Frameworx Specification

Party Management API REST Specification

TMF632
Release 14.5.1
June 2015

<table>
<thead>
<tr>
<th>Latest Update: Frameworx Release 14.5</th>
<th>TM Forum Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version 1.1.1</td>
<td>IPR Mode: RAND</td>
</tr>
</tbody>
</table>

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N/A
INTRODUCTION

The following document is the specification of the REST API Party Management.

The party management API provides standardized mechanism for party management such as creation, update, retrieval, deletion and notification of events.

Party can be an individual or an organization that has any kind of relation with the enterprise.

Party is created to record individual or organization information before the assignment of any role.

For example, within the context of a split billing mechanism, Party management API allows creation of the individual or organization that will play the role of 3rd payer for a given offer and, then, allows consultation or update of his information.

Party management API manages the following data resources:

- **Individual**
  - Individual represents a single human being (a man, woman or child). The individual can be a customer, an employee or any other person that the organization needs to store information about.
  - Main Individual attributes are its identifier, place of birth, country of birth, nationality, marital status, birth and death dates, disability, title, , names (given, family, middle, etc.), location, individual identification, related parties

- **Organization**
  - Organization represents a group of people identified by shared interests or purpose. Examples include business, department, and enterprise. Because of the complex nature of many businesses, both organizations and organization units are represented by the same data
  - Main organization attributes are its identifier, type, legal entity, date of creation and cessation, trading name and type, other name, organization identifier, related parties and organization relationships (Parent and Child)

Party management API performs the following operations on individuals and organizations:

- Retrieval of an individual or organization or of a collection of them depending on filter criteria
- Full update of an individual or organization
- Partial update of an individual or organization
- Creation of an individual or organization
- Deletion of an individual or organization (for administration purposes)
- Notification of events:
  - Individual create
  - Individual update
  - Individual delete
  - Organization create
  - Organization update
  - Organization delete
SAMPLE USE CASES

Reader will find example of use cases using Party management API in “Open Digital Business Scenarios and Use Cases” document.
RESOURCE MODEL

Managed Entity and Task Resource Models

For every single resource managed by the API provide a JSON based representation of the managed entities and tasks.

INDIVIDUAL RESOURCE

An Individual represents a physical person.

JSON representation of an Individual

```
{
  "id": "i42",
  "href": "http://serverlocation:port/partyManagement/individual/i42",
  "gender": "male",
  "placeOfBirth": "http://goo.gl/maps/l8F9L",
  "countryOfBirth": "Austria",
  "nationality": "Canadian",
  "maritalStatus": "never married",
  "disability": [
    {"disability": "blind"}
  ],
  "birthDate": "1961-03-05T00:00:00Z",
  "characteristic": [
    {"name": "hobby",
      "value": "hockey"
    },
    {"name": ",",
      "value": ","
    }
  ],
  "title": ",",
  "givenName": "John",
  "familyName": "Smith",
  "middleName": ",",
  "fullName": ",",
  "formattedName": ",",
  "otherName": [
    {"title": ",",
      "givenName": ",",
      "familyName": ",",
      "middleName": ",",
      "fullName": ",",
      "formattedName": ","
    }]
}
```
"validFor": {
    "startDateTime": "2013-04-19T16:42:23.0Z",
    "endDateTime": "2013-06-19T00:00:00.0Z"
  },
  "location": "http://goo.gl/maps/l8F9L",
  "status": "Initialized",
  "individualIdentification": [
    {
      "type": "Passport",
      "identificationId": "73736625252",
      "issuingAuthority": "",
      "issuingDate": "2013-06-19T00:00:00.0Z"
    },
    {
      "type": "SocialSecurityNumber",
      "identificationId": "33636363",
      "issuingAuthority": "",
      "issuingDate": "2013-06-19T00:00:00.0Z"
    }
  ],
  "externalReference": [
    {
      "href": "http://facebook.com/17263635",
      "type": "FacebookID"
    },
    {
      "href": "http://google.com/17263635",
      "type": "GoogleID"
    }
  ],
  "relatedParty": [
    {
      "id": "1",
      "href": "http://serverlocation:port/partyManagement/organization/1",
      "role": "Employee",
      "name": "Richard Cole",
      "validFor": {
        "startDateTime": "2013-04-19T16:42:23.0Z",
        "endDateTime": "2013-06-19T00:00:00.0Z"
      }
    }
  ],
  "contactMedium": [
    {
      "type": "Email",
      "validFor": {
        "startDateTime": "2013-04-19T16:42:23.0Z"
      },
      "medium": {
        "emailAddress": "abc@tmforum.com"
      }
    }
  ]
Field Descriptions:

Characteristic: describes the characteristics of the individual such as individual hobbies, center of interests.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Name of the characteristic</td>
</tr>
<tr>
<td>value</td>
<td>Value of the characteristic</td>
</tr>
</tbody>
</table>

ContactMedium: indicates the contact medium that could be used to contact the customer.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>preferred</td>
<td>If true, indicates that is the preferred contact medium</td>
</tr>
<tr>
<td>type</td>
<td>Email address, telephone number, postal address</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>validFor</td>
<td>The time period that the contact medium is valid for</td>
</tr>
</tbody>
</table>

Disability: indicate lack or inadequate strength or ability

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>disability</td>
<td>Physical or mental handicap</td>
</tr>
</tbody>
</table>

ExternalReference: to manage touch points to external OTT identifiers for the person (facebook, google+, ...).

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>href</td>
<td>External reference</td>
</tr>
<tr>
<td>type</td>
<td>Reference type</td>
</tr>
</tbody>
</table>

Individual: represents a physical person.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>birthdate</td>
<td>Birth date</td>
</tr>
<tr>
<td>countryOfBirth</td>
<td>The country of birth</td>
</tr>
<tr>
<td>deathDate</td>
<td>Death date</td>
</tr>
<tr>
<td>familyName</td>
<td>Last name</td>
</tr>
<tr>
<td>formattedName</td>
<td>A formatted name useful for specific contexts (Chinese, Japanese, Korean, ...)</td>
</tr>
<tr>
<td>fullName</td>
<td>Full name flatten (first, middle, and last names)</td>
</tr>
<tr>
<td>gender</td>
<td>Gender</td>
</tr>
<tr>
<td>givenName</td>
<td>First name</td>
</tr>
<tr>
<td>href</td>
<td>Reference of the individual</td>
</tr>
<tr>
<td>id</td>
<td>Unique identifier for the individual</td>
</tr>
<tr>
<td>location</td>
<td>Temporary current location of the individual (may be used if the individual has approved its sharing)</td>
</tr>
<tr>
<td>maritalStatus</td>
<td>Marital status (married, divorced, widow, ...)</td>
</tr>
<tr>
<td>middleName</td>
<td>Middle names</td>
</tr>
<tr>
<td>nationality</td>
<td>Nationality</td>
</tr>
<tr>
<td>placeOfBirth</td>
<td>An hyperlink to the place of birth</td>
</tr>
<tr>
<td>status</td>
<td>Status of the individual - Initialized, Validated, Deceased</td>
</tr>
<tr>
<td>title</td>
<td>Useful for titles (aristocratic, social, ...) : Pr, Dr, Sir, ...</td>
</tr>
</tbody>
</table>

IndividualIdentification: represents our registration of information used as proof of identity by an individual (passport, national identity card, driver's license, social security number, birth certificate)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>identificationId</td>
<td>identifier</td>
</tr>
<tr>
<td>issuingAuthority</td>
<td>Authority which has issued the identifier (social security, town hall...)</td>
</tr>
<tr>
<td>issuingDate</td>
<td>Date at which the identifier was issued</td>
</tr>
<tr>
<td>type</td>
<td>Identification type (passport, national identity card, driver's license, social security number, birth certificate)</td>
</tr>
</tbody>
</table>
Medium: describes the contact medium that could be used to contact the customer

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>city</td>
<td>City</td>
</tr>
<tr>
<td>country</td>
<td>Country</td>
</tr>
<tr>
<td>emailAddress</td>
<td>Full email address in standard format</td>
</tr>
<tr>
<td>type</td>
<td>Type of medium (fax, mobile phone…)</td>
</tr>
<tr>
<td>number</td>
<td>Phone number</td>
</tr>
<tr>
<td>postcode</td>
<td>Postcode</td>
</tr>
<tr>
<td>stateOrProvince</td>
<td>State or province</td>
</tr>
<tr>
<td>street1</td>
<td>Describes the street</td>
</tr>
<tr>
<td>street2</td>
<td>Complementary street description</td>
</tr>
</tbody>
</table>

OtherName: To keep track of other names (for example the old name of a woman before marriage or an artist name)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>title</td>
<td>Useful for titles (aristocratic, social, …): Pr, Dr, Sir,…</td>
</tr>
<tr>
<td>givenName</td>
<td>First name</td>
</tr>
<tr>
<td>familyName</td>
<td>Last name</td>
</tr>
<tr>
<td>middleName</td>
<td>Middle names</td>
</tr>
<tr>
<td>fullName</td>
<td>Full name flatten (first, middle, and last names)</td>
</tr>
<tr>
<td>formattedName</td>
<td>A formatted name useful for specific contexts (Chinese, Japanese, Korean, …)</td>
</tr>
<tr>
<td>validFor</td>
<td>The period for which the other name is valid</td>
</tr>
</tbody>
</table>

RelatedParty: Defines party or partyRole linked to a specific entity.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>Unique identifier of related party</td>
</tr>
<tr>
<td>href</td>
<td>Reference of the relatedParty, could be a party reference or a partyRole reference</td>
</tr>
<tr>
<td>role</td>
<td>Role of the related party</td>
</tr>
<tr>
<td>name</td>
<td>Name of the related party</td>
</tr>
<tr>
<td>validFor</td>
<td>The period for which the related party is valid</td>
</tr>
</tbody>
</table>
ORGANIZATION RESOURCE

JSON representation of an Organization

```
{
   "id": "128",
   "href": "http://serverlocation:port/partyManagement/organization/128",
   "isLegalEntity": true,
   "type": "Company",
   "existsDuring": {
      "startDate": "2013-04-19T16:42:23.0Z"
   },
   "tradingName": "Telekom",
   "nameType": "Co.",
   "status": "Initialized",
   "otherName": {
      "nameType": "Co.",
      "tradingName": "Orange",
      "validFor": {
         "startDateTime": "2013-04-19T16:42:23.0Z",
         "endDateTime": "2013-06-19T00:00:00.0Z"
      }
   },
   "characteristic": {
      "name": "industry",
      "value": "telecom"
   },
   "organizationIdentification": {
      "type": "CompanyRegistrationNumber",
      "identificationId": "374748328",
      "issuingAuthority": "",
      "issuingDate": "2013-06-19T00:00:00.0Z",
      "validFor": {
         "startDateTime": "2013-04-19T16:42:23.0Z",
         "endDateTime": "2013-06-19T00:00:00.0Z"
      }
   },
   "externalReference": [
      {
         "href": "http://facebook.com/17263635",
         "type": "FacebookID"
      },
      {
         "href": "http://google.com/17263635",
         "type": "GoogleID"
      }
   ],
   "relatedParty": {
      "id": "12",
      "href": "http://serverlocation:port/partyManagement/organization/12",
      "role": "Vendor",
      "name": "Richard Cole",
      "validFor": {
         "startDateTime": "2013-04-19T16:42:23.0Z"
      }
   }
}
```
"endDateTime": "2013-06-19T00:00:00.0Z"
}
,"organizationParentRelationship": {
  "relationshipType": "Juridical",
  "id": "13",
  "href": "http://serverlocation:port/partyManagement/organization/13",
  "validFor": {
    "startDateTime": "2013-04-19T16:42:23.0Z",
    "endDateTime": "2013-06-19T00:00:00.0Z"
  }
},
,"organizationChildRelationship": {
  "relationshipType": "Juridical",
  "id": "16",
  "href": "http://serverlocation:port/partyManagement/organization/16",
  "validFor": {
    "startDateTime": "2013-04-19T16:42:23.0Z",
    "endDateTime": "2013-06-19T00:00:00.0Z"
  }
},
,"contactMedium": [
  {
    "type": "Email",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23.0Z"
    },
    "medium": {
      "emailAddress": "abc@tmforum.com"
    }
  },
  {
    "type": "PostalAddress",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23.0Z"
    },
    "medium": {
      "city": "Wien",
      "country": "Austria",
      "postcode": "1020",
      "stateOrProvince": "Quebec",
      "street1": "Lassallestrasse7",
      "street2": ""
    }
  },
  {
    "type": "TelephoneNumber",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23.0Z"
    },
    "medium": {
      "type": "mobile",
      "number": "+436641234567"
    }
  }
],
Field Descriptions:

Characteristic: describes the characteristics of the individual such as individual hobbies, center of interests.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Name of the characteristic</td>
</tr>
<tr>
<td>value</td>
<td>Value of the characteristic</td>
</tr>
</tbody>
</table>

ContactMedium: indicates the contact medium that could be used to contact the customer.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>preferred</td>
<td>If true, indicates that is the preferred contact medium</td>
</tr>
<tr>
<td>type</td>
<td>Email address, telephone number, postal address</td>
</tr>
<tr>
<td>validFor</td>
<td>The time period that the contact medium is valid for</td>
</tr>
</tbody>
</table>

ExternalReference: to manage touch points to external OTT identifiers for the organization (facebook, google+, ...).

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>href</td>
<td>External reference</td>
</tr>
<tr>
<td>type</td>
<td>Reference type</td>
</tr>
</tbody>
</table>

Medium: describes the contact medium that could be used to contact the customer

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>city</td>
<td>City</td>
</tr>
<tr>
<td>country</td>
<td>Country</td>
</tr>
<tr>
<td>emailAddress</td>
<td>Full email address in standard format</td>
</tr>
<tr>
<td>type</td>
<td>Type of medium (fax, mobile phone…)</td>
</tr>
<tr>
<td>number</td>
<td>Phone number</td>
</tr>
<tr>
<td>postcode</td>
<td>Postcode</td>
</tr>
<tr>
<td>stateOrProvince</td>
<td>State or province</td>
</tr>
</tbody>
</table>
Organization: represents a group of people identified by shared interests or purpose. Because of the complex nature of many businesses, both organizations and organization units are represented by the same business entity in this model.

### Field Description

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>existsDuring</td>
<td>Details the establishment of the organization and its cessation</td>
</tr>
<tr>
<td>href</td>
<td>Reference of the organization</td>
</tr>
<tr>
<td>id</td>
<td>Unique identifier for the organization</td>
</tr>
<tr>
<td>isLegalEntity</td>
<td>To tag if the organization is a legal entity known by national referential</td>
</tr>
<tr>
<td>nameType</td>
<td>“Co.”, “Inc.”, “Ltd.”, “Pty Ltd.”, “Plc.”, “Gmbh”</td>
</tr>
<tr>
<td>status</td>
<td>Status of the organization - Initialized, Validated, Closed</td>
</tr>
<tr>
<td>tradingName</td>
<td>The name that the organization (unit) trades under</td>
</tr>
<tr>
<td>type</td>
<td>Type of Organization (Company, …)</td>
</tr>
</tbody>
</table>

**OrganizationIdentification:** represents our registration of information used as proof of identity by an organization.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>identificationId</td>
<td>The name that the organization trades under</td>
</tr>
<tr>
<td>issuingAuthority</td>
<td>Authority which has issued the identifier (chamber of commerce…)</td>
</tr>
<tr>
<td>issuingDate</td>
<td>Date at which the identifier was issued</td>
</tr>
<tr>
<td>type</td>
<td>Type of identification information used to identify the company in a country or internationally</td>
</tr>
<tr>
<td>validFor</td>
<td>The period for which the identification information is valid</td>
</tr>
</tbody>
</table>

**OrganizationChildRelationship:** represents the links between organizations: useful to describe an organization structure between headquarters, affiliates, … It indicates the children of the organization.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>Unique identifier of the child organization</td>
</tr>
<tr>
<td>href</td>
<td>Reference of the child organization</td>
</tr>
<tr>
<td>relationshipType</td>
<td>Juridical, hierarchical, geographical, functional…</td>
</tr>
<tr>
<td>validFor</td>
<td>The time period the relationship is valid</td>
</tr>
</tbody>
</table>

**OrganizationParentRelationship:** represents the links between organizations: useful to describe an organization structure between headquarters, affiliates, … It indicates the parent of the organization.
### Relationship Specifications

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>Unique identifier of the parent organization</td>
</tr>
<tr>
<td>href</td>
<td>Reference of the parent organization</td>
</tr>
<tr>
<td>relationshipType</td>
<td>Juridical, hierarchical, geographical, functional…</td>
</tr>
<tr>
<td>validFor</td>
<td>The time period the relationship is valid</td>
</tr>
</tbody>
</table>

**OtherName:** To keep track of other names (for example the old name of a woman before marriage or an artist name)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>nameType</td>
<td>Co., Inc., Ltd., Pty Ltd., Plc., Gmbh</td>
</tr>
<tr>
<td>tradingName</td>
<td>The name that the organization trades under</td>
</tr>
<tr>
<td>validFor</td>
<td>The period for which the other name is valid</td>
</tr>
</tbody>
</table>

**RelatedParty:** Defines party or partyRole linked to a specific entity.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>Unique identifier of related party</td>
</tr>
<tr>
<td>href</td>
<td>Reference of the relatedParty, could be a party reference or a partyRole reference</td>
</tr>
<tr>
<td>role</td>
<td>Role of the related party</td>
</tr>
<tr>
<td>name</td>
<td>Name of the related party</td>
</tr>
<tr>
<td>validFor</td>
<td>The period for which the related party is valid</td>
</tr>
</tbody>
</table>
EXPORT JOB RESOURCE

An ExportJob resource represents a TASK used to export resources to a File.

The ExportJob resource supports the following properties:
<table>
<thead>
<tr>
<th>Attribute name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>query</strong></td>
<td>Used to scope the exported data (identical to GET filter construct using target ID as base)</td>
</tr>
<tr>
<td></td>
<td>“query”: &quot;type=productOffering&amp;version=2.0&quot;</td>
</tr>
<tr>
<td><strong>path</strong></td>
<td>URL of the root resource acting as the source for streaming content to the file specified by the ExportJob</td>
</tr>
<tr>
<td></td>
<td>../partyManagement/individual</td>
</tr>
<tr>
<td><strong>content-type</strong></td>
<td>The format of the exported data. By default “application/json”</td>
</tr>
<tr>
<td><strong>status</strong></td>
<td>notstarted, running, succeeded, failed</td>
</tr>
<tr>
<td><strong>url</strong></td>
<td>URL of the File containing the data to be exported</td>
</tr>
<tr>
<td></td>
<td>a file URL, which is of the form file://host/path</td>
</tr>
<tr>
<td></td>
<td>where host is the fully qualified domain name of the system on which the path is accessible, and path is a hierarchical directory path of the form directory/directory/.../name</td>
</tr>
<tr>
<td><strong>completionDate</strong></td>
<td>Date at which the Job was completed.</td>
</tr>
<tr>
<td><strong>creationDate</strong></td>
<td>Date at which the Job was created.</td>
</tr>
<tr>
<td><strong>errorLog</strong></td>
<td>Reason for Failure</td>
</tr>
</tbody>
</table>

**JSON representation of an ExportJob**

```
{
  "id": "54",
  "href": "http://api/catalogManagement/exportJob/54",
  "status": "running",
  "path": "partyManagement/",
  "content-type": "application/json",
}
```
"errorLog": "",
"creationDate": "2013-04-19T16:42:23-04:00",
"completionDate": "2013-04-21T16:42:23-04:00",
"url": "ftp://ftp.myParty.com/party/54"
}

UML Model:

### IMPORT JOB RESOURCE

An ImportJob resource represent a TASK used to import resources from a File

The ImportJob resource supports the following properties:

<table>
<thead>
<tr>
<th>Attribute name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>content-type</td>
<td>The format of the imported data. By default “application/json”</td>
</tr>
<tr>
<td>path</td>
<td>URL of the root resource where the content of the file specified by the ImportJob must be applied</td>
</tr>
<tr>
<td>status</td>
<td>notstarted, running, succeeded, failed</td>
</tr>
<tr>
<td>url</td>
<td>URL of the File containing the data to be imported</td>
</tr>
</tbody>
</table>
A file URL, which is of the form

file://host/path

where host is the fully qualified domain name of the system on which the path is accessible, and path is a hierarchical directory path of the form directory/directory/.../name

<table>
<thead>
<tr>
<th>completionDate</th>
<th>Date at which the Job was completed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>creationDate</td>
<td>Date at which the Job was created.</td>
</tr>
<tr>
<td>errorLog</td>
<td>Reason for Failure if status is failed</td>
</tr>
</tbody>
</table>

**JSON representation of an ImportJob**

```json
{
    "id": "54",
    "href": "http://api/partyManagement/importJob/54",
    "status": "completed",
    "path": "partyManagement/",
    "contentType": "application/json",
    "errorLog": "",
    "creationDate": "2013-04-19T16:42:23-04:00",
    "completionDate": "2013-04-21T16:42:23-04:00",
    "url": "ftp://ftp.myParty.com/party/54"
}
```

**UML Model:**

```
importJob
- id :String
- href :String
- contentType :String
- path :String
- status :String
- url :String
- completionDate :DateTime
- creationDate :DateTime
- errorLog :String
```
Notification Resource Models

8 notification event types are defined:

1. IndividualCreateNotification
2. IndividualUpdateNotification
3. IndividualDeleteNotification
4. OrganizationCreateNotification
5. OrganizationUpdateNotification
6. OrganizationDeleteNotification
7. ImportJobCompletionNotification
8. ExportJobCompletionNotification

UML Model:

Event: IndividualCreateNotification

```json
{ }
```
"eventType": "IndividualCreateNotification",
"eventTime": "2014-09-27T05:46:25.0Z",
"eventId": "1154231",
"event": {
    "individual": {
        "id": "12",
        Following a whole representation of the Individual with all its attributes
        See Individual Resource.
    }
}
}

Event: IndividualUpdateNotification

{
    "eventType": "IndividualUpdateNotification",
    "eventTime": "2014-09-27T05:46:25.0Z",
    "eventId": "119331",
    "event": {
        "individual": {
            "id": "12",
            Following a whole representation of the Individual with all its attributes
            See Individual Resource.
        }
    }
}

Event: individualDeleteNotification

{
    "eventType": "IndividualDeleteNotification",
    "eventTime": "2014-09-27T05:46:25.0Z",
    "eventId": "1189231",

"event": {
    "individual": {
        "id": "12",
        Following a whole representation of the Individual with all its attributes
        See Individual Resource.
    }
}

ORGANIZATION Notifications

1. Create
2. Update
3. Delete

UML Model:
Event: OrganizationCreateNotification

```json
{
    "eventType": "OrganizationCreateNotification",
    "eventTime": "2014-09-27T05:46:25.0Z",
    "eventId": "1154391",
    "event": {
        "organization": {
            "id": "128",
            Following a whole representation of the Organization with all its attributes
            See Organization Resource.
        }
    }
}
```

Event: OrganizationUpdateNotification

```json
{
    "eventType": "OrganizationUpdateNotification",
    "eventTime": "2014-09-27T05:46:25.0Z",
    "eventId": "1156731",
    "event": {
        "organization": {
            "id": "128",
            Following a whole representation of the Organization with all its attributes
            See Organization Resource.
        }
    }
}
```

Event: OrganizationDeleteNotification

```json
{
    "eventType": "OrganizationDeleteNotification",
}
```
"eventTime": "2014-09-27T05:46:25.0Z",
"eventId": "1154278",
"event": {
    "organization": {
        "id": "128",
        Following a whole representation of the Organization with all its attributes
        See Organization Resource.
    }
}

Export and Import Job Notifications

1. Export Job Completion Notification
2. Import Job Completion Notification

UML Model:
Event: ExportJobCompletionNotification

```json
{
    "eventType": "ExportJobCompletionNotification",
    "eventTime": "2014-09-27T05:46:25.0Z",
    "eventId": "1154278",
    "event": {
        "exportJob": {
            "id": "54",
            "href": "http://api/partyManagement/exportJob/54",
            "status": "succeeded",
            "path": "partyManagement/",
            "content-type": "application/json",
            "errorLog": "",
            "creationDate": "2013-04-19T16:42:23-04:00",
            "completionDate": "2013-04-21T16:42:23-04:00",
        }
    }
}
```

Event: ImportJobCompletionNotification

```json
{
    "eventType": "ImportJobCompletionNotification",
    "eventTime": "2014-09-27T05:46:25.0Z",
    "eventId": "1154278",
    "event": {
        "importJob": {
            "id": "54",
            "href": "http://api/partyManagement/importJob/54",
            "status": "succeeded",
            "path": "partyManagement/",
            "content-type": "application/json",
            "errorLog": "",
            "creationDate": "2013-04-19T16:42:23-04:00",
            "completionDate": "2013-04-21T16:42:23-04:00",
        }
    }
}
```
{}
**API OPERATION TEMPLATES**

For every single 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:

<table>
<thead>
<tr>
<th>Operation on Entities</th>
<th>Uniform API Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Query Entities</td>
<td>GET Resource</td>
<td>GET must be used to retrieve a representation of a resource.</td>
</tr>
<tr>
<td>Create Entity</td>
<td>POST Resource</td>
<td>POST must be used to create a new resource</td>
</tr>
<tr>
<td>Partial Update of an Entity</td>
<td>PATCH Resource</td>
<td>PATCH must be used to partially update a resource</td>
</tr>
<tr>
<td>Complete Update of an Entity</td>
<td>PUT Resource</td>
<td>PUT must be used to completely update a resource identified by its resource URI</td>
</tr>
<tr>
<td>Remove an Entity</td>
<td>DELETE Resource</td>
<td>DELETE must be used to remove a resource</td>
</tr>
<tr>
<td>Execute an Action on an Entity</td>
<td>POST on TASK Resource</td>
<td>POST must be used to execute Task Resources</td>
</tr>
<tr>
<td>Other Request Methods</td>
<td>POST on TASK Resource</td>
<td>GET and POST must not be used to tunnel other request methods.</td>
</tr>
</tbody>
</table>

Filtering and attribute selection rules are described in the TMF REST Design Guidelines.
Notifications are also described in a subsequent section.

**GET /PARTYMANAGEMENT/INDIVIDUAL/{ID}**

Note that collections can be retrieved via GET /API/INDIVIDUAL with no {ID}

**Description:**
- Operation to retrieve individuals (physical persons) in a party repository
- Filtering is enabled for all attributes
- Attribute selection is enabled for all attributes
- The resource is either a managed entity (query by id) or a collection (query with criteria)
- The resource identifier is a http uri

**Behavior:**
- Standard behavior and response codes for GET operations

**Example:** Retrieve individual with id 11 who is John Doe - with all his attributes.

<table>
<thead>
<tr>
<th>REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET /partyManagement/individual/i42</td>
</tr>
<tr>
<td>Accept: application/json</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
</tr>
<tr>
<td>Content-Type: application/json</td>
</tr>
</tbody>
</table>

```
{
  "id": "i42",
  "href": "http://serverlocation:port/partyManagement/individual/i42",
  "gender": "male",
  "placeOfBirth": "http://goo.gl/maps/l8F9L",
  "countryOfBirth": "Austria",
  "nationality": "Canadian",
  "maritalStatus": "never married",
  "disability": [
  
  ```
"disability": "blind",
},
"birthDate": "1961-03-05T00:00:00.0Z",
"characteristic": [
{
  "name": "hobby",
  "value": "hockey"
},
{
  "name": "",
  "value": ""
}
],
"title": "",
"givenName": "John",
"familyName": "Smith",
"middleName": "",
"fullName": "",
"formattedName": "",
"otherName": [
{
  "title": "",
  "givenName": "",
  "familyName": "",
  "middleName": "",
  "fullName": "",
  "formattedName": "",
  "validFor": {
    "startDateTime": "2013-04-19T16:42:23.0Z",
    "endDateTime": "2013-06-19T00:00:00.0Z"
  }
}
],
"location": "http://goo.gl/maps/l8F9L",
"status": "Initialized"
"individualIdentification": [
    {
      "type": "Passport",
      "identificationId": "73736625252",
      "issuingAuthority": "",
      "issuingDate": "2013-06-19T00:00:00.0Z"
    },
    {
      "type": "SocialSecurityNumber",
      "identificationId": "33636363",
      "issuingAuthority": "",
      "issuingDate": "2013-06-19T00:00:00.0Z"
    }
  ],
"externalReference": [
  {
    "href": "http://facebook.com/17263635",
    "type": "FacebookID"
  },
  {
    "href": "http://google.com/17263635",
    "type": "GoogleID"
  }
],
"relatedParty": [
  {
    "id": "1",
    "href": "http://serverlocation:port/partyManagement/organization/1",
    "role": "Employee",
    "name": "Richard Cole",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23.0Z",
      "endDateTime": "2013-06-19T00:00:00.0Z"
    }
  }
]
"contactMedium": [ 
  {
    "type": "Email",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23.0Z"
    },
    "medium": {
      "emailAddress": "abc@tmforum.com"
    }
  },
  {
    "type": "PostalAddress",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23.0Z"
    },
    "medium": {
      "city": "Wien",
      "country": "Austria",
      "postcode": "1020",
      "stateOrProvince": "Quebec",
      "street1": "Lassallestrasse7",
      "street2": ""
    }
  },
  {
    "type": "TelephoneNumber",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23.0Z"
    },
    "medium": {
      "type": "mobile",
      "number": "+436641234567"
    }
  },
  {
    "preferred": true,
"type": "TelephoneNumber",
"validFor": {
    "startDateTime": "2013-04-19T16:42:23.0Z"
},
"medium": {
    "type": "business",
    "number": "+436641234567"
}
}
]

Example: Retrieve John Doe individual entry and we only want to get his full name.

REQUEST
GET /partyManagement/individual/11?fields=fullName
Accept: application/json

RESPONSE
200
Content-Type: application/json

{
    "fullName": "Dr. John Doe"
}

GET /PARTYMANAGEMENT/ORGANIZATION/{ID}

Note that collections can be retrieved via GET /API/<RESOURCE> with no {ID}

Description:
- Operation to retrieve organizations (corporations) in a party repository
- Filtering is enabled for all attributes
- Attribute selection is enabled for all attributes
- The resource is either a managed entity (query by id) or a collection (query with criteria)
- The resource identifier is a http uri

Behavior:
- Standard behavior and response codes for GET operations

**Example**: Get all names of children organizations of a given one (131)

```
REQUEST
GET /partyManagement/organization/?fields=tradingName&organizationParentRelationship.id=131
Accept: application/json

RESPONSE
200
Content-Type: application/json

[

  {
    "id": "1311",
    "tradingName": "IT"
  },

  {
    "id": "1312",
    "tradingName": "Network"
  }
]
```

**Example**: Get specific organization using its id returning all attributes

```
REQUEST
GET /partyManagement/organization/128
Accept: application/json

RESPONSE
200
Content-Type: application/json

{
  "id": "128",
  "href": "http://serverlocation:port/partyManagement/organization/128",
  "isLegalEntity": true,
  "type": "Company",
  "existsDuring": {
```

© TM Forum 2015. All Rights Reserved.
"startDate": "2013-04-19T16:42:23.0Z",
"tradingName": "Telekom",
"nameType": "Co.",
"status": "Initialized",
"otherName": {
    "nameType": "Co.",
    "tradingName": "Orange",
    "validFor": {
        "startDate": "2013-04-19T16:42:23.0Z",
        "endDate": "2013-06-19T00:00:00.0Z"
    }
},
"characteristic": {
    "name": "industry",
    "value": "telecom"
},
"organizationIdentification": {
    "type": "CompanyRegistrationNumber",
    "identificationId": "374748328",
    "issuingAuthority": "",
    "issuingDate": "2013-06-19T00:00:00.0Z",
    "validFor": {
        "startDate": "2013-04-19T16:42:23.0Z",
        "endDate": "2013-06-19T00:00:00.0Z"
    }
},
"externalReference": [
    {
        "href": "http://facebook.com/17263635",
        "type": "FacebookID"
    },
    {
        "href": "http://google.com/17263635",
        "type": "GoogleID"
    }
]
"relatedParty": {
    "id": "12",
    "href": "http://serverlocation:port/partyManagement/organization/12",
    "role": "Vendor",
    "name": "Richard Cole",
    "validFor": {
        "startDateTime": "2013-04-19T16:42:23.0Z",
        "endDateTime": "2013-06-19T00:00:00.0Z"
    }
},
"organizationParentRelationship": {
    "relationshipType": "Juridical",
    "id": "13",
    "href": "http://serverlocation:port/partyManagement/organization/13",
    "validFor": {
        "startDateTime": "2013-04-19T16:42:23.0Z",
        "endDateTime": "2013-06-19T00:00:00.0Z"
    }
},
"organizationChildRelationship": {
    "relationshipType": "Juridical",
    "id": "16",
    "href": "http://serverlocation:port/partyManagement/organization/16",
    "validFor": {
        "startDateTime": "2013-04-19T16:42:23.0Z",
        "endDateTime": "2013-06-19T00:00:00.0Z"
    }
},
"contactMedium": [
    {
        "type": "Email",
        "validFor": {
            "startDateTime": "2013-04-19T16:42:23.0Z"
        }
    },
    "medium": {

"emailAddress": "abc@tmforum.com"
",
{
  "type": "PostalAddress",
  "validFor": {
    "startDateDateTime": "2013-04-19T16:42:23.0Z"
  },
  "medium": {
    "city": "Wien",
    "country": "Austria",
    "postcode": "1020",
    "stateOrProvince": "Quebec",
    "street1": "Lassallestrasse7",
    "street2": ""
  }
},
{
  "type": "TelephoneNumber",
  "validFor": {
    "startDateDateTime": "2013-04-19T16:42:23.0Z"
  },
  "medium": {
    "type": "mobile",
    "number": "+436641234567"
  }
},
{
  "preferred": true,
  "type": "TelephoneNumber",
  "validFor": {
    "startDateDateTime": "2013-04-19T16:42:23.0Z"
  },
  "medium": {
    "type": "business",
    "number": "+436641234567"
PUT PARTYMANAGEMENT/INDIVIDUAL/{ID}

**Description**:
- Allows to overwrite an existing individual entry in the party repository
- The resource is a managed entity

**Behavior**:
- Standard behavior and response codes for PUT operations

**Example**: Update John Smith (identified by ‘i42’): full update

**REQUEST**

```json
PUT partyManagement/individual/i42
Content-type: application/json

{
   "id": "i42",
   "href": "http://serverlocation:port/partyManagement/individual/i42",
   "gender": "male",
   "placeOfBirth": "http://goo.gl/maps/l8F9L",
   "countryOfBirth": "Austria",
   "nationality": "Canadian",
   "maritalStatus": "never married",
   "disability": [
      {
         "disability": "blind"
      }
   ],
   "birthDate": "1961-03-05T00:00:00.0Z",
   "characteristic": [
      {
         "name": "hobby",
      }
   ]
}
```
"value": "hockey"
},

{  
  "name": "",  
  "value": ""
}
],  
"title": "",  
"givenName": "John",  
"familyName": "Smith",  
"middleName": "",  
"fullName": "",  
"formattedName": "",  
"otherName": [  
  {  
    "title": "",  
    "givenName": "",  
    "familyName": "",  
    "middleName": "",  
    "fullName": "",  
    "formattedName": "",  
    "validFor": {  
      "startDateTime": "2013-04-19T16:42:23.0Z",  
      "endDateTime": "2013-06-19T00:00:00.0Z"
    }  
  }  
],  
"location": "http://goo.gl/maps/l8F9L",  
"status": "Initialized",  
"individualIdentification": [  
  {  
    "type": "Passport",  
    "identificationId": "73736625252",  
    "issuingAuthority": "",  
    "issuingDate": "2013-06-19T00:00:00.0Z"
  }  
},
{  
  "type": "SocialSecurityNumber",
  "identificationId": "33636363",
  "issuingAuthority": "",
  "issuingDate": "2013-06-19T00:00:00.0Z"
},

"externalReference": [
  {
    "href": "http://facebook.com/17263635",
    "type": "FacebookID"
  },
  {
    "href": "http://google.com/17263635",
    "type": "GoogleID"
  }
],

"relatedParty": [
  {
    "id": "1",
    "href": "http://serverlocation:port/partyManagement/organization/1",
    "role": "Employee",
    "name": "Richard Cole",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23.0Z",
      "endDateTime": "2013-06-19T00:00:00.0Z"
    }
  }
],

"contactMedium": [
  {
    "type": "Email",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23.0Z"
    },
    "medium": {
      "href": "http://example.com/contact",
      "type": "Email"
    }
  }
]
"emailAddress": "abc@tmforum.com"
,
{
"type": "PostalAddress",
"validFor": {
   "startDateTime": "2013-04-19T16:42:23.0Z"
},
"medium": {
   "city": "Wien",
   "country": "Austria",
   "postcode": "1020",
   "stateOrProvince": "Quebec",
   "street1": "Lassallestrasse7",
   "street2": ""
}
},
{
"type": "TelephoneNumber",
"validFor": {
   "startDateTime": "2013-04-19T16:42:23.0Z"
},
"medium": {
   "type": "mobile",
   "number": "+436641234567"
}
},
{
"preferred": true,
"type": "TelephoneNumber",
"validFor": {
   "startDateTime": "2013-04-19T16:42:23.0Z"
},
"medium": {
   "type": "business",
   "number": "+436641234567"
RESPONSE

201
Content-Type: application/json

{
  "id": "i42",
  "href": "http://serverlocation:port/partyManagement/individual/i42",
  "gender": "male",
  "placeOfBirth": "http://goo.gl/maps/l8F9L",
  "countryOfBirth": "Austria",
  "nationality": "Canadian",
  "maritalStatus": "never married",
  "disability": [
    {
      "disability": "blind"
    }
  ],
  "birthDate": "1961-03-05T00:00:00.0Z",
  "characteristic": [
    {
      "name": "hobby",
      "value": "hockey"
    },
    {
      "name": "",
      "value": ""
    }
  ],
  "title": "",
  "givenName": "John",
  "familyName": "Smith",
  "middleName": ""
}
"fullName": "", 
"formattedName": "", 
"otherName": [ 

{ 
  "title": "", 
  "givenName": "", 
  "familyName": "", 
  "middleName": "", 
  "fullName": "", 
  "formattedName": "", 
  "validFor": { 
    "startDateTime": "2013-04-19T16:42:23.0Z", 
    "endDateTime": "2013-06-19T00:00:00.0Z" 
  } 
}
], 
"location": "http://goo.gl/maps/l8F9L", 
"status": "Initialized", 
"individualIdentification": [ 

{ 
  "type": "Passport", 
  "identificationId": "73736625252", 
  "issuingAuthority": "", 
  "issuingDate": "2013-06-19T00:00:00.0Z" 
}, 

{ 
  "type": "SocialSecurityNumber", 
  "identificationId": "33636363", 
  "issuingAuthority": "", 
  "issuingDate": "2013-06-19T00:00:00.0Z" 
}
], 
"externalReference": [ 

{ 
  "href": "http://facebook.com/17263635", 
  "type": "FacebookID" 
}


},
{
    "href": "http://google.com/17263635",
    "type": "GoogleID"
}
],
"relatedParty": [
{
    "id": "1",
    "href": "http://serverlocation:port/partyManagement/organization/1",
    "role": "Employee",
    "name": "Richard Cole",
    "validFor": {
        "startDateTime": "2013-04-19T16:42:23.0Z",
        "endDateTime": "2013-06-19T00:00:00.0Z"
    }
}
],
"contactMedium": [
{
    "type": "Email",
    "validFor": {
        "startDateTime": "2013-04-19T16:42:23.0Z"
    },
    "medium": {
        "emailAddress": "abc@tmforum.com"
    }
}
],
{
    "type": "PostalAddress",
    "validFor": {
        "startDateTime": "2013-04-19T16:42:23.0Z"
    },
    "medium": {
        "city": "Wien",
        "country": "Austria",
        "countryCode": "AT"
    }
}
"postcode": "1020",
"stateOrProvince": "Quebec",
"street1": "Lassallestrasse7",
"street2": ""
}
},
{
  "type": "TelephoneNumber",
  "validFor": {
    "startDateTime": "2013-04-19T16:42:23.0Z"
  },
  "medium": {
    "type": "mobile",
    "number": "+436641234567"
  }
},
{
  "preferred": true,
  "type": "TelephoneNumber",
  "validFor": {
    "startDateTime": "2013-04-19T16:42:23.0Z"
  },
  "medium": {
    "type": "business",
    "number": "+436641234567"
  }
}
]

PUT PARTYMANAGEMENT/ORGANIZATION/{ID}

**Description**:

- Allows to overwrite an existing organization entry in the party repository
- The resource is a managed entity

**Behavior**:
Standard behavior and response codes for PUT operations

**REQUEST**

PUT /partyManagement/organization/128
Content-type: application/json

```
{
    "id": "128",
    "href": "http://serverlocation:port/partyManagement/organization/128",
    "isLegalEntity": true,
    "type": "Company",
    "existsDuring": {
        "startDate": "2013-04-19T16:42:23.0Z"
    },
    "tradingName": "Telekom",
    "nameType": "Co.",
    "status": "Initialized",
    "otherName": {
        "nameType": "Co.",
        "tradingName": "Orange",
        "validFor": {
            "startDate": "2013-04-19T16:42:23.0Z",
            "endDate": "2013-06-19T00:00:00.0Z"
        }
    },
    "characteristic": {
        "name": "industry",
        "value": "telecom"
    },
    "organizationIdentification": {
        "type": "CompanyRegistrationNumber",
        "identificationId": "374748328",
        "issuingAuthority": "",
        "issuingDate": "2013-06-19T00:00:00.0Z",
        "validFor": {
            "startDate": "2013-04-19T16:42:23.0Z",
            "endDate": "2013-06-19T00:00:00.0Z"
        }
    }
}
```


},
"externalReference": [
{
"href": "http://facebook.com/17263635",
"type": "FacebookID"
},
{
"href": "http://google.com/17263635",
"type": "GoogleID"
}
],
"relatedParty": {
"id": "1",
"href": "http://serverlocation:port/partyManagement/organization/12",
"role": "Vendor",
"name": "Richard Cole",
"validFor": {
"startDateTime": "2013-04-19T16:42:23.0Z",
"endDateTime": "2013-06-19T00:00:00.0Z"
}
},
"organizationParentRelationship": {
"relationshipType": "Juridical",
"id": "13",
"href": "http://serverlocation:port/partyManagement/organization/13",
"validFor": {
"startDateTime": "2013-04-19T16:42:23.0Z",
"endDateTime": "2013-06-19T00:00:00.0Z"
}
},
"organizationChildRelationship": {
"relationshipType": "Juridical",
"id": "16",
"href": "http://serverlocation:port/partyManagement/organization/16",
"validFor": {
"startDateTime": "2013-04-19T16:42:23.0Z",
"endDateTime": "2013-06-19T00:00:00.0Z"
}
}
"endDate": "2013-06-19T00:00:00.0Z",
},
"contactMedium": [
{
"type": "Email",
"validFor": {
"startDateTime": "2013-04-19T16:42:23.0Z"
},
"medium": {
"emailAddress": "abc@tmforum.com"
}
},
{
"type": "PostalAddress",
"validFor": {
"startDateTime": "2013-04-19T16:42:23.0Z"
},
"medium": {
"city": "Wien",
"country": "Austria",
"postcode": "1020",
"stateOrProvince": "Quebec",
"street1": "Lassallestrasse7",
"street2": ""
}
},
{
"type": "TelephoneNumber",
"validFor": {
"startDateTime": "2013-04-19T16:42:23.0Z"
},
"medium": {
"type": "mobile",
"number": "+436641234567"
}
}
PATCH PARTYMANAGEMENT/INDIVIDUAL/{ID}

This Uniform Contract operation is used to partially update the representation of an individual.

Description:

- Patch operation can be used partially update one or more individual
- The resource represents a managed entity or a collection
- The identifier is a string that can consist of numbers, not necessarily alphanumeric

Behavior:

- Return Status Codes:
  - Returns HTTP/1.1 status code 201 if individual was updated successfully
  - 400 – Bad Request Error
  - 404 - If no record was found for the supplied criteria
  - 500 - The server encountered an unexpected condition which prevented it from fulfilling the request
### Patchable attributes for an individual:

<table>
<thead>
<tr>
<th>Attribute name</th>
<th>Patchable</th>
<th>Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>gender</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>placeOfBirth</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>countryOfBirth</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>nationality</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>maritalStatus</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>disability</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>birthDate</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>deathDate</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>characteristic</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>title</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>givenName</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>familyName</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>middleName</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>fullName</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>formattedName</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>otherName</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>location</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>
Further document any rules that must be implemented when patching attributes.

<table>
<thead>
<tr>
<th>Rule name</th>
<th>Rule/Pre Condition/Side Effects/Post Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>disability</td>
<td>disability is mandatory</td>
</tr>
<tr>
<td>characteristic</td>
<td>name and value are mandatory</td>
</tr>
<tr>
<td>organizationIdentification</td>
<td>type and identification id must be set</td>
</tr>
<tr>
<td>externalReference</td>
<td>referenceType and reference must be set</td>
</tr>
<tr>
<td>relatedParty</td>
<td>role and party are mandatory&lt;br&gt;startDateTime is not mandatory but has a default value -&gt; it is set to sysdate by default</td>
</tr>
<tr>
<td>xxxRelationship</td>
<td>relationshipType and href are mandatory</td>
</tr>
</tbody>
</table>

**Example** : Update John Doe (identified with ‘11’) : he is updating his marital status.

```
REQUEST
PATCH partyManagement/individual/11
Content-type: application/json
{
  "maritalStatus": "married"
}
```
**Example**: Update John Doe (identified with ‘11’): he is joining an organization that is already stored in the party referential.

**REQUEST**

```
PATCH partyManagement/individual/11
Content-type: application/json-patch+json

{  
  "op": "add",
  "path": "/relatedParty",
  "value": {
    "id": "1",
    "href": "http://serverlocation:port/partyManagement/organization/1",
    "role": "Employee",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23-04:00",
      "endDateTime": ""
    }
  }
}
```

**RESPONSE**

```
201
Content-Type: application/json

{  
  JSON resource representation with all attributes including the changed one
  See individual resource model for details
}
```
Description:

- Patch operation can be used partially update one or more organizations
- The resource represents a managed entity or a collection
- The identifier is a string that can consist of numbers, not necessarily alphanumeric

Behavior:

- Return Status Codes:
  - Returns HTTP/1.1 status code 201 if organization was updated successfully
  - 400 – Bad Request Error
  - 404 - If no record was found for the supplied criteria
  - 500 - The server encountered an unexpected condition which prevented it from fulfilling the request

Patchable attributes for an organization:

<table>
<thead>
<tr>
<th>Attribute name</th>
<th>Patchable</th>
<th>Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>isLegalEntity</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>type</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>existsDuring</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>tradingName</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>nameType</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>otherName</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>characteristic</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>organizationIdentification</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>externalReference</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>relatedParty</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>
Further document any rules that must be implemented when patching attributes.

<table>
<thead>
<tr>
<th>Rule name</th>
<th>Rule/Pre Condition/Side Effects/Post Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>characteristic Patching</td>
<td>Name and value</td>
</tr>
<tr>
<td>Mandatory Values</td>
<td></td>
</tr>
<tr>
<td>organizationIdentification</td>
<td>Type and identificationId</td>
</tr>
<tr>
<td>Patching Mandatory Values</td>
<td></td>
</tr>
<tr>
<td>externalReference Patching</td>
<td>referenceType and reference</td>
</tr>
<tr>
<td>Mandatory Values</td>
<td></td>
</tr>
<tr>
<td>relatedParty Patching</td>
<td>Role and party</td>
</tr>
<tr>
<td>Mandatory Values</td>
<td></td>
</tr>
<tr>
<td>relatedParty Patching Default</td>
<td>startDateTime is not mandatory is set to sysdate by default</td>
</tr>
<tr>
<td>Values</td>
<td></td>
</tr>
</tbody>
</table>

**Example**: Example of an organization structure which is changing: IT and Network were previously separated and a new entity was created to merge these two entities (IT&N)

We describe 2 PATCH operations here under:
- PATCH IT entity to tag it as former
- PATCH main organization to change the organization structure (children links)

We assume that IT&N is already created, and Network entity has been patched.
PATCH of the IT entity:

**REQUEST**

PATCH partyManagement/organization/1311

Content-type: application/json

```
{
    "id": "1311",
    "href": "http://serverlocation:port/partyManagement/organization/1311",
    "existsDuring": {
        "endDate": "2013-04-19T16:42:23-04:00"
    }
}
```

**RESPONSE**

201

Content-Type: application/json

```
{
    JSON resource representation with all attributes including the changed one
    See individual resource model for details
}
```

PATCH of the Organization top entity: set the relationships endDate for IT & Network relationships, and creation of a new relationship with IT&N

**REQUEST**

PATCH partyManagement/organization/131

Content-type: application/json-patch+json

```
[
    {
        "op": "replace",
        "path": "/organizationChildRelationship/1",
        "value": {
            "relationshipType": "Juridical",
            "id": "1311",
            "href": "http://serverlocation:port/partyManagement/organization/1311",
            "validFor": {
```
"startDateTime": "2001-04-19T16:42:23-04:00",
"endDateTime": "2013-04-19T16:42:23-04:00"
}
}, {
  "op": "replace",
  "path": "/organizationChildRelationship/2",
  "value": {
    "relationshipType": "Juridical",
    "id": "1311",
    "href": "http://serverlocation:
port/partyManagement/organization/1312",
    "validFor": {
      "startDateTime": "2001-04-19T16:42:23-04:00",
      "endDateTime": "2013-04-19T16:42:23-04:00"
    }
  }
}, {
  "op": "add",
  "path": "/organizationChildRelationship",
  "value": {
    "relationshipType": "Juridical",
    "id": "1319",
    "href": "http://serverlocation:
port/partyManagement/organization/1319",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23-04:00",
      "endDateTime": ""
    }
  }
}]

**RESPONSE**

201
Content-Type: application/json

{
JSON resource representation with all attributes including the changed one
See individual resource model for details
}

**POST PARTYMANAGEMENT/INDIVIDUAL**

This operation is used to create an individual.

- The identifier is a string that can consist of numbers, not necessarily alphanumeric
- The mandatory element(s) is/are
  - givenName
  - familyName

When using following elements there are some mandatory attributes within each element:

- Within “disability”
  - the disability
- Within “characteristic”
  - name & value
- Within “organizationIdentification”
  - type
  - identificationId
- Within “externalReference”
  - referenceType
  - reference
- Within “relatedParty”
  - Role
  - Party
  - startDateDateTime -> not mandatory is set to sysdate by default
- Within “xxxRelationship”
  - relationshipType
  - ref
  - startDateDateTime -> not mandatory is set to sysdate by default

- The id is generated automatically

**Behavior:**

- Return Status Codes:
  - 201 – Individual create successfully
  - 400 – Bad Request Error
  - 500 - The server encountered an unexpected condition which prevented it from fulfilling the request

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<table>
<thead>
<tr>
<th>Attribute name</th>
<th>Mandatory</th>
<th>Default</th>
<th>Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>N</td>
<td>Automatically generated</td>
<td>If not given, the id is generated by the system. It is also possible to add an ID in the POST request, which is then used</td>
</tr>
<tr>
<td>gender</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>placeOfBirth</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>countryOfBirth</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nationality</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>maritalStatus</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>disability</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>birthDate</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>deathDate</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>characteristic</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>title</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>givenName</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>familyName</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>middleName</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fullName</td>
<td>N</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
formattedName N
otherName N
location N
individualIdentification N
externalReference N
relatedParty N
contactMedium N

Further specify any rules on the creation of the entity

<table>
<thead>
<tr>
<th>Rule name</th>
<th>Rule/Pre Condition/Side Effects/Post Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>disability</td>
<td>disability is mandatory</td>
</tr>
<tr>
<td>characteristic</td>
<td>name and value are mandatory</td>
</tr>
<tr>
<td>organizationIdentificiation</td>
<td>type and identification id must be set</td>
</tr>
<tr>
<td>externalReference</td>
<td>referenceType and reference must be set</td>
</tr>
<tr>
<td>relatedParty</td>
<td>role and party are mandatory startDateTime is not mandatory but has a default value -&gt; it is set to sysdate by default</td>
</tr>
<tr>
<td>xxxRelationship</td>
<td>relationshipType and ref are mandatory</td>
</tr>
</tbody>
</table>

Example: creation of an individual named John Doe

REQUEST

POST partyManagement/individual
Content-type: application/json
{  "gender": "male",  "placeOfBirth": "http://goo.gl/maps/l8F9L",  "countryOfBirth": "Austria",  "nationality": "Canadian",  "maritalStatus": "never married",  "disability": [  {    "disability": "blind"  }  ],  "birthDate": "2014-03-05",  "characteristic": [  {    "name": "hobby",    "value": "hockey"  }  ],  "title": "Dr",  "givenName": "John",  "familyName": "Doe",  "location": "http://goo.gl/maps/l8F9L",  "individualIdentification": [  {    "type": "Passport",    "identificationId": "73736625252",    "issuingAuthority": "",    "issuingDate": "2013-06-19T00:00:00-04:00"  }  ],  "externalReference": [  {    "href": "http://facebook.com/17263635",    "type": "FacebookID"  }  ]}


},
"contactMedium": [
{
"type": "Email",
"validFor": {
"startDateDateTime": "2013-04-19T16:42:23-04:00",
"endDateDateTime": ""
},
"medium": {
"emailAddress": "abc@tmforum.com"
}
}, {
"type": "PostalAddress",
"validFor": {
"startDateDateTime": "2013-04-19T16:42:23-04:00",
"endDateDateTime": ""
},
"medium": {
"street1": "Lassallestrasse7",
"street2": "",
"postcode": "1020",
"stateOrProvince": "Quebec",
"city": "Wien",
"country": "Austria"
}
}, {
"type": "TelephoneNumber",
"validFor": {
"startDateDateTime": "2013-04-19T16:42:23-04:00",
"endDateDateTime": ""
},
"medium": {
"type": "mobile",
"number": "+436641234567"
}
}]}
"preferred": true,
"type": "TelephoneNumber",
"validFor": {
  "startDateDateTime": "2013-04-19T16:42:23-04:00",
  "endDateDateTime": ""
},
"medium": {
  "type": "business",
  "number": "+436641234567"
}
}
]

RESPONSE

201
Content-Type: application/json

{
  "id": "11",
  "href": "http://serverlocation:port/partyManagement/individual/11",
  "gender": "male",
  "placeOfBirth": "http://goo.gl/maps/l8F9L",
  "countryOfBirth": "Austria",
  "nationality": "Canadian",
  "maritalStatus": "never married",
  "disability": [
    {
      "disability": "blind"
    }
  ],
  "birthDate": "2014-03-05",
  "characteristic": [
    {
      "name": "hobby",
      "value": "hockey"
    }
  ]
}
"title": "Dr",
"givenName": "John",
"familyName": "Doe",
"location": "http://goo.gl/maps/l8F9L",
"individualIdentification": [
  {
    "type": "Passport",
    "identificationId": "73736625252",
    "issuingAuthority": "",
    "issuingDate": "2013-06-19T00:00:00-04:00"
  }
],
"externalReference": [
  {
    "href": "http://facebook.com/17263635",
    "type": "FacebookID"
  }
],
"contactMedium": [
  {
    "type": "Email",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23-04:00",
      "endDateTime": ""
    },
    "medium": {
      "emailAddress": "abc@tmforum.com"
    }
  }, {
    "type": "PostalAddress",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23-04:00",
      "endDateTime": ""
    },
    "medium": {
      ""}


```
{
  "street1": "Lassallesrassle7",
  "street2": "",
  "postcode": "1020",
  "stateOrProvince": "Quebec",
  "city": "Wien",
  "country": "Austria"
}
}, {
  "type": "TelephoneNumber",
  "validFor": {
    "startDateTime": "2013-04-19T16:42:23-04:00",
    "endDateTime": ""
  },
  "medium": {
    "type": "mobile",
    "number": "+436641234567"
  }
}, {
  "preferred": true,
  "type": "TelephoneNumber",
  "validFor": {
    "startDateTime": "2013-04-19T16:42:23-04:00",
    "endDateTime": ""
  },
  "medium": {
    "type": "business",
    "number": "+436641234567"
  }
}
```

POST PARTYMANAGEMENT/ORGANIZATION

This operation is used to create an organization.
• The identifier is a string that can consist of numbers, not necessarily alphanumeric
• The mandatory element is:
  o tradingName

When using following elements there are some mandatory attributes within each element:
  ▪ Within “characteristic”
    • name & value
  ▪ Within “organizationIdentification”
    • type
    • identificationId
  ▪ Within “externalReference”
    • referenceType
    • reference
  ▪ Within “relatedParty”
    • Role
    • Party
    • startDateTime -> not mandatory is set to sysdate by default
  ▪ Within “xxxRelationship”
    • relationshipType
    • ref
    • startDateTime -> not mandatory is set to sysdate by default
• The id is generated automatically

Behavior:
• Return Status Codes:
  o 201 – organization created successfully
  o 400 – Bad Request Error
  o 500 - The server encountered an unexpected condition which prevented it from fulfilling the request

Specify the attributes required when an entity is created (and their default values if not):

<table>
<thead>
<tr>
<th>Attribute name</th>
<th>Mandatory</th>
<th>Default</th>
<th>Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>N</td>
<td>Automatically generated</td>
<td>If not given, the id is generated by the system. It is also possible to add an ID in the POST request, which is then</td>
</tr>
<tr>
<td></td>
<td>used</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>isLegalEntity</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>type</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>existsDuring</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tradingName</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nameType</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>otherName</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>characteristic</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>organizationIdentification</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>externalReference</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>relatedParty</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>organizationParentRelation</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>organizationChildRelation</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>contactMedium</td>
<td>N</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Further specify any rules on the creation of the entity

<table>
<thead>
<tr>
<th>Rule name</th>
<th>Rule/Pre Condition/Side Effects/Post Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>characteristic Patching Mandatory Values</td>
<td>Name and value</td>
</tr>
<tr>
<td>organizationIdentification Patching Mandatory Values</td>
<td>Type and identificationId</td>
</tr>
</tbody>
</table>
### External Reference Patching

<table>
<thead>
<tr>
<th>Mandatory Values</th>
<th>referenceType and reference</th>
</tr>
</thead>
</table>

### Related Party Patching

<table>
<thead>
<tr>
<th>Mandatory Values</th>
<th>Role and party</th>
</tr>
</thead>
</table>

### Related Party Patching

<table>
<thead>
<tr>
<th>Default Values</th>
<th>startDateTime is not mandatory is set to sysdate by default</th>
</tr>
</thead>
</table>

**Example**: Creation of a new organization, which is an affiliate of the ‘13’ one already created in the party referential.

**REQUEST**

POST partyManagement/organization

Content-type: application/json

```json
{
    "isLegalEntity": true,
    "type": "Company",
    "existsDuring": {
        "startDate": "2003-04-19T16:42:23-04:00",
        "endDate": ""
    },
    "tradingName": "Orange Romania",
    "nameType": "Co.",
    "organizationIdentification": [
        {
            "type": "CompanyRegistrationNumber",
            "identificationId": "374748328",
            "issuingAuthority": "",
            "issuingDate": "2013-06-19T00:00:00-04:00",
            "validFor": {
                "startDate": "2013-04-19T16:42:23-04:00",
                "endDate": "2013-06-19T00:00:00-04:00"
            }
        }
    ],
}
```
"externalReference": [
  {
    "href": "http://facebook.com/17263635",
    "type": "FacebookID"
  }
],
"organizationParentRelationship": {
  "relationshipType": "Juridical",
  "id": "13",
  "href": "http://serverlocation: port/partyManagement/organization/13",
  "validFor": {
    "startDateTime": "2013-04-19T16:23:04:00",
    "endDateTime": ""
  }
},
"contactMedium": [
  {
    "type": "Email",
    "validFor": {
      "startDateTime": "2013-04-19T16:23:04:00",
      "endDateTime": ""
    },
    "medium": {
      "emailAddress": "abc@tmforum.com"
    }
  }, {
    "type": "PostalAddress",
    "validFor": {
      "startDateTime": "2013-04-19T16:23:04:00",
      "endDateTime": ""
    },
    "medium": {
      "street1": "Lassallestrasse7",
      "street2": "",
      "postcode": "1020",
      "stateOrProvince": "Quebec",
      "country": ""
"city": "Wien",
"country": "Austria"
}
}, {
"type": "TelephoneNumber",
"validFor": {
"startDateDateTime": "2013-04-19T16:42:23-04:00",
"endDateDateTime": ""
},
"medium": {
"type": "mobile",
"number": "+436641234567"
}
}, {
"preferred": true,
"type": "TelephoneNumber",
"validFor": {
"startDateDateTime": "2013-04-19T16:42:23-04:00",
"endDateDateTime": ""
},
"medium": {
"type": "business",
"number": "+436641234567"
}
}]

RESPONSE

201
Content-Type: application/json

{
"id": "44",
"href": "http://serverlocation:port/partyManagement/organization/44",
"isLegalEntity": true,
"type": "Company",
}
"existsDuring": {
  "startDate": "2003-04-19T16:42:23-04:00",
  "endDate": ""
},
"tradingName": "Orange Romania",
"nameType": "Co.",
"organizationIdentification": [
  {
    "type": "CompanyRegistrationNumber",
    "identificationId": "374748328",
    "issuingAuthority": "",
    "issuingDate": "2013-06-19T00:00:00-04:00",
    "validFor": {
      "startDateTime": "2013-04-19T16:42:23-04:00",
      "endDateTime": "2013-06-19T00:00:00-04:00"
    }
  }
],
"externalReference": [
  {
    "href": "http://facebook.com/17263635",
    "type": "FacebookID"
  }
],
"organizationParentRelationship": {
  "relationshipType": "Juridical",
  "id": "13",
  "href": "http://serverlocation: port/partyManagement/organization/13",
  "validFor": {
    "startDateTime": "2013-04-19T16:42:23-04:00",
    "endDateTime": ""
  }
},
"contactMedium": [
  {
    "type": "Email",
    "href": ""
  }
]
"validFor": {
    "startDateDateTime": "2013-04-19T16:42:23-04:00",
    "endDateDateTime": ""
},
"medium": {
    "emailAddress": "abc@tmforum.com"
}
}, {
    "type": "PostalAddress",
    "validFor": {
        "startDateDateTime": "2013-04-19T16:42:23-04:00",
        "endDateDateTime": ""
    },
    "medium": {
        "street1": "Lassallestrasse7",
        "street2": "",
        "postcode": "1020",
        "stateOrProvince": "Quebec",
        "city": "Wien",
        "country": "Austria"
    }
}, {
    "type": "TelephoneNumber",
    "validFor": {
        "startDateDateTime": "2013-04-19T16:42:23-04:00",
        "endDateDateTime": ""
    },
    "medium": {
        "type": "mobile",
        "number": "+436641234567"
    }
}, {
    "preferred": true,
    "type": "TelephoneNumber",
    "validFor": {
        "startDateDateTime": "2013-04-19T16:42:23-04:00",
        "endDateDateTime": ""
    },
    "medium": {
        "type": "mobile",
        "number": "+436641234567"
    }
}
"endDateTime": ""
],
"medium": {
  "type": "business",
  "number": "+436641234567"
}
]
}

DELETE PARTYMANAGEMENT/INDIVIDUAL/{ID} OR /ORGANIZATION/{ID}

Only useful and allowed for administration matters

<table>
<thead>
<tr>
<th>REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>DELETE partyManagement/individual/11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
</tr>
</tbody>
</table>

POST PARTYMANAGEMENT/IMPORTJOB

ImportJob Tasks are created as resources.

The ImportJob is attached to the URL of the root resource where the content of the file specified by the ImportJob will be applied.

For example to apply the content of the import file located at ftp://ftp.myParty.com/party/54 to the partyManagement root.
**REQUEST**

POST ../partyManagement/importJob
Content-type: application/json

```json
{
  "url": "ftp://ftp.myParty.com/party/54"
}
```

**RESPONSE**

201
Content-Type: application/json
Location: ../partyManagement/importJob/554

```json
{
  "id": "54",
  "href": "http://api/partyManagement/importJob/54",
  "status": "running",
  "path": "partyManagement/",
  "content-type": "application/json",
  "errorLog": "",
  "creationDate": "2013-04-19T16:42:23-04:00",
  "url": "ftp://ftp.myParty.com/party/54"
}
```

**POST PARTYMANAGEMENT/EXPORTJOB**

ExportJob Tasks are created as resources.

The ExportJob is attached to a specific resource acting as the root for the collection of resources to be streamed to a File.

An ExportJob can be attached to a specific Resource in the Party Management application or may be attached to the Individual or Organization collections

- ../partyManagement/exportJob
  Export all the resources within partyManagement subject to query and path assignments.
- ../partyManagement/individual/exportJob
Export all the individual resources within partyManagement subject to query and path assignments.

For example:

REQUEST

POST ../partyManagement/exportJob
Content-type: application/json

{
}

RESPONSE

201
Content-Type: application/json
Location: ../partyManagement/exportJob/54

{
    "id": "54",
    "href": "http://api/catalogManagement/exportJob/54",
    "status": "running",
    "path": "partyManagement/",
    "content-type": "application/json",
    "errorLog": "",
    "creationDate": "2013-04-19T16:42:23-04:00",
    "completionDate": "2013-04-21T16:42:23-04:00",
    "url": "ftp://ftp.myParty.com/party/54"
}

GET PARTYMANAGEMENT/EXPORTJOB
ExportJob resources can be found under the API/exportJob collection and may be retrieved using the normal GET constructs.

For example:

**REQUEST**

```
GET ../partyManagement/exportJob/54
Content-type: application/json

{ }
```

**RESPONSE**

```
200
Content-Type: application/json

{
    "id": "54",
    "href": "http://api/catalogManagement/exportJob/54",
    "status": "running",
    "path": "partyManagement/",
    "content-type": "application/json",
    "errorLog": "",
    "creationDate": "2013-04-19T16:42:23-04:00",
    "completionDate": "2013-04-21T16:42:23-04:00",
    "url": "ftp://ftp.myParty.com/party/54"
}
```

**GET PARTYMANAGEMENT/IMPORTJOB**

ImportJob resources can be found under the API/importJob collection and may be retrieved using the normal GET constructs.

For example:

**REQUEST**

```
GET ../partyManagement/importJob/54
Content-type: application/json

{ }
```
```json
{
}

RESPONSE

200
Content-Type: application/json

{
    "id": "54",
    "href": "http://api/catalogManagement/importJob/54",
    "status": "running",
    "path": "partyManagement/",
    "content-type": "application/json",
    "errorLog": "",
    "creationDate": "2013-04-19T16:42:23-04:00",
    "completionDate": "2013-04-21T16:42:23-04:00",
    "url": "ftp://ftp.myParty.com/party/54"
}
```
API NOTIFICATION TEMPLATES

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.

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.

<table>
<thead>
<tr>
<th>REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>DELETE /api/hub/{id}</td>
</tr>
<tr>
<td>Accept: application/json</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>204</td>
</tr>
</tbody>
</table>

**PUBLISH {EVENTTYPE} POST /LISTENER**

Description:

Provide the Event description

Behavior:

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

<table>
<thead>
<tr>
<th>REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST /client/listener</td>
</tr>
<tr>
<td>Accept: application/json</td>
</tr>
</tbody>
</table>

```json
{
    "eventType": "EventType",
    "eventTime": "2014-09-27T05:46:25.0Z",
    "eventId": "1562231",
    "event":
    {
        EVENT BODY
    }
}
```

<table>
<thead>
<tr>
<th>RESPONSE</th>
</tr>
</thead>
</table>

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Example see TMF REST Design Guidelines.
MANAGING PARTY ROLES RELATIONSHIP IN THE CUSTOMER/PARTY MODEL

1. Model modification (relative to SID)

In order to capture some use cases we added a relationship between PartyRole and Party which represents the role is played for (this association is part of existing Amdocs contribution on FrameworkAgreement). This way a CSP (Orange) can model employer/employee relationship between Individual (Josh) and Organization (Amdocs).

From UML perspective the modified model looks like

In order to simplify the JSON resource model we decided that in some cases the relation between parties will use the PartyRole entity as association class that was promoted to an entity; hence the JSON model in some cases looks like

```json
{
    "relatedParty": [
        {
            "role": "Employee",
            "id": "100000",
            "href": "http://serverlocation:port/partyManagement/organization/10000",
            "validFor": {
                "startDateTime": "2013-04-19T16:42:23-04:00",
                "endDateTime": "2013-06-19T00:00:00-04:00"
            }
        }
    ]
}
```
Please note that the attributes of the relatedParty dependent entity are the PartyRole attributes, but also that in some cases in the digital services APIs this construct is used for association to PartyRole (Customer) and not to Party.

Another important observation is that from service model perspective the model above is not symmetrical. The direction from Party, through the PartyHasRoles association and then via RolePlayedFor association back to party is more important than the other direction. In UML service model we will show it as

Let's assume now that we implement in the model the Employee PartyRole but not the Employer PartyRole (this is implementation decision, but a reasonable one). So let's look at the very simple model with 3 instances:

Note: Amdocs does not have a PartyRole instance with the role Employer

From JSON resource model perspective it means that we want to show the primary direction when we retrieve the related party (so when we retrieve Individual for Josh we want to show the Employee role and association to Organization Amdocs), but not the other side (when we retrieve Amdocs we don’t want to show in the Amdocs resource model all the employees) – if we want to retrieve all the Amdocs employees we need a task API for that.
## RELEASE HISTORY

<table>
<thead>
<tr>
<th>Release Number</th>
<th>Date</th>
<th>Release led by:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TM Forum</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:pgauthier@tmforum.org">pgauthier@tmforum.org</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Christian Traxler (Infonova)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alexander Sturm (Infonova)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gilbert Scheibelhofer (A1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Josh Salomon (Amdocs)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Véronique Mauneau (Orange)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maxime Delon (Orange)</td>
<td></td>
</tr>
<tr>
<td>Release 1.1</td>
<td></td>
<td>Christian Traxler (Infonova)</td>
<td>Updated during Paris Spec Jam – and rebranded</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Daniel Buinac (Ericsson)</td>
<td></td>
</tr>
</tbody>
</table>

## CONTRIBUTORS TO DOCUMENT

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veronique Mauneau</td>
<td>Orange</td>
</tr>
<tr>
<td>Jean-Luc Tymen</td>
<td>Orange</td>
</tr>
<tr>
<td>Pierre Gauthier</td>
<td>TM Forum</td>
</tr>
<tr>
<td>John Morey</td>
<td>Ciena</td>
</tr>
</tbody>
</table>