

# **TM Forum Specification**

# Account Management Conformance Profile

**TMF666B** 

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Direct inquiries to the TM Forum office:

4 Century Drive, Suite 100 Parsippany, NJ 07054, USA Tel No. +1 973 944 5100 Fax No. +1 973 944 5110

TM Forum Web Page: www.tmforum.org



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# **INTRODUCTION - API DESCRIPTION**

See introduction on the user manual



#### **RESOURCE MODEL CONFORMANCE**

#### API MANDATORY RESOURCES

The following table indicates the mandatory resources for this API.

Resource Name	Comment
PartyAccount	
BillingAccount	
SettlementAccount	
FinancialAccount	
BillingCycleSpecification	
BillFormat	
BillPresentationMedia	

#### GENERAL NOTES ON RESOURCE ATTRIBUTE CONFORMANCE

There are three situations that could occur for an attribute:

- Mandatory attribute,
- o Mandatory attribute if the optional parent attribute is present,
- Non-mandatory/Optional attribute. Those are all the other attributes not mentioned in the following subsections. Please refer to the corresponding API REST Specification for more details.
- The tables in the subsections below indicate which attributes are mandatory including mandatory when an optional parent is present.
- Where a resource is an input into an API (e.g. POST, PATCH), Mandatory means that the attribute value must be supplied by the API consumer in the input (and must not be blank or null).
- Where a resource is an output from an API (e.g. GET, POST), Mandatory means that the attribute value must be supplied by the API provider in the output (and must not be blank or null).
- For a sub-resource that is not an array, Mandatory (cardinality 1..1) means that the sub-resource must be present, while Optional (cardinality 0..1) means that the sub-resource may be absent. Mandatory and Optional on the sub-resource attributes apply to the sub-resource if present.
- For a sub-resource that is an array, Mandatory (cardinality 1..\*) means that at least one sub-resource must be present in the array, while Optional (cardinality 0..\*) means that the array may be absent. Mandatory and Optional on the sub-resource attributes apply to each of the sub-resources if present.



In this table are listed all mandatory attributes. A mandatory attribute MUST be retrieved in resource representation when no attribute selection is used (e.g. GET /../{id}) without any attribute selection

When an attribute is listed with an indentation (in second column) it means this attribute is mandatory if root (parent) attribute is present.

#### PARTYACCOUNT RESOURCE MANDATORY ATTRIBUTES

Mandatory attribute when parent is present	Rule
href	M (in response messages)
id	M (in response messages)
name	М
relatedParty	М
	Array of RelatedParty
@referredType	М
id	М
name	М
defaultPaymentMethod (if present)	
id	M
financialAccount (if present)	
id	М
paymentPlan.paymentMethod (if present)	See conditions for PaymentMethodRef at defaultPaymentMethod
taxExemption (if present)	Array of TaxExemptionCertificate
issuingJurisdiction	M
validFor	М
accountBalance (if present)	Array of AccountBalance
amount	M
balanceType	M
validFor	M
accountRelationship (if present)	Array of AccountRelationship



Man	datory attribute when parent is present	Rule
	relationshipType	М
	validFor	М
acco	ountRelationship.account (if present)	
	id	М
billS	tructure.cycleSpecification (if present)	
	name	М
billS	tructure.format (if present)	
	name	М
billS	tructure.presentationMedia (if present)	Array of BillPresentationMediaRefOrValue
	name	М
cont	act (if present)	Array of Contact
	contactType	M
	validFor	M
cont	act.relatedParty (if present)	See conditions for RelatedParty at relatedParty

# **BILLINGACCOUNT RESOURCE MANDATORY ATTRIBUTES**

Mandatory attribute when parent is present	Rule
href	M (in response messages)
id	M (in response messages)
name	М
relatedParty	М
	Array of RelatedParty
@referredType	M
id	M
name	M
defaultPaymentMethod (if present)	



Mandatory attribute when parent is present	Rule
id	M
financialAccount (if present)	
id	M
paymentPlan.paymentMethod (if present)	See conditions for PaymentMethodRef at defaultPaymentMethod
taxExemption (if present)	Array of TaxExemptionCertificate
issuingJurisdiction	M
validFor	M
accountBalance (if present)	Array of AccountBalance
amount	M
balanceType	M
validFor	M
accountRelationship (if present)	Array of AccountRelationship
relationshipType	M
validFor	M
accountRelationship.account (if present)	
id	M
billStructure.cycleSpecification (if present)	
name	M
billStructure.format (if present)	
name	M
billStructure.presentationMedia (if present)	Array of BillPresentationMediaRefOrValue
name	M
contact (if present)	Array of Contact
contactType	M
validFor	M
contact.relatedParty (if present)	See conditions for RelatedParty at relatedParty



# SETTLEMENTACCOUNT RESOURCE MANDATORY ATTRIBUTES

Mandatory attribute when parent is present	Rule
href	M (in response messages)
id	M (in response messages)
name	M
relatedParty	M
	Array of RelatedParty
@referredType	M
id	М
name	M
defaultPaymentMethod (if present)	
id	M
financialAccount (if present)	
id	M
paymentPlan.paymentMethod (if present)	See conditions for PaymentMethodRef at defaultPaymentMethod
taxExemption (if present)	Array of TaxExemptionCertificate
issuingJurisdiction	M
validFor	М
accountBalance (if present)	Array of AccountBalance
amount	M
balanceType	M
validFor	M
accountRelationship (if present)	Array of AccountRelationship
relationshipType	М
validFor	М
accountRelationship.account (if present)	



Mandatory attribute when parent is present	Rule
id	М
billStructure.cycleSpecification (if present)	
name	М
billStructure.format (if present)	
name	М
billStructure.presentationMedia (if present)	Array of BillPresentationMediaRefOrValue
name	М
contact (if present)	Array of Contact
contactType	М
validFor	М
contact.relatedParty (if present)	See conditions for RelatedParty at relatedParty

# FINANCIALACCOUNT RESOURCE MANDATORY ATTRIBUTES

Mandatory attribu	te when parent is present	Rule
href		M (in response messages)
id		M (in response messages)
name		М
taxExemption (if p	present)	Array of TaxExemptionCertificate
issuingJuris	diction	М
validFor		М
accountBalance (	if present)	Array of AccountBalance
amount		М
balanceType	e	М
validFor		М
accountRelations	hip (if present)	Array of AccountRelationship
relationship <sup>-</sup>	Гуре	М



Man	datory attribute when parent is present	Rule
	validFor	М
acco	ountRelationship.account (if present)	
	id	М
relat	edParty (if present)	Array of RelatedParty
	@referredType	М
	id	М
	name	М
cont	act (if present)	Array of Contact
	contactType	М
	validFor	М
cont	act.relatedParty (if present)	See conditions for RelatedParty at relatedParty

#### BILLINGCYCLESPECIFICATION RESOURCE MANDATORY ATTRIBUTES

Mandatory attribute when parent is present	Rule
href	M (in response messages)
id	M (in response messages)
name	М

#### **BILLFORMAT RESOURCE MANDATORY ATTRIBUTES**

Mandatory attribute when parent is present	Rule
href	M (in response messages)
id	M (in response messages)
name	M

#### BILLPRESENTATIONMEDIA RESOURCE MANDATORY ATTRIBUTES

Mandatory attribute when parent is present	Rule
href	M (in response messages)



Mandatory attribute when parent is present	Rule
id	M (in response messages)
name	M



#### **API OPERATIONS CONFORMANCE**

For every single resource the following tables includes mandatory operations.

#### PARTYACCOUNT MANDATORY OPERATIONS

The following table indicates which ones are mandatory for the PartyAccount resource:

Uniform API Operation
GET
POST
PATCH
DELETE

#### **BILLINGACCOUNT MANDATORY OPERATIONS**

The following table indicates which ones are mandatory for the BillingAccount resource:

Uniform API Operation	
GET	
POST	
PATCH	

#### SETTLEMENTACCOUNT MANDATORY OPERATIONS

The following table indicates which ones are mandatory for the SettlementAccount resource:

Uniform API Operation	
GET	
POST	
PATCH	

#### FINANCIALACCOUNT MANDATORY OPERATIONS

The following table indicates which ones are mandatory for the FinancialAccount resource:



Uniform API Operation
GET
POST
PATCH
BILLINGCYCLESPECIFICATION MANDATORY OPERATIONS
The following table indicates which ones are mandatory for the BillingCycleSpecification resource:
Uniform API Operation
GET
POST
PATCH
BILLFORMAT MANDATORY OPERATIONS
The following table indicates which ones are mandatory for the BillFormat resource:
Uniform API Operation
GET
POST
PATCH
BILLPRESENTATIONMEDIA MANDATORY OPERATIONS
The following table indicates which ones are mandatory for the BillPresentationMedia resource:
Uniform API Operation



#### **API GET OPERATION CONFORMANCE**

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

GET	Mandatory/Optional
Response Status Code 200 if successful	М
Response Status Code 404 if not found	М

#### **DEFINITIONS FOR FILTER**

The following definitions apply to all the GET operations:

- Filtered Search: A filtered search can be applied using query parameters to obtain only the resources 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 (Limiting Response Data): In order to limit which attributes are included in the
  response, the GET request can include the ?fields= query parameter. Only those attributes whose
  names are supplied in this parameter will be returned. Attribute selection capabilities are the same
  for collections retrieval and individual resource queries.
- Level: The filtering and attribute selection can apply to the top level properties (attributes) and subproperties. The tables below show which attributes need to be supported in top-level or contained resources.

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

This operation list or find PartyAccount entities

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation retrieves a PartyAccount entity. Attribute selection is enabled for all first level attributes.

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation list or find BillingAccount entities

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels



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

This operation retrieves a BillingAccount entity. Attribute selection is enabled for all first level attributes.

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation list or find SettlementAccount entities

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation retrieves a SettlementAccount entity. Attribute selection is enabled for all first level attributes.

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation list or find Financial Account entities

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation retrieves a Financial Account entity. Attribute selection is enabled for all first level attributes.

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation list or find BillingCycleSpecification entities

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels



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

This operation retrieves a BillingCycleSpecification entity. Attribute selection is enabled for all first level attributes.

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation list or find BillFormat entities

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation retrieves a BillFormat entity. Attribute selection is enabled for all first level attributes.

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation list or find BillPresentationMedia entities

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

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

This operation retrieves a BillPresentationMedia entity. Attribute selection is enabled for all first level attributes.

Attribute selection is mandatory for all first level attributes except for the href attribute.

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	Mandatory/Optional
Status Code 201 if resource created	М

# POST /PARTYACCOUNT

This operation creates a PartyAccount entity.

The following table provides the list of mandatory attributes when creating an instance of the PartyAccount resource, including any possible rule, conditions and applicable default values.

Mandatory Attributes	Rule
name	
relatedParty	
relatedParty.@referredType	
relatedParty.id	
relatedParty.name	

# POST /BILLINGACCOUNT

This operation creates a BillingAccount entity.

The following table provides the list of mandatory attributes when creating an instance of the BillingAccount resource, including any possible rule, conditions and applicable default values.

Mandatory Attributes	Rule
name	
relatedParty	
relatedParty.@referredType	
relatedParty.id	
relatedParty.name	



#### POST /SETTLEMENTACCOUNT

This operation creates a SettlementAccount entity.

The following table provides the list of mandatory attributes when creating an instance of the SettlementAccount resource, including any possible rule, conditions and applicable default values.

Mandatory Attributes	Rule
name	
relatedParty	
relatedParty.@referredType	
relatedParty.id	
relatedParty.name	

#### POST /FINANCIALACCOUNT

This operation creates a FinancialAccount entity.

The following table provides the list of mandatory attributes when creating an instance of the FinancialAccount resource, including any possible rule, conditions and applicable default values.

Mandatory Attributes	Rule
name	

# POST /BILLINGCYCLESPECIFICATION

This operation creates a BillingCycleSpecification entity.

The following table provides the list of mandatory attributes when creating an instance of the BillingCycleSpecification resource, including any possible rule, conditions and applicable default values.

Mandatory Attributes	Rule
name	

## POST /BILLFORMAT

This operation creates a BillFormat entity.

The following table provides the list of mandatory attributes when creating an instance of the BillFormat resource, including any possible rule, conditions and applicable default values.



r	Mandatory Attributes	Rule
r	name	

# POST /BILLPRESENTATIONMEDIA

This operation creates a BillPresentationMedia entity.

The following table provides the list of mandatory attributes when creating an instance of the BillPresentationMedia resource, including any possible rule, conditions and applicable default values.

Mandatory Attributes	Rule
name	



#### **API PATCH OPERATION CONFORMANCE**

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

The mandatory application context is JSON Merge.

PATCH	Mandatory/Optional
Status Code 200 if resource modified	М

# PATCH /PARTYACCOUNT/{ID}

This operation updates partially a PartyAccount entity.

Patchable Attributes	Rule
name	
relatedParty	

# PATCH /BILLINGACCOUNT/{ID}

This operation updates partially a BillingAccount entity.

Patchable Attributes	Rule
name	
relatedParty	

# PATCH /SETTLEMENTACCOUNT/{ID}

This operation updates partially a SettlementAccount entity.

Patchable Attributes	Rule
name	
relatedParty	

# PATCH /FINANCIALACCOUNT/{ID}

This operation updates partially a FinancialAccount entity.



Patchable Attributes	Rule
name	

# PATCH /BILLINGCYCLESPECIFICATION/{ID}

This operation updates partially a BillingCycleSpecification entity.

Patchable Attributes	Rule
name	

# PATCH /BILLFORMAT/{ID}

This operation updates partially a BillFormat entity.

Patchable Attributes	Rule
name	

# PATCH /BILLPRESENTATIONMEDIA/{ID}

This operation updates partially a BillPresentationMedia entity.

Patchable Attributes	Rule
name	



#### **API DELETE OPERATION CONFORMANCE**

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

DELETE	Mandatory/Optional
Status Code 204 if resource deleted	M

# DELETE /PARTYACCOUNT/{ID}

This operation deletes a PartyAccount entity.

#### DELETE /BILLINGACCOUNT/{ID}

This operation deletes a BillingAccount entity.

#### DELETE /SETTLEMENTACCOUNT/{ID}

This operation deletes a SettlementAccount entity.

#### DELETE /FINANCIALACCOUNT/{ID}

This operation deletes a FinancialAccount entity.

## DELETE /BILLINGCYCLESPECIFICATION/{ID}

This operation deletes a BillingCycleSpecification entity.

# DELETE /BILLFORMAT/{ID}

This operation deletes a BillFormat entity.

# DELETE / BILLPRESENTATION MEDIA / {ID}

This operation deletes a BillPresentationMedia entity.



# **ACKNOWLEDGEMENTS**

# **RELEASE HISTORY**

Release Number	Date	Release led by:	Description

#### **VERSION HISTORY**

Version Number	Date	Modified by	Description