



Dimensions® RM 12.7.1 Web Service and Rest Service Reference

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Preface

This document describes the Dimensions RM web services and restful services. Web services and restful services allow software developers to access functionality from custom programs.

Objective

The purpose of this guide is to describe the functionality and interfaces of Dimensions RM web services and restful services.

Audience

The audience for this manual is administrators and software developers who have extensive domain knowledge about Dimensions RM and programming languages such as Java or JavaScript.

Contacting Serena Technical Support

Serena provides technical support for all registered users of this product, including limited installation support for the first 30 days. If you need support after that time, contact Serena Support at the following URL and follow the instructions:

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<http://support.serena.com/Download/Default.aspx>

Chapter 1

RM Web Service

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General

The Dimensions RM Web Service contains all non-administrative functions and types. The default URL is *http://localhost:8080/rtmBrowser/WebServices*. Adjust protocol, server name and port to match your environment.

Methods

| Name | Description |
|-------------------------------------|---|
| AddObjectToCollection | Add an object to a collection |
| AddSyncXrefLink | Adds a link to Sync_Xref table |
| AppendRMDocumentEx | Append an RM document to an existing document. |
| AppendRtmDocument | Append an RM document to an existing document. |
| ApproveChangeRequest | Approve proposed change for the object |
| AsyncAppendRtmDoc | Append an RM document to an existing document. |
| AsyncCreateRtmDoc | Create a new RM document . |
| AsyncQueryRtmDoc | Creates an XML representing RM Document structure. |
| AsyncReplaceRtmDoc | Replace an existing project rtm document. |
| ChangeRequest | Create a change request for the specified requirement |
| CollectionAssociationWithCMPProject | Associate or un-associate RM collection/baseline with CM project/stream. |
| CreateBaseline | Create a baseline with given requirements (possible to associate it to a CM baseline) |
| CreateCategory | Creates a new RM category |
| CreateChildDocument | Creates a new Child document of the specified Master document |
| CreateCollection | Creates an empty collection |
| CreateObject | Creates a new requirement, based on given class name and requirement data |
| CreateObjectEx | Creates a new requirement, based on given class name and requirement data |
| CreateObjectWithAttachment | Creates a new requirement with attachment, based on given class id and requirement data |
| CreateProduct | Create a new Product |
| CreateRMDocumentEx | Create a new RM document |
| CreateRtmDocSnapshot | Creates document snapshot by document id |
| CreateRtmDocument | Creates a new document with given content |
| CreateTemplate | Creates a new project template for importing document using RM Import |
| DeleteBaseline | Deletes a baseline |
| DeleteObjects | Marks requirements as deleted |
| DeleteRtmDocument | Deletes document specified by document id |
| DeleteSyncXrefLink | Deletes a link from Sync_Xref table |
| DeleteTemplate | Deletes the project template specified by template id |
| DocumentAddChapter | Add chapter to the document |

| Name | Description |
|-----------------------------|--|
| DocumentMoveObject | Moves object in the document |
| DocumentRemoveObject | Marks objects as removed from the Document |
| FindAndReplaceObject | Search requirement(s) based on attribute list and replaces those with specified requirement data |
| FindLinkedObjects | Returns links and requirements linked to specified requirement |
| FindModifiedObjects | Find objects that have been modified since the given time\date |
| FindObjects | Find objects that match the given search criteria. |
| FindObjectsInClasses | Find objects in classes that match the given search criteria. |
| FindObjectsInCollections | Find objects in the given collections |
| FindRtmDocument | Get a document specified by id |
| FindTemplate | Get a document template specified by id |
| getAsyncAppendRtmDocStatus | Get status from the async. commmand |
| getAsyncCreateRtmDocStatus | Get status from the async. commmand |
| getAsyncQueryRtmDocStatus | Get status from the async. commmand |
| getAsyncReplaceRtmDocStatus | Get status from the async. commmand |
| getAsyncStatus | Get status from the asynchronous commmand |
| GetAttributeDefInfo | Get information about attribute definition |
| GetAvailableTransitions | Get all available transitions for requirement defined in the workflow |
| GetCategoryByDisplayName | Get category id by category display name |
| GetCategoryById | Get category information by given category id |
| GetClassDefInfo | Get definition of specified class by class Id/name |
| GetCollectionById | Get a collection specified by collection id |
| GetCollectionByName | Get a collection specified by name |
| GetCollectionInfo | Get information about specified collection |
| GetObjectHierarchyInfo | Retrieves information about the hierarchy position for the specified requirement |
| GetObjectsInCollection | Get objects in the given collection |
| GetObjectsInCollections | Get objects in the given collections |
| GetObjectsInRMDocument | Get object in the given document |
| GetProjectInfo | Get information about project |
| GetRMDocSnapshotDiffUrl | Get the url of comparison specified document snapshots |
| GetRMDocSnapshots | Returns list of snapshots for specified document. |
| GetRtmDocSnapshotById | Retrieve document snapshot information by id. |
| GetRtmDocSnapshotByName | Retrieve document snapshot information by name. |
| GetSharedFile | Download a shared file for local use |
| GetTemplateFile | Get the template file of the template specified by template id |
| getTestAsyncStatus | Get status from the async. test commmand |

| Name | Description |
|---------------------------|--|
| GetUserAttributeDefInfo | Get user attribute definition with list of users filtered by category |
| IsSSOLoginEnabled | Returns information if SSO enabled or not |
| LinkObjects | Link multiple children to a parent object |
| LinkObjectsEx | Link multiple children to a parent object |
| LinkObjectsExById | Link multiple children to a parent object |
| ListAllAllowedCategories | Get a list of all allowed categories for the project. |
| ListCategories | Get a list of child categories for the given parent category. |
| ListCollections | Get a list of collection names in the project. |
| ListCollectionsEx | Get a list of collections in the project. |
| ListCollectionsEx2 | Get a list of collections in the project. |
| ListObjectLinks | List secondary links for a specified requirement |
| ListRootCategories | Get a list of top-level categories in the project. |
| ListRtmDocuments | Get a list of rtm documents in the project. |
| ListTemplates | Get a list of document templates in the project. |
| Login | Login into RTM - use returned sessionId for subsequent calls. |
| LoginByProjectId | Login into RTM - use returned sessionId for subsequent calls. |
| LoginEx | Login into RTM and return if it was admin login along with sessionId. |
| Logout | Logout of RTM. |
| ModifyObjectsByScript | Update/replace/approve/delete/undelete/transition requirements by script name/text |
| MoveObjectInHierarchy | Move requirement to the other position in the hierarchy |
| ProposeNewRequirement | Creates a requirement proposal |
| PutSharedFile | Upload a shared file for access by others |
| QueryAttributes | Return the list of defined attributes in a class |
| QueryAttributesEx | Return the list of defined attributes in a class |
| QueryAttributesEx2 | Return the list of defined attributes in a class |
| QueryClasses | Return the list of defined classes in project |
| QueryClassesEx | Return the list of defined classes in project |
| QueryDatabases | Return the list of oracle databases |
| QueryLinkClasses | Return the list of linked classes information in project |
| QueryProjects | Return the list of defined projects in database |
| QueryProjectsEx | Return the list of defined projects in database |
| QueryRtmDocumentStructure | Creates an XML representing RM Document structure |
| QuerySystemInfo | Return the system information |
| ReadObject | Read object information with all the attribute values |
| ReadObjectAttachment | Read attachment of a requirement |

| Name | Description |
|--------------------------------|---|
| ReadObjectEx | Read object information with all the attribute values |
| ReadObjects | Read object information with all the attribute values |
| ReadSyncXrefLink | Reads a link from Sync_Xref table |
| RejectChangeRequest | Service definition of function ns__RejectChangeRequest |
| RemoveObject | RemoveObject Removes a requirement from the database |
| RemoveObjectFromCollection | Service definition of function ns__RemoveObjectFromCollection |
| ReplaceObject | Replaces a RM requirement with specified requirement data |
| ReplaceObjectEx | Replaces a RM requirement with specified requirement data |
| ReplaceObjectWithAttachment | Replace a RM requirement with attachment, given a class id and requirement data |
| ResolveSuspicion | Clears suspect links |
| RTMDocumentAddChapter | Add the new chapter after the existing chapter at the same level. |
| RTMDocumentAddRequirement | Add requirement in the existing Chapter. |
| RTMDocumentExchangeRequirement | Exchange requirements inplace. |
| RTMDocumentRemoveRequirement | Marks requirements as removed from the Document. |
| runTestAsync | Run the async. test command |
| SendCMNotifications | Send notifications to CM |
| TransitionObject | Transition requirement to the specified state |
| UnlinkObjects | Unlink multiple children from a parent object |
| UnlinkObjectsEx | Unlink multiple children from a parent object |
| UnlinkObjectsExById | Unlink multiple children from a parent object |
| UpdateObject | Updates a RM requirement with specified requirement data |
| UpdateObjectAttachment | Updates a RM requirement attachment |
| UpdateObjectEx | Updates a RM requirement with specified requirement data |
| UpdateTemplate | Update the template name, filename, and description fields and the template file. |
| UpdateTemplateFile | Replace the template file of the template specified by template id |
| UploadImageForHTMLAttribute | Upload picture and file to the RM server |

AddObjectToCollection

Add an object to a collection

Style

Document

Input (Literal)

The input of this method is the argument AddObjectToCollection having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------|---------------------------------------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| objectIdentifier | RequirementIdentifier | 1..1 | A combination of PUID/classname or objectID/classname that specifies a project requirement. |
| collectionName | string | 1..1 | The collection name |

Output (Literal)

The output of this method is the argument addObjectToCollectionResponseResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---|--------|---------------------------------------|
| result | addObjectToCollectionResponse | 1..1 | Status of adding object to collection |

Remarks

The AddObjectToCollection call provides a method for adding the requirement to the specified collection

Example of usage:

```
<urn:AddObjectToCollection>
  <sessionId>1443452989</sessionId>
  <objectIdentifier>
    <sClassName>Marketing_Requirements</sClassName>
    <nObjectId>38</nObjectId>
  </objectIdentifier>
  <collectionName>Scoping</collectionName>
</urn:AddObjectToCollection>
```

AddSyncXrefLink

Adds a link to Sync_Xref table

Style

Document

Input (Literal)

The input of this method is the argument AddSyncXrefLink having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|------------------------------|--------|--|
| sessionId | string | 1..1 | The current session identifier |
| aXref | SyncXrefLink | 1..1 | A reference entry consists of a Dimensions RM class id, Dimensions RM PUID, foreign tool id and foreign item identifier. |

Output (Literal)

The output of this method is the argument AddSyncXrefLinkResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------|--------|--|
| result | boolean | 1..1 | A flag indication whether the adding reference was successful or not |

Remarks

The AddSyncXrefLink call provides a method for adding an association entry between Dimensions RM and the other (foreign) tool in SYNC_XREF table.

Example of usage:

```
<urn:AddSyncXrefLink>
  <sessionId>1444320707</sessionId>
  <aXref>
    <sForeignId>1</sForeignId>
    <nRMClassId>1</nRMClassId>
    <sRMPUID>MRKT_000003</sRMPUID>
    <sForeignToolName>TEST</sForeignToolName>
  </aXref>
</urn:AddSyncXrefLink>
```

AppendRMDocumentEx

Append a Dimension RM document to an existing document with possibility to use existing chapters and requirements.

Style

Document

Input (Literal)

The input of this method is the argument AppendRMDocumentEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|-----------------------------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| id | int | 1..1 | The document id |
| rtmDoc | RtmDocument | 1..1 | Content of the document |

Output (Literal)

The output of this method is the argument AppendRMDocumentExResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--|--------|------------------------------|
| result | AppendRMDocumentExResult | 1..1 | Result of appending document |

Remarks

The AppendRMDocumentEx call provides a method for append an existing document with the specified document content and provide possibility to include existing requirements.

Note: If new sub-requirements specified along with a pre-existing parent requirement, the sub-requirements would be attached to the pre-existing requirement. Even if you specify a different location in the document for the parent requirement, its current location would be used instead of creating a copy of the requirement in the specified location.

Example of usage:

```
<urn:AppendRMDocumentEx>
  <sessionId>1444320707</sessionId>
  <id>12</id>
  <rtmDoc>
    <sContent><![CDATA[<?xml version="1.0" ?>
      <Document name="ZVBob3RvIFJlcXVpcmVtZW50cw=="
projectName="Uk1ERU1P" databaseName="Uk0=" version="1.1"
application="RM Web Services">
      <Chapter title="RG9jdW1bnRhdGlvb1BSZXF1aXJlbWVudHM="
uid="185" iid="45">
      <Description/>
      <Requirement classid="1" className="Marketing_Requirements"
```


AppendRtmDocument

Append an RM document to an existing document.

Style

Document

Input (Literal)

The input of this method is the argument `AppendRtmDocument` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|-----------------------------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| id | int | 1..1 | The document id |
| rtmDoc | RtmDocument | 1..1 | Content of the document |

Output (Literal)

The output of this method is the argument `AppendRtmDocumentResponse` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---|--------|------------------------------|
| result | AppendRtmDocumentResult | 1..1 | Result of appending document |

Remarks

The `AppendRtmDocument` call provides a method for append an existing document with the specified document content.

Example of usage:

```
<urn:AppendRtmDocument>
  <sessionId>111111111</sessionId>
  <id>12</id>
  <rtmDoc>
    <sContent><![CDATA[<?xml version="1.0" ?>
      <Document name="ZVBob3RvIFJlcXVpcmVtZW50cw=="
projectName="Uk1ERU1P" databaseName="Uk0=" version="1.1"
application="RM Web Services">
        <Chapter title="ZVBob3RvIFJlcXVpcmVtZW50cw==" uid="374">
          <Description/>
        <Chapter title="VXNpbmVtZW50cw==" uid="374">
          <Description/>
        <Requirement classid="1" className="Marketing_Requirements"
title="" categoryid="6" uid="31">
          <Attribute attrid="3011" typeid="1"
title="Title">U3lzdGVtIHJlc3BvbvNlIHRpbWVzMg==</Attribute>
```

```
<Attribute attrid="31" typeid="5"
title="Text">QmFzZTY0IGlzIGegZ2VuZXJpYyB0ZXJtIGZvciBhIG51bWJlciBvZiBza
W1pbGFyIGVuY29kaW5nIHNjaGVtZXMgdGhhdCB1bmNvZGUgYmluYXJ5IGRhdGEgYnkgdHJ
lYXRpbmcgaXQgbnVtZXJpY2FsbHkgYW5kIHRyYW5zbGF0aw5nIGl0IGludG8gYSBiYXNlI
DY0IHJlcHJlc2VudGF0aw9uLiA=</Attribute>
ID">TVJLVF8wMDAwMjk=</Attribute>
</Requirement>
</Chapter>
</Chapter>
</Document>]]</sContent>
</rtmDoc>
</urn:AppendRtmDocument>
```


ApproveChangeRequest

Approve the proposed change request

Style

Document

Input (Literal)

The input of this method is the argument ApproveChangeRequest having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| className | string | 1..1 | Specifies the class name |
| requestId | long | 1..1 | Specifies the object id of proposed requirement |

Output (Literal)

The output of this method is the argument ApproveChangeRequestResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|-------------------------------|--------|-----------------------------------|
| nId | long | 1..1 | Object id of approved requirement |
| status | CommandStatus | 1..1 | Status of operation |

Remarks

The ApproveChangeRequest call provides a method for approve proposed changed for requirement by given class name and object id of proposed change request.

Example of usage:

```
<urn:ApproveChangeRequest>
  <sessionId>1111111111</sessionId>
  <className>Marketing_Requirements</className>
  <requestId>57</requestId>
</urn:ApproveChangeRequest>
```

AsyncAppendRtmDoc

Append an rtm document to an existing document.

Style

Document

Input (Literal)

The input of this method is the argument AsyncAppendRtmDoc having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| id | int | 1..1 | |
| sContent | string | 1..1 | |

Output (Literal)

The output of this method is the argument AsyncAppendRtmDocResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---|--------|-------------|
| result | AsyncAppendRtmDocResponse | 1..1 | |

AsyncCreateRtmDoc

Create a new project rtm document.

Style

Document

Input (Literal)

The input of this method is the argument AsyncCreateRtmDoc having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|-----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| rtmDoc | RtmDocument | 1..1 | |

Output (Literal)

The output of this method is the argument AsyncCreateRtmDocResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---|--------|-------------|
| result | AsyncCreateRtmDocResponse | 1..1 | |

AsyncQueryRtmDoc

Creates an XML representing RM Document structure.

Style

Document

Input (Literal)

The input of this method is the argument AsyncQueryRtmDoc having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------|---------|--------|-------------|
| sessionId | string | 1..1 | |
| nDocId | int | 1..1 | |
| nChapterId | int | 0..1 | |
| bIncludeReq | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument getAsyncQueryRtmDocResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---|--------|-------------|
| result | getAsyncQueryRtmDocResponse | 1..1 | |

AsyncReplaceRtmDoc

Replace an existing project rtm document.

Style

Document

Input (Literal)

The input of this method is the argument AsyncReplaceRtmDoc having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| id | int | 1..1 | |
| sContent | string | 1..1 | |

Output (Literal)

The output of this method is the argument AsyncReplaceRtmDocResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--|--------|-------------|
| result | AsyncReplaceRtmDocResponse | 1..1 | |

ChangeRequest

Create Change Request RM requirement with specified requirement data

Style

Document

Input (Literal)

The input of this method is the argument ChangeRequest having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|--------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| anObject | Requirement | 1..1 | |
| anECPsInfo | ECPsObjectInfo | 0..1 | |
| inChangeReason | string | 1..1 | |

Output (Literal)

The output of this method is the argument ChangeRequestResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | RequirementOut | 1..1 | |

CollectionAssociationWithCMPProject

Associate or un-associate RM collection/baseline with CM project/stream

Style

Document

Input (Literal)

The input of this method is the argument CollectionAssociationWithCMPProject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------|--------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| sCollectionName | string | 1..1 | |
| projectCM | CMPProjectInfo | 1..1 | |
| bAssociate | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument CollectionAssociationWithCMPProjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------|--------|-------------|
| sResult | string | 1..1 | |

Remarks

When bAssociate parameter is set to "true", then web service will work in Associate mode, if set to "false" then web service will work in Un-associate mode.

Example of usage:

```
<urn:CollectionAssociationWithCMPProject>
  <sessionId>1111111111</sessionId>
  <sCollectionName>test_col</sCollectionName>
  <projectCM>
    <sProductName>QLARIUS</sProductName>
    <sProjectName>JAVA_BRANCHA_PRJ</sProjectName>
  </projectCM>
  <bAssociate>true</bAssociate>
</urn:CollectionAssociationWithCMPProject>
```

CreateBaseline

Create a baseline with given requirements and associate it to a CM baseline

Style

Document

Input (Literal)

The input of this method is the argument CreateBaseline having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------------|---|--------|-------------|
| sessionId | string | 1..1 | |
| sName | string | 1..1 | |
| sCategoryFullName | string | 0..1 | |
| nCmSourceBaselineUid | int | 1..1 | |
| requirements | RequirementIdentifierList | 1..1 | |

Output (Literal)

The output of this method is the argument CreateBaselineResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------|--------|-------------|
| nId | int | 1..1 | |
| nStatus | int | 1..1 | |
| sUrl | string | 1..1 | |

Remarks

Additional info:

Category name can be specified on baseline creation.

'sCategoryFullName' value can be specified as:

- a** category full name, separated by '/' or '\'
 - b** category name(only in case when name is unique);

Example of usage:

```
<urn:CreateBaseline>
  <sessionId>1</sessionId>
  <sName>test baseline</sName>
  <sCategoryFullName>RMDemo/Functional</sCategoryFullName>
  <requirements>
    <item>
      <sPUID>MRKT_000003</sPUID>
      <sClassName>Marketing_Requirements</sClassName>
    </item>
  </requirements>
</urn:CreateBaseline>
```

```
</item>
<item>
  <sPUID>MRKT_000004</sPUID>
  <sClassName>Marketing_Requirements</sClassName>
</item>
<item>
  <sPUID>MRKT_000021</sPUID>
  <sClassName>Marketing_Requirements</sClassName>
</item>
</requirements>
</urn:CreateBaseline>
```

CreateCategory

Creates a RM category, given a category name, description and parent category id.

Style

Document

Input (Literal)

The input of this method is the argument CreateCategory having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------|-----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| CategoryReq | CategoryReq | 1..1 | |

Output (Literal)

The output of this method is the argument createCategoryResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------|--------------------------|--------|-------------|
| item | Category | 1..1 | |

CreateChildDocument

Create a new Child document of the specified Master document.

Style

Document

Input (Literal)

The input of this method is the argument CreateChildDocument having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|---|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| rtmDoc | CreateChildDocumentData | 1..1 | Child document info |

Output (Literal)

The output of this method is the argument CreateChildDocumentResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---|--------|---|
| result | CreateRtmDocumentResult | 1..1 | Result with info about created document |

Remarks

The CreateChildDocument call provides a method for creating new Child document based on specified Master document.

Created Child doc will inherit all structure of the Master doc.

Example of usage:

```
<urn:CreateChildDocument>
  <sessionId>1111111111</sessionId>
  <rtmDoc>
    <sName>Child doc</sName>
    <nMasterDocId>18</nMasterDocId>
  </rtmDoc>
</urn:CreateChildDocument>
```

CreateCollection

Creates an empty collections.

Style

Document

Input (Literal)

The input of this method is the argument CreateCollection having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------------|------------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| collectionName | CreateCollectionEx | 1..1 | |
| sCategoryFullName | string | 0..1 | |

Output (Literal)

The output of this method is the argument CreateCollectionResponseResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------|--------|--------|-------------|
| nId | long | 1..1 | |
| sName | string | 1..1 | |
| sUrl | string | 1..1 | |

Remarks

Additional info:

Category name can be specified on collection creation.

'sCategoryFullName' value can be specified as:

- a** category full name, separated by '/' or '\'
- b** category name(only in case when name is unique);

Example of usage:

```
<urn:CreateCollection>
  <sessionId>1111111111</sessionId>
  <collectionName>
    <sName>testCol21</sName>
  </collectionName>
  <sCategoryFullName>RMDEMO\Availability</sCategoryFullName>
</urn:CreateCollection>
```

CreateObject

Creates a new requirement, based on given class name and requirement data

Style

Document

Input (Literal)

The input of this method is the argument CreateObject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|-----------------------------|--------|-----------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| anObject | Requirement | 1..1 | A set of object attributes values |

Output (Literal)

The output of this method is the argument CreateObjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-----------------------------------|
| result | RequirementOut | 1..1 | A set of object attributes values |

Example of usage:

```
<urn:CreateObject>
  <sessionId>1478719333</sessionId>
  <anObject>
    <sClassName>Tests</sClassName>
    <sDescription>Object description</sDescription>
    <sTitle>Test name</sTitle>
    <aAttrList>
      <item>
        <sName>SUBJECT</sName>
        <sValue>Subject</sValue>
      </item>
    </aAttrList>
  </anObject>
</urn:CreateObject>
```

CreateObjectEx

Creates a new requirement, based on given class name and requirement data

Style

Document

Input (Literal)

The input of this method is the argument CreateObjectEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------------|-----------------------------|--------|--|
| sessionId | string | 1..1 | The current session identifier |
| anObject | Requirement | 1..1 | A set of object attributes values |
| bDontGenerateAlfEvent | boolean | 0..1 | A flag indicating whether to generate an alf event |

Output (Literal)

The output of this method is the argument CreateObjectExResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-----------------------------------|
| result | RequirementOut | 1..1 | A set of object attributes values |

Example of usage:

```
<urn:CreateObjectEx>
  <sessionId>1478719333</sessionId>
  <anObject>
    <sClassName>Tests</sClassName>
    <sDescription>Object description</sDescription>
    <sTitle>Test name</sTitle>
    <aAttrList>
      <item>
        <sName>EXECUTION_STATUS</sName>
        <sValue>Failed</sValue>
      </item>
    </aAttrList>
  </anObject>
  <bDontGenerateAlfEvent>>false</bDontGenerateAlfEvent>
</urn:CreateObjectEx>
```

CreateObjectWithAttachment

Creates a new requirement with attachment, based on given class id and requirement data

Style

Document

Input (Literal)

The input of this method is the argument CreateObjectWithAttachment having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------------------------------|--------|--------------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| anObject | Requirement | 1..1 | A set of object attributes values |
| sAttrName | string | 0..1 | File attachment attribute name |
| oFile | FileAttachment | 0..1 | File attachment details and contents |

Output (Literal)

The output of this method is the argument CreateObjectWithAttachmentResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-----------------------------------|
| result | RequirementOut | 1..1 | A set of object attributes values |

Example of usage:

```
<urn:CreateObjectWithAttachment>
  <sessionId>1479156038</sessionId>
  <anObject>
    <sClassName>Marketing_Requirements</sClassName>
    <aAttrList>
      <item>
        <sName>TITLE</sName>
        <sValue>Title</sValue>
      </item>
      <item>
        <sName>TEXT</sName>
        <sValue>Description of requirement</sValue>
      </item>
    </aAttrList>
  </anObject>
  <sAttrName>FILE_ATTACHMENT</sAttrName>
  <oFile>
    <sFullPath>c:\:examples</sFullPath>
```

```
<sFilename>doc</sFilename>  
  <encodedContents>VGvzdCBkb2N1bWVudA==</encodedContents>  
</oFile>  
</urn:CreateObjectWithAttachment>
```


CreateProduct

Create a new Product with the option to define if a corresponding category should be created

Style

Document

Input (Literal)

The input of this method is the document element CreateProduct having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------|-----------------------------|--------|--|
| sessionId | string | 1..1 | The current session identifier |
| anObject | Requirement | 1..1 | A set of product attributes values |
| bCreateCategory | boolean | 1..1 | A flag indicating whether to create Category |

Output (Literal)

The output of this method is the document element CreateObjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|------------------------------------|
| result | RequirementOut | 1..1 | A set of Product attributes values |

Example of usage:

```
<urn:CreateProduct>
  <sessionId></sessionId>
  <anObject>
    <sTitle>General Product</sTitle>
    <aAttrList>
      <item>
        <sName>SHORT_NAME</sName>
        <sValue>PRD1</sValue>
      </item>
    </aAttrList>
  </anObject>
  <bCreateCategory>>false</bCreateCategory>
</urn:CreateProduct>
```



```

U1F1IjsgdHlwZT0idGV4dC9odG1sIgoKLS0tLS0tLS0tLS0tLS1Cb3VuZGFyeS0wMD1fUj
g2RmVRelZQc1N2ZVVHN2dTUXUKQ29udGVudC1UeXB1Oib0ZXh0L2h0bWwKQ29udGVudC1U
cmFuc2Zlci1FbmNvZGluZzogYmFzZTY0CgpWR2hsSUdWUWFHOTBieUJ6ZVh0MFpXMGdjMm
hoYkd3Z2MzVndjRz15ZENCd2FHOTBiM01nZEdoaGRDQmhjbVVnUVdSM1lXNTAKYVhnZ0tE
TWdjMmw2WlhNcElHWnZjbTFoZENCdmNtbG5hVzVoYkhNZ2QybDBhQ0J1YjNRZ2JHVnpjeU
IwYUdGdU1ESTFOaUJqCmIyeHZjbk11SUV0dmJuTnBaR1Z5WVhScGIyNGdjMmh2ZFd4a0lH
SmxJR2RwZG1WdU1IUnZJSFJvWlNCM11Ya2dkR2hoZENCcwpZWEpuWlhJZ2NISnBib1J6SU
cxaGVTQmlaU0JoYzNOcGJXbHNZWfJswkNCaGJtUWdZU0J6YjJ4MWRhBHZiaUJ6YUdGc2JD
QmkKw1NCamFH0XpaVzRnYVc0Z2NHRnlkQ0JpWVhObFpDQjFjRz11SUh0MVkyZ2dabXhsZU
dsaWFXeHBkSGt1CgotLS0tLS0tLS0tLS0tLUJvdW5kYXJ5LTAWPV9SODZGZVF6V1BzU3Zl
VUc3Z1NRdS0tCg==</Attribute>
    <Attribute attrid="26" typeid="12" title="Rqmt ID">
TVJLVF8wMDAwMDI=</Attribute>
    </Requirement>
    </Chapter>
    </Document>]]</sContent>
</rtmDoc>
</urn:CreateRMDocumentEx>

```

The method allows to create document as a Master document if provide `bIsMaster` as true in the input param of request.

```

<urn:CreateRMDocumentEx>
  <sessionId>1111111111</sessionId>
  <rtmDoc>
    <info>
      <sName>Test Specification Master</sName>
    </info>
    <sContent><![CDATA[<?xml version="1.0" ?>
<Document name="ZVBob3RvIFJlcXVpcmVtZW50cw=="
projectName="Uk1ERU1P" databaseName="Uk0=" version="1.1"
application="RM Web Services">
  <Chapter title="RGVzaWduIFJlcXVpcmVtZW50cw==" uid="169" iid="44">
    <Description/>
    <Requirement classid="1" className="Marketing_Requirements"
title="" category="5" uid="52" iid="22">
      <Attribute attrid="3011" typeid="1" title="Title">
U3VvcG9ydCBZHZhbnRpeCBmb3JtYXRz</Attribute>
      <Attribute attrid="31" typeid="5" title="Text">
TU1NRS1WZXJzaW9uOiAxLjAKQ29udGVudC1UeXB1OibTdWx0aXBhcnQvcmlsYXRlZDsKIC
Bib3VuZGFyeT0iLS0tLS0tLS0tLS0tLS0tLS0tLS0tLS0tLS1Cb3VuZGFyeS0wMD1fUj
g2RmVRelZQc1N2ZVVHN2dTUXUKQ29udGVudC1UeXB1Oib0ZXh0L2h0bWwKQ29udGVudC1U
cmFuc2Zlci1FbmNvZGluZzogYmFzZTY0CgpWR2hsSUdWUWFHOTBieUJ6ZVh0MFpXMGdjMm

```

```
hoYkd3Z2MzVndjRz15ZENCd2FHOTBiM01nZEdoaGRDQmhjbVvNuvdSM1lXNTAKYVhnZ0tE
TwdjMmw2WlhNcElHwnZjbTFoZENCdmNtbG5hVzVoYkhNZ2QybDBhQ0J1YjNRZ2JHVnpjeU
IwYUdGdUlESTFOaUJqCmIyeHZjBk11SUV0dmJuTnBaR1Z5WVhScGIyNGdjMmh2ZFd4a0lH
SmxJR2RwZG1WdUlIUnZJSFJvWlNCM1lYa2dkR2hoZENCcwpZWEpuWlhJZ2NISnBib1J6SU
cxaGVTQmlaU0JoYzNOcGJXbHNZWfJswkNCaGJtUwdZU0J6YjJ4MWRHbHZiaUJ6YUdGc2JD
QmkKwLNCamFH0XpaVzRnYVc0Z2NHRnlkQ0JpWVhObFpDQjFjRz11SUhOMVkyZ2dabXhsZU
dsaWFXeHBkSGt1CgotLS0tLS0tLS0tLS0tLUJvdW5kYXJ5LTAwPV9SODZGZVF6VlBzU3Zl
VUc3Z1NRdS0tCg==</Attribute>
  <Attribute attrid="26" typeid="12" title="Rqmt ID">
TVJLVF8wMDAwMDI=</Attribute>
  </Requirement>
</Chapter>
</Document>]]</sContent>
<bIsMaster>>true</bIsMaster>
</rtmDoc>
</urn:CreateRMDocumentEx>
```

Example of date attribute tag for creating requirements with filled date attribute:

```
<Attribute attrid="3389" typeid="3" title="date4">
MTQ4MTM0NjMwNQ==</Attribute>
```

where:

attrid - id of the date attribute

typeid - type id, for date attribute it always 3

title - attribute name, but can be specified as empty.

Inner text of the attribute tag (MTQ4MTM0NjMwNQ== in this example) must be the base64 encoded date which has to be in the same format as specified for this attribute in Class Definition.

CreateRtmDocSnapshot

Creates document snapshot by document id.

Style

Document

Input (Literal)

The input of this method is the argument CreateRtmDocSnapshot having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------------------------------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| snapshot | RtmDocSnapshot | 1..1 | A set of snapshot properties |

Output (Literal)

The output of this method is the argument CreateRtmDocSnapshotResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|-----------------------------------|--------|------------------------------|
| snapshot | RtmDocSnapshotOut | 1..1 | A set of snapshot properties |

When creating a new snapshot in the web service was added snapshot description and choice its type (MINOR|MAJOR|NONE).

- MINOR:** When you enter MINOR type it is means that the snapshot name will be consist of document name and two numbers separated by a point, regardless of which name was entered . First number is current amount major snapshots. Second number is current amount minor snapshots.
- MAJOR:** When you enter MAJOR type it is means that the snapshot name will be consist of document name and two numbers separated by a point, regardless of which name was entered. First number is current amount major snapshots. Second number always will be zero.
- NONE:** When you enter NONE type it is means that the snapshot name will be the same as entered name.

Example of usage:

```
<urn:CreateRtmDocSnapshot>
  <sessionId>1478719333</sessionId>
  <snapshot>
    <sName>SNAPSHOT</sName>
    <nDocumentId>12</nDocumentId>
    <sDescription>Provide some description there</sDescription>
    <sType>NONE</sType>
  </snapshot>
</urn:CreateRtmDocSnapshot>
```

CreateRtmDocument

Creates a new document with given content.

Style

Document

Input (Literal)

The input of this method is the argument CreateRtmDocument having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|---|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| rtmDoc | RtmDocumentWithCategory | 1..1 | A set of document properties |

Output (Literal)

The output of this method is the argument CreateRtmDocumentResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---|--------|------------------------------|
| result | CreateRtmDocumentResult | 1..1 | A set of document properties |

Remarks

The CreateRtmDocument call provides a method for creating document with specified document content

Example of usage:

```
<urn:CreateRtmDocument>
  <sessionId>1111111111</sessionId>
  <rtmDoc>
    <info>
      <sName>Test Specification</sName>
    </info>
    <sContent><![CDATA[<?xml version="1.0" ?>
      <Document name="ZVBob3RvIFJlcXVpcmVtZW50cw=="
projectName="Uk1ERU1P" databaseName="Uk0=" version="1.1"
application="RM Web Services">
      <Chapter title="RGVzaWduIFJlcXVpcmVtZW50cw==" uid="169"
iid="44">
        <Description/>
        <Requirement classid="1" className="Marketing_Requirements"
title="" category="5" uid="52" iid="22">
          <Attribute attrid="3011" typeid="1"
title="Title">U3VwcG9ydCBBZHZhbnRpeCBmb3JtYXRz</Attribute>
          <Attribute attrid="31" typeid="5" title="Text">
TU1NRS1WZXJzaW9uOjAxLjAKQ29udGVudC1UeXB1oiBtdWx0aXBhcnQvcnVsYXRlZDsKIC
```

```

Bib3VuZGFyeT0iLS0tLS0tLS0tLS0tQm91bmRhcncktMDA9X1I4NkZlUXpwUHNTdmVVRzdn
U1F1IjsgdHlwZT0idGV4dC9odG1sIgoKLS0tLS0tLS0tLS0tLS1Cb3VuZGFyeS0wMD1fUj
g2RmVRelZQc1N2ZVVHN2dTUXUKQ29udGVudC1UeXB1Oib0ZXh0L2h0bWwKQ29udGVudC1U
cmFuc2Zlci1FbmNvZGluZzogYmFzZTY0CgpWR2hsSudWUWFHOTBieUJ6ZVh0MFpXMGdjMm
hoYkd3Z2MzVndjRz15ZENCd2FHOTBiM01nZEdoaGRDQmhjbVvVnUVdSM1lXNTAKYVhnZ0tE
TWdjMmw2WlhNcElHwnZjbTFoZENCdmNtbG5hVzVoYkhNZ2QybDBhQ0J1YjNRZ2JHVnpjeU
IwYUdGdU1ESTF0aUJqCmIyeHZjbk11SUV0dmJuTnBaR1Z5WVhScGIyNGdjMmh2ZFd4a0lH
SmxJR2RwZG1WdU1lUnZJSFJvWlNCM1lYa2dkR2hoZENCcwpZWEpuWlhJZ2NISnBib1J6SU
cxaGVTQmlaU0JoYzNOcGJXbHNZWFFJswkNCaGJtUWdZU0J6YjJ4MWRHbHZiaUJ6YUdGc2JD
QmkKwLNCamFH0XpaVzRnYVc0Z2NHRnlkQ0JpWVhObFpDQjFjRz11SUh0MVkyZ2dabXhsZU
dsaWFXeHBkSGt1CgotLS0tLS0tLS0tLS0tLUJvdW5kYXJ5LTAwPV9SODZGZVF6VlBzU3Zl
VUc3Z1NRdS0tCg==</Attribute>
    <Attribute attrid="26" typeid="12" title="Rqmt ID">
TVJLVF8wMDAwMDI=</Attribute>
    </Requirement>
  </Chapter>
</Document>]]></sContent>
</rtmDoc>
</urn:CreateRtmDocument>

```

The method allows to create document as a Master document if provide `bIsMaster` as true in the input param of request.

```

<urn:CreateRtmDocument>
  <sessionId>1111111111</sessionId>
  <rtmDoc>
    <info>
      <sName>Test Specification Master</sName>
    </info>
    <sContent><![CDATA[<?xml version="1.0" ?>
      <Document name="ZVBob3RvIFJlcXVpcmVtZW50cw=="
projectName="Uk1ERUIP" databaseName="Uk0=" version="1.1"
application="RM Web Services">
        <Chapter title="RGVzaWduIFJlcXVpcmVtZW50cw==" uid="169"
iid="44">
          <Description/>
<Requirement classid="1" className="Marketing_Requirements" title=""
category="5" uid="52" iid="22">
          <Attribute attrid="3011" typeid="1"
title="Title">U3VwcG9ydCBBZHZhbnRpeCBmb3JtYXRz</Attribute>
          <Attribute attrid="31" typeid="5" title="Text">
TU1NRS1WZXJzaW9uOiAxLjAKQ29udGVudC1UeXB1OibTdWx0aXBhcncvcmVsYXRlZDsKIC
Bib3VuZGFyeT0iLS0tLS0tLS0tLS0tQm91bmRhcncktMDA9X1I4NkZlUXpwUHNTdmVVRzdn
U1F1IjsgdHlwZT0idGV4dC9odG1sIgoKLS0tLS0tLS0tLS0tLS1Cb3VuZGFyeS0wMD1fUj

```

```
g2RmVRe1ZQc1N2ZVVHN2dTUXUKQ29udGVudC1UeXB10iB0ZXh0L2h0bWwKQ29udGVudC1U
cmFuc2Zlci1FbmNvZGluZzZogYmFzZTY0CgpWR2hsSudWUWFHOTBieUJ6ZVhOMFpXMGdjMm
hoYkd3Z2MzVndjRz15ZENCd2FHOTBiM01nZEdoaGRDQmhjbVvVnUVdSMl1XNTAKYVhnZ0tE
TWdjMmw2WlhNcElHwnZjbTFoZENCdmNtbG5hVzVoYkhNZ2QybDBhQ0J1YjNRZ2JHVnpjeU
IwYUdGdU1ESTFOaUJqCmIyeHZjbk11SUV0dmJuTnBaR1Z5WVhScGIyNGdjMmh2ZFd4a0lH
SmxJR2RwZG1WdU1IUnZJSFJvWlNCM1lYa2dkR2hoZENCcwpZWEpuWlhJZ2NISnBib1J6SU
cxaGVTQmlaU0JoYzNOcGJXbHNZWFJswkNCaGJtUWdZU0J6YjJ4MWRHbHZiaUJ6YUdGc2JD
QmkKwlnCamFHOXpaVzRnYVc0Z2NHRnlkQ0JpWVhObFpDQjFjRz11SUhOMVkyZ2dabXhsZU
dsaWFXeHBKSGt1CgotLS0tLS0tLS0tLS0tLUJvdW5kYXJ5LTAwPV9SODZGZVF6V1BzU3Zl
VUc3Z1NRdS0tCg==</Attribute>
    <Attribute attrid="26" typeid="12" title="Rqmt ID">
TVJLVF8wMDAwMDI=</Attribute>
    </Requirement>
    </Chapter>
    </Document>]]></sContent>
    <bIsMaster>true</bIsMaster>
</rtmDoc>
</urn:CreateRtmDocument>
```

Example of date attribute tag for creating requirements with filled date attribute:

```
<Attribute attrid="3389" typeid="3" title="date4">
MTQ4MTM0NjMwNQ==</Attribute>
```

where:

attrid - id of the date attribute

typeid - type id, for date attribute it always 3

title - attribute name, but can be specified as empty.

Inner text of the attribute tag (MTQ4MTM0NjMwNQ== in this example) must be the base64 encoded date which has to be in the same format as specified for this attribute in Class Definition.

CreateTemplate

Creates a new project template for importing document using RM Import.

Style

Document

Input (Literal)

The input of this method is the argument CreateTemplate having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|--------------------------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| docTemplate | Template | 1..1 | A set of template properties |
| encodedContent | base64Binary | 0.. | Content of template in xml format encoded to Base64Binary |

Output (Literal)

The output of this method is the argument CreateTemplateResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|--------------------------|--------|------------------------------|
| returnTemplate | Template | 1..1 | A set of template properties |

Example of usage:

```
<urn:CreateTemplate>
  <sessionId>1478777334</sessionId>
  <docTemplate>
    <sName>TEM511</sName>
  </docTemplate>
  <encodedContent>PD94bWwgdMvYc2lvcj0iMS4wIj8+DQoNCi08SW1wb3J0VGvtcGxhdG
UgZGVmYXVsZDENCsYXNzPSItMSIgdMvYc2lvcj0iMSIgaWQ9IjEiPgoKDQoNCi08R2VuZXJh
bFJ1bGUgaWQ9ImdlbmVvYyYwWiPg0KDQo8QXV0aG9yPnJtZGVtb2FkbWluPC9BdXR0b3I+DQ
oNCjxYXRlPjEwLzE4LzIwMDcgNjoxMjo0MSBQTtwvRGF0ZT4NCg0KPERlc2NyaXB0aW9u
PlRoaxMgdGVtcGxhdGUgbGV0cyB5b3UgaW1wb3J0IGEgV29yZCBkb2N1bWVudCBpbnRvIE
RpbWVuc2lvcnMgUk0gZG12aWRlZCBpbjBjaGFwdGVycy4gUmVmZXIgdG8gdGh1IFNlcmVu
YSBEaW11bnNpb25zIFJNIEFkbWluaXN0cmF0b3Inc3IjEwLzE4LzIwMDcgNjoxMjo0MSBQTtwv
RGF0ZT4NCg0KPERlc2NyaXB0aW9uPgoKDQo8L0dlbmVvYyYwSdWxLPg0KDQoNCi08Q2hhcHRlclJ1bGUgaWQ9Im
NoYXB0ZXIiPgoKDQoNCi08SGVhZGluZ1J1bGUgaWQ9Imh1YWRpbmciIGhpbmQ9ImFsbCI+
DQoNCg0KLTxIZWFkaW5ncz4NCg0KPEh1YWRpbmci+U3RhbmRhcMqV29yZCBIZWFkaW5ncz
wvSGVhZGluZz4NCg0KPC9IZWFkaW5ncz4NCg0KPC9IZWFkaW5nUnVsZT4NCg0KPC9DaGFw
dGVyUnVsZT4NCg0KDQotPFJlcXVpcMvTzW50UnVsZSBpZD0icmVxdWlyZW11bnQiPg0KDQ
oNCi08TGF5b3V0UnVsZSBpZD0idGFibGVMYXlvdXQiIGlnbm9yZT0iZmFsc2UiPg0KDQoN
Ci08SGVhZGluZ1J1bGUgaWQ9Imh1YWRpbmciIGhpbmQ9ImFsbCI+DQoNCg0KLTxIZWFkaW
5ncz4NCg0KPEh1YWRpbmci+SGVhZGluZyAyPC9IZWFkaW5nPg0KDQo8SGVhZGluZz5IZWFk
```

```
aW5nIDM8L0h1YWRpbmc+DQoNCjxIZWFkaW5nPkhlYWRpbmcgNDwvSGVhZGluZz4NCg0KPE
h1YWRpbmc+SGVhZGluZyA1PC9IZWFkaW5nPg0KDQo8SGVhZGluZz5IZWFkaW5nIDY8L0h1
YWRpbmc+DQoNCjxIZWFkaW5nPkhlYWRpbmcgNzwwSGVhZGluZz4NCg0KPEh1YWRpbmc+SG
VhZGluZyA4PC9IZWFkaW5nPg0KDQo8SGVhZGluZz5IZWFkaW5nIDk8L0h1YWRpbmc+DQoN
CjwwSGVhZGluZz3M+DQoNCjwwSGVhZGluZz1J1bGU+DQoNCjwwTGZ5b3V0UnVsZT4NCg0KPC
9SZXF1aXJlbWVudFJ1bGU+DQoNCjwwSW1wb3J0VGltcGxhdGU+</encodedContent>
</urn:CreateTemplate>
```

DeleteBaseline

Deletes a baseline.

Style

Document

Input (Literal)

The input of this method is the argument DeleteBaseline having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------|--------|--------|--|
| sessionId | string | 1..1 | The current session identifier |
| nBaselineId | int | 1..1 | Identifier of the baseline to be deleted |

Output (Literal)

The output of this method is the argument DeleteBaselineResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|------|--------|--|
| nStatus | int | 1..1 | Status of operation (0 – success, 1 – failure) |

Example of usage:

```
<urn:DeleteBaseline>  
  <sessionId>1478715622</sessionId>  
  <nBaselineId>11</nBaselineId>  
</urn:DeleteBaseline>
```

DeleteObjects

Marks requirements as deleted.

Style

Document

Input (Literal)

The input of this method is the argument DeleteObjects having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|----------------------------|--------|--|
| sessionId | string | 1..1 | The current session identifier |
| sClassName | string | 1..1 | Class name of objects to be deleted |
| aObjectPUIDs | StringList | 1..1 | Unique object identifiers of objects to be deleted |

Output (Literal)

The output of this method is the argument DeleteObjectsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------|--------|---|
| result | boolean | 1..1 | A flag indicating whether the deletion was successful |

Example of usage:

```
<urn:DeleteObjects>
  <sessionId>1478715622</sessionId>
  <sClassName>Marketing_Requirements</sClassName>
  <aObjectPUIDs>
    <item>MRKT_000004</item>
    <item>MRKT_000007</item>
  </aObjectPUIDs>
</urn:DeleteObjects>
```

DeleteRtmDocument

Deletes document specified by document id.

Style

Document

Input (Literal)

The input of this method is the argument DeleteRtmDocument having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|--------------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| id | int | 1..1 | Identifier of document to be deleted |

Output (Literal)

The output of this method is the argument DeleteRtmDocumentResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|-------------------------------|--------|---------------------|
| status | CommandStatus | 1..1 | Status of operation |

Example of usage:

```
<urn:DeleteRtmDocument>  
  <sessionId>1478777334</sessionId>  
  <id>22</id>  
</urn:DeleteRtmDocument>
```

DeleteSyncXrefLink

Deletes a link from Sync_Xref table.

Style

Document

Input (Literal)

The input of this method is the argument DeleteSyncXrefLink having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| aXref | SyncXrefLink | 1..1 | |

Output (Literal)

The output of this method is the argument DeleteSyncXrefLinkResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------|--------|-------------|
| result | boolean | 1..1 | |

DeleteTemplate

Deletes the project template specified by template id.

Style

Document

Input (Literal)

The input of this method is the argument DeleteTemplate having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|--------------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| id | int | 1..1 | Identifier of template to be deleted |

Output (Literal)

The output of this method is the argument DeleteTemplateResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|--------------------------|--------|------------------------------|
| returnTemplate | Template | 1..1 | A set of template properties |

Example of usage:

```
<urn:DeleteTemplate>  
  <sessionId>1478777334</sessionId>  
  <id>25</id>  
</urn:DeleteTemplate>
```

DocumentAddChapter

Adds new chapter to the document.

Style

Document

Input (Literal)

The input of this method is the argument DocumentAddChapter having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|-----------------------------------|--------|--|
| sessionId | string | 1..1 | The current session identifier |
| documentId | int | 0..1 | Specified document identifier |
| documentName | string | 0..1 | Specified document name |
| parentIID | int | 0..1 | Specifies internal id of parent object |
| chapterName | ns-chapterDetails | 1..1 | Name and description of chapter to be created |
| position | int | 0..1 | Position of added object (by default added at the end of parent, if less or equal 1 then add at the top of parent) |

Output (Literal)

The output of this method is the argument DocumentAddChapterResults having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------------------------------|--------|-----------------------------|
| sResult | string | 1..1 | Result message |
| Chapter | DocumentObject | 0..1 | A set of chapter properties |

Example of usage:

```
<urn:DocumentAddChapter>
  <sessionId>1478800111</sessionId>
  <documentId>23</documentId>
  <documentName>DOCUMENT</documentName>
  <parentIID>222</parentIID>
  <chapterName>
    <sName>chapter</sName>
  </chapterName>
</urn:DocumentAddChapter>
```


DocumentMoveObject

Moves chapter or requirement in the document.

Style

Document

Input (Literal)

The input of this method is the argument DocumentMoveObject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|---|
| sessionId | string | 1..1 | Specifies session id for connection |
| documentId | int | 0..1 | Specifies document id |
| documentName | string | 0..1 | Specifies document name |
| IID | int | 1..1 | Specifies internal id of the object |
| parentIID | int | 1..1 | Specifies internal id of parent object |
| position | int | 0..1 | Position of moved object (by default added at the end of parent, if less or equal 1 then add at the top of parent). |

Output (Literal)

The output of this method is the argument DocumentMoveObjectResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------|--------|-------------------------|
| result | string | 1..1 | Result of moving object |

Remarks

The DocumentMoveObject call provides a method to move objects in the document structure.

Document name or id can be used for providing details about document; iid of the objects could be taken from the QueryRtmDocumentStructure web service response.

Example of usage:

```
<urn:DocumentMoveObject>
  <sessionId>1111111111</sessionId>
  <documentId>17</documentId>
  <IID>86</IID>
  <parentIID>82</parentIID>
  <position>1</position>
</urn:DocumentMoveObject>
```

DocumentRemoveObject

Marks objects as removed from the Document.

Style

Document

Input (Literal)

The input of this method is the argument DocumentRemoveObject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------------------------------|
| sessionId | string | 1..1 | Specifies session id for connection |
| documentId | int | 0..1 | Specifies document id |
| documentName | string | 0..1 | Specifies document name |
| IID | int | 1..1 | Specifies internal id of the object |

Output (Literal)

The output of this method is the argument DocumentRemoveObjectResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|---|
| sMessage | string | 1..1 | Result of removing object from document |

Remarks

The DocumentRemoveObject call provides a method to remove objects in the document structure.

Document name or id could be used for providing details about document (if documentId and documentName parameters are set, documentId has higher priority.); iid of the object could be taken from the QueryRtmDocumentStructure web service response.

Example of usage:

```
<urn:DocumentRemoveObject>
  <sessionId>1111111111</sessionId>
  <documentId>17</documentId>
  <IID>86</IID>
</urn:DocumentRemoveObject>
```

FindAndReplaceObject

Searches requirement(s) based on attribute list and replaces those with specified requirement data

Style

Document

Input (Literal)

The input of this method is the argument FindAndReplaceObject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------------|-------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| anObject | Requirement | 1..1 | |
| aAttrList | NameValueList | 0..1 | |
| bCreateIfnotFound | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument FindAndReplaceObjectResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|--|--------|-------------|
| results | ReplaceRequirementList | 1..1 | |

FindLinkedObjects

Returns links and requirements linked to specified requirement

Style

Document

Input (Literal)

The input of this method is the argument FindLinkedObjects having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------|----------------------------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| sClassName | string | 1..1 | Name of specified requirement class |
| nObjectId | int | 1..1 | Unique identifier of requirement |
| sStatus | string | 0..1 | Current status of requirement |
| aAttrList | StringList | 0..1 | A set of requirement attributes |
| bIncludeDeleted | boolean | 0..1 | A flag indicating whether to show requirements with deleted links |

Output (Literal)

The output of this method is the argument LinkListEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------|-------------------------------|--------|---|
| sourceObjDetails | ObjectDetails | 1..1 | Source requirement details |
| relations | RelationList | 0..1 | List of linked requirements by each relationship with their details |

Remarks

Additional info:

It is possible to return deleted links in the result list. If bIncludeDeleted value is set to true then all related requirements will be returned. Each returned item has status of link (current/deleted).

If bIncludeDeleted it set to false, or not specified, only current links will be returned.

Example of usage:

```
<urn:FindLinkedObjects>
  <sessionId>1436973992</sessionId>
  <sClassName>Marketing_Requirements</sClassName>
  <nObjectId>1</nObjectId>
  <bIncludeDeleted>true</bIncludeDeleted>
</urn:FindLinkedObjects>
```

FindModifiedObjects

Find objects that have been modified since the given time\date

Style

Document

Input (Literal)

The input of this method is the argument FindModifiedObjects having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|----------------------------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| sClassName | string | 1..1 | Name of specified requirement class |
| nTimestamp | dateTime | 1..1 | Specified time and date |
| aObjectPUIDs | StringList | 0..1 | A set of requirements PUIDs, that can be used as search criteria |
| aAttrList | StringList | 0..1 | A set of requirement attributes, that can be used as search criateria |

Output (Literal)

The output of this method is the argument FindModifiedObjectsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|---------------------------------|--------|--|
| results | RequirementList | 1..1 | A list of requirements (and its properties), that have been modified since specified time and date |

Example of usage:

```
<urn:FindModifiedObjects>
  <sessionId>1479138561</sessionId>
  <sClassName>Marketing_Requirements</sClassName>
  <nTimestamp>2001-09-30T01:54:23-07:00</nTimestamp>
</urn:FindModifiedObjects>
```

FindObject

Find objects that match the given search criteria.

Style

Document

Input (Literal)

The input of this method is the argument FindObjects having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------------|-----------------------------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| sClassName | string | 1..1 | Name of class, used as search criteria (only requirement from specified class will be returned) |
| aKeywords | StringList | 0..1 | Keywords that can be used as search criteria |
| bSearchFullText | boolean | 0..1 | A flag indicating whether to search a keyword as a full text or not (partial match) |
| bIncludeSubCategories | boolean | 0..1 | A flag indicating whether to search within sub categories or not |
| sAdditionalConditions | string | 0..1 | Condition that can be used as search criteria |
| anExample | Requirement | 0..1 | A set of requirements attributes and its values that can be used as search criteria |
| aAttrList | StringList | 0..1 | Attributes to be shown in search results |

Output (Literal)

The output of this method is the argument FindObjectsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------------------------------|--------|---|
| result | RequirementList | 1..1 | A list of requirements (that satisfy search criteria) and its details |

Remarks

Additional info:

For looking for requirements in some categories, IN_CATEGORY attribute can be used.

To return requirements in subcategories set bIncludeSubCategories value as "true". If set bIncludeSubCategories value as "false" then requirements from specified category only will be returned.

Requirements could be filtered by condition, using sAdditionalConditions parameter.

Example of usage:

```

<urn:FindObject>
  <sessionId>1</sessionId>
  <sClassName>Marketing_Requirements</sClassName>
  <bIncludeSubCategories>true</bIncludeSubCategories>
  <sAdditionalConditions>DELIVERY_PHASE IN ('Build1') and STATUS IN
('Replaced')</sAdditionalConditions>
  <anExample>
    <aAttrList>
      <item>
        <sName>IN_CATEGORY</sName>
        <sValue>Availability</sValue>
      </item>
      <item>
        <sName>IN_CATEGORY</sName>
        <sValue>Functional</sValue>
      </item>
    </aAttrList>
  </anExample>
  <aAttrList>
    <item>STATUS</item>
    <item>DELIVERY_PHASE</item>
    <item>IN_CATEGORY</item>
  </aAttrList>
</urn:FindObject>

```

Other example of "sAdditionalConditions" param value:

```
"STATUS IN ('Current','Replaced') and group not in ('User') and primary_in
MarketingRqmts_to_ProdRqmts"
```

As FindObjects uses doctool engine for filtering the full syntax from RM reports ("where" clause) is supported in this parameter.

sValue for IN_CATEGORY can be specified as:

- a** category id;
- b** category full name, separated by '/' or '\'
- c** category name(only in case when name is unique);

FindObjectInClasses

Find objects in classes that match the given search criteria.

Style

Document

Input (Literal)

The input of this method is the argument FindObjectsInClasses having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------------|-----------------------------|--------|--|
| sessionId | string | 1..1 | The current session identifier |
| aClassNamesList | StringList | 0..1 | Names of classes, used as search criteria (only requirement from specified classes will be returned) |
| aKeywords | StringList | 0..1 | Keywords that can be used as search criteria |
| bSearchFullText | boolean | 0..1 | A flag indicating whether to search a keyword as a full text or not (partial match) |
| bIncludeSubCategories | boolean | 0..1 | A flag indicating whether to search within sub categories or not |
| sAdditionalConditions | string | 0..1 | Condition that can be used as search criteria |
| anExample | Requirement | 0..1 | A set of requirements attributes and its values that can be used as search criteria |
| aAttrList | StringList | 0..1 | Attributes to be shown in search results |

Output (Literal)

The output of this method is the argument FindObjectsInClassesResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------------------------------|--------|---|
| result | RequirementList | 1..1 | A list of requirements (that satisfy search criteria) and its details |

Remarks

Additional info:

For looking for requirements in some categories, IN_CATEGORY attribute can be used.

To return requirements in subcategories set bIncludeSubCategories value as "true". If set bIncludeSubCategories value as "false" then requirements from specified category only will be returned.

Example of usage:


```
<urn:FindObjectInClasses>
  <sessionId>1</sessionId>
  <bIncludeSubCategories>true</bIncludeSubCategories>
  <anExample>
    <aAttrList>
      <item>
        <sName>IN_CATEGORY</sName>
        <sValue>1</sValue>
      </item>
    </aAttrList>
  </anExample>
  <aAttrList>
    <item>IN_CATEGORY</item>
  </aAttrList>
</urn:FindObjectInClasses>
```

sValue for IN_CATEGORY can be:

- a** category id;
- b** category full name, separated by '/' or '\'
- c** category name(only in case when name is unique);

FindObjectInCollections

Find objects in the given collections.

Style

Document

Input (Literal)

The input of this method is the argument FindObjectsInCollections having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------------|-----------------------------------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| collectionIds | IdList | 1..1 | Unique identifiers of collections, used as search criteria (only requirement from specified collections will be returned) |
| aSearchAttr | SearchRequirement | 0..1 | A set of requirements attributes and its values that can be used as search criteria |
| aKeywords | StringList | 0..1 | Keywords that can be used as search criteria |
| bSearchFullText | boolean | 0..1 | A flag indicating whether to search a keyword as a full text or not (partial match) |
| bDetagDescription | boolean | 0..1 | A flag indicating whether to detag description or not |
| aReturnAttrList | StringList | 0..1 | A set of attributes to be shown in search results |

Output (Literal)

The output of this method is the argument FindObjectsInCollectionsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|-------------------------------------|--------|---|
| results | RequirementFindList | 1..1 | A list of requirements from specified collection(s) and their attributes (specified in aReturnAttrList) |

Remarks

Additional info:

RTM_KEYWORDs attributes now can be used in the output. Now it is split to 4 groups: Collections, Documents, Snapshots and Baselines.

Also next web services can use these attributes to be returned to display in results:

- FindModifiedObjects
- FindObjectsInClasses

- GetObjectsInCollection
- FindObjectsInCollections
- GetObjectsInCollections

Example of usage:

```
<urn:FindObjectsInCollections>
  <sessionId>1</sessionId>
  <collectionIds>
    <item>12</item>
  </collectionIds>
  <aSearchAttr/>
  <aKeywords/>
  <aReturnAttrList>
    <item>PUID</item>
    <item>RTM_KEYWORD</item>
    <item>RTM_DOCUMENTS</item>
    <item>RTM_COLLECTIONS</item>
    <item>RTM_BASELINES</item>
    <item>RTM_SNAPSHOTS</item>
    <item>RTM_LINKS_FROM</item>
    <item>RTM_LINKS_TO</item>
  </aReturnAttrList>
</urn:FindObjectsInCollections>
```

FindRtmDocument

Get a document specified by id.

Style

Document

Input (Literal)

The input of this method is the argument FindRtmDocument having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| id | int | 1..1 | Unique identifier of document |

Output (Literal)

The output of this method is the argument FindRtmDocumentResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------------------------------|--------|---|
| result | RtmDocumentList | 1..1 | Document properties (Id, name and url to access document) |

Example of usage:

```
<urn:FindRtmDocument>  
  <sessionId>1479216967</sessionId>  
  <id>12</id>  
</urn:FindRtmDocument>
```

FindTemplate

Get a document template specified by id.

Style

Document

Input (Literal)

The input of this method is the argument FindTemplate having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| id | int | 1..1 | Unique identifier of template |

Output (Literal)

The output of this method is the argument FindTemplateResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------------|--------|---------------------|
| result | TemplateList | 1..1 | Template properties |

Example of usage:

```
<urn:FindTemplate>
  <sessionId>1479216967</sessionId>
  <id>1</id>
</urn:FindTemplate>
```

getAsyncAppendRtmDocStatus

Get status from the async. test commmand

Style

Document

Input (Literal)

The input of this method is the argument getAsyncAppendRtmDocStatus having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| cmdToken | string | 1..1 | |

Output (Literal)

The output of this method is the argument getAsyncAppendRtmDocStatusResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--|--------|-------------|
| result | getAsyncAppendRtmDocStatusResponse | 1..1 | |

getAsyncCreateRtmDocStatus

Get status from the async. test commmand

Style

Document

Input (Literal)

The input of this method is the argument `getAsyncCreateRtmDocStatus` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| cmdToken | string | 1..1 | |

Output (Literal)

The output of this method is the argument `getAsyncCreateRtmDocStatusResult` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--|--------|-------------|
| result | getAsyncAppendRtmDocStatusResponse | 1..1 | |

getAsyncQueryRtmDocStatus

Service definition of function ns__getAsyncQueryRtmDocStatus

Style

Document

Input (Literal)

The input of this method is the argument getAsyncQueryRtmDocStatus having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| cmdToken | string | 1..1 | |

Output (Literal)

The output of this method is the argument getAsyncQueryRtmDocumentStatusResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--|--------|-------------|
| result | getAsyncQueryRtmDocumentStatusResponse | 1..1 | |

getAsyncReplaceRtmDocStatus

Get status from the async. test commmand

Style

Document

Input (Literal)

The input of this method is the argument getAsyncReplaceRtmDocStatus having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| cmdToken | string | 1..1 | |

Output (Literal)

The output of this method is the argument getAsyncReplaceRtmDocStatusResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---|--------|-------------|
| result | getAsyncReplaceRtmDocStatusResponse | 1..1 | |

getAsyncStatus

Get status from an asynchronous command

Style

Document

Input (Literal)

The input of this method is the argument `getAsyncStatus` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| cmdToken | string | 1..1 | |

Output (Literal)

The output of this method is the argument `getAsyncStatusResponseResult` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--|--------|-------------|
| result | getAsyncStatusResponse | 1..1 | |

GetAttributeDefInfo

Service definition of function ns__GetAttributeDefInfo

Style

Document

Input (Literal)

The input of this method is the argument GetAttributeDefInfo having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------------------|--|--------|-------------|
| GetAttributeDefInfoRequest | GetAttributeDefInfoRequest | 0..1 | |

Output (Literal)

The output of this method is the argument GetAttributeDefInfoReply of type GetAttributeDefInfoReply having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------|----------------------------------|--------|-------------|
| attributeDefInfo | AttributeDefInfo | 1..1 | |

Remarks

The GetAttributeDefInfo call provides a method for getting information about attribute definition.

If list or user attribute is specified in input then it is possible to filter values for that attribute depending on Access Rights set for users in the specified category. In response will be list with only allowed users in the category.

Example of usage:

```
<urn:GetAttributeDefInfo>
  <urn:GetAttributeDefInfoRequest>
    <sessionId>1111111111</sessionId>
    <classSpecifier>
      <Type>0</Type>
      <Value>2</Value>
    </classSpecifier>
    <attributeDefSpecifier>
      <Type>1</Type>
      <Value>MANAGER</Value>
      <CategoryInfo>
        <DisplayName>RMDEMO</DisplayName>
      </CategoryInfo>
    </attributeDefSpecifier>
  </urn:GetAttributeDefInfoRequest>
</urn:GetAttributeDefInfo>
```

GetAvailableTransitions

Get all available transitions for requirement defined in the workflow.

Style

Document

Input (Literal)

The input of this method is the argument GetAvailableTransitions having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|-------------------------------|--------|--|
| sessionId | string | 1..1 | The current session identifier |
| anObject | InRequirement | 1..1 | Requirement attributes and its values, used as search criteria |

Output (Literal)

The output of this method is the argument GetAvailableTransitionsResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------|-----------------------------|--------|---|
| sPUIID | string | 1..1 | PUIID of specified requirement |
| sClassName | string | 1..1 | Name of requirement class |
| sDescription | string | 0..1 | Description of requirement |
| sCreatedBy | string | 1..1 | User, who created requirement |
| sModifiedBy | string | 1..1 | Last user, who modified requirement |
| nCreateTime | dateTime | 1..1 | Time of requirement creation |
| nModifiedTime | dateTime | 1..1 | Last time, when requirement was modified |
| sTitle | string | 0..1 | Title of requirement |
| nObjectId | int | 1..1 | Unique identifier of requirement |
| nObjectVersionId | int | 1..1 | Unique identifier of requirement version |
| sURL | string | 1..1 | Url, which can be used to access requirement in browser |
| sState | string | 1..1 | Workflow state of requirement |
| sOwner | string | 1..1 | Owner of workflow state |
| transitionList | Transitions | 0..1 | List of available transitions and its properties |

Remarks

Example of usage:

```
<urn:GetAvailableTransitions>
  <sessionId>1111111111</sessionId>
  <anObject>
```

```
<sClassName>Component_Requirements</sClassName>  
<sPUID>COMP_000008</sPUID>  
</anObject>  
</urn:GetAvailableTransitions>
```

GetCategoryByDisplayName

Get category id by category display name.

Style

Document

Input (Literal)

The input of this method is the argument GetCategoryByDisplayName having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| sDisplayName | string | 1..1 | Display name of category |

Output (Literal)

The output of this method is the argument CategoryResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------|------|--------|---|
| nId | long | 1..1 | Unique identifier of specified category |

Remarks

Additional info:

'sDisplayName' value of category name can be specified as:

- a** category full name, separated by '/' or '\'
- b** category name(only in case when name is unique);

Example of usage:

```
<urn:GetCategoryByDisplayName>  
  <sessionId>1111111111</sessionId>  
  <sDisplayName>RMDEMO/Availability</sDisplayName>  
</urn:GetCategoryByDisplayName>
```

GetCategoryById

Get category information by given category id.

Style

Document

Input (Literal)

The input of this method is the argument GetCategoryById having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------|--------|--------|--------------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| categoryId | long | 1..1 | Unique identifier of category |
| parentLevel | long | 0..1 | Unique identifier of parent category |

Output (Literal)

The output of this method is the argument CategoryEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|---|
| nId | long | 1..1 | Unique identifier of specified category |
| nType | long | 1..1 | Type of specified category |
| sName | string | 1..1 | Name of specified category |
| sDescription | string | 0..1 | Description of specified category |
| sDisplayName | string | 1..1 | Display name of specified category |
| nParentId | long | 1..1 | Unique identifier of parent category |

Remarks:

Returned 'nParentId' property shows the parent category of specified category. Since each category can have subcategory, same category can have few parent categories. Returned 'nParentId' value depends on specified 'parentLevel' value.

Example: There is category "C", which is a sub category of "B" category. And "B" category is subcategory of "A" category. So, category "C" have two parent categories "B" and "A".

For given example if to specify "categoryId" of "C" category, and specify 'parentLevel' as 0 – then returned 'nParentId' will show id of category "B". If specify 'parentLevel' as 1 – then returned 'nParentId' will show id of category "A".

So 'parentLevel' can have values from 0 to N, depending on number of parent categories of specified category. For any sub category, the highest parent category is root category. For specified root category 'nParentId' property have "-1" value, it means that there is not parent category of root category.

Example of usage:

```
<urn:GetCategoryById>
  <sessionId>1437063352</sessionId>
```

```
<categoryId>15</categoryId>  
<parentLevel>0</parentLevel>  
</urn:GetCategoryById>
```

Additional info:

'sDisplayName' value of category name in the output will be specified with '\' separator, e.g. 'RMDEMO\Availability\Cost'

GetClassDefInfo

Get definition of specified class by class Id/name

Style

Document

Input (Literal)

The input of this method is the argument GetClassDefInfo having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------------|--|--------|--|
| GetClassDefInfoRequest | GetClassDefInfoRequest | 0..1 | Class identification properties, used as search criteria |

Output (Literal)

The output of this method is the argument GetClassDefInfoReply of type GetClassDefInfoReply having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|------------------------------|--------|---------------------------|
| classDefInfo | ClassDefInfo | 1..1 | A set of class properties |

Example of usage:

```
<urn:GetClassDefInfoRequest>
  <sessionId>1479221671</sessionId>
  <classSpecifier>
    <Type>1</Type>
    <Value>Class_Name</Value>
  </classSpecifier>
</urn:GetClassDefInfoRequest>
```

GetCollectionById

Get a collection specified by collection id.

Style

Document

Input (Literal)

The input of this method is the argument GetCollectionById having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------------|--------|--------|---------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| collection-id | int | 1..1 | Unique identifier of collection |

Output (Literal)

The output of this method is the argument GetCollectionByIdResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|------------------------------|--------|--------------------------------|
| collection | CollectionEx | 1..1 | A set of collection properties |

Example of usage:

```
<urn:GetCollectionById>  
  <sessionId>1479221671</sessionId>  
  <collection-id>1</collection-id>  
</urn:GetCollectionById>
```

GetCollectionByName

Get a collection specified by name

Style

Document

Input (Literal)

The input of this method is the argument GetCollectionByName having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------|--------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| collection-name | string | 1..1 | Name of collection |

Output (Literal)

The output of this method is the argument GetCollectionByNameResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|------------------------------|--------|--------------------------------|
| collection | CollectionEx | 1..1 | A set of collection properties |

Example of usage:

```
<urn:GetCollectionByName>  
  <sessionId>1479221671</sessionId>  
  <collection-name>Collection_Name</collection-name>  
</urn:GetCollectionByName>
```

GetCollectionInfo

Service definition of function ns__GetCollectionInfo

Style

Document

Input (Literal)

The input of this method is the argument GetCollectionInfo having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------------------|--|--------|-------------|
| GetCollectionInfoRequest | GetCollectionInfoRequest | 0..1 | |

Output (Literal)

The output of this method is the argument GetCollectionInfoReply of type GetCollectionInfoReply having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|--------------------------------|--------|-------------|
| collectionInfo | CollectionInfo | 1..1 | |

GetObjectHierarchyInfo

Retrieves information about the hierarchy position for the specified requirement.

Style

Document

Input (Literal)

The input of this method is the document element `GetObjectHierarchyInfo` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-----------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| object | RequirementIdentifier | 1..1 | A set of object attributes values |

Output (Literal)

The output of this method is the document element `HierarchyInfoResponse` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------------------------------------|--------|---|
| parent | RequirementIdentifier | 0..1 | A set of parent object attributes values |
| order | int | 1..1 | Order of requirement in the scope of the parent |

Example of usage:

```
<urn:GetObjectHierarchyInfo>
  <sessionId>1111111111</sessionId>
  <object>
    <sPUID>COMP_000006</sPUID>
    <sClassName>Component_Requirements</sClassName>
  </object>
</urn:GetObjectHierarchyInfo>
```

GetObjectsInCollection

Get objects in the given collection.

Style

Document

Input (Literal)

The input of this method is the argument GetObjectsInCollection having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------------|----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| collectionId | int | 1..1 | |
| bDetagDescription | boolean | 0..1 | |
| aAttrList | StringList | 0..1 | |

Output (Literal)

The output of this method is the argument GetObjectsInCollectionResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|---------------------------------|--------|-------------|
| results | RequirementList | 1..1 | |

GetObjectsInCollections

Get objects in the given collections.

Style

Document

Input (Literal)

The input of this method is the argument `GetObjectsInCollections` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------------|----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| collectionIds | IdList | 1..1 | |
| bDetagDescription | boolean | 0..1 | |
| aAttrList | StringList | 0..1 | |

Output (Literal)

The output of this method is the argument `GetObjectsInCollectionsResponse` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|---------------------------------|--------|-------------|
| results | RequirementList | 1..1 | |

GetObjectsInRMDocument

Service definition of function ns__GetObjectsInRMDocument

Style

Document

Input (Literal)

The input of this method is the argument GetObjectsInRMDocument having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------------------|----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| nDocId | int | 1..1 | |
| detagHtmlAttributes | boolean | 0..1 | |
| aAttrList | StringList | 0..1 | |

Output (Literal)

The output of this method is the argument GetObjectsInRMDocumentResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|---------------------------------|--------|-------------|
| results | RequirementList | 1..1 | |

GetProjectInfo

Service definition of function ns__GetProjectInfo

Style

Document

Input (Literal)

The input of this method is the argument GetProjectInfo having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------------|---------------------------------------|--------|-------------|
| GetProjectInfoRequest | GetProjectInfoRequest | 0..1 | |

Output (Literal)

The output of this method is the argument GetProjectInfoReply of type GetProjectInfoReply having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------|-----------------------------|--------|-------------|
| projectInfo | ProjectInfo | 1..1 | |

GetRMDocSnapshotDiffUrl

Service definition of function ns__GetRMDocSnapshotDiffUrl

Style

Document

Input (Literal)

The input of this method is the argument GetRMDocSnapshotDiffUrl having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| chngid | int | 1..1 | |
| baseid | int | 1..1 | |

Output (Literal)

The output of this method is the argument GetRMDocSnapshotDiffUrlResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------|--------|--------|-------------|
| sUrl | string | 1..1 | |

GetRMDocSnapshots

Returns list of snapshots for specified document.

Style

Document

Input (Literal)

The input of this method is the argument GetRMDocSnapshots having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| documentId | int | 1..1 | |

Output (Literal)

The output of this method is the argument GetRMDocSnapshotsResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------------------------------------|--------|-------------|
| snapshots | RtmDocSnaphotOutList | 1..1 | |

GetRtmDocSnapshotById

Retrieve document snapshot information by id. See ns__RtmDocSnapshot.

Style

Document

Input (Literal)

The input of this method is the argument GetRtmDocSnapshotById having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| id | int | 1..1 | |

Output (Literal)

The output of this method is the argument GetRtmDocSnapshotByIdResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|-----------------------------------|--------|-------------|
| snapshot | RtmDocSnapshotOut | 1..1 | |

GetRtmDocSnapshotByName

Retrieve document snapshot information by name. See ns__RtmDocSnapshot.

Style

Document

Input (Literal)

The input of this method is the argument GetRtmDocSnapshotByName having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| name | string | 1..1 | |

Output (Literal)

The output of this method is the argument GetRtmDocSnapshotByNameResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|-----------------------------------|--------|-------------|
| snapshot | RtmDocSnapshotOut | 1..1 | |

GetSharedFile

Download a shared file for local use

Style

Document

Input (Literal)

The input of this method is the argument GetSharedFile having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|--------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| iFileStorageId | int | 1..1 | |
| oFile | FileAttachment | 1..1 | |

Output (Literal)

The output of this method is the argument FileAttachmentResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | FileAttachment | 1..1 | |

GetTemplateFile

Get the template file of the template specified by template id

Style

Document

Input (Literal)

The input of this method is the argument GetTemplateFile having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| id | int | 1..1 | |

Output (Literal)

The output of this method is the argument GetTemplateFileResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------|--------|-------------|
| result | base64Binary | 1..1 | |

getTestAsyncStatus

Get status from the async. test commmand

Style

Document

Input (Literal)

The input of this method is the argument getTestAsyncStatus having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| cmdToken | string | 1..1 | |

Output (Literal)

The output of this method is the argument getTestAsyncStatusResponseResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---|--------|-------------|
| result | testAsyncStatusResponse | 1..1 | |

GetUserAttributeDefInfo

Get detailed information about user attribute and list of its values.

Style

Document

Input (Literal)

The input of this method is the argument GetUserAttributeDefInfo having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------------------------|--|--------|-------------|
| GetUserAttributeDefInfoRequest | GetUserAttributeDefInfoRequest | 0..1 | |

Output (Literal)

The output of this method is the argument GetUserAttributeDefInfoReply of type GetUserAttributeDefInfoReply having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------|--------------------------------------|--------|-------------|
| attributeDefInfo | UserAttributeDefInfo | 1..1 | |

Remarks

The GetUserAttributeDefInfo call provides a method for get detailed information about user attribute and list of its values. In the output for users <DisplayName> value changes depending on the option selected in Project Settings.

Please note that user attribute values are filtered if category was specified.

Example of usage:

```
<urn:GetUserAttributeDefInfo>
  <urn:GetUserAttributeDefInfoRequest>
    <sessionId>1467923392</sessionId>
    <classSpecifier>
      <Type>1</Type>
      <Value>Product_Requirements</Value>
    </classSpecifier>
    <attributeDefSpecifier>
      <Type>1</Type>
      <Value>Manager</Value>
      <CategoryInfo>
        <CategoryId>3</CategoryId>
      </CategoryInfo>
    </attributeDefSpecifier>
  </urn:GetUserAttributeDefInfoRequest>
</urn:GetUserAttributeDefInfo>
```

IsSSOLoginEnabled

Service definition of function ns__IsSSOLoginEnabled

Style

Document

Input (Literal)

The input of this method is the argument IsSSOLoginEnabled having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sDatabase | string | 1..1 | |

Output (Literal)

The output of this method is the argument IsSSOLoginEnabledResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------|--------|-------------|
| result | boolean | 1..1 | |

LinkObjects

Link multiple children to a parent object

Style

Document

Input (Literal)

The input of this method is the argument LinkObjects having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------|----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| sParentClassName | string | 1..1 | |
| sParentPUID | string | 1..1 | |
| sChildClassName | string | 1..1 | |
| aChildPUIDs | StringList | 1..1 | |

Output (Literal)

The output of this method is the argument LinkObjectsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------|--------|-------------|
| results | string | 1..1 | |

Remarks

Example of usage:

```
<urn:LinkObjects>
  <sessionId>11111111</sessionId>
  <sParentClassName>Marketing_Requirements</sParentClassName>
  <sParentPUID>MRKT_000020</sParentPUID>
  <sChildClassName>Product_Requirements</sChildClassName>
  <aChildPUIDs>
    <item>PROD_000023</item>
  </aChildPUIDs>
</urn:LinkObjects>
```

Additional Info:

It is also possible to undelete deleted requirement links using LinkObjects/ LinkObjectsEx/ LinkObjectsExById web services. Any links between requirements that were deleted now can be restored.

Usage is the same as on creating link.

LinkObjectsEx

Link multiple children to a parent object

Style

Document

Input (Literal)

The input of this method is the argument LinkObjectsEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------------|----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| nRelationId | int | 0..1 | |
| sRelationName | string | 0..1 | |
| sParentPUIID | string | 1..1 | |
| aChildPUIIDs | StringList | 1..1 | |

Output (Literal)

The output of this method is the argument LinkObjectsExResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------|--------|-------------|
| results | string | 1..1 | |

Remarks

Example of usage:

```
<urn:LinkObjectsEx>
  <sessionId>1111111111</sessionId>
  <nRelationId>5</nRelationId>
  <sParentPUIID>MRKT_000021</sParentPUIID>
  <aChildPUIIDs>
    <item>PROD_000023</item>
  </aChildPUIIDs>
</urn:LinkObjectsEx>
```

Additional Info:

It is also possible to undelete deleted requirement links using LinkObjects/ LinkObjectsEx/ LinkObjectsExById web services. Any links between requirements that were deleted now can be restored.

Usage is the same as on creating link.

LinkObjectsExById

Link multiple children to a parent object

Style

Document

Input (Literal)

The input of this method is the argument LinkObjectsExById having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------------|------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| nRelationId | int | 0..1 | |
| sRelationName | string | 0..1 | |
| nParentId | int | 1..1 | |
| aChildIds | IdList | 1..1 | |

Output (Literal)

The output of this method is the argument LinkResults having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|----------------------------|--------|-------------|
| sResult | string | 1..1 | |
| lLinkList | StringList | 0..1 | |

Remarks

Example of usage:

```
<urn:LinkObjectsExById>
  <sessionId>11111111</sessionId>
  <nRelationId>5</nRelationId>
  <nParentId>32</nParentId>
  <aChildIds>
    <item>47</item>
  </aChildIds>
</urn:LinkObjectsExById>
```

Additional Info:

It is also possible to undelete deleted requirement links using LinkObjects/ LinkObjectsEx/ LinkObjectsExById web services. Any links between requirements that were deleted now can be restored.

Usage is the same as on creating link.

ListAllAllowedCategories

Get a list of all allowed categories for the project.

Style

Document

Input (Literal)

The input of this method is the argument ListAllAllowedCategories having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument ListAllAllowedCategoriesResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------------|--------|-------------|
| result | CategoryList | 1..1 | |

ListCategories

Get a list of child categories for the given parent category.

Style

Document

Input (Literal)

The input of this method is the argument ListCategories having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| categoryId | long | 1..1 | |

Output (Literal)

The output of this method is the argument ListCategoriesResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------------|--------|-------------|
| result | CategoryList | 1..1 | |

ListCollections

Get a list of collection names in the project.

Style

Document

Input (Literal)

The input of this method is the argument ListCollections having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument ListCollectionsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | CollectionList | 1..1 | |

ListCollectionsEx

Get a list of collections in the project.

Style

Document

Input (Literal)

The input of this method is the argument ListCollectionsEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument ListCollectionsExResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|----------------------------------|--------|-------------|
| result | CollectionExList | 1..1 | |

ListCollectionsEx2

Get a list of collections in the project.

Style

Document

Input (Literal)

The input of this method is the argument ListCollectionsEx2 having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument ListCollectionsEx2Response having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|-----------------------------------|--------|-------------|
| result | CollectionEx2List | 1..1 | |

ListObjectLinks

List secondary links for a specified requirement

Style

Document

Input (Literal)

The input of this method is the argument ListObjectLinks having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------|-----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| aRequirement | Requirement | 1..1 | |
| bIncludeDeleted | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument ListObjectLinksResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------------------------|--------|-------------|
| results | LinkList | 1..1 | |

Remarks

Additional info:

It is possible to return deleted links in the result list. If bIncludeDeleted value is set to true then all related requirements will be returned. Each returned item has status of link (current/deleted).

If bIncludeDeleted it set to false, or not specified, only current links will be returned.

Example of usage:

```
<urn:ListObjectLinks>
  <sessionId>1436973992</sessionId>
  <aRequirement>
    <sClassName>Marketing_Requirements</sClassName>
    <nObjectId>1</nObjectId>
  </aRequirement>
  <bIncludeDeleted>true</bIncludeDeleted>
</urn:ListObjectLinks>
```

ListRootCategories

Get a list of top-level categories in the project.

Style

Document

Input (Literal)

The input of this method is the argument ListRootCategories having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument ListRootCategoriesResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------------|--------|-------------|
| result | CategoryList | 1..1 | |

ListRtmDocuments

Get a list of rtm documents in the project.

Style

Document

Input (Literal)

The input of this method is the argument ListRtmDocuments having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|---------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| filter | DocumentsFilter | 0..1 | |

Output (Literal)

The output of this method is the argument ListRtmDocumentsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------------------------------|--------|-------------|
| result | RtmDocumentList | 1..1 | |

Remarks

Additional info:

ListRtmDocuments WS also allows to filter documents by category.

Optional input parameters were added:

- sCategory
Can be specified by full path (separated with '\ ' or '/') or by category_id
- bIncludeSubCategories

Example of usage:

```
<urn:ListRtmDocuments>
  <sessionId>1</sessionId>
  <filter>
    <sCreatedBy>ephoto</sCreatedBy>
    <sCategory>RMDEMO\Functional</sCategory>
    <bIncludeSubCategories>true</bIncludeSubCategories>
  </filter>
</urn:ListRtmDocuments>
```

It is also possible to filter list of documents to show Master and Child documents or not, depending on bIncludeMasterDocuments and bIncludeChildDocuments values.

Example of usage:

```
<urn:ListRtmDocuments>
```

```
<sessionId>1</sessionId>
<filter>
  <sCreatedBy>ephoto</sCreatedBy>
  <bIncludeMasterDocuments>true</bIncludeMasterDocuments>
  <bIncludeChildDocuments>>false</bIncludeChildDocuments>
</filter>
</urn:ListRtmDocuments>
```

ListTemplates

Get a list of document templates in the project.

Style

Document

Input (Literal)

The input of this method is the argument ListTemplates having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument ListTemplatesResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------------|--------|-------------|
| result | TemplateList | 1..1 | |

Login

Login into RTM - use returned sessionId for subsequent calls.

Style

Document

Input (Literal)

The input of this method is the argument Login having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| sUserId | string | 0..1 | |
| sPassword | string | 0..1 | |
| sProjectName | string | 0..1 | |
| sDatabase | string | 1..1 | |

Output (Literal)

The output of this method is the argument LoginResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Remarks

Possible to login using Internal RM user or SSO user credentials.

Example of usage:

```
<urn:Login>
<!--Internal RM user name or SSO user name-->
  <sUserId>ephoto</sUserId>
  <!--Internal RM user password or SSO user password-->
  <sPassword>rtm</sPassword>
  <sProjectName>RMDEMO</sProjectName>
  <sDatabase>RM</sDatabase>
</urn:Login>
```

Possible to use RM Browser session in any RM web service instead of sessionId value.

Required values:

- content of "authenticatedxxxxxx" cookie
- name of the database to log in

To use it specify for sessionId value:

"database name": "authenticatedxxxxxx cookie value" (without double quotes)

Example of usage:


```
<urn:ListRtmDocuments>
  <sessionId>RM:2EE9D7815C921FCB3E8F1FB17F8C9D83F5EC103B4B055E2AA6290
0F74F95E250B4C63A18A362554EE703EA2BD90F4C4771F8BAC71D6B8520CCCDF2FE64D
68A1269CC8741AF586AE10EFD7A5A905D5F71CAC63BAFBBDD4FD33408356A970669ADD
5D4F37CEEEEA89865930ECF8ADE5C26B2C6E62A6561592</sessionId>
</urn:ListRtmDocuments>
```

Logging in with SSO Token (e.g. from Azure AD) in Header



NOTE To get the SSO token, call the Rest service function GetSSOToken (<https://host/rtmBrowser/RestServices/Admin/GetSSOToken>).

The token value used is assigned to the "token" attribute in the JSON response. When using SAML2 format on the Login call, it must be decoded (from Base64 format). For JWT Login calls, the token can be used in Base64 encoding.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:rtmService">
  <soapenv:Header>
    TOKEN_VALUE
  </soapenv:Header>
  <soapenv:Body>
    <urn:Login>
      <sProjectName>RMDEMO</sProjectName>
      <sDatabase>RM</sDatabase>
    </urn:Login>
  </soapenv:Body>
</soapenv:Envelope>
```

Logging in with SSO Token (e.g. from Azure AD) in Password Field



NOTE To get the SSO token, call the Rest service function GetSSOToken (<https://host/rtmBrowser/RestServices/Admin/GetSSOToken>).

The token value used is assigned to the "token" attribute in the JSON response. When using SAML2 format on the Login call, it must be decoded (from Base64 format). For JWT Login calls, the token can be used in Base64 encoding.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:rtmService">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:Login>
      <sPassword>TOKEN_VALUE</sPassword>
      <sProjectName>RMDEMO</sProjectName>
      <sDatabase>RM</sDatabase>
    </urn:Login>
  </soapenv:Body>
</soapenv:Envelope>
```

LoginByProjectId

Login into RTM - use returned sessionId for subsequent calls.

Style

Document

Input (Literal)

The input of this method is the argument LoginByProjectId having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|--------|--------|-------------|
| sUserId | string | 0..1 | |
| sPassword | string | 0..1 | |
| nProjectId | int | 1..1 | |
| sDatabase | string | 1..1 | |

Output (Literal)

The output of this method is the argument LoginByProjectIdResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Remarks

Possible to login using Internal RM user or SSO user credentials.

Example of usage:

```
<urn:LoginByProjectId>
  <!--Internal RM user name or SSO user name-->
  <sUserId>ephoto</sUserId>
  <!--Internal RM user password or SSO user password-->
  <sPassword>rtm</sPassword>
  <nProjectId>1</nProjectId>
  <sDatabase>RM</sDatabase>
</urn:LoginByProjectId>
```

Logging in with SSO Token (e.g. from Azure AD) in Header



NOTE To get the SSO token, call the Rest service function GetSSOToken (<https://host/rtmBrowser/RestServices/Admin/GetSSOToken>).

The token value used is assigned to the "token" attribute in the JSON response. When using SAML2 format on the Login call, it must be decoded (from Base64 format). For JWT Login calls, the token can be used in Base64 encoding.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:rtmService">
  <soapenv:Header>
    TOKEN_VALUE
  </soapenv:Header>
  <soapenv:Body>
    <urn:LoginByProjectId>
      <nProjectId>1</nProjectId>
      <sDatabase>RM</sDatabase>
    </urn:LoginByProjectId>
  </soapenv:Body>
</soapenv:Envelope>
```

Logging in with SSO Token (e.g. from Azure AD) in Password Field



NOTE To get the SSO token, call the Rest service function GetSSOToken (<https://host/rtmBrowser/RestServices/Admin/GetSSOToken>).

The token value used is assigned to the "token" attribute in the JSON response. When using SAML2 format on the Login call, it must be decoded (from Base64 format). For JWT Login calls, the token can be used in Base64 encoding.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:rtmService">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:LoginByProjectId>
      <sPassword>TOKEN_VALUE</sPassword>
      <nProjectId>1</nProjectId>
      <sDatabase>RM</sDatabase>
    </urn:LoginByProjectId>
  </soapenv:Body>
</soapenv:Envelope>
```

LoginEx

Login into RTM and return if it was admin login along with sessionId.

Style

Document

Input (Literal)

The input of this method is the argument LoginEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| sUserId | string | 0..1 | |
| sPassword | string | 0..1 | |
| sProjectName | string | 0..1 | |
| sDatabase | string | 1..1 | |

Output (Literal)

The output of this method is the argument LoginExResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------|-----------------------------------|--------|-------------|
| info | LoginExResultInfo | 1..1 | |

Remarks

Possible to login using Internal RM user or SSO user credentials.

Example of usage:

```
<urn:LoginEx>
  <!--Internal RM user name or SSO user name-->
  <sUserId>ephoto</sUserId>
  <!--Internal RM user password or SSO user password-->
  <sPassword>rtm</sPassword>
  <sProjectName>RMDEMO</sProjectName>
  <sDatabase>RM</sDatabase>
</urn:LoginEx>
```

Logging in with SSO Token (e.g. from Azure AD) in Header



NOTE To get the SSO token, call the Rest service function GetSSOToken (<https://host/rtmBrowser/RestServices/Admin/GetSSOToken>).

The token value used is assigned to the "token" attribute in the JSON response. When using SAML2 format on the Login call, it must be decoded (from Base64 format). For JWT Login calls, the token can be used in Base64 encoding.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:rtmService">
```

```

<soapenv:Header>
  TOKEN_VALUE
</soapenv:Header>
<soapenv:Body>
  <urn:LoginEx>
    <sProjectName>RMDEMO</sProjectName>
    <sDatabase>RM</sDatabase>
  </urn:LoginEx>
</soapenv:Body>
</soapenv:Envelope>

```

Logging in with SSO Token (e.g. from Azure AD) in Password Field



NOTE To get the SSO token, call the Rest service function GetSSOToken (<https://host/rtmBrowser/RestServices/Admin/GetSSOToken>).

The token value used is assigned to the "token" attribute in the JSON response. When using SAML2 format on the Login call, it must be decoded (from Base64 format). For JWT Login calls, the token can be used in Base64 encoding.

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:rtmService">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:LoginEx>
      <sPassword>TOKEN_VALUE</sPassword>
      <sProjectName>RMDEMO</sProjectName>
      <sDatabase>RM</sDatabase>
    </urn:LoginEx>
  </soapenv:Body>
</soapenv:Envelope>

```

Logout

Logout of RTM.

Style

Document

Input (Literal)

The input of this method is the argument Logout having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument LogoutResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------|------|--------|-------------|
| value | int | 1..1 | |

ModifyObjectsByScript

Mass Replace, Update, Approve, Reject, Delete, Remove, Undelete, Transition requirements by script text or report name. (Reports with run-time parameters are also supported)

Style

Document

Input (Literal)

The input of this method is the argument `ModifyObjectsByScript` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------------|-------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| sAction | string | 1..1 | |
| aAttributes | NameValueList | 1..1 | |
| anScript | Script | 1..1 | |
| anTransition | InTransition | 0..1 | |
| bDontGenerateAlfEvent | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument `ModifyObjectsResponse` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------|-----------------------------|--------|-------------|
| aSucceedObjects | ObjectsList | 1..1 | |
| aFailedObjects | ObjectsList | 1..1 | |

Remarks

Additional Info:

New attributes values section is used for replace, update actions. Either it used for Reject action to set up `CHANGE_REASON` attribute.

Note that for reject Action of requirements `CHANGE_REASON` is mandatory.

For locating requirements for mass update next possibilities:

- script name
- script text

Using action 'transition' possible to transition several requirements to some state.

Example of usage:

1 Update requirements by script text:

```
<urn:ModifyObjectsByScript>
  <sessionId>1</sessionId>
```

```
<sAction>Update</sAction>
<aAttributes>
  <item>
    <sName>PRIORITY</sName>
    <sValue>1</sValue>
  </item>
  <item>
    <sName>TT_ITEM_STATE</sName>
    <sValue>New</sValue>
  </item>
</aAttributes>
<anScript>
  <sScriptText>select object_id from Marketing_Requirements
where STATUS IN ('Current') and group in ('ePhoto Requirements')
</sScriptText>
</anScript>
</urn:ModifyObjectsByScript>
```

2 Remove requirements by script text

```
<urn:ModifyObjectsByScript>
  <sessionId>1</sessionId>
  <sAction>Remove</sAction>
  <anScript>
    <sScriptText>select object_id from Marketing_Requirements
where STATUS IN ('Current') and DELIVERY_PHASE in ('TBD')
</sScriptText>
  </anScript>
</urn:ModifyObjectsByScript>
```

3 Reject requirements by scriptname (also with run-time parameters):

```
<urn:ModifyObjectsByScript>
  <sessionId>1</sessionId>
  <sAction>Reject</sAction>
  <aAttributes>
    <item>
      <sName>CHANGE_REASON</sName>
      <sValue>Some reason text...</sValue>
    </item>
  </aAttributes>
  <anScript>
    <anSavedReport>
      <sCategoryName>RMDEMO</sCategoryName>
      <sReportName>All changed requirements from document
(run time)</sReportName>
    </anSavedReport>
  </anScript>
  <anRunTimeParameters>
    <item>
      <sName>RTP__GROUP_1</sName>
      <sValue>ePhoto Requirements</sValue>
    </item>
  </anRunTimeParameters>
```

```
</urn:ModifyObjectsByScript>
```

4 Transition requirements by script:

```
<urn:ModifyObjectsByScript>  
  <sessionId>1436979823</sessionId>  
  <sAction>transition</sAction>  
  <anScript>  
    <sScriptText>select object_id from Product_Requirements  
where STATUS IN ('Current') </sScriptText>  
  </anScript>  
  <anTransition>  
    <sTransitionName>Approve</sTransitionName>  
  </anTransition>  
</urn:ModifyObjectsByScript>
```

MoveObjectInHierarchy

Move requirement to the other position in the hierarchy.

Style

Document

Input (Literal)

The input of this method is the document element MoveObjectInHierarchy having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|---------------------------------------|--------|------------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| object | RequirementIdentifier | 1..1 | A set of object attributes values |
| position | HierarchyInfo | 1..1 | Position and optionally new parent |

Output (Literal)

The output of this method is the document element MoveObjectInHierarchyResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| sMessage | string | 1..1 | |

Example of usage:

```
<urn:MoveObjectInHierarchy>
  <sessionId>1559933409</sessionId>
  <object>
    <!--Optional:-->
    <sPUID>COMP_000039</sPUID>
    <sClassName>Component_Requirements</sClassName>
  </object>
  <position>
    <order>2</order>
    <!--Optional:-->
    <parent>
      <sPUID>COMP_000012</sPUID>
      <sClassName>Component_Requirements</sClassName>
    </parent>
  </position>
</urn:MoveObjectInHierarchy>
```

ProposeNewRequirement

Creates a requirement proposal.

Style

Document

Input (Literal)

The input of this method is the argument `ProposeNewRequirement` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|--------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| sClassName | string | 1..1 | |
| aAttrList | NameValueList | 1..1 | |
| anECPsInfo | ECPsObjectInfo | 0..1 | |
| inChangeReason | string | 1..1 | |

Output (Literal)

The output of this method is the argument `ProposeNewRequirementResult` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------------------|---|--------|-------------|
| oProposeNewRequirementResult | ProposeNewRequirementResult | 1..1 | |

Example of usage:

```
<urn:ProposeNewRequirement>
  <sessionId>1418399921</sessionId>
  <sClassName>Marketing_Requirements</sClassName>
  <aAttrList>
    <!--Zero or more repetitions:-->
    <item>
      <sName>Title</sName>
      <!--Optional:-->
      <sValue>new MRKT 15 - title</sValue>
    </item>
    <item>
      <sName>Text</sName>
      <!--Optional:-->
      <sValue>new MRKT 15 - text</sValue>
    </item>
  </aAttrList>
  <!--Optional:-->
  <anECPsInfo>
```

```
<iECPsClassId>18</iECPsClassId>  
<iECPsObjectId>1</iECPsObjectId>  
</anECPsInfo>  
<!--Optional:-->  
<inChangeReason>vvvvvv</inChangeReason>  
</urn:ProposeNewRequirement>
```

PutSharedFile

Upload a shared file for access by others

Style

Document

Input (Literal)

The input of this method is the argument PutSharedFile having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| oFile | FileAttachment | 1..1 | |

Output (Literal)

The output of this method is the argument PutSharedFileResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|------|--------|-------------|
| iFileStorageId | int | 1..1 | |

QueryAttributes

Return the list of attributes defined in a class.

Style

Document

Input (Literal)

The input of this method is the argument QueryAttributes having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|-------------------------------|--------|---|
| sessionId | string | 1..1 | |
| sClassName | string | 1..1 | |
| CategoryInfo | Category Info | 0..1 | Category identification properties, used as search criteria |

Output (Literal)

The output of this method is the argument QueryAttributesResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|----------------------------------|--------|-------------|
| result | AttributeDefList | 1..1 | |

Remarks

The QueryAttributes call provides a method for getting attributes list from the specified class.

Attribute properties such as mandatory, default values, etc. will be also returned in the output.

There is also a possibility to filter user attributes values to have only users/groups that are assigned to the specified category.

Example of usage:

- 1 Get all attributes from the specified class:

```
<urn:QueryAttributes>
  <sessionId>111111111</sessionId>
  <sClassName>Product_Requirements</sClassName>
</urn:QueryAttributes>
```

- 2 Get all attributes of the specified class but filter possible values of user attributes by category:

```
<urn:QueryAttributes>
  <sessionId>111111111</sessionId>
  <sClassName>Product_Requirements</sClassName>
  <CategoryInfo>
    <CategoryId>-1</CategoryId>
```

```
    <DisplayName>RMDEMO\Availability</DisplayName>  
  </CategoryInfo>  
</urn:QueryAttributes>
```

QueryAttributesEx

Return the list of attributes defined in a class.

Style

Document

Input (Literal)

The input of this method is the argument QueryAttributesEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|------------------------------|--------|---|
| sessionId | string | 1..1 | |
| sClassName | string | 1..1 | |
| CategoryInfo | CategoryInfo | 0..1 | Category identification properties, used as search criteria |

Output (Literal)

The output of this method is the argument QueryAttributesExResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------------------|--------|-------------|
| result | AttributeDefExList | 1..1 | |

Remarks

The QueryAttributesEx call provides a method for getting attributes list from the specified class.

All attribute properties such as mandatory, default values, etc returned in the output.

There is also a possibility to filter user attributes values to have only users/groups assigned to the specified category.

Example of usage:

- 1 Get all attributes from the specified class:

```
<urn:QueryAttributesEx>
  <sessionId>1111111111</sessionId>
  <sClassName>Product_Requirements</sClassName>
</urn:QueryAttributesEx>
```

- 2 Get all attribute of the specified class but filter possible values of user attributes by category:

```
<urn:QueryAttributesEx>
  <sessionId>1111111111</sessionId>
  <sClassName>Product_Requirements</sClassName>
  <CategoryInfo>
    <CategoryId>17</CategoryId>
  </CategoryInfo>
</urn:QueryAttributesEx>
```


QueryAttributesEx2

Return the list of attributes defined in a class.

Style

Document

Input (Literal)

The input of this method is the argument QueryAttributesEx2 having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|------------------------------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| sClassName | string | 1..1 | Name of requirement class |
| CategoryInfo | CategoryInfo | 0..1 | Category identification properties, used as search criteria |

Output (Literal)

The output of this method is the argument QueryAttributesEx2Response having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|-------------------------------------|--------|------------------------------|
| result | AttributeDefEx2List | 1..1 | List of attribute properties |

Remarks

QueryAttributesEx2 call provides a method for getting attributes list from the specified class.

All attribute properties such as mandatory, default values, etc returned in the output.

There is also a possibility to filter user attributes values to have only users/groups assigned to the specified category.

Service also returns information about list attribute values, whether value is default and deleted.

Example of usage:

- 1 Get all attributes from the specified class:

```
<urn:QueryAttributesEx2>
  <sessionId>1111111111</sessionId>
  <sClassName>Product_Requirements</sClassName>
</urn:QueryAttributesEx2>
```

- 2 Get all attribute of the specified class but filter possible values of user attributes by category:

```
<urn:QueryAttributesEx2>
  <sessionId>1111111111</sessionId>
  <sClassName>Product_Requirements</sClassName>
  <CategoryInfo>
    <CategoryId>17</CategoryId>
```

```
</CategoryInfo>  
</urn:QueryAttributesEx>
```

QueryClasses

Return the list of defined classes in project.

Style

Document

Input (Literal)

The input of this method is the argument QueryClasses having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument QueryClassesResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------------|--------|-------------|
| result | ClassDefList | 1..1 | |

QueryClassesEx

Return the list of defined classes in project.

Style

Document

Input (Literal)

The input of this method is the argument QueryClassesEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument QueryClassesExResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | ClassDefExList | 1..1 | |

QueryDatabases

Return the list of oracle databases.

Style

Document

Input (Literal)

The input of this method is the argument QueryDatabases that is always empty.

Output (Literal)

The output of this method is the argument QueryDatabasesResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------------|--------|-------------|
| result | DatabaseList | 1..1 | |

QueryLinkClasses

Return the list of linked classes information in project.

Style

Document

Input (Literal)

The input of this method is the argument QueryLinkClasses having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| nClassId | int | 1..1 | |

Output (Literal)

The output of this method is the argument QueryLinkClassesResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|----------------------------------|--------|-------------|
| result | LinkClassDefList | 1..1 | |

QueryProjects

Return the list of defined projects in database.

Style

Document

Input (Literal)

The input of this method is the argument QueryProjects having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sUserId | string | 0..1 | |
| sPassword | string | 0..1 | |
| sDatabase | string | 1..1 | |

Output (Literal)

The output of this method is the argument QueryProjectsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|-----------------------------|--------|-------------|
| result | ProjectList | 1..1 | |

QueryProjectsEx

Return the list of defined projects in database.

Style

Document

Input (Literal)

The input of this method is the argument QueryProjectsEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sUserId | string | 0..1 | |
| sPassword | string | 0..1 | |
| sDatabase | string | 1..1 | |

Output (Literal)

The output of this method is the argument QueryProjectsExResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|-------------------------------|--------|-------------|
| result | ProjectExList | 1..1 | |

QueryRtmDocumentStructure

Creates an XML representing RM Document structure.

Style

Document

Input (Literal)

The input of this method is the argument QueryRtmDocumentStructure having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------|---------|--------|-------------|
| sessionId | string | 1..1 | |
| nDocId | int | 1..1 | |
| nChapterId | int | 0..1 | |
| bIncludeReq | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument RtmDocumentOut having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|---------------------------------------|--------|-------------|
| info | RtmDocumentProperties | 1..1 | |
| sContent | string | 1..1 | |

Remarks

Example of usage:

```
<urn:QueryRtmDocumentStructure>
  <sessionId>111111111</sessionId>
  <nDocId>12</nDocId>
  <nChapterId>169</nChapterId>
  <bIncludeReq>true</bIncludeReq>
</urn:QueryRtmDocumentStructure>
```

The Example of output:

```
<ns:RtmDocumentOut>
  <info>
    <nId>12</nId>
    <sName>ePhoto Requirements</sName>
  </info>
  <sContent><![CDATA[<?xml version="1.0" ?>
    <Document name="ZVBob3RvIFJlcXVpcmVtZW50cw==" projectName="Uk1ERU1P"
    databaseName="Uk0=" version="1.1" application="RM Web Services">
    <Chapter title="RGVzaWduIFJlcXVpcmVtZW50cw==" uid="169" iid="44">
    <Description/>
```


QuerySystemInfo

Return the system information.

Style

Document

Input (Literal)

The input of this method is the argument QuerySystemInfo having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument SystemInfoResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|----------------------------|--------|-------------|
| result | SystemInfo | 1..1 | |

ReadObject

Read object information with all the attribute values

Style

Document

Input (Literal)

The input of this method is the argument ReadObject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|---------------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| aRequirement | RequirementIdentifier | 1..1 | |

Output (Literal)

The output of this method is the argument ReadObjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | RequirementOut | 1..1 | |

ReadObjectAttachment

Read attachment of a requirement

Style

Document

Input (Literal)

The input of this method is the argument ReadObjectAttachment having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|---------------------------------------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| aRequirement | RequirementIdentifier | 1..1 | A combination of PUID/classname or objectID/classname that specifies a project requirement. |
| sAttrName | string | 1..1 | File attachment attribute name |
| nFileIndex | number | 0..1 | The index for the file to retrieve from the file attachment attribute. Specify nFileIndex only if the file attachment attribute has Allow multiple selections enabled. |

Output (Literal)

The output of this method is the argument ReadObjectAttachmentResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | FileAttachment | 1..1 | |

Examples of usage:

Reading from a simple file attachment attribute by PUID

```
<urn:ReadObjectAttachment>
  <sessionId>443452989</sessionId>
  <aRequirement>
    <sPUID>MC_000001</sPUID>
    <sClassName>MyClass</sClassName>
  </aRequirement>
  <sAttrName>ATTACHMENT</sAttrName>
</urn:ReadObjectAttachment>
```

Reading from a simple file attachment attribute by Object ID

```
<urn:ReadObjectAttachment>
  <sessionId>443452989</sessionId>
  <aRequirement>
    <sClassName>MyClass</sClassName>
    <nObjectId>423</nObjectId>
  </aRequirement>
  <sAttrName>ATTACHMENT</sAttrName>
</urn:ReadObjectAttachment>
```

Reading from a multi file attachment attribute by PUID

```
<urn:ReadObjectAttachment>
  <sessionId>443452989</sessionId>
  <aRequirement>
    <sPUID>MRKT_000003</sPUID>
    <sClassName>Marketing_Requirements</sClassName>
  </aRequirement>
  <sAttrName>FILE_ATTACHMENT</sAttrName>
  <nFileIndex>0</nFileIndex>
</urn:ReadObjectAttachment>
```

Reading from a multi file attachment attribute by object ID

```
<urn:ReadObjectAttachment>
  <sessionId>443452989</sessionId>
  <aRequirement>
    <sPUID>MRKT_000003</sPUID>
    <sClassName>Marketing_Requirements</sClassName>
    <nObjectId>58</nObjectId>
  </aRequirement>
  <sAttrName>FILE_ATTACHMENT</sAttrName>
  <nFileIndex>0</nFileIndex>
</urn:ReadObjectAttachment>
```

ReadObjectEx

Read object information with all the attribute values

Style

Document

Input (Literal)

The input of this method is the argument ReadObjectEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------------------|---------------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| aRequirement | RequirementIdentifier | 1..1 | |
| detagHtmlAttributes | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument ReadObjectExResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | RequirementOut | 1..1 | |

ReadObjects

Read object information with all the attribute values

Style

Document

Input (Literal)

The input of this method is the argument ReadObjects having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|---|--------|-------------|
| sessionId | string | 1..1 | |
| requirements | RequirementIdentifierList | 1..1 | |

Output (Literal)

The output of this method is the argument ReadObjectsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------------------------------|--------|-------------|
| result | RequirementList | 1..1 | |

ReadSyncXrefLink

Reads a link from Sync_Xref table

Style

Document

Input (Literal)

The input of this method is the argument ReadSyncXrefLink having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| aXref | SyncXrefLink | 1..1 | |

Output (Literal)

The output of this method is the argument ReadSyncXrefLinkResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|----------------------------------|--------|-------------|
| result | SyncXrefLinkList | 1..1 | |

RejectChangeRequest

Service definition of function ns__RejectChangeRequest

Style

Document

Input (Literal)

The input of this method is the argument RejectChangeRequest having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| className | string | 1..1 | |
| requestId | long | 1..1 | |
| reason | string | 1..1 | |

Output (Literal)

The output of this method is the argument RejectChangeRequestResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|-------------------------------|--------|-------------|
| status | CommandStatus | 1..1 | |

RemoveObject

RemoveObject Removes a requirement from the database

Style

Document

Input (Literal)

The input of this method is the argument RemoveObject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|---------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| objectDef | ObjectDef | 1..1 | |

Output (Literal)

The output of this method is the argument RemoveObjectResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------|--------|-------------|
| result | boolean | 1..1 | |

RemoveObjectFromCollection

Service definition of function ns__RemoveObjectFromCollection

Style

Document

Input (Literal)

The input of this method is the argument RemoveObjectFromCollection having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------|---------------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| objectIdentifier | RequirementIdentifier | 1..1 | |
| collectionName | string | 1..1 | |

Output (Literal)

The output of this method is the argument removeObjectFromCollectionResponseResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--|--------|-------------|
| result | removeObjectFromCollectionResponse | 1..1 | |

ReplaceObject

Replaces a RM requirement with specified requirement data

Style

Document

Input (Literal)

The input of this method is the argument ReplaceObject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|-----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| anObject | Requirement | 1..1 | |

Output (Literal)

The output of this method is the argument ReplaceObjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | RequirementOut | 1..1 | |

ReplaceObjectEx

Replaces a RM requirement with specified requirement data

Style

Document

Input (Literal)

The input of this method is the argument ReplaceObjectEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------------|-----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| anObject | Requirement | 1..1 | |
| bDontGenerateAlfEvent | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument ReplaceObjectExResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | RequirementOut | 1..1 | |

ReplaceObjectWithAttachment

Replace a RM requirement with attachment, given a class id and requirement data

Style

Document

Input (Literal)

The input of this method is the argument `ReplaceObjectWithAttachment` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------------|--------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| anObject | Requirement | 1..1 | |
| sAttrName | string | 1..1 | |
| oFile | FileAttachment | 0..1 | |
| bDontGenerateAlfEvent | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument `ReplaceObjectWithAttachmentResult` having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------------------------------------|--------|-------------|
| result | ReplaceRequirementOut | 1..1 | |

ResolveSuspicion

Clears suspect links.

Style

Document

Input (Literal)

The input of this method is the argument ResolveSuspicion having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------|---------|--------|---|
| sessionId | string | 1..1 | |
| sClassName | string | 1..1 | |
| nObjectId | int | 1..1 | |
| bPrimaryLinks | boolean | 0..1 | If true , all outgoing links will be cleared from suspect. If false , outgoing links will still be suspect. Default is true |
| bSecondaryLinks | boolean | 0..1 | If true , all incoming links will be cleared from suspect. If false , incoming links will still be suspect. Default is true |

RTMDocumentAddChapter

The New Chapter Shall be added after the Existing Chapter at the same level.

Style

Document

Input (Literal)

The input of this method is the argument RTMDocumentAddChapter having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------|-----------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| nDocument-id | int | 1..1 | |
| nExistChapter-id | int | 1..1 | |
| chapterName | ns-chapterDetails | 1..1 | |

Output (Literal)

The output of this method is the argument RTMDocumentAddChapterResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| sMessage | string | 1..1 | |

RTMDocumentAddRequirement

The Requirement Shall be added in the Existing Chapter.

Style

Document

Input (Literal)

The input of this method is the argument RTMDocumentAddRequirement having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|-----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| nDocument-id | int | 1..1 | |
| nChapter-id | int | 0..1 | |
| sClassName | string | 0..1 | |
| nObject-id | int | 0..1 | |
| anObject | Requirement | 0..1 | |

Output (Literal)

The output of this method is the argument RTMDocumentAddRequirementResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| sMessage | string | 1..1 | |

RTMDocumentExchangeRequirement

Exchange requirements inplace.

Style

Document

Input (Literal)

The input of this method is the argument RTMDocumentExchangeRequirement having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------------|----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| nDocument-id | int | 1..1 | |
| nChapter-id | int | 1..1 | |
| sClassName | string | 1..1 | |
| nOldObject-id | int | 1..1 | |
| nNewObject-id | int | 1..1 | |
| ECPObject | ECPObjInfo | 0..1 | |

Output (Literal)

The output of this method is the argument RTMDocumentExchangeResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| sMessage | string | 1..1 | |

RTMDocumentRemoveRequirement

Marks requirements as removed from the Document.

Style

Document

Input (Literal)

The input of this method is the argument RTMDocumentRemoveRequirement having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| nDocument-id | int | 1..1 | |
| nChapter-id | int | 1..1 | |
| sClassName | string | 1..1 | |
| nObject-id | int | 1..1 | |

Output (Literal)

The output of this method is the argument RTMDocumentRequirementResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|--------|--------|-------------|
| sMessage | string | 1..1 | |

runTestAsync

Run the async. test commmand

Style

Document

Input (Literal)

The input of this method is the argument runTestAsync having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| param-1 | runTestAsyncInputData | 1..1 | |

Output (Literal)

The output of this method is the argument runTestAsyncResponseResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------------|--------|-------------|
| result | runTestAsyncResponse | 1..1 | |

SendCMNotifications

Send notifications to CM

Style

Document

Input (Literal)

The input of this method is the argument SendCMNotifications having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| CMUserId | string | 1..1 | |
| CMPassword | string | 1..1 | |

Output (Literal)

The output of this method is the argument CMNotificationsResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------|--------|-------------|
| nValue | int | 1..1 | |

TransitionObject

Transition requirement to the specified state

Style

Document

Input (Literal)

The input of this method is the argument TransitionObject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|-------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| anObject | TransitObject | 1..1 | |

Output (Literal)

The output of this method is the argument TransitionObjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------|----------|--------|-------------|
| sPUID | string | 1..1 | |
| sClassName | string | 1..1 | |
| sDescription | string | 0..1 | |
| sCreatedBy | string | 1..1 | |
| sModifiedBy | string | 1..1 | |
| nCreateTime | dateTime | 1..1 | |
| nModifiedTime | dateTime | 1..1 | |
| sTitle | string | 0..1 | |
| nObjectId | int | 1..1 | |
| nObjectVersionId | int | 1..1 | |
| sURL | string | 1..1 | |
| sState | string | 1..1 | |
| sOwner | string | 1..1 | |

Remarks

Example of usage:

```
<urn:TransitionObject>
  <sessionId>1111111111</sessionId>
  <anObject>
    <sClassName>Component_Requirements</sClassName>
    <nObjectId>20</nObjectId>
    <sTransitionName>DELEGATE</sTransitionName>
    <aAttrList>
```

```
        <item>
            <sName>DEVELOPER</sName>
            <sValue>MICHAEL</sValue>
        </item>
    </aAttrList>
</anObject>
</urn:TransitionObject>
```


UnlinkObjects

Unlink multiple children from a parent object

Style

Document

Input (Literal)

The input of this method is the argument UnlinkObjects having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------|----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| sParentClassName | string | 1..1 | |
| sParentPUIID | string | 1..1 | |
| sChildClassName | string | 1..1 | |
| aChildPUIIDs | StringList | 1..1 | |
| bOnlyDelete | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument UnlinkObjectsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------|--------|-------------|
| results | string | 1..1 | |

Remarks

Example of usage:

```
<urn:UnlinkObjects>
  <sessionId>11111111</sessionId>
  <sParentClassName>Marketing_Requirements</sParentClassName>
  <sParentPUIID>MRKT_000020</sParentPUIID>
  <sChildClassName>Product_Requirements</sChildClassName>
  <aChildPUIIDs>
    <item>PROD_000023</item>
  </aChildPUIIDs>
  <bOnlyDelete>>false</bOnlyDelete>
</urn:UnlinkObjects>
```

Additional Info:

It is possible not only remove requirement links but also delete requirement links in UnLinkObjects, UnLinkObjectsEx and UnLinkObjectsExById web services. If bOnlyDelete input parameter specified as true, then link will be deleted. If false or not specified then link will be removed at all.

UnlinkObjectsEx

Unlink multiple children from a parent object

Style

Document

Input (Literal)

The input of this method is the argument UnlinkObjectsEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------------|----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| nRelationId | int | 0..1 | |
| sRelationName | string | 0..1 | |
| sParentPUID | string | 1..1 | |
| aChildPUIDs | StringList | 1..1 | |
| bOnlyDelete | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument UnlinkObjectsExResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------|--------|-------------|
| results | string | 1..1 | |

Remarks

Example of usage:

```
<urn:UnlinkObjectsEx>
  <sessionId>1111111111</sessionId>
  <nRelationId>5</nRelationId>
  <sParentPUID>MRKT_000021</sParentPUID>
  <aChildPUIDs>
    <item>PROD_000023</item>
  </aChildPUIDs>
  <bOnlyDelete>>false</bOnlyDelete>
</urn:UnlinkObjectsEx>
```

Additional Info:

It is possible not only remove requirement links but also delete requirement links in UnLinkObjects, UnLinkObjectsEx and UnLinkObjectsExById web services. If bOnlyDelete input parameter specified as true, then link will be deleted. If false or not specified then link will be removed at all.

UnlinkObjectsExById

Unlink multiple children from a parent object

Style

Document

Input (Literal)

The input of this method is the argument UnlinkObjectsExById having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------------|------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| nRelationId | int | 0..1 | |
| sRelationName | string | 0..1 | |
| nParentId | int | 1..1 | |
| aChildIds | IdList | 1..1 | |
| bOnlyDelete | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument UnLinkResults having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|----------------------------|--------|-------------|
| sResult | string | 1..1 | |
| lLinkList | StringList | 0..1 | |

Remarks

Example of usage:

```
<urn:UnlinkObjectsExById>
  <sessionId>11111111</sessionId>
  <nRelationId>5</nRelationId>
  <nParentId>55</nParentId>
  <aChildIds>
    <item>32</item>
  </aChildIds>
  <bOnlyDelete>>false</bOnlyDelete>
</urn:UnlinkObjectsExById>
```

Additional Info:

It is possible not only remove requirement links but also delete requirement links in UnLinkObjects, UnLinkObjectsEx and UnLinkObjectsExById web services. If bOnlyDelete input parameter specified as true, then link will be deleted. If false or not specified then link will be removed at all.

UpdateObject

Updates a RM requirement with specified requirement data

Style

Document

Input (Literal)

The input of this method is the argument UpdateObject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|-----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| anObject | Requirement | 1..1 | |

Output (Literal)

The output of this method is the argument UpdateObjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | RequirementOut | 1..1 | |

UpdateObjectAttachment

Updates a RM requirement attachment

Style

Document

Input (Literal)

The input of this method is the argument UpdateObjectAttachment having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|--------------------------------|--------|--|
| sessionId | string | 1..1 | The current session identifier |
| sClassName | string | 1..1 | Name of requirement class |
| sPUID | string | 1..1 | PUID of specified requirement |
| sAttrName | string | 1..1 | File attachment attribute name |
| nFileIndex | integer | 0..1 | The index at which the file will be added to the file attachment attribute. Specify nFileIndex only if the file attachment attribute has the Allow multiple selections option enabled. To add an attachment at the last position, set nFileIndex higher than the last index. |
| oFile | FileAttachment | 0..1 | The file attachment to upload. To delete an attachment, clear sFullPath and sFileName. |

Output (Literal)

The output of this method is the argument UpdateObjectAttachmentResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------|--------|-------------|
| results | string | 1..1 | |

Example of usage:

Uploading a file attachment to a simple file attachment attribute

```
<urn:UpdateObjectAttachment>
  <sessionId>443452989</sessionId>
  <sClassName>MyClass</sClassName>
  <sPUID>MC_000001</sPUID>
  <sAttrName>ATTACHMENT</sAttrName>
  <oFile>
    <sFullPath>C:\temp\Design.docx</sFullPath>
    <sFilename>Design.docx</sFilename>
  </oFile>
</urn:UpdateObjectAttachment>
```

Uploading a file attachment to a multi file attachment attribute

```
<urn:UpdateObjectAttachment>
  <sessionId>443452989</sessionId>
  <sClassName>Marketing_Requirements</sClassName>
  <sPUID>MRKT_000003</sPUID>
  <sAttrName>FILE_ATTACHMENT</sAttrName>
  <nFileIndex>0</nFileIndex>
  <oFile>
    <sFullPath>C:\temp\Design.docx</sFullPath>
    <sFilename>Design.docx</sFilename>
  </oFile>
</urn:UpdateObjectAttachment>
```

UpdateObjectEx

Updates a RM requirement with specified requirement data

Style

Document

Input (Literal)

The input of this method is the argument UpdateObjectEx having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------------|-----------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| anObject | Requirement | 1..1 | |
| bDontGenerateAlfEvent | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument UpdateObjectExResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------------|--------|-------------|
| result | RequirementOut | 1..1 | |

UpdateTemplate

Update the template name, filename, and description fields and the template file.

Style

Document

Input (Literal)

The input of this method is the argument UpdateTemplate having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|--------------|--------|-------------|
| sessionId | string | 1..1 | |
| docTemplate | Template | 1..1 | |
| encodedContent | base64Binary | 0..1 | |

Output (Literal)

The output of this method is the argument UpdateTemplateResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------|--------|-------------|
| result | int | 1..1 | |

UpdateTemplateFile

Replace the template file of the template specified by template id

Style

Document

Input (Literal)

The input of this method is the argument UpdateTemplateFile having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|--------------|--------|-------------|
| sessionId | string | 1..1 | |
| id | int | 1..1 | |
| encodedContent | base64Binary | 0..1 | |

Output (Literal)

The output of this method is the argument UpdateTemplateFileResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------|--------|-------------|
| result | int | 1..1 | |

UploadImageForHTMLAttribute

Upload picture and file to the RM server

Style

Document

Input (Literal)

The input of this method is the argument UploadImageForHTMLAttribute having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|---------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| files | ImageList | 1..1 | |

Output (Literal)

The output of this method is the argument UploadImageResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------|---------------------------------------|--------|-------------|
| aSucceed | ImageUploadResultList | 1..1 | |
| aFailed | ImageUploadResultList | 1..1 | |

Remarks

Example of usage:

```
<urn:UploadImageForHTMLAttribute>
  <sessionId>1406221868</sessionId>
  <files>
    <item>
      <!--test2.gif is a local file on RM application server-->
      <sFullPath>c:\Temp\_a\test2.gif</sFullPath>
      <sFilename>test2.gif</sFilename>
    </item>
    <item>
      <sFilename>test1.png</sFilename>
    </item>
  </files>
</UploadImageForHTMLAttribute>
<encodedContents>iVBORw0KGgoAAAANSUHEUgAAADwAAAA1CAIAAACskR/tAAAAAXNSR
0IARs4c6QAAAARnQU1BAACxjwv8YQUAAAJcEhZcwAADsMAAA7DAcdvqGQAAAHxSURBVGH
D7ZQxcSIEEU5FwfIPJyBI6TgABYBloouDTMumKGgIJL2S1ptstgSlSIEvfmTSXYV7bMte
/V4Q7p0K7p0K7p0K7p0Kz5AerX7rhHsPpLJ0mJGpWDYBMA1xda1g61PGZEWO7YJZuv802m
xlwkasyJGmKChkyGNagXEIBM0FBYhbcia1aVfIGvWh0nvD0l3tRv26MTW+nhHyXE6Xn4vJ
nwdQVWhWPq+/Uq6Nl/Xk23dNqFyuLnFBKtjZQR1H1QViqXJwN+w82DXkMpwXdvfL+5n1KP
bvzm4lcnFWGhECKoKpdJk6WfjPNCfrrU+3tyj8FeFK7nu3QnZnKkasf/OgqpCoTQ7nSHwo
5bRcldy2Q626H+nQ4UiJ92qjnR41RD2uINrsGePJT1UjLiVC6oKZdL8huH18k+caSXnxC3
2h0S8hYYwhYKqQpE0zfY3j046vm5cC8tc2HHnjyWAZT6oKhRjP7NxpvmW/zyHb9xf15fils
WgqlAiTZZxNrvx8Rxb8C33K9W30EAjQlBVKHwRZydrVpd+gaxZXfoFsmYtQl0MMKFDIU0a
```

```
gt58iP1N0NB5Jm0Q27UJZussThqDnzIibRCbVg1GjjEuTYjdawSTJjBVmhBjZgm2ziFPei
F06VZ06VZ06VZ06Va8ofTj8Q06Ch0Ds8230QAAAABJRU5ErkJggg==
</encodedContents>
    </item>
</files>
</urn:UploadImageForHTMLAttribute>
```

Complex Types

| Name | Description |
|-------------------------------|-------------|
| addObjectToCollectionResponse | |
| AppendRMDocumentExResult | |
| AppendRtmDocumentResult | |
| AsyncAppendRtmDocResponse | |
| AsyncCreateRtmDocResponse | |
| AsyncReplaceRtmDocResponse | |
| AttributeDef | |
| AttributeDefEx | |
| AttributeDefEx2 | |
| AttributeDefExList | |
| AttributeDefEx2List | |
| AttributeDefInfo | |
| AttributeDefList | |
| AttributeDefSpecifier | |
| AttributeFormatDef | |
| Category | |
| CategoryInfo | |
| CategoryAssign | |
| CategoryList | |
| CategoryReq | |
| ClassDef | |
| ClassDefEx | |
| ClassDefExList | |
| ClassDefInfo | |
| ClassDefList | |
| ClassSpecifier | |
| CmdStatus | |
| CMPProjectInfo | |
| CollectionEx | |
| CollectionEx2 | |
| CollectionEx2List | |
| CollectionExList | |
| CollectionInfo | |

| Name | Description |
|--|-------------|
| CollectionList | |
| CollectionSpecifier | |
| CollectionTransferRules | |
| CollectionTransferRulesEx | |
| CommandStatus | |
| CreateCollectionEx | |
| CreateChildDocumentData | |
| CreateRMDocumentExResult | |
| CreateRtmDocumentResult | |
| DatabaseList | |
| DocumentObject | |
| DocumentsFilter | |
| ECPObjInfo | |
| ECPObjInfo | |
| FileAttachment | |
| FindRequirementOut | |
| FormatDef | |
| getAsyncAppendRtmDocStatusResponse | |
| getAsyncCreateRtmDocStatusResponse | |
| getAsyncQueryRtmDocResponse | |
| getAsyncQueryRtmDocumentStatusResponse | |
| getAsyncReplaceRtmDocStatusResponse | |
| getAsyncStatusResponse | |
| GetAttributeDefInfoReply | |
| GetAttributeDefInfoRequest | |
| GetClassDefInfoReply | |
| GetClassDefInfoRequest | |
| GetCollectionInfoReply | |
| GetCollectionInfoRequest | |
| GetProjectInfoReply | |
| GetProjectInfoRequest | |
| GetUserAttributeDefInfoReply | |
| GetUserAttributeDefInfoRequest | |
| HierarchyInfo | |
| IdList | |
| ImageList | |

| Name | Description |
|------------------------------------|-------------|
| ImageUploadResult | |
| ImageUploadResultList | |
| InRequirement | |
| InTransition | |
| Link | |
| LinkClassDef | |
| LinkClassDefList | |
| LinkList | |
| ListItemDef | |
| ListItems | |
| LoginExResultInfo | |
| NameValue | |
| NameValueList | |
| ns-chapterDetails | |
| Object | |
| ObjectDef | |
| ObjectDetails | |
| ObjectDetailsList | |
| ObjectsList | |
| ProjectEx | |
| ProjectExList | |
| ProjectInfo | |
| ProjectList | |
| ProjectSpecifier | |
| ProposeNewRequirementResult | |
| RelationList | |
| RelationWithObjects | |
| removeObjectFromCollectionResponse | |
| ReplaceRequirementList | |
| ReplaceRequirementOut | |
| Report | |
| Requirement | |
| RequirementFindList | |
| RequirementIdentifier | |
| RequirementIdentifierList | |
| RequirementOut | |

| Name | Description |
|--------------------------|-------------|
| Result | |
| RtmDocSnapshot | |
| RtmDocSnapshotOut | |
| RtmDocSnapshotOutList | |
| RtmDocumentProperties | |
| RtmDocumentWithCategory | |
| runTestAsyncInputData | |
| runTestAsyncResponse | |
| runTestAsyncResponseData | |
| Script | |
| SearchRequirement | |
| StatusMessage | |
| StatusMessageList | |
| StringList | |
| SyncXrefLink | |
| SyncXrefLinkList | |
| SystemInfo | |
| Template | |
| TemplateList | |
| testAsyncStatusResponse | |
| Transition | |
| Transitions | |
| TransitObject | |
| UserAttributeDefInfo | |
| UserValue | |
| UserValueList | |

addObjectToCollectionResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| status | cmdStatusCode | 1..1 | |

AppendRMDocumentExResult

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| status | CommandStatus | 1..1 | |

AppendRtmDocumentResult

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| status | CommandStatus | 1..1 | |

AsyncAppendRtmDocResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sCmdToken | string | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| status | CmdStatus | 1..1 | |

AsyncCreateRtmDocResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sCmdToken | string | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| status | CmdStatus | 1..1 | |

AsyncReplaceRtmDocResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sCmdToken | string | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| status | CmdStatus | 1..1 | |

AttributeDef

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|----------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |
| nTypeId | int | 1..1 | |
| sTypeName | string | 1..1 | |
| sDisplayName | string | 1..1 | |
| sDefaultValue | string | 0..1 | |
| bMandatory | boolean | 1..1 | |
| bEditable | boolean | 1..1 | |
| bUnique | boolean | 1..1 | |
| bVisible | boolean | 1..1 | |
| bMultiple | boolean | 1..1 | |
| aFormat | FormatDef | 1..1 | |
| aValues | StringList | 0..1 | |

AttributeDefEx

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|----------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |
| nTypeId | int | 1..1 | |
| sTypeName | string | 1..1 | |
| sDisplayName | string | 1..1 | |
| sDefaultValue | string | 0..1 | |
| bMandatory | boolean | 1..1 | |
| bEditable | boolean | 1..1 | |
| bUnique | boolean | 1..1 | |
| bVisible | boolean | 1..1 | |
| bMultiple | boolean | 1..1 | |
| bImplicit | boolean | 1..1 | |
| bHtml | boolean | 0..1 | |
| aFormat | FormatDef | 1..1 | |
| aValues | StringList | 0..1 | |

AttributeDefEx2

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|---------------------------|--------|--|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | Attribute identifier |
| sName | string | 1..1 | Attribute name |
| nTypeId | int | 1..1 | Attribute type identifier |
| sTypeName | string | 1..1 | Attribute type name |
| sDisplayName | string | 1..1 | Attribute display name |
| sDefaultValue | string | 0..1 | Attribute default value |
| bMandatory | boolean | 1..1 | Flag, indicating if attribute is mandatory |
| bEditable | boolean | 1..1 | Flag, indicating if attribute is editable |
| bUnique | boolean | 1..1 | Flag, indicating if attribute values must be unique |
| bVisable | boolean | 1..1 | Flag, indicating if attribute is visible in RM Browser |
| bMultiple | boolean | 1..1 | Flag, indicating if attribute can have multiple values |
| bImplicit | boolean | 1..1 | Flag, indicating if attribute is implicit |
| bHtml | boolean | 0..1 | Flag, indicating if attribute is HTML enabled |
| aFormat | FormatDef | 1..1 | Attribute format properties |
| aValues | ListItems | 0..1 | List of attribute values |

AttributeDefExList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | AttributeDefEx | 0..* | |

AttributeDefEx2List

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------|--------|----------------------|
| SEQUENCE | | 1..1 | |
| item | AttributeDefEx2 | 0..* | Attribute properties |

AttributeDefInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |
| nTypeId | int | 1..1 | |
| sTypeName | string | 1..1 | |
| sDisplayName | string | 1..1 | |
| sDefaultValue | string | 1..1 | |
| bMandatory | boolean | 1..1 | |
| bEditable | boolean | 1..1 | |
| bUnique | boolean | 1..1 | |
| bVisible | boolean | 1..1 | |
| bMultiple | boolean | 1..1 | |
| bImplicit | boolean | 1..1 | |
| bHtml | boolean | 1..1 | |
| aFormat | AttributeFormatDef | 1..1 | |
| aValues | StringList | 0..1 | |

AttributeDefList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | AttributeDef | 0..* | |

AttributeDefSpecifier

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------|-----------------------------------|--------|--|
| SEQUENCE | | 1..1 | |
| Type | IdNameEnumeration | 1..1 | Possible values: 0 - then attribute will be specified by id 1 - then attribute will be specified by name |
| Value | IdNameUnion | 1..1 | id or attribute name(depending on previous setting) |
| CategoryInfo | CategoryInfo | 0..1 | Category information for filtering values |

AttributeFormatDef

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nMaxLen | int | 1..1 | |
| nDisplayLen | int | 1..1 | |
| sCase | string | 1..1 | |
| sTemplate | string | 1..1 | |
| sMinValue | string | 1..1 | |
| sMaxValue | string | 1..1 | |

Category

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | long | 1..1 | |
| nType | long | 1..1 | |
| sName | string | 1..1 | |
| sDescription | string | 0..1 | |
| sDisplayName | string | 1..1 | |

Remarks

Additional info:

'sDisplayName' value of category name in the output will be specified with '\' separator, e.g. 'RMDEMO\Availability\Cost'

CategoryInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------|--------|--------|--|
| SEQUENCE | | 1..1 | |
| CategoryId | long | 0..1 | Category id, default value = -1, means that no filter set by category id |
| DisplayName | string | 0..1 | Category name |

CategoryAssign

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nCategoryId | long | 0..1 | |
| sDisplayName | string | 0..1 | |

CategoryList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | Category | 0..* | |

CategoryReq

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sName | string | 1..1 | |
| sDescription | string | 0..1 | |
| nParentCategoryId | long | 1..1 | |
| bInheritAccessRightsFromParentCategory | bool | 0..1 | |

ClassDef

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |

ClassDefEx

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |
| nDescriptionAttrId | int | 1..1 | |
| nTitleAttrId | int | 1..1 | |
| nType | int | 1..1 | |

ClassDefExList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|----------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | ClassDefEx | 0..* | |

ClassDefInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |
| nDescriptionAttrId | int | 1..1 | |
| nTitleAttrId | int | 1..1 | |
| nType | int | 1..1 | |

ClassDefList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | ClassDef | 0..* | |

ClassSpecifier

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| Type | IdNameEnumeration | 1..1 | |
| Value | IdNameUnion | 1..1 | |

CmdStatus

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| status | int | 1..1 | |
| msgs | StatusMessageList | 0..1 | |

CMProjectInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sProductName | string | 1..1 | |
| sProjectName | string | 1..1 | |

CollectionEx

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sType | string | 1..1 | |
| sName | string | 1..1 | |
| bDocument | boolean | 1..1 | |
| bBaseline | boolean | 1..1 | |
| sURL | string | 1..1 | |

CollectionEx2

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|---|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sType | string | 1..1 | |
| sName | string | 1..1 | |
| bDocument | boolean | 1..1 | |
| bBaseline | boolean | 1..1 | |
| transferRules | CollectionTransferRules | 1..1 | |

CollectionEx2List

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | CollectionEx2 | 0..* | |

CollectionExList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | CollectionEx | 0..* | |

CollectionInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|---|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sType | string | 1..1 | |
| sName | string | 1..1 | |
| bDocument | boolean | 1..1 | |
| bBaseline | boolean | 1..1 | |
| transferRules | CollectionTransferRules | 1..1 | |

CollectionList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | string | 0..* | |

CollectionSpecifier

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| Type | IdNameEnumeration | 1..1 | |
| Value | IdNameUnion | 1..1 | |

CollectionTransferRules

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------------------|---------|--------|-------------|
| SEQUENCE | | 1..1 | |
| bTransferToChild | boolean | 1..1 | |
| bDeleteFromParent | boolean | 1..1 | |
| bTransferBackToParent | boolean | 1..1 | |

CollectionTransferRulesEx

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------------------|---------|--------|-------------|
| SEQUENCE | | 1..1 | |
| bTransferToChild | boolean | 0..1 | |
| bDeleteFromParent | boolean | 0..1 | |
| bTransferBackToParent | boolean | 0..1 | |
| bObjectsAddOrRemove | boolean | 0..1 | |

CommandStatus

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nStatusCode | int | 1..1 | |
| sMessage | string | 0..1 | |

CreateCollectionEx

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|---|--------|-------------|
| SEQUENCE | | 1..1 | |
| sName | string | 1..1 | |
| sDescription | string | 0..1 | |
| transferRules | CollectionTransferRules | 0..1 | |

CreateChildDocumentData

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|----------------|--------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sName | string | 1..1 | |
| nMasterDocId | int | 0..1 | |
| sMasterDocName | string | 0..1 | |
| categoryInfo | CategoryAssign | 0..1 | |

CreateRMDocumentExResult

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| status | CommandStatus | 1..1 | |

CreateRtmDocumentResult

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| status | CommandStatus | 1..1 | |

DatabaseList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | string | 0..* | |

DocumentObject

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|------|--------|-------------|
| SEQUENCE | | 1..1 | |
| iid | int | 1..1 | |
| objectId | int | 1..1 | |
| classId | int | 1..1 | |

DocumentsFilter

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------------------------------|----------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sCreatedBy | string | 0..1 | |
| sModifiedBy | string | 0..1 | |
| sOwner | string | 0..1 | |
| nCreateTime | dateTime | 0..1 | |
| nCreateTimeAfter | dateTime | 0..1 | |
| nCreateTimeBefore | dateTime | 0..1 | |
| nModifiedTime | dateTime | 0..1 | |
| nModifiedTimeAfter | dateTime | 0..1 | |
| nModifiedTimeBefore | dateTime | 0..1 | |
| bIsBeforeAndAfterIncludeSpecifiedTime | boolean | 0..1 | |
| sCategory | string | 0..1 | |
| bIncludeSubCategories | boolean | 0..1 | |
| bIncludeMasterDocuments | boolean | 0..1 | |
| bIncludeChildDocuments | boolean | 0..1 | |

ECPObjInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| classId | int | 0..1 | |
| className | string | 0..1 | |
| PUID | string | 0..1 | |
| objectId | int | 0..1 | |


ECPsObjectInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--|------|--------|-------------|
|  SEQUENCE | | 1..1 | |
| iECPsClassId | int | 1..1 | |
| iECPsObjectId | int | 1..1 | |

FileAttachment

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------------|--------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sFullPath | string | 0..1 | |
| sFilename | string | 1..1 | |
| nModifiedTime | dateTime | 0..1 | |
| nChecksum | long | 0..1 | |
| encodedContents | base64Binary | 0..1 | |

FindRequirementOut

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| aAttrList | NameValueList | 1..1 | |

FormatDef

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nMaxLen | int | 1..1 | |
| nDisplayLen | int | 1..1 | |
| sCase | string | 0..1 | |
| sTemplate | string | 0..1 | |
| sMinValue | string | 0..1 | |
| sMaxValue | string | 0..1 | |

getAsyncAppendRtmDocStatusResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| status | CmdStatus | 1..1 | |

getAsyncCreateRtmDocStatusResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| status | CmdStatus | 1..1 | |

getAsyncQueryRtmDocResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sCmdToken | string | 1..1 | |
| rtmDoc | RtmDocument | 1..1 | |
| status | CmdStatus | 1..1 | |

getAsyncQueryRtmDocumentStatusResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| rtmDoc | RtmDocument | 1..1 | |
| status | CmdStatus | 1..1 | |

getAsyncReplaceRtmDocStatusResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| status | CmdStatus | 1..1 | |

getAsyncStatusResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| status | CmdStatus | 1..1 | |

GetAttributeDefInfoReply

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------------|----------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| attributeDefInfo | AttributeDefInfo | 1..1 | |

GetAttributeDefInfoRequest

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------------------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sessionId | string | 1..1 | |
| classSpecifier | ClassSpecifier | 1..1 | |
| attributeDefSpecifier | AttributeDefSpecifier | 1..1 | |


GetClassDefInfoReply

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--|------------------------------|--------|-------------|
|  SEQUENCE | | 1..1 | |
| classDefInfo | ClassDefInfo | 1..1 | |

GetClassDefInfoRequest

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|----------------|--------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sessionId | string | 1..1 | |
| classSpecifier | ClassSpecifier | 1..1 | |

GetCollectionInfoReply

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|----------------|--------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| collectionInfo | CollectionInfo | 1..1 | |

GetCollectionInfoRequest

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------------|-------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sessionId | string | 1..1 | |
| collectionSpecifier | CollectionSpecifier | 1..1 | |

GetProjectInfoReply

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------|-----------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| projectInfo | ProjectInfo | 1..1 | |

GetProjectInfoRequest

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------------|----------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| projectSpecifier | ProjectSpecifier | 1..1 | |
| sUserId | string | 1..1 | |
| sPassword | string | 1..1 | |
| sDatabase | string | 1..1 | |

GetUserAttributeDefInfoReply

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------------|--------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| attributeDefInfo | UserAttributeDefInfo | 1..1 | |

GetUserAttributeDefInfoRequest

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------------------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sessionId | string | 1..1 | |
| classSpecifier | ClassSpecifier | 1..1 | |
| attributeDefSpecifier | AttributeDefSpecifier | 1..1 | |

HierarchyInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|---|
| SEQUENCE | | 1..1 | |
| parent | RequirementIdentifier | 0..1 | A set of object attributes values of parent requirement |
| order | int | 1..1 | Order of the object in scope of parent |

IdList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | int | 0..* | |

ImageList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | FileAttachment | 0..* | |

ImageUploadResult

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sFilename | string | 0..1 | |
| result | string | 0..1 | |

ImageUploadResultList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | ImageUploadResult | 0..* | |

InRequirement

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sClassName | string | 1..1 | |
| nObjectId | long | 0..1 | |
| sPUID | string | 0..1 | |

InTransition

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nTransitionId | long | 0..1 | |
| sTransitionName | string | 0..1 | |

Link

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sPrimaryClassName | string | 1..1 | |
| nPrimaryObjectId | int | 1..1 | |
| sPrimaryPUIID | string | 1..1 | |
| sSecondaryClassName | string | 1..1 | |
| nSecondaryObjectId | int | 1..1 | |
| sSecondaryPUIID | string | 1..1 | |
| sRelationName | string | 1..1 | |
| nRelationId | int | 1..1 | |
| sRelationStatus | string | 0..1 | |

LinkClassDef

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |
| sRelationName | string | 1..1 | |

LinkClassDefList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | LinkClassDef | 0..* | |

LinkedList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|----------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | Link | 0..* | |

ListItemDef

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------|--------|--------------------------------------|
| SEQUENCE | | 1..1 | |
| sName | string | 1..1 | Attribute value name |
| bDefault | boolean | 0..1 | Flag, indicating if value is default |
| bDeleted | boolean | 0..1 | Flag, indicating if value is deleted |

ListItems

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-------------|--------|------------------------------------|
| SEQUENCE | | 1..1 | |
| item | ListItemDef | 0..* | List of attribute value properties |

LoginExResultInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sessionId | string | 1..1 | |
| bIsAdmin | boolean | 1..1 | |

NameValue

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sName | string | 1..1 | |
| sValue | string | 0..1 | |

NameValueList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | NameValue | 0..* | |

ns-chapterDetails

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sName | string | 1..1 | |
| sDescription | string | 0..1 | |

Object

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sClassName | string | 1..1 | |
| nObjectId | long | 1..1 | |
| sReason | string | 0..1 | |

ObjectDef

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sClassName | string | 1..1 | |
| nObjectId | int | 1..1 | |

ObjectDetails

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nObjectId | int | 1..1 | |
| sPUID | string | 1..1 | |
| sRelationStatus | string | 0..1 | |
| ObjAttrs | NameValueList | 0..1 | |

ObjectDetailsList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | ObjectDetails | 0..* | |

ObjectsList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | Object | 0..* | |

ProjectEx

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|---------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |
| sDescription | string | 0..1 | |
| bLockStatus | boolean | 1..1 | |
| sVersion | string | 0..1 | |
| bAssociatedCM | boolean | 1..1 | |

ProjectExList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | ProjectEx | 0..* | |

ProjectInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|---------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |
| sDescription | string | 1..1 | |
| bLockStatus | boolean | 1..1 | |
| sVersion | string | 1..1 | |
| bAssociatedCM | boolean | 1..1 | |

ProjectList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | string | 0..* | |

ProjectSpecifier

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| Type | IdNameEnumeration | 1..1 | |
| Value | IdNameUnion | 1..1 | |

ProposeNewRequirementResult

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| result | RequirementOut | 1..1 | |

Example:

```
<ns:ProposeNewRequirementResult>
  <result>
    <sPUID>MRKT_000055</sPUID>
    <sClassName>Marketing_Requirements</sClassName>
    <sDescription>new MRKT 15 - text</sDescription>
    <sCreatedBy>EPHOTO</sCreatedBy>
    <sModifiedBy>EPHOTO</sModifiedBy>
    <nCreateTime>2014-12-12T14:47:38+02:00</nCreateTime>
    <nModifiedTime>2014-12-12T14:48:09+02:00</nModifiedTime>
    <sTitle>new MRKT 15 - title</sTitle>
    <nObjectId>91</nObjectId>
    <nObjectVersionId>1</nObjectVersionId>
    <aAttrList/>
  </result>
</ns:ProposeNewRequirementResult>
```

RelationList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | RelationWithObjects | 0..* | |

RelationWithObjects

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|-----------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nRelationType | int | 1..1 | |
| nRelationId | int | 1..1 | |
| sRelationName | string | 1..1 | |
| ObjList | ObjectDetailsList | 0..1 | |

removeObjectFromCollectionResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| status | cmdStatusCode | 1..1 | |

ReplaceRequirementList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | ReplaceRequirementOut | 0..* | |

ReplaceRequirementOut

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| obj | RequirementOut | 1..1 | |
| eStatus | reqStatusCode | 1..1 | |

Report

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sCategoryName | string | 1..1 | |
| sReportName | string | 1..1 | |

Requirement

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sPUID | string | 0..1 | |
| sClassName | string | 0..1 | |
| sDescription | string | 0..1 | |
| sCreatedBy | string | 0..1 | |
| sModifiedBy | string | 0..1 | |
| nCreateTime | dateTime | 0..1 | |
| nModifiedTime | dateTime | 0..1 | |
| sTitle | string | 0..1 | |
| nObjectId | int | 0..1 | |
| aAttrList | NameValueList | 0..1 | |

RequirementFindList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | FindRequirementOut | 0..* | |

RequirementIdentifier

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sPUID | string | 0..1 | |
| sClassName | string | 1..1 | |
| nObjectId | int | 0..1 | |

RequirementIdentifierList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | RequirementIdentifier | 0..* | |

RequirementList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | RequirementOut | 0..* | |

RequirementOut

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sPUIID | string | 1..1 | |
| sClassName | string | 1..1 | |
| sDescription | string | 0..1 | |
| sCreatedBy | string | 1..1 | |
| sModifiedBy | string | 1..1 | |
| nCreateTime | dateTime | 1..1 | |
| nModifiedTime | dateTime | 1..1 | |
| sTitle | string | 1..1 | |
| nObjectId | int | 1..1 | |
| nObjectVersionId | int | 1..1 | |
| sURL | string | 0..1 | |
| aAttrList | NameValueList | 0..1 | |

Result

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nStatusCode | int | 1..1 | |
| sMessage | string | 0..1 | |

RtmDocSnapshot

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------|--------|--------|--|
| SEQUENCE | | 1..1 | |
| sName | string | 1..1 | Snapshot name |
| nDocumentId | int | 1..1 | Document Id |
| sDescription | string | 0..1 | Snapshot description |
| sType | string | 0..1 | Snapshot type: MINOR, MAJOR, NONE If no value provided, then NONE is used |

RtmDocSnapshotOut

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |
| nDocumentId | int | 1..1 | |
| sUrl | string | 1..1 | |

RtmDocSnaphotOutList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | RtmDocSnapshotOut | 0..* | |

RtmDocument

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| sContent | string | 0..1 | |

RtmDocumentList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | RtmDocumentProperties | 0..* | |

RtmDocumentProperties

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 0..1 | |
| sName | string | 1..1 | |
| sURL | string | 0..1 | |

RtmDocumentWithCategory

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------|---------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| info | RtmDocumentProperties | 1..1 | |
| sContent | string | 0..1 | |
| categoryInfo | CategoryAssign | 0..1 | |
| bIsMaster | boolean | 0..1 | |

runTestAsyncInputData

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|----------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| reflectInt | int | 1..1 | |
| sReflectString | string | 0..1 | |
| logInterval | int | 1..1 | |
| timeSpan | int | 1..1 | |
| createFailure | int | 1..1 | |

runTestAsyncResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--|--------|-------------|
| SEQUENCE | | 1..1 | |
| sCmdToken | string | 0..1 | |
| data | runTestAsyncResponseData | 1..1 | |
| status | CmdStatus | 1..1 | |

runTestAsyncResponseData

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|----------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| reflectInt | int | 1..1 | |
| sReflectString | string | 0..1 | |
| times56 | int | 1..1 | |

Script

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sScriptText | string | 0..1 | |
| anSavedReport | Report | 0..1 | |
| anRunTimeParameters | NameValueList | 0..1 | |

SearchRequirement

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sTitle | string | 0..1 | |
| sDescription | string | 0..1 | |
| nCreateTime | dateTime | 0..1 | |
| nModifiedTime | dateTime | 0..1 | |
| aAttrList | NameValueList | 0..1 | |

StatusMessage

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|----------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| msgId | int | 1..1 | |
| level | int | 1..1 | |
| parms | StringList | 0..1 | |

StatusMessageList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | StatusMessage | 0..* | |

StringList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | string | 0..* | |

SyncXrefLink

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sForeignId | string | 0..1 | |
| nRMClassId | int | 0..1 | |
| sRMPUID | string | 0..1 | |
| sForeignToolName | string | 1..1 | |

SyncXrefLinkList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | SyncXrefLink | 0..* | |

SystemInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sDBCharSet | string | 0..1 | |
| sClientCharSet | string | 0..1 | |
| sRMMinorVersion | string | 0..1 | |
| sRMMajorVersion | string | 0..1 | |
| sRMAdminMajor | string | 0..1 | |
| sRMAdminMinor | string | 0..1 | |
| sOperatingSystem | string | 0..1 | |
| sOperatingSystemVersion | string | 0..1 | |
| sDatabase | string | 0..1 | |
| sDatabaseVersion | string | 0..1 | |

Template

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|---------------|----------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 0..1 | |
| sName | string | 1..1 | |
| sFileName | string | 0..1 | |
| sDescription | string | 0..1 | |
| sCreatedBy | string | 0..1 | |
| sModifiedBy | string | 0..1 | |
| nLastModified | dateTime | 0..1 | |

TemplateList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | Template | 0..* | |

testAsyncStatusResponse

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--|--------|-------------|
| SEQUENCE | | 1..1 | |
| data | runTestAsyncResponseData | 1..1 | |
| status | CmdStatus | 1..1 | |

Transition

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | long | 1..1 | |
| sName | string | 1..1 | |
| sDescription | string | 1..1 | |
| sToState | string | 1..1 | |

Transitions

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|----------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | Transition | 0..* | |

TransitObject

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------------|-------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sClassName | string | 1..1 | |
| nObjectId | long | 0..1 | |
| sPUID | string | 0..1 | |
| nTransitionId | long | 0..1 | |
| sTransitionName | string | 0..1 | |
| aAttrList | NameValueList | 0..1 | |

UserAttributeDefInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|----------------|------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | int | 1..1 | |
| sName | string | 1..1 | |
| nTypeId | int | 1..1 | |
| sTypeName | string | 1..1 | |
| sDisplayName | string | 1..1 | |
| aDefaultValues | UserValueList | 1..1 | |
| bMandatory | boolean | 1..1 | |
| bEditable | boolean | 1..1 | |
| bUnique | boolean | 1..1 | |
| bVisible | boolean | 1..1 | |
| bMultiple | boolean | 1..1 | |
| bImplicit | boolean | 1..1 | |
| bHtml | boolean | 1..1 | |
| aFormat | AttributeFormatDef | 1..1 | |
| aValues | UserValueList | 1..1 | |

UserValue

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------|---------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nId | integer | 1..1 | |
| sName | string | 1..1 | |
| sDisplayName | string | 1..1 | |
| sFirstName | string | 0..1 | |
| sLastName | string | 0..1 | |
| sPhone | string | 0..1 | |
| sFax | string | 0..1 | |
| sEmail | string | 0..1 | |
| sPager | string | 0..1 | |
| sLocation | string | 0..1 | |
| sMobilePhone | string | 0..1 | |
| sType | string | 1..1 | |

UserValueList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | UserValue | 0..* | |

Simple Types

| Name | Description |
|-------------------|-------------|
| cmdStatusCode | |
| IdNameEnumeration | |
| IdNameUnion | |
| reqStatusCode | |
| statusCode | |

cmdStatusCode

Derived By

Restricting string

Enumeration

| Value | Description |
|----------------------|-------------|
| SUCCESS | |
| FAILURE | |
| COLLECTION-NOT-FOUND | |

IdNameEnumeration

Derived By

Restricting string

Enumeration

| Value | Description |
|-------|-------------|
| ID | |
| NAME | |

IdNameUnion

Derived By

Restricting string

reqStatusCode

Derived By

Restricting string

Enumeration

| Value | Description |
|-----------|-------------|
| eCREATED | |
| eREPLACED | |
| eUPDATED | |
| eNOCHANGE | |

statusCode

Derived By

Restricting string

Enumeration

| Value | Description |
|-----------|-------------|
| STARTING | |
| ACTIVE | |
| FINISHED | |
| ERR | |
| NOT-FOUND | |

Chapter 2

RM Admin Web Service

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General

The Dimensions RM Web Service contains all administrative functions and types. The default URL is *http://localhost:8080/rtmBrowser/WebServices*. Adjust protocol, server name and port to match your environment.

Methods

| Name | Description |
|---|---|
| AssignCategoryToGroup | Assign category access to the group |
| AssignGroupToProject | Assign group to the project |
| AssignUsersInGroupPerCategory | Assign/revoke users access in group per category |
| AssignUserToGroup | Assign user to the group |
| AssignUserToProject | Assign user to the project |
| CopyGroup | Copy group with all project assignments and permissions |
| CopyUser | Copy user with group, project assignments and permissions |
| CreateGroup | Create a new group |
| CreateUser | Create a new user |
| CreateLDAPUser | Create a new LDAP user |
| CreateSSOUser | Create a new SSO user |
| DeleteGroup | Delete a group |
| DeleteUser | Delete a user |
| GetGroupInfo | Get information about group |
| GetGroups | Get list of groups |
| GetLoginSources | Get available login sources on the RM server |
| GetUserInfo | Get information about user |
| GetUsers | Get list of all users |
| GrantPermissionToGroup | Grant permission to group for some action |
| GrantPermissionToUser | Grant permission to user for some action |
| InheritPermissionForUser | Inherit permission to user for some action |
| RevokePermissionFromGroup | Revoke permission from group for some action |
| RevokePermissionFromUser | Revoke permission from user for some action |
| UnassignCategoryFromGroup | Un-assign category from the group |
| UnassignGroupFromProject | Un-assign group from the project |
| UnassignUserFromGroup | Un-assign user from the group |
| UnassignUserFromProject | Un-assign user from the project |
| UpdateListAttributeValues | Change list attribute values in attribute definition |
| UpdateUser | Update user information and account properties |
| UpdateUserAttributeValues | Allows to setup default values for the user attributes |

AssignCategoryToGroup

Assign category access to the group

Style

Document

Input (Literal)

The input of this method is the argument AssignCategoryToGroup having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------------|---------|--------|-------------|
| sessionId | string | 1..1 | |
| sGroupName | string | 1..1 | |
| sProjectName | string | 1..1 | |
| sCategoryName | string | 1..1 | |
| bIncludeSubcategories | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument AssignCategoryToGroupResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:AssignCategoryToGroup>  
  <sessionId>1</sessionId>  
  <sGroupName>read</sGroupName>  
  <sProjectName>RMDEMO</sProjectName>  
  <sCategoryName>RMDEMO/Functional</sCategoryName>  
  <bIncludeSubcategories>true</bIncludeSubcategories>  
</urn:AssignCategoryToGroup>
```

AssignGroupToProject

Assign group to the project

Style

Document

Input (Literal)

The input of this method is the argument AssignGroupToProject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------------|---------|--------|-------------|
| sessionId | string | 1..1 | |
| sGroupName | string | 1..1 | |
| sProjectName | string | 1..1 | |
| bForceUserAssignment | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument AssignGroupToProjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:AssignGroupToProject>  
  <sessionId>1</sessionId>  
  <sGroupName>test1</sGroupName>  
  <sProjectName>RMDEMO</sProjectName>  
</urn:AssignGroupToProject>
```

AssignUsersInGroupPerCategory

Assign/revoke users access in group per category

Style

Document

Input (Literal)

The input of this method is the argument AssignUsersInGroupPerCategory having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------------|------------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| sProjectName | string | 1..1 | |
| sCategoryName | string | 1..1 | |
| sGroupName | string | 1..1 | |
| excludeUsers | UserNameList | 0..1 | |
| includeUsers | UserNameList | 0..1 | |

Output (Literal)

The output of this method is the argument AssignUsersInGroupPerCategoryResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:AssignUsersInGroupPerCategory>
  <sessionId>1433504615</sessionId>
  <sProjectName>RMDEMO</sProjectName>
  <sCategoryName>RMDEMO\123\test\some category</sCategoryName>
  <sGroupName>WRITE</sGroupName>
  <excludeUsers>
    <item>support</item>
    <item>test</item>
  </excludeUsers>
  <includeUsers>
    <item>ephoto</item>
    <item>sales</item>
  </includeUsers>
</urn:AssignUsersInGroupPerCategory>
```

Users in excludeUsers section will be unassign in WRITE group in specified category.

Users in includeUsers section will be assigned to WRITE group in specified category.

If Inherit access rights from parent category turned on, after applying changes it will be unchecked.

Additional Info:

'sCategoryName value of category name can be specified as:

- a** category full name, separated by '/' or '\'
- b** category name(only in case when name is unique);

AssignUserToGroup

Assign user to the group

Style

Document

Input (Literal)

The input of this method is the argument AssignUserToGroup having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sUserName | string | 1..1 | |
| sGroupName | string | 1..1 | |

Output (Literal)

The output of this method is the argument AssignUserToGroupResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:AssignUserToGroup>  
  <sessionId>1</sessionId>  
  <sUserName>epphoto</sUserName>  
  <sGroupName>read</sGroupName>  
</urn:AssignUserToGroup>
```

AssignUserToProject

Assign user to the project

Style

Document

Input (Literal)

The input of this method is the argument AssignUserToProject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------|---------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| sUserName | string | 1..1 | User name |
| sGroupName | string | 1..1 | Group name |
| sProjectName | string | 1..1 | Project name |
| bDontAutoAssign | boolean | 0..1 | Default is "false". If the value is "false", the web service automatically assigns the specified user to the group categories, otherwise the user will not be assigned. |

Output (Literal)

The output of this method is the argument AssignUserToProjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

- 1 Assign user to project in the group with automatical assignment to the group categories

```
<urn:AssignUserToProject>
  <sessionId>session id</sessionId>
  <sUserName>user1</sUserName>
  <sGroupName>Group1</sGroupName>
  <sProjectName>RMDEMO</sProjectName>
  <bDontAutoAssign>>false</bDontAutoAssign>
</urn:AssignUserToProject>
```

- 2 Assign user to project in the group without assigning to the group categories

```
<urn:AssignUserToProject>
  <sessionId>session id</sessionId>
  <sUserName>user2</sUserName>
  <sGroupName>Group1</sGroupName>
  <sProjectName>RMDEMO</sProjectName>
  <bDontAutoAssign>>true</bDontAutoAssign>
</urn:AssignUserToProject>
```

CopyGroup

Copy group with all project assignments and permissions

Style

Document

Input (Literal)

The input of this method is the argument CopyGroup having the structure defined by the following table.

| Name | Type | Occurs | Description |
|---------------|---------------------------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| sGroupName | string | 1..1 | Name of new group |
| sSrcGroupName | string | 1..1 | Name of source group |
| anGroupInfo | GroupInfo | 0..1 | Additional group information |

Output (Literal)

The output of this method is the argument CopyGroupResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

The CopyGroup call provides a method for copying existing group with all project assignments and permissions.

Example of usage:

1 Create copy of group:

```
<urn:CopyGroup>
  <sessionId>1472146937</sessionId>
  <sGroupName>REPORTERS</sGroupName>
  <sSrcGroupName>icDemo Users</sSrcGroupName>
</urn:CopyGroup>
```

2 Create copy of group and provide description:

```
<urn:CopyGroup>
  <sessionId>1472146937</sessionId>
  <sGroupName>REPORTERS</sGroupName>
  <sSrcGroupName>icDemo Users</sSrcGroupName>
  <anGroupInfo>
    <sDescription>Reporters group</sDescription>
  </anGroupInfo>
</urn:CopyGroup>
```

CopyUser

Copy user with group, project assignments and permissions

Style

Document

Input (Literal)

The input of this method is the argument CopyUser having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------------------------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| sUserName | string | 1..1 | New user name |
| sSrcUserName | string | 1..1 | Source user name |
| sPassword | string | 0..1 | Password |
| anUserInfo | UserInfo | 0..1 | Additional user info |

Output (Literal)

The output of this method is the argument CopyUserResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

The CopyUser call provides a method for copying existing user with all group, category, project assignments and permissions.

Example of usage:

- 1 Create Full copy of user (including all information - firstname, lastname, phone, etc.)

```
<urn:CopyUser>
  <sessionId>1472146937</sessionId>
  <sUserName>Joe1</sUserName>
  <sSrcUserName>joe</sSrcUserName>
  <sPassword>123456</sPassword>
  <anUserInfo>
  </anUserInfo>
</urn:CopyUser>
```

- 2 Create copy of user and override some information from source user:

```
<urn:CopyUser>
  <sessionId>1472146937</sessionId>
  <sUserName>Joe1</sUserName>
  <sSrcUserName>joe</sSrcUserName>
  <sPassword>123456</sPassword>
  <anUserInfo>
    <sFirstName>John</sFirstName>
  </anUserInfo>
</urn:CopyUser>
```

```
<sLastName>Pettor</sLastName>  
<sPhone>3558832224</sPhone>  
<sEmail>jpettor@mail.com</sEmail>  
</anUserInfo>  
</urn:CopyUser>
```

CreateGroup

Create a new group

Style

Document

Input (Literal)

The input of this method is the argument CreateGroup having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------|---------------------------|--------|-------------|
| sessionId | string | 1..1 | |
| sGroupName | string | 1..1 | |
| anGroupInfo | GroupInfo | 0..1 | |

Output (Literal)

The output of this method is the argument CreateGroupResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:CreateGroup>
  <sessionId>1</sessionId>
  <sGroupName>read</sGroupName>
  <anGroupInfo>
    <sDescription>Some description</sDescription>
  </anGroupInfo>
</urn:CreateGroup>
```

CreateUser

Create a new user

Style

Document

Input (Literal)

The input of this method is the argument CreateUser having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|----------|--------|-------------|
| sessionId | string | 1..1 | |
| sUserName | string | 1..1 | |
| sPassword | string | 0..1 | |
| anUserInfo | UserInfo | 0..1 | |

Output (Literal)

The output of this method is the argument CreateUserResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:CreateUser>
  <sessionId>1</sessionId>
  <sUserName>Teddy</sUserName>
  <sPassword>nice</sPassword>
  <anUserInfo>
    <bPwdNeverExpires>true</bPwdNeverExpires>
  </anUserInfo>
</urn:CreateUser>
```


CreateLDAPUser

Create a new LDAP user

Style

Document

Input (Literal)

The input of this method is the argument CreateLDAPUser having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|-----------------------------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| sUserName | string | 1..1 | User name |
| anUserInfo | UserInfoExt | 0..1 | User information |

Output (Literal)

The output of this method is the argument CreateLDAPUserResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|------------------------------|
| result | Result | 1..1 | Result of LDAP user creation |

Remarks

The CreateLDAPUser call provides a method for creation new LDAP user.

Created users will have LDAP type in RM(as it is not differentiated SSO or LDAP).

For such user it is not possible to change password settings, except (bAccountDisabled).

Example of usage:

```
<urn:CreateLDAPUser>
<sessionId>11111111</sessionId>
  <sUserName>Peter</sUserName>
  <anUserInfo>
    <sFirstName>Peter</sFirstName>
    <sLastName>Oneil</sLastName>
  </anUserInfo>
</urn: CreateLDAPUser>
```

CreateSSOUser

Create a new SSO user

Style

Document

Input (Literal)

The input of this method is the argument CreateSSOUser having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|-----------------------------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| sUserName | string | 1..1 | User name |
| anUserInfo | UserInfoExt | 0..1 | User information |

Output (Literal)

The output of this method is the argument CreateSSOUserResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-----------------------------|
| result | Result | 1..1 | Result of SSO user creation |

Remarks

The CreateSSOUser call provides a method for creation new SSO user.

Created users will have LDAP type in RM(as it is not differentiated SSO or LDAP).

For such user it is not possible to change password settings, except (bAccountDisabled).

Example of usage:

```
<urn:CreateSSOUser>
  <sessionId>111111111</sessionId>
  <sUserName>John</sUserName>
  <anUserInfo>
    <sFirstName>John</sFirstName>
    <sLastName>Harrison</sLastName>
  </anUserInfo>
</urn: CreateSSOUser>
```

DeleteGroup

Delete a group

Style

Document

Input (Literal)

The input of this method is the argument DeleteGroup having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sGroupName | string | 1..1 | |

Output (Literal)

The output of this method is the argument DeleteGroupResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:DeleteGroup>  
  <sessionId>1</sessionId>  
  <sGroupName>TestGroup</sGroupName>  
</urn:DeleteGroup>
```

DeleteUser

Delete a user

Style

Document

Input (Literal)

The input of this method is the argument DeleteUser having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sUserName | string | 1..1 | |

Output (Literal)

The output of this method is the argument DeleteUserResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:DeleteUser>  
  <sessionId>1</sessionId>  
  <sUserName>testUser</sUserName>  
</urn:DeleteUser>
```

GetGroupInfo

Get information about group

Style

Document

Input (Literal)

The input of this method is the argument GetGroupInfo having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sGroupName | string | 1..1 | |

Output (Literal)

The output of this method is the argument GroupDetailInfo having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-------------|----------------------------|--------|-------------|
| sGroupName | string | 0..1 | |
| anGroupInfo | GroupInfo | 1..1 | |
| aProjects | StringList | 1..1 | |
| aUsers | StringList | 1..1 | |

Remarks

Example of usage:

```
<urn:GetGroupInfo>  
  <sessionId>1</sessionId>  
  <sGroupName>Administrators</sGroupName>  
</urn:GetGroupInfo>
```

GetGroups

Get list of groups

Style

Document

Input (Literal)

The input of this method is the argument GetGroups having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument GetGroupsResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|---------------------------|--------|-------------|
| result | GroupList | 1..1 | |

Remarks

Example of usage:

```
<urn:GetGroups>  
  <sessionId>1</sessionId>  
</urn:GetGroups>
```

GetLoginSources

Get available login sources on the RM server

Style

Document

Input (Literal)

The input of this method is the argument GetLoginSources having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| sessionId | string | 1..1 | |

Output (Literal)

The output of this method is the argument GetLoginSourcesResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------------|--------|-------------|
| result | LoginSources | 1..1 | |

Remarks

The GetLoginSources call provides a method to get login sources that are currently available on the RM server.

Example of usage:

```
<urn:GetLoginSources>  
  <sessionId>1464698712</sessionId>  
</urn:GetLoginSources>
```

GetUserInfo

Get information about user

Style

Document

Input (Literal)

The input of this method is the argument GetUserInfo having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------------|---------|--------|-------------|
| sessionId | string | 1..1 | |
| sUserName | string | 1..1 | |
| bIncludeAdditionalInfo | boolean | 0..1 | |
| bIncludeGroups | boolean | 0..1 | |
| bIncludeProjects | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument GetUserInfoResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------------|------------------------------------|--------|-------------|
| sUserName | string | 0..1 | |
| sUserLoginType | string | 0..1 | |
| sFirstName | string | 0..1 | |
| sLastName | string | 0..1 | |
| sEmail | string | 0..1 | |
| bAccountDisabled | boolean | 1..1 | |
| anAdditionalUserInfo | AdditionalUserInfo | 0..1 | |
| aGroups | StringList | 0..1 | |
| aProjects | NameValueList | 0..1 | |

Remarks

Example of usage:

```
<urn:GetUserInfo>
  <sessionId>1</sessionId>
  <sUserName>bill</sUserName>
  <bIncludeAdditionalInfo>>false</bIncludeAdditionalInfo>
  <bIncludeProjects>>true</bIncludeProjects>
</urn:GetUserInfo>
```


GetUsers

Get list of all users

Style

Document

Input (Literal)

The input of this method is the argument GetUsers having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------------------|---------|--------|-------------|
| sessionId | string | 1..1 | |
| sGroupName | string | 0..1 | |
| sProjectName | string | 0..1 | |
| bIncludeAdditionalInfo | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument GetUsersResponse having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------------------------|--------|-------------|
| result | UserList | 1..1 | |

Remarks

Example of usage:

```
<urn:GetUsers>
  <sessionId>1</sessionId>
  <!-- optional, if set then will be returned all users from this group -->
  <sGroupName></sGroupName>
  <!-- optional, is set then will be returned all users assigned to this project -->
  <sProjectName></sProjectName>
  <bIncludeAdditionalInfo>>false</bIncludeAdditionalInfo>
</urn:GetUsers>
```

GrantPermissionToGroup

Grant permission to group for some action

Style

Document

Input (Literal)

The input of this method is the argument GrantPermissionToGroup having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sGroupName | string | 1..1 | |
| sProjectName | string | 1..1 | |
| sResource | string | 1..1 | |
| sAction | string | 1..1 | |
| sObject | string | 0..1 | |

Output (Literal)

The output of this method is the argument GrantPermissionToGroupResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:GrantPermissionToGroup>
  <sessionId>1</sessionId>
  <sGroupName>read</sGroupName>
  <sProjectName>RMDemo</sProjectName>
  <sResource>Categories</sResource>
  <sAction>FullAccess</sAction>
</urn:GrantPermissionToGroup>
```

GrantPermissionToUser

Grant permission to user for some action

Style

Document

Input (Literal)

The input of this method is the argument GrantPermissionToUser having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sUserName | string | 1..1 | |
| sProjectName | string | 1..1 | |
| sResource | string | 1..1 | |
| sAction | string | 1..1 | |
| sObject | string | 0..1 | |

Output (Literal)

The output of this method is the argument GrantPermissionToUserResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:GrantPermissionToUser>
  <sessionId>1</sessionId>
  <sUserName>nata</sUserName>
  <sProjectName>RMDEMO</sProjectName>
  <sResource>Classes</sResource>
  <sAction>Create</sAction>
  <sObject>Marketing_Requirements</sObject>
</urn:GrantPermissionToUser>
```

InheritPermissionForUser

Inherit permission to user for some action

Style

Document

Input (Literal)

The input of this method is the argument InheritPermissionForUser having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sUserName | string | 1..1 | |
| sProjectName | string | 1..1 | |
| sResource | string | 1..1 | |
| sAction | string | 1..1 | |
| sObject | string | 0..1 | |

Output (Literal)

The output of this method is the argument InheritPermissionForUserResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:InheritPermissionForUser>
  <sessionId>1</sessionId>
  <sUserName>ephoto</sUserName>
  <sProjectName>RMDEMO</sProjectName>
  <sResource>Attributes</sResource>
  <sAction>Update</sAction>
</urn:InheritPermissionForUser>
```

RevokePermissionFromGroup

Revoke permission from group for some action

Style

Document

Input (Literal)

The input of this method is the argument RevokePermissionFromGroup having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sGroupName | string | 1..1 | |
| sProjectName | string | 1..1 | |
| sResource | string | 1..1 | |
| sAction | string | 1..1 | |
| sObject | string | 0..1 | |

Output (Literal)

The output of this method is the argument RevokePermissionFromGroupResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:RevokePermissionFromGroup>
  <sessionId>1</sessionId>
  <sGroupName>read</sGroupName>
  <sProjectName>RMDemo</sProjectName>
  <sResource>Categories</sResource>
  <sAction>FullAccess</sAction>
</urn:RevokePermissionFromGroup>
```

RevokePermissionFromUser

Revoke permission from user for some action

Style

Document

Input (Literal)

The input of this method is the argument RevokePermissionFromUser having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sUserName | string | 1..1 | |
| sProjectName | string | 1..1 | |
| sResource | string | 1..1 | |
| sAction | string | 1..1 | |
| sObject | string | 0..1 | |

Output (Literal)

The output of this method is the argument RevokePermissionFromUserResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:RevokePermissionFromUser>
  <sessionId>1</sessionId>
  <sUserName>nata</sUserName>
  <sProjectName>RMDEMO</sProjectName>
  <sResource>Classes</sResource>
  <sAction>Create</sAction>
  <sObject>Marketing_Requirements</sObject>
</urn:RevokePermissionFromUser>
```

UnassignCategoryFromGroup

Un-assign category from the group

Style

Document

Input (Literal)

The input of this method is the argument UnassignCategoryFromGroup having the structure defined by the following table.

| Name | Type | Occurs | Description |
|-----------------------|---------|--------|-------------|
| sessionId | string | 1..1 | |
| sGroupName | string | 1..1 | |
| sProjectName | string | 1..1 | |
| sCategoryName | string | 1..1 | |
| bIncludeSubcategories | boolean | 0..1 | |

Output (Literal)

The output of this method is the argument UnassignCategoryFromGroupResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:UnassignCategoryFromGroup>
  <sessionId>1</sessionId>
  <sGroupName>read</sGroupName>
  <sProjectName>RMDemo</sProjectName>
  <sCategoryName>Functional</sCategoryName>
  <bIncludeSubcategories>true</bIncludeSubcategories>
</urn:UnassignCategoryFromGroup>
```

UnassignGroupFromProject

Un-assign group from the project

Style

Document

Input (Literal)

The input of this method is the argument UnassignGroupFromProject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sGroupName | string | 1..1 | |
| sProjectName | string | 1..1 | |

Output (Literal)

The output of this method is the argument UnassignGroupFromProjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:UnassignGroupFromProject>  
  <sessionId>1</sessionId>  
  <sGroupName>read</sGroupName>  
  <sProjectName>RMDemo</sProjectName>  
</urn:UnassignGroupFromProject>
```


UnassignUserFromGroup

Un-assign user from the group

Style

Document

Input (Literal)

The input of this method is the argument UnassignUserFromGroup having the structure defined by the following table.

| Name | Type | Occurs | Description |
|------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sUserName | string | 1..1 | |
| sGroupName | string | 1..1 | |

Output (Literal)

The output of this method is the argument UnassignUserFromGroupResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:UnassignUserFromGroup>  
  <sessionId>1</sessionId>  
  <sUserName>qa</sUserName>  
  <sGroupName>group</sGroupName>  
</urn:UnassignUserFromGroup>
```

UnassignUserFromProject

Un-assign user from the project

Style

Document

Input (Literal)

The input of this method is the argument UnassignUserFromProject having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| sessionId | string | 1..1 | |
| sUserName | string | 1..1 | |
| sGroupName | string | 1..1 | |
| sProjectName | string | 1..1 | |

Output (Literal)

The output of this method is the argument UnassignUserFromProjectResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:UnassignUserFromProject>  
  <sessionId>1</sessionId>  
  <sUserName>qa</sUserName>  
  <sGroupName>TEST</sGroupName>  
  <sProjectName>RMDEMO</sProjectName>  
</urn:UnassignUserFromProject>
```

UpdateListAttributeValues

Change list attribute values in attribute definition

Style

Document

Input (Literal)

The input of this method is the argument UpdateListAttributeValues having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|-----------|--------|---|
| sessionId | string | 1..1 | The current session identifier |
| sClassName | string | 1..1 | Name of class where list attribute is defined |
| sAttributeName | string | 1..1 | List attribute name |
| aValues | ListItems | 1..1 | List of attribute values |

Output (Literal)

The output of this method is the argument UpdateListAttributeValues having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|--------------------------------|
| result | Result | 1..1 | Result of updating list values |

Remarks

The UpdateListAttributeValues call provides a method to change defined list attribute values to the new ones, or change properties of existing values.

After request list values will be ordered as specified in the input.

It is possible to set default attribute value(s), mark value as retired, remove and restore value.

In order to retire (delete) value, it is needed to put 'true' in <bDeleted> parameter.

In order to restore the retired value, it is needed to put 'false' in <bDeleted> parameter.

If some existing value is not specified in request, then it will be removed.

Example of usage:

```
<urn:UpdateListAttributeValues>
  <sessionId>1489425621</sessionId>
  <sClassName>Product_Requirements</sClassName>
  <sAttributeName>PRIORITY</sAttributeName>
  <aValues>
    <item>
      <sName>High</sName>
      <!--Optional:-->
      <bDefault>>false</bDefault>
    </item>
  </aValues>
</urn:UpdateListAttributeValues>
```

```
        <bDeleted>>false</bDeleted>
    </item>
    <item>
        <sName>Low</sName>
        <!--Optional:-->
        <bDefault>>true</bDefault>
        <bDeleted>>false</bDeleted>
    </item>
</aValues>
</urn:UpdateListAttributeValues>
```

UpdateUser

Update user information and account properties

Style

Document

Input (Literal)

The input of this method is the argument UpdateUser having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------------|--------------------------|--------|--|
| sessionId | string | 1..1 | The current session identifier |
| sUserName | string | 1..1 | Internal RM user or SSO user name |
| sPassword | string | 0..1 | New password |
| sLoginType | string | 0..1 | Possible values: RM, SSO SSO is also used for LDAP users. |
| sNewUserName | string | 0..1 | New user name |
| anUserInfo | UserInfo | 0..1 | |

Output (Literal)

The output of this method is the argument UpdateUserResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|------------------------|--------|-------------|
| result | Result | 1..1 | |

Remarks

Example of usage:

```
<urn:UpdateUser>
  <sessionId>1</sessionId>
  <sUserName>admin</sUserName>
  <anUserInfo>
    <sPhone>123543324</sPhone>
    <sEmail>test@email.com</sEmail>
  </anUserInfo>
</urn:UpdateUser>
```

Changing the User Name:

```
<urn:UpdateUser>
  <sessionId></sessionId>
  <sUserName>DEV_MANAGER</sUserName>
  <sNewUserName>NEW_MANAGER</sNewUserName>
</urn:UpdateUser>
```

UpdateUserAttributeValues

Allows to setup default values for the user attributes.

Style

Document

Input (Literal)

The input of this method is the argument UpdateUser having the structure defined by the following table.

| Name | Type | Occurs | Description |
|----------------|-----------|--------|--------------------------------|
| sessionId | string | 1..1 | The current session identifier |
| sClassName | string | 1..1 | Class name |
| sAttributeName | string | 0..1 | Attribute name |
| aValues | UserItems | 0..1 | Default values |

Output (Literal)

The output of this method is the argument UpdateUserResult having the structure defined by the following table.

| Name | Type | Occurs | Description |
|--------|--------|--------|-------------|
| result | Result | 1..1 | |

Example of usage:

```
<urn:UpdateUserAttributeValues>
  <sessionId>1568710553</sessionId>
  <sClassName>Marketing_Requirements</sClassName>
  <sAttributeName>USER_TEST</sAttributeName>
  <aValues>
    <item>
      <sName>joe</sName>
      <!-- Possible values for nItemType: 1 - groups, 2 - user, 3 - team-->
      <nItemType>2</nItemType>
      <bDefault>>true</bDefault>
    </item>
    <item>
      <sName>icDemo Users</sName>
      <!-- Possible values for nItemType: 1 - groups, 2 - user, 3 - team-->
      <nItemType>1</nItemType>
      <bDefault>>true</bDefault>
    </item>
  </aValues>
</urn:UpdateUserAttributeValues>
```

Complex Types

| Name | Description |
|--------------------|-------------|
| AdditionalUserInfo | |
| Group | |
| GroupInfo | |
| GroupList | |
| IdList | |
| LoginSource | |
| LoginSources | |
| NameValue | |
| NameValueList | |
| Result | |
| StringList | |
| User | |
| UserInfo | |
| UserInfoExt | |
| UserItemDef | |
| UserItems | |
| UserList | |
| UserNameList | |

AdditionalUserInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------------|---------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sPhone | string | 0..1 | |
| sFax | string | 0..1 | |
| sPager | string | 0..1 | |
| sLocation | string | 0..1 | |
| sMobilePhone | string | 0..1 | |
| bChangePwdOnLogin | boolean | 1..1 | |
| bCanNotChangePwd | boolean | 1..1 | |
| bPwdNeverExpires | boolean | 1..1 | |

Group

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------|----------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sGroupName | string | 0..1 | |
| aProjects | StringList | 1..1 | |

GroupInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|--------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sDescription | string | 0..1 | |

GroupList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | Group | 0..* | |

IdList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | int | 0..* | |

LoginSource

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sName | string | 0..1 | |

LoginSources

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | LoginSource | 0..* | |

NameValue

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sName | string | 1..1 | |
| sValue | string | 0..1 | |

NameValueList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | NameValue | 0..* | |

Result

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| nStatusCode | int | 1..1 | |
| sMessage | string | 0..1 | |

StringList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | string | 0..* | |

User

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|----------------------|------------------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sUserName | string | 0..1 | |
| sUserLoginType | string | 0..1 | |
| sFirstName | string | 0..1 | |
| sLastName | string | 0..1 | |
| sEmail | string | 0..1 | |
| bAccountDisabled | boolean | 1..1 | |
| anAdditionalUserInfo | AdditionalUserInfo | 0..1 | |

UserInfo

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-------------------|---------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sFirstName | string | 0..1 | |
| sLastName | string | 0..1 | |
| sPhone | string | 0..1 | |
| sFax | string | 0..1 | |
| sEmail | string | 0..1 | |
| sPager | string | 0..1 | |
| sLocation | string | 0..1 | |
| sMobilePhone | string | 0..1 | |
| bChangePwdOnLogin | boolean | 0..1 | |
| bCanNotChangePwd | boolean | 0..1 | |
| bPwdNeverExpires | boolean | 0..1 | |
| bAccountDisabled | boolean | 0..1 | |

UserInfoExt

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|------------------|---------|--------|-------------|
| SEQUENCE | | 1..1 | |
| sFirstName | string | 0..1 | |
| sLastName | string | 0..1 | |
| sPhone | string | 0..1 | |
| sFax | string | 0..1 | |
| sEmail | string | 0..1 | |
| sPager | string | 0..1 | |
| sLocation | string | 0..1 | |
| sMobilePhone | string | 0..1 | |
| bAccountDisabled | boolean | 0..1 | |

UserItemDef

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|---------|--------|---|
| SEQUENCE | | 1..1 | |
| sName | string | 1..1 | User/group/team name |
| sType | string | 1..1 | 1 groups 2 user 3 team |
| bDefault | boolean | 0..1 | ▪ true: Value is default ▪ false: Value is not default |

UserItems

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|-----------------------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | UserItemDef | 0..* | |

UserList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | User | 0..* | |

UserNameList

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | string | 0..* | |

Chapter 3

RM Restful Services

| | |
|----------------------------------|-----|
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| Authentication for Rest Services | 373 |
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General

General info about RM Restful Services:

- 1 URI: `http://<host>:<port>/rtmBrowser/RestServices/<ServiceName>/<Action>`
- 2 Support only JSON/JSONP format.
- 3 Errors are returned through the HTTP status in response headers:
 - a **401 Unauthorized:** The client should retry the request with a suitable Authorization header.
 - b **403 Forbidden:** The server understood the request, but is refusing to fulfill it. Authorization was failed.
 - c **404 Not found:** The server has not found anything matching the Request-URI.
 - d **500 Internal Server Error:** The server encountered an unexpected condition which prevented it from fulfilling the request: can't connect to oracle, data not found, etc.



NOTE Detail information about error presented in **X-Error-Message** response header field.

The screenshot shows the browser's developer console with the 'Response' tab selected. The response headers are displayed as follows:

```

Access-Control-Allow-Cred... true
Access-Control-Allow-Orig... *
Connection close
Content-Length 1189
Content-Type text/html;charset=utf-8
Date Wed, 15 May 2013 15:10:39 GMT
Server Unknown Web_Server/1.0
X-Error-Message Attribute 'FUID2' is not in the object 'MARKETING_REQUIREMENTS'

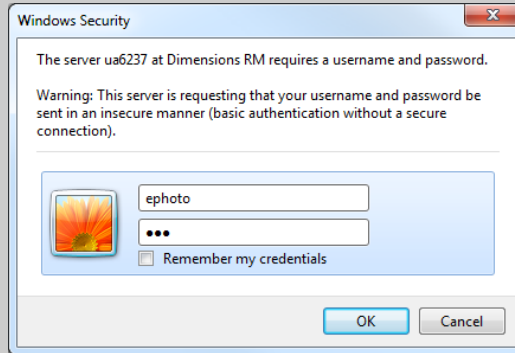
```

- 4 RM Restful services are cookies independent. (don't set/retrieve cookies)

RestServices/Image?authenticated=DBB6979CEFD5B27ED2B0E&db=RM&p=RMDEMO&u=ephoto&image= I9_7ani1a.gif



NOTE If the user has not specified any type of authentication in the HTTP request described above, the server will return response '401 Unauthorized', in which case the login dialog will be raised.



Methods

| Name | Description |
|---------------------------------------|-------------------------------------|
| Reports | Get reports |
| Report | Get report info |
| Run | Run report |
| Containers | Get containers |
| ContainerRequirements | Get requirements from the container |

Reports

Get list of reports. Results could be filtered by report type, category and class id (class_id only for 'filter' reports)

Action

http://hostname:port/rtmBrowser/RestServices/Reports?

Style

HTTP GET

Input

The inputs of this method are the arguments defined by the following table.

| Name | Type | Occurs | Description |
|---------------|--------|--------|--|
| type | int | 0..1 | Report type: 0 - all 1 - filter 2 - script 3 - trace |
| category_id | int | 0..1 | Category id |
| category_name | string | 0..1 | Category name |
| depth | int | 0..1 | Depth search by category. |
| class_id | int | 0..1 | Class id (only for filter report). |

Output (JSON)

The outputs of this method are the arguments defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------------|--------|-----------------|
| data | Complex Type | 1..1 | List of reports |
| message | string | 1..1 | |
| oiddata | object | 1..1 | |
| success | boolean | 1..1 | |
| total | int | 1..1 | |

Complex Type: data

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | Complex Type | 0..* | |

Complex Type: item**Content Model**

Contains elements as defined in the following table:

| Component | Type | Occurs | Description |
|-------------|--------|--------|---------------|
| | | 1..1 | |
| categoryId | int | 1..1 | Category id |
| description | string | 1..1 | Category name |
| id | int | 1..1 | Report id |
| name | string | 1..1 | Report name |

Remarks**Example of usage:**

<http://host:8080/rtmBrowser/RestServices/Reports?db=RM&p=RMDEMO&u=ephoto&pwd=rtm&type=1>

Example of output:

```
{
  "data": [
    {
      "categoryId": 0,
      "classId": 1,
      "className": "Marketing_Requirements",
      "description": "This filter retrieves all current Marketing
Requirements assigned to a 'Build1' delivery phase.",
      "hasRuntimeParameters": false,
      "id": 183,
      "name": "Build 1 Marketing Rqmts",
      "type": "filter"
    },
    {
      "categoryId": 0,
      "classId": 1,
      "className": "Marketing_Requirements",
      "description": "This filter retrieves all current Marketing
Requirements.",
      "hasRuntimeParameters": false,
      "id": 181,
      "name": "Current Marketing Rqmts",
      "type": "filter"
    }
  ],
  "message": ""
}
```

```
"oiddata": null,  
"success": true,  
"total": 2  
}
```

Report

Get information about the specified report

Action

http://hostname:port/rtmBrowser/RestServices/Report?

Style

HTTP GET

Input

The inputs of this method are the arguments defined by the following table.

| Name | Type | Occurs | Description |
|---------------|--------|--------|--|
| id | int | 0..1 | Report id |
| name | string | 0..1 | Report name |
| category_id | int | 0..1 | Category id |
| category_name | string | 0..1 | Category name |
| rtval | int | 0..1 | If set to 1 – service will return additional information for the runtime parameters: possible values for the List Attribute, Categories, Containers. |

Output (JSON)

The outputs of this method are the arguments defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------------|--------|-------------|
| data | Complex Type | 1..1 | Report info |
| message | string | 1..1 | |
| oiddata | object | 1..1 | |
| success | boolean | 1..1 | |
| total | int | 1..1 | |

Complex Type: data

Content Model

Contains elements as defined in the following table:

| Component | Type | Occurs | Description |
|---------------|--------------|--------|------------------------|
| SEQUENCE | | 0..1 | |
| category_id | int | 1..1 | Category id |
| category_name | string | 1..1 | Category name |
| classes | Complex Type | 1..1 | Classes used in report |
| column_model | Complex Type | 1..1 | Attributes |

| Component | Type | Occurs | Description |
|--------------------|--------------|--------|---------------------|
| description | string | 1..1 | Report description |
| id | int | 1..1 | Report Id |
| name | string | 1..1 | Report name |
| owner | string | 1..1 | Owner of the report |
| report_type | string | 1..1 | Report type |
| runtime_parameters | Complex Type | 1..1 | Runtime parameters |
| script | string | 1..1 | Script text |

Complex Type: classes

Content Model

Contains elements as defined in the following table:

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------------|
| SEQUENCE | | 1..* | |
| name | string | 1..1 | Class name |
| xref | string | 0..1 | Relationship name |

Complex Type: column_model

Content Model

Contains elements as defined in the following table:

| Component | Type | Occurs | Description |
|--------------|--------|--------|------------------------|
| SEQUENCE | | 0..* | |
| column_name | string | 1..1 | Attribute name |
| display_name | string | 1..1 | Attribute display name |

Complex Type: runtime_parameters

Content Model

Contains elements as defined in the following table:

| Component | Type | Occurs | Description |
|-----------|---------|--------|--------------------|
| SEQUENCE | | 0..* | |
| attr_name | string | 1..1 | Attribute name |
| attr_type | int | 1..1 | Attribute type |
| multiple | boolean | 0..1 | Is multi selection |
| name | string | 1..1 | Name |

| Component | Type | Occurs | Description |
|-----------|------------|--------|----------------------------------|
| prompt | string | 1..1 | Prompt for value |
| values | StringList | 0..1 | Allowed values for the attribute |

Remarks**Example of usage:**

[http://localhost:8080/rtmBrowser/RestServices/Report?name=All Current Component Requirements&db=RM&p=RMDEMO&u=ephoto&pwd=rtm](http://localhost:8080/rtmBrowser/RestServices/Report?name=All%20Current%20Component%20Requirements&db=RM&p=RMDEMO&u=ephoto&pwd=rtm)

Example of output:

```
{
  "data": {
    "category_id": 0,
    "category_name": "RMDEMO",
    "classes": [
      {
        "name": "Component_Requirements"
      }
    ],
    "column_model": [
      {
        "column_name": "PUID",
        "display_name": "Rqmt ID"
      },
      {
        "column_name": "DOCUMENT_ID",
        "display_name": "Document ID"
      },
      {
        "column_name": "PARAGRAPH_ID",
        "display_name": "Paragraph ID"
      },
      {
        "column_name": "TEXT",
        "display_name": "Text"
      }
    ],
    "description": "This script reports all the current Component Requirements",
    "id": 1143,
    "name": "All Current Component Requirements",
    "owner": "Ephoto",
    "report_type": "script",
    "runtime_parameters": [ ],
    "script": "select <Rqmt ID>PUID <Document ID>DOCUMENT_ID"
```

```
<Paragraph ID>PARAGRAPH_ID <Text>TEXT from Component_Requirements where
STATUS = 'Current' order by @PUID"
  },
  "message": "",
  "oiddata": null,
  "success": true,
  "total": 0
}
```

Run

Run report by given report id or report name.

Action

http://hostname:port/rtmBrowser/RestServices/Report/Run?

Style

HTTP GET

Input

The inputs of this method are the arguments defined by the following table.

| Name | Type | Occurs | Description |
|---------------|--------|--------|------------------------------|
| id | int | 0..1 | Report id |
| name | string | 0..1 | Report name |
| category_id | int | 0..1 | Category id |
| category_name | string | 0..1 | Category name |
| page | int | 0..1 | Current page |
| rows | int | 0..1 | Count of rows on the page |
| sidx | string | 0..1 | Column for sorting |
| sord | string | 0..1 | Type of sorting: desc or asc |
| skipheaders | string | 0..1 | Skip headers for XREF query |

Output (JSON)

The outputs of this method are the arguments defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------------|--------|-----------------|
| page | int | 1..1 | current page |
| records | int | | records in page |
| rows | Complex Type | | |
| total | | | total pages |

Complex Type: rows

Content Model

Contains elements as defined in the following table:

| Component | Type | Occurs | Description |
|-----------|--------------|--------|-------------|
| SEQUENCE | | 1..1 | |
| item | Complex Type | 0..* | |

Complex Type: item**Content Model**

Contains elements as defined in the following table:

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 1..1 | |
| PUID | | 1..1 | |
| TITLE | string | 1..1 | |
| id | | 1..1 | row id |
| c | | 1..1 | class id |
| o | | 1..1 | object id |

Remarks**Example of usage:**

```
http://localhost:8080/rtmBrowser/RestServices/Report/Run?name=SomeReport&db=RM&p=RMDEMO&u=ephoto&pwd=rtm
```

Example of output:

```
{
  "page" : 1,    -- current page
  "records" : 2, --records in page
  "rows" : [
    {
      "PUID" : "MRKT_000002",
      "TITLE" : "Support Advantix formats",
      "id" : 1,  --row id
      "c" : 1,  --class id
      "o" : 31  --object id
    },
    {
      "PUID" : "MRKT_000003",
      "TITLE" : "Runs on standard home PC",
      "id" : 2,  --row id
      "c" : 1,  --class id
      "o" : 32  --object id
    }
  ],
  "total" : 5  --total pages
}
```


}



NOTE Columns "c" and "o" returns always for all rows. They can be used for create URL to open requirement:

```
http://.../rtmBrowser/cgi-bin/
rtmBrowser.exe?goto=req&db=RM&proj=RMDEMO&c=1&o=32
```

Reports with runtime parameters

To run report with runtime parameters all values must be specified in the request: `http://.../RestServices/Report/Run?name=test&db=RM&p=RMDEMO&RTP__STATUS_2=Current&RTP__TITLE_1=demo`

Names of runtime parameters (RTP__STATUS_1, RTP__TITLE_2) can be obtained from report info REST Service: `http://.../RestServices/Report?name=test&db=RM&p=RMDEMO`

```
"runtime_parameters" : [
  {
    "attr_name" : "TITLE",
    "name" : "RTP__TITLE_1",
    "prompt" : "Enter Title"
  },
  {
    "attr_name" : "STATUS",
    "name" : "RTP__STATUS_2",
    "prompt" : "Enter Current Status"
  }
]
```



NOTE If one of the runtime parameters will not specified in request server will return an error.

The screenshot shows a browser's developer console with the following details:

- Console:** GET http://ua6237:9090/rtmBrowser/RestServices/Report...se&nd=1368630628656&rows=4&page=1&sidx=&sord=asc 500 Internal Server Error 10.29s
- Response Headers:**
 - Access-Control-Allow-Cred... true
 - Access-Control-Allow-Orig... *
 - Connection close
 - Content-Length 1189
 - Content-Type text/html;charset=utf-8
 - Date Wed, 15 May 2013 16:10:39 GMT
 - Server Unknown Web Server/1.0
- X-Error-Message:** Attribute 'PUIID2' is not in the object 'MARKETING_REQUIREMENTS'

Additional info:

Using in SBM rest grids. Only class reports (by only 1 class) or multi-class scripts but with same column structure are supported in SBM rest grids. Multi-class script reports with different column structure, relationship reports, traceability reports are not supported, due to unavailability to present different column structure for different classes in SBM rest grid.

Containers

Get list of containers by specified type. Results could be filtered by container name.

Action

http://hostname:port/rtmBrowser/RestServices/Containers?

Style

HTTP GET

Input

The inputs of this method are the arguments defined by the following table.

| Name | Type | Occurs | Description |
|------------|---------|--------|--|
| type | int | 1..1 | Container type Possible values: ALL - containers B - baselines C - collections D - documents S - snapshots |
| documentId | int | 0..1 | Document id if "type" parameter is set to S |
| designMode | boolean | 0..1 | possible value – true If that parameter is set (designMode=true) the service returns an example data |
| filter | string | 0..1 | Search by container name |

Output (JSON)

The outputs of this method are the arguments defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------------|--------|-----------------|
| data | Complex Type | 1..1 | Containers info |
| message | string | 1..1 | |
| oiddata | object | 1..1 | |
| success | boolean | 1..1 | |
| total | int | 1..1 | |

Complex Type: data

Content Model

Contains elements as defined in the following table:

| Component | Type | Occurs | Description |
|-----------|------|--------|--------------|
| SEQUENCE | | 0..* | |
| id | int | 1..1 | Container id |

| Component | Type | Occurs | Description |
|-----------|--------|--------|--|
| name | string | 1..1 | Container name |
| type | string | 1..1 | Container type B - baseline C - collection D - document S - snapshot |
| url | string | 1..1 | Direct url to the container |

Remarks

"filter" is an optional parameter. A search string can be provided in that parameter. The search is case insensitive and searches by container name.

Example: find all containers which have AA or BB string in the name - filter=AA%20BB

Example of usage:

```
http://localhost:8080/rtmBrowser/RestServices/Containers?sessionId=123456&type=all
```

Example of output:

```
{
  "data": [
    {
      "id": 11,
      "name": "Baseline of Engineering Hot List",
      "type": "B",
      "url": "http://localhost:8080/rtmBrowser/cgi-bin/rtmBrowser.exe?goto=collection&db=RM&proj=RMDEMO&collectionId=11"
    },
    {
      "id": 20,
      "name": "Def document",
      "type": "D",
      "url": "http://localhost:8080/rtmBrowser/cgi-bin/rtmBrowser.exe?goto=doc&db=RM&proj=RMDEMO&docID=20"
    },
    {
      "id": 19,
      "name": "ECP controlled",
      "type": "D",
      "url": "http://localhost:8080/rtmBrowser/cgi-bin/rtmBrowser.exe?goto=doc&db=RM&proj=RMDEMO&docID=19"
    },
    {
      "id": 5,
      "name": "Engineering Hot List",
```

```
        "type": "C",
        "url": "http://localhost:8080/rtmBrowser/cgi-bin/
rtmBrowser.exe?goto=collection&db=RM&proj=RMDEMO&collectionId=5"
    }
],
"message": "",
"oiddata": null,
"success": true,
"total": 4
}
```

ContainerRequirements

Get requirements in the given container. Requirements could be filtered by specified criteria.

Action

<http://hostname:port/rtmBrowser/RestServices/ContainerRequirements?>

Style

HTTP GET

Input

The inputs of this method are the arguments defined by the following table.

| Name | Type | Occurs | Description |
|----------------|---------|--------|--|
| id | int | 1..1 | Container id |
| designMode | boolean | 0..1 | possible value - true If that parameter is set (designMode=true) the service returns example data |
| filter | string | 0..1 | Filter for the requirements list |
| searchFullText | boolean | 0..1 | |

Output (JSON)

The outputs of this method are the arguments defined by the following table.

| Name | Type | Occurs | Description |
|---------|--------------|--------|--------------|
| data | Complex Type | 1..1 | Requirements |
| message | string | 1..1 | |
| oiddata | object | 1..1 | |
| success | boolean | 1..1 | |
| total | int | 1..1 | |

Complex Type: data

Content Model

Contains elements as defined in the following table.

| Component | Type | Occurs | Description |
|-----------|--------|--------|-------------|
| SEQUENCE | | 0..* | |
| category | string | 1..1 | Category |
| className | string | 1..1 | Class name |
| class_id | int | 1..1 | Class id |
| object_id | int | 1..1 | Object id |
| puid | string | 1..1 | PUID |

| Component | Type | Occurs | Description |
|-----------|--------|--------|---------------------|
| status | string | 1..1 | Status |
| title | string | 1..1 | Title |
| url | string | 1..1 | url |
| version | int | 1..1 | Requirement version |

Remarks

"filter" is optional parameter. A search string can be provided in that parameter. The search is case insensitive and searches for requirements - by PUID or TITLE or DESCRIPTION.

Optional "searchFullText" input parameter is available in ContainerRequirements REST service.

If it's set to true filter applies to Alphanumeric and Text attributes, as in the QuickSearch.

Example: find all requirements which have CC or DD string in the PUID or TITLE or DESCRIPTION - filter=CC%20DD

Example of usage:

<http://localhost:8080/rtmBrowser/RestServices/ContainerRequirements?sessionId=123456&containerId=12>

Example of output:

```
{
  "data": [
    {
      "category": "RMDEMO",
      "className": "Marketing_Requirements",
      "class_id": 1,
      "object_id": 4,
      "puid": "MRKT_000004",
      "status": "Current",
      "title": "Annotate photos with text",
      "url": "http://stl-qa-rm08:8080/rtmBrowser/cgi-bin/rtmBrowser.exe?goto=req&db=RM&proj=RMDEMO&class=Marketing_Requirements&puid=MRKT_000004&ver=1",
      "version": 1
    },
    {
      "category": "RMDEMO/Support/Training/Documentation",
      "className": "Marketing_Requirements",
      "class_id": 1,
      "object_id": 7,
      "puid": "MRKT_000007",
      "status": "Current",
      "title": "On-line help provided",

```

```
        "url": "http://stl-qa-rm08:8080/rtmBrowser/cgi-bin/
rtmBrowser.exe?goto=req&db=RM&proj=RMDEMO&class=Marketing_Requirements
&puid=MRKT_000007&ver=1",
        "version": 1
    },
    {
        "category": "RMDEMO",
        "className": "Marketing_Requirements",
        "class_id": 1,
        "object_id": 26,
        "puid": "MRKT_000024",
        "status": "Current",
        "title": "Stored photo slideshows",
        "url": "http://stl-qa-rm08:8080/rtmBrowser/cgi-bin/
rtmBrowser.exe?goto=req&db=RM&proj=RMDEMO&class=Marketing_Requirements
&puid=MRKT_000024&ver=1",
        "version": 1
    },
    {
        "category": "RMDEMO/Functional/Design and Construction",
        "className": "Marketing_Requirements",
        "class_id": 1,
        "object_id": 35,
        "puid": "MRKT_000031",
        "status": "Current",
        "title": "System comes in different colors",
        "url": "http://stl-qa-rm08:8080/rtmBrowser/cgi-bin/
rtmBrowser.exe?goto=req&db=RM&proj=RMDEMO&class=Marketing_Requirements
&puid=MRKT_000031&ver=1",
        "version": 1
    }
],
"message": "",
"oiddata": null,
"success": true,
"total": 4
}
```


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