

TM Forum Specification

Change Management API REST Specification

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INTRODUCTION

The following document is the specification of the REST API for Change management. It includes the model definition as well as all available operations.

Change Management process is to respond to the customer's changing business requirements while maximizing value and reducing incidents, disruption and network. The Change Management API provides the standard integration capabilities between external applications and Change Management Application. The API consists of a simple set of operations that interact with Change Request in a consistent manner. A Change Request is an IT service management discipline. The objective of change management in this context is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes to control IT infrastructure and Network, in order to minimize the number and impact of any related incidents upon service.

Change Request API performs the following operations on Change Request:

- Retrieval of a change request or a collection of change request s depending on filter criteria
- Partial update of a change request (including approve/reject, complete, abort and worklog exchange etc.)
- Creation of a change request (including default values and creation rules)
- Deletion of change request (for administration purposes e.g. backup & archive)
- Notification of events on change request

SAMPLE USE CASES

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

CHANGE MANAGEMENT GOVERNANCE IN VIP ASSURANCE FOR PLANNED SERVICE OUTAGE

To decrease Customers impact at Construction work and Request for Changes (RFCs), NW Service Provider changes routes with planned service outage. The schedule is adjusted based on customer’s impact. Customer can query for checking the outage schedule and status.

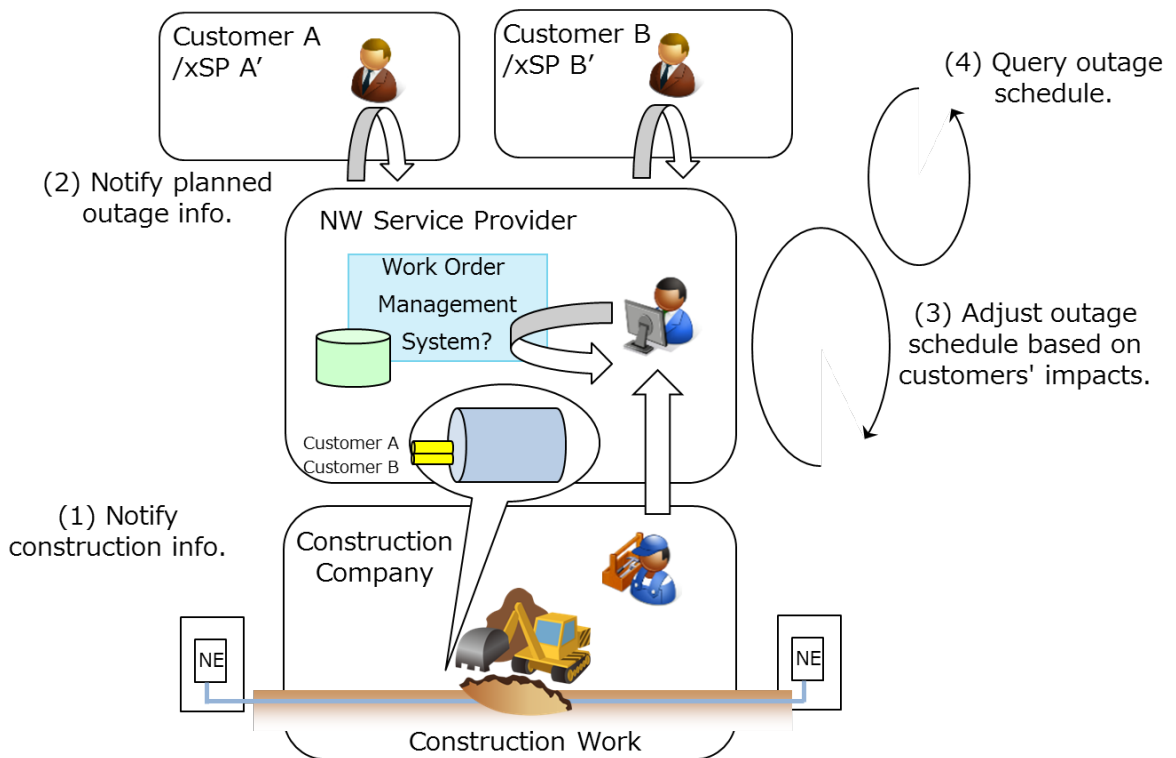


Figure 1. Example of planned service outage scenario

The Supplier has identified that the PR resolution will require disruption to common infrastructure /equipment serving other services owned by that Buyer. Other Buyers’ services are not affected. The Supplier requests permission to disrupt those services at a specified date/time, which the Buyer authorizes or rejects.

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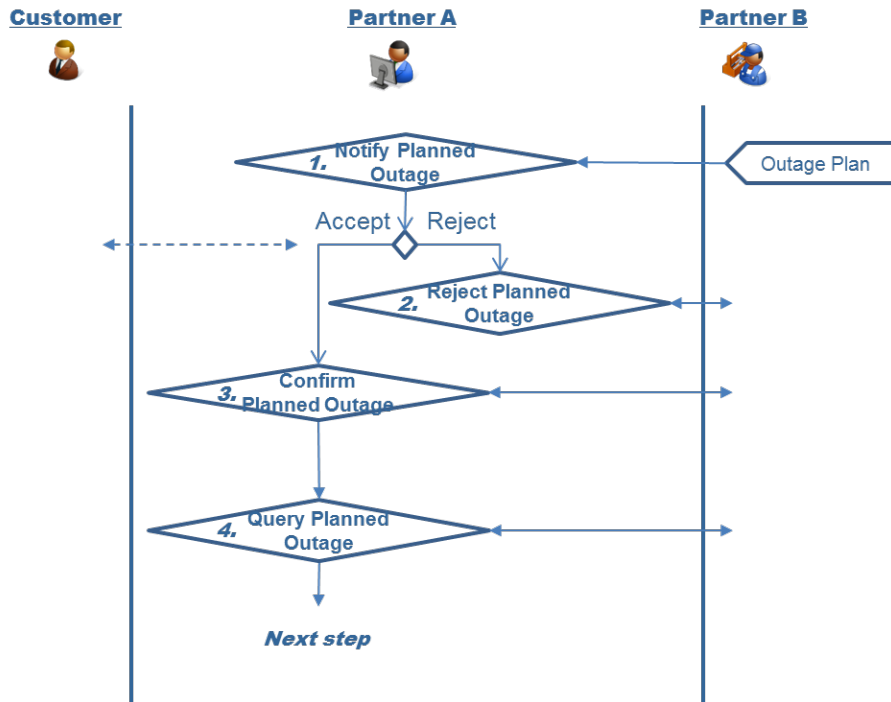


Figure 2. Example of planned service outage scenario

SUPPORT OF POLYMORPHISM AND EXTENSION PATTERNS

Support of polymorphic collections and types and schema based extension is provided by means of a list of generic meta-attributes that we describe below.

Generic support of polymorphism and pattern extensions is described in the TMF API Guidelines v3.0 Part 2 document.

The @type attribute provides a way to represent the actual class type of an entity. All resources and sub-resources of this API have a @type attributes that can be provided when this is useful. All resources and sub-resources of this API have a @type attributes that can be provided when this is useful. Such as ChangeRequest, ChangeRequestCharacteristic, Attachment, etc.

The @referredType can be used within reference entities (like for instance RelatedPartyRef) to explicitly denote the actual entity type of the referred class. Notice that in reference entities the @type, when used, denotes the class types of the reference itself, such as RelatedPartyRef , and not the class type of the referred object. However, since reference classes are rarely sub-classed, @type is generally not useful in reference objects.

The @schemaLocation property can be used in resources to allow specifying user-defined properties of an Entity or to specify the expected characteristics of an entity.

The @baseType attribute gives a way to provide explicitly the base of class of a given resource that has been extended.

Notice that because these meta-attributes have a generic meaning we will not repeat their definition in the resource description tables of each resource and each sub-resource.

RESOURCE MODEL

MANAGED ENTITY AND TASK RESOURCE MODELS

CHANGE REQUEST RESOURCE

1.1.1.1.1 RESOURCE MODEL

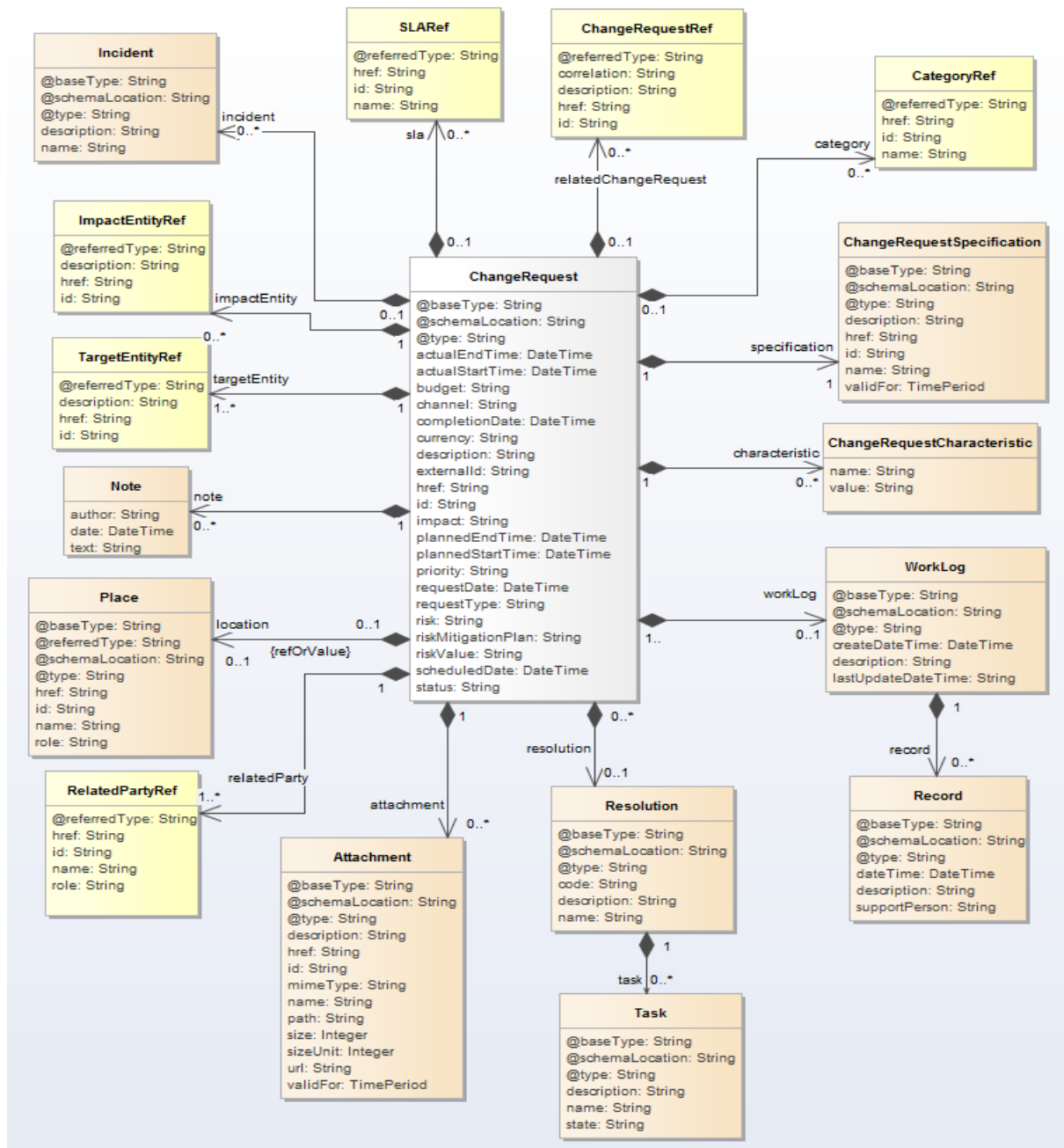


Fig.3. Change Request Resource

1.1.1.1.2 FIELD DESCRIPTIONS

ChangeRequest

Change Request is a type of request which can be used for the management and control of Change Management process between a customer and a service provider or between a service provider and a partner and vice versa.

Fields	Type	Description
@type	String	Indicates the type of resource.
@baseType	String	Indicates the type of resource.
@schemaLocation	String	Link to schema describing this resource.
actualEndTime	DateTime	Date and time when the change implementation is finished actually.
actualStartTime	DateTime	Date and time when the change implementation is started actually.
budget	String	The budget reserved for the change.
channel	String	A String. A channel represents the way the Change Request was created
completionDate	DateTime	A DateTime. Date and time when the change request is confirmed to be completed
currency	String	A String. The used currency related with cost
description	String	A String. Description of the change request.
externalId	String	ID given by the requestor to facilitate the relationship set up and searches afterwards)
href	String	Hyperlink to access a change request
id	String	Identifier of a Change Request, it is created on repository side (Change Management system).
impact	String	Indicates how about the impact by this change
plannedEndTime	DateTime	Date and time when the change implementation is planned to be finished.
plannedStartTime	DateTime	Date and time when the change implementation is planned to be started.
priority	String	A way that can be used by consumers to prioritize change request in Change Management system
requestDate	DateTime	Date and time when the change request is raised
requestType	String	Indicates the type of the change request.
risk	String	The risk to implement this change request.
riskMitigationPlan	String	The risk mitigation plan.
riskValue	String	The additional cost if the risk will happen.
scheduledDate	DateTime	Date and time that the schedule is made.
status	String	Status of the change request and it's a sub-state.
category	CategoryRef	The Category of change request
sla	SLARef	A component that holds details of the SLA being applied to the change request.
characteristic	ChangeRequestCharacteristic	Characteristics of the change request to instantiate or to modify
specification	ChangeRequestSpecifi	Defines a set of attributes related to Change Request.

Fields	Type	Description
	cation	
workLog	WorkLog	A record of the work performed on the change request during the investigation and resolution process.
targetEntity	TargetEntityRef	The entity which will be changed or configured while the change request is executed.
impactEntity	ImpactEntityRef	Defines the entities (product, service, resource, and other related objects) which will be impacted while the change request is executed.
relatedChangeRequest	ChangeRequestRef	An existing Change Request that has some form of correlation with the given Change Request.
location	Place	Used to define a location that is useful for the change request .
note	Note	Defines the additional information of the change request.
resolution	Resolution	The way one or more change request has been implementation through a direct remedy or task.
relatedParty	RelatedPartyRef	Defines parties which are involved in the change request and the role they are playing. It may be the customer, operator or 3 rd party.
attachment	Attachment	A document or other file attached to the information about a Change Request to help explain the change being implemented as part of this Change Request.
incident	Incident	An Incident is a record of an event that has altered the operational state of an entity (Resource, Service or Customer's Product).

Attachment

A document or other file attached to the information about a Change Request to help explain the change being implemented as part of this Change Request.

Fields	Type	Description
@type	String	Indicates the type of resource.
@baseType	String	Indicates the type of resource.
@schemaLocation	String	Link to schema describing this resource.
name	String	The name of attached file in the communication message.
path	String	The path of the attached file in the communication message.
description	String	Description of the attached file
href	String	href of the attached file

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Fields	Type	Description
contentType	String	Multi-purpose Internet Mail Extensions Type
Size	Integer	Size of the attached file
sizeUnit	Integer	Size Unit of the attached file
url	String	URL of the attached file
validFor	TimePeriod	“Valid For” period of the attached file

CategoryRef

The category of the change request.

Fields	Type	Description
@referredType	String	Indicates the type of resource.
name	String	Name of the category.
id	String	Id of the category.
href	String	Hyperlink to access the category.

ChangeRequestCharacteristic

Characteristics of the change request to instantiate or to modify

Fields	Type	Description
name	String	Name of the characteristic.
value	String	Value of the characteristic.

ChangeRequestSpecification

Defines a set of attributes related to Change Request.

Fields	Type	Description
@type	String	Indicates the type of resource.
@baseType	String	Indicates the type of resource.
@schemaLocation	String	Link to schema describing this resource.
description	String	Description of the specification
href	String	Hyperlink to access the specification.
id	String	Identifier of the specification.
name	String	Name of the specification.
validFor	TimePeriod	A valid duration of a thing.

ImpactEntityRef

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Defines the entities (product, service, resource, and other related objects) which will be impacted while the change request is executed.

Fields	Type	Description
@referredType	String	Indicates the type of resource.
description	String	Description and analysis of the impact of the change request on the Product, Service or Resource.
href	String	Hyperlink to access the impacted party, it could be a party reference or a party role reference.
id	String	Identifier of impacted entity.

TargetEntityRef

The entity which will be changed or configured while the change request is executed.

Fields	Type	Description
@referredType	String	Indicates the type of resource.
description	String	The description to the related party.
href	String	Hyperlink to access the target entity.
id	String	Identifier of target entity

Incident

An Incident is a record of an event that has altered the operational state of an entity (Resource, Service or Customer's Product).

Fields	Type	Description
@type	String	Indicates the type of resource.
@baseType	String	Indicates the type of resource.
@schemaLocation	String	Link to schema describing this resource.
description	String	The description of the incident.
name	String	The name of the incident.

Place

Used to define a place that is useful for the change request

Fields	Type	Description
@referredType	String	Indicates the type of resource.
@type	String	Indicates the type of resource.
@baseType	String	Indicates the type of resource.
@schemaLocation	String	Link to schema describing this resource.
id	String	ID of an existing place
href	String	Reference of a place (for instance in google map).
role	String	The role of the place (e.g. delivery address, install site etc.).
name	String	A user-friendly name for the place, such as Paris Store, London Store, Main Home

Note

Defines the additional information of the change request.

Fields	Type	Description
author	String	Indicates who provides the description.
dateTime	DateTime	Date and time when the description was inputted.
text	String	The additional description.

WorkLog

A record of the work performed on the change request during the investigation and resolution process.

Fields	Type	Description
@type	String	Indicates the type of resource.
@baseType	String	Indicates the type of resource.
@schemaLocation	String	Link to schema describing this resource.
createDateTime	DateTime	Date and time of worklog generated.
description	String	The description of the worklog.
lastUpdateDateTime	DateTime	Date and time when the worklog updated.
record	Record	A record in a worklog.

Record

A record in a worklog.

Fields	Type	Description
@type	String	Indicates the type of resource.
@baseType	String	Indicates the type of resource.
@schemaLocation	String	Link to schema describing this resource.
dateTime	DateTime	The date time that a record is generated.
description	String	The detail description in a record.
supportPerson	String	The person who logged that record.

ChangeRequestRef

An existing Change Request that has some form of correlation with the given Change Request.

Fields	Type	Description
@referredType	String	Indicates the type of resource.
correlation	String	The correlation between two change requests
description	String	Description of a change request.
href	String	Hyper link to access a change request.
id	String	Identifier of an Change Request

RelatedPartyRef

Defines parties which are involved in the change request and the role they are playing. It may be the customer, operator or 3rd party.

Fields	Type	Description
@referredType	String	Indicates the type of resource.
href	String	Hyperlink to access a related party.
id	String	Identifier of a related party.
name	String	Name of related party.
role	String	Role of related Party.

Resolution

The way one or more change request has been implementation through a direct remedy or task.

Fields	Type	Description
@type	String	Indicates the type of resource.
@baseType	String	Indicates the type of resource.
@schemaLocation	String	Link to schema describing this resource.
code	String	The resolution's code, it can be configured as a multiple level hierarchy.
description	String	The description of the resolution.
name	String	The name of the resolution
task	Task	A step or task along in the process of implementation a Change Request.

Task

A step or task along in the process of implementation a Change Request.

Fields	Type	Description
@type	String	Indicates the type of resource.
@baseType	String	Indicates the type of resource.
@schemaLocation	String	Link to schema describing this resource.
description	String	The description of the task.
name	String	The name of the task.
state	String	The state of the task.

SLARef

A component that holds details of the SLA being applied to the change request.

Fields	Type	Description
@referredType	String	Indicates the type of resource.
href	String	Hyper link to a SLA
id	String	Identifier of a SLA
name	String	The name of a SLA

1.1.1.1.3**1.1.1.1.4 JSON REPRESENTATION SAMPLE**

We provide below the JSON representation of an example of Change Request Resource object:

```
{
  "id": "20",
  "href": "http://serverlocation:port/changeManagement/changeRequest/20",
  "actualEndTime": "2013-04-19T16:42:23+0800",
  "actualStartTime": "2013-04-19T16:42:23+0800",
  "budget": "1000",
  "@type": "problem",
  "@baseType": "basicRequest",
  "@schemaLocation": " http://serverlocation:port/changeManagement/schema/ problem.yml ",
  "channel": "web",
  "completionDateTime": "2013-04-19T16:42:23+0800",
  "currency": "$",
  "description": "the description of change request",
  "externalId": "ChangeRequest_22",
  "impact": "Non-service affecting",
  "plannedEndTime": "2013-04-19T16:42:23+0800",
  "plannedStartTime": "2013-04-12T16:42:23+0800",
  "priority": "Critical ",
  "requestDate": "2013-04-12T16:42:23+0800",
  "requestType": "Normal",
  "risk": "only 2 engineers have the knowledge to execute the task",
  "riskMitigationPlan": "document encoding with base64",
  "riskValue": "500",
  "scheduledDateTime": "2013-04-12T16:42:23+0800",
  "status": "Scheduled for Approval",
  "sla":[
    {
      "id": "2",
      "href": "http://serverlocation:port/SLAManagement/SLA/2",
      "description": "SLA description",
      "name": "name2"
    },
    {
      "id": "3",
      "href": "http://serverlocation:port/SLAManagement/SLA/3",
      "description": "SLA description",
      "name": "name3"
    }
  ],
  "characteristic": [
    {
      "name": "additionalRequest",
      "value": "text"
    },
    {
      "name": "test",
      "value": "text"
    }
  ],
}
```


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```

"specification": {
  "id": "20",
  "href": "http://serverlocation:port/changeManagement/changerequestspecification/20",
  "name": "ChangeRequestSpec_SiteMaintenance",
  "description": "Change Request Specification for Site Maintenance",
  "validFor":
  {
    "startDateTime": "2013-04-12T16:42:23+0800",
    "endDateTime": "2018-04-12T16:42:23+0800"
  }
},
"workLog": {
  "description": "approved by email from Jack",
  "creatDateTime": "2015-10-23T08:00:06+0800",
  "creatDateTime": "2015-10-24T08:00:06+0800",
  "record": [
    {
      "dateTime": "2015-10-23T08:00:06+0800",
      "description": "receive the change request",
      "supportPerson": "Bob"
    },
    {
      "dateTime": "2015-10-24T08:00:06+0800",
      "description": "Scheduled for Approval",
      "supportPerson": "Bob"
    }
  ]
},
"targetEntity": [
  {
    "id": "11",
    "href": "http://serverlocation:port/serviceInventory/11",
    "description": "This is the target"
  }
],
"impactEntity": [
  {
    "id": "12",
    "href": "http://serverlocation:port/serviceInventory/12",
    "description": "This is a related entity"
  },
  {
    "id": "13",
    "href": "http://serverlocation:port/serviceInventory/13",
    "description": "This is a related entity"
  }
],
"relatedChangeRequest": [
  {
    "id": "19",
    "href": "http://serverlocation:port/changeManagement/changeRequest/19",
    "description": "the former change request",
    "correlation": "former",
  }
],
"note": [

```

Change Management API REST Specification

```

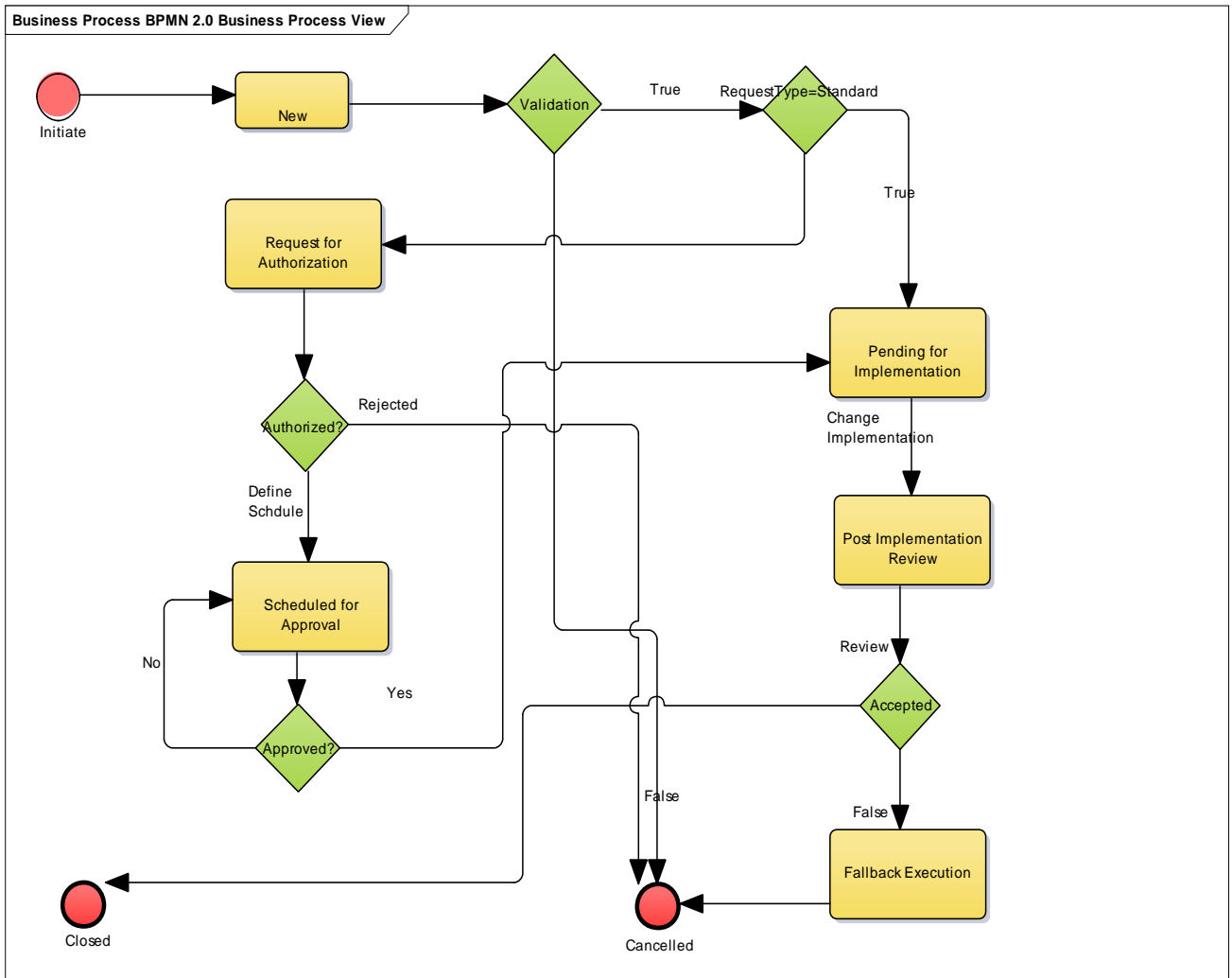
    {
      "text": "CreatedBy John at 2015-10-23T08: 00: 05+0800",
      "dateTime": "2015-10-23T08: 00: 05+0800",
      "author": "John"
    },
    {
      "text": "Approved Smith at 2015-10-23T08: 00: 06+0800",
      "dateTime": "2015-10-23T08: 00: 06+0800",
      "author": "Smith"
    }
  ],
  "relatedParty": [
    {
      "role": "requestor",
      "id": "100",
      "href": "http://serverlocation:port/partyManagement/customer/100",
      "name": "John Doe"
    },
    {
      "role": "currentHandler",
      "id": "101",
      "href": "http://serverlocation:port/partyManagement/customer/101",
      "name": "Pierre"
    }
  ],
  "resolution": {
    "code": "223-112-21-23",
    "description": "need to pause the network",
    "name": "pause network",
    "task": [
      {
        "description": "pause the network",
        "name": "pause",
        "state": "plan to do",
      }
    ]
  },
  "attachment": [
    {
      "id": "121",
      "href": "http://serverlocation:port/attachment/121"
    }
  ],
  "incident": {
    "description": "prepare to pause a network",
    "name": "preparation"
  }
}

```

CHANGE REQUEST LIFECYCLE

Here is the state machine diagram for a change request. Each change request states are described in the tab below.

Change Management API REST Specification



New	The Change Request is submitted.
Request for Authorization	The Change Request is waiting authorization
Scheduled for Approval	The Change Request is scheduled and waiting the approval for execution
Pending for Implementation	The Change Request is approved and waiting for execution according pre-defined schedule.
Post Implementation Review	The Change Request is executed and waiting the review for result
Fallback Execution	The result is not successful and needs to fallback
Cancelled	The Change Request is cancelled

Closed	The Change Request is closed after review.
--------	--

NOTIFICATION RESOURCE MODELS

3 notifications are defined for this API

Notifications related to ChangeRequest:

- ChangeRequestCreationNotification
- ChangeRequestAttributeValueChangeNotification
- ChangeRequestRemoveNotification

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).

CHANGE REQUEST CREATION NOTIFICATION

Notification sent when a new ChangeRequest resource is created.

Json representation sample

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

```
{
  "eventId":"00004",
  "eventTime":"2016-03-01T16:42:25",
  "eventType":"ChangeRequestCreationNotification",
  "event": {
    "ChangeRequest" :
      {-- SEE ChangeRequest RESOURCE SAMPLE --}
  }
}
```

CHANGE REQUEST ATTRIBUTE VALUE CHANGE NOTIFICATION

Notification sent when changing an attribute of a ChangeRequest resource.

Json representation sample

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

```
{
  "eventId":"00005",
  "eventTime":"2016-03-02T16:42:25",
  "eventType":" ChangeRequestAttributeValueChangeNotificationNotification",
  "event": {
    "ChangeRequest" :
      {-- SEE ChangeRequest RESOURCE SAMPLE --}
  }
}
```

CHANGE REQUEST REMOVE NOTIFICATION

Notification sent when changing an attribute of a ChangeRequest resource.

Json representation sample

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

```
{
  "eventId":"00005",
  "eventTime":"2016-03-02T16:42:25",
  "eventType":" ChangeRequestRemoveNotification",
  "event": {
    "ChangeRequest" :
      {-- SEE ChangeRequest RESOURCE SAMPLE --}
  }
}
```

API OPERATIONS

Remember the following Uniform Contract:

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
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
Execute an Action on an Entity	POST on TASK Resource	POST must be used to execute Task Resources
Other Request Methods	POST on TASK Resource	GET and POST must not be used to tunnel other request methods.

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

Notifications are also described in a subsequent section.

GET /CHANGEREQUEST?FIELDS=...&{FILTERING}

Description

This operation list Change Request entities.

Attribute selection is enabled for all first level attributes.

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

Usage Samples

Here's an example of a request for retrieving ChangeRequest resources.

Request
<pre>GET /ChangeManagement/ChangeRequest/fields=id,href,targetEntity,impactedEntity&id=20 Accept: application/json</pre>
Response
<pre>200 [{ "id": "20", "href": "http://serverlocation:port/changeManagement/changeRequest/20", "targetEntity": [{ "id": "11", "href": "http://serverlocation:port/serviceInventory/11", "description": "This is the target" }], "impactEntity": [{ "id": "12", "href": "http://serverlocation:port/serviceInventory/12", "description": "This is a related entity" }, { "id": "13", "href": "http://serverlocation:port/serviceInventory/13", "description": "This is a related entity" }] }]</pre>

GET /CHANGEREQUEST/{ID}?FIELDS=...&{FILTERING}

Description

This operation retrieves a Change Request entity.

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.

Usage Samples

Here's an example of a request for retrieving a ChangeRequest resource.

Request
GET /ChangeManagement/ChangeRequest/19?fields=href,id,description Accept: application/json
Response
200 { "href": "https://host:port/ChangeManagement/ChangeRequest/19", "id": "19", "description": " the description of change request" }

POST /CHANGEREQUEST

Description

This operation creates a Change Request entity.

Usage Samples

Here's an example of a request for creating a ChangeRequest resource. In this example the request only passes mandatory attributes.

Request
POST /ChangeManagement/ChangeRequest Content-Type: application/json {

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```

"status": "New",
"priority": "Critical ",
"changeRequestSpecification": {
  "id": "21",
  "href": "http://serverlocation:port/changeManagement/changerequestspecification/21",
  "name": "ChangeRequestSpec_SiteMaintenance",
  "description": "Change Request Specification for Site Maintenance",
  "validFor":
  {
    "startDateTime": "2013-04-12T16:42:23+0800",
    "endDateTime": "2018-04-12T16:42:23+0800"
  }
},
"targetEntity": [
  {
    "id": "12",
    "href": "http://serverlocation:port/serviceInventory/12",
    "description": "This is the target"
  }
],
}

```

Response

201

```

{
  "id": "21",
  "href": "http://serverlocation:port/changeManagement/changeRequest/21",
  "status": "New",
  "priority": "Critical ",
  "changeRequestSpecification": {
    "id": "21",
    "href": "http://serverlocation:port/changeManagement/changerequestspecification/21",
    "name": "ChangeRequestSpec_SiteMaintenance",
    "description": "Change Request Specification for Site Maintenance",
    "validFor":
    {
      "startDateTime": "2013-04-12T16:42:23+0800",
      "endDateTime": "2018-04-12T16:42:23+0800"
    }
  },
  "targetEntity": [
    {
      "id": "12",
      "href": "http://serverlocation:port/serviceInventory/12",
      "description": "This is the target"
    }
  ],
}

```

PATCH /CHANGEREQUEST/{ID}

Usage Samples

Here's an example of requests for patching a ChangeRequest resource.

Changing the status to 'prospective' (using json-merge)

Request
PATCH /ChangeManagement/ChangeRequest/21 Content-Type: application/merge-patch+json <pre>{ "status": "Request for Authorization" }</pre>
Response
200 <pre>{ "id": "21", "href": "http://serverlocation:port/changeManagement/changeRequest/21", "status": "Request for Authorization", "priority": "Critical ", "changeRequestSpecification": { "id": "21", "href": "http://serverlocation:port/changeManagement/changerequestspecification/21", "name": "ChangeRequestSpec_SiteMaintenance", "description": "Change Request Specification for Site Maintenance", "validFor": { "startDateTime": "2013-04-12T16:42:23+0800", "endDateTime": "2018-04-12T16:42:23+0800" } }, "targetEntity": [{ "id": "12", "href": "http://serverlocation:port/serviceInventory/12", "description": "This is the target" }], }</pre>

DELETE /CHANGEREQUEST/{ID}**Description**

This operation deletes a Change Request entity.

Usage Samples

Here's an example of a request for deleting a ChangeRequest resource.

Request
DELETE /ChangeManagement/ChangeRequest/21
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
<pre>POST /api/hub Accept: application/json {"callback": "http://in.listener.com"}</pre>
Response
<pre>201 Content-Type: application/json Location: /api/hub/42 {"id": "42", "callback": "http://in.listener.com", "query": null}</pre>

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 { "event": { EVENT BODY }, "eventType": "EVENT_TYPE" }
Response
201

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

ACKNOWLEDGEMENTS

VERSION HISTORY

Version Number	Date	Release led by:	Description
1.0	11/28/2016	Pierre Gauthier TM Forum pgauthier@tmforum.org	Version issued for Fx16.5
1.1	12/06/2018	Pierre Gauthier Mariano Belaunde Orange mariano.belaunde@orange.com Hongxia Hao Huawei haohongxia@huawei.com	Fx18.0
2.0	24/02/2018	Hongxia Hao	Updated. Main change points: 1. Aligned with DG3.0, add @attributes. 2. Replace Location entity with Place as Service Inventory API. 3. Replace ChangeRequestAttachment with Attachment as Document API 4. Remove contact info from relatedParty 5. Change category attribute to be CategoryRef 6. Move the Mandatory and Non-Mandatory related description to the conformance profile 7. Modify some typos. 8. Modify some names like RelatedClassRef (suggested by Mariano).
2.0.1	27-Jun-2018	Adrienne Walcott	Formatting/style edits prior to R18 publishing.

RELEASE HISTORY

Release Number	Date	Release led by:	Description
16.5.1	24-Apr-2017		Initial Release
18.0.0	25-Jun-2018		Updated for R18.

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