



# Dimensions® RM 12.10 Web Service and Rest Service Reference

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## Chapter 1

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*Chapter 3*

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# Preface

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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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Language-specific technical support is available during local business hours. For all other hours, technical support is provided in English.

You can use the Serena Support Web page to:

- Report problems and ask questions.
- Obtain up-to-date technical support information, including that shared by our customers via the Web, automatic e-mail notification, newsgroups, and regional user groups.
- Access a knowledge base, which contains how-to information and allows you to search on keywords for technical bulletins.
- Download updates and fix releases for your Serena products.

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# Chapter 1

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

Name	Description
ReadObjectAttachment	Read attachment of a requirement
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	<a href="#">RequirementIdentifier</a>	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	<a href="#">addObjectToCollectionResponse</a>	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	<a href="#">SyncXrefLink</a>	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	<a href="#">RtmDocument</a>	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	<a href="#">AppendRMDocumentExResult</a>	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	<a href="#">RtmDocument</a>	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	<a href="#">AppendRtmDocumentResult</a>	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">U3lzdGVtIHJlc3Bvb3RvIFJlcXVpcmVtZW50cw==</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	<a href="#">CommandStatus</a>	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	<a href="#">AsyncAppendRtmDocResponse</a>	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	<a href="#">RtmDocument</a>	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	<a href="#">AsyncCreateRtmDocResponse</a>	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	<a href="#">getAsyncQueryRtmDocResponse</a>	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	<a href="#">AsyncReplaceRtmDocResponse</a>	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	<a href="#">ECPsObjectInfo</a>	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	<a href="#">RequirementOut</a>	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	<a href="#">CMPProjectInfo</a>	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	<a href="#">RequirementIdentifierList</a>	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	<a href="#">CategoryReq</a>	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	<a href="#">Category</a>	1..1	

## CreateChildDocument

Create a new Child document of the specified Parent 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	<a href="#">CreateChildDocumentData</a>	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	<a href="#">CreateRtmDocumentResult</a>	1..1	Result with info about created document

### Remarks

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

Created Child doc will inherit all structure of the Parent 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	<a href="#">CreateCollectionEx</a>	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	<a href="#">Requirement</a>	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	<a href="#">RequirementOut</a>	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>
      <item>
        <sName>URL</sName>
        <sValue>&lt;a href=&quot;https://www.microfocus.com/
&quot; target=&quot;_blank&quot;&gt;Micro Focus&lt;/a&gt;&lt;a
href=&quot;https://www.microfocus.com/en-us/products/dimensions-rm/
overview&quot; target=&quot;_blank&quot;&gt;Dimensions RM&lt;/a&gt;</
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	<a href="#">Requirement</a>	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	<a href="#">RequirementOut</a>	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	<a href="#">Requirement</a>	1..1	A set of object attributes values
sAttrName	string	0..1	File attachment attribute name
oFile	<a href="#">FileAttachment</a>	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	<a href="#">RequirementOut</a>	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	<a href="#">Requirement</a>	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	<a href="#">RequirementOut</a>	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
IwYUdGdU1ESTFOaUJqCmIyeHZjbnk1SUUV0dmJuTnBaR1Z5WVhScGIyNGdjMmh2ZFd4a0lH
SmxJR2RwZG1WdU1IUnZJSFJvWlNCM11Ya2dkR2hoZENCcwpZWEpuWlhJZ2NISnBib1J6SU
cxaGVTQmlaU0JoYzNOcGJXbHNZWJswkNCaGJtUWdZU0J6YjJ4MWRHbHZiaUJ6YUdGc2JD
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 Parent document if provide `bIsMaster` as true in the input param of request.

```

<urn:CreateRMDocumentEx>
  <sessionId>1111111111</sessionId>
  <rtmDoc>
    <info>
      <sName>Test Specification Parent</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
IwYUdGdU1ESTFOaUJqCmIyeHZjBk11SUV0dmJuTnBaR1Z5WVhScGIyNGdjMmh2ZFd4a0lH
SmxJR2RwZG1WdU1lUnZJSFJvWlNCM1lYa2dkR2hoZENCcwpZWEpuWlhJZ2NISnBib1J6SU
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	<a href="#">RtmDocSnapshot</a>	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	<a href="#">RtmDocSnapshotOut</a>	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	<a href="#">RtmDocumentWithCategory</a>	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	<a href="#">CreateRtmDocumentResult</a>	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
```



```
g2RmVRe1ZQc1N2ZVVHN2dTUXUKQ29udGVudC1UeXB10iB0ZXh0L2h0bWwKQ29udGVudC1U
cmFuc2Zlci1FbmNvZGluZzogYmFzZTY0CgpWR2hsSudWUWFHOTBieUJ6ZVhOMFpXMGdjMm
hoYkd3Z2MzVndjRz15ZENCd2FHOTBiM01nZEdoaGRDQmhjbVvVnUVdSM1lXNTAKYVhnZ0tE
TWdjMmw2WlhNcElHwnZjbTFoZENCdmNtbG5hVzVoYkhNZ2QybDBhQ0J1YjNRZ2JHVnpjeU
IwYUdGdU1ESTFOaUJqCmIyeHZjbk11SUV0dmJuTnBaR1Z5WVhScGIyNGdjMmh2ZFd4a0lH
SmxJR2RwZG1WdU1lUnZJSFJvWlNCM1lYa2dkR2hoZENCcwpZWEpuWlhJZ2NISnBib1J6SU
cxaGVTQmlaU0JoYzN0cGJXbHNZWJswkNCaGJtUWdZU0J6YjJ4MWRHbHZiaUJ6YUdGc2JD
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	<a href="#">Template</a>	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	<a href="#">Template</a>	1..1	A set of template properties

### Example of usage:

```
<urn:CreateTemplate>
  <sessionId>1478777334</sessionId>
  <docTemplate>
    <sName>TEM511</sName>
  </docTemplate>
<encodedContent>PD94bWwgdmVyc2lvbj0iMS4wIj8+DQoNCi08SW1wb3J0VGVtcGxhdG
UgZGVmYXVsZDENSXNzPSItMSIgdGVyc2lvbj0iMSIgaWQ9IjEiPgoKDQoNCi08R2VuZXJh
bFJ1bGUgaWQ9ImdlbmVvYyYwWiPg0KDQo8QXV0aG9yPnJtZGVtb2FkbWluPC9BdXR0b3I+DQ
oNCjxEYXRlPjEwLzE4LzIwMDcgNjoxMjo0MSBQTtwvRGF0ZT4NCg0KPERlc2NyaXB0aW9u
PlRoaxMgdGVtcGxhdGUgbGV0cyB5b3UgaW1wb3J0IGEgV29yZCBkb2N1bWVudCBpbnRvIE
RpbWVuc2lvbnMgUk0gZG12aWRlZCBpbjBjaGFwdGVycy4gUmVmZXIgdG8gdGh1IFNlcmVu
YSBEaW11bnNpb25zIFJNIEFkbWluaXN0cmF0b3IncyBHdWlkZSBmb3IgbW9yZSBpbmZvcml
hdGlvbiBhYm91dCBjcmVhdGluZyB2YXJpb3VzIHR5cGVzIG9mIHRlbXBsYXRlc2U4L0Rl
c2NyaXB0aW9uPg0KDQo8L0dlbmVvYyYwSdWxLPg0KDQoNCi08Q2hhcHRlc2U4L0Rl
NoYXB0ZXIiPgoKDQoNCi08SGVhZGluZ1J1bGUgaWQ9Imh1YWRpbmciIGhpbmQ9ImFsbCI+
DQoNCg0KLTxIZWFkaW5ncz4NCg0KPEh1YWRpbmci+U3RhbmRhcmlWV29yZCBIZWFkaW5ncz
wvSGVhZGluZz4NCg0KPC9IZWFkaW5ncz4NCg0KPC9IZWFkaW5nUnVsZT4NCg0KPC9DaGFw
dGVyUnVsZT4NCg0KDQotPFJlcXVpcmlVtZ50UnVsZSBpZD0icmVxdWlyZW11bnQiPg0KDQ
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	<a href="#">StringList</a>	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	<a href="#">CommandStatus</a>	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	<a href="#">SyncXrefLink</a>	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	<a href="#">Template</a>	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	<a href="#">ns-chapterDetails</a>	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	<a href="#">DocumentObject</a>	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	<a href="#">Requirement</a>	1..1	
aAttrList	<a href="#">NameValueList</a>	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	<a href="#">ReplaceRequirementList</a>	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	<a href="#">StringList</a>	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	<a href="#">ObjectDetails</a>	1..1	Source requirement details
relations	<a href="#">RelationList</a>	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	<a href="#">StringList</a>	0..1	A set of requirements PUIDs, that can be used as search criteria
aAttrList	<a href="#">StringList</a>	0..1	A set of requirement attributes, that can be used as search criteria

### Output (Literal)

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

Name	Type	Occurs	Description
results	<a href="#">RequirementList</a>	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>
```

## FindObjects

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	<a href="#">StringList</a>	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	<a href="#">Requirement</a>	0..1	A set of requirements attributes and its values that can be used as search criteria
aAttrList	<a href="#">StringList</a>	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	<a href="#">RequirementList</a>	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	<a href="#">StringList</a>	0..1	Names of classes, used as search criteria (only requirement from specified classes will be returned)
aKeywords	<a href="#">StringList</a>	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	<a href="#">Requirement</a>	0..1	A set of requirements attributes and its values that can be used as search criteria
aAttrList	<a href="#">StringList</a>	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	<a href="#">RequirementList</a>	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	<a href="#">IdList</a>	1..1	Unique identifiers of collections, used as search criteria (only requirement from specified collections will be returned)
aSearchAttr	<a href="#">SearchRequirement</a>	0..1	A set of requirements attributes and its values that can be used as search criteria
aKeywords	<a href="#">StringList</a>	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	<a href="#">StringList</a>	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	<a href="#">RequirementFindList</a>	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	<a href="#">RtmDocumentList</a>	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	<a href="#">TemplateList</a>	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	<a href="#">getAsyncAppendRtmDocStatusResponse</a>	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	<a href="#">getAsyncAppendRtmDocStatusResponse</a>	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	<a href="#">getAsyncQueryRtmDocumentStatusResponse</a>	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	<a href="#">getAsyncReplaceRtmDocStatusResponse</a>	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	<a href="#">getAsyncStatusResponse</a>	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	<a href="#">GetAttributeDefInfoRequest</a>	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	<a href="#">AttributeDefInfo</a>	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	<a href="#">InRequirement</a>	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	<a href="#">Transitions</a>	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	<a href="#">GetClassDefInfoRequest</a>	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	<a href="#">ClassDefInfo</a>	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	<a href="#">CollectionEx</a>	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	<a href="#">CollectionEx</a>	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	<a href="#">GetCollectionInfoRequest</a>	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	<a href="#">CollectionInfo</a>	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	<a href="#">RequirementIdentifier</a>	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	<a href="#">RequirementIdentifier</a>	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	<a href="#">StringList</a>	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	<a href="#">RequirementList</a>	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	<a href="#">IdList</a>	1..1	
bDetagDescription	boolean	0..1	
aAttrList	<a href="#">StringList</a>	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	<a href="#">RequirementList</a>	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	<a href="#">StringList</a>	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	<a href="#">RequirementList</a>	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	<a href="#">GetProjectInfoRequest</a>	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	<a href="#">ProjectInfo</a>	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	<a href="#">RtmDocSnaphotOutList</a>	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	<a href="#">RtmDocSnapshotOut</a>	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	<a href="#">RtmDocSnapshotOut</a>	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	<a href="#">FileAttachment</a>	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	<a href="#">FileAttachment</a>	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	<a href="#">testAsyncStatusResponse</a>	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	<a href="#">GetUserAttributeDefInfoRequest</a>	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	<a href="#">UserAttributeDefInfo</a>	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	<a href="#">StringList</a>	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	<a href="#">StringList</a>	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	<a href="#">IdList</a>	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	<a href="#">StringList</a>	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	<a href="#">CategoryList</a>	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	<a href="#">CategoryList</a>	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	<a href="#">CollectionList</a>	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	<a href="#">CollectionExList</a>	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	<a href="#">CollectionEx2List</a>	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	<a href="#">Requirement</a>	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	<a href="#">LinkList</a>	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	<a href="#">CategoryList</a>	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	<a href="#">DocumentsFilter</a>	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	<a href="#">RtmDocumentList</a>	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 Parent 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>
```

## ListRtmDocumentsEx

Get a list of rtm documents and snapshots in the project.

### Style

Document

### Input (Literal)

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

Name	Type	Occurs	Description
sessionId	string	1..1	The current session identifier
filter	<a href="#">DocumentsFilter</a>	0..1	Settings for querying documents
bIncludeSnapshots	boolean	1..1	Defines if the result should include snapshots along with the documents.

### Output (Literal)

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

Name	Type	Occurs	Description
result	<a href="#">RtmDocumentListEx</a>	1..1	

### Remarks

#### Additional info:

ListRtmDocumentsEx WS also allows to filter documents by category:

- 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 Parent 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	<a href="#">TemplateList</a>	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

- It is possible to login using Internal RM user or SSO user credentials.
- The session will expire as defined by the administrator for the instance you logged in to.

### 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
68A1269CC8741AF586AE10EFD7A5A905D5F71CAC63BAFBDD4FD33408356A970669ADD
5D4F37CEEEEA89865930ECF8ADED5C26B2C6E62A6561592</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

- It is possible to login using Internal RM user or SSO user credentials.
- The session will expire as defined by the administrator for the instance you logged in to.

### 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	<a href="#">LoginExResultInfo</a>	1..1	

### Remarks

- It is possible to login using Internal RM user or SSO user credentials.
- The session will expire as defined by the administrator for the instance you logged in to.

### 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	<a href="#">RequirementIdentifier</a>	1..1	A set of object attributes values
position	<a href="#">HierarchyInfo</a>	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	<a href="#">NameValueList</a>	1..1	
anECPsInfo	<a href="#">ECPsObjectInfo</a>	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	<a href="#">ProposeNewRequirementResult</a>	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	<a href="#">FileAttachment</a>	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	<a href="#">Category Info</a>	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	<a href="#">AttributeDefList</a>	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>11111111</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>11111111</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	<a href="#">CategoryInfo</a>	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	<a href="#">AttributeDefExList</a>	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	<a href="#">CategoryInfo</a>	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	<a href="#">AttributeDefEx2List</a>	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>
```

```
</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	<a href="#">ClassDefList</a>	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	<a href="#">ClassDefExList</a>	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	<a href="#">DatabaseList</a>	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	<a href="#">LinkClassDefList</a>	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	<a href="#">ProjectList</a>	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	<a href="#">ProjectExList</a>	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	<a href="#">RtmDocumentProperties</a>	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>
```

#### 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="U1RN" version="1.1" application="RM Web Services">
  <Chapter title="ZVBob3RvIFJlcXVpcmVtZW50cw==" uid="1806" iid="1"
  puid="1">
```

```

<Description>TU1N...LS0K</Description>
<!-- ... -->
<Chapter title="UmVxdWlyZW1lbnRz" uid="20" iid="4" puid="4">
<Description/>
<Chapter title="R2VuZXJhbCBSZXF1aXJlbWudHM=" uid="26" iid="5"
puid="5">
<Description/>
<!-- ... -->
<Chapter title="RnVuY3Rpb25hbCBSZXF1aXJlbWudHM=" uid="158" iid="43"
puid="7">
<Description/>
<Requirement classid="1" className="Marketing_Requirements"
title="" category="7" uid="118" iid="21">
  <Attribute attrid="3011" typeid="1" title="Title">
RVBob3RvIHdpbGwgYmUgYW4gb25saW5lIHBob3RvIGFsYnVt</Attribute>
  <Attribute attrid="31" typeid="6" title="Text">
TU1N...LQo=</Attribute>
  <Attribute attrid="26" typeid="12" title="Rqmt ID">
TVJL...MDE=</Attribute>
  <!-- ... -->
</Requirement>
<!-- ... -->
</Chapter>
<!-- ... -->
</Chapter>
<!-- ... -->
</Chapter>
<!-- ... -->
</Chapter>
<!-- ... -->
<Chapter title="VGFiGUg2YgRmlndXJlcw==" uid="1594" iid="341"
puid="40">
<Description>TU1N...qLS0K</Description>
</Chapter>
</Chapter>
</Document>]]</sContent>
</ns:RtmDocumentOut>

```

**Additional info:**

In the output of web service, each chapter and each requirement has iid attribute which means internal id of object in the document.

iid value can be used in next web services which work with document structure:

- [DocumentAddChapter](#)
- [DocumentMoveObject](#)
- [DocumentRemoveObject](#)

## 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	<a href="#">SystemInfo</a>	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	<a href="#">RequirementIdentifier</a>	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	<a href="#">RequirementOut</a>	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	<a href="#">RequirementIdentifier</a>	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 <b>Allow multiple selections</b> 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	<a href="#">FileAttachment</a>	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	<a href="#">RequirementIdentifier</a>	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	<a href="#">RequirementOut</a>	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	<a href="#">RequirementIdentifierList</a>	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	<a href="#">RequirementList</a>	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	<a href="#">SyncXrefLink</a>	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	<a href="#">SyncXrefLinkList</a>	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	<a href="#">CommandStatus</a>	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	<a href="#">ObjectDef</a>	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	<a href="#">RequirementIdentifier</a>	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	<a href="#">removeObjectFromCollectionResponse</a>	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	<a href="#">Requirement</a>	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	<a href="#">RequirementOut</a>	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	<a href="#">Requirement</a>	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	<a href="#">RequirementOut</a>	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	<a href="#">Requirement</a>	1..1	
sAttrName	string	1..1	
oFile	<a href="#">FileAttachment</a>	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	<a href="#">ReplaceRequirementOut</a>	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 <b>true</b> , all outgoing links will be cleared from suspect.  If <b>false</b> , outgoing links will still be suspect.  Default is true
bSecondaryLinks	boolean	0..1	If <b>true</b> , all incoming links will be cleared from suspect.  If <b>false</b> , 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	<a href="#">ns-chapterDetails</a>	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	<a href="#">Requirement</a>	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	<a href="#">ECPObjInfo</a>	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	<a href="#">runTestAsyncInputData</a>	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	<a href="#">runTestAsyncResponse</a>	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	<a href="#">TransitObject</a>	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	<a href="#">StringList</a>	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	
sParentPUIID	string	1..1	
aChildPUIIDs	<a href="#">StringList</a>	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>
  <sParentPUIID>MRKT_000021</sParentPUIID>
  <aChildPUIIDs>
    <item>PROD_000023</item>
  </aChildPUIIDs>
  <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	<a href="#">IdList</a>	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	<a href="#">StringList</a>	0..1	

### Remarks

#### Example of usage:

```
<urn:UnlinkObjectsExById>
  <sessionId>111111111</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	<a href="#">Requirement</a>	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	<a href="#">RequirementOut</a>	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 <b>only</b> if the file attachment attribute has the <b>Allow multiple selections</b> option enabled. To add an attachment at the last position, set nFileIndex higher than the last index.
oFile	<a href="#">FileAttachment</a>	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	<a href="#">Requirement</a>	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	<a href="#">RequirementOut</a>	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	<a href="#">Template</a>	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 any 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	<a href="#">ImageList</a>	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	<a href="#">ImageUploadResultList</a>	1..1	
aFailed	<a href="#">ImageUploadResultList</a>	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
0IARs4c6QAAAAARnQU1BAACxjwv8YQUAAAAJcEhZcwAADsMAAA7DAcdvqGQAAAHxSURBVGh
D7ZQxcSIEEU5Fwf iPJyBI6TgABYBloouDTMumKGgIJL2S1ptstgSlS YEvfmTSXYV7bMte
/V4Q7p0K7p0K7p0K7p0Kz5AerX7rhHsPpLJ0mJGpWDYBMA1xda1g61PGZEWO7YJZuv802m
xlwkasyJGmKChkyGNagXEIBM0FBYhbcia1aVfIGvWh0nvD0l3tRv26MTW+nhHyXE6Xn4vJ
nwdQVWhWPq+/Uq6Nl/Xk23dNqFyuLnFBKtjZQR1H1QViqXJwN+w82DXkMpwXdv fL+5n1KP
bvzm4lcnFWGhECKoKpdJk6WfjPNCfrrU+3tyj8FeFK7nu3QnZnKkasf/OgqpCoTQ7nSHwo
5bRcldy2Q626H+nQ4UiJ92qjnR41RD2uINrsGePJT1UjLiVC6oKZdL8huH18k+caSXnxC3
2h0S8hYYwhYKqQpE0zfY3j046vm5cC8tc2HHnjyWAZT6oKhRjP7NxvpmW/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	
RtmDocumentPropertiesEx	
RtmDocumentWithCategory	
RtmSnapshotListEx	
RtmSnapshotPropertiesEx	
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	<a href="#">cmdStatusCode</a>	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	<a href="#">RtmDocumentProperties</a>	1..1	
status	<a href="#">CommandStatus</a>	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	<a href="#">RtmDocumentProperties</a>	1..1	
status	<a href="#">CommandStatus</a>	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	<a href="#">RtmDocumentProperties</a>	1..1	
status	<a href="#">CmdStatus</a>	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	<a href="#">RtmDocumentProperties</a>	1..1	
status	<a href="#">CmdStatus</a>	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	<a href="#">RtmDocumentProperties</a>	1..1	
status	<a href="#">CmdStatus</a>	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	
bVisable	boolean	1..1	
bMultiple	boolean	1..1	
aFormat	<a href="#">FormatDef</a>	1..1	
aValues	<a href="#">StringList</a>	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	
bVisable	boolean	1..1	
bMultiple	boolean	1..1	
bImplicit	boolean	1..1	
bHtml	boolean	0..1	
aFormat	<a href="#">FormatDef</a>	1..1	
aValues	<a href="#">StringList</a>	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	<a href="#">FormatDef</a>	1..1	Attribute format properties
aValues	<a href="#">ListItems</a>	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	<a href="#">AttributeDefEx</a>	0..*	

## AttributeDefEx2List

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
item	<a href="#">AttributeDefEx2</a>	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	
bVisable	boolean	1..1	
bMultiple	boolean	1..1	
bImplicit	boolean	1..1	
bHtml	boolean	1..1	
aFormat	<a href="#">AttributeFormatDef</a>	1..1	
aValues	<a href="#">StringList</a>	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	<a href="#">AttributeDef</a>	0..*	

## AttributeDefSpecifier

Derived By

Restricting anyType

Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
Type	<a href="#">IdNameEnumeration</a>	1..1	Possible values: 0 - then attribute will be specified by id 1 - then attribute will be specified by name
Value	<a href="#">IdNameUnion</a>	1..1	id or attribute name(depending on previous setting)
CategoryInfo	<a href="#">CategoryInfo</a>	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	<a href="#">Category</a>	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	<a href="#">ClassDefEx</a>	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	<a href="#">ClassDef</a>	0..*	

## ClassSpecifier

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
Type	<a href="#">IdNameEnumeration</a>	1..1	Possible values: 0 - then class will be specified by ID 1 - then class will be specified by name
Value	<a href="#">IdNameUnion</a>	1..1	ID or class name (depending on previous setting)

## 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	<a href="#">StatusMessageList</a>	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	<a href="#">CollectionTransferRules</a>	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	<a href="#">CollectionEx2</a>	0..*	

## CollectionExList

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
item	<a href="#">CollectionEx</a>	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	<a href="#">CollectionTransferRules</a>	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	<a href="#">IdNameEnumeration</a>	1..1	
Value	<a href="#">IdNameUnion</a>	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	<a href="#">CollectionTransferRules</a>	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	<a href="#">CategoryAssign</a>	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	<a href="#">RtmDocumentProperties</a>	1..1	
status	<a href="#">CommandStatus</a>	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	<a href="#">RtmDocumentProperties</a>	1..1	
status	<a href="#">CommandStatus</a>	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	<a href="#">NameValueList</a>	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	<a href="#">RtmDocumentProperties</a>	1..1	
status	<a href="#">CmdStatus</a>	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	<a href="#">RtmDocumentProperties</a>	1..1	
status	<a href="#">CmdStatus</a>	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	<a href="#">RtmDocument</a>	1..1	
status	<a href="#">CmdStatus</a>	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	<a href="#">RtmDocument</a>	1..1	
status	<a href="#">CmdStatus</a>	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	<a href="#">RtmDocumentProperties</a>	1..1	
status	<a href="#">CmdStatus</a>	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	<a href="#">CmdStatus</a>	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	<a href="#">AttributeDefInfo</a>	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	<a href="#">ClassSpecifier</a>	1..1	
attributeDefSpecifier	<a href="#">AttributeDefSpecifier</a>	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	<a href="#">ClassDefInfo</a>	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	<a href="#">ClassSpecifier</a>	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	<a href="#">CollectionInfo</a>	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	<a href="#">CollectionSpecifier</a>	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	<a href="#">ProjectInfo</a>	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	<a href="#">ProjectSpecifier</a>	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	<a href="#">UserAttributeDefInfo</a>	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	<a href="#">ClassSpecifier</a>	1..1	
attributeDefSpecifier	<a href="#">AttributeDefSpecifier</a>	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	<a href="#">RequirementIdentifier</a>	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	<a href="#">FileAttachment</a>	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	<a href="#">ImageUploadResult</a>	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	<a href="#">LinkClassDef</a>	0..*	

## LinkedList

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
item	<a href="#">Link</a>	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	<a href="#">ListItemDef</a>	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	Attribute name
sValue	string	0..1	<p>The value the attribute can receive.</p> <p><b>URL attribute:</b> The value must be an escaped HTML link. If the attribute supports several URLs, specify all URLs with this value.</p> <p><u>Example:</u>  <code>&lt;a href="https://microfocus.com/" target="_blank"&gt;Micro Focus&lt;/a&gt;</code></p> <p>translates to</p> <pre>&amp;lt;a href=&amp;quot;https:// www.microfocus.com/&amp;quot; target=&amp;quot;_blank&amp;quot;&amp;gt;Micro Focus&amp;lt;/a&amp;gt;</pre>

## 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	<a href="#">NameValueList</a>	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	<a href="#">ObjectDetails</a>	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	<a href="#">ProjectEx</a>	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	<a href="#">IdNameEnumeration</a>	1..1	
Value	<a href="#">IdNameUnion</a>	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	<a href="#">RelationWithObjects</a>	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	<a href="#">ObjectDetailsList</a>	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	<a href="#">cmdStatusCode</a>	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	<a href="#">ReplaceRequirementOut</a>	0..*	

## ReplaceRequirementOut

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
obj	<a href="#">RequirementOut</a>	1..1	
eStatus	<a href="#">reqStatusCode</a>	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	<a href="#">NameValueList</a>	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	<a href="#">FindRequirementOut</a>	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	<a href="#">RequirementIdentifier</a>	0..*	



---

## RequirementList

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
item	<a href="#">RequirementOut</a>	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	<a href="#">NameValueList</a>	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	<a href="#">RtmDocSnapshotOut</a>	0..*	

## RtmDocument

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
info	<a href="#">RtmDocumentProperties</a>	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	<a href="#">RtmDocumentProperties</a>	0..*	



## RtmDocumentListEx

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
item	<a href="#">RtmDocumentPropertiesEx</a>	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	

## RtmDocumentPropertiesEx

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
bIsChild	boolean	1..1	If true, the document is a child document.
bIsMaster	boolean	1..1	If true, the document is a parent document.
nId	int	0..1	The ID of the document
nParentId	int	1..1	The ID of the parent document (if document is a child document), or 0
nTimeCreated	dateTime	0..1	The date and time the document was created
nTimeModified	dateTime	0..1	The date and time the document was last modified
sCategory	string	0..1	The full path of the category where the document is located
sCreatedBy	string	0..1	The user who created the document
sDescription	string	0..1	The description of the document
sModifiedBy	string	0..1	The last user who modified the document
sName	string	1..1	The name of the document
snapshots	<a href="#">RtmSnapshotListEx</a>	0..1	The snapshots associated with the document
sOwner	string	0..1	The owner of the workflow state
sState	string	0..1	The workflow state of the document
sURL	string	0..1	The URL under which the document can be accessed in a web browser

## RtmDocumentWithCategory

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
info	<a href="#">RtmDocumentProperties</a>	1..1	
sContent	string	0..1	
categoryInfo	<a href="#">CategoryAssign</a>	0..1	
bIsMaster	boolean	0..1	

## RtmSnapshotListEx

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
item	<a href="#">RtmSnapshotPropertiesEx</a>	0..*	

## RtmSnapshotPropertiesEx

### 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	The ID of the snapshot
nTimeCreated	dateTime	0..1	The date and time the document was created
sCreatedBy	string	0..1	The user who created the document
sDescription	string	0..1	The description of the document
sName	string	1..1	The name of the document
sURL	string	0..1	The URL under which the document can be accessed in a web browser

## 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	<a href="#">runTestAsyncResponseData</a>	1..1	
status	<a href="#">CmdStatus</a>	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	<a href="#">Report</a>	0..1	
anRunTimeParameters	<a href="#">NameValueList</a>	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	<a href="#">NameValueList</a>	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	<a href="#">StringList</a>	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	<a href="#">StatusMessage</a>	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	<a href="#">SyncXrefLink</a>	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	
sRMinorVersion	string	0..1	
sRMajorVersion	string	0..1	
sRAdminMajor	string	0..1	
sRAdminMinor	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	<a href="#">Template</a>	0..*	

## testAsyncStatusResponse

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
data	<a href="#">runTestAsyncResponseData</a>	1..1	
status	<a href="#">CmdStatus</a>	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	<a href="#">Transition</a>	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	<a href="#">NameValueList</a>	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	<a href="#">UserValueList</a>	1..1	
bMandatory	boolean	1..1	
bEditable	boolean	1..1	
bUnique	boolean	1..1	
bVisable	boolean	1..1	
bMultiple	boolean	1..1	
bImplicit	boolean	1..1	
bHtml	boolean	1..1	
aFormat	<a href="#">AttributeFormatDef</a>	1..1	
aValues	<a href="#">UserValueList</a>	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
<a href="#">AssignCategoryToGroup</a>	Assign category access to the group
<a href="#">AssignGroupToProject</a>	Assign group to the project
<a href="#">AssignUsersInGroupPerCategory</a>	Assign/revoke users access in group per category
<a href="#">AssignUserToGroup</a>	Assign user to the group
<a href="#">AssignUserToProject</a>	Assign user to the project
<a href="#">CheckPermission</a>	Checks permission for the specified action
<a href="#">CopyGroup</a>	Copy group with all project assignments and permissions
<a href="#">CopyUser</a>	Copy user with group, project assignments and permissions
<a href="#">CreateGroup</a>	Create a new group
<a href="#">CreateUser</a>	Create a new user
<a href="#">CreateLDAPUser</a>	Create a new LDAP user
<a href="#">CreateSSOUser</a>	Create a new SSO user
<a href="#">DeleteGroup</a>	Delete a group
<a href="#">DeleteUser</a>	Delete a user
<a href="#">GetGroupInfo</a>	Get information about group
<a href="#">GetGroups</a>	Get list of groups
<a href="#">GetLoginSources</a>	Get available login sources on the RM server
<a href="#">GetUserInfo</a>	Get information about user
<a href="#">GetUsers</a>	Get list of all users
<a href="#">GrantPermissionToGroup</a>	Grant permission to group for some action
<a href="#">GrantPermissionToUser</a>	Grant permission to user for some action
<a href="#">InheritPermissionForUser</a>	Inherit permission to user for some action
<a href="#">RevokePermissionFromGroup</a>	Revoke permission from group for some action
<a href="#">RevokePermissionFromUser</a>	Revoke permission from user for some action
<a href="#">UnassignCategoryFromGroup</a>	Un-assign category from the group
<a href="#">UnassignGroupFromProject</a>	Un-assign group from the project
<a href="#">UnassignUserFromGroup</a>	Un-assign user from the group
<a href="#">UnassignUserFromProject</a>	Un-assign user from the project
<a href="#">UpdateListAttributeValues</a>	Change list attribute values in attribute definition
<a href="#">UpdateUser</a>	Update user information and account properties
<a href="#">UpdateUserAttributeValues</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">UserNameList</a>	0..1	
includeUsers	<a href="#">UserNameList</a>	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	<a href="#">Result</a>	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>epphoto</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	<a href="#">Result</a>	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	<a href="#">Result</a>	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>
```

## CheckPermission

Checks permission for the specified action.

### Style

Document

### Input (Literal)

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

Name	Type	Occurs	Description
sessionId	string	1..1	The current session identifier
sResource	string	1..1	Specifies the permission set. For details, see chapter <a href="#">"Resource and Action Parameters" on page 377</a> .
sAction	string	1..1	Specifies the permission to check. For details, see chapter <a href="#">"Resource and Action Parameters" on page 377</a> .
sObject	string	0..1	Specifies the class name or relationship name.
sCategory	string	0..1	Specifies the category. Can be specified by full path (separated with '\' or '/') or by category ID.

### Output (Literal)

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

Name	Type	Occurs	Description
bAllowed	boolean	1..1	<ul style="list-style-type: none"> <li>▪ <b>True:</b> permission is granted</li> <li>▪ <b>False:</b> permission is denied</li> </ul>

### Remarks

#### Example of usage:

```
<urn:CheckPermission>
  <sessionId>1111111111</sessionId>
  <sResource>Classes</sResource>
  <sAction>Read</sAction>
  <sObject>Marketing_Requirements</sObject>
  <sCategory>RMDEMO\Support\Maintenance</sCategory>
</urn:CheckPermission>
```

## 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	<a href="#">GroupInfo</a>	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	<a href="#">Result</a>	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	<a href="#">UserInfo</a>	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	<a href="#">Result</a>	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	<a href="#">GroupInfo</a>	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	<a href="#">Result</a>	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	<a href="#">UserInfoExt</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">GroupInfo</a>	1..1	
aProjects	<a href="#">StringList</a>	1..1	
aUsers	<a href="#">StringList</a>	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	<a href="#">GroupList</a>	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	<a href="#">LoginSources</a>	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	<a href="#">AdditionalUserInfo</a>	0..1	
aGroups	<a href="#">StringList</a>	0..1	
aProjects	<a href="#">NameValueList</a>	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	<a href="#">UserList</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">Result</a>	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	<a href="#">UserInfo</a>	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	<a href="#">Result</a>	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	<a href="#">StringList</a>	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	<a href="#">LoginSource</a>	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	<a href="#">NameValue</a>	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	<a href="#">AdditionalUserInfo</a>	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	<b>1</b> groups <b>2</b> user <b>3</b> team
bDefault	boolean	0..1	<ul style="list-style-type: none"><li>▪ <b>true:</b> Value is default</li><li>▪ <b>false:</b> Value is not default</li></ul>

## UserItems

### Derived By

Restricting anyType

### Content Model

Contains elements as defined in the following table.

Component	Type	Occurs	Description
SEQUENCE		1..1	
item	<a href="#">UserItemDef</a>	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.

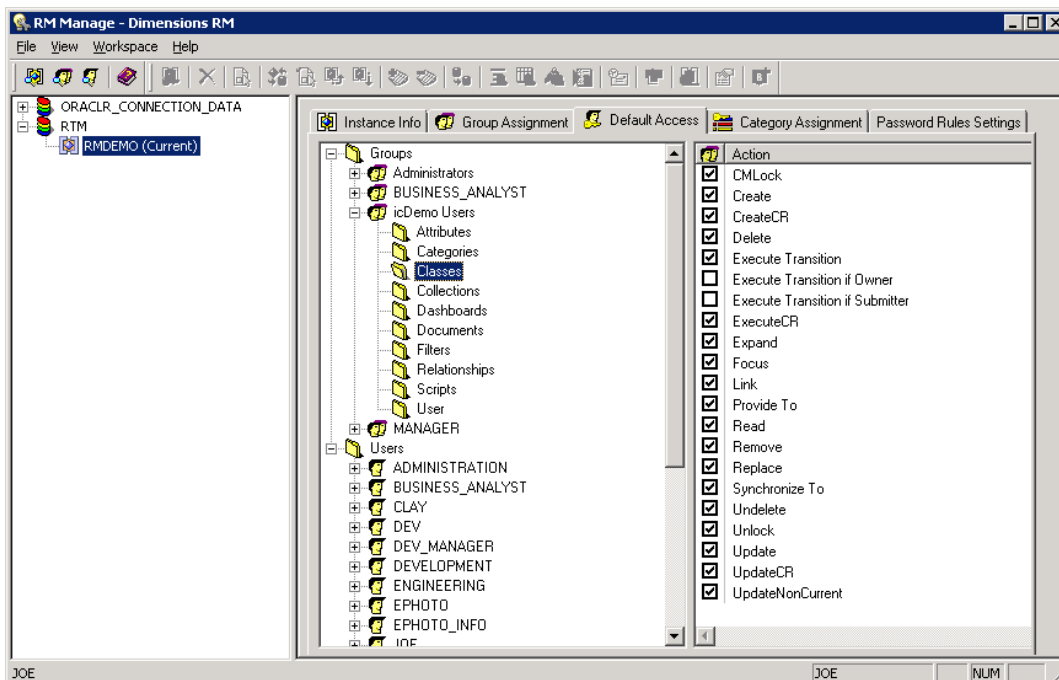
Component	Type	Occurs	Description
SEQUENCE		1..1	
item	string	0..*	



# Appendix

## Resource and Action Parameters

Several permission related functions require to specify a resource (usually sResource) and action (usually sAction) parameter. The values for action are only valid in combination with the related resource value. The easiest way to retrieve the resource and action combinations is by checking the **Default Access** options for a group or user in RM Manage.



**Resource** is identical with the folder name. In the image above, the resource **Class** is selected.

**Action** is an option name from the list of options.

For the resource **Classes**, possible action values are e.g. Delete, ExecuteCR, Read.



## Chapter 3

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# RM Restful Services

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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 listed 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'
  
```

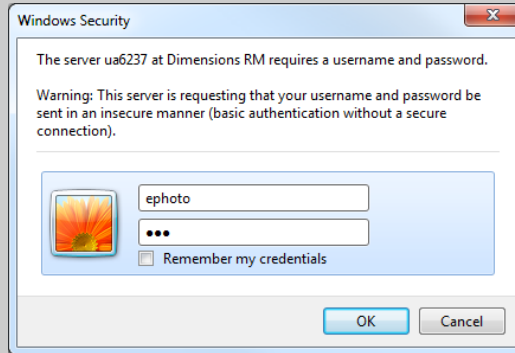
- 4 RM Restful services are cookies independent. (don't set/retrieve cookies)



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
<a href="#">Reports</a>	Get reports
<a href="#">Report</a>	Get report info
<a href="#">Run</a>	Run report
<a href="#">Containers</a>	Get containers
<a href="#">ContainerRequirements</a>	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
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://localhost: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://localhost: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://localhost: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://localhost: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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