



Operator Messaging Service (OMS) API Guide

Overview

Introduction

This document describes the data model and API of the Cisco Operator Messaging Service (OMS).

Document Version

This is the first formal release of this document.

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OMS API Conventions

Request Headers

The following headers apply in the same manner to all OMS requests.

General HTTP Request Headers	Description
[Content-Type]	The content type that the client is prepared to accept in the response. Default value is application/xml.

Possible Error Codes

The possible error codes returned by this call are:

3001, 3002, 3003, 3004, 3005, 3006, 3007, 3008, 3009

Error Code	Description
3001	Group-related error; for example, the OMS group does not exist, fails to list groups, or fails to retrieve group information.
3002	Subscriber-related error; for example, a failure to list subscribers or retrieve subscriber information.
3003	Message-related error; for example, message does not exist, a failure to retrieve a message, or an invalid message transmission.
3004	Initialization error; for example, a failure to initialize the OMS.
3005	Configuration error; for example, a failure to configure the OMS.
3006	Message publishing error; for example, a failure to publish a message through Pubsub.
3007	UPM-related error; for example, a failure to retrieve user information from the UPM service.
3008	Database-related error; for example, a failure to store group information or historic messages in the database.
3009	Rule-related error; for example, an incorrect rule or rule parameter information.

Publish Message

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=publishMessage`

Request Body

Parameter	Type	Mandatory	Description
arg0	String	Yes	The name of OMS group. The group should have previously been created.
arg1	OMS Message	Yes	The data structure of the OMS message.

OMS Message

Parameter	Type	Mandatory	Description
fileName	String	Yes	The file name of the message in the FTP server.
message	String	Yes	A URL-encoded string of the OMS message body.
validated	Boolean	Yes	Default is true. true: The message has been validated and it is a valid message. false: It is an invalid message.

Request Example

```
curl -l -H "Content-Type:application/xml" --user
restful:conductor -X "POST" --data
<publishMessage>
  <arg0>groupcd01</arg0>
  <arg1>
    goqamexample.xml</fileName>
    <message>&lt;oms
xmlns='http://conductor.cisco.com/oms/1.0' &gt;

      &lt;sender&gt;pubsubadmin@oms.example.com&lt;/sender&gt;
        &lt;senderName&gt;username1&lt;/senderName&gt;
          &lt;expireTime&gt;2012-12-
17T14:57:00+08:00&lt;/expireTime&gt;
            &lt;priority&gt;3&lt;/priority&gt;
              &lt;type&gt;Promotion&lt;/type&gt;
                &lt;scope&gt;Public&lt;/scope&gt;
                  &lt;title&gt;A title of message&lt;/title&gt;
                    &lt;description&gt;
XML encoded content.
          &lt;/description&gt;
            &lt;payload&gt;
XML encoded payload.
          &lt;/payload&gt;
            &lt;/oms&gt;</message>
          <validated>true</validated>
        </arg1>
      </publishMessage>
http://192.168.60.102:8100/service/OMSService?method=publishMe
ssage
```

Response Example:

```
<publishMessage></publishMessage>
```

Send Message

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=sendMessage`

Request Body

Parameter	Type	Mandatory	Description
arg0	String	Yes	The user's ID in the UPM database. The user should already exist in UPM, as well as in the Videoscape Control Suite.
arg1	OMS Message	Yes	The data structure of the OMS message.

OMS Message

Parameter	Type	Mandatory	Description
fileName	String	Yes	The file name of the message on the FTP server.
message	String	Yes	A URL-encoded string of the OMS message body.
validated	Boolean	Yes	Default is true. true: The message has been validated and it is a valid message. false: It is an invalid message.

Request Example

```
curl -l -H "Content-Type:application/xml" --user  
restful:conductor -X "POST" --data
```

```
<sendMessage>  
  <arg0>groupcd01_user0</arg0>  
  <arg1>  
    goqamexample.xml</fileName>  
    <message>&lt;oms  
xmlns='http://conductor.cisco.com/oms/1.0' &gt;  
  
  &lt;sender&gt;pubsubadmin@oms.example.com&lt;/sender&gt;  
    &lt;senderName&gt;username1&lt;/senderName&gt;  
    &lt;expireTime&gt;2012-12-  
17T14:57:00+08:00&lt;/expireTime&gt;  
    &lt;priority&gt;3&lt;/priority&gt;  
    &lt;type&gt;Promotion&lt;/type&gt;  
    &lt;scope&gt;Public&lt;/scope&gt;  
    &lt;title&gt;A title of message&lt;/title&gt;  
    &lt;description&gt;  
XML encoded content.  
    &lt;/description&gt;  
    &lt;payload&gt;  
XML encoded payload.  
    &lt;/payload&gt;  
    &lt;/oms&gt;</message>  
  <validated>true</validated>  
  </arg1>  
</sendMessage>  
http://192.168.60.102:8100/service/OMSService?method=sendMessa  
ge
```

Response Example

```
<sendMessage></sendMessage>
```

List Groups

Request URI

Type: @POST

```
http://{WebServerIP}:{PORT}/service/{OMSService}?method=listGroups
```

Request Body

None

Request Example

```
curl -l -H "Content-Type:application/xml" --user restful:conductor -X "POST" --data "<listGroups/>" http://192.168.60.102:8100/service/OMSService?method=listGroups
```

Response Example

```
<listGroupsResponse>  
  <return>  
    <createTime>2011-11-15T02:37:39+00:00</createTime>  
    <description></description>  
    <grpId>1</grpId>  
    <grpName>restful</grpName>  
    <grpType>user</grpType>  
    <rules>cityrule1:city=shanghai</rules>  
    <status>2</status>  
  </return>  
</listGroupsResponse>
```

List Subscribers

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=listSubscribers`

Request Body

Parameter	Type	Mandatory	Description
arg0	String	Yes	The name of the group to list the subscriber
arg1	Int	Yes	Start index of list, default is 0
arg2	Int	Yes	End index of list; default is (size-1). For example, the end should be 49 if you want to list the first 50 subscribers.

Request Example

```
curl -l -H "Content-Type:application/xml" --user
restful:conductor -X "POST" --data
```

```
<listSubscribers>
```

```
  <arg0>restful</arg0>
```

```
  <arg1>0</arg1>
```

```
  <arg2>49</arg2>
```

```
</listSubscribers>
```

```
http://192.168.60.102:8100/service/OMSService?method=listSubscribers
```

Response Example

```
<listSubscribersResponse>
```

```
  <return>
```

```
    <count>1</count>
```

```
    <result>
```

```
      <userId>oms_user_username1</userId>
```

```
      <name>oms_user_username1</name>
```

```
    <parameters>
```



```
        <paramName>key1</paramName>
        <paramValue>shanghai</paramValue>
    </parameters>
    <parameters>
        <paramName>key2</paramName>
        <paramValue>pudong</paramValue>
    </parameters>
    <parameters>
        <paramName>province</paramName>
        <paramValue>shanghai</paramValue>
    </parameters>
</result>
</return>
</listSubscribersResponse>
```

Add Group

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=addGroup`

Request Body

Parameter	Type	Mandatory	Description
arg0	OMS group	Yes	The data structure of the group.

OMS Group

Parameter	Type	Mandatory	Description
grpId	String	Yes	Default is empty; assigned by backend.
grpType	String	Yes	Default is 'user'.
createTime	String	Yes	Default is 0; generated by back end.
grpName	String	Yes	Default source is GUI.
rules	String	Yes	The rule of this group. Format is <rule name>:<rule key>=<rule value> . A rule can contain multiple key/value pairs, which are separated by a semicolon.
description	String	No	The description of this group.
status	String	Yes	The status of this group: 0 – normal 1 – sync with UPM service 2 – error

Request Example

```
curl -l -H "Content-Type:application/xml" --user  
restful:conductor -X "POST" --data
```

```
<addGroup>  
  <arg0>  
    <grpId></grpId>  
    <grpType>user</grpType>  
    <createTime>0</createTime>  
    <grpName>restful</grpName>  
    <rules>cityrule1:city=shanghai</rules>  
    <description></description>  
    <status>0</status>  
  </arg0>  
</addGroup>
```

```
http://192.168.60.102:8100/service/OMSService?method=addGroup
```

Request Response

```
<addGroupResponse></addGroupResponse>
```

Delete Group

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=deleteGroup`

Request Body

Parameter	Type	Mandatory	Description
arg0	String	Yes	The name of the group to delete.

Request Example

```
curl -l -H "Content-Type:application/xml" --user  
restful:conductor -X "POST" --data
```

```
<deleteGroup>  
  <arg0>restful</arg0>  
</deleteGroup>
```

```
http://192.168.60.102:8100/service/OMSService?method=deleteGroup
```

Response Example

```
<deleteGroupResponse></deleteGroupResponse>
```

List Messages

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=listMessages`

Request Body

none

Request Example

```
curl -l -H "Content-Type:application/xml" --user
restful:conductor -X "POST" --data "<listMessages/>"
http://192.168.60.102:8100/service/OMSService?method=listMessages
```

Response Example

```
<listMessagesResponse>
  <return>
    goqamtest_sender_1.xml</filename>
    <lastModTime>2012-10-23T16:00:00+00:00</lastModTime>
    <size>1464</size>
    <user>0</user>
  </return>
  <return>
    goqamtest_sender_2.xml</filename>
    <lastModTime>2012-10-23T16:00:00+00:00</lastModTime>
    <size>1465</size>
    <user>0</user>
  </return>
  <return>
    goqamtest_sender_3.xml</filename>
    <lastModTime>2012-10-23T16:00:00+00:00</lastModTime>
    <size>434</size>
    <user>0</user>
  </return>
```

List Messages

```
<return>
  goqamtest_sender_4.xml</filename>
  <lastModTime>2012-10-23T16:00:00+00:00</lastModTime>
  <size>421</size>
  <user>0</user>
</return>
<return>
  goqamtest_sender_5.xml</filename>
  <lastModTime>2012-10-23T16:00:00+00:00</lastModTime>
  <size>503</size>
  <user>0</user>
</return>
<return>
</listMessagesResponse>
```

Retrieve Messages

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=retrieveMessages`

Request Body

Parameter	Type	Mandatory	Description
arg0	String	Yes	The file name to be retrieved.

Request Example

```
curl -l -H "Content-Type:application/xml" --user
restful:conductor -X "POST" --data
```

```
<retrieveMessages>
```

```
    <arg0>test_sender_1.xml</arg0>
```

```
</retrieveMessages>
```

```
http://192.168.60.102:8100/service/OMSService?method=retrieveMessages
```

Response Example

```
<retrieveMessagesResponse>
```

```
    <return>
```

```
        goqamtest_sender_1.xml</fileName>
```

```
        <message>&lt;?xml version='1.0' encoding='utf-8'?&gt;
```

```
            &lt;oms
```

```
xmlns="http://conductor.cisco.com/oms/1.0"&gt;
```

```
            &lt;sender&gt;ssssssss&lt;/sender&gt;
```

```
            &lt;senderName&gt;username1&lt;/senderName&gt;
```

```
            &lt;expireTime&gt;2012-12-
```

```
17T14:57:00+08:00&lt;/expireTime&gt;
```

```
            &lt;priority&gt;3&lt;/priority&gt;
```

```
            &lt;type&gt;Promotion&lt;/type&gt;
```

```
            &lt;scope&gt;Test&lt;/scope&gt;
```

```
            &lt;title&gt;A title of message&lt;/title&gt;
```

```
            &lt;description&gt;
```

Retrieve Messages

```
Content.  
&lt;/description&gt;  
&lt;payload&gt;  
Payload.  
&lt;/payload&gt;  
&lt;/oms&gt;</message>  
<validated>true</validated>  
</return>  
</retrieveMessagesResponse>
```


Get Historical Messages

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=getHistoricMessages`

Request Body

Parameter	Type	Mandatory	Description
arg0	Type	Yes	Search type; default type is range.
arg1	Search keyword	Yes	Search keyword. For range search, the keyword could be one of 'from' or 'to'.
arg2	Search value	Yes	Search value corresponding to search keyword.
arg3	Search keyword	Yes	Search keyword. For range search, the keyword could be one of 'from' or 'to'.
arg4	Search value	Yes	Search value corresponding to search keyword.

Request Example

```
curl -l -H "Content-Type:application/xml" --user restful:conductor -X "POST" --data
```

```
<getHistoricMessages>
  <arg0>
    <type>range</type>
    <key>from</key>
    <value>0</value>
  </arg0>
  <arg0>
    <type>range</type>
```

Get Historical Messages

```
<key>to</key>
<value>2</value>
</arg0>
</getHistoricMessages>
http://192.168.60.102:8100/service/OMSService?method=getHistoricMessages
```

Response Example

```
<getHistoricMessagesResponse>
  <return>
    <count>33</count>
    <queryCriteria>
      <key>from</key>
      <type>range</type>
      <value>0</value>
    </queryCriteria>
    <queryCriteria>
      <key>to</key>
      <type>range</type>
      <value>2</value>
    </queryCriteria>
    <results>
      <expireTime>2012-12-17T14:57:00+08:00</expireTime>
      <failReason></failReason>
      <fileName>goqamchinese_msg2.xml</fileName>
      <msgId>3319</msgId>
      <msgType>1</msgType>
      <priority>3</priority>
      <receiver>group_chinese</receiver>
      <scope>Public</scope>
      <sendResult>0</sendResult>
      <sendTime>2012-07-27T02:41:45+00:00</sendTime>
      <sender>pubsubadmin@oms.example.com</sender>
      <senderName>username1</senderName>
      <title>Intern</title>
      <type>Promotion</type>
    </results>
  </return>
</getHistoricMessagesResponse>
```

```
<results>
  <expireTime>2012-12-17T14:57:00+08:00</expireTime>
  <failReason></failReason>
  goqamchinese_msg2.xml</fileName>
  <msgId>3318</msgId>
  <msgType>1</msgType>
  <priority>3</priority>
  <receiver>group_chinese</receiver>
  <scope>Public</scope>
  <sendResult>0</sendResult>
  <sendTime>2012-07-27T02:37:16+00:00</sendTime>
  <sender>pubsubadmin@oms.example.com</sender>
  <senderName>username1</senderName>
  <title>Intern</title>
  <type>Promotion</type>
</results>
</return>
</getHistoricMessagesResponse>
```

Get Historical Message Details

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=getHistoricMessageDetail`

Request Body

Parameter	Type	Mandatory	Description
arg0	long	Yes	The unique message ID of a specific message.

Request Example

```
curl -l -H "Content-Type:application/xml" --user restful:conductor -X "POST" --data
```

```
<getHistoricMessageDetail>
```

```
  <arg0>3319</arg0>
```

```
</getHistoricMessageDetail>
```

```
http://192.168.60.102:8100/service/OMSService?method=getHistoricMessageDetail
```

Response Example

```
<getHistoricMessageDetailResponse>
```

```
  <return>
```

```
  <description>Intern, Intern, Intern, Intern, Intern, Intern, </description>
```

```
    <expireTime>2012-12-17T14:57:00+08:00</expireTime>
```

```
    <failReason></failReason>
```

```
    goqamchinese_msg2.xml</fileName>
```

```
    <msgId>3319</msgId>
```

```
    <msgType>1</msgType>
```

```
    <payload>this is the payload</payload>
```

```
    <prority>3</prority>
```

```
    <receiver>group_chinese</receiver>
```

```
    <scope>Public</scope>
```

Get Historical Message Details

```
<sendResult>0</sendResult>
<sendTime>2012-07-27T02:41:45+00:00</sendTime>
<sender>pubsubadmin@oms.example.com</sender>
<senderName>username1</senderName>
<title>Intern</title>
<type>Promotion</type>
</return>
</getHistoricMessageDetailResponse>
```

List Rules

Request URI

Type: @POST

```
http://{WebServerIP}:{PORT}/service/{OMSService}?method=listRules
```

Request Body

None

Request Example

```
curl -l -H "Content-Type:application/xml" --user  
restful:conductor -X "POST" --data "<listRules/>"  
http://192.168.60.102:8100/service/OMSService?method=listRules
```

Response Example

```
<listRulesResponse>  
  <return>  
    <description></description>  
    <operator>EqualTo</operator>  
    <parameter>city</parameter>  
    <ruleName>cityrule1</ruleName>  
    <type>List</type>  
    <value>shanghai</value>  
  </return>  
</listRulesResponse>
```

Add Rule

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=addRule`

Request Body

Parameter	Type	Mandatory	Description
arg0	Rule	Yes	The data structure of the rule.

Rule

Parameter	Type	Mandatory	Description
ruleName	String	Yes	The name of the rule.
description	String	No	The description of the rule parameter.
type	String	Yes	The possible types of rule parameters are: <ul style="list-style-type: none"> ■ String ■ List
parameter	String	Yes	The name of the rule parameter used by this rule.
operator	String	Yes	The default operator is 'EqualTo'.
value	String	Yes	The value of the rule parameter used by this rule.

Request Example

```
curl -l -H "Content-Type:application/xml" --user
restful:conductor -X "POST" --data
```

```
<addRule>
  <arg0>
    <ruleName>cityrule1</ruleName>
    <description></description>
    <type>List</type>
```

Add Rule

```
        <parameter>city</parameter>
        <operator>EqualTo</operator>
        <value>shanghai</value>
    </arg0>
</addRule>
```

Response Example

```
<addRuleResponse></addRuleResponse>
```


Delete Rule

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=deleteRule`

Request Body

Parameter	Type	Mandatory	Description
arg0	String	Yes	The name of the rule to delete.

Request Example

```
curl -l -H "Content-Type:application/xml" --user
restful:conductor -X "POST" --data
```

```
<deleteRule>
```

```
    <arg0>cityrule1</arg0>
```

```
</deleteRule>
```

```
http://192.168.60.102:8100/service/OMSService?method=deleteRule
```

Response Example

```
<deleteRuleResponse></deleteRuleResponse>
```

List Rule Parameters

Request URI

Type: @POST

```
http://{WebServerIP}:{PORT}/service/{OMSService}?method=listRuleParameters
```

Request Body

None

Request Example

```
curl -l -H "Content-Type:application/xml" --user  
restful:conductor -X "POST" --data "<listRuleParameters/>"  
http://192.168.60.102:8100/service/OMSService?method=listRuleParameters
```

Response Example

```
<listRuleParametersResponse>  
  <return>  
    <description></description>  
    <ruleParameterName>city</ruleParameterName>  
    <seqNum>3</seqNum>  
    <source>GUI</source>  
    <type>List</type>  
    <value>shanghai;beijing</value>  
  </return>  
</listRuleParametersResponse>
```

Add Rule Parameter

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=addRuleParameter`

Request Body

Parameter	Type	Mandatory	Description
arg0	RuleParameter	Yes	The data structure of the rule parameter.

Rule Parameter

Parameter	Type	Mandatory	Description
ruleParameterName	String	Yes	The name of the rule parameter.
type	String	Yes	The possible types of rule parameters are: <ul style="list-style-type: none"> ■ String ■ List
value	String	Yes	The value of the rule parameter is String. If there are multiple strings, the separator is ';'.
source	String	Yes	Default source is 'GUI'.
description	String	No	The description of rule parameter.

Request Example

```
curl -l -H "Content-Type:application/xml" --user  
restful:conductor -X "POST" --data
```

```
<addRuleParameter>
```

```
  <arg0>
```

```
    <ruleParameterName>city</ruleParameterName>
```

```
    <type>List</type>
```

```
    <value>shanghai;beijing</value>
```

```
    <source>GUI</source>
```

```
    <description></description>
```

```
  </arg0>
```

```
</addRuleParameter>
```

```
http://192.168.60.102:8100/service/OMSService?method=addRulePa  
rameter
```

Response Example

```
<addRuleParameterResponse></addRuleParameterResponse>
```

Delete Rule Parameter

Request URI

Type: @POST

`http://{WebServerIP}:{PORT}/service/{OMSService}?method=deleteRuleParameter`

Request Body

Parameter	Type	Mandatory	Description
arg0	String	Yes	The name of the rule parameter to delete.

Request Example

```
curl -l -H "Content-Type:application/xml" --user restful:conductor -X "POST" --data
```

```
<deleteRuleParameter>
  <arg0>city</arg0>
</deleteRuleParameter>
```

```
http://192.168.60.102:8100/service/OMSService?method=deleteRuleParameter
```

Response Example

```
<deleteRuleParameterResponse></deleteRuleParameterResponse>
```

For Information

If You Have Questions

If you have technical questions, contact Cisco Services for assistance. Follow the menu options to speak with a service engineer.



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