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Sales Management API Conformance Profile

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2. Introduction - API DESCRIPTION

The following document is the REST API Conformance for Sales Management.

This API provides interfaces for Sales Lead, Sales Opportunity, Sales Quote and the other management capabilities to support the sales activities to build relationship with the prospect customer who could be a person or organization that has an interest in the goods and/or services and possibly become the actual customers with one or more subscriptions.

The first release of this API specifies only the SalesLead resource.

The Lead corresponds to the nominal result of an interaction involving a prospective customer towards one of offers or services. It is the first stage (S) of the SPANCO process.

A prospect could have expressed a commercial interest or a commercial interest has been detected from his behavior analysis. The Lead Management function enables to collect, evaluate and attribute the leads to the appropriate sales representatives. The lead is an interest concerning an offer family or a product line, or expressed literally during an interaction, possibly further to a marketing campaign, and it must be handled and specified to become an opportunity or an order.

In a nominal way, once the interest towards offers or services is confirmed and the prospective customer clearly identified, then an Opportunity is created.

3. RESOURCE MODEL CONFORMANCE

1. 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
SalesLead	M	

2. SALESLEAD MANDATORY AND OPTIONAL ATTRIBUTES

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

Attribute Name		Mandatory or Optional	Comments
id		M (in response messages) O (otherwise)	Initially generated by the server and provided in the response upon resource creation. Accepted in entity-creation request if the server supports the incoming identifier as the reference to create new resource
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
creationDate		M (in response messages) O (otherwise)	Refers to the date when the appointment entity was created in the server. Only required in the response messages from the server when providing the appointment entity content
description		O	
name		M	
priority		O	
rating		O	
referredDate		O	
status		M (in response messages) O (otherwise)	Generated by the server and provided in the response upon resource creation
statusChangeDate		M (in response messages) O (otherwise)	Generated by the server and provided in the response upon resource creation
statusChangeReason		O	Not in post request.
type		O	
estimatedRevenue		O	
	unit	M	Mandatory if estimatedRevenue is provided
	value	M	Mandatory if estimatedRevenue is provided
validFor		O	
	startDateTime	M	Mandatory if estimatedRevenue is provided
	endDateTime	M	Mandatory if estimatedRevenue is provided
@baseType		O	
@type		O	
@schemaLocation		O	
channel			
	id	M	Mandatory if channel is provided
	href	O	
	name	O	
	@baseType	O	
	@type	O	
	@schemaLocation	O	
	@referredType	O	
marketSegment		O	
	id	M	Mandatory if marketSegment is provided
	href	O	
	name	O	

Attribute Name		Mandatory or Optional	Comments
	@baseType	O	
	@type	O	
	@schemaLocation	O	
	@referredType	O	
marketingCampaign		O	
	id	M	Mandatory if marketingCampaign is provided
	href	O	
	name	O	
	@baseType	O	
	@type	O	
	@schemaLocation	O	
	@referredType	O	
note		O	An array of notes
	id	M	Mandatory if note is provided
	author	O	
	date	O	
	text	O	
	@baseType	O	
	@type	O	
	@schemaLocation	O	
productOffering		O	
	id	M	Mandatory if productOffreing is provided
	href	O	
	name	O	
	@baseType	O	
	@type	O	
	@schemaLocation	O	
	@referredType	O	
category		O	
	id	M	Mandatory if category is provided
	href	O	
	name	O	
	version	O	
	@baseType	O	
	@type	O	
	@schemaLocation	O	
	@referredType	O	
salesOpportunity		O	
	id	M	Mandatory if salesOpportunity is provided
	href	O	
	name	O	
	@baseType	O	
	@type	O	

Attribute Name		Mandatory or Optional	Comments
	@schemaLocation	O	
	@referredType	O	
relatedParty		O	An array of structures
	id	M	Mandatory if relatedParty is provided
	href	O	
	name	O	
	role	O/M	The role is mandatory if the id is referring a party resource. The role is optional is the id is referring a partyRole resource.
	@baseType	O	
	@type	O	
	@schemaLocation	O	
	@referredType	M	It allows to get id type : partyRole or Party or Party specialization: individual or organization
prospectContact		O	An Array of contact mediums
	mediumType	M	Mandatory if prospectContact is provided
	preferred	O	
	characteristic	O	
	city	O	
	contactType	O	
	country	O	
	emailAddress	O	
	faxNumber	O	
	phoneNumber	O	
	postCode	O	
	socialNetworkId	O	
	stateOrProvince	O	
	street1	O	
	street2	O	
	type	O	
	@baseType	O	
	@type	O	
	@schemaLocation	O	
	@referredType	O	
	validFor	O	
	startDateTime	O	
	startDateTime	O	
	@baseType	O	
	@type	O	
	@schemaLocation	O	
productSpecification		O	
	id	M	Mandatory if productSpecification is provided

Attribute Name		Mandatory or Optional	Comments
	href	O	
	name	O	
	version	O	
	@baseType	O	
	@type	O	
	@schemaLocation	O	
	@referredType	O	
	targetProductSchema	O	
	@baseType	O	
	@type	O	
	@schemaLocation	O	
product			
	id	M	Mandatory if product is provided
	href	O	
	@baseType	O	
	@baseType	O	
	@type	O	
	@schemaLocation	O	
	@referredType	O	

4. 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.

3. 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
SalesLeadCreationNotification	O	
SalesLeadRemoveNotification	O	

5. API OPERATIONS CONFORMANCE

4. 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 SalesLead	POST must be used to create a new resource
PUT	O for all resources	PUT must be used to completely update a resource identified by its resource URI
PATCH	O for all resources	PATCH must be used to partially update a resource
DELETE	O for all resources	DELETE must be used to remove a resource

6. 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.

GET	M	
Response Status Code 200	M	
Other Status Codes	NA	

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

This operation lists salesLead entities.

Attribute selection is mandatory for all first level attributes.

Filtering is mandatory for first compliance level (L1) and optional otherwise.

GET /salesLead/{id}?fields=...&{filtering}

This operation retrieves a salesLead entity.

Attribute selection is mandatory for all first Attribute selection is mandatory for all first level attributes.

Filtering is mandatory for first compliance level (L1) and optional otherwise.

7. API POST OPERATION CONFORMANCE

POST /salesLead

This operation is used to create a salesLead resource in the server.

POST	M	
Status Code 201	M	
Other Status Codes	NA	

The response to this operation must include a location header set to `../salesLead/{ID}` where `{ID}` indicates the identifier assigned by the server to the new salesLead resource created.

The following table indicates attributes that are required to be sent when creating a new appointment 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
id	N		Accepted in entity-creation requests if the server supports the incoming identifier as the reference to create new resources
href	N		
creationDate	NA		Must not be in POST request
description	N		
name	Y		
priority	N		
rating	N		
referredDate			
status	NA		Must not be in POST request

Attribute name	Mandatory	Default	Rule
statusChangeDate	NA		Must not be in POST request
statusChangeReason	NA		Must not be in POST request
type	N		
estimatedRevenue	N		
validFor	N		
channel	N		
category	N		
marketSegment	N		
marketingCampaign	N		
note	N		
product	N		
productOffering	N		
productSpecification	N		
prospectContact	N		
relatedParty	N		
salesOpportunity	N		

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 (e.g.: status may be differently set by the server after processing than the one requested by the requestor)

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 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 salesLead as per the resource model defined

- id
- href
- status
- statusChangeDate
- creationDate

We must note that some attributes must not be send in the POST request and could be not valued in the POST answer:

- statusChangeReason

The BODY of the response from the server could include attribute “href” (or “reference”) under each one of the entities within the salesLead model that can be addressed individually and were included in the response. This applies to any of the following entities

- channel
- marketSegment
- marketingCampaign
- productOffering
- category
- product
- productSpecification
- relatedParty
- salesOpportunity

8. API PATCH OPERATION CONFORMANCE

This section defines which attributes of salesLead are patchable .

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

9. API DELETE OPERATION CONFORMANCE

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

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

10. 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}/salesManagement/v1**, where {serverRoot} defines the certification endpoint

5. salesLead resource TEST CASES

Nominal Scenarios

TC_ SalesLead_N1 – Create new SalesLead with minimum required information

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

```
{
    "name": "Campaign 17 salesLead 7851"
}
```

- 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}/salesLead/{IDSL1}` where {IDSL1} indicates the identifier assigned by the server to the new salesLead resource
 - The response message includes all mandatory parameters (including id, status, statusChageDate and referredDate 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}/salesLead/{IDSL1}`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK

- The body of the response includes one salesLead resource with ID set to {IDSL1}, 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 {IDSL1} matches the values set in the original request

TC_SalesLead_N2 – Create new Ticket with minimum set of parameters supported by server

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

```
{
  "name": "Campaign 17 salesLead 7852",
  "referredDate": "2019-01-19T12:27:59.123Z",
  "priority": "medium",
  "productOffering": {
    "id": "42",
    "href":
    "https://serverlocation:port/catalogManagement/productOffering/42",
    "name": "Gold Credit Card"
  },
  "prospectContact": [
    {
      "preferred": "true",
      "mediumType": "phone",
      "validFor": {
        "startDateTime": "2017-03-15T07:49:25.246Z",
        "endDateTime": ""
      },
      "characteristic": {
        "phoneNumber": "+33607080910"
      }
    }
  ]
}
```

- 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}/salesLead/{IDSL2}` where `{IDSL2}` indicates the identifier assigned by the server to the new salesLead resource
 - The response message includes all mandatory parameters (including id, status and statusChageDate 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}/salesLead/`
 - Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one salesLead resource with ID set to `{IDSL2}`, 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 `{IDSL2}` matches the values set in the original request
 - Send a GET message to `/{apiRoot}/salesLead/{IDSL2}`
 - 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 salesLead resource structure that matches the values in the original request

TC_SalesLead_N3 – Search for sales leads with specific characteristics

- Send a GET message to `/{apiRoot}/salesLead?priority=medium`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK

- The body of the response includes at least one ticket resource referring to {IDSL2}
- The body of the response for the resource with each identifier matches the values in the corresponding original request.

TC_SalesLead_N4 – Filtered retrieval of sales leads

- Send a GET message to
`/{apiRoot}/salesLead/{IDSL2}?fields=name,referredDate,priority`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one salesLead resource referring to {IDSL2} and including only attributes name, referredDate and priority, matching the values in the original request :

```
{  
  "name": "Campaign 17 salesLead 7852",  
  "referredDate": "2019-01-19T12:27:59.123Z",  
  "priority": "medium"  
}
```

Notice that this test case is using parameters "name", "referredDate" and "priority" to filter the data included in the response but any other parameter could be used.

TC_SalesLead_N5 – Filtered Search and Filtered data response

- Send a GET message to
`/{apiRoot}/salesLead/{IDSL2}?priority=medium&fields=name,referredDate,priority`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one salesLead resource referring to {IDSL2} and there is no reference to salesLead resource {IDSL1}

- 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 parameters name, referredDate and priority to filter the data included in the response, but any other parameter could be used

Error Scenarios

TC_salesLead_E1 – Unknown salesLead identifier

- Send a GET message to `{/apiRoot}/salesLead/{IDSL3}`, where `{IDSL3}` 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_Trou_E2 – Invalid Request – Missing mandatory parameter

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

```
{
  "referredDate": "2019-01-19T12:27:59.123Z",
  "priority": "high",
  "productOffering": {
    "id": "42",
    "href":
    "https://serverlocation:port/catalogManagement/productOffering/42",
    "name": "Gold Credit Card"
  },
  "prospectContact": [
    {
      "preferred": "true",
      "mediumType": "phone",
      "validFor": {
        "startDateTime": "2017-03-15T07:49:25.246Z",
        "endDateTime": ""
      },
      "characteristic": {
        "phoneNumber": "+33607080910"
      }
    }
  ]
}
```

Notice that this request is missing mandatory parameter "name" .

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

11. Document History

version Number	Date	Release led by:	Description
1.0.0 Release 19.0	07-June-2019	Grégoire Laurent	First Release of the Document.

6. Contributors to Document

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