



TM Forum Specification

Geographic Site Management API REST Specification

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INTRODUCTION

The following document is the specification of the REST API for Site Management. It includes the model definition as well as all available operations for SID GeographicSite entity.

This API covers the operations to manage (create, read, delete) sites that can be associated to a customer, an account, a service delivery or other entities.

This API defines a Site as a convenience class that allows to easily refer to places important to other entities, where a geographic place is the entity that can answer the question “where?”, allowing to determine where things are in relation to the earth's surface, and can be represented either in a textual structured way (geographic address) or as a geometry referred to a spatial reference system (geographic location)

This API relates with the following two APIs also covering SID GeographicPlace entity

- Address Management API, specific to manage places defined in a structured textual way (street name, street number, ...) and validate existence of given address definition.
- GeoLocation API specific for management of places defined as a geometry in the spatial reference regarding the surface of the Earth (coordinates, ...) and the relationship between different geolocations (distance, proximity, ...)

This API allows the following operations

- Create a new site
- Retrieve a list of sites stored in a server filtered by a given criteria
- Retrieve a specific site

SAMPLE USE CASES

This section includes a set of main use cases that can be performed with this API. Additional use cases can be generated using the operations and resources defined in this specification.

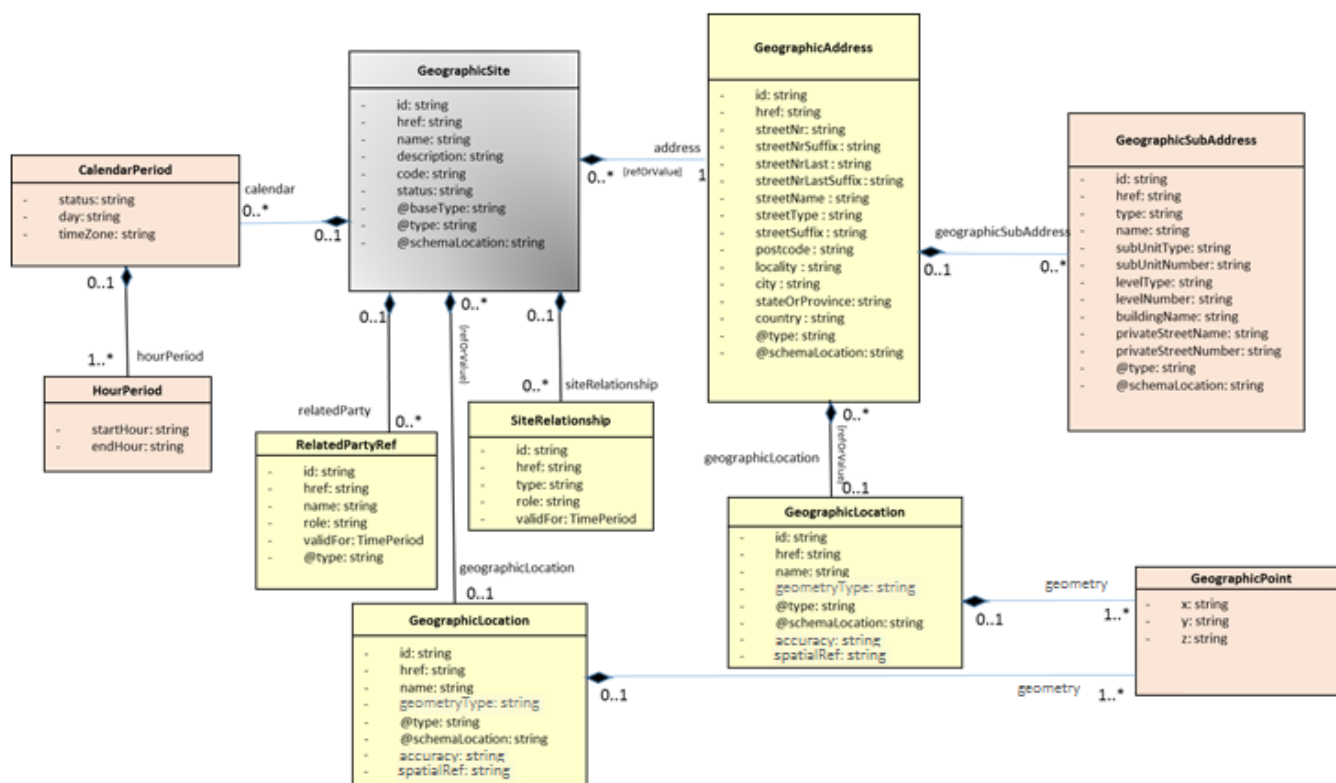
- Create a site in the server and associate a given customer/account to that site. The site definition includes all the address definition (street name, street number, ...) as well as the type of site it is in the relationship with the customer and the validity period for the relationship
- Request a new product order and associate the delivery of any of the products/services in the order to one of the sites that have been associated to a customer/account
- A customer creates a new trouble ticket for technical assistance requiring an agent to assist in a specific geographic address, identified as one of the sites allocated to the customer

RESOURCE MODEL

GEOGRAPHIC SITE RESOURCE

The GeographicSite resource represents a class that allows to easily refer to Places important to other entities (such as a customer, an account, a product,).

Resource model



Lifecycle

No state machine for the resources detailed in this API

Field descriptions

GeographicSite fields

Field	Mandatory in API messages	Description
id	Yes in response	A string. Unique identifier of the site within the server
href	Yes, in response	A string. An URI used to access to the site resource
name	Yes	A string. The name that the site is known by
description	No	A string. Text describing additional information regarding the site
code	No	A string. A code that may be used for some addressing schemes e.g. [ANSI T1.253-1999]

status	Yes, in response	A string. The condition of the GeographicSite, such as active, inactive, planned
address	Yes, if geographicLocation not included	An address (GeographicAddress) passed by reference or by value. Used to identify the physical place over the surface of the Earth that is associated to the site based on an entity uniquely identified in the server or, providing the geographic address (textual description) and the geographic location (geometry description) of the physical place
geographicLocation	Yes, if address not included	A geo location (GeographicLocation) passed by reference or by value. A GeoLocation allows describing through coordinate(s) a point, a line or a space.
calendar	No	A list of calendar period entries (CalendarPeriod[*]) indicating the time availability of the site for different periods
relatedParty	No	A list of related party references (RelatedPartyRef [*]). A related party defines party or party role linked to a specific entity
siteRelationship	No	A list of site relationships (SiteRelationship [*]). Linked sites
@baseType	No	A string. Indicates the base type of the resource for extensibility and polymorphism purposes to differentiate the definition of different type of sites (enterprise, residential, ...).
@type	No	A string. Indicates the type of the resource for extensibility purposes.
@schemaLocation	No	A string. A Link to the schema describing this REST Resource.

GeographicAddress sub-resource

Address reference. Defines an address and/or identifies an existing address entity

An address allows textual description of an existing place over the surface of the Earth

This resource could be invoked as reference or value

Field	Mandatory in API messages	Description
id	No	A string. Unique identifier of the entity within the server
href	No	A string. Reference of the entity
streetNr	Yes if neither id nor href nor are included	A string. Number identifying a specific property on a public street. It may be combined with streetNrLast for ranged addresses.
streetNrSuffix	No	A string. the first street number suffix.
streetNrLast	No	A string. Last number in a range of street numbers allocated to a property.
streetNrLastSuffix	No	A string. Last street number suffix for a ranged address.
streetName	Yes, if neither id nor href nor are included	A string. Name of the street or other street type.
streetType	Yes, if neither id nor href nor are included	A string. Alley, avenue, boulevard, brae, crescent, drive, highway, lane, terrace, parade, place, tarn, way, wharf.
streetSuffix	No	A string. A modifier denoting a relative direction.
postcode	Yes, if neither id nor href nor are included	A string. Descriptor for a postal delivery area, used to speed and simplify the delivery of mail (also known as zipcode).
locality	Yes, if neither id nor href nor are included	A string. "An area of defined or undefined boundaries within a local authority or other legislatively defined area, usually rural or semi-rural in nature." [ANZLIC-

		STREET], or a suburb "a bounded locality within a city, town or shire principally of urban character " [ANZLICSTREET].
city	No	A string. City that the address is in.
stateOrProvince	Yes, if neither id nor href nor are included	A string. the State or Province that the address is in.
country	Yes, if neither id nor href nor are included	A string. Country that the address is in.
geographicLocation	No	A geo location (GeographicLocation) passed by reference or by value. A GeoLocation allows describing through coordinate(s) a point, a line or a space.
geographicSubAddress	No	A list of sub addresses (GeographicSubAddress [*]). Representation of a SubAddress It is used for addressing within a property in an urban area (country properties are often defined differently). It may refer to a building, a building cluster, or a floor of a multistory building.
@type	No	A string. Indicates the type of the resource. Here can be 'UrbanPropertyAddress', 'FormattedAddress', 'JapanesePropertyAddress', 'AustralianPropertyAddress', etc...
@schemaLocation	No	A string. A Link to the schema describing this REST Resource. The resource described 'UrbanPropertyAddress' but a schema could be used for other property address description.

GeoGraphicLocation sub-resource

GeographicLocation reference. Defines a geo location and/or identifies an existing geo location entity

A GeoLocation allows describing through coordinate(s) a point, a line or a space.

This resource could be invoked as reference or value

Field	Mandatory in API messages	Description
id	No	A string. Unique Identifier of a GeoLocation.
href	No	A string. href of the GeoLocation.
name	No	A string. Name of a GeoLocation.
geometryType	Yes, if href not included	A string. Type allows describing Geolocation form: it could be a point, a line, a polygon, a cylinder, etc....
accuracy	Yes, if href not included	A string. Accuracy of the points in the geometry specified.
spatialRef	Yes, if href not included	A string. Geocoding referential.
geometry	Yes, if href not included	A list of geo points (GeographicPoint [1..*]). A GeoPoint defines a geographic point through coordinates.
@type	No	A string. Indicates the type of the resource for extensibility purposes.
@schemaLocation	No	A string. A Link to the schema describing this REST Resource.

GeographicPoint sub-resource

A GeoPoint defines a geographic point through coordinates.

Field	Mandatory in API messages	Description
x	Yes	A string. x coordinate (usually latitude).
y	Yes	A string. y coordinate (usually longitude).
z	No	A string. z coordinate (usually elevation).

GeographicSubAddress sub-resource

Representation of a SubAddress

It is used for addressing within a property in an urban area (country properties are often defined differently). It may refer to a building, a building cluster, or a floor of a multistory building.

Field	Mandatory in API messages	Description
id	No	A string. Unique Identifier of the subAddress.
href	No	A string. Href of the subAddress.
type	No	A string. type of subAddress: it can be a subunit or a private street.
name	No	A string. Name of the subAddress to identify it with a meaningful identification.
subUnitType	No	A string. the type of subunit e.g. BERTH, FLAT, PIER, SUITE, SHOP, TOWER, UNIT, WHARF.
subUnitNumber	No	A string. the discriminator used for the subunit often just a simple number e.g. FLAT 5, may also be a range.
levelType	No	A string. describes level types within a building.
levelNumber	No	A string. used where a level type may be repeated e.g. BASEMENT 1, BASEMENT 2.
buildingName	No	A string. allows for buildings that have well-known names.
privateStreetName	No	A string. private streets internal to a property (e.g. a university) may have internal names that are not recorded by the land title office.
privateStreetNumber	No	A string. private streets numbers internal to a private street.
@type	No	A string. Type of the resource for this subResource
@schemaLocation	No	A string. A Link to the schema describing the structure of this REST Resource to allow for extensions

RelatedPartyRef relationship

Field	Mandatory in API messages	Description
id	Yes	A string. Unique identifier of the entity within the server
href	No	A string. Reference of the entity
name	No	A string. Name of the related party
role	No	A string. Role of the related party
validFor	No	TimeperiodType. Validity for the relationship with the related party
@type	No	A string. Indicates the type of the resource. Here can be 'Individual', 'Organization', etc...

SiteRelationship relationship

Field	Mandatory in API messages	Description
id	Yes	A string. Unique identifier of the related site entity within the server
href	No	A string. Reference of the related site
type	Yes	A string. Type of relationship
role	No	A string. Role of the related site in the relationship
validFor	No	TimePeriodType. Validity for the relationship

CalendarPeriod sub-resource

Field	Mandatory in API messages	Description
status	Yes	A string. Indication of the availability of the site (e.g.: open)
day	Yes	A string. Day where the calendar status applies (e.g.: monday, mon-to-fri, weekdays, weekend, all week, ...)
timeZone	No	A string. Indication of the timezone applicable to the calendar information (e.g.: Paris, GMT+1)
hourPeriod	Yes	A list of periods of hours (HourPeriod [*]). Defines the time period when the status for the place is applicable

HourPeriod type

Field	Mandatory in API messages	Description
startHour	Yes	A string. The time when the status starts applying
endHour	Yes	A string. The time when the status ends applying

Json representation sample

The example below provides the json representation of a 'GeographicSite' resource object (including main elements) where the physical place associated is included via reference to an address entity registered in the server

```
{
  "id": "12345",
  "href": "https://host:port/siteManagementlocation/v1/site/12345",
  "name": "Main Building",
  "description": "This site refers to the Main Building of the company",
  "status": "active",
  "address": {
    "id": "9912",
    "href": " https://host:port/addressManagement/v1/address/9912"
  },
  "calendar": [{
    "status": "open",
    "day": "weekdays",
    "timeZone": "GMT+1",
    "hourPeriod": [
      {
```

```

        "startHour": "9:00 am ",
        "endHour": "18:00 pm"
    }
}],
"siteRelationship": [{
    "id": "9913",
    "href": " https://host:port/addressManagement/v1/address/9913",
    "type": "alternative site",
    "role": "emergency available office"
}]
}

```

The example below provides the json representation of a 'GeographicSite' resource object (including main elements) where the physical place associated is included directly, providing all the geographic address and geolocation information

```

{
  "id": "12345",
  "href": "https://host:port/siteManagementlocation/v1/site/12345",
  "name": "Main Building",
  "description": "This site refers to the Main Building of the company",
  "status": "active",
  "address": {
    "streetNr": "56",
    "streetName": "Arlington",
    "streetType": "Road",
    "postcode": "W45E02",
    "locality": "London",
    "city": "London",
    "stateOrProvince": "Great London",
    "country": "England",
    "geographicLocation": {
      "geometryType": "point",
      "accuracy": "",
      "spatialRef": "WGS84",
      "geometry": [
        {
          "x": " 1.430937",
          "y": " 43.597208",
          "z": ""
        }
      ]
    }
  }
},
"calendar": [{
  "status": "open",
  "day": "weekdays",
  "timeZone": "GMT+1",
  "hourPeriod": [
    {
      "startHour": "9:00 am ",
      "endHour": "18:00 pm"
    }
  ]
}],
}

```

```

"siteRelationship": [{
  "id": "9913",
  "href": " https://host:port/addressManagement/v1/address/9913",
  "type": "alternative site",
  "role": "emergency available office"
}]
}

```

The example below provides the json representation of a 'GeographicSite' resource object (including main elements) where the physical place associated is included via reference to a geographical location entity registered in the server and associated at creation to a specific party (organization)

```

{
  "id": "12345",
  "href": "https://host:port/siteManagementlocation/v1/site/12345",
  "name": "Main Building",
  "description": "This site refers to the Main Building of the company (organization XYZ)",
  "status": "planned",
  " geographicLocation ": {
    "id": "geo001",
    "href": " https://host:port/ geographicLocationManagement/v1/geographicLocation /geo001"
  },
  "calendar": [{
    "status": "open",
    "day": "weekdays",
    "timeZone": "GMT+1",
    "hourPeriod": [
      {
        "startHour": "9:00 am ",
        "endHour": "18:00 pm"
      }
    ]
  }],
  "relatedParty": [{
    "id": "1234",
    "href": " https://host:port/partyManagement/organization/1234",
    "name": "organizationXYZ",
    "role": "headquarters" ,
    "@type": "organization",
  }
]
}

```

Notification Resource Models

2 notifications are defined for this API

Notifications related to GeographicSite:

- GeographicSiteCreationNotification
- GeographicSiteChangeNotification

The notification structure for all notifications in this API follow the pattern depicted by the figure below. A notification resource (depicted by "SpecificNotification" placeholder) is a sub class of a generic Notification structure containing an id of the event occurrence (eventId), an event timestamp (eventTime), and the name of the notification resource (eventType).

This notification structure owns an event structure ("SpecificEvent" placeholder) linked to the resource concerned by the notification using the resource name as access field ("resourceName" placeholder).

GEOGRAPHICSITE CREATION NOTIFICATION

Notification sent when a new GeographicSite resource is created.

Json representation sample

We provide below the json representation of an example of an 'GeographicSiteCreationNotification' notification object

```
{
  "eventId":"00001",
  "eventTime":"2015-11-16T16:42:25-04:00",
  "eventType":"GeographicSiteCreationNotification",
  "event": {
    "geographicSite" :
      {-- SEE GeographicSite RESOURCE SAMPLE --}
  }
}
```

GEOGRAPHICSITE CHANGE NOTIFICATION

Notification sent when a new GeographicSite resource is modified.

Json representation sample

We provide below the json representation of an example of an 'GeographicSiteModificationNotification' notification object

```
{
  "eventId":"00001",
  "eventTime":"2015-11-16T16:42:25-04:00",
  "eventType":"GeographicSiteModificationNotification",
  "event": {
    "geographicSite" :
      {-- SEE GeographicSite RESOURCE SAMPLE --}
  }
}
```

API OPERATION TEMPLATES

For every single of operation on the entities use the following templates and provide sample REST requests and responses.

Remember that the following Uniform Contract rules must be used:

Operation on Entities	Uniform API Operation	Description
Query Entities	GET Resource	GET must be used to retrieve a representation of a resource.
Create Entity	POST Resource	POST must be used to create a new resource
Partial Update of an Entity	PATCH Resource	PATCH must be used to partially update a resource For reconciliation processes
Complete Update of an Entity	PUT Resource	PUT must be used to completely update a resource identified by its resource URI
Remove an Entity	DELETE Resource	DELETE must be used to remove a resource

Filtering and attribute selection rules are described in the TMF REST Design Guidelines.

Notifications are also described in a subsequent section.

OPERATIONS ON GEOGRAPHICSITE

LIST SITES

GET

```
/geographicSiteManagement/v1/geographicSite?{fields=attributes}&{filtering expression}
```

Description

The Application invokes this operation to retrieve a list of sites stored in the server.

The request could include filters in order to retrieve only a specific subset of all the sites stored in the server such as filtering by status.

At least one filter is expected in order to prevent from having a response to an unbounded collection but each specific server and application must define the limits on the maximum number of elements in the response

Behavior:

Status Code	Description
200	List of Sites information was returned successfully
400	Request Error
500	The server encountered an unexpected condition which prevented it from fulfilling the request
Other	The server may use other HTTP error status codes to reflect the error, the client must be processed in accordance with the error messages in other HTTP specifications.

Usage Samples

The example below includes the attributes within the Sites resource model that must be included in the query response

REQUEST
<pre>GET https://{serverRoot}/geographicSiteManagement/v1/geographicSite Accept: application/json</pre>
RESPONSE
<pre>200 Content-Type: application/json [{ "id": "12345", "href": "https://host:port/geographicSiteManagement/v1/geographicSite/12345", "name": "Main Building", "description": "This site refers to the Main Building of the company", "status": "active",</pre>


```

"address": {
  "id": "9912",
  "href": " https://host:port/ geographicAddressManagement/v1/ geographicAddress/9912"
},
"calendar": [{
  "status": "open",
  "day": "weekdays",
  "timeZone": "GMT+1",
  "hourPeriod": [
    {
      "startHour": "9:00 am ",
      "endHour": "18:00 pm"
    }
  ]
}]
},
{
  "id": "9876",
  "href": "https://host:port/ geographicSiteManagement /v1/geographicSite/9876",
  "name": "Second Building",
  "description": "This site refers to the Second Building of the company, open in weekends",
  "status": "active",
  "address": {
    "streetNr": "60",
    "streetName": "Arlington",
    "streetType": "Road",
    "postcode": "W45E02",
    "locality": "London",
    "stateOrProvince": "Great London",
    "country": "England",
  }
},
"calendar": [{
  "status": "open",
  "day": "weekends",
  "timeZone": "GMT+1",
  "hourPeriod": [
    {
      "startHour": "9:00 am ",
      "endHour": "13:00 pm"
    }
  ]
}]
}
]

```

REGISTER NEW SITE

POST /geographicSiteManagement/v1/geographicSite

Description

The Application invokes this operation to request a new geographicSite resource to be created in the server

Behavior:

Status Code	Description
201	Successful site registration (resource created)
400	Request Error
500	The server encountered an unexpected condition which prevented it from fulfilling the request
Other	The server may use other HTTP error status codes to reflect the error, the client must be processed in accordance with the error messages in other HTTP specifications.

Mandatory and Non Mandatory Attributes

The following tables provide the list of mandatory and non mandatory attributes when creating a RetrieveGeographicLocation, 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	
address	Required if geographicLocation not included
geographicLocation	required if address not included

Non Mandatory Attributes	Default Value	Rule
description		
code		
status		
calendar		
relatedParty		
siteRelationship		

Usage Samples

The example below includes the attributes within the GeographicSite entity resource model that are mandatory to be included in the request when creating a new resource in the server when associating an address to a site

REQUEST
<pre>POST https://{serverRoot}/geographicSiteManagement/v1/geographicSite Content-type: application/json { "name": "New branch to be open in France ", "description": "This site refers to the new branch office to be open in France", "status": "planned", "address": { "streetNr": "1", "streetName": "République (de la)", "streetType": "Rue", "postcode": "13001", "locality": "Marseille", "stateOrProvince": "Bouches-du-Rhône", "country": "France", } }</pre>
RESPONSE
<pre>201 Content-Type: application/json Location: https://{serverRoot}/geographicSiteManagement/v1/geographicSite/12345 Response is not required to include a BODY with the contents of the geographicSite resource created, but if included it must be filled with at least the mandatory parameters.</pre>

The example below includes the attributes within the GeographicSite entity resource model that are mandatory to be included in the request when creating a new resource in the server when associating a geographic location to a site for an specific party (organization)

REQUEST
<pre>POST https://{serverRoot}/geographicSiteManagement/v1/geographicSite Content-type: application/json { "name": "New branch to be open in France ", "description": "This site refers to the new branch office to be open in France", "status": "planned", "address": { "streetNr": "1",</pre>

```

    "streetName": "République (de la)",
    "streetType": "Rue",

    "postcode": "13001",
    "locality": "Marseille",
    "stateOrProvince": "Bouches-du-Rhône",
    "country": "France",

    },

    "relatedParty": [{
      "id": "1234",
      "href": " https://host:port/partyManagement/organization/1234",

      "name": "organizationXYZ",
      "role": "headquarters" ,

      "@type": "organization",
    }]
  }

```

RESPONSE

```

201
Content-Type: application/json
Location:
https://{serverRoot}/geographicSiteManagement/v1/geographicSite/12345

Response is not required to include a BODY with the contents of
the geographicSite resource created, but if included it must be
filled with at least the mandatory parameters.

```

RETRIEVE INDIVIDUAL SITE

GET

/geographicSiteManagement/v1/geographicSite/{siteId}?{fields=attrs}

Description

This operation retrieves a site entity using its unique ID. This ID should be retrieve either using the site creation process, or in another API of the ecosystem (party, appointment, etc.)

Attribute selection is enabled for all first level attributes.

Filtering on sub-resources may be available depending on the compliance level supported by an implementation.

Behavior:

Status Code	Description
200	the site information was returned successfully
400	Request Error
500	The server encountered an unexpected condition which prevented it from fulfilling the request
Other	The server may use other HTTP error status codes to reflect the error, the client must be processed in accordance with the error messages in other HTTP specifications.

Usage Samples

The example below includes the attributes within the GeographicSite resource model that must be included in the query response where the physical place associated is included via reference to an address entity registered in the server

REQUEST
<pre>GET https://{serverRoot}/geographicSiteManagement/v1/geographicSite/12345 Accept: application/json</pre>
RESPONSE
<pre>200 Content-Type: application/json { "id": "12345", "href": "https://host:port/geographicSiteManagement/v1/geographicSite/12345", "name": "Main Building", "status": "active", "address": { "id": "9912", "href": " https://host:port/geographicAddressManagement/v1/geographicAddress/9912" } }</pre>

The example below includes the attributes within the GeographicSite resource model that must be included in the query response where the physical place associated is included directly, providing all the geographic address and geolocation information

REQUEST
<pre>GET https://{serverRoot}/geographicSiteManagement/v1/geographicSite/12345 Accept: application/json</pre>
RESPONSE
<pre>200 Content-Type: application/json { "id": "12345", "href": "https://host:port/geographicSiteManagement/v1/geographicSite/12345", "name": "Main Building", "status": "active", "address": { "streetNr": "56", "streetName": "Arlington", "streetType": "Road", "postcode": "W45E02", "locality": "London", "stateOrProvince": "Great London", "country": "England", } }</pre>

COMPLETE UPDATE OF AN INDIVIDUAL SITE

PUT /geographicSiteManagement/v1/geographicSite/{siteId}

Description

This operation is optional to be supported in this API

This operation updates completely the contents of a geographicSite resource by replacing the contents of that entity with the contents of the resource structure provided in the request.

Notice that the PUT method is intended to modify completely the resource impacted, meaning that optional values that are not included in the request may be erased in the server after updating, and will not keep the previous value stored. Behavior of the server on optional values not included is undefined.

Behavior:

Status Code	Description
200	Successful site modification (resource updated)
400	Request Error
500	The server encountered an unexpected condition which prevented it from fulfilling the request
Other	The server may use other HTTP error status codes to reflect the error, the client must be processed in accordance with the error messages in other HTTP specifications.

Usage Samples

The example below includes the attributes within the GeographicSite entity resource model that are mandatory to be included in the request when updating completely a resource in the server

REQUEST
<pre> PUT https://{serverRoot}/geographicSiteManagement/v1/geographicSite/12345 Content-type: application/json { "name": "New branch open in France ", "description": "This site refers to the new branch office recently open in France", "status": "active", "address": { "streetNr": "1", "streetName": "République (de la)", "streetType": "Rue", "postcode": "13001", "locality": "Marseille", "stateOrProvince": "Bouches-du-Rhône", "country": "France", } } </pre>
RESPONSE
<pre> 200 Content-Type: application/json Response is not required to include a BODY with the contents of the GeographicSite resource created, but if included it must be </pre>

filled with the new values set and include at least the mandatory parameters (including id and href).

PARTIAL UPDATE OF AN INDIVIDUAL SITE

PATCH /geographicSiteManagement/v1/geographicSite/{siteId}

Description

This operation is optional to be supported in this API

This operation allows partial updates of a geographicSite resource entity. The definition of the modification is recommended to follow the json/patch (<http://tools.ietf.org/html/rfc5789>) and the extension proposed in Design Guidelines to manage modification of array entities.

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
name	
description	
code	
status	
addressRef	
address	
calendar	
relatedParty	
siteRelationship	

Non Patchable attributes	Rule
id	
href	

Behavior:

Status Code	Description
200	Successful site modification (resource modified)
400	Request Error
500	The server encountered an unexpected condition which prevented it from fulfilling the request
Other	The server may use other HTTP error status codes to reflect the error, the client must be processed in accordance with the error messages in other HTTP specifications.

Usage Samples

The example below shows how to complete a partial update of a GeographicSite entity resource model using the json/patch (RFC5789) approach

To Be Completed

DELETE AN INDIVIDUAL SITE

DELETE /geographicSiteManagement/v1/geographicSite/{siteId}

Description

This operation is optional to be supported in this API

Note: this operation is available only to ADMIN API users

This operation deletes and removes from the server geographicSite resource previously registered.

Behavior:

Status Code	Description
204	Successful site removal
400	Request Error
500	The server encountered an unexpected condition which prevented it from fulfilling the request
Other	The server may use other HTTP error status codes to reflect the error, the client must be processed in accordance with the error messages in other HTTP specification.

Usage Samples

The example below shows a request for deleting a GeographicSite resource

REQUEST
<pre>DELETE https://{serverRoot}/geographicSiteManagement/v1/geographicSite/12345</pre>
RESPONSE
204

API NOTIFICATIONS

For every single of operation on the entities use the following templates and provide sample REST notification POST calls.

It is assumed that the Pub/Sub uses the Register and UnRegister mechanisms described in the REST Guidelines reproduced below.

REGISTER LISTENER

POST /hub

Description

Sets the communication endpoint address the service instance must use to deliver information about its health state, execution state, failures and metrics. Subsequent POST calls will be rejected by the service if it does not support multiple listeners. In this case DELETE /api/hub/{id} must be called before an endpoint can be created again.

Behavior

Returns HTTP/1.1 status code 204 if the request was successful.

Returns HTTP/1.1 status code 409 if request is not successful.

Usage Samples

Here's an example of a request for registering a listener.

Request
POST /api/hub Accept: application/json {"callback": "http://in.listener.com"}
Response
201 Content-Type: application/json Location: /api/hub/42 {"id": "42", "callback": "http://in.listener.com", "query": null}

UNREGISTER LISTENER

DELETE /hub/{id}**Description**

Clears the communication endpoint address that was set by creating the Hub.

Behavior

Returns HTTP/1.1 status code 204 if the request was successful.

Returns HTTP/1.1 status code 404 if the resource is not found.

Usage Samples

Here's an example of a request for un-registering a listener.

Request
DELETE /api/hub/42 Accept: application/json
Response
204

PUBLISH EVENT TO LISTENER

POST /client/listener**Description**

Clears the communication endpoint address that was set by creating the Hub.

Provides to a registered listener the description of the event that was raised. The /client/listener url is the callback url passed when registering the listener.

Behavior

Returns HTTP/1.1 status code 201 if the service is able to set the configuration.

Usage Samples

Here's an example of a notification received by the listener. In this example "EVENT TYPE" should be replaced by one of the notification types supported by this API (see Notification Resources Models section) and EVENT BODY refers to the data structure of the given notification type.

Request
POST /client/listener Accept: application/json <pre>{ "event": { EVENT BODY }, "eventType": "EVENT_TYPE" }</pre>
Response
201

For detailed examples on the general TM Forum notification mechanism, see the TMF REST Design Guidelines



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RELEASE HISTORY

Release / Version Number	Date	Release led by:	Description
Version 1.0.1	22-May-2017	Luis Velarde (Telefónica)	First Release of Draft Version of the Document.
Version 1.0.2	24-Oct-2017	Luis Velarde(Telefónica)	Updated to be aligned with TMF API guidelines 3.0 Updated after review comments in R17.5 (October review cycle)
Version 1.0.3	30-Nov-2017	Luis Velarde(Telefónica)	Updated after review of related API (TMF675) in R17.5 (October review cycle). New structure defined for GeographicLocation
Version 1.0.4 Release 17.5.0	20-Jan-2018	Adrienne Walcott	Formatting/style edits prior to publishing

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