

TM Forum Specification

Account Management API Conformance Profile

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INTRODUCTION - API DESCRIPTION

See the introduction of the related specification document.

RESOURCE MODEL CONFORMANCE

API MANDATORY AND OPTIONAL RESOURCES

For the resources defined by the API fill the following table and indicate which ones are mandatory and which ones are optional.

Resource Name	Mandatory or Optional	Comments
PartyAccount	M	
BillingAccount	M	
SettlementAccount	M	
FinancialAccount	M	
BillingCycleSpecification	M	
BillFormat	M	
BillPresentationMedia	M	

PARTY ACCOUNT MANDATORY AND OPTIONAL ATTRIBUTES

The table below summarizes mandatory and optional attributes for resource "PartyAccount"

Attribute Name	Mandatory or Optional	Comments
@baseType	O	
@schemaLocation	O	
@type	O	
creditLimit	O	

description	O	
href	M (in response messages) O (otherwise)	Url for the created resource
id	M (in response messages) O (otherwise)	Generated by the server
lastModified	O	
name	M (for resource creation) O (otherwise)	
state	O	
type	O	
paymentStatus	O	
billStructure	O	
paymentPlan	O	
financialAccount	O	
defaultPaymentMethod	O	
relatedParty	M (for resource creation) O (otherwise)	
taxExemption	O	
contact	O	
accountBalance	O	Attribute non patchable
accountRelationship	O	

BILLING ACCOUNT MANDATORY AND OPTIONAL ATTRIBUTES

The table below summarizes mandatory and optional attributes for resource "BillingAccount"

Attribute Name	Mandatory or Optional	Comments
----------------	-----------------------	----------

paymentStatus	O	
@baseType	O	
@schemaLocation	O	
@type	O	
creditLimit	O	
description	O	
href	M (in response messages) O (otherwise)	Url for the created resource
id	M (in response messages) O (otherwise)	Generated by the server
lastModified	O	
name	M (for resource creation) O (otherwise)	
state	O	
type	O	
billStructure	O	
paymentPlan	O	
financialAccount	O	
defaultPaymentMethod	O	
relatedParty	M (for resource creation) O (otherwise)	
taxExemption	O	
contact	O	
accountBalance	O	Attribute non patchable
accountRelationship	O	

SETTLEMENT ACCOUNT MANDATORY AND OPTIONAL ATTRIBUTES

The table below summarizes mandatory and optional attributes for resource "SettlementAccount"

Attribute Name	Mandatory or Optional	Comments
paymentStatus	O	
@baseType	O	
@schemaLocation	O	
@type	O	
creditLimit	O	
description	O	
href	M (in response messages) O (otherwise)	Url for the created resource
id	M (in response messages) O (otherwise)	Generated by the server
lastModified	O	
name	M (for resource creation) O (otherwise)	
state	O	
type	O	
billStructure	O	
paymentPlan	O	
financialAccount	O	
defaultPaymentMethod	O	
relatedParty	M (for resource creation) O (otherwise)	

taxExemption	O	
contact	O	
accountBalance	O	Attribute non patchable
accountRelationship	O	

FINANCIAL ACCOUNT MANDATORY AND OPTIONAL ATTRIBUTES

The table below summarizes mandatory and optional attributes for resource "FinancialAccount"

Attribute Name	Mandatory or Optional	Comments
@baseType	O	
@schemaLocation	O	
@type	O	
creditLimit	O	
description	O	
href	M (in response messages) O (otherwise)	Url for the created resource
id	M (in response messages) O (otherwise)	Generated by the server
lastModified	O	Attribute non patchable
name	M (for resource creation) O (otherwise)	
state	O	
type	O	
relatedParty	O	
taxExemption	O	

contact	O	
accountBalance	O	
accountRelationship	O	

BILLING CYCLE SPECIFICATION MANDATORY AND OPTIONAL ATTRIBUTES

The table below summarizes mandatory and optional attributes for resource "BillingCycleSpecification"

Attribute Name	Mandatory or Optional	Comments
@baseType	O	
@schemaLocation	O	
@type	O	
billingDateShift	O	
billingPeriod	O	
chargeDateOffset	O	
creditDateOffset	O	
description	O	
frequency	O	
href	M (in response messages) O (otherwise)	Url for the created resource
id	M (in response messages) O (otherwise)	Generated by the server
mailingDateOffset	O	
name	M (for resource creation) O (otherwise)	
paymentDueDateOffset	O	

validFor	O	
----------	---	--

BILL FORMAT MANDATORY AND OPTIONAL ATTRIBUTES

The table below summarizes mandatory and optional attributes for resource "BillFormat"

Attribute Name	Mandatory or Optional	Comments
@baseType	O	
@schemaLocation	O	
@type	O	
description	O	
href	M (in response messages) O (otherwise)	Url for the created resource
id	M (in response messages) O (otherwise)	Generated by the server
name	M (for resource creation) O (otherwise)	

BILL PRESENTATION MEDIA MANDATORY AND OPTIONAL ATTRIBUTES

The table below summarizes mandatory and optional attributes for resource "BillPresentationMedia"

Attribute Name	Mandatory or Optional	Comments
@baseType	O	
@schemaLocation	O	
@type	O	
description	O	
href	M (in response messages) O (otherwise)	Url for the created resource

id	M (in response messages) O (otherwise)	Generated by the server
name	M (for resource creation) O (otherwise)	

NOTIFICATION MODEL CONFORMANCE

The Pub/Sub models are common and described in the TMF REST Design Guidelines. Use the following templates to describe the Hub Mandatory and Optional attributes and filtering support.

API MANDATORY AND OPTIONAL NOTIFICATIONS

For the Notifications defined by the API the following table indicates which ones are mandatory and which ones are optional.

Notification Name	Mandatory or Optional	Comments
PartyAccountAttributeValueChangeEvent	O	
PartyAccountStateChangeEvent	O	
BillingAccountAttributeValueChangeEvent	O	
BillingAccountStateChangeEvent	O	
SettlementAccountAttributeValueChangeEvent	O	
SettlementAccountStateChangeEvent	O	
FinancialAccountCreationEvent	O	
FinancialAccountAttributeValueChangeEvent	O	
FinancialAccountStateChangeEvent	O	
FinancialAccountRemoveEvent	O	

All attributes of the resource associated with the notification are mandatory

API OPERATIONS CONFORMANCE

For every single resource use the following templates and define what operations are optional and what operations are mandatory.

API MANDATORY AND OPTIONAL OPERATIONS

The following table indicates which ones are mandatory and which ones are optional for each one of the resources in the API (default is for all resources).

Uniform API Operation	Mandatory/Optional	Comments
GET	M for all resources	GET must be used to retrieve a representation of a resource
POST	M for resources: PartyAccount BillingAccount SettlementAccount FinancialAccount BillingCycleSpecification BillFormat BillPresentationMedia	POST must be used to create a new resource
PUT	O for resources: PartyAccount BillingAccount SettlementAccount FinancialAccount BillingCycleSpecification BillFormat BillPresentationMedia	PUT must be used to completely update a resource identified by its resource URI
PATCH	M for resources: PartyAccount BillingAccount SettlementAccount FinancialAccount BillingCycleSpecification BillFormat BillPresentationMedia	PATCH must be used to partially update a resource
DELETE	M for resources: PartyAccount	DELETE must be used to

	BillingAccount SettlementAccount FinancialAccount BillingCycleSpecification BillFormat BillPresentationMedia	remove a resource
--	---	-------------------

API GET OPERATION CONFORMANCE

For every single resource use the following template to specify the mandatory and optional features supported by the GET operation.

Definitions

Filtered Search: A filtered search can be applied using query parameters in order to obtain only the resource entities that meet the criteria defined by the filtering parameters included in the query request. Several elements can be applied to the filtered search. In that case logic, a logical AND is applied to combine the criteria (e.g.:?severity=<value> &status=<value>)

Attribute selection (Filtered Response Data): In order to apply a filter and limit the number of attributes included in the response, the GET request can include the “?fields=” query parameter. Several elements can be applied to the filter. In that case, a logical AND is applied to combine the values (e.g.:?fields=severity,status) will provide in the response only the values assigned to attributes category and channel. Attribute selection capabilities are the same for collections retrieval and individual resource queries

All the GET operations in this API share the same status code pattern.

GET	M	
Response Status Code 200	M	
Other Status Codes	NA	

/PARTYACCOUNT?FIELDS=...&{FILTERING}

This operation list party account entities.
Attribute selection is mandatory for all first level attributes.
Filtering is mandatory for first compliance level (L1) and optional otherwise.

/PARTYACCOUNT/{ID}?FIELDS=...&{FILTERING}

This operation retrieves a party account entity.
Attribute selection is mandatory for all first level attributes.
Filtering on sub-resources is optional for all compliance levels.

/BILLINGACCOUNT?FIELDS=...&{FILTERING}

This operation list billing account entities.
Attribute selection is mandatory for all first level attributes.
Filtering is mandatory for first compliance level (L1) and optional otherwise.

/BILLINGACCOUNT/{ID}?FIELDS=...&{FILTERING}

This operation retrieves a billing account entity.
Attribute selection is mandatory for all first level attributes.
Filtering on sub-resources is optional for all compliance levels.

/SETTLEMENTACCOUNT?FIELDS=...&{FILTERING}

This operation list settlement account entities.
Attribute selection is mandatory for all first level attributes.
Filtering is mandatory for first compliance level (L1) and optional otherwise.

/SETTLEMENTACCOUNT/{ID}?FIELDS=...&{FILTERING}

This operation retrieves a settlement account entity.
Attribute selection is mandatory for all first level attributes.
Filtering on sub-resources is optional for all compliance levels.

/FINANCIALACCOUNT?FIELDS=...&{FILTERING}

This operation list financial account entities.
Attribute selection is mandatory for all first level attributes.
Filtering is mandatory for first compliance level (L1) and optional otherwise.

/FINANCIALACCOUNT/{ID}?FIELDS=...&{FILTERING}

This operation retrieves a financial account entity.
Attribute selection is mandatory for all first level attributes.
Filtering on sub-resources is optional for all compliance levels.

/BILLINGCYCLESPECIFICATION?FIELDS=...&{FILTERING}

This operation list billing cycle specification entities.
Attribute selection is mandatory for all first level attributes.
Filtering is mandatory for first compliance level (L1) and optional otherwise.

/BILLINGCYCLESPECIFICATION/{ID}?FIELDS=...&{FILTERING}

This operation retrieves a billing cycle specification entity.
Attribute selection is mandatory for all first level attributes.
Filtering on sub-resources is optional for all compliance levels.

/BILLFORMAT?FIELDS=...&{FILTERING}

This operation list bill format entities.
Attribute selection is mandatory for all first level attributes.
Filtering is mandatory for first compliance level (L1) and optional otherwise.

/BILLFORMAT/{ID}?FIELDS=...&{FILTERING}

This operation retrieves a bill format entity.
Attribute selection is mandatory for all first level attributes.
Filtering on sub-resources is optional for all compliance levels.

/BILLPRESENTATIONMEDIA?FIELDS=...&{FILTERING}

This operation list bill presentation media entities.
Attribute selection is mandatory for all first level attributes.
Filtering is mandatory for first compliance level (L1) and optional otherwise.

/BILLPRESENTATIONMEDIA/{ID}?FIELDS=...&{FILTERING}

This operation retrieves a bill presentation media entity.
Attribute selection is mandatory for all first level attributes.
Filtering on sub-resources is optional for all compliance levels.

API POST OPERATION CONFORMANCE

All the POST operations in this API share the same status code pattern.

POST	M	
Status Code 201	M	
Other Status Codes	NA	

/PARTYACCOUNT

This operation creates a party account entity.

Mandatory and Non Mandatory Attributes

The following tables provides the list of mandatory and non mandatory attributes when creating a PartyAccount, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
----------------------	------

name

relatedParty

Non Mandatory Attributes	Default Value	Rule
--------------------------	---------------	------

@baseType

@schemaLocation

@type

creditLimit

description

lastModified

state

accountType

paymentStatus

billStructure

paymentPlan

financialAccount
 defaultPaymentMethod
 taxExemption
 contact
 accountBalance
 accountRelationship

Default Values Summary

When creating the resource, the following table summarizes the default values applicable to optional attributes of the resource (or sub-resources).

Attributes	Default Value
validFor.startDateTime	Current date (Default for 'regular' API users)
billStructure.cycleSpecification.name	"Bill issuer choice"
billStructure.format.name	"Standard invoice"
billStructure.presentationMedia.name	"Electronic invoice"
currencyCode	"National currency" (Default for 'regular' API users)

/BILLINGACCOUNT

This operation creates a billing account entity.

Mandatory and Non Mandatory Attributes

The following tables provides the list of mandatory and non mandatory attributes when creating a BillingAccount, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
name	
relatedParty	

Non Mandatory Attributes	Default Value	Rule
paymentStatus		
@baseType		
@schemaLocation		

@type
 creditLimit
 description
 lastModified
 state
 accountType
 billStructure
 paymentPlan
 financialAccount
 defaultPaymentMethod
 taxExemption
 contact
 accountBalance
 accountRelationship

Default Values Summary

When creating the resource, the following table summarizes the default values applicable to optional attributes of the resource (or sub-resources).

Attributes	Default Value
billStructure.cycleSpecification.name	"Bill issuer choice"
billStructure.format.name	"Standard invoice"
billStructure.presentationMedia.name	"Electronic invoice"

/SETTLEMENTACCOUNT

This operation creates a settlement account entity.

Mandatory and Non Mandatory Attributes

The following tables provides the list of mandatory and non mandatory attributes when creating a SettlementAccount, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
name	

relatedParty

Non Mandatory Attributes	Default Value	Rule
paymentStatus		
@baseType		
@schemaLocation		
@type		
creditLimit		
description		
lastModified		
state		
accountType		
billStructure		
paymentPlan		
financialAccount		
defaultPaymentMethod		
taxExemption		
contact		
accountBalance		
accountRelationship		

Default Values Summary

When creating the resource, the following table summarizes the default values applicable to optional attributes of the resource (or sub-resources).

Attributes	Default Value
billStructure.cycleSpecification.name	"Bill issuer choice"
billStructure.format.name	"Standard invoice"
billStructure.presentationMedia.name	"Electronic invoice"

/FINANCIALACCOUNT

This operation creates a financial account entity.

Mandatory and Non Mandatory Attributes

The following tables provides the list of mandatory and non mandatory attributes when creating a FinancialAccount, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
name	

Non Mandatory Attributes	Default Value	Rule
@baseType		
@schemaLocation		
@type		
creditLimit		
description		
lastModified	Automatically generated	
state		
accountType		
relatedParty		
taxExemption		
contact		
accountBalance		
accountRelationship		

Additional Rules

The following table provides additional rules indicating mandatory fields in sub-resources or relationships when creating a FinancialAccount resource.

Context	Mandatory Sub-Attributes
taxExemption	issuingJurisdiction, validFor
accountRelationship	relationshipType, validFor
contact	contactType, validFor
relatedParty	id, name

accountBalance type, amount, validFor

Default Values Summary

When creating the resource, the following table summarizes the default values applicable to optional attributes of the resource (or sub-resources).

Attributes	Default Value
id	Automatically generated
href	Automatically generated
lastModified	Automatically generated

/BILLINGCYCLESPECIFICATION

This operation creates a billing cycle specification entity.

Mandatory and Non Mandatory Attributes

The following tables provides the list of mandatory and non mandatory attributes when creating a BillingCycleSpecification, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
name	

Non Mandatory Attributes	Default Value	Rule
@baseType		
@schemaLocation		
@type		
billingDateShift		
billingPeriod		
chargeDateOffset		
creditDateOffset		
description		
frequency		
mailingDateOffset		
paymentDueDateOffset		

validFor

/BILLFORMAT

This operation creates a bill format entity.

Mandatory and Non Mandatory Attributes

The following tables provides the list of mandatory and non mandatory attributes when creating a BillFormat, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
----------------------	------

name	
------	--

Non Mandatory Attributes	Default Value	Rule
--------------------------	---------------	------

@baseType		
-----------	--	--

@schemaLocation		
-----------------	--	--

@type		
-------	--	--

description		
-------------	--	--

/BILLPRESENTATIONMEDIA

This operation creates a bill presentation media entity.

Mandatory and Non Mandatory Attributes

The following tables provides the list of mandatory and non mandatory attributes when creating a BillPresentationMedia, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
----------------------	------

name	
------	--

Non Mandatory Attributes	Default Value	Rule
--------------------------	---------------	------

@baseType		
-----------	--	--

@schemaLocation		
-----------------	--	--

@type		
-------	--	--

description		
-------------	--	--

API PUT OPERATION CONFORMANCE

All the PUT operations in this API share the same status code pattern.

PUT	O	
Status Code 201	M	
Other Status Codes	NA	

API PATCH OPERATION CONFORMANCE

All the PATCH operations in this API share the same status code pattern.

PATCH	O	
Status Code 201	M	
Other Status Codes	NA	

/PARTYACCOUNT/{ID}

This operation allows partial updates of a party account 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

The tables below provide the list of patchable and non patchable attributes, including constraint rules on their usage.

Patchable Attributes	Rule
----------------------	------

@baseType

@schemaLocation

@type

creditLimit

description

lastModified

name

state

accountType

paymentStatus

billStructure

paymentPlan

financialAccount
defaultPaymentMethod
relatedParty
taxExemption
contact
accountRelationship

Non Patchable Attributes Rule

id
href
accountBalance
@baseType
@schemaLocation
@type
creditLimit
description
lastModified
name
state
type
paymentStatus
billStructure
paymentPlan
financialAccount
defaultPaymentMethod
relatedParty
taxExemption
contact
accountRelationship

/BILLINGACCOUNT/{ID}

This operation allows partial updates of a billing account 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

The tables below provide the list of patchable and non patchable attributes, including constraint rules on their usage.

Notice that patching is possible only for 'admin' API users.

Patchable Attributes	Rule
billStructure.cycleSpecification	
billStructure.format	
billStructure.presentationMedia	
paymentStatus	
@baseType	
@schemaLocation	
@type	
creditLimit	
description	
lastModified	
name	
state	
accountType	
billStructure	
paymentPlan	
financialAccount	
defaultPaymentMethod	
relatedParty	
taxExemption	
contact	

accountRelationship

Non Patchable Attributes	Rule
--------------------------	------

id

href

accountBalance

paymentStatus

@baseType

@schemaLocation

@type

creditLimit

description

lastModified

name

state

accountType

billStructure

paymentPlan

financialAccount

defaultPaymentMethod

relatedParty

taxExemption

contact

accountRelationship

/SETTLEMENTACCOUNT/{ID}

This operation allows partial updates of a settlement account 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

The tables below provide the list of patchable and non patchable attributes, including constraint rules on their usage.

Notice that patching is possible only for 'admin' API users.

Patchable Attributes	Rule
----------------------	------

billStructure.cycleSpecification	
----------------------------------	--

billStructure.format	
----------------------	--

billStructure.presentationMedia	
---------------------------------	--

paymentStatus	
---------------	--

@baseType	
-----------	--

@schemaLocation	
-----------------	--

@type	
-------	--

creditLimit	
-------------	--

description	
-------------	--

lastModified	
--------------	--

name	
------	--

state	
-------	--

accountType	
-------------	--

billStructure	
---------------	--

paymentPlan	
-------------	--

financialAccount	
------------------	--

defaultPaymentMethod	
----------------------	--

relatedParty	
--------------	--

taxExemption	
--------------	--

contact	
---------	--

accountRelationship	
---------------------	--

Non Patchable Attributes	Rule
--------------------------	------

id	
----	--

href	
------	--

accountBalance	
----------------	--

paymentStatus
 @baseType
 @schemaLocation
 @type
 creditLimit
 description
 lastModified
 name
 state
 type
 billStructure
 paymentPlan
 financialAccount
 defaultPaymentMethod
 relatedParty
 taxExemption
 contact
 accountRelationship

/FINANCIALACCOUNT/{ID}

This operation allows partial updates of a financial account 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

The tables below provide the list of patchable and non patchable attributes, including constraint rules on their usage.

Patchable Attributes	Rule
@baseType	
@schemaLocation	

@type
creditLimit
description
name
state
accountType
relatedParty
taxExemption
contact
accountBalance
accountRelationship

Non Patchable Attributes Rule

id
href
lastModified
@baseType
@schemaLocation
@type
creditLimit
description
name
state
type
relatedParty
taxExemption
contact
accountBalance
accountRelationship

/BILLINGCYCLESPECIFICATION/{ID}

This operation allows partial updates of a billing cycle specification 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

The tables below provide the list of patchable and non patchable attributes, including constraint rules on their usage.

Patchable Attributes	Rule
----------------------	------

@baseType

@schemaLocation

@type

billingDateShift

billingPeriod

chargeDateOffset

creditDateOffset

description

frequency

mailingDateOffset

name

paymentDueDateOffset

validFor

Non Patchable Attributes	Rule
--------------------------	------

id

href

@baseType

@schemaLocation

@type

billingDateShift
 billingPeriod
 chargeDateOffset
 creditDateOffset
 description
 frequency
 mailingDateOffset
 name
 paymentDueDateOffset
 validFor

/BILLFORMAT/{ID}

This operation allows partial updates of a bill format 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

The tables below provide the list of patchable and non patchable attributes, including constraint rules on their usage.

Notice that patching is possible only for 'admin' API users.

Patchable Attributes	Rule
----------------------	------

@baseType

@schemaLocation

@type

description

name

Non Patchable Attributes	Rule
--------------------------	------

id

href

@baseType
 @schemaLocation
 @type
 description
 name

/BILLPRESENTATIONMEDIA/{ID}

This operation allows partial updates of a bill presentation media 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

The tables below provide the list of patchable and non patchable attributes, including constraint rules on their usage.

Notice that patching is possible only for 'admin' API users.

Patchable Attributes	Rule
----------------------	------

@baseType	
@schemaLocation	
@type	
description	
name	

Non Patchable Attributes	Rule
--------------------------	------

id	
href	
@baseType	
@schemaLocation	
@type	
description	
name	

API DELETE OPERATION CONFORMANCE

All the DELETE operations in this API share the same status code pattern.

DELETE	O	
Status Code 200	M	
Other Status Codes	NA	

/PARTYACCOUNT/{ID}

This operation deletes a party account entity.

/BILLINGACCOUNT/{ID}

This operation deletes a billing account entity.

/SETTLEMENTACCOUNT/{ID}

This operation deletes a settlement account entity.

/FINANCIALACCOUNT/{ID}

This operation deletes a financial account entity.

/BILLINGCYCLESPECIFICATION/{ID}

This operation deletes a billing cycle specification entity.

/BILLFORMAT/{ID}

This operation deletes a bill format entity.

/BILLPRESENTATIONMEDIA/{ID}

This operation deletes a bill presentation media entity.

API CONFORMANCE TEST SCENARIOS

This section describes the test scenarios required for the basic CONNECT certification of the API.

Test Cases must be executed in the order defined for each resource because the result from one of the scenarios will be input for the next one.

Requests must be addressed to the endpoint provided for certification, specifically they must be addressed to the URI defined by the concatenation of the {apiRoot} and the specific resource, where the {apiRoot} is defined as **{serverRoot}/troubleTicket/v1**, where {serverRoot} defines the certification endpoint

For convenience we provide the test cases for only the **PartyAccount** resource. For the other kinds of accounts the test cases are similar. Simply replace the PartyAccount by the actual resource being considered.

RESOURCE PartyAccount TEST CASES

Nominal Scenarios

TC_Acc_N1 – Create new PartyAccount with minimum required information

- Send a POST message to {apiRoot}/partyAccount/ with the following contents in the BODY

```
{
  "name": "MyAccount",
}
```

- Wait for a response from the server with the following characteristics
 - Response Code 201-Created
 - Include a location header in the body set to /{apiRoot}/partyAccount/{IDtt1} where {IDtt1} indicates the identifier assigned by the server to the new PartyAccount resource
 - The response message includes all mandatory parameters (including description, severity and type that were not sent in the original request)
 - The body of the response matches the values set in the original request
- Send a GET message to /{apiRoot}/partyAccount/

- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one PartyAccount resource with ID set to {IDtt1}, the same identifier as assigned by the server to the new resource created
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDtt1} matches the values set in the original request
- Send a GET message to `/{apiRoot}/partyAccount/{IDtt1}`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The response message includes all mandatory parameters
 - The body of the response includes a PartyAccount resource structure that matches the values in the original request

TC_Acc_N2 – Search for PartyAccounts with specific characteristics

- Send a GET message to `/{apiRoot}/partyAccount`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes at least two PartyAccount resources referring to {IDtt1} and {IDtt2}
 - The body of the response for the resource with each identifier matches the values in the corresponding original request
- Send a GET message to `/{apiRoot}/partyAccount?type=joint`
- Wait for a response from the server with the following characteristics

- Response Code 200-OK
 - The body of the response includes one PartyAccount resource referring to {IDtt1} and there is no reference to PartyAccount resource {IDtt2}
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDtt1} matches the values in the original request
- Send a GET message to `/{apiRoot}/partyAccount?state=Active`
 - Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one PartyAccount resource referring to {IDtt2} and there is no reference to PartyAccount resource {IDtt1}
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDtt2} matches the values in the original request

TC_Acc_N3 – Filtered retrieval of PartyAccounts

- Send a GET message to `/{apiRoot}/partyAccount/{IDtt1}?fields=state`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one PartyAccount resource referring to {IDtt1} and including only attributes name and status, matching the values in the original request
- Send a GET message to `/{apiRoot}/partyAccount/{IDtt2}?fields=state,type`
- Wait for a response from the server with the following characteristics

- Response Code 200-OK
- The body of the response includes one PartyAccount resource referring to {IDtt2} and including only attributes severity and status, matching the values in the original request

Notice that this test case is using some specific parameters to filter the data included in the response but any other parameter could be used

TC_Acc_N4 – Filtered Search and Filtered data response

- Send a GET message to `/{apiRoot}/partyAccount?state=Active&fields=state,type`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one PartyAccountresource referring to {IDtt1} and there is no reference to PartyAccount resource {IDtt2}
 - The body of the response for the resource with each identifier includes only attribute description, matching the values in the corresponding original request

Notice that this test case is using the parameter "description" to filter the data included in the response but any other parameter could be used

Error Scenarios

TC_Acc_E1 – Unknown PartyAccount identifier

- Send a GET message to `/{apiRoot}/partyAccount/{IDtt3}`, where {IDtt3} does not match any of the identifiers previously created in the server
- Wait for a response from the server with the following characteristics
 - Response Code 404-Not Found

TC_Acc_E2 – Invalid Request – Missing mandatory parameter

- Send a POST message to {apiRoot}/partyAccount/ with the following contents in the BODY.

```
{  
}
```

Notice that this request is missing mandatory parameter "name"
but any other mandatory parameter could be used

Wait for an error response from the server indicating the mandatory parameter is missing in the request

RELEASE HISTORY

Release Number	Date	Release led by:	Description
Release 1.0	07/15/2015	Pierre Gauthier TM Forum pgauthier@tmforum. orf	First Release of Draft Version of the Document.
Release 1.1	03/15/2017	Mariano Belaunde	Updated version including Test scenarios
Release 4.0	21-Jul-2019	Mariano Belaunde	Schematization of the API