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Party Role Management API Conformance Profile

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INTRODUCTION - API DESCRIPTION

The following document is the conformance profile of the specification of the REST API for Party Role management.

This API can be seen as a generalization of Customer management API where Party Roles may be any – not only a Customer. It shares in fact the same data structure than the Customer API but its use is intended in more general case, for instance within a partnership where the defined roles depend on the partnership kind (see Partnership management API specification).

The Party Role Management API defines a unique root resource named Party Role. It assumes the use of the following APIs :

- the Party Management API for access to parties
- the Account Management API for definition of accounts
- the Agreement API for agreement definition

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
PartyRole	M	

PartyRole MANDATORY AND OPTIONAL ATTRIBUTES

The table below reminds mandatory and optional attributes for resource "PartyRole". For the list of mandatory and optional attributes of all contained entities see the Party Role Management API R19.0.0 specification document.

Attribute Name	Mandatory or Optional	Comments
@type	M (in response messages) M (in request in polymorphic context: see comment) O (otherwise)	@type is mandatory if we create a user-specific sub-class via polymorphism mechanism.
@baseType	O (in request and response in polymorphic context: see comment)	@baseType is mandatory if we create a user-specific sub-class via polymorphism mechanism.
@schemaLocation	O (in request and response in polymorphic context: see comment)	@schemaLocation is mandatory if we create a user-specific sub-class via polymorphism mechanism.
href	M (in response messages) O (otherwise)	Value in response must be the same as the one set in location header provided upon entity creation
id	M (in response messages)	Id is auto-generated at creation time
name	M (for resource creation) O (otherwise)	
status	O	
statusReason	O	
validFor	O	

Attribute Name		Mandatory or Optional	Comments
engagedParty	O		The sub-property @referredType is mandatory
relatedParty	O		The sub-property @referredType is mandatory
account	O		The sub-property @referredType is mandatory
paymentMethod	O		
contactMedium	O		
characteristic	O		
creditProfile	O		

NOTIFICATION MODEL CONFORMANCE

The Pub/Sub models are common and described in the TMF REST Design Guidelines.

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
PartyRoleCreateEvent	O	
PartyRoleAttributeValueChangeEvent	O	
PartyRoleStateChangeEvent	O	
PartyRoleDeleteEvent	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.

PartyRole MANDATORY AND OPTIONAL OPERATIONS

The following table indicates which ones are mandatory and which ones are optional for PartyRole resource:

Uniform API Operation	Mandatory/Optional	Comments
GET	M	GET must be used to retrieve a representation of a resource
POST	M	POST must be used to create a new resource
PATCH	M (JSON-MERGE) O (JSON-PATCH)	PATCH must be used to partially update a resource. Support of Json merge is mandatory, support of json-path is optional.
DELETE	M	DELETE must be used to remove a resource

API GET FILTERING OPERATION CONFORMANCE

This section defines the conformance for retrieval operations in this API.

The list of retrieval operations in this API are:

GET /partyRole?fields=...&{filtering}

GET /partyRole/{ID}?fields=...&{filtering}

These operations allow retrieval of PartyRole entities.

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

GET	M	
Response Status Code 200	M	With JSON resource objects as body response.
Response Status Code 404	M	When resource can't be found
Other Status Codes	N/A	

We remind below the filtered search and attribute selection mechanisms that are defined generically.

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.:?category=<value> &state=<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=category,state) will provide in the response only the values assigned to attributes category and state. Attribute selection capabilities are the same for collections retrieval and individual resource queries

Attribute selection is enabled for all first level attributes.

Filtering is mandatory to avoid answer with too many occurrences.

When using the form with {ID}, the Uniform Contract operation is used to returns a specific resource with given {ID}, where {ID} indicates the identifier assigned by the server when a resource was created.

Attribute selection is mandatory for all first level attributes. Filtering on sub-resources is optional for all compliance levels.

API POST OPERATION CONFORMANCE

This section defines the conformance for creation operations in this API.

The following operations are used to create PartyRole resources in the server.

POST /partyRole/

The response to these operations must include a Location header set to {baseUrl}/{resource}/{ID} where {ID} indicates the identifier assigned by the server to the new resource created.

The table below shows the expected return codes.

POST	M	
Response Status Code 201	M	
Other Status Codes	NA	

The response from the server must include a BODY with the contents of the new resource created, filled with at least the same information elements that were included in the request and are supported by the server. Notice that the value stored by the server may be different than the one set in the request.

If the POST request includes optional parameters (as per the model resource definition) that are not supported by the server, then the server must reject the request (replying with a 4xx error response) indicating the parameter not supported.

The BODY of the response from the server must include attribute "href" set to the same value as the one in the Location header.

For all the details on mandatory or optional attributes when creating resources, see the Party Role Management API R19.0.0 specification document.

API PATCH OPERATION CONFORMANCE

This section defines the conformance for update operations in this API.
The following operations are used to update PartyRole resources in the server.

PATCH /partyRole/

The table below shows the expected return codes.

PATCH	M	
Response Status Code 200	M	
Other Status Codes	NA	

See the Party Role Management API R19.0.0 specification document for the list of attributes that are patchable.

API DELETE OPERATION CONFORMANCE

This section defines the conformance for delete operations in this API.
The following operations are used to delete PartyRole resources in the server.

DELETE /partyRole/

The table below shows the expected return codes.

POST	M	
Response Status Code 204	M	
Other Status Codes	NA	

API CONFORMANCE TEST SCENARIOS

This section describes the test scenarios required for the basic CONNECT certification of Party Role Management 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}/partyRoleManagement/v4, being {serverRoot} defines the certification endpoint

PartyRole resource TEST CASES

Nominal Scenarios

TC_PartyRole_N1 – Create new PartyRole with “active” status

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

```
{
  "name": "Moon Football Club",
  "status": "Active",
  "relatedParty": [
    {
      "@referredType": "Organization",
      "id": "500",
      "name": "Moon Football Club "
    }
  ]
}
```

- 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}/partyRole/{ID1} where {ID1} indicates the identifier assigned by the server to the PartyRole resource
 - The response message includes all mandatory parameters
 - The response message adds @type, id and href in PartyRole object
 - The body of the response matches the values set in the original request

TC_PartyRole_N2 – Create a PartyRole with status non active

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

```
{
  "name": "nanana",
  "status": "Pending",
  "account": {
    "description": "This account ...",
  }
}
```

```
"href": "https://host:port/tmf-apis/accountManagement/v4/account/6081",  
"id": "6081",  
"name": "Travel Account"  
}  
}
```

- 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}/account/{ID2}` where `{ID2}` indicates the identifier assigned by the server to the new PartyRole resource
 - The response message includes all mandatory parameters 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}/partyRole/`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one PartyRole resource with ID set to `{ID2}`, 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 `{ID2}` matches the values set in the original request
- Send a GET message to `/{apiRoot}/partyRole/{ID2}`
- 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 PartyRole resource structure that matches the values in the original request

TC_PartyRole_N3 – Search for PartyRole with specific characteristics

- Send a GET message to `/{apiRoot}/partyRole`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes at least two PartyRole resources referring to {ID1} and {ID2}
 - 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}/partyRole?status=Active`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one PartyRole resource referring to {ID1} and there is no reference to PartyRole resource {ID2}
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {ID1} matches the values in the original request

TC_PartyRole_N4 – Filtered retrieval of PartyRoles

- Send a GET message to `/{apiRoot}/partyRole/{ID1}?fields=name,status`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one PartyRole resource referring to {ID1} and including only attributes name and status, matching the values in the original request

Error Scenarios

TC_PartyRole_E1 – Unknown PartyRole identifier

- Send a GET message to `/{apiRoot}/partyRole/{ID3}`, where `{ID3}` 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_PartyRole_E2 – Invalid Request – Missing mandatory parameter

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

```
{
  "status": "Active",
}
```

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

TC_PartyRole_E3 – Invalid Request – Missing parameter mandatory in context

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

```
{
  "name": "some name",
  "account":
    {
      "description": "blabla ..."
    }
}
```

Notice that this request is missing mandatory parameters `"id"` and `"href"` in the included account reference.

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

Document History

Version History

Version Number	Date	Release led by:	Description
2.0	27-Jun-2017	Mariano Belaunde	Refactored API
4.0	18-July-2019	Mariano Belaunde mariano.belaunde@orange.com Pierre Gauthier TM Forum pgauthier@tmforum.org	Renaming and refactoring for R19.0 <i>Nota: the version 4.0 is assigned to all the APIs delivered in the release 19.0</i>

Release History

Release Number	Date	Release led by:	Description
Release 17.0.0	15-June-2017	Orange Team	Initial Release
Release 19.0.0	18-July-2019	Mariano Belaunde - Orange mariano.laurent@orange.com	Version 4.0 of the API