxDefinition sub-resource fields

id	A String. Unique identifier of the tax.
jurisdictionLevel	A String. Level of the jurisdiction that levies the tax.
jurisdictionName	A String. Name of the jurisdiction that levies the tax.
name	A String. Tax name.

taxType	A String. Type of the tax.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

TaxExemptionCertificate sub-resource fields

attachment	An AttachmentRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the Attachment entity and not the AttachmentRefOrValue class itself.
certificateNumber	A String. Identifier of a document that shows proof of exemption from taxes for the taxing jurisdiction.
id	A String. Identifier of the tax exemption within list of the exemptions.
issuingJurisdiction	A String. Name of the jurisdiction that issued the exemption.
reason	A String. Reason for the tax exemption.
taxDefinition	A TaxDefinition. A list of taxes that are covered by the exemption, e.g. City Tax, State Tax. The definition would include the exemption (e.g. for a rate exemption 0% would be a full exemption, 5% could be a partial exemption if the actual rate was 10%).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Json representation sample(s)

We provide below a JSON representation as example of the 'BillingAccount' resource object.

```
{
  "@type": "BillingAccount",
  "paymentStatus": "In Arrears",
  "creditLimit": {
    "unit": "USD",
    "value": 10000
  },
  "description": "This billing account ...",
  "href": "https://host:port/tmf-api/accountManagement/v5/billingAccount/5430",
  "id": "5430",
}
```

```

    "lastModified": "2018-06-14T00:00:00.000Z",
    "name": "Home Account",
    "state": "Inactive",
    "accountType": "Business",
    "billStructure": {
      "@type": "BillStructure",
      "presentationMedia": [
        {
          "@type": "BillPresentationMedia",
          "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/9968",
          "id": "9968",
          "name": "Post Mail"
        }
      ],
      "format": {
        "@type": "BillFormat",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billFormat/3555",
        "id": "3555",
        "name": "Detailed invoice"
      },
      "cycleSpecification": {
        "@type": "BillingCycleSpecification",
        "dateShift": 54,
        "frequency": "monthly",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/3828",
        "id": "3828",
        "name": "Annual billing"
      }
    },
    "paymentPlan": [
      {
        "@type": "PaymentPlan",
        "numberOfPayments": 4,
        "paymentFrequency": "monthly",
        "priority": 1,
        "status": "Effective",
        "totalAmount": {
          "unit": "USD",
          "value": 100.0
        },
        "paymentType": "regular",
        "validFor": {
          "startDateTime": "2018-06-11T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "paymentMethod": {
          "@type": "PaymentMethodRef",
          "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/2452",
          "id": "2452",
          "name": "professional payment"
        }
      }
    ],
    "financialAccount": {
      "@referredType": "FinancialAccount",
      "@type": "FinancialAccountRef",
      "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/2063",
      "id": "2063",

```

```

    "name": "Partnership account"
  },
  "defaultPaymentMethod": {
    "@type": "PaymentMethodRef",
    "href": "https://host:port/tmf-api/paymentMethods/v5/paymentMethod/3537",
    "id": "3537",
    "name": "family payment"
  },
  "relatedParty": [
    {
      "role": "service provider",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "href": "https://host:port/tmf-api/partyManagement/v5/party/6838",
        "id": "6838",
        "name": "Richard Cole"
      }
    }
  ],
  "taxExemption": [
    {
      "@type": "TaxExemption",
      "id": "1",
      "certificateNumber": "9665432345",
      "issuingJurisdiction": "USA",
      "reason": "Embassy",
      "taxDefinition": [
        {
          "@type": "TaxDefinition",
          "id": "96",
          "name": "Value Added Tax",
          "taxType": "federalVat"
        }
      ],
      "attachment": {
        "@type": "Attachment",
        "id": "88888834534552",
        "href": "https://host:port/tmf-api/document/v5/attachment/88888834534552",
        "attachmentType": "taxExemptionCertificate",
        "name": "TaxExemptionCertificate-888.pdf",
        "description": "Electronic version of the tax exemption certificate",
        "mimeType": "application/pdf",
        "url": "http://host:port/DocumentManager/666/TaxExemptionCertificate-888.pdf"
      },
      "validFor": {
        "startDateTime": "2018-06-17T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
  "contact": [
    {
      "@type": "Contact",
      "contactName": "Rachel Douglas",
      "contactType": "secondary",
      "partyRoleType": "Vendor",
      "validFor": {
        "startDateTime": "2018-06-17T00:00:00.000Z",

```

```

        "endTime": "2019-01-10T00:00:00.000Z"
      },
      "contactMedium": [
        {
          "@type": "GeographicAddressContactMedium",
          "preferred": true,
          "mediumType": "PostalAddress",
          "validFor": {
            "startTime": "2018-06-14T00:00:00.000Z",
            "endTime": "2019-01-10T00:00:00.000Z"
          },
          "city": "Paris",
          "country": "France",
          "postCode": "75014",
          "street1": "15 Rue des Canards"
        }
      ],
      "relatedParty": {
        "@type": "Organization",
        "href": "https://host:port/tmf-api/partyManagement/v5/party/9947",
        "id": "9947",
        "name": "Richard Cole",
        "role": "owner"
      }
    },
    "accountBalance": [
      {
        "@type": "AccountBalance",
        "amount": {
          "unit": "USD",
          "value": 58.33
        },
        "balanceType": "ReceivableBalance",
        "validFor": {
          "startTime": "2018-06-10T00:00:00.000Z",
          "endTime": "2019-01-10T00:00:00.000Z"
        }
      }
    ],
    "accountRelationship": [
      {
        "@type": "AccountRelationship",
        "relationshipType": "contains",
        "validFor": {
          "startTime": "2018-06-13T00:00:00.000Z",
          "endTime": "2019-01-10T00:00:00.000Z"
        },
        "account": {
          "@referredType": "BillingAccount",
          "@type": "AccountRef",
          "href": "https://host:port/tmf-api/accountManagement/v5/billingAccount/9327",
          "id": "9327",
          "name": "Paradise Account"
        }
      }
    ]
  }
}

```

FinancialAccount resource

An account of money owed by a party to another entity in exchange for goods or services that have been delivered or used. A financial (account receivable account/account payable) aggregates the amounts of one or more party accounts (billing or settlement) owned by a given party. It is a specialization of entity Account.

Resource model

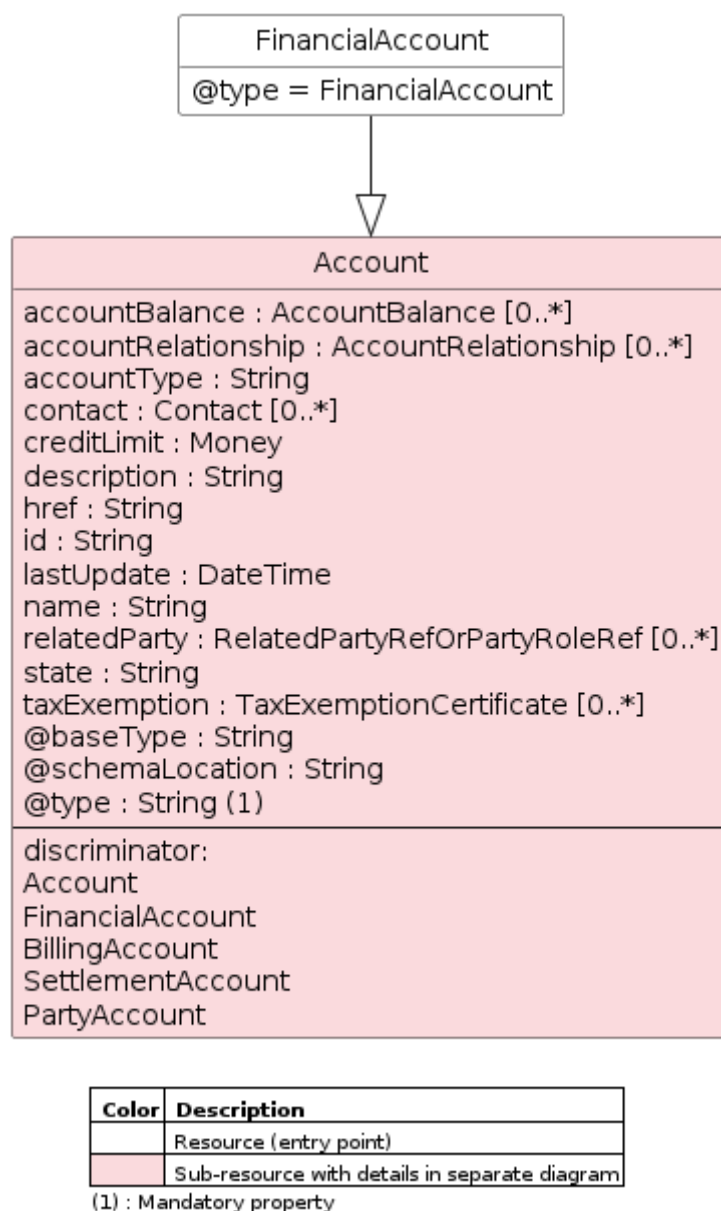


Figure 9 - FinancialAccount

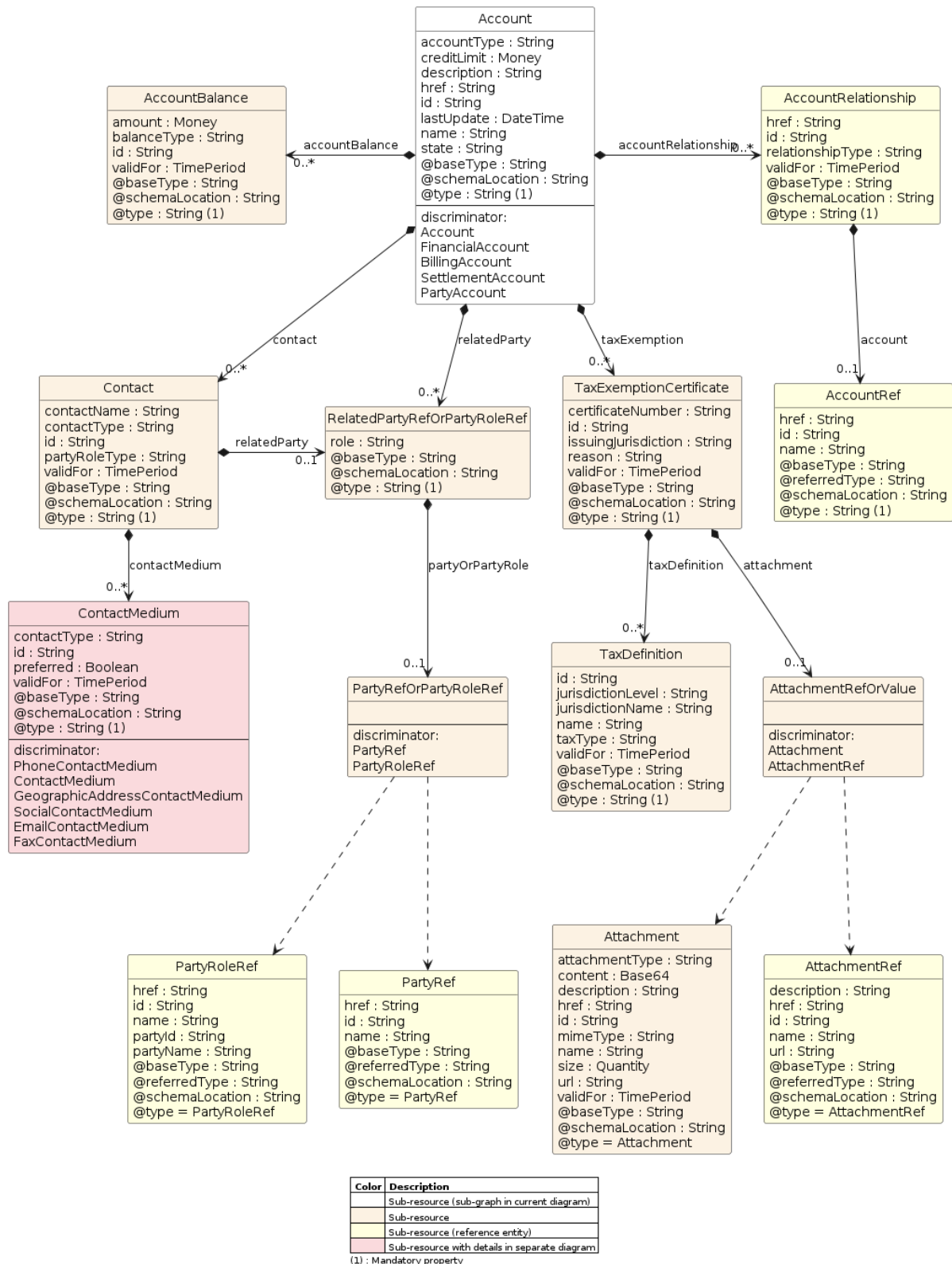


Figure 10 - Account

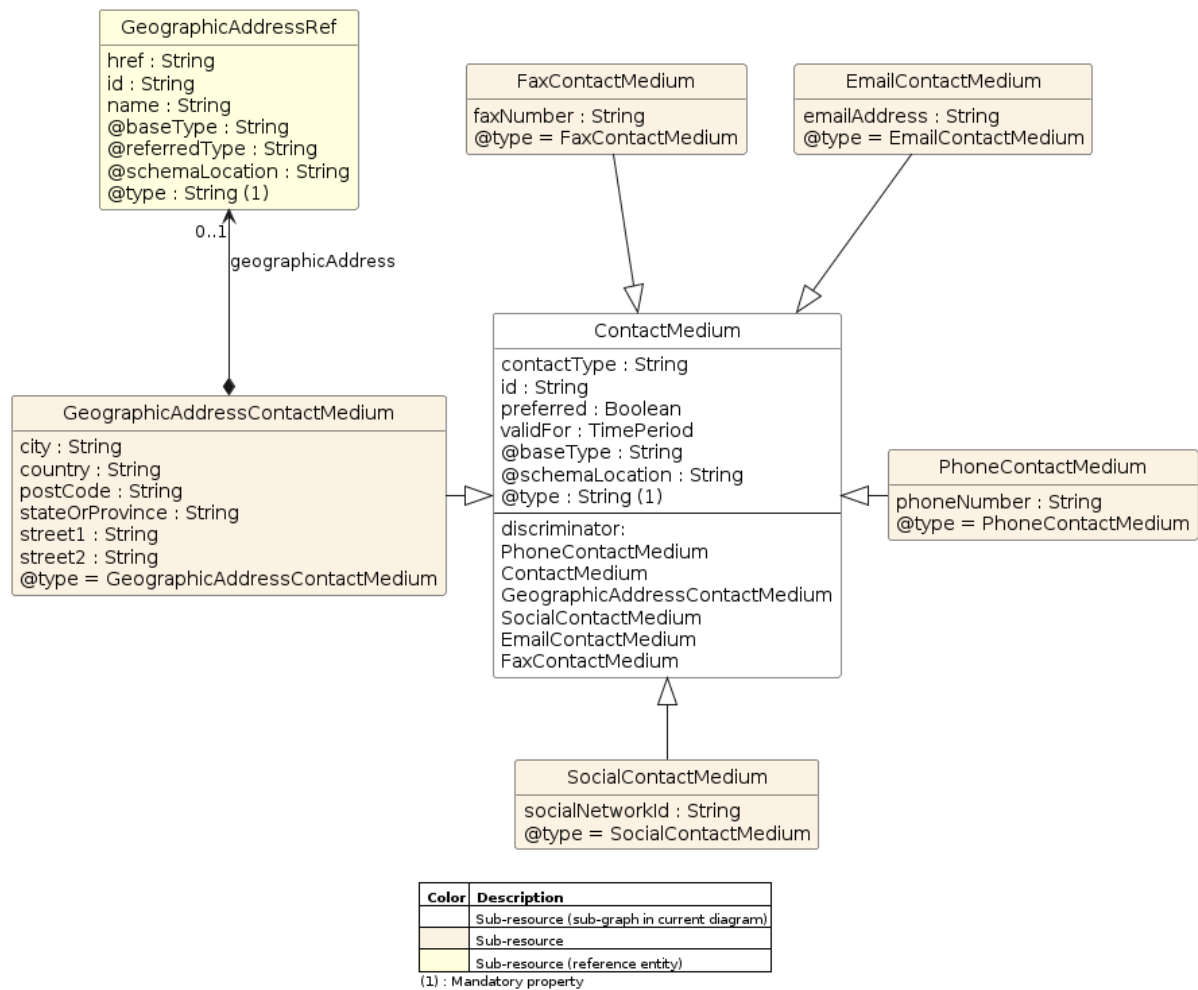


Figure 11 - ContactMedium

Field descriptions

Account sub-resource fields

accountBalance	An AccountBalance. List of balances for the account, for example regular postpaid balance, deposit balance, write-off balance.
accountRelationship	An AccountRelationship. List of balances related to the account. For example a list of billing accounts that contribute to a financial account.
accountType	A String. A categorization of an account, such as individual, joint, and so forth, whose instances share some of the same characteristics. Note: for flexibility we use a String here but an implementation may use an enumeration with a limited list of valid values.
contact	A Contact. List of people who could be contacted regarding the account, for example the accountant who authorizes payments.
creditLimit	A Money. A base / value business entity used to represent money.

description	A String. Detailed description of the account.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
lastUpdate	A DateTime. The date and time that the account was last updated.
name	A String. Name of the account.
relatedParty	A RelatedPartyRefOrPartyRoleRef. List of parties that have some relationship with the account, for example the customer to whom the account belongs.
state	A String. Contains the lifecycle state such as: Active, Closed, Suspended and so on.
taxExemption	A TaxExemptionCertificate. List of tax exemptions that can be applied when calculating charges levied to the account.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountBalance sub-resource fields

amount	A Money. A base / value business entity used to represent money.
balanceType	A String. Type of the balance : deposit balance, disputed balance, loyalty balance, receivable balance...
id	A String. Identifier of the balance within list of the balances (for entities with list).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.

@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountRelationship sub-resource fields

account	An AccountRef. Account reference. A account may be a party account or a financial account.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
relationshipType	A String. Type of relationship.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Attachment sub-resource fields

attachmentType	A String. A business characterization of the purpose of the attachment, for example logo, instructionManual, contractCopy.
content	A Base64. The actual contents of the attachment object, if embedded, encoded as base64.
description	A String. A narrative text describing the content of the attachment.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
contentType	A String. A technical characterization of the attachment content format using IETF Mime Types.
name	A String. The name of the attachment.
size	A Quantity. An amount in a given unit.
url	A String. Uniform Resource Locator, is a web page address (a subset of URI).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.

@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AttachmentRef sub-resource fields

description	A String. A narrative text describing the content of the attachment.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
url	A String. Link to the attachment media/content.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Contact sub-resource fields

contactMedium	A ContactMedium. List of contact mediums for the contact, such as mobile phone number, email address, etc.
contactName	A String. A displayable name for that contact.
contactType	A String. Type of contact (primary, secondary...).
id	A String. Identifier of the contact within list of the contacts (for entities with list).
partyRoleType	A String. Identifies what kind of party role type is linked to the contact (a account manager...).
relatedParty	A RelatedPartyRefOrPartyRoleRef. RelatedParty reference. A related party defines party or party role or its reference, linked to a specific entity.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

ContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

EmailContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
emailAddress	A String. Full email address in standard format.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

FaxContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
faxNumber	A String. The fax number of the contact.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.

@type	A String. When sub-classing, this defines the sub-class Extensible name.
-------	--

GeographicAddressContactMedium sub-resource fields

city	A String. The city.
contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
country	A String. The country.
geographicAddress	A GeographicAddressRef. Reference to a Geographic Address.
id	A String. Identifier for this contact medium.
postCode	A String. Postcode.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
stateOrProvince	A String. State or province.
street1	A String. Describes the street.
street2	A String. Complementary street description.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

GeographicAddressRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PartyRef sub-resource fields

href	A String. Hyperlink reference.
------	--------------------------------

id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PartyRoleRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
partyId	A String. The identifier of the engaged party that is linked to the PartyRole object.
partyName	A String. The name of the engaged party that is linked to the PartyRole object.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PhoneContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.
phoneNumber	A String. The phone number of the contact.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

RelatedPartyRefOrPartyRoleRef sub-resource fields

partyOrPartyRole	A PartyRefOrPartyRoleRef.
role	A String. Role played by the related party or party role in the context of the specific entity it is linked to. Such as 'initiator', 'customer', 'salesAgent', 'user'.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

SocialContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
socialNetworkId	A String. Identifier as a member of a social network.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

TaxDefinition sub-resource fields

id	A String. Unique identifier of the tax.
jurisdictionLevel	A String. Level of the jurisdiction that levies the tax.
jurisdictionName	A String. Name of the jurisdiction that levies the tax.
name	A String. Tax name.
taxType	A String. Type of the tax.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

TaxExemptionCertificate sub-resource fields

attachment	An AttachmentRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the Attachment entity and not the AttachmentRefOrValue class itself.
certificateNumber	A String. Identifier of a document that shows proof of exemption from taxes for the taxing jurisdiction.
id	A String. Identifier of the tax exemption within list of the exemptions.
issuingJurisdiction	A String. Name of the jurisdiction that issued the exemption.
reason	A String. Reason for the tax exemption.
taxDefinition	A TaxDefinition. A list of taxes that are covered by the exemption, e.g. City Tax, State Tax. The definition would include the exemption (e.g. for a rate exemption 0% would be a full exemption, 5% could be a partial exemption if the actual rate was 10%).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Json representation sample(s)

We provide below a JSON representation as example of the 'FinancialAccount' resource object.

```
{
  "@type": "FinancialAccount",
  "creditLimit": {
    "unit": "USD",
    "value": 3500
  },
  "description": "This financial account ...",
  "href": "https://host:port/tmf-api/accountManagement/v5/financialAccount/1041",
  "id": "1041",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Administration account",
  "state": "Active",
  "accountType": "Global",
  "relatedParty": [
    {
      "role": "employee",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-api/partyManagement/v5/party/2186",
        "id": "2186",

```

```

        "name": "Gustave Flaubert"
      }
    },
    ],
    "taxExemption": [
      {
        "@type": "TaxExemption",
        "certificateNumber": "45678909876",
        "issuingJurisdiction": "Prefecture",
        "reason": "Social",
        "taxDefinition": [
          {
            "@type": "TaxDefinition",
            "id": "96",
            "name": "Value Added Tax",
            "taxType": "federalVat"
          }
        ],
        "attachment": {
          "@type": "Attachment",
          "id": "9304357346341236",
          "href": "https://host:port/tmf-api/document/v5/attachment/9304357346341236",
          "attachmentType": "taxExemptionCertificate",
          "name": "TaxExemptionCertificate-54321.pdf",
          "description": "Electronic version of the tax exemption certificate",
          "mimeType": "application/pdf",
          "url": "http://host:port/DocumentManager/666/TaxExemptionCertificate-54321.pdf"
        },
        "validFor": {
          "startDateTime": "2018-06-13T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        }
      }
    ],
    "contact": [
      {
        "@type": "Contact",
        "contactName": "Ludwig Borgia",
        "contactType": "secondary",
        "partyRoleType": "CustomerAccountRepresentative",
        "validFor": {
          "startDateTime": "2018-06-11T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "contactMedium": [
          {
            "@type": "EmailContactMedium",
            "preferred": false,
            "mediumType": "Email",
            "validFor": {
              "startDateTime": "2018-06-12T00:00:00.000Z",
              "endDateTime": "2019-01-10T00:00:00.000Z"
            },
            "emailAddress": "alain.delon@best-actor.fr"
          }
        ],
        "relatedParty": {
          "role": "bill receiver",
          "@type": "RelatedPartyRefOrPartyRoleRef",
          "partyOrPartyRole": {

```

```

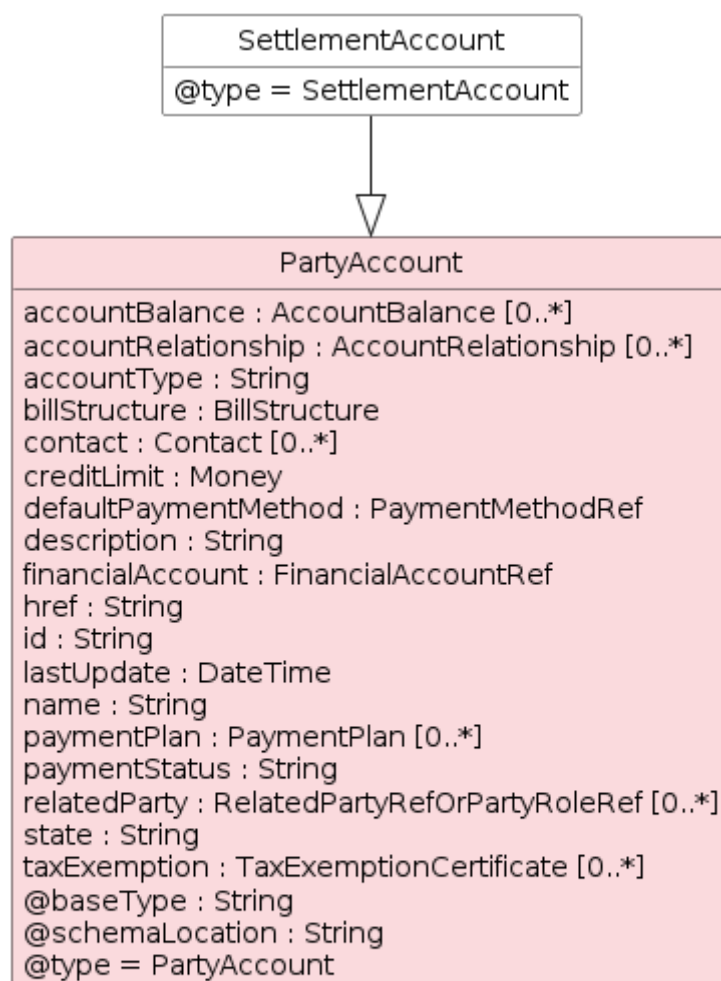
        "@referredType" : "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/party/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
    }
}
],
"accountBalance": [
    {
        "@type": "AccountBalance",
        "amount": {
            "unit": "USD",
            "value": 50.58
        },
        "balanceType": "ReceivableBalance",
        "validFor": {
            "startDateTime": "2018-06-15T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        }
    }
],
"accountRelationship": [
    {
        "relationshipType": "contains",
        "validFor": {
            "startDateTime": "2018-06-13T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "account": {
            "@referredType": "BillingAccount",
            "@type": "AccountRef",
            "href": "https://host:port/tmf-
api/accountManagement/v5/billingAccount/7688",
            "id": "7688",
            "name": "Travel Account"
        }
    }
]
}

```

SettlementAccount resource

A party account used for settlement purposes. It includes a description of the bill structure (frequency, presentation media, format and so on). It is a specialization of entity PartyAccount.

Resource model



Color	Description
	Resource (entry point)
	Sub-resource with details in separate diagram

(1) : Mandatory property

Figure 12 - SettlementAccount

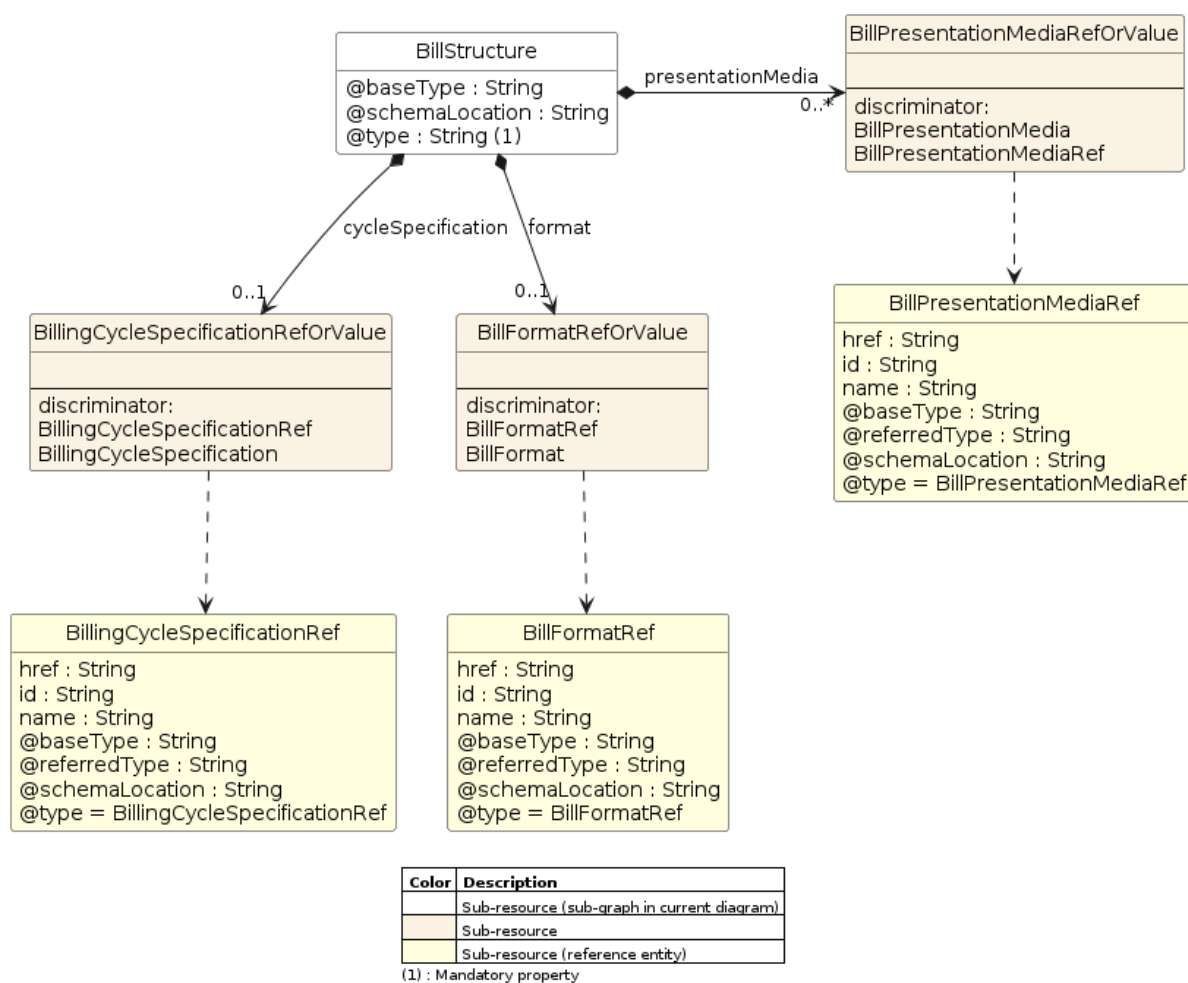


Figure 13 - BillStructure

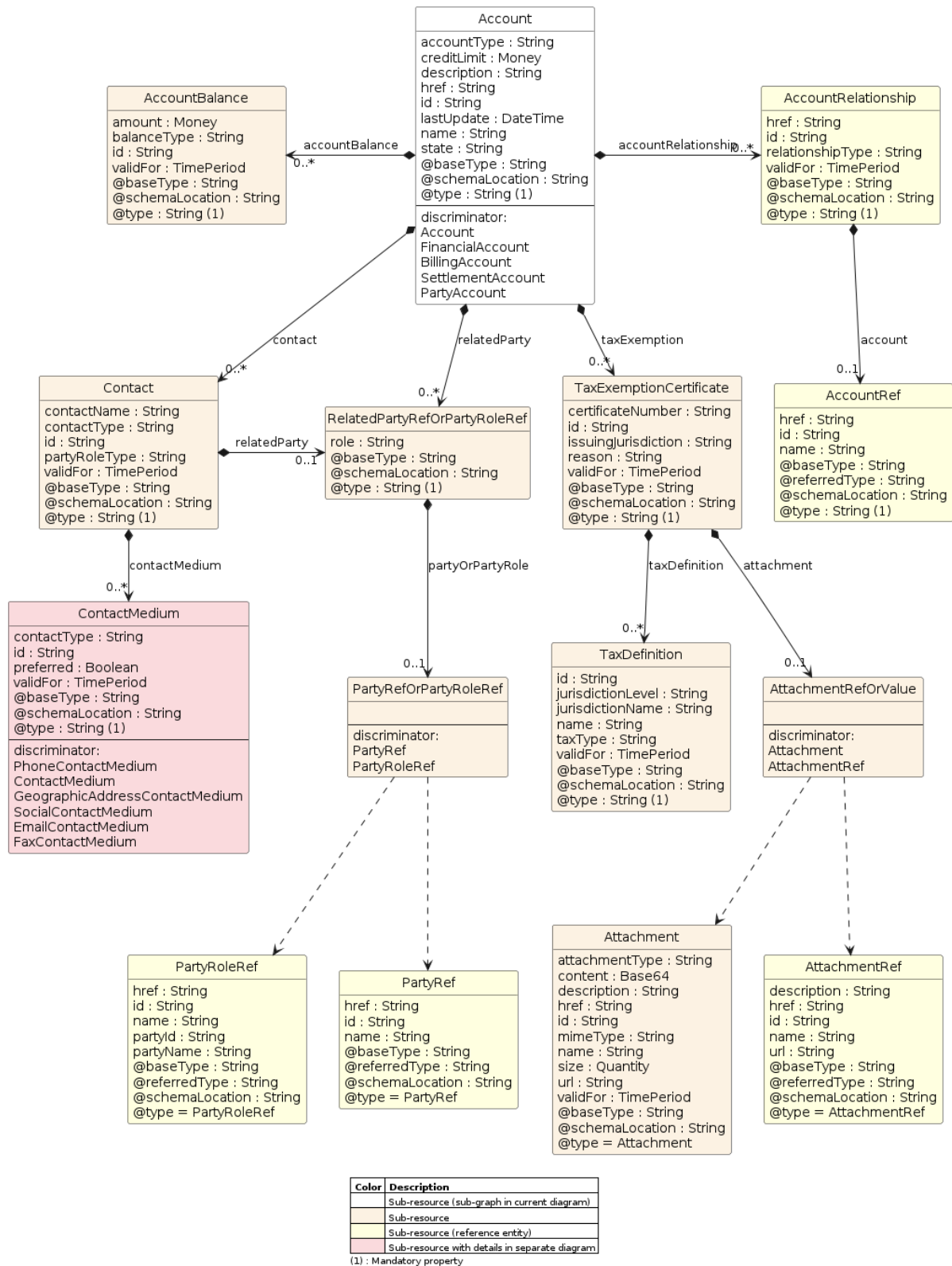


Figure 14 - Account

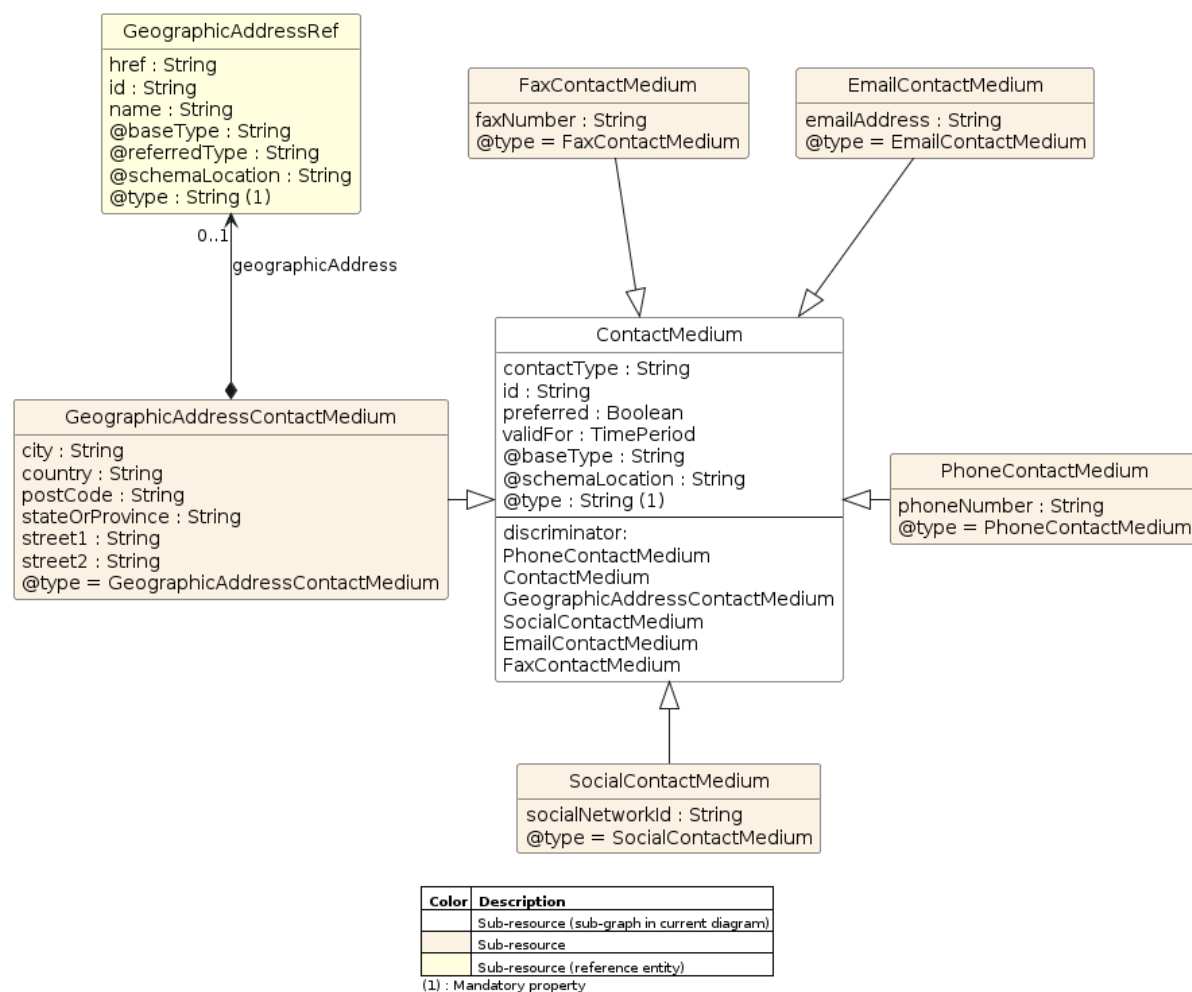


Figure 15 - ContactMedium

Field descriptions

Account sub-resource fields

accountBalance	An AccountBalance. List of balances for the account, for example regular postpaid balance, deposit balance, write-off balance.
accountRelationship	An AccountRelationship. List of balances related to the account. For example a list of billing accounts that contribute to a financial account.
accountType	A String. A categorization of an account, such as individual, joint, and so forth, whose instances share some of the same characteristics. Note: for flexibility we use a String here but an implementation may use an enumeration with a limited list of valid values.
contact	A Contact. List of people who could be contacted regarding the account, for example the accountant who authorizes payments.
creditLimit	A Money. A base / value business entity used to represent money.

description	A String. Detailed description of the account.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
lastUpdate	A DateTime. The date and time that the account was last updated.
name	A String. Name of the account.
relatedParty	A RelatedPartyRefOrPartyRoleRef. List of parties that have some relationship with the account, for example the customer to whom the account belongs.
state	A String. Contains the lifecycle state such as: Active, Closed, Suspended and so on.
taxExemption	A TaxExemptionCertificate. List of tax exemptions that can be applied when calculating charges levied to the account.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountBalance sub-resource fields

amount	A Money. A base / value business entity used to represent money.
balanceType	A String. Type of the balance : deposit balance, disputed balance, loyalty balance, receivable balance...
id	A String. Identifier of the balance within list of the balances (for entities with list).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.

@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AccountRelationship sub-resource fields

account	An AccountRef. Account reference. A account may be a party account or a financial account.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
relationshipType	A String. Type of relationship.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Attachment sub-resource fields

attachmentType	A String. A business characterization of the purpose of the attachment, for example logo, instructionManual, contractCopy.
content	A Base64. The actual contents of the attachment object, if embedded, encoded as base64.
description	A String. A narrative text describing the content of the attachment.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
contentType	A String. A technical characterization of the attachment content format using IETF Mime Types.
name	A String. The name of the attachment.
size	A Quantity. An amount in a given unit.
url	A String. Uniform Resource Locator, is a web page address (a subset of URI).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.

@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

AttachmentRef sub-resource fields

description	A String. A narrative text describing the content of the attachment.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
url	A String. Link to the attachment media/content.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillFormat sub-resource fields

description	A String. An explanatory text for this bill format.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. A short descriptive name.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillFormatRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.

@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillPresentationMedia sub-resource fields

description	A String. An explanatory text describing this bill presentation media.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. A short descriptive name.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillPresentationMediaRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillStructure sub-resource fields

cycleSpecification	A BillingCycleSpecificationRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the BillingCycleSpecification entity and not the BillingCycleSpecificationRefOrValue class itself.
format	A BillFormatRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the BillFormat entity and not the BillFormatRefOrValue class itself.
presentationMedia	A BillPresentationMediaRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the BillPresentationMedia entity and not the BillPresentationMediaRefOrValue class itself.

@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillingCycleSpecification sub-resource fields

billingDateShift	An Integer. An offset of a billing/settlement date. The offset is expressed as number of days with regard to the start of the billing/settlement period.
billingPeriod	A String. A billing time period. It can be recurring, for example: week, month, quarter of year, year .
chargeDateOffset	An Integer. An offset of a date through which charges previously received by the billing system will appear on the bill. The offset is expressed as number of days with regard to the start of the BillingPeriod.
creditDateOffset	An Integer. An offset of a date through which credits previously received by the billing system will appear on the bill. The offset is expressed as number of days with regard to the start of the BillingPeriod.
description	A String. An explanation regarding this billing cycle specification.
frequency	A String. Frequency of the billing cycle (monthly for instance).
href	A String. Hyperlink reference.
id	A String. Unique identifier.
mailingDateOffset	An Integer. An offset of a customer bill mailing date. The offset is expressed as number of days with regard to the start of the BillingPeriod.
name	A String. A short descriptive name.
paymentDueDateOffset	An Integer. An offset of a payment due date. The offset is expressed as number of days with regard to the start of the BillingPeriod.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

BillingCycleSpecificationRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.

name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Contact sub-resource fields

contactMedium	A ContactMedium. List of contact mediums for the contact, such as mobile phone number, email address, etc.
contactName	A String. A displayable name for that contact.
contactType	A String. Type of contact (primary, secondary...).
id	A String. Identifier of the contact within list of the contacts (for entities with list).
partyRoleType	A String. Identifies what kind of party role type is linked to the contact (a account manager...).
relatedParty	A RelatedPartyRefOrPartyRoleRef. RelatedParty reference. A related party defines party or party role or its reference, linked to a specific entity.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

ContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.

@type	A String. When sub-classing, this defines the sub-class Extensible name.
-------	--

EmailContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
emailAddress	A String. Full email address in standard format.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

FaxContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
faxNumber	A String. The fax number of the contact.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

FinancialAccountRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.

@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

GeographicAddressContactMedium sub-resource fields

city	A String. The city.
contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
country	A String. The country.
geographicAddress	A GeographicAddressRef. Reference to a Geographic Address.
id	A String. Identifier for this contact medium.
postCode	A String. Postcode.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
stateOrProvince	A String. State or province.
street1	A String. Describes the street.
street2	A String. Complementary street description.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

GeographicAddressRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PartyAccount sub-resource fields

accountBalance	An AccountBalance. List of balances for the account, for example regular postpaid balance, deposit balance, write-off balance.
accountRelationship	An AccountRelationship. List of balances related to the account. For example a list of billing accounts that contribute to a financial account.
accountType	A String. A categorization of an account, such as individual, joint, and so forth, whose instances share some of the same characteristics. Note: for flexibility we use a String here but an implementation may use an enumeration with a limited list of valid values.
billStructure	A BillStructure. The structure of the bill for party accounts (billing or settlement).
contact	A Contact. List of people who could be contacted regarding the account, for example the accountant who authorizes payments.
creditLimit	A Money. A base / value business entity used to represent money.
defaultPaymentMethod	A PaymentMethodRef. PaymentMethod reference. A payment method defines a specific mean of payment (e.g direct debit).
description	A String. Detailed description of the account.
financialAccount	A FinancialAccountRef. AccountReceivable reference. An account of money owed by a party to another entity in exchange for goods or services that have been delivered or used. An account receivable aggregates the amounts of one or more party accounts (billing or settlement) owned by a given party.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
lastUpdate	A DateTime. The date and time that the account was last updated.
name	A String. Name of the account.
paymentPlan	A PaymentPlan. A list of payment plans that are active or expired for the account, for example if the customer had difficulty in paying.
paymentStatus	A String. The condition of the account, such as due, paid, in arrears.
relatedParty	A RelatedPartyRefOrPartyRoleRef. List of parties that have some relationship with the account, for example the customer to whom the account belongs.
state	A String. Contains the lifecycle state such as: Active, Closed, Suspended and so on.
taxExemption	A TaxExemptionCertificate. List of tax exemptions that can be applied when calculating charges levied to the account.
@baseType	A String. When sub-classing, this defines the super-class.

@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PartyRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PartyRoleRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
partyId	A String. The identifier of the engaged party that is linked to the PartyRole object.
partyName	A String. The name of the engaged party that is linked to the PartyRole object.
@baseType	A String. When sub-classing, this defines the super-class.
@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PaymentMethodRef sub-resource fields

href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. Name of the referred entity.
@baseType	A String. When sub-classing, this defines the super-class.

@referredType	A String. The actual type of the target instance when needed for disambiguation.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PaymentPlan sub-resource fields

id	A String. Identifier of the plan within list of the plans (for entities with list).
numberOfPayments	An Integer. Number of payments used to spread the global payment.
paymentFrequency	A String. Frequency of the payments, such as monthly and bimonthly.
paymentMethod	A PaymentMethodRef. PaymentMethod reference. A payment method defines a specific mean of payment (e.g direct debit).
planType	A String. Type of payment plan.
priority	An Integer. Priority of the payment plan.
status	A String. Status of the payment plan (effective, ineffective).
totalAmount	A Money. A base / value business entity used to represent money.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

PhoneContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.
phoneNumber	A String. The phone number of the contact.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.

@type	A String. When sub-classing, this defines the sub-class Extensible name.
-------	--

RelatedPartyRefOrPartyRoleRef sub-resource fields

partyOrPartyRole	A PartyRefOrPartyRoleRef.
role	A String. Role played by the related party or party role in the context of the specific entity it is linked to. Such as 'initiator', 'customer', 'salesAgent', 'user'.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

SocialContactMedium sub-resource fields

contactType	A String. Type of the contact medium to qualify it like pro email / personal email. This is not used to define the contact medium used.
id	A String. Identifier for this contact medium.
preferred	A Boolean. If true, indicates that is the preferred contact medium.
socialNetworkId	A String. Identifier as a member of a social network.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

TaxDefinition sub-resource fields

id	A String. Unique identifier of the tax.
jurisdictionLevel	A String. Level of the jurisdiction that levies the tax.
jurisdictionName	A String. Name of the jurisdiction that levies the tax.
name	A String. Tax name.
taxType	A String. Type of the tax.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.

@type	A String. When sub-classing, this defines the sub-class Extensible name.
-------	--

TaxExemptionCertificate sub-resource fields

attachment	An AttachmentRefOrValue. The polymorphic attributes @type, @schemaLocation & @referredType are related to the Attachment entity and not the AttachmentRefOrValue class itself.
certificateNumber	A String. Identifier of a document that shows proof of exemption from taxes for the taxing jurisdiction.
id	A String. Identifier of the tax exemption within list of the exemptions.
issuingJurisdiction	A String. Name of the jurisdiction that issued the exemption.
reason	A String. Reason for the tax exemption.
taxDefinition	A TaxDefinition. A list of taxes that are covered by the exemption, e.g. City Tax, State Tax. The definition would include the exemption (e.g. for a rate exemption 0% would be a full exemption, 5% could be a partial exemption if the actual rate was 10%).
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Json representation sample(s)

We provide below a JSON representation as example of the 'SettlementAccount' resource object.

```
{
  "@type": "SettlementAccount",
  "paymentStatus": "In Collection",
  "creditLimit": {
    "unit": "USD",
    "value": 20000
  },
  "description": "This settlement account ...",
  "href": "https://host:port/tmf-api/accountManagement/v5/settlementAccount/8790",

  "id": "8790",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Per Usage Account",
  "state": "inactive",
  "accountType": "Business",
  "billStructure": {
    "@type": "BillStructure",
    "presentationMedia": [
```

```

    {
      "@type": "BillPresentationMedia",
      "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/1451",
      "id": "1451",
      "name": "Web Page"
    }
  ],
  "format": {
    "@type": "BillFormat",
    "href": "https://host:port/tmf-
api/accountManagement/v5/billFormat/8128",
    "id": "8128",
    "name": "Detailed invoice"
  },
  "cycleSpecification": {
    "@type": "BillingCycleSpecification",
    "dateShift": 62,
    "frequency": "monthly",
    "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/1361",
    "id": "1361",
    "name": "Annual billing"
  }
},
"paymentPlan": [
  {
    "@type": "PaymentPlan",
    "numberOfPayments": 4,
    "paymentFrequency": "monthly",
    "priority": 3,
    "status": "Effective",
    "totalAmount": {
      "unit": "USD",
      "value": 543.8
    },
    "planType": "regular",
    "validFor": {
      "startDateTime": "2018-06-17T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    },
    "paymentMethod": {
      "@type": "PaymentMethodRef",
      "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/1534",
      "id": "1534",
      "name": "professional payment"
    }
  }
],
"financialAccount": {
  "@referredType": "FinancialAccount",
  "@type": "FinancialAccountRef",
  "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/3408",
  "id": "3408",
  "name": "Partnership account"
},
"defaultPaymentMethod": {
  "@type": "PaymentMethodRef",
  "href": "https://host:port/tmf-api/paymentMethods/v5/paymentMethod/9124",
  "id": "9124",
  "name": "family payment"
}

```

```

    },
    "relatedParty": [
      {
        "@referredType": "Organization",
        "href": "https://host:port/tmf-api/partyManagement/v5/party/5965",
        "id": "5965",
        "name": "Jimmy Doe",
        "role": "employee"
      }
    ],
    "taxExemption": [
      {
        "@type": "TaxExemption",
        "id": "1",
        "certificateNumber": "98765432345",
        "issuingJurisdiction": "USA",
        "reason": "Embassy",
        "taxDefinition": [
          {
            "@type": "TaxDefinition",
            "id": "96",
            "name": "Value Added Tax",
            "taxType": "federalVat"
          }
        ],
        "attachment": {
          "@type": "Attachment",
          "id": "1256673452346345",
          "href": "https://host:port/tmf-api/document/v5/attachment/1256673452346345",
          "attachmentType": "taxExemptionCertificate",
          "name": "TaxExemptionCertificate-555.pdf",
          "description": "Electronic version of the tax exemption certificate",
          "mimeType": "application/pdf",
          "url": "http://host:port/DocumentManager/666/TaxExemptionCertificate-555.pdf"
        },
        "validFor": {
          "startDateTime": "2018-06-17T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        }
      }
    ],
    "contact": [
      {
        "@type": "Contact",
        "contactName": "Virginie Cork",
        "contactType": "primary",
        "partyRoleType": "Publisher",
        "validFor": {
          "startDateTime": "2018-06-11T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "contactMedium": [
          {
            "@type": "GeographicAddressContactMedium",
            "preferred": true,
            "mediumType": "PostalAddress",
            "validFor": {
              "startDateTime": "2018-06-14T00:00:00.000Z",
              "endDateTime": "2019-01-10T00:00:00.000Z"
            }
          }
        ]
      }
    ]
  },

```

```

        "city": "Paris",
        "country": "France",
        "postCode": "75014",
        "street1": "15 Rue des Canards"
      }
    ],
    "relatedParty": {
      "role": "bill receiver",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/party/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    }
  },
  "accountBalance": [
    {
      "@type": "AccountBalance",
      "amount": {
        "unit": "USD",
        "value": 55.28
      },
      "balanceType": "DepositBalance",
      "validFor": {
        "startDateTime": "2018-06-10T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
  "accountRelationship": [
    {
      "@type": "AccountRelationship",
      "relationshipType": "contains",
      "validFor": {
        "startDateTime": "2018-06-16T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "account": {
        "@referredType": "BillingAccount",
        "@type": "AccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billingAccount/7550",
        "id": "7550",
        "name": "Travel Account"
      }
    }
  ]
}

```

BillPresentationMedia resource

A mean of communicating a bill, supported by the associated bill format. For example, post mail, email, web page.

Resource model

BillPresentationMedia
description : String href : String id : String name : String @baseType : String @schemaLocation : String @type = BillPresentationMedia

(1) : Mandatory property

Figure 16 - BillPresentationMedia

Field descriptions

BillPresentationMedia fields

description	A String. An explanatory text describing this bill presentation media.
href	A String. Hyperlink reference.
id	A String. Unique identifier.
name	A String. A short descriptive name.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Json representation sample(s)

We provide below a JSON representation as example of the 'BillPresentationMedia' resource object.

```
{
  "@type": "BillPresentationMedia",
  "description": "This bill presentation media describes electronic media",
  "href": "https://host:port/tmf-api/accountManagement/v5/billPresentationMedia/4506",
  "id": "4506",
  "name": "Electronic"
}
```

BillingCycleSpecification resource

A detailed description of when to initiate a billing cycle and the various sub steps of a billing cycle.

Resource model

BillingCycleSpecification
billingDateShift : Integer billingPeriod : String chargeDateOffset : Integer creditDateOffset : Integer description : String frequency : String href : String id : String mailingDateOffset : Integer name : String paymentDueDateOffset : Integer validFor : TimePeriod @baseType : String @schemaLocation : String @type = BillingCycleSpecification

(1) : Mandatory property

Figure 17 - BillingCycleSpecification

Field descriptions

BillingCycleSpecification fields

billingDateShift	An Integer. An offset of a billing/settlement date. The offset is expressed as number of days with regard to the start of the billing/settlement period.
billingPeriod	A String. A billing time period. It can be recurring, for example: week, month, quarter of year, year .
chargeDateOffset	An Integer. An offset of a date through which charges previously received by the billing system will appear on the bill. The offset is expressed as number of days with regard to the start of the BillingPeriod.
creditDateOffset	An Integer. An offset of a date through which credits previously received by the billing system will appear on the bill. The offset is expressed as number of days with regard to the start of the BillingPeriod.
description	A String. An explanation regarding this billing cycle specification.
frequency	A String. Frequency of the billing cycle (monthly for instance).
href	A String. Hyperlink reference.
id	A String. Unique identifier.
mailingDateOffset	An Integer. An offset of a customer bill mailing date. The offset is expressed as number of days with regard to the start of the BillingPeriod.
name	A String. A short descriptive name.

paymentDueDateOffset	An Integer. An offset of a payment due date. The offset is expressed as number of days with regard to the start of the BillingPeriod.
validFor	A TimePeriod. A period of time, either as a deadline (endDateTime only) a startDateTime only, or both.
@baseType	A String. When sub-classing, this defines the super-class.
@schemaLocation	A String. A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A String. When sub-classing, this defines the sub-class Extensible name.

Json representation sample(s)

We provide below a JSON representation as example of the 'BillingCycleSpecification' resource object.

```
{
  "@type": "BillingCycleSpecification",
  "billi": 20,
  "chargeDateOffset": 5,
  "creditDateOffset": 5,
  "description": "This billing cycle specification specifies cycle 5th of month",
  "frequency": "monthly",
  "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/4556",
  "id": "4556",
  "mailingDateOffset": 25,
  "name": "Monthly billing",
  "paymentDueDateOffset": 30,
  "validFor": {
    "startDateTime": "2018-06-10T00:00:00.000Z",
    "endDateTime": "2019-01-10T00:00:00.000Z"
  }
}
```

Notification Resource Models

28 notifications are defined for this API.

Notifications related to BillFormat:

- Bill Format Delete Event
- Bill Format State Change Event
- Bill Format Create Event
- Bill Format Attribute Value Change Event

Notifications related to PartyAccount:

- Party Account Create Event

- Party Account Attribute Value Change Event
- Party Account Delete Event
- Party Account State Change Event

Notifications related to BillingAccount:

- Billing Account Attribute Value Change Event
- Billing Account State Change Event
- Billing Account Delete Event
- Billing Account Create Event

Notifications related to FinancialAccount:

- Financial Account Delete Event
- Financial Account Create Event
- Financial Account State Change Event
- Financial Account Attribute Value Change Event

Notifications related to SettlementAccount:

- Settlement Account Create Event
- Settlement Account Delete Event
- Settlement Account Attribute Value Change Event
- Settlement Account State Change Event

Notifications related to BillPresentationMedia:

- Bill Presentation Media Attribute Value Change Event
- Bill Presentation Media Create Event
- Bill Presentation Media State Change Event
- Bill Presentation Media Delete Event

Notifications related to BillingCycleSpecification:

- Billing Cycle Specification Delete Event
- Billing Cycle Specification Attribute Value Change Event
- Billing Cycle Specification State Change Event
- Billing Cycle Specification Create Event

The notification structure for all notifications in this API follow the pattern depicted by the figure below. A notification event resource (depicted by "SpecificEvent" placeholder) is a subclass of a generic Event structure containing at least an id of the event occurrence (eventId), an event timestamp (eventTime), and the name of the resource (eventType). This notification structure owns an event payload structure ("SpecificEventPayload" placeholder) linked to the resource concerned by the notification using the resource name as access field

("resourceName" placeholder).

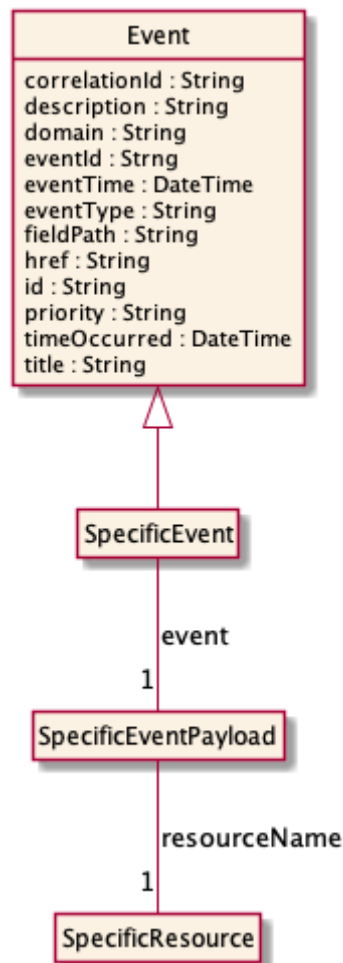


Figure 18 Notification Pattern

Bill Format Delete Event

Message example for BillFormatDeleteEvent event

```

Content-Type: application/json

{
  "correlationId": "14094289-0a38",
  "description": "BillFormatDeleteEvent illustration",
  "domain": "Commercial",
  "eventId": "48cb-a41e-943478b26d15",
  "eventTime": "2022-08-25T12:23:44.212Z",
  "eventType": "BillFormatDeleteEvent",
  "priority": "1",
  "timeOccurred": "2022-08-25T12:23:35.327Z",
  "title": "BillFormatDeleteEvent",
  "event": {
    "billFormat": {
      "@type": "BillFormat",
      "description": "This bill format ...",
      "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/8718",

```

```

        "id": "8718",
        "name": "Detailed invoice"
      }
    },
    "reportingSystem": {
      "id": "855",
      "name": "APP-400",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "source": {
      "id": "92",
      "name": "APP-105",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "@baseType": "Event",
    "@type": "BillFormatDeleteEvent"
  }
}

```

Bill Format State Change Event

Message example for BillFormatStateChangeEvent event

```

Content-Type: application/json

{
  "correlationId": "fe01e099-6931",
  "description": "BillFormatStateChangeEvent illustration",
  "domain": "Commercial",
  "eventId": "463e-90fc-7f2accb4b802",
  "eventTime": "2022-08-25T12:23:44.202Z",
  "eventType": "BillFormatStateChangeEvent",
  "priority": "5",
  "timeOccurred": "2022-08-25T12:23:40.247Z",
  "title": "BillFormatStateChangeEvent",
  "event": {
    "billFormat": {
      "@type": "BillFormat",
      "description": "This bill format ...",
      "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/8718",
      "id": "8718",
      "name": "Detailed invoice"
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "BillFormatStateChangeEvent"
}

```

}

Bill Format Create Event

Message example for BillFormatCreateEvent event

Content-Type: application/json

```
{
  "correlationId": "0510f131-c102",
  "description": "BillFormatCreateEvent illustration",
  "domain": "Commercial",
  "eventId": "46a2-b923-aa337ca92912",
  "eventTime": "2022-08-25T12:23:44.181Z",
  "eventType": "BillFormatCreateEvent",
  "priority": "5",
  "timeOcurred": "2022-08-25T12:23:37.884Z",
  "title": "billFormatCreateEvent",
  "event": {
    "billFormat": {
      "@type": "BillFormat",
      "description": "This bill format ...",
      "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/8718",
      "id": "8718",
      "name": "Detailed invoice"
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "BillFormatCreateEvent"
}
```

Bill Format Attribute Value Change Event

Message example for BillFormatAttributeValueChangeEvent event

Content-Type: application/json

```
{
  "correlationId": "95731510-e85e",
  "description": "BillFormatAttributeValueChangeEvent illustration",
  "domain": "Commercial",
  "eventId": "421f-ba83-b5ed387f1100",
  "eventTime": "2022-08-25T12:23:44.191Z",
  "eventType": "BillFormatAttributeValueChangeEvent",

```

```

    "priority": "2",
    "timeOccurred": "2022-08-25T12:23:40.440Z",
    "title": "BillFormatAttributeValueChangeEvent",
    "event": {
      "billFormat": {
        "@type": "BillFormat",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billFormat/8718",
        "id": "8718",
        "name": "Detailed invoice"
      }
    },
    "reportingSystem": {
      "id": "855",
      "name": "APP-400",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "source": {
      "id": "92",
      "name": "APP-105",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "@baseType": "Event",
    "@type": "BillFormatAttributeValueChangeEvent"
  }

```

Party Account Create Event

Message example for PartyAccountCreateEvent event

```

Content-Type: application/json

{
  "correlationId": "0510f131-c102",
  "description": "PartyAccountCreateEvent illustration",
  "domain": "Commercial",
  "eventId": "46a2-b923-aa337ca92912",
  "eventTime": "2022-08-25T12:23:44.181Z",
  "eventType": "PartyAccountCreateEvent",
  "priority": "5",
  "timeOccurred": "2022-08-25T12:23:37.884Z",
  "title": "PartyAccountCreateEvent",
  "event": {
    "partyAccount": {
      "@type": "PartyAccount",
      "creditLimit": {
        "unit": "USD",
        "value": 20000
      },
      "description": "This party account ...",
      "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/4458",
      "id": "4458",
      "lastModified": "2018-06-14T00:00:00.000Z",
      "name": "Travel account",
      "state": "Suspended",
      "accountType": "Business",
      "paymentStatus": "In Arrears",

```

```

    "billStructure": {
      "@type": "BillStructure",
      "presentationMedia": [
        {
          "@type": "BillPresentationMedia",
          "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/8800",
          "id": "8800",
          "name": "Electronic"
        }
      ],
      "format": {
        "@type": "BillFormat",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billFormat/4824",
        "id": "4824",
        "name": "Summary invoice"
      },
      "cycleSpecification": {
        "@type": "BillingCycleSpecification",
        "dateShift": 8,
        "frequency": "monthly",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/1309",
        "id": "1309",
        "name": "Monthly billing"
      }
    },
    "paymentPlan": [
      {
        "@type": "PaymentPlan",
        "numberOfPayments": 12,
        "paymentFrequency": "monthly",
        "priority": 2,
        "status": "Ineffective",
        "totalAmount": {
          "unit": "USD",
          "value": 100.0
        },
        "planType": "regular",
        "validFor": {
          "startDateTime": "2018-06-17T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "paymentMethod": {
          "@type": "PaymentMethodRef",
          "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/6895",
          "id": "6895",
          "name": "family payment"
        }
      }
    ],
    "financialAccount": {
      "@type": "FinancialAccountRef",
      "@referredType": "FinancialAccount",
      "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/2209",
      "id": "2209",
      "name": "Travel account"
    },
    "defaultPaymentMethod": {
      "@type": "PaymentMethodRef",

```

```

    "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/6514",
    "id": "6514",
    "name": "family payment"
  },
  "relatedParty": [
    {
      "role": "owner",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "href": "https://host:port/tmf-
api/partyManagement/v5/party/4665",
        "id": "4665",
        "name": "John Doe Ltd"
      }
    }
  ],
  "taxExemption": [
    {
      "@type": "TaxExemption",
      "certificateNumber": "45678889876",
      "issuingJurisdiction": "USA",
      "reason": "Embassy",
      "taxDefinition": [
        {
          "@type": "TaxDefinition",
          "id": "96",
          "name": "Value Added Tax",
          "taxType": "federalVat"
        }
      ],
      "attachment": {
        "@type": "Attachment",
        "id": "654321234334534552",
        "href": "https://host:port/tmf-
api/document/v5/attachment/654321234334534552",
        "attachmentType": "taxExemptionCertificate",
        "name": "TaxExemptionCertificate-654321.pdf",
        "description": "Electronic version of the tax exemption
certificate",
        "mimeType": "application/pdf",
        "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-654321.pdf"
      },
      "validFor": {
        "startDateTime": "2018-06-13T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
  "contact": [
    {
      "@type": "Contact",
      "contactName": "Anna Cristal",
      "contactType": "primary",
      "partyRoleType": "Publisher",
      "validFor": {
        "startDateTime": "2018-06-11T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
}

```

```

        "contactMedium": [
            {
                "@type": "GeographicAddressContactMedium",
                "preferred": false,
                "mediumType": "PostalAddress",
                "validFor": {
                    "startDateTime": "2018-06-14T00:00:00.000Z",
                    "endDateTime": "2019-01-10T00:00:00.000Z"
                },
                "city": "Paris",
                "country": "France",
                "postCode": "75014",
                "street1": "15 Rue des Canards"
            }
        ],
        "relatedParty": {
            "role": "owner",
            "@type": "RelatedPartyRefOrPartyRoleRef",
            "partyOrPartyRole": {
                "@referredType": "Individual",
                "@type": "PartyRefOrPartyRoleRef",
                "href": "https://host:port/tmf-
api/partyManagement/v5/party/2186",
                "id": "2186",
                "name": "Gustave Flaubert"
            }
        }
    },
    ],
    "accountBalance": [
        {
            "@type": "AccountBalance",
            "amount": {
                "unit": "USD",
                "value": 53.29
            },
            "balanceType": "DepositBalance",
            "validFor": {
                "startDateTime": "2018-06-13T00:00:00.000Z",
                "endDateTime": "2019-01-10T00:00:00.000Z"
            }
        }
    ],
    "accountRelationship": [
        {
            "@type": "AccountRelationship",
            "relationshipType": "contains",
            "validFor": {
                "startDateTime": "2018-06-10T00:00:00.000Z",
                "endDateTime": "2019-01-10T00:00:00.000Z"
            },
            "account": {
                "@referredType": "BillingAccount",
                "@type": "AccountRef",
                "href": "https://host:port/tmf-
api/accountManagement/v5/billingAccount/9522",
                "id": "9522",
                "name": "Travel Account"
            }
        }
    ]
}

```

```

    "reportingSystem": {
      "id": "855",
      "name": "APP-400",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "source": {
      "id": "92",
      "name": "APP-105",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "@baseType": "Event",
    "@type": "PartyAccountCreateEvent"
  }

```

Party Account Attribute Value Change Event

Message example for PartyAccountAttributeValueChangeEvent event

```

Content-Type: application/json

{
  "correlationId": "95731510-e85e",
  "description": "PartyAccountAttributeValueChangeEvent illustration",
  "domain": "Commercial",
  "eventId": "421f-ba83-b5ed387f1100",
  "eventTime": "2022-08-25T12:23:44.191Z",
  "eventType": "PartyAccountAttributeValueChangeEvent",
  "priority": "2",
  "timeOccurred": "2022-08-25T12:23:40.440Z",
  "title": "PartyAccountAttributeValueChangeEvent",
  "event": {
    "partyAccount": {
      "href": "http://servername/PartyAccount/1041",
      "id": "1041",
      "@type": "PartyAccount",
      "accountBalance": [
        {
          "@type": "AccountBalance",
          "amount": {
            "unit": "USD",
            "value": 50.58
          },
          "balanceType": "ReceivableBalance",
          "validFor": {
            "startDateTime": "2018-06-15T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
          }
        }
      ]
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {

```

```

        "id": "92",
        "name": "APP-105",
        "@type": "ReportingResource",
        "@referredType": "LogicalResource"
    },
    "@baseType": "Event",
    "@type": "PartyAccountAttributeValueChangeEvent"
}

```

Party Account Delete Event

Message example for PartyAccountDeleteEvent event

```

Content-Type: application/json

{
  "correlationId": "14094289-0a38",
  "description": "PartyAccountDeleteEvent illustration",
  "domain": "Commercial",
  "eventId": "48cb-a41e-943478b26d15",
  "eventTime": "2022-08-25T12:23:44.212Z",
  "eventType": "PartyAccountDeleteEvent",
  "priority": "1",
  "timeOccurred": "2022-08-25T12:23:35.327Z",
  "title": "PartyAccountDeleteEvent",
  "event": {
    "partyAccount": {
      "@type": "PartyAccount",
      "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/4458",
      "id": "4458"
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "PartyAccountDeleteEvent"
}

```

Party Account State Change Event

Message example for PartyAccountStateChangeEvent event

```

Content-Type: application/json

{
  "correlationId": "fe01e099-6931",

```

```

    "description": "PartyAccountStateChangeEvent illustration",
    "domain": "Commercial",
    "eventId": "463e-90fc-7f2accb4b802",
    "eventTime": "2022-08-25T12:23:44.202Z",
    "eventType": "PartyAccountStateChangeEvent",
    "priority": "5",
    "timeOccurred": "2022-08-25T12:23:40.247Z",
    "title": "PartyAccountStateChangeEvent",
    "event": {
      "partyAccount": {
        "href": "http://servername/PartyAccount/1041",
        "id": "1041",
        "@type": "PartyAccount",
        "state": "Active"
      }
    },
    "reportingSystem": {
      "id": "855",
      "name": "APP-400",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "source": {
      "id": "92",
      "name": "APP-105",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "@baseType": "Event",
    "@type": "PartyAccountStateChangeEvent"
  }

```

Billing Account Attribute Value Change Event

Message example for BillingAccountAttributeValueChangeEvent event

```

Content-Type: application/json

{
  "correlationId": "95731510-e85e",
  "description": "BillingAccountAttributeValueChangeEvent illustration",
  "domain": "Commercial",
  "eventId": "421f-ba83-b5ed387f1100",
  "eventTime": "2022-08-25T12:23:44.191Z",
  "eventType": "BillingAccountAttributeValueChangeEvent",
  "priority": "2",
  "timeOccurred": "2022-08-25T12:23:40.440Z",
  "title": "BillingAccountAttributeValueChangeEvent",
  "event": {
    "billingAccount": {
      "href": "http://servername/BillingAccount/1041",
      "id": "1041",
      "@type": "BillingAccount",
      "accountBalance": [
        {
          "@type": "AccountBalance",
          "amount": {
            "unit": "USD",
            "value": 50.58
          }
        }
      ]
    }
  }
}

```

```

        "balanceType": "ReceivableBalance",
        "validFor": {
            "startDateTime": "2018-06-15T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        }
    }
}
],
},
"reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
},
"source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
},
"@baseType": "Event",
"@type": "BillingAccountAttributeValueChangeEvent"
}

```

Billing Account State Change Event

Message example for BillingAccountStateChangeEvent event

Content-Type: application/json

```

{
    "correlationId": "fe01e099-6931",
    "description": "BillingAccountStateChangeEvent illustration",
    "domain": "Commercial",
    "eventId": "463e-90fc-7f2accb4b802",
    "eventTime": "2022-08-25T12:23:44.202Z",
    "eventType": "BillingAccountStateChangeEvent",
    "priority": "5",
    "timeOccurred": "2022-08-25T12:23:40.247Z",
    "title": "BillingAccountStateChangeEvent",
    "event": {
        "billingAccount": {
            "href": "http://servername/BillingAccount/1041",
            "id": "1041",
            "@type": "BillingAccount",
            "state": "Active"
        }
    },
    "reportingSystem": {
        "id": "855",
        "name": "APP-400",
        "@type": "ReportingResource",
        "@referredType": "LogicalResource"
    },
    "source": {
        "id": "92",
        "name": "APP-105",
        "@type": "ReportingResource",
        "@referredType": "LogicalResource"
    }
}

```

```

    },
    "@baseType": "Event",
    "@type": "BillingAccountStateChangeEvent"
  }

```

Billing Account Delete Event

Message example for BillingAccountDeleteEvent event

```

Content-Type: application/json

{
  "correlationId": "14094289-0a38",
  "description": "BillingAccountDeleteEvent illustration",
  "domain": "Commercial",
  "eventId": "48cb-a41e-943478b26d15",
  "eventTime": "2022-08-25T12:23:44.212Z",
  "eventType": "BillingAccountDeleteEvent",
  "priority": "1",
  "timeOccurred": "2022-08-25T12:23:35.327Z",
  "title": "BillingAccountDeleteEvent",
  "event": {
    "billingAccount": {
      "@type": "BillingAccount",
      "href": "https://host:port/tmf-api/accountManagement/v5/billingAccount/5430",
      "id": "5430"
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "BillingAccountDeleteEvent"
}

```

Billing Account Create Event

Message example for BillingAccountCreateEvent event

```

Content-Type: application/json

{
  "correlationId": "0510f131-c102",
  "description": "BillingAccountCreateEvent illustration",
  "domain": "Commercial",
  "eventId": "46a2-b923-aa337ca92912",
  "eventTime": "2022-08-25T12:23:44.181Z",

```

```

"eventType": "BillingAccountCreateEvent",
"priority": "5",
"timeOccurred": "2022-08-25T12:23:37.884Z",
"title": "BillingAccountCreateEvent",
"event": {
  "billingAccount": {
    "@type": "BillingAccount",
    "paymentStatus": "In Arrears",
    "creditLimit": {
      "unit": "USD",
      "value": 10000
    },
    "description": "This billing account ...",
    "href": "https://host:port/tmf-
api/accountManagement/v5/billingAccount/5430",
    "id": "5430",
    "lastModified": "2018-06-14T00:00:00.000Z",
    "name": "Home Account",
    "state": "Inactive",
    "accountType": "Business",
    "billStructure": {
      "@type": "BillStructure",
      "presentationMedia": [
        {
          "@type": "BillPresentationMedia",
          "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/9968",
          "id": "9968",
          "name": "Post Mail"
        }
      ],
      "format": {
        "@type": "BillFormat",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billFormat/3555",
        "id": "3555",
        "name": "Detailed invoice"
      },
      "cycleSpecification": {
        "@type": "BillingCycleSpecification",
        "dateShift": 54,
        "frequency": "monthly",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/3828",
        "id": "3828",
        "name": "Annual billing"
      }
    },
    "paymentPlan": [
      {
        "@type": "PaymentPlan",
        "numberOfPayments": 4,
        "paymentFrequency": "monthly",
        "priority": 1,
        "status": "Effective",
        "totalAmount": {
          "unit": "USD",
          "value": 100.0
        },
        "paymentType": "regular",
        "validFor": {
          "startDateTime": "2018-06-11T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        }
      }
    ]
  }
}

```

```

    },
    "paymentMethod": {
      "@type": "PaymentMethodRef",
      "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/2452",
      "id": "2452",
      "name": "professional payment"
    }
  },
  "financialAccount": {
    "@referredType": "FinancialAccount",
    "@type": "FinancialAccountRef",
    "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/2063",
    "id": "2063",
    "name": "Partnership account"
  },
  "defaultPaymentMethod": {
    "@type": "PaymentMethodRef",
    "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/3537",
    "id": "3537",
    "name": "family payment"
  },
  "relatedParty": [
    {
      "role": "service provider",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "href": "https://host:port/tmf-
api/partyManagement/v5/party/6838",
        "id": "6838",
        "name": "Richard Cole"
      }
    }
  ],
  "taxExemption": [
    {
      "@type": "TaxExemption",
      "id": "1",
      "certificateNumber": "9665432345",
      "issuingJurisdiction": "USA",
      "reason": "Embassy",
      "taxDefinition": [
        {
          "@type": "TaxDefinition",
          "id": "96",
          "name": "Value Added Tax",
          "taxType": "federalVat"
        }
      ]
    }
  ],
  "attachment": {
    "@type": "Attachment",
    "id": "88888834534552",
    "href": "https://host:port/tmf-
api/document/v5/attachment/88888834534552",
    "attachmentType": "taxExemptionCertificate",
    "name": "TaxExemptionCertificate-888.pdf",
    "description": "Electronic version of the tax exemption
certificate",

```

```

        "mimeType": "application/pdf",
        "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-888.pdf"
    },
    "validFor": {
        "startDateTime": "2018-06-17T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
    }
},
],
"contact": [
    {
        "@type": "Contact",
        "contactName": "Rachel Douglas",
        "contactType": "secondary",
        "partyRoleType": "Vendor",
        "validFor": {
            "startDateTime": "2018-06-17T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "contactMedium": [
            {
                "@type": "GeographicAddressContactMedium",
                "preferred": true,
                "mediumType": "PostalAddress",
                "validFor": {
                    "startDateTime": "2018-06-14T00:00:00.000Z",
                    "endDateTime": "2019-01-10T00:00:00.000Z"
                },
                "city": "Paris",
                "country": "France",
                "postCode": "75014",
                "street1": "15 Rue des Canards"
            }
        ],
        "relatedParty": {
            "@type": "Organization",
            "href": "https://host:port/tmf-
api/partyManagement/v5/party/9947",
            "id": "9947",
            "name": "Richard Cole",
            "role": "owner"
        }
    }
],
"accountBalance": [
    {
        "@type": "AccountBalance",
        "amount": {
            "unit": "USD",
            "value": 58.33
        },
        "balanceType": "ReceivableBalance",
        "validFor": {
            "startDateTime": "2018-06-10T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        }
    }
],
"accountRelationship": [
    {
        "@type": "AccountRelationship",
        "relationshipType": "contains",

```

```

        "validFor": {
            "startDateTime": "2018-06-13T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "account": {
            "@referredType": "BillingAccount",
            "@type": "AccountRef",
            "href": "https://host:port/tmf-
api/accountManagement/v5/billingAccount/9327",
            "id": "9327",
            "name": "Paradise Account"
        }
    }
}
},
"reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
},
"source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
},
"@baseType": "Event",
"@type": "BillingAccountCreateEvent"
}

```

Financial Account Delete Event

Message example for FinancialAccountDeleteEvent event

```

Content-Type: application/json

{
    "correlationId": "14094289-0a38",
    "description": "FinancialAccountDeleteEvent illustration",
    "domain": "Commercial",
    "eventId": "48cb-a41e-943478b26d15",
    "eventTime": "2022-08-25T12:23:44.212Z",
    "eventType": "FinancialAccountDeleteEvent",
    "priority": "1",
    "timeOccurred": "2022-08-25T12:23:35.327Z",
    "title": "FinancialAccountDeleteEvent",
    "event": {
        "financialAccount": {
            "@type": "FinancialAccount",
            "href": "http://servername/financialAccount/1041",
            "id": "1041"
        }
    },
    "reportingSystem": {
        "id": "855",
        "name": "APP-400",
        "@type": "ReportingResource",
        "@referredType": "LogicalResource"
    }
}

```

```

    },
    "source": {
      "id": "92",
      "name": "APP-105",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "@baseType": "Event",
    "@type": "FinancialAccountDeleteEvent"
  }
}

```

Financial Account Create Event

Message example for FinancialAccountCreateEvent event

Content-Type: application/json

```

{
  "correlationId": "0510f131-c102",
  "description": "FinancialAccountCreateEvent illustration",
  "domain": "Commercial",
  "eventId": "46a2-b923-aa337ca92912",
  "eventTime": "2022-08-25T12:23:44.181Z",
  "eventType": "FinancialAccountCreateEvent",
  "priority": "5",
  "timeOccurred": "2022-08-25T12:23:37.884Z",
  "title": "FinancialAccountCreateEvent",
  "event": {
    "financialAccount": {
      "@type": "FinancialAccount",
      "creditLimit": {
        "unit": "USD",
        "value": 3500
      },
      "description": "This financial account allows administration of the obligations",
      "href": "http://servername/financialAccount/1041",
      "id": "1041",
      "lastModified": "2018-06-14T00:00:00.000Z",
      "name": "Administration account",
      "state": "Active",
      "accountType": "Global",
      "relatedParty": [
        {
          "role": "bill receiver",
          "@type": "RelatedPartyRefOrPartyRoleRef",
          "partyOrPartyRole": {
            "@referredType": "Individual",
            "@type": "PartyRefOrPartyRoleRef",
            "href": "https://host:port/tmf-api/partyManagement/v5/party/2186",
            "id": "2186",
            "name": "Gustave Flaubert"
          }
        }
      ],
      "taxExemption": [
        {
          "@type": "TaxExemption",
          "certificateNumber": "45678909876",

```

```

    "issuingJurisdiction": "Prefecture",
    "reason": "Social",
    "taxDefinition": [
      {
        "@type": "TaxDefinition",
        "id": "96",
        "name": "Value Added Tax",
        "taxType": "federalVat"
      }
    ],
    "attachment": {
      "@type": "Attachment",
      "id": "9304357346341236",
      "href": "https://host:port/tmf-
api/document/v5/attachment/9304357346341236",
      "attachmentType": "taxExemptionCertificate",
      "name": "TaxExemptionCertificate-54321.pdf",
      "description": "Electronic version of the tax exemption
certificate",
      "mimeType": "application/pdf",
      "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-54321.pdf"
    },
    "validFor": {
      "startDateTime": "2018-06-13T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    }
  },
  "contact": [
    {
      "@type": "Contact",
      "contactName": "Ludwig Borgia",
      "contactType": "secondary",
      "partyRoleType": "CustomerAccountRepresentative",
      "validFor": {
        "startDateTime": "2018-06-11T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "contactMedium": [
        {
          "@type": "EmailContactMedium",
          "preferred": false,
          "mediumType": "Email",
          "validFor": {
            "startDateTime": "2018-06-12T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
          },
          "emailAddress": "alain.delon@best-actor.fr"
        }
      ],
      "relatedParty": {
        "role": "employee",
        "@type": "RelatedPartyRefOrPartyRoleRef",
        "partyOrPartyRole": {
          "@referredType": "Individual",
          "@type": "PartyRefOrPartyRoleRef",
          "href": "https://host:port/tmf-
api/partyManagement/v5/party/2186",
          "id": "2186",
          "name": "Gustave Flaubert"
        }
      }
    }
  ]
}

```

```

    }
  ],
  "accountBalance": [
    {
      "@type": "AccountBalance",
      "amount": {
        "unit": "USD",
        "value": 50.58
      },
      "balanceType": "ReceivableBalance",
      "validFor": {
        "startDateTime": "2018-06-15T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
  "accountRelationship": [
    {
      "@type": "AccountRelationship",
      "relationshipType": "contains",
      "validFor": {
        "startDateTime": "2018-06-13T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "account": {
        "@referredType": "BillingAccount",
        "@type": "AccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billingAccount/7688",
        "id": "7688",
        "name": "Travel Account"
      }
    }
  ]
},
"reportingSystem": {
  "id": "855",
  "name": "APP-400",
  "@type": "ReportingResource",
  "@referredType": "LogicalResource"
},
"source": {
  "id": "92",
  "name": "APP-105",
  "@type": "ReportingResource",
  "@referredType": "LogicalResource"
},
"@baseType": "Event",
"@type": "FinancialAccountCreateEvent"
}

```

Financial Account State Change Event

Message example for FinancialAccountStateChangeEvent event

```

Content-Type: application/json

{
  "correlationId": "fe01e099-6931",

```

```

    "description": "FinancialAccountStateChangeEvent illustration",
    "domain": "Commercial",
    "eventId": "463e-90fc-7f2accb4b802",
    "eventTime": "2022-08-25T12:23:44.202Z",
    "eventType": "FinancialAccountStateChangeEvent",
    "priority": "5",
    "timeOccurred": "2022-08-25T12:23:40.247Z",
    "title": "FinancialAccountStateChangeEvent",
    "event": {
      "financialAccount": {
        "href": "http://servername/financialAccount/1041",
        "id": "1041",
        "@type": "FinancialAccount",
        "state": "Active"
      }
    },
    "reportingSystem": {
      "id": "855",
      "name": "APP-400",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "source": {
      "id": "92",
      "name": "APP-105",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "@baseType": "Event",
    "@type": "FinancialAccountStateChangeEvent"
  }

```

Financial Account Attribute Value Change Event

Message example for FinancialAccountAttributeValueChangeEvent event

```

Content-Type: application/json

{
  "correlationId": "95731510-e85e",
  "description": "FinancialAccountAttributeValueChangeEvent illustration",
  "domain": "Commercial",
  "eventId": "421f-ba83-b5ed387f1100",
  "eventTime": "2022-08-25T12:23:44.191Z",
  "eventType": "FinancialAccountAttributeValueChangeEvent",
  "priority": "2",
  "timeOccurred": "2022-08-25T12:23:40.440Z",
  "title": "FinancialAccountAttributeValueChangeEvent",
  "event": {
    "financialAccount": {
      "href": "http://servername/financialAccount/1041",
      "id": "1041",
      "@type": "FinancialAccount",
      "accountBalance": [
        {
          "@type": "AccountBalance",
          "amount": {
            "unit": "USD",
            "value": 50.58
          }
        }
      ]
    }
  }
}

```

```

        "balanceType": "ReceivableBalance",
        "validFor": {
            "startDateTime": "2018-06-15T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        }
    }
}
],
},
"reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
},
"source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
},
"@baseType": "Event",
"@type": "FinancialAccountAttributeValueChangeEvent"
}

```

Settlement Account Create Event

Message example for SettlementAccountCreateEvent event

```

Content-Type: application/json

{
    "correlationId": "0510f131-c102",
    "description": "SettlementAccountCreateEvent illustration",
    "domain": "Commercial",
    "eventId": "46a2-b923-aa337ca92912",
    "eventTime": "2022-08-25T12:23:44.181Z",
    "eventType": "SettlementAccountCreateEvent",
    "priority": "5",
    "timeOccurred": "2022-08-25T12:23:37.884Z",
    "title": "SettlementAccountCreateEvent",
    "event": {
        "settlementAccount": {
            "@type": "SettlementAccount",
            "paymentStatus": "In Collection",
            "creditLimit": {
                "unit": "USD",
                "value": 20000
            },
            "description": "This settlement account ...",
            "href": "https://host:port/tmf-api/accountManagement/v5/settlementAccount/8790",
            "id": "8790",
            "lastModified": "2018-06-14T00:00:00.000Z",
            "name": "Per Usage Account",
            "state": "inactive",
            "accountType": "Business",
            "billStructure": {
                "@type": "BillStructure",
                "presentationMedia": [

```

```

        {
            "@type": "BillPresentationMedia",
            "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/1451",
            "id": "1451",
            "name": "Web Page"
        }
    ],
    "format": {
        "@type": "BillFormat",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billFormat/8128",
        "id": "8128",
        "name": "Detailed invoice"
    },
    "cycleSpecification": {
        "@type": "BillingCycleSpecification",
        "dateShift": 62,
        "frequency": "monthly",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/1361",
        "id": "1361",
        "name": "Annual billing"
    }
},
"paymentPlan": [
    {
        "@type": "PaymentPlan",
        "numberOfPayments": 4,
        "paymentFrequency": "monthly",
        "priority": 3,
        "status": "Effective",
        "totalAmount": {
            "unit": "USD",
            "value": 543.8
        },
        "planType": "regular",
        "validFor": {
            "startDateTime": "2018-06-17T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "paymentMethod": {
            "@type": "PaymentMethodRef",
            "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/1534",
            "id": "1534",
            "name": "professional payment"
        }
    }
],
"financialAccount": {
    "@referredType": "FinancialAccount",
    "@type": "FinancialAccountRef",
    "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/3408",
    "id": "3408",
    "name": "Partnership account"
},
"defaultPaymentMethod": {
    "@type": "PaymentMethodRef",
    "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/9124",
    "id": "9124",

```

```

    "name": "family payment"
  },
  "relatedParty": [
    {
      "role": "employee",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/party/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    }
  ],
  "taxExemption": [
    {
      "@type": "TaxExemption",
      "id": "1",
      "certificateNumber": "98765432345",
      "issuingJurisdiction": "USA",
      "reason": "Embassy",
      "taxDefinition": [
        {
          "@type": "TaxDefinition",
          "id": "96",
          "name": "Value Added Tax",
          "taxType": "federalVat"
        }
      ],
      "attachment": {
        "@type": "Attachment",
        "id": "1256673452346345",
        "href": "https://host:port/tmf-
api/document/v5/attachment/1256673452346345",
        "attachmentType": "taxExemptionCertificate",
        "name": "TaxExemptionCertificate-555.pdf",
        "description": "Electronic version of the tax exemption
certificate",
        "mimeType": "application/pdf",
        "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-555.pdf"
      },
      "validFor": {
        "startDateTime": "2018-06-17T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
  "contact": [
    {
      "@type": "Contact",
      "contactName": "Virginie Cork",
      "contactType": "primary",
      "partyRoleType": "Publisher",
      "validFor": {
        "startDateTime": "2018-06-11T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "contactMedium": [
        {
          "@type": "GeographicAddressContactMedium",

```

```

        "preferred": true,
        "mediumType": "PostalAddress",
        "validFor": {
            "startDateTime": "2018-06-14T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "city": "Paris",
        "country": "France",
        "postCode": "75014",
        "street1": "15 Rue des Canards"
    }
},
"relatedParty": {
    "role": "bill receiver",
    "@type": "RelatedPartyRefOrPartyRoleRef",
    "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/party/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
    }
}
},
"accountBalance": [
    {
        "@type": "AccountBalance",
        "amount": {
            "unit": "USD",
            "value": 55.28
        },
        "balanceType": "DepositBalance",
        "validFor": {
            "startDateTime": "2018-06-10T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        }
    }
],
"accountRelationship": [
    {
        "@type": "AccountRelationship",
        "relationshipType": "contains",
        "validFor": {
            "startDateTime": "2018-06-16T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "account": {
            "@referredType": "BillingAccount",
            "@type": "AccountRef",
            "href": "https://host:port/tmf-
api/accountManagement/v5/billingAccount/7550",
            "id": "7550",
            "name": "Travel Account"
        }
    }
]
},
"reportingSystem": {
    "id": "855",
    "name": "APP-400",

```

```

    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "SettlementAccountCreateEvent"
}

```

Settlement Account Delete Event

Message example for SettlementAccountDeleteEvent event

```

Content-Type: application/json

{
  "correlationId": "14094289-0a38",
  "description": "SettlementAccountDeleteEvent illustration",
  "domain": "Commercial",
  "eventId": "48cb-a41e-943478b26d15",
  "eventTime": "2022-08-25T12:23:44.212Z",
  "eventType": "SettlementAccountDeleteEvent",
  "priority": "1",
  "timeOccurred": "2022-08-25T12:23:35.327Z",
  "title": "SettlementAccountDeleteEvent",
  "event": {
    "settlementAccount": {
      "@type": "SettlementAccount",
      "href": "https://host:port/tmf-api/accountManagement/v5/settlementAccount/8790",
      "id": "8790"
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "SettlementAccountDeleteEvent"
}

```

Settlement Account Attribute Value Change Event

Message example for SettlementAccountAttributeValueChangeEvent event

Content-Type: application/json

```
{
  "correlationId": "95731510-e85e",
  "description": "SettlementAccountAttributeValueChangeEvent illustration",
  "domain": "Commercial",
  "eventId": "421f-ba83-b5ed387f1100",
  "eventTime": "2022-08-25T12:23:44.191Z",
  "eventType": "SettlementAccountAttributeValueChangeEvent",
  "priority": "2",
  "timeOccurred": "2022-08-25T12:23:40.440Z",
  "title": "SettlementAccountAttributeValueChangeEvent",
  "event": {
    "settlementAccount": {
      "href": "http://servername/SettlementAccount/1041",
      "id": "1041",
      "@type": "SettlementAccount",
      "accountBalance": [
        {
          "@type": "AccountBalance",
          "amount": {
            "unit": "USD",
            "value": 50.58
          },
          "balanceType": "ReceivableBalance",
          "validFor": {
            "startDateTime": "2018-06-15T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
          }
        }
      ]
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "SettlementAccountAttributeValueChangeEvent"
}
```

Settlement Account State Change Event

Message example for SettlementAccountStateChangeEvent

Content-Type: application/json

```
{
  "correlationId": "fe01e099-6931",
  "description": "SettlementAccountStateChangeEvent illustration",
  "domain": "Commercial",
```

```

"eventId": "463e-90fc-7f2accb4b802",
"eventTime": "2022-08-25T12:23:44.202Z",
"eventType": "SettlementAccountStateChangeEvent",
"priority": "5",
"timeOccurred": "2022-08-25T12:23:40.247Z",
"title": "SettlementAccountStateChangeEvent",
"event": {
  "settlementAccount": {
    "href": "http://servername/SettlementAccount/1041",
    "id": "1041",
    "@type": "SettlementAccount",
    "state": "Active"
  }
},
"reportingSystem": {
  "id": "855",
  "name": "APP-400",
  "@type": "ReportingResource",
  "@referredType": "LogicalResource"
},
"source": {
  "id": "92",
  "name": "APP-105",
  "@type": "ReportingResource",
  "@referredType": "LogicalResource"
},
"@baseType": "Event",
"@type": "SettlementAccountStateChangeEvent"
}

```

Bill Presentation Media Attribute Value Change Event

Message example for BillPresentationMediaAttributeValueChanged event

```

Content-Type: application/json

{
  "correlationId": "95731510-e85e",
  "description": "BillPresentationMediaAttributeValueChanged illustration",
  "domain": "Commercial",
  "eventId": "421f-ba83-b5ed387f1100",
  "eventTime": "2022-08-25T12:23:44.191Z",
  "eventType": "BillPresentationMediaAttributeValueChanged",
  "priority": "2",
  "timeOccurred": "2022-08-25T12:23:40.440Z",
  "title": "BillPresentationMediaAttributeValueChanged",
  "event": {
    "billPresentationMedia": {
      "@type": "BillPresentationMedia",
      "href": "https://host:port/tmf-api/accountManagement/v5/BillPresentationMedia/8718",
      "id": "8718",
      "name": "Formatted e-paper"
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  }
}

```

```

    },
    "source": {
      "id": "92",
      "name": "APP-105",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "@baseType": "Event",
    "@type": "BillPresentationMediaAttributeValueChangeEvent"
  }
}

```

Bill Presentation Media Create Event

Message example for BillPresentationMediaCreateEvent event

```

Content-Type: application/json

{
  "correlationId": "0510f131-c102",
  "description": "BillPresentationMediaCreateEvent illustration",
  "domain": "Commercial",
  "eventId": "46a2-b923-aa337ca92912",
  "eventTime": "2022-08-25T12:23:44.181Z",
  "eventType": "BillPresentationMediaCreateEvent",
  "priority": "5",
  "timeOccurred": "2022-08-25T12:23:37.884Z",
  "title": "BillPresentationMediaCreateEvent",
  "event": {
    "billPresentationMedia": {
      "@type": "BillPresentationMedia",
      "description": "This bill format ...",
      "href": "https://host:port/tmf-api/accountManagement/v5/BillPresentationMedia/8718",
      "id": "8718",
      "name": "Detailed invoice"
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "BillPresentationMediaCreateEvent"
}

```

Bill Presentation Media State Change Event

Message example for BillPresentationMediaStateChangeEvent event

Content-Type: application/json

```
{
  "correlationId": "fe01e099-6931",
  "description": "BillPresentationMediaStateChangeEvent illustration",
  "domain": "Commercial",
  "eventId": "463e-90fc-7f2accb4b802",
  "eventTime": "2022-08-25T12:23:44.202Z",
  "eventType": "BillPresentationMediaStateChangeEvent",
  "priority": "5",
  "timeOccurred": "2022-08-25T12:23:40.247Z",
  "title": "BillPresentationMediaStateChangeEvent",
  "event": {
    "billPresentationMedia": {
      "@type": "BillPresentationMedia",
      "description": "This bill format ...",
      "href": "https://host:port/tmf-
api/accountManagement/v5/BillPresentationMedia/8718",
      "id": "8718",
      "name": "Detailed invoice"
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "BillPresentationMediaStateChangeEvent"
}
```

Bill Presentation Media Delete Event

Message example for BillPresentationMediaDeleteEvent event

Content-Type: application/json

```
{
  "correlationId": "14094289-0a38",
  "description": "BillPresentationMediaDeleteEvent illustration",
  "domain": "Commercial",
  "eventId": "48cb-a41e-943478b26d15",
  "eventTime": "2022-08-25T12:23:44.212Z",
  "eventType": "BillPresentationMediaDeleteEvent",
  "priority": "1",
  "timeOccurred": "2022-08-25T12:23:35.327Z",
  "title": "BillPresentationMediaDeleteEvent",
  "event": {
    "billPresentationMedia": {
      "@type": "BillPresentationMedia",
      "description": "This bill format ...",
      "href": "https://host:port/tmf-
```

```

api/accountManagement/v5/BillPresentationMedia/8718",
  "id": "8718",
  "name": "Detailed invoice"
},
{
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "BillPresentationMediaDeleteEvent"
}

```

Billing Cycle Specification Delete Event

Message example for BillingCycleSpecificationDeleteEvent event

```

Content-Type: application/json

{
  "correlationId": "14094289-0a38",
  "description": "BillingCycleSpecificationDeleteEvent illustration",
  "domain": "Commercial",
  "eventId": "48cb-a41e-943478b26d15",
  "eventTime": "2022-08-25T12:23:44.212Z",
  "eventType": "BillingCycleSpecificationDeleteEvent",
  "priority": "1",
  "timeOccurred": "2022-08-25T12:23:35.327Z",
  "title": "BillingCycleSpecificationDeleteEvent",
  "event": {
    "billingCycleSpecification": {
      "@type": "BillingCycleSpecification",
      "billingDateShift": 20,
      "chargeDateOffset": 5,
      "creditDateOffset": 5,
      "description": "This billing cycle specification ...",
      "frequency": "monthly",
      "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/4556",
      "id": "4556",
      "mailingDateOffset": 25,
      "name": "Monthly billing",
      "paymentDueDateOffset": 30,
      "validFor": {
        "startDateTime": "2018-06-10T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    },
    "reportingSystem": {
      "id": "855",
      "name": "APP-400",

```

```

        "@type": "ReportingResource",
        "@referredType": "LogicalResource"
    },
    "source": {
        "id": "92",
        "name": "APP-105",
        "@type": "ReportingResource",
        "@referredType": "LogicalResource"
    },
    "@baseType": "Event",
    "@type": "BillingCycleSpecificationDeleteEvent"
}

```

Billing Cycle Specification Attribute Value Change Event

Message example for BillingCycleSpecificationAttributeValueChangeEvent event

```

Content-Type: application/json

{
  "correlationId": "95731510-e85e",
  "description": "BillingCycleSpecificationAttributeValueChangeEvent
illustration",
  "domain": "Commercial",
  "eventId": "421f-ba83-b5ed387f1100",
  "eventTime": "2022-08-25T12:23:44.191Z",
  "eventType": "BillingCycleSpecificationAttributeValueChangeEvent",
  "priority": "2",
  "timeOccurred": "2022-08-25T12:23:40.440Z",
  "title": "BillingCycleSpecificationAttributeValueChangeEvent",
  "event": {
    "billingCycleSpecification": {
      "href": "http://servername/BillingCycleSpecification/1041",
      "id": "1041",
      "@type": "BillingCycleSpecification",
      "chargeDateOffset": 5
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "BillingCycleSpecificationAttributeValueChangeEvent"
}

```

Billing Cycle Specification State Change Event

Message example for BillingCycleSpecificationStateChangeEvent event

Content-Type: application/json

```
{
  "correlationId": "fe01e099-6931",
  "description": "BillingCycleSpecificationStateChangeEvent illustration",
  "domain": "Commercial",
  "eventId": "463e-90fc-7f2accb4b802",
  "eventTime": "2022-08-25T12:23:44.202Z",
  "eventType": "BillingCycleSpecificationStateChangeEvent",
  "priority": "5",
  "timeOccurred": "2022-08-25T12:23:40.247Z",
  "title": "BillingCycleSpecificationStateChangeEvent",
  "event": {
    "billingCycleSpecification": {
      "@type": "BillingCycleSpecification",
      "billingDateShift": 20,
      "chargeDateOffset": 5,
      "creditDateOffset": 5,
      "description": "This billing cycle specification ...",
      "frequency": "monthly",
      "href": "https://host:port/tmf-api/accountManagement/v5/billingCycleSpecification/4556",
      "id": "4556",
      "mailingDateOffset": 25,
      "name": "Monthly billing",
      "paymentDueDateOffset": 30,
      "validFor": {
        "startDateTime": "2018-06-10T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  },
  "reportingSystem": {
    "id": "855",
    "name": "APP-400",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "source": {
    "id": "92",
    "name": "APP-105",
    "@type": "ReportingResource",
    "@referredType": "LogicalResource"
  },
  "@baseType": "Event",
  "@type": "BillingCycleSpecificationStateChangeEvent"
}
```

Billing Cycle Specification Create Event

Message example for BillingCycleSpecificationCreateEvent event

Content-Type: application/json

```
{
  "correlationId": "0510f131-c102",
  "description": "BillingCycleSpecificationCreateEvent illustration",
  "domain": "Commercial",
  "eventId": "46a2-b923-aa337ca92912",
  ...
}
```

```

    "eventTime": "2022-08-25T12:23:44.181Z",
    "eventType": "BillingCycleSpecificationCreateEvent",
    "priority": "5",
    "timeOccurred": "2022-08-25T12:23:37.884Z",
    "title": "BillingCycleSpecificationCreateEvent",
    "event": {
      "billingCycleSpecification": {
        "@type": "BillingCycleSpecification",
        "billingDateShift": 20,
        "chargeDateOffset": 5,
        "creditDateOffset": 5,
        "description": "This billing cycle specification ...",
        "frequency": "monthly",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/4556",
        "id": "4556",
        "mailingDateOffset": 25,
        "name": "Monthly billing",
        "paymentDueDateOffset": 30,
        "validFor": {
          "startDateTime": "2018-06-10T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        }
      }
    },
    "reportingSystem": {
      "id": "855",
      "name": "APP-400",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "source": {
      "id": "92",
      "name": "APP-105",
      "@type": "ReportingResource",
      "@referredType": "LogicalResource"
    },
    "@baseType": "Event",
    "@type": "BillingCycleSpecificationCreateEvent"
  }

```

API OPERATIONS

Remember the following Uniform Contract:

Operation on Entities	Uniform API Operation	Description
Query Entities	GET Resource	GET must be used to retrieve a representation of a resource.
Create Entity	POST Resource	POST must be used to create a new resource
Partial Update of an Entity	PATCH Resource	PATCH must be used to partially update a resource
Remove an Entity	DELETE Resource	DELETE must be used to remove a resource
Execute an Action on an Entity	POST on TASK Resource	POST must be used to execute Task Resources
Other Request Methods	POST on TASK Resource	GET and POST must not be used to tunnel other request methods.

Filtering and attribute selection rules are described in the TMF REST Design Guidelines.

Notifications are also described in a subsequent section.

Operations on BillFormat

Retrieves a BillFormat by ID

GET /billFormat/{id}?fields=...

Description

This operation retrieves a BillFormat entity. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving a BillFormat resource

Request

```
GET /billFormat/8718
Content-Type: application/json
```

Response

```
200
```

```
{
  "@type": "BillFormat",
  "description": "This bill format gives a detailed invoice",
  "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/8718",
  "id": "8718",
  "name": "Detailed invoice"
}
```

List or find BillFormat objects

GET /billFormat?fields=...

Description

This operation list BillFormat entities. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Retrieving all bill formats. The result items are shrunk to show only the id and name (fields=id,name).

Request

```
GET /billFormat?fields=id,name
Content-Type: application/json
```

Response

```
200

[
  {
    "@type": "BillFormat",
    "id": "42",
    "name": "simple invoice"
  },
  {
    "@type": "BillFormat",
    "id": "43",
    "name": "detailed invoice"
  }
]
```

Creates a BillFormat

POST /billFormat?fields=...

Description

This operation creates a BillFormat entity.

Mandatory Attributes

Mandatory Attributes	Rule
name	
@type	

Usage samples

Here is a sample of a request for creating a BillFormat resource. In this example the request only passes mandatory attributes.

Request

```
POST /billFormat
Content-Type: application/json

{
  "@type": "BillFormat",
  "name": "Detailed invoice"
}
```

Response

```
201

{
  "@type": "BillFormat",
  "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/8718",
  "id": "8718",
  "name": "Detailed invoice"
}
```

Updates partially a BillFormat

PATCH /billFormat/{id}?fields=...

Description

This operation allows partial updates of a BillFormat entity. Support of json/merge (<https://tools.ietf.org/html/rfc7386>) is mandatory, support of json/patch (<http://tools.ietf.org/html/rfc5789>) is optional. Note: If the update operation yields to the creation of sub-resources or relationships, the same rules concerning mandatory sub-resource attributes and default value settings in the POST operation applies to the PATCH operation. Hence these tables are not repeated here.

Patchable and Non Patchable Attributes

Non Patchable Attributes	Rule
href	

Non Patchable Attributes	Rule
id	
@baseType	@baseType is immutable
@schemaLocation	@schemaLocation is immutable
@type	@type is immutable

Patchable Attributes	Rule
description	
name	

Usage samples

Here is an example of a request for patching a BillFormat resource with change on description attribute using patch merge

Request

```
PATCH /billFormat/{id}
Content-Type: application/merge-patch+json

{
  "@type": "BillFormat",
  "description": "Detailed billing containing full phone numbers of calls"
}
```

Response

```
200

{
  "description": "Detailed billing containing full phone numbers of calls",
  "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/8718",
  "id": "8718",
  "name": "Detailed invoice"
}
```

Here is an example of a request for patching a BillFormat resource with change on description attribute using patch merge

Request

```
PATCH /billFormat/{id}
Content-Type: application/merge-patch+json

{
  "@type": "BillFormat",
  "description": "Detailed billing containing full phone numbers of calls"
}
```

Response

```
200

{
  "description": "Detailed billing containing full phone numbers of calls",
  "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/8718",
  "id": "8718",
  "name": "Detailed invoice"
}
```

Here is an example of a request for patching a BillFormat resource with change on description attribute using JSON Patch

Request

```
PATCH /billFormat/{id}
Content-Type: application/json-patch+json

{
  "path": "/description",
  "value": "Detailed billing containing full phone numbers of calls",
  "op": "replace"
}
```

Response

```
200

{
  "description": "Detailed billing containing full phone numbers of calls",
  "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/8718",
  "id": "8718",
  "name": "Detailed invoice"
}
```

Deletes a BillFormat

DELETE /billFormat/{id}

Description

This operation deletes a BillFormat entity.

Operations on PartyAccount

List or find PartyAccount objects

GET /partyAccount?fields=...

Description

This operation list PartyAccount entities. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving PartyAccount resources.
Retrieving all party accounts of type Business with due status. The result items are shrunk to show only the id, name and the credit limit (fields=id,name,creditLimit).

Request

```
GET /partyAccount?status=due
Content-Type: application/json
```

Response

```
200

[
  {
    "@type": "PartyAccount",
    "id": "9473",
    "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/9473",
    "creditLimit": {
      "unit": "USD",
      "value": 50000
    },
    "name": "Administration Account"
  },
  {
    "@type": "PartyAccount",
    "id": "9899",
    "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/9899",
    "creditLimit": {
      "unit": "USD",
      "value": 1000000
    },
    "name": "Bahamas Account"
  }
]
```

Retrieves a PartyAccount by ID

GET /partyAccount/{id}?fields=...

Description

This operation retrieves a PartyAccount entity. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving a PartyAccount resource

Request

```
GET /partyAccount/4458
Content-Type: application/json
```

Response

```
200

{
  "@type": "PartyAccount",
  "creditLimit": {
    "unit": "USD",
    "value": 20000
  },
  "description": "This party account ...",
  "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/4458",
  "id": "4458",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Travel account",
  "state": "Suspended",
  "accountType": "Business",
  "paymentStatus": "In Arrears",
  "billStructure": {
    "@type": "BillStructure",
    "presentationMedia": [
      {
        "@type": "BillPresentationMedia",
        "href": "https://host:port/tmf-api/accountManagement/v5/billPresentationMedia/8800",
        "id": "8800",
        "name": "Electronic"
      }
    ],
    "format": {
      "@type": "BillFormat",
      "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/4824",
      "id": "4824",
      "name": "Summary invoice"
    },
    "cycleSpecification": {
      "@type": "BillingCycleSpecification",
      "dateShift": 8,
      "frequency": "monthly",
      "href": "https://host:port/tmf-api/accountManagement/v5/billingCycleSpecification/1309",
      "id": "1309",
      "name": "Monthly billing"
    }
  },
  "paymentPlan": [
    {
      "@type": "PaymentPlan",
      "numberOfPayments": 12,
      "paymentFrequency": "monthly",
      "priority": 2,

```

```

        "status": "Ineffective",
        "totalAmount": {
            "unit": "USD",
            "value": 100.0
        },
        "planType": "regular",
        "validFor": {
            "startDateTime": "2018-06-17T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "paymentMethod": {
            "@type": "PaymentMethodRef",
            "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/6895",
            "id": "6895",
            "name": "family payment"
        }
    },
    "financialAccount": {
        "@referredType": "FinancialAccount",
        "@type": "FinancialAccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/2209",
        "id": "2209",
        "name": "Travel account"
    },
    "defaultPaymentMethod": {
        "@type": "PaymentMethodRef",
        "href": "https://host:port/tmf-api/paymentMethods/v5/paymentMethod/6514",
        "id": "6514",
        "name": "family payment"
    },
    "relatedParty": [
        {
            "role": "owner",
            "@type": "RelatedPartyRefOrPartyRoleRef",
            "partyOrPartyRole": {
                "@type": "PartyRefOrPartyRoleRef",
                "@referredType": "Organization",
                "href": "https://host:port/tmf-
api/partyManagement/v5/organization/4665",
                "id": "4665",
                "name": "John Doe Ltd"
            }
        }
    ],
    "taxExemption": [
        {
            "@type": "TaxExemption",
            "certificateNumber": "45678889876",
            "issuingJurisdiction": "USA",
            "reason": "Embassy",
            "taxDefinition": [
                {
                    "@type": "TaxDefinition",
                    "id": "96",
                    "name": "Value Added Tax",
                    "taxType": "federalVat"
                }
            ]
        }
    ],
    "attachment": {

```

```

        "@type": "Attachment",
        "id": "66235558562345",
        "href": "https://host:port/tmf-
api/document/v5/attachment/66235558562345",
        "attachmentType": "taxExemptionCertificate",
        "name": "TaxExemptionCertificate-654321.pdf",
        "description": "Electronic version of the tax exemption
certificate",
        "mimeType": "application/pdf",
        "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-654321.pdf"
    },
    "validFor": {
        "startDateTime": "2018-06-13T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
    }
},
],
"contact": [
    {
        "@type": "Contact",
        "contactName": "Anna Cristal",
        "contactType": "primary",
        "partyRoleType": "Publisher",
        "validFor": {
            "startDateTime": "2018-06-11T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "contactMedium": [
            {
                "@type": "GeographicAddressContactMedium",
                "preferred": false,
                "mediumType": "PostalAddress",
                "validFor": {
                    "startDateTime": "2018-06-14T00:00:00.000Z",
                    "endDateTime": "2019-01-10T00:00:00.000Z"
                },
                "city": "Paris",
                "country": "France",
                "postCode": "75014",
                "street1": "15 Rue des Canards"
            }
        ],
        "relatedParty": {
            "role": "bill receiver",
            "@type": "RelatedPartyRefOrPartyRoleRef",
            "partyOrPartyRole": {
                "@referredType": "Individual",
                "@type": "PartyRefOrPartyRoleRef",
                "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
                "id": "2186",
                "name": "Gustave Flaubert"
            }
        }
    }
],
"accountBalance": [
    {
        "@type": "AccountBalance",
        "amount": {
            "unit": "USD",
            "value": 53.29
        }
    }
]

```

```

    },
    "balanceType": "DepositBalance",
    "validFor": {
      "startDateTime": "2018-06-13T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    }
  },
  ],
  "accountRelationship": [
    {
      "@type": "AccountRelationship",
      "relationshipType": "contains",
      "validFor": {
        "startDateTime": "2018-06-10T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "account": {
        "@referredType": "BillingAccount",
        "@type": "AccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/9522",
        "id": "9522",
        "name": "Travel Account"
      }
    }
  ]
}

```

Creates a PartyAccount

POST /partyAccount?fields=...

Description

This operation creates a PartyAccount entity.

Mandatory Attributes

Mandatory Attributes	Rule
name	
relatedParty	
relatedParty.@type	
relatedParty.role	
@type	

Usage samples

Here is a sample of a request for creating an PartyAccount resource. In this example the request only passes mandatory attributes.

Request

```
POST /partyAccount
```

```

Content-Type: application/json

{
  "@type": "PartyAccount",
  "name": "Travel account",
  "relatedParty": [
    {
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "role": "owner",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "href": "https://host:port/tmf-api/partyManagement/v5/organization/4665",
        "id": "4665"
      }
    }
  ]
}

```

Response

```

201

{
  "@type": "PartyAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/4458",
  "id": "4458",
  "name": "Travel account",
  "relatedParty": [
    {
      "role": "owner",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "href": "https://host:port/tmf-api/partyManagement/v5/organization/4665",
        "id": "4665",
        "name": "John Doe Ltd"
      }
    }
  ]
}

```

Updates partially a PartyAccount

PATCH /partyAccount/{id}?fields=...

Description

This operation allows partial updates of a PartyAccount entity. Support of json/merge (<https://tools.ietf.org/html/rfc7386>) is mandatory, support of json/patch (<http://tools.ietf.org/html/rfc5789>) is optional. Note: If the update operation yields to the creation of sub-resources or relationships, the same rules concerning mandatory sub-resource attributes and default

value settings in the POST operation applies to the PATCH operation. Hence these tables are not repeated here.

Patchable and Non Patchable Attributes

Non Patchable Attributes	Rule
accountBalance	
href	
id	
lastUpdate	
@baseType	@baseType is immutable
@schemaLocation	@schemaLocation is immutable
@type	@type is immutable

Patchable Attributes	Rule
accountRelationship	
accountType	
billStructure	
contact	
creditLimit	
defaultPaymentMethod	
description	
financialAccount	
name	
paymentPlan	
paymentStatus	
relatedParty	
state	
taxExemption	

Usage samples

Here is an example of a request for patching an PartyAccount resource with change on credit limit attribute using patch merge

Request

```
PATCH /partyAccount/{id}
Content-Type: application/json

{
```

```

    "@type": "PartyAccount",
    "creditLimit": {
      "unit": "USD",
      "value": 5000
    }
  }

```

Response

```

200

{
  "@type": "PartyAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/4458",
  "id": "4458",
  "name": "Travel account",
  "creditLimit": {
    "unit": "USD",
    "value": 5000
  },
  "relatedParty": [
    {
      "role": "owner",
      "@type": "RelatedPartyRefOrRelatedPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "href": "https://host:port/tmf-api/partyManagement/v5/organization/4665",
        "id": "4665",
        "name": "John Doe Ltd"
      }
    }
  ]
}

```

Here is an example of a request for patching an PartyAccount resource with change on credit limit attribute using patch merge

Request

```

PATCH /partyAccount/{id}
Content-Type: application/merge-patch+json

{
  "@type": "PartyAccount",
  "creditLimit": {
    "unit": "USD",
    "value": 5000
  }
}

```

Response

```

200

```

```
{
  "@type": "PartyAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/4458",
  "id": "4458",
  "name": "Travel account",
  "creditLimit": {
    "unit": "USD",
    "value": 5000
  },
  "relatedParty": [
    {
      "role": "owner",
      "@type": "RelatedPartyRefOrRelatedPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "href": "https://host:port/tmf-api/partyManagement/v5/organization/4665",
        "id": "4665",
        "name": "John Doe Ltd"
      }
    }
  ]
}
```

Here is an example of a request for patching a PartyAccount by adding another related party using json-patch

Request

```
PATCH /partyAccount/{id}
Content-Type: application/json-patch+json

[
  {
    "op": "add",
    "path": "/relatedParty",
    "value": {
      "role": "contact",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Individual",
        "href": "https://host:port/tmf-api/partyManagement/v5/individual/6666",
        "id": "6666",
        "name": "John Doe"
      }
    }
  }
]
```

Response

```
200

{
```

```

    "@type": "PartyAccount",
    "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/4458",
    "id": "4458",
    "name": "Travel account",
    "creditLimit": {
      "unit": "USD",
      "value": 5000
    },
    "relatedParty": [
      {
        "role": "owner",
        "@type": "RelatedPartyRefOrPartyRoleRef",
        "partyOrPartyRole": {
          "@type": "PartyRefOrPartyRoleRef",
          "@referredType": "Organization",
          "href": "https://host:port/tmf-
api/partyManagement/v5/organization/4665",
          "id": "4665",
          "name": "John Doe Ltd"
        }
      },
      {
        "role": "contact",
        "@type": "RelatedPartyRefOrPartyRoleRef",
        "partyOrPartyRole": {
          "@type": "PartyRefOrPartyRoleRef",
          "@referredType": "Individual",
          "href": "https://host:port/tmf-
api/partyManagement/v5/individual/6666",
          "id": "6666",
          "name": "John Doe"
        }
      }
    ]
  }
}

```

Here is an example of a request for patching a PartyAccount by extending the validity period of a tax exemption using json-patch query

Request

```

PATCH /partyAccount/{id}
Content-Type: application/json-patch-query+json

[
  {
    "op": "replace",
    "path": "/taxExemption/validFor?/taxExemption/certificateNumber=45678889876",
    "value": {
      "startDateTime": "2018-06-13T00:00:00.000Z",
      "endDateTime": "2020-01-10T00:00:00.000Z"
    }
  }
]

```

Response

200

```
{
  "@type": "PartyAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/4458",
  "id": "4458",
  "name": "Travel account",
  "taxExemption": [
    {
      "@type": "TaxExemption",
      "certificateNumber": "45678889876",
      "issuingJurisdiction": "USA",
      "reason": "Embassy",
      "taxDefinition": [
        {
          "@type": "TaxDefinition",
          "id": "96",
          "name": "Value Added Tax",
          "taxType": "federalVat"
        }
      ],
      "attachment": {
        "@type": "Attachment",
        "id": "654321234334534552",
        "href": "https://host:port/tmf-api/document/v5/attachment/654321234334534552",
        "attachmentType": "taxExemptionCertificate",
        "name": "TaxExemptionCertificate-654321.pdf",
        "description": "Electronic version of the tax exemption certificate",
        "mimeType": "application/pdf",
        "url": "http://host:port/DocumentManager/666/TaxExemptionCertificate-654321.pdf"
      },
      "validFor": {
        "startDateTime": "2018-06-13T00:00:00.000Z",
        "endDateTime": "2020-01-10T00:00:00.000Z"
      }
    }
  ]
}
```

Deletes a PartyAccount

DELETE /partyAccount/{id}

Description

This operation deletes a PartyAccount entity.

Operations on BillingAccount

Retrieves a BillingAccount by ID

GET /billingAccount/{id}?fields=...

Description

This operation retrieves a BillingAccount entity. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving a BillingAccount resource

Request

```
GET /billingAccount/5430
Content-Type: application/json
```

Response

```
200

{
  "@type": "BillingAccount",
  "paymentStatus": "In Arrears",
  "creditLimit": {
    "unit": "USD",
    "value": 10000
  },
  "description": "This billing account ...",
  "href": "https://host:port/tmf-api/accountManagement/v5/bilingAccount/5430",
  "id": "5430",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Home Account",
  "state": "Inactive",
  "accountType": "Business",
  "billStructure": {
    "@type": "BillStructure",
    "presentationMedia": [
      {
        "@type": "BillPresentationMedia",
        "href": "https://host:port/tmf-api/accountManagement/v5/billPresentationMedia/9968",
        "id": "9968",
        "name": "Post Mail"
      }
    ],
    "format": {
      "@type": "BillFormat",
      "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/3555",
      "id": "3555",
      "name": "Detailed invoice"
    },
    "cycleSpecification": {
      "@type": "BillingCycleSpecification",
      "dateShift": 54,
      "frequency": "monthly",
      "href": "https://host:port/tmf-api/accountManagement/v5/billingCycleSpecification/3828",
      "id": "3828",
      "name": "Annual billing"
    }
  }
}
```

```

    },
    "paymentPlan": [
      {
        "@type": "PaymentPlan",
        "numberOfPayments": 4,
        "paymentFrequency": "monthly",
        "priority": 1,
        "status": "Effective",
        "totalAmount": {
          "unit": "USD",
          "value": 100.0
        },
      },
      {
        "planType": "regular",
        "validFor": {
          "startDateTime": "2018-06-11T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "paymentMethod": {
          "@type": "PaymentMethodRef",
          "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/2452",
          "id": "2452",
          "name": "professional payment"
        }
      }
    ],
    "financialAccount": {
      "@referredType": "FinancialAccount",
      "@type": "FinancialAccountRef",
      "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/2063",
      "id": "2063",
      "name": "Partnership account"
    },
    "defaultPaymentMethod": {
      "@type": "PaymentMethodRef",
      "href": "https://host:port/tmf-api/paymentMethods/v5/paymentMethod/3537",
      "id": "3537",
      "name": "family payment"
    },
    "relatedParty": [
      {
        "role": "service provider",
        "@type": "RelatedPartyRefOrRelatedPartyRoleRef",
        "partyOrPartyRole": {
          "@type": "PartyRefOrPartyRoleRef",
          "@referredType": "Organization",
          "href": "https://host:port/tmf-
api/partyManagement/v5/organization/9947",
          "id": "9947",
          "name": "Richard Cole"
        }
      }
    ],
    "taxExemption": [
      {
        "@type": "TaxExemption",
        "id": "1",
        "certificateNumber": "45678909876",
        "issuingJurisdiction": "Prefecture",
        "reason": "Social",
        "taxDefinition": [

```

```

        {
            "@type": "TaxDefinition",
            "id": "96",
            "name": "Value Added Tax",
            "taxType": "federalVat"
        }
    ],
    "attachment": {
        "@type": "Attachment",
        "id": "1232455768567",
        "href": "https://host:port/tmf-
api/document/v5/attachment/1232455768567",
        "attachmentType": "taxExemptionCertificate",
        "name": "TaxExemptionCertificate-12345.pdf",
        "description": "Electronic version of the tax exemption
certificate",
        "mimeType": "application/pdf",
        "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-12345.pdf"
    },
    "validFor": {
        "startDateTime": "2018-06-13T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
    }
}
],
"contact": [
    {
        "@type": "Contact",
        "contactName": "Rachel Douglas",
        "contactType": "secondary",
        "partyRoleType": "Vendor",
        "validFor": {
            "startDateTime": "2018-06-17T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "contactMedium": [
            {
                "@type": "GeographicAddressContactMedium",
                "preferred": true,
                "mediumType": "PostalAddress",
                "validFor": {
                    "startDateTime": "2018-06-14T00:00:00.000Z",
                    "endDateTime": "2019-01-10T00:00:00.000Z"
                },
                "city": "Paris",
                "country": "France",
                "postCode": "75014",
                "street1": "15 Rue des Canards"
            }
        ],
        "relatedParty": {
            "role": "owner",
            "@type": "RelatedPartyRefOrRelatedPartyRoleRef",
            "partyOrPartyRole": {
                "@type": "PartyRefOrPartyRoleRef",
                "@referredType": "Organization",
                "href": "https://host:port/tmf-
api/partyManagement/v5/organization/9947",
                "id": "9947",
                "name": "Richard Cole"
            }
        }
    }
]

```

```

    }
  },
  ],
  "accountBalance": [
    {
      "@type": "AccountBalance",
      "amount": {
        "unit": "USD",
        "value": 58.33
      },
      "balanceType": "ReceivableBalance",
      "validFor": {
        "startDateTime": "2018-06-10T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
  ],
  "accountRelationship": [
    {
      "@type": "AccountRelationship",
      "relationshipType": "contains",
      "validFor": {
        "startDateTime": "2018-06-13T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "account": {
        "@referredType": "BillingAccount",
        "@type": "AccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/9327",
        "id": "9327",
        "name": "Paradise Account"
      }
    }
  ]
}

```

List or find BillingAccount objects

GET /billingAccount?fields=...

Description

This operation list BillingAccount entities. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving BillingAccount resources.

List all suspended billing accounts. The result items are shrunk to show only the id and name (fields=id,name).

Request

```
GET /billingAccount?state=Suspended
```

```
Content-Type: application/json
```

Response

```
200

[
  {
    "@type": "BillingAccount",
    "id": "42",
    "href": "https://host:port/tmf-api/accountManagement/v5/billingAccount/42",
    "name": "Lakes Agency Account"
  },
  {
    "@type": "BillingAccount",
    "id": "43",
    "href": "https://host:port/tmf-api/accountManagement/v5/billingAccount/43",
    "name": "Santa Claus Donate Account"
  }
]
```

Creates a BillingAccount

POST /billingAccount?fields=...

Description

This operation creates a BillingAccount entity.

Mandatory Attributes

Mandatory Attributes	Rule
name	
relatedParty	
relatedParty.@type	
relatedParty.role	
@type	

Usage samples

Here is an example of a request for creating a specific BillingAccount. In this example the request only passes mandatory attributes.

Request

```
POST /billingAccount
Content-Type: application/json

{
  "@type": "BillingAccount",
  "name": "Home Account",
```

```

    "relatedParty": [
      {
        "role": "service provider",
        "@type": "RelatedPartyRefOrRelatedPartyRoleRef",
        "partyOrPartyRole": {
          "@type": "PartyRefOrPartyRoleRef",
          "@referredType": "Organization",
          "href": "https://host:port/tmf-api/partyManagement/v5/organization/9947",
          "id": "9947",
          "name": "Richard Cole"
        }
      }
    ]
  }
}

```

Response

```

201
{
  "@type": "BillingAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/billingAccount/5430",
  "id": "5430",
  "name": "Home Account",
  "relatedParty": [
    {
      "role": "service provider",
      "@type": "RelatedPartyRefOrRelatedPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "href": "https://host:port/tmf-api/partyManagement/v5/organization/9947",
        "id": "9947",
        "name": "Richard Cole"
      }
    }
  ]
}

```

Updates partially a BillingAccount

PATCH /billingAccount/{id}?fields=...

Description

This operation allows partial updates of a BillingAccount entity. Support of json/merge (<https://tools.ietf.org/html/rfc7386>) is mandatory, support of json/patch (<http://tools.ietf.org/html/rfc5789>) is optional. Note: If the update operation yields to the creation of sub-resources or relationships, the same rules concerning mandatory sub-resource attributes and default value settings in the POST operation applies to the PATCH operation. Hence these tables are not repeated here.

Patchable and Non Patchable Attributes

Non Patchable Attributes	Rule
accountBalance	
href	
id	
lastUpdate	
@baseType	@baseType is immutable
@schemaLocation	@schemaLocation is immutable
@type	@type is immutable

Patchable Attributes	Rule
accountRelationship	
accountType	
billStructure	
contact	
creditLimit	
defaultPaymentMethod	
description	
financialAccount	
name	
paymentPlan	
paymentStatus	
ratingType	
relatedParty	
state	
taxExemption	

Usage samples

Here is an example of a request for patching a BillingAccount. In this example, the name is modified, using JSON Patch

Request

```
PATCH /billingAccount/{id}
Content-Type: application/json-patch+json

{
  "path": "/name",
  "value": "Richard Cole Account",
```

```

    "op": "replace"
  }

```

Response

```

200

{
  "@type": "BillingAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/billingAccount/5430",
  "id": "5430",
  "name": "Richard Cole Account",
  "relatedParty": [
    {
      "role": "service provider",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "id": "6838",
        "href": "https://host:port/tmf-api/partyManagement/v5/organization/6838",
        "name": "Richard Cole"
      }
    }
  ]
}

```

Here is an example of a request for patching a BillingAccount. In this example, the contact is promoted from secondary to primary, using JSON Patch Query

Request

```

PATCH /billingAccount/{id}
Content-Type: application/json-patch-query+json

{
  "path": "/contact/contactType?/contact.contactName=Rachel Douglas",
  "value": "primary",
  "op": "replace"
}

```

Response

```

200

{
  "@type": "BillingAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/billingAccount/5430",
  "id": "5430",
  "name": "Richard Cole Account",
  "contact": [
    {
      "@type": "Contact",
      "contactName": "Rachel Douglas",

```

```

        "contactType": "primary"
      }
    ]
  }

```

Here is an example of a request for patching a BillingAccount. In this example, the name is modified, using Patch Merge

Request

```

PATCH /billingAccount/{id}
Content-Type: application/json

{
  "@type": "BillingAccount",
  "name": "Richard Cole Account"
}

```

Response

```

200

{
  "@type": "BillingAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/billingAccount/5430",
  "id": "5430",
  "name": "Richard Cole Account",
  "relatedParty": [
    {
      "role": "service provider",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "id": "6838",
        "href": "https://host:port/tmf-api/partyManagement/v5/organization/6838",
        "name": "Richard Cole"
      }
    }
  ]
}

```

Here is an example of a request for patching a BillingAccount. In this example, the name is modified, using Patch Merge

Request

```

PATCH /billingAccount/{id}
Content-Type: application/merge-patch+json

{
  "@type": "BillingAccount",
  "name": "Richard Cole Account"
}

```

```
}

```

Response

```
200

{
  "@type": "BillingAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/billingAccount/5430",
  "id": "5430",
  "name": "Richard Cole Account",
  "relatedParty": [
    {
      "role": "service provider",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "id": "6838",
        "href": "https://host:port/tmf-api/partyManagement/v5/organization/6838",
        "name": "Richard Cole"
      }
    }
  ]
}
```

Deletes a BillingAccount

DELETE /billingAccount/{id}

Description

This operation deletes a BillingAccount entity.

Operations on FinancialAccount

List or find FinancialAccount objects

GET /financialAccount?fields=...

Description

This operation list FinancialAccount entities. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving multiple FinancialAccounts.

Request

```
GET /financialAccount
Content-Type: application/json
```

Response

```
200

[
  {
    "creditLimit": {
      "unit": "USD",
      "value": 3500
    },
    "description": "This financial account ...",
    "@type": "FinancialAccount",
    "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/1041",
    "id": "1041",
    "lastModified": "2018-06-14T00:00:00.000Z",
    "name": "Administration account",
    "state": "Active",
    "accountType": "Global",
    "relatedParty": [
      {
        "role": "bill receiver",
        "@type": "RelatedPartyRefOrPartyRoleRef",
        "partyOrPartyRole": {
          "@referredType": "Individual",
          "@type": "PartyRefOrPartyRoleRef",
          "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
          "id": "2186",
          "name": "Gustave Flaubert"
        }
      }
    ],
    "taxExemption": [
      {
        "@type": "TaxExemption",
        "id": "1",
        "certificateNumber": "45678909876",
        "issuingJurisdiction": "Prefecture",
        "reason": "Social",
        "taxDefinition": [
          {
            "@type": "TaxDefinition",
            "id": "96",
            "name": "Value Added Tax",
            "taxType": "federalVat"
          }
        ]
      },
      {
        "attachment": {
          "@type": "Attachment",
          "id": "9304357346341236",
          "href": "https://host:port/tmf-
api/document/v5/attachment/9304357346341236",
          "attachmentType": "taxExemptionCertificate",
          "name": "TaxExemptionCertificate-54321.pdf",
          "description": "Electronic version of the tax exemption"
        }
      }
    ]
  }
]
```

```

certificate",
    "mimeType": "application/pdf",
    "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-54321.pdf"
  },
  "validFor": {
    "startDateTime": "2018-06-13T00:00:00.000Z",
    "endDateTime": "2019-01-10T00:00:00.000Z"
  }
},
"contact": [
  {
    "@type": "Contact",
    "contactName": "Ludwig Borgia",
    "contactType": "secondary",
    "partyRoleType": "CustomerAccountRepresentative",
    "validFor": {
      "startDateTime": "2018-06-11T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    },
    "contactMedium": [
      {
        "@type": "EmailContactMedium",
        "preferred": false,
        "mediumType": "Email",
        "validFor": {
          "startDateTime": "2018-06-12T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "emailAddress": "alain.delon@best-actor.fr"
      }
    ],
    "relatedParty": {
      "role": "employee",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    }
  }
],
"accountBalance": [
  {
    "@type": "AccountBalance",
    "amount": {
      "unit": "USD",
      "value": 50.58
    },
    "balanceType": "ReceivableBalance",
    "validFor": {
      "startDateTime": "2018-06-15T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    }
  }
],
"accountRelationship": [
  {

```

```

        "@type": "AccountRelationship",
        "relationshipType": "contains",
        "validFor": {
            "startDateTime": "2018-06-13T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "account": {
            "@referredType": "BillingAccount",
            "@type": "AccountRef",
            "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/7688",
            "id": "7688",
            "name": "Travel Account"
        }
    }
}
]

```

Retrieves a FinancialAccount by ID

GET /financialAccount/{id}?fields=...

Description

This operation retrieves a FinancialAccount entity. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving a specific FinancialAccount.

Request

```

GET /financialAccount/1041
Content-Type: application/json

```

Response

```

200

{
  "@type": "FinancialAccount",
  "creditLimit": {
    "unit": "USD",
    "value": 3500
  },
  "description": "This financial account ...",
  "href": "https://host:port/tmf-api/accountManagement/v5/financialAccount/1041",
  "id": "1041",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Administration account",
  "state": "Active",
  "accountType": "Global",

```

```

    "relatedParty": [
      {
        "role": "bill receiver",
        "@type": "RelatedPartyRefOrPartyRoleRef",
        "partyOrPartyRole": {
          "@referredType": "Individual",
          "@type": "PartyRefOrPartyRoleRef",
          "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
          "id": "2186",
          "name": "Gustave Flaubert"
        }
      }
    ],
    "taxExemption": [
      {
        "@type": "TaxExemption",
        "id": "1",
        "certificateNumber": "45678909876",
        "issuingJurisdiction": "Prefecture",
        "reason": "Social",
        "taxDefinition": [
          {
            "@type": "TaxDefinition",
            "id": "96",
            "name": "Value Added Tax",
            "taxType": "federalVat"
          }
        ],
        "attachment": {
          "@type": "Attachment",
          "id": "9304357346341236",
          "href": "https://host:port/tmf-
api/document/v5/attachment/9304357346341236",
          "attachmentType": "taxExemptionCertificate",
          "name": "TaxExemptionCertificate-54321.pdf",
          "description": "Electronic version of the tax exemption
certificate",
          "mimeType": "application/pdf",
          "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-54321.pdf"
        },
        "validFor": {
          "startDateTime": "2018-06-13T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        }
      }
    ],
    "contact": [
      {
        "@type": "Contact",
        "contactName": "Ludwig Borgia",
        "contactType": "secondary",
        "partyRoleType": "CustomerAccountRepresentative",
        "validFor": {
          "startDateTime": "2018-06-11T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "contactMedium": [
          {
            "@type": "EmailContactMedium",
            "preferred": false,
            "mediumType": "Email",

```

```

        "validFor": {
            "startDateTime": "2018-06-12T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "emailAddress": "alain.delon@best-actor.fr"
    }
},
"relatedParty": {
    "role": "employee",
    "@type": "RelatedPartyRefOrPartyRoleRef",
    "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
    }
}
},
],
"accountBalance": [
    {
        "@type": "AccountBalance",
        "amount": {
            "unit": "USD",
            "value": 50.58
        },
        "balanceType": "ReceivableBalance",
        "validFor": {
            "startDateTime": "2018-06-15T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        }
    }
],
"accountRelationship": [
    {
        "@type": "AccountRelationship",
        "relationshipType": "contains",
        "validFor": {
            "startDateTime": "2018-06-13T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "account": {
            "@referredType": "BillingAccount",
            "@type": "AccountRef",
            "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/7688",
            "id": "7688",
            "name": "Travel Account"
        }
    }
]
}

```

Creates a FinancialAccount

POST /financialAccount?fields=...

Description

This operation creates a FinancialAccount entity.

Mandatory Attributes

Mandatory Attributes	Rule
name	
relatedParty	
relatedParty.@type	
relatedParty.role	
@type	

Usage samples

Here is an example of a request for creating a specific FinancialAccount. In this example the request only passes mandatory attributes.

Request

```
POST /financialAccount
Content-Type: application/json

{
  "@type": "FinancialAccount",
  "name": "Administration account",
  "relatedParty": [
    {
      "role": "employee",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    }
  ]
}
```

Response

```
201

{
  "@type": "FinancialAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/financialAccount/1041",
  "id": "1041",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Administration account"
}
```

Updates partially a FinancialAccount

PATCH /financialAccount/{id}?fields=...

Description

This operation allows partial updates of a FinancialAccount entity. Support of json/merge (<https://tools.ietf.org/html/rfc7386>) is mandatory, support of json/patch (<http://tools.ietf.org/html/rfc5789>) is optional. Note: If the update operation yields to the creation of sub-resources or relationships, the same rules concerning mandatory sub-resource attributes and default value settings in the POST operation applies to the PATCH operation. Hence these tables are not repeated here.

Patchable and Non Patchable Attributes

Non Patchable Attributes	Rule
accountBalance	
href	
id	
lastUpdate	
@baseType	@baseType is immutable
@schemaLocation	@schemaLocation is immutable
@type	@type is immutable

Patchable Attributes	Rule
accountRelationship	
accountType	
contact	
creditLimit	
description	
name	
relatedParty	
state	
taxExemption	

Usage samples

Here is an example of a request for patching a FinancialAccount. In this example, the name attribute is set, using Patch Merge

Request

```
PATCH /financialAccount/{id}
Content-Type: application/merge-patch+json
```

```
{
  "@type": "FinancialAccount",
  "name": "Consolidation Account"
}
```

Response

```
200

{
  "@type": "FinancialAccount",
  "creditLimit": {
    "unit": "USD",
    "value": 3500
  },
  "description": "This financial account helps consolidate across all the
branches.",
  "href": "https://host:port/tmf-api/accountManagement/v5/financialAccount/1041",
  "id": "1041",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Consolidation Account",
  "state": "Active",
  "accountType": "Global",
  "relatedParty": [
    {
      "role": "bill receiver",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    }
  ],
  "taxExemption": [
    {
      "@type": "TaxExemption",
      "id": "1",
      "certificateNumber": "45678909876",
      "issuingJurisdiction": "Prefecture",
      "reason": "Social",
      "taxDefinition": [
        {
          "@type": "TaxDefinition",
          "id": "96",
          "name": "Value Added Tax",
          "taxType": "federalVat"
        }
      ],
      "attachment": {
        "@type": "Attachment",
        "id": "9304357346341236",
        "href": "https://host:port/tmf-
api/document/v5/attachment/9304357346341236",
        "attachmentType": "taxExemptionCertificate",
        "name": "TaxExemptionCertificate-54321.pdf",

```

```

        "description": "Electronic version of the tax exemption
certificate",
        "mimeType": "application/pdf",
        "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-54321.pdf"
    },
    "validFor": {
        "startDateTime": "2018-06-13T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
    }
},
],
"contact": [
    {
        "@type": "Contact",
        "contactName": "Ludwig Borgia",
        "contactType": "secondary",
        "partyRoleType": "CustomerAccountRepresentative",
        "validFor": {
            "startDateTime": "2018-06-11T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "contactMedium": [
            {
                "@type": "EmailContactMedium",
                "preferred": false,
                "mediumType": "Email",
                "validFor": {
                    "startDateTime": "2018-06-12T00:00:00.000Z",
                    "endDateTime": "2019-01-10T00:00:00.000Z"
                },
                "emailAddress": "alain.delon@best-actor.fr"
            }
        ],
        "relatedParty": {
            "role": "employee",
            "@type": "RelatedPartyRefOrPartyRoleRef",
            "partyOrPartyRole": {
                "@referredType": "Individual",
                "@type": "PartyRefOrPartyRoleRef",
                "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
                "id": "2186",
                "name": "Gustave Flaubert"
            }
        }
    }
],
"accountBalance": [
    {
        "@type": "AccountBalance",
        "amount": {
            "unit": "USD",
            "value": 50.58
        },
        "balanceType": "ReceivableBalance",
        "validFor": {
            "startDateTime": "2018-06-15T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        }
    }
],
"accountRelationship": [

```

```

    {
      "@type": "AccountRelationship",
      "relationshipType": "contains",
      "validFor": {
        "startDateTime": "2018-06-13T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "account": {
        "@referredType": "BillingAccount",
        "@type": "AccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/7688",
        "id": "7688",
        "name": "Travel Account"
      }
    }
  ]
}

```

Here is an example of a request for patching a FinancialAccount. In this example, the name attribute is set, using Patch Merge

Request

```

PATCH /financialAccount/{id}
Content-Type: application/json

{
  "@type": "FinancialAccount",
  "name": "Consolidation Account"
}

```

Response

```

200

{
  "@type": "FinancialAccount",
  "creditLimit": {
    "unit": "USD",
    "value": 3500
  },
  "description": "This financial account helps consolidate across all the
branches.",
  "href": "https://host:port/tmf-api/accountManagement/v5/financialAccount/1041",
  "id": "1041",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Consolidation Account",
  "state": "Active",
  "accountType": "Global",
  "relatedParty": [
    {
      "role": "bill receiver",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",

```

```

        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
    }
},
    "taxExemption": [
        {
            "@type": "TaxExemption",
            "id": "1",
            "certificateNumber": "45678909876",
            "issuingJurisdiction": "Prefecture",
            "reason": "Social",
            "taxDefinition": [
                {
                    "@type": "TaxDefinition",
                    "id": "96",
                    "name": "Value Added Tax",
                    "taxType": "federalVat"
                }
            ],
            "attachment": {
                "@type": "Attachment",
                "id": "9304357346341236",
                "href": "https://host:port/tmf-
api/document/v5/attachment/9304357346341236",
                "attachmentType": "taxExemptionCertificate",
                "name": "TaxExemptionCertificate-54321.pdf",
                "description": "Electronic version of the tax exemption
certificate",
                "mimeType": "application/pdf",
                "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-54321.pdf"
            },
            "validFor": {
                "startDateTime": "2018-06-13T00:00:00.000Z",
                "endDateTime": "2019-01-10T00:00:00.000Z"
            }
        }
    ],
    "contact": [
        {
            "@type": "Contact",
            "contactName": "Ludwig Borgia",
            "contactType": "secondary",
            "partyRoleType": "CustomerAccountRepresentative",
            "validFor": {
                "startDateTime": "2018-06-11T00:00:00.000Z",
                "endDateTime": "2019-01-10T00:00:00.000Z"
            },
            "contactMedium": [
                {
                    "@type": "EmailContactMedium",
                    "preferred": false,
                    "mediumType": "Email",
                    "validFor": {
                        "startDateTime": "2018-06-12T00:00:00.000Z",
                        "endDateTime": "2019-01-10T00:00:00.000Z"
                    },
                    "emailAddress": "alain.delon@best-actor.fr"
                }
            ]
        }
    ],

```

```

    "relatedParty": {
      "role": "employee",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    }
  ],
  "accountBalance": [
    {
      "@type": "AccountBalance",
      "amount": {
        "unit": "USD",
        "value": 50.58
      },
      "balanceType": "ReceivableBalance",
      "validFor": {
        "startDateTime": "2018-06-15T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
  "accountRelationship": [
    {
      "@type": "AccountRelationship",
      "relationshipType": "contains",
      "validFor": {
        "startDateTime": "2018-06-13T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "account": {
        "@referredType": "BillingAccount",
        "@type": "AccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/7688",
        "id": "7688",
        "name": "Travel Account"
      }
    }
  ]
}

```

Here is an example of a request for patching a FinancialAccount, by adding another related party using json-patch

Request

```

PATCH /financialAccount/{id}
Content-Type: application/json-patch+json

[
  {
    "op": "add",
    "path": "/relatedParty",

```

```

    "value": {
      "role": "payer",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/345365",
        "id": "345365",
        "name": "Sylvia Strudock"
      }
    }
  }
}
]

```

Response

```

200

{
  "creditLimit": {
    "unit": "USD",
    "value": 3500
  },
  "description": "This financial account helps consolidate across all the
branches.",
  "href": "https://host:port/tmf-api/accountManagement/v5/financialAccount/1041",
  "id": "1041",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Consolidation Account",
  "state": "Active",
  "accountType": "Global",
  "relatedParty": [
    {
      "role": "bill receiver",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    },
    {
      "role": "payer",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/345365",
        "id": "345365",
        "name": "Sylvia Strudock"
      }
    }
  ],
  "taxExemption": [
    {

```

```

    "@type": "TaxExemption",
    "id": "1",
    "certificateNumber": "45678909876",
    "issuingJurisdiction": "Prefecture",
    "reason": "Social",
    "taxDefinition": [
      {
        "@type": "TaxDefinition",
        "id": "96",
        "name": "Value Added Tax",
        "taxType": "federalVat"
      }
    ],
    "attachment": {
      "@type": "Attachment",
      "id": "9304357346341236",
      "href": "https://host:port/tmf-
api/document/v5/attachment/9304357346341236",
      "attachmentType": "taxExemptionCertificate",
      "name": "TaxExemptionCertificate-54321.pdf",
      "description": "Electronic version of the tax exemption
certificate",
      "mimeType": "application/pdf",
      "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-54321.pdf"
    },
    "validFor": {
      "startDateTime": "2018-06-13T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    }
  },
  "contact": [
    {
      "@type": "Contact",
      "contactName": "Ludwig Borgia",
      "contactType": "secondary",
      "partyRoleType": "CustomerAccountRepresentative",
      "validFor": {
        "startDateTime": "2018-06-11T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "contactMedium": [
        {
          "@type": "EmailContactMedium",
          "preferred": false,
          "mediumType": "Email",
          "validFor": {
            "startDateTime": "2018-06-12T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
          },
          "emailAddress": "alain.delon@best-actor.fr"
        }
      ],
      "relatedParty": {
        "role": "employee",
        "@type": "RelatedPartyRefOrPartyRoleRef",
        "partyOrPartyRole": {
          "@referredType": "Individual",
          "@type": "PartyRefOrPartyRoleRef",
          "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
          "id": "2186",

```

```

        "name": "Gustave Flaubert"
      }
    }
  ],
  "accountBalance": [
    {
      "@type": "AccountBalance",
      "amount": {
        "unit": "USD",
        "value": 50.58
      },
      "balanceType": "ReceivableBalance",
      "validFor": {
        "startDateTime": "2018-06-15T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
  "accountRelationship": [
    {
      "@type": "AccountRelationship",
      "relationshipType": "contains",
      "validFor": {
        "startDateTime": "2018-06-13T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "account": {
        "@referredType": "BillingAccount",
        "@type": "AccountRef",
        "href": "https://host:port/tmf-api/accountManagement/v5/partyAccount/7688",
        "id": "7688",
        "name": "Travel Account"
      }
    }
  ]
}

```

Here is an example of a request for patching a FinancialAccount, by removing an account relationship using json-patch query

Request

```

PATCH /financialAccount/{id}
Content-Type: application/json-patch-query+json

[
  {
    "op": "remove",
    "path": "/accountRelationship?accountRelationship.account.id=7688"
  }
]

```

Response

200

```

{
  "creditLimit": {
    "unit": "USD",
    "value": 3500
  },
  "description": "This financial account helps consolidate across all the
branches.",
  "href": "https://host:port/tmf-api/accountManagement/v5/financialAccount/1041",
  "id": "1041",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Consolidation Account",
  "state": "Active",
  "accountType": "Global",
  "relatedParty": [
    {
      "role": "bill receiver",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    },
    {
      "role": "payer",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/345365",
        "id": "345365",
        "name": "Sylvia Strudock"
      }
    }
  ],
  "taxExemption": [
    {
      "@type": "TaxExemption",
      "id": "1",
      "certificateNumber": "45678909876",
      "issuingJurisdiction": "Prefecture",
      "reason": "Social",
      "taxDefinition": [
        {
          "@type": "TaxDefinition",
          "id": "96",
          "name": "Value Added Tax",
          "taxType": "federalVat"
        }
      ]
    }
  ],
  "attachment": {
    "@type": "Attachment",
    "id": "9304357346341236",
    "href": "https://host:port/tmf-
api/document/v5/attachment/9304357346341236",
    "attachmentType": "taxExemptionCertificate",
    "name": "TaxExemptionCertificate-54321.pdf",
    "description": "Electronic version of the tax exemption

```

```

certificate",
  "mimeType": "application/pdf",
  "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-54321.pdf"
},
"validFor": {
  "startDateTime": "2018-06-13T00:00:00.000Z",
  "endDateTime": "2019-01-10T00:00:00.000Z"
}
},
],
"contact": [
{
  "@type": "Contact",
  "contactName": "Ludwig Borgia",
  "contactType": "secondary",
  "partyRoleType": "CustomerAccountRepresentative",
  "validFor": {
    "startDateTime": "2018-06-11T00:00:00.000Z",
    "endDateTime": "2019-01-10T00:00:00.000Z"
  },
  "contactMedium": [
    {
      "@type": "EmailContactMedium",
      "preferred": false,
      "mediumType": "Email",
      "validFor": {
        "startDateTime": "2018-06-12T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "emailAddress": "alain.delon@best-actor.fr"
    }
  ],
  "relatedParty": {
    "role": "employee",
    "@type": "RelatedPartyRefOrPartyRoleRef",
    "partyOrPartyRole": {
      "@referredType": "Individual",
      "@type": "PartyRefOrPartyRoleRef",
      "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
      "id": "2186",
      "name": "Gustave Flaubert"
    }
  }
},
],
"accountBalance": [
{
  "@type": "AccountBalance",
  "amount": {
    "unit": "USD",
    "value": 50.58
  },
  "balanceType": "ReceivableBalance",
  "validFor": {
    "startDateTime": "2018-06-15T00:00:00.000Z",
    "endDateTime": "2019-01-10T00:00:00.000Z"
  }
}
]
}

```

Deletes a FinancialAccount

DELETE /financialAccount/{id}

Description

This operation deletes a FinancialAccount entity.

Operations on SettlementAccount

Retrieves a SettlementAccount by ID

GET /settlementAccount/{id}?fields=...

Description

This operation retrieves a SettlementAccount entity. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving a SettlementAccount resource

Request

```
GET /settlementAccount/8790
Content-Type: application/json
```

Response

```
200

{
  "@type": "SettlementAccount",
  "paymentStatus": "In Collection",
  "creditLimit": {
    "unit": "USD",
    "value": 20000
  },
  "description": "This settlement account ...",
  "href": "https://host:port/tmf-api/accountManagement/v5/settlementAccount/8790",

  "id": "8790",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Per Usage Account",
  "state": "inactive",
  "accountType": "Business",
  "billStructure": {
    "@type": "BillStructure",
    "presentationMedia": [
      {
        "@type": "BillPresentationMedia",
        "href": "https://host:port/tmf-api/accountManagement/v5/billPresentationMedia/1451",
```

```

        "id": "1451",
        "name": "Web Page"
    },
    ],
    "format": {
        "@type": "BillFormat",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billFormat/8128",
        "id": "8128",
        "name": "Detailed invoice"
    },
    "cycleSpecification": {
        "@type": "BillingCycleSpecification",
        "dateShift": 62,
        "frequency": "monthly",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/1361",
        "id": "1361",
        "name": "Annual billing"
    },
    },
    "paymentPlan": [
        {
            "@type": "PaymentPlan",
            "numberOfPayments": 4,
            "paymentFrequency": "monthly",
            "priority": 3,
            "status": "Effective",
            "totalAmount": {
                "unit": "USD",
                "value": 543.8
            },
            "planType": "regular",
            "validFor": {
                "startDateTime": "2018-06-17T00:00:00.000Z",
                "endDateTime": "2019-01-10T00:00:00.000Z"
            },
            "paymentMethod": {
                "@type": "PaymentMethodRef",
                "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/1534",
                "id": "1534",
                "name": "professional payment"
            }
        },
        {
            "@type": "FinancialAccount",
            "@referredType": "FinancialAccount",
            "@type": "FinancialAccountRef",
            "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/2063",
            "id": "2063",
            "name": "Partnership account"
        },
        {
            "@type": "PaymentMethodRef",
            "href": "https://host:port/tmf-api/paymentMethods/v5/paymentMethod/9124",
            "id": "9124",
            "name": "family payment"
        },
        {
            "role": "bill receiver",

```

```

        "@type": "RelatedPartyRefOrPartyRoleRef",
        "partyOrPartyRole": {
            "@referredType": "Individual",
            "@type": "PartyRefOrPartyRoleRef",
            "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
            "id": "2186",
            "name": "Gustave Flaubert"
        }
    },
    ],
    "taxExemption": [
        {
            "@type": "TaxExemption",
            "id": "1",
            "certificateNumber": "98765432345",
            "issuingJurisdiction": "USA",
            "reason": "Embassy",
            "taxDefinition": [
                {
                    "@type": "TaxDefinition",
                    "id": "96",
                    "name": "Value Added Tax",
                    "taxType": "federalVat"
                }
            ],
            "attachment": {
                "@type": "Attachment",
                "id": "1256673452346345",
                "href": "https://host:port/tmf-
api/document/v5/attachment/1256673452346345",
                "attachmentType": "taxExemptionCertificate",
                "name": "TaxExemptionCertificate-555.pdf",
                "description": "Electronic version of the tax exemption
certificate",
                "mimeType": "application/pdf",
                "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-555.pdf"
            },
            "validFor": {
                "startDateTime": "2018-06-17T00:00:00.000Z",
                "endDateTime": "2019-01-10T00:00:00.000Z"
            }
        }
    ],
    "contact": [
        {
            "@type": "Contact",
            "contactName": "Virginie Cork",
            "contactType": "primary",
            "partyRoleType": "Publisher",
            "validFor": {
                "startDateTime": "2018-06-11T00:00:00.000Z",
                "endDateTime": "2019-01-10T00:00:00.000Z"
            },
            "contactMedium": [
                {
                    "@type": "GeographicAddressContactMedium",
                    "preferred": false,
                    "mediumType": "PostalAddress",
                    "validFor": {
                        "startDateTime": "2018-06-14T00:00:00.000Z",
                        "endDateTime": "2019-01-10T00:00:00.000Z"
                    }
                }
            ]
        }
    ]
}

```

```

        },
        "city": "Paris",
        "country": "France",
        "postCode": "75014",
        "street1": "15 Rue des Canards"
    }
  ],
  "relatedParty": {
    "role": "bill receiver",
    "@type": "RelatedPartyRefOrPartyRoleRef",
    "partyOrPartyRole": {
      "@referredType": "Individual",
      "@type": "PartyRefOrPartyRoleRef",
      "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
      "id": "2186",
      "name": "Gustave Flaubert"
    }
  }
},
"accountBalance": [
  {
    "@type": "AccountBalance",
    "amount": {
      "unit": "USD",
      "value": 55.28
    },
    "balanceType": "DepositBalance",
    "validFor": {
      "startDateTime": "2018-06-10T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    }
  }
],
"accountRelationship": [
  {
    "@type": "AccountRelationship",
    "relationshipType": "contains",
    "validFor": {
      "startDateTime": "2018-06-16T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    },
    "account": {
      "@referredType": "BillingAccount",
      "@type": "AccountRef",
      "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/7550",
      "id": "7550",
      "name": "Travel Account"
    }
  }
]
}

```

List or find SettlementAccount objects

GET /settlementAccount?fields=...

Description

This operation list SettlementAccount entities. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving SettlementAccount resources.
List all settlement accounts connected to a given party account. The result items are shrunk to show only the id and name (fields=id,name).

Request

```
GET /settlementAccount?partyAccount.id=7876543
Content-Type: application/json
```

Response

```
200

[
  {
    "@type": "SettlementAccount",
    "id": "442",
    "href": "https://host:port/tmf-api/accountManagement/v5/settlementAccount/442",
    "name": "API Usage Account"
  },
  {
    "@type": "SettlementAccount",
    "id": "443",
    "href": "https://host:port/tmf-api/accountManagement/v5/settlementAccount/443",
    "name": "Storage Usage Account"
  }
]
```

Creates a SettlementAccount

POST /settlementAccount?fields=...

Description

This operation creates a SettlementAccount entity.

Mandatory Attributes

Mandatory Attributes	Rule
name	
relatedParty	
relatedParty.@type	

Mandatory Attributes	Rule
relatedParty.role	
@type	

Usage samples

Here is an example of a request for creating a specific SettlementAccount. In this example the request only passes mandatory attributes.

Request

```
POST /settlementAccount
Content-Type: application/json

{
  "@type": "SettlementAccount",
  "name": "Per Usage Account",
  "relatedParty": [
    {
      "role": "bill receiver",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    }
  ]
}
```

Response

```
201

{
  "@type": "SettlementAccount",
  "href": "https://host:port/tmf-api/accountManagement/v5/settlementAccount/8790",
  "id": "8790",
  "name": "Per Usage Account",
  "relatedParty": [
    {
      "role": "bill receiver",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    }
  ]
}
```

```
}
]
```

Updates partially a SettlementAccount

PATCH /settlementAccount/{id}?fields=...

Description

This operation allows partial updates of a SettlementAccount entity. Support of json/merge (<https://tools.ietf.org/html/rfc7386>) is mandatory, support of json/patch (<http://tools.ietf.org/html/rfc5789>) is optional. Note: If the update operation yields to the creation of sub-resources or relationships, the same rules concerning mandatory sub-resource attributes and default value settings in the POST operation applies to the PATCH operation. Hence these tables are not repeated here.

Patchable and Non Patchable Attributes

Non Patchable Attributes	Rule
accountBalance	
href	
id	
lastUpdate	
@baseType	@baseType is immutable
@schemaLocation	@schemaLocation is immutable
@type	@type is immutable

Patchable Attributes	Rule
accountRelationship	
accountType	
billStructure	
contact	
creditLimit	
defaultPaymentMethod	
description	
financialAccount	
name	
paymentPlan	
paymentStatus	
relatedParty	
state	

Patchable Attributes	Rule
taxExemption	

Usage samples

Here is an example of a request for patching a SettlementAccount. In this example, a tax exemption is added, using JSON Patch

Request

```
PATCH /settlementAccount/{id}
Content-Type: application/json-patch+json

{
  "path": "/taxExemption",
  "op": "add",
  "value": {
    "@type": "TaxExemption",
    "id": "2",
    "certificateNumber": "1212555247",
    "issuingJurisdiction": "City of San Jose",
    "reason": "Embassy",
    "taxDefinition": [
      {
        "@type": "TaxDefinition",
        "id": "96",
        "name": "City Tax",
        "taxType": "CityTax"
      }
    ],
    "attachment": {
      "@type": "Attachment",
      "id": "902347285733567433412",
      "href": "https://host:port/tmf-api/document/v5/attachment/902347285733567433412",
      "attachmentType": "taxExemptionCertificate",
      "name": "TaxExemptionCertificate-777.pdf",
      "description": "Electronic version of the tax exemption certificate",
      "mimeType": "application/pdf",
      "url": "http://host:port/DocumentManager/777/TaxExemptionCertificate-777.pdf"
    },
    "validFor": {
      "startDateTime": "2018-04-17T00:00:00.000Z",
      "endDateTime": "2019-02-10T00:00:00.000Z"
    }
  }
}
```

Response

```
200

{
  "@type": "SettlementAccount",
  "paymentStatus": "In Collection",
}
```

```

    "creditLimit": {
      "unit": "USD",
      "value": 20000
    },
    "description": "This settlement account ...",
    "href": "https://host:port/tmf-api/accountManagement/v5/settlementAccount/8790",

    "id": "8790",
    "lastModified": "2018-06-14T00:00:00.000Z",
    "name": "Per Usage Account",
    "state": "inactive",
    "accountType": "Business",
    "billStructure": {
      "@type": "BillStructure",
      "presentationMedia": [
        {
          "@type": "BillPresentationMedia",
          "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/1451",
          "id": "1451",
          "name": "Web Page"
        }
      ],
      "format": {
        "@type": "BillFormat",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billFormat/8128",
        "id": "8128",
        "name": "Detailed invoice"
      },
      "cycleSpecification": {
        "@type": "BillingCycleSpecification",
        "dateShift": 62,
        "frequency": "monthly",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/1361",
        "id": "1361",
        "name": "Annual billing"
      }
    },
    "paymentPlan": [
      {
        "@type": "PaymentPlan",
        "numberOfPayments": 4,
        "paymentFrequency": "monthly",
        "priority": 3,
        "status": "Effective",
        "totalAmount": {
          "unit": "USD",
          "value": 543.8
        },
        "planType": "regular",
        "validFor": {
          "startDateTime": "2018-06-17T00:00:00.000Z",
          "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "paymentMethod": {
          "@type": "PaymentMethodRef",
          "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/1534",
          "id": "1534",
          "name": "professional payment"
        }
      }
    ]
  }

```

```

    }
  ],
  "financialAccount": {
    "@referredType": "FinancialAccount",
    "@type": "FinancialAccountRef",
    "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/2063",
    "id": "2063",
    "name": "Partnership account"
  },
  "defaultPaymentMethod": {
    "@type": "PaymentMethodRef",
    "href": "https://host:port/tmf-api/paymentMethods/v5/paymentMethod/9124",
    "id": "9124",
    "name": "family payment"
  },
  "relatedParty": [
    {
      "role": "employee",
      "@type": "RelatedPartyRefOrRelatedPartyRoleRef",
      "partyOrPartyRole": {
        "@type": "PartyRefOrPartyRoleRef",
        "@referredType": "Organization",
        "href": "https://host:port/tmf-
api/partyManagement/v5/organization/5965",
        "id": "5965",
        "name": "Jimmy Doe"
      }
    }
  ],
  "taxExemption": [
    {
      "@type": "TaxExemption",
      "id": "1",
      "certificateNumber": "98765432345",
      "issuingJurisdiction": "USA",
      "reason": "Embassy",
      "taxDefinition": [
        {
          "@type": "TaxDefinition",
          "id": "96",
          "name": "Value Added Tax",
          "taxType": "federalVat"
        }
      ],
      "attachment": {
        "@type": "Attachment",
        "id": "1256673452346345",
        "href": "https://host:port/tmf-
api/document/v5/attachment/1256673452346345",
        "attachmentType": "taxExemptionCertificate",
        "name": "TaxExemptionCertificate-555.pdf",
        "description": "Electronic version of the tax exemption
certificate",
        "mimeType": "application/pdf",
        "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-555.pdf"
      },
      "validFor": {
        "startDateTime": "2018-06-17T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
}

```

```

{
  "@type": "TaxExemption",
  "id": "2",
  "certificateNumber": "1212555247",
  "issuingJurisdiction": "City of San Jose",
  "reason": "Embassy",
  "taxDefinition": [
    {
      "@type": "TaxDefinition",
      "id": "96",
      "name": "City Tax",
      "taxType": "CityTax"
    }
  ],
  "attachment": {
    "@type": "Attachment",
    "id": "902347285733567433412",
    "href": "https://host:port/tmf-
api/document/v5/attachment/902347285733567433412",
    "attachmentType": "taxExemptionCertificate",
    "name": "TaxExemptionCertificate-777.pdf",
    "description": "Electronic version of the tax exemption
certificate",
    "mimeType": "application/pdf",
    "url":
"http://host:port/DocumentManager/777/TaxExemptionCertificate-777.pdf"
  },
  "validFor": {
    "startDateTime": "2018-04-17T00:00:00.000Z",
    "endDateTime": "2019-02-10T00:00:00.000Z"
  }
},
{
  "contact": [
    {
      "@type": "Contact",
      "contactName": "Virginie Cork",
      "contactType": "primary",
      "partyRoleType": "Publisher",
      "validFor": {
        "startDateTime": "2018-06-11T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "contactMedium": [
        {
          "@type": "GeographicAddressContactMedium",
          "preferred": false,
          "mediumType": "PostalAddress",
          "validFor": {
            "startDateTime": "2018-06-14T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
          },
          "city": "Paris",
          "country": "France",
          "postCode": "75014",
          "street1": "15 Rue des Canards"
        }
      ],
      "relatedParty": {
        "role": "bill receiver",
        "@type": "RelatedPartyRefOrPartyRoleRef",
        "partyOrPartyRole": {
          "@referredType": "Individual",

```

```

        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    }
  ],
  "accountBalance": [
    {
      "@type": "AccountBalance",
      "amount": {
        "unit": "USD",
        "value": 55.28
      },
      "balanceType": "DepositBalance",
      "validFor": {
        "startDateTime": "2018-06-10T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
  "accountRelationship": [
    {
      "@type": "AccountRelationship",
      "relationshipType": "contains",
      "validFor": {
        "startDateTime": "2018-06-16T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "account": {
        "@referredType": "BillingAccount",
        "@type": "AccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/7550",
        "id": "7550",
        "name": "Travel Account"
      }
    }
  ]
}

```

Here is an example of a request for patching a SettlementAccount. In this example, credit limit and payment status are updated, using Patch Merge

Request

```

PATCH /settlementAccount/{id}
Content-Type: application/merge-patch+json

{
  "@type": "SettlementAccount",
  "paymentStatus": "Normal",
  "creditLimit": {
    "unit": "USD",
    "value": 25000
  }
}

```

Response

200

```

{
  "@type": "SettlementAccount",
  "paymentStatus": "Normal",
  "creditLimit": {
    "unit": "USD",
    "value": 25000
  },
  "description": "This settlement account ...",
  "href": "https://host:port/tmf-api/accountManagement/v5/settlementAccount/8790",

  "id": "8790",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Per Usage Account",
  "state": "inactive",
  "accountType": "Business",
  "billStructure": {
    "@type": "BillStructure",
    "presentationMedia": [
      {
        "@type": "BillPresentationMedia",
        "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/1451",
        "id": "1451",
        "name": "Web Page"
      }
    ],
    "format": {
      "@type": "BillFormat",
      "href": "https://host:port/tmf-
api/accountManagement/v5/billFormat/8128",
      "id": "8128",
      "name": "Detailed invoice"
    },
    "cycleSpecification": {
      "@type": "BillingCycleSpecification",
      "dateShift": 62,
      "frequency": "monthly",
      "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/1361",
      "id": "1361",
      "name": "Annual billing"
    }
  },
  "paymentPlan": [
    {
      "@type": "PaymentPlan",
      "numberOfPayments": 4,
      "paymentFrequency": "monthly",
      "priority": 3,
      "status": "Effective",
      "totalAmount": {
        "unit": "USD",
        "value": 543.8
      },
      "planType": "regular",
      "validFor": {
        "startDateTime": "2018-06-17T00:00:00.000Z",

```

```

        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "paymentMethod": {
        "@type": "PaymentMethodRef",
        "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/1534",
        "id": "1534",
        "name": "professional payment"
      }
    },
    "financialAccount": {
      "@referredType": "FinancialAccount",
      "@type": "FinancialAccountRef",
      "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/2063",
      "id": "2063",
      "name": "Partnership account"
    },
    "defaultPaymentMethod": {
      "@type": "PaymentMethodRef",
      "href": "https://host:port/tmf-api/paymentMethods/v5/paymentMethod/9124",
      "id": "9124",
      "name": "family payment"
    },
    "relatedParty": [
      {
        "role": "employee",
        "@type": "RelatedPartyRefOrRelatedPartyRoleRef",
        "partyOrPartyRole": {
          "@type": "PartyRefOrPartyRoleRef",
          "@referredType": "Organization",
          "href": "https://host:port/tmf-
api/partyManagement/v5/organization/5965",
          "id": "5965",
          "name": "Jimmy Doe"
        }
      }
    ],
    "taxExemption": [
      {
        "@type": "TaxExemption",
        "id": "1",
        "certificateNumber": "98765432345",
        "issuingJurisdiction": "USA",
        "reason": "Embassy",
        "taxDefinition": [
          {
            "@type": "TaxDefinition",
            "id": "96",
            "name": "Value Added Tax",
            "taxType": "federalVat"
          }
        ],
        "attachment": {
          "@type": "Attachment",
          "id": "1256673452346345",
          "href": "https://host:port/tmf-
api/document/v5/attachment/1256673452346345",
          "attachmentType": "taxExemptionCertificate",
          "name": "TaxExemptionCertificate-555.pdf",
          "description": "Electronic version of the tax exemption
certificate",

```

```

        "mimeType": "application/pdf",
        "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-555.pdf"
    },
    "validFor": {
        "startDateTime": "2018-06-17T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
    }
},
{
    "@type": "TaxExemption",
    "id": "2",
    "certificateNumber": "1212555247",
    "issuingJurisdiction": "City of San Jose",
    "reason": "Embassy",
    "taxDefinition": [
        {
            "@type": "TaxDefinition",
            "id": "96",
            "name": "City Tax",
            "taxType": "CityTax"
        }
    ],
    "attachment": {
        "@type": "Attachment",
        "id": "902347285733567433412",
        "href": "https://host:port/tmf-
api/document/v5/attachment/902347285733567433412",
        "attachmentType": "taxExemptionCertificate",
        "name": "TaxExemptionCertificate-777.pdf",
        "description": "Electronic version of the tax exemption
certificate",
        "mimeType": "application/pdf",
        "url":
"http://host:port/DocumentManager/777/TaxExemptionCertificate-777.pdf"
    },
    "validFor": {
        "startDateTime": "2018-04-17T00:00:00.000Z",
        "endDateTime": "2019-02-10T00:00:00.000Z"
    }
}
],
"contact": [
    {
        "@type": "Contact",
        "contactName": "Virginie Cork",
        "contactType": "primary",
        "partyRoleType": "Publisher",
        "validFor": {
            "startDateTime": "2018-06-11T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "contactMedium": [
            {
                "@type": "GeographicAddressContactMedium",
                "preferred": false,
                "mediumType": "PostalAddress",
                "validFor": {
                    "startDateTime": "2018-06-14T00:00:00.000Z",
                    "endDateTime": "2019-01-10T00:00:00.000Z"
                },
                "city": "Paris",
                "country": "France",

```

```

        "postCode": "75014",
        "street1": "15 Rue des Canards"
      }
    ],
    "relatedParty": {
      "role": "bill receiver",
      "@type": "RelatedPartyRefOrPartyRoleRef",
      "partyOrPartyRole": {
        "@referredType": "Individual",
        "@type": "PartyRefOrPartyRoleRef",
        "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
        "id": "2186",
        "name": "Gustave Flaubert"
      }
    }
  },
  "accountBalance": [
    {
      "@type": "AccountBalance",
      "amount": {
        "unit": "USD",
        "value": 55.28
      },
      "balanceType": "DepositBalance",
      "validFor": {
        "startDateTime": "2018-06-10T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      }
    }
  ],
  "accountRelationship": [
    {
      "@type": "AccountRelationship",
      "relationshipType": "contains",
      "validFor": {
        "startDateTime": "2018-06-16T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "account": {
        "@referredType": "BillingAccount",
        "@type": "AccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/7550",
        "id": "7550",
        "name": "Travel Account"
      }
    }
  ]
}

```

Here is an example of a request for patching a SettlementAccount. In this example, credit limit and payment status are updated, using Patch Merge

Request

```

PATCH /settlementAccount/{id}
Content-Type: application/json

```

```
{
  "@type": "SettlementAccount",
  "paymentStatus": "Normal",
  "creditLimit": {
    "unit": "USD",
    "value": 25000
  }
}
```

Response

```
200

{
  "@type": "SettlementAccount",
  "paymentStatus": "Normal",
  "creditLimit": {
    "unit": "USD",
    "value": 25000
  },
  "description": "This settlement account ...",
  "href": "https://host:port/tmf-api/accountManagement/v5/settlementAccount/8790",

  "id": "8790",
  "lastModified": "2018-06-14T00:00:00.000Z",
  "name": "Per Usage Account",
  "state": "inactive",
  "accountType": "Business",
  "billStructure": {
    "@type": "BillStructure",
    "presentationMedia": [
      {
        "@type": "BillPresentationMedia",
        "href": "https://host:port/tmf-api/accountManagement/v5/billPresentationMedia/1451",
        "id": "1451",
        "name": "Web Page"
      }
    ],
    "format": {
      "@type": "BillFormat",
      "href": "https://host:port/tmf-api/accountManagement/v5/billFormat/8128",
      "id": "8128",
      "name": "Detailed invoice"
    },
    "cycleSpecification": {
      "@type": "BillingCycleSpecification",
      "dateShift": 62,
      "frequency": "monthly",
      "href": "https://host:port/tmf-api/accountManagement/v5/billingCycleSpecification/1361",
      "id": "1361",
      "name": "Annual billing"
    }
  },
  "paymentPlan": [
    {
      "@type": "PaymentPlan",
      "numberOfPayments": 4,

```

```

        "paymentFrequency": "monthly",
        "priority": 3,
        "status": "Effective",
        "totalAmount": {
            "unit": "USD",
            "value": 543.8
        },
        "planType": "regular",
        "validFor": {
            "startDateTime": "2018-06-17T00:00:00.000Z",
            "endDateTime": "2019-01-10T00:00:00.000Z"
        },
        "paymentMethod": {
            "@type": "PaymentMethodRef",
            "href": "https://host:port/tmf-
api/paymentMethods/v5/paymentMethod/1534",
            "id": "1534",
            "name": "professional payment"
        }
    },
    "financialAccount": {
        "@referredType": "FinancialAccount",
        "@type": "FinancialAccountRef",
        "href": "https://host:port/tmf-
api/accountManagement/v5/financialAccount/2063",
        "id": "2063",
        "name": "Partnership account"
    },
    "defaultPaymentMethod": {
        "@type": "PaymentMethodRef",
        "href": "https://host:port/tmf-api/paymentMethods/v5/paymentMethod/9124",
        "id": "9124",
        "name": "family payment"
    },
    "relatedParty": [
        {
            "role": "employee",
            "@type": "RelatedPartyRefOrRelatedPartyRoleRef",
            "partyOrPartyRole": {
                "@type": "PartyRefOrPartyRoleRef",
                "@referredType": "Organization",
                "href": "https://host:port/tmf-
api/partyManagement/v5/organization/5965",
                "id": "5965",
                "name": "Jimmy Doe"
            }
        }
    ],
    "taxExemption": [
        {
            "@type": "TaxExemption",
            "id": "1",
            "certificateNumber": "98765432345",
            "issuingJurisdiction": "USA",
            "reason": "Embassy",
            "taxDefinition": [
                {
                    "@type": "TaxDefinition",
                    "id": "96",
                    "name": "Value Added Tax",
                    "taxType": "federalVat"
                }
            ]
        }
    ]
}

```

```

    ],
    "attachment": {
      "@type": "Attachment",
      "id": "1256673452346345",
      "href": "https://host:port/tmf-
api/document/v5/attachment/1256673452346345",
      "attachmentType": "taxExemptionCertificate",
      "name": "TaxExemptionCertificate-555.pdf",
      "description": "Electronic version of the tax exemption
certificate",
      "mimeType": "application/pdf",
      "url":
"http://host:port/DocumentManager/666/TaxExemptionCertificate-555.pdf"
    },
    "validFor": {
      "startDateTime": "2018-06-17T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    }
  },
  {
    "@type": "TaxExemption",
    "id": "2",
    "certificateNumber": "1212555247",
    "issuingJurisdiction": "City of San Jose",
    "reason": "Embassy",
    "taxDefinition": [
      {
        "@type": "TaxDefinition",
        "id": "96",
        "name": "City Tax",
        "taxType": "CityTax"
      }
    ],
    "attachment": {
      "@type": "Attachment",
      "id": "902347285733567433412",
      "href": "https://host:port/tmf-
api/document/v5/attachment/902347285733567433412",
      "attachmentType": "taxExemptionCertificate",
      "name": "TaxExemptionCertificate-777.pdf",
      "description": "Electronic version of the tax exemption
certificate",
      "mimeType": "application/pdf",
      "url":
"http://host:port/DocumentManager/777/TaxExemptionCertificate-777.pdf"
    },
    "validFor": {
      "startDateTime": "2018-04-17T00:00:00.000Z",
      "endDateTime": "2019-02-10T00:00:00.000Z"
    }
  }
],
"contact": [
  {
    "@type": "Contact",
    "contactName": "Virginie Cork",
    "contactType": "primary",
    "partyRoleType": "Publisher",
    "validFor": {
      "startDateTime": "2018-06-11T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    },
    "contactMedium": [

```

```

    {
      "@type": "GeographicAddressContactMedium",
      "preferred": false,
      "mediumType": "PostalAddress",
      "validFor": {
        "startDateTime": "2018-06-14T00:00:00.000Z",
        "endDateTime": "2019-01-10T00:00:00.000Z"
      },
      "city": "Paris",
      "country": "France",
      "postCode": "75014",
      "street1": "15 Rue des Canards"
    }
  ],
  "relatedParty": {
    "role": "bill receiver",
    "@type": "RelatedPartyRefOrPartyRoleRef",
    "partyOrPartyRole": {
      "@referredType": "Individual",
      "@type": "PartyRefOrPartyRoleRef",
      "href": "https://host:port/tmf-
api/partyManagement/v5/individual/2186",
      "id": "2186",
      "name": "Gustave Flaubert"
    }
  }
},
"accountBalance": [
  {
    "@type": "AccountBalance",
    "amount": {
      "unit": "USD",
      "value": 55.28
    },
    "balanceType": "DepositBalance",
    "validFor": {
      "startDateTime": "2018-06-10T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    }
  }
],
"accountRelationship": [
  {
    "@type": "AccountRelationship",
    "relationshipType": "contains",
    "validFor": {
      "startDateTime": "2018-06-16T00:00:00.000Z",
      "endDateTime": "2019-01-10T00:00:00.000Z"
    },
    "account": {
      "@referredType": "BillingAccount",
      "@type": "AccountRef",
      "href": "https://host:port/tmf-
api/accountManagement/v5/partyAccount/7550",
      "id": "7550",
      "name": "Travel Account"
    }
  }
]
}

```

Deletes a SettlementAccount

DELETE /settlementAccount/{id}

Description

This operation deletes a SettlementAccount entity.

Operations on BillPresentationMedia

Retrieves a BillPresentationMedia by ID

GET /billPresentationMedia/{id}?fields=...

Description

This operation retrieves a BillPresentationMedia entity. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving a BillPresentationMedia resource

Request

```
GET /billPresentationMedia/4506
Content-Type: application/json
```

Response

```
200

{
  "@type": "BillPresentationMedia",
  "description": "This bill presentation media ...",
  "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/4506",
  "id": "4506",
  "name": "Electronic"
}
```

List or find BillPresentationMedia objects

GET /billPresentationMedia?fields=...

Description

This operation list BillPresentationMedia entities. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Retrieving all bill presentation medias. The result items are shrunk to show only the id and name (fields=id,name).

Request

```
GET /billPresentationMedia?fields=id,name
Content-Type: application/json
```

Response

```
200
[
  {
    "@type": "BillPresentationMedia",
    "id": "42",
    "name": "signed mail"
  },
  {
    "@type": "BillPresentationMedia",
    "id": "43",
    "name": "postal"
  },
  {
    "@type": "BillPresentationMedia",
    "id": "44",
    "name": "web"
  }
]
```

Creates a BillPresentationMedia

POST /billPresentationMedia?fields=...

Description

This operation creates a BillPresentationMedia entity.

Mandatory Attributes

Mandatory Attributes	Rule
name	
@type	

Usage samples

Here is a sample of a request for creating a BillPresentationMedia resource. In this example the request only passes mandatory attributes.

Request

```
POST /billPresentationMedia
Content-Type: application/json

{
  "@type": "BillPresentationMedia",
  "name": "Electronic"
}
```

Response

```
201

{
  "@type": "BillPresentationMedia",
  "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/4506",
  "id": "4506",
  "name": "Electronic"
}
```

Updates partially a BillPresentationMedia

PATCH /billPresentationMedia/{id}?fields=...

Description

This operation allows partial updates of a BillPresentationMedia entity. Support of json/merge (<https://tools.ietf.org/html/rfc7386>) is mandatory, support of json/patch (<http://tools.ietf.org/html/rfc5789>) is optional. Note: If the update operation yields to the creation of sub-resources or relationships, the same rules concerning mandatory sub-resource attributes and default value settings in the POST operation applies to the PATCH operation. Hence these tables are not repeated here.

Patchable and Non Patchable Attributes

Non Patchable Attributes	Rule
href	
id	
@baseType	@baseType is immutable
@schemaLocation	@schemaLocation is immutable
@type	@type is immutable

Patchable Attributes	Rule
description	
name	

Usage samples

Here is an example of a request for patching a BillPresentationMedia resource with change on description attribute using patch merge

Request

```
PATCH /billPresentationMedia/{id}
Content-Type: application/merge-patch+json

{
  "@type": "BillPresentationMedia",
  "description": "This bill presentation media is electronic"
}
```

Response

```
200

{
  "description": "This bill presentation media is electronic",
  "href": "https://host:port/tmf-api/accountManagement/v5/billPresentationMedia/4506",
  "id": "4506",
  "name": "Electronic"
}
```

Here is an example of a request for patching a BillPresentationMedia resource with change on description attribute using patch merge

Request

```
PATCH /billPresentationMedia/{id}
Content-Type: application/merge-patch+json

{
  "@type": "BillPresentationMedia",
  "description": "This bill presentation media is electronic"
}
```

Response

```
200

{
  "description": "This bill presentation media is electronic",
  "href": "https://host:port/tmf-api/accountManagement/v5/billPresentationMedia/4506",
  "id": "4506",
  "name": "Electronic"
}
```

Here is an example of a request for patching a BillPresentationMedia resource with change on description attribute using JSON patch

Request

```
PATCH /billPresentationMedia/{id}
Content-Type: application/json-patch+json

{
  "path": "/description",
  "value": "This bill presentation media is electronic",
  "op": "replace"
}
```

Response

```
200

{
  "description": "This bill presentation media is electronic",
  "href": "https://host:port/tmf-
api/accountManagement/v5/billPresentationMedia/4506",
  "id": "4506",
  "name": "Electronic"
}
```

Deletes a BillPresentationMedia

DELETE /billPresentationMedia/{id}

Description

This operation deletes a BillPresentationMedia entity.

Operations on BillingCycleSpecification

Retrieves a BillingCycleSpecification by ID

GET /billingCycleSpecification/{id}?fields=...

Description

This operation retrieves a BillingCycleSpecification entity. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is a sample of a request for retrieving a BillingCycleSpecification resource based on its ID.

Request

```
GET /billingCycleSpecification/4556
```

```
Content-Type: application/json
```

Response

```
200

{
  "@type": "BillingCycleSpecification",
  "billingDateShift": 20,
  "billingPeriod": "monthly",
  "chargeDateOffset": 10,
  "creditDateOffset": 15,
  "description": "This billing cycle specification describes the cycle for 20th of
the month.",
  "frequency": "monthly",
  "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/4556",
  "id": "4556",
  "mailingDateOffset": 25,
  "name": "Monthly billing",
  "paymentDueDateOffset": 30,
  "validFor": {
    "startDateTime": "2018-06-10T00:00:00.000Z",
    "endDateTime": "2025-01-10T00:00:00.000Z"
  }
}
```

List or find BillingCycleSpecification objects

GET /billingCycleSpecification?fields=...

Description

This operation list BillingCycleSpecification entities. Attribute selection is enabled for all first level attributes. Filtering may be available depending on the compliance level supported by an implementation.

Usage samples

Here is an example of a request for retrieving BillingCycleSpecification resources. Retrieving all BillingCycleSpecifications. The result items are field-restricted to show only the id and name

Request

```
GET /billingCycleSpecification?fields=id,name
Content-Type: application/json
```

Response

```
200
```

```
[
```

```

{
  "@type": "BillCycleSpecification",
  "id": "9473",
  "name": "bimonthly"
},
{
  "@type": "BillCycleSpecification",
  "id": "9473",
  "name": "monthly"
},
{
  "@type": "BillCycleSpecification",
  "id": "9899",
  "name": "weekly"
}
]

```

Creates a BillingCycleSpecification

POST /billingCycleSpecification?fields=...

Description

This operation creates a BillingCycleSpecification entity.

Mandatory Attributes

Mandatory Attributes	Rule
name	
@type	

Usage samples

Here is a sample of a request for creating a BillingCycleSpecification resource. In this example the request only passes mandatory attributes.

Request

```

POST /billingCycleSpecification
Content-Type: application/json

{
  "@type": "BillCycleSpecification",
  "name": "Monthly billing"
}

```

Response

```

201

{
  "@type": "BillCycleSpecification",
  "href": "https://host:port/tmf-

```

```
api/accountManagement/v5/billingCycleSpecification/4556",
  "id": "4556",
  "name": "Monthly billing"
}
```

Updates partially a BillingCycleSpecification

PATCH /billingCycleSpecification/{id}?fields=...

Description

This operation allows partial updates of a BillingCycleSpecification entity. Support of json/merge (<https://tools.ietf.org/html/rfc7386>) is mandatory, support of json/patch (<http://tools.ietf.org/html/rfc5789>) is optional. Note: If the update operation yields to the creation of sub-resources or relationships, the same rules concerning mandatory sub-resource attributes and default value settings in the POST operation applies to the PATCH operation. Hence these tables are not repeated here.

Patchable and Non Patchable Attributes

Non Patchable Attributes	Rule
href	
id	
@baseType	@baseType is immutable
@schemaLocation	@schemaLocation is immutable
@type	@type is immutable

Patchable Attributes	Rule
billingDateShift	
billingPeriod	
chargeDateOffset	
creditDateOffset	
description	
frequency	
mailingDateOffset	
name	
paymentDueDateOffset	
validFor	

Usage samples

Here is an example of a request for patching a BillingCycleSpecification resource with change on mailing date offset attribute using patch merge

Request

```
PATCH /billingCycleSpecification/{id}
Content-Type: application/merge-patch+json

{
  "@type": "BillingCycleSpecification",
  "mailingDateOffset": 30
}
```

Response

```
200

{
  "@type": "BillCycleSpecification",
  "billingDateShift": 20,
  "billingPeriod": "monthly",
  "chargeDateOffset": 10,
  "creditDateOffset": 15,
  "description": "This billing cycle specification describes the cycle for 20th of the month.",
  "frequency": "monthly",
  "href": "https://host:port/tmf-api/accountManagement/v5/billingCycleSpecification/4556",
  "id": "4556",
  "mailingDateOffset": 30,
  "name": "Monthly billing",
  "paymentDueDateOffset": 30,
  "validFor": {
    "startDateTime": "2018-06-10T00:00:00.000Z",
    "endDateTime": "2025-01-10T00:00:00.000Z"
  }
}
```

Here is an example of a request for patching a BillingCycleSpecification resource with change on mailing date offset attribute using patch merge

Request

```
PATCH /billingCycleSpecification/{id}
Content-Type: application/json

{
  "@type": "BillingCycleSpecification",
  "mailingDateOffset": 30
}
```

Response

```
200

{
  "@type": "BillCycleSpecification",
```

```

    "billingDateShift": 20,
    "billingPeriod": "monthly",
    "chargeDateOffset": 10,
    "creditDateOffset": 15,
    "description": "This billing cycle specification describes the cycle for 20th of
the month.",
    "frequency": "monthly",
    "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/4556",
    "id": "4556",
    "mailingDateOffset": 30,
    "name": "Monthly billing",
    "paymentDueDateOffset": 30,
    "validFor": {
      "startDateTime": "2018-06-10T00:00:00.000Z",
      "endDateTime": "2025-01-10T00:00:00.000Z"
    }
  }
}

```

Here is an example of a request for patching a BillingCycleSpecification resource with change on mailing date offset attribute using JSON patch

Request

```

PATCH /billingCycleSpecification/{id}
Content-Type: application/json-patch+json

{
  "path": "/mailingDateOffset",
  "value": 30,
  "op": "replace"
}

```

Response

```

200

{
  "@type": "BillCycleSpecification",
  "billingDateShift": 20,
  "billingPeriod": "monthly",
  "chargeDateOffset": 10,
  "creditDateOffset": 15,
  "description": "This billing cycle specification describes the cycle for 20th of
the month.",
  "frequency": "monthly",
  "href": "https://host:port/tmf-
api/accountManagement/v5/billingCycleSpecification/4556",
  "id": "4556",
  "mailingDateOffset": 30,
  "name": "Monthly billing",
  "paymentDueDateOffset": 30,
  "validFor": {
    "startDateTime": "2018-06-10T00:00:00.000Z",
    "endDateTime": "2025-01-10T00:00:00.000Z"
  }
}

```

```
}
```

Here is an example of a request for patching a `BillingCycleSpecification` resource with change on billing date shift to 30 days only if it was 20 days previously, using JSON patch query

Request

```
PATCH /billingCycleSpecification/{id}
Content-Type: application/json-patch-query+json

{
  "op": "replace",
  "path": "/billingDateShift?/billingDateShift=20",
  "value": 30
}
```

Response

```
200

{
  "@type": "BillCycleSpecification",
  "billingDateShift": 30,
  "billingPeriod": "monthly",
  "chargeDateOffset": 10,
  "creditDateOffset": 15,
  "description": "This billing cycle specification describes the cycle for 20th of the month.",
  "frequency": "monthly",
  "href": "https://host:port/tmf-api/accountManagement/v5/billingCycleSpecification/4556",
  "id": "4556",
  "mailingDateOffset": 30,
  "name": "Monthly billing",
  "paymentDueDateOffset": 30,
  "validFor": {
    "startDateTime": "2018-06-10T00:00:00.000Z",
    "endDateTime": "2025-01-10T00:00:00.000Z"
  }
}
```

Deletes a BillingCycleSpecification

DELETE `/billingCycleSpecification/{id}`

Description

This operation deletes a `BillingCycleSpecification` entity.

API NOTIFICATIONS

For every single of operation on the entities use the following templates and provide sample REST notification POST calls.

It is assumed that the Pub/Sub uses the Register and UnRegister mechanisms described in the REST Guidelines reproduced below.

Register listener

POST /hub

Description

Sets the communication endpoint address the service instance must use to deliver information about its health state, execution state, failures and metrics. Subsequent POST calls will be rejected by the service if it does not support multiple listeners. In this case DELETE /api/hub/{id} must be called before an endpoint can be created again.

Behavior

Returns HTTP/1.1 status code 204 if the request was successful.

Returns HTTP/1.1 status code 409 if request is not successful.

Usage Samples

Here's an example of a request for registering a listener.

Request

```
POST /api/hub

Accept: application/json

{
  "callback": "http://in.listener.com"
}
```

Response

```
201

Content-Type: application/json

Location: /api/hub/42

{
  "id": "42",
  "callback": "http://in.listener.com",
  "query": ""
}
```

Unregister listener

DELETE /hub/{id}

Description

Clears the communication endpoint address that was set by creating the Hub..

Behavior

Returns HTTP/1.1 status code 204 if the request was successful.

Returns HTTP/1.1 status code 404 if the resource is not found.

Usage Samples

Here's an example of a request for un-registering a listener.

Request

```
DELETE /api/hub/42  
  
Accept: application/json
```

Response

```
204
```

Publish Event to listener

POST /client/listener

Description

Clears the communication endpoint address that was set by creating the Hub.

Provides to a registered listener the description of the event that was raised. The /client/listener url is the callback url passed when registering the listener.

Behavior

Returns HTTP/1.1 status code 201 if the service is able to set the configuration.

Usage Samples

Here's an example of a notification received by the listener. In this example "EVENT TYPE" should be replaced by one of the notification types supported by this API (see Notification resources Models section) and EVENT BODY refers to the data structure of the given notification type.

Request

```
POST /client/listener

Accept: application/json

{
  "event": {
    EVENT BODY
  },
  "eventType": "EVENT_TYPE"
}
```

Response

```
201
```

For detailed examples on the general TM Forum notification mechanism, see the TMF REST Design Guidelines.

Acknowledgements

Release History

Release Number	Date	Release led by:	Description
Release 1.0	04/15/2017	*Pierre Gauthier TM Forum pgauthier@tmforum.org * Mariano Belaunde Orange Labs	First Release of the Document. Generated from API Data Model. It is a rebrand of the old Billing Management specification since its scope has been enlarged to other accounting aspects.
Release 2.0	11/06/2018	Mariano Belaunde Orange Labs	Alignment with Guidelines 3.0
Release 4.0	30/05/2019	Mariano Belaunde Orange Labs	Regeneration after schematization
Release 4.1	13/07/2022	Jonathan Goldberg Amdocs	Various fixes to model
Version 5.0.0	December 2022	Jonathan Goldberg Amdocs Jonathan.Goldberg@amdocs.com	Upgrade to V5 design patterns and OAS3

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