

# TM Forum Specification

## Test Execution API User Guide

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Direct inquiries to the TM Forum office:

4 Century Drive, Suite 100  
Parsippany, NJ 07054, USA  
Tel No. +1 973 944 5100  
Fax No. +1 973 998 7196  
TM Forum Web Page: [www.tmforum.org](http://www.tmforum.org)

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N/A

# Introduction

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

## SAMPLE USE CASES

The reader will find examples of use cases in TMF913 “Test API Component Suite” document.

# 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. Polymorphism in collections occurs when entities inherit from base entities, for instance `TestCaseExecution` and `TestSuiteExecution` inheriting properties from the abstract `TestExecution` entity.

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. For example, within a list of `TestExecution` instances some may be instances of `TestCaseExecution` where other could be instances of `TestSuiteExecution`. The `@type` gives this information. All resources and sub-resources of this API have a `@type` attributes that can be provided when this is useful.

The `@referredType` can be used within reference entities (like for instance a `TestExecutionRef` object) to explicitly denote the actual entity type of the referred class. Notice that in reference entities the `@type`, when used, denotes the class type of the reference itself, such as `TestCaseExecutionRef` or `TestSuiteExecutionRef`, 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.

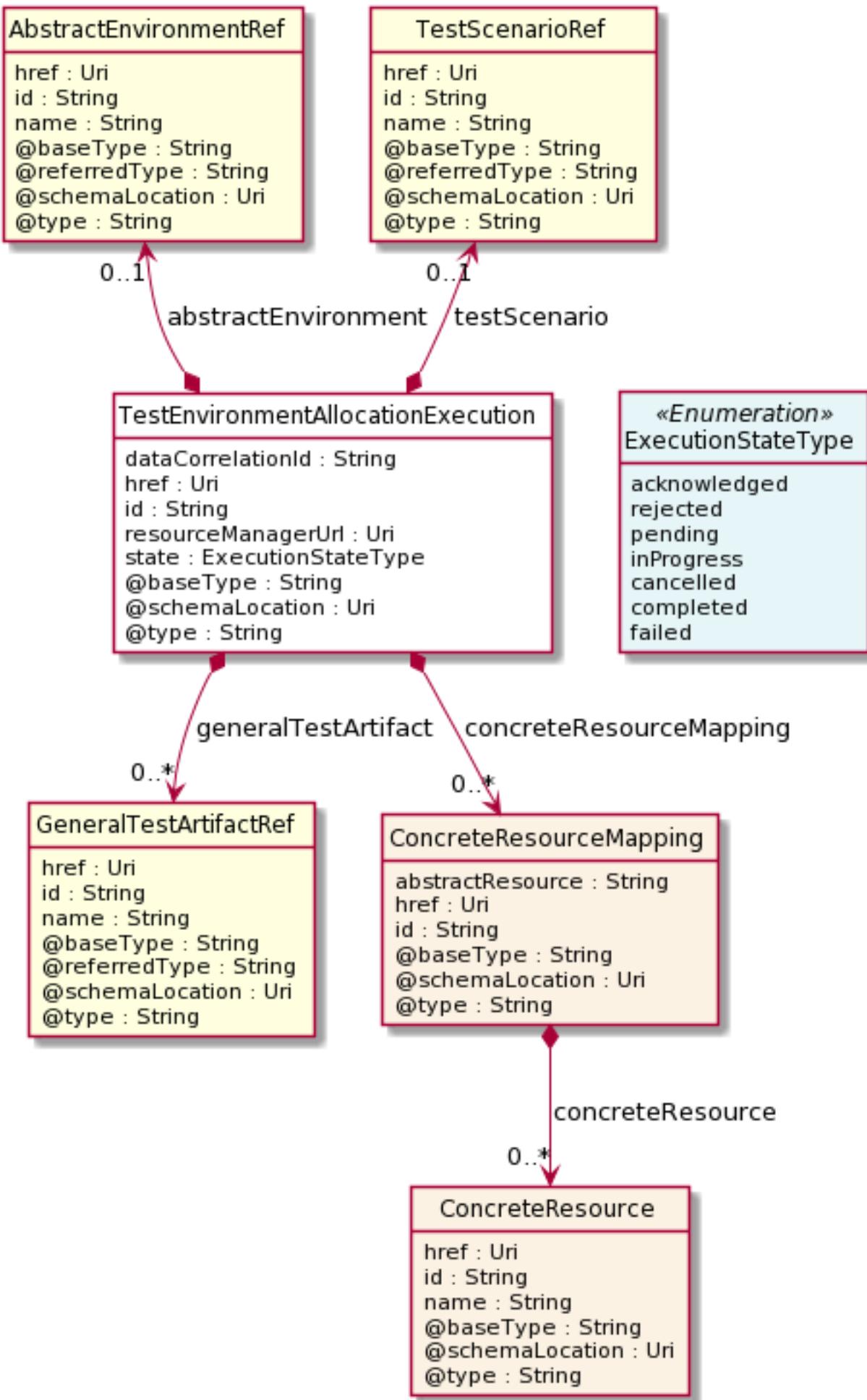
# RESOURCE MODEL

## Managed Entity and Task Resource Models

### Test Environment Allocation Execution resource

REST resource for test environment allocation lifecycle.

#### Resource model



## Field descriptions

### [TestEnvironmentAllocationExecution](#) fields

dataCorrelationId	A string. Data correlation ID passed in by the API consumer.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
abstractEnvironment	An abstract environment reference (AbstractEnvironmentRef). A reference to a managed test abstract environment resource.
concreteResourceMapping	A list of concrete resource mappings (ConcreteResourceMapping [*]). Individual mapping from an abstract resource to a list of concrete resources.
resourceManagerUrl	An uri (Uri).
testScenario	A test scenario reference (TestScenarioRef). A reference to a managed test scenario resource.
generalTestArtifact	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
state	An execution state type (ExecutionStateType). Possible values for the state of the execution.

### [ConcreteResource](#) sub-resource

href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.

@type	A string. When sub-classing, this defines the sub-class Extensible name.
name	A string. Concrete resource name.

#### *ConcreteResourceMapping* sub-resource

Individual mapping from an abstract resource to a list of concrete resources.

href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
abstractResource	A string.
concreteResource	A list of concrete resources (ConcreteResource [*]).

#### *AbstractEnvironmentRef* relationship

A reference to a managed test abstract environment resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

#### *GeneralTestArtifactRef* relationship

A reference to a managed general test artifact resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.

<code>id</code>	A string. unique identifier.
<code>@baseType</code>	A string. When sub-classing, this defines the super-class.
<code>@schemaLocation</code>	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
<code>@type</code>	A string. When sub-classing, this defines the sub-class Extensible name.

#### *TestScenarioRef relationship*

A reference to a managed test scenario resource.

<code>@referredType</code>	A string. The actual type of the target instance when needed for disambiguation.
<code>name</code>	A string. Name of the related entity.
<code>href</code>	An uri (Uri). Hyperlink reference.
<code>id</code>	A string. unique identifier.
<code>@baseType</code>	A string. When sub-classing, this defines the super-class.
<code>@schemaLocation</code>	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
<code>@type</code>	A string. When sub-classing, this defines the sub-class Extensible name.

#### **Json representation sample**

We provide below the json representation of an example of a 'TestEnvironmentAllocationExecution' resource object

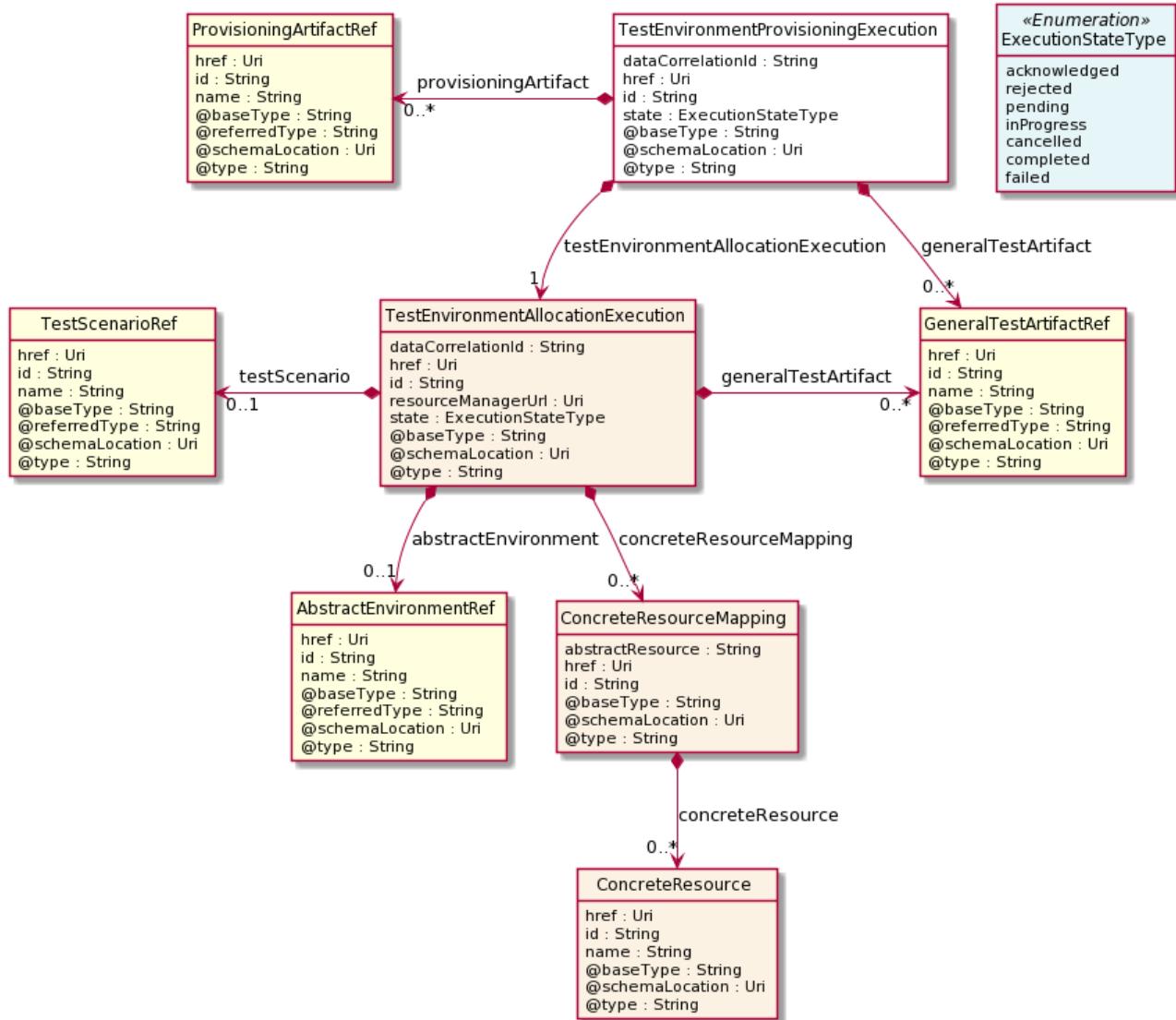
```
{
  "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
  "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01ccf12cd",
  "resourceManagerUrl": "https://myserver.com/resourceManager",
  "testScenario": {
    "id": "35776d4f-1851-435c-8573-802438f41e7a",
    "href": "https://mycsp:8080/tmf-api/testScenario/v4/testScenario/35776d4f-1851-435c-8573-802438f41e7a",
    "@referredType": "TestScenario"
  },
  "concreteResourceMapping": [
    {
      "abstractResource": "phone",
      "concreteResource": [
        {
          "name": "iPhone_1289"
        }
      ]
    }
  ]
}
```

```
],
  "state": "completed",
  "@baseType": "Execution",
  "@type": "TestEnvironmentAllocationExecution"
}
```

## Test Environment Provisioning Execution resource

REST resource for test environment provisioning lifecycle.

### Resource model



### Field descriptions

#### TestEnvironmentProvisioningExecution fields

`dataCorrelationId`

A string. Data correlation ID passed in by the API consumer.

href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
provisioningArtifact	A list of provisioning artifact references (ProvisioningArtifactRef [*]). A reference to a managed provisioning artifact resource.
testEnvironmentAllocationExecution	A test environment allocation execution (TestEnvironmentAllocationExecution). REST resource for test environment allocation lifecycle.
generalTestArtifact	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
state	An execution state type (ExecutionStateType). Possible values for the state of the execution.

#### ConcreteResource sub-resource

href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
name	A string. Concrete resource name.

#### ConcreteResourceMapping sub-resource

Individual mapping from an abstract resource to a list of concrete resources.

href	An uri (Uri). Hyperlink reference.
------	------------------------------------

<b>id</b>	A string. unique identifier.
<b>@baseType</b>	A string. When sub-classing, this defines the super-class.
<b>@schemaLocation</b>	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
<b>@type</b>	A string. When sub-classing, this defines the sub-class Extensible name.
<b>abstractResource</b>	A string.
<b>concreteResource</b>	A list of concrete resources (ConcreteResource [*]).

#### *TestEnvironmentAllocationExecution* sub-resource

REST resource for test environment allocation lifecycle.

<b>dataCorrelationId</b>	A string. Data correlation ID passed in by the API consumer.
<b>href</b>	An uri (Uri). Hyperlink reference.
<b>id</b>	A string. unique identifier.
<b>@baseType</b>	A string. When sub-classing, this defines the super-class.
<b>@schemaLocation</b>	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
<b>@type</b>	A string. When sub-classing, this defines the sub-class Extensible name.
<b>abstractEnvironment</b>	An abstract environment reference (AbstractEnvironmentRef). A reference to a managed test abstract environment resource.
<b>concreteResourceMapping</b>	A list of concrete resource mappings (ConcreteResourceMapping [*]). Individual mapping from an abstract resource to a list of concrete resources.
<b>resourceManagerUrl</b>	An uri (Uri).
<b>testScenario</b>	A test scenario reference (TestScenarioRef). A reference to a managed test scenario resource.
<b>generalTestArtifact</b>	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
<b>state</b>	An execution state type (ExecutionStateType). Possible values for the state of the execution.

### *AbstractEnvironmentRef relationship*

A reference to a managed test abstract environment resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

### *GeneralTestArtifactRef relationship*

A reference to a managed general test artifact resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

### *ProvisioningArtifactRef relationship*

A reference to a managed provisioning artifact resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.

@schemaLocation An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.

@type A string. When sub-classing, this defines the sub-class Extensible name.

#### TestScenarioRef relationship

A reference to a managed test scenario resource.

@referredType A string. The actual type of the target instance when needed for disambiguation.

name A string. Name of the related entity.

href An uri (Uri). Hyperlink reference.

id A string. unique identifier.

@baseType A string. When sub-classing, this defines the super-class.

@schemaLocation An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.

@type A string. When sub-classing, this defines the sub-class Extensible name.

#### **Json representation sample**

We provide below the json representation of an example of a 'TestEnvironmentProvisioningExecution' resource object

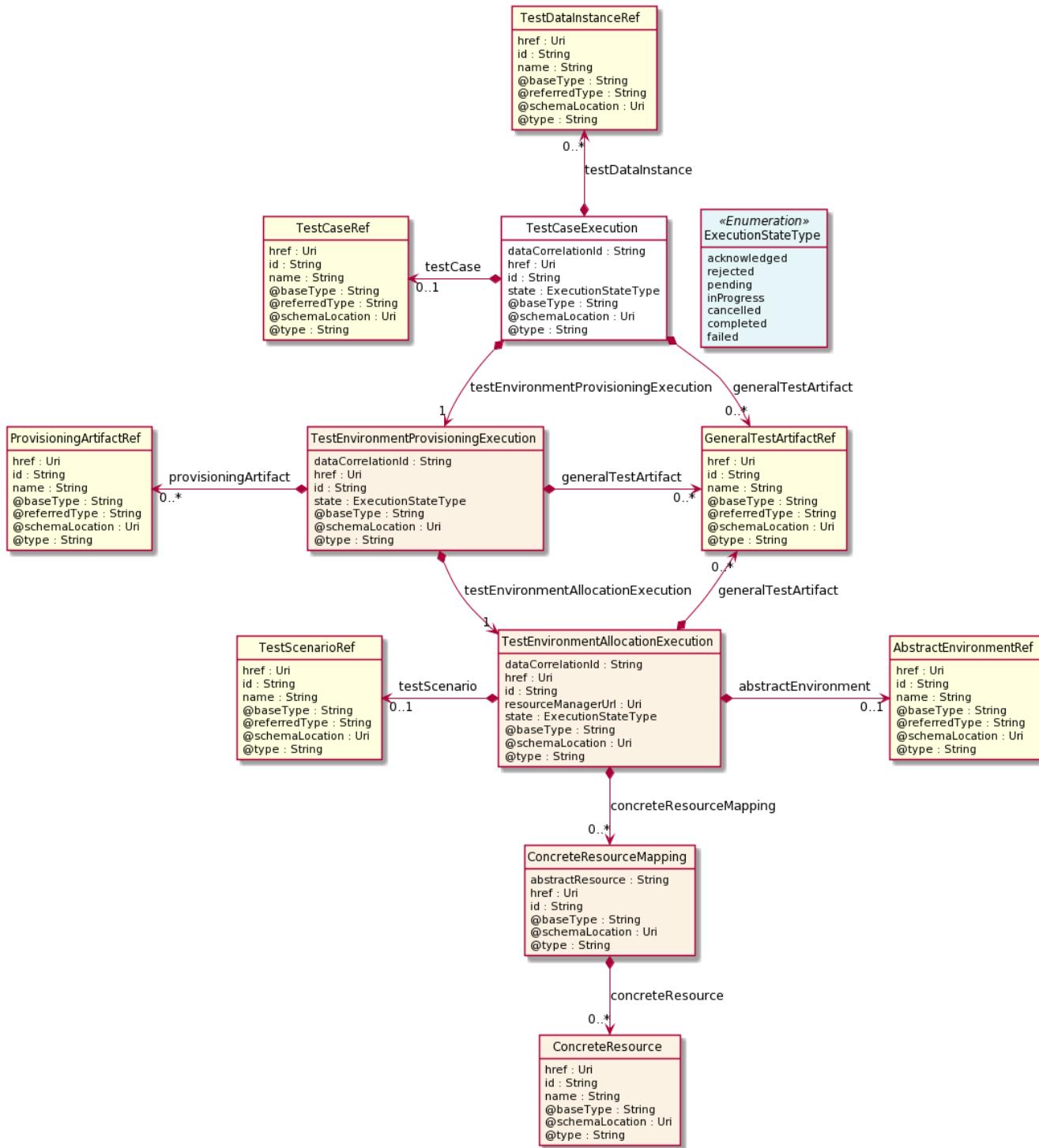
```
{
  "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d",
  "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
  "provisioningArtifact": [
    {
      "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-835242ee505a",
      "@referredType": "ProvisioningArtifact"
    }
  ],
  "testEnvironmentAllocationExecution": {
    "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
    "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",
    "resourceManagerUrl": "https://myserver.com/resourceManager",
    "abstractEnvironment": {
      "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
      "@referredType": "AbstractEnvironment"
    }
  }
}
```

```
},
"concreteResourceMapping": [
  {
    "abstractResource": "phone",
    "concreteResources": [
      {
        "name": "iPhone_1289"
      }
    ]
  }
],
"state": "completed",
"@baseType": "Execution",
"@type": "TestEnvironmentAllocationExecution"
},
"state": "completed",
"@baseType": "Execution",
"@type": "TestEnvironmentProvisioningExecution"
}
```

## Test Case Execution resource

REST resource for the test case execution lifecycle.

### Resource model



## Field descriptions

### TestCaseExecution fields

<code>dataCorrelationId</code>	A string. Data correlation ID passed in by the API consumer.
<code>href</code>	An uri (Uri). Hyperlink reference.

id	A string. unique identifier.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
testCase	A test case reference (TestCaseRef). A reference to a managed test case artifact.
testDataInstance	A list of test data instance references (TestDataInstanceRef [*]). A reference to a managed test data instance resource.
testEnvironmentProvisioningExecution	A test environment provisioning execution (TestEnvironmentProvisioningExecution). REST resource for test environment provisioning lifecycle.
generalTestArtifact	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
state	An execution state type (ExecutionStateType). Possible values for the state of the execution.

#### ConcreteResource sub-resource

href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
name	A string. Concrete resource name.

#### ConcreteResourceMapping sub-resource

Individual mapping from an abstract resource to a list of concrete resources.

href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
abstractResource	A string.
concreteResource	A list of concrete resources (ConcreteResource [*]).

#### TestEnvironmentAllocationExecution sub-resource

REST resource for test environment allocation lifecycle.

dataCorrelationId	A string. Data correlation ID passed in by the API consumer.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
abstractEnvironment	An abstract environment reference (AbstractEnvironmentRef). A reference to a managed test abstract environment resource.
concreteResourceMapping	A list of concrete resource mappings (ConcreteResourceMapping [*]). Individual mapping from an abstract resource to a list of concrete resources.
resourceManagerUrl	An uri (Uri).
testScenario	A test scenario reference (TestScenarioRef). A reference to a managed test scenario resource.
generalTestArtifact	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
state	An execution state type (ExecutionStateType). Possible values for the state of the execution.

#### TestEnvironmentProvisioningExecution sub-resource

REST resource for test environment provisioning lifecycle.

<code>dataCorrelationId</code>	A string. Data correlation ID passed in by the API consumer.
<code>href</code>	An uri (Uri). Hyperlink reference.
<code>id</code>	A string. unique identifier.
<code>@baseType</code>	A string. When sub-classing, this defines the super-class.
<code>@schemaLocation</code>	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
<code>@type</code>	A string. When sub-classing, this defines the sub-class Extensible name.
<code>provisioningArtifact</code>	A list of provisioning artifact references (ProvisioningArtifactRef [*]). A reference to a managed provisioning artifact resource.
<code>testEnvironmentAllocationExecution</code>	A test environment allocation execution (TestEnvironmentAllocationExecution). REST resource for test environment allocation lifecycle.
<code>generalTestArtifact</code>	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
<code>state</code>	An execution state type (ExecutionStateType). Possible values for the state of the execution.

#### *AbstractEnvironmentRef relationship*

A reference to a managed test abstract environment resource.

<code>@referredType</code>	A string. The actual type of the target instance when needed for disambiguation.
<code>name</code>	A string. Name of the related entity.
<code>href</code>	An uri (Uri). Hyperlink reference.
<code>id</code>	A string. unique identifier.
<code>@baseType</code>	A string. When sub-classing, this defines the super-class.
<code>@schemaLocation</code>	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
<code>@type</code>	A string. When sub-classing, this defines the sub-class Extensible name.

#### *GeneralTestArtifactRef relationship*

A reference to a managed general test artifact resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

#### ProvisioningArtifactRef relationship

A reference to a managed provisioning artifact resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

#### TestCaseRef relationship

A reference to a managed test case artifact.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.

**@type** A string. When sub-classing, this defines the sub-class Extensible name.

#### [TestDataInstanceRef relationship](#)

A reference to a managed test data instance resource.

**@referredType** A string. The actual type of the target instance when needed for disambiguation.

**name** A string. Name of the related entity.

**href** An uri (Uri). Hyperlink reference.

**id** A string. unique identifier.

**@baseType** A string. When sub-classing, this defines the super-class.

**@schemaLocation** An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.

**@type** A string. When sub-classing, this defines the sub-class Extensible name.

#### [TestScenarioRef relationship](#)

A reference to a managed test scenario resource.

**@referredType** A string. The actual type of the target instance when needed for disambiguation.

**name** A string. Name of the related entity.

**href** An uri (Uri). Hyperlink reference.

**id** A string. unique identifier.

**@baseType** A string. When sub-classing, this defines the super-class.

**@schemaLocation** An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.

**@type** A string. When sub-classing, this defines the sub-class Extensible name.

#### **Json representation sample**

We provide below the json representation of an example of a 'TestCaseExecution' resource object

```
{
  "id": "1a522dd3-83c9-411b-9fd6-c375a7856621",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testCaseExecution/1a522dd3-83c9-411b-9fd6-c375a7856621",
  "dataCorrelationId": "77d3aa51-d90b-4c04-aa28-950fe2874bc7",
  "testCase": {
    "id": "aac9969d-219d-4ff1-b256-1765dcf9b342",
```

```
"href": "https://mycsp:8080/tmf-api/testCase/v4/testCase/aac9969d-219d-4ff1-b256-1765dcf9b342",
"@referredType": "TestCase"
},
"generalTestArtifact": [
{
"id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",
"href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-
dd86a40b8974",
"@referredType": "GeneralTestArtifact"
}
],
"testDataInstance": [
{
"id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
"href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
"@referredType": "TestDataInstance"
}
],
"TestEnvironmentProvisioningExecution": {
"id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
"href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-
4cb6-b608-5b28d5d73a8d",
"dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
"testEnvironmentAllocationExecution": {
"id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
"href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-
b64e-93f8db9b614a",
"dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",
"resourceManagerUrl": "https://myserver.com/resourceManager",
"testScenario": {
"id": "35776d4f-1851-435c-8573-802438f41e7a",
"href": "https://mycsp:8080/tmf-api/testScenario/v4/testScenario/35776d4f-1851-435c-8573-802438f41e7a",
"@referredType": "TestScenario"
},
"concreteResourceMapping": [
{
"abstractResource": "phone",
"concreteResources": [
{
"name": "iPhone_1289"
}
]
}
],
"state": "completed",
"@baseType": "Execution",
"@type": "TestEnvironmentAllocationExecution"
},
"state": "completed",
"@baseType": "Execution",
"@type": "TestEnvironmentProvisioningExecution"
},
"state": "completed",
"@baseType": "TestExecution",
"
```

```

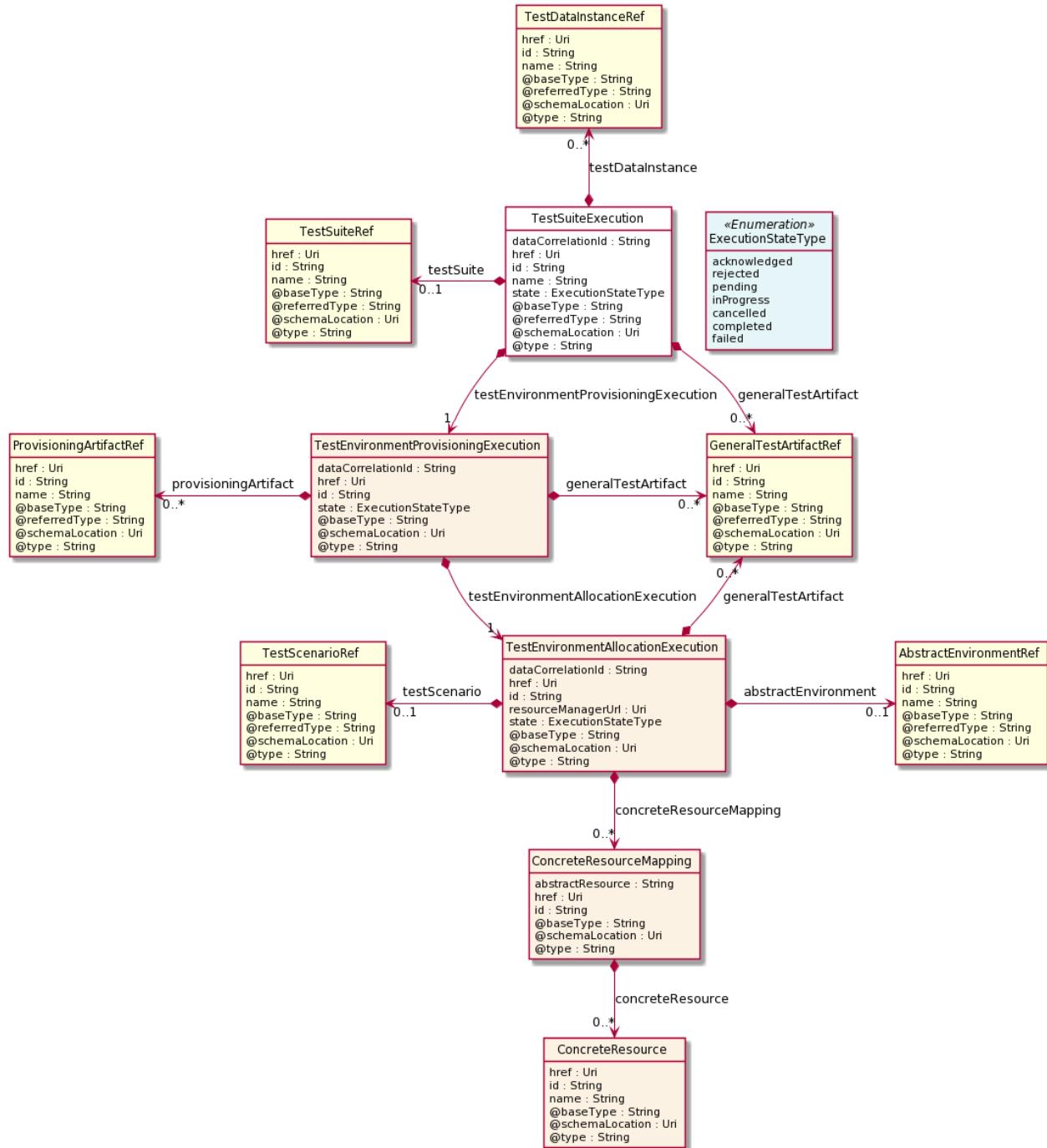
    "@type": "TestCaseExecution"
}

```

## Test Suite Execution resource

REST resource for the test suite execution lifecycle.

### Resource model



## Field descriptions

### TestSuiteExecution fields

dataCorrelationId	A string. Data correlation ID passed in by the API consumer.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
testSuite	A test suite reference (TestSuiteRef). A reference to a managed test suite resource.
testDataInstance	A list of test data instance references (TestDataInstanceRef [*]). A reference to a managed test data instance resource.
testEnvironmentProvisioningExecution	A test environment provisioning execution (TestEnvironmentProvisioningExecution). REST resource for test environment provisioning lifecycle.
generalTestArtifact	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
state	An execution state type (ExecutionStateType). Possible values for the state of the execution.

### ConcreteResource sub-resource

href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.

@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
name	A string. Concrete resource name.

#### ConcreteResourceMapping sub-resource

Individual mapping from an abstract resource to a list of concrete resources.

href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
abstractResource	A string.
concreteResource	A list of concrete resources (ConcreteResource [*]).

#### TestEnvironmentAllocationExecution sub-resource

REST resource for test environment allocation lifecycle.

dataCorrelationId	A string. Data correlation ID passed in by the API consumer.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
abstractEnvironment	An abstract environment reference (AbstractEnvironmentRef). A reference to a managed test abstract environment resource.
concreteResourceMapping	A list of concrete resource mappings (ConcreteResourceMapping [*]). Individual mapping from an abstract resource to a list of concrete resources.

resourceManagerUrl	An uri (Uri).
testScenario	A test scenario reference (TestScenarioRef). A reference to a managed test scenario resource.
generalTestArtifact	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
state	An execution state type (ExecutionStateType). Possible values for the state of the execution.

#### *TestEnvironmentProvisioningExecution sub-resource*

REST resource for test environment provisioning lifecycle.

dataCorrelationId	A string. Data correlation ID passed in by the API consumer.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
provisioningArtifact	A list of provisioning artifact references (ProvisioningArtifactRef [*]). A reference to a managed provisioning artifact resource.
testEnvironmentAllocationExecution	A test environment allocation execution (TestEnvironmentAllocationExecution). REST resource for test environment allocation lifecycle.
generalTestArtifact	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
state	An execution state type (ExecutionStateType). Possible values for the state of the execution.

#### *AbstractEnvironmentRef relationship*

A reference to a managed test abstract environment resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.

href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

#### *GeneralTestArtifactRef relationship*

A reference to a managed general test artifact resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

#### *ProvisioningArtifactRef relationship*

A reference to a managed provisioning artifact resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

### *TestDataInstanceRef relationship*

A reference to a managed test data instance resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

### *TestScenarioRef relationship*

A reference to a managed test scenario resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

### *TestSuiteRef relationship*

A reference to a managed test suite resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.

**@schemaLocation** An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.

**@type** A string. When sub-classing, this defines the sub-class Extensible name.

### Json representation sample

We provide below the json representation of an example of a 'TestSuiteExecution' resource object

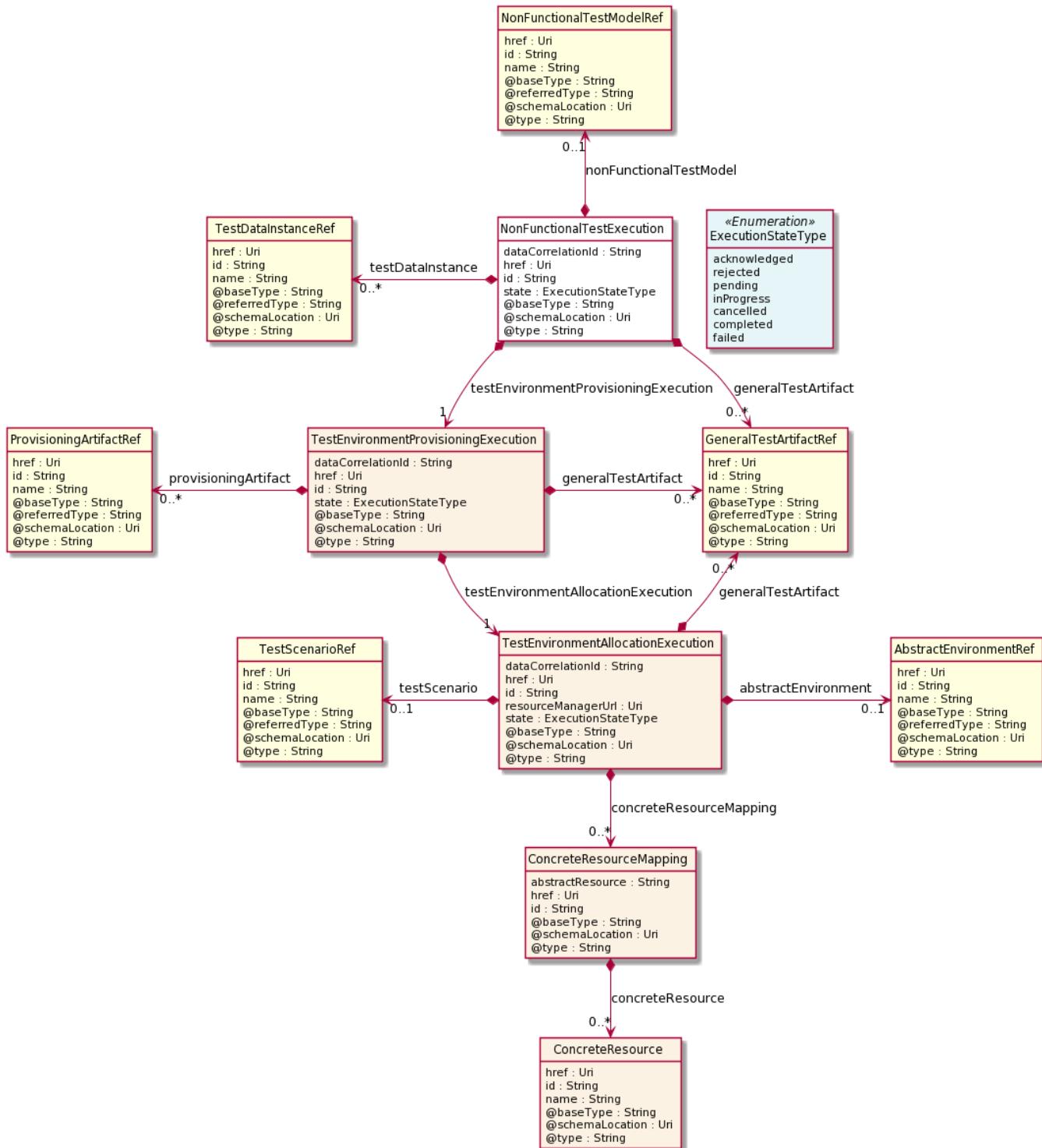
```
{
  "id": "48c76edf-31fc-4f2b-a409-1e80c8b13124",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testSuiteExecution/48c76edf-31fc-4f2b-a409-1e80c8b13124",
  "dataCorrelationId": "77d3aa51-d90b-4c04-aa28-950fe2874bc7",
  "testSuite": {
    "id": "4cb18d40-a35f-4261-a9e9-20ab58498c42",
    "href": "https://mycsp:8080/tmf-api/testCase/v4/testSuite/4cb18d40-a35f-4261-a9e9-20ab58498c42",
    "@referredType": "TestSuite"
  },
  "generalTestArtifact": [
    {
      "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",
      "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-dd86a40b8974",
      "@referredType": "GeneralTestArtifact"
    }
  ],
  "testDataInstance": [
    {
      "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
      "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
      "@referredType": "TestDataInstance"
    }
  ],
  "TestEnvironmentProvisioningExecution": {
    "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d",
    "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
    "testEnvironmentAllocationExecution": {
      "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
      "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
      "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cccf12cd",
      "resourceManagerUrl": "https://myserver.com/resourceManager",
      "testScenario": {
        "id": "35776d4f-1851-435c-8573-802438f41e7a",
        "href": "https://mycsp:8080/tmf-api/testScenario/v4/testScenario/35776d4f-1851-435c-8573-802438f41e7a",
        "@referredType": "TestScenario"
      },
      "concreteResourceMapping": [
        {
          "abstractResource": "phone",
          "concreteResources": [
            {
              "id": "35776d4f-1851-435c-8573-802438f41e7a"
            }
          ]
        }
      ]
    }
  }
}
```

```
        "name": "iPhone_1289"
    }
]
}
],
"state": "completed",
"@baseType": "Execution",
"@type": "TestEnvironmentAllocationExecution"
},
"state": "completed",
"@baseType": "Execution",
"@type": "TestEnvironmentProvisioningExecution"
},
"state": "completed",
"@baseType": "TestExecution",
"@type": "TestSuiteExecution"
}
```

## Non Functional Test Execution resource

REST resource for the non-functional test execution lifecycle.

### Resource model



## Field descriptions

### NonFunctionalTestExecution fields

<code>dataCorrelationId</code>	A string. Data correlation ID passed in by the API consumer.
<code>href</code>	An uri (Uri). Hyperlink reference.

<b>id</b>	A string. unique identifier.
<b>href</b>	An uri (Uri). Hyperlink reference.
<b>id</b>	A string. unique identifier.
<b>@baseType</b>	A string. When sub-classing, this defines the super-class.
<b>@schemaLocation</b>	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
<b>@type</b>	A string. When sub-classing, this defines the sub-class Extensible name.
<b>nonFunctionalTestModel</b>	A non functional test model reference (NonFunctionalTestModelRef). A reference to a managed non-functional test model resource.
<b>testDataInstance</b>	A list of test data instance references (TestDataInstanceRef [*]). A reference to a managed test data instance resource.
<b>testEnvironmentProvisioningExecution</b>	A test environment provisioning execution (TestEnvironmentProvisioningExecution). REST resource for test environment provisioning lifecycle.
<b>generalTestArtifact</b>	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
<b>state</b>	An execution state type (ExecutionStateType). Possible values for the state of the execution.

#### ConcreteResource sub-resource

<b>href</b>	An uri (Uri). Hyperlink reference.
<b>id</b>	A string. unique identifier.
<b>@baseType</b>	A string. When sub-classing, this defines the super-class.
<b>@schemaLocation</b>	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
<b>@type</b>	A string. When sub-classing, this defines the sub-class Extensible name.
<b>name</b>	A string. Concrete resource name.

#### ConcreteResourceMapping sub-resource

Individual mapping from an abstract resource to a list of concrete resources.

href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
abstractResource	A string.
concreteResource	A list of concrete resources (ConcreteResource [*]).

#### TestEnvironmentAllocationExecution sub-resource

REST resource for test environment allocation lifecycle.

dataCorrelationId	A string. Data correlation ID passed in by the API consumer.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
abstractEnvironment	An abstract environment reference (AbstractEnvironmentRef). A reference to a managed test abstract environment resource.
concreteResourceMapping	A list of concrete resource mappings (ConcreteResourceMapping [*]). Individual mapping from an abstract resource to a list of concrete resources.
resourceManagerUrl	An uri (Uri).
testScenario	A test scenario reference (TestScenarioRef). A reference to a managed test scenario resource.
generalTestArtifact	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
state	An execution state type (ExecutionStateType). Possible values for the state of the execution.

### *TestEnvironmentProvisioningExecution* sub-resource

REST resource for test environment provisioning lifecycle.

dataCorrelationId	A string. Data correlation ID passed in by the API consumer.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.
provisioningArtifact	A list of provisioning artifact references (ProvisioningArtifactRef [*]). A reference to a managed provisioning artifact resource.
testEnvironmentAllocationExecution	A test environment allocation execution (TestEnvironmentAllocationExecution). REST resource for test environment allocation lifecycle.
generalTestArtifact	A list of general test artifact references (GeneralTestArtifactRef [*]). A reference to a managed general test artifact resource.
state	An execution state type (ExecutionStateType). Possible values for the state of the execution.

### *AbstractEnvironmentRef* relationship

A reference to a managed test abstract environment resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

### [GeneralTestArtifactRef relationship](#)

A reference to a managed general test artifact resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

### [NonFunctionalTestModelRef relationship](#)

A reference to a managed non-functional test model resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.
@schemaLocation	An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.
@type	A string. When sub-classing, this defines the sub-class Extensible name.

### [ProvisioningArtifactRef relationship](#)

A reference to a managed provisioning artifact resource.

@referredType	A string. The actual type of the target instance when needed for disambiguation.
name	A string. Name of the related entity.
href	An uri (Uri). Hyperlink reference.
id	A string. unique identifier.
@baseType	A string. When sub-classing, this defines the super-class.

@schemaLocation An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.

@type A string. When sub-classing, this defines the sub-class Extensible name.

#### TestDataInstanceRef relationship

A reference to a managed test data instance resource.

@referredType A string. The actual type of the target instance when needed for disambiguation.

name A string. Name of the related entity.

href An uri (Uri). Hyperlink reference.

id A string. unique identifier.

@baseType A string. When sub-classing, this defines the super-class.

@schemaLocation An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.

@type A string. When sub-classing, this defines the sub-class Extensible name.

#### TestScenarioRef relationship

A reference to a managed test scenario resource.

@referredType A string. The actual type of the target instance when needed for disambiguation.

name A string. Name of the related entity.

href An uri (Uri). Hyperlink reference.

id A string. unique identifier.

@baseType A string. When sub-classing, this defines the super-class.

@schemaLocation An uri (Uri). A URI to a JSON-Schema file that defines additional attributes and relationships.

@type A string. When sub-classing, this defines the sub-class Extensible name.

#### **Json representation sample**

We provide below the json representation of an example of a 'NonFunctionalTestExecution' resource object

```
{
  "id": "195dae44-a433-49bf-a15b-9ab198dad0e2",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/nonFunctionalTestExecution/195dae44-a433-49bf-a15b-9ab198dad0e2",
  "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
```

```
"nonFunctionalTestModel": {
    "id": "16db32a3-e008-401b-8168-4ebac788f9d8",
    "href": "https://mycsp:8080/tmf-api/testCase/v4/nonFunctionalTestModel/16db32a3-e008-401b-8168-4ebac788f9d8",
    "@referredType": "NonFunctionalTestModel"
},
"generalTestArtifact": [
    {
        "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",
        "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-dd86a40b8974",
        "@referredType": "GeneralTestArtifact"
    }
],
"testDataInstance": [
    {
        "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
        "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
        "@referredType": "TestDataInstance"
    }
],
"TestEnvironmentProvisioningExecution": {
    "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d",
    "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
    "testEnvironmentAllocationExecution": {
        "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
        "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
        "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",
        "resourceManagerUrl": "https://myserver.com/resourceManager",
        "testScenario": {
            "id": "35776d4f-1851-435c-8573-802438f41e7a",
            "href": "https://mycsp:8080/tmf-api/testScenario/v4/testScenario/35776d4f-1851-435c-8573-802438f41e7a",
            "@referredType": "TestScenario"
        },
        "concreteResourceMapping": [
            {
                "abstractResource": "phone",
                "concreteResources": [
                    {
                        "name": "iPhone_1289"
                    }
                ]
            }
        ],
        "state": "completed",
        "@baseType": "Execution",
        "@type": "TestEnvironmentAllocationExecution"
    },
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentProvisioningExecution"
},
"state": "completed",
"@baseType": "Execution",
"@type": "TestEnvironmentProvisioningExecution"
},
```

```
    "state": "completed",
    "@baseType": "TestExecution",
    "@type": "NonFunctionalTestExecution"
}
```

## Notification Resource Models

15 notifications are defined for this API

Notifications related to TestEnvironmentAllocationExecution:

- TestEnvironmentAllocationExecutionCreateEvent
- TestEnvironmentAllocationExecutionDeleteEvent
- TestEnvironmentAllocationExecutionStateChangeEvent

Notifications related to TestEnvironmentProvisioningExecution:

- TestEnvironmentProvisioningExecutionCreateEvent
- TestEnvironmentProvisioningExecutionDeleteEvent
- TestEnvironmentProvisioningExecutionStateChangeEvent

Notifications related to TestCaseExecution:

- TestCaseExecutionCreateEvent
- TestCaseExecutionDeleteEvent
- TestCaseExecutionStateChangeEvent

Notifications related to TestSuiteExecution:

- TestSuiteExecutionCreateEvent
- TestSuiteExecutionDeleteEvent
- TestSuiteExecutionStateChangeEvent

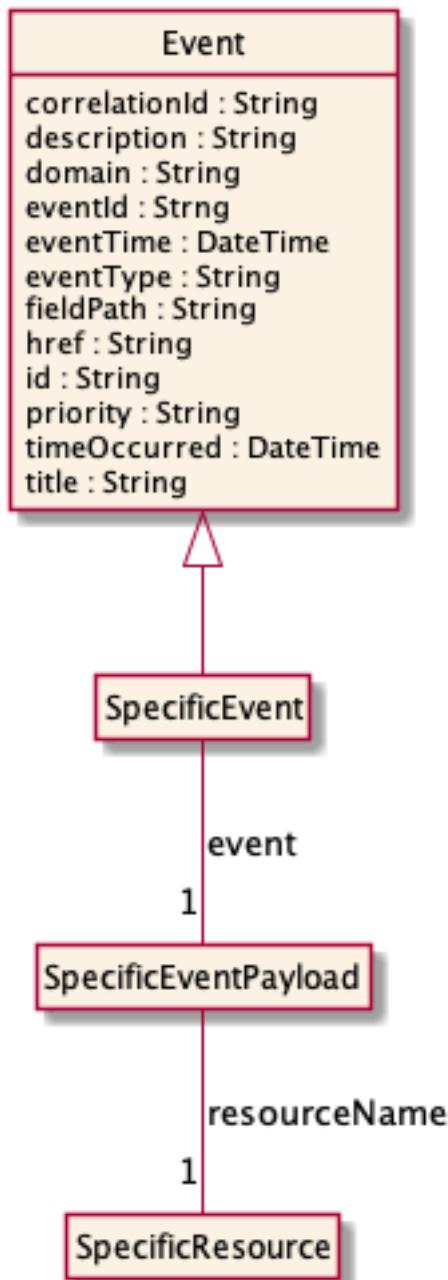
Notifications related to NonFunctionalTestExecution:

- NonFunctionalTestExecutionCreateEvent
- NonFunctionalTestExecutionDeleteEvent
- NonFunctionalTestExecutionStateChangeEvent

The notification structure for all notifications in this API follow the pattern depicted by the figure below.

A notification event resource (depicted by "SpecificEvent" placeholder) is a sub class of a generic Event structure containing at least an id of the event occurrence (eventId), an event timestamp (eventTime), and the name of the resource (eventType).

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



## Test Environment Allocation Execution Create Event

Notification TestEnvironmentAllocationExecutionCreateEvent case for resource  
TestEnvironmentAllocationExecution

### Json representation sample

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

```
{
  "eventId":"00001",
```

```
"eventTime":"2015-11-16T16:42:25-04:00",
"eventType":"TestEnvironmentAllocationExecutionCreateEvent",
"event": {
  "testEnvironmentAllocationExecution" :
    {-- SEE TestEnvironmentAllocationExecution RESOURCE SAMPLE --}
}
```

## Test Environment Allocation Execution Delete Event

Notification TestEnvironmentAllocationExecutionDeleteEvent case for resource  
TestEnvironmentAllocationExecution

### Json representation sample

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

```
{
  "eventId":"00001",
  "eventTime":"2015-11-16T16:42:25-04:00",
  "eventType":"TestEnvironmentAllocationExecutionDeleteEvent",
  "event": {
    "testEnvironmentAllocationExecution" :
      {-- SEE TestEnvironmentAllocationExecution RESOURCE SAMPLE --}
  }
}
```

## Test Environment Allocation Execution State Change Event

Notification TestEnvironmentAllocationExecutionStateChangeEvent case for resource  
TestEnvironmentAllocationExecution

### Json representation sample

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

```
{
  "eventId":"00001",
  "eventTime":"2015-11-16T16:42:25-04:00",
  "eventType":"TestEnvironmentAllocationExecutionStateChangeEvent",
  "event": {
    "testEnvironmentAllocationExecution" :
      {-- SEE TestEnvironmentAllocationExecution RESOURCE SAMPLE --}
  }
}
```

## Test Environment Provisioning Execution Create Event

Notification TestEnvironmentProvisioningExecutionCreateEvent case for resource  
TestEnvironmentProvisioningExecution

### Json representation sample

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

```
{  
  "eventId":"00001",  
  "eventTime":"2015-11-16T16:42:25-04:00",  
  "eventType":"TestEnvironmentProvisioningExecutionCreateEvent",  
  "event": {  
    "testEnvironmentProvisioningExecution" :  
      {-- SEE TestEnvironmentProvisioningExecution RESOURCE SAMPLE --}  
  }  
}
```

## Test Environment Provisioning Execution Delete Event

Notification TestEnvironmentProvisioningExecutionDeleteEvent case for resource  
TestEnvironmentProvisioningExecution

### Json representation sample

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

```
{  
  "eventId":"00001",  
  "eventTime":"2015-11-16T16:42:25-04:00",  
  "eventType":"TestEnvironmentProvisioningExecutionDeleteEvent",  
  "event": {  
    "testEnvironmentProvisioningExecution" :  
      {-- SEE TestEnvironmentProvisioningExecution RESOURCE SAMPLE --}  
  }  
}
```

## Test Environment Provisioning Execution State Change Event

Notification TestEnvironmentProvisioningExecutionStateChangeEvent case for resource  
TestEnvironmentProvisioningExecution

### Json representation sample

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

```
{  
  "eventId":"00001",  
  "eventTime":"2015-11-16T16:42:25-04:00",  
  "eventType":"TestEnvironmentProvisioningExecutionStateChangeEvent",  
  "event": {  
    "testEnvironmentProvisioningExecution" :  
      {-- SEE TestEnvironmentProvisioningExecution RESOURCE SAMPLE --}  
  }  
}
```

## Test Case Execution Create Event

Notification TestCaseExecutionCreateEvent case for resource TestCaseExecution

### Json representation sample

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

```
{  
  "eventId":"00001",  
  "eventTime":"2015-11-16T16:42:25-04:00",  
  "eventType":"TestCaseExecutionCreateEvent",  
  "event": {  
    "testCaseExecution" :  
      {-- SEE TestCaseExecution RESOURCE SAMPLE --}  
  }  
}
```

## Test Case Execution Delete Event

Notification TestCaseExecutionDeleteEvent case for resource TestCaseExecution

### Json representation sample

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

```
{  
  "eventId":"00001",  
  "eventTime":"2015-11-16T16:42:25-04:00",  
  "eventType":"TestCaseExecutionDeleteEvent",  
  "event": {  
    "testCaseExecution" :  
      {-- SEE TestCaseExecution RESOURCE SAMPLE --}  
  }  
}
```

## Test Case Execution State Change Event

Notification TestCaseExecutionStateChangeEvent case for resource TestCaseExecution

### Json representation sample

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

```
{  
  "eventId":"00001",  
  "eventTime":"2015-11-16T16:42:25-04:00",  
  "eventType":"TestCaseExecutionStateChangeEvent",  
  "event": {  
    "testCaseExecution" :  
      {-- SEE TestCaseExecution RESOURCE SAMPLE --}  
  }  
}
```

## Test Suite Execution Create Event

Notification TestSuiteExecutionCreateEvent case for resource TestSuiteExecution

### Json representation sample

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

```
{  
  "eventId":"00001",  
  "eventTime":"2015-11-16T16:42:25-04:00",  
  "eventType":"TestSuiteExecutionCreateEvent",  
  "event": {  
    "testSuiteExecution" :  
      {-- SEE TestSuiteExecution RESOURCE SAMPLE --}  
  }  
}
```

## Test Suite Execution Delete Event

Notification TestSuiteExecutionDeleteEvent case for resource TestSuiteExecution

### Json representation sample

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

```
{  
  "eventId":"00001",  
  "eventTime":"2015-11-16T16:42:25-04:00",  
}
```

```

"eventType":"TestSuiteExecutionDeleteEvent",
"event": {
  "testSuiteExecution" :
    {-- SEE TestSuiteExecution RESOURCE SAMPLE --}
}
}

```

## Test Suite Execution State Change Event

Notification TestSuiteExecutionStateChangeEvent case for resource TestSuiteExecution

### Json representation sample

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

```

{
  "eventId":"00001",
  "eventTime":"2015-11-16T16:42:25-04:00",
  "eventType":"TestSuiteExecutionStateChangeEvent",
  "event": {
    "testSuiteExecution" :
      {-- SEE TestSuiteExecution RESOURCE SAMPLE --}
  }
}

```

## Non Functional Test Execution Create Event

Notification NonFunctionalTestExecutionCreateEvent case for resource NonFunctionalTestExecution

### Json representation sample

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

```

{
  "eventId":"00001",
  "eventTime":"2015-11-16T16:42:25-04:00",
  "eventType":"NonFunctionalTestExecutionCreateEvent",
  "event": {
    "nonFunctionalTestExecution" :
      {-- SEE NonFunctionalTestExecution RESOURCE SAMPLE --}
  }
}

```

## Non Functional Test Execution Delete Event

Notification NonFunctionalTestExecutionDeleteEvent case for resource NonFunctionalTestExecution

### Json representation sample

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

```
{  
    "eventId":"00001",  
    "eventTime":"2015-11-16T16:42:25-04:00",  
    "eventType":"NonFunctionalTestExecutionDeleteEvent",  
    "event": {  
        "nonFunctionalTestExecution" :  
            {-- SEE NonFunctionalTestExecution RESOURCE SAMPLE --}  
    }  
}
```

### Non Functional Test Execution State Change Event

Notification NonFunctionalTestExecutionStateChangeEvent case for resource NonFunctionalTestExecution

### Json representation sample

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

```
{  
    "eventId":"00001",  
    "eventTime":"2015-11-16T16:42:25-04:00",  
    "eventType":"NonFunctionalTestExecutionStateChangeEvent",  
    "event": {  
        "nonFunctionalTestExecution" :  
            {-- SEE NonFunctionalTestExecution 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
Remove an Entity	DELETE Resource	DELETE must be used to remove a resource

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

Notifications are also described in a subsequent section.

## Operations on Test Environment Allocation Execution

### List test environment allocation executions

**GET**

**/testEnvironmentAllocationExecution?fields=... &{filtering}**

#### Description

This operation list test environment allocation execution 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 a list of test environment allocation executions.

Request
<pre>GET /tmf-api/testExecution/v4/testEnvironmentAllocationExecution Accept: application/json</pre>
Response
<pre>200 [   {     "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",     "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",     "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cccf12cd",     "resourceManagerUrl": "https://myserver.com/resourceManager",     "abstractEnvironment": {       "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",       "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",       "@referredType": "AbstractEnvironment"     },     "concreteResourceMapping": [       {         "abstractResource": "phone",         "concreteResource": [           {             "name": "iPhone_1289"           }         ]       }     ],     "state": "completed",     "@baseType": "Execution",     "@type": "TestEnvironmentAllocationExecution"   } ]</pre>

## Retrieve test environment allocation execution

```
GET
/testEnvironmentAllocationExecution/{id}?fields=...&{filtering}
```

## Description

This operation retrieves a test environment allocation execution 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 specific test environment allocation execution.

<b>Request</b>	
GET /tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a Accept: application/json	
Response	
200	<pre>{   "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",   "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48- b64e-93f8db9b614a",   "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",   "resourceManagerUrl": "https://myserver.com/resourceManager",   "abstractEnvironment": {     "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",     "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8- 11ba6059c0dd",     "@referredType": "AbstractEnvironment"   },   "concreteResourceMapping": [     {       "abstractResource": "phone",       "concreteResource": [         {           "name": "iPhone_1289"         }       ]     }   ],   "state": "completed",   "@baseType": "Execution",   "@type": "TestEnvironmentAllocationExecution" }</pre>

## Create test environment allocation execution

### **POST /testEnvironmentAllocationExecution**

#### Description

This operation creates a test environment allocation execution entity.

#### Mandatory and Non Mandatory Attributes

The following tables provide the list of mandatory and non mandatory attributes when creating a TestEnvironmentAllocationExecution, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
resourceManagerUrl	

Non Mandatory Attributes	Rule
dataCorrelationId	
@baseType	
@schemaLocation	
@type	
abstractEnvironment	
concreteResourceMapping	
testScenario	
generalTestArtifact	
state	

#### Usage Samples

Here's an example of a request for creating a test environment allocation execution.

Request
<pre>POST /tmf-api/testExecution/v4/testEnvironmentAllocationExecution Content-Type: application/json  {   "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",   "resourceManagerUrl": "https://myserver.com/resourceManager",   "abstractEnvironment": {     "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",     "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",     "@referredType": "AbstractEnvironment"   } }</pre>

**Response**

201

```
{
  "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
  "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",
  "resourceManagerUrl": "https://myserver.com/resourceManager",
  "abstractEnvironment": {
    "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
    "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
    "@referredType": "AbstractEnvironment"
  },
  "concreteResourceMapping": [
    {
      "abstractResource": "phone",
      "concreteResource": [
        {
          "name": "iPhone_1289"
        }
      ]
    }
  ],
  "state": "completed",
  "@baseType": "Execution",
  "@type": "TestEnvironmentAllocationExecution"
}
```

**Delete test environment allocation execution****DELETE /testEnvironmentAllocationExecution/{id}****Description**

This operation deletes a test environment allocation execution entity.

**Usage Samples**

Here's an example of a request for deleting a test environment allocation execution.

**Request**

DELETE /tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a
--

<b>Response</b>
-----------------

204
-----

## Operations on Test Environment Provisioning Execution

### List test environment provisioning executions

**GET**

**/testEnvironmentProvisioningExecution?fields=...&{filtering}**

#### Description

This operation list test environment provisioning execution 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 a list of test environment provisioning executions.

<b>Request</b>
----------------

GET /tmf-api/testExecution/v4/testEnvironmentProvisioningExecution Accept: application/json
--

<b>Response</b>
-----------------

200
-----

[ { "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d", "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d", "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea", "provisioningArtifact": [ { "id": "bd73ed1f-05fa-4a08-a461-835242ee505a", "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-
--

```

835242ee505a",
  "@referredType": "ProvisioningArtifact"
}
],
"testEnvironmentAllocationExecution": {
  "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
  "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01ccf12cd",
  "resourceManagerUrl": "https://myserver.com/resourceManager",
  "abstractEnvironment": {
    "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
    "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
    "@referredType": "AbstractEnvironment"
  },
  "concreteResourceMapping": [
    {
      "abstractResource": "phone",
      "concreteResources": [
        {
          "name": "iPhone_1289"
        }
      ]
    }
  ],
  "state": "completed",
  "@baseType": "Execution",
  "@type": "TestEnvironmentAllocationExecution"
},
"state": "completed",
"@baseType": "Execution",
"@type": "TestEnvironmentProvisioningExecution"
}
]

```

## Retrieve test environment provisioning execution

**GET**

**/testEnvironmentProvisioningExecution/{id}?fields=...&{filtering}**

### Description

This operation retrieves a test environment provisioning execution 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 specific test environment provisioning execution.

Request
<pre>GET /tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d Accept: application/json</pre>
Response
<pre>200  {   "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",   "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6- b608-5b28d5d73a8d",   "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",   "provisioningArtifact": [     {       "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",       "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461- 835242ee505a",       "@referredType": "ProvisioningArtifact"     }   ],   "testEnvironmentAllocationExecution": {     "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",     "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48- b64e-93f8db9b614a",     "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01ccf12cd",     "resourceManagerUrl": "https://myserver.com/resourceManager",     "abstractEnvironment": {       "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",       "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8- 11ba6059c0dd",       "@referredType": "AbstractEnvironment"     },     "concreteResourceMapping": [       {         "abstractResource": "phone",         "concreteResources": [           {             "name": "iPhone_1289"           }         ]       }     ]   } }</pre>

```

    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentAllocationExecution"
},
{
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentProvisioningExecution"
}

```

## Create test environment provisioning execution

### POST /testEnvironmentProvisioningExecution

#### Description

This operation creates a test environment provisioning execution entity.

#### Mandatory and Non Mandatory Attributes

The following tables provide the list of mandatory and non mandatory attributes when creating a TestEnvironmentProvisioningExecution, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
testEnvironmentAllocationExecution	

Non Mandatory Attributes	Rule
dataCorrelationId	
@baseType	
@schemaLocation	
@type	
provisioningArtifact	
generalTestArtifact	
state	

#### Usage Samples

Here's an example of a request for creating a test environment provisioning execution.

Request
<pre> POST /tmf-api/testExecution/v4/testEnvironmentProvisioningExecution Content-Type: application/json  {     "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",     "provisioningArtifact": [ </pre>

```
{
  "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
  "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-835242ee505a",
  "@referredType": "ProvisioningArtifact"
},
],
"testEnvironmentAllocationExecution": {
  "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
  "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",
  "resourceManagerUrl": "https://myserver.com/resourceManager",
  "abstractEnvironment": {
    "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
    "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
    "@referredType": "AbstractEnvironment"
  },
  "concreteResourceMapping": [
    {
      "abstractResource": "phone",
      "concreteResources": [
        {
          "name": "iPhone_1289"
        }
      ]
    }
  ],
  "state": "completed",
  "@baseType": "Execution",
  "@type": "TestEnvironmentAllocationExecution"
}
}
```

## Response

201

```
{
  "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d",
  "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
  "provisioningArtifact": [
    {
      "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-835242ee505a",
      "@referredType": "ProvisioningArtifact"
    }
  ]
}
```

```

"testEnvironmentAllocationExecution": {
    "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
    "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cccf12cd",
    "resourceManagerUrl": "https://myserver.com/resourceManager",
    "abstractEnvironment": {
        "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
        "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
        "@referredType": "AbstractEnvironment"
    },
    "concreteResourceMapping": [
        {
            "abstractResource": "phone",
            "concreteResources": [
                {
                    "name": "iPhone_1289"
                }
            ]
        }
    ],
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentAllocationExecution"
},
{
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentProvisioningExecution"
}
}

```

## Delete test environment provisioning execution

**DELETE /testEnvironmentProvisioningExecution/{id}**

### Description

This operation deletes a test environment provisioning execution entity.

### Usage Samples

Here's an example of a request for deleting a test environment provisioning execution.

Request
DELETE /tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d

**Response**

204

## Operations on Test Case Execution

### List test case executions

```
GET /testCaseExecution?fields=... &{filtering}
```

**Description**

This operation list test case execution 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 ONAP VTP example of a request for retrieving a list of test case executions. This example does not use test environments.

**Request**

```
GET /tmf-api/testExecution/v4/testCaseExecution  
Accept: application/json
```

**Response**

200

```
[  
 {  
   "id": "1a522dd3-83c9-411b-9fd6-c375a7856621",  
   "href": "https://mycsp:8080/tmf-api/testExecution/v4/testCaseExecution/1a522dd3-83c9-411b-9fd6-  
c375a7856621",  
   "dataCorrelationId": "c38a6acf-ec2d-43b7-a3c6-2d39de1d300c",  
   "testCase": {  
     "id": "aac9969d-219d-4ff1-b256-1765dcf9b342",  
     "href": "https://mycsp:8080/tmf-api/testCase/v4/testCase/aac9969d-219d-4ff1-b256-1765dcf9b342",  
     "@referredType": "TestCase"  
   },  
   "generalTestArtifact": [  
     {  
       "id": "1a522dd3-83c9-411b-9fd6-c375a7856621",  
       "href": "https://mycsp:8080/tmf-api/testExecution/v4/generalTestArtifact/1a522dd3-83c9-411b-9fd6-  
c375a7856621",  
       "dataCorrelationId": "c38a6acf-ec2d-43b7-a3c6-2d39de1d300c",  
       "testCase": {  
         "id": "aac9969d-219d-4ff1-b256-1765dcf9b342",  
         "href": "https://mycsp:8080/tmf-api/testCase/v4/testCase/aac9969d-219d-4ff1-b256-1765dcf9b342",  
         "@referredType": "TestCase"  
       }  
     }  
   ]  
 }]
```

```

    "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",
    "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-
dd86a40b8974",
    "@referredType": "GeneralTestArtifact"
}
],
"testDataInstance": [
{
    "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
    "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
    "@referredType": "TestDataInstance"
}
],
"state": "completed",
"@baseType": "TestExecution",
"@type": "TestCaseExecution"
}
]

```

## Retrieve test case execution

**GET /testCaseExecution/{id}?fields=...&{filtering}**

### Description

This operation retrieves a test case execution 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 ONAP VTP example of a request for retrieving a specific test case execution. This example does not use test environments.

Request
<pre>GET /tmf-api/testExecution/v4/testCaseExecution/1a522dd3-83c9-411b-9fd6-c375a7856621 Accept: application/json</pre>
Response
<pre>200 {     "id": "1a522dd3-83c9-411b-9fd6-c375a7856621",     "href": "https://mycsp:8080/tmf-api/testExecution/v4/testCaseExecution/1a522dd3-83c9-411b-9fd6-c375a7856621",</pre>

```

"dataCorrelationId": "c38a6acf-ec2d-43b7-a3c6-2d39de1d300c",
"testCase": {
  "id": "aac9969d-219d-4ff1-b256-1765dcf9b342",
  "href": "https://mycsp:8080/tmf-api/testCase/v4/testCase/aac9969d-219d-4ff1-b256-1765dcf9b342",
  "@referredType": "TestCase"
},
"generalTestArtifact": [
  {
    "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",
    "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-
dd86a40b8974",
    "@referredType": "GeneralTestArtifact"
  }
],
"testDataInstance": [
  {
    "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
    "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
    "@referredType": "TestDataInstance"
  }
],
"state": "completed",
"@baseType": "TestExecution",
"@type": "TestCaseExecution"
}

```

## Create test case execution

### POST /testCaseExecution

#### Description

This operation creates a test case execution entity.

#### Mandatory and Non Mandatory Attributes

The following tables provide the list of mandatory and non mandatory attributes when creating a TestCaseExecution, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
testEnvironmentProvisioningExecution	

Non Mandatory Attributes	Rule
dataCorrelationId	
@baseType	
@schemaLocation	
@type	
testCase	
testDataInstance	

Non Mandatory Attributes	Rule
generalTestArtifact	
state	

## Usage Samples

Here's an ONAP VTP example of a request for creating a test case execution. This example does not use test environments.

Request
<pre>POST /tmf-api/testExecution/v4/testCaseExecution Content-Type: application/json  {   "dataCorrelationId": "c38a6acf-ec2d-43b7-a3c6-2d39de1d300c",   "testCase": {     "id": "aac9969d-219d-4ff1-b256-1765dcf9b342",     "href": "https://mycsp:8080/tmf-api/testCase/v4/testCase/aac9969d-219d-4ff1-b256-1765dcf9b342",     "@referredType": "TestCase"   },   "generalTestArtifact": [     {       "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",       "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-dd86a40b8974",       "@referredType": "GeneralTestArtifact"     }   ],   "testDataInstance": [     {       "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",       "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",       "@referredType": "TestDataInstance"     }   ] }</pre>

Response
<pre>201  {   "id": "1a522dd3-83c9-411b-9fd6-c375a7856621",   "href": "https://mycsp:8080/tmf-api/testExecution/v4/testCaseExecution/1a522dd3-83c9-411b-9fd6-c375a7856621",   "dataCorrelationId": "c38a6acf-ec2d-43b7-a3c6-2d39de1d300c",   "testCase": {     "id": "aac9969d-219d-4ff1-b256-1765dcf9b342",     "href": "https://mycsp:8080/tmf-api/testCase/v4/testCase/aac9969d-219d-4ff1-b256-1765dcf9b342",   } }</pre>

```
    "@referredType": "TestCase"
},
"generalTestArtifact": [
{
  "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",
  "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-
dd86a40b8974",
  "@referredType": "GeneralTestArtifact"
}
],
"testDataInstance": [
{
  "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
  "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
  "@referredType": "TestDataInstance"
}
],
"state": "completed",
"@baseType": "TestExecution",
"@type": "TestCaseExecution"
}
```

## Delete test case execution

**DELETE /testCaseExecution/{id}**

### Description

This operation deletes a test case execution entity.

### Usage Samples

Here's an example of a request for deleting a test case execution.

Request
DELETE /tmf-api/testExecution/v4/testCaseExecution/1a522dd3-83c9-411b-9fd6-c375a7856621
Response
204

## Operations on Test Suite Execution

### List test suite executions

**GET /testSuiteExecution?fields=... &{filtering}**

#### Description

This operation lists test suite execution 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 a list of test suite executions. This example uses a test environment.

Request
<pre>GET /tmf-api/testExecution/v4/testSuiteExecution Accept: application/json</pre>
Response
<pre>200 [   {     "id": "48c76edf-31fc-4f2b-a409-1e80c8b13124",     "href": "https://mycsp:8080/tmf-api/testExecution/v4/testSuiteExecution/48c76edf-31fc-4f2b-a409-1e80c8b13124",     "dataCorrelationId": "aac9969d-219d-4ff1-b256-1765dcf9b342",     "testSuite": {       "id": "4cb18d40-a35f-4261-a9e9-20ab58498c42",       "href": "https://mycsp:8080/tmf-api/testCase/v4/testSuite/4cb18d40-a35f-4261-a9e9-20ab58498c42",       "@referredType": "TestSuite"     },     "generalTestArtifact": [       {         "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",         "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-dd86a40b8974",         "@referredType": "GeneralTestArtifact"       }     ],     "testDataInstance": [       {         "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",         "href": "https://mycsp:8080/tmf-api/testDataInstance/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7"       }     ]   } ]</pre>

```
"href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
"@referredType": "TestDataInstance"
},
],
"TestEnvironmentProvisioningExecution": {
  "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-
4cb6-b608-5b28d5d73a8d",
  "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
  "provisioningArtifact": [
    {
      "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-
835242ee505a",
      "@referredType": "ProvisioningArtifact"
    }
  ],
  "testEnvironmentAllocationExecution": {
    "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-
4f48-b64e-93f8db9b614a",
    "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",
    "resourceManagerUrl": "https://myserver.com/resourceManager",
    "abstractEnvironment": {
      "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-
11ba6059c0dd",
      "@referredType": "AbstractEnvironment"
    },
    "concreteResourceMapping": [
      {
        "abstractResource": "phone",
        "concreteResources": [
          {
            "name": "iPhone_1289"
          }
        ]
      }
    ],
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentAllocationExecution"
  },
  "state": "completed",
  "@baseType": "Execution",
  "@type": "TestEnvironmentProvisioningExecution"
},
{
  "state": "completed",
  "@baseType": "TestExecution",
  "@type": "TestSuiteExecution"
}
]
```

## Retrieve test suite execution

**GET /testSuiteExecution/{id}?fields=...&{filtering}**

### Description

This operation retrieves a test suite execution 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 specific test suite execution. This example uses a test environment.

Request
<pre>GET /tmf-api/testExecution/v4/testSuiteExecution/48c76edf-31fc-4f2b-a409-1e80c8b13124 Accept: application/json</pre>
Response
<pre>200  {   "id": "48c76edf-31fc-4f2b-a409-1e80c8b13124",   "href": "https://mycsp:8080/tmf-api/testExecution/v4/testSuiteExecution/48c76edf-31fc-4f2b-a409-1e80c8b13124",   "dataCorrelationId": "aac9969d-219d-4ff1-b256-1765dcf9b342",   "testSuite": {     "id": "4cb18d40-a35f-4261-a9e9-20ab58498c42",     "href": "https://mycsp:8080/tmf-api/testCase/v4/testSuite/4cb18d40-a35f-4261-a9e9-20ab58498c42",     "@referredType": "TestSuite"   },   "generalTestArtifact": [     {       "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",       "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-dd86a40b8974",       "@referredType": "GeneralTestArtifact"     }   ],   "testDataInstance": [     {       "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",       "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",       "@referredType": "TestDataInstance"     }   ] }</pre>

```
"TestEnvironmentProvisioningExecution": {
    "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d",
    "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
    "provisioningArtifact": [
        {
            "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
            "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-835242ee505a",
            "@referredType": "ProvisioningArtifact"
        }
    ],
    "testEnvironmentAllocationExecution": {
        "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
        "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
        "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",
        "resourceManagerUrl": "https://myserver.com/resourceManager",
        "abstractEnvironment": {
            "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
            "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
            "@referredType": "AbstractEnvironment"
        },
        "concreteResourceMapping": [
            {
                "abstractResource": "phone",
                "concreteResources": [
                    {
                        "name": "iPhone_1289"
                    }
                ]
            }
        ],
        "state": "completed",
        "@baseType": "Execution",
        "@type": "TestEnvironmentAllocationExecution"
    },
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentProvisioningExecution"
},
"state": "completed",
"@baseType": "TestExecution",
"@type": "TestSuiteExecution"
}
```

## Create test suite execution

### **POST /testSuiteExecution**

#### Description

This operation creates a test suite execution entity.

#### Mandatory and Non Mandatory Attributes

The following tables provide the list of mandatory and non mandatory attributes when creating a TestSuiteExecution, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
testEnvironmentProvisioningExecution	

Non Mandatory Attributes	Rule
dataCorrelationId	
@baseType	
@schemaLocation	
@type	
@referredType	
name	
testSuite	
testDataInstance	
generalTestArtifact	
state	

#### Usage Samples

Here's an example of a request for creating a test suite execution. This example uses a test environment.

Request
<pre>POST /tmf-api/testExecution/v4/testSuiteExecution Content-Type: application/json  {   "dataCorrelationId": "ab6ef98b-7af0-4ce6-b658-f98c56ebcd38",   "testSuite": {     "id": "4cb18d40-a35f-4261-a9e9-20ab58498c42",     "href": "https://mycsp:8080/tmf-api/testCase/v4/testSuite/4cb18d40-a35f-4261-a9e9-20ab58498c42",     "@referredType": "TestSuite"   },   "generalTestArtifact": [     {       "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",     }   ] }</pre>

```

    "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-
dd86a40b8974",
    "@referredType": "GeneralTestArtifact"
}
],
"testDataInstance": [
{
    "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
    "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
    "@referredType": "TestDataInstance"
}
],
"TestEnvironmentProvisioningExecution": {
    "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-
4cb6-b608-5b28d5d73a8d",
    "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
    "provisioningArtifact": [
        {
            "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
            "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-
835242ee505a",
            "@referredType": "ProvisioningArtifact"
        }
    ],
    "testEnvironmentAllocationExecution": {
        "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
        "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-
b64e-93f8db9b614a",
        "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",
        "resourceManagerUrl": "https://myserver.com/resourceManager",
        "abstractEnvironment": {
            "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
            "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-
11ba6059c0dd",
            "@referredType": "AbstractEnvironment"
        },
        "concreteResourceMapping": [
            {
                "abstractResource": "phone",
                "concreteResources": [
                    {
                        "name": "iPhone_1289"
                    }
                ]
            }
        ],
        "state": "completed",
        "@baseType": "Execution",
        "@type": "TestEnvironmentAllocationExecution"
    },
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentProvisioningExecution"
}
]

```

```

    }
}
```

## Response

201

```
{
  "id": "48c76edf-31fc-4f2b-a409-1e80c8b13124",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testSuiteExecution/48c76edf-31fc-4f2b-a409-1e80c8b13124",
  "dataCorrelationId": "aac9969d-219d-4ff1-b256-1765dcf9b342",
  "testSuite": {
    "id": "4cb18d40-a35f-4261-a9e9-20ab58498c42",
    "href": "https://mycsp:8080/tmf-api/testCase/v4/testSuite/4cb18d40-a35f-4261-a9e9-20ab58498c42",
    "@referredType": "TestSuite"
  },
  "generalTestArtifact": [
    {
      "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",
      "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-
dd86a40b8974",
      "@referredType": "GeneralTestArtifact"
    }
  ],
  "testDataInstance": [
    {
      "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
      "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
      "@referredType": "TestDataInstance"
    }
  ],
  "TestEnvironmentProvisioningExecution": {
    "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-
4cb6-b608-5b28d5d73a8d",
    "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
    "provisioningArtifact": [
      {
        "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
        "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-
835242ee505a",
        "@referredType": "ProvisioningArtifact"
      }
    ],
    "testEnvironmentAllocationExecution": {
      "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
      "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-
b64e-93f8db9b614a",
      "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cccf12cd",
      "resourceManagerUrl": "https://myserver.com/resourceManager",
      "abstractEnvironment": {
        "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
        "
```

```
    "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
    "@referredType": "AbstractEnvironment"
},
"concreteResourceMapping": [
    {
        "abstractResource": "phone",
        "concreteResources": [
            {
                "name": "iPhone_1289"
            }
        ]
    }
],
"state": "completed",
"@baseType": "Execution",
"@type": "TestEnvironmentAllocationExecution"
},
"state": "completed",
"@baseType": "Execution",
"@type": "TestEnvironmentProvisioningExecution"
},
"state": "completed",
"@baseType": "TestExecution",
"@type": "TestSuiteExecution"
}
```

## Delete test suite execution

**DELETE /testSuiteExecution/{id}**

### Description

This operation deletes a test suite execution entity.

### Usage Samples

Here's an example of a request for deleting a test suite execution.

#### Request

```
DELETE /tmf-api/testExecution/v4/testSuiteExecution/48c76edf-31fc-4f2b-a409-1e80c8b13124
```

#### Response

204

## Operations on Non Functional Test Execution

### List non functional test executions

```
GET /nonFunctionalTestExecution?fields=... &{filtering}
```

#### Description

This operation list non functional test execution 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 a list of non-functional test executions. This example uses a test environment.

Request
<pre>GET /tmf-api/testExecution/v4/nonFunctionalTestExecution Accept: application/json</pre>
Response
<pre>200 [   {     "id": "195dae44-a433-49bf-a15b-9ab198dad0e2",     "href": "https://mycsp:8080/tmf-api/testExecution/v4/nonFunctionalTestExecution/195dae44-a433-49bf-a15b-9ab198dad0e2",     "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",     "nonFunctionalTestModel": {       "id": "16db32a3-e008-401b-8168-4ebac788f9d8",       "href": "https://mycsp:8080/tmf-api/testCase/v4/nonFunctionalTestModel/16db32a3-e008-401b-8168-4ebac788f9d8",       "@referredType": "NonFunctionalTestModel"     },     "generalTestArtifact": [       {         "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",         "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-"       }     ]   } ]</pre>

```

dd86a40b8974",
  "@referredType": "GeneralTestArtifact"
}
],
"testDataInstance": [
  {
    "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
    "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
    "@referredType": "TestDataInstance"
  }
],
"TestEnvironmentProvisioningExecution": {
  "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d",
  "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
  "provisioningArtifact": [
    {
      "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-835242ee505a",
      "@referredType": "ProvisioningArtifact"
    }
  ],
  "testEnvironmentAllocationExecution": {
    "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
    "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01ccf12cd",
    "resourceManagerUrl": "https://myserver.com/resourceManager",
    "abstractEnvironment": {
      "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
      "@referredType": "AbstractEnvironment"
    },
    "concreteResourceMapping": [
      {
        "abstractResource": "phone",
        "concreteResources": [
          {
            "name": "iPhone_1289"
          }
        ]
      }
    ],
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentAllocationExecution"
  },
  "state": "completed",
  "@baseType": "Execution",
  "@type": "TestEnvironmentProvisioningExecution"
},

```

```

    "state": "completed",
    "@baseType": "TestExecution",
    "@type": "NonFunctionalTestExecution"
}
]

```

## Retrieve non functional test execution

**GET /nonFunctionalTestExecution/{id}?fields=...&{filtering}**

### Description

This operation retrieves a non functional test execution 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 specific non-functional test execution. This example uses a test environment.

Request
<pre>GET /tmf-api/testExecution/v4/nonFunctionalTestExecution/195dae44-a433-49bf-a15b-9ab198dad0e2 Accept: application/json</pre>
Response
<pre>200  {   "id": "195dae44-a433-49bf-a15b-9ab198dad0e2",   "href": "https://mycsp:8080/tmf-api/testExecution/v4/nonFunctionalTestExecution/195dae44-a433-49bf-a15b-9ab198dad0e2",   "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",   "nonFunctionalTestModel": {     "id": "16db32a3-e008-401b-8168-4ebac788f9d8",     "href": "https://mycsp:8080/tmf-api/testCase/v4/nonFunctionalTestModel/16db32a3-e008-401b-8168-4ebac788f9d8",     "@referredType": "NonFunctionalTestModel"   },   "generalTestArtifact": [     {       "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",       "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-dd86a40b8974",     }   ] }</pre>

```

    "@referredType": "GeneralTestArtifact"
  },
],
"testDataInstance": [
  {
    "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
    "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
    "@referredType": "TestDataInstance"
  }
],
"TestEnvironmentProvisioningExecution": {
  "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d",
  "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
  "provisioningArtifact": [
    {
      "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-835242ee505a",
      "@referredType": "ProvisioningArtifact"
    }
  ],
  "testEnvironmentAllocationExecution": {
    "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
    "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01ccef12cd",
    "resourceManagerUrl": "https://myserver.com/resourceManager",
    "abstractEnvironment": {
      "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
      "@referredType": "AbstractEnvironment"
    },
    "concreteResourceMapping": [
      {
        "abstractResource": "phone",
        "concreteResources": [
          {
            "name": "iPhone_1289"
          }
        ]
      }
    ],
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentAllocationExecution"
  },
  "state": "completed",
  "@baseType": "Execution",
  "@type": "TestEnvironmentProvisioningExecution"
},
"state": "completed",

```

```

"@baseType": "TestExecution",
"@type": "NonFunctionalTestExecution"
}

```

## Create non functional test execution

### **POST /nonFunctionalTestExecution**

#### Description

This operation creates a non functional test execution entity.

#### Mandatory and Non Mandatory Attributes

The following tables provide the list of mandatory and non mandatory attributes when creating a NonFunctionalTestExecution, including any possible rule conditions and applicable default values. Notice that it is up to an implementer to add additional mandatory attributes.

Mandatory Attributes	Rule
testEnvironmentProvisioningExecution	

Non Mandatory Attributes	Rule
dataCorrelationId	
@baseType	
@schemaLocation	
@type	
nonFunctionalTestModel	
testDataInstance	
generalTestArtifact	
state	

#### Usage Samples

Here's an example of a request for creating a non-functional test execution. This example uses a test environment.

Request
<pre> POST /tmf-api/testExecution/v4/nonFunctionalTestExecution Content-Type: application/json  {   "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",   "nonFunctionalTestModel": {     "id": "16db32a3-e008-401b-8168-4ebac788f9d8",     "href": "https://mycsp:8080/tmf-api/testCase/v4/nonFunctionalTestModel/16db32a3-e008-401b-8168-4ebac788f9d8",     "@referredType": "NonFunctionalTestModel"   } } </pre>

```
},
"generalTestArtifact": [
{
  "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",
  "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-
dd86a40b8974",
  "@referredType": "GeneralTestArtifact"
},
],
"testDataInstance": [
{
  "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
  "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
  "@referredType": "TestDataInstance"
},
],
"TestEnvironmentProvisioningExecution": {
  "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-
4cb6-b608-5b28d5d73a8d",
  "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
  "provisioningArtifact": [
    {
      "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-
835242ee505a",
      "@referredType": "ProvisioningArtifact"
    }
  ],
  "testEnvironmentAllocationExecution": {
    "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-
b64e-93f8db9b614a",
    "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",
    "resourceManagerUrl": "https://myserver.com/resourceManager",
    "abstractEnvironment": {
      "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
      "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-
11ba6059c0dd",
      "@referredType": "AbstractEnvironment"
    },
    "concreteResourceMapping": [
      {
        "abstractResource": "phone",
        "concreteResources": [
          {
            "name": "iPhone_1289"
          }
        ]
      }
    ],
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentAllocationExecution"
  }
}
```

```

    },
    "state": "completed",
    "@baseType": "Execution",
    "@type": "TestEnvironmentProvisioningExecution"
  }
}

```

## Response

201

```

{
  "id": "195dae44-a433-49bf-a15b-9ab198dad0e2",
  "href": "https://mycsp:8080/tmf-api/testExecution/v4/nonFunctionalTestExecution/195dae44-a433-49bf-a15b-9ab198dad0e2",
  "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
  "nonFunctionalTestModel": {
    "id": "16db32a3-e008-401b-8168-4ebac788f9d8",
    "href": "https://mycsp:8080/tmf-api/testCase/v4/nonFunctionalTestModel/16db32a3-e008-401b-8168-4ebac788f9d8",
    "@referredType": "NonFunctionalTestModel"
  },
  "generalTestArtifact": [
    {
      "id": "178ca8bb-81bc-47ef-911e-dd86a40b8974",
      "href": "https://mycsp:8080/tmf-api/generalTestArtifact/v4/generalTestArtifact/178ca8bb-81bc-47ef-911e-dd86a40b8974",
      "@referredType": "GeneralTestArtifact"
    }
  ],
  "testDataInstance": [
    {
      "id": "2db74193-e5fb-462a-98e0-6b1ed970dfc7",
      "href": "https://mycsp:8080/tmf-api/testData/v4/testDataInstance/2db74193-e5fb-462a-98e0-6b1ed970dfc7",
      "@referredType": "TestDataInstance"
    }
  ],
  "TestEnvironmentProvisioningExecution": {
    "id": "622815ac-5811-4cb6-b608-5b28d5d73a8d",
    "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentProvisioningExecution/622815ac-5811-4cb6-b608-5b28d5d73a8d",
    "dataCorrelationId": "29d7832e-9970-4af8-8d80-19444e1973ea",
    "provisioningArtifact": [
      {
        "id": "bd73ed1f-05fa-4a08-a461-835242ee505a",
        "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/provisioningArtifact/bd73ed1f-05fa-4a08-a461-835242ee505a",
        "@referredType": "ProvisioningArtifact"
      }
    ],
    "testEnvironmentAllocationExecution": {
      "id": "418b253c-0cf3-4f48-b64e-93f8db9b614a",

```

```

  "href": "https://mycsp:8080/tmf-api/testExecution/v4/testEnvironmentAllocationExecution/418b253c-0cf3-4f48-b64e-93f8db9b614a",
  "dataCorrelationId": "156cf43a-fd6a-488e-a8dd-6b01cce12cd",
  "resourceManagerUrl": "https://myserver.com/resourceManager",
  "abstractEnvironment": {
    "id": "f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
    "href": "https://mycsp:8080/tmf-api/testEnvironment/v4/abstractEnvironment/f4cfa280-f0d7-45e5-99f8-11ba6059c0dd",
    "@referredType": "AbstractEnvironment"
  },
  "concreteResourceMapping": [
    {
      "abstractResource": "phone",
      "concreteResources": [
        {
          "name": "iPhone_1289"
        }
      ]
    }
  ],
  "state": "completed",
  "@baseType": "Execution",
  "@type": "TestEnvironmentAllocationExecution"
},
{
  "state": "completed",
  "@baseType": "Execution",
  "@type": "TestEnvironmentProvisioningExecution"
},
{
  "state": "completed",
  "@baseType": "TestExecution",
  "@type": "NonFunctionalTestExecution"
}

```

## Delete non functional test execution

**DELETE /nonFunctionalTestExecution/{id}**

### Description

This operation deletes a non functional test execution entity.

### Usage Samples

Here's an example of a request for deleting a non-functional test execution.

#### Request

<code>DELETE /tmf-api/testExecution/v4/nonFunctionalTestExecution/195dae44-a433-49bf-a15b-9ab198dad0e2</code>
<b>Response</b>
204

# API NOTIFICATIONS

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

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

## Register listener

**POST /hub**

### Description

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

### Behavior

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

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

### Usage Samples

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

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

## Unregister listener

**DELETE /hub/{id}**

### Description

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

### Behavior

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

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

### Usage Samples

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

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

## Publish Event to listener

**POST /client/listener**

### Description

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

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

### Behavior

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

### Usage Samples

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

**Request**

```
POST /client/listener  
Accept: application/json  
  
{  
    "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
4.0.0	31-Jul-2020	Pierre Gauthier TM Forum <a href="mailto:pgauthier@tmforum.org">pgauthier@tmforum.org</a>  Edward Pershwitz ITEA Technologies <a href="mailto:edward.pershwitz@iteatechnologies.com">edward.pershwitz@iteatechnologies.com</a>	First Release of the Document.

## Release History

Release Status	Date	Release led by:	Description
Pre-production	31-Jul-2020	Pierre Gauthier  Edward Pershwitz	First Release of the Document.
Production	23-Sep-2020	Adrienne Walcott	Updated to reflect TM Forum Approved Status

## Contributors to Document

Kanagaraj Manickam	Huawei Technologies Co., Ltd
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