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Party Interaction Management API Conformance Profile

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INTRODUCTION

The following document is the REST API Conformance for the Party Interaction Management API.

API DESCRIPTION

The Party Interaction Management API provides the standardized client interface for mobile apps, dashboards or other systems to represent the interactions -complaints raised through a web, visits to a store, calls to a call center...- a party has had with an enterprise through different channels. The data that can be extracted with the Party Interaction Management API is typically created by ticketing systems, call center applications, retail store systems, etc. and can be used as information for agents or final users.

RESOURCE MODEL CONFORMANCE

Party Interaction Management API MANDATORY AND OPTIONAL RESOURCES

Resource Name	Mandatory or Optional	Comments
partyInteraction	M	

Party Interaction resource MANDATORY AND OPTIONAL ATTRIBUTES

Attribute Name	Mandatory or Optional	Comments
id	M (in response messages) O (otherwise)	Generated by the server and provided in the response upon resource creation. Accepted in entity-creation requests if the server supports the incoming identifier as the reference to create new resources
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
@type	M	
@schemaLocation	O	
interactionDate	M	
description	O	
reason	O	
status	O	
substatus	O	

statusChangeDate		O	
direction		M	
channel		O	
relatedParty		O	
	id	M if relatedParty appears	
	href	M if relatedParty appears	
	@referredType	M	
	role	O	
	name	O	
interactionItem		O	
	id	M if relatedObject appears	
	href	M if relatedObject appears	
	@referredType	O	
	itemDate	O	
	resolution	O	
	item	M	
	note	O	
	attachment	O	

API OPERATIONS CONFORMANCE

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

Party Interaction MANDATORY AND OPTIONAL OPERATIONS

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
PUT	O	PUT must be used to completely update a resource identified by its resource URI
PATCH (JSON-MERGE)	O	PATCH must be used to partially update a resource
DELETE	O	DELETE must be used to remove a resource

API GET FILTERING OPERATION CONFORMANCE

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.:?interactionDate=<value> &status=<value>)

Filtered Data (Attribute selection): 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=id,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

Filtering in Party Interaction resource

Attribute name	Filtered search First Level	Filtered search N Level	Attribute Selection First Level	Attribute Selection N Level
id	NA	NA	M	NA
href	NA	NA	M	NA
@type	M	NA	M	NA
interactionDate	NA	M	M	NA
description	O	NA	M	NA
relatedParty	NA	O	M	NA
item	NA	O	M	NA
reason	O	NA	M	NA

Attribute name	Filtered search First Level	Filtered search N Level	Attribute Selection First Level	Attribute Selection N Level
status	O	NA	M	NA
subStatus	O	NA	M	NA
statusChangeDate	NA	M	M	NA
direction	O	NA	M	NA
channel	NA	O	M	NA
relatedParty	O	NA	M	NA
interactionItem	O	NA	M	NA

GET /partyInteraction

Filtered Search: A filtered search can be applied using the following filtering criteria

- **startDate:** To obtain the list of party interactions that happened after a certain date.
- **endDate:** To obtain the list of party interactions that happened before a certain date.
- **channel.id:** To obtain the list of party interactions that happened in a specific channel.
- **channel.name:** To obtain the list of party interactions that happened in a specific channel.
- **status:** To obtain the list of party interactions that are in a certain status.
- **@type:** To obtain the the list of party interactions of a certain type.

- other optional attributes as defined in the table above

Filtered Data: A filtered response can be requested for the following attributes using the “?fields=” query parameter

- Any of the attributes in the first level of party interaction resource definition

GET /partyInteraction/{ID}

Filtered Search: A filtered response can be requested for the following attributes using the “?fields=” query parameter

- Any of the attributes in the first level of the Party Interaction resource definition

API POST OPERATION CONFORMANCE

POST to /partyInteraction

This Uniform Contract operation is used to create a partyInteraction resource in the server.

The response to this operation must include a Location header set to /partyInteraction/{ID} where {ID} indicates the identifier assigned by the server to the new party interaction resource created

POST	M	
Response Status Code 201	M	
Other Status Codes	NA	

The following table indicates attributes that are required to be sent when creating a new partyInteraction resource as well as attributes with special considerations. All other attributes defining the resource are not required to be sent as part of the BODY of the POST request message:

Attribute name	Mandatory	Default	Rule
@type	Y		

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.

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 following parameters must be supported by the server when included in the request to create a new resource

- reason
- direction
- channel

- relatedParty
- interactionItem
- description
- interactionDate

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

The server must include in the BODY of the response, even if they are not included in the request, the following attributes that are mandatory in the definition of a Party Interaction as per the resource model defined (unless a response filter is included in the request indicating otherwise)

- id
- interactionDate
- href
- status

API PATCH OPERATION CONFORMANCE

This section defines which attributes are patchable.

Since PATCH operation is optional and not included in the basic CONNECT certification this is not applicable in this conformance document.

API DELETE OPERATION CONFORMANCE

This section defines what operations can be used to delete a Party Interaction resource.

Since DELETE operation is optional and not included in the basic CONNECT certification this is not applicable in this conformance document

API CONFORMANCE TEST SCENARIOS

This section describes the test scenarios required for the basic CONNECT certification of Party Interactions 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}/partyInteraction/v1, being {serverRoot} defines the certification endpoint

Party Interactions resource TEST CASES

Nominal Scenarios

TC_PtIn_N1 – Create new Party Interaction with minimum required information

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

```
{
  "@type": "call",
  "description": "Called to call center",
  "relatedParty": [
    {
      "id": "123456",
      "href": "customersApiEndpoint/customer/123456",
      "@referredType": "customer",
      "name": "John Doe"
    }
  ],
  "interactionItem": [
    {
      "@referredType": "offering",
      "item": {
        "name": "Samsung Galaxy S7",
        "id": "789456",
        "href": "catalogApiEndpoint/catalog/789456"
      }
    }
  ],
  "reason": "Called to request pricing information of a mobile phone",
  "status": "finished",
  "direction": "inbounds",
  "channel": {
    "id": "321321321",
```



```
        "href": "channelsApisEndpoint/channels/321321321",  
        "name": "End users call center"  
    }  
}
```

- 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}/partyInteraction/{IDp1}` where `{IDp1}` indicates the identifier assigned by the server to the new party interaction resource
 - The response message includes all mandatory parameters (including `interactionDate` that was 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}/partyInteraction`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one party interaction resource with ID set to `{IDp1}`, 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 `{IDp1}` matches the values set in the original request
- Send a GET message to `/{apiRoot}/partyInteraction/{IDp1}`
- 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 party interaction resource structure that matches the values in the original request

TC_PtIn_N2 – Create new party interaction with minimum set of parameters supported by server

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

```
{
  "@type": "sms",
  "description": "Christmas marketing campaign",
  "relatedParty": [
    {
      "id": "123456",
      "href": "customersApiEndpoint/customer/123456",
      "@referredType": "customer",
      "name": "John Doe"
    }
  ],
  "interactionItem": [
    {
      "@referredType": "offering",
      "item": {
        "id": "333333",
        "href": "catalogApiEndpoint/catalog/333333",
        "name": "New DSL tariffs"
      }
    }
  ],
  "reason": "SMS to notify the customer about the new DSL tariffs",
  "status": "finished",
  "direction": "outbounds",
  "channel": {
    "id": "555555",
    "href": "channelsApisEndpoint/channels/555555",
    "name": "SMS notificator"
  }
}
```

- 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}/partyInteraction/{IDp2} where {IDp2} indicates the identifier assigned by the server to the new partyInteraction resource

- The response message includes all mandatory parameters (including interactionDate that was 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}/partyInteraction`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one party interaction resource with ID set to `{IDp2}`, 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 `{IDp2}` matches the values set in the original request
- Send a GET message to `/{apiRoot}/partyInteraction/{IDp2}`
- 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 party interaction resource structure that matches the values in the original request

TC_PtIn_N3 – Search for party interactions with specific characteristics

- Send a GET message to `/{apiRoot}/partyInteraction`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes at least two party interaction resources referring to `{IDp1}` and `{IDp2}`

- 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}/partyInteraction?type=call`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one party interaction resource referring to {IDp1} and there is no reference to party interaction resource {IDp2}
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDp1} matches the values in the original request
- Send a GET message to `/{apiRoot}/partyInteraction?direction=outbounds`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one party interaction resource referring to {IDp2} and there is no reference to the party interaction resource {IDp1}
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDp2} matches the values in the original request

TC_PtIn_N4 – Filtered retrieval of Party Interactions

- Send a GET message to `/{apiRoot}/partyInteraction/{IDp1}?fields=channel`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK

- The body of the response includes one partyInteraction resource referring to {IDp1} and including only the channel attribute matching the values in the original request
- Send a GET message to
`/{apiRoot}/partyInteraction/{IDp2}?fields=interactionDate,status`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one partyInteraction resource referring to {IDp2} and including only attributes interactionDate and status matching the values returned in the original request

Notice that this test case is using parameters “channel”, “interactionDate” and “status” to filter the data included in the response but any other parameter could be used

TC_PtIn_N5 – Filtered Search and Filtered data response

- Send a GET message to
`/{apiRoot}/partyInteraction?channel.id=5555555&fields=interactionDate`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one party interaction resource referring to {IDp2} and there is no reference to party interaction resource {IDp1}
 - The body of the response for the resource with each identifier includes only attribute interactionDate, matching the values in the corresponding original creation

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

Error Scenarios

TC_PtIn_E1 – Unknown party interaction identifier

- Send a GET message to `{apiRoot}/partyInteraction/{IDp3}`, where `{IDp3}` 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_UsIn_E2 – Invalid Request – Missing mandatory parameter

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

```
{
  "description": "Christmas marketing campaign",
  "relatedParty": [
    {
      "id": "123456",
      "href": "customersApiEndpoint/customer/123456",
      "@referredType": "customer",
      "name": "John Doe"
    }
  ],
  "interactionItem": [
    {
      "@referredType": "offering",
      "item": {
        "id": "333333",
        "href": "catalogApiEndpoint/catalog/",
        "name": "New DSL tariffs"
      }
    }
  ],
  "reason": "SMS to notify the customer about the new DSL tariffs",
  "status": "finished",
  "originator": "company",
  "channel": {
    "id": "5555555",
    "href": "channelsApisEndpoint/channels/5555555",
    "name": "SMS noticator"
  }
}
```

Notice that this request is missing mandatory parameter “@type” 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_PtIn_E3 – Invalid Request – Missing parameter mandatory in context

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

```
{
  "@type": "sms",
  "description": "Christmas marketing campaign",
  "relatedParty": [
    {
      "name": "John Doe"
    }
  ],
  "interactionItem": [
    {
      "@referredType": "offering",
      "item": {
        "id": "333333",
        "href": "catalogApiEndpoint/catalog/.../333333",
        "name": "New DSL tariffs"
      }
    }
  ],
  "reason": "SMS to notify the customer about the new DSL tariffs",
  "status": "finished",
  "direction": "outbounds",
  "channel": {
    "id": "5555555",
    "href": "channelsApisEndpoint/channels/5555555",
    "name": "SMS noticator"
  }
}
```

Notice that this request is missing mandatory parameters “id” and “href” when information element “relatedParty” is included in the request, but any other parameter that becomes mandatory based on the context could be used

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

ACKNOWLEDGEMENTS

VERSION HISTORY

Version Number	Date	Release led by:	Description
1.0	11/10/2017	Guillermo Martínez del Camino Telefónica guillermo.martinezdelcamino@telefonica.com	First Release of Draft Version of the Document.
2.0	24-Apr-2018	Guillermo Martínez del Camino	Renamed from UserInteraction to PartyInteraction and added multiple modifications
2.0.1	29-Jun-2018	Adrienne Walcott	Formatting/style edits prior to R18 publishing.

RELEASE HISTORY

Release Number	Date	Release led by:	Description
18.0.0	25-Jun-2018	Guillermo Martínez del Camino	Initial Release